



CITY OF AUBURN DEVELOPMENT REVIEW APPLICATION

For:

**186 Main Street
Auburn, Maine 04210**

Applicant:

**JCS 18, LLC
20 Mechanic Street
Gorham, Maine 04038**

Prepared by:

**Sebago Technics, Inc.
75 John Roberts Road, Suite 4A
South Portland, Maine 04106**

May 2023

220503-01



May 5, 2023
220503-01

Mr. Eric Cousens, Director of Planning & Permitting
City of Auburn
60 Court Street
Auburn, Maine 04210

RE: Proposed New Mixed-Use Building
Auburn Development Review Application
186 Main Street
Tax Map/Lot: 231/020
Applicant: JCS 18, LLC

Dear Eric:

On behalf of our client JCS 18, LLC, Sebago Technics, Inc is pleased to submit the enclosed materials for Development Review approval in accordance with the Auburn Zoning Ordinance Sec. 60, Div. 14 – Form Based Code 60-550. The applicant proposes to develop a city-owned parcel located at 186 Main Street in the City of Auburn. The proposed development is comprised of a new five (5) story mixed-use building that will be made up of four (4) floors with 18 units of multi-family apartment housing and 1,118 square feet of retail/commercial space and one (1) floors with a 118 seat restaurant/ brewery space. The parcel totals roughly 0.16 acres and is identified on the City of Auburn Tax Map 231 Lot 020. The applicant has extensive experience permitting and building similar facilities throughout New England.

Existing Conditions: The site is currently vacant and undeveloped. The parcel is currently zoned as commercial and is included in the Downtown Traditional Center designated growth area in the City of Auburn Comprehensive Plan. The development area falls entirely within the General Development Shoreland Zone and partially in FEMA Flood Zone AE per the City of Auburn GIS mapping available to the public. The development parcel is bordered by Main Street to the west, residential space to the north and south, and Miller Street and the Auburn Riverwalk to the east.

Access: Access to the site is proposed via the front entrance to the building on Main Street and a rear entrance along Miller Street. It is our understanding that the proposed parking to be redeveloped on the backside of the site is currently leased and unavailable for this development. As such, vehicular access for the site is anticipated through Main Street on-street parking and available parking in the Mechanics Row Parking Garage. Delivery truck access to the site is proposed via Miller Alley with exiting movements through Miller Street. Additionally, the Auburn Riverwalk provides a pedestrian pathway at the rear of the building.

Delegated review: The City of Auburn has delegated review authority from the Maine Department of Environmental Protection for Site Law that includes stormwater management review. The proposed project does not require delegated review of stormwater under the applicable statutes, rules, and ordinances, but a stormwater management plan has been developed for the project to aid in the City's Development Review. A full stormwater management plan is included in Section 12 of the City Development Review Application.

Additional Permits: Two additional permits are required for this project. The following will be reviewed by the City of Auburn concurrently with the City Development Review Application.

- Flood Hazard Development Permit Application
- Traffic Movement Permit

City Standards

Comprehensive Plan Consideration: Per the *Future Land Use Plan*, in the 2021 Comprehensive Plan update, the parcel in the Form-Based Code Development District (FBCD) should be established to reflect the existing pattern of development in these neighborhoods. Per City Zoning, the facility is appropriately sited, and the use is allowed.

Waiver Requests: The applicant is requesting two waivers in regard to the maximum lot coverage for the total footprint of all structures, parking lots, and other non-vegetated surfaces. One waiver is requested under the Shoreland Zone standards, and one is requested under the Downtown Traditional Center standards. The applicant is also requesting one waiver in regard to the minimum rear setback standard within the Downtown Traditional Center zone.

Sec. 60-992. Principal and accessory structures. subsection (d):

The applicant is requesting a waiver of the standard for a maximum lot coverage of 70 percent. The waiver is requested because the nature of the lot makes it extremely impracticable to meet the standard.

Sec. 60-550.1. Building placement and configuration. Subsection (e):

The applicant is requesting a waiver of the standard for a maximum lot coverage of 75 percent. The waiver is requested because the nature of the lot makes it extremely impracticable to meet the standard.

Sec. 60-550.1. Building placement and configuration. Subsection (d):

The applicant is requesting a waiver of the standard for a minimum rear setback of 10 feet. The waiver is requested because the nature of the lot in coordination with the proposed restaurant/ brewery space on the lower level makes it extremely impracticable to meet the standard.

We are hopeful that the enclosed information adequately addresses the required project review information. Upon reviewing the enclosed information and plans, however, please contact me with any questions or if you require additional information. I appreciate your consideration.

Sincerely,
SEBAGO TECHNICS, INC.

A handwritten signature in black ink that reads "Kylie S. Mason". The signature is written in a cursive, flowing style.

Kylie S. Mason, RLA, LEED-AP
Chief Operations Officer
Maine Licensed Landscape Architect

enc.

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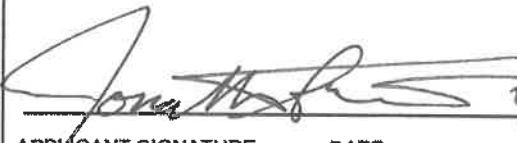
1 of 1 Existing Conditions Plan

A


Agent Authorization

AGENT AUTHORIZATION

APPLICANT/ OWNER	Name	JCS 18, LLC		
PROPERTY DESCRIPTION	Physical Address	186 Main Street Auburn, Maine 04210	Map	231
			Lot	20
APPLICANT'S AGENT INFORMATION	Name	Kylie S. Mason, RLA, LEED AP, COO		
	Phone	(207) 200-2071	Business Name & Mailing Address	Sebago Technics, Inc. 75 John Roberts Road, Suite 4A South Portland, ME 04106

 5/4/23
 APPLICANT SIGNATURE DATE

PLEASE TYPE OR PRINT NAME HERE JONATHAN E-SMITH

 5/4/2023
 APPLICANT'S AGENT SIGNATURE DATE

Kylie S. Mason, RLA, LEED AP
 Chief Operations Officer

PLEASE TYPE OR PRINT NAME HERE

B

Development Review Application, Development Review Checklist



City of Auburn, Maine

Planning & Permitting

Eric Cousens, Director

60 Court Street | Auburn, Maine 04210

www.auburnmaine.gov | 207.333.6601

Development Review Application

PROJECT NAME: _____

PROPOSED DEVELOPMENT ADDRESS: 186 Main Street, Auburn, ME

PARCEL ID #: 231-020

REVIEW TYPE: Site Plan ☐ Site Plan Amendment ☐
 Subdivision ☐ Subdivision Amendment ☐

PROJECT DESCRIPTION: The applicant proposes to develop a city-owned parcel located at 186 Main Street in the City of Auburn. The development is proposed with a new five (5) story mixed-use building that will be made up of three (3) floors with fourteen units of multi-family apartment housing and two (2) floors with 243 seats of restaurant/ brewery space.

CONTACT INFORMATION:

Applicant

Name: _____

Address: _____

City / State _____

Zip Code _____

Work #: _____

Cell #: _____

Fax #: _____

Home #: _____

Email: _____

Property Owner

Name: _____

Address: _____

City / State _____

Zip Code _____

Work #: _____

Cell #: _____

Fax #: _____

Home #: _____

Email: _____

Project Representative

Name: _____

Address: _____

City / State _____

Zip Code _____

Work #: _____

Cell #: _____

Fax #: _____

Home #: _____

Email: _____

Other professional representatives for the project (surveyors, engineers, etc.),

Name: _____

Address: _____

City / State _____

Zip Code _____

Work #: _____

Cell #: _____

Fax #: _____

Home #: _____

Email: _____

PROJECT DATA

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

IMPERVIOUS SURFACE AREA/RATIO

Existing Total Impervious Area	_____	sq. ft.
Proposed Total Paved Area	_____	sq. ft.
Proposed Total Impervious Area	_____	sq. ft.
Proposed Impervious Net Change	_____	sq. ft.
Impervious surface ratio existing	_____	% of lot area
Impervious surface ratio proposed	_____	% of lot area

BUILDING AREA/LOT COVERAGE

Existing Building Footprint	_____	sq. ft.
Proposed Building Footprint	_____	sq. ft.
Proposed Building Footprint Net change	_____	sq. ft.
Existing Total Building Floor Area	_____	sq. ft.
Proposed Total Building Floor Area	_____	sq. ft.
Proposed Building Floor Area Net Change	_____	sq. ft.
New Building	_____	(yes or no)
Building Area/Lot coverage existing	_____	% of lot area
Building Area/Lot coverage proposed	_____	% of lot area

ZONING

Existing	_____
Proposed, if applicable	_____

LAND USE

Existing	_____
Proposed	_____

RESIDENTIAL, IF APPLICABLE

Existing Number of Residential Units	_____
Proposed Number of Residential Units	_____
Subdivision, Proposed Number of Lots	_____

PARKING SPACES

Existing Number of Parking Spaces	_____
Proposed Number of Parking Spaces	_____
Number of Handicapped Parking Spaces	_____
Proposed Total Parking Spaces	_____

ESTIMATED COST OF PROJECT:

DELEGATED REVIEW AUTHORITY CHECKLIST

SITE LOCATION OF DEVELOPMENT AND STORMWATER MANAGEMENT

Existing Impervious Area	_____	sq. ft.
Proposed Disturbed Area	_____	sq. ft.
Proposed Impervious Area	_____	sq. ft.

1. *If the proposed disturbance is greater than one acre, then the applicant shall apply for a Maine Construction General Permit (MCGP) with MDEP.*
2. *If the proposed impervious area is greater than one acre including any impervious area created since 11/16/05, then the applicant shall apply for a MDEP Stormwater Management Permit, Chapter 500, with the City.*
3. *If total impervious area (including structures, pavement, etc) is greater than 3 acres since 1971 but less than 7 acres, then the applicant shall apply for a Site Location of Development Permit with the City. If more than 7 acres then the application shall be made to MDEP unless determined otherwise.*
4. *If the development is a subdivision of more than 20 acres but less than 100 acres then the applicant shall apply for a Site Location of Development Permit with the City. If more than 100 acres then the application shall be made to MDEP unless determined otherwise.*

TRAFFIC ESTIMATE

Total traffic estimated in the peak hour-existing _____ passenger car equivalents (PCE)
(Since July 1, 1997)

Total traffic estimated in the peak hour-proposed (Since July 1, 1997) _____ 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.

Zoning Summary

1. Property is located in the _____ zoning district.
2. Parcel Area: _____ acres / _____ square feet(sf).

Regulations

Required/Allowed

Provided

Min Lot Area _____ / _____

Street Frontage _____ / _____

Min Front Yard _____ / _____

Min Rear Yard _____ / _____

Min Side Yard _____ / _____

Max. Building Height _____ / _____

Use Designation _____ / _____

Parking Requirement 1 space/ per _____ square feet of floor area

Total Parking: _____ / _____

Overlay zoning districts (if any): _____ / _____

Urban impaired stream watershed? YES/NO If yes, watershed name _____

DEVELOPMENT REVIEW APPLICATION SUBMISSION

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

1. 5 Full size plans and 10 smaller (no larger than 11" x 17") plans containing the information found in the attached sample plan checklist.
2. Application form that is completed and signed by the property owner or designated representative.
(NOTE: All applications will be reviewed by staff and any incomplete application will not be accepted until all deficiencies are corrected.
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.

To view the City of Auburn Zoning Ordinance, go to:

www.auburnmaine.gov under Government, select Departments of the City, then Planning, Permitting & Code. On the left menu, choose Subdivisions, Land Use, Zoning Ordinance. Or click [HERE](#).

For additional information on Site Plan Review, please click [HERE](#) or scan code:



For additional information on Special Exceptions, please click [HERE](#) or scan code:



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 only; a Performance Guarantee, Inspection Fee, Building Permit Application and other associated fees and permits will be required prior to construction.

Signature of Applicant:

Kyrus S. Nason

Date:



City of Auburn, Maine

Office of Planning & Permitting

Eric J. Cousens, Director

60 Court Street | Auburn, Maine 04210

www.auburnmaine.gov | 207.333.6601

Development Review Checklist

The following information is required where applicable to be submitted for an application to be complete

PROJECT NAME: _____

PROPOSED DEVELOPMENT ADDRESS: _____

PARCEL #: _____

<i>Required Information</i>		<i>Check when Submitted</i>		<i>Applicable Ordinance</i>
		<i>Applicant</i>	<i>Staff</i>	
Site Plan				
	Owner's Names/Address			
	Names of Development			
	Professionally Prepared Plan			
	Tax Map or Street/Parcel Number			
	Zoning of Property			
	Distance to Property Lines			
	Boundaries of Abutting land			
	Show Setbacks, Yards and Buffers			
	Airport Area of Influence			
	Parking Space Calcs			
	Drive Openings/Locations			
	Subdivision Restrictions			
	Proposed Use			
	PB/BOA/Other Restrictions			
	Fire Department Review			
	Open Space/Lot Coverage			

<i>Required Information</i>		<i>Check when Submitted</i>		<i>Applicable Ordinance</i>
Landscape Plan		<i>Applicant</i>	<i>Staff</i>	
	Greenspace Requirements			
	Setbacks to Parking			
	Buffer Requirements			
	Street Tree Requirements			
	Screened Dumpsters			
	Additional Design Guidelines			
	Planting Schedule			
Stormwater & Erosion Control Plan		<i>Applicant</i>	<i>Staff</i>	
	Compliance w/ chapter 500			
	Show Existing Surface Drainage			
	Direction of Flow			
	Location of Catch Basins, etc.			
	Drainage Calculations			
	Erosion Control Measures			
	Maine Construction General Permit			
	Bonding and Inspection Fees			
	Post-Construction Stormwater Plan			
	Inspection/monitoring requirements			
Lighting Plan		<i>Applicant</i>	<i>Staff</i>	
	Full cut-off fixtures			
	Meets Parking Lot Requirements			
Traffic Information		<i>Applicant</i>	<i>Staff</i>	
	Access Management			
	Signage			
	PCE - Trips in Peak Hour			

<i>Required Information</i>		<i>Check when Submitted</i>		<i>Applicable Ordinance</i>
	Vehicular Movements			
	Safety Concerns			
	Pedestrian Circulation			
	Police Traffic			
	Engineering Traffic			
Utility Plan		<i>Applicant</i>	<i>Staff</i>	
	Water			
	Adequacy of Water Supply			
	Water main extension agreement			
	Sewer			
	Available city capacity			
	Electric			
	Natural Gas			
	Cable/Phone			
Natural Resources		<i>Applicant</i>	<i>Staff</i>	
	Shoreland Zone			
	Flood Plain			
	Wetlands or Streams			
	Urban Impaired Stream			
	Phosphorus Check			
	Aquifer/Groundwater Protection			
	Applicable State Permits			
	Lake Auburn Watershed			
	Taylor Pond Watershed			
Right, Title or Interest		<i>Applicant</i>	<i>Staff</i>	
	Verify			
	Document Existing Easements, Covenants, etc.			

<i>Required Information</i>		<i>Check when Submitted</i>		<i>Applicable Ordinance</i>
Technical & Financial Capacity		<i>Applicant</i>	<i>Staff</i>	
	Cost Est./Financial Capacity			
	Performance Guarantee			
State Subdivision Law		<i>Applicant</i>	<i>Staff</i>	
	Verify/Check			
	Covenants/Deed Restrictions			
	Offers of Conveyance to City			
	Association Documents			
	Location of Proposed Streets & Sidewalks			
	Proposed Lot Lines, etc.			
	Data to Determine Lots, etc.			
	Subdivision Lots/Blocks			
	Specified Dedication of Land			
Additional Subdivision Standards		<i>Applicant</i>	<i>Staff</i>	
	Mobile Home Parks			
	PUD			
A JPEG or PDF of the proposed site plan		<i>Applicant</i>	<i>Staff</i>	
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				

Section 1

Performance Standards Responses

Exhibit 1 – Performance Standards Responses

This application has been compiled in accordance with the Auburn Zoning Ordinance Sec. 60, Div. 14 – Form Based Code 60-550. Please see this Exhibit for Performance Standards.

Division 14-Form Based Code
Sec. 60-550

Sec. 60-550.1 Building placement and configuration T-5.1

(1) Principal Building Placement

- a. *Front Setback, Principal:* 0 ft. Min., 10 ft. Max, **met**
- b. *(Corner Lot) Front Setback, Secondary:* 0 ft. Min., 10ft. Max, **met**
- c. *Side Setback:* 0 ft. – 5 ft. Min., **met**
- d. *Rear Setback:* 10 ft. Min., ***Waiver requested. Please see Cover Letter.***
- e. *Building Lot Coverage:* 75% Max, ***Waiver requested. Please see Cover Letter.***
- f. *Useable Open Space: 5% Min.*
- g. *Frontage Build-Out:* 75% Min. along Front Setback, Primary, **met**
- h. *Lot Width:* 24 ft. Min, 160 ft. Max, **met**

(2) Principal Building Configuration

- a. *Building Width:* 14 ft. Min., 150 ft. Max, **met**
- b. *Building Height Minimum:* 2 Story Min., **met**
- c. *Building Height Maximum:* 4 Story Max (excluding attic story), **met**

Sec. 60-550.2 Building frontages T-5.1

(1) Building Frontage Types:

Stoop, Storefront, and Gallery
Building frontage will be Storefront.

(2) Building Entries:

Primary entry door is encouraged along ground story façade facing a primary street.
Primary entry door for the development will be on the ground story of Main Street with a secondary rear entry fronting Miller Street.

(3) Building Envelope Articulation:

- a. *Ground Story Building Frontage Façade:* Windows and doors shall comprise a minimum of 25% and maximum 60% coverage of the total ground story façade frontage.
Met
- b. *Upper Story Building Frontage Façade:* Windows and doors shall comprise a minimum of 20 % and maximum 40 % coverage of the total upper story façade frontage.
Met
- c. *Ground Story Finished Floor Elevation:* The ground story must be a minimum of 2 feet minimum and 6 feet maximum above the front yard elevation (average grade).
Met

d. Front Façade Wall:

Blank lengths of wall exceeding 10 linear feet are prohibited.

Met

Sec. 60-550.3 External elements T-5.1

- (1) Front Yard Fence: Residential - A front yard fence a minimum of 2 feet and a maximum of 4 feet in height is encouraged to maintain spatial edge of street. No chain link, vinyl, split rail, or barbed wire is allowed.
N/A
- (2) Street Wall/Wall Opening: A vehicle entry way, as part of a street wall, shall be a maximum width of 20 feet (residential) and 24 feet (commercial); a pedestrian entry way shall be a maximum width of 6 feet.
N/A
- (3) Building Projections: No part of any building, except overhanging eaves, awnings, balconies, bay windows, and other architectural features shall encroach beyond the minimum front setback line.
Met
- (4) Encroachments: Stoops may encroach upon the front setback line by the following distances but not encroach in the street right-of-way.
Met
- (5) Garages: Detached garages shall be located a minimum of 20 feet from any street right-of-way.
Met
- (6) Driveways: Driveways are encouraged to be on the secondary street frontage. Driveways shall be paved and a minimum of 8 feet wide and a maximum of 20 feet wide.
Met
- (7) Parking: Residential - Vehicle parking areas shall be located only on driveways or designated parking areas and shall not extend into the street right-of-way or sidewalk.
Met
Commercial - Parking shall be located to rear of the property to the greatest extent possible. Parking on a side yard is limited to no more than 60 feet wide or 40% of the lot width. Screening and/or street wall is required for parking areas along a street.
Met
- (8) Accessory Structures: Accessory structures shall be located a minimum of 20 feet from any street right-of-way and 5 feet from either side or rear property line.
N/A

- (9) Landscaping: Landscaping is encouraged but shall not extend into any street sidewalk or travel way. Street trees are encouraged.
Met
- (10) Foundation Planting: Foundation plantings are encouraged but should be pruned and maintained with enough clearance from the building facade to encourage air circulation.
Met

Sec. 60-608. Parking Requirements

In accordance with Sec. 60-554 note 2, parking requirements for the development will be provided by municipality and private parking resources within 1,000 feet of the principal building through Main Street on-street parking and available parking in the Mechanics Row Parking Garage.

Floodplain Overlay District

In accordance with Chapter 60, Division 2 for a Floodplain Overlay District, a Flood Hazard Development Permit Application is being filed concurrently with this application.

Shoreland Zoning

Sec. 60-992. Principal and accessory structures

- (a) All new principal and accessory structures shall be set back at least 100 feet, horizontal distance, from the normal high-water line of great ponds classified GPA and rivers that flow to great ponds classified GPA, and 75 feet, horizontal distance, from the normal high-water line of other water bodies, tributary streams, or the upland edge of a wetland, except that in general development areas the setback from the normal high-water line shall be at least 25 feet, horizontal distance. Lots less than 150 feet deep measured at right angles to the shoreline which were in existence on or before December 17, 1973, shall have a shoreline setback requirement of 50 percent of the lot depth. In the resource protection district the setback requirement shall be 250 feet, horizontal distance, except for structures, roads, parking spaces or other regulated objects specifically allowed in that district in which case the setback requirements specified above shall apply.

The proposed development will meet all setback requirements for Shoreland Zoning.

For the purpose of this section the term "general development areas" includes all areas where the underlying zoning is identified as General Business, General Business II, Form Based Code districts or Industrial districts, except where these districts fall within the Taylor Pond or Lake Auburn Watersheds or on the east shore of Bobbin Mill Brook.

In addition:

- (1) The water body, tributary stream, or wetland setback provision shall neither apply

to structures which require direct access to the water body or wetland as an operational necessity, such as piers, docks and retaining walls, nor to other functionally water-dependent uses.

Not Applicable as no such structures are proposed.

- (2) On a nonconforming lot of record on which only a residential structure exists, and it is not possible to place an accessory structure meeting the required water body, tributary stream or wetland setbacks, the code enforcement officer may issue a permit to place a single accessory structure, with no utilities, for the storage of yard tools and similar equipment. Such accessory structure shall not exceed 80 square feet in area nor eight feet in height, and shall be located as far from the shoreline or tributary stream as practical and shall meet all other applicable standards, including lot coverage and vegetation clearing limitations. In no case shall the structure be located closer to the shoreline or tributary stream than the principal structure.

Not Applicable as no such structures are proposed.

- (b) Principal or accessory structures and expansions of existing structures which are permitted in the underlying zoning district, shall not exceed 35 feet in height. Exception: where identified as special local condition overlay to the shoreland zone the height of all principal or accessory structures shall be limited to 50 feet in height. This provision shall not apply to structures such as transmission towers, windmills, antennas, and similar structures having no floor area.

The proposed development is in the Downtown Traditional Center overlay, and the proposed 5 story building is in compliance with Section 60-550.1 and is 49 feet 7 inches in height at the building's frontage with Main Street. Please see Architecture Drawings.

- (c) The lowest floor elevation or openings of all buildings and structures, including basements, shall be elevated and constructed in accordance with provisions of this chapter, art. XII, div. 2, Floodplain Overlay District. Accessory structures may be placed in accordance with the standards of that division and need not meet the elevation requirements.

The lowest floor elevations of the building are in accordance with applicable ordinances for the Floodplain Overlay District.

- (d) The total footprint area of all structures, parking lots and other non-vegetated surfaces, within the SLO district shall not exceed 20 percent of the lot or a portion thereof, located within the SLO district, including land area previously developed, except in the general development areas adjacent to rivers that do not flow to great ponds classified GPA, where lot coverage shall not exceed 70 percent.

Do to the nature of the subject lot, we are requesting a waiver of the 70 percent standard for the proposed development. Please see wavier request in Cover Letter.

- (e) Retaining walls that are not necessary for erosion control shall meet the structure setback requirement [...].

Not Applicable – there are no retaining walls proposed as part of this project.

- (f) Notwithstanding the requirements stated above, stairways or similar structures may be allowed with a permit from the code enforcement officer, to provide shoreline access in areas of steep slopes or unstable soils provided: that the structure is limited to a maximum of four feet in width; that the structure does not extend below or over the normal high-water line of a water body or upland edge of a wetland, (unless permitted by the Department of Environmental Protection pursuant to the Natural Resources Protection Act, 38 M.R.S.A. § 480-C); and that the applicant demonstrates that no reasonable access alternative exists on the property.

Not Applicable – there are no retaining walls proposed as part of this project.

- A. Site Plan Review, Section 60-12777: In considering a site plan, the planning board shall make findings that the development has made provisions for:

1. Protection of adjacent areas against detrimental or offensive uses on the site by provision of adequate surface water drainage, buffers against artificial and reflected light, sight, sound, dust, and vibration; and preservation of light and air;

It is not anticipated that the proposed development will result in any detrimental effect including offensive uses on the site. The design provides for adequate surface water drainage, natural existing vegetative buffering from light, sightlines, sound, dust and vibration with preservation of light and air. Please see Section 11 Landscaping.

2. Convenience and safety of vehicular and pedestrian movement within the site and in relation to adjacent areas;

The site design and access points provide for safe vehicular movement and pedestrian movement within the site and in relation to adjacent areas. The layout is similar to other facilities in the Zoning area where the proposed flow pattern is known to accommodate requirements. Please see the plan set.

3. Adequacy of the methods of disposal for wastes; and

For wastewater, the proposed development will connect to the Auburn Water District sewer line for which the District has identified available capacity. For solid waste, dumpsters will be located in an enclosed area in the northeast corner of the project area.

4. Protection of environment features on the site and in adjacent areas

Downstream waters are protected by the extensive stormwater management features at the easterly limits of the site.

Sec. 60-999. Stormwater runoff.

- (a) All new construction and development shall be designed to minimize stormwater runoff from the site in excess of the natural predevelopment conditions. Where possible, existing natural runoff control features, such as berms, swales, terraces and wooded areas, shall be retained in order to reduce runoff and encourage infiltration of stormwaters.

The project follows standards for Erosion and Sediment Control as outlined in Sec. 46-209.a.1 – Erosion and sediment control and stormwater management plans. Please see Section 13 Stormwater.

- (b) Stormwater runoff control systems shall be maintained as necessary to ensure proper functioning.

Acknowledged.

Sec. 60-1001. Essential services.

- (a) Where feasible, the installation of essential services shall be limited to existing public ways and existing service corridors.

Proposed installation of essential services will use existing corridors and public ways.

- (b) The installation of essential services, other than road-side distribution lines, is not allowed in a resource protection district, except to provide services to a permitted use within said district, or except where the applicant demonstrates that no reasonable alternative exists. Where allowed, such structures and facilities shall be located so as to minimize any adverse impacts on surrounding uses and resources, including visual impacts.

Not applicable as no development is proposed within a resource development district.

- (c) Damaged or destroyed public utility transmission and distribution lines, towers and related equipment may be replaced or reconstructed without a permit.

Acknowledged.

Sec. 60-1005. Erosion and sedimentation control.

- (a) All activities which involve filling, grading, excavation or other similar activities which result in unstabilized soil conditions and which require a permit shall also require a written soil erosion and sedimentation control plan. The plan shall be submitted to the permitting authority for approval and shall include, where applicable, provisions for:

- (1) Mulching and revegetation of disturbed soil.
- (2) Temporary runoff control features such as hay bales, silt fencing or diversion...
- (3) Permanent stabilization structures such as retaining walls or rip-rap.

Acknowledged.

- (b) In order to create the least potential for erosion, development shall be designed to fit with the topography and soils of the site. Areas of steep slopes where high cuts and fills may be required shall be avoided wherever possible, and natural contours shall be followed as closely as possible.

The project follows standards for Erosion and Sediment Control as outlined in Sec. 46-209.a.1 – Erosion and sediment control and stormwater management plans. Please see Section 13 Stormwater.

- (c) Erosion and sedimentation control measures shall apply to all aspects of the proposed project involving land disturbance, and shall be in operation during all stages of the activity. The amount of exposed soil at every phase of construction shall be minimized to reduce the potential for erosion.

Acknowledged.

- (d) Any exposed ground area shall be temporarily or permanently stabilized within one week from the time it was last actively worked, by use of riprap, sod, seed, and mulch, or other effective measures. In all cases permanent stabilization shall occur within nine months of the initial date of exposure.

Acknowledged.

- (e) Natural and manmade drainageways and drainage outlets shall be protected from erosion from water flowing through them. Drainageways shall be designed and constructed in order to carry water from a 25-year storm or greater, and shall be stabilized with vegetation or lined with riprap.

The project follows standards for Erosion and Sediment Control as outlined in Sec. 46-209.a.1 – Erosion and sediment control and stormwater management plans. Please see Section 13 Stormwater.

Sec. 60-1006. Soils.

All land uses shall be located on soils in or upon which the proposed uses or structures can be established or maintained without causing adverse environmental impacts, including severe erosion, mass soil movement, improper drainage, and water pollution, whether during or after construction. Proposed uses requiring subsurface waste disposal, and commercial or industrial development and other similar intensive land uses, shall require a soils report based on an on-site investigation and be prepared by state-certified professionals. Certified persons may include Maine Certified Soil Scientists, Maine Registered Professional Engineers, Maine State Certified Geologists and other persons who have training and experience in the recognition and evaluation of soil properties. The report shall be based upon the analysis of the characteristics of the soil and surrounding land and water areas, maximum ground water elevation, presence of

ledge, drainage conditions, and other pertinent data which the evaluator deems appropriate. The soils report shall include recommendations for a proposed use to counteract soil limitations where they exist.

A soils report for the development site has been generated through the United States Department of Agriculture Natural Resources Conservation Service. Soil on the development site is identified as Made land, loamy materials, which will adequately support development without adverse environmental impacts. Please see Section 13 Natural Resources.

Sec. 60-1007. Water quality.

No activity shall deposit on or into the ground or discharge to the waters of the state any pollutant that, by itself or in combination with other activities or substances, will impair designated uses or the water classification of the water body, tributary stream or wetland.

No discharge of pollutants is anticipated from the proposed development.

Sec. 60-1095. Historic and Archaeological submission requirements

The location of historic and/or archaeological resources, must be indicated on the plans if the area is located within identified historic or archaeological areas shown on the Maine Historic Preservation Commission Maps in the Community Development Office.

The development site abuts a location identified as a place of historical significance by the Maine Historic Preservation Commission, the "Roak Block" identified as Tax Map/Lot 241/024, and is within close proximity to the Auburn Commercial Historic District that is identified as a district of historical significance by the Maine Historic Preservation Commission.

Section 2

Site Location Maps

Exhibit 2 – Location Map

Please see the enclosed location map which shows the proposed development in relation to existing streets.



SEBAGO
TECHNICS

WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd., Suite 4A
South Portland, ME 04106
Tel: 207-285-2198

LOCATION MAP
GREAT FALLS CONSTRUCTION

LOCATION:
186 MAIN STREET,
AUBURN, ME

INFORMATION:
MAINE GEOLIBRARY
USGS QUADRANGLE

SCALE: 1:24,000
DATE: 11/16/2022

Section 3

Abutters

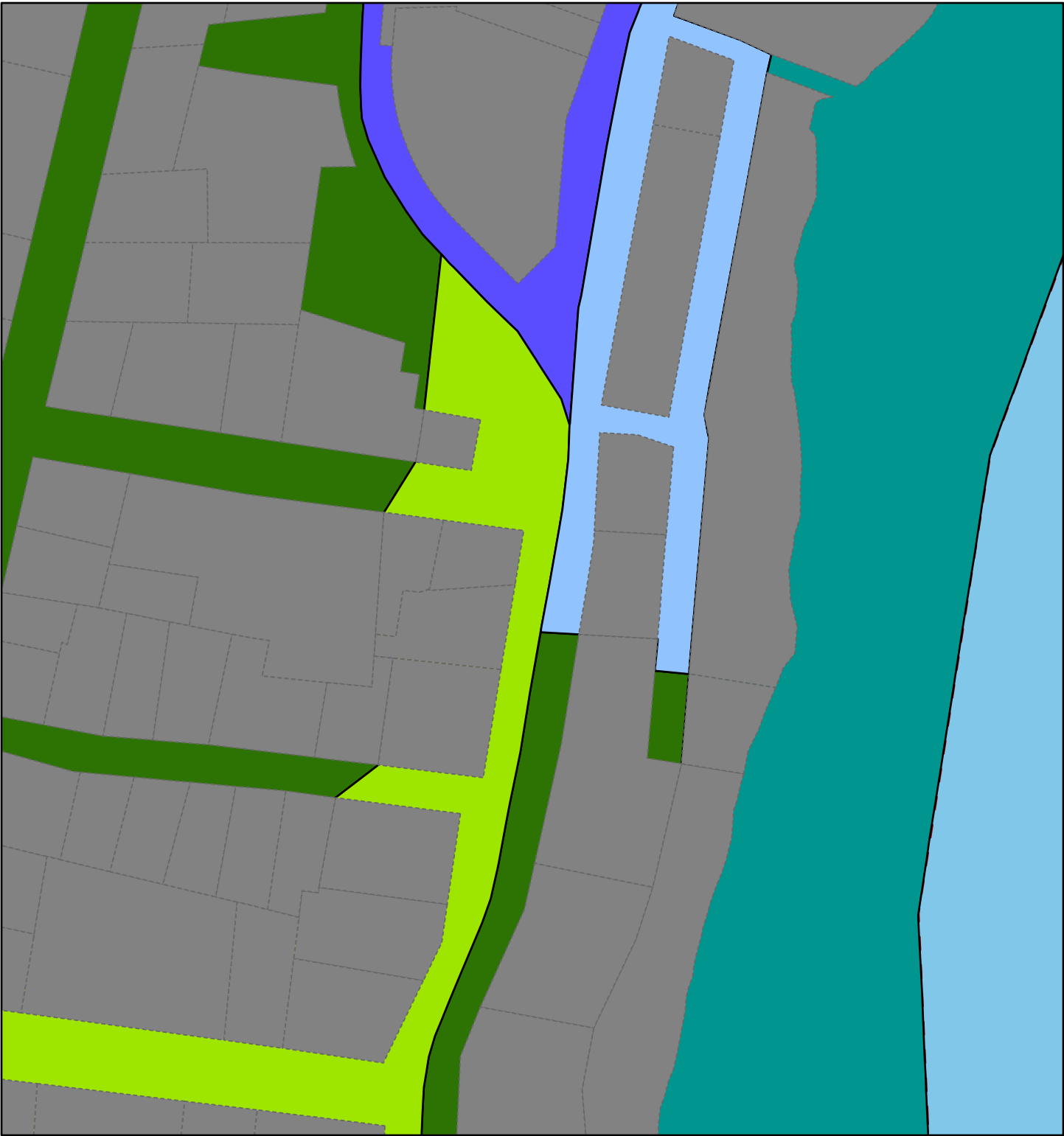
Exhibit 3 – Abutters

Please see this Exhibit for a map and table of the location, ownership, zone and present use of the immediate abutters for the site.

ABUTTERS LIST

MAP	LOT	OWNER	ADDRESS
231	014	PHILLIPS, HAROLD III & VANDERMAY, SHARON	201 MAIN STREET, AUBURN, ME, 04210
231	015-001	BOULET, SHAWN	44 DOLE DRIVE, PORTLAND, ME, 04103
231	016	BOULET, SHAWN	44 DOLE DRIVE, PORTLAND, ME, 04103
231	017	AUBURN, CITY OF	60 COURT STREET, AUBURN, ME, 04210
231	018	AUBURN, CITY OF	60 COURT STREET, AUBURN, ME, 04210
231	019	TURSON LLC	C/O WILLIAM T TURNER JR 368 MINOT AVE, AUBURN, ME, 04210
231	021	MCDONOUGH, HALSEY WILLIAM	61 WINTER STREET, GARDINER, ME, 04345
241	023	EDGEWATER LLC	30 TAYWOOD RD, AUBURN, ME, 04210
241	024	AUBURN HOUSING AUTHORITY	PO BOX 3037, AUBURN, ME, 04210

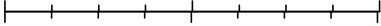
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Section 4

Title, Right, or Interest

Exhibit 4 - Title, Right or Interest

The City of Auburn is the owner of record for the subject parcel. JCS 18, LLC has obtained interest in the subject parcel and associated easements by contract for a Purchase and Sale Agreement with the City of Auburn. Please see this Exhibit for a copy of the relevant Deeds.

05654

BK3233 PG001

QUITCLAIM DEED

BOOTS E. A. POLIQUIN of Auburn, County of Androscoggin, State of Maine, for consideration paid, grants to THE CITY OF AUBURN, Auburn, County of Androscoggin, State of Maine, with Quitclaim Covenants the land and any buildings thereon located in Auburn, County of Androscoggin, State of Maine, bounded and described as follows:

A certain lot or parcel of land, with any buildings thereon, situated in Auburn, County of Androscoggin, State of Maine, bounded and described as follows:

Beginning on the easterly line of Main Street, at the southwest corner of land now or formerly of Edward A. Little, upon which is a brick block of houses; thence running southerly by the easterly line of said Main Street fifty (50) feet; thence easterly on a line parallel with the southerly line of said Little's land to the easterly side of a street or way known as Miller Street; thence northerly by said Miller Street fifty (50) feet to the southerly line of said Little's land; thence westerly by said Little's southerly line to Main Street and the point of beginning.

Being the same premises conveyed to the above named grantor by deed of Boots E. A. Poliquin and Frank Leonas dated July 27th, 1993, and recorded in the Androscoggin County Registry of Deeds, Book 3153, Page 145.

Witness my hand and seal this 8 day of NOVEMBER, 1993.

Claire J. Blanchette
Witness

Boots E. A. Poliquin
Boots E. A. Poliquin

STATE OF MAINE
ANDROSCOGGIN, SS

November 8, 1993

Personally appeared the above-named Boots E. A. Poliquin and acknowledged the foregoing instrument to be his free act and deed.

Before me,



Claire J. Blanchette
Notary Public

CLAIRE J. BLANCHETTE
NOTARY PUBLIC, MAINE
MY COMMISSION EXPIRES MAY 8, 2000

RECEIVED
ANDROSCOGGIN S.S.

94 MAR 25 AM 9:32

ATTEST:

Jeanne L. Bergeron
REGISTER OF DEEDS

WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS,

THAT, I, **HALSEY WILLIAM McDONOUGH**, of Gardiner, County of Kennebec, State of Maine,

in consideration of one dollar and other valuable consideration,

paid by the **CITY OF AUBURN**, a body corporate located in Auburn, County of Androscoggin, State of Maine,

the receipt whereof, I do hereby acknowledge, do hereby **GIVE, GRANT, BARGAIN, SELL AND CONVEY** unto the said **CITY OF AUBURN**, its successors and assigns forever,

A certain lot or parcel of land with any buildings thereon, situated in Auburn, County of Androscoggin, State of Maine, on the East side of Main Street, bounded and described as follows:

On the north by land formerly of one A'Hern; on the east by Miller Street; on the south by land formerly owned by Edward A. Little and John C. Symmes, and on the West by Main Street. Said lot is fifty (50) feet wide on Main Street and extends back of uniform width, to Miller Street.

Being **PARCEL ONE** described in the deed of Guy E. Giguere and Jacqueline Giguere to Halsey William McDonough dated June 23, 1986 and recorded in Androscoggin County Registry of Deeds at Book 1947, Page 51.

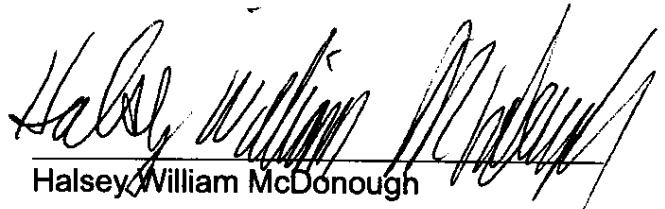
TO HAVE AND TO HOLD the aforegranted and bargained premises with all the privileges and appurtenances thereof, to the said **CITY OF AUBURN**, its successors and assigns, to it and their use and behoof forever.

AND I do **COVENANT** with the said Grantee, its successors and assigns, that I am lawfully seized in fee of the premises, that they are free of all encumbrances except as hereinbefore set forth; that I have good right to sell and convey the same to the said Grantee to hold as aforesaid and that I and my heirs shall and will **WARRANT and DEFEND** the same to the said Grantee, its successors and assigns forever, against the lawful claims and demands of all persons.

