

Town of Kittery Maine Planning Board Meeting February 27, 2020

ITEM 3 – 8 Wentworth Street – Preliminary Plan Acceptance

Action: Accept or deny application.

Owner/applicant, the Town of Kittery, requests consideration of a preliminary plan for a three-story addition and related site improvements to the Rice Public Library located at 8 Wentworth Street (Tax Map 4, Lot 88) in the Mixed Use – Kittery Foreside (MU-KF).Zone. Agent is Ryan Kanteres, Scott Simons Architects.

PROJECT TRACKING

REQ'D	ACTION	COMMENTS	STATUS
NO	Sketch Plan Review	Held 1/9/2020	APPROVED
NO	Site Visit		
YES	Determination of Completeness/Acceptance		
YES	Public Hearing		
YES	Shoreland Development / Preliminary Plan Review and Decision		
YES	Final Plan Review and Decision		

Plan Review Notes reflect comments and recommendations regarding applicability of Town Land Use Development Code, and standard planning and development practices. Only the PB makes final decisions on code compliance and approves, approves with conditions or denies final plans. Prior to the signing of the approved Plan any **Conditions of Approval related to the Findings of Fact along with waivers and variances (by the BOA) must be placed on the Final Plan and recorded at the York County Registry of Deeds. PLACE THE MAP AND LOT NUMBER IN 1/4" HIGH LETTERS AT LOWER RIGHT BORDER OF ALL PLAN SHEETS.** As per Section 16.4.4.L - Grading/Construction Final Plan Required. - Grading or construction of roads, grading of land or lots, or construction of buildings is prohibited until the original copy of the approved final plan endorsed has been duly recorded in the York County registry of deeds when applicable.

Background

This is a preliminary plan application to expand the existing 2.5 -story + full basement Romanesque Revival structure known as the Rice Public Library (listed on the National Register of Historic Places), by adding a three-story expansion to the southeastern corner of the original building. The .8 acre (34,947 sf) lot is located in the Mixed Use – Kittery Foreside Zone.

The existing library building is a non-conforming structure as it exceeds the 40-foot height limit set in the Mixed Use - Kittery Foreside Zone.

The Board accepted and approved the sketch plan at their meeting on January 9, 2020.

Staff Review

Submissions

The preliminary plan submission includes the information required under 16.10.5.2. *Planner Review and confirmation of submittal content for preliminary plan* that would apply to a currently developed lot on which a public building is located with the following exceptions:

1. All the abutters, including those across the street from the library should be shown on the plans, along with their map/lot and owner information.
2. The map and lot for the Rice Library parcel should be in the title block on the plans as well as in the general notes.
3. The owner of the property is the Town of Kittery – the new deed should be submitted and the application and general plan note should reflect this.

BOA Notice of Decision

On January 14, 2020, the Board of Appeals heard an application for a miscellaneous variation request to allow the non-conforming library building to be expanded per 16.7.3.3.B *Nonconforming structure repair and expansion* and to allow a portion of the roof to be flat as 16.3.2.15.D.(4).(e) *Roof slope and shapes* does not allow it. The BOA approved both miscellaneous variation requests. The Notice of Decision is included with this PRN.

Project Description

The Applicant's agent has provided a detailed summary of the improvements to the Rice Library building and site in their cover letter dated February 6 located immediately after the Table of Contents in the Site Plan Application submission.

Section 16.3.2.15. Mixed Use - Kittery Foreside Zone

General requirements

1. The current use (described under B.(3) Permitted Uses) as a *municipal or state building or use* is a permitted use.
2. The lot conforms as it is greater than 5,000 sf.
3. The current building and the proposed expansion meet the 10 feet setback required for front, rear and side yard setbacks.
4. The original building plus the expansion does not exceed 60% of the lot (15.87% as stated in General Note #11 on Sheet 2 of the plans).
5. The 40% open space requirement is met (see General Note #11 on Sheet 2 of the plans)
 - a. Total de-vegetated area will be 44.58%, leaving 55.42% as open space (defined by 16.2.2 Definitions as "*Includes all dedicated portions of a parcel that has vegetated surfaces or is in an undisturbed natural state...*")

Maximum building height

1. The maximum building height in the MU-KF Zone is 40 feet. The original building will remain the tallest structure on the lot.
2. The architectural drawings submitted show that the addition's height will not exceed 40 feet. To demonstrate this, on the second sheet labeled A202, the average grade is shown in the illustration on the top right-hand side of the page as 30 feet, 2 7/16 inches. The height of a building is defined in 16.2.2. Definitions as "*The vertical measurement from the average grade between the highest and lowest elevation of the original ground level to the highest point of the roof beams in flat roofs, to the highest point of pitched roofs or hip roofs...*". The elevation of each story is shown. The new addition's third-story height is therefore: 66 feet, 4 ¾ inches minus 30 feet, 2 7/16 inches. Rounding for ease shows that 66 feet, 5 inches minus 30 feet, 2 inches = 36 feet, 3 inches.

Maximum building footprint

1. The original library building will remain so these standards do not apply since they apply only to new or replacement buildings.

Design standards

1. The current footprint of the library building is 1,629 sf – with the proposed addition, that footprint will be expanded to about 5,370 sf. This exceeds the 30% threshold so additional standards apply.
 - a. The expansion takes advantage of the existing slope of the lot and is oriented to Wentworth Street. See 16.3.2.15.D.(4).(a).
 - b. Per 16.3.2.15.D.(4).(b) *the overall massing objective is to simulate a concentrated use of space in the Foreside while avoiding the use of large multiunit buildings. In the interest of this objective , building footprints must not exceed the maximums set forth within this subsection.* The library is not a multiunit building. The subsection referred to must necessarily be 16.3.2.15.D.(3) *Maximum building height* since that is the only subsection that places set limitations on building footprints.

- c. As noted above, these limitations apply only to new or replacement buildings. The original library building will remain with an expansion to it being proposed.
- d. According to 16.3.2.15.D.(4).(e) *Roof slope and shapes*, a hipped roof does not have to meet the 8:12 pitch. The largest area of roof proposed for the expansion is a hipped roof but a portion of the roof, where it connects to the original building is flat. This would not meet the standards in e [3], *Roof slope and shapes*. Finally, e[4] states *the roof pitch of additions or wings must be similar to the pitch of the primary roof*. As noted earlier, the Applicant applied for relief via a miscellaneous variation request and was granted that relief by the BOA.

Special parking standards

1. There isn't a specific special parking standard for municipal buildings listed in the MU-KF zone or in 16.8.9.4.D Parking Standards. There is a category for public buildings in 16.8.9.4.D which requires 2 parking spaces for each office unit and 1 space for every 250 feet of gross floor area. The Applicant had stated in the previous sketch plan application that they were basing the number of parking spaces on public floor area and the number of full time equivalent (FTE) employees. The floor plans were not submitted so the amount of public floor isn't available but the number of FTE employees is six (gleaned from the Trip Generation Memo).
2. The Planning Board can determine whether or not the parking as proposed is sufficient per 16.8.9.4.C *In cases not specifically covered, the Town Board or officer with jurisdiction to approve the application is authorized to determine the parking requirements and projected development use intensity*.
3. The Applicant is proposing 27 off-street parking spaces. No mention was made of two dedicated short-term parking spaces to be located on Wentworth Street which were previously described in the sketch plan. The southern parking lot is proposed to be paved (it is currently gravel) with 10 parking spaces + one ADA-compliant space while the northern parking lot is proposed to accommodate 15 parking spaces + one ADA-compliant space. The number of ADA-compliant parking spaces meets the requirements for each parking lot (1 ADA-compliant space for up to 25 parking spaces). It appears that the north arrow may be backwards on Sheets 2, 3 and 4.

Traffic, Utilities and Stormwater

1. The Applicant has provided a vehicular traffic report as required.
2. Utilities are shown on Sheet 3 and letters from the Water District and the Sewer Department are included in the submission.
3. A stormwater management report and the accompanying calculations have been submitted.

Site Improvements and Landscaping

1. The Kittery Foreside Mixed-Use Zone (MU-KF) does not have any specific landscaping, screening or buffering requirements. The Applicant has submitted a landscape plan including a planting plan.
2. In the cover letter, the Applicant states that there is an on-going discussion with DPW, on how the retaining wall currently being shown on Sheet 2 might possibly be eliminated.
3. Also on Sheet 2, are the locations of signs, benches and the book drop.
4. A photometric plan is included. All fixtures will be full cut-off to prevent light trespass.

Section 16.7.3.3.B Nonconforming structure repair and/or expansion

1. As stated earlier, the Rice Public Library is a non-conforming building by virtue of its height. Because the proposed expansion involves the addition of more than 6 parking spaces and is not residential in nature, the Planning Board is the municipal permitting authority through site plan review.
2. The Rice Public Library is not within a shoreland zone.
3. The pertinent subsection is 16.7.3.3.B.(3).(a) which states that *a nonconforming structure may be repaired or maintained and may be expanded in conformity with the dimensional requirements, such as setback, height, etc. as contained in this title*. This was addressed by the BOA as stated earlier.

Recommendation

This preliminary plan application is the formal submission of plans for the proposed expansion of the Rice Public Library. More details have been provided and the Board has the opportunity to consider how the plans meet the requirements of Title 16.

The preliminary plan application is substantially complete. Staff finds the plan to be in general conformance with Title 16 based on the information provided with the exception of the three submission omissions/corrections noted earlier – all of which can be addressed for the Board’s review at a future meeting.

The Board may wish to accept the preliminary plan dated February 6, 2020 as complete, with or without conditions. The motion is below.

Move to accept the preliminary plan application dated February 6, 2020 from owner/applicant The Town of Kittery, for a three-story addition and related site improvements to the Rice Public Library located at 8 Wentworth Street (Tax Map 4, Lot 88) in the Mixed Use – Kittery Foreside (MU-KF) [with the condition that the three submission comments are addressed in the next plan submission].

If the Board accepts the preliminary plan with or without conditions, the Board will want to set a public hearing date. The motion to set the public hearing date is below:

Move to hold a public hearing on March 26th 2020 on a preliminary plan from owner/applicant The Town of Kittery, for a three-story addition and related site improvements to the Rice Public Library located at 8 Wentworth Street (Tax Map 4, Lot 88) in the Mixed Use – Kittery Foreside (MU-KF).



Site Preliminary Plan Review Application

To:

Town of Kittery

For:

Rice Public Library Expansion
8 Wentworth Street

Presented by:

Lassel Architects
Scott Simons Architects

Prepared by:

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

February, 2020

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February 6, 2020
18438

Mr. Adam Causey, Director of Planning and Development
Town of Kittery
200 Rogers Rd.
Kittery, ME 03904

Site Plan Review Application
Rice Public Library, 8 Wentworth Street

Dear Mr. Causey:

On behalf of Rice Public Library (applicant) and in association with Lassel Architects and Scott Simons Architects, I am pleased to submit this cover letter, attached plans and supportive documents for the construction of an addition to the Rice Public Library and associated site improvements. This project was presented to the Planning Board as a Sketch Plan by the Architects and now we have refined the plans and wish to proceed through the Site Plan Review process. This property is shown as Lot 88 on Tax Map 4, and is located in the Kittery Foreside District.

Improvements to the property will consist of the following:

1. Construction of a three story, 11,174 square foot addition to the existing 4,887 sq. ft. historic library. The total new square footage will be 16,061 sq. ft. This addition will replace the Taylor Annex across the street from the Library.
2. A new library entrance court is planned into the addition from Wentworth Street. A second entrance is proposed from the lower parking lot.
3. A common green is planned along Wentworth Street to compliment the building and provide open space for the public. Benches and a small group seating area are provided through out the site for passive enjoyment.
4. Reconfiguring and expanding the upper side parking lot and paving it for 16 patron parking spaces. The lower parking lot will also be reconfigured and accommodate 11 spaces.
5. The garden to the north of the existing library will be redeveloped and a formal children's garden created. It is planned to transplant several of the larger caliper ornamental trees from the existing garden into this new space. Additional plantings may be transplanted elsewhere on site.
6. New site lighting is proposed consisting of light poles for parking lots and bollard lights for walkways. All fixtures are full cut off. A photometric plan is provided.
7. Landscaping of the property is planned with an evergreen planting near the upper parking lot to buffer this from three abutting residential uses.
8. Water, sewer and power services will be upgraded to serve the new addition.
9. Additional site elements include relocation of informational signs for the public, book drops, bicycle racks and memorials.
10. We are currently working with David Rich, Commissioner of Public Works, to explore the possibility of eliminating the proposed retaining wall for the new parking lot along Traip Avenue. Our proposed plan is to remove a strip of pavement in Traip Avenue and create a landscaped slope from the parking lot to the street. To accomplish this, we need to verify that emergency vehicles can maneuver on Traip Avenue and that a uniform road width can be maintained. We anticipate resolving this plan change prior to the Planning Board meeting.

11. We will be adding a dumpster enclosure in the upper parking lot. We anticipate reconfiguring this lot slightly and adding a dumpster in the northeast corner of the property. This will be screened from abutting properties by a six foot high solid fence and evergreen vegetation. This addition will be refined prior to the Final Plan submission.

Submission Items

In accordance with 16.10.5.2 of the Site Plan Review Application requirements of the Land-Use Code we offer the following plans and supportive documents for your review and consideration of this application.

1. Application and Checklist
2. Copy of Deed.
3. Tax Map and List of Abutters.
4. Ability to serve letters from the water and sewer districts.
5. Architectural floor plans and elevations
6. Cut sheets for site light fixtures. Photometric plan is included in the plan set.
7. A stormwater management plan prepared by a registered professional engineer.
8. Traffic Memorandum
9. Plan set at a scale of 1" = 20' showing location map, zoning information, proposed name of project, name and address of record owner/applicant, assessor's information, standard boundary survey, right of way lines, metes and bounds of lot lines, parcel summary, net development calculations, proposed improvements including: grading, utilities, paved areas, building setbacks, plan dimensions, abutting lot owners, landscaping, erosion and sedimentation control, and lighting locations.

I trust this packet provides you with sufficient information to review this project and that we can placed on the February 27th Planning Board agenda. If you or Town staff require additional information, please contact me.

Sincerely,

SEBAGO TECHNICS, INC.



Stephen G. Doe, RLA, LEED-AP
Landscape Architect

SGD: llg
Enc.

cc: Kendra Amaral, Town Manager
Ryan Kanteres, Scott Simons Architects



TOWN OF KITTERY, MAINE

TOWN PLANNING AND DEVELOPMENT DEPARTMENT

200 Rogers Road, Kittery, Maine 03904
 PHONE: (207) 475-1323 - FAX: (207) 439-6806
www.kittery.org

APPLICATION: SITE PLAN REVIEW

FEE FOR SITE PLAN REVIEW:	<input checked="" type="checkbox"/> \$300.00 PLUS THE GREATER OF:	<input type="checkbox"/> \$50/USE OF UNIT; OR	<input checked="" type="checkbox"/> \$5.00/100 SQ FT OF GROSS FLOOR AREA	Application Fee Paid: \$ _____ Date: _____						
		<input type="checkbox"/> \$0.50/LINEAR FOOT OF DOCK, SLIP & FLOAT; OR	<input type="checkbox"/> \$20.00/ UNIT INTENDED TO PROVIDE OVERNIGHT SLEEPING ACCOMODATIONS	ASA Fee Paid: (TITLE 3.3 TOWN CODE) \$ _____ Date: _____						
PROPERTY DESCRIPTION	Parcel ID	Map	4	Lot	88	Zone:	MU-KF	Total Land Area (Square Feet)	34,947	
	Physical Address	8 WENTWORTH STREET								
PROPERTY OWNER'S INFORMATION	Name	RICE PUBLIC LIBRARY			Mailing Address	8 WENTWORTH STREET				
	Phone	207-439-1553				KITTERY, ME 03904				
	Fax									
	Email	arabella@rice.lib.me.us								
APPLICANT'S AGENT INFORMATION <i>*ALSO SEE Below</i>	Name	RYAN KANTERES			Name of Business	Scott Simons Architects				
	Phone	772-4645			Mailing Address	75 YORK ST				
	Fax					PORTLAND, ME 04101				
	Email	RYAN@SIMONSAARCHITECTS.COM								
PROJECT DESCRIPTION	Existing Use: PUBLIC LIBRARY				ALT AGENT FOR SITE PLAN:					
					% STEVE DOE					
					SEBAGO TECHNICS INC					
					S.DOE@SEBAGOTECHNICS.COM					
					207-200-2056					
	Project Name: RICE PUBLIC LIBRARY EXPANSION									
	Proposed Use: PUBLIC LIBRARY									

WAIVER REQUEST

	Ordinance Section	Describe why this request is being made.
DESCRIPTION	***EXAMPLE*** 16.32.560 (B)- OFFSTREET PARKING.	***EXAMPLE*** Requesting a waiver of this ordinance since the proposed professional offices have a written agreement with the abutting Church owned property to share parking.
	N/A	N/A

Related Kittery Land Use Code concerning waivers and modifications:

16.10.8.2.5 Conditions or Waivers.

Conditions required by the Planning Board at the final plan review phase must have been met before the final plan may be given final approval unless so specified in the condition or specifically waived, upon written request by the applicant, by formal Planning Board action wherein the character and extent of such waivers which may have been requested are such that they may be waived without jeopardy to the public health, safety and general welfare.

16.7.4.1 Objectives Met. In granting modifications or waivers, the Planning Board must require such conditions as will, in its judgment, substantially meet the objectives of the requirements so waived or modified.

I certify that, to the best of my knowledge, the information provided in this application is true and correct and will not deviate from the plans submitted without notifying the Kittery Planning Department of any changes.		
Applicant's Signature: _____ Date: _____	 2/4/2020 (Agent)	Owner's Signature: _____ Date: _____

COMPLETED BY OFFICE STAFF

ASA CHARGE	AMOUNT	ASA CHARGE	AMOUNT
REVIEW		SERVICES	
LEGAL FEES (TBD)		RECORDER	\$35
ENGINEERS REVIEW (TBD)		FACT FINDING (TBD)	
ABUTTER NOTICES		3 RD PARTY INSPECTIONS (TBD)	
POSTAGE	\$20	OTHER PROFESSIONAL SERVICES	\$50
LEGAL NOTICES		PERSONNEL	
ADVERTISING	\$300	SALARY CHARGES IN EXCESS OF 20 HOURS	
SUPPLIES			
OFFICE	\$5		
SUB TOTAL		SUB TOTAL	
		TOTAL ASA REVIEW FEES	

Minimum Submission Requirements

- 15 COPIES OF THIS APPLICATION
- 15 COPIES OF THE PROPOSED SITE PLAN – 12 REDUCED SIZE AT 11"X17"AND 3 FULL SIZE AT 24"X 36"
- 1 PDF OF THE SITE PLAN SHOWING GPS COORDINATES / *on Survey*

SUBMITTALS THE TOWN PLANNER DEEMS SUFFICIENTLY LACKING IN CONTENT WILL NOT BE SCHEDULED FOR PLANNING BOARD REVIEW.

Related Ordinances: Kittery Land Use Code- Title 16

16.10.5.2 Planner Review and Confirmation of Submittal Content - Preliminary Plan.

A completed application must include on the plan or attached thereto, the following items, unless upon the applicant's written request, the Planning Board, by formal action, waives or defers any requirement(s) for submission.

- A. A minimum of fifteen (15) paper copies of the application form, plan and all attachments thereto plus if applicable, five (5) paper copies of the 24 x 36 inches size plan sheets.
- B. Plan must include:
 1. Plan sheets drawn on a reproducible medium and must measure no less than eleven (11) inches by seventeen (17) inches and no larger than twenty-four (24) inches by thirty-six (36) inches; with a:
 2. Scale of the drawings no greater than one inch equals thirty (30) feet for developments less than ten (10) acres, and one inch equals fifty (50) feet for all others;
 3. Code block in the lower right-hand corner. The block must contain:
 - a. Name(s) and address(es) of the applicant and owner,
 - b. Name of the project.
 - c. Name and address of the preparer of the plan, with professional seal, if applicable,
 - d. Date of plan preparation/revision, and a unique ID number for the plan and any revisions;
 4. Standard boundary survey conducted by a surveyor licensed in the state of Maine, in the manner recommended by the State Board of Registration for Land Surveyors;
 5. An arrow showing true north and the magnetic declination, a graphic scale, and signature blocks for the owner(s) and members of the Planning Board;
 6. Locus map showing the property in relation to surrounding roads, within two thousand (2,000) feet of any property line of the development,
 7. Surveyed acreage of the total parcel, of rights-of-way, wetlands, and area to be disturbed and amount of street frontage;
 8. Names and addresses of all owners of record of property abutting the development, including those across a street;
 9. Locations of essential physical features such as watercourses, forest cover, and outcroppings
 10. Proposed development area conditions including, but not limited to:
 - a. Structures; their location and description including signs, to be placed on the site, floor plan of exterior walls and accesses located within one hundred (100) feet of the property line;
 - b. Utilities proposed including power, water, sewer, holding tanks, bridges, culverts and drainage ways;

Exhibit 1

Vicinity Map

Exhibit 1: Vicinity Map

The proposed project is located at 8 Wentworth Street, Tax Map 4 Lot 88. Please see this exhibit for a copy of the vicinity map.



PROJECT SITE



WWW.SEBAGOTECHNICS.COM
 75 John Roberts Rd. - Suite 4A
 South Portland, ME 04106
 Tel. 207-200-2100

**LOCATION MAP
 FOR: RICE LIBRARY**

SCALE: 1:24,000
 DATE: 01/20/2020

LOCATION: 8 WENTWORTH STREET
 KITTERY, ME

INFORMATION: USGS Quadrangle: Kittery

Exhibit 2

Existing Development Area Calculations

Exhibit 2: Existing Development Area Conditions

Existing development area conditions can be found on the Existing Conditions Plan labeled sheet 1 of 1 in the submitted plan set.

Exhibit 3

Right, Title, or Interest

Exhibit 3: Right, Title, or Interest

Please see this Exhibit for a copy of the existing deed recorded in the York County Registry of Deeds Book/Page, 2099/425.

That We, Lester W. Frisbee, of York, in the County of York and State of Maine, and Elizabeth B. Brewster and Judith Maby, both of Kittery, in the County of York and State of Maine, all as Trustees under the Will of Arabella Rice, late of Portsmouth, in the County of Rockingham and State of New Hampshire, and acting under a Decree of the York County Superior Court, dated October 2, 1975, in an action entitled In Re Estate of Arabella Rice, Civil Action Docket Number 75-217, for consideration paid, grant to Rice Public Library, a corporation organized under the Laws of the State of Maine, a certain lot or parcel of land together with the buildings and improvements thereon situated on the southeasterly side of Wentworth Street in the Town of Kittery, County of York and State of Maine, bounded and described as follows:

Beginning at a point in the southeasterly sideline of Wentworth Street and at the southwesterly corner of a lot now or formerly owned by William E. Dennett; thence proceeding in a southwesterly direction by said Wentworth Street for a distance of three hundred (300) feet, more or less, to the intersection of Traip Avenue with Wentworth Street; thence turning and running southeasterly along the sideline of Traip Avenue, one hundred twenty (120) feet, more or less; thence turning and running northeasterly along the sideline of Traip Avenue to a point at the southwesterly corner of a lot now or formerly owned by Richard E. Leary and Mildred M. Leary; thence continuing by the westerly sideline of land now or formerly owned by said Richard E. Leary and Mildred M. Leary, ninety-eight (98) feet, more or less, to land now or formerly of said William E. Dennett; thence turning and running in a northwesterly direction along land now or formerly of said William E. Dennett, eighty-eight (88) feet, more or less to the point of beginning.

Being the same premises conveyed to the Trustees of the Rice Public Library Fund under the last will and testament of Arabella Rice, late of Portsmouth, New Hampshire, deceased, by the following three (3) deeds:

- (1) Deed from Mark F. Wentworth dated September 19, 1885, and recorded in York County Registry of Deeds in Book 411, Page 109.
- (2) Deed from John Wentworth, Trustee under the last will and testament of Robert Traip, dated September 19, 1885, and recorded in York County Registry of Deeds in Book 410, Page 179.
- (3) Deed from Louisa H.L. Traip dated October 2, 1885, and recorded in York County Registry of Deeds in Book 411, Page 110.

But excepting from said premises that portion conveyed to John F. Mathews by deed dated May 23, 1891, and recorded in York County Registry of Deeds in Book 446, Page 30.

Witness our hands and seals this Sixth day of October, 1975.

<u>Francis F. Neal</u>	<u>Elizabeth B. Brewster</u>
<u>Francis F. Neal</u>	<u>Lester W. Frisbee</u>
<u>Francis F. Neal</u>	<u>Judith Maby</u>

THE STATE OF MAINE October 6, 1975

Then personally appeared Lester W. Frisbee, Elizabeth B. Brewster and Judith Maby and acknowledged the above instrument to be their free act and deed in their said capacity.

FRANCIS F. NEAL
ATTORNEY AT LAW
16 SHAPLEIGH ROAD
KITTERY, MAINE 03904

York, ss.

Before me, Francis F. Neal
Justice of the Peace

Received OCT 10 1975 at 11:50 AM
and recorded from the original

Exhibit 4

Property Encumbrances

Exhibit 4: Property Encumbrances

Not applicable. There are no known existing or proposed encumbrances in relation to this property.

Exhibit 5

Water District Approval Letter

Exhibit 5: Water District Approval Letter

Please see this Exhibit for a copy of the approval letter from the Kittery Water District dated January 23, 2020.

James E. Golter, President
Michael S. Rogers, Superintendent

Julia H. O'Connell, Secretary

OFFICE OF
KITTERY WATER DISTRICT

17 State Road
Kittery, ME 03904-1565
TEL: 207-439-1128
FAX: 207-439-8549
E-Mail: kitterywater@comcast.net

Paul Ostrowski, P.E.
Sebago Technics
75 John Roberts Road, Suite 4A
South Portland, ME 04106

January 23, 2020

Re: Rice Public Library Expansion

Dear Paul,

This letter is to verify that the Kittery Water District does have the capacity to supply both domestic water and fire protection to the proposed Rice Library expansion on 8 Wentworth Street, Kittery.

Sincerely,



Michael S. Rogers
Superintendent

cc: Kittery Planning Board

Exhibit 6

Erosion and Sedimentation Control Plan

Exhibit 6: Erosion and Sedimentation Control Plan

Please see the attached plans for the Erosion and Sedimentation Control Plan.

Exhibit 7

Stormwater Management Plan (Narrative only)

Exhibit 7: Stormwater Management Plan

Please see the separately bound Stormwater Management Report by Sebago Technics, Inc. for a stormwater management plan and an inspection, maintenance, and housekeeping plan. See this Exhibit for the narrative portion of the report.



CIVIL ENGINEERING • SURVEYING • LANDSCAPE ARCHITECTURE

STORMWATER MANAGEMENT REPORT

For

**RICE PUBLIC LIBRARY
KITTERY, MAINE**

Prepared for

Rice Public Library
8 Wentworth Street
Kittery, Maine 03904

February, 2020

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- Appendix 1B: Hydrologic Modeling – Proposed Conditions (HydroCAD) Summary
- Appendix 2: Inspection, Maintenance and Housekeeping Plan
- Appendix 3: Subsurface Investigations
- Appendix 4: Stormwater Management Plans

**STORMWATER MANAGEMENT REPORT
RICE PUBLIC LIBRARY
KITTERY, MAINE**

I. 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 modification 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 to comply with applicable regulatory requirements.

II. Existing Conditions

The project site consists of developed land located at 8 Wentworth Street in downtown Kittery. The site is approximately 0.8 acres in total consisting of the existing Rice Public Library building, gravel parking on the south end of the lot and paved parking on the north end. The site is bounded by Wentworth Street to the west and Traip Avenue on the southern and eastern sides of the site. The surrounding properties located on Traip Avenue consist of residential units while the buildings located on Wentworth Street are primarily for commercial use.

Slopes on the site range from approximately 3% across the paved parking lot to 45% in the landscape area between the southwestern corner of the library and the gravel lot. The majority of the site consists of slopes of 9-10% across the gravel parking lot south of the library and the surrounding landscaped areas.

The site is tributary to a system of storm sewers which outlet into the Piscataqua River. The river is not listed in Chapter 502 of the Maine Department of Environmental Protection (MDEP) regulations on *Direct Watersheds of Lakes Most at Risk From New Development, and Urban Impaired Streams*.

The proposed development area of the site is not located in an identified flood zone per the FEMA Flood Insurance Rate Map for the Kittery Community Panel 728, revised April 14, 2017.

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Soil characteristics were obtained from the Class D: Medium Intensity Soil Survey completed by the United States Department of Agriculture Natural Resources Conservation Service custom Web Soil Survey. The Hydrologic Groups (HSG) of the soils are classified by Technical Release TR-55 of the Soil Conservation Service as follows:

Soil Map Symbol	Soil Name	Slope (%)	HSG
Ur	Urban Land	0-8	D

Hydrologic Soil Group boundaries are delineated on the Watershed Map. A copy of the Class D Medium Intensity Soil Survey is included as Appendix 3.

IV. Proposed Site Improvements

The proposed development will consist of an approximately 3,660 square-foot addition to the existing Rice Public Library. The existing gravel parking lot on site will be transformed into a paved parking area with a new driveway entrance. The existing paved parking lot in the northern most area of the site will be redesigned as part of the project. Other site improvements include the redesign of pedestrian walkways on site as well as various landscape features.

V. Existing Conditions Model

The existing conditions watershed plan consists of one subcatchment labeled 1.0S in the HydroCAD model. One location was identified as the Study Point (SP) for comparing peak runoff rates for the site.

SP1 represents the drainage structure located south of the southeasterly corner of the site within Traip Avenue. Subcatchment 1.0S contributes runoff to this study point with an overall runoff area of approximately 0.84 acres. Runoff from the site enters a catch basin (1.0P) at the southeast corner of the site and then flows to SP1 via a corrugated metal pipe. SP1 and the associated drainage area are tributary to the Piscataqua River.

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The proposed conditions watershed area consists of the same overall area as the existing conditions plan, however, the existing conditions subcatchment has been broken into smaller subcatchments as a result of the proposed development.

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VII. Stormwater Management

Basic Standard - Chapter 500, Section 4(B)

The project will not disturb more than one (1) acre of land area, where MDEP Basic Standards apply, requiring that grading or other construction activities on the site do not impede or otherwise alter drainage ways to have an unreasonable adverse impact. However, we have avoided adverse impacts by providing an Erosion & Sedimentation Control Plan, and an Inspection, Maintenance and Housekeeping Plan (Appendix 2) to be implemented during construction and post-construction stabilization of the site. These construction requirements have been developed following Best Management Practice guidelines, latest edition.

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Runoff curve numbers were determined for each of the watersheds by measuring the area of each hydrologic soil group within each type of land cover. The type of land cover was determined based on survey data, field reconnaissance and aerial photography. Times of concentration were determined from site topographic maps in accordance with SCS procedures.

The 24-hour rainfall values utilized in the hydrologic model were obtained from Appendix A of the *New Hampshire Stormwater Manual, Volume 2: Post-Construction Best Management Practices Selection & Design* (latest edition). Rainfall values for Portsmouth, NH are listed in the table below.

Storm Frequency Precipitation (in./24 hr)	
Portsmouth, NH	
2-year	3.1
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The following table presents the results of the peak runoff calculations at the study point for the existing and proposed conditions.

Peak Runoff Rate Summary Table			
Analysis Point	Storm Event	Existing Conditions (cfs)	Proposed Conditions (cfs)
SP-1	2-year	2.02	2.00
	25-year	3.84	3.81

The HydroCAD Data output sheets from this analysis are appended to this report (Appendix 1) along with the Stormwater Management Plans (Appendix 4). The model predicts that the peak runoff rates in the proposed condition at Study Point 1 are below existing condition runoff rates for the 2 and 25-year storm events with implementation of the proposed stormwater management practices.

VIII. Summary

The proposed development has been designed to manage stormwater runoff through Best Management Practices approved by MDEP. Runoff discharging from the site will be below existing conditions for the 2 and 25-year storm events at the chosen study point. Additionally, erosion and sedimentation controls along with associated maintenance and housekeeping procedures have been outlined to prevent unreasonable impacts on the site and to the surrounding environment.

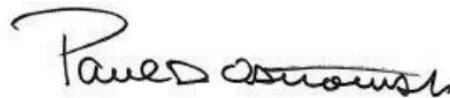
Prepared by:

SEBAGO TECHNICS, INC.



Mathew K. Orr, EI
Civil Engineer

MKO



Paul D. Ostrowski, P.E.
Senior Project Engineer

PDO

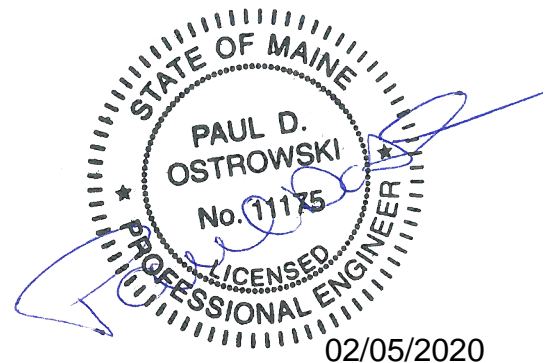


Exhibit 8

Soil Survey

Exhibit 8: Soil Survey

Please see the separately bound Stormwater Management Report for a copy of the Class D: Medium Intensity Soil Survey.

Exhibit 9

Vehicular Traffic Report

Exhibit 9: Vehicular Traffic Report

Please see this Exhibit for a traffic memo prepared by Sebago Technics, Inc.

Memorandum

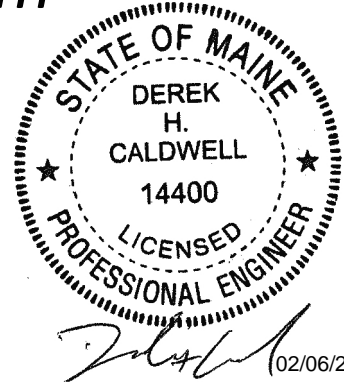
18438

To: Stephen Doe, RLA, LEED-AP

From: Derek Caldwell, P.E., PTOE

Date: February 6, 2020

Subject: Trip Generation
Rice Public Library
Kittery, Maine



Per your request, we have completed a trip generation analysis for the proposed Rice Public Library addition in Kittery, Maine. It is our understanding the project proposes to construct an addition to the existing Rice Library which will replace the existing Taylor Annex building. The existing library and annex have a total of 9,847 square feet of floor space. Post build, the renovated library will have a total of 16,061 square feet and the annex would be closed. The library currently has six full time employees. It is our understanding that this number is not to change with the expansion.

The 10th Edition of the Institute of Transportation Engineers Trip Generation Manual, was used to calculate the estimated trip generation of both the existing and proposed uses. This calculation was completed considering both the square footage and number of employees as the independent variable. Land Use Code (LUC) 590 – Library was used for this calculation. Tables 1 and 2 show the calculated trip generation of both the existing and proposed library on the basis of square footage. Table 3 shows the increase in calculated trip generation based on square footage, found by subtracting the values in Table 1 from the values in Table 2.

