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## Town of Kittery Planning Board Meeting December 14, 2023

## 5 ITEM 4—27 & 29 Wentworth—Major Site Plan — Final Review

<u>Action: Approve plan or continue review.</u> Eric Weinrieb, on behalf of applicant Madbury Real Estate Ventures, is proposing
to convert an existing bed and breakfast into two independent inns with a total of 24 rental units and 2 innkeeper's suites.
The proposed development is located on the properties of 27 & 29 Wentworth Street, Map 9 Lots 37, 38, in the Kittery
Foreside (MU-KF) Zone.

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## 11 **PROCESS SUMMARY**

REQ'D	ACTION	COMMENTS	STATUS	
NO	Sketch Plan Acceptance/Approval	7/27/23	Accepted	
YES	Planning board determination of completeness	9/14/23	Accepted	
NO	Site Visit	9/19/23	Held	
YES	Public Hearing	9/28/23	Held	
YES	Preliminary Plan Approval	11/16/23	Approved	
YES	Final Plan Review and Decision	Scheduled for 12/14/23	TBD	
Applicant: 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, when applicable, 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.				

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## 13 **OTHER PERMITS AND REQUIREMENTS**

- Coordination with MDOT street project on Wentworth Street.
  - State Fire Marshal NFPA #13 fire protection system approval.
- 16 DEP construction permitting and site review.17

## 18 **PROJECT INTRODUCTION**

This is the final review for the redevelopment of the existing Enchanted Nights bed and breakfast into two inns on adjacent lots. The properties are located on Wentworth Street leading into the Kittery Foreside, directly abutting residential dwellings and a railroad running adjacent to 29 Wentworth to the northeast. Per assessor data, Enchanted Nights was an 8-bedroom bed and breakfast on 29 Wentworth Street, utilizing an additional 3-bedroom house on the adjacent property of 27 Wentworth. The plan proposes constructing one 12-unit inn, with a 13<sup>th</sup> innkeeper's suite, on each property. Both inns would share a 16-space parking lot and a driveway located on the property of 29 Wentworth.

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The property on 27 Wentworth would be demolished, with the new building moved closer to the street while maintaining the minimum 10' front yard setback. The property on 29 Wentworth would be partially demolished during renovation, with the intention of maintaining the majority of the original 1800's era structure. Each inn will be a 4-story building. The upper floor of 27 Wentworth will have two larger guest suites with recessed balconies. 29 Wentworth will have one ADA accessible unit on the ground floor and one innkeeper's suite in the existing walk-in basement. Following guidance from the planning board, the applicant has drafted an easement to ensure shared parking access for both properties.

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Per the definition of an inn in §16.3, each individual use requires an innkeeper's suite. When the sketch plan was accepted on September 27<sup>th</sup>, the planning board advised the applicant they were amenable to a single innkeeper's suite to manage

35 both inns, if a restrictive covenant was drafted to ensure an innkeeper would be required on both properties should ownership

change hands at any point. The planning board also said they were amenable to a requested modification of the open space
minimum, to allow the applicant to fit all the required parking spaces (a minimum of 18).

The planning board first reviewed the preliminary application on September 14<sup>th</sup>, where they accepted the application as complete. They then held a site walk on September 19<sup>th</sup>, and a public hearing during their September 28<sup>th</sup> meeting. However, at this stage the planning board decided they wanted a legal consultation's advisement before moving forward with the single innkeeper. The Town contracted an attorney from Preti Flaherty, who drafted a letter advising the planning board to adhere strictly to the code's definition of an inn. The legal consultant also advised against granting a modification to the open space minimum, as they considered it a dimensional standard which would require a variance from Board of Appeals.

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Following this legal response, the applicant submitted a new plan set with a note dictating one innkeeper's suite will be required for each inn. The new plan also reduced the proposed parking lot to meet open space requirements, from 22 spaces to 16 spaces. This was below the minimum requirement of 18 spaces; however, parking minimums are a general performance standard within the purview of the planning board to modify. The applicant has submitted a full final plan set and photometric plan, which has been reviewed by CMA engineers, who found no errors significant enough to delay final approval. The plan set has not changed since preliminary approval, except to correct minor issues raised by the engineer review. As all requirements have been met, staff suggest the planning board determine if the plan is ready for final approval.

## 54 WAIVERS REQUESTED

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The following waivers were approved by the planning board on November 16<sup>th</sup>:

- 1. Parking minimum modification: the applicant is requesting to reduce the number of required parking spaces from 18 to 16, to meet the required open space minimum. (Approved 4-0-1)
- 2. Signpost distance modification: the applicant is requesting to reduce the setback of a proposed signpost from 33 feet from the centerline of the road to 22.5 feet, to ensure the proposed landscaping does not block visibility of the signage. (Approved 5-0-0)
- 3. Drainpipe size waiver: the applicant is requesting to reduce the requirements from a 12" drainpipe to 6", as they are only proposing roof leaders and underdrain pipes. (Approved 5-0-0)

## 66 STAFF COMMENTS

67 Listed below are comments provided by staff in addition to general review of standards:

- 1. The applicant has submitted a parking access easement to provide shared parking for both properties, even if ownership should change. Note 24 of the site plan states shared parking for both properties shall remain in perpetuity, even if ownership should change.
  - 2. MDOT is planning a sidewalk development project along Wentworth Street. Note 22 of the site plan details the plan intends to complete utility service connections along Wentworth Street prior to or in conjunction with MDOT.