MAINE REAL ESTATE
TRANSFER TAX PAID

IN WITNESS WHEREOF, I, the said **HALSEY WILLIAM McDONOUGH**, have hereunto set my hand and seal this 26th day of September, in the year of our Lord two thousand and three.

Signed, Sealed and Delivered
in presence of:

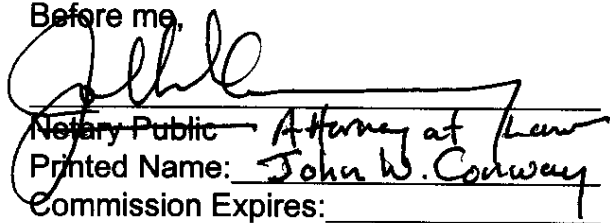

Halsey William McDonough

STATE OF MAINE,
Androscoggin, ss.

September 26, 2003

Personally appeared the above named **Halsey William McDonough** and acknowledged the foregoing instrument to be his free act and deed,

Before me,


~~Notary Public~~ Attorney at Law
Printed Name: John W. Conway
Commission Expires: _____

ANDROSCOGGIN COUNTY
Tina M. Chaurand
REGISTER OF DEEDS

Section 5

Technical Ability

Exhibit 5 – Technical Ability

Please see this Exhibit for proof of Technical Ability.

OUR BACKGROUND

Located in South Portland, Maine, Sebago Technics, Inc. (STI) is a consulting firm of more than 90 design professionals and technical staff providing services throughout New England. From the start, our business plan was simple: "to provide quality, cost-effective civil engineering services that are responsive to a customer's goals, schedule and budget." With the centralization of expertise and knowledge collaborating under one roof, every project and customer benefits with a superior result.



YOUR IDEAS, OUR SOLUTIONS.
OUR MUTUAL SUCCESS.



ONE COMPANY,
FIELD TO FINISH.

BIG ENOUGH TO SERVE,
SMALL ENOUGH TO CARE.

THE WAY WE WORK

As a **100% employee-owned company**, our employees set us apart through commitment and integrity. Sebago Technics assigns **small, integrated, multi-disciplined teams** comprised of Engineers and Landscape Architects supported by specialty service areas, including surveying, transportation, CADD, natural resources and environmental services. This allows a **quick, efficient response** to any project's unique challenges.

Our services and structure offers significant benefits to our clients; providing **flexible scheduling and workload management, increased communication between disciplines**, as well as fostering collaborative design. Our project managers maintain day-to-day involvement, where their experience and expertise is most valuable to our clients.

Our projects include private and public commissions. As a result, we have an **extremely diverse skill set** that we believe adds value to every project we work on. As a private consultant, we are highly attuned to ensuring projects maintain **functional budgets** and are designed with their final built project in mind. As a public consultant, we have worked closely with government staff, committees and community members to ensure **collaborative design solutions** with solid aesthetics and engineering.

OUR FIRM IN NUMBERS



EMPLOYEE-OWNERS
UNDER ONE ROOF



YEARS IN BUSINESS



AWARD-WINNING
DISCIPLINES

KYLIE S. MASON, RLA, LEED-AP

Chief Operations Officer



Kylie Mason, RLA, LEED-AP, is a Maine licensed landscape architect and Chief Operations Officer for Sebago Technics. In this role, she is responsible for the overall operations of one of Maine's largest and most successful land development firms.

In addition, Kylie oversees large-scale, complex projects serving a range of clients from Public & Private Schools to Medical Provider Campuses to Corporate Campuses. She excels in her listening and communication skills, which form the foundation of her strong design ability and understanding of clients' goals and objectives.

EXPERIENCE



- Project Manager for multiple projects for **Bowdoin College** including **Roux Center for the Environment, Whittier Athletic Complex, Pine Street Extension, Park Row Apartments, Harpswell Apartments, Brunswick Apartments, Schiller Coastal Studies Center**, and multiple campus improvement projects.
- **L.L. Bean Outdoor Discovery Center at Lower Flying Point**, a new waterfront facility serving thousands of visitors annually. Includes multi-purpose space, visitor orientation space and wrap-around porch with direct access to Casco Bay. This is the flagship for the premiere Maine retailer's Outdoor Discovery Programs.
- **Campus Master Plan and Site Development for the L.L. Bean Corporate & Retail Campuses** featuring innovative bioretention/rain gardens, considered the first of its kind in Maine, and received a LEED Silver Certification; multiple pedestrian plazas, retail vignette opportunities, and Route One Streetscape Enhancements in Freeport, Maine.
- **Riverwalk North, Westbrook, Maine:** Evaluation of Site, Masterplanning, Design and Permitting for new Riverwalk, Park and Brown Street realignment and streetscape along the Presumpscot River in Westbrook, between Bridge Street and Cumberland Street.
- The City's representative, project manager and lead designer for the **Gardiner Waterfront Park Project**, working side-by-side with numerous stakeholders to ensure timely delivery of the park. Significant collaboration with the Savings Bank of Maine, having committed \$1 million to the project.
- **Maine Medical Center Long-Range Planning and Parcel Evaluation:** Portland and Scarborough Campus.
- **Martin's Point Healthcare Long-Range Planning and Site Development:** Site Selection, Site Engineering and Permitting for innovative new Medical Office Facilities throughout Maine.
- **Margaret Chase Smith School:** 39,000 s.f. expansion of the existing Margaret Chase Smith School in Sanford, Maine. The new improvements will create 2 accessible playgrounds, efficient and safe parent drop-off, expansion of the parking doubling the existing capacity, and a new multi-purpose recreational field benefiting the students and the community.
- **Sanford School District:** Site Selection Study, Site Engineering and Permitting for a New 350,000 s.f. High School and Regional Technical Center in the City of Sanford.
- **Morse High School RSU1:** Evaluation and Recommendation of entire District for Site Selection, for new High School and Technical Center heading into Site Engineering, Development and Permitting

REGISTRATIONS



Registered Landscape Architect
Maine #3335

LEED Accredited Professional

CLARB Certified

LPA Certification, NHDOT

ASSOCIATIONS

American Society of Landscape
Architects

Council of Landscape Architects
Registration Board

USGBC (LEED)

PUBLIC SPEAKING

**2013 USGBC - New Hampshire
Chapter:** Sustainable and Functional
Aesthetics in the Landscape

2013 Maine Medical Association:
Accommodating your levels of care - LEED
Healthcare, Healing Spaces & Exterior
considerations for your practice

**2014 Maine Society of Landscape
Architects:** Sustainable Strategies for
Stormwater in Maine

SEBAGO
T E C H N I C S

TANNER F. GOODINE, EI

Civil Engineer



Mr. Goodine joined Sebago Technics, Inc., (STI) in March of 2021. Tanner graduated from the University of Maine with a degree in Civil Engineering. He has experience in construction with the Lane Corporation and in project design and inspection with Walsh Associates. He has served as a Resident Project Representative, permitted and designed projects and performed surveys using GPS. While at Sebago Technics, Tanner has served as a full-time construction inspector, performed erosion control inspections in both Maine and New Hampshire, and helped with design while not in the field.

EXPERIENCE



Portland Transfer Station Parking Lot Reconstruction and Stormwater Improvements – Portland, ME (April 2021 to August 2021):

Full-time resident inspections of the reconstruction of a parking lot for the bus terminal in Portland, Maine. The project included full-depth pavement reconstruction and redesign of the parking lots with new curb (granite and concrete). Various site improvements through the redesign were made, such as concrete sidewalks that comply with ADA standards, new traffic routing through the site, and new parking gates and lighting requiring the installation of electrical conduit. The project had various stormwater improvements such as the installation of approximately 30 drainage structures and the installation of a 17,000 square foot subsurface sand filter stormwater system. The project required coordination between the client and the contractor, both to keep the site operational and to schedule subcontractors under the employment of the client. The project also required coordination with the City of Portland's Stormwater division with weekly erosion control reports.

Boothbay Harbor Route 27 Sidewalk – Boothbay Harbor, ME (October 2021 –

December 2021): Full-time resident inspection on a Locally Administered Project (LAP) of the construction of approximately 1,400 linear feet of paved sidewalk with concrete slipform curbing. The project also included the installation of four drainage structures. Since this is an LAP, the project required adherence to Maine Department of Transportation (MDOT) standards and specifications as well as ADA compliance. The project required coordination between the Town (client) and the contractor, as well as Maine Department of Transportation (MDOT).

Various 3rd Party Inspections for the Towns of Wells, ME, Cape Elizabeth,

ME and Rye, NH (Ongoing): Weekly inspections for various ongoing subdivision construction projects in Wells, ME and Rye, NH. The projects vary in scope, but important highlights are the inspections of instream culvert installations, level spreaders and detention ponds, full-depth pavement construction, and other erosion control measures. As the projects continued into the winter season, these inspections included implementation of winter stabilization measures.

EDUCATION



University of Maine - Orono, ME
B.S., Civil Engineering
2020

CERTIFICATIONS

Erosion and Sediment Control
Certification Program

Local Project Administration (LPA)

OSHA-10



REBECCA L. GABRYSZEWSKI

Senior Team Leader, Entitlements Group



Ms. Gabryszewski joined Sebago Technics, Inc. (STI) in May of 2016 and serves as Senior Team Leader of the Entitlements Group. Rebecca brings to this role over 30 years of diverse experience, having worked with many different disciplines in the various aspects of permitting, environmental assessments and site planning. Rebecca has provided regulatory, environmental, and mapping services for projects throughout the Eastern states, Midwest, and New York. She has completed Environmental Assessments (NEPA), Phase I and Phase II Environmental Site Assessments, Monitoring reports, and Integrated Natural Resource Management Plans for various municipal, state and federal clients. She is responsible for the training and development of our team members for regulatory processes, creating clear, concise permitting applications, and the advancement of our map-making and graphic communications of our site information.

EXPERIENCE



Municipality/State/Federal Permitting

- **Lewiston Fire Station – Lewiston, ME:** Completed Conditional Use and Development Review applications for the City of Lewiston for the construction of a new 9,192 s.f. fire station.
- **Gorham School Department – Gorham, ME:** Completed local Site Plan Review application for the addition of new modular classrooms and cafeteria at the Narragansett School in Gorham.
- **Back Cove South Storage Facility – Portland, ME:** Completed local and State applications for the City of Portland CSO Abatement Project.
- **Maine Correctional Center – Windham, ME:** Completed local and State applications for the Maine Correctional Center. Phase 1 Conditional use, site plan, Minor Amendment. Phase 2 Site plan, SLODA, NRPA, ACOE.
- **109 Capitol Street DHHS & MePERS Office Buildings Complex, Augusta, Maine** – Conditional Use and Development Review
- **Whittier Field Bowdoin College – Brunswick, ME** – Major Development Review, DEP Site Location of Development

Environmental Work

- **Commons Phase I ESA – Sanford, ME:** Completed a Phase I ESA of the Sanford Medical Center properties that comprised the Summer Commons site.
- **LPA Marine SPCC Plan – 98 Island Ave, Peaks Island, Portland, ME:** Provided compliance updates and responded to EPA comments to LPA Marine's SPCC plan.
- **193 Main Street Ellsworth Phase I ESA and Air Test – Ellsworth, ME:** Completed a Phase I ESA of the site, coordinated air testing, and provided reporting memo of air test results.
- **1397 Washington Avenue – Portland, ME:** Completed a Phase I ESA of site, coordinated air test, and provided reporting memo of air test results.
- **Precision Manufacturing Phase I ESA – Biddeford, ME:** Completed a Phase I ESA for the former location of Precision Manufacturing in Biddeford.
- **Phase I ESAs for assorted solar projects:** Denmark, Sanford, Baldwin, ME.

VRAP review/respond to DEP comments

- Orono Public Works – Orono Maine

EDUCATION



B.A. Geography
University of Connecticut, Storrs, CT
1993

A.S. Office Management Systems
Sacred Heart University, Fairfield, CT
1988

TRAINING

U.S. Department of Transportation/
Federal Highway Administration NEPA
Training

U.S. Army Corps Wetland Delineation
methods course at the University of
New Hampshire - Durham, NH



Section 6

Financial Capacity

Exhibit 6 – Financial Capacity

Please see this Exhibit for proof of Financial Capacity.

March 31, 2023

Eric Cousens - Director
Planning, Permitting & Code Department
City of Auburn
60 Court Street
South Portland, ME 04106

RE: Project – 186 Main Street, Auburn, ME
Owner – JCS 18 LLC
Contractor – Great Falls Construction

Eric:

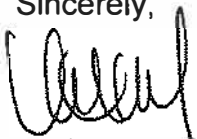
Jonathan and Cynthia Smith, through their construction company Great Falls Builders and various other real estate entities, have been commercial customers of Kennebunk Savings Bank for more than twenty years. The bank has a long standing confidence in both their financial and construction management of commercial and residential projects.

It is the opinion of Kennebunk Savings Bank that Great Falls Construction has the technical and financial capacity to successfully undertake the above referenced project. As such this letter is confirmation of Kennebunk Savings Bank's "intent to fund" the 186 Main Street project being proposed by Jonathan and Cynthia Smith. Please share this letter with any City or State agencies that require this document as part of the project approval process.

Full funding approval of the project is expected upon receipt of the final project plans, specs, estimates and projections to be provided by the borrower upon final City approval.

Please do not hesitate to contact me directly at (603-334-1021) with any questions or concerns.

Sincerely,



Christopher Kehl
Executive Vice President

Section 7

Traffic

Exhibit 7 – Traffic

The development is estimated to generate 87 trips, 114 trips, and 77 trips during the AM, PM, and Saturday peak hours. As such, the project requires a Traffic Movement Permit from the City of Auburn. Thus, in coordination with this application, a Traffic Movement Permit application has been concurrently filed with the City of Auburn. Please see the Traffic Movement Permit under a separate cover.

Parking requirements for the proposed development as stated in applicable City of Auburn Ordinance sections require 24 designated parking spaces to serve the proposed residential units including 1 handicap accessible space. The proposed parking to be redeveloped on the backside of the site is currently leased and unavailable for this development. As such, the required accessible space will be added to Main Street on-street parking, and the 23 additional spaces will be provided in the Mechanics Row Parking Garage. Please see this Exhibit for Pedestrian Pathway to Parking Plan.

Section 8

Lighting

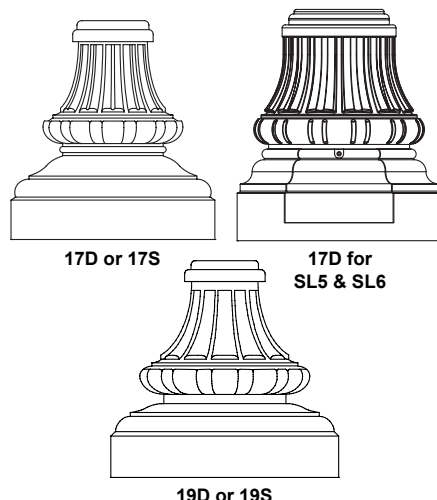
Exhibit 8 – Site Lighting

The proposed development to the parking area east of the subject parcel will remain mostly unchanged. Proposed changes include the relocation of one existing pole. Site Lighting specifications have been provided through Holophane.

Catalog Number	
Notes	Type

WDA

Wadsworth Aluminum Pole



SPECIFICATIONS

General Description

The lighting post shall be all aluminum, one-piece construction, with a classic tapered and fluted base design.

Materials

- The base and fluted tapered cast shaft shall be heavy wall, cast aluminum produced from certified ASTM 356.1 ingot per ASTM B-179 or ASTM B26.
- The straight shafts shall be extruded from aluminum, ASTM 6061 alloy.
- The tapered shaft shall be extruded from aluminum, ASTM 6063 alloy, spun to a tapered shape.
- All hardware shall be tamper resistant stainless steel
- Anchor bolts to be completely hot dip galvanized.

Construction

- The shaft shall be double welded to the base casting and shipped as one piece for maximum structural integrity.
- The shaft shall be welded inside the base casting at the top of the access door, and externally where the shaft exits the base.
- All welding shall be per ANSI/AWS.

Dimensions

- The post height shall range from 8' to 22' with a 17 or 19" diameter base.
- At the top of the post, an integral tenon with a transitional donut shall be provided for luminaire mounting.

Installation

- The post shall be provided with four, hot dip galvanized L-type anchor bolts.
- A door shall be provided in the base for anchorage and wiring access.
- A grounding screw shall be provided inside the base opposite the door.

Warranty

1-Year Limited. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

IMPORTANT INSTALLATION NOTES:

- **Do not** erect poles without having fixtures installed.
- Factory-supplied templates must be used when setting anchor bolts. Acuity Brands Lighting will not accept claim for incorrect anchorage placement due to failure to use factory template.
- If poles are stored outside, all protective wrapping must be removed immediately upon delivery to prevent finish damage.
- Acuity Brands Lighting is not responsible for the foundation design.

Note: Actual performance may differ as a result of end-user environment and application.
Specifications subject to change without notice.

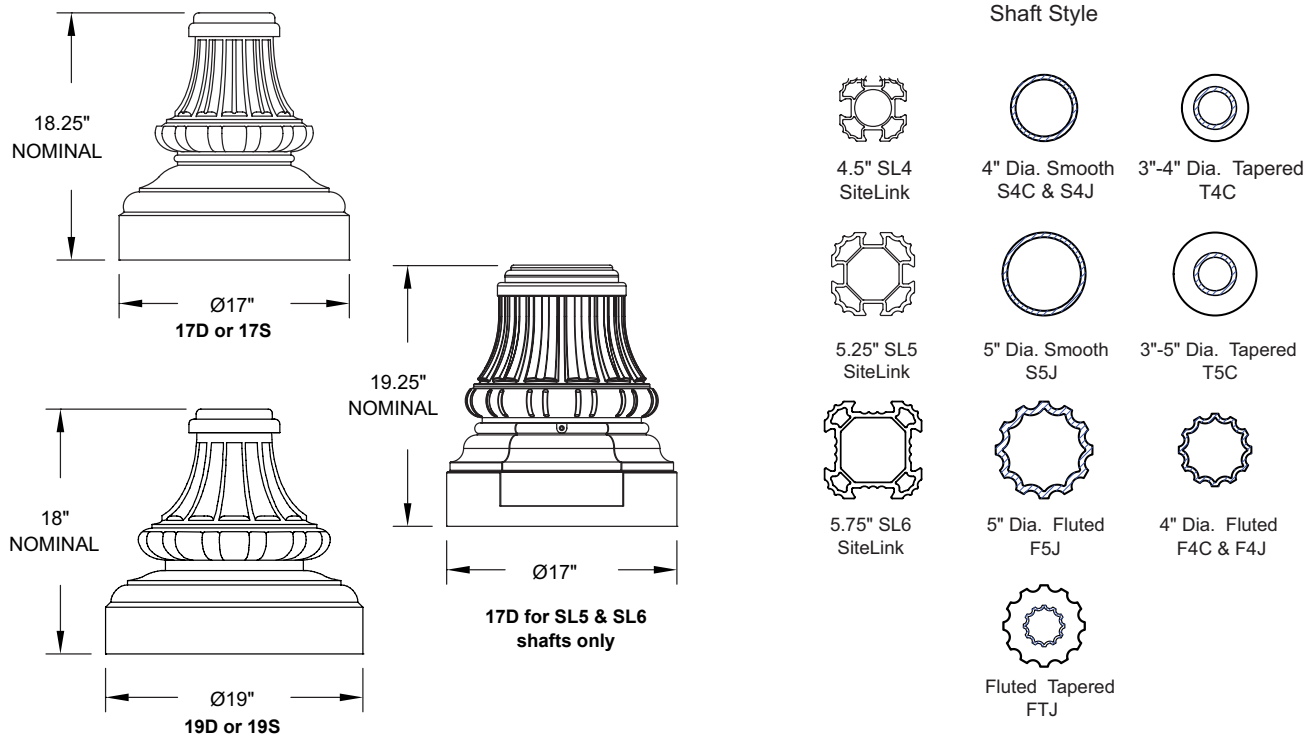
ORDERING INFORMATION

Example: WDA 14 S4C 17D C03 BK

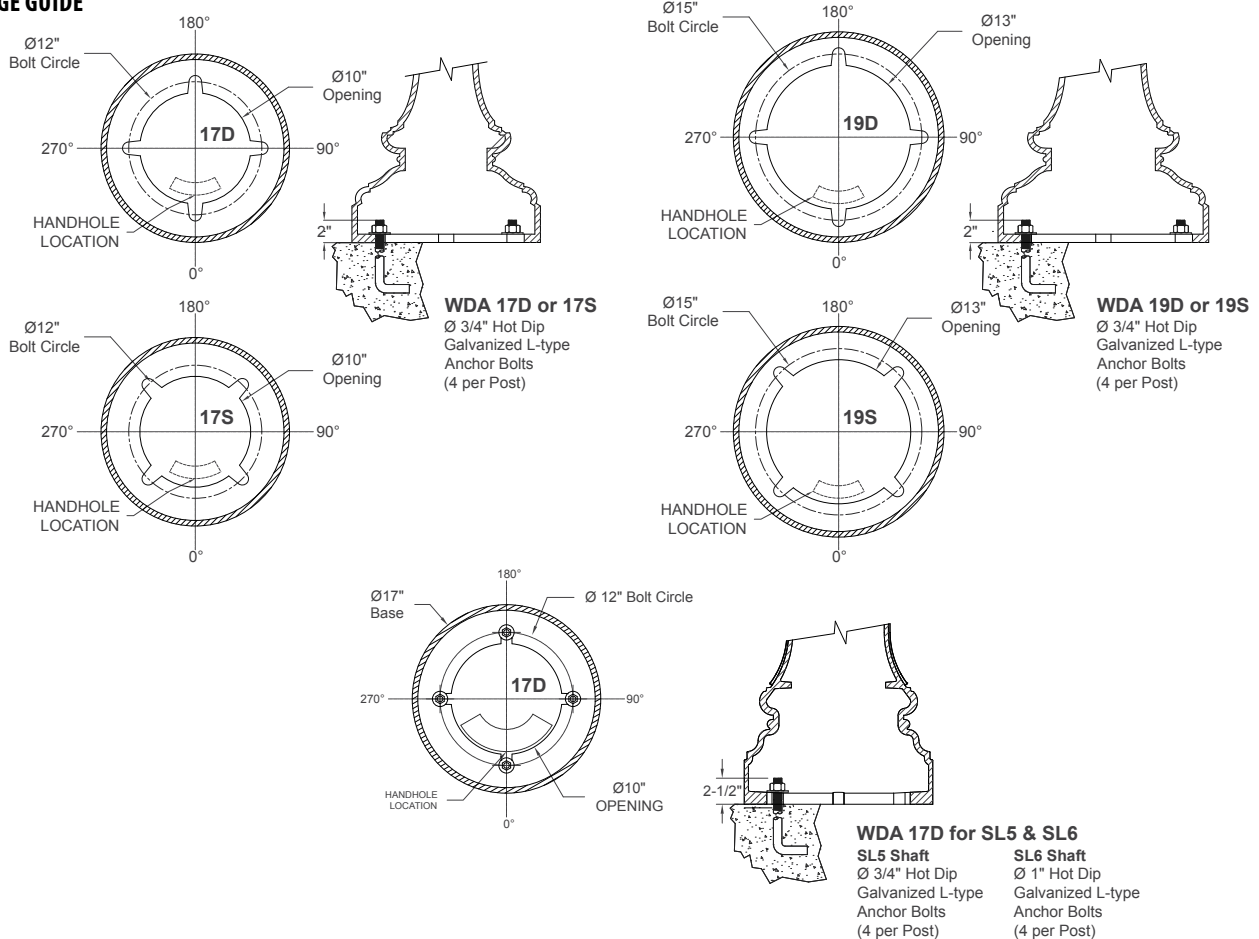
Post	Height	Shaft Style	Base	Tenon
WDA Wadsworth Aluminum Pole	08 8 Feet	Fluted Shaft	17D 17" Base, Diamond Pattern Bolt Circle	PLN ¹ Plain pole top pole - no tenon
	09 9 Feet	FTJ Fluted Tapered (Cast), .25	17S 17" Base, Square Pattern Bolt Circle	C03 3X3 Tenon, (actual size 2.88 O.D. X 3" LG.)
	10 10 Feet	F4C 4" Diameter Fluted, .125 Wall	19D 19" Base, Diamond Pattern Bolt Circle	C04 3X4 Tenon, (actual size 2.88 O.D. X 4" LG.)
	11 11 Feet	F4J 4" Diameter Fluted, .25 Wall	19S 19" Base, Square Pattern Bolt Circle	C05 3X5 Tenon, (actual size 2.88 O.D. X 5" LG.)
	12 12 Feet	F5J 5" Diameter Fluted, .25 Wall		C06 3X6 Tenon, (actual size 2.88 O.D. X 6" LG.)
	13 13 Feet	SiteLink Shaft		C08 3X8 Tenon, (actual size 2.88 O.D. X 8" LG.)
	14 14 Feet	SL4 4.5" .156 Wall		C09 3X9 Tenon, (actual size 2.88 O.D. X 9" LG.)
	15 15 Feet	SL5 5.25" .25 Wall		C12 3X12 Tenon, (actual size 2.88 O.D. X 12" LG.)
	16 16 Feet	SL6 5.75" .25 Wall		C14 3X14 Tenon, (actual size 2.88 O.D. X 14" LG.)
	17 17 Feet	Smooth Shaft		E08 ² 3-1/2X8 Tenon, (actual size 3.5 O.D. X 8" LG.)
	18 18 Feet	S4C 4" Diameter .125 Wall		G12 ² 4-3/8X12 Tenon, (actual size 4.38 O.D. X 12" LG.)
	19 19 Feet	S4J 4" Diameter .25 Wall		H10 ² 4-1/2X10 Tenon, (actual size 4.5 O.D. X 10" LG.)
	20 20 Feet	S5J 5" Diameter .25 Wall		VGP ² VGC Plate
	21 21 Feet	Tapered Shaft		
	22 22 Feet	T4C 3" to 4" Diameter .125 Wall		
		T5C 3" to 5" Diameter .125 Wall		
	NOTE: Refer to Pole Guide on page 4 for height based on Shaft Style			NOTE: 1. Available with SL4, SL5 and SL6 shaft styles only 2. Available with F5J and S5J shaft styles only

Finish	Options	Welded Provisions	Accessories: Order as separate catalog number.
BK Black	DBB Factory installed direct burial base	EXXXY ³ Provision for eye bolt	Anchor Bolt Sets: AB-27-4 ⁴ 1" Anchor bolt set, galvanized steel
BZ Bronze	FGB GFI receptacle assembly inside base	LXXXY ³ Large provision	AB-31-4 3/4" Anchor bolt set, galvanized steel
CMC Customer matched color	GRD 1/2 Brass grounding lug	RXXXY ³ Receptacle provision	Direct Burial Bases: ADB81R4 ⁵ 17" Galvanized steel direct burial base ADB81R7 ⁵ 20" Galvanized steel direct burial base
CTBS Standard color to be determined		SXXXY ³ Small provision	Templates: TMP-85 12" Bolt Circle, (for 17D Base Option) TMP-157 12" Bolt Circle, (for 17S Base Option) TMP-98 15" Bolt Circle, (for 19D Base Option) TMP-158 15" Bolt Circle, (for 19S Base Option) TMP40010 12" Bolt Circle, (for 17D Base Option): for SiteLink Shafts only
DB Dark Blue		SBORXXXY ³ Occupancy sensor provision	Breakaway Kits & Transpo Couplings: BWKT 1700R 1200BC 075AB xx For use with 17" base, excludes SiteLink. Breakaway Kit for 3/4" anchor bolts, includes Bearing Plate and Skirt (xx=finish). Transpo breakaway couplings shipped as separate line item (TRANSP0-SPM4075XL) TRANSP0-SPM4075XL Transpo breakaway couplings for BWKT 1700R 1200BC 075AB BWKT 1700R 1200BC 100AB xx For use with 17" base, only SiteLink. Breakaway Kit for 1" anchor bolts, includes Bearing Plate and Skirt (xx=finish). Transpo breakaway couplings shipped as separate line item (TRANSP0-SPM4100XL) TRANSP0-SPM4100XL Transpo breakaway couplings for BWKT 1700R 1200BC 100AB BWKT 1900R 1500BC 075AB xx For use with 19". Breakaway Kit for 3/4" anchor bolts, includes Bearing Plate and Skirt (xx=finish). Transpo breakaway couplings shipped as separate line item (TRANSP0-SPM4075XL) TRANSP0-SPM4075XL Transpo breakaway couplings for BWKT 1900R 1500BC 075AB
GH Graphite			NOTE: 4 For use with SL6 poles. 5 Base moment cannot exceed 3800 ft. lbs. Must validate wind load calculation. Not available with SL5 and SL6 Shaft styles.
GN Green			
GR Gray			
PP Prime Painted			
RALxxxxSDCR RAL Super Durable Corrosion Resistant, 80% Gloss Paint, replace xxxx with RAL number.			
SL Silver			
WH White			
		NOTE: 3 Replace "XXXX" with height from grade (inches), can be up to 3 digits. Must use whole numbers. Leading zeros are not used. Replace Y with orientation from hand hole (A=0, B=90, C=180, D=270). Add multiple provisions as necessary to cover each location. Must validate EPA restrictions for banners.	

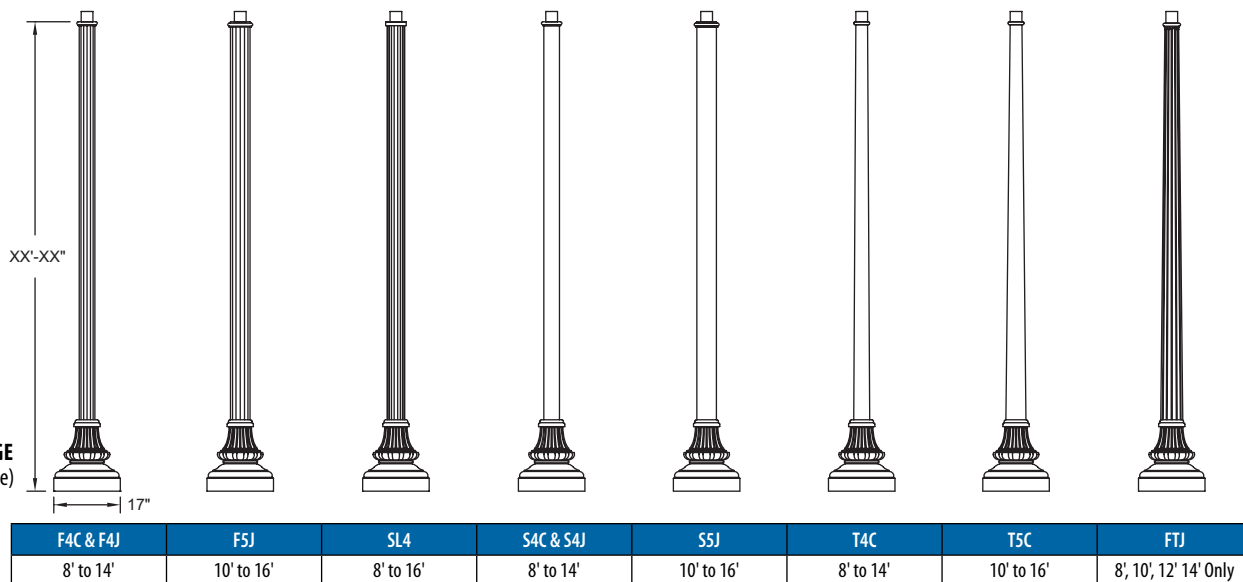
DIMENSIONAL DATA



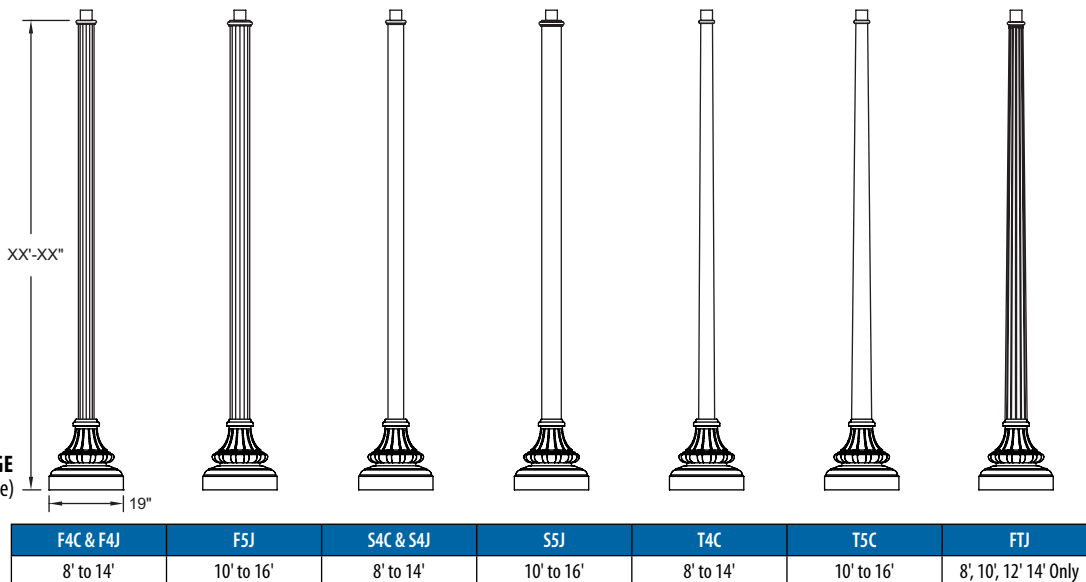
ANCHORAGE GUIDE



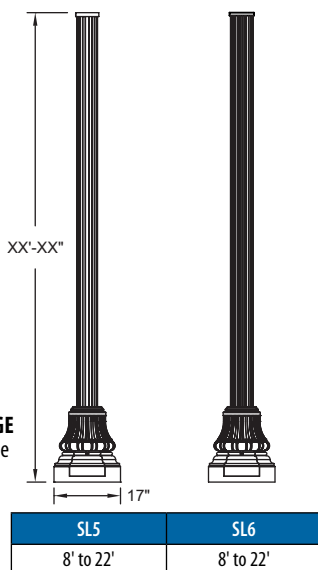
POLE GUIDE

POLE HEIGHT RANGE
(For 17" diameter base)


F4C & F4J	F5J	SL4	S4C & S4J	S5J	T4C	T5C	FTJ
8' to 14'	10' to 16'	8' to 16'	8' to 14'	10' to 16'	8' to 14'	10' to 16'	8', 10', 12' 14' Only

POLE HEIGHT RANGE
(For 19" diameter base)


F4C & F4J	F5J	S4C & S4J	S5J	T4C	T5C	FTJ
8' to 14'	10' to 16'	8' to 14'	10' to 16'	8' to 14'	10' to 16'	8', 10', 12' 14' Only

POLE HEIGHT RANGE
(For 17" diameter base
SL5 & SL6 only)


SL5	SL6
8' to 22'	8' to 22'

Catalog Number	
Notes	Type

WFCL2

Utility Washington Series Luminaire
Full Cutoff LED2



Mechanical

- Heavy grade A360 cast aluminum (<1% copper)
- Tool-less access with a spring-loaded latch
- Hidden hinge door allowing the door to swing open and remain open
- Optional internal or external NEMA twist lock photocontrol receptacle. Housing contains a tempered glass window to allow light to reach the cell for internal versions.
- Mount to slip-fitter that will accept 3" high by 2-7/8" to 3-1/8" O.D. pole tenon
- Decorative top cover contains stainless steel hinge which secures entry the LED optical chamber
- Polyester power coat paint to ensure maximum durability
- Rigorous multi-stage pre-treating and painting process yields a finish that achieves a scribe creepage rating of 8 (per ASTM D1654) after over 5,000 hours exposure to salt fog chamber (operated per ASTM B117) on standard and RAL finish options.
- RAL (RALxxxxSDCR) paint colors are Super Durable Corrosion Resistant, 80% gloss.

Electrical

- All surge protection meets ANSI/IEEE C62.41.2 10kV/10kA.
- Standard SPD meets 10kV/5kA per ANSI C136.2-2015.
- 20KV Option meets 20kV/10kA per ANSI C136.2-2015.
- Quick disconnect connectors for ease of installation and maintenance.
- Three pole terminal block is standard, with optional prewired leads for ease of installation
- LLED drivers meet maximum total harmonic distortion (THD) of 20%, >0.90 Power Factor and are ROHS compliant. Minimum operating temperature is -40°C. Electronic driver has an estimated minimum life of 100,000 hours at 25°C.

Optical

- IP65 rated optical compartment
- LED circuit board located in the top cover
- Asymmetric or Symmetric full cutoff distributions
- 3000K, 4000K, and 5000K CCT
- 70CRI Standard

Control Options

- Field Adjustable Output (AO) module - Onboard device that adjusts the light output and input wattage to meet site specific requirements. The AO module is preset at the factory to position number 8 (see chart).
- Factory Programmed Driver (FPDxx) - Customize lumen output prior to manufacturing and still enables control leads so other options can also be used
- Long Life Photocontrols (PCLL) - 20 Year Life
- 3 and 7 pin photocontrol receptacles internally (PR3, PR7) or externally (PR3E, PR7E) mounted

Testing/Compliance

- UL 1598 - Wet Locations Safety Listing
- Suitable for ambient temperatures -40°C to 40°C

Manufacturing

- Manufactured in Crawfordsville, Indiana, ARRA compliant
- 100% electrical testing on all luminaires before shipment
- Ten (10) years minimum experience in manufacturing LED based products

Buy American Act

This product is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT regulations. Please refer to www.acuitybrands.com/resources/buy-american for additional information.

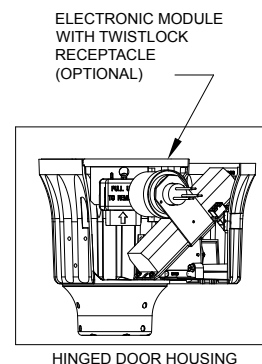
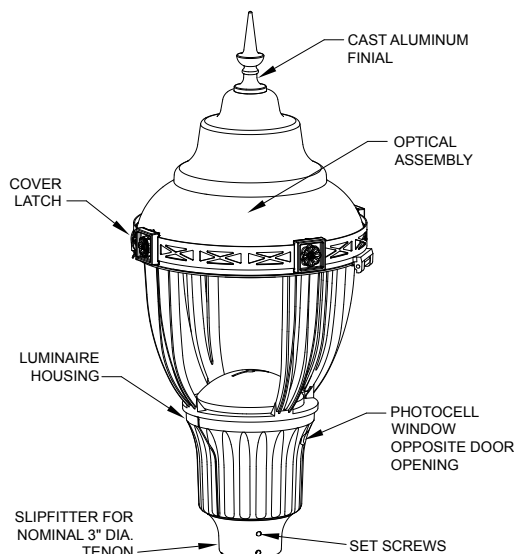
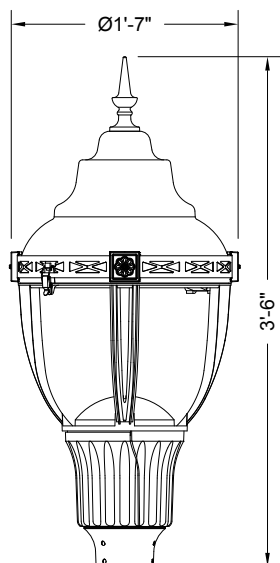
Warranty

5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

DesignLights Consortium® DLC qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25°C. Specifications subject to change without notice.

DIMENSIONAL DATA



Maximum Weight - 57 lbs
Maximum Effective Projected Area - 1.72 sq. ft.