**Table 1 –Existing Trip Generation
LUC –590 – Library
(9,847 Square Feet)**

	Trip Generation Rate/1,000 SF	Total	Entering	Exiting	Entering %	Exiting %
Weekday	72.05	709	354	355	50%	50%
AM Peak Hour of Adj. Street	1.00	10	7	3	71%	29%
PM Peak Hour of Adj. Street	8.16	80	38	42	48%	52%
AM Peak Hour of Generator	6.25	62	30	32	49%	51%
PM Peak Hour of Generator	8.53	84	44	40	52%	48%
Saturday	80.09	789	394	395	50%	50%
Saturday Peak Hour	12.6	124	65	58	53%	47%

**Table 2 –Proposed Trip Generation
LUC –590 – Library
(16,061 Square Feet)**

	Trip Generation Rate/1,000 SF	Total	Entering	Exiting	Entering %	Exiting %
Weekday	72.05	1157	578	579	50%	50%
AM Peak Hour of Adj. Street	1.00	16	11	5	71%	29%
PM Peak Hour of Adj. Street	8.16	131	63	68	48%	52%
AM Peak Hour of Generator	6.25	100	49	51	49%	51%
PM Peak Hour of Generator	8.53	137	71	66	52%	48%
Saturday	80.09	1286	643	643	50%	50%
Saturday Peak Hour	12.6	202	107	95	53%	47%

Table 3
Net Trip Increase
(Based on Square Footage)

	Total	Entering	Exiting
Weekday	448	224	224
AM Peak Hour of Adjacent Street	6	4	2
PM Peak Hour of Adjacent Street	51	25	26
AM Peak Hour of Generator	38	19	19
PM Peak Hour of Generator	53	27	26
Saturday	497	249	248
Saturday Peak Hour	78	42	37

Table 4 shows the calculated trip generation on the basis of six employees. As the number of employees is not proposed to change, the resultant increase in trip generation would be zero.

The total projected increase in vehicular trip generation is then based upon the average of the net difference of trips calculated based on square footage (shown in Table 4) and calculated based on number of employees (no increase). Table 5 summarizes the results of this calculation.

Table 4 – Existing and Proposed Trip Generation
LUC –590 – Library
(6 Employees)

	Trip Generation Rate/Employee	Total	Entering	Exiting	Entering %	Exiting %
Weekday	55.64	334	167	167	50%	50%
AM Peak Hour of Adj. Street	1.06	6	4	2	69%	31%
PM Peak Hour of Adj. Street	5.82	35	17	18	47%	53%
AM Peak Hour of Generator	4.98	30	15	15	50%	50%
PM Peak Hour of Generator	6.81	41	21	20	52%	48%
Saturday	69.31	416	208	208	50%	50%
Saturday Peak Hour	10.9	65	34	31	53%	47%

**Table 5
Total Net Trip Increase**

	Total	Entering	Exiting
Weekday	224	112	112
AM Peak Hour of Adjacent Street	3	2	1
PM Peak Hour of Adjacent Street	26	12	13
AM Peak Hour of Generator	19	9	10
PM Peak Hour of Generator	27	14	13
Saturday	249	125	124
Saturday Peak Hour	39	21	18

As shown in Table 5, the proposed library addition is estimated to result in an increase of 224 trips on an average weekday and an increase of 27 trips during the PM Peak Hour. Additionally, it is estimated the project will result in an increase of 249 daily trips on an average Saturday and an increase of 39 trips during the Saturday Peak Hour.

Exhibit 10

Traffic Impact Analysis

Exhibit 10: Traffic Impact Analysis

Not applicable. The proposed project does not involve the development of forty (40) parking spaces or generate more than four hundred (400) vehicle trips per day.

Exhibit 11

Test Pit Analysis

Exhibit 11: Test Pit Analysis

Not applicable. The proposed project will not dispose of sewage on site and therefore will not require test pits.

Exhibit 12

Town Sewage Department Approval

Exhibit 12: Town Sewage Department Approval

Please see this Exhibit for a copy of the Request for Acceptance of Wastewater Flow dated January 21, 2020. Please also see this Exhibit for a copy of approval by email dated January 22, 2020.



January 21, 2020
18438

Timothy Babkirk, Superintendent
Kittery Wastewater Treatment
200 Rogers Road
Kittery, ME 03904

Request for Acceptance of Wastewater Flow
Proposed Rice Library Expansion
8 Wentworth Street, Kittery

Dear Mr. Babkirk:

Sebago Technics, Inc., as part of a design team, has been retained to prepare plans and permit applications for the proposed Rice Library expansion and renovation located at 8 Wentworth Street. The proposed development consists of an approximately 3,660 square-foot expansion to the existing structure and associated site improvements as the attached plan shows.

As seen on the enclosed plan, the proposed system is anticipated to consist of approximately 40 linear feet of sewer service. The proposed sewer service is a 4-inch line and is proposed to connect to the existing 8-inch gravity main located within Traip Avenue. Proposed sewer services are less than 10' in depth from the ground surface. Please also see attached a diagram for fixture units developed by others. During days of operation, the current demand of the library is 44GPD.

Maine Subsurface Wastewater Rules, Table 4C, was utilized to calculate anticipated average daily flows. The following is a summary to the assumed uses and contributing flows for the expansion:

Library

Calculated as visitors center.

$(25 \text{ visitors} * 5 \text{ GPD per visitor}) + (5 \text{ employees} * 12 \text{ GPD per employee}) = 185 \text{ GPD}$

If you have any questions or need additional information, please do not hesitate to contact me.

Sincerely,

SEBAGO TECHNICS, INC.

A handwritten signature in black ink that reads "Paul Ostrowski".

Paul Ostrowski, P.E.
Senior Project Engineer

PDO/llg
Enc.

From: Timothy Babkirk <TBabkirk@kitteryme.org>
Sent: Wednesday, January 22, 2020 9:03 AM
To: Mathew Orr
Subject: RE: Rice Library Expansion Request for Acceptance of Wastewater Flow

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thank you Matt everything looks good.

Thank You
Tim

Timothy Babkirk
Superintendent of Sewer Services
Town of Kittery
(207) 439-4646

From: Mathew Orr [<mailto:morr@sebagotechnics.com>]
Sent: Tuesday, January 21, 2020 2:44 PM
To: Timothy Babkirk <TBabkirk@kitteryme.org>
Subject: Rice Library Expansion Request for Acceptance of Wastewater Flow

Good afternoon Tim,

Please find attached a request for acceptance of wastewater flow for the proposed Rice Library expansion at 8 Wentworth Street. Enclosed with the letter is a proposed fixture unit diagram for the expansion as well as a Utility plan. We hope we have provided enough information, please let me know if there is anything else you may need for reviewing this request.

Regards,
Matt

Mathew Orr, EI *Civil Engineer*

Sebago Technics, Inc. | An Employee-Owned Company
75 John Roberts Rd., Suite 4A, South Portland, ME 04106
Office: 207.200.2100 | Direct: 207.200.2134 | Fax: 207.856.2206
morr@sebagotechnics.com | www.sebagotechnics.com



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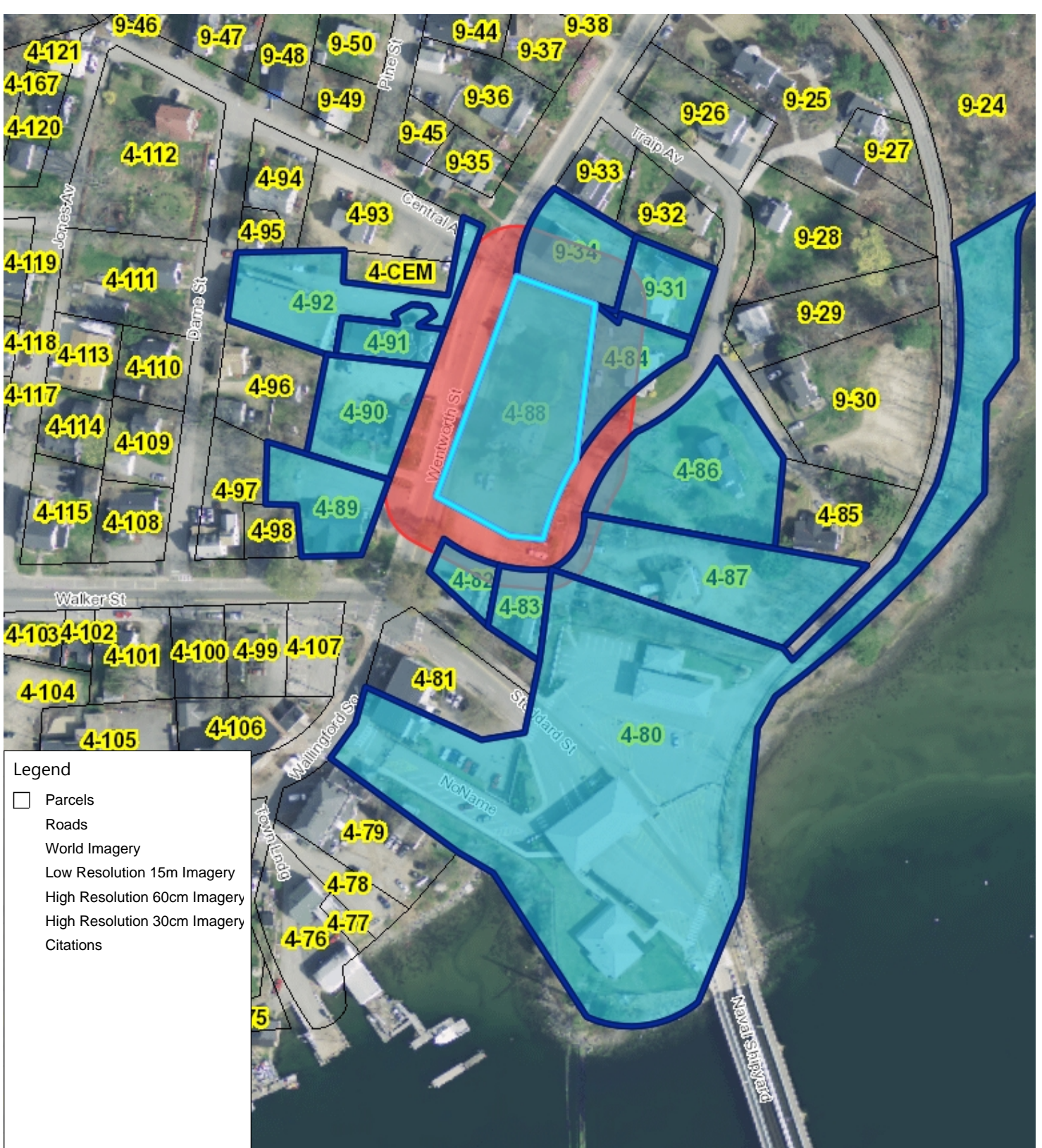
Exhibit 13

List of Abutters

Exhibit 13: List of Abutters

Please see this Exhibit for a list of abutters to this project site.

Abutters map



9-34

DENNETT, FRANK A
272 ROLLINGWOOD DRIVE ME
ELIOT ME 3903

9-31

MCNALLY, MATTHEW A.
17 TRAIPI AVENUE ME
KITTEERY ME 3904

4-92

THE OMEGA KITTEERY
12 DAME STREET, SUITE 5 ME
KITTEERY ME 3904

4-91

SOTIRIS REAL ESTATE HOLDING LLC
15 WENTWORTH STREET ME
KITTEERY ME 03904-1719

4-84

PEAPORRIDGE REALTY LLC
225 WILBIRD STREET NH
PORTSMOUTH NH 3801

4-88

RICE LIBRARY
8 WENTWORTH STREET ME
KITTEERY ME 3904

4-90

LARSON TR, LORI LORI LARSON LIVING
REVOCABLE TRUST 2009
36 PINE HILL ROAD SOUTH ME
CAPE NEDDICK ME 3902

4-86

CAMPION, MICHAEL J CAMPION, LAURA B
18 TRAIPI AVENUE ME
KITTEERY ME 03904-1716

4-89

RICE PUBLIC LIBRARY TRUSTEES
8 WENTWORTH STREET ME
KITTEERY ME 03904-1756

4-87

TOBEY, JOYCE ANN
167 ROGERS ROAD ME
KITTEERY ME 03904-1429

4-82

2-4 WENTWORTH ST LLC
165 CENTRAL ROAD NH
RYE NH 3870

4-83

COOPER, EVON
4 TRAIPI AVENUE ME
KITTEERY ME 3904

4-80

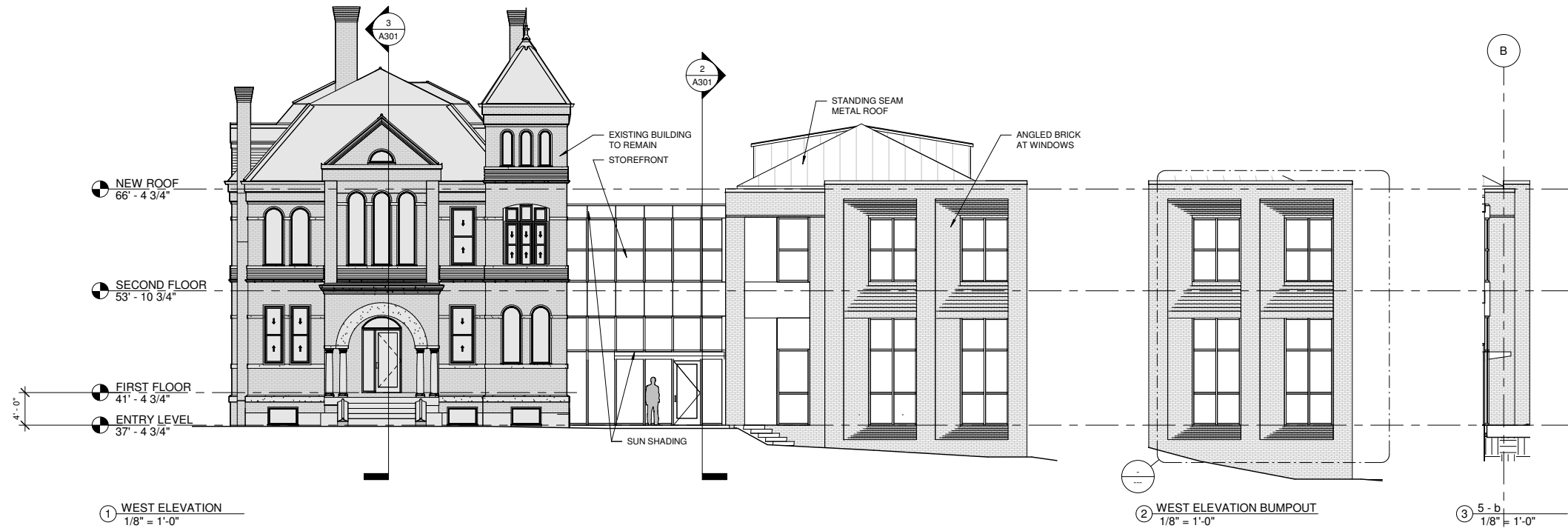
UNITED STATES OF AMERICA
300 WESTGATE CENTER DRIVE MA
HADLEY MA 1035

Exhibit 14

Building Elevation

Exhibit 14: Building Elevation

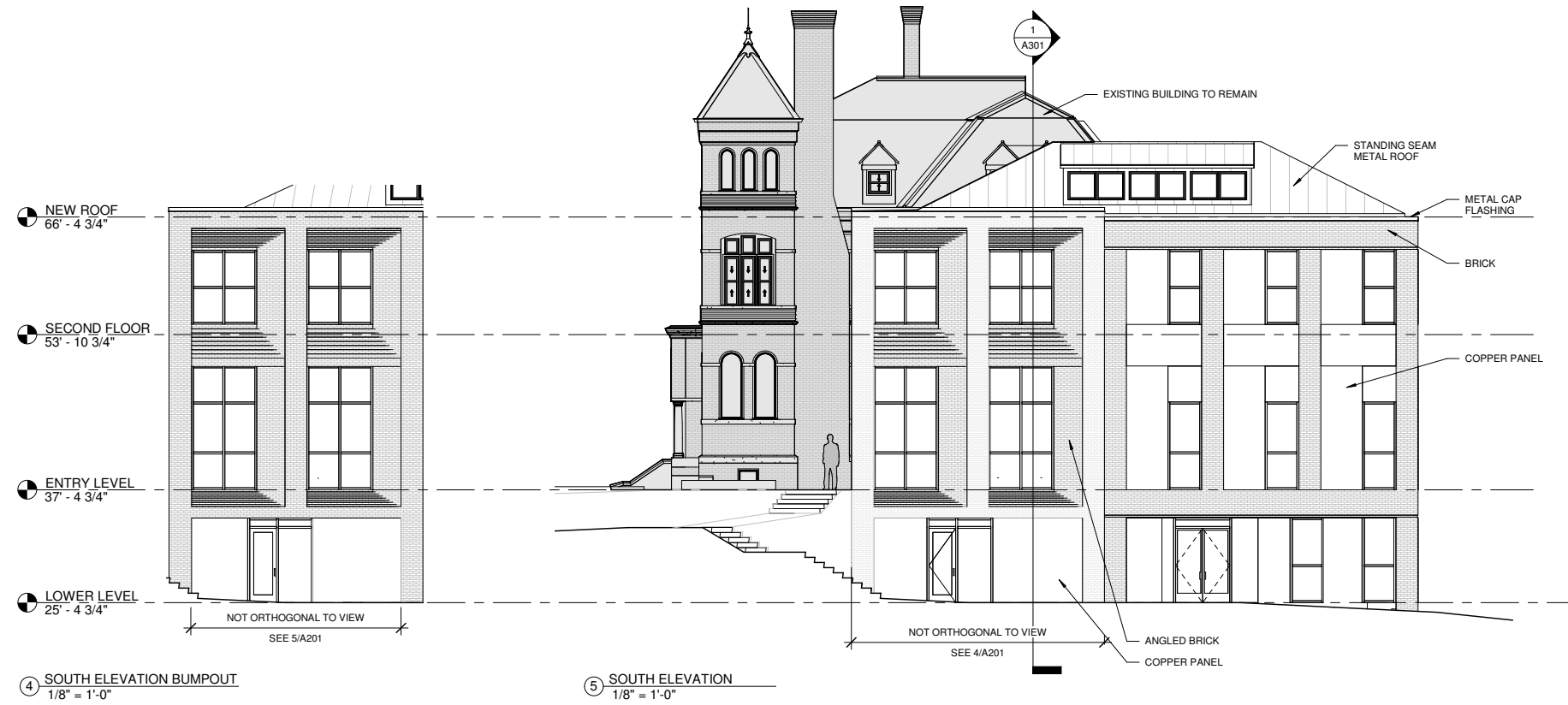
Please see this Exhibit for an architectural drawing of the proposed building by Scott Simons Architects.



1 WEST ELEVATION
1/8" = 1'-0"

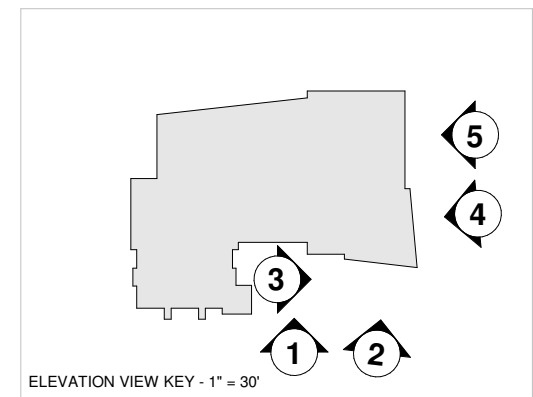
2 WEST ELEVATION BUMPOUT
1/8" = 1'-0"

3 5 - b
1/8" = 1'-0"



4 SOUTH ELEVATION BUMPOUT
1/8" = 1'-0"

5 SOUTH ELEVATION
1/8" = 1'-0"



PROJECT NAME:

RICE PUBLIC LIBRARY

ADDRESS:

SEAL:

NOT FOR CONSTRUCTION

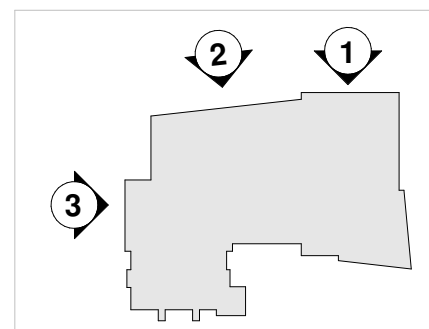
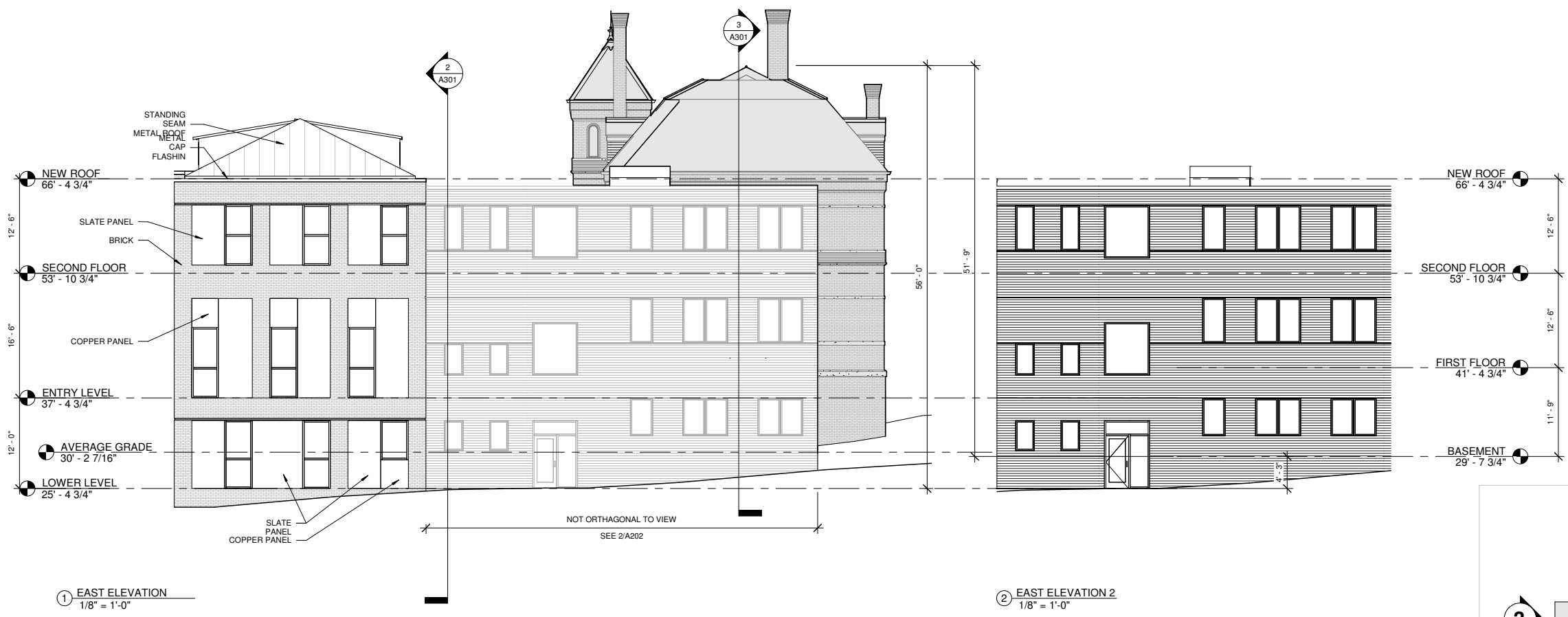
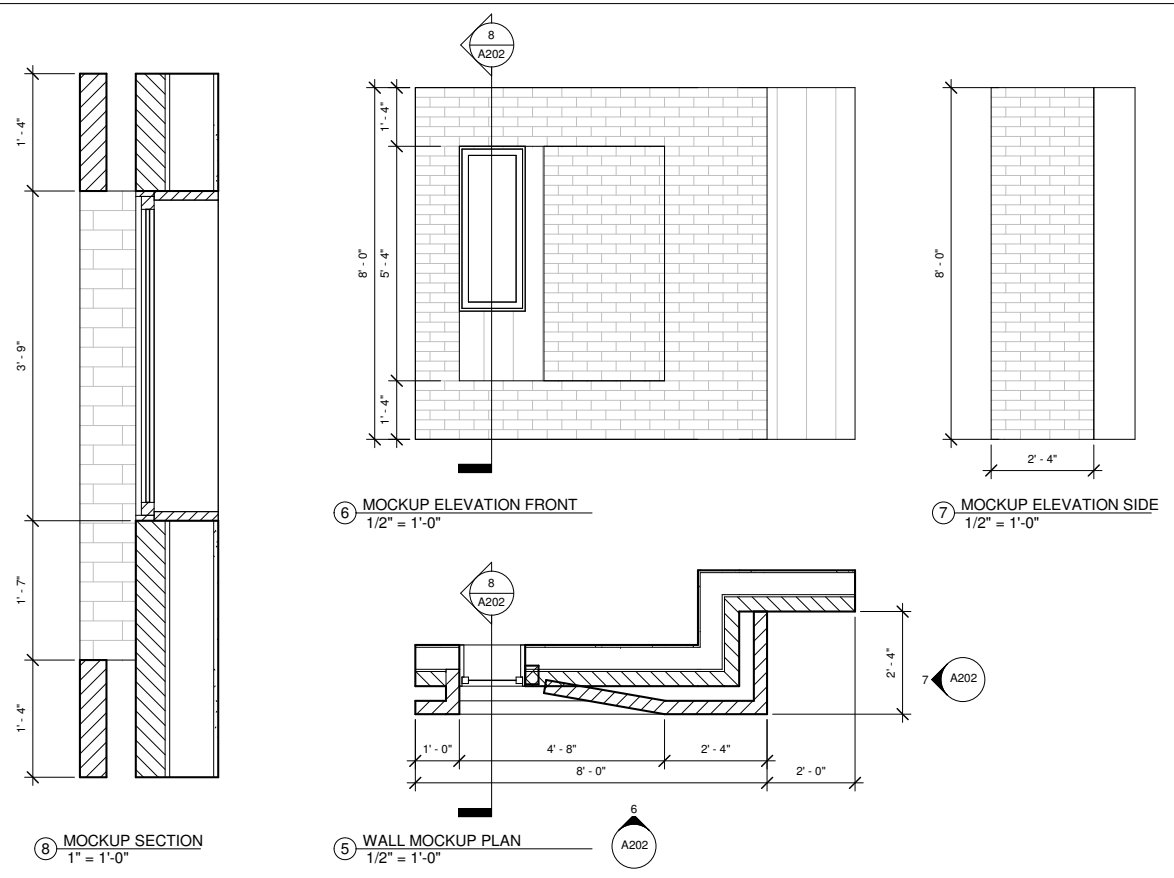
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REVISION:	DATE
1	DATE
2	DATE
3	DATE
4	DATE
5	DATE
6	DATE

DATE OF ISSUE: 2020.01.07
PROJECT NUMBER: 2018-0200
STATUS: DESIGN DEVELOPMENT

BUILDING ELEVATIONS

A201



PROJECT NAME:
RICE PUBLIC LIBRARY

ADDRESS:
 SEAL:

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6	DATE

DATE OF ISSUE: 2020.01.07
 PROJECT NUMBER: 2018-0200
 STATUS: DESIGN DEVELOPMENT

BUILDING ELEVATIONS

A202



CIVIL ENGINEERING • SURVEYING • LANDSCAPE ARCHITECTURE

STORMWATER MANAGEMENT REPORT

For

**RICE PUBLIC LIBRARY
KITTERY, MAINE**

Prepared for

Rice Public Library
8 Wentworth Street
Kittery, Maine 03904

February, 2020

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VIII. Summary.....	4

Appendices

- Appendix 1A: Hydrologic Modeling– Existing Conditions (HydroCAD)Summary
- Appendix 1B: Hydrologic Modeling – Proposed Conditions (HydroCAD) Summary
- Appendix 2: Inspection, Maintenance and Housekeeping Plan
- Appendix 3: Subsurface Investigations
- Appendix 4: Stormwater Management Plans

**STORMWATER MANAGEMENT REPORT
RICE PUBLIC LIBRARY
KITTERY, MAINE**

I. 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 modification 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 to comply with applicable regulatory requirements.

II. Existing Conditions

The project site consists of developed land located at 8 Wentworth Street in downtown Kittery. The site is approximately 0.8 acres in total consisting of the existing Rice Public Library building, gravel parking on the south end of the lot and paved parking on the north end. The site is bounded by Wentworth Street to the west and Traip Avenue on the southern and eastern sides of the site. The surrounding properties located on Traip Avenue consist of residential units while the buildings located on Wentworth Street are primarily for commercial use.

Slopes on the site range from approximately 3% across the paved parking lot to 45% in the landscape area between the southwestern corner of the library and the gravel lot. The majority of the site consists of slopes of 9-10% across the gravel parking lot south of the library and the surrounding landscaped areas.

The site is tributary to a system of storm sewers which outlet into the Piscataqua River. The river is not listed in Chapter 502 of the Maine Department of Environmental Protection (MDEP) regulations on *Direct Watersheds of Lakes Most at Risk From New Development, and Urban Impaired Streams*.

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Soil characteristics were obtained from the Class D: Medium Intensity Soil Survey completed by the United States Department of Agriculture Natural Resources Conservation Service custom Web Soil Survey. The Hydrologic Groups (HSG) of the soils are classified by Technical Release TR-55 of the Soil Conservation Service as follows:

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VII. Stormwater Management

Basic Standard - Chapter 500, Section 4(B)

The project will not disturb more than one (1) acre of land area, where MDEP Basic Standards apply, requiring that grading or other construction activities on the site do not impede or otherwise alter drainage ways to have an unreasonable adverse impact. However, we have avoided adverse impacts by providing an Erosion & Sedimentation Control Plan, and an Inspection, Maintenance and Housekeeping Plan (Appendix 2) to be implemented during construction and post-construction stabilization of the site. These construction requirements have been developed following Best Management Practice guidelines, latest edition.

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The planned project will not create more than three (3) acres of impervious surface, where MDEP Flooding Standards must be met. However, the Town of Kittery code for stormwater management requires a project's stormwater management system detain, retain, or result in the infiltration of stormwater from 24-hour storms of the 2 and 25-year frequencies such that the peak flows of stormwater from the project site do not exceed the peak flows of stormwater prior to undertaking the project. As such, a runoff evaluation was performed using the methodology outlined in the USDA Soil Conservation Service's "Urban Hydrology for Small Watersheds - Technical Release #55 (TR-55)". HydroCAD computer software was utilized to perform the calculations using Portsmouth, NH rainfall data, as required by Town of Kittery codes.

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Portsmouth, NH	
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Peak Runoff Rate Summary Table			
Analysis Point	Storm Event	Existing Conditions (cfs)	Proposed Conditions (cfs)
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The HydroCAD Data output sheets from this analysis are appended to this report (Appendix 1) along with the Stormwater Management Plans (Appendix 4). The model predicts that the peak runoff rates in the proposed condition at Study Point 1 are below existing condition runoff rates for the 2 and 25-year storm events with implementation of the proposed stormwater management practices.

VIII. Summary

The proposed development has been designed to manage stormwater runoff through Best Management Practices approved by MDEP. Runoff discharging from the site will be below existing conditions for the 2 and 25-year storm events at the chosen study point. Additionally, erosion and sedimentation controls along with associated maintenance and housekeeping procedures have been outlined to prevent unreasonable impacts on the site and to the surrounding environment.

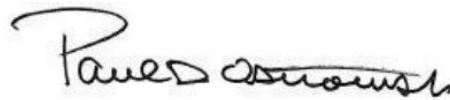
Prepared by:

SEBAGO TECHNICS, INC.