## 75 **PROJECT ANALYSIS**

Staff reviewed the application and provided materials and have provided their determination on the requirements and
 standards below:

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Code Ref.	§16.4 Land Use Zone Standards			
	Standard	Determination		
§16.4.25.B/C.	Permitted/Special Exception Uses	The proposed use is permitted		

§16.4.25.D.(1).	Design standards	It appears the standard is satisfied.
§16.4.25.D.(2).(a).	Minimum land area per dwelling unit: 5,000 sq ft.	Not applicable
§16.4.25.D.(2).(b).	Lot size: 5,000 sq ft. minimum	It appears the standard is satisfied.
§16.4.25.D.(2).(c).	Street frontage: no minimum	It appears the standard is satisfied.
§16.4.25.D.(2).(d).	Front setback: 10 ft minimum if not along Government Street or Wallingford Square	It appears the standard is satisfied.
§16.4.25.D.(2).(e).	Rear and side setbacks: 10 ft minimum.	It appears the standard is satisfied.
§16.4.25.D.(2).(f).	Separation distance between buildings on the same lot: 10 ft minimum	The inns are on separate lots: not applicable.
§16.4.25.D.(2).(g).	Building height: 40 ft maximum	It appears the standard is satisfied.
§16.4.25.D.(2).(h).	Shoreland zone: setback from all other uses, including buildings and parking: 75 ft unless modified	Not applicable
§16.4.25.D.(2).(i).	Building coverage: 60% maximum	It appears the standard is satisfied
§16.4.25.D.(2).(j).	Open space: 40% minimum	It appears the standard is satisfied
§16.4.25.D.(3).	Building footprint maximum: 1,500 square feet.	It appears the standard is satisfied
	NOTE: if development is replacing a building existing on the lot as of April 1, 2005, the development can match the existing footprint. Width of the new building as measured parallel to the front lot line may not be greater than the width of the pre-existing building.	
§16.4.25.D.(4).	Special design standards	Design standards appear to be met.
§16.4.25.D.(5).	Signage: display of signboard and/or products of sale	This standard does not appear to apply to the proposed wooden signpost. See <b>§16.5.23.</b> below.
§16.4.25.D.(7).	Off-street parking standards: one parking space per guest room: 24 spaces total. NOTE: the proposed development is exempt for up to 6 required off-street parking spaces, lowering this	The planning board approved a modification of parking space minimums to 16 spaces. 2 spaces are ADA as required.
	requirement to 18.	
Code Ref.	§16.5 Performance Stands Standard	ards Determination
§16.5.10	Essential Services	All utilities in the plan are proposed to be underground. The standard appears to be satisfied.

		Utility installation will be in coordination with the MDOT sidewalk project, as indicated on the site plan.			
§16.5.23	Wentworth Street is a part of Maine State Route 103. The signpost notated on the Site preparation plan (sheet C-1) must notate and be placed outside of 33 ft setback from center line of ROW.	The planning board approved a modification of this setback to 22.5 feet.			
§16.5.25	Sprinkler Systems are required in all buildings of 3 stories or more and must meet NFPA standards	Kittery Water District has sufficient capacity for sprinkler systems. Approval will be determined by State Fire Marshal.			
§16.5.27	Street Standards	MDOT is currently in the process of installing sidewalks along Wentworth St. The proposed development will coordinate with MDOT to ensure utility installation does not impair state project.			
§13.1.6.5/§13.1.6.6	Sewer connection fees for new units: \$15,000 Sewer entrance fee for new utility connections: \$6,000 Total fee: \$21,000	Sewer fees will be paid prior to issuance of a building permit			
C. L. D. f	§16.7.10 Preliminary Site Plan Requirements				
Code Rei.	Standard	Determination			
§16.7.10.C.(4).(a-i).	<ul> <li>Paper plan sheets no smaller than 11" x 17"</li> <li>Scale of drawing no greater than 1 inch = 30 feet</li> <li>Code block in right-hand corner</li> <li>Standard boundary survey of existing conditions</li> <li>Compass with arrow pointing true north</li> <li>Locus map of property</li> <li>Vicinity map and aerial photograph</li> <li>Surveyed acreage of parcel(s), rights-of-way, wetlands, and amount of street frontage</li> <li>Names and addresses of owners of record abutting property</li> </ul>	Provided			
§16.7.10.C.(4).(j).	Existing conditions survey including all identified structures, natural resources, rights-of-way, and utilities located on and within 100 feet of the property.	Provided			

§16.7.10.C.(4).(k).	<ul> <li>Proposed development area including:</li> <li>Location and detail of proposed structures and signs</li> <li>Proposed utilities including power, water, and sewer.</li> <li>Sewage facilities type and placement.</li> <li>Domestic water source</li> <li>Lot lines, rights-of-way, and street alignments</li> <li>Road and other paved area plans</li> <li>Existing and proposed setbacks</li> <li>Storage areas for waste or hazardous materials</li> <li>Topographic contours of existing contours and finished grade elevations</li> <li>Locations and dimensions of artificial features such as pedestrian ways, sidewalks, curb cuts, driveways, fences, retaining walls,</li> </ul>	Provided
§16.7.10.C.(4).(1).	Natural features or site elements to be preserved.	Provided
§16.7.10.C.(4).(m).	Identified property encumbrances.	Provided
§16.7.10.C.(4).(n).	Kittery Water District approval letter.	Provided
§16.7.10.C.(4).(o).	Erosion and sedimentation control plan.	Provided
§16.7.10.C.(4).(p).	Stormwater management plan and drainage analysis.	Provided
§16.7.10.C.(4).(q).	Soil survey.	Provided
§16.7.10.C.(4).(r).	Vehicular traffic report.	Provided
§16.7.10.C.(4).(s).	Traffic impact analysis.	Estimated trips do not trigger a traffic impact analysis.
§16.7.10.C.(4).(t).	Test pit analysis.	Not applicable
§16.7.10.C.(4).(u).	Approval letter from Town sewage.	Provided
§16.7.10.C.(4).(v).	Evaluation of development by Technical Review Committee department heads.	Provided
§16.7.10.C.(4).(w).	<ul> <li>Additional submissions as required:</li> <li>Restrictive covenant for innkeeper's suite</li> <li>Shared parking access easement</li> </ul>	Provided

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## 80 DISCUSSION, NEXT STEPS, AND RECOMMENDATIONS

The purpose of final review is to allow the applicant to address any final outstanding issues that must be addressed before planning board approval can be granted. All requested waivers have already been granted, and the applicant has ensured their final plan set meets the guidance of the requested legal counsel. Staff believe the application is ready to receive final approval.