WFCL2

Utility Washington Series Luminaire Full Cutoff LED2

ORDERING INFORMATION

Example: WFCL2 P20 30K AS GN L2 N P73

Series	Led performance package	LED Color temperature	Voltage	Optics	Housing Color	Finial
WFCL2 Utility Washington LED FCO	P10 1,500 nominal lumens (amber only)	AMB True amber	MVOLT Auto-sensing voltage (120 thru 277) 50/60 HZ	FC2 Type 2 distribution full cutoff	BK Black	NF None
	P20 4,500 nominal lumens	30K 3000K CCT	HVOLT Auto-sensing voltage (347 thru 480) 50/60 HZ	FC3 Type 3 distribution full cutoff	GR Gray	BL Ball
	P30 6,500 nominal lumens	40K 4000K CCT			GH Graphite	SK Spike
	P40 8,500 nominal lumens	50K 5000K CCT			GN Green	
	P50 11,500 nominal lumens				PP Prime paint	
				FC4 Type 4 distribution full cutoff	WH White	
				FC5 Type 5 distribution full cutoff	BZ Bronze	
					RALxxxxSDCR RAL Super Durable Corrosion Resistant, 80% Gloss Paint, replace xxxx with RAL number.	
					CMC Custom color match	

Options: Option Compatibility Matrix on page 3 of 4

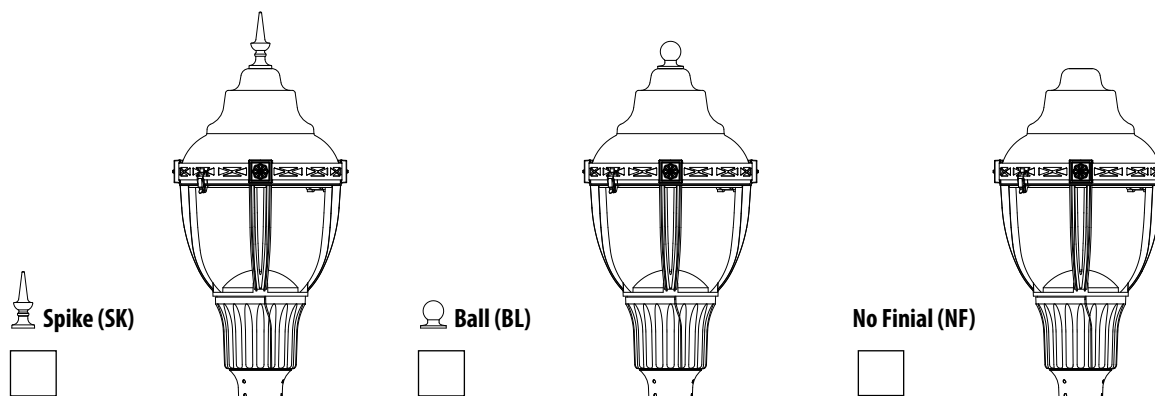
A0 Field Adjustable Output	PR3E NEMA Twist Lock Photocontrol Receptacle - 3 PIN. Externally mounted, available with NF option	L1H 1.5 ft prewired leads
FPDxx Factory Programmed Driver	PR7E NEMA Twist Lock Photocontrol Receptacle - 7 PIN. Externally mounted, available with NF option	L03 3ft prewired leads
PR3 NEMA Twist Lock photocontrol receptacle - 3 PIN receptacle only.	SH Shorting cap	L10 10 ft prewired leads
PR7 NEMA Twist Lock Dimming photocontrol receptacle - 7 PIN receptacle only.	HSS House side shield	L20 20 ft prewired leads
PCLL DTL long life twistlock photocontrol for solid-state MVOLT		L25 25 ft prewired leads
P34 DTL long life twistlock photocontrol for solid-state 347V		L30 30 ft prewired leads
P48 DTL long life twistlock photocontrol for solid-state 480V		NL1X1 NEMA Label 1" X 1"
		NL2X2 NEMA Label 2" X 2"
		20KV 20kV/10kA surge protection

Accessories: Order as separate catalog number.

WFCL2HSS1	House side shield (Qty 1)
WFCL2HSSJ50	House side shield, (Bulk Qty 50)
RK8WFCL2 MVOLT SPD10K	Replacement surge protector kit, 10KV/5Ka 120-277V
RK8WFCL2 HVOLT SPD10K	Replacement surge protector kit, 10KV/5Ka 347-480V
RK8WFCL2 MVOLT SPD20K	Replacement surge protector kit, 20KV/10Ka 120-277V
RK8WFCL2 HVOLT SPD20K	Replacement surge protector kit, 20KV/10Ka 347-480V

FINIAL INFORMATION

Mark Appropriate Box for Finial Options



OPTIONS MATRIX

Mounting		SELECTED OPTION (start here)										
		A0	FPDxx	PR3	PR3E	PR7	PR7E	P34	P48	PCLL	SH	20kV
LED Performance Package	P10	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	P20	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	P30	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	P40	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	P50	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
Voltage	MVOLT	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y
	HVOLT	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Finial	BL	Y	Y	Y	N	Y	N	Y	Y	Y	Y	Y
	SK	Y	Y	Y	N	Y	N	Y	Y	Y	Y	Y
	NF	Y	Y	Y	M	Y	M	Y	Y	Y	Y	Y
Compatible Options	A0		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	FPDxx	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y
	PR3	Y	Y		N	N	N	Y	Y	Y	Y	Y
	PR3E	Y	Y	N		N	N	Y	Y	Y	Y	Y
	PR7	Y	Y	N	N		N	Y	Y	Y	Y	Y
	PR7E	Y	Y	N	N	N		Y	Y	Y	Y	Y
	P34	Y	Y	Y	Y	Y	Y		N	N	N	Y
	P48	Y	Y	Y	Y	Y	Y	N		N	N	Y
	PCLL	Y	Y	Y	Y	Y	Y	N	N		N	Y
	SH	Y	Y	Y	Y	Y	Y	N	N	N		Y
	20kV	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	

Y = Valid Option Combination

M = Must have: one of these must be installed for the luminaire to operate

N = Combination Not available

LUMEN AMBIENT TEMPERATURE (LAT) MULTIPLIERS

Use the factors to determine relative lumen output for average ambient temperatures from 0-40C (32-104F)

Ambient Temp (degrees C) Lumen Multiplier								
0	5	10	15	20	25	30	35	40
1.05	1.04	1.03	1.02	1.01	1.00	0.99	0.98	0.97

PROJECTED LED LUMEN MAINTENANCE

Data references the extrapolated performance projections for the platforms noted in 25C ambient, based on 6,000 hours of IED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11). To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Package	Lumen Maintenance						L70 Hrs
	25k hrs	36k hrs	50k hrs	60k hrs	75k hrs	100k hrs	
P20-P40	0.97	0.96	0.95	0.94	0.93	0.91	383,000
P50	0.96	0.94	0.93	0.91	0.90	0.87	267,667

PERFORMANCE DATA

LED Package	Distribution	SystemWatts	3000K		4000K		5000K	
			Lumens	LPW	Lumens	LPW	Lumens	LPW
P20	FC2	45	4265	95	4701	104	4853	108
	FC3	45	3838	85	4230	94	4357	97
	FC4	45	4054	90	4468	99	4603	102
	FC5	45	4210	94	4640	103	4780	106
P30	FC2	66	6082	92	6703	102	6905	105
	FC3	66	5472	83	6031	91	6213	94
	FC4	66	5781	88	6371	97	6563	99
	FC5	66	6002	91	6615	100	6815	103
P40	FC2	89	7823	88	8622	97	8882	100
	FC3	89	7038	79	7757	87	7991	90
	FC4	89	7436	84	8195	92	8442	95
	FC5	89	7721	87	8509	96	8766	98
P50	FC2	139	11300	81	12454	90	12830	92
	FC3	139	10166	73	11205	81	11543	83
	FC4	139	10740	77	11837	85	12195	88
	FC5	139	11152	80	12291	88	12662	91

FPDXX DATA OPTIONS

FPDxx Setting	Wattage	P20 30K				P20 40K				P20 50K			
		FC2	FC3	FC4	FC5	FC2	FC3	FC4	FC5	FC2	FC3	FC4	FC5
Standard	45	4265	3838	4054	4210	4701	4230	4468	4640	4843	4357	4603	4780
FPD95	43	4052	3646	3852	3999	4466	4018	4245	4408	4601	4139	4373	4541
FPD90	41	3839	3454	3649	3789	4231	3807	4021	4176	4359	3921	4143	4302
FPD85	38	3626	3262	3446	3578	3996	3595	3798	3944	4117	3704	3913	4063
FPD80	36	3412	3070	3243	3368	3761	3384	3575	3712	3874	3486	3683	3824

FPDxx Setting	Wattage	P30 30K				P30 40K				P30 50K			
		FC2	FC3	FC4	FC5	FC2	FC3	FC4	FC5	FC2	FC3	FC4	FC5
Standard	66	6082	5472	5781	6002	6703	6031	6371	6615	6905	6213	6563	6815
FPD95	63	5778	5198	5492	5702	6368	5729	6053	6285	6560	5902	6235	6474
FPD90	59	5474	4925	5203	5402	6033	5428	5734	5954	6215	5591	5907	6134
FPD85	56	5170	4651	4914	5102	5698	5126	5415	5623	5870	5281	5579	5793
FPD80	53	4865	4377	4625	4802	5362	4825	5097	5292	5524	4970	5251	5452
FPD75	50	4561	4104	4336	4502	5027	4523	4778	4962	5179	4660	4923	5111
FPD70	46	4257	3830	4046	4202	4692	4221	4460	4631	4834	4349	4594	4771

FPDxx Setting	Wattage	P40 30K				P40 40K				P40 50K			
		FC2	FC3	FC4	FC5	FC2	FC3	FC4	FC5	FC2	FC3	FC4	FC5
Standard	89	7823	7038	7436	7721	8622	7757	8195	8509	8882	7991	8442	8766
FPD95	85	7432	6686	7064	7335	8191	7369	7785	8084	8438	7592	8020	8328
FPD90	80	7041	6334	6692	6949	7760	6891	7375	7658	7994	7192	7598	7889
FPD85	76	6649	5982	6320	6562	7329	6593	6966	7233	7550	6792	7176	7451
FPD80	71	6258	5631	5948	6176	6897	6206	6566	6807	7106	6393	6754	7013

FPDxx Setting	Wattage	P50 30K				P50 40K				P50 50K			
		FC2	FC3	FC4	FC5	FC2	FC3	FC4	FC5	FC2	FC3	FC4	FC5
Standard	139	11300	10166	10740	11152	12454	11205	11837	11291	12830	11543	12195	12662
FPD95	132	10735	9658	10203	10594	11831	10644	11245	11677	12188	10966	11585	12029
FPD90	125	10170	9150	9666	10037	11209	10084	10654	11062	11547	10389	10975	11396
FPD85	118	9605	8641	9129	9479	10586	9524	10062	10447	10905	9811	10365	10763
FPD80	111	9040	8133	8592	8922	9963	8964	9470	9833	10264	9234	9756	10130

WFCL2

Utility Washington Series Luminaire Full Cutoff LED2

COMPONENTS & OPTIONS DATA



AO
Manual field adjustable output dimming device



20kV
Safeguard your investment from extreme voltage spikes with our new Extreme 20kV/10kA SPD



HSS
Minimize backlight with a louvered house-side-shield. Available as a factory option or field accessory

Section 9

Utilities

Exhibit 9 – Utilities

Water:

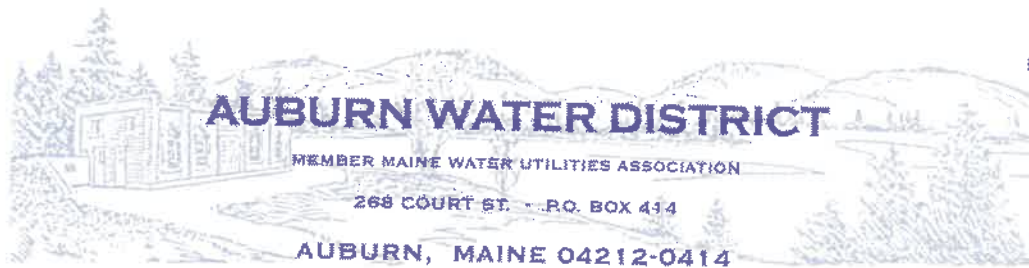
A proposed water service line will extend from the existing water main in Main Street. Please see the attached communication with the Auburn Water District.

Wastewater:

A proposed sewer main will connect to the existing sewer main in Miller Street. Please see the attached communication with the Auburn Water District.

Electrical:

Three phase power will be extended onto the site from existing lines on Main Street and will receive service from Central Maine Power.



Tanner Goodine, E.I.
Sebago Technics
75 John Roberts Rd
Suite 1A, South Portland, Me 04106-6963

March 30, 2023

Subject: 186 Main Street Water and Sewer Capacity

Tanner,

Thank you for providing the capacity estimates for the property located at 186 Main Street, Auburn Maine. The District has sufficient Water and Sewer capacity at this location to serve the proposed development. We look forward to further review of the plans to ensure that the configuration of the development does not impact our sewer mains on Miller Street.

Sincerely;

A handwritten signature in blue ink, which appears to read "Michael Broadbent", is written over the printed name.

Michael Broadbent
Superintendent
Auburn Water and Sewer District

Section 10

Landscaping

Exhibit 10 – Landscaping

Proposed landscaping for the development site is concentrated on the east side of the proposed building buffering the area between the proposed building and the existing parking area and associated changes. A plant schedule is included in the landscaping plan found in the plan set. Please see Plan Set sheet 7.

Section 11

Stormwater

Exhibit 11 – Stormwater Management

Please see the attached Stormwater Report including the Stormwater Plans and Details.



STORMWATER MANAGEMENT REPORT

For

**186 MAIN STREET
AUBURN, MAINE**

Prepared for:

JCS 18, LLC
20 Mechanic Street
Gorham, ME 04038

Prepared by:

Sebago Technics, Inc.
75 John Roberts Rd, Suite 4A
South Portland, ME 04106

May, 2023

Table of Contents

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1. Introduction.....	1
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3. Soils.....	1
4. Proposed Site Improvements.....	1
5. Existing Conditions Model.....	2
6. Proposed Conditions Model.....	2
7. Stormwater Management.....	3
City of Auburn Stormwater Standards.....	3
8. Summary.....	4

Appendices

- Appendix 1A: Hydrologic Modeling– Existing Conditions (HydroCAD) Summary
- Appendix 1B: Hydrologic Modeling – Proposed Conditions (HydroCAD) Summary
- Appendix 2: Soil Information & FEMA Map
- Appendix 3: Stormwater Management Plans

**STORMWATER MANAGEMENT REPORT
186 MAIN STREET DEVELOPMENT
AUBURN, ME**

1. Introduction

This Stormwater Management Plan Report has been prepared to present analyses performed to address the potential impacts associated with the project due to proposed modifications in stormwater runoff characteristics and land cover changes. The stormwater management controls that are outlined in this report have been designed to suit the proposed development and comply with applicable regulatory requirements.

2. Existing Conditions

The project site consists of undeveloped land located at 186 Main Street in Auburn, Maine. The site is approximately 0.16 acres or 6,800 square feet. The site is bounded by Main Street to the west, Miller Street and the Androscoggin River to the east, a multi-story residential building to the north, and an undeveloped parcel to the south.

Slopes on the project site range from 5% to 33%. The westernmost section of the parcel abuts a retaining wall along Main Street.

The site drains directly to the Androscoggin River, which is considered a major river in Androscoggin County. The Androscoggin River is approximately 170 miles long and has a watershed area of approximately 3,500 square miles.

The proposed development area of the site is located in an identified flood zone per the FEMA Flood Insurance Rate Map (FIRM) for Auburn, ME Community Panel 230010326E, effective July 8, 2013. A copy of the FIRM can be seen in Appendix 2.

3. Soils

Soil characteristics were obtained from the United States Geologic Survey Web Soil Survey online application on November 15, 2022. The soils were classified as Md – Made land, loamy materials. Since no Hydrologic Soil Group (HSG) of the soils was given, an HSG D was assumed as the worst-case scenario.

4. Proposed Site Improvements

The proposed development will consist of a five (5) story residential/commercial building and will include a deck facing the Androscoggin River and associated pedestrian pathways. The parking area near Miller Street is being reconfigured to accommodate the building shift and increase parking. Overall, the project increases the impervious area by 0.1 acres and

decreases the overall vegetated area by 0.1 acres. A wooded area equating to 3,230 square feet (0.07 acres) that abuts the western retaining wall is proposed to be cleared on-site. Since the project does not disturb greater than one (1) acre, the project does not qualify for a DEP Stormwater Permit.

5. Existing Conditions Model

The pre-development watershed plan consists of two (2) subcatchments labeled 1S and 2S in the HydroCAD model. One location was identified as a Point of Analysis (POA) for comparing peak runoff rates to the Androscoggin River.

POA-1 represents the project's watershed that drains to the Androscoggin River. Watersheds 1S and 2S contribute runoff to this study point with an overall runoff area of approximately 0.6 acres. 1S represents the southern watershed of the site that drains to a catch basin, which is represented by 1P. 1P drains to POA-1 via a 15" CPP culvert that discharges directly to the Androscoggin River. 2S represents the northern watershed of the site that drains to a catch basin, which is represented by 2P. 2P drains to POA-1 via a 30" culvert that discharges directly to the Androscoggin River.

6. Proposed Conditions Model

The post-development watershed area consists of the same overall area as the pre-development plan. Subcatchments 1.1S, 1.2S, and 2.1S represent the pre-development subcatchment area that is redistributed as a result of the proposed development. POA-1 is unchanged and represents the Androscoggin River in the post-development condition.

Subcatchment 1.1S represents a portion of off-site drainage to the south of the project site as well as the area of Miller Street and the proposed parking improvements that drain to the existing catch basin, which is represented by 1.1P. 1.1P represents the existing catch basin that was represented by 1P in the existing condition that will be altered as a result of the proposed development. Subcatchment 1.2S represents the roof of the proposed project. Subcatchment 1.2S drains to a roof drain, represented by 1.2R, which will then drain into 1.1P. 1.1P drains via the existing 15" CPP culvert and discharges directly to the Androscoggin River, represented by POA-1.

Subcatchment 2.1S represents the reduction and reconstruction of pre-development subcatchment 2S. 2.1S drains directly to the existing catch basin represented as 2P. 2P remains unaltered between the pre-development and post-development conditions.

7. Stormwater Management

City of Auburn Stormwater Standards

As stated above, since the project will disturb less than one (1) acre of land, the project does not require a DEP Stormwater Permit, and does not need to submit a stormwater management plan to the city engineering division. The project follows standards for Erosion and Sediment Control as outlined in Sec. 46-209.a.1 – Erosion and sediment control and stormwater management plans.

Sec. 46-209.3.a of the Auburn Zoning Ordinance specifically states that stormwater management plans shall not increase peak discharge rates from the pre-development condition to the post-development condition for 24-hour storms of the 2-, 10-, and 25-year frequencies for all projects that will result in three or more acres of impervious area or 20 or more acres of developed area. Our project does not require this, but we are providing this information to ensure that the proposed project will not adversely affect the existing drainage system.

The 24-hour rainfall values utilized in the hydrologic model were obtained from Appendix H of MDEP's Chapter 500: Stormwater Management (effective date August 2015). Rainfall values for Androscoggin County are listed in the table below.

Storm Frequency Precipitation (in./24 hr) Androscoggin County	
2-year	3.0
10-year	4.3
25-year	5.4

The following table presents the results of the peak runoff calculations at the analysis points for the existing and proposed conditions.

Peak Runoff Rate Summary Table			
Analysis Point	Storm Event	Existing Conditions (cfs)	Proposed Conditions (cfs)
POA-1	2-year	1.6	1.7
	10-year	2.5	2.5
	25-year	3.2	3.2

Based on the table above, the peak rate of the 2-year storm increases by 0.1 cfs or between the existing condition and the proposed condition. Given this project directly discharges to the Androscoggin River, this amount of increased flow is insignificant and would not adversely affect the water level of the River. The 10-year and 25-year storms remain unchanged between the existing condition and the proposed condition. As this project does not qualify for requiring peak discharge rates to be equal or less in the post-development condition according to Sec. 46-209.3.a of the Auburn Zoning Ordinance, the applicant will not be requesting a waiver.

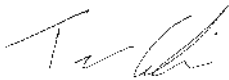
The proposed roof drain has been designed to have a capacity greater than the 25-year peak flow. Using Manning's Equation with a pipe slope of 2.65% and a roughness coefficient of 0.01 for PVC, the estimated capacity of the 6" pipe is equal to 1.08 cfs. The attached post-development HydroCAD summary for the roof drain calculates that the peak rate in the 25-year storm is equal to 0.7 cfs. Therefore, the pipe has the capacity to convey the 25-year storm.

8. Summary

The proposed development has been designed to convey stormwater runoff to the existing discharge point, the Androscoggin River

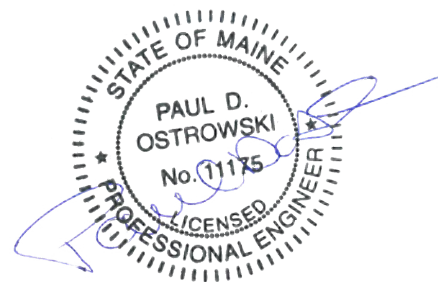
Prepared by:

SEBAGO TECHNICS, INC.



Tanner F. Goodine, EI
Civil Engineer

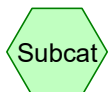
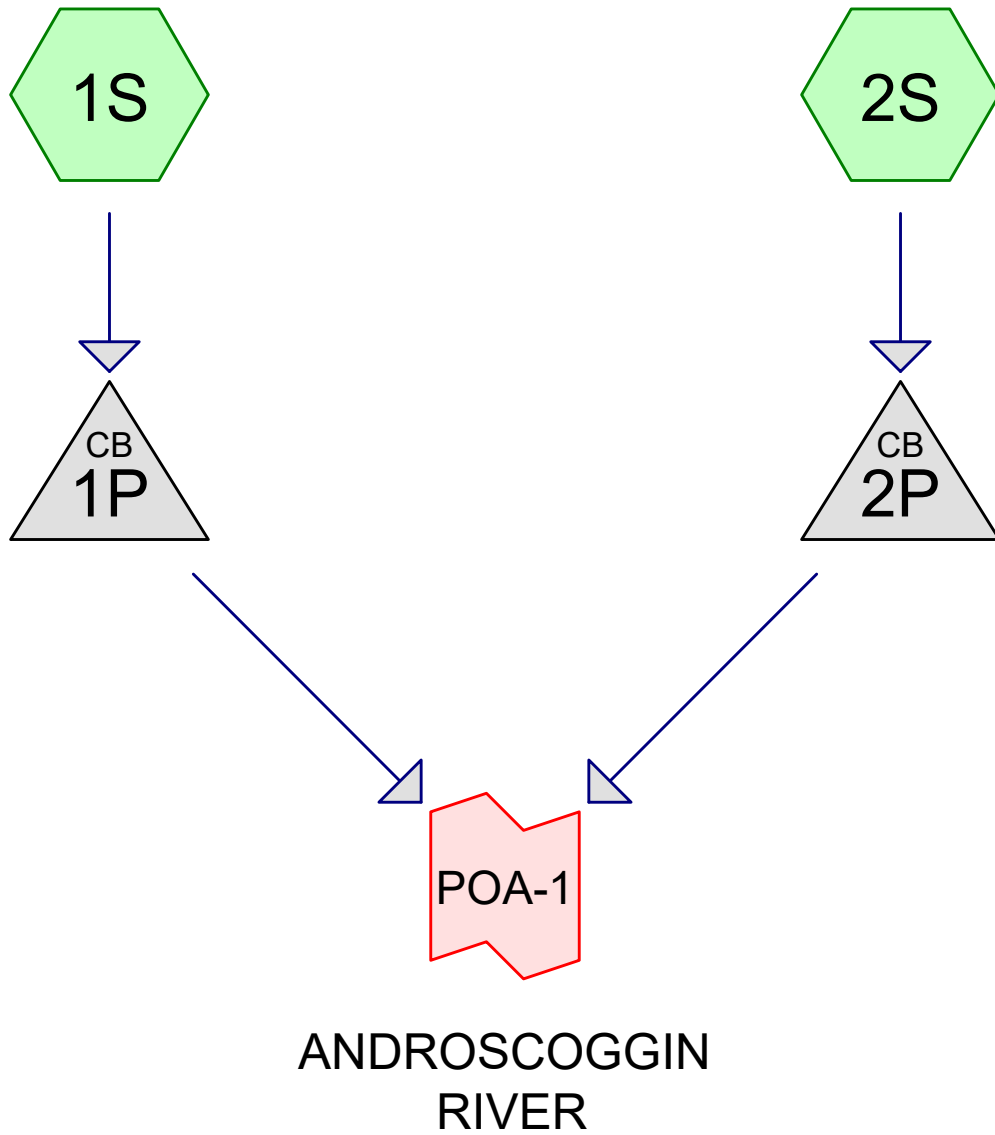
TFG/PDO



Paul D. Ostrowski, PE
Senior Project Engineer

Appendix 1A

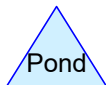
Existing Conditions HydroCAD Summary



Subcat



Reach



Pond



Link

Routing Diagram for 220503-01 Pre

Prepared by {enter your company name here}, Printed 5/4/2023
HydroCAD® 10.00-24 s/n 01856 © 2018 HydroCAD Software Solutions LLC

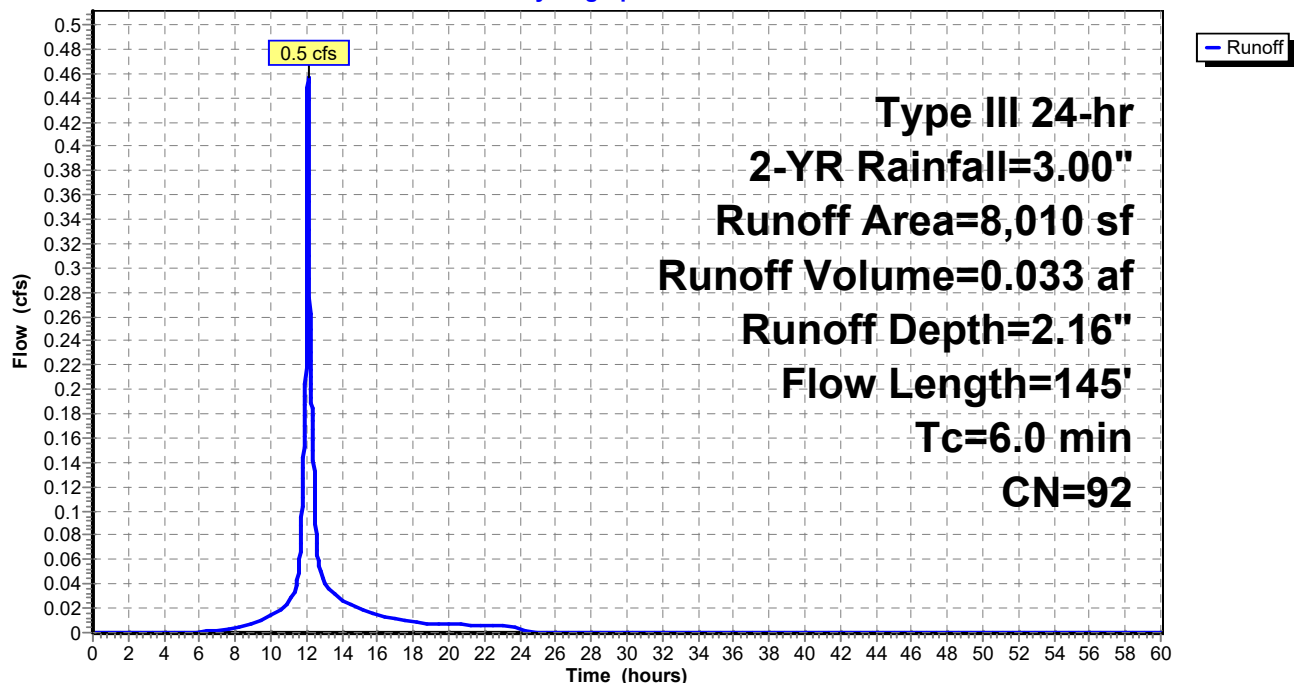
Summary for Subcatchment 1S:

Runoff = 0.5 cfs @ 12.09 hrs, Volume= 0.033 af, Depth= 2.16"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-YR Rainfall=3.00"

Area (sf)	CN	Description
1,500	86	Woods/grass comb., Poor, HSG D
3,700	89	<50% Grass cover, Poor, HSG D
2,810	98	Paved parking, HSG D
8,010	92	Weighted Average
5,200		64.92% Pervious Area
2,810		35.08% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.4	30	0.2500	0.36		Sheet Flow, A-B
					Grass: Short n= 0.150 P2= 3.00"
0.2	65	0.1500	5.81		Shallow Concentrated Flow, B-C
					Grassed Waterway Kv= 15.0 fps
0.4	50	0.0100	2.03		Shallow Concentrated Flow, C-D
					Paved Kv= 20.3 fps
4.0					Direct Entry, DIRECT ENTRY
6.0	145	Total			

Subcatchment 1S:**Hydrograph**

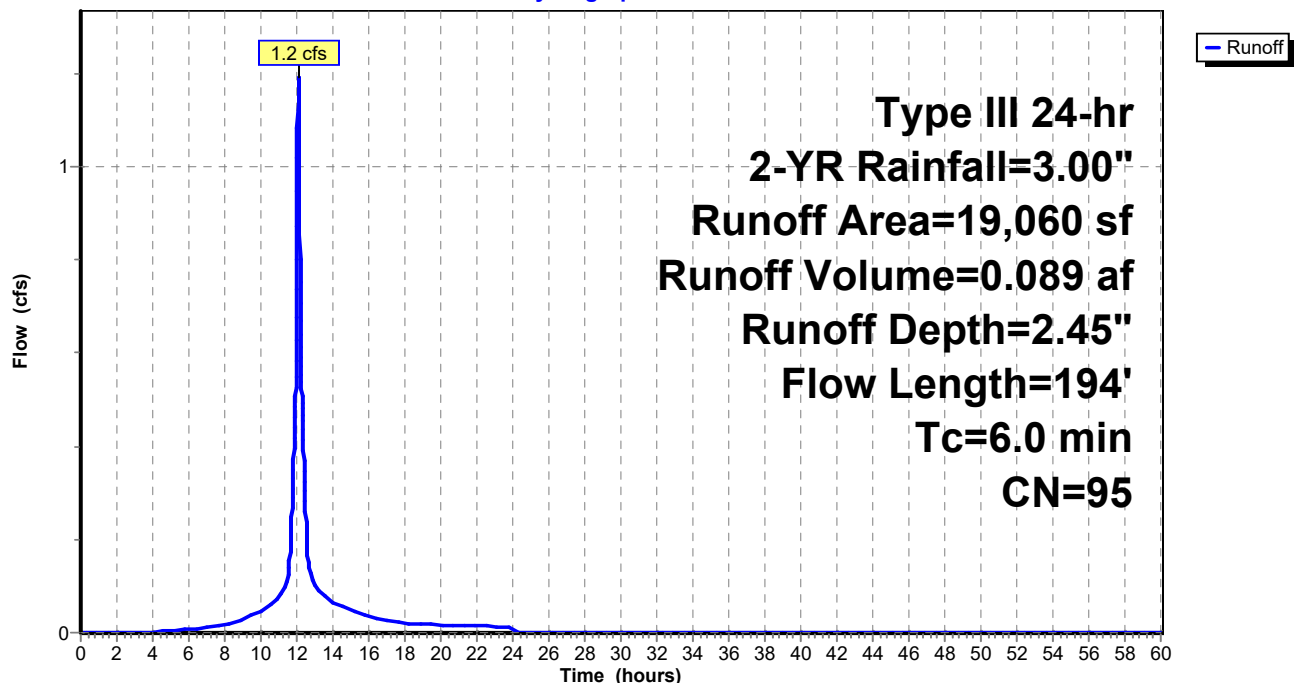
Summary for Subcatchment 2S:

Runoff = 1.2 cfs @ 12.08 hrs, Volume= 0.089 af, Depth= 2.45"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-YR Rainfall=3.00"

Area (sf)	CN	Description
1,650	86	Woods/grass comb., Poor, HSG D
4,910	89	<50% Grass cover, Poor, HSG D
12,500	98	Paved parking, HSG D
19,060	95	Weighted Average
6,560		34.42% Pervious Area
12,500		65.58% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.2	44	0.1800	0.34		Sheet Flow, A-B
					Grass: Short n= 0.150 P2= 3.00"
0.1	30	0.1670	6.13		Shallow Concentrated Flow, B-C
					Grassed Waterway Kv= 15.0 fps
0.7	120	0.0200	2.87		Shallow Concentrated Flow, C-D
					Paved Kv= 20.3 fps
3.0					Direct Entry, DIRECT ENTRY
6.0	194	Total			

Subcatchment 2S:**Hydrograph**

Summary for Pond 1P:

Inflow Area = 0.2 ac, 35.08% Impervious, Inflow Depth = 2.16" for 2-YR event
 Inflow = 0.5 cfs @ 12.09 hrs, Volume= 0.033 af
 Outflow = 0.5 cfs @ 12.09 hrs, Volume= 0.033 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.5 cfs @ 12.09 hrs, Volume= 0.033 af

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

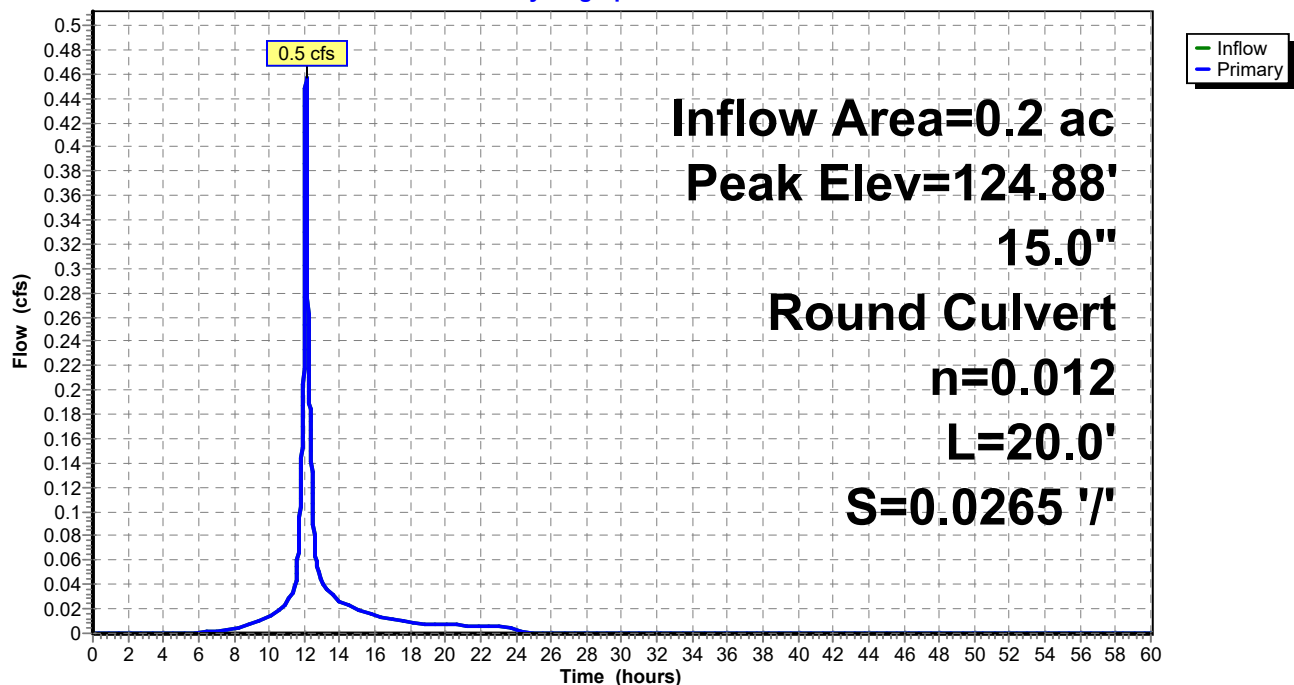
Peak Elev= 124.88' @ 12.09 hrs

Flood Elev= 128.83'

Device	Routing	Invert	Outlet Devices
#1	Primary	124.53'	15.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 124.53' / 124.00' S= 0.0265 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=0.5 cfs @ 12.09 hrs HW=124.88' (Free Discharge)

↑1=Culvert (Inlet Controls 0.5 cfs @ 1.60 fps)

Pond 1P:**Hydrograph**

Summary for Pond 2P:

Inflow Area = 0.4 ac, 65.58% Impervious, Inflow Depth = 2.45" for 2-YR event
 Inflow = 1.2 cfs @ 12.08 hrs, Volume= 0.089 af
 Outflow = 1.2 cfs @ 12.08 hrs, Volume= 0.089 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.2 cfs @ 12.08 hrs, Volume= 0.089 af

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

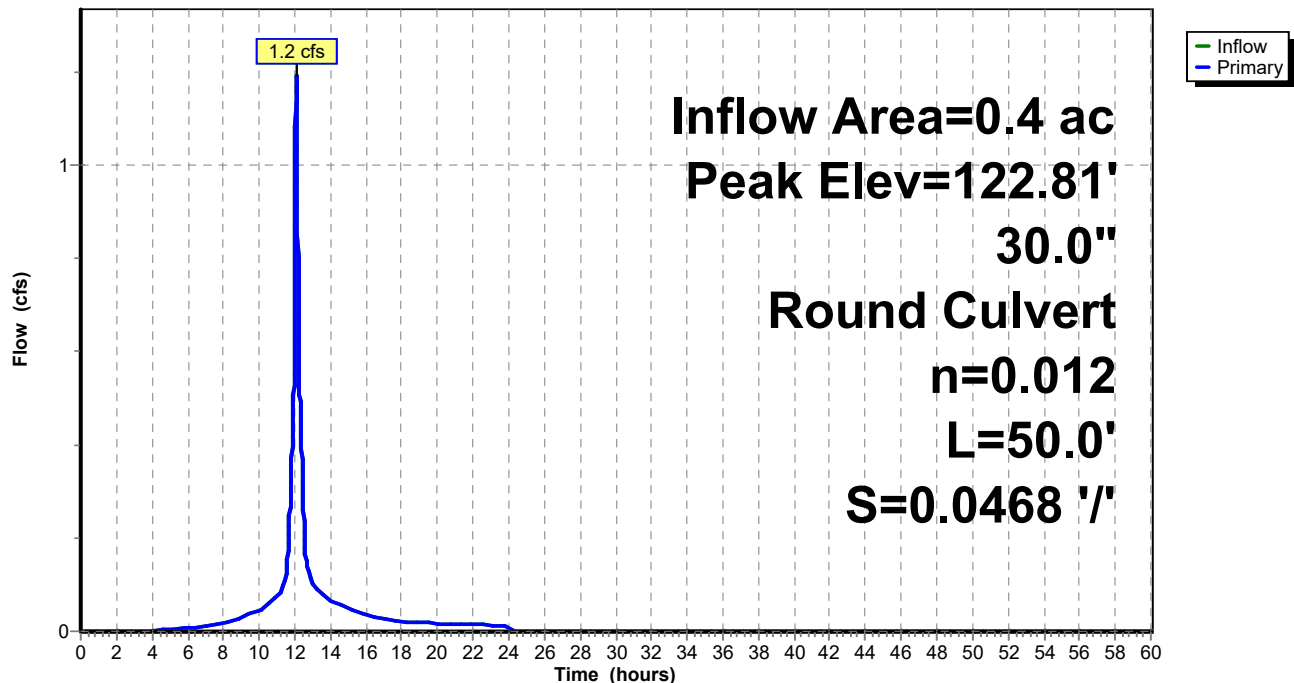
Peak Elev= 122.81' @ 12.08 hrs

Flood Elev= 127.46'

Device	Routing	Invert	Outlet Devices
#1	Primary	122.34'	30.0" Round Culvert L= 50.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 122.34' / 120.00' S= 0.0468 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 4.91 sf

Primary OutFlow Max=1.2 cfs @ 12.08 hrs HW=122.81' (Free Discharge)