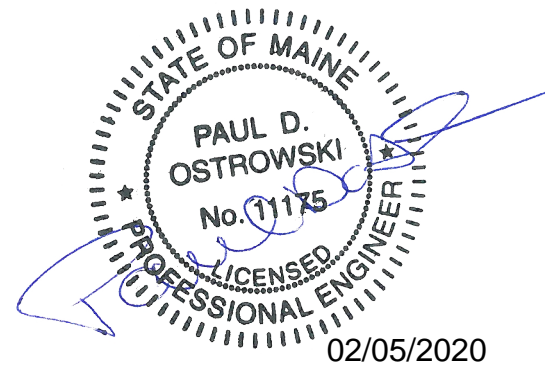
Mathew K. Orr, EI
Civil Engineer

MKO



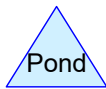
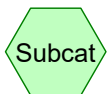
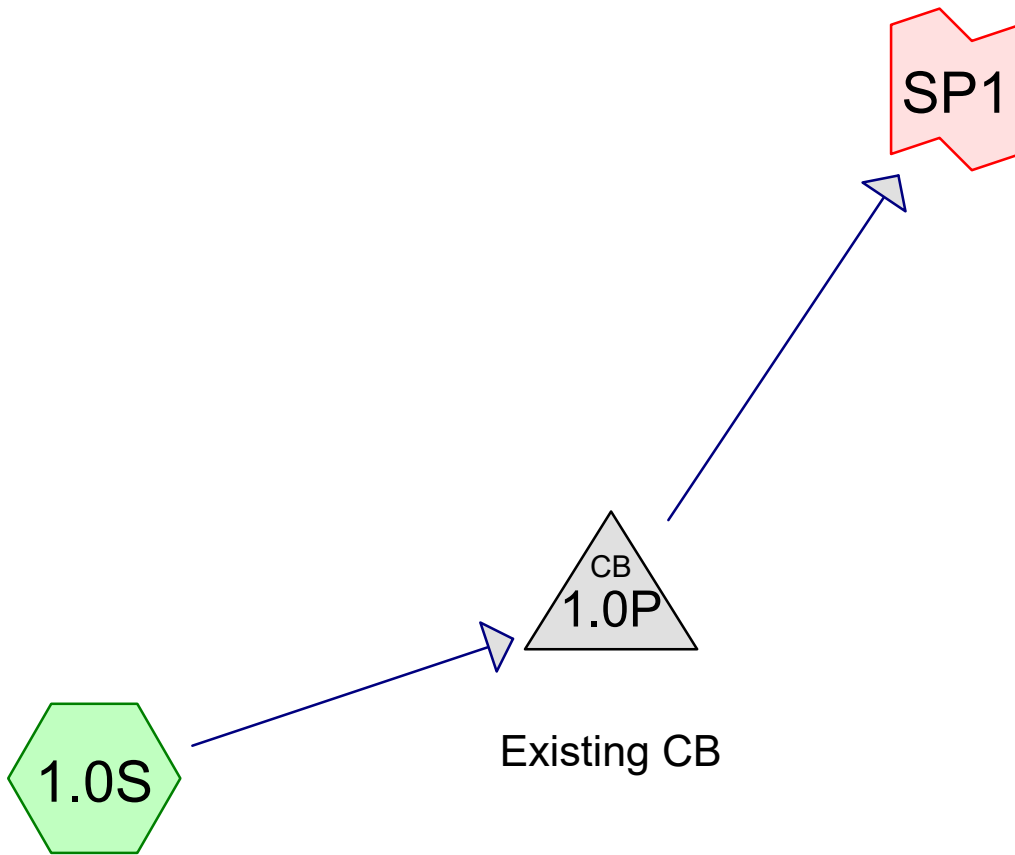
Paul D. Ostrowski, P.E.
Senior Project Engineer

PDO



Appendix 1A

**Hydrologic Modeling
Existing Conditions
HydroCAD Summary**



Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
16,845	80	>75% Grass cover, Good, HSG D (1.0S)
11,550	98	Existing Gravel (1.0S)
5,050	98	Existing Pavement (1.0S)
1,770	98	Existing Roof (1.0S)
1,240	98	Existing Walkways (1.0S)
36,455	90	TOTAL AREA

18438PRE

Type III 24-hr 2-YR Rainfall=3.10"

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Time span=0.00-50.00 hrs, dt=0.01 hrs, 5001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1.0S:

Runoff Area=36,455 sf 53.79% Impervious Runoff Depth=2.08"
Flow Length=242' Tc=6.0 min CN=90 Runoff=2.02 cfs 6,307 cf

Pond 1.0P: Existing CB

Peak Elev=17.04' Inflow=2.02 cfs 6,307 cf
12.0" Round Culvert n=0.025 L=38.0' S=0.0329 '/ Outflow=2.02 cfs 6,307 cf

Link SP1:

Inflow=2.02 cfs 6,307 cf
Primary=2.02 cfs 6,307 cf

Total Runoff Area = 36,455 sf Runoff Volume = 6,307 cf Average Runoff Depth = 2.08"
46.21% Pervious = 16,845 sf 53.79% Impervious = 19,610 sf

18438PRE

Type III 24-hr 25-YR Rainfall=5.20"

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Time span=0.00-50.00 hrs, dt=0.01 hrs, 5001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1.0S:

Runoff Area=36,455 sf 53.79% Impervious Runoff Depth=4.07"
Flow Length=242' Tc=6.0 min CN=90 Runoff=3.84 cfs 12,363 cf

Pond 1.0P: Existing CB

Peak Elev=18.20' Inflow=3.84 cfs 12,363 cf
12.0" Round Culvert n=0.025 L=38.0' S=0.0329 '/ Outflow=3.84 cfs 12,363 cf

Link SP1:

Inflow=3.84 cfs 12,363 cf
Primary=3.84 cfs 12,363 cf

Total Runoff Area = 36,455 sf Runoff Volume = 12,363 cf Average Runoff Depth = 4.07"
46.21% Pervious = 16,845 sf 53.79% Impervious = 19,610 sf

Summary for Subcatchment 1.0S:

Runoff = 3.84 cfs @ 12.08 hrs, Volume= 12,363 cf, Depth= 4.07"

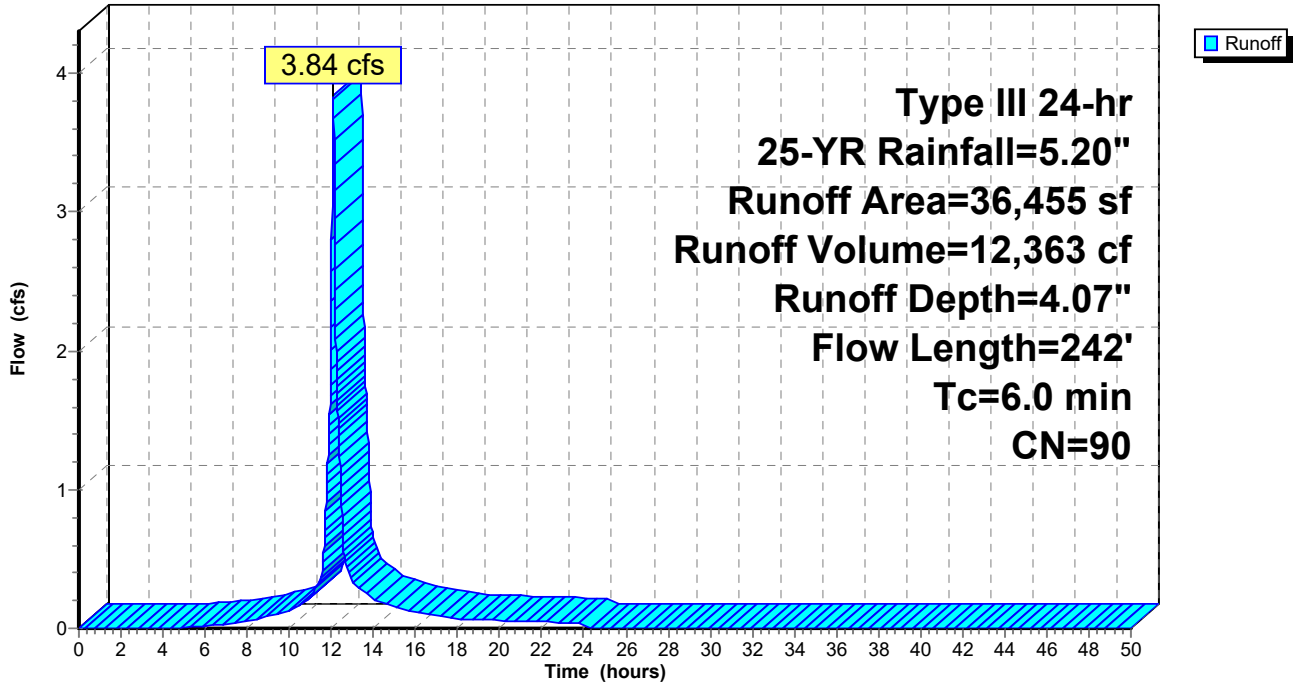
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
 Type III 24-hr 25-YR Rainfall=5.20"

Area (sf)	CN	Description
* 1,770	98	Existing Roof
* 1,240	98	Existing Walkways
* 11,550	98	Existing Gravel
* 5,050	98	Existing Pavement
16,845	80	>75% Grass cover, Good, HSG D
36,455	90	Weighted Average
16,845		46.21% Pervious Area
19,610		53.79% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.4	39	0.0769	0.19		Sheet Flow, A-B Grass: Short n= 0.150 P2= 2.00"
0.3	52	0.1346	2.57		Shallow Concentrated Flow, B-C Short Grass Pasture Kv= 7.0 fps
0.4	92	0.0489	3.56		Shallow Concentrated Flow, C-D Unpaved Kv= 16.1 fps
0.6	59	0.0508	1.58		Shallow Concentrated Flow, D-E Short Grass Pasture Kv= 7.0 fps
1.3					Direct Entry,
6.0	242	Total			

Subcatchment 1.0S:

Hydrograph



Summary for Pond 1.0P: Existing CB

Inflow Area = 36,455 sf, 53.79% Impervious, Inflow Depth = 4.07" for 25-YR event
 Inflow = 3.84 cfs @ 12.08 hrs, Volume= 12,363 cf
 Outflow = 3.84 cfs @ 12.08 hrs, Volume= 12,363 cf, Atten= 0%, Lag= 0.0 min
 Primary = 3.84 cfs @ 12.08 hrs, Volume= 12,363 cf

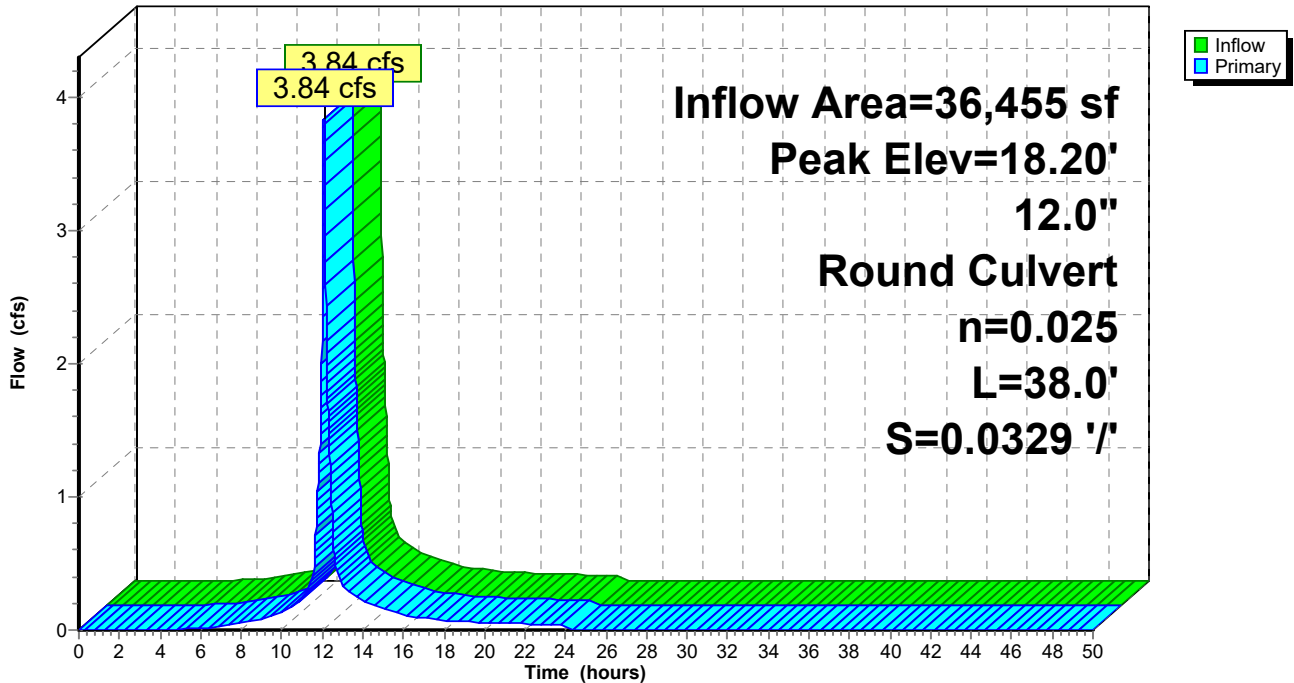
Routing by Dyn-Stor-Ind method, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
 Peak Elev= 18.20' @ 12.08 hrs
 Flood Elev= 18.75'

Device	Routing	Invert	Outlet Devices
#1	Primary	16.25'	12.0" Round CMP_Round 12" L= 38.0' CMP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 16.25' / 15.00' S= 0.0329 '/ Cc= 0.900 n= 0.025 Corrugated metal, Flow Area= 0.79 sf

Primary OutFlow Max=3.83 cfs @ 12.08 hrs HW=18.19' TW=0.00' (Dynamic Tailwater)
 ↳1=CMP_Round 12" (Barrel Controls 3.83 cfs @ 4.88 fps)

Pond 1.0P: Existing CB

Hydrograph

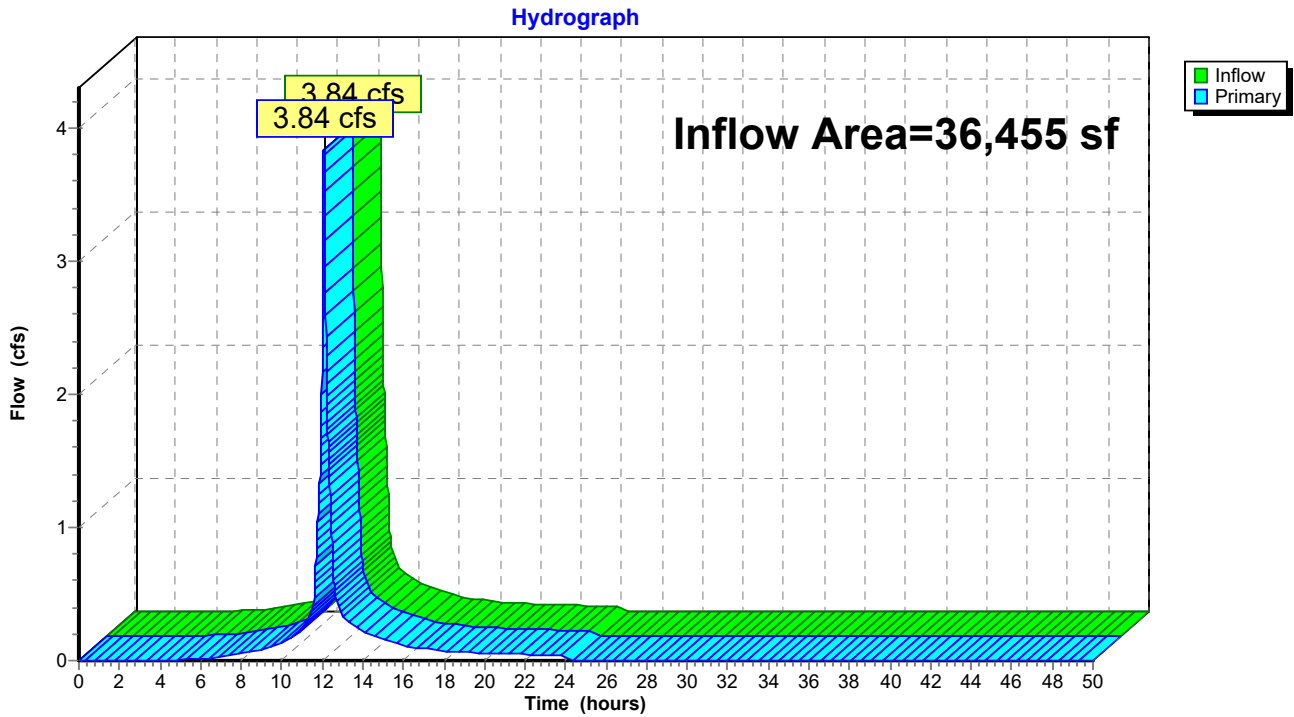


Summary for Link SP1:

Inflow Area = 36,455 sf, 53.79% Impervious, Inflow Depth = 4.07" for 25-YR event
Inflow = 3.84 cfs @ 12.08 hrs, Volume= 12,363 cf
Primary = 3.84 cfs @ 12.08 hrs, Volume= 12,363 cf, Atten= 0%, Lag= 0.0 min

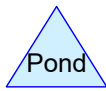
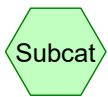
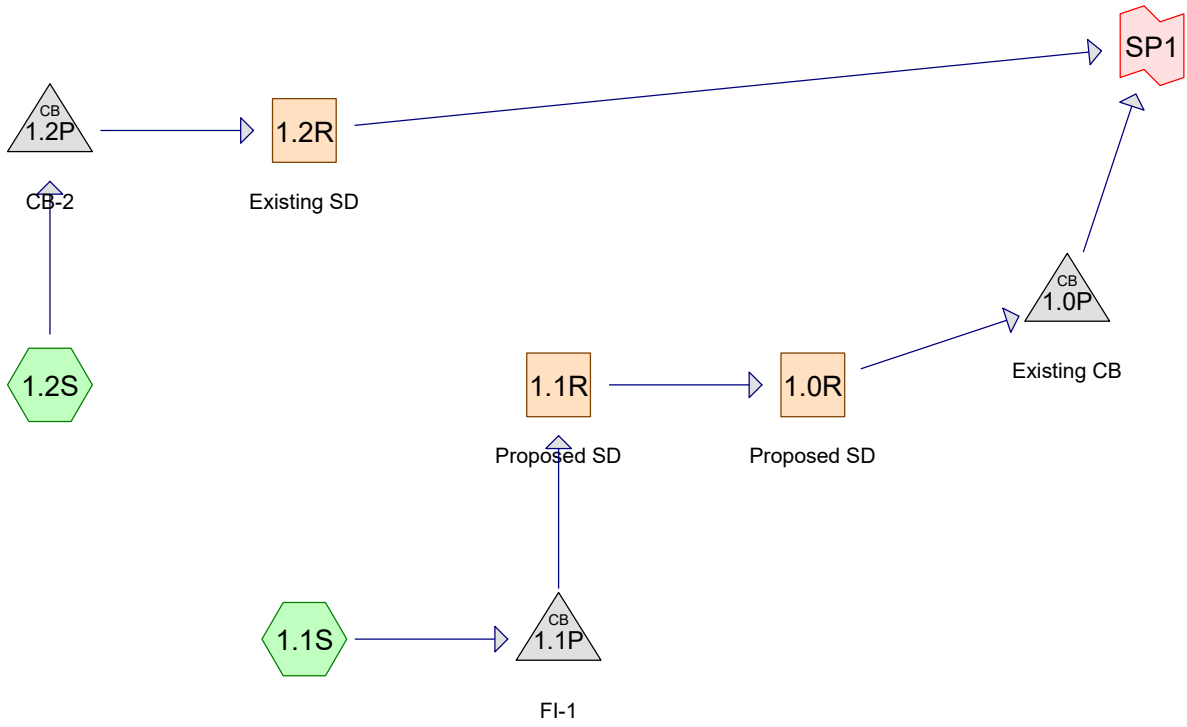
Primary outflow = Inflow, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs

Link SP1:



Appendix 1B

**Hydrologic Modeling
Proposed Conditions
HydroCAD Summary**



18438POST

Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
15,845	80	>75% Grass cover, Good, HSG D (1.1S, 1.2S)
1,430	98	Existing Pavement (1.1S, 1.2S)
1,770	98	Existing Roof (1.1S)
9,715	98	Proposed Pavement (1.1S, 1.2S)
260	98	Proposed Retaining Walls (1.1S)
3,680	98	Proposed Roof (1.1S)
3,755	98	Proposed Walkways (1.1S, 1.2S)
36,455	90	TOTAL AREA

18438POST

Type III 24-hr 2-YR Rainfall=3.10"

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Time span=0.00-50.00 hrs, dt=0.01 hrs, 5001 points
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
 Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1.1S: Runoff Area=20,560 sf 68.53% Impervious Runoff Depth=2.26"
 Flow Length=77' Tc=6.0 min CN=92 Runoff=1.22 cfs 3,865 cf

Subcatchment 1.2S: Runoff Area=15,895 sf 41.02% Impervious Runoff Depth=1.83"
 Flow Length=73' Tc=6.0 min CN=87 Runoff=0.78 cfs 2,420 cf

Reach 1.0R: Proposed SD Avg. Flow Depth=0.24' Max Vel=8.22 fps Inflow=1.22 cfs 3,865 cf
 12.0" Round Pipe n=0.013 L=16.0' S=0.0687 '/ Capacity=9.34 cfs Outflow=1.22 cfs 3,865 cf

Reach 1.1R: Proposed SD Avg. Flow Depth=0.31' Max Vel=6.55 fps Inflow=1.22 cfs 3,865 cf
 10.0" Round Pipe n=0.013 L=105.0' S=0.0350 '/ Capacity=4.10 cfs Outflow=1.22 cfs 3,865 cf

Reach 1.2R: Existing SD Avg. Flow Depth=0.29' Max Vel=4.10 fps Inflow=0.78 cfs 2,420 cf
 12.0" Round Pipe n=0.025 L=170.0' S=0.0521 '/ Capacity=4.23 cfs Outflow=0.78 cfs 2,420 cf

Pond 1.0P: Existing CB Peak Elev=16.83' Inflow=1.22 cfs 3,865 cf
 12.0" Round Culvert n=0.025 L=38.0' S=0.0329 '/ Outflow=1.22 cfs 3,865 cf

Pond 1.1P: FI-1 Peak Elev=22.21' Inflow=1.22 cfs 3,865 cf
 10.0" Round Culvert n=0.013 L=24.0' S=0.0146 '/ Outflow=1.22 cfs 3,865 cf

Pond 1.2P: CB-2 Peak Elev=24.75' Inflow=0.78 cfs 2,420 cf
 12.0" Round Culvert n=0.013 L=25.0' S=0.0136 '/ Outflow=0.78 cfs 2,420 cf

Link SP1: Inflow=2.00 cfs 6,284 cf
 Primary=2.00 cfs 6,284 cf

Total Runoff Area = 36,455 sf Runoff Volume = 6,284 cf Average Runoff Depth = 2.07"
43.46% Pervious = 15,845 sf 56.54% Impervious = 20,610 sf

18438POST

Type III 24-hr 25-YR Rainfall=5.20"

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Time span=0.00-50.00 hrs, dt=0.01 hrs, 5001 points
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
 Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1.1S: Runoff Area=20,560 sf 68.53% Impervious Runoff Depth=4.28"
 Flow Length=77' Tc=6.0 min CN=92 Runoff=2.24 cfs 7,341 cf

Subcatchment 1.2S: Runoff Area=15,895 sf 41.02% Impervious Runoff Depth=3.76"
 Flow Length=73' Tc=6.0 min CN=87 Runoff=1.57 cfs 4,975 cf

Reach 1.0R: Proposed SD Avg. Flow Depth=0.33' Max Vel=9.78 fps Inflow=2.24 cfs 7,341 cf
 12.0" Round Pipe n=0.013 L=16.0' S=0.0687 '/ Capacity=9.34 cfs Outflow=2.24 cfs 7,341 cf

Reach 1.1R: Proposed SD Avg. Flow Depth=0.44' Max Vel=7.68 fps Inflow=2.24 cfs 7,341 cf
 10.0" Round Pipe n=0.013 L=105.0' S=0.0350 '/ Capacity=4.10 cfs Outflow=2.24 cfs 7,341 cf

Reach 1.2R: Existing SD Avg. Flow Depth=0.42' Max Vel=4.98 fps Inflow=1.57 cfs 4,975 cf
 12.0" Round Pipe n=0.025 L=170.0' S=0.0521 '/ Capacity=4.23 cfs Outflow=1.57 cfs 4,975 cf

Pond 1.0P: Existing CB Peak Elev=17.10' Inflow=2.24 cfs 7,341 cf
 12.0" Round Culvert n=0.025 L=38.0' S=0.0329 '/ Outflow=2.24 cfs 7,341 cf

Pond 1.1P: FI-1 Peak Elev=22.72' Inflow=2.24 cfs 7,341 cf
 10.0" Round Culvert n=0.013 L=24.0' S=0.0146 '/ Outflow=2.24 cfs 7,341 cf

Pond 1.2P: CB-2 Peak Elev=24.99' Inflow=1.57 cfs 4,975 cf
 12.0" Round Culvert n=0.013 L=25.0' S=0.0136 '/ Outflow=1.57 cfs 4,975 cf

Link SP1: Inflow=3.81 cfs 12,316 cf
 Primary=3.81 cfs 12,316 cf

Total Runoff Area = 36,455 sf Runoff Volume = 12,316 cf Average Runoff Depth = 4.05"
43.46% Pervious = 15,845 sf 56.54% Impervious = 20,610 sf

Summary for Subcatchment 1.1S:

Runoff = 2.24 cfs @ 12.08 hrs, Volume= 7,341 cf, Depth= 4.28"

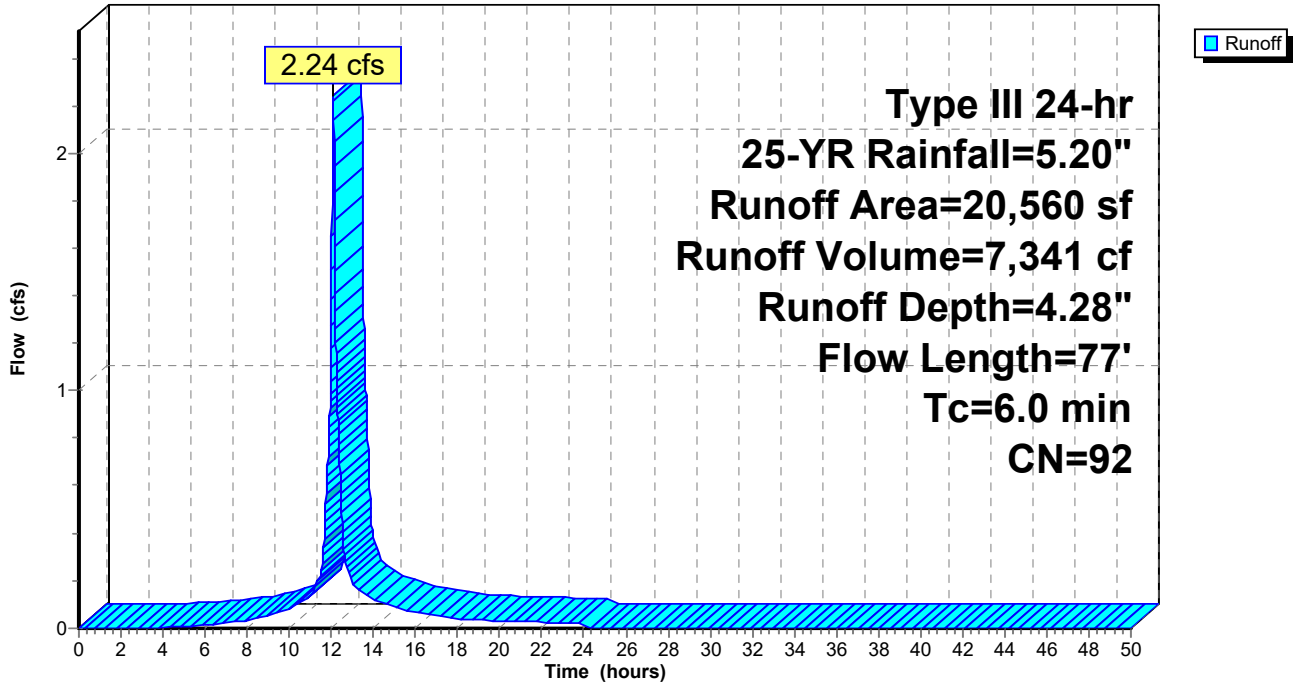
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
 Type III 24-hr 25-YR Rainfall=5.20"

Area (sf)	CN	Description
* 1,770	98	Existing Roof
* 3,680	98	Proposed Roof
* 1,115	98	Existing Pavement
* 2,530	98	Proposed Walkways
* 260	98	Proposed Retaining Walls
* 4,735	98	Proposed Pavement
6,470	80	>75% Grass cover, Good, HSG D
20,560	92	Weighted Average
6,470		31.47% Pervious Area
14,090		68.53% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.8	18	0.0278	0.11		Sheet Flow, A-B Grass: Short n= 0.150 P2= 2.00"
0.1	19	0.0500	4.54		Shallow Concentrated Flow, B-C Paved Kv= 20.3 fps
0.3	40	0.0875	2.07		Shallow Concentrated Flow, C-D Short Grass Pasture Kv= 7.0 fps
2.8					Direct Entry,
6.0	77	Total			

Subcatchment 1.1S:

Hydrograph



Summary for Subcatchment 1.2S:

Runoff = 1.57 cfs @ 12.09 hrs, Volume= 4,975 cf, Depth= 3.76"

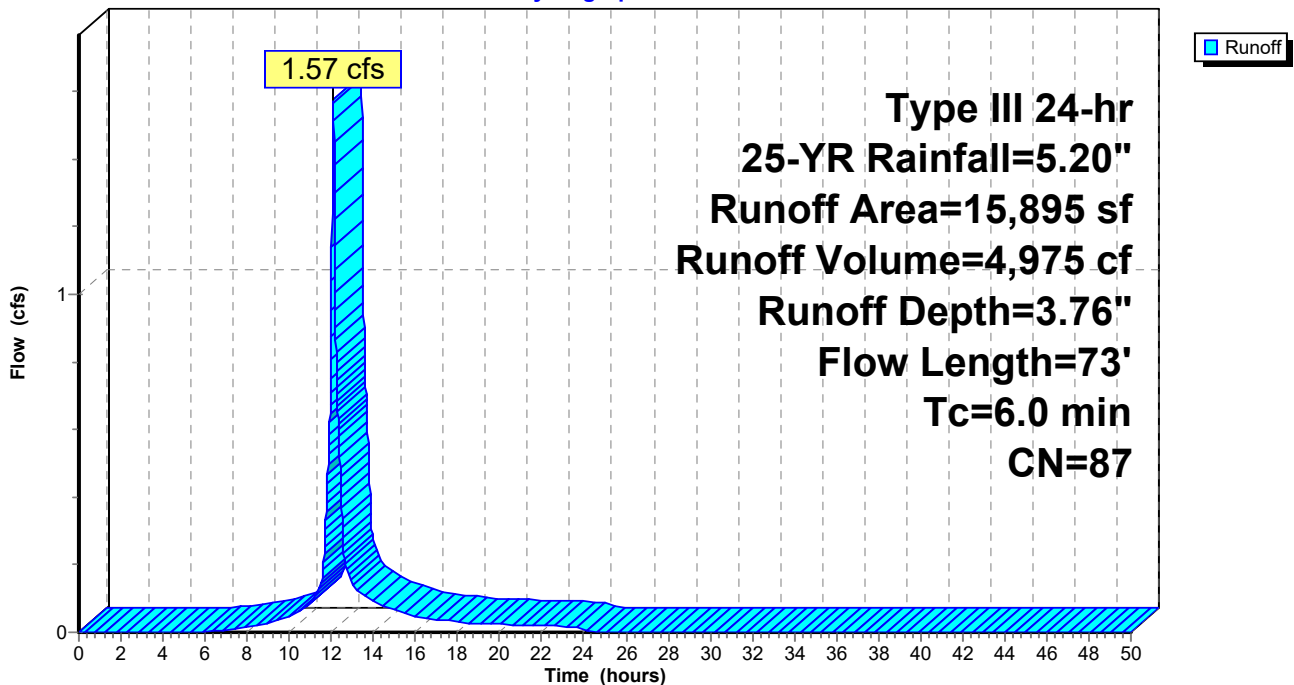
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
 Type III 24-hr 25-YR Rainfall=5.20"

Area (sf)	CN	Description
* 315	98	Existing Pavement
* 4,980	98	Proposed Pavement
* 1,225	98	Proposed Walkways
9,375	80	>75% Grass cover, Good, HSG D
15,895	87	Weighted Average
9,375		58.98% Pervious Area
6,520		41.02% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.9	34	0.0882	0.20		Sheet Flow, A-B Grass: Short n= 0.150 P2= 2.00"
0.2	39	0.1410	2.63		Shallow Concentrated Flow, B-C Short Grass Pasture Kv= 7.0 fps
2.9					Direct Entry,
6.0	73	Total			

Subcatchment 1.2S:

Hydrograph



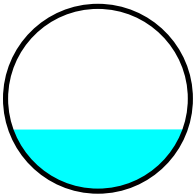
Summary for Reach 1.0R: Proposed SD

Inflow Area = 20,560 sf, 68.53% Impervious, Inflow Depth = 4.28" for 25-YR event
 Inflow = 2.24 cfs @ 12.09 hrs, Volume= 7,341 cf
 Outflow = 2.24 cfs @ 12.09 hrs, Volume= 7,341 cf, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
 Max. Velocity= 9.78 fps, Min. Travel Time= 0.0 min
 Avg. Velocity = 3.20 fps, Avg. Travel Time= 0.1 min

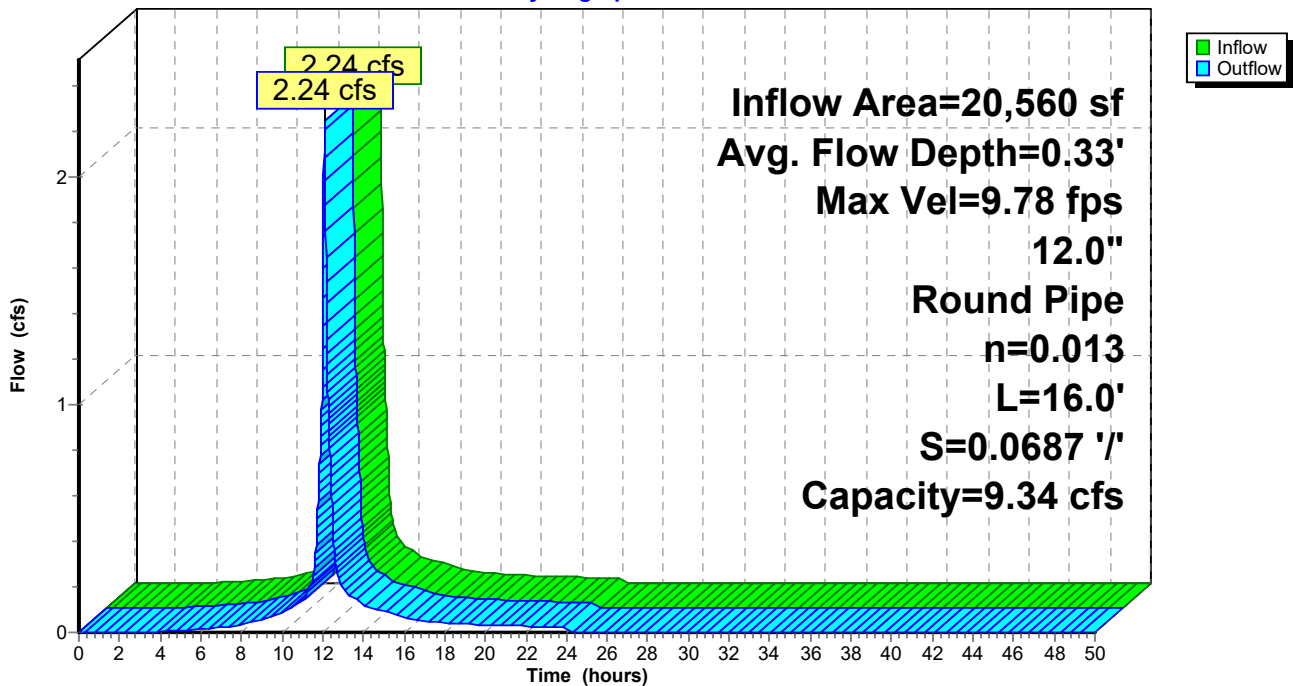
Peak Storage= 4 cf @ 12.09 hrs
 Average Depth at Peak Storage= 0.33'
 Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 9.34 cfs

12.0" Round Pipe
 n= 0.013 Corrugated PE, smooth interior
 Length= 16.0' Slope= 0.0687 '/
 Inlet Invert= 17.45', Outlet Invert= 16.35'



Reach 1.0R: Proposed SD

Hydrograph



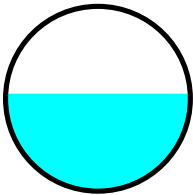
Summary for Reach 1.1R: Proposed SD

Inflow Area = 20,560 sf, 68.53% Impervious, Inflow Depth = 4.28" for 25-YR event
 Inflow = 2.24 cfs @ 12.08 hrs, Volume= 7,341 cf
 Outflow = 2.24 cfs @ 12.09 hrs, Volume= 7,341 cf, Atten= 0%, Lag= 0.2 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
 Max. Velocity= 7.68 fps, Min. Travel Time= 0.2 min
 Avg. Velocity = 2.58 fps, Avg. Travel Time= 0.7 min

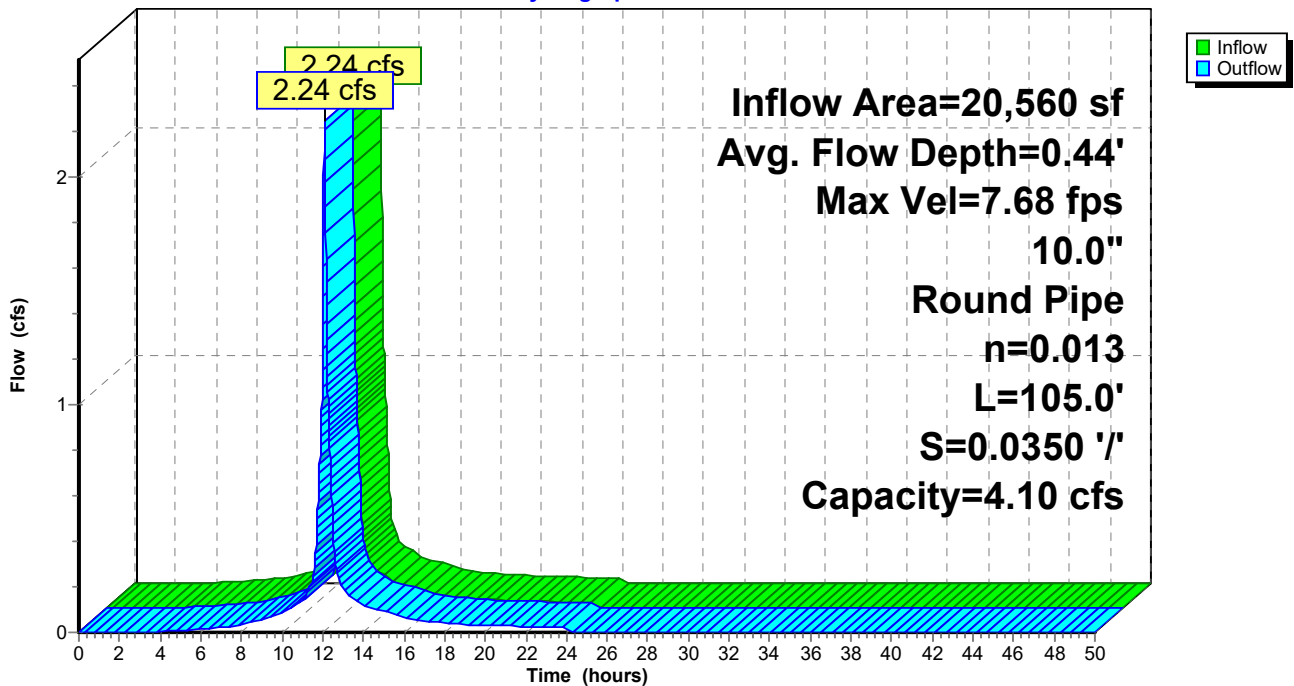
Peak Storage= 31 cf @ 12.09 hrs
 Average Depth at Peak Storage= 0.44'
 Bank-Full Depth= 0.83' Flow Area= 0.5 sf, Capacity= 4.10 cfs