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## 90 **Recommended motions**

- 91 Below are recommended motions for the Board's use and consideration:
- 92 *Motion to approve the application*
- 93 Move to approve the final site plan by Eric Weinrieb, on behalf of applicant Madbury Real Estate Ven

Note: This approval by the Planning Board constitutes an agreement between the Town and the Developer incorporating the Development plan and supporting documentation, the Findings of Fact, and all waivers and/or conditions approved and required by the Planning Board.

**WHEREAS:** Eric Weinrieb, on behalf of applicant Madbury Real Estate Ventures, is proposing to convert an existing bed and breakfast into two independent inns with a total of 24 rental units and 2 innkeeper's suites on the properties of 27 & 29 Wentworth Street, Map 9 Lots 37, 38, in the Kittery Foreside (MU-KF) Zone.

Pursuant to the Plan Review meetings conducted by the Planning Board as noted in the Plan Review Notes dated 12/14/23

REQ'D	ACTION	COMMENTS	STATUS
NO	Sketch Plan	7/27/23	Accepted
YES	Completeness/Acceptance	9/14/23	Accepted
YES	Public Hearing	9/28/23	Held
NO	Site Visit	9/19/23	Held
YES	Preliminary Plan Approval	11/16/23	Approved
YES	Final Plan Approval	12/14/23	Approved

Pursuant to the application and plan and other documents considered to be a part of a plan review decision by the Planning Board in this Finding of Fact consisting of the following (hereinafter the "Plan"):

- 1. Final site plan application received 11/22/23 from Eric Weinrieb of Altus Engineering.
- 2. Stormwater Management Report received 11/22/23 from Eric Weinrieb of Altus Engineering.

**NOW THEREFORE,** based on the entire record before the Planning Board and pursuant to the applicable standards in the Land Use and Development Code, the Planning Board makes the following factual findings and conclusions:

## **Chapter 16.7 GENERAL DEVELOPMENT REQUIREMENTS**

## 16.7.10.D.(5).(b). Findings of Fact

Action by the Board shall be based upon findings of fact which certify or waive compliance with all the required standards of this title, and which certify that the development satisfies the following requirements:

## [1] Development Conforms to Local Ordinances.

**Standard:** The proposed development conforms to a duly adopted comprehensive plan as per adopted provisions in the Town Code, zoning ordinance, subdivision regulation or ordinance, development plan or land use plan, if any. In making this determination, the municipal reviewing authority may interpret these ordinances and plans.

**Finding:** The proposed development conforms to Title 16 as the proposed development meets all definitions of an inn set in **16.3**.

**Conclusion:** This standard appears to be met.

Vote of \_\_\_\_\_in favor \_\_\_\_against \_\_\_\_abstaining

## [2] Water Supply Sufficient.

**Standard:** The proposed development has sufficient water available for the reasonably foreseeable needs of the development.

**Finding:** The proposed development has received confirmation from Kittery Water District that sufficient capacity exists to service all water and fire suppression needs.

Conclusion: This standard appears to be met.

Vote of \_\_in favor \_\_ against \_\_ abstaining

[3] Sewage Disposal Adequate.

**Standard:** The proposed development will provide for adequate sewage waste disposal and will not cause an unreasonable burden on municipal services if they are utilized.

**Finding:** The proposed development has received confirmation from the Town Wastewater Department confirming sufficient capacity for anticipated wastewater needs.

Conclusion: This standard appears to be met.

Vote of \_\_ in favor \_\_ against \_\_ abstaining

## [4] Stormwater Managed.

**Standard:** *The proposed development will provide for adequate stormwater management.* 

**Finding:** The proposed development necessitated a stormwater management system which was reviewed by the Town's peer review engineering firm and found to be satisfactory.

Conclusion: This standard appears to be met.

Vote of \_\_ in favor \_\_ against \_\_ abstaining

## [5] Traffic Managed.

**Standard:** *The proposed development will:* 

[a] Not cause unreasonable highway or public road congestion or unsafe conditions with respect to the use of the highways or public roads existing or proposed; and

[b] Provide adequate traffic circulation, both on-site and off-site.

**Finding:** Trip generation estimates appear to show the proposed development will not cause unreasonable congestion and unsafe conditions onto public ways and provides for adequate on-and off-site traffic circulation.

Conclusion: This standard appears to be met.

Vote of \_\_\_\_\_ in favor \_\_\_\_ against \_\_\_\_ abstaining

[6] Parking and Loading.

**Standard:** *Provisions have been made for safe internal vehicular circulation, loading and service areas, and parking associated with the proposed development.* 

**Finding:** The proposed development shows that internal vehicular circulation will be safe and adequate loading and service areas are provided. By removing one curb-cut, the proposed development will add one parking space to Wentworth Street as part of this development. The applicant has received a waiver to reduce the required minimum number of on-site parking spaces by two.

Conclusion: This standard appears to be met.

Vote of \_\_in favor \_\_ against \_\_ abstaining

[7] Utilities.