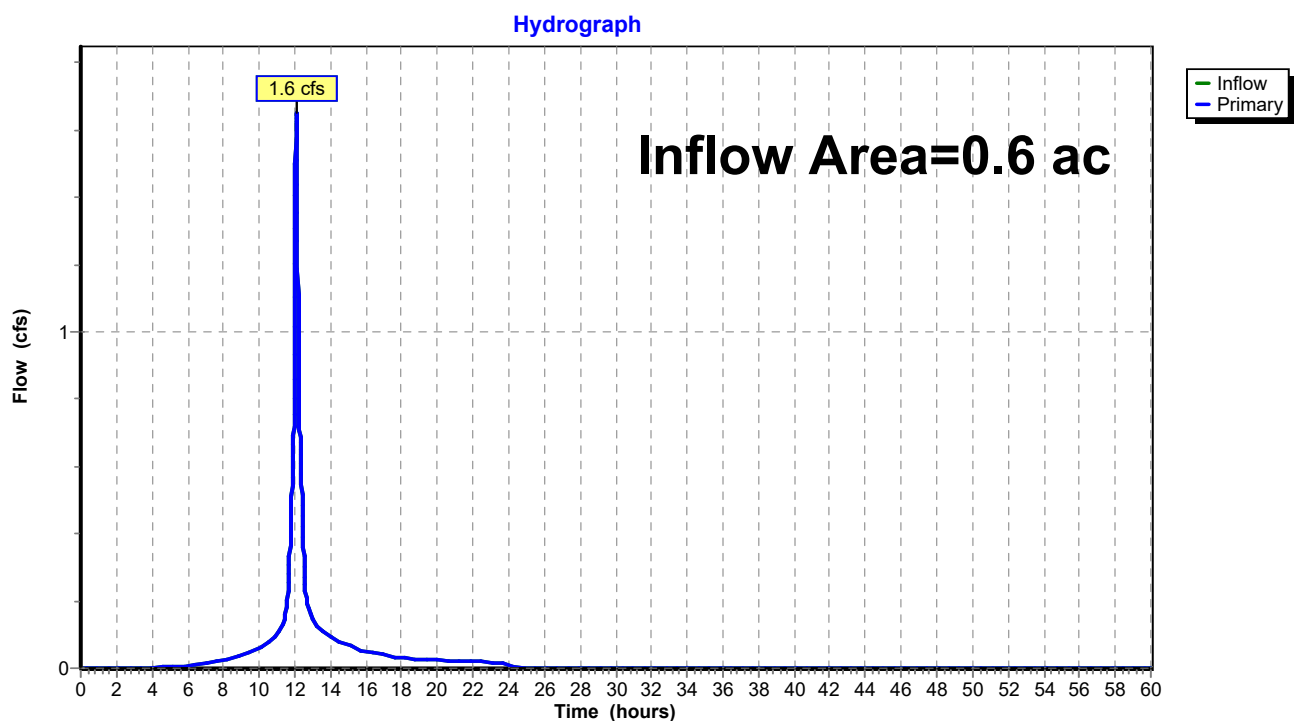
↑1=Culvert (Inlet Controls 1.2 cfs @ 1.85 fps)

Pond 2P:**Hydrograph**

Summary for Link POA-1: ANDROSCOGGIN RIVER

Inflow Area = 0.6 ac, 56.56% Impervious, Inflow Depth = 2.36" for 2-YR event
Inflow = 1.6 cfs @ 12.08 hrs, Volume= 0.122 af
Primary = 1.6 cfs @ 12.08 hrs, Volume= 0.122 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Link POA-1: ANDROSCOGGIN RIVER

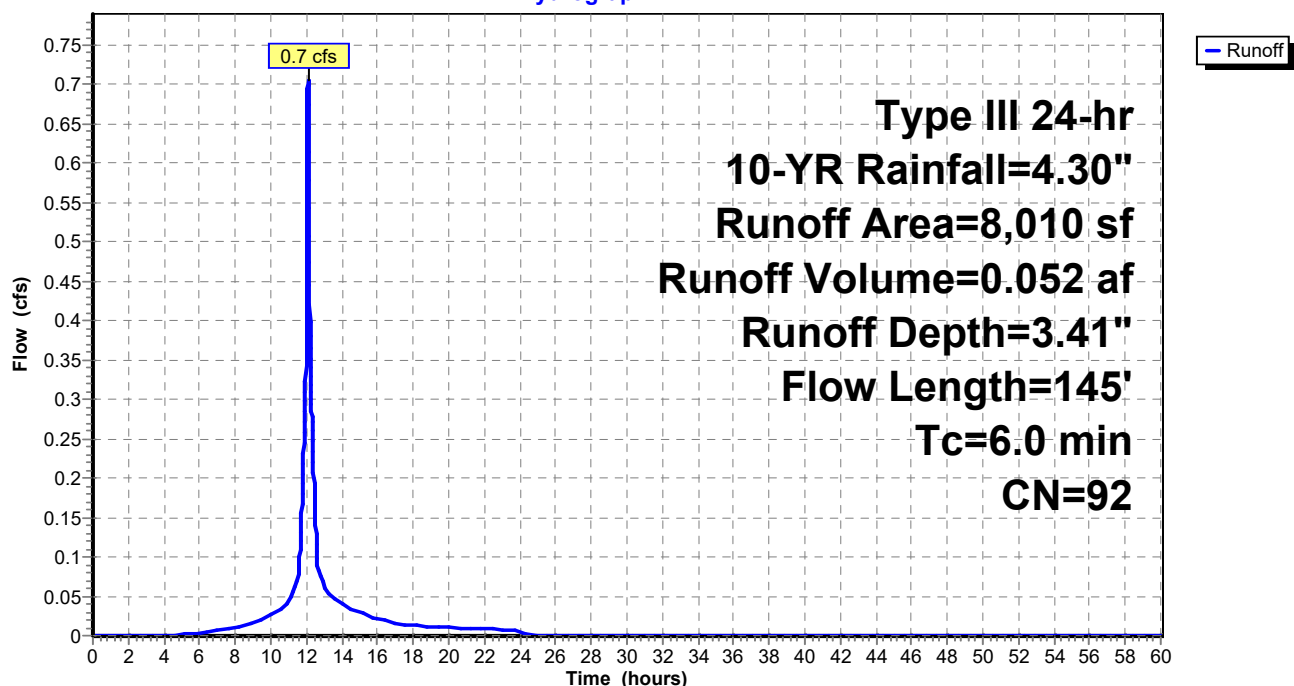
Summary for Subcatchment 1S:

Runoff = 0.7 cfs @ 12.08 hrs, Volume= 0.052 af, Depth= 3.41"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-YR Rainfall=4.30"

Area (sf)	CN	Description
1,500	86	Woods/grass comb., Poor, HSG D
3,700	89	<50% Grass cover, Poor, HSG D
2,810	98	Paved parking, HSG D
8,010	92	Weighted Average
5,200		64.92% Pervious Area
2,810		35.08% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.4	30	0.2500	0.36		Sheet Flow, A-B
					Grass: Short n= 0.150 P2= 3.00"
0.2	65	0.1500	5.81		Shallow Concentrated Flow, B-C
					Grassed Waterway Kv= 15.0 fps
0.4	50	0.0100	2.03		Shallow Concentrated Flow, C-D
					Paved Kv= 20.3 fps
4.0					Direct Entry, DIRECT ENTRY
6.0	145	Total			

Subcatchment 1S:**Hydrograph**

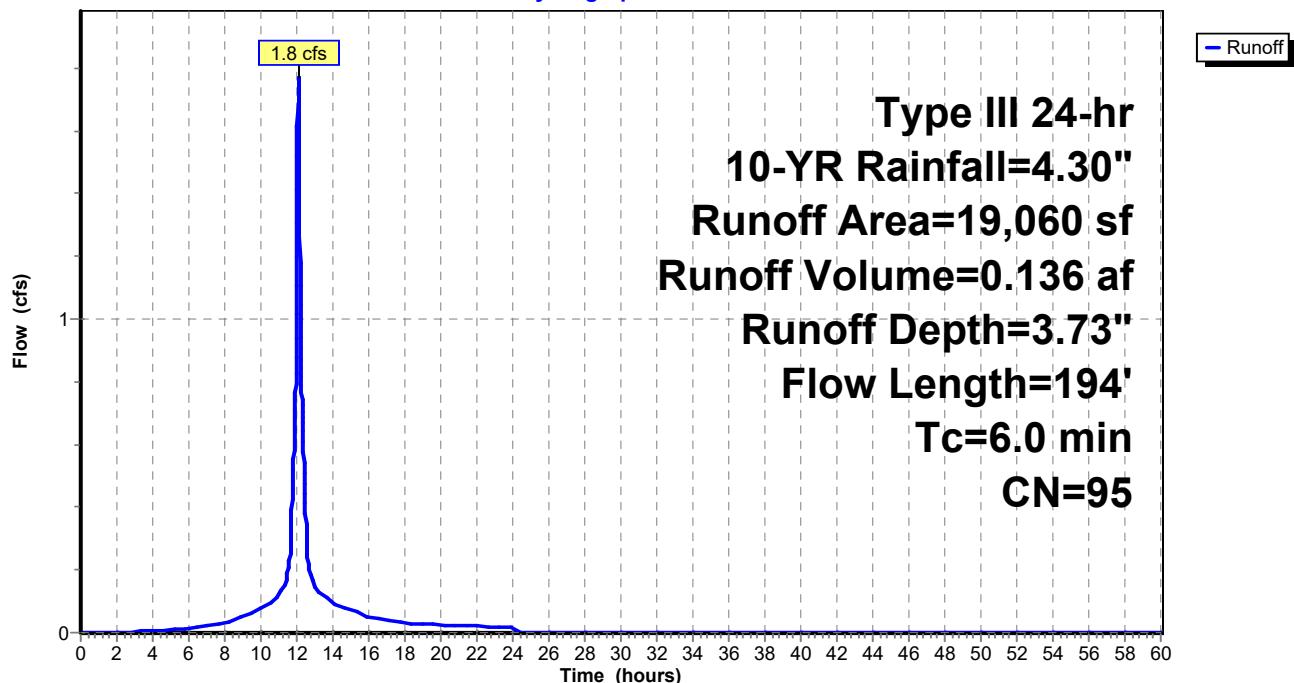
Summary for Subcatchment 2S:

Runoff = 1.8 cfs @ 12.08 hrs, Volume= 0.136 af, Depth= 3.73"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-YR Rainfall=4.30"

Area (sf)	CN	Description
1,650	86	Woods/grass comb., Poor, HSG D
4,910	89	<50% Grass cover, Poor, HSG D
12,500	98	Paved parking, HSG D
19,060	95	Weighted Average
6,560		34.42% Pervious Area
12,500		65.58% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.2	44	0.1800	0.34		Sheet Flow, A-B
					Grass: Short n= 0.150 P2= 3.00"
0.1	30	0.1670	6.13		Shallow Concentrated Flow, B-C
					Grassed Waterway Kv= 15.0 fps
0.7	120	0.0200	2.87		Shallow Concentrated Flow, C-D
					Paved Kv= 20.3 fps
3.0					Direct Entry, DIRECT ENTRY
6.0	194	Total			

Subcatchment 2S:**Hydrograph**

Summary for Pond 1P:

Inflow Area = 0.2 ac, 35.08% Impervious, Inflow Depth = 3.41" for 10-YR event
 Inflow = 0.7 cfs @ 12.08 hrs, Volume= 0.052 af
 Outflow = 0.7 cfs @ 12.08 hrs, Volume= 0.052 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.7 cfs @ 12.08 hrs, Volume= 0.052 af

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

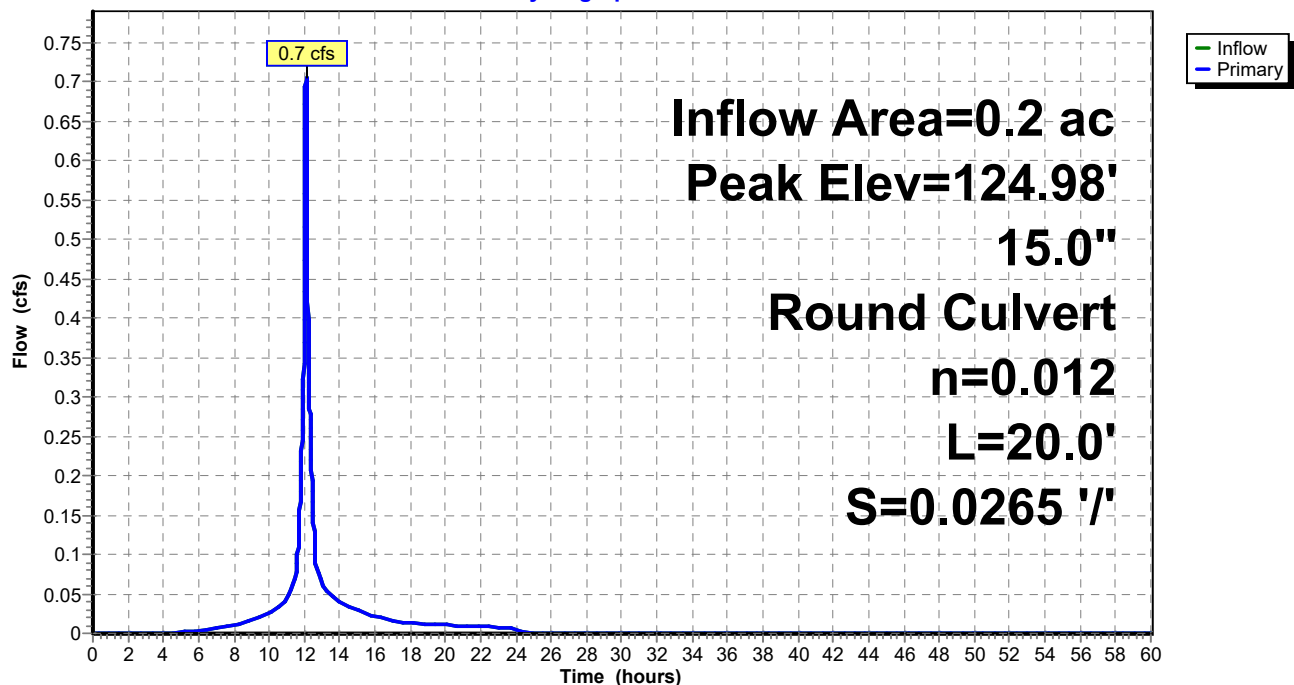
Peak Elev= 124.98' @ 12.08 hrs

Flood Elev= 128.83'

Device	Routing	Invert	Outlet Devices
#1	Primary	124.53'	15.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 124.53' / 124.00' S= 0.0265 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=0.7 cfs @ 12.08 hrs HW=124.97' (Free Discharge)

↑1=Culvert (Inlet Controls 0.7 cfs @ 1.79 fps)

Pond 1P:**Hydrograph**

Summary for Pond 2P:

Inflow Area = 0.4 ac, 65.58% Impervious, Inflow Depth = 3.73" for 10-YR event
 Inflow = 1.8 cfs @ 12.08 hrs, Volume= 0.136 af
 Outflow = 1.8 cfs @ 12.08 hrs, Volume= 0.136 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.8 cfs @ 12.08 hrs, Volume= 0.136 af

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Peak Elev= 122.92' @ 12.08 hrs

Flood Elev= 127.46'

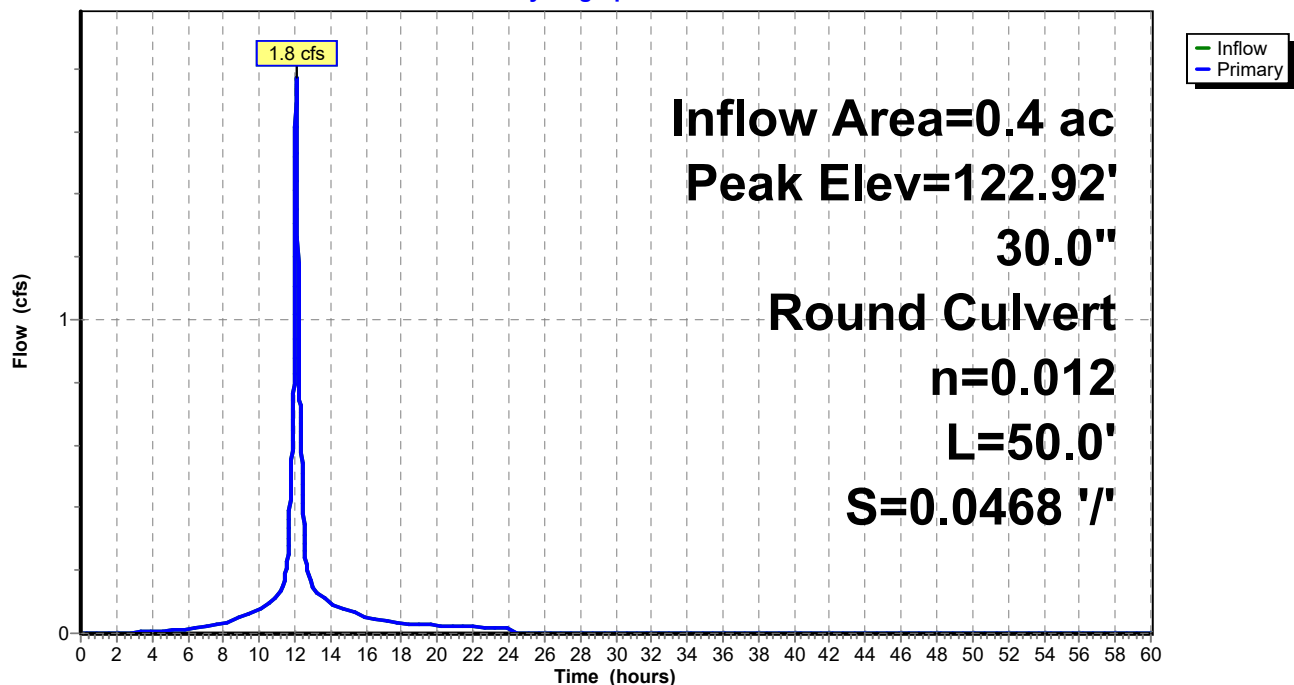
Device	Routing	Invert	Outlet Devices
#1	Primary	122.34'	30.0" Round Culvert L= 50.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 122.34' / 120.00' S= 0.0468 '/ Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 4.91 sf

Primary OutFlow Max=1.8 cfs @ 12.08 hrs HW=122.92' (Free Discharge)

↑1=Culvert (Inlet Controls 1.8 cfs @ 2.05 fps)

Pond 2P:

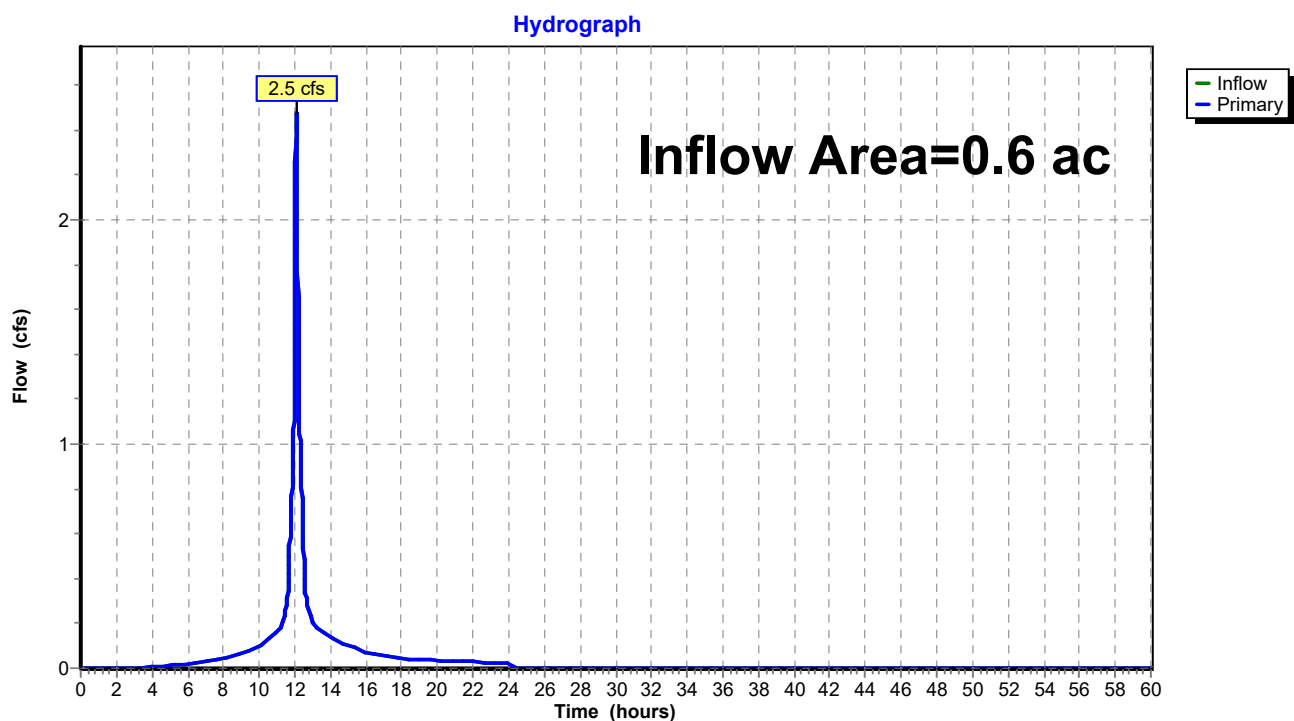
Hydrograph



Summary for Link POA-1: ANDROSCOGGIN RIVER

Inflow Area = 0.6 ac, 56.56% Impervious, Inflow Depth = 3.63" for 10-YR event
Inflow = 2.5 cfs @ 12.08 hrs, Volume= 0.188 af
Primary = 2.5 cfs @ 12.08 hrs, Volume= 0.188 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Link POA-1: ANDROSCOGGIN RIVER

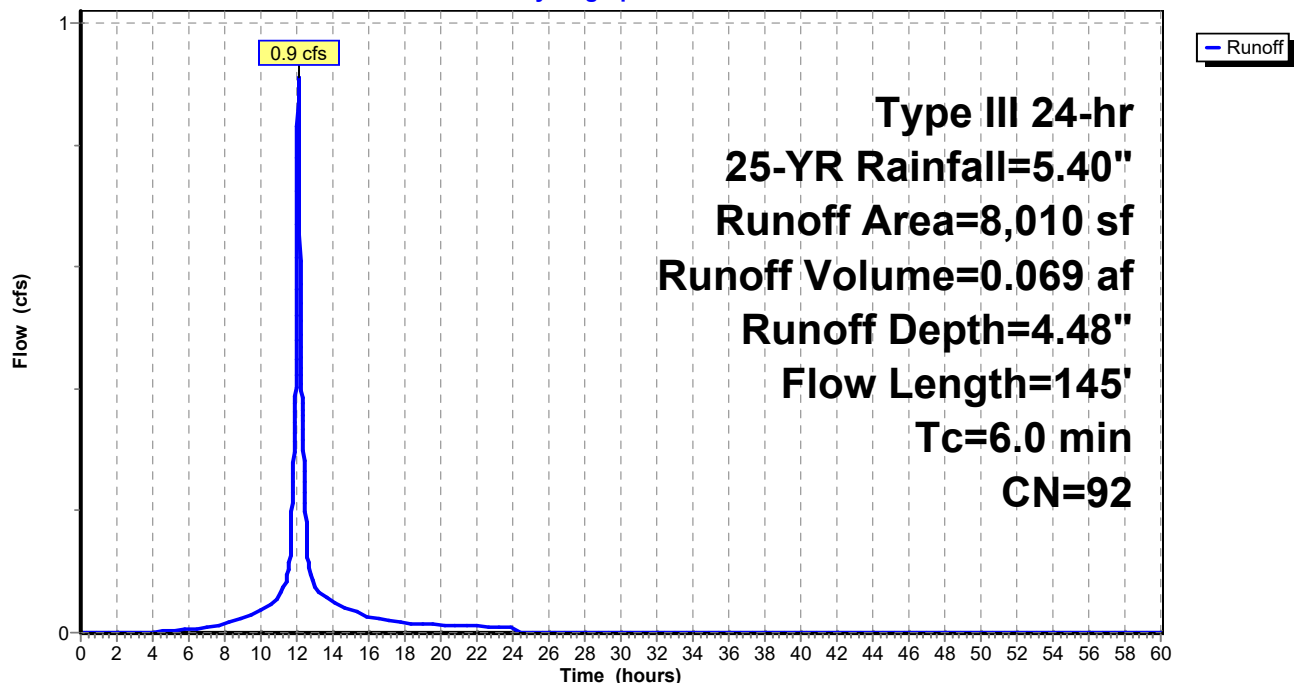
Summary for Subcatchment 1S:

Runoff = 0.9 cfs @ 12.08 hrs, Volume= 0.069 af, Depth= 4.48"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=5.40"

Area (sf)	CN	Description
1,500	86	Woods/grass comb., Poor, HSG D
3,700	89	<50% Grass cover, Poor, HSG D
2,810	98	Paved parking, HSG D
8,010	92	Weighted Average
5,200		64.92% Pervious Area
2,810		35.08% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.4	30	0.2500	0.36		Sheet Flow, A-B
					Grass: Short n= 0.150 P2= 3.00"
0.2	65	0.1500	5.81		Shallow Concentrated Flow, B-C
					Grassed Waterway Kv= 15.0 fps
0.4	50	0.0100	2.03		Shallow Concentrated Flow, C-D
					Paved Kv= 20.3 fps
4.0					Direct Entry, DIRECT ENTRY
6.0	145	Total			

Subcatchment 1S:**Hydrograph**

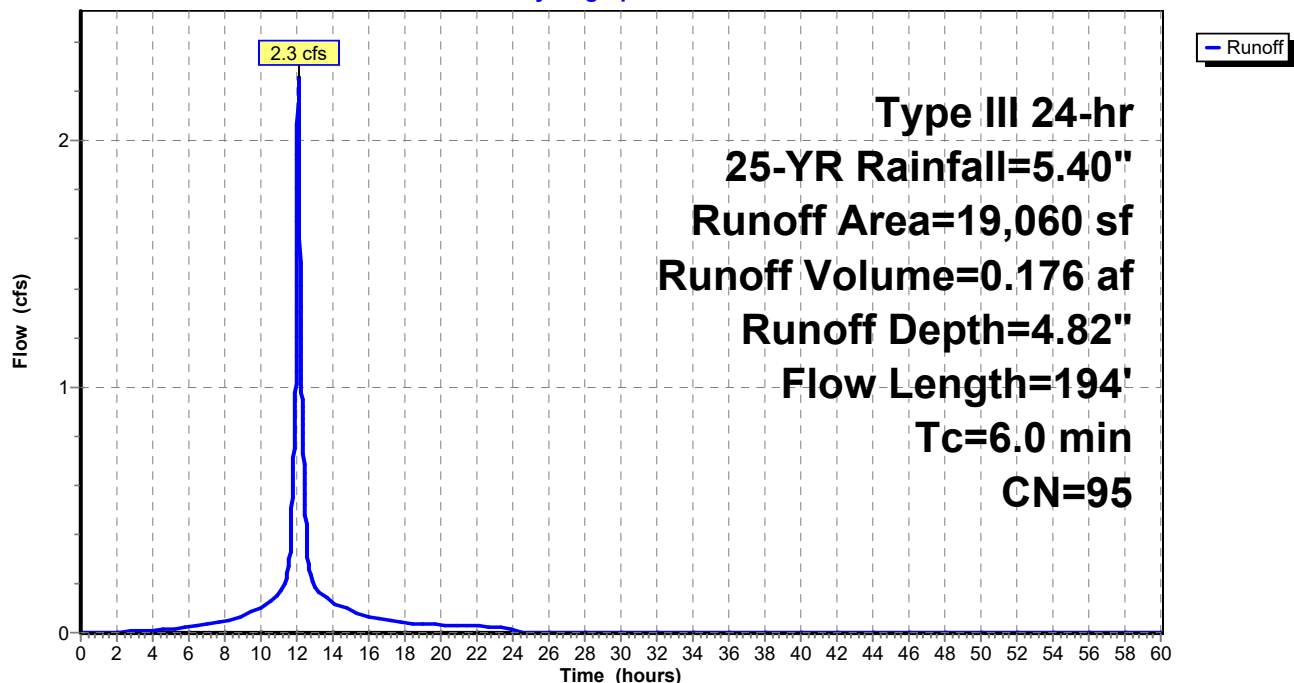
Summary for Subcatchment 2S:

Runoff = 2.3 cfs @ 12.08 hrs, Volume= 0.176 af, Depth= 4.82"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=5.40"

Area (sf)	CN	Description
1,650	86	Woods/grass comb., Poor, HSG D
4,910	89	<50% Grass cover, Poor, HSG D
12,500	98	Paved parking, HSG D
19,060	95	Weighted Average
6,560		34.42% Pervious Area
12,500		65.58% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.2	44	0.1800	0.34		Sheet Flow, A-B
					Grass: Short n= 0.150 P2= 3.00"
0.1	30	0.1670	6.13		Shallow Concentrated Flow, B-C
					Grassed Waterway Kv= 15.0 fps
0.7	120	0.0200	2.87		Shallow Concentrated Flow, C-D
					Paved Kv= 20.3 fps
3.0					Direct Entry, DIRECT ENTRY
6.0	194	Total			

Subcatchment 2S:**Hydrograph**

Summary for Pond 1P:

Inflow Area = 0.2 ac, 35.08% Impervious, Inflow Depth = 4.48" for 25-YR event
 Inflow = 0.9 cfs @ 12.08 hrs, Volume= 0.069 af
 Outflow = 0.9 cfs @ 12.08 hrs, Volume= 0.069 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.9 cfs @ 12.08 hrs, Volume= 0.069 af

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

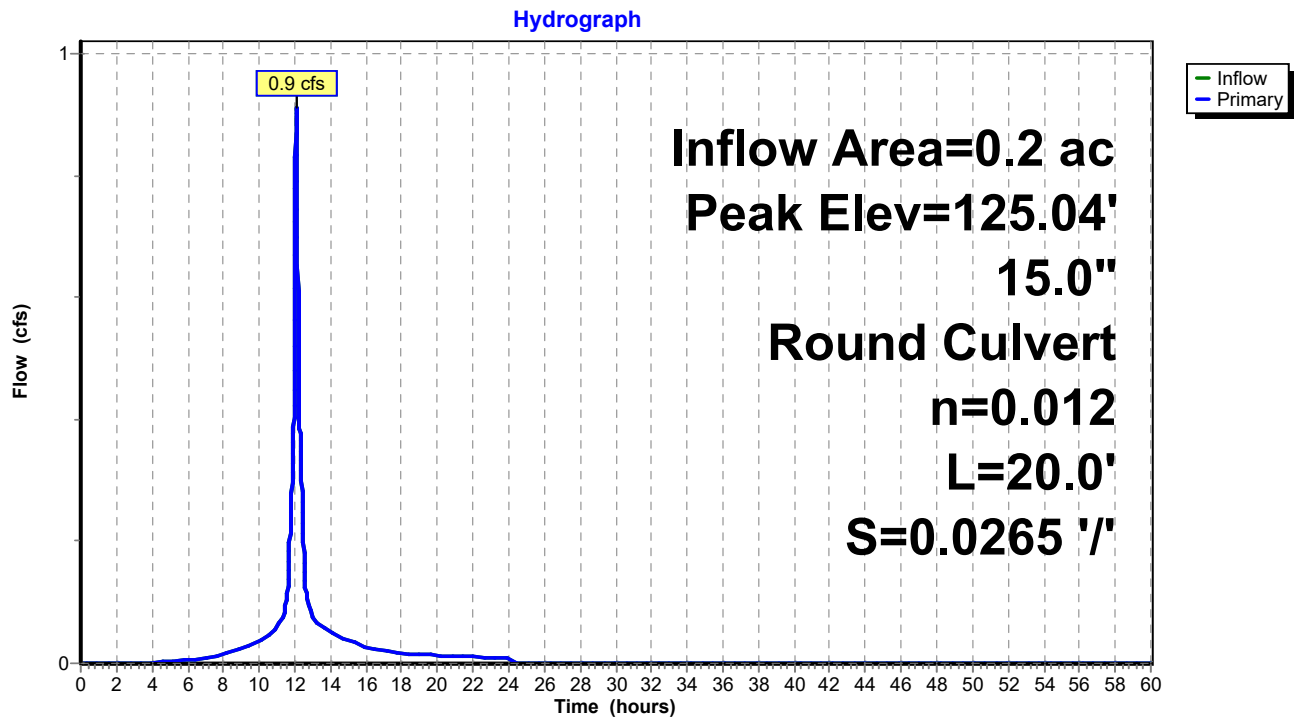
Peak Elev= 125.04' @ 12.08 hrs

Flood Elev= 128.83'

Device	Routing	Invert	Outlet Devices
#1	Primary	124.53'	15.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 124.53' / 124.00' S= 0.0265 '/ Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=0.9 cfs @ 12.08 hrs HW=125.04' (Free Discharge)

↑1=Culvert (Inlet Controls 0.9 cfs @ 1.92 fps)

Pond 1P:

Summary for Pond 2P:

Inflow Area = 0.4 ac, 65.58% Impervious, Inflow Depth = 4.82" for 25-YR event
 Inflow = 2.3 cfs @ 12.08 hrs, Volume= 0.176 af
 Outflow = 2.3 cfs @ 12.08 hrs, Volume= 0.176 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.3 cfs @ 12.08 hrs, Volume= 0.176 af

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Peak Elev= 123.00' @ 12.08 hrs

Flood Elev= 127.46'

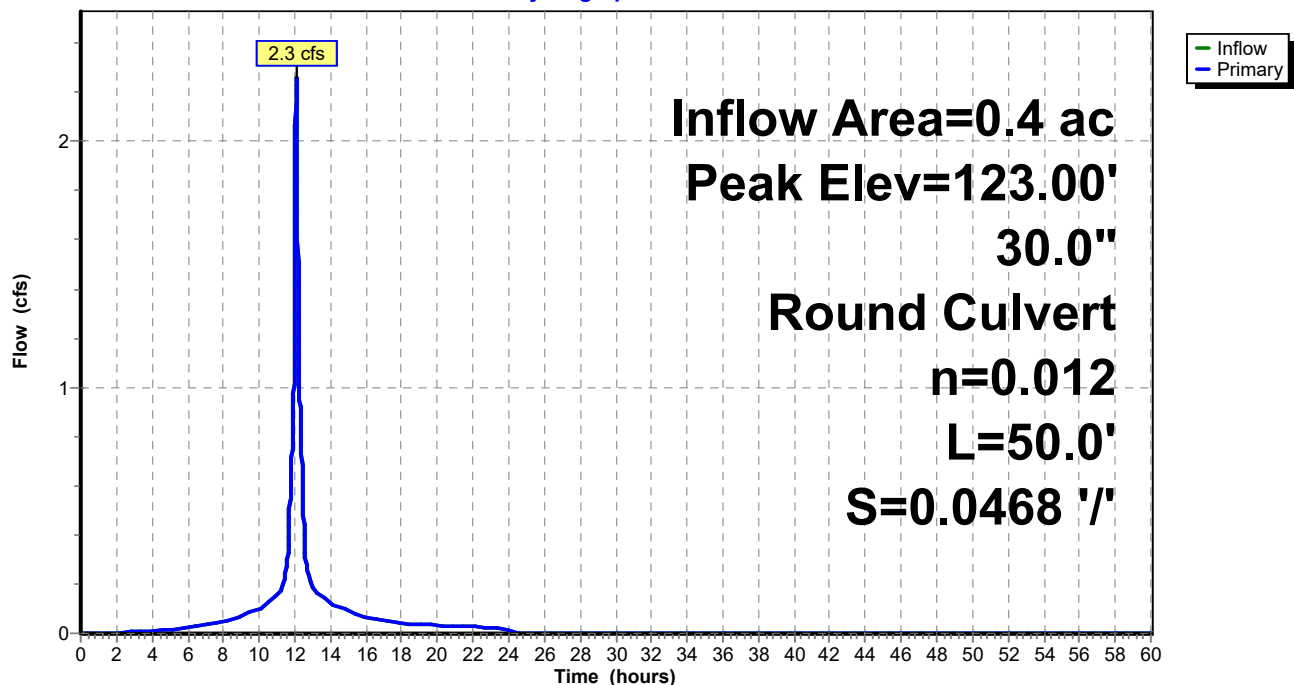
Device	Routing	Invert	Outlet Devices
#1	Primary	122.34'	30.0" Round Culvert L= 50.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 122.34' / 120.00' S= 0.0468 '/ Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 4.91 sf

Primary OutFlow Max=2.3 cfs @ 12.08 hrs HW=123.00' (Free Discharge)

↑1=Culvert (Inlet Controls 2.3 cfs @ 2.18 fps)

Pond 2P:

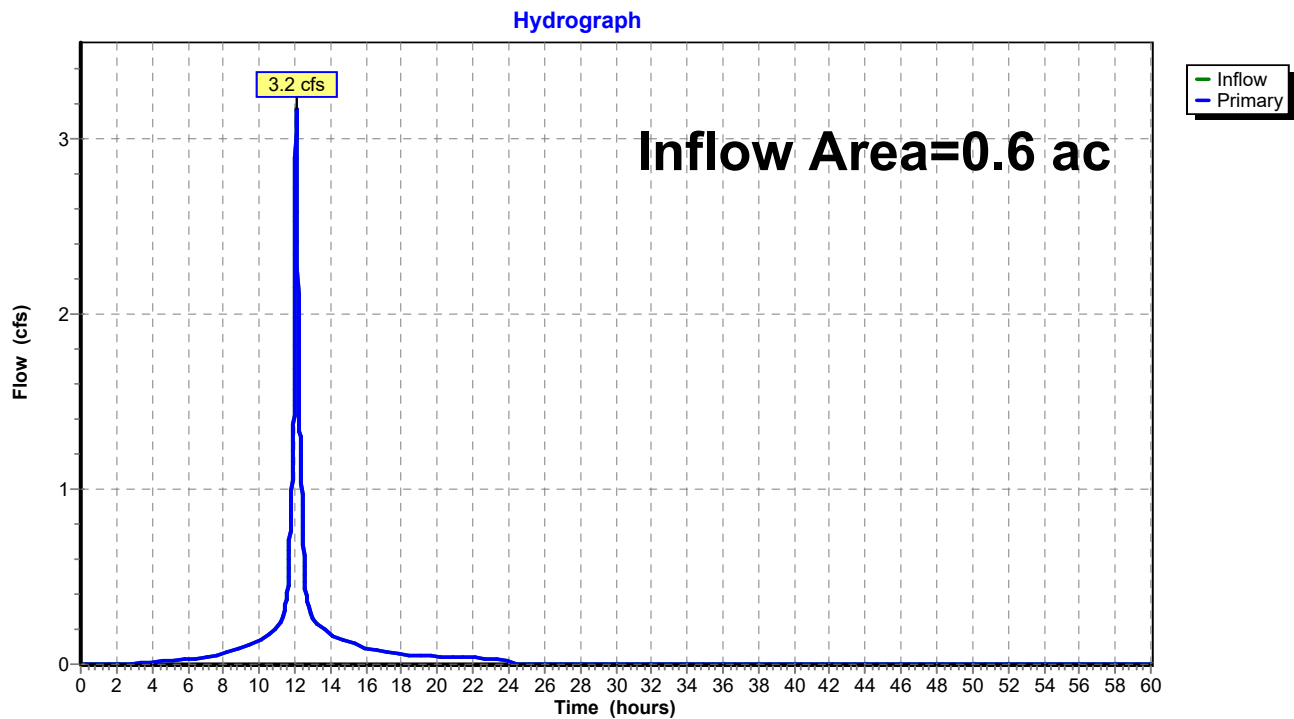
Hydrograph



Summary for Link POA-1: ANDROSCOGGIN RIVER

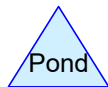
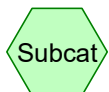
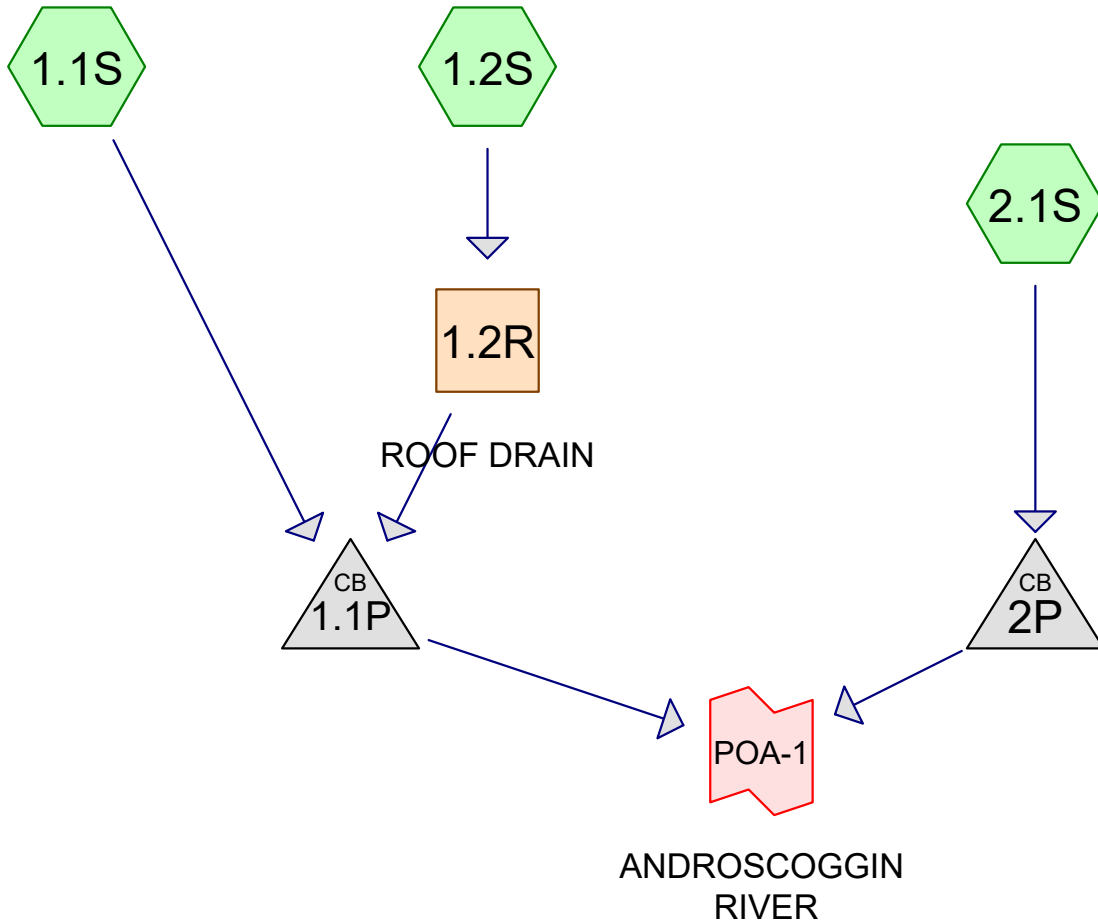
Inflow Area = 0.6 ac, 56.56% Impervious, Inflow Depth = 4.72" for 25-YR event
Inflow = 3.2 cfs @ 12.08 hrs, Volume= 0.244 af
Primary = 3.2 cfs @ 12.08 hrs, Volume= 0.244 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Link POA-1: ANDROSCOGGIN RIVER