10.0" Round Pipe
 n= 0.013 Corrugated PE, smooth interior
 Length= 105.0' Slope= 0.0350 '/
 Inlet Invert= 21.22', Outlet Invert= 17.55'



Reach 1.1R: Proposed SD

Hydrograph



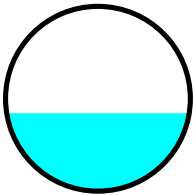
Summary for Reach 1.2R: Existing SD

Inflow Area = 15,895 sf, 41.02% Impervious, Inflow Depth = 3.76" for 25-YR event
 Inflow = 1.57 cfs @ 12.09 hrs, Volume= 4,975 cf
 Outflow = 1.57 cfs @ 12.09 hrs, Volume= 4,975 cf, Atten= 0%, Lag= 0.4 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
 Max. Velocity= 4.98 fps, Min. Travel Time= 0.6 min
 Avg. Velocity = 1.67 fps, Avg. Travel Time= 1.7 min

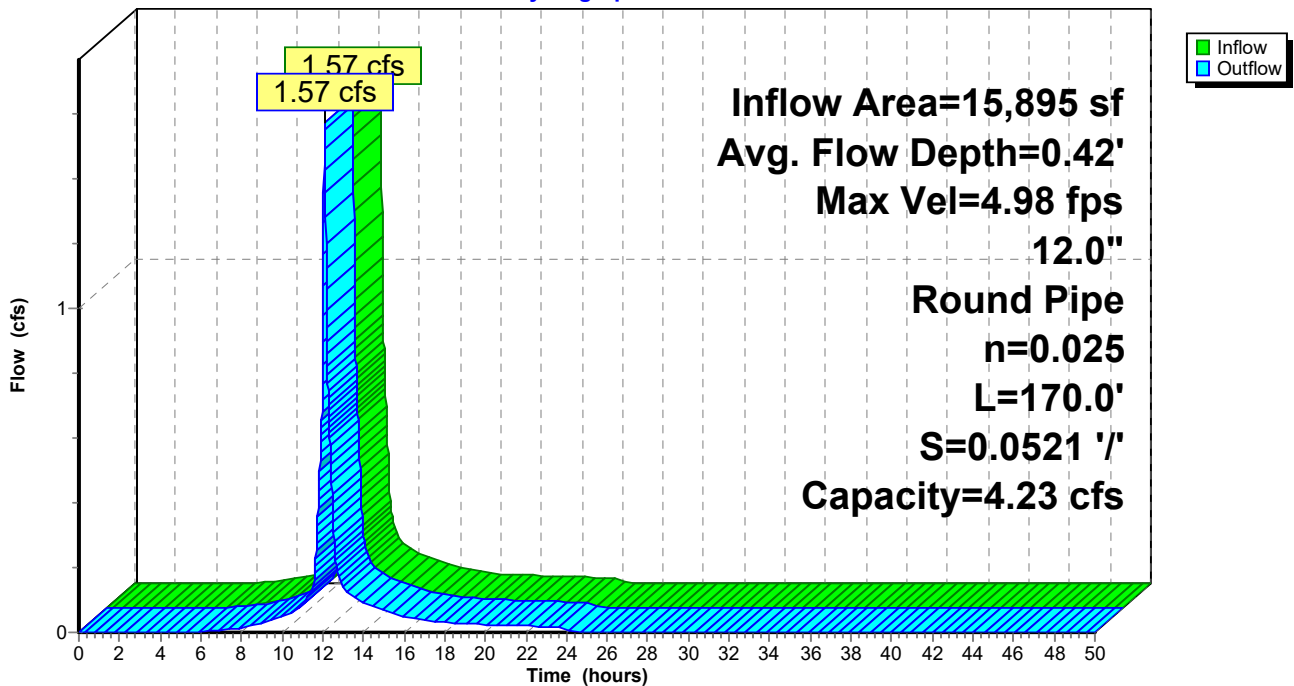
Peak Storage= 53 cf @ 12.09 hrs
 Average Depth at Peak Storage= 0.42'
 Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 4.23 cfs

12.0" Round Pipe
 n= 0.025 Corrugated metal
 Length= 170.0' Slope= 0.0521 '/'
 Inlet Invert= 23.86', Outlet Invert= 15.00'



Reach 1.2R: Existing SD

Hydrograph



Summary for Pond 1.0P: Existing CB

Inflow Area = 20,560 sf, 68.53% Impervious, Inflow Depth = 4.28" for 25-YR event
 Inflow = 2.24 cfs @ 12.09 hrs, Volume= 7,341 cf
 Outflow = 2.24 cfs @ 12.09 hrs, Volume= 7,341 cf, Atten= 0%, Lag= 0.0 min
 Primary = 2.24 cfs @ 12.09 hrs, Volume= 7,341 cf

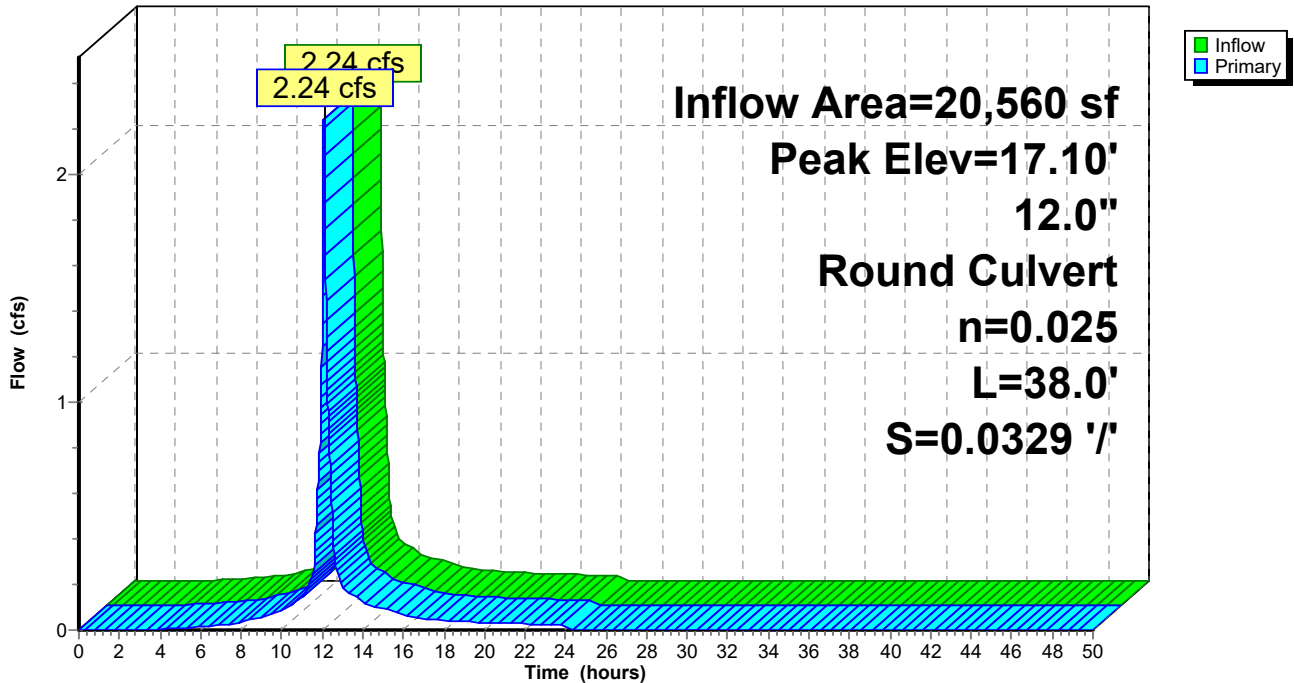
Routing by Dyn-Stor-Ind method, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
 Peak Elev= 17.10' @ 12.09 hrs
 Flood Elev= 18.75'

Device	Routing	Invert	Outlet Devices
#1	Primary	16.25'	12.0" Round CMP_Round 12" L= 38.0' CMP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 16.25' / 15.00' S= 0.0329 '/ Cc= 0.900 n= 0.025 Corrugated metal, Flow Area= 0.79 sf

Primary OutFlow Max=2.24 cfs @ 12.09 hrs HW=17.10' TW=0.00' (Dynamic Tailwater)
 ↳1=CMP_Round 12" (Inlet Controls 2.24 cfs @ 3.14 fps)

Pond 1.0P: Existing CB

Hydrograph



Summary for Pond 1.1P: FI-1

Inflow Area = 20,560 sf, 68.53% Impervious, Inflow Depth = 4.28" for 25-YR event
 Inflow = 2.24 cfs @ 12.08 hrs, Volume= 7,341 cf
 Outflow = 2.24 cfs @ 12.08 hrs, Volume= 7,341 cf, Atten= 0%, Lag= 0.0 min
 Primary = 2.24 cfs @ 12.08 hrs, Volume= 7,341 cf

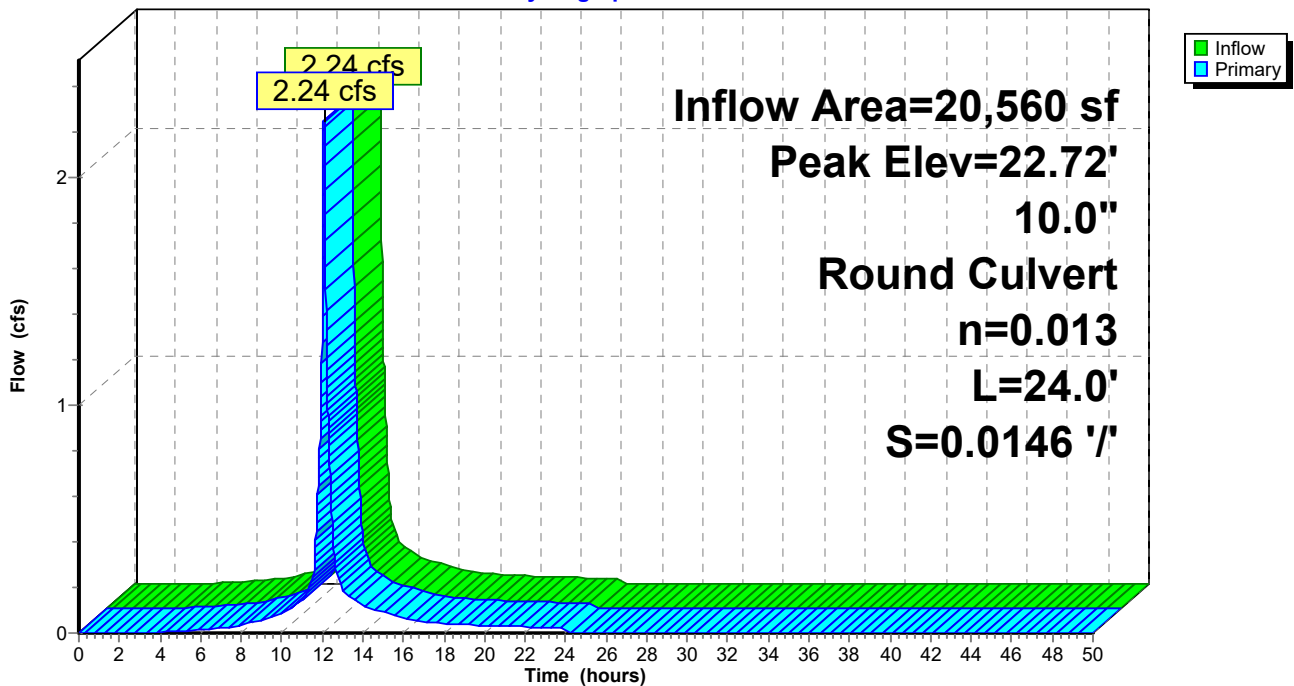
Routing by Dyn-Stor-Ind method, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
 Peak Elev= 22.72' @ 12.08 hrs
 Flood Elev= 32.38'

Device	Routing	Invert	Outlet Devices
#1	Primary	21.57'	10.0" Round SD-6 L= 24.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 21.57' / 21.22' S= 0.0146 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.55 sf

Primary OutFlow Max=2.24 cfs @ 12.08 hrs HW=22.71' TW=21.66' (Dynamic Tailwater)
 ↳1=SD-6 (Inlet Controls 2.24 cfs @ 4.11 fps)

Pond 1.1P: FI-1

Hydrograph



Summary for Pond 1.2P: CB-2

Inflow Area = 15,895 sf, 41.02% Impervious, Inflow Depth = 3.76" for 25-YR event
 Inflow = 1.57 cfs @ 12.09 hrs, Volume= 4,975 cf
 Outflow = 1.57 cfs @ 12.09 hrs, Volume= 4,975 cf, Atten= 0%, Lag= 0.0 min
 Primary = 1.57 cfs @ 12.09 hrs, Volume= 4,975 cf

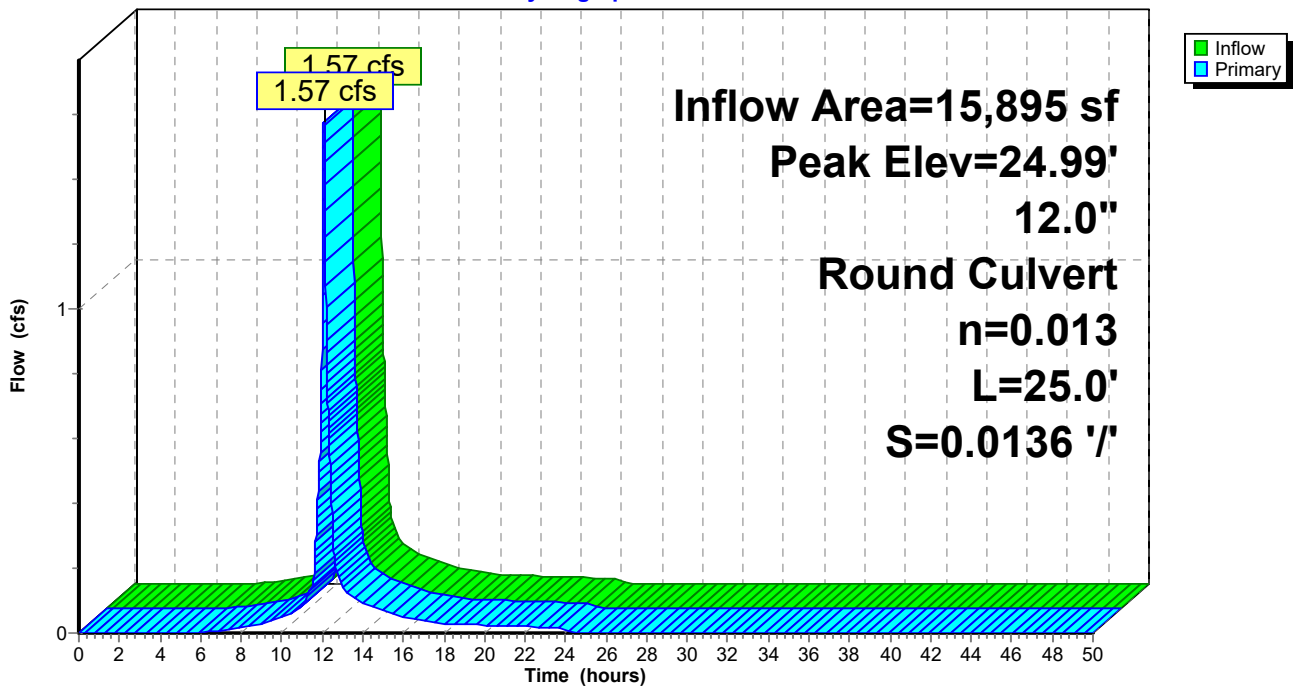
Routing by Dyn-Stor-Ind method, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
 Peak Elev= 24.99' @ 12.09 hrs
 Flood Elev= 28.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	24.30'	12.0" Round SD-2 L= 25.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 24.30' / 23.96' S= 0.0136 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.57 cfs @ 12.09 hrs HW=24.99' TW=24.28' (Dynamic Tailwater)
 ↳1=SD-2 (Barrel Controls 1.57 cfs @ 3.82 fps)

Pond 1.2P: CB-2

Hydrograph



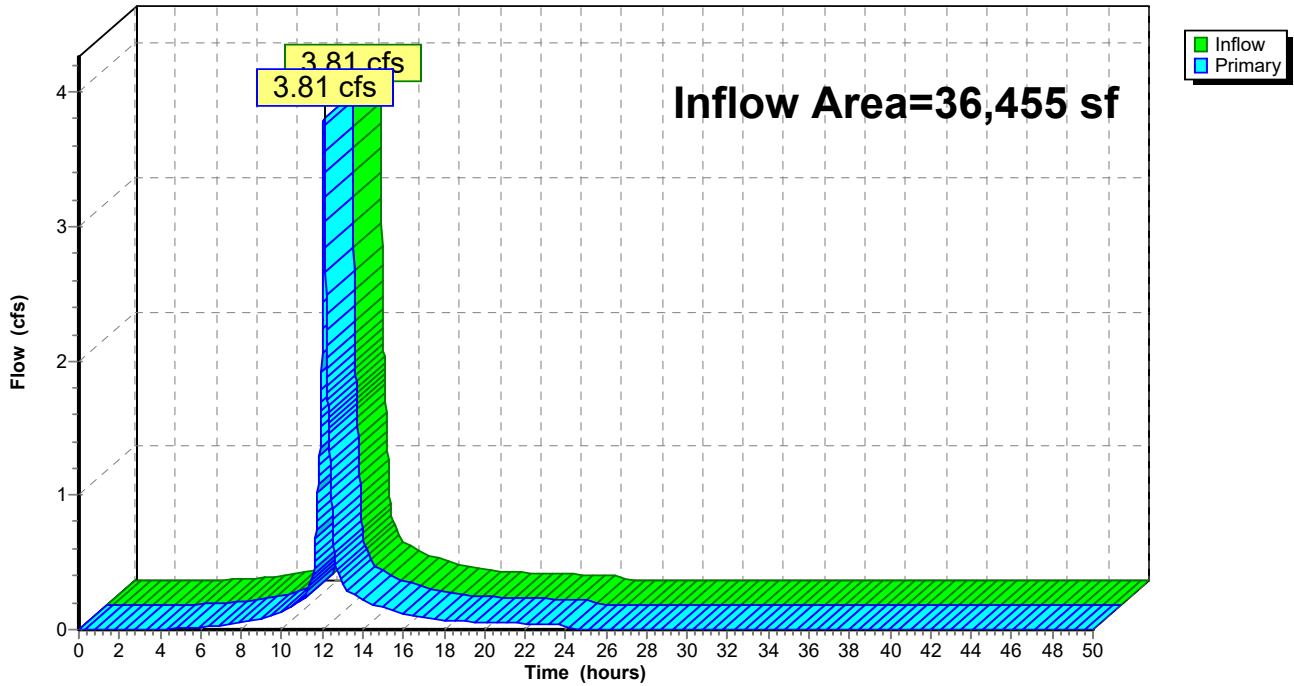
Summary for Link SP1:

Inflow Area = 36,455 sf, 56.54% Impervious, Inflow Depth = 4.05" for 25-YR event
Inflow = 3.81 cfs @ 12.09 hrs, Volume= 12,316 cf
Primary = 3.81 cfs @ 12.09 hrs, Volume= 12,316 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs

Link SP1:

Hydrograph



Appendix 2

Inspection, Maintenance and Housekeeping Plan



INSPECTION, MAINTENANCE, AND HOUSEKEEPING PLAN

For:

**Rice Public Library
8 Wentworth Street
Kittery, Maine**

By:

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

Introduction

The following plan outlines the anticipated inspection and maintenance procedures for the erosion and sedimentation control measures as well as stormwater management facilities for the project. This plan also outlines several housekeeping requirements that shall be followed during and after construction. These procedures shall be followed in order to ensure the intended function of the designed measures and to prevent unreasonably adverse impacts to the surrounding environment.

The procedures outlined in this Inspection, Maintenance and Housekeeping Plan are provided as an overview of the anticipated practices to be used on this site. In some instances, additional measures may be required due to unexpected conditions. For additional detail on any of the erosion and sedimentation control measures or stormwater management devices to be utilized on this project, refer to the most recently revised edition of the "Maine Erosion and Sedimentation Control BMP" manual and/or the "Stormwater Management for Maine: Best Management Practices" manual as published by the Maine Department of Environmental Protection (MDEP).

During Construction

- Inspection:** During the construction process, it is the Contractor's responsibility to comply with the inspection and maintenance procedures outlined in this section. These responsibilities include inspecting disturbed and impervious areas, erosion control measures, materials storage areas that are exposed to precipitation, and locations where vehicles enter or exit the site. These areas shall be inspected at least once a week as well as before and after a storm event (0.5" of rainfall), and prior to completing permanent stabilization measures. A person with knowledge of erosion and stormwater control, including the standards and conditions in any applicable permits, shall conduct the inspections.
- Maintenance:** All measures shall be maintained in an effective operating condition until areas are permanently stabilized. If Best Management Practices (BMPs) need to be maintained or modified, additional BMPs are necessary, or other corrective action is needed, implementation must be completed within 7 calendar days and prior to any storm event (0.5" of rainfall).
- Documentation:** A log summarizing the inspections and any corrective action taken must be maintained on-site. The log must include the name(s) and qualifications of the person making the inspections, the date(s) of the inspections, and major observations about the operation and maintenance of erosion and sedimentation controls, material storage areas, and vehicle access

points to the site. Major observations must include BMPs that need maintenance, BMPs that failed to operate as designed or proved inadequate for a particular location, and locations where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the log the corrective action taken and when it was taken. The log must be made accessible to the appropriate regulatory agency upon request. The permittee shall retain a copy of the log for a period of at least three years from the completion of permanent stabilization.

4. **Specific Inspection and Maintenance Tasks:** The following is a list of erosion control and stormwater management measures and the specific inspection and maintenance tasks to be performed during construction.

A. Sediment Barriers:

- Hay bale barriers, silt fences, and filter berms shall be inspected immediately after each rainfall and at least daily during prolonged rainfall.
- If the fabric on a silt fence or filter barrier should decompose or become ineffective prior to the end of the expected usable life and the barrier is still necessary, it shall be replaced.
- Sediment deposits should be removed after each storm event (0.5" of rainfall). They must be removed before deposits reach approximately one-half the height of the barrier.
- Filter berms shall be reshaped as needed.
- Any sediment deposits remaining in place after the silt fence or filter barrier is no longer required should be dressed to conform to the existing grade, prepared, and seeded.

B. Riprap Materials:

- Once a riprap installation has been completed, it should require very little maintenance. It shall, however, be inspected periodically to determine if high flows have caused scour beneath the riprap or dislodged any of the stone.

C. Erosion Control Blankets:

- Inspect these reinforced areas semi-annually and after significant rainfall events for slumping, sliding, seepage, and scour. Pay close attention to unreinforced areas adjacent to the erosion control blankets, which may experience accelerated erosion.
- Review all applicable inspection and maintenance procedures recommended by the specific blanket manufacturer. These tasks shall be included in addition to the requirements of this plan.

D. Stabilized Construction Entrances/Exits:

- The exit shall be maintained in a condition that will prevent tracking of sediment onto public rights-of-way.
- When the control pad becomes ineffective, the stone shall be removed along with the collected soil material. The entrance should then be reconstructed.
- Areas that have received mud-tracking or sediment deposits shall be swept or

washed. Washing shall be done on an area stabilized with aggregate, which drains into an approved sediment-trapping device (not into storm drains, ditches, or waterways).

E. Temporary Seed and Mulch:

- Mulched areas should be inspected after rain events to check for rill erosion.
- If less than 90% of the soil surface is covered by mulch, additional mulch shall be applied in bare areas.
- In applications where seeding and mulch have been applied in conjunction with erosion control blankets, the blankets must be inspected after rain events for dislocation or undercutting.
- Mulch shall continue to be reapplied until 95% of the soil surface has established temporary vegetative cover.

F. Stabilized Temporary Drainage Swales:

- Sediment accumulation in the swale shall be removed once the cross section of the swale is reduced by 25%.
- The swales shall be inspected after rainfall events. Any evidence of sloughing of the side slopes or channel erosion shall be repaired and corrective action should be taken to prevent reoccurrence of the problem.
- In addition to the stabilized lining of the channel (i.e. erosion control blankets), stone check dams may be needed to further reduce channel velocity.

5. **Housekeeping:** The following general performance standards apply to the proposed project.

- A. Spill prevention: Controls must be used to prevent pollutants from being discharged from materials on-site, including storage practices to minimize exposure of the materials to stormwater, and appropriate spill prevention, containment, and response planning and implementation.
- B. Groundwater protection: During construction, liquid petroleum products and other hazardous materials with the potential to contaminate groundwater may not be stored or handled in areas of the site draining to an infiltration area. An "infiltration area" is any area of the site that by design or as a result of soils, topography and other relevant factors, accumulates runoff that infiltrates into the soil. Dikes, berms, sumps, and other forms of secondary containment that prevent discharge to groundwater may be used to isolate portions of the site for the purposes of storage and handling of these materials.
- C. Fugitive sediment and dust: Actions must be taken to ensure that activities do not result in noticeable erosion of soils or fugitive dust emissions during or after construction. Oil may not be used for dust control.
- D. Debris and other materials: Litter, construction debris, and chemicals exposed to stormwater must be prevented from becoming a pollutant source.
- E. Trench or foundation dewatering: Trench dewatering is the removal of water from

trenches, foundations, cofferdams, ponds, and other areas within the construction area that retain water after excavation. In most cases, the collected water is heavily silted and hinders correct and safe construction practices. The collected water must be removed from the ponded area, either through gravity or pumping, and must be spread through natural wooded buffers or removed to areas that are specifically designed to collect the maximum amount of sediment possible, like a cofferdam sedimentation basin. Avoid allowing the water to flow over disturbed areas of the site. Equivalent measures may be taken if approved.

Post-Construction

1. **Inspection:** After construction, it is the responsibility of the owner or assigned heirs to comply with the inspection and maintenance procedures outlined in this section. All measures must be maintained in effective operating condition. The owner shall inspect and maintain the BMPs, including but not limited to any parking areas, catch basins, drainage swales, detention basins and ponds, pipes and related structures, in accordance with all municipal and state inspection, cleaning and maintenance requirements of the approved post-construction stormwater management plan.
2. **Specific Inspection and Maintenance Tasks:** The following is a list of permanent erosion control and stormwater management measures and the inspection and maintenance tasks to be performed after construction. If the BMP requires maintenance, repair or replacement to function as intended by the approved post-construction stormwater management plan, the owner or operator of the BMP shall take corrective action(s) to address the deficiency or deficiencies as soon as possible after the deficiency is discovered and shall provide a record of the deficiency and corrective action(s) to the local municipality in the annual report.
 - A. **Vegetated Areas:**
 - Inspect vegetated areas, particularly slopes and embankments, early in the growing season or after heavy rains (>0.5") to identify active or potential erosion problems.
 - Replant bare areas or areas with sparse growth. Where rill erosion is evident, armor the area with an appropriate lining or divert the erosive flows to on-site areas able to withstand the concentrated flows.
 - B. **Ditches, Swales and Other Open Channels:**
 - Inspect ditches, swales, level spreaders and other open stormwater channels in the spring, in the late fall, and after heavy rains to remove any obstructions to flow. Remove accumulated sediments and debris, remove woody vegetative growth that could obstruct flow, and repair any erosion of the ditch lining.
 - Vegetated ditches must be mowed at least annually or otherwise maintained to control the growth of woody vegetation and maintain flow capacity.
 - Any woody vegetation growing through riprap linings must also be removed. Repair any slumping side slopes as soon as practicable.
 - If the ditch has a riprap lining, replace riprap in areas where any underlying filter fabric or underdrain gravel is showing through the stone or where stones have dislodged.

C. Culverts:

- Inspect culverts in the spring, in the late fall, and after heavy rains (>0.5") to remove any obstructions to flow.
- Remove accumulated sediments and debris at the inlet, at the outlet, and within the conduit.
- Inspect and repair any erosion damage at the culvert's inlet and outlet.

D. Removal of Winter Sand:

- Clear accumulations of winter sand in parking lots and along roadways at least once a year, preferably in the spring.
- Accumulations on pavement may be removed by pavement sweeping.
- Accumulations of sand along road shoulders may be removed by grading excess sand to the pavement edge and removing it manually or by a front-end loader or other acceptable method.

E. Outlet Control Structures:

- Inspect outlet structures two times per year (preferably in spring and fall) to ensure that the outlet structures are working in their intended fashion and that they are free of debris.
- Clean structures when sediment depths reach 12 inches from invert of outlet.
- At a minimum, remove floating debris and hydrocarbons at the time of the inspection.

3. Documentation:

- A. The owner or operator of a BMP or a qualified post-construction stormwater inspector hired by that person, shall, as required by the local municipality, provide a completed and signed certification on a form provided by the local municipality, certifying that the person has inspected the BMP(s) and that they are adequately maintained and functioning as intended by the approved post-construction stormwater management plan, or that they required maintenance or repair, including the record of the deficiency and corrective action(s) taken.
- B. A log summarizing the inspections and any corrective action taken must be maintained. The log must include the name(s) and qualifications of the person making the inspections, the date(s) of the inspections, and major observations about the operation and maintenance of controls. Major observations must include BMPs that need maintenance, BMPs that failed to operate as designed or proved inadequate for a particular location, and locations where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the log the corrective action taken and when it was taken. The log must be made accessible to the appropriate regulatory agency upon request. A sample "Stormwater Inspection and Maintenance Form" has been included as Attachment 1 of this Inspection, Maintenance, and Housekeeping Plan.

4. **Duration of Maintenance:** Perform maintenance as described and required for any associated permits unless and until the system is formally accepted by a municipality or quasi-municipal district, or is placed under the jurisdiction of a legally created association that will be responsible for the maintenance of the system. If a municipality or quasi-municipal district chooses to accept a stormwater management system, or a component of a stormwater system, it must provide a letter to the MDEP stating that it assumes responsibility for the system. The letter must specify the components of the system for which the municipality or district will assume responsibility, and that the municipality or district agrees to maintain those components of the system in compliance with MDEP standards. Upon such assumption of responsibility, and approval by the MDEP, the municipality, quasi-municipal district, or association becomes a co-permittee for this purpose only and must comply with all terms and conditions of the permit.

Attachments

Attachment 1 – Stormwater Inspection Maintenance and Housekeeping Log Form

General Site

INSPECTION MAINTENANCE AND HOUSEKEEPING FORM			
General Information			
Project Name:		Inspection Date:	
Project Location:		Current Weather:	
		Date / Amount Last Precip:	
BMP Owner:		Company conducting inspection:	
Owner Mailing Address:		Company Mailing Address:	
Owner Phone #:		Company Phone #:	
Owner Email:		Inspector Name:	
		Inspector Email:	
Site Element	Suggested Maintenance (recm'd frequency)	Observations	Inspection Notes/Recommended Action
Vegetated Areas	Inspect Slopes/Embankments for erosion (annually)		
	Replant bare areas or areas of sparse growth (annually)		
Paved Surfaces	Clear accumulated winter sand (annually)		
	Remove sediment along edges of parking and within low spots/pockets (annually)		
Ditches/Swales	Remove obstructions/debris/sediment (monthly)		
	Inspect for erosion/repair as needed (annually)		
	Remove woody vegetation (annually)		
	Mow vegetated ditches (annually)		
Catch Basins	Remove sediment/debris from sump (annually)		
Culverts	Remove sediment/debris from inlet/outlet aprons (annually)		
	Inspect inlet/outlet aprons for erosion, repair as needed (annually)		
	Inspect, repair as needed, riprap aprons for dislodged/sparse coverage (annually)		
Pipe Outlets	Remove sediment/debris from outlet aprons (annually)		
	Inspect outlet aprons for erosion, repair as needed (annually)		
	Inspect, repair as needed, riprap aprons for dislodged/sparse coverage (annually)		
Additional Notes/Observations:			

Appendix 3

Subsurface Investigations



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

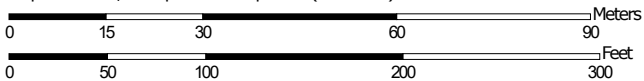
Custom Soil Resource Report for York County, Maine



Custom Soil Resource Report Soil Map



Map Scale: 1:1,170 if printed on A portrait (8.5" x 11") sheet.



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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
LnC	Lyman loam, 8 to 15 percent slopes, rocky	0.6	14.6%
Ur	Urban land	3.7	85.4%
Totals for Area of Interest		4.3	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,

Custom Soil Resource Report

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.