**Standard:** The size, type, and locations of all public utilities and private utilities to serve the proposed development will be installed per accepted engineering practices

**Finding:** The proposed development will be utilizing existing public utilities for the new inns. The lighting plan has been positioned to minimize glare to abutting properties.

**Conclusion:** This standard appears to be met.

Vote of \_\_in favor \_\_ against \_\_ abstaining

## [8] Erosion controlled.

**Standard:** The proposed development will not cause unreasonable soil erosion or a reduction in the land's capacity to hold water so that a dangerous or unhealthy condition results.

**Finding:** The proposed development will be required to provide erosion and sedimentation controls during construction and the approved stormwater management system will control the stormwater on-site.

Conclusion: This standard appears to be met.

Vote of \_\_\_\_\_ in favor \_\_\_\_ against \_\_\_\_ abstaining

## [9] Groundwater protected.

**Standard:** The proposed development will not, alone or in conjunction with existing activities, adversely affect the quality or quantity of groundwater.

**Finding:** It appears the proposed development will not cause any unreasonable adverse effects of the quantity or quality of groundwater.

Conclusion: This standard appears to be met.

Vote of \_\_in favor \_\_ against \_\_ abstaining

## [10] Freshwater wetlands identified.

**Standard:** All freshwater wetlands within the project area have been identified on any maps submitted as part of the application, regardless of the size of these wetlands.

Finding: There are no freshwater wetlands on the site.

Conclusion: This standard appears to be met.

## Vote of \_\_ in favor \_\_ against \_\_ abstaining

## [11] River, stream or brook identified.

**Standard:** Any river, stream or brook within or abutting the proposed project area has been identified on any maps submitted as part of the application. For purposes of this section, "river, stream or brook" has the same meaning as in 38 M.R.S. § 480-B, subsection 9. Municipal solid waste disposal available. The proposed development will not cause an unreasonable burden on the municipality's ability to dispose of solid waste, if municipal services are to be used.

Finding: It appears that a stream does not exist in or abutting the property within 75 feet.

Conclusion: This standard appears to be met.

Vote of \_\_\_\_\_ in favor \_\_\_\_ against \_\_\_\_ abstaining

## [12] Water body quality and shoreline protected.

**Standard:** Whenever situated entirely or partially within 250 feet of any wetland, the proposed development will not adversely affect the quality of that body of water or unreasonably affect the shoreline of that body of water. Flood areas identified and development conditioned. All flood-prone areas within the project area have been identified on maps submitted as part of the application. Water and air pollution minimized. The proposed development will not result in undue water or air pollution. In making this determination, the following must be considered:

[a] Elevation of the land above sea level and its relation to the floodplains;

[b] Nature of soils and subsoils and their ability to adequately support waste disposal;

[c] Slope of the land and its effect on effluents;

[d] Availability of streams for disposal of effluents;

[e] Applicable state and local health and water resource rules and regulations; and

[f] Safe transportation, disposal and storage of hazardous materials.

Finding: It appears that the proposed development will not adversely affect the quality of any water or wetland body.

Conclusion: This standard appears to be met.

Vote of \_\_in favor \_\_ against \_\_ abstaining

## [13] Aesthetic, cultural and natural values protected.

**Standard:** The proposed development will not have an undue adverse effect on the scenic or natural beauty of the area, aesthetics, historic sites, significant wildlife habitat identified by the Department of Inland Fisheries and Wildlife or the municipality, or rare and irreplaceable natural areas, or any public rights for physical or visual access to the shoreline.

**Finding:** The proposed development does not appear to have an adverse effect on aesthetic, cultural and natural values as described in the standard.

Conclusion: This standard appears to be met.

Vote of \_\_ in favor \_\_ against \_\_ abstaining

## [14] Environmental considerations.

**Standard:** The proposed development will not result in undue levels of lighting, noise, vibrations, smoke, heat, glare, fumes, dust, toxic matter, odors, or electromagnetic interference.

**Finding:** The proposed development will not produce any adverse effects that would cause undue environmental degradation. The landscaping plan has endeavored to maintain existing mature vegetation to the greatest practical extent, and to replace any removed vegetation after construction.

Conclusion: This standard appears to be met.

Vote of \_\_\_\_\_ in favor \_\_\_\_ against \_\_\_\_ abstaining

## [15] Utilization of the site.

Standard: The proposed development does reflect the natural capabilities of the site to support development.

Finding: It appears that the proposed development is designed in a manner that respects the natural capabilities of the lot.

**Conclusion:** This standard appears to be met.

Vote of \_\_in favor \_\_ against \_\_ abstaining

[16] Developer financially and technically capable.

Standard: Developer is financially and technically capable to meet the standards of this section.

**Finding:** It appears the developer is financially and technically capable of effectuating the project. A cost estimate and performance guarantee will be provided to Planning Staff prior to the issuance of any permitting.

Conclusion: This standard appears to be met.

Vote of \_\_in favor \_\_ against \_\_ abstaining

Based on the foregoing Findings, the Kittery Planning Board finds the applicant has satisfied each of the review standards for approval and, therefore, the Kittery Planning Board hereby grants final approval for the Development at the above referenced property, including any waivers granted or conditions as noted.

## Waivers:

- 1. Modification of minimum parking spaces from 18 to 16, to ensure open space minimums are met (Approved 4-0-1)
- 2. Modification of setback of signpost from the road from 33 feet to 22.5 feet, to prevent any proposed landscaping from blocking visibility of signage. (Approved 5-0-0)
- 3. Modification of drainpipe size from 12 inches to 6 inches, as that size is sufficient for the proposed roof leaders and underdrain pipes (Approved 5-0-0)

<u>Conditions of Approval (to be included as notes on the final plan in addition to the existing notes):</u>

- 1. Without prior approval, no changes, erasures, modifications or revisions may be made to any Planning Board approved final plan.
- 2. Applicant/contractor will follow Maine DEP Best Management Practices for all work associated with site and building construction to ensure adequate erosion control and slope stabilization.