Appendix 1B

Proposed Conditions HydroCAD Summary



Routing Diagram for 220503-01 Post

Prepared by {enter your company name here}, Printed 5/4/2023
HydroCAD® 10.00-24 s/n 01856 © 2018 HydroCAD Software Solutions LLC

220503-01 Post

Prepared by {enter your company name here}

HydroCAD® 10.00-24 s/n 01856 © 2018 HydroCAD Software Solutions LLC

Type III 24-hr 2-YR Rainfall=3.00"

Printed 5/4/2023

Page 2

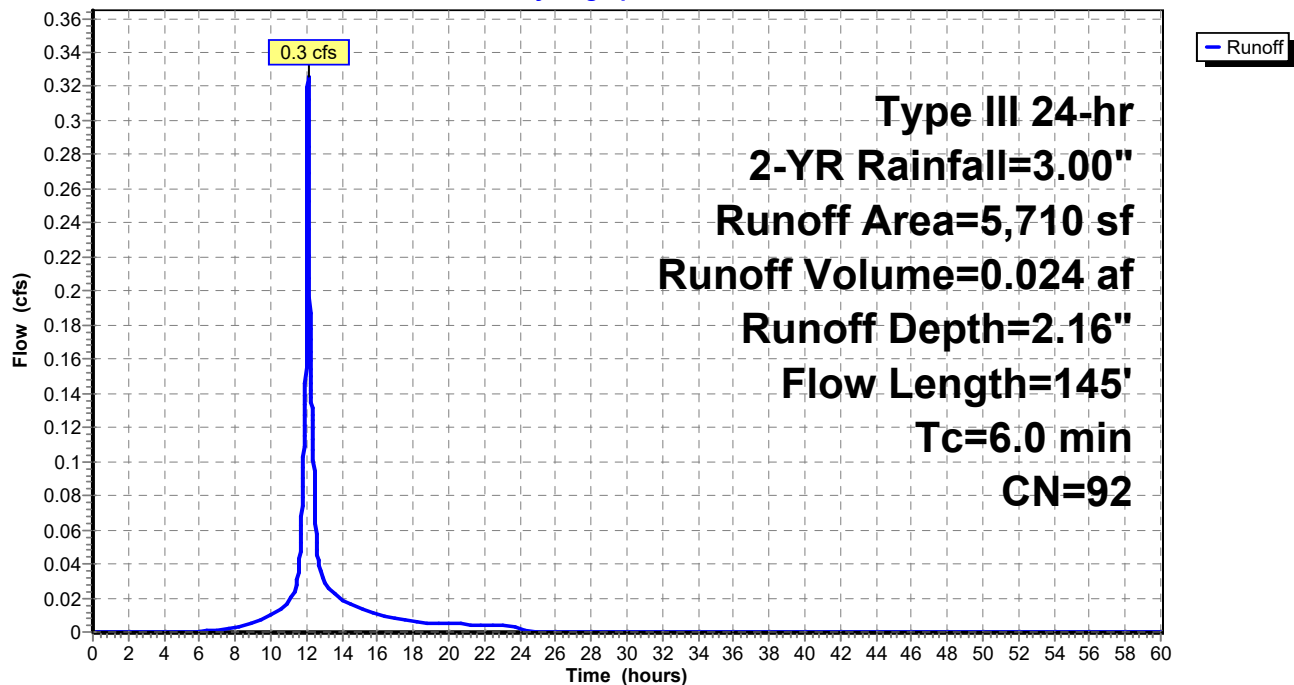
Summary for Subcatchment 1.1S:

Runoff = 0.3 cfs @ 12.09 hrs, Volume= 0.024 af, Depth= 2.16"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-YR Rainfall=3.00"

Area (sf)	CN	Description
760	86	Woods/grass comb., Poor, HSG D
520	89	<50% Grass cover, Poor, HSG D
1,250	80	>75% Grass cover, Good, HSG D
3,180	98	Paved parking, HSG D
5,710	92	Weighted Average
2,530		44.31% Pervious Area
3,180		55.69% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.4	30	0.2500	0.36		Sheet Flow, A-B
					Grass: Short n= 0.150 P2= 3.00"
0.2	65	0.1500	5.81		Shallow Concentrated Flow, B-C
					Grassed Waterway Kv= 15.0 fps
0.4	50	0.0100	2.03		Shallow Concentrated Flow, C-D
					Paved Kv= 20.3 fps
4.0					Direct Entry, DIRECT ENTRY
6.0	145	Total			

Subcatchment 1.1S:**Hydrograph**

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Type III 24-hr 2-YR Rainfall=3.00"

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Summary for Subcatchment 1.2S:

Runoff = 0.4 cfs @ 12.08 hrs, Volume= 0.031 af, Depth= 2.77"

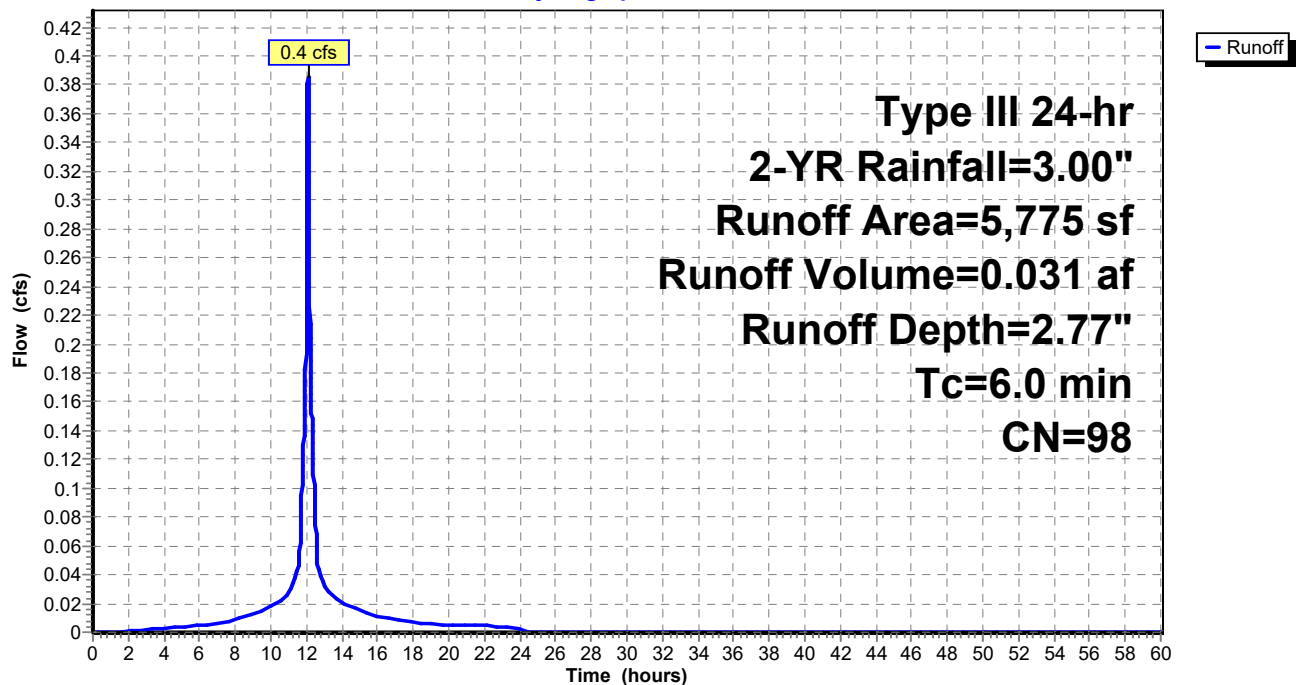
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-YR Rainfall=3.00"

Area (sf)	CN	Description
5,775	98	Roofs, HSG D
5,775		100.00% Impervious Area

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

Subcatchment 1.2S:

Hydrograph



220503-01 Post

Type III 24-hr 2-YR Rainfall=3.00"

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Summary for Subcatchment 2.1S:

Runoff = 1.0 cfs @ 12.08 hrs, Volume= 0.073 af, Depth= 2.45"

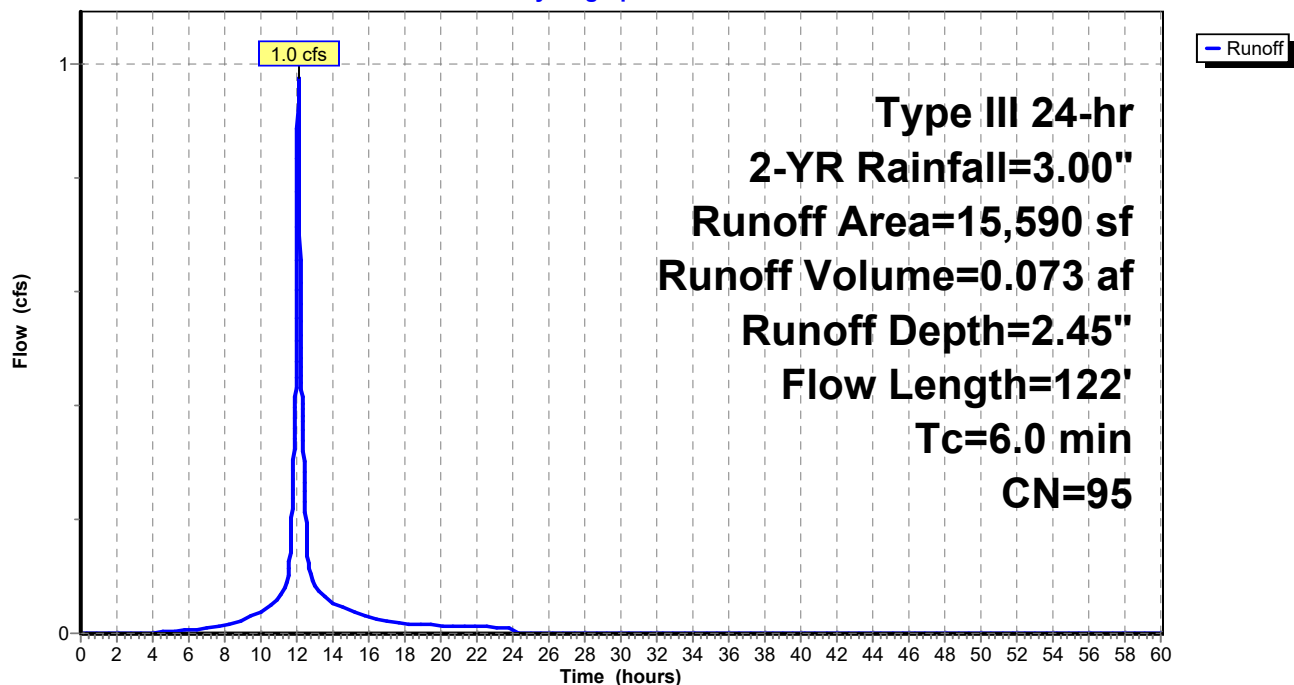
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-YR Rainfall=3.00"

Area (sf)	CN	Description
2,930	80	>75% Grass cover, Good, HSG D
12,660	98	Paved parking, HSG D
15,590	95	Weighted Average
2,930		18.79% Pervious Area
12,660		81.21% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.4	12	0.0100	0.08		Sheet Flow, A-B
					Grass: Short n= 0.150 P2= 3.00"
0.7	110	0.0150	2.49		Shallow Concentrated Flow, B-C
					Paved Kv= 20.3 fps
2.9					Direct Entry, DIRECT ENTRY
6.0	122	Total			

Subcatchment 2.1S:

Hydrograph



Summary for Reach 1.2R: ROOF DRAIN

[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 0.1 ac, 100.00% Impervious, Inflow Depth = 2.77" for 2-YR event
 Inflow = 0.4 cfs @ 12.08 hrs, Volume= 0.031 af
 Outflow = 0.4 cfs @ 12.09 hrs, Volume= 0.031 af, Atten= 0%, Lag= 0.4 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Max. Velocity= 4.83 fps, Min. Travel Time= 0.2 min

Avg. Velocity= 1.61 fps, Avg. Travel Time= 0.7 min

Peak Storage= 6 cf @ 12.09 hrs

Average Depth at Peak Storage= 0.21'

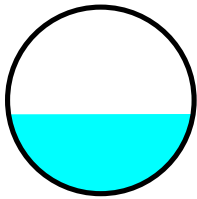
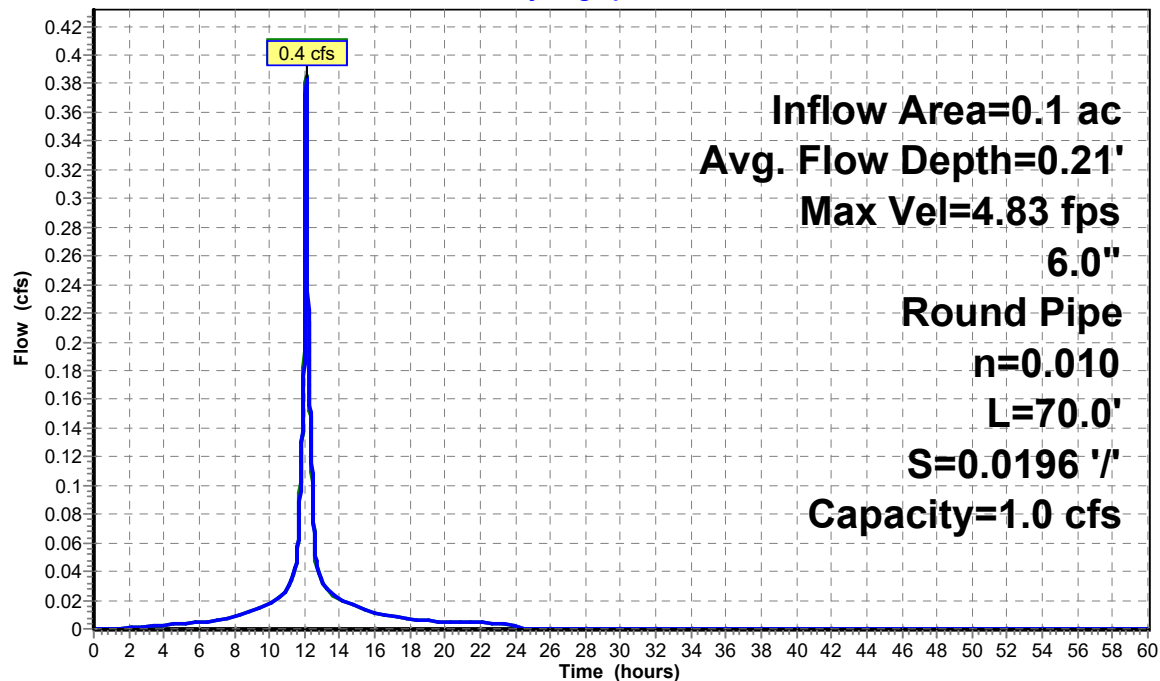
Bank-Full Depth= 0.50' Flow Area= 0.2 sf, Capacity= 1.0 cfs

6.0" Round Pipe

n= 0.010 PVC, smooth interior

Length= 70.0' Slope= 0.0196 '/'

Inlet Invert= 126.00', Outlet Invert= 124.63'

**Reach 1.2R: ROOF DRAIN****Hydrograph**

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Type III 24-hr 2-YR Rainfall=3.00"

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Summary for Pond 1.1P:

[62] Hint: Exceeded Reach 1.2R OUTLET depth by 0.13' @ 12.09 hrs

Inflow Area = 0.3 ac, 77.97% Impervious, Inflow Depth = 2.47" for 2-YR event
 Inflow = 0.7 cfs @ 12.09 hrs, Volume= 0.054 af
 Outflow = 0.7 cfs @ 12.09 hrs, Volume= 0.054 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.7 cfs @ 12.09 hrs, Volume= 0.054 af

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

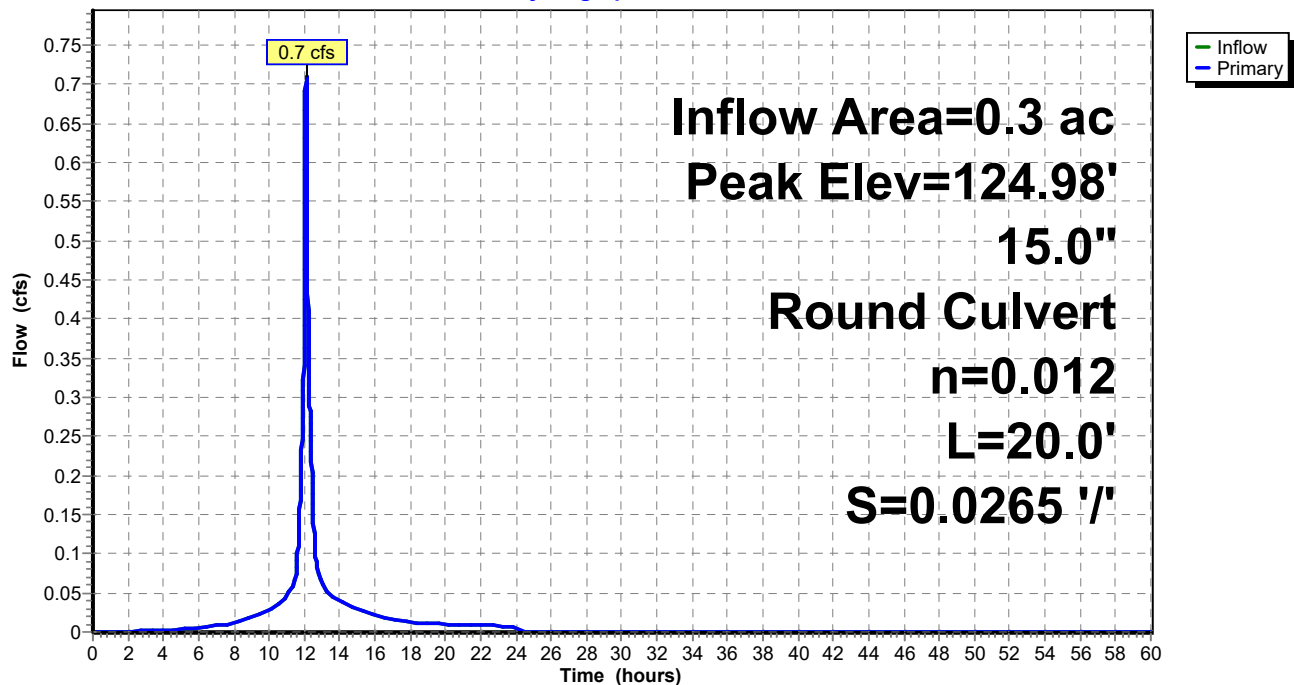
Peak Elev= 124.98' @ 12.09 hrs

Flood Elev= 128.83'

Device	Routing	Invert	Outlet Devices
#1	Primary	124.53'	15.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 124.53' / 124.00' S= 0.0265 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=0.7 cfs @ 12.09 hrs HW=124.98' (Free Discharge)

↑1=Culvert (Inlet Controls 0.7 cfs @ 1.80 fps)

Pond 1.1P:**Hydrograph**

220503-01 Post

Type III 24-hr 2-YR Rainfall=3.00"

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Summary for Pond 2P:

Inflow Area = 0.4 ac, 81.21% Impervious, Inflow Depth = 2.45" for 2-YR event
Inflow = 1.0 cfs @ 12.08 hrs, Volume= 0.073 af
Outflow = 1.0 cfs @ 12.08 hrs, Volume= 0.073 af, Atten= 0%, Lag= 0.0 min
Primary = 1.0 cfs @ 12.08 hrs, Volume= 0.073 af

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Peak Elev= 122.77' @ 12.08 hrs

Flood Elev= 127.46'

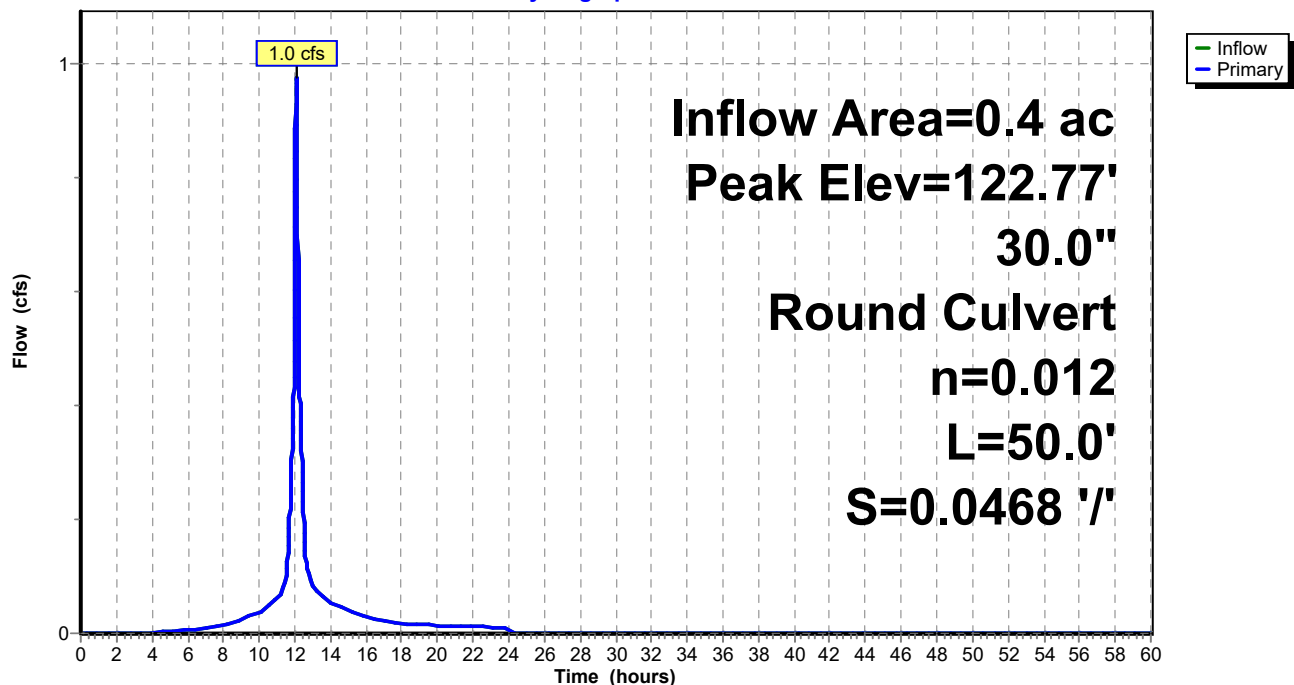
Device	Routing	Invert	Outlet Devices
#1	Primary	122.34'	30.0" Round Culvert L= 50.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 122.34' / 120.00' S= 0.0468 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 4.91 sf

Primary OutFlow Max=1.0 cfs @ 12.08 hrs HW=122.77' (Free Discharge)

↑1=Culvert (Inlet Controls 1.0 cfs @ 1.75 fps)

Pond 2P:

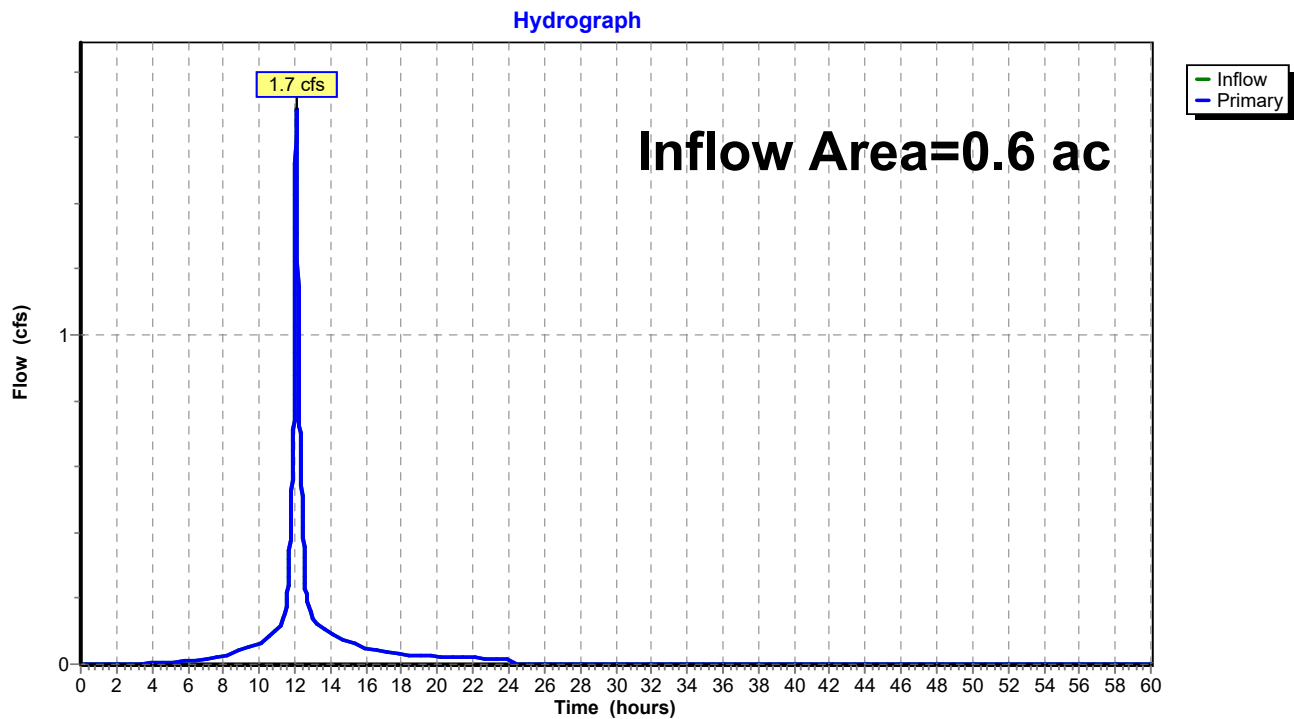
Hydrograph



Summary for Link POA-1: ANDROSCOGGIN RIVER

Inflow Area = 0.6 ac, 79.83% Impervious, Inflow Depth = 2.46" for 2-YR event
Inflow = 1.7 cfs @ 12.09 hrs, Volume= 0.127 af
Primary = 1.7 cfs @ 12.09 hrs, Volume= 0.127 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Link POA-1: ANDROSCOGGIN RIVER

220503-01 Post

Type III 24-hr 10-YR Rainfall=4.30"

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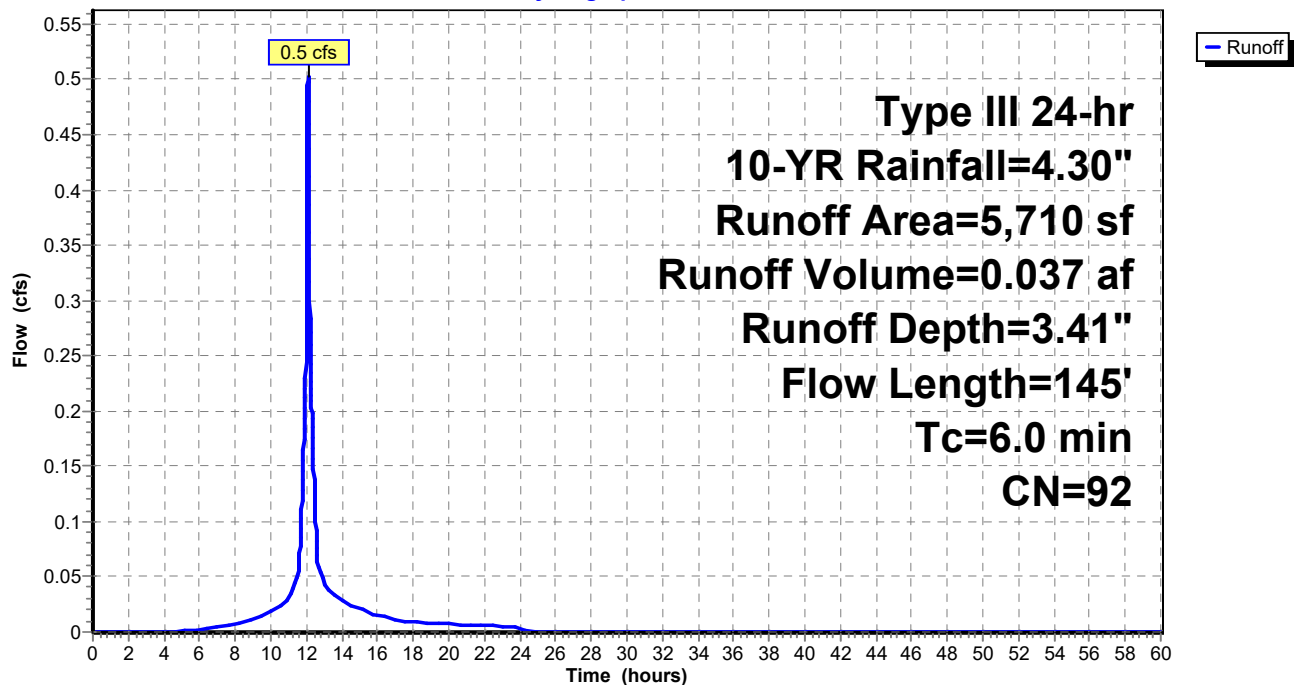
Summary for Subcatchment 1.1S:

Runoff = 0.5 cfs @ 12.08 hrs, Volume= 0.037 af, Depth= 3.41"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-YR Rainfall=4.30"

Area (sf)	CN	Description
760	86	Woods/grass comb., Poor, HSG D
520	89	<50% Grass cover, Poor, HSG D
1,250	80	>75% Grass cover, Good, HSG D
3,180	98	Paved parking, HSG D
5,710	92	Weighted Average
2,530		44.31% Pervious Area
3,180		55.69% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.4	30	0.2500	0.36		Sheet Flow, A-B
					Grass: Short n= 0.150 P2= 3.00"
0.2	65	0.1500	5.81		Shallow Concentrated Flow, B-C
					Grassed Waterway Kv= 15.0 fps
0.4	50	0.0100	2.03		Shallow Concentrated Flow, C-D
					Paved Kv= 20.3 fps
4.0					Direct Entry, DIRECT ENTRY
6.0	145	Total			

Subcatchment 1.1S:**Hydrograph**

Summary for Subcatchment 1.2S:

Runoff = 0.6 cfs @ 12.08 hrs, Volume= 0.045 af, Depth= 4.06"

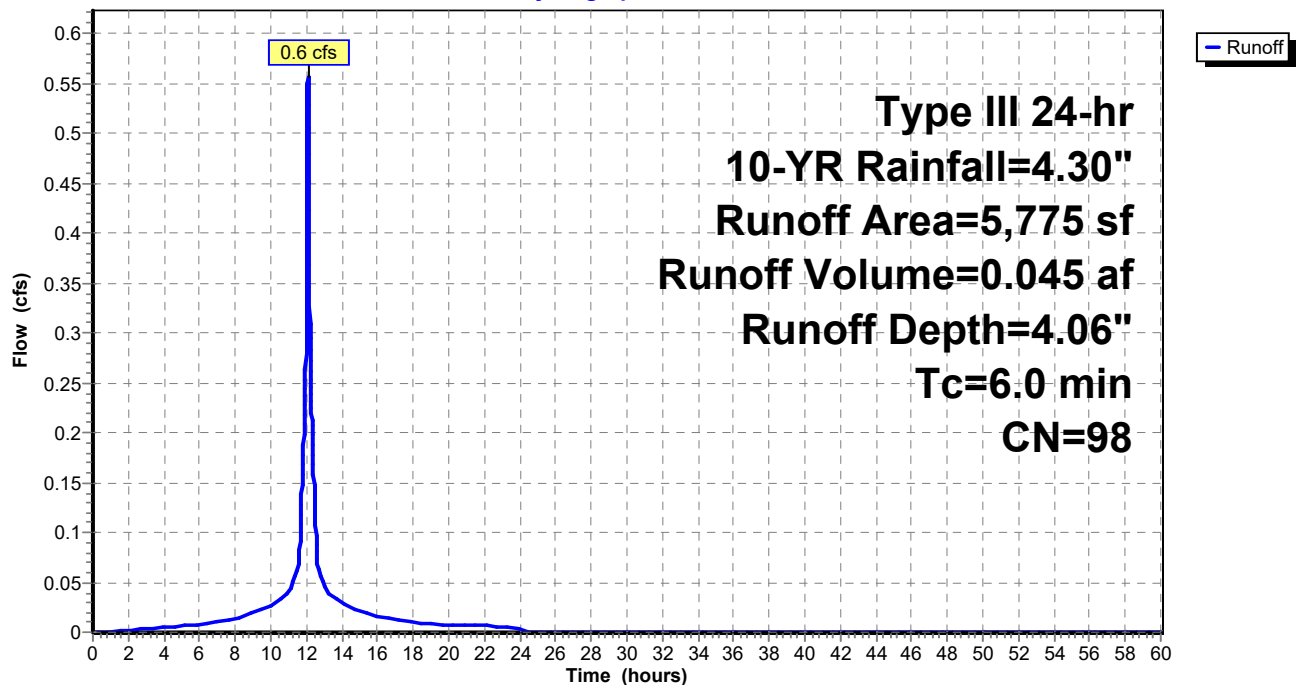
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-YR Rainfall=4.30"

Area (sf)	CN	Description
5,775	98	Roofs, HSG D
5,775		100.00% Impervious Area

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

Subcatchment 1.2S:

Hydrograph



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Type III 24-hr 10-YR Rainfall=4.30"

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Summary for Subcatchment 2.1S:

Runoff = 1.4 cfs @ 12.08 hrs, Volume= 0.111 af, Depth= 3.73"

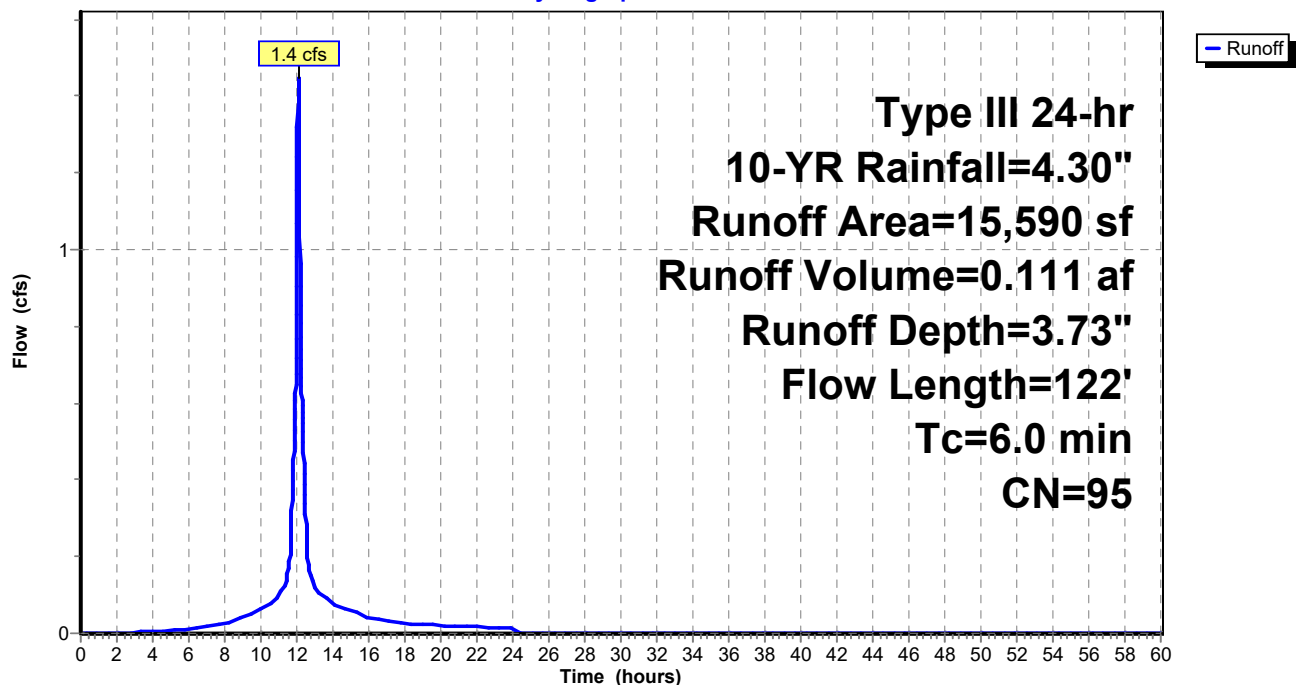
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-YR Rainfall=4.30"

Area (sf)	CN	Description
2,930	80	>75% Grass cover, Good, HSG D
12,660	98	Paved parking, HSG D
15,590	95	Weighted Average
2,930		18.79% Pervious Area
12,660		81.21% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.4	12	0.0100	0.08		Sheet Flow, A-B
					Grass: Short n= 0.150 P2= 3.00"
0.7	110	0.0150	2.49		Shallow Concentrated Flow, B-C
					Paved Kv= 20.3 fps
2.9					Direct Entry, DIRECT ENTRY
6.0	122	Total			

Subcatchment 2.1S:

Hydrograph



Summary for Reach 1.2R: ROOF DRAIN

[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 0.1 ac, 100.00% Impervious, Inflow Depth = 4.06" for 10-YR event
 Inflow = 0.6 cfs @ 12.08 hrs, Volume= 0.045 af
 Outflow = 0.6 cfs @ 12.09 hrs, Volume= 0.045 af, Atten= 0%, Lag= 0.4 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Max. Velocity= 5.31 fps, Min. Travel Time= 0.2 min

Avg. Velocity= 1.80 fps, Avg. Travel Time= 0.6 min

Peak Storage= 7 cf @ 12.09 hrs

Average Depth at Peak Storage= 0.26'

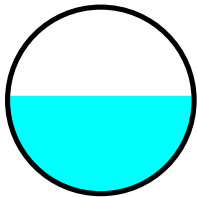
Bank-Full Depth= 0.50' Flow Area= 0.2 sf, Capacity= 1.0 cfs

6.0" Round Pipe

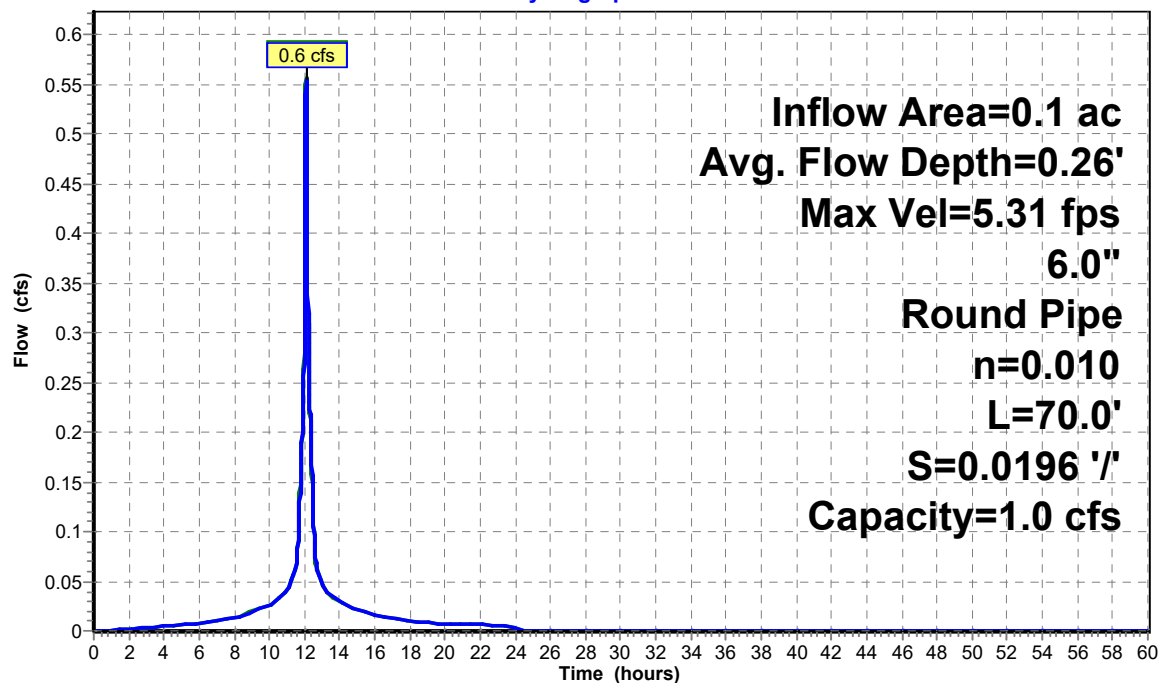
n= 0.010 PVC, smooth interior

Length= 70.0' Slope= 0.0196 '/'

Inlet Invert= 126.00', Outlet Invert= 124.63'

**Reach 1.2R: ROOF DRAIN**

Hydrograph



— Inflow
 — Outflow

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Type III 24-hr 10-YR Rainfall=4.30"

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Summary for Pond 1.1P:

[62] Hint: Exceeded Reach 1.2R OUTLET depth by 0.19' @ 12.09 hrs

Inflow Area = 0.3 ac, 77.97% Impervious, Inflow Depth = 3.74" for 10-YR event
Inflow = 1.1 cfs @ 12.09 hrs, Volume= 0.082 af
Outflow = 1.1 cfs @ 12.09 hrs, Volume= 0.082 af, Atten= 0%, Lag= 0.0 min
Primary = 1.1 cfs @ 12.09 hrs, Volume= 0.082 af

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Peak Elev= 125.09' @ 12.09 hrs

Flood Elev= 128.83'

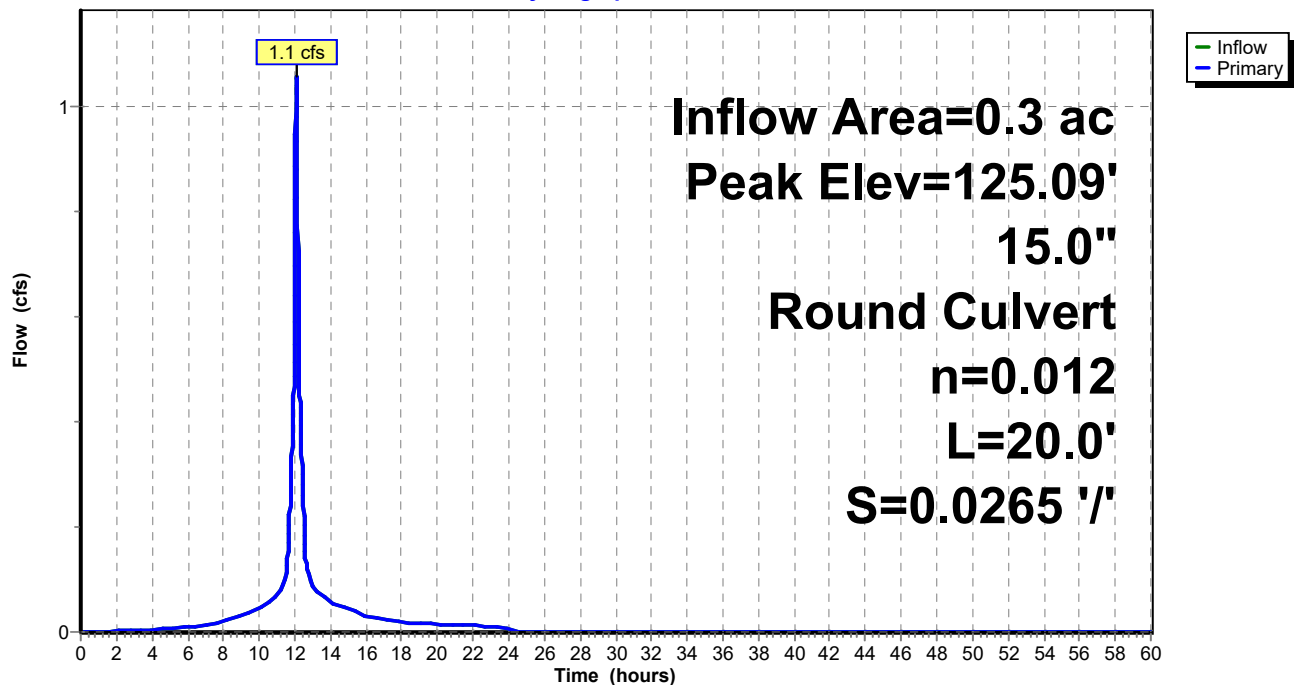
Device	Routing	Invert	Outlet Devices
#1	Primary	124.53'	15.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 124.53' / 124.00' S= 0.0265 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=1.1 cfs @ 12.09 hrs HW=125.09' (Free Discharge)

↑1=Culvert (Inlet Controls 1.1 cfs @ 2.00 fps)

Pond 1.1P:

Hydrograph



220503-01 Post

Type III 24-hr 10-YR Rainfall=4.30"

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Summary for Pond 2P:

Inflow Area = 0.4 ac, 81.21% Impervious, Inflow Depth = 3.73" for 10-YR event
Inflow = 1.4 cfs @ 12.08 hrs, Volume= 0.111 af
Outflow = 1.4 cfs @ 12.08 hrs, Volume= 0.111 af, Atten= 0%, Lag= 0.0 min
Primary = 1.4 cfs @ 12.08 hrs, Volume= 0.111 af

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Peak Elev= 122.86' @ 12.08 hrs

Flood Elev= 127.46'

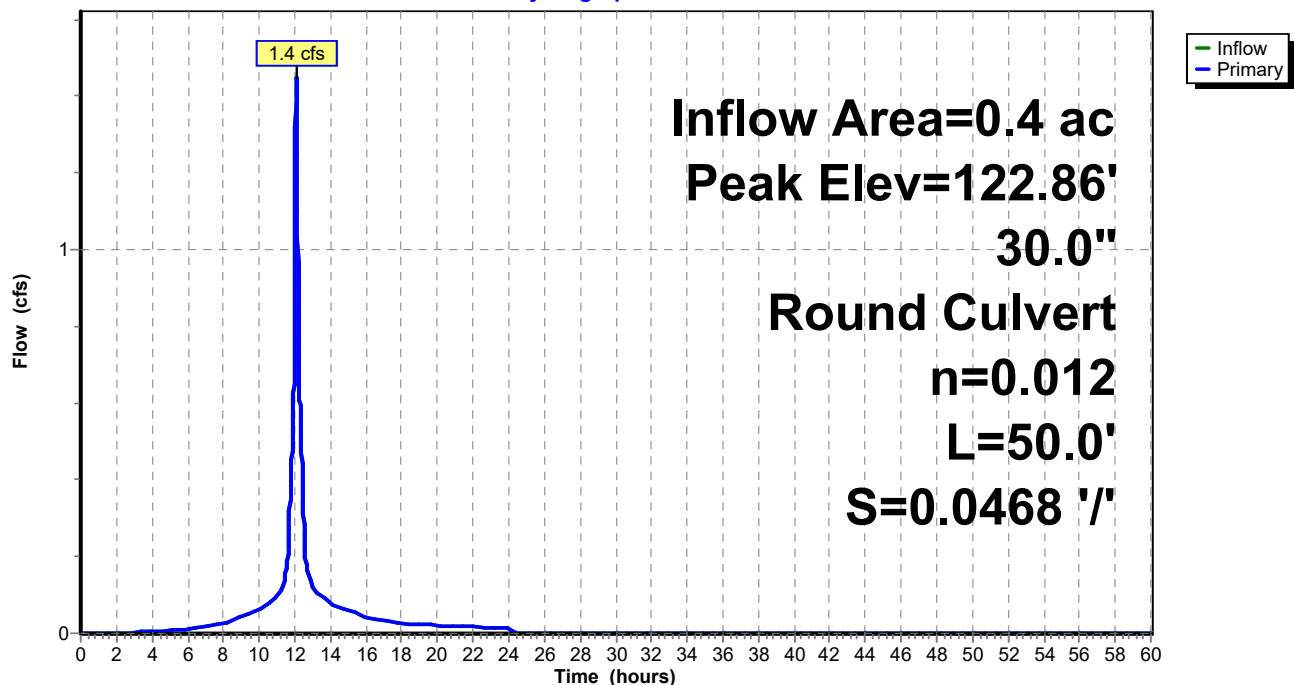
Device	Routing	Invert	Outlet Devices
#1	Primary	122.34'	30.0" Round Culvert L= 50.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 122.34' / 120.00' S= 0.0468 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 4.91 sf

Primary OutFlow Max=1.4 cfs @ 12.08 hrs HW=122.86' (Free Discharge)

↑1=Culvert (Inlet Controls 1.4 cfs @ 1.94 fps)

Pond 2P:

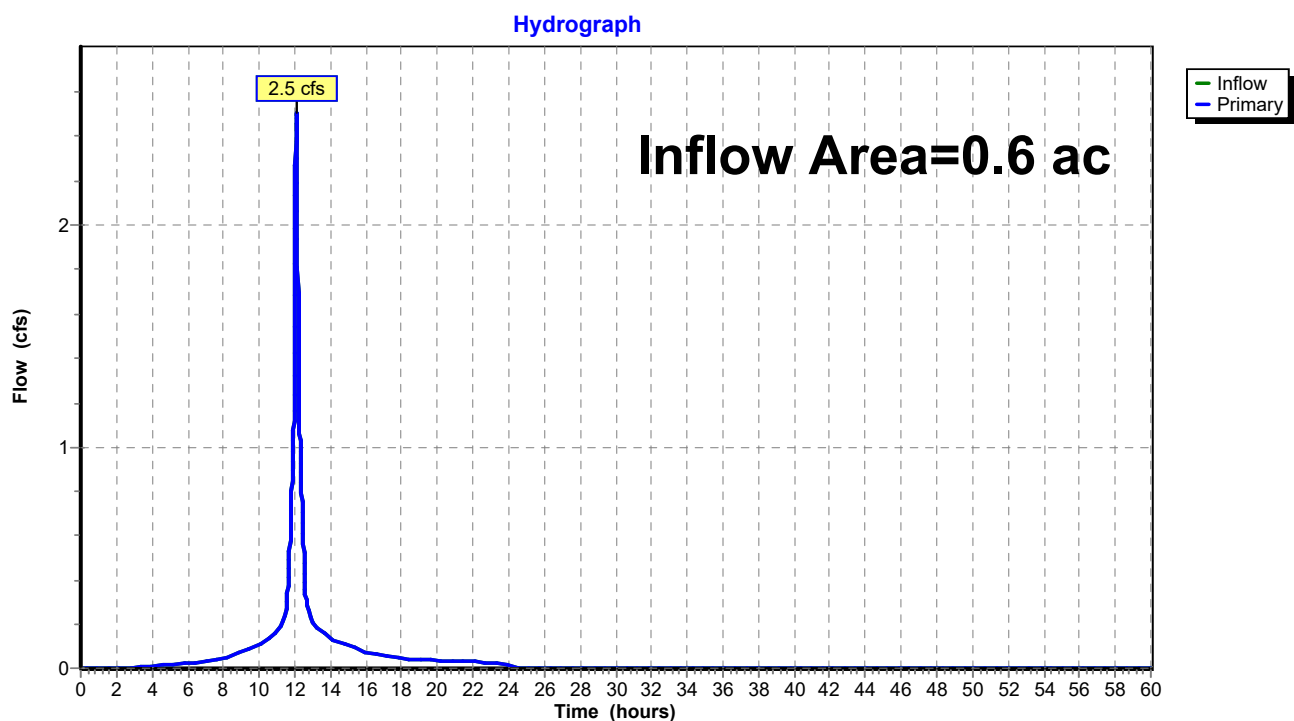
Hydrograph



Summary for Link POA-1: ANDROSCOGGIN RIVER

Inflow Area = 0.6 ac, 79.83% Impervious, Inflow Depth = 3.73" for 10-YR event
Inflow = 2.5 cfs @ 12.09 hrs, Volume= 0.193 af
Primary = 2.5 cfs @ 12.09 hrs, Volume= 0.193 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Link POA-1: ANDROSCOGGIN RIVER

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Type III 24-hr 25-YR Rainfall=5.40"

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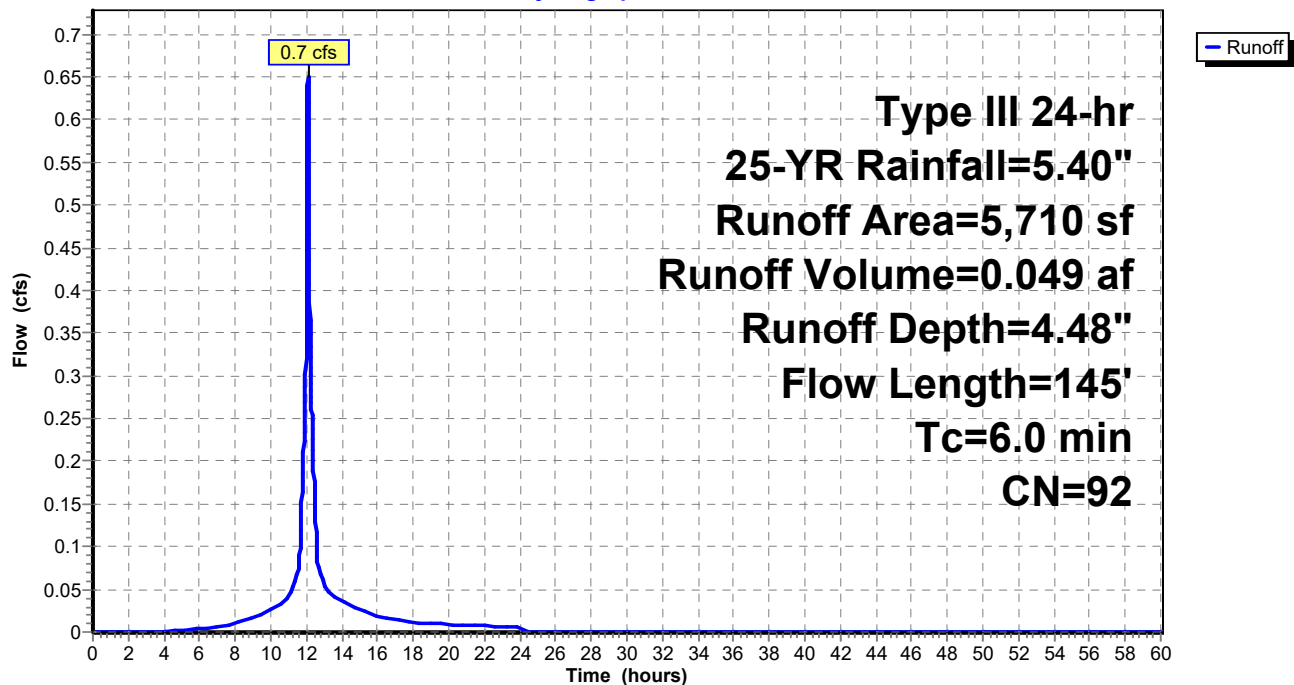
Summary for Subcatchment 1.1S:

Runoff = 0.7 cfs @ 12.08 hrs, Volume= 0.049 af, Depth= 4.48"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=5.40"

Area (sf)	CN	Description
760	86	Woods/grass comb., Poor, HSG D
520	89	<50% Grass cover, Poor, HSG D
1,250	80	>75% Grass cover, Good, HSG D
3,180	98	Paved parking, HSG D
5,710	92	Weighted Average
2,530		44.31% Pervious Area
3,180		55.69% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.4	30	0.2500	0.36		Sheet Flow, A-B
					Grass: Short n= 0.150 P2= 3.00"
0.2	65	0.1500	5.81		Shallow Concentrated Flow, B-C
					Grassed Waterway Kv= 15.0 fps
0.4	50	0.0100	2.03		Shallow Concentrated Flow, C-D
					Paved Kv= 20.3 fps
4.0					Direct Entry, DIRECT ENTRY
6.0	145	Total			

Subcatchment 1.1S:**Hydrograph**

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Type III 24-hr 25-YR Rainfall=5.40"

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Summary for Subcatchment 1.2S:

Runoff = 0.7 cfs @ 12.08 hrs, Volume= 0.057 af, Depth= 5.16"

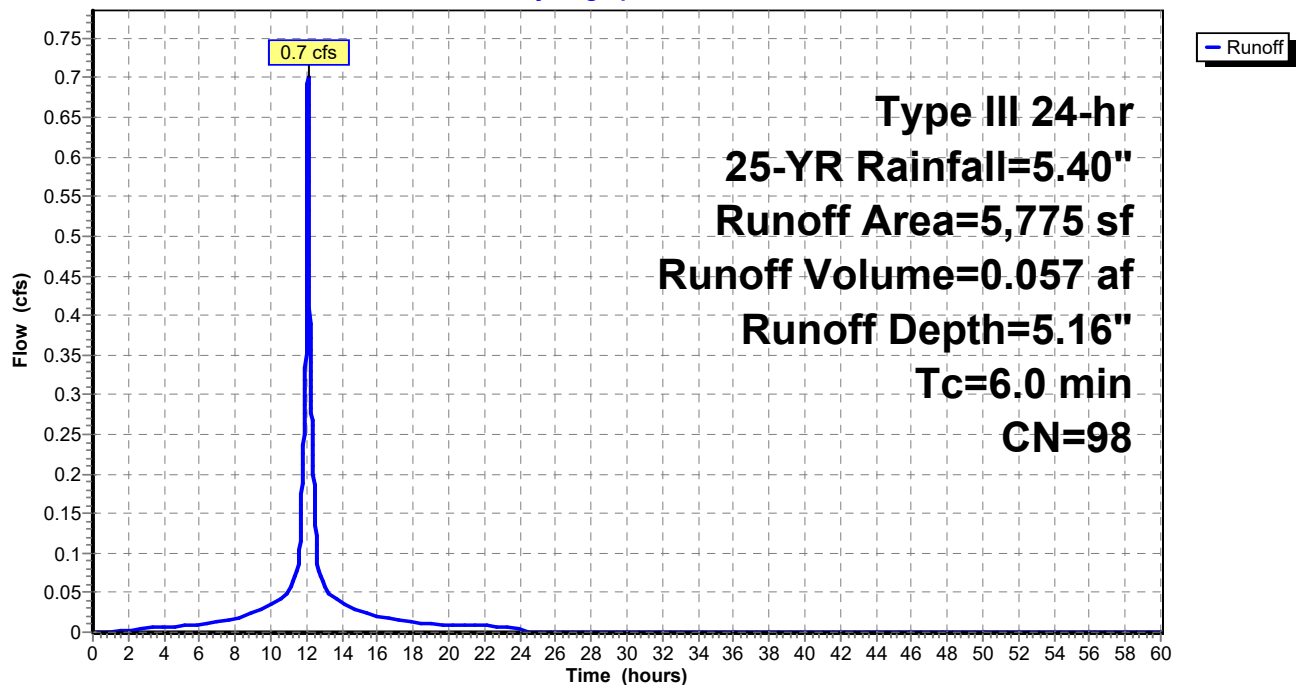
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=5.40"

Area (sf)	CN	Description
5,775	98	Roofs, HSG D
5,775		100.00% Impervious Area

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

Subcatchment 1.2S:

Hydrograph



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Type III 24-hr 25-YR Rainfall=5.40"

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Summary for Subcatchment 2.1S:

Runoff = 1.8 cfs @ 12.08 hrs, Volume= 0.144 af, Depth= 4.82"

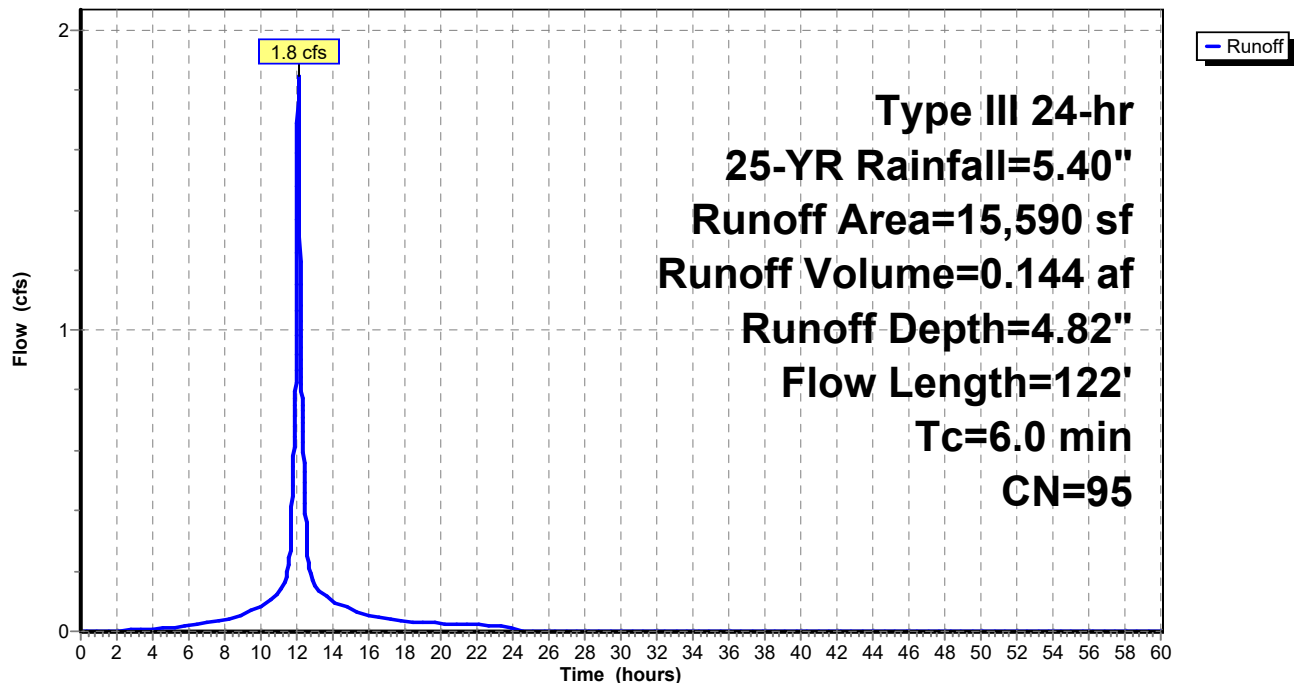
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=5.40"

Area (sf)	CN	Description
2,930	80	>75% Grass cover, Good, HSG D
12,660	98	Paved parking, HSG D
15,590	95	Weighted Average
2,930		18.79% Pervious Area
12,660		81.21% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.4	12	0.0100	0.08		Sheet Flow, A-B
					Grass: Short n= 0.150 P2= 3.00"
0.7	110	0.0150	2.49		Shallow Concentrated Flow, B-C
					Paved Kv= 20.3 fps
2.9					Direct Entry, DIRECT ENTRY
6.0	122	Total			

Subcatchment 2.1S:

Hydrograph



Summary for Reach 1.2R: ROOF DRAIN

[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 0.1 ac, 100.00% Impervious, Inflow Depth = 5.16" for 25-YR event
 Inflow = 0.7 cfs @ 12.08 hrs, Volume= 0.057 af
 Outflow = 0.7 cfs @ 12.09 hrs, Volume= 0.057 af, Atten= 0%, Lag= 0.4 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Max. Velocity= 5.60 fps, Min. Travel Time= 0.2 min

Avg. Velocity= 1.94 fps, Avg. Travel Time= 0.6 min

Peak Storage= 9 cf @ 12.09 hrs

Average Depth at Peak Storage= 0.30'

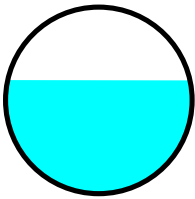
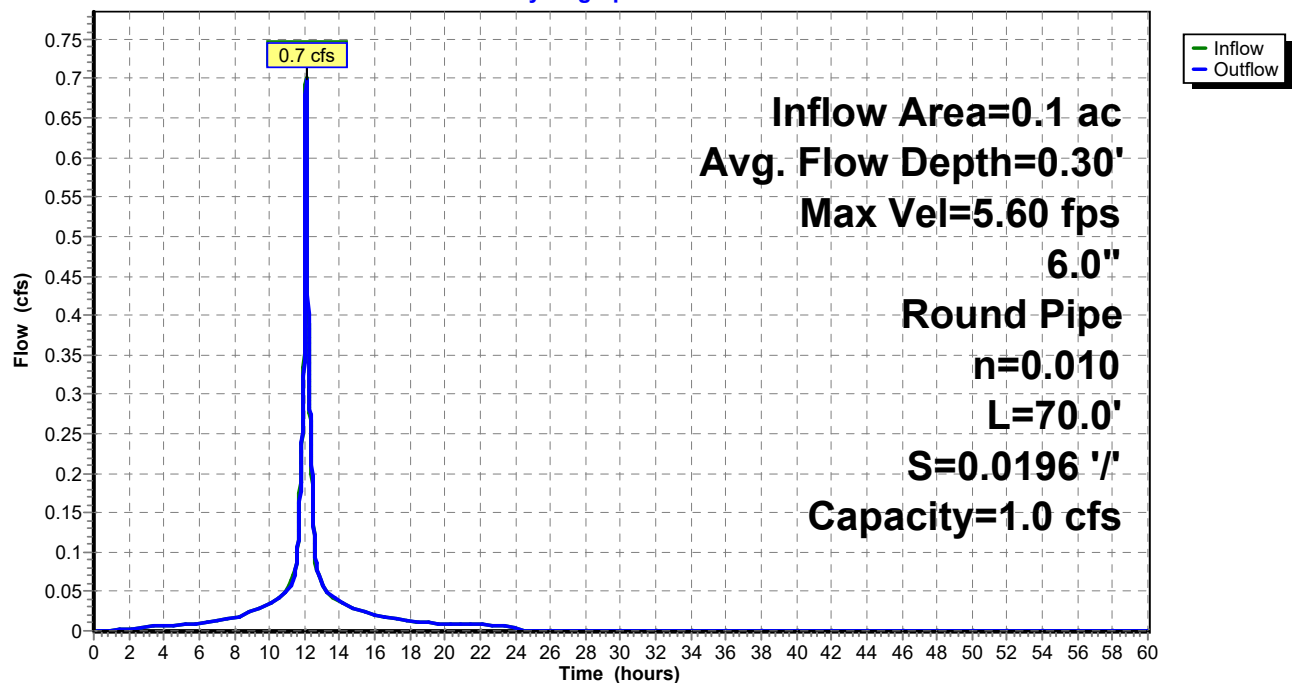
Bank-Full Depth= 0.50' Flow Area= 0.2 sf, Capacity= 1.0 cfs

6.0" Round Pipe

n= 0.010 PVC, smooth interior

Length= 70.0' Slope= 0.0196 '/

Inlet Invert= 126.00', Outlet Invert= 124.63'

**Reach 1.2R: ROOF DRAIN****Hydrograph**

220503-01 Post

Type III 24-hr 25-YR Rainfall=5.40"

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Summary for Pond 1.1P:

[62] Hint: Exceeded Reach 1.2R OUTLET depth by 0.23' @ 12.09 hrs

Inflow Area = 0.3 ac, 77.97% Impervious, Inflow Depth = 4.82" for 25-YR event
 Inflow = 1.3 cfs @ 12.09 hrs, Volume= 0.106 af
 Outflow = 1.3 cfs @ 12.09 hrs, Volume= 0.106 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.3 cfs @ 12.09 hrs, Volume= 0.106 af

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

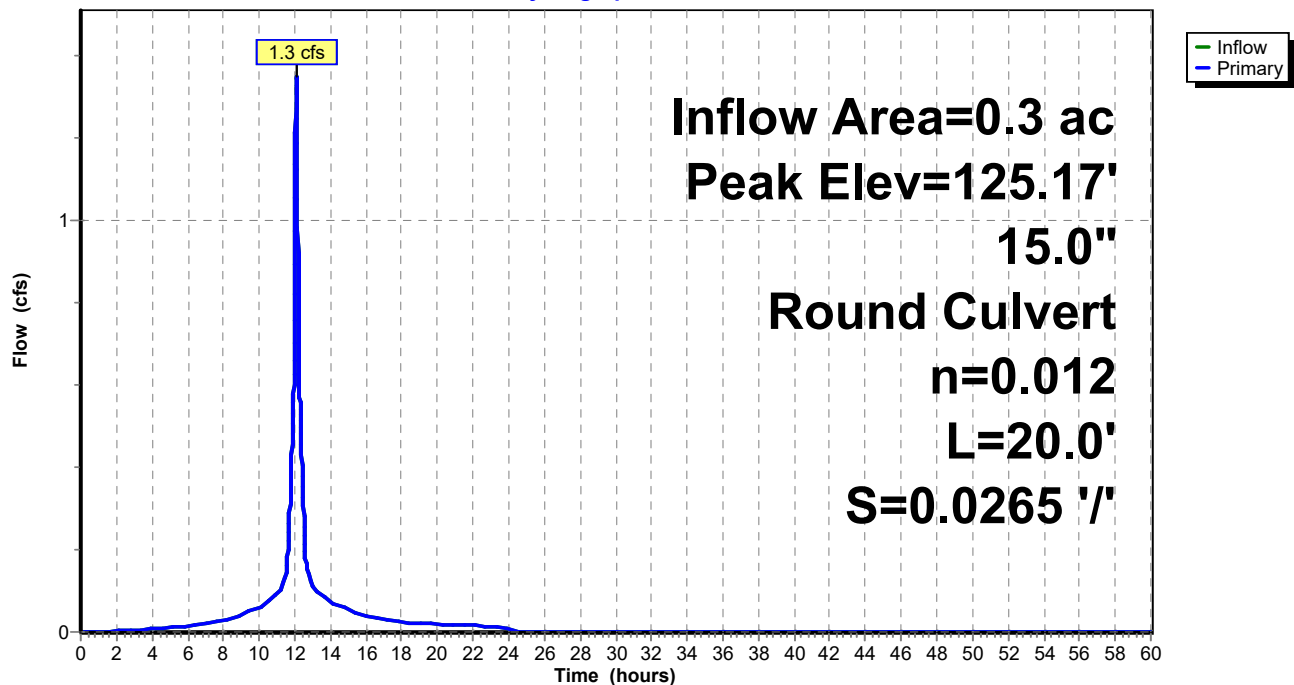
Peak Elev= 125.17' @ 12.09 hrs

Flood Elev= 128.83'

Device	Routing	Invert	Outlet Devices
#1	Primary	124.53'	15.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 124.53' / 124.00' S= 0.0265 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=1.3 cfs @ 12.09 hrs HW=125.17' (Free Discharge)

↑1=Culvert (Inlet Controls 1.3 cfs @ 2.14 fps)

Pond 1.1P:**Hydrograph**

220503-01 Post

Type III 24-hr 25-YR Rainfall=5.40"

Prepared by {enter your company name here}

Printed 5/4/2023

HydroCAD® 10.00-24 s/n 01856 © 2018 HydroCAD Software Solutions LLC

Page 21

Summary for Pond 2P:

Inflow Area = 0.4 ac, 81.21% Impervious, Inflow Depth = 4.82" for 25-YR event
Inflow = 1.8 cfs @ 12.08 hrs, Volume= 0.144 af
Outflow = 1.8 cfs @ 12.08 hrs, Volume= 0.144 af, Atten= 0%, Lag= 0.0 min
Primary = 1.8 cfs @ 12.08 hrs, Volume= 0.144 af

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

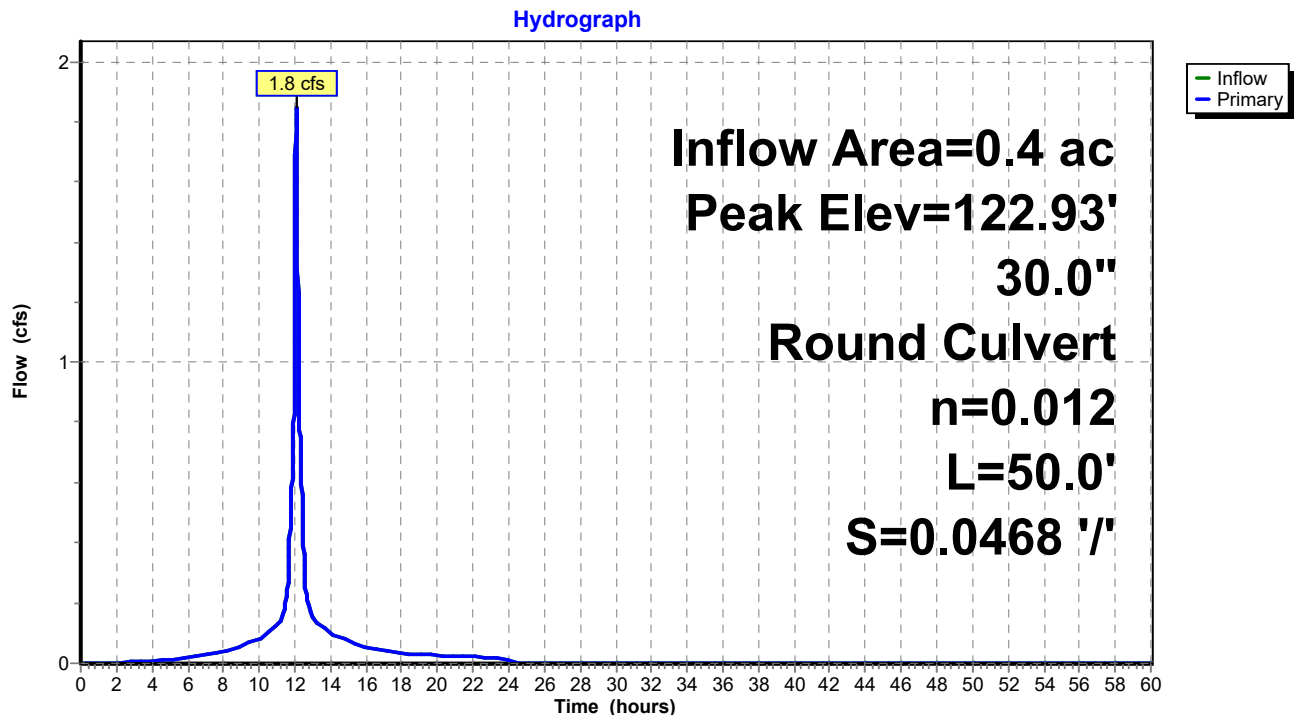
Peak Elev= 122.93' @ 12.08 hrs

Flood Elev= 127.46'

Device	Routing	Invert	Outlet Devices
#1	Primary	122.34'	30.0" Round Culvert L= 50.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 122.34' / 120.00' S= 0.0468 '/ Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 4.91 sf

Primary OutFlow Max=1.8 cfs @ 12.08 hrs HW=122.93' (Free Discharge)

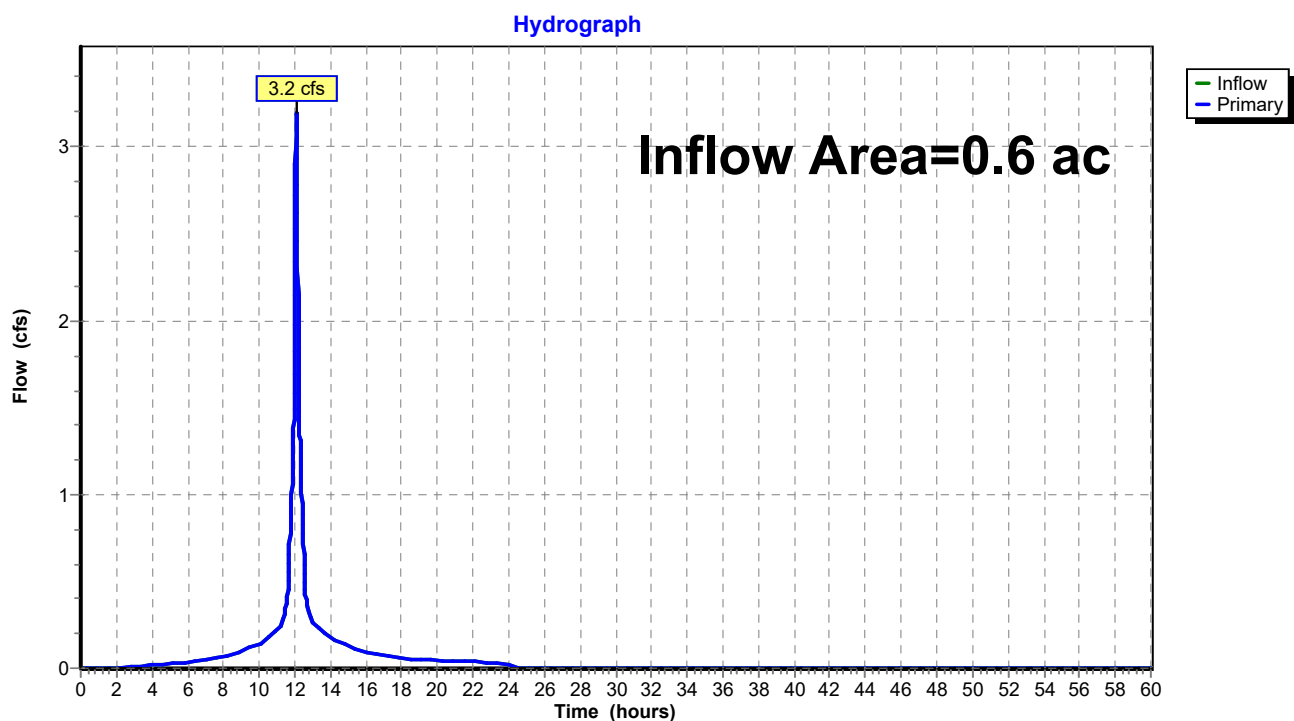
↑1=Culvert (Inlet Controls 1.8 cfs @ 2.07 fps)

Pond 2P:

Summary for Link POA-1: ANDROSCOGGIN RIVER

Inflow Area = 0.6 ac, 79.83% Impervious, Inflow Depth = 4.82" for 25-YR event
Inflow = 3.2 cfs @ 12.09 hrs, Volume= 0.250 af
Primary = 3.2 cfs @ 12.09 hrs, Volume= 0.250 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Link POA-1: ANDROSCOGGIN RIVER

Appendix 2

Soil Information & FEMA Map



United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for **Androscoggin and Sagadahoc Counties, Maine**



November 15, 2022

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Md—Made land, loamy materials.....	14
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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.