York County, Maine

LnC—Lyman loam, 8 to 15 percent slopes, rocky

Map Unit Setting

National map unit symbol: 2trq9
Elevation: 0 to 690 feet
Mean annual precipitation: 36 to 65 inches
Mean annual air temperature: 36 to 52 degrees F
Frost-free period: 60 to 160 days
Farmland classification: Not prime farmland

Map Unit Composition

Lyman, rocky, and similar soils: 86 percent
Minor components: 14 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lyman, Rocky

Setting

Landform: Hills, mountains
Landform position (two-dimensional): Backslope, summit, shoulder
Landform position (three-dimensional): Mountaintop, mountainbase, mountainflank, crest, side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy supraglacial till derived from granite and gneiss and/or loamy supraglacial till derived from phyllite and/or loamy supraglacial till derived from mica schist

Typical profile

Oe - 0 to 1 inches: moderately decomposed plant material
A - 1 to 3 inches: loam
E - 3 to 5 inches: fine sandy loam
Bhs - 5 to 7 inches: loam
Bs1 - 7 to 11 inches: loam
Bs2 - 11 to 18 inches: channery loam
R - 18 to 28 inches: bedrock

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: 11 to 24 inches to lithic bedrock
Natural drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to high (0.00 to 14.03 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 3.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Tunbridge, rocky

Percent of map unit: 6 percent

Landform: Hills, mountains

Landform position (two-dimensional): Backslope, summit, shoulder

Landform position (three-dimensional): Mountaintop, mountainbase, mountainflank, side slope, crest

Down-slope shape: Convex

Across-slope shape: Convex

Hydric soil rating: No

Skerry, rocky

Percent of map unit: 5 percent

Landform: Hills, mountains

Landform position (two-dimensional): Footslope, backslope

Landform position (three-dimensional): Mountaintop, mountainbase, mountainflank, crest, side slope

Microfeatures of landform position: Closed depressions, closed depressions, open depressions, open depressions

Down-slope shape: Concave

Across-slope shape: Concave

Hydric soil rating: No

Hermon, rocky

Percent of map unit: 2 percent

Landform: Mountains, hills

Landform position (two-dimensional): Summit, shoulder, backslope

Landform position (three-dimensional): Mountainflank, mountaintop, mountainbase, side slope, crest

Down-slope shape: Convex

Across-slope shape: Convex

Hydric soil rating: No

Brayton, rocky

Percent of map unit: 1 percent

Landform: Hills, mountains

Landform position (two-dimensional): Footslope, toeslope

Landform position (three-dimensional): Mountaintop, mountainbase, mountainflank, crest, side slope

Microfeatures of landform position: Closed depressions, closed depressions, open depressions, open depressions

Down-slope shape: Concave

Across-slope shape: Concave

Hydric soil rating: Yes

Ur—Urban land

Map Unit Setting

National map unit symbol: 9k6x

Custom Soil Resource Report

Elevation: 10 to 2,200 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 70 to 160 days
Farmland classification: Not prime farmland

Map Unit Composition

Urban land: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Urban Land

Setting

Landform position (two-dimensional): Toeslope, footslope
Landform position (three-dimensional): Base slope, tread
Down-slope shape: Linear
Across-slope shape: Linear

Typical profile

H1 - 0 to 6 inches: variable

Properties and qualities

Slope: 0 to 8 percent
Natural drainage class: Moderately well drained
Depth to water table: About 24 to 72 inches
Available water storage in profile: Very low (about 0.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8s
Hydric soil rating: No

Minor Components

Adams

Percent of map unit: 2 percent
Landform: Outwash plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Scantic

Percent of map unit: 2 percent
Landform: Coastal plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Buxton

Percent of map unit: 2 percent
Landform: Coastal plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread

Custom Soil Resource Report

Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

Sulfhemists

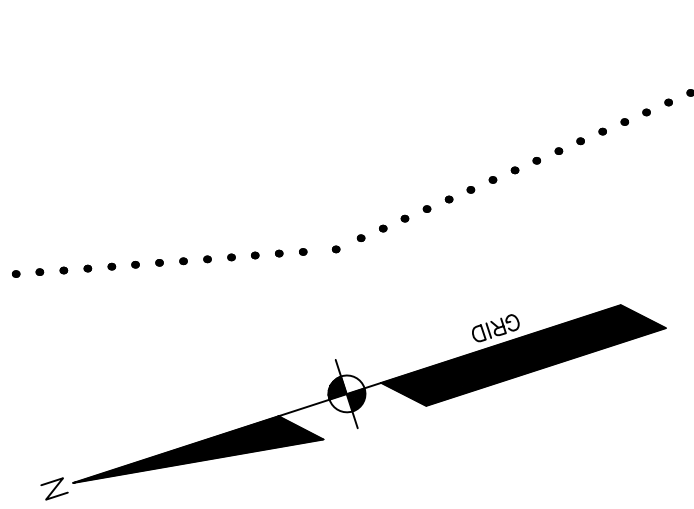
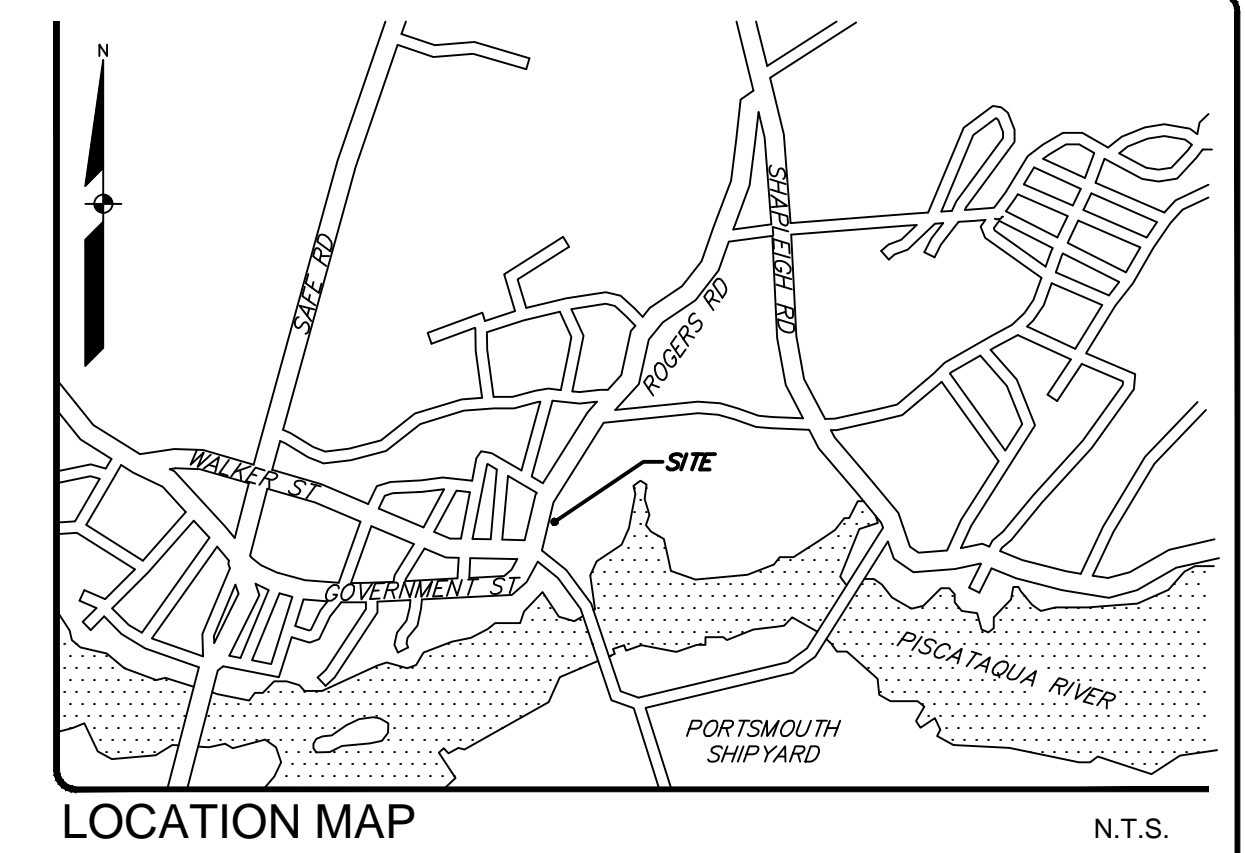
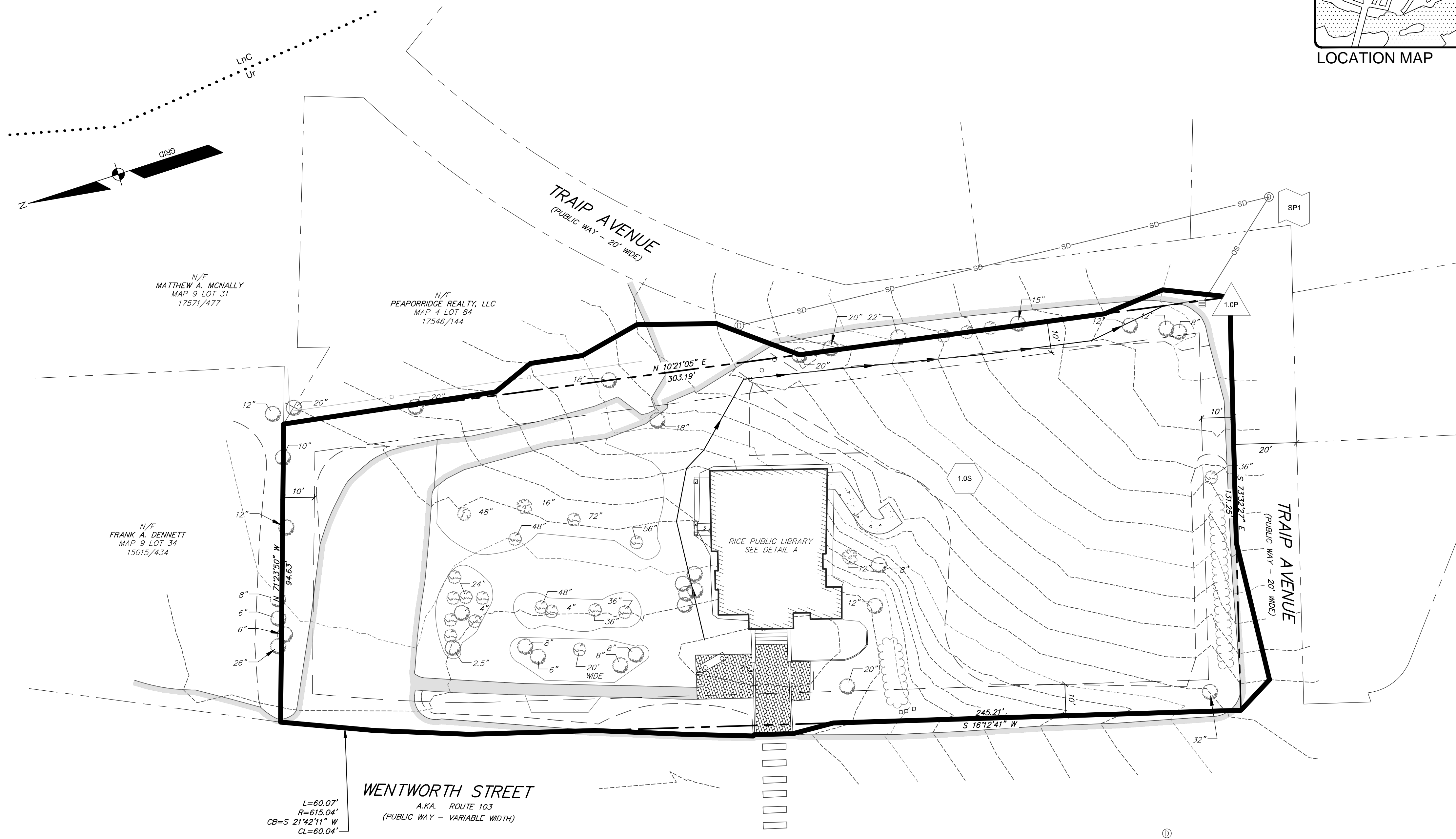
Percent of map unit: 2 percent
Landform: Salt marshes
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

Croghan

Percent of map unit: 2 percent
Landform: Outwash plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Appendix 4

Stormwater Management Plans

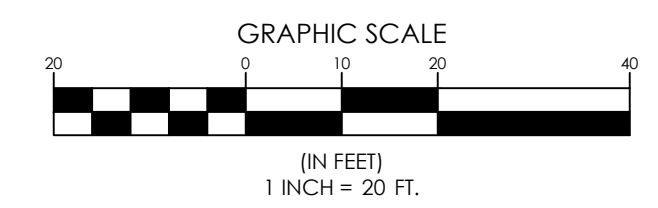


WENTWORTH STREET
A.K.A. ROUTE 103
(PUBLIC WAY - VARIABLE WIDTH)

$L=60.07'$
 $R=615.04'$
 $CB=S 21^{\circ}42'11'' W$
 $CL=60.04'$

SOIL TYPE				
SYMBOL	SERIES	SCOPE	HSG	
Ur	URBAN LAND	0-8%	D	POORLY DRAINED

- EXISTING CONDITIONS LEGEND**
- WATERSHED BOUNDARY
 - TIME OF CONCENTRATION
 - REACH
 - WATERSHED LABEL
 - REACH
 - STUDY POINT
 - STORMWATER TREATMENT/DETENTION POND
 - SOILS BOUNDARY



NOT FOR
CONSTRUCTION
PROGRESS
PRINT

PAUL D. OSTROWSKI
No. 01175
PROFESSIONAL ENGINEER
STATE OF MAINE
02/06/2020

REV.	BY	DATE	STATUS
B	SGD	02/06/2020	ISSUED FOR SITE PLAN REVIEW
A	SGD	08/27/19	ISSUED FOR CLIENT USE

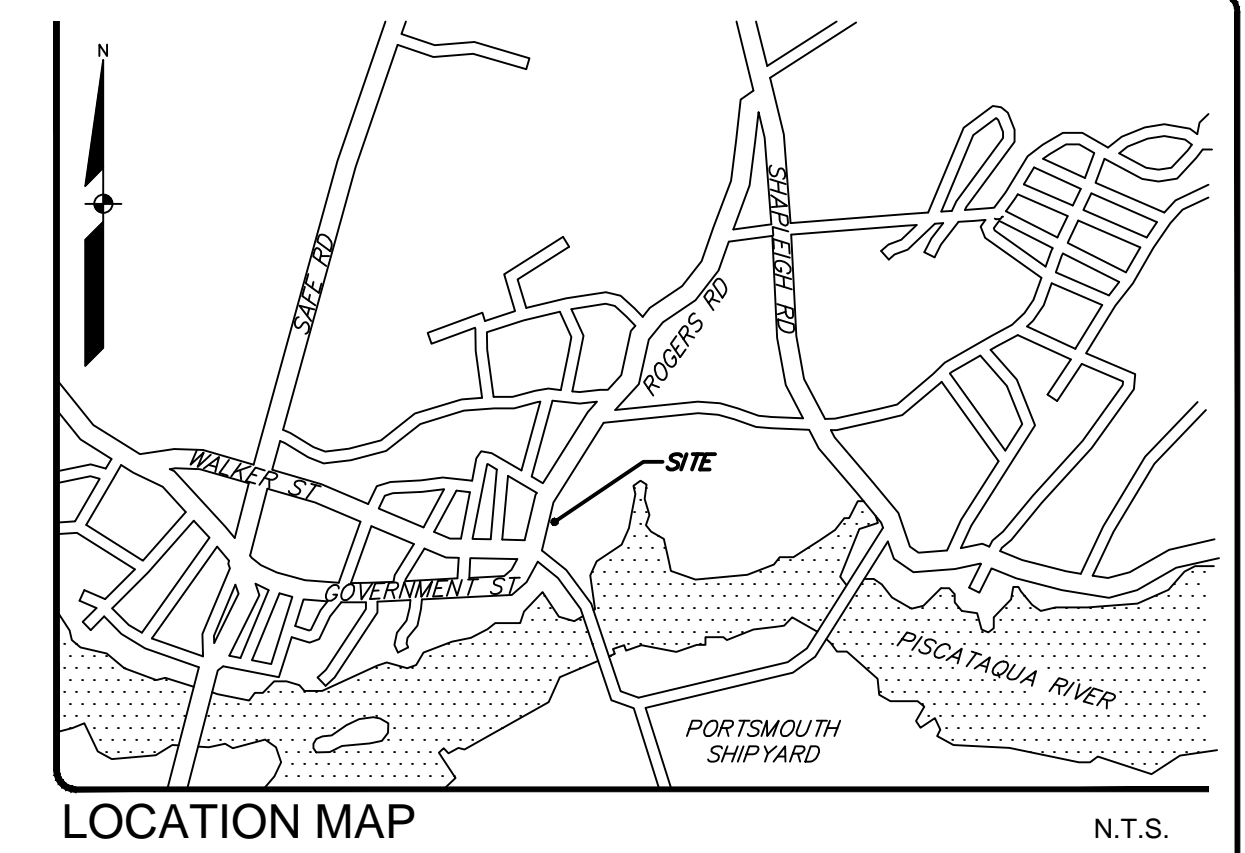
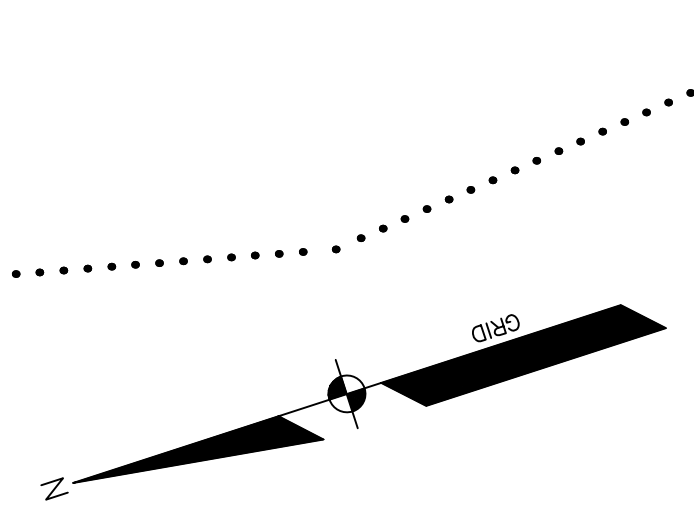
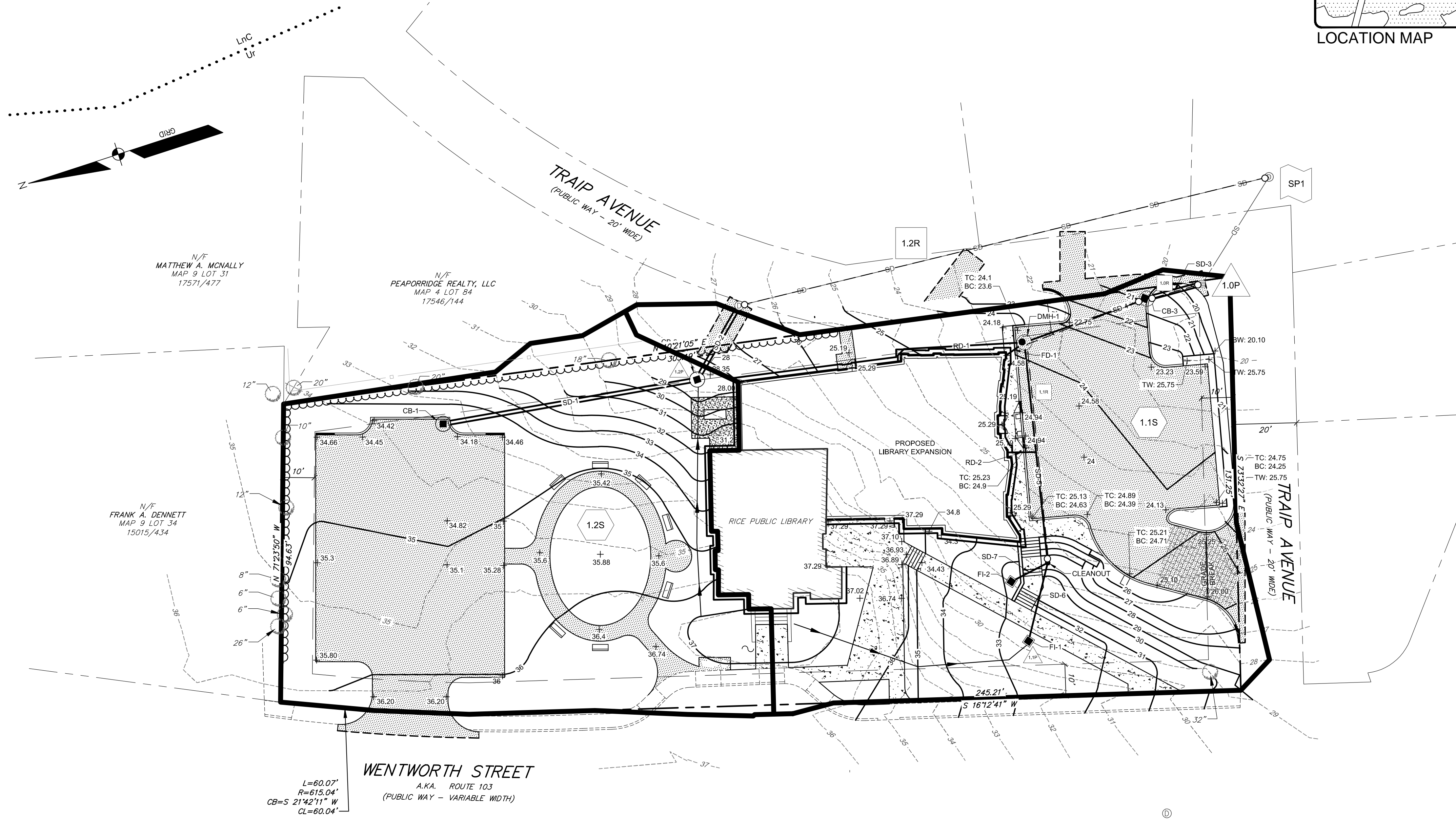
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75 John Roberts Rd.
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South Portland, ME 04106
Tel. 207-200-2100
WWW.SEBAGOTECHNIQS.COM

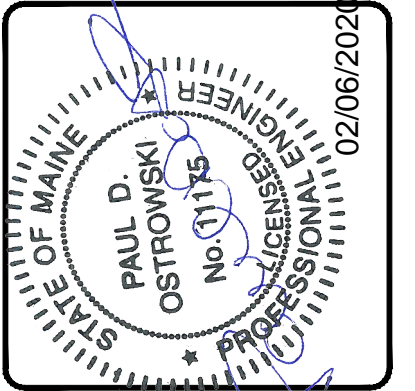
EXISTING CONDITIONS WATERSHED PLAN
OF
RICE PUBLIC LIBRARY
8 WENTWORTH STREET
KITTEERY, MAINE 03904
FOR:
LASSEL ARCHITECTS
P.O. BOX 370, 370 MAIN STREET
SOUTH BERWICK, MAINE 03908
SCOTT SIMONS ARCHITECTS
75 YORK STREET
PORTLAND, MAINE 04101

DESIGNED	MKO
DRAWN	SRC
CHECKED	PDO
DATE	02/06/2020
SCALE	1" = 20'
PROJECT	18438

SHEET 1 OF 2



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REV.	BY:	DATE:	STATUS:
B	SGD	02/06/2020	ISSUED FOR SITE PLAN REVIEW
A	SGD	08/27/19	ISSUED FOR CLIENT USE

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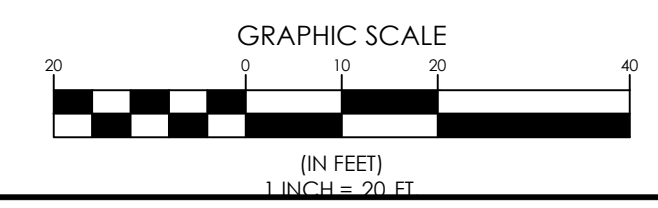
PROPOSED CONDITIONS WATERSHED PLAN
OF
RICE PUBLIC LIBRARY
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SHEET 2 OF 2

SOIL TYPE			
SYMBOL	SERIES	SCOPE	HSG
Ur	URBAN LAND	0-8%	D POORLY DRAINED

PROPOSED CONDITIONS LEGEND	
	WATERSHED BOUNDARY
	TIME OF CONCENTRATION
	REACH
	WATERSHED LABEL
	REACH
	STUDY POINT
	STORMWATER TREATMENT/RETENTION POND
	HSG #
	SOILS BOUNDARY



RICE PUBLIC LIBRARY

8 WENTWORTH STREET
KITTERY, MAINE 03904

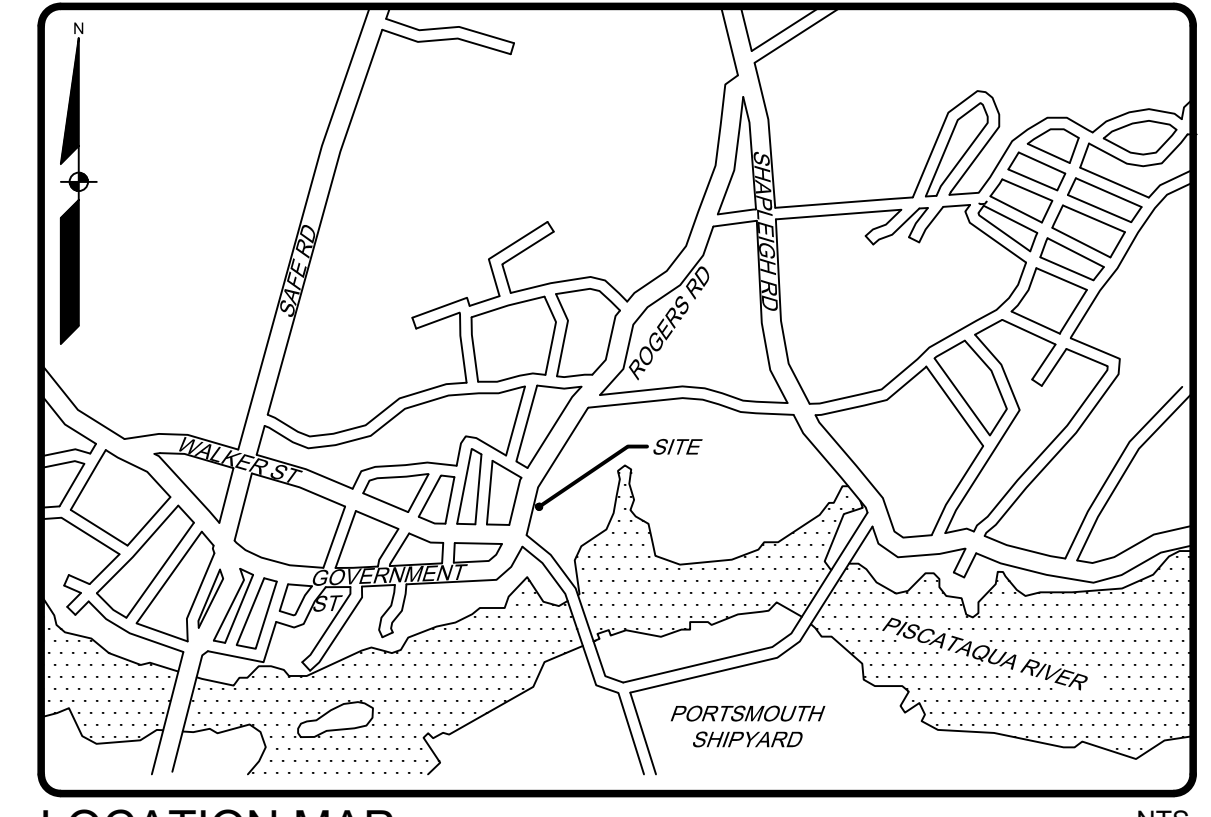
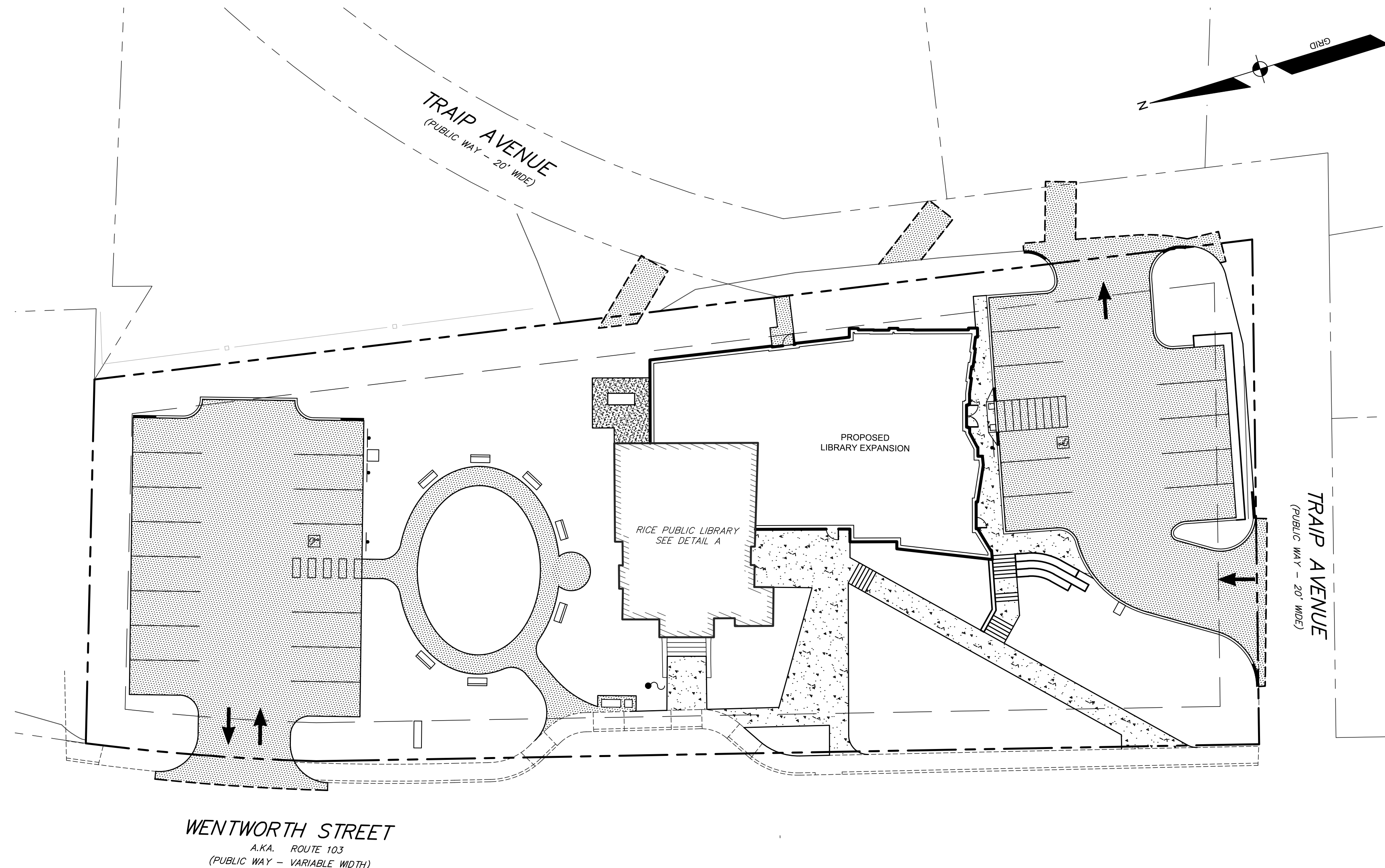
APPLICANT:

LASSEL ARCHITECT
P.O. BOX 370, 370 MAIN STREET
SOUTH BERWICK, MAINE 03908

SCOTT SIMONS ARCHITECTS
75 YORK STREET
PORTLAND, MAINE 04101

**ENGINEER/SURVEYOR/
LANDSCAPE ARCHITECT:**

SEBAGO
TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100



Sheet List Table

Sheet Number	Sheet Title
1	COVER SHEET
1 OF 1	EXISTING CONDITIONS
2	SITE PLAN
3	GRADING AND UTILITY PLAN
4	LANDSCAPE PLAN
5	EROSION CONTROL NOTES AND DETAILS
6	DETAILS
7	DETAILS
8	PHOTOMETRIC PLAN - BY OTHERS

SCALE: 1" = 20'

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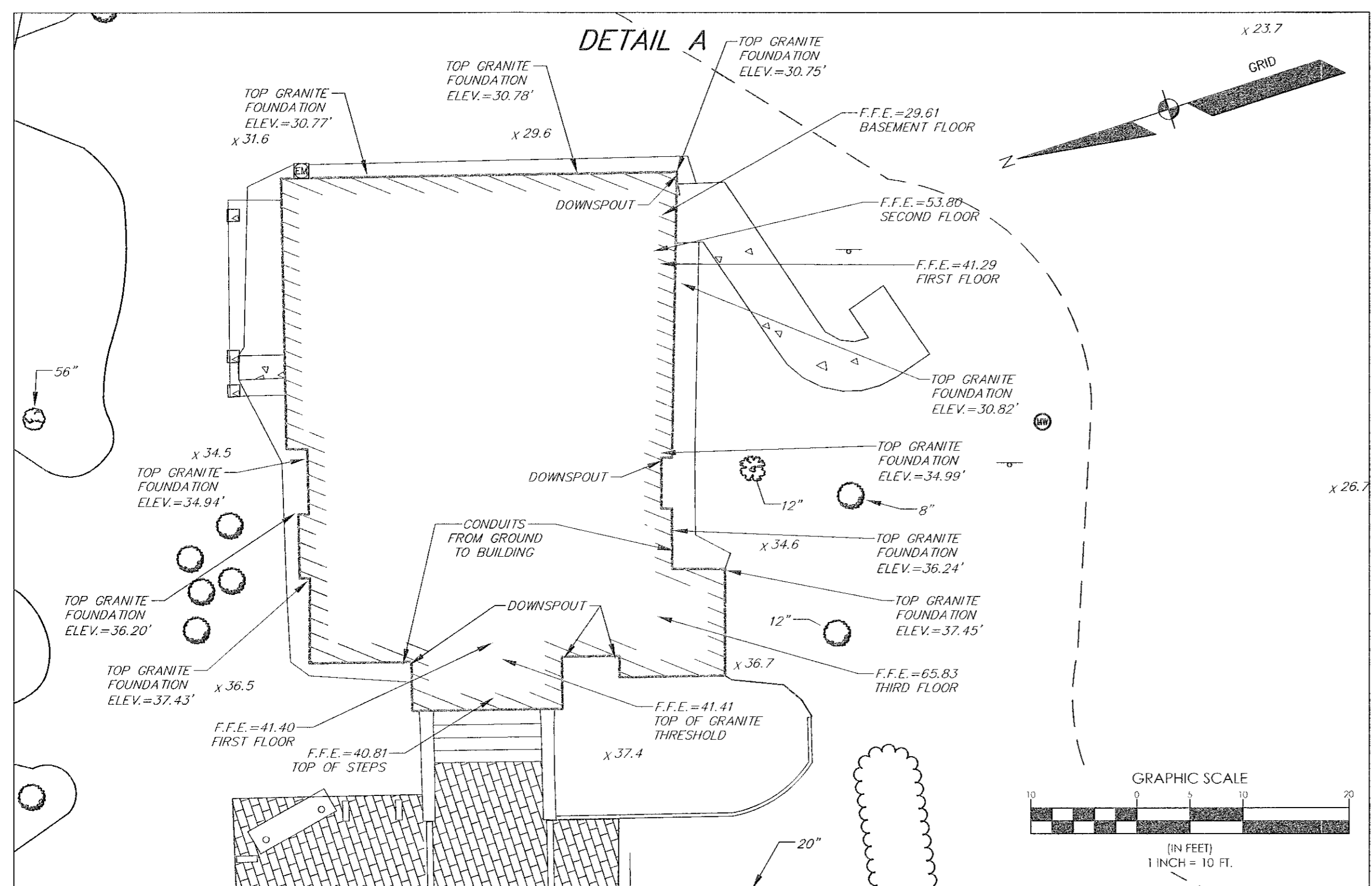
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COVER SHEET
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8 WENTWORTH STREET
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DRAWN	SRC
CHECKED	SGD
DATE	02/06/2020
SCALE	1" = 20'
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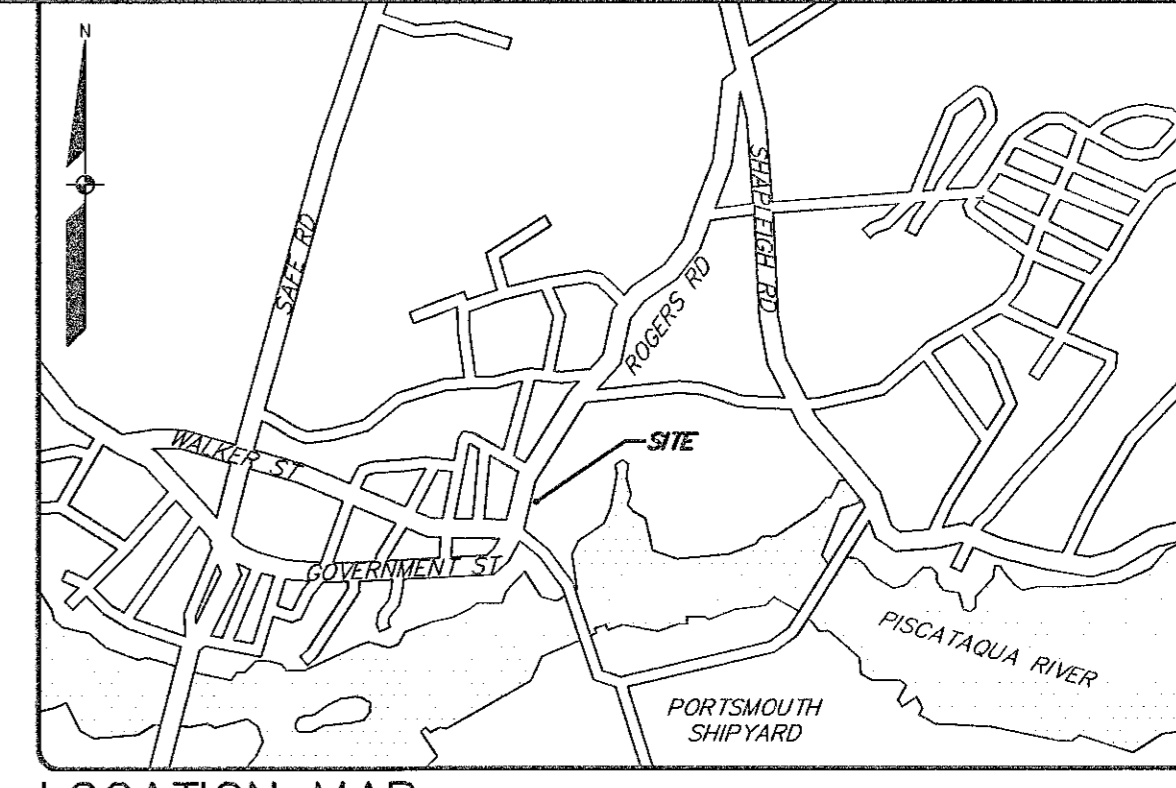
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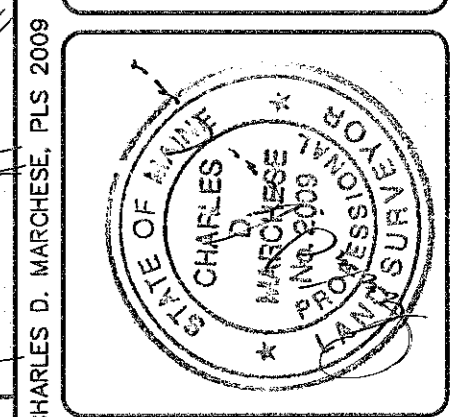
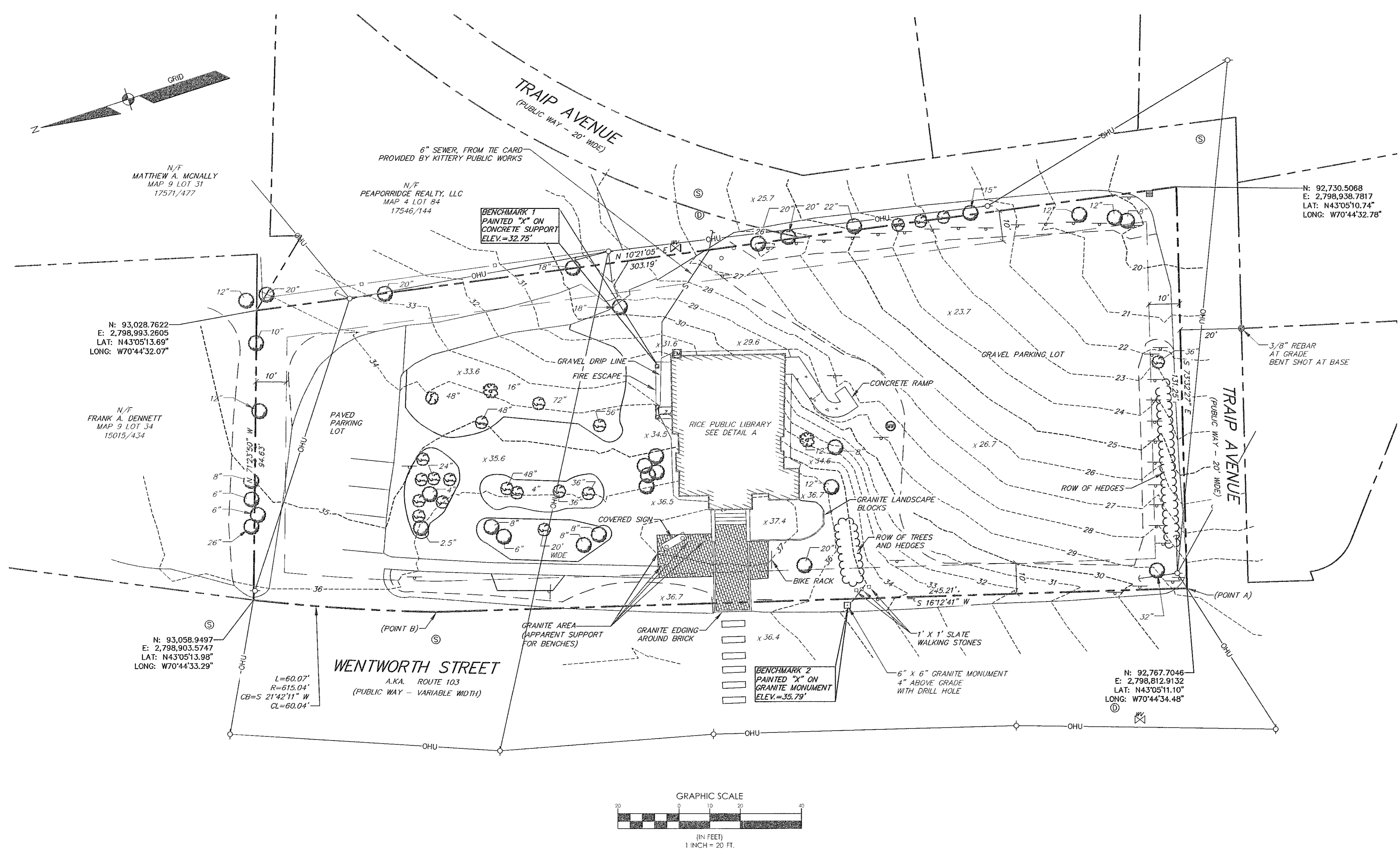
EXISTING