- 3. Prior to the commencement of grading and/or construction within a building envelope, as shown on the Plan, the owner and/or developer must stake all corners of the envelope. These markers must remain in place until the Code Enforcement Officer determines construction is completed and there is no danger of damage to areas that are, per Planning Board approval, to remain undisturbed.
- 4. All Notices to Applicant contained in the Findings of Fact (dated: 12/14/23).

Conditions of Approval (Not to be included as notes on the final plan):

1. <u>Incorporate any plan revisions on the site plan as recommended by Staff, Planning Board, or Peer</u> Review Engineer, and submit for Staff review prior to endorsement and recording of the plan.

## **Notices to Applicant:**

- 1. Prior to the release of the signed plans, the applicant must pay all outstanding fees associated with review, including, but not limited to, Town Attorney fees, peer review, newspaper advertisements and abutter notification.
- 2. State law requires all subdivision and shoreland development plans, and any plans receiving waivers or variances, be recorded at the York County Registry of Deeds within 90 days of the final approval.
- 3. Three (3) paper copies of the final recorded plan and any and all related state/federal permits or legal documents that may be required, must be submitted to the Town Planning Department. Date of Planning Board approval shall be included on the final plan in the Signature Block.
- 4. This approval by the Town Planning Board constitutes an agreement between the Town and the Developer, incorporating the Plan and supporting documentation, the Findings of Fact, and any Conditions of Approval.

The Planning Board authorizes the Planning Board Chair, or Vice Chair, to sign the Final Plan and the Findings of Fact upon confirmation of compliance with any conditions of approval.

Vote of \_\_ in favor \_\_ against \_\_ abstaining

APPROVED BY THE KITTERY PLANNING BOARD ON 12/14/23

Dutch Dunkelberger, Planning Board Chair

Per Title 16.2.12.B(1) - An aggrieved party with legal standing may appeal a final decision of the Planning Board to the York County Superior Court in accordance with Maine Rules of Civil Procedures Section 80B, within forty-five (45) days from the date the decision by the Planning Board was rendered.



Civil Site Planning Environmental Engineering

133 Court Street Portsmouth, NH 03801-4413

November 22, 2023

Maxim Zakian, Town Planner Town of Kittery 200 Rogers Road Kittery, Maine 03904

Re: Site Plan Review Tax Map 9, Lots 37 & 38 27 & 29 Wentworth Street P5431

Transmitted via email to: mzakian@kitteryme.org

Dear Max:

Altus Engineering (Altus) is in receipt of the November 14, 2023 CMA peer review letter for the Foreside Inn development project at 27 and 29 Wentworth Street. It is our opinion that the remaining items are more housekeeping issues rather than technical items that could impact the functionality of the site design.

Only the outstanding items are noted below. Our responses are highlighted below the CMA comment in red:

## 16.7.11.A. Water supply

The applicant is proposing to connect the inns to the Kittery Water District water supply for domestic and fire services. These are proposed via a single service/tap at the main per building that splits. KWD should review components of the design. The applicant has indicated that KWD has approved the design. Documentation of this approval should be provided.

Altus: See attached approval letter from KWD.

## 16.7.11.B. Sewage disposal

The applicant is proposing to connect the inns to public sewer through separate services. The service for Lot 37 is located within the stormwater treatment device footprint. Alternative configurations should be analyzed. Kittery sewer services should review components of the design. The applicant has indicated that Kittery sewer services has approved the design. Documentation of this approval should be provided. Altus: See attached approval letter from KSD.

## 16.7.11.C. Stormwater and surface drainage

The applicant has presented an updated Drainage Analysis for the project. Stormwater management and treatment are accomplished through the use of porous pavement, a depression, stone drip strips and an underground stormwater management gallery.

We have the following comment on the drainage analysis:

1. The drainage analysis still uses the term "rain garden" in multiple places. Altus: References to raingarden removed.

## Stormwater Inspection and Maintenance Manual

## An updated I&M Manual was not provided. The following comments still apply.

- 1. The frequency of porous pavement vacuuming is specified (2-4 per year) but could be specifically listed (e.g., one per season, quarterly, etc.) Altus: Manual has been revised to require maintenance a minimum of twice a year (spring and fall).
- 2. There should be a section on maintenance of the stormwater depression if applicable or it should be mentioned under the landscaped areas section. Altus: The depression is not a BMP and identified as a "Landscape Depression" on the Stormwater Management Plan. Special maintenance is not required.
- 3. The Permit Coverage and Plans table contains items that are not shown on the plans (grassed underdrain soil filter, plunge pool) and there are items on the plans that are not in the table (proposed depression, river stone swale, porous pavement, drip strips). Altus: An updated drainage report and inspection manual has been provided.

## 16.7.11.E. Vehicular traffic

The applicant has provided a traffic generator summary for a business hotel but has not drawn any conclusions. This comment remains unaddressed.

Altus: The additional traffic associated with this business will have minimal impact on the local traffic.

## 16.7.11.F. Parking and Loading

16.7.11.F.(4)(d) – The shared parking area is allowed a 6 space credit under 16.4.25.D.(7).(g). changing the required number of spaces to 18 spaces. The applicant is proposing 16 parking spaces in order to meet the open space requirement of 16.4.25.D.(j). of 40%. The applicant should apply for a waiver. Altus: The Planning Board granted the waiver from the parking requirement at the November 16, 2023 meeting.

We have the following comments on the plans:

## Existing Conditions Plan

1. Note 1 has one of the addresses incorrectly listed as 28 Wentworth Street. This comment remains unaddressed. Altus: The surveyor previously made the corrections in a couple of locations but missed Note #1. The revised plan correct Note #1.