Custom Soil Resource Report Soil Map



Custom Soil Resource Report

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)


Soils


 Soil Map Unit Polygons


 Soil Map Unit Lines


 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit


 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop


 Saline Spot

 Sandy Spot

 Severely Eroded Spot


 Sinkhole


 Slide or Slip

 Sodic Spot


 Spoil Area

 Stony Spot


 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals


Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

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

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

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

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

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

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

Soil Survey Area: Androscoggin and Sagadahoc Counties, Maine

Survey Area Data: Version 23, Aug 30, 2022

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

Date(s) aerial images were photographed: Jul 11, 2021—Oct 29, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

MAP LEGEND

MAP INFORMATION

imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Md	Made land, loamy materials	2.4	100.0%
Totals for Area of Interest		2.4	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Androscoggin and Sagadahoc Counties, Maine

Md—Made land, loamy materials

Map Unit Composition

Made land: 91 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Made Land

Typical profile

H1 - 0 to 60 inches: very gravelly sandy loam

Properties and qualities

Slope: 0 to 35 percent

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to very high (0.06 to 20.00 in/hr)

Depth to water table: About 24 to 72 inches

Available water supply, 0 to 60 inches: Moderate (about 6.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Ecological site: F144BY501ME - Loamy Slope (Northern Hardwoods)

Hydric soil rating: No

References

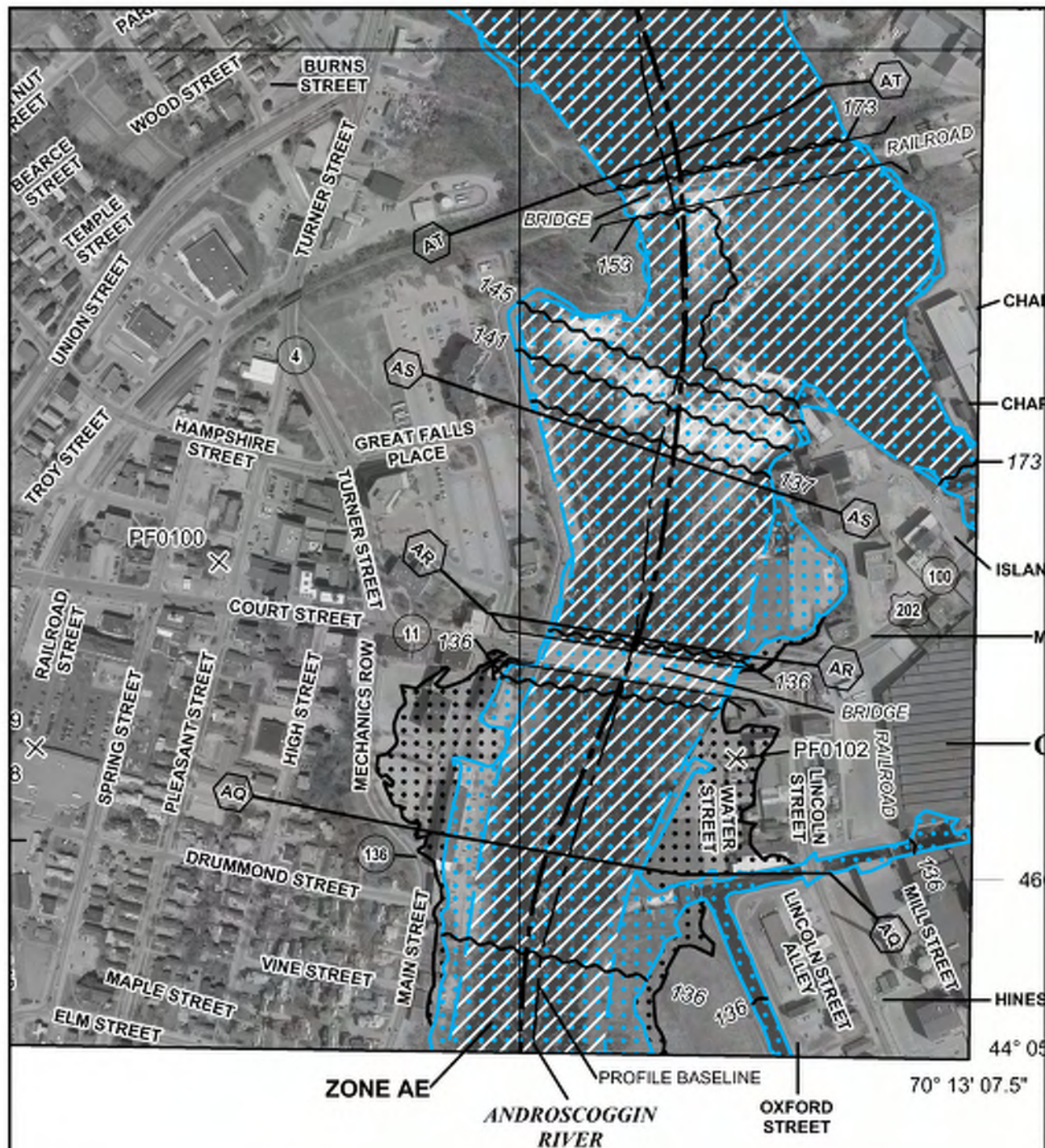
- American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.
- American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.
- Federal Register. July 13, 1994. Changes in hydric soils of the United States.
- Federal Register. September 18, 2002. Hydric soils of the United States.
- Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.
- National Research Council. 1995. Wetlands: Characteristics and boundaries.
- Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262
- Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577
- Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580
- Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.
- United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.
- United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374
- United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelpdb1043084>

Custom Soil Resource Report

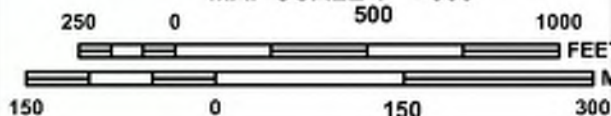
United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf



MAP SCALE 1" = 500'



NFIP

PANEL 0326E

FIRM

FLOOD INSURANCE RATE MAP
ANDROSCOGGIN
COUNTY, MAINE
(ALL JURISDICTIONS)

PANEL 326 OF 470
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
AUBURN, CITY OF	230001	0326	E
LEWISTON, CITY OF	230004	0326	E

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.



MAP NUMBER
23001C0326E
EFFECTIVE DATE
JULY 8, 2013

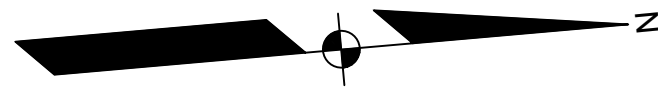
Federal Emergency Management Agency

This is an official FIRMette showing a portion of the above-referenced flood map created from the MSC FIRMette Web tool. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For additional information about how to make sure the map is current, please see the Flood Hazard Mapping Updates Overview Fact Sheet available on the FEMA Flood Map Service Center home page at <https://msc.fema.gov>.

Appendix 3

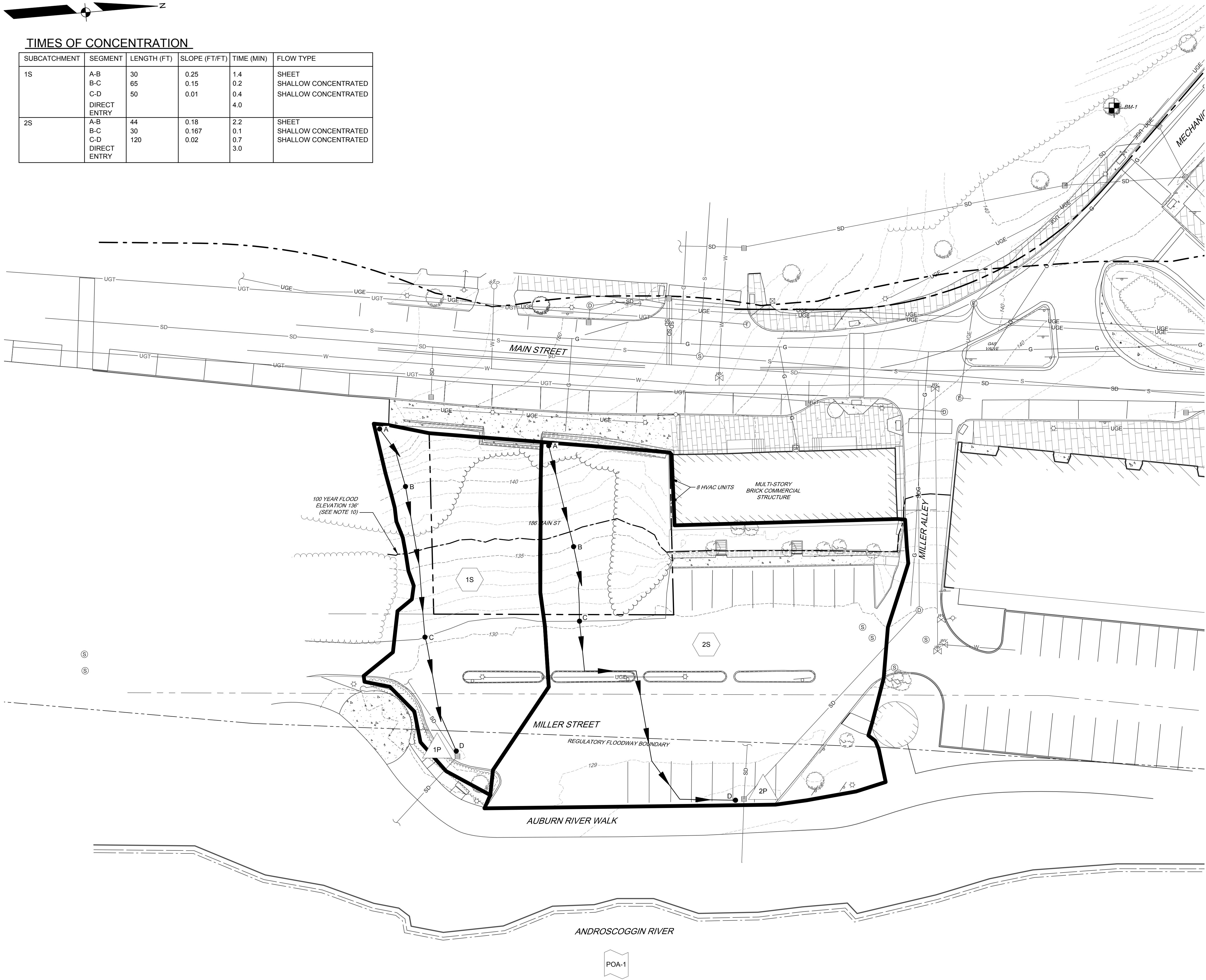
Stormwater Management Plans

F:\Projects\220503 SW Pre.dwg, TAB SW Existing Conditions 5/15/2023 7:45 AM - TANNER F. GOODINE



TIMES OF CONCENTRATION

SUBCATCHMENT	SEGMENT	LENGTH (FT)	SLOPE (FT/FT)	TIME (MIN)	FLOW TYPE
1S	A-B	30	0.25	1.4	SHEET
	B-C	65	0.15	0.2	SHALLOW CONCENTRATED
	C-D	50	0.01	0.4	SHALLOW CONCENTRATED
	DIRECT ENTRY			4.0	
2S	A-B	44	0.18	2.2	SHEET
	B-C	30	0.167	0.1	SHALLOW CONCENTRATED
	C-D	120	0.02	0.7	SHALLOW CONCENTRATED
	DIRECT ENTRY			3.0	

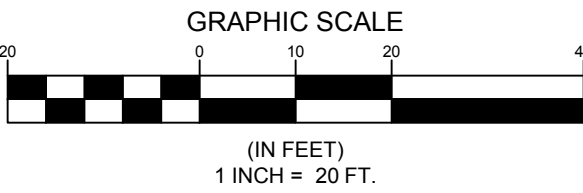


SOIL NOTES

SOIL INFORMATION & DATA WAS OBTAINED USING UNITED STATES GEOLOGIC SURVEY WEB SOIL SURVEY ONLINE APPLICATION ON NOV. 15, 2022. SOILS WERE CLASSIFIED AS MADE LAND, LOAMY MATERIALS (ML), AND IS ASSUMED TO BE HSG D.

EXISTING CONDITIONS LEGEND

- WATERSHED BOUNDARY
- TIME OF CONCENTRATION
- REACH
- SUBCATCHMENT LABEL
- REACH
- POINT OF ANALYSIS
- STORMWATER TREATMENT/DETENTION POND



220503 SW Pre.dwg, TAB SW Existing Conditions

STORMWATER PLAN - PRE

OF:
186 MAIN STREET
186 MAIN STREET
AUBURN, MAINE 04210

FOR:
GREAT FALLS CONSTRUCTION
20 MECHANIC STREET
GORHAM, MAINE 04038

RECORD OWNER:
CITY OF AUBURN
60 COURT STREET
AUBURN, ME 04210

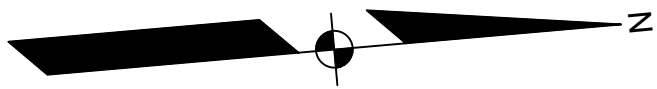
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WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Sullivan, ME 04106
South Portland, ME 04106
Tel. 207-200-2100

C	PDO	05/05/2023	ISSUED TO CITY OF AUBURN FOR SITE PLAN SUBMISSION
B	ACH	01/27/2023	REVISED PER CLIENT AND CITY OF AUBURN COMMENTS
A	ACH	01/06/2023	ISSUED FOR TRAFFIC MOVEMENT PERMIT
REV	BY	DATE	STATUS
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS, INC.			



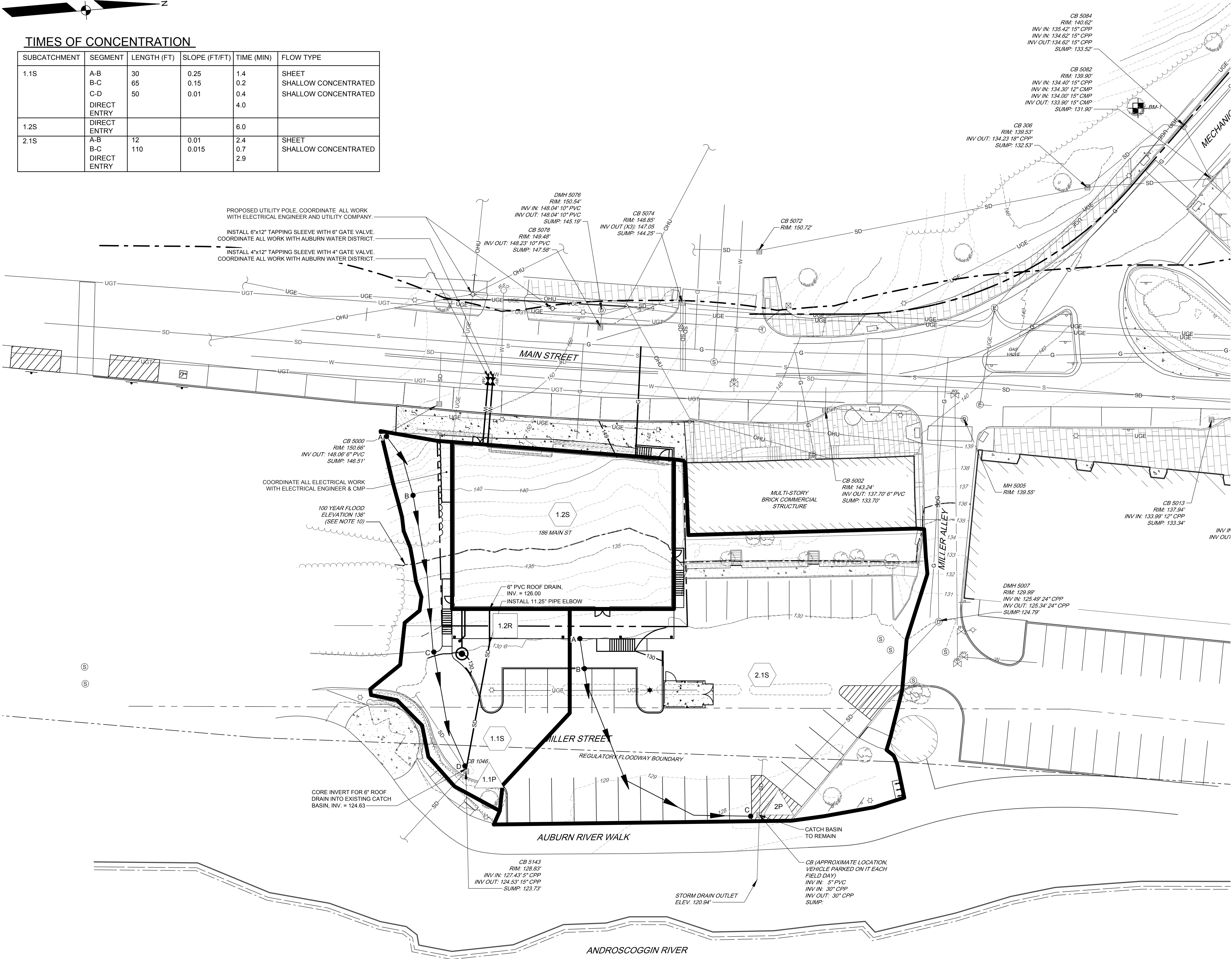
PAUL D. OSTROWSKI, PE 11175

NOT FOR
CONSTRUCTION



TIMES OF CONCENTRATION

SUBCATCHMENT	SEGMENT	LENGTH (FT)	SLOPE (FT/FT)	TIME (MIN)	FLOW TYPE
1.1S	A-B	30	0.25	1.4	SHEET
	B-C	65	0.15	0.2	SHALLOW CONCENTRATED
	C-D	50	0.01	0.4	SHALLOW CONCENTRATED
	DIRECT ENTRY			4.0	
1.2S	DIRECT ENTRY			6.0	
2.1S	A-B	12	0.01	2.4	SHEET
	B-C	110	0.015	0.7	SHALLOW CONCENTRATED
	DIRECT ENTRY			2.9	

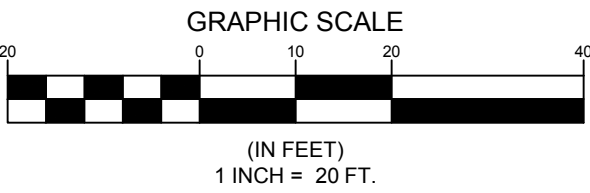


SOIL NOTES

SOIL INFORMATION & DATA WAS OBTAINED USING UNITED STATES GEOLOGIC SURVEY WEB SOIL SURVEY ONLINE APPLICATION ON NOV. 15, 2022. SOILS WERE CLASSIFIED AS MADE LAND, LOAMY MATERIALS (ML), AND IS ASSUMED TO BE HSG D.

PROPOSED CONDITIONS LEGEND

- WATERSHED BOUNDARY
- TIME OF CONCENTRATION
- REACH
- SUBCATCHMENT LABEL
- REACH
- POINT OF ANALYSIS
- STORMWATER TREATMENT/DETENTION POND
- HSG #
- SOILS BOUNDARY



NOT FOR CONSTRUCTION

PAUL D. OSTROWSKI, PE 11175

PAUL D. OSTROWSKI, PE 11175

05/05/2023

C	PDO	05/05/2023	ISSUED TO CITY OF AUBURN FOR SITE PLAN SUBMISSION
B	ACH	01/27/2023	REVISED PER CLIENT AND CITY OF AUBURN COMMENTS
A	ACH	01/06/2023	ISSUED FOR TRAFFIC MOVEMENT PERMIT
REV	BY	DATE	STATUS

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75 John Roberts Rd.
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South Portland, ME 04106
Tel: 207-200-2100

STORMWATER PLAN - POST

OF:

186 MAIN STREET

186 MAIN STREET

AUBURN, MAINE 04210

FOR:

GREAT FALLS CONSTRUCTION

20 MECHANIC STREET

GORHAM, MAINE 04038

DESIGNED	TFG
DRAWN	ABB
CHECKED	PDO
DATE	05/05/2023
SCALE	1" = 20'
PROJECT	220503-01

SHEET 2 OF 2

Section 12

Architecture

Exhibit 12 – Architecture

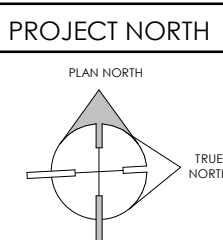
Architectural drawings have been provided through CWS Architecture + Interior Design.

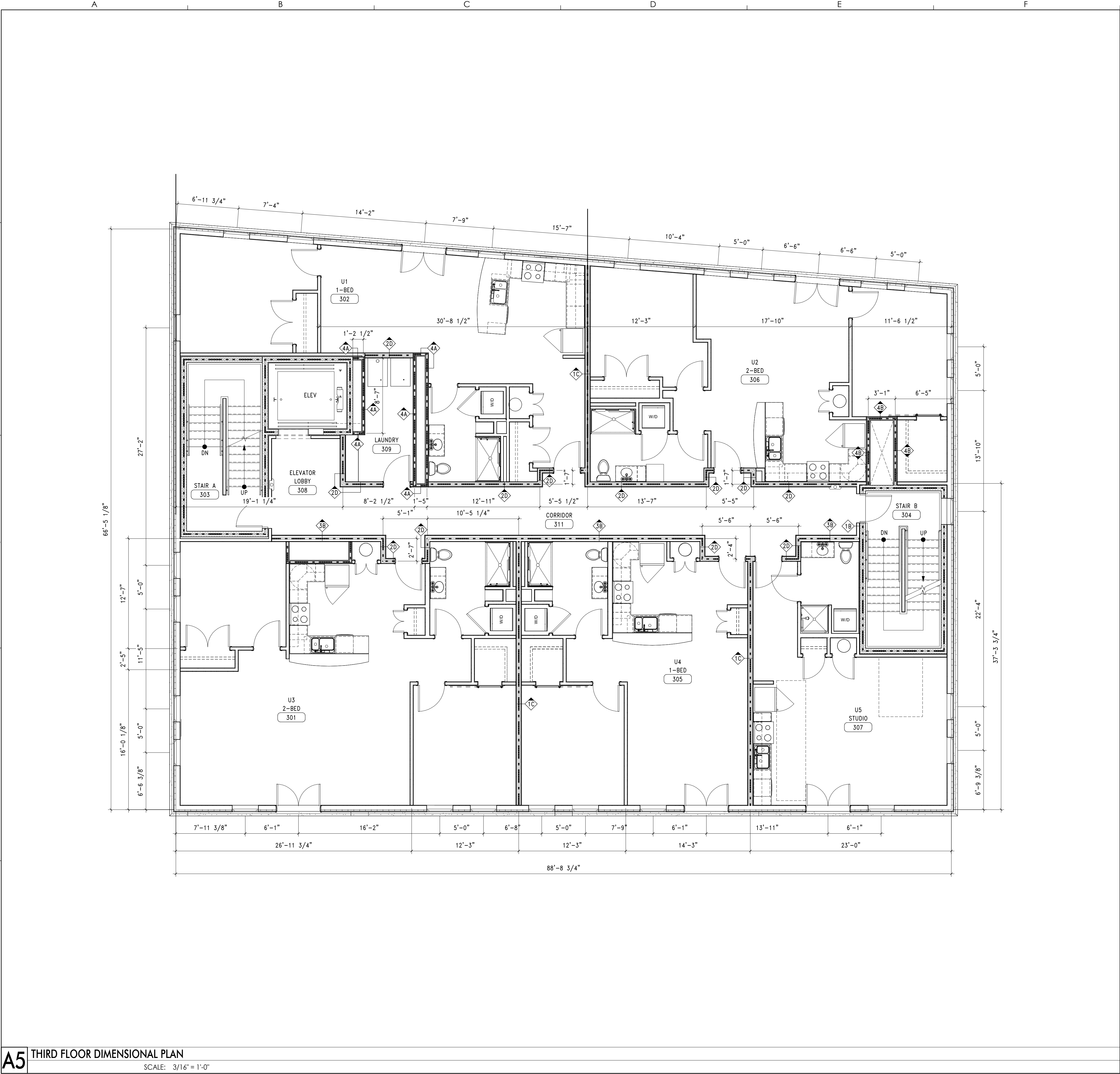


SCALE: 3/16" = 1'-0'

C:\Users\Christopher McDongia\Documents\22018 186 Main Street ARCH R22 cmcdongia\N65GM.rvt

ISSUED FOR REVIEW





A5 THIRD FLOOR DIMENSIONAL PLAN
SCALE: 3/16" = 1'-0"

C:\Users\Christopher McDonald\Documents\22018_186 Main Street_ARCH\R22_cmcDonald\6504.rvt

CWS ARCHITECTURE + INTERIOR DESIGN

PLANNING + DESIGN
CONSTRUCTION SERVICES

DESIGNER

CWS ARCHITECTURE + INTERIOR DESIGN

24 US ROUTE ONE, SUITE 100-2A
SCARBOROUGH, ME 04074 207.774.4441
WWW.CWSARCH.COM

OWNER



20 MECHANIC STREET
GORHAM, MAINE 04038

PROJECT

186 MAIN STREET BUILDING

186 MAINE STREET
AUBURN, MAINE 04210

DRAWING

THIRD FLOOR
DIMENSIONAL PLAN

CWS PROJECT NUMBER: 20018

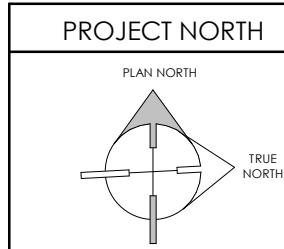
REVISIONS

DRAWING NUMBER

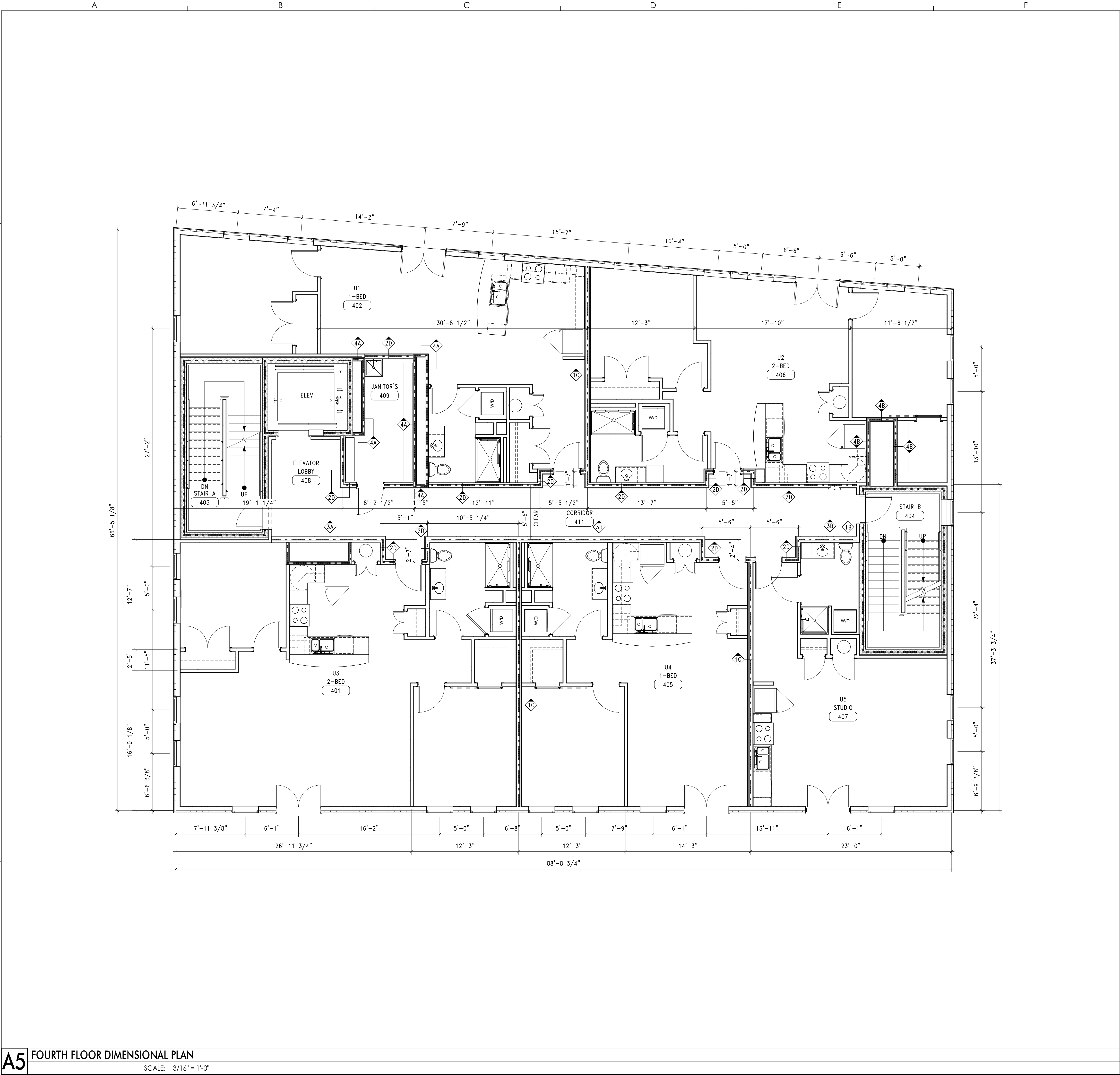
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DATE: 05/03/2023

ISSUED FOR REVIEW



5/3/2023 12:01:38 PM



A5 FOURTH FLOOR DIMENSIONAL PLAN
SCALE: 3/16" = 1'-0"

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CWS ARCHITECTURE + INTERIOR DESIGN

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Great Falls CONSTRUCTION

20 MECHANIC STREET
GORHAM, MAINE 04038

PROJECT

186 MAIN STREET BUILDING

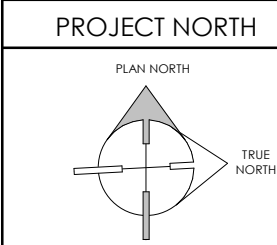
186 MAINE STREET
AUBURN, MAINE 04210

DRAWING

FOURTH FLOOR
DIMENSIONAL PLAN

CWS PROJECT NUMBER: 20018

REVISIONS

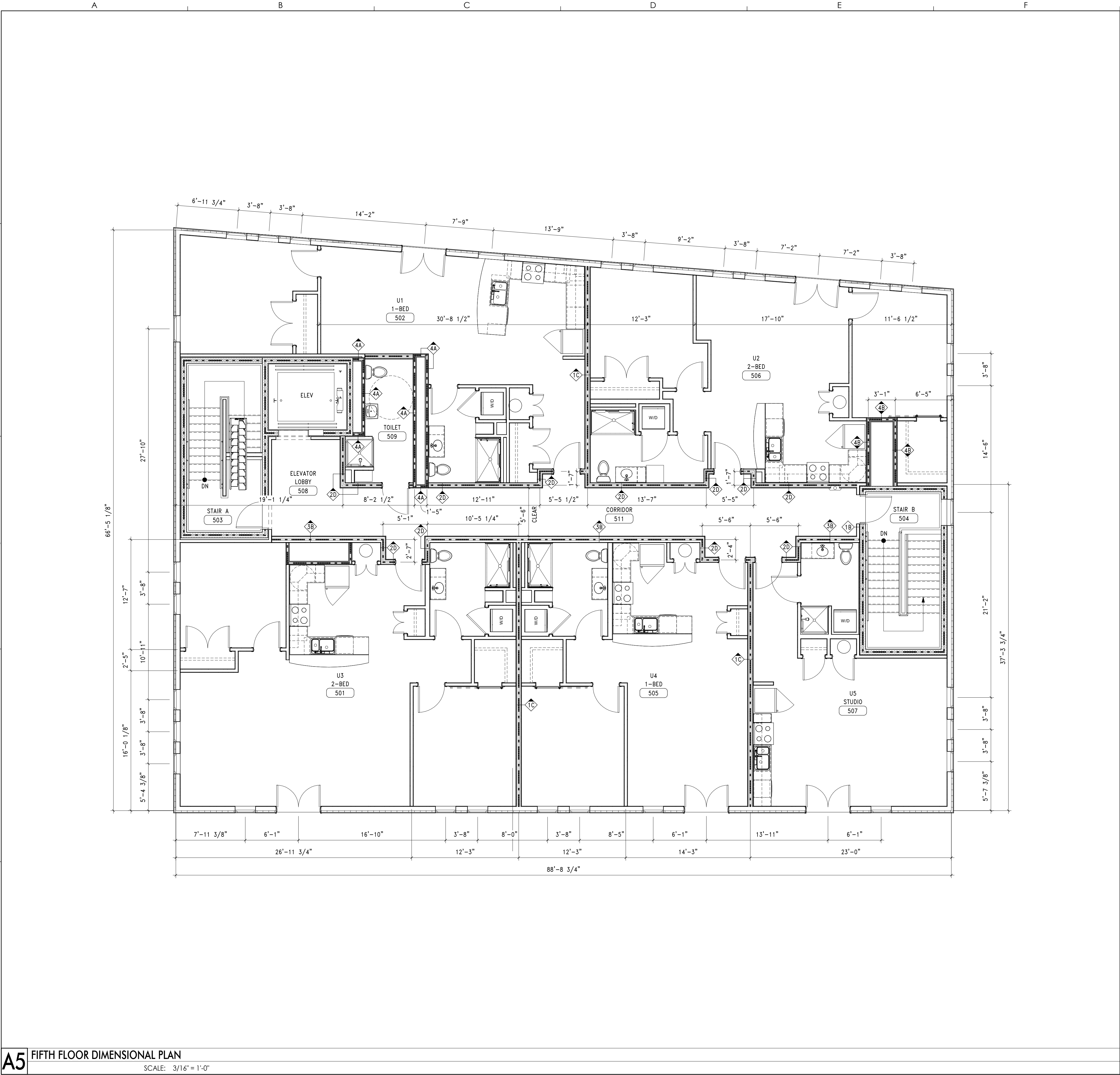


DRAWING NUMBER

A1.31

SCALE: 3/16" = 1'-0"

DATE: 05/03/2023



A5 FIFTH FLOOR DIMENSIONAL PLAN

SCALE: 3/16" = 1'-0"

C:\Users\Christopher McDonald\Documents\22018_186 Main Street_ARCH\R22_cmcDonald\6504.rvt

CWS ARCHITECTURE + INTERIOR DESIGN

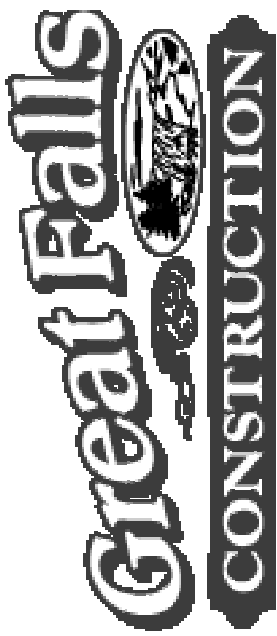
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CONSTRUCTION SERVICES

DESIGNER

CWS ARCHITECTURE + INTERIOR DESIGN

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20 MECHANIC STREET
GORHAM, MAINE 04038

PROJECT

186 MAIN STREET BUILDING

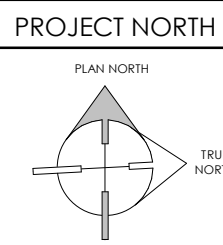
186 MAINE STREET
AUBURN, MAINE 04210

DRAWING

FIFTH FLOOR
DIMENSIONAL PLAN

CWS PROJECT NUMBER: 20018

REVISIONS



DRAWING NUMBER

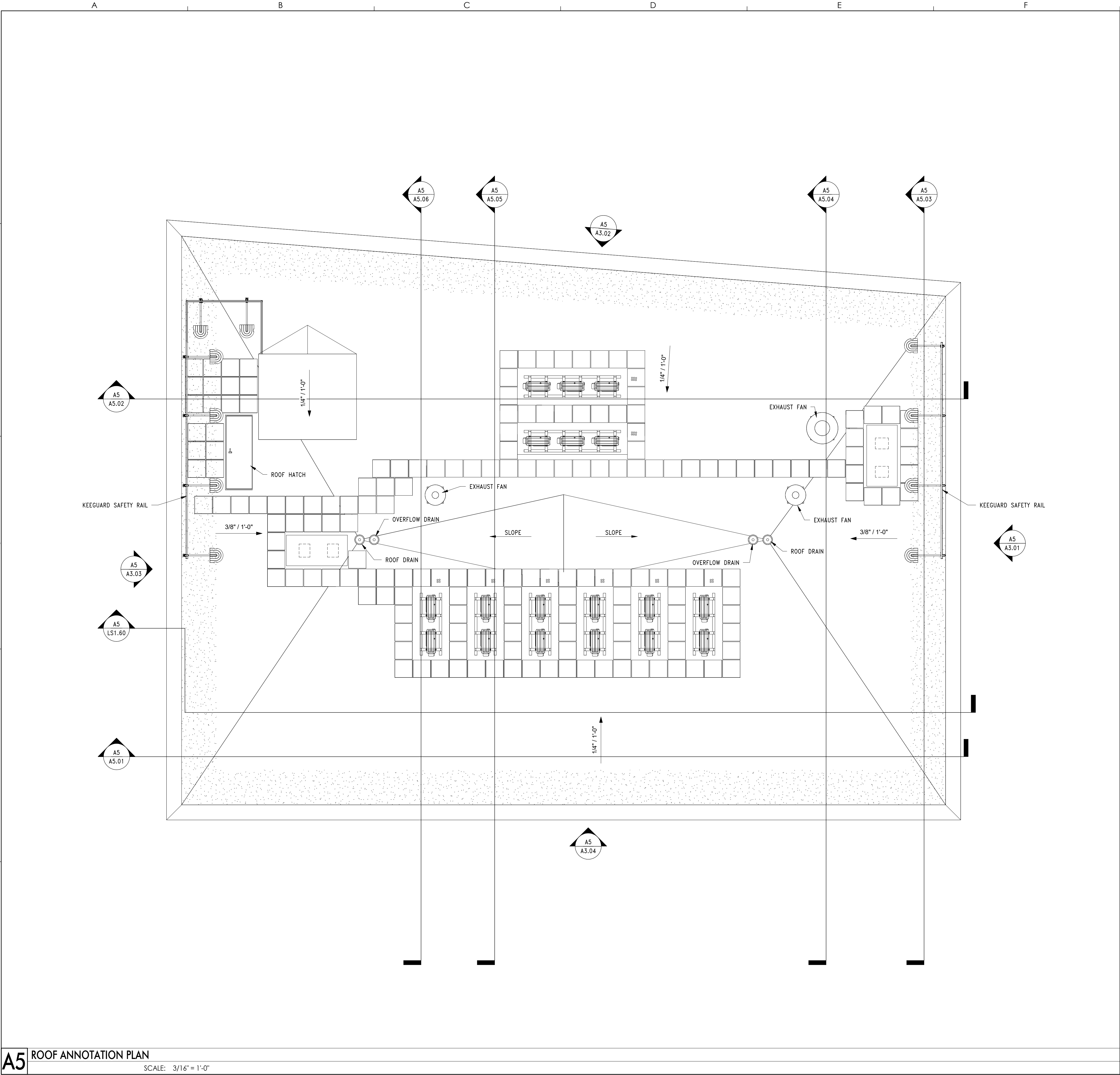
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SCALE: 3/16" = 1'-0"