- PROPERTY LINE/R.O.W.
- - - ABUTTER LINE/R.O.W.
- MONUMENT
- IRON PIPE/ROD
- BENCHMARK
- ▭ BUILDING
- ▨ DECK/STEPS/OVERHANG
- ▧ EDGE PAVEMENT
- ▩ EDGE CONCRETE
- ▨ EDGE GRAVEL
- ▨ LANDSCAPING
- ▨ TREELINE/HEDGE
- 120 118 CONTOURS
- SPOT GRADE
- STOCKADE FENCE
- DECIDUOUS TREE
- CONIFEROUS TREE
- ORNAMENTAL SHRUB
- BOLLARD
- SIGN
- WATER GATE VALVE
- SANITARY MANHOLE
- DRAINAGE MANHOLE
- OHU OVERHEAD UTILITY
- ELECTRIC METER
- UTILITY POLE
- GUY WIRE
- MONITORING WELL
- SANITARY SEWER



GENERAL NOTES:

- THE RECORD OWNER OF THE PARCEL IS RICE PUBLIC LIBRARY BY DEED DATED OCTOBER 6, 1975 AND RECORDED AT THE YORK COUNTY REGISTRY OF DEEDS (YCRD) IN BOOK 2099, PAGE 425.
- THE PROPERTY IS SHOWN AS LOT 88 ON THE TOWN OF KITTERY TAX MAP 4 AND IS LOCATED IN THE MIXED USE - KITTERY FORESIDE DISTRICT.
- SPACE AND BULK CRITERIA FOR THE MIXED USE - KITTERY FORESIDE DISTRICT ARE AS FOLLOWS:
 - NET RESIDENTIAL DENSITY: 5,000 SQUARE FEET
 - MINIMUM LOT SIZE: 5,000 SQUARE FEET
 - MINIMUM STREET FRONTAGE: NONE
 - MINIMUM FRONT YARD: 0/10 FEET*
 - MINIMUM SIDE YARD: 10 FEET*
 - MINIMUM REAR YARD: 10 FEET*
 - MAXIMUM BUILDING HEIGHT: 40 FEET*
 - MAXIMUM BUILDING COVERAGE: 60%
- * SEE ORDINANCE FOR MORE PARTICULAR INFORMATION.
- TOTAL AREA OF PARCEL IS APPROXIMATELY 34,947 SQUARE FEET OR 0.80 ACRES AS DEPICTED ON PLAN REFERENCE 6A.
- THE BOUNDARY AS DEPICTED HEREON IS BASED SOLELY ON PLAN REFERENCE 6A. TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED UPON A FIELD SURVEY PERFORMED BY SEBAGO TECHNICS, INC. IN JANUARY 17, 2019.
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- THE LOCUS PROPERTY AS DEPICTED HEREON DOES NOT FALL WITHIN A SPECIAL FLOOD HAZARD AREA AS DELINEATED ON THE FLOOD INSURANCE RATE MAP FOR KITTERY, MAINE, YORK COUNTY, COMMUNITY-PANEL NUMBER 230171-0008-D, HAVING AN EFFECTIVE DATE OF JULY 3, 1986. THE LOCUS FALLS WITHIN AN AREA IDENTIFIED AS ZONE C, AREAS OF MINIMAL FLOODING.
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DRAWN	CHECKED
AJS	TSL/CDM
D SGD 02-06-20 ISSUED FOR SITE PLAN REVIEW C SGD 08-27-19 ISSUED FOR CLIENT USE B AJS 02-20-19 UPDATED FOR CLIENT USE A AJS 01-10-19 ISSUED FOR CLIENT REVIEW REV: BY: DATE: STATUS:	

SEBAGO TECHNICS
 WWW.SEBAGOTECHNICS.COM
 75 West Roberts Rd.
 South Portland, ME 04106
 Tel: 207-200-2100

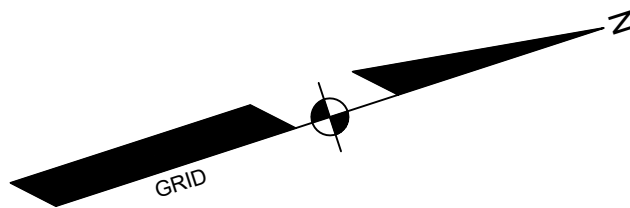
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 SCOTT SIMONS ARCHITECTS
 P.O. BOX 370, 370 MAIN STREET
 SOUTH BERWICK, MAINE 03908

SURVEYOR'S STATEMENT

THIS SURVEY WAS PERFORMED UNDER MY DIRECT SUPERVISION AND TO THE BEST OF MY KNOWLEDGE AND BELIEF, IT WAS DONE IN ACCORDANCE WITH CHAPTER 90, PART 1 (PROFESSIONAL STANDARDS OF PRACTICE) AND PART 2 (TECHNICAL STANDARDS OF PRACTICE) OF THE MAINE BOARD OF LICENSURE FOR PROFESSIONAL LAND SURVEYORS.

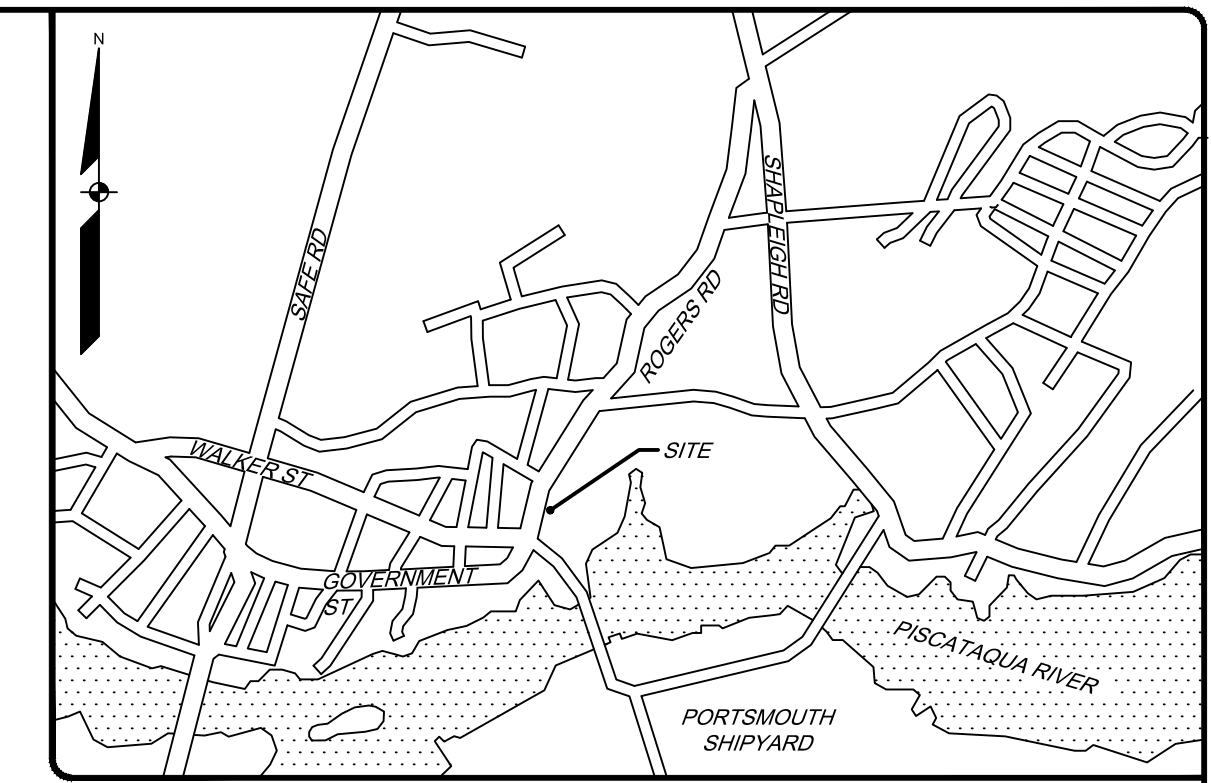
Charles D. Marchese
 CHARLES D. MARCHESE, PLS 2009 FEBRUARY 3, 2020

PROJECT NO.	SCALE
18438	1" = 20'



LEGEND

EXISTING	PROPOSED
	PROPERTY LINE/O.W.
	ABUTTER LINE/O.W.
	MONUMENT
	IRON PIPE/ROD
	BUILDING
	DECK/STEPS/OVERHANG
	EDGE PAVEMENT
	EDGE CONCRETE
	PAVEMENT SAWCUT
	CURB LINE
	LANDSCAPING
	TREELINE/HEDGE
	STOCKADE FENCE
	DECIDUOUS TREE
	CONIFEROUS TREE
	ORNAMENTAL SHRUB
	BOLLARD
	SIGN



LOCATION MAP

N.T.S.

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REV.	BY	DATE	STATUS
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11. LOT COVERAGE CALCULATIONS:

	BUILDING	TOTAL NON-VEGETATED
EXISTING:	5.32%	44.58%
PROPOSED:	15.87%	38.14%

12. USE: LIBRARY

13. PARKING SUMMARY
 EXISTING: 35+ SPACES (GRAVEL LOT HAS UNDEFINED SPACES)
 PROPOSED: 27 SPACES

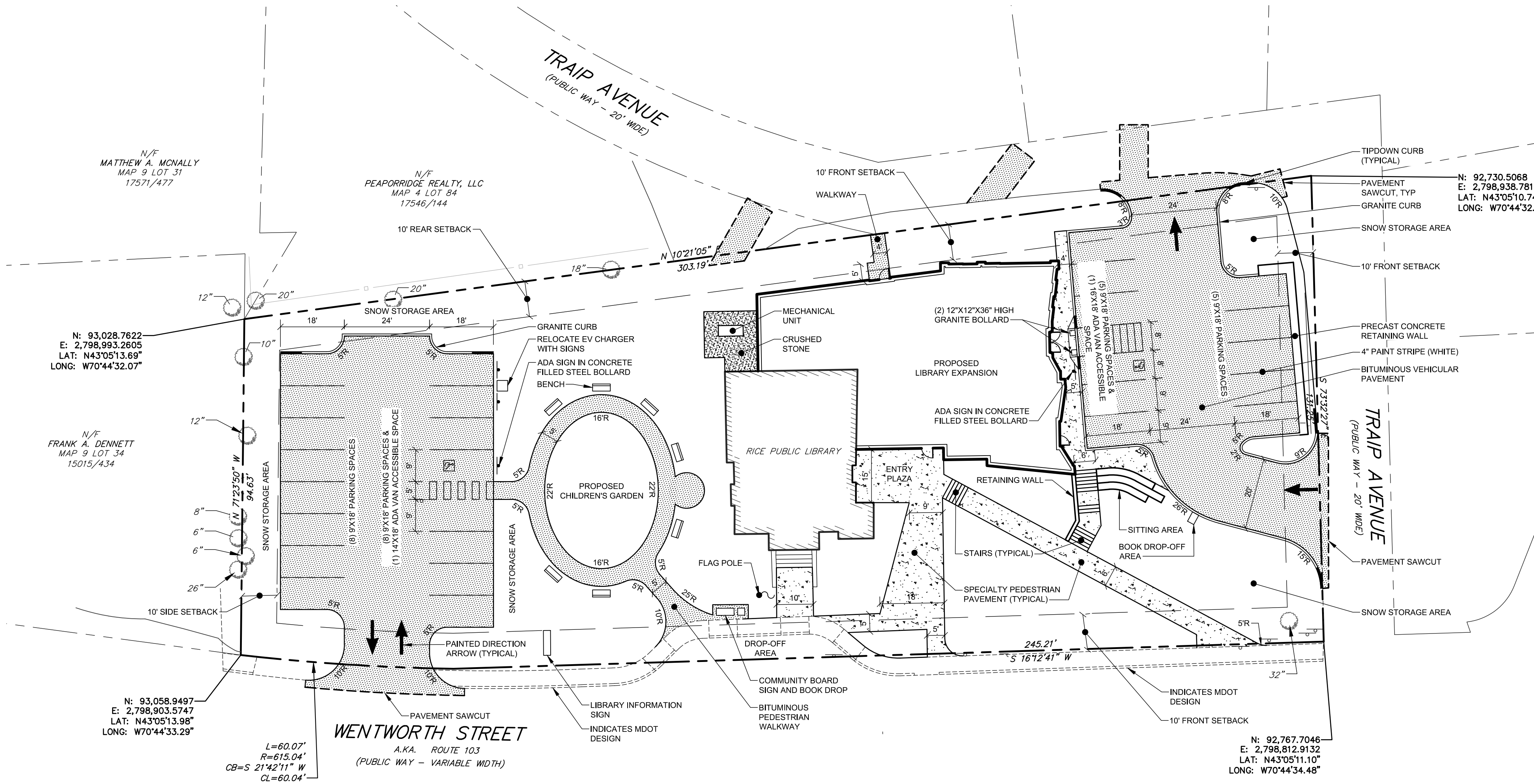
14. BUILDING SUMMARY:
 EXISTING RICE LIBRARY
 BASEMENT: 1629 SF
 1ST FLOOR: 1629 SF
 2ND FLOOR: 1629 SF

EXISTING TAYLOR LIBRARY (TO BE DISCONTINUED)
 BASEMENT: 2480 SF
 FIRST FLOOR: 2480 SF

PROPOSED RICE LIBRARY
 1ST FLOOR: 5321 SF
 2ND FLOOR: 5370 SF
 3RD FLOOR: 5370 SF

APPROVAL-
 TOWN OF KITTERY
 PLANNING BOARD

DATE _____
 CHAIRPERSON _____



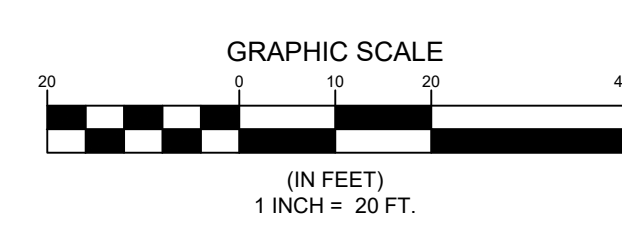
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 E: 2,798,993.2805
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 LONG: W70°44'32.07"

N: 93,058.9497
 E: 2,798,903.5747
 LAT: N43°05'13.98"
 LONG: W70°44'33.29"

N: 92,730.5068
 E: 2,798,938.7817
 LAT: N43°05'10.74"
 LONG: W70°44'32.78"

N: 92,767.7046
 E: 2,798,812.9132
 LAT: N43°05'11.10"
 LONG: W70°44'34.48"

L=60.07'
 R=615.04'
 CB=S 21°42'11" W
 CL=60.04'



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NOT FOR CONSTRUCTION

154885.dwg, TAB 81a

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 WWW.SEAGOTECHINCS.COM
 75 John Roberts Rd.
 South Portland, ME 04106
 Tel: 207-500-2100

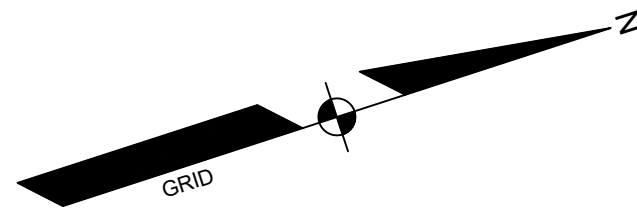
SCOTT SIMONS ARCHITECTS
 75 YORK STREET
 PORTLAND, MAINE 04101

SITE PLAN OF RICE PUBLIC LIBRARY
 8 WENTWORTH STREET
 KITTERY, MAINE 03904

FOR: **LASSEL ARCHITECTS**
 P.O. BOX 370, 370 MAIN STREET
 SOUTH BERWICK, MAINE 03908

DESIGNED	SGD
DRAWN	SRC
CHECKED	SGD
DATE	02/06/2020
SCALE	1" = 20'
PROJECT	18438

SHEET 2 OF 8



PLANT SCHEDULE

KEY BOTANICAL NAME	COMMON NAME	SIZE
BG BUXUS X 'GLENCOE'	CHICAGOLAND GREEN BOXWOOD	#3 CONT.
CK CLETHRA ALNIFOLIA 'SIXTEEN CANDLES'	SIXTEEN CANDLES SUMMERSWEET	#3 CONT.
HST HYDRANGEA SERRATA 'TINY TUFF STUFF'	TINY TUFF STUFF HYDRANGEA	#3 CONT.
LFC LEUCOTHOE FONTANESIANA 'COMPACTA'	DWARF DROOPING LEUCOTHOE	24"-30"
RYK RHODODENDRON YAKUSHIMANUM 'KEN JANECK'	KEN JANECK RHODODENDRON	24"-30"
HSG HOSTA 'STAINED GLASS'	STAINED GLASS HOSTA	#1 CONT.
WF WALDSTEINIA FRAGARIODES	BARREN STRAWBERRY	#1 CONT.
AF ACER X FREEMANII 'ARMSTRONG'	DWARF BOTTLEBRUSH BUSH	#3 CONT.
TP THUJA PLIGATA 'SPRING GROVE'	ARMSTRONG MAPLE	2 1/2" CAL.
TB TAXUS BACCATA 'FASTIGIATA'	SPRING GROVE ARBORVITAE	5'-8' HGT
HS HYDRANGEA MACROPHYLLA 'SEASIDE SERANADE BAR HARBOR'	COLUMNAR YEW	4'-5' HGT
	SEASIDE SERANADE BAR HARBOR HYDRANGEA	#3 CONT.

LEGEND

EXISTING	PROPOSED
---	---
---	---
□	□
○	○
▨	▨
▬	▬
▬	▬
▬	▬
▬	▬
▬	▬
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PROGRESS PRINT

STEVE DOE R.L.A. 131

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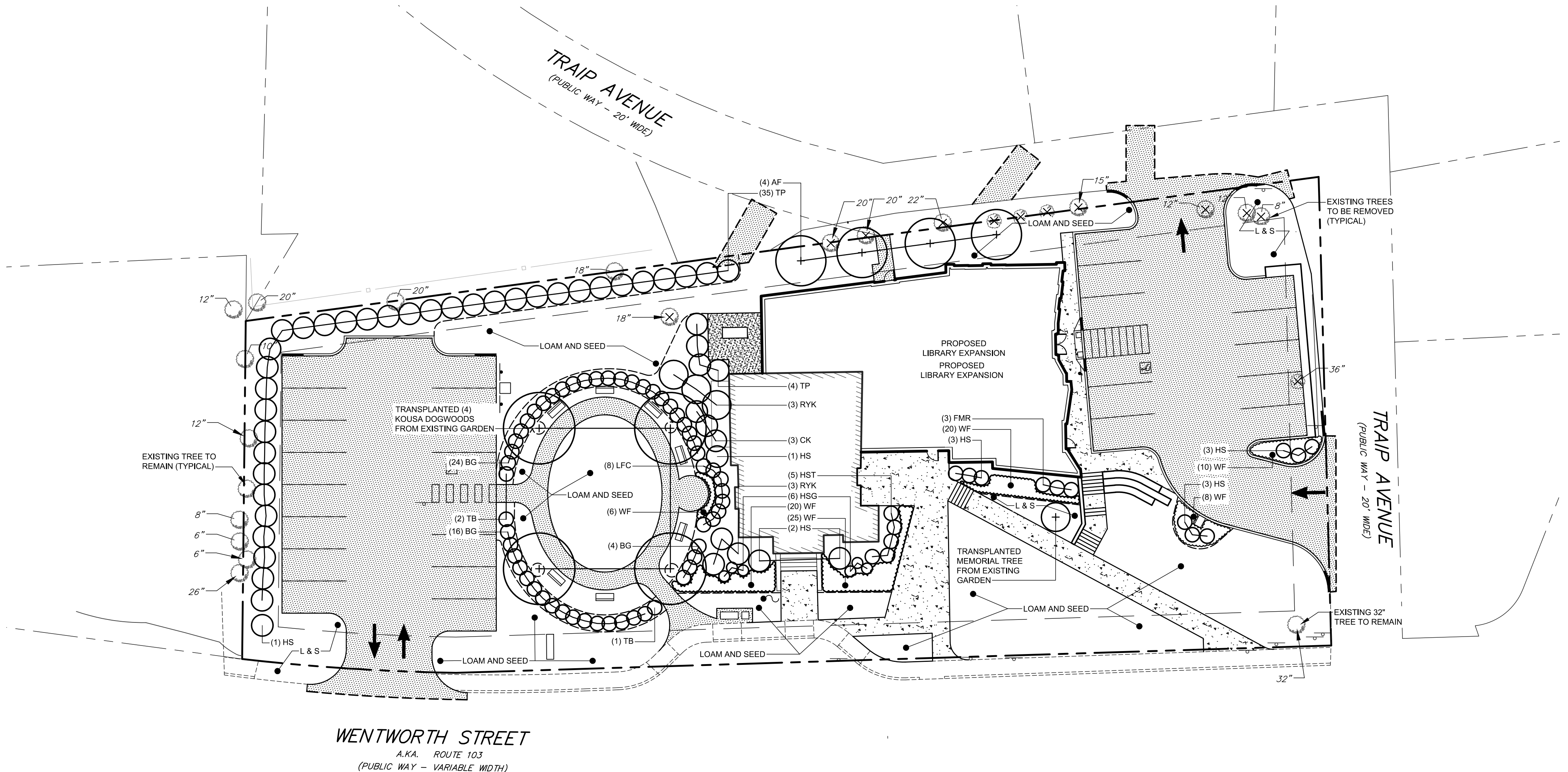
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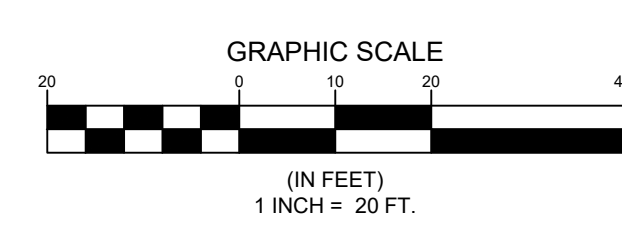
DESIGNED	SGD
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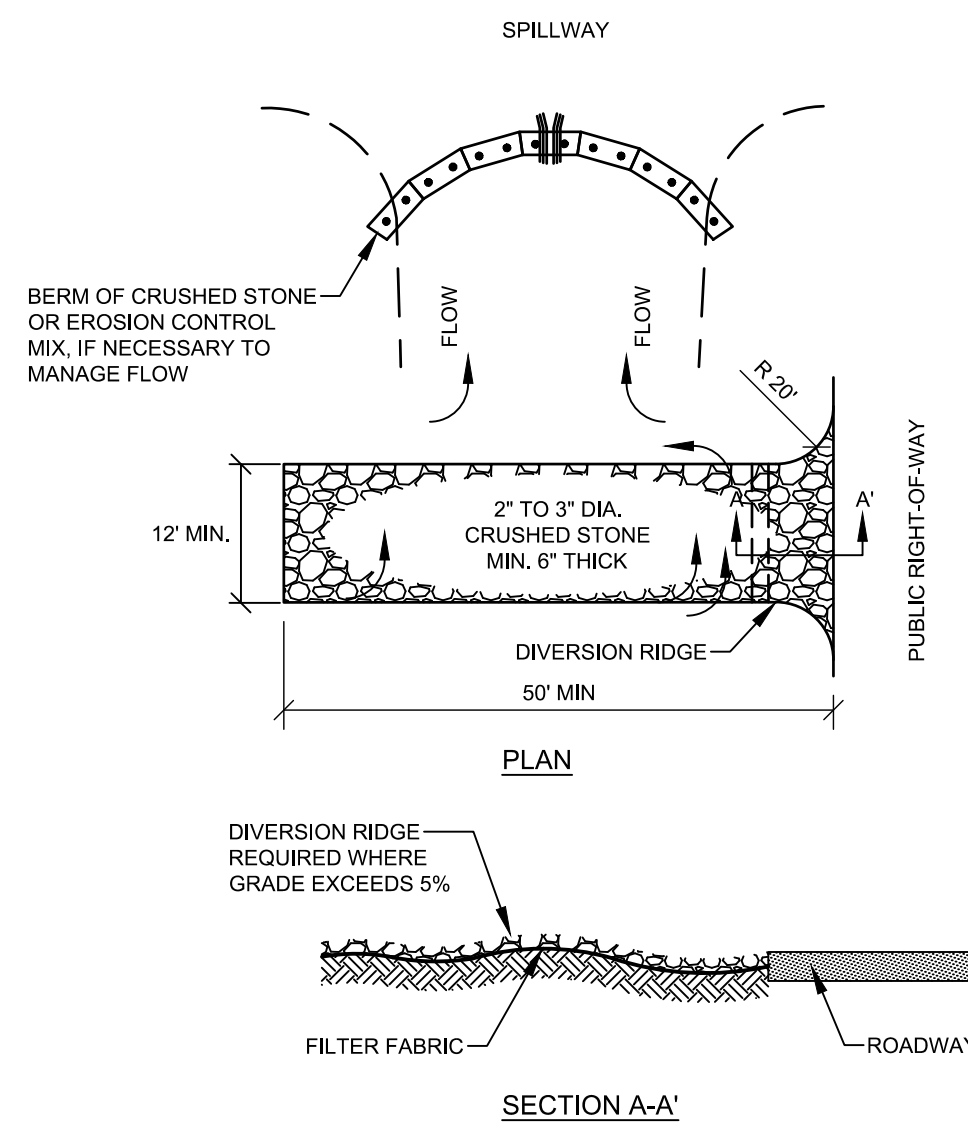
SHEET 4 OF 8

18438.dwg TAB Landscape



WENTWORTH STREET
A.K.A. ROUTE 103
(PUBLIC WAY - VARIABLE WIDTH)





CONSTRUCTION SPECIFICATIONS:

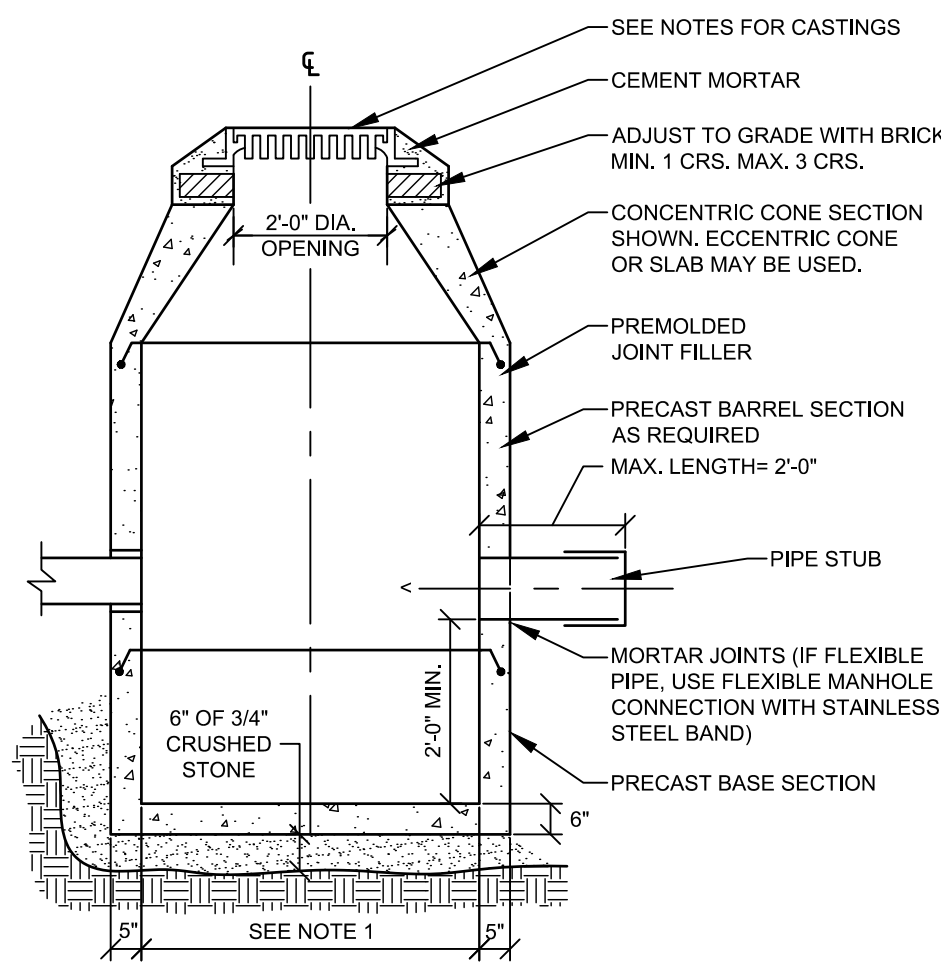
1. THE ENTRANCE/EXIT PAD SHOULD HAVE A LENGTH OF 50 FEET OR MORE AND A 12 FOOT MINIMUM WIDTH (OR AS APPROPRIATE TO CONTAIN THE WHEEL BASE OF CONSTRUCTION VEHICLES PLUS 3 FEET ON EITHER SIDE).
2. THE PAD SHOULD BE 6 INCHES OR MORE THICK WITH ANGULAR AGGREGATE (2-3 INCH DIAMETER), APPROPRIATE RECLAIMED CONCRETE MATERIAL MAY BE USED.
3. THE AGGREGATE SHOULD BE PLACED OVER A GEOTEXTILE FILTER TO PREVENT THE STONES FROM PUSHING INTO THE NATIVE SOIL.
4. AT THE BOTTOM OF SLOPES, A DIVERSION RIDGE SHOULD BE PROVIDED TO INTERCEPT RUNOFF.
5. BERMS MAY BE NECESSARY TO DIVERT WATER AROUND ANY EXPOSED SOIL, AND RUNOFF SHOULD BE DIRECTED TO A SEDIMENT TRAP.
6. THE WHEELS OF CONSTRUCTION EQUIPMENT MAY BE WASHED PRIOR TO EXITING THE SITE. WASHING SHOULD BE PERFORMED IN AN AREA THAT DRAINS TO A SEDIMENT TRAP OR BASIN.
7. THE PAD SHOULD BE INSPECTED WEEKLY, AND BEFORE AND AFTER EACH STORM, THE PAD MAY HAVE TO BE REPLACED IF THE VOIDS BECOME FILLED WITH SEDIMENT.
8. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.

A PAD OF COURSE AGGREGATE AT THE CONSTRUCTION ENTRANCE/EXIT WILL REDUCE THE TRACKING OF SOIL FROM CONSTRUCTION TRAFFIC ONTO A PUBLIC STREET. SEDIMENTS FROM THE TIRE TREADS ARE KNOCKED LOOSE BY THE ANGULAR STONES AND ARE TRAPPED IN THE VOIDS BETWEEN THE STONES.

NOTES:

1. STONE SIZE- AASHTO DESIGNATION M43, SIZE NO. 2 (1 1/2" TO 1 1/2"), USE CRUSHED STONE.
2. LENGTH- AS SHOWN ON PLANS, MIN. 50 FEET.
3. THICKNESS- NOT LESS THAN EIGHT (8) INCHES.
4. WIDTH- NOT LESS THAN FULL WIDTH OF ALL POINT OF INGRESS OR EGRESS.
5. MAINTENANCE- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.