## Sheet C-1: Site Preparation Plan

- 1. Verify that Kittery Water District wants the two old services cut and capped 2' beyond the property line and not at the property line or at the main. This comment remains unaddressed. Provide documentation from KWD that the proposed design is approved. Altus: Our previous discussion with the KWD had been verbal. See attached approval letter from KWD.
- 2. Where are the existing sewer services located? What abandonment or demolition is planned for them? This comment remains unaddressed. Altus: The existing services are proposed to be reused. The exact locations were based on tie sheets provided by KSD. Notes have been added to the plans requiring the locations to be verified in the field. See attached approval letter from KSD.

## Sheet C-5: Utility Plan

- 1. Amend "X" fire and X" domestic" leader for service sizes. Provide final approved design by KWD. Altus: The 6" fire and 2" domestic services have been approved by KWD. See KWD documentation.
- 2. Should there be two water main taps for each inn rather than the domestic service branching off of the fire service lines? Provide documentation from KWD that the proposed design is approved. Altus: The configuration has been modified and approved by KWD. See KWD documentation.
- 3. The sewer services should have cleanouts. Altus: Cleanout Note #18 has been added to the plans.

## Sheet C-8: Detail Sheet

- 1. What is the ground treatment above the stormwater management gallery? Loam and seed? This information should be shown in detail. This comment was unaddressed. Altus: Both the Grading Plan and the Landscape Plan indicate that the surface is intended to be loam and seed. The details have been modified to further clarify this issue.
- 2. Are there access/cleanout ports for the stormwater gallery other than from the area drain? Altus: Inspections ports (clean outs) have been added to each galley run to improve maintenance.
- 3. Where is the 3" I.D. Low Profile CB/DMH located? Is this the 36" ADS area drain called out on Sheet C-3? Designations should correspond. This comment was unaddressed. Altus: The 3-foot ID low profile DMH is noted on the plans with additional clarification on the galley details.
- 4. Is a maintenance sign required for the porous pavement? If so, here should be a detail for it. Altus: We do not recommend a porous pavement maintenance sign on this site. The Owner has on-site maintenance staff that will be made aware of the requirements.
- 5. Where is the plunge pool located? Altus: No plunge pools are proposed, detail removed.

## Sheet C-9: Detail Sheet

1. Remove the wood sheeting from the Drainage and Sewer Trench detail. Altus: The wood sheeting has been removed from the drainage and sewer trench detail as requested.

## Sheet C-10: Detail Sheet

- 1. The Concrete Sidewalk detail references NHDOT specifications. This comment is unaddressed. Altus: The reference to NHDOT has been corrected to reference MeDOT.
- 2. Details should be provided for the signs. This comment is unaddressed. Please contact me directly if you have any questions or require any additional information. Altus: The handicap accessible sign has been added to the plan set.

Sincerely,

## ALTUS ENGINEERING

Eric D. Weinrieb, P.E. President

RMB/edw/5431.CMA respond ltr 3.docx

Enclosures

ecopy: Taylor McMaster, Madbury Real Estate Ventures Brandon Holden, Winter Holden Architecture Robbi Woodburn, Landscape Architect



## TOWN OF KITTERY, MAINE

SEWER DEPARTMENT 200 Rogers Road, Kittery, ME 03904 Telephone: (207) 439-4646 Fax: (207) 439-2799

November 21, 2023

Re: Sewer acceptance letter 27 & 29 Wentworth Street Kittery, ME 03904

This letter is to confirm the acceptance of sanitary sewer discharge for the Project at 27 & 29 Wentworth Street in the Town of Kittery Maine. The sewer department has reviewed the final plans and found no issues.

This project must follow all specifications in accordance with design and performance standards set by the Kittery Sewer Department found in Title 13 of the Town Code.

Before the connection to the Kittery Sewer line, you will need to obtain a sewer permit from the Town of Kittery and pay all Impact and Entrance fees.

During the engineering and construction process plans may change, if they do, consideration for acceptance may change. Please notify me of any changes in design or construction.

If you have further questions or concerns, please contact me.

Sincerely,

L

Timothy Babkirk Town of Kittery Superintendent of Sewer Services 1-207-439-4646 tbabkirk@kitteryme.org

John C. Perry, President James E. Golter, Treasurer Robert A. Gray, Clerk Michael H. Melhorn, Trustee Carla J. Robinson, Trustee



Michael S. Rogers, Superintendent Carl B. Palm, Assistant Superintendent Melissa J. Locke, Office Manager

OFFICE OF

## **KITTERY WATER DISTRICT**

17 State Road Kittery, ME 03904-1565 TEL: 207-439-1128 FAX: 207-439-8549 Email: info@kitterywater.org

Kittery Planning Board 200 Rogers Road Kittery, ME 03904

November 21, 2023

Re: Proposed Redevelopment of 27-29 Wentworth Street, Kittery

Dear Planning Board Members,

Please accept this letter as verification that the Kittery Water District does have the capacity to supply municipal water service to the proposed redevelopment of 27-29 Wentworth Street, Kittery.

In addition, the District would like this project to be supplied with:

- (2) 6" Mains for Fire Protection
- (2) 2" Mains for Domestic Water

Lastly, in regards to abandoning the two existing water services; turning these off at the curb stops and capping the lines on or close to the property line is sufficient.