DATE: 05/03/2023

ISSUED FOR REVIEW

5/3/2023 12:01:59 PM



A5 ROOF ANNOTATION PLAN
SCALE: 3/16" = 1'-0"

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PLANNING + DESIGN
CONSTRUCTION SERVICES

DESIGNER

CWS ARCHITECTURE + INTERIOR DESIGN

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20 MECHANICS STREET
GORHAM, MAINE 04038

PROJECT

186 MAIN STREET BUILDING

186 MAINE STREET
AUBURN, MAINE 04210

DRAWING

ROOF ANNOTATION PLAN

CWS PROJECT NUMBER: 20018

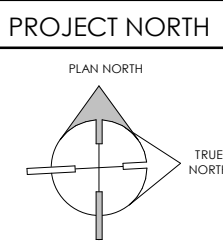
REVISIONS

DRAWING NUMBER

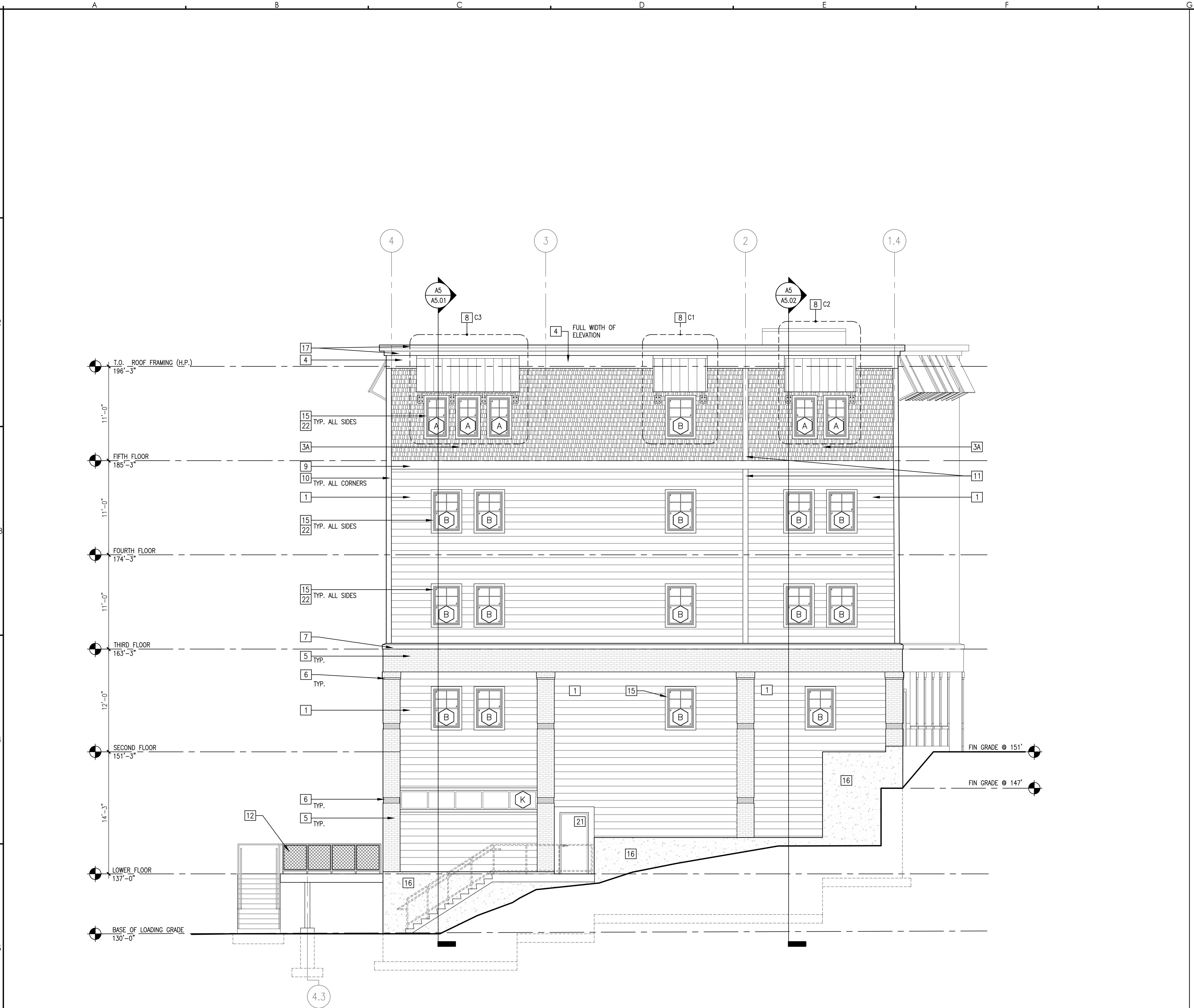
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DATE: 05/03/2023

ISSUED FOR REVIEW



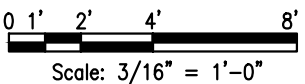
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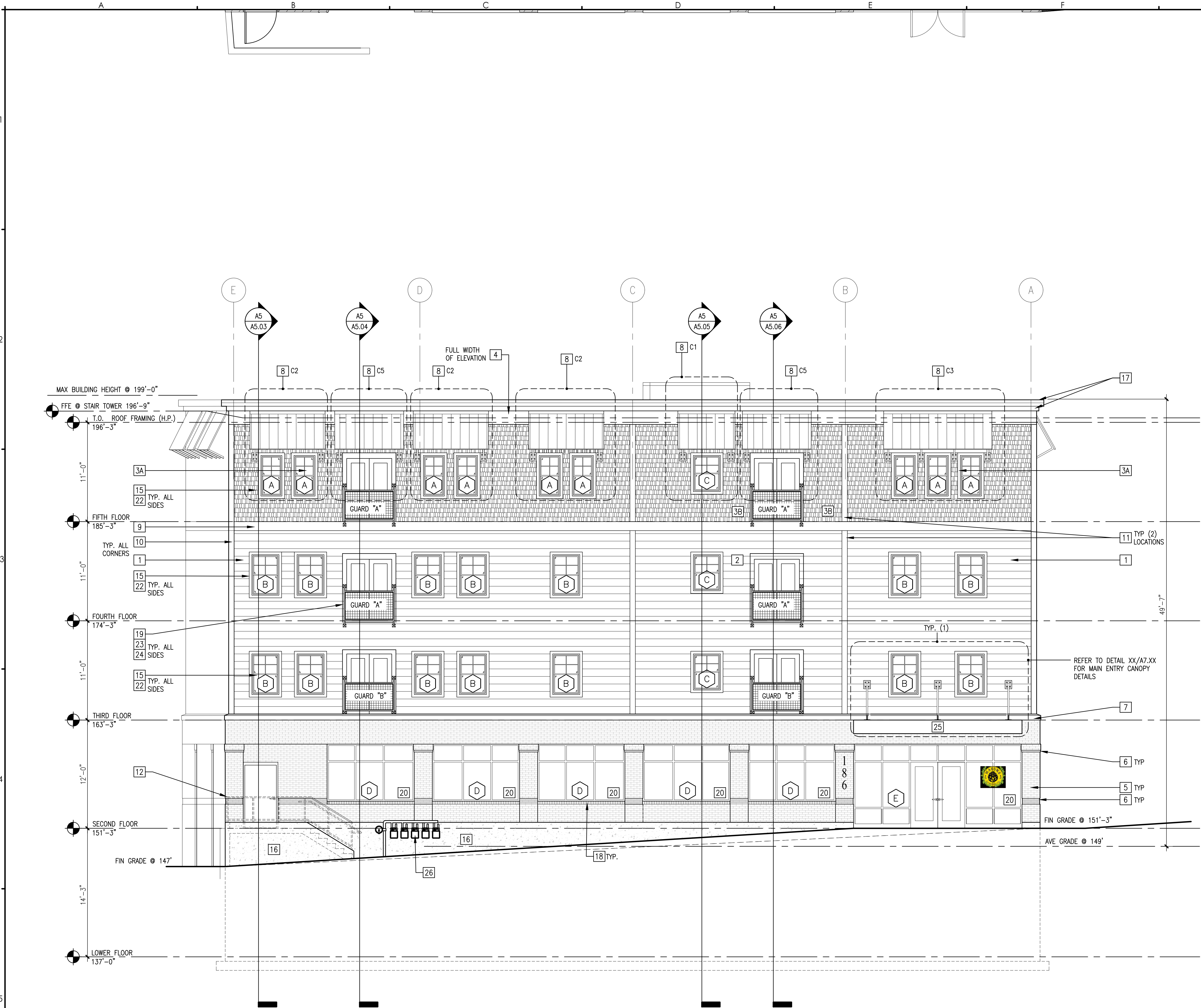
A5 NORTH ELEVATION
REFERENCED FROM: SCALE: 3/16" = 1'-0"

EXTERIOR MATERIALS LEGEND

- LP SMARTSIDE 76 SERIES CEDAR TEXTURE LAP SIDING - 10" EXPOSURE, COLOR NO. 1
- LP SMARTSIDE 76 SERIES CEDAR TEXTURE LAP SIDING - 10" EXPOSURE, COLOR NO. 2
- LP SMARTSIDE CEDAR TEXTURE SHAKES - 7" EXPOSURE, COLOR NO. 3
- LP SMARTSIDE CEDAR TEXTURE SHAKES - 7" EXPOSURE, COLOR NO. 4
- LP SMARTSIDE PANEL SMOOTH FINISH, 1'-6"H EXPOSURE, COLOR NO. 5
- STANDARD MODULAR RED BRICK, NARROW FLASH RANGE, MAIN BODY COLOR
- STANDARD MODULAR RED BRICK, HEAVY FLASH RANGE, ACCENT BAND COLOR
- PRE-CAST CONCRETE MASONRY WALL CAP - COLOR TO BE SELECTED FROM MANUFACTURER'S STANDARD COLOR LINE
- METAL FRAMED AWNING ASSEMBLY WITH STANDING SEAM METAL ROOFING
- 1x12" LP SMARTSIDE SMOOTH FINISH FASCIA TRIM BOARD, COLOR NO. 5
- 1x8 LP SMARTSIDE SMOOTH FINISH CORNER BOARD TRIM, COLOR NO. 5
- 1x8 LP SMARTSIDE SMOOTH FINISH FASCIA TRIM BOARD, COLOR NO. 5
- EPOXY PAINT FINISHED STEEL GUARDRAIL ASSEMBLY WITH WIRE MESH INFILL. COLOR NO. 6.
- PAINT FINISHED, WOOD FRAMED DECK WITH INTEGRAL GUTTER SYSTEM, MATCH SMARTSIDE COLOR NO. 5.
- PAINT FINISHED WOOD COLUMNS AND BRACING, MATCH SMARTSIDE COLOR NO. 5.
- 1x4 VINYL CASING TRIM - PROVIDED WITH WINDOW UNIT, TYP. ALL (4) SIDES.
- PAINT FINISHED EXPOSED CONCRETE FOUNDATION SYSTEM. COLOR NO. 7
- BREAK METAL CLOSURE TRIM AND PARAPET CAP / DRIP EDGE
- STANDARD MODULAR RED BRICK ROW LOCK, NARROW FLASH RANGE, MAIN BODY COLOR
- 1x6 LP SMARTSIDE CASING TRIM, ALL (4) SIDES, COLOR NO. 5. TYPICAL AT ALL EXTERIOR DOORS ON THE RESIDENTIAL FLOORS.
- ALUMINUM STOREFRONT SYSTEM - DARK BRONZE
- INSULATED HOLLOW METAL DOOR AND FRAME - DARK BRONZE MATCHING STOREFRONT SYSTEM
- VINYL SINGLE HUNG WINDOW UNIT
- EXTERIOR DOOR PAIR - REFER TO DOOR SCHEDULE
- EPOXY PAINT FINISHED STEEL GUARDRAIL ASSEMBLY WITH WIRE MESH INFILL, FACE OF WALL, FASTENED. COLOR NO. 6. REFERENCE DETAILS ON...
- MAIN ENTRY CANOPY.
- GAS ENTRANCE AND METER CLUSTER



NO.	DESCRIPTION	DATE



EXTERIOR MATERIALS LEGEND

1

LP SMARTSIDE 76 SERIES CEDAR TEXTURE LAP SIDING – 10" EXPOSURE, COLOR NO. 1

2

LP SMARTSIDE 76 SERIES CEDAR TEXTURE LAP SIDING – 10" EXPOSURE, COLOR NO. 2

3A

LP SMARTSIDE CEDAR TEXTURE SHAKES – 7" EXPOSURE, COLOR NO. 3

3B

LP SMARTSIDE CEDAR TEXTURE SHAKES – 7" EXPOSURE, COLOR NO. 4

4

LP SMARTSIDE PANEL SMOOTH FINISH, 1'-6"H EXPOSURE, COLOR NO. 5

5

STANDARD MODULAR RED BRICK, NARROW FLASH RANGE, MAIN BODY COLOR

6

STANDARD MODULAR RED BRICK, HEAVY FLASH RANGE, ACCENT BAND COLOR

7

PRE-CAST CONCRETE MASONRY WALL CAP – COLOR TO BE SELECTED FROM MANUFACTURER'S STANDARD COLOR LINE

8

METAL FRAMED AWNING ASSEMBLY WITH STANDING SEAM METAL ROOFING

9

1x12" LP SMARTSIDE SMOOTH FINISH FASCIA TRIM BOARD, COLOR NO. 5

10

1x8 LP SMARTSIDE SMOOTH FINISH CORNER BOARD TRIM, COLOR NO. 5

11

1x8 LP SMARTSIDE SMOOTH FINISH FASCIA TRIM BOARD, COLOR NO. 5

12

EPOXY PAINT FINISHED STEEL GUARDRAIL ASSEMBLY WITH WIRE MESH INFILL. COLOR NO. 6.

13

PAINT FINISHED, WOOD FRAMED DECK WITH INTEGRAL GUTTER SYSTEM, MATCH SMARTSIDE COLOR NO. 5.

14

PAINT FINISHED WOOD COLUMNS AND BRACING, MATCH SMARTSIDE COLOR NO. 5.

15

1x4 VINYL CASING TRIM – PROVIDED WITH WINDOW UNIT, TYP. ALL (4) SIDES.

16

PAINT FINISHED EXPOSED CONCRETE FOUNDATION SYSTEM. COLOR NO. 7

17

BREAK METAL CLOSURE TRIM AND PARAPET CAP / DRIP EDGE

18

STANDARD MODULAR RED BRICK ROW LOCK, NARROW FLASH RANGE, MAIN BODY COLOR

19

1x6 LP SMARTSIDE CASING TRIM, ALL (4) SIDES, COLOR NO. 5. TYPICAL AT ALL EXTERIOR DOORS ON THE RESIDENTIAL FLOORS.

20

ALUMINUM STOREFRONT SYSTEM – DARK BRONZE

21

INSULATED HOLLOW METAL DOOR AND FRAME – DARK BRONZE MATCHING STOREFRONT SYSTEM

22

VINYL SINGLE HUNG WINDOW UNIT

23

EXTERIOR DOOR PAIR – REFER TO DOOR SCHEDULE

24

EPOXY PAINT FINISHED STEEL GUARDRAIL ASSEMBLY WITH WIRE MESH INFILL. FACE OF WALL FASTENED. COLOR NO. 6. REFERENCE DETAILS ON...

25

MAIN ENTRY CANOPY.

26

GAS ENTRANCE AND METER CLUSTER

PLANNING + DESIGN
CONSTRUCTION SERVICES

DESIGNER

OWNER

PROJECT

DRAWING

REVISIONS

CWS ARCHITECTURE +
INTERIOR DESIGN

264 US ROUTE ONE SUITE 100-2A
SCARBOROUGH, MAINE 04074 207.774.4441
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Great Falls
CONSTRUCTION

20 MECHANIC STREET
GORHAM, MAINE 04038

186 MAIN STREET BUILDING

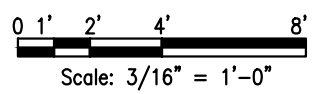
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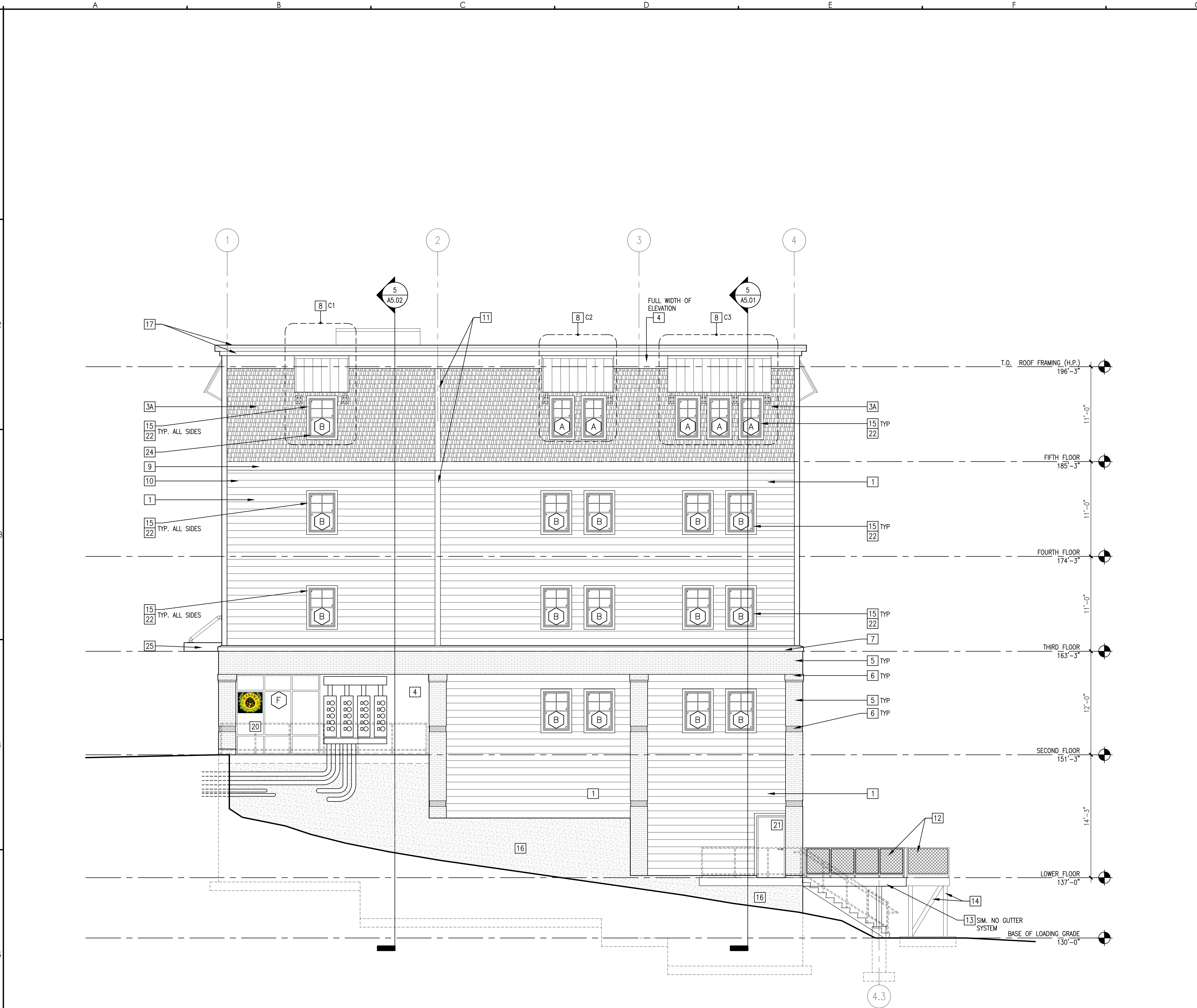
CWS PROJECT NUMBER: 2018

DRAWING NUMBER
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DATE: 05/03/2023

ISSUED FOR REVIEW

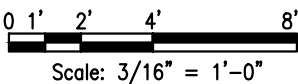




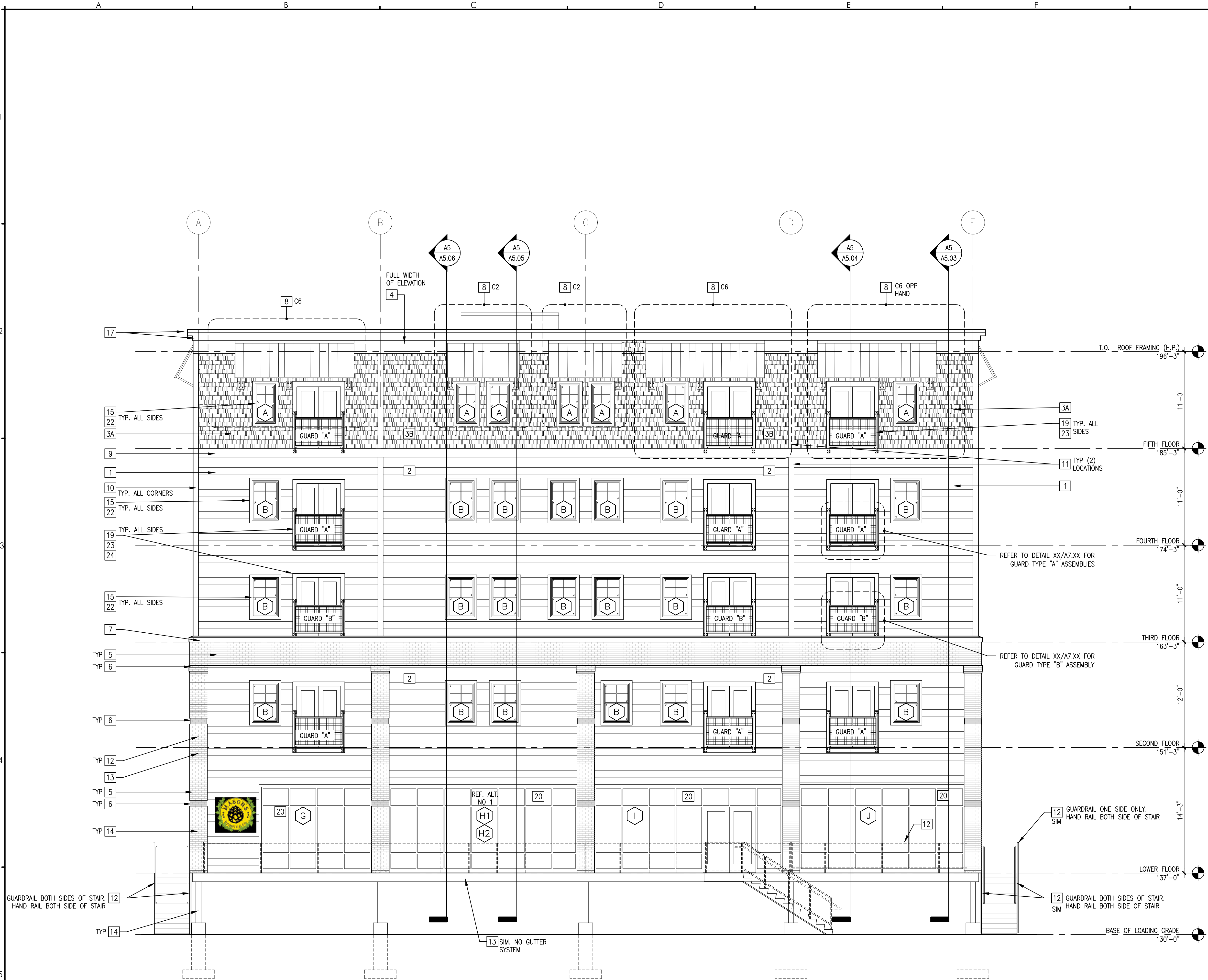
A5 SOUTH ELEVATION
REFERENCED FROM: SCALE: 3/16" = 1'-0"

EXTERIOR MATERIALS LEGEND

- 1 LP SMARTSIDE 76 SERIES CEDAR TEXTURE LAP SIDING - 10" EXPOSURE, COLOR NO. 1
- 2 LP SMARTSIDE 76 SERIES CEDAR TEXTURE LAP SIDING - 10" EXPOSURE, COLOR NO. 2
- 3A LP SMARTSIDE CEDAR TEXTURE SHAKES - 7" EXPOSURE, COLOR NO. 3
- 3B LP SMARTSIDE CEDAR TEXTURE SHAKES - 7" EXPOSURE, COLOR NO. 4
- 4 LP SMARTSIDE PANEL SMOOTH FINISH, 1'-6"H EXPOSURE, COLOR NO. 5
- 5 STANDARD MODULAR RED BRICK, NARROW FLASH RANGE, MAIN BODY COLOR
- 6 STANDARD MODULAR RED BRICK, HEAVY FLASH RANGE, ACCENT BAND COLOR
- 7 PRE-CAST CONCRETE MASONRY WALL CAP - COLOR TO BE SELECTED FROM MANUFACTURER'S STANDARD COLOR LINE
- 8 METAL FRAMED AWNING ASSEMBLY WITH STANDING SEAM METAL ROOFING
- 9 1x12" LP SMARTSIDE SMOOTH FINISH FASCIA TRIM BOARD, COLOR NO. 5
- 10 1x8 LP SMARTSIDE SMOOTH FINISH CORNER BOARD TRIM, COLOR NO. 5
- 11 1x8 LP SMARTSIDE SMOOTH FINISH FASCIA TRIM BOARD, COLOR NO. 5
- 12 EPOXY PAINT FINISHED STEEL GUARDRAIL ASSEMBLY WITH WIRE MESH INFILL. COLOR NO. 6.
- 13 PAINT FINISHED, WOOD FRAMED DECK WITH INTEGRAL GUTTER SYSTEM, MATCH SMARTSIDE COLOR NO. 5.
- 14 PAINT FINISHED WOOD COLUMNS AND BRACING, MATCH SMARTSIDE COLOR NO. 5.
- 15 1x4 VINYL CASING TRIM - PROVIDED WITH WINDOW UNIT, TYP. ALL (4) SIDES.
- 16 PAINT FINISHED EXPOSED CONCRETE FOUNDATION SYSTEM. COLOR NO. 7
- 17 BREAK METAL CLOSURE TRIM AND PARAPET CAP / DRIP EDGE
- 18 STANDARD MODULAR RED BRICK ROW LOCK, NARROW FLASH RANGE, MAIN BODY COLOR
- 19 1x6 LP SMARTSIDE CASING TRIM, ALL (4) SIDES, COLOR NO. 5. TYPICAL AT ALL EXTERIOR DOORS ON THE RESIDENTIAL FLOORS.
- 20 ALUMINUM STOREFRONT SYSTEM - DARK BRONZE
- 21 INSULATED HOLLOW METAL DOOR AND FRAME - DARK BRONZE MATCHING STOREFRONT SYSTEM
- 22 VINYL SINGLE HUNG WINDOW UNIT
- 23 EXTERIOR DOOR PAIR - REFER TO DOOR SCHEDULE
- 24 EPOXY PAINT FINISHED STEEL GUARDRAIL ASSEMBLY WITH WIRE MESH INFILL. FACE OF WALL. FASTENED. COLOR NO. 6. REFERENCE DETAILS ON...
- 25 MAIN ENTRY CANOPY.
- 26 GAS ENTRANCE AND METER CLUSTER



NO.	DESCRIPTION	DATE



A5 EAST ELEVATION
REFERENCED FROM: SCALE: 3/16" = 1'-0"

EXTERIOR MATERIALS LEGEND

- LP SMARTSIDE 76 SERIES CEDAR TEXTURE LAP SIDING - 10" EXPOSURE, COLOR NO. 1
- LP SMARTSIDE 76 SERIES CEDAR TEXTURE LAP SIDING - 10" EXPOSURE, COLOR NO. 2
- LP SMARTSIDE CEDAR TEXTURE SHAKES - 7" EXPOSURE, COLOR NO. 3
- LP SMARTSIDE CEDAR TEXTURE SHAKES - 7" EXPOSURE, COLOR NO. 4
- LP SMARTSIDE PANEL SMOOTH FINISH, 1'-6"H EXPOSURE, COLOR NO. 5
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- STANDARD MODULAR RED BRICK, HEAVY FLASH RANGE, ACCENT BAND COLOR
- PRE-CAST CONCRETE MASONRY WALL CAP - COLOR TO BE SELECTED FROM MANUFACTURER'S STANDARD COLOR LINE
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- MAIN ENTRY CANOPY.
- GAS ENTRANCE AND METER CLUSTER

0' 1' 2' 4' 8'
Scale: 3/16" = 1'-0"

NO.	DESCRIPTION	DATE

Section 13

Natural Resources

Flooding a.

Soils b.

Watershed c.

Historic d.

Exhibit 13 – Natural Resources

Flooding

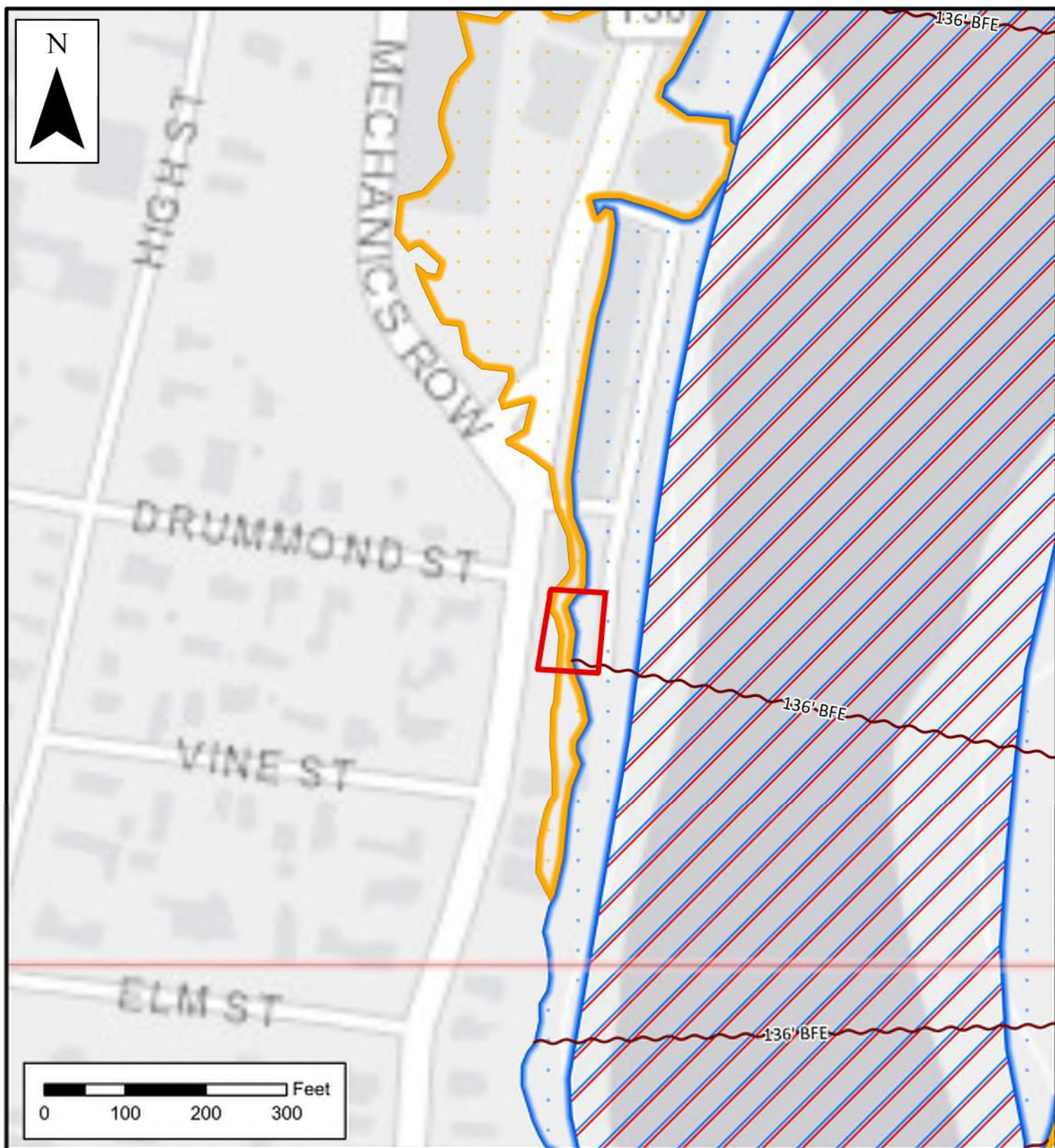
The Flood Insurance Rate Map (FIRM) for the City of Auburn (Community Panel 23001C0326E, dated July 8, 2013) identifies the project site to be in Zone X and Zone AE, identifying part of the subject lot as an area determined to be within the 100-year flood. Thus, a Flood Hazard Development Permit will be required through the City of Auburn and an application will be filed subsequently. Please see the attached flood map.

Soils

A Class 'D' Medium Intensity Soil Survey published by the United States Department of Agriculture, Natural Resources Conservation Service has also been attached. The soils were identified as made land, loamy materials with a typical profile of H1 - 0 to 60 inches of very gravelly sandy loam. Please see the attached soil map.

Watershed

The project site is located within the Stetson Brook – Androscoggin River Watershed. Please see the attached Watershed Map.



- | | | | |
|-----------------|--------------------------------|--------------------------------|----------------------------------|
| Subject Site | FEMA Flood Hazard Zones | Area of 1% Annual Chance Flood | Area of 0.2% Annual Chance Flood |
| FEMA FIRM Panel | Floodway | Base Flood Elevation | |

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WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd., Suite 4A
South Portland, ME 04106
Tel: 207-285-2198

FEMA NATIONAL FLOOD HAZARDS
GREAT FALLS CONSTRUCTION

LOCATION:
186 MAIN STREET
AUBURN, ME

INFORMATION:
MAINE GEOLIBRARY
FEMA NFHL (DEC 2021)

SCALE: 1:2,000

DATE: 11/16/2022



United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for **Androscoggin and Sagadahoc Counties, Maine**



November 15, 2022

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

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identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map



Custom Soil Resource Report

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)


Soils


 Soil Map Unit Polygons


 Soil Map Unit Lines


 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit


 Clay Spot


 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry


 Miscellaneous Water


 Perennial Water

 Rock Outcrop


 Saline Spot

 Sandy Spot

 Severely Eroded Spot


 Sinkhole


 Slide or Slip

 Sodic Spot


 Spoil Area

 Stony Spot


 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals


Transportation

 Rails


 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

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

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

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

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

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

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

Soil Survey Area: Androscoggin and Sagadahoc Counties, Maine
Survey Area Data: Version 23, Aug 30, 2022

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

Date(s) aerial images were photographed: Jul 11, 2021—Oct 29, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

MAP LEGEND

MAP INFORMATION

imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Md	Made land, loamy materials	2.4	100.0%
Totals for Area of Interest		2.4	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Androscoggin and Sagadahoc Counties, Maine

Md—Made land, loamy materials

Map Unit Composition

Made land: 91 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Made Land

Typical profile

H1 - 0 to 60 inches: very gravelly sandy loam

Properties and qualities

Slope: 0 to 35 percent

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to very high (0.06 to 20.00 in/hr)

Depth to water table: About 24 to 72 inches

Available water supply, 0 to 60 inches: Moderate (about 6.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Ecological site: F144BY501ME - Loamy Slope (Northern Hardwoods)

Hydric soil rating: No

References

- American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.
- American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.
- Federal Register. July 13, 1994. Changes in hydric soils of the United States.
- Federal Register. September 18, 2002. Hydric soils of the United States.
- Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.
- National Research Council. 1995. Wetlands: Characteristics and boundaries.
- Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262
- Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577
- Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580
- Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.
- United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.
- United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374
- United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084>

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United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf



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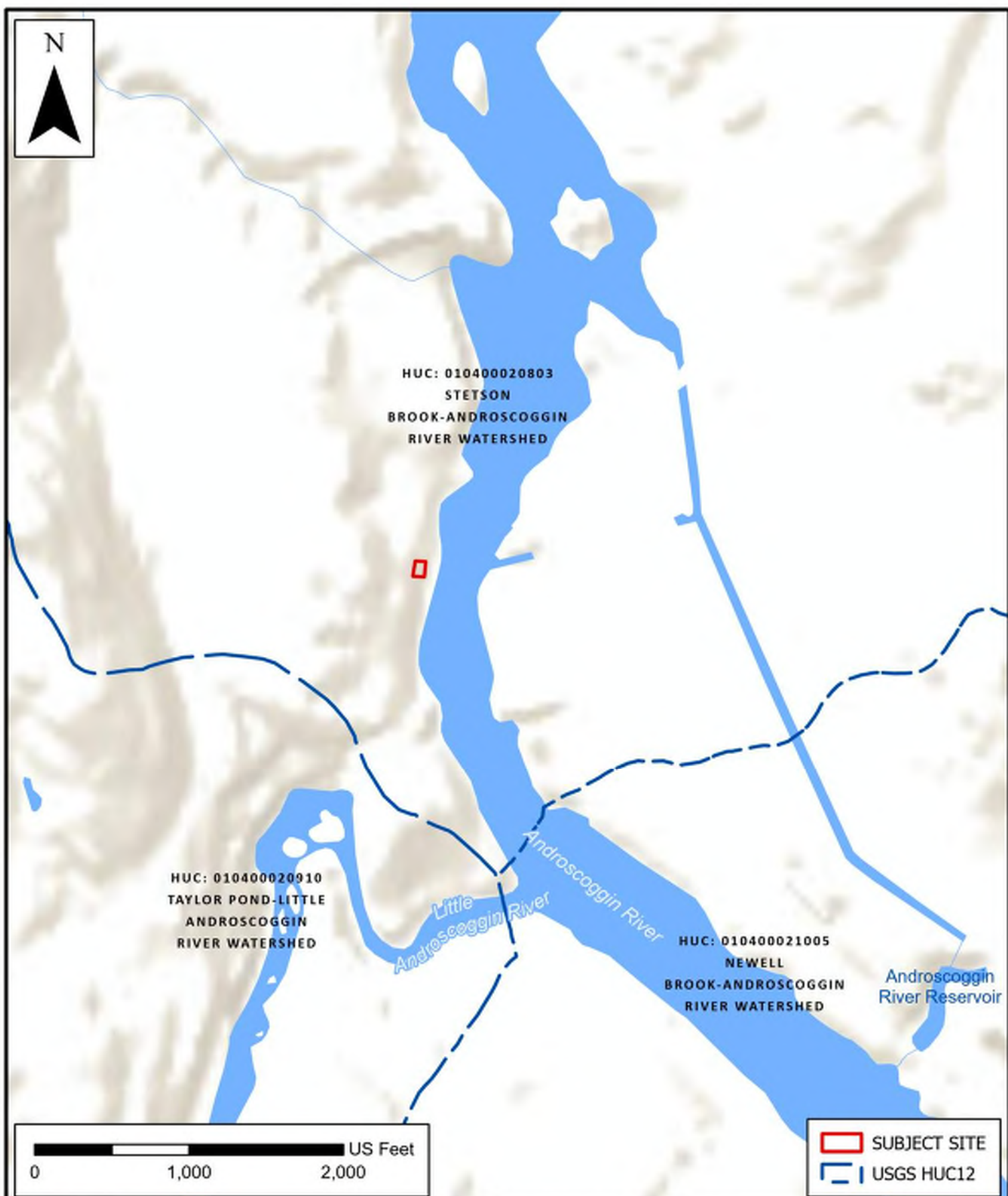
NCRS SOIL SURVEY MAP
GREAT FALLS CONSTRUCTION

LOCATION:
186 MAIN STREET
AUBURN, ME

INFORMATION: MAINE GEOLIBRARY
USDA NRCS SOIL SURVEY 2020
2018 ORTHOREGIONAL IMAGERY

SCALE: 1:1,700

DATE: 11/16/2022



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**USGS WATERSHED MAP
GREAT FALLS CONSTRUCTION**

LOCATION:
186 MAIN STREET
AUBURN, ME

INFORMATION: MAINE GEOLIBRARY
USGS WATERSHED BOUNDARY DATASET
ESRI WORLD TERRAIN BASE

SCALE: 1:10,000

DATE: 11/16/2022