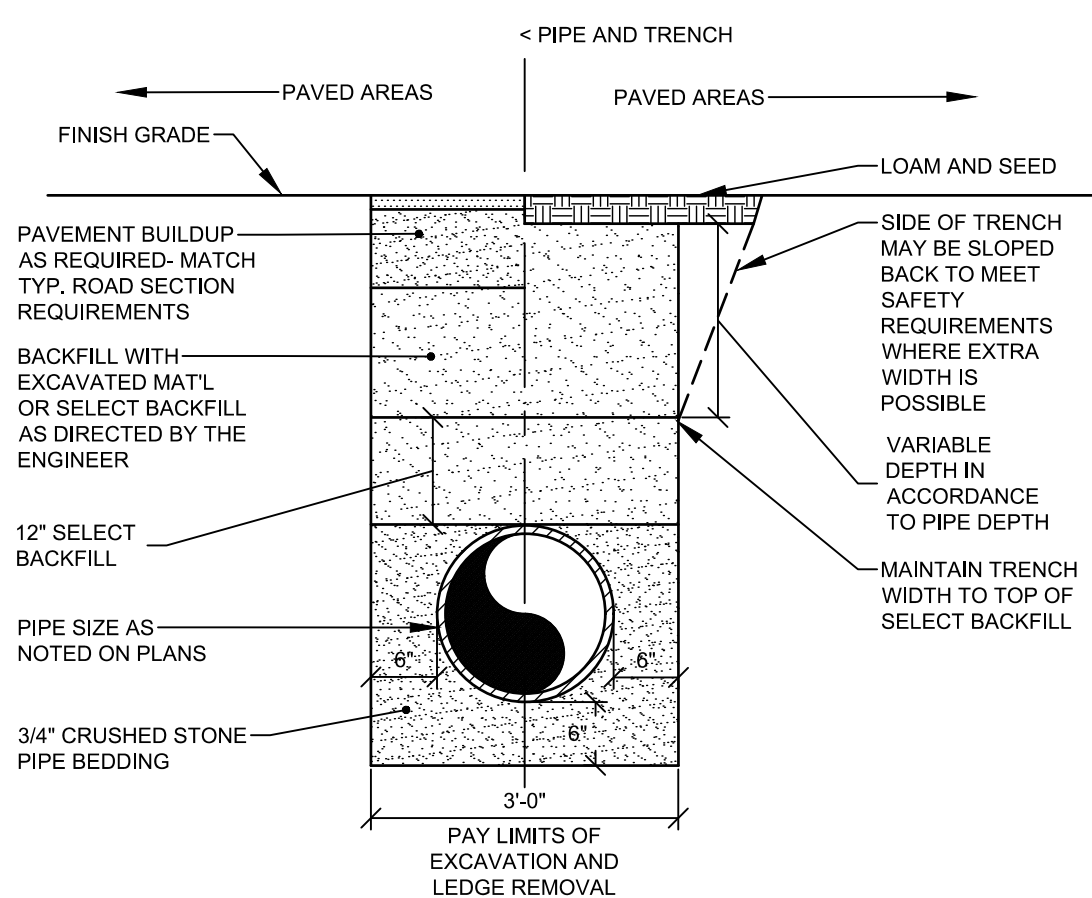
STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE



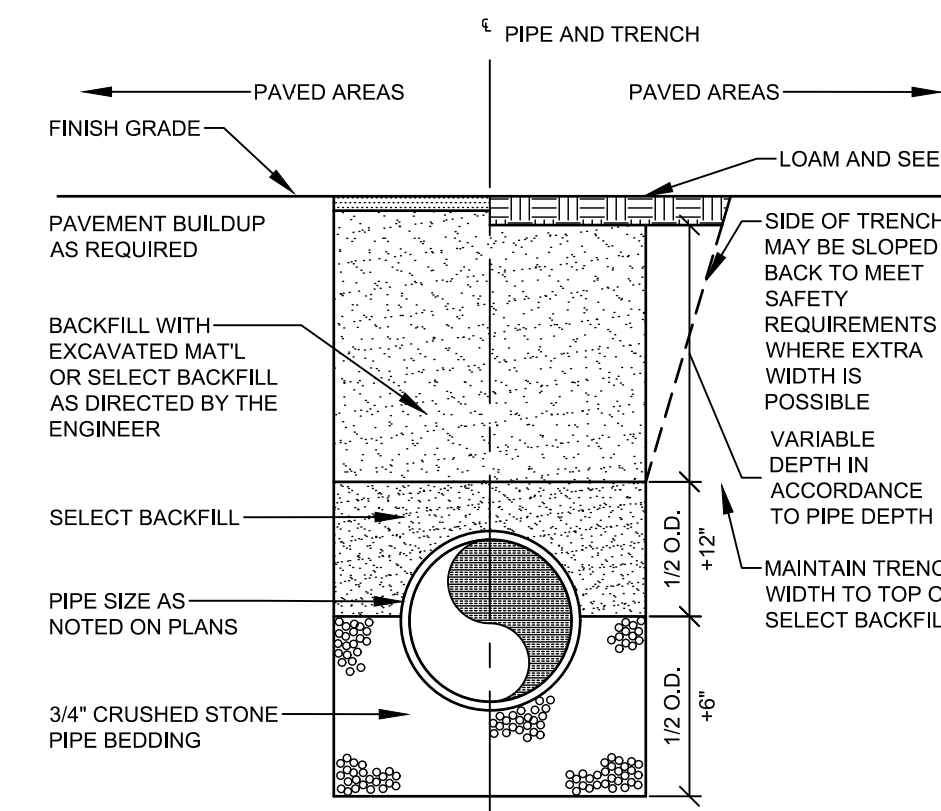
NOTES:

1. 4'-0" I.D. TYPICAL. SOME STRUCTURES MAY REQUIRE LARGER I.D. PROVIDE SHOP DRAWINGS.
2. DRAINAGE STRUCTURES TO BE DESIGNED FOR H-20 LOADING.
3. PIPE SIZES AND INVERTS AS NOTED ON PLANS.
4. CATCH BASIN FRAME AND GRATE TO BE NEENAH FOUNDRY R-2554, OR APPROVED EQUAL.

CATCH BASIN
NOT TO SCALE



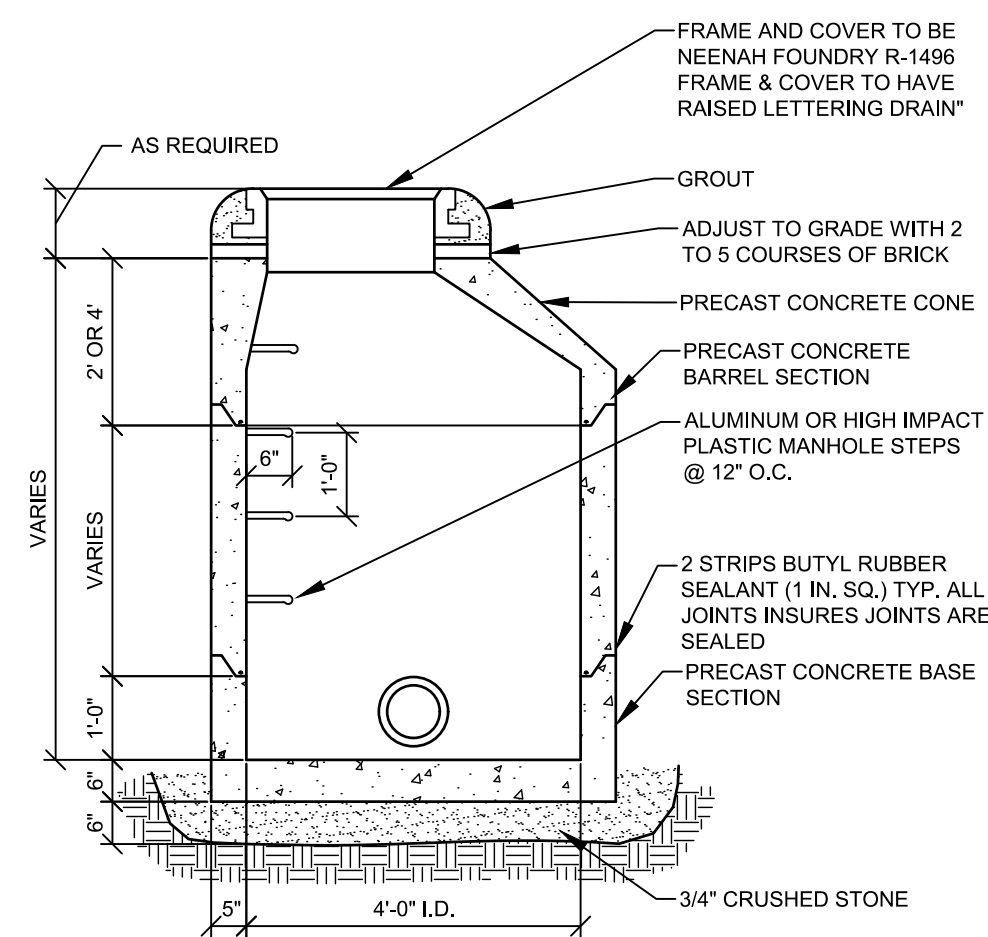
TRENCH SECTION WITHIN CITY R.O.W.
NOT TO SCALE



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

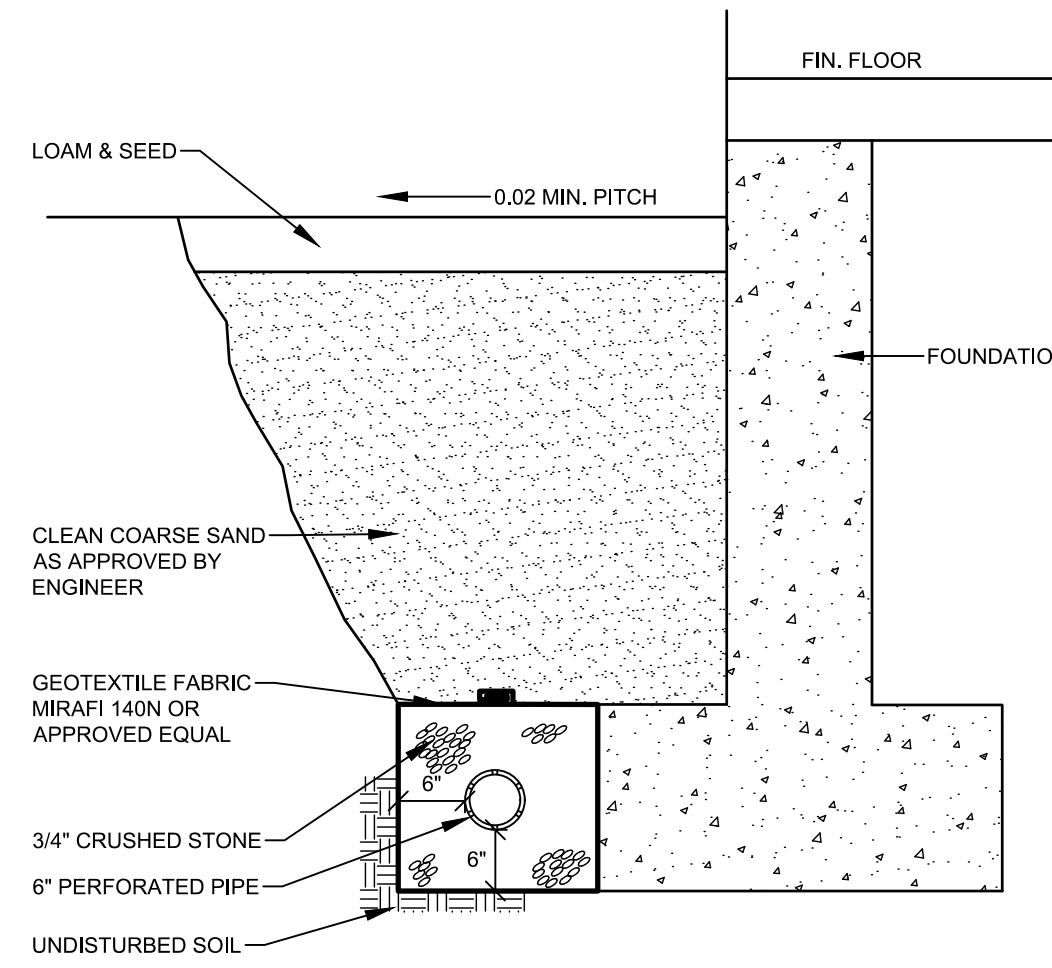
NOTE:
ALL BRACING AND SHEETING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL MEET ALL STATE AND O.S.H.A. SAFETY STANDARDS.

TRENCH SECTION
NOT TO SCALE

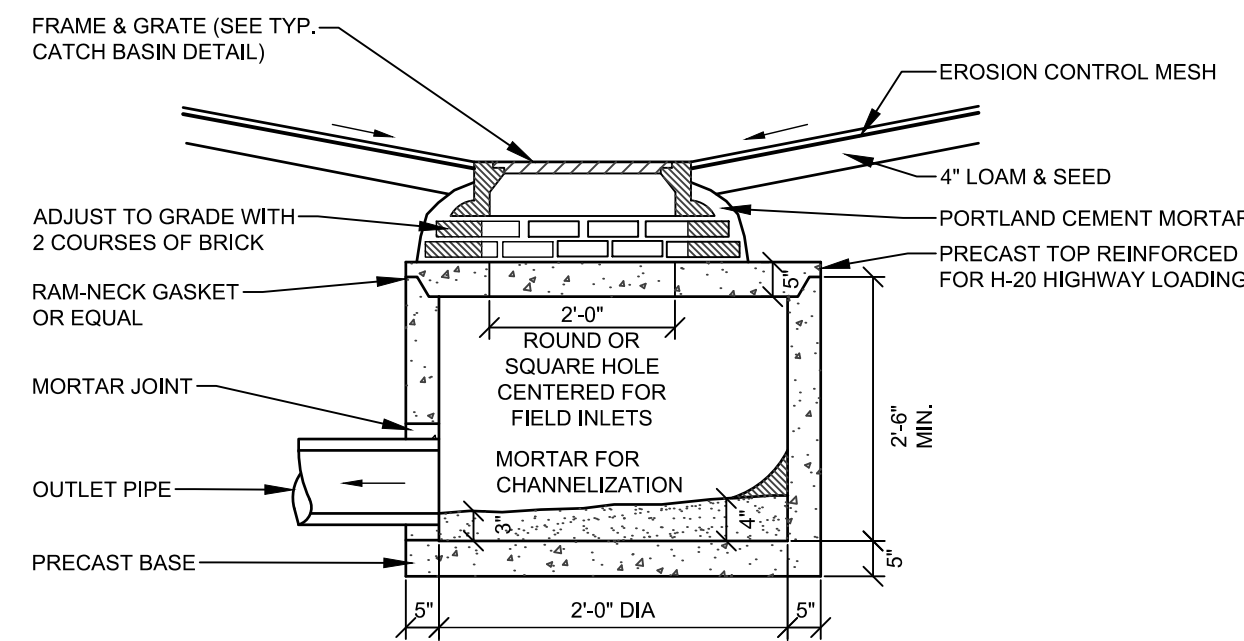


1. DRAINAGE STRUCTURES TO BE DESIGNED FOR H-20 LOADING.
2. PIPE SIZES AND INVERTS AS NOTED ON PLANS.
3. PIPE CONNECTIONS SHALL BE WATERTIGHT FLEXIBLE BOOT CONNECTORS.

PRECAST MANHOLE
NOT TO SCALE

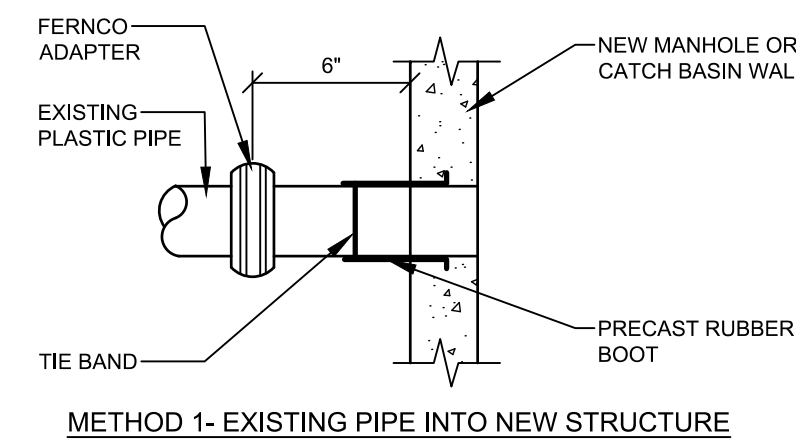


FOUNDATION DRAIN SECTION
NOT TO SCALE

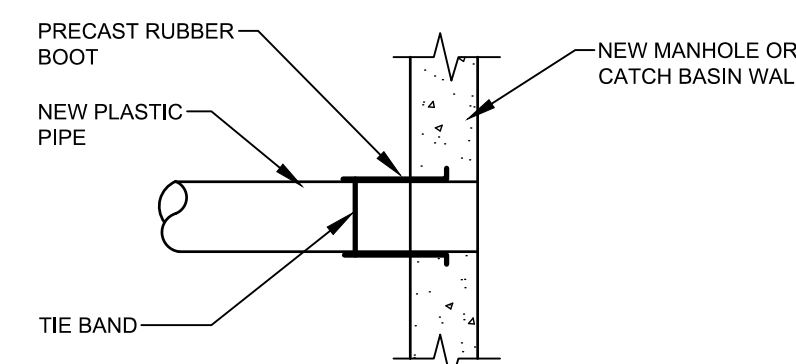


1. SUBMIT SHOP DRAWINGS FOR OWNERS APPROVAL.
2. SEE PLAN AND PROFILE FOR INVERT AND RIM ELEVATIONS.

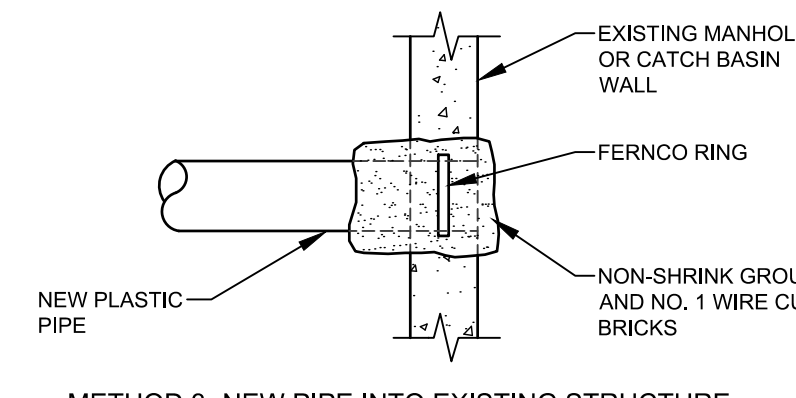
FIELD INLET CATCH BASIN
NOT TO SCALE



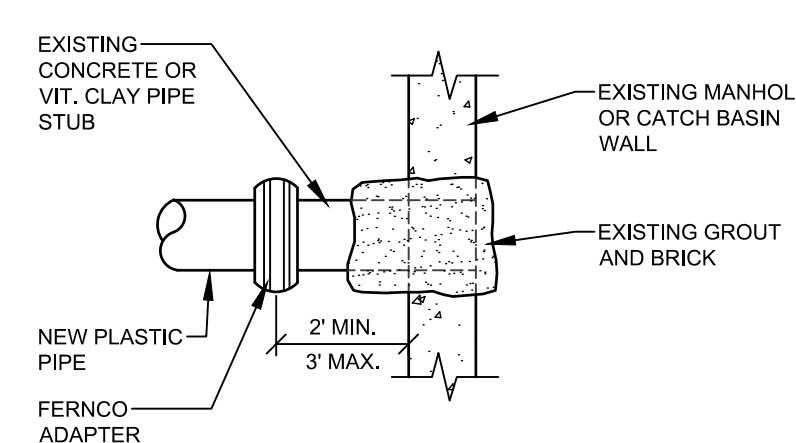
METHOD 1- EXISTING PIPE INTO NEW STRUCTURE



METHOD 2- NEW CONSTRUCTION

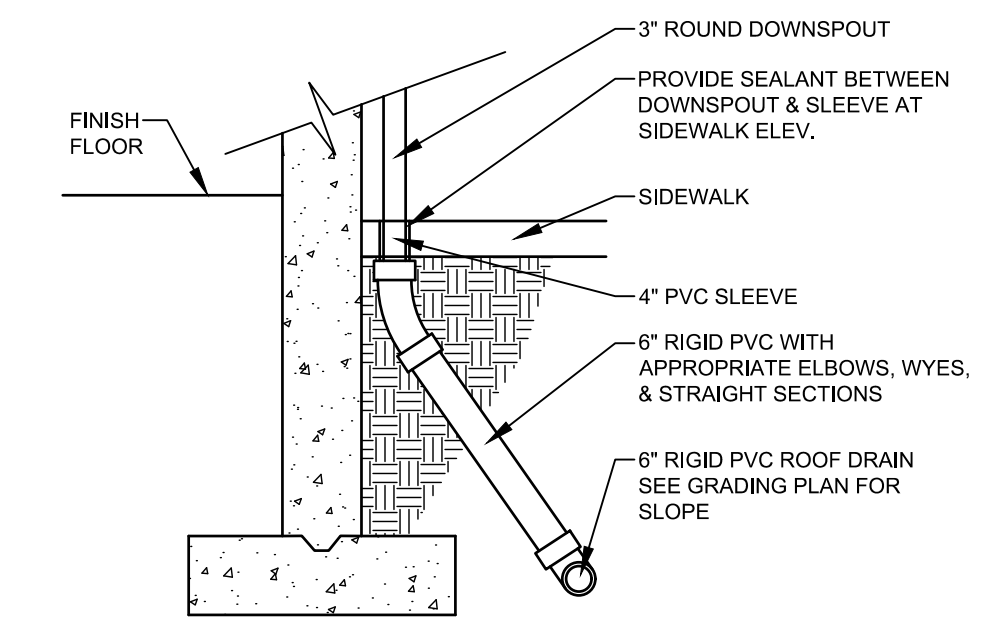


METHOD 3- NEW PIPE INTO EXISTING STRUCTURE

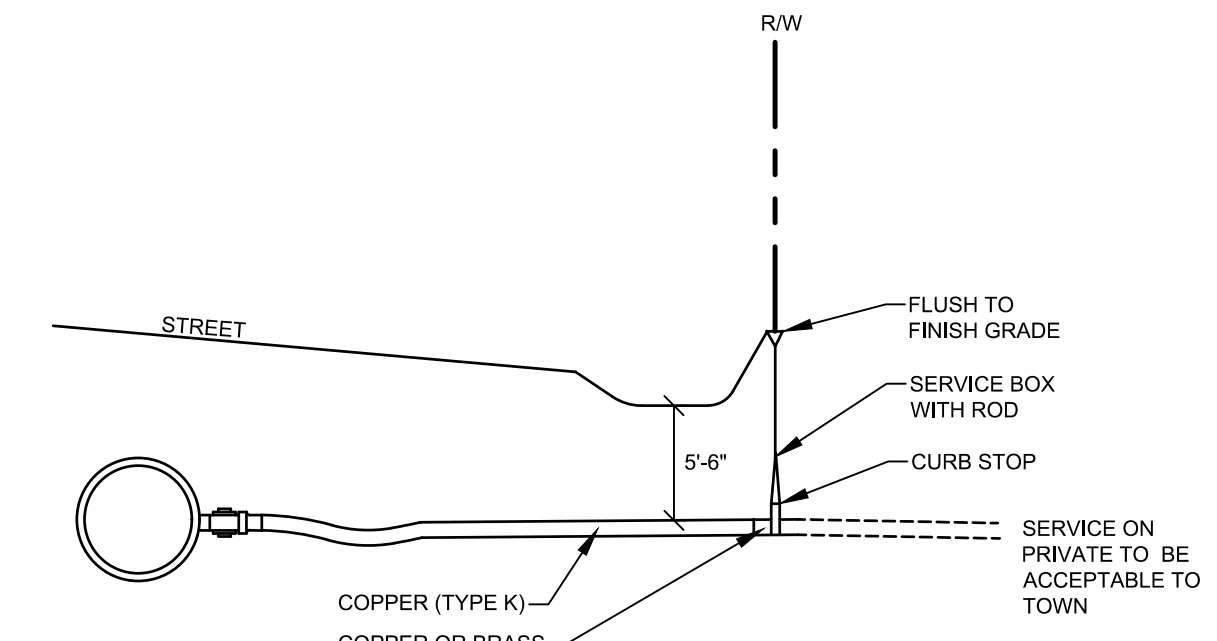


METHOD 4- NEW PIPE INTO EXISTING STUB

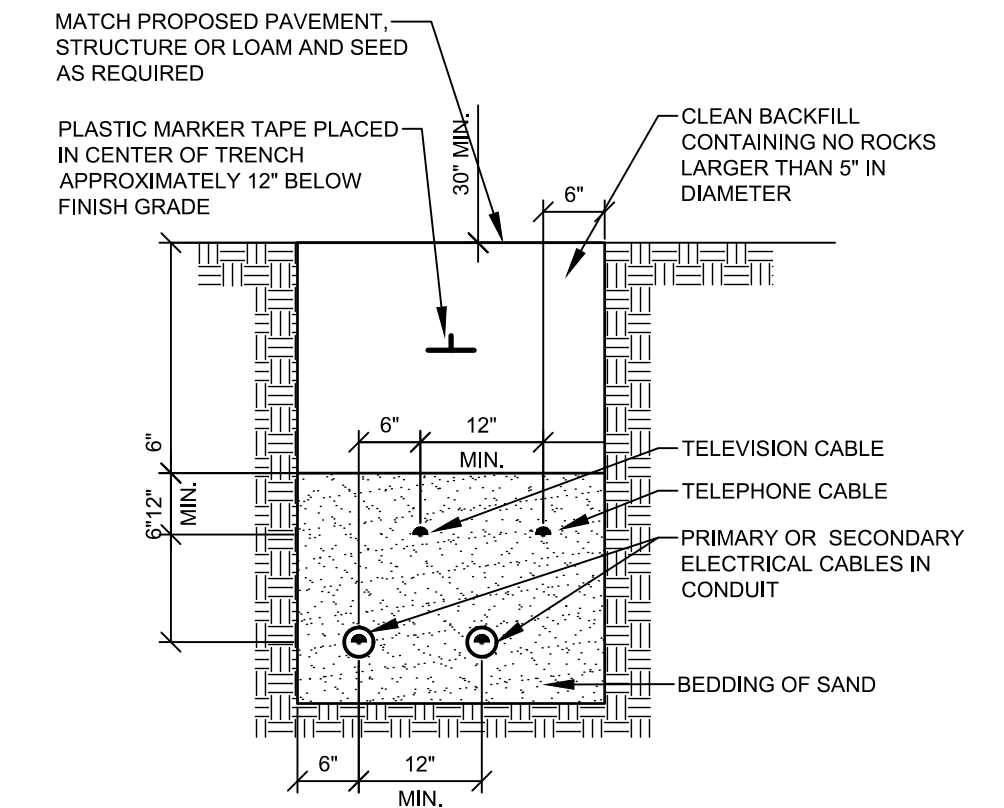
PLASTIC PIPE CONNECTIONS
NOT TO SCALE



ROOF DRAIN CONNECTOR
NOT TO SCALE

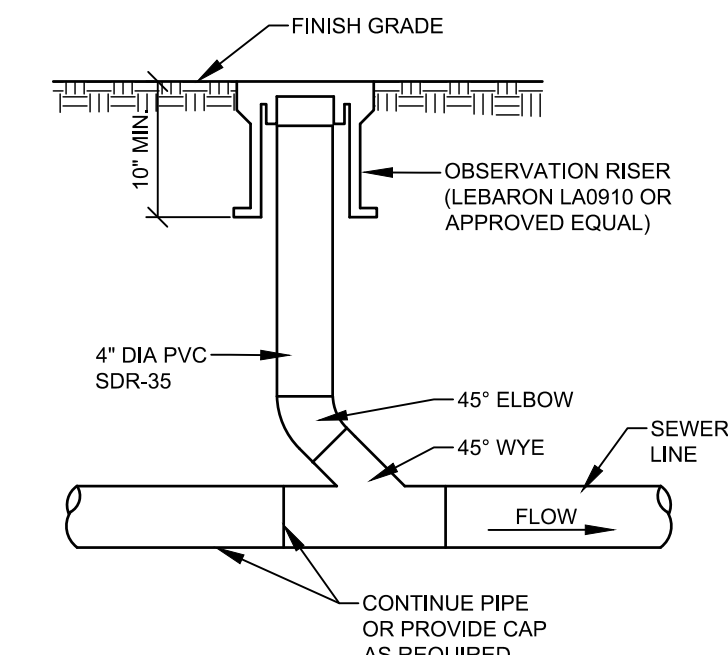


WATER SERVICE CONNECTION
NOT TO SCALE



NOTES:
CABLES TO BE ENCASED IN SCHEDULE 40 PVC CONDUIT.

UNDERGROUND CABLE INSTALLATION
NOT TO SCALE



STORMTRAIN CLEANOUT
NOT TO SCALE

NOT FOR CONSTRUCTION
PRINT PROGRESS PRINT

NOT FOR CONSTRUCTION

B	SGD	02/06/2020	ISSUED FOR SITE PLAN REVIEW
A	SGD	08/27/19	ISSUED FOR CLIENT USE
REV.	BY:	DATE:	STATUS:

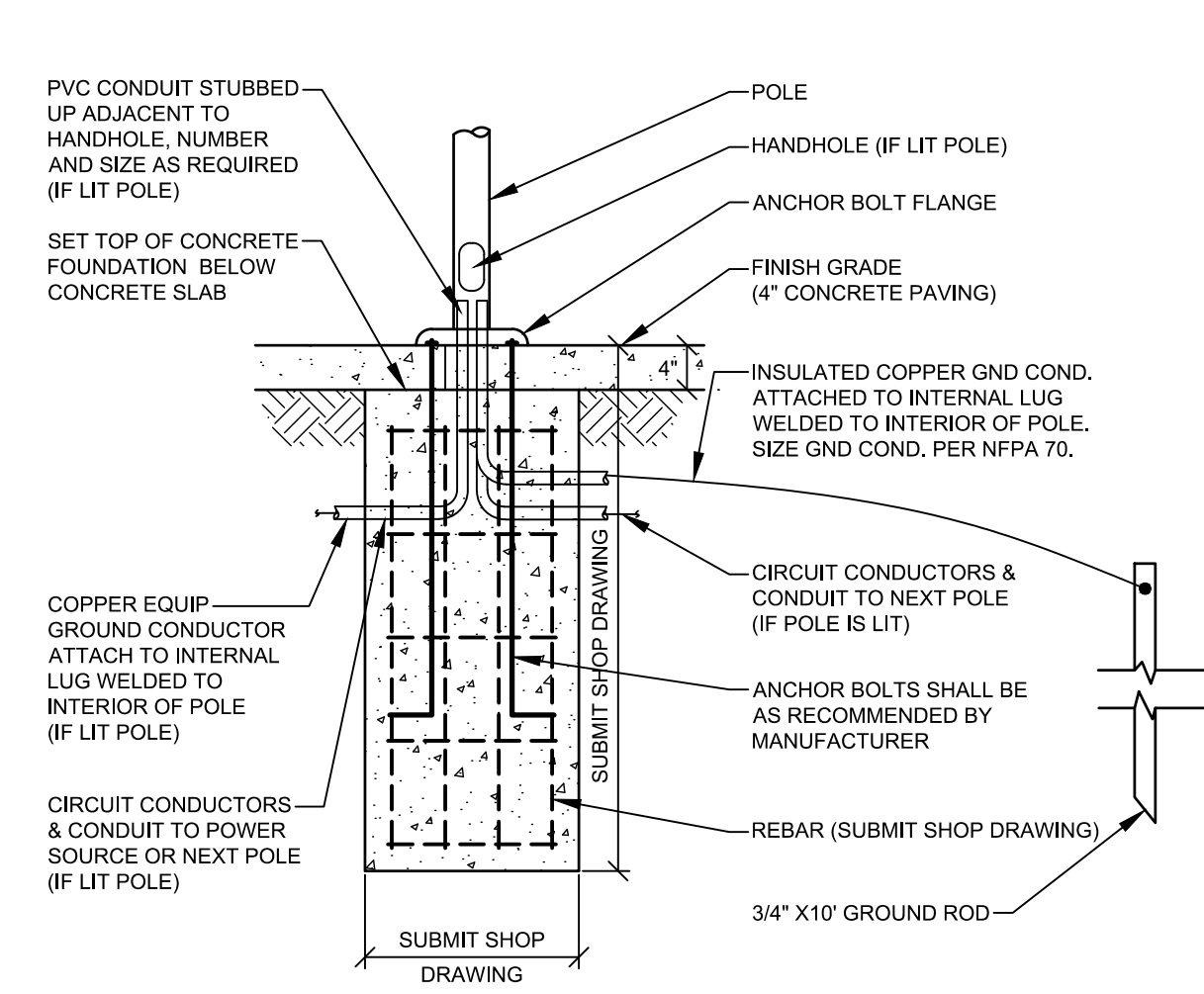
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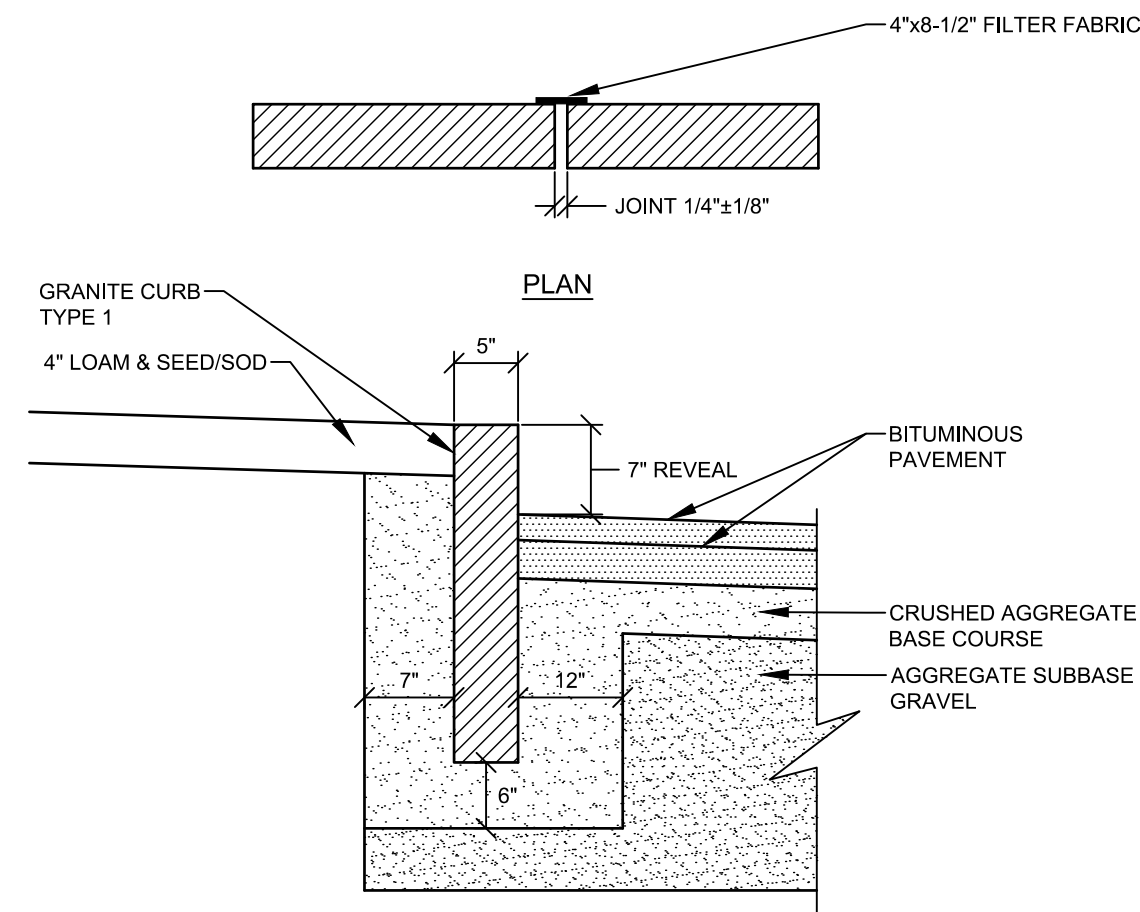
DETAILS OF:
RICE PUBLIC LIBRARY
8 WENTWORTH STREET
KITTERY, MAINE 03904
FOR:
LASSEL ARCHITECTS
P.O. BOX 370, 370 MAIN STREET
SOUTH BERWICK, MAINE 03908