Sincerely,

Michael D. Rog-

Michael S. Rogers Superintendent

cc: Ronald M. Beal, P.E. - Altus Engineering

Owner: 27 WENTWORTH STREET, LLC & MREV KITTERY INN, LLC

401 EDGEWATER PLACE, SUITE 570 WAKEFIELD, MA 01880

Applicant: MADBURY REAL ESTATE VENTURES

401 EDGEWATER PLACE, SUITE 570 WAKEFIELD, MA 01880

# Architect:



WINTER 7 Wallingford Square Unit 2099 Kittery, ME 03904 (207) 994-3104

# Civil Engineer:



133 Court Street Portsmouth, NH 03801 (603) 433-2335 www.altus-eng.com

## Landscape Architect:



Surveyor:



Serving Your Professional Surveying & Mapping Nee 102 Kent Place, Newmarket, NH 03857 (603) 659-6560 Offices in Bedford & Keene, NH and Kennebunk, ME http://www.doucetsurvey.com

# THE FORESIDE INN

# 27 & 29 WENTWORTH STREET KITTERY, MAINE

# Assessor's Parcel 9, Lots 37 & 38

Plan Issue Date:

August 24, 2023 October 5, 2023 November 3, 2023 November 22, 2023

Preliminary Site Plan Review **Resubmit Preliminary Site Plan Resubmit Preliminary Site Plan** Final Site Plan Approval



## Sheet Index

Title Existing Conditions Boundary Line Adjus Site Preparation Plo Site Plan Stormwater Mgmt. Grading Plan Utility Plan Landscape Plan Detail Sheet Detail Sheet Detail Sheet Detail Sheet Detail Sheet

THIS DRAWING SET HAS NOT BEEN RELEASED FOR CONSTRUCTION

	Sheet No.:	Rev.	Date
Plan	1 of 1	0	11/15/23
stment Plan	1 of 1	0	11/21/23
ท	C-1	3	11/22/23
	C-2	3	11/22/23
Plan	C-3	3	11/22/23
	C-4	3	11/22/23
	C-5	3	11/22/23
	L-1	0	11/03/23
	C-6	3	11/22/23
	C-7	3	11/22/23
	C-8	3	11/22/23
	C-9	3	11/22/23
	C-10	3	11/22/23



- TOTAL PARCEL AREA: LOT 37 = 8,319 SQ. FT. OR 0.19 AC. (SEE NOTE 12) LOT 38 = 13,389 SQ. FT. OR 0.31 AC. (SEE NOTE 12)
- OWNER OF RECORD TAX MAP 9, LOT 37 27 WENTWORTH STREET 401 EDGEWATER PLACE, SUITE 570 401 EDGEWATER PLACE, SUITE 570 WAKEFIELD, MA 01880 Y.C.R.D. BK. 19297, PG. 823