SCOTT SIMONS ARCHITECTS
PORTLAND, MAINE 04101

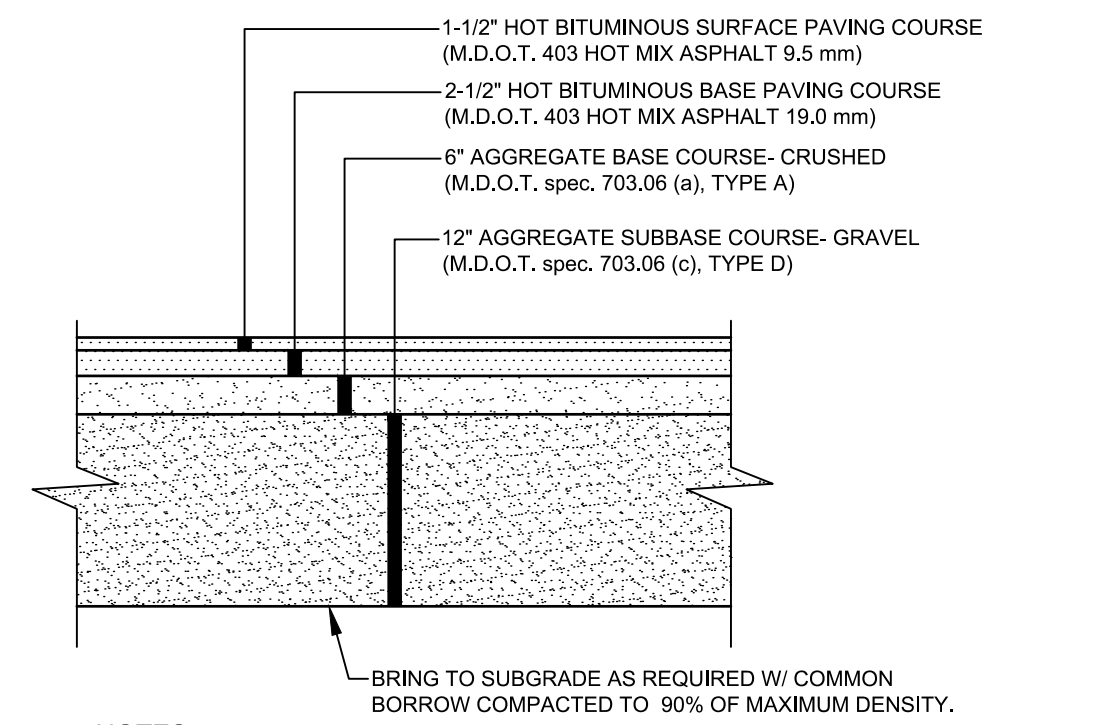
DESIGNED	SGD
DRAWN	SRC
CHECKED	SGD
DATE	02/06/2020
SCALE	1" = 20'
PROJECT	18438



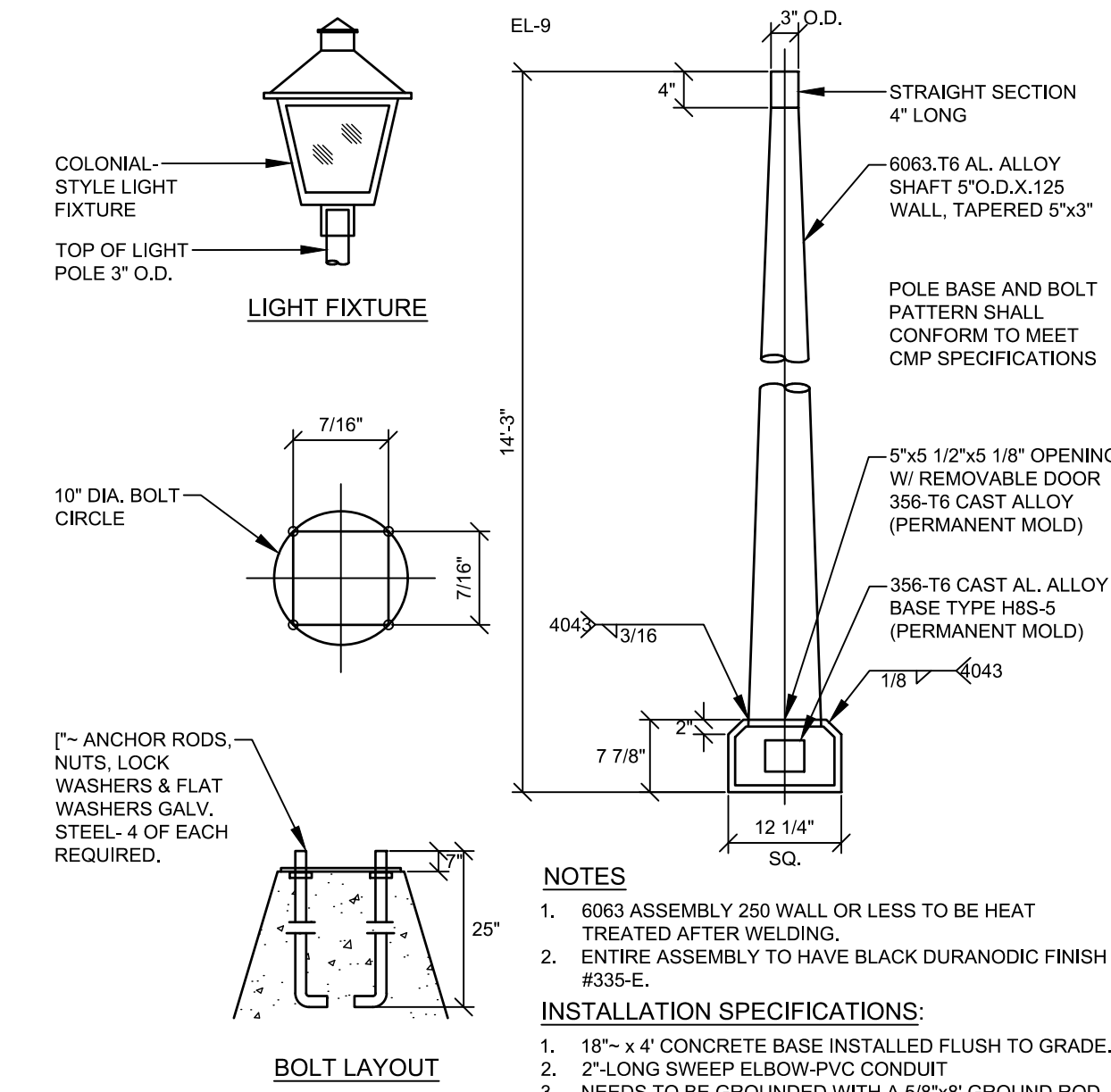
FLAG POLE DETAIL
NOT TO SCALE



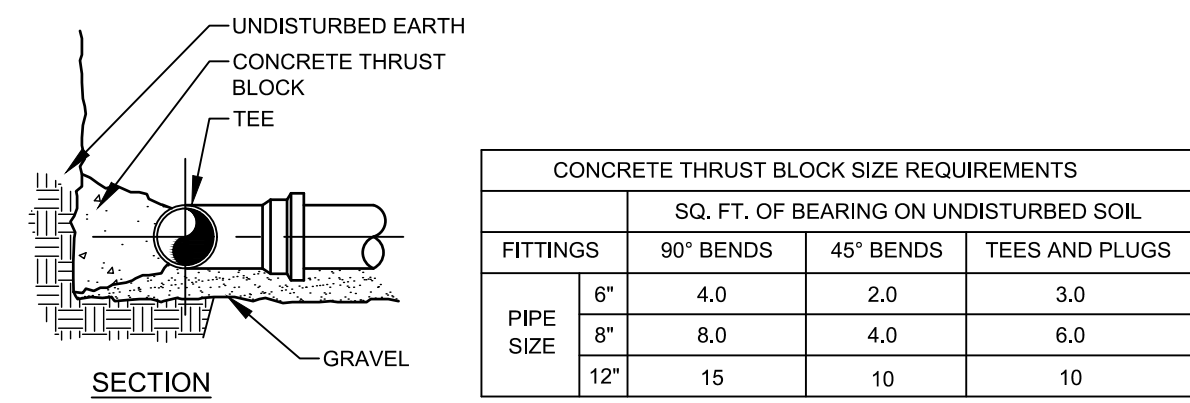
VERTICAL GRANITE CURB
NOT TO SCALE



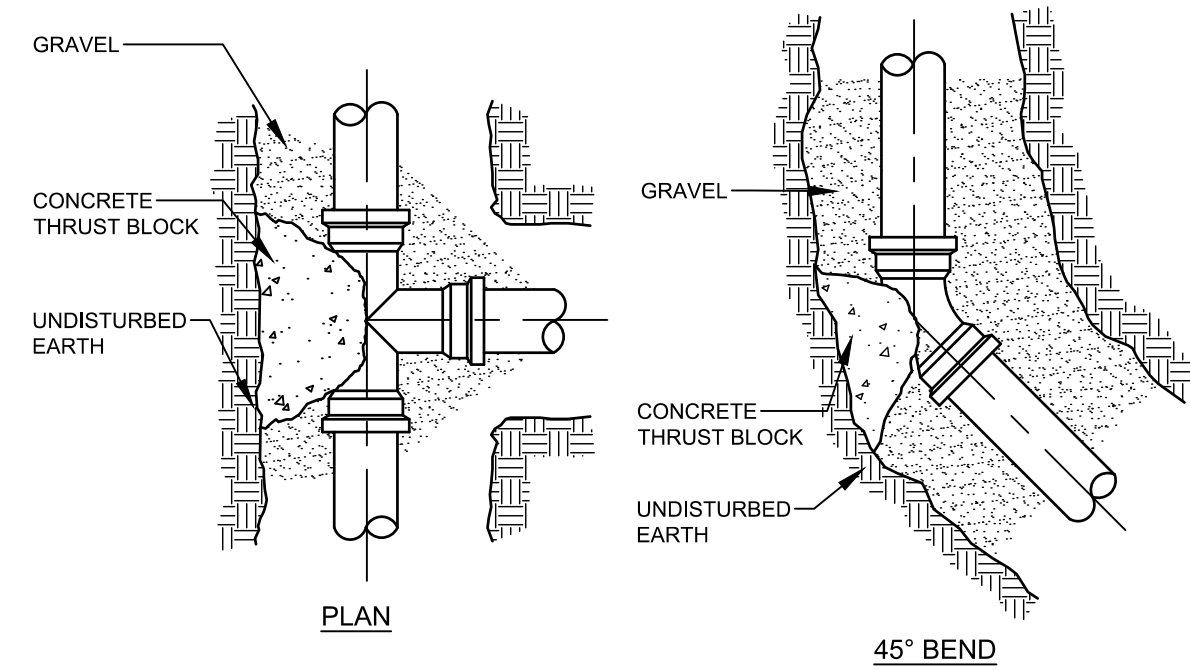
PAVED PARKING LOT SECTION
NOT TO SCALE



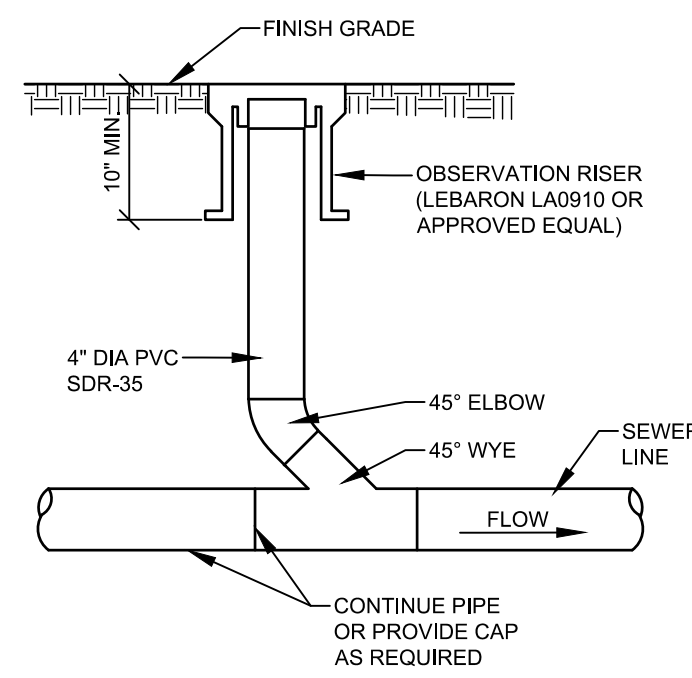
LIGHT POLE
NOT TO SCALE



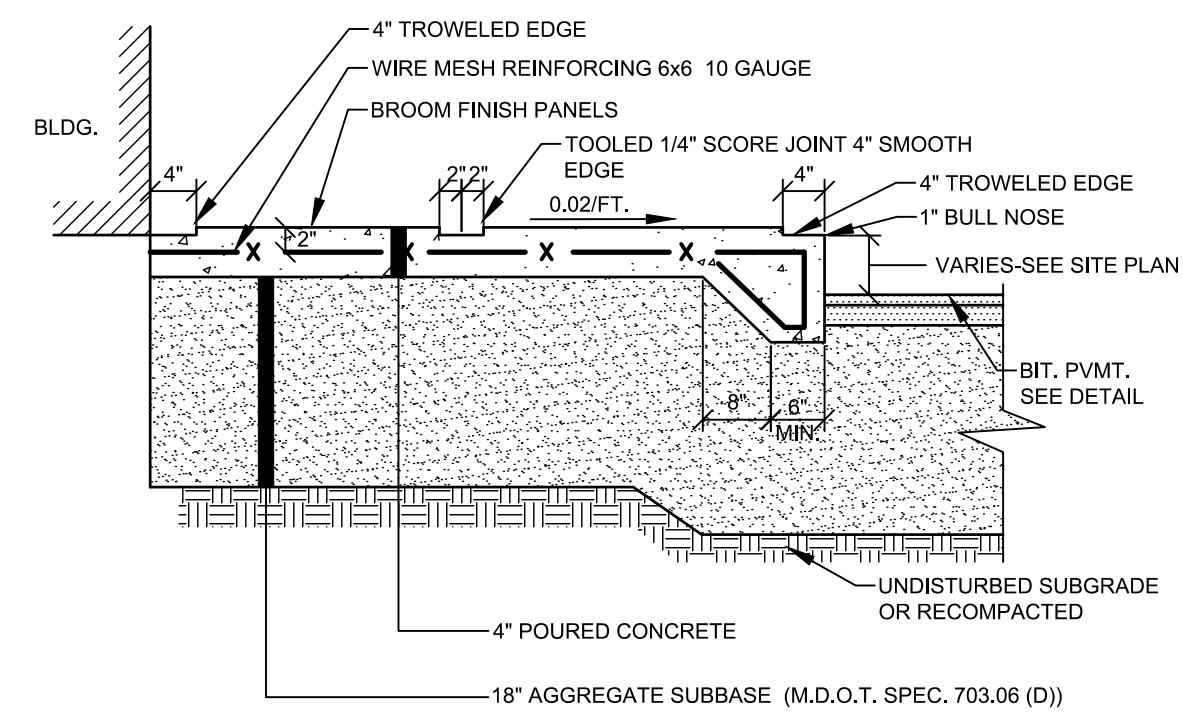
CONCRETE THRUST BLOCK SIZE REQUIREMENTS			
FITTINGS	SQ. FT. OF BEARING ON UNDISTURBED SOIL		
	90° BENDS	45° BENDS	TEES AND PLUGS
PIPE SIZE			
6"	4.0	2.0	3.0
8"	8.0	4.0	6.0
12"	15	10	10



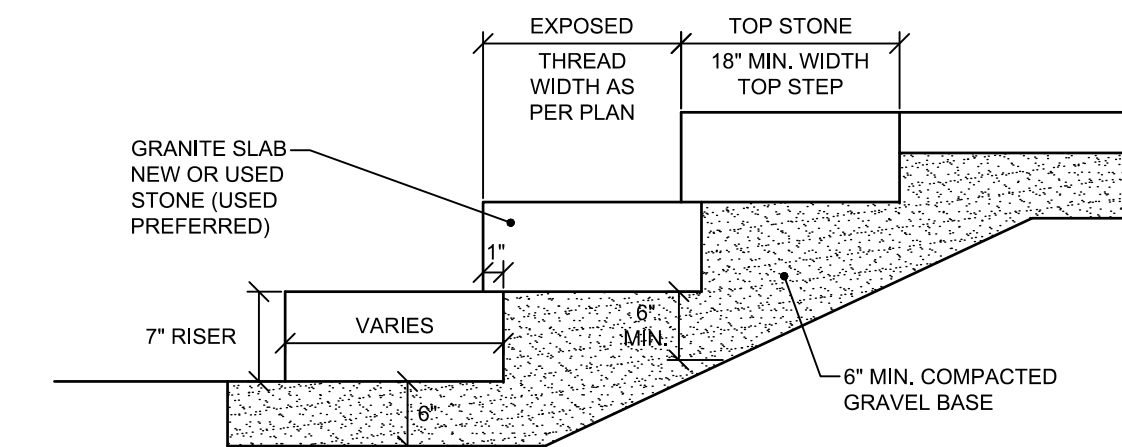
TEE & BEND DETAIL
NOT TO SCALE



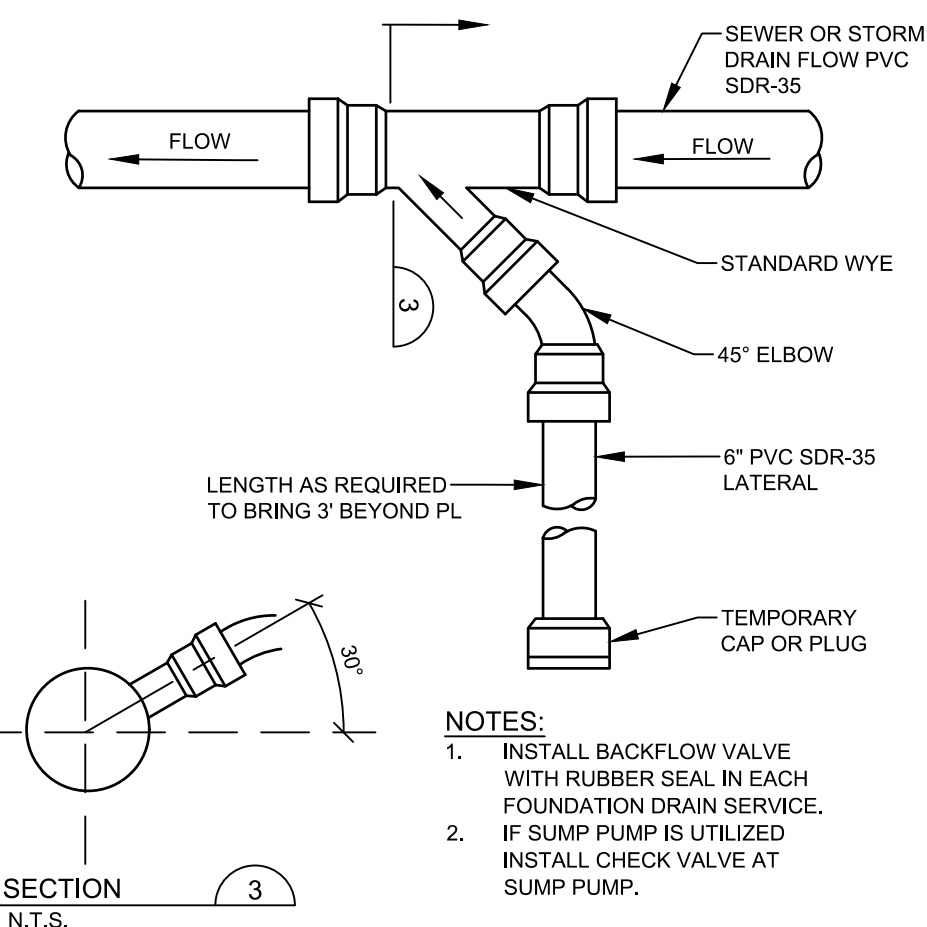
STORMTRAIN CLEANOUT
NOT TO SCALE



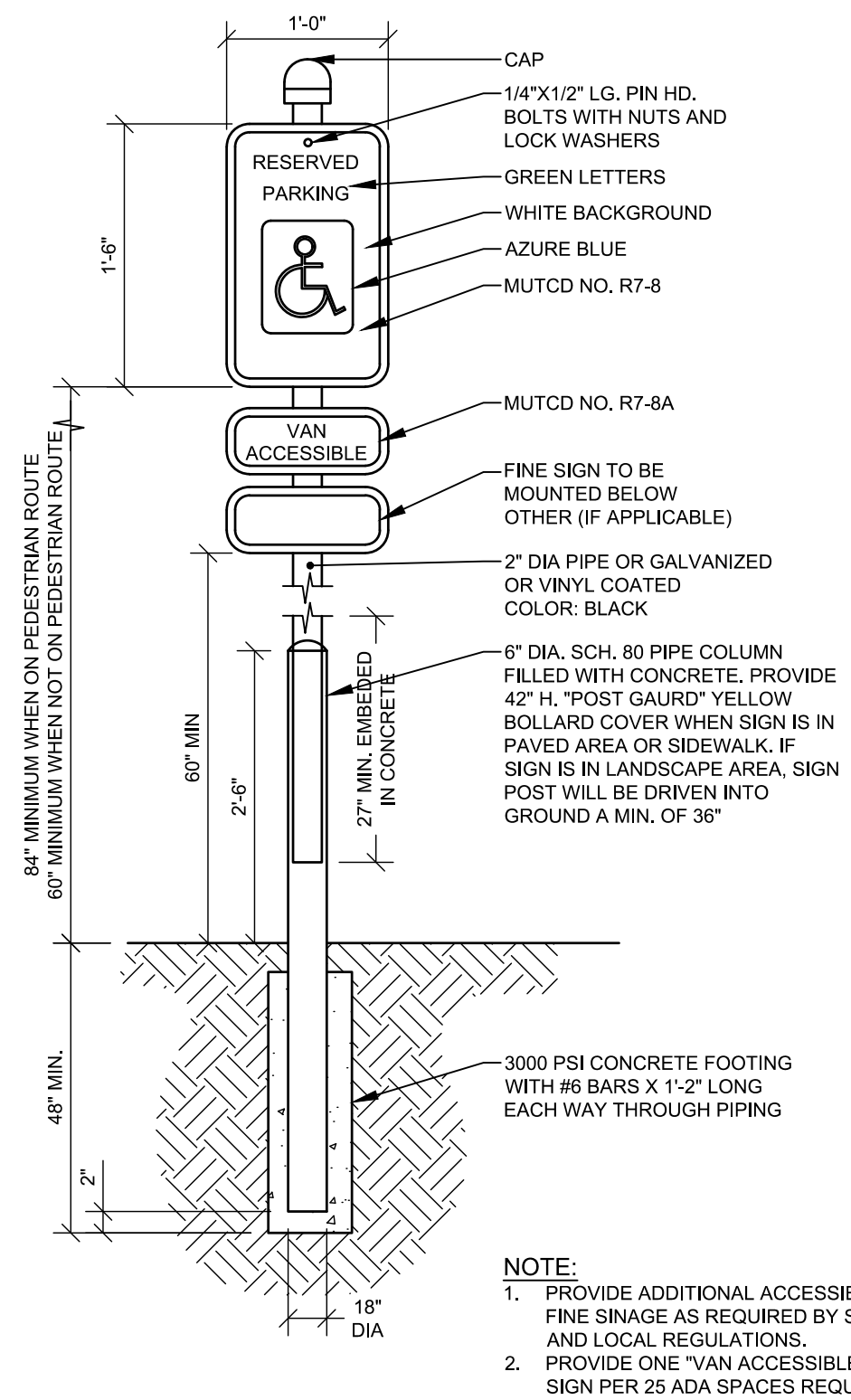
CONCRETE SIDEWALK
NOT TO SCALE



GRANITE STAIR
NOT TO SCALE



SEWER / FOUNDATION DRAIN SERVICE CONNECTION
NOT TO SCALE



RESERVED PARKING SIGN (POLE MOUNTED)
NOT TO SCALE

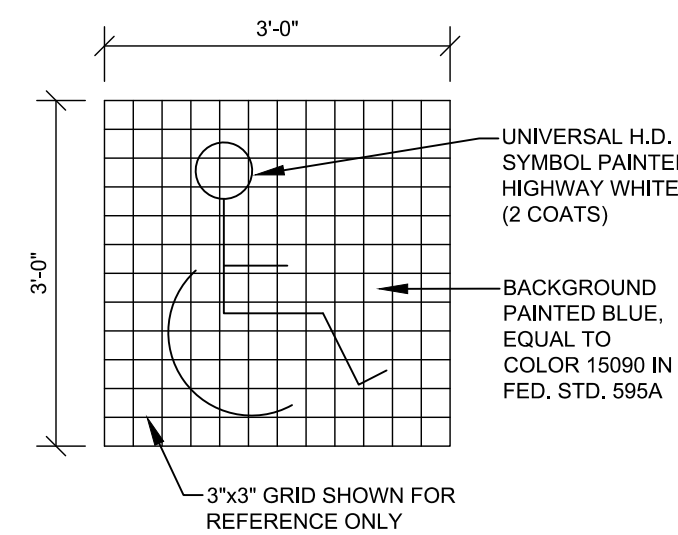


R7-8 STANDARD PARKING SIGN

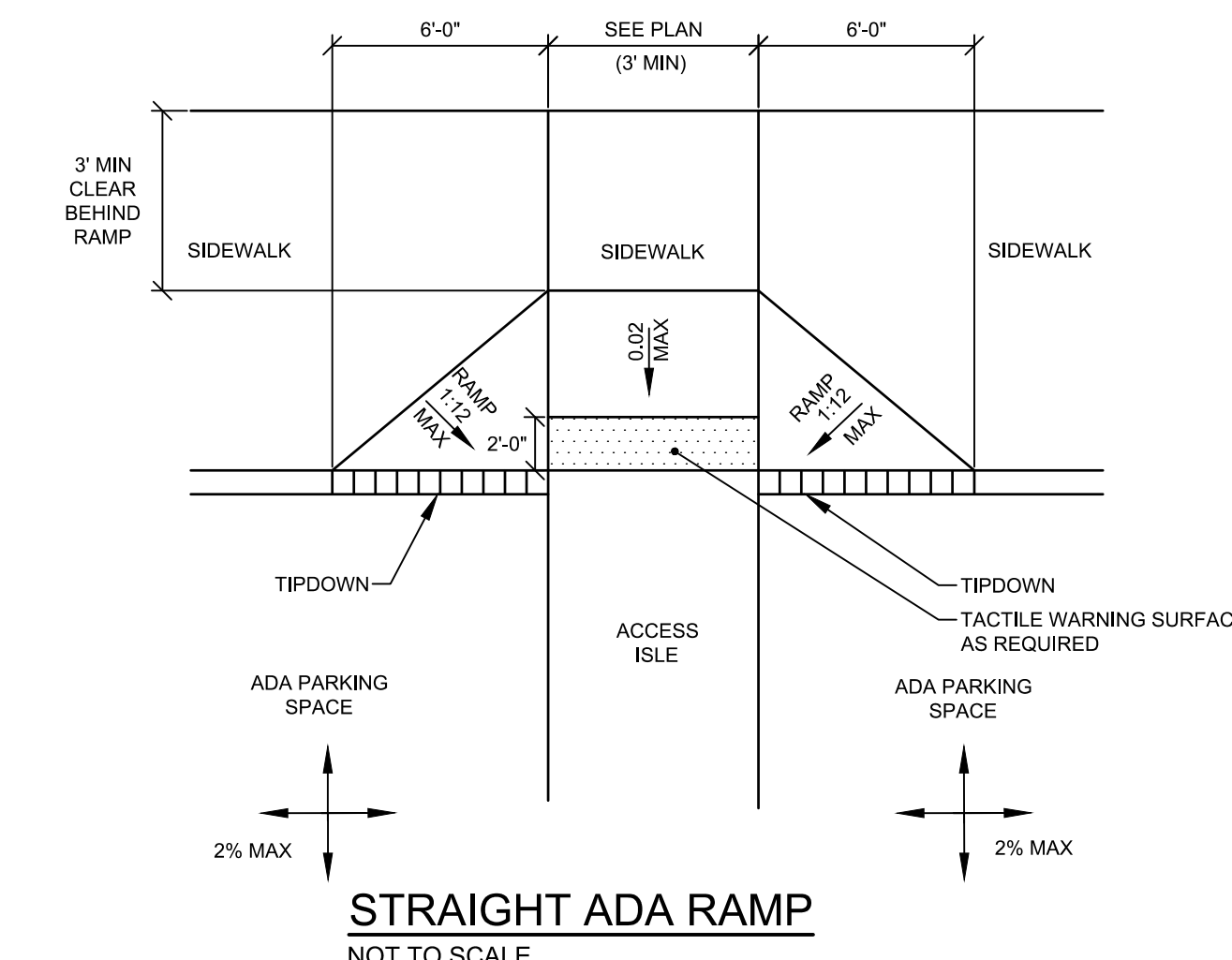


R7-8A STANDARD VAN ACCESSIBLE SIGN

A LOCAL MUNICIPALITY MAY HAVE MORE STRINGENT REGULATIONS BUT THEY CANNOT BE LESS STRINGENT THAN ADA STANDARDS OR STATE LAW.



ADA ACCESSIBLE SIGNS
NOT TO SCALE



STRAIGHT ADA RAMP
NOT TO SCALE

NOT FOR CONSTRUCTION
PRINT PROGRESS

NOT FOR CONSTRUCTION

REV.	BY	DATE	STATUS
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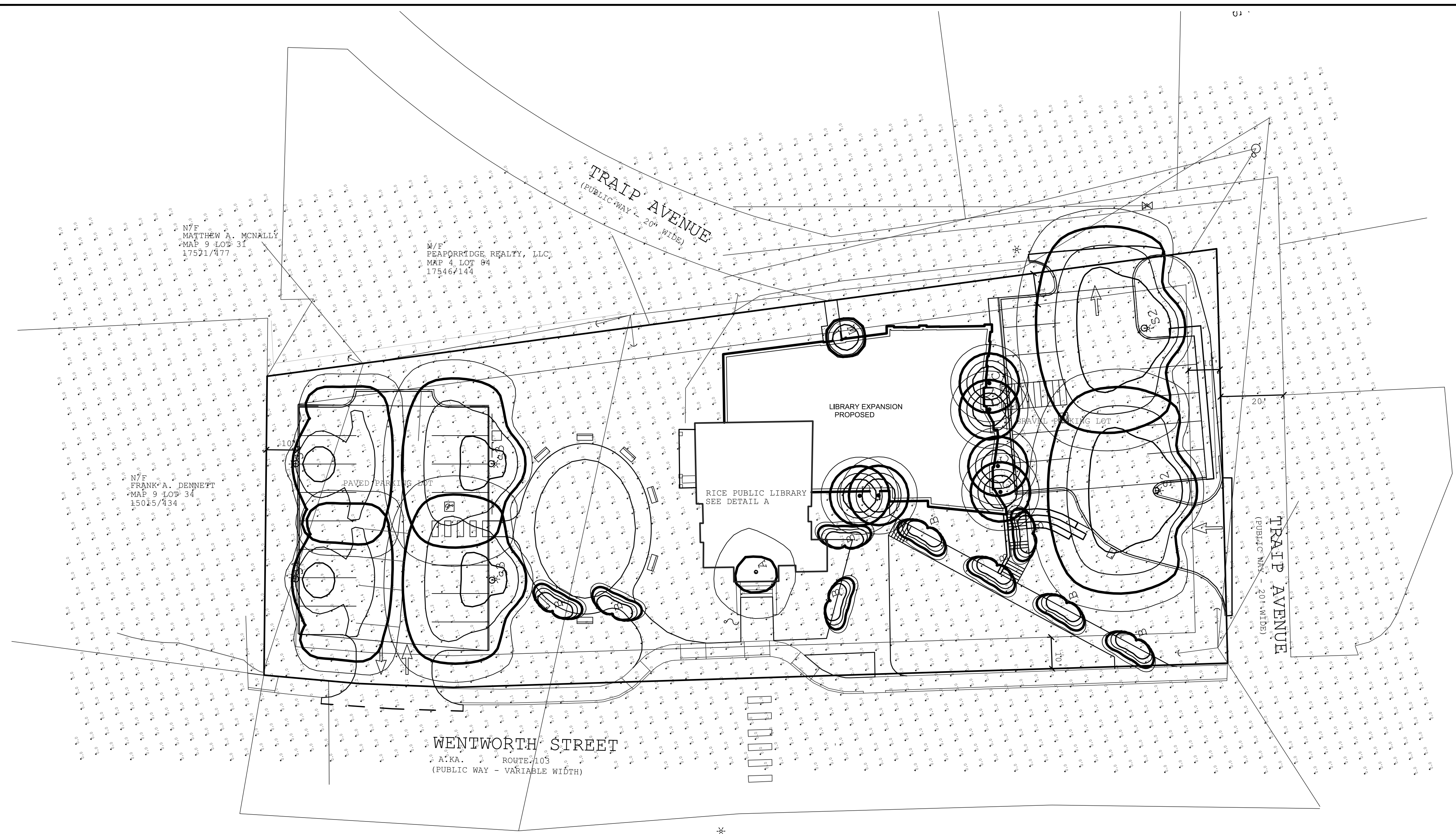
SCOTT SIMONS ARCHITECTS
75 YORK STREET
PORTLAND, MAINE 04101

DESIGNED	SGD
DRAWN	SRC
CHECKED	SGD
DATE	02/06/2020
SCALE	1" = 20'
PROJECT	18438

SHEET 7 OF 8

18438D.dwg, TAB 03

NOT FOR
CONSTRUCTION
PROGRESS
PRINT



StatArea_1	StatArea_2
NORTH PARKING LOT	SOUTH PARKING LOT
Illuminance (Fc)	Illuminance (Fc)
Average = 1.45	Average = 1.80
Maximum = 2.9	Maximum = 4.6
Minimum = 0.4	Minimum = 0.2
Avg/Min Ratio = 3.63	Avg/Min Ratio = 9.00
Max/Min Ratio = 7.25	Max/Min Ratio = 23.00

Luminaire Schedule					
Symbol	Qty	Label	Arrangement	Description	[MANUFAC]
□	1	A	SINGLE	PENDENT LIGHT WITH LED BULB	Verbatim Americas
○	9	B	SINGLE	FLINDT 31.5 15W LED/4000K 120-277 NPA POST W/ANCHORAGE UNIT DIM 0-10V	Louis Poulsen Lighting
○	6	C	SINGLE	55943	BEGA Converted by LUMCat V 19.09.2014 / H.R.
○	2	S2	SINGLE	ICS-E02-LED-E1-T4-XX/RSS4A12S-1NX (12' POLE)	EATON - INVUE (FORMER COOPER LIGHTING)
○	2	S3	SINGLE	ICS-E01-LED-E1-T4-XX/ RSS4A12S-N1X (12' POLE)	EATON - INVUE (FORMER COOPER LIGHTING)
○	2	S4	SINGLE	ICS-E01-LED-E1-SL4-HSS-XX/RSS4A12S-N1X (12' POLE)	EATON - INVUE (FORMER COOPER LIGHTING)
□	1	W	SINGLE	33580	BEGA Converted by LUMCat V 22.04.2016 / H.R.

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South Portland, ME 04106
Tel. 207-260-2100

PHOTOMETRIC PLAN - BY OTHERS
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FOR:
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DESIGNED	BY OTHERS
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NOTE: LIGHTING PLAN DONE BY CHARRON INC.