TAX MAP 9. LOT 38 MREV KITTERY INN, LLC WAKEFIELD, MA 01880 Y.C.R.D. BOOK 19297, PAGE 853

- FIELD SURVEY PERFORMED BY J.P.E. & S.N.F. (DOUCET SURVEY) DURING ON APRIL 4. 2023 USING A TOTAL STATION AND A SURVEY GRADE GPS WITH A DATA COLLECTOR AND A DIGITAL LEVEL. TRAVERSE ADJUSTMENT BASED ON LEAST SQUARE ANALYSIS.
- HORIZONTAL DATUM BASED ON NAD83(2011) MAINE WEST STATE PLANE COORDINATE ZONE (1802) DERIVED FROM REDUNDANT GPS OBSERVATIONS UTILIZING THE KEYNET GPS VRS NETWORK.
- VERTICAL DATUM IS BASED ON NAVD88 PER CONTROL SURVEY PERFORMED IN 2018/2019 BY DOUCET SURVEY FOR THE PORTSMOUTH NAVAL SHIPYARD.
- FLOOD HAZARD ZONE: "C", PER FIRM MAP #2301710008D, DATED 7/3/1986.
- PROPER FIELD PROCEDURES WERE FOLLOWED IN ORDER TO GENERATE CONTOURS AT 1' INTERVALS. ANY MODIFICATION OF THIS INTERVAL WILL DIMINISH THE INTEGRITY OF THE DATA, AND DOUCET SURVEY WILL NOT BE RESPONSIBLE FOR ANY SUCH ALTERATION PERFORMED BY THE USER.
- UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON OBSERVED PHYSICAL EVIDENCE AND PAINT MARKS FOUND ON-SITE.
- 0. THE ACCURACY OF MEASURED UTILITY INVERTS AND PIPE SIZES/TYPES IS SUBJECT TO NUMEROUS FIELD CONDITIONS, INCLUDING; THE ABILITY TO MAKE VISUAL OBSERVATIONS, DIRECT ACCESS TO THE VARIOUS ELEMENTS, MANHOLE CONFIGURATION, ETC
- I. DUE TO THE COMPLEXITY OF RESEARCHING ROAD RECORDS AS A RESULT OF INCOMPLETE, UNORGANIZED, INCONCLUSIVE OBLITERATED, OR LOST DOCUMENTS, THERE IS AN INHERENT UNCERTAINTY INVOLVED WHEN ATTEMPTING TO DETERMINE THE LOCATION AND WIDTH OF A ROADWAY RIGHT OF WAY. THE EXTENT OF WENTWORTH STREET AS DEPICTED HEREON IS/ARE BASED ON RESEARCH CONDUCTED AT THE YORK COUNTRY REGISTRY OF DEEDS, THE TOWN OF KITTERY AND MAINE DEPARTMENT OF TRANSPORTATION. WENTWORTH STREET IS LISTED AS A 40' WIDE RIGHT OF WAY PER YORK COUNTY COMMISSIONERS RECORDS VOLUME 16, PAGE 255 & VARIABLE WIDTH PER Y.C.R.D. BOOK 2828, PAGE 137. SEE ALSO REFERENCE PLAN 2.
- 2. THE BOUNDARY LINES AS SHOWN ARE A REPRESENTATION OF THE DEEDED BOUNDARIES BASED ON THE OPERATIVE RECORDS AND THE LIMITED BOUNDARY EVIDENCE FOUND IN THE FIELD. UNWRITTEN RIGHTS MAY APPLY WHERE LINES OF OCCUPATION DIFFER FROM THE BOUNDARY LINES AS SHOWN. LAND OWNER SHOULD CONSULT WITH AN ATTORNEY PRIOR TO DEVELOPMENT NEAR LINES OF OCCUPATION.
- PARCEL AREAS AND THE SETBACKS ALONG THE WESTERLY BOUNDARY LINES ARE BASED ON A LINE ESTABLISHED FROM PHYSICAL EVIDENCE SUCH AS STONE WALLS AND FENCES AS THE LIMITS OF OCCUPATION FOR THE SUBJECT AND ABUTTING PARCELS.
- 3. PER DISCUSSION WITH LINDA TUTTLE ON 6/5/23, AT THE TIME SHE ERECTED HER FENCE 20+ YEARS AGO THE ABUTTER OF OUR SUBJECT PARCEL INDICATED THE COMMON LOT LINE SPLIT THE MAPLE TREE SHOWN. ATTEMPTS TO REACH THE OWNERS OF TAX MAP 9, LOT 36 AND LOT 43 VIA CERTIFIED MAIL AND PHONE WERE UNSUCCESSFUL
- 4. THE DEED FOR LOT 38, Y.C.R.D. BOOK 4993, PAGE 227 HAS AN ERROR IN CLOSURE OF 11.98'.
- <u>REFERENCE PLANS:</u> I. "STANDARD BOUNDARY SURVEY PREPARED FOR PHYLLIS F. GRAY, WENTWORTH STREET, KITTERY, MAINE" DATED JULY 1997 BY ANDERSON LIVINGSTON ENGINEERS, INC. FILE NO. 5771, PLAN NO. 1505.970701 (NOT RECORDED)
- "STATE OF MAINE DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS RIGHT OF WAY MAP, STATE HIGHWAY "100" KITTERY, YORK COUNTY FEDERAL AID PROJECT NO. M-4220(I) & M-4220(2)" DATED MAY 1981 Y.C.R.D. PLANS 139-57 & 58.
- "PLAN SHOWING PORTION OF PROPERTY OF GERTRUDE P. WILSON TO BE CONVEYED TO GEORGE B. LANDERS. LOCATED IN KITTERY, YORK COUNTY, ME." DATED APRIL 9, 1954 BY MOULTON ENGINEERING CO. Y.C.R.D. PLAN 25–22.
- "PLAN SHOWING PROPERTY OF GEORGE S. WOOD, LOCATED IN KITTERY, YORK COUNTY, ME", DATED AUGUST 1953, BY MOULTON ENGINEERING CO., Y.C.R.D. PLAN 25-9.
- "PLAN SHOWING DIVISION OF ANDREW'S ELECTRICAL SHOP, INC. AND EMILE H. LEBEL, JR. & WILLETTA J. LEBEL, KITTERY, YORK COUNTY, ME", DATED AUGUST 1956, BY MOULTON ENGINEERING CO., Y.C.R.D. PLAN 21-20.
- "STANDARD BOUNDARY SURVEY OF THE RICE PUBLIC LIBRARY LOT, WENTWORTH ST. & TRAIP AVE. KITTERY, MAINE" DATED JAN. 18, 1981 BY EASTERLY SURVEYING Y.C.R.D. PLAN 201-11.
- "STATE OF MAINE DEPARTMENT OF TRANSPORTATION RIGHT OF WAY MAP, "ROGERS ROAD" KITTERY, YORK COUNTY, FEDERAL AID PROJECT NO. M-STP-4215(2)" DATED MARCH 1993 SHEET 1 OF 6 Y.C.R.D. PLAN 269-6.
- "STANDARD BOUNDARY SURVEY FOR PROPERTY AT 17 WENTWORTH STREET, KITTERY, YORK COUNTY, MAINE, OWNED BY EDMUND K. ARNOLD & BYONG HWAN KIM", BY NORTHEASTERLY SURVEYING, INC., DATED JULY 31, 2003, Y.C.R.D. PLAN 284-24.
- "STANDARD BOUNDARY AND TOPOGRAPHIC SURVEY, OF LAND OF THE ROMAN CATHOLIC BISHOP OF PORTLAND, ST. RAPHAEL'S CHURCH, WENTWORTH ST. & WHIPPLE RD., KITTERY, MAINE" DATED 2/21/2001 BY CIVIL CONSULTANTS (NOT RECORDED).
- D. "LAND IN KITTERY, MAINE, YORK HARBOR & BEACH R.R. CO. TO BOSTON & MAINE R.R.", DATED APRIL 1927, Y.C.R.D. PLAN 10-69.
- . "PLAN OF HOUSE LOTS IN KITTERY MAINE OWNED BY ROBERT M. OTIS & CAROLINE L. LOCKE", BY MOSES A. SAFFORD, DATED JUNE 27, 1870, Y.C.R.D. PLAN 1-72.
- . "CENTERLINE SURVEY FOR A DRAINAGE EASEMENT AND PERIMETER SURVEY FOR 1.4 ACRE ACQUISITION, NAVAL SHIPYARD, PORTSMOUTH, NH." DATED OCT. 23, 1998 BY OAK POINT ASSOCIATES (NOT RECORDED).
- 3. "RIGHT OF WAY AND TRACK MAP (FORMERLY YORK BARBOR & BEACH R.R. CO.) BOSTON AND MAINE R.R., OPERATED BY THE BOSTON AND MAINE R.R., STATION 0+00 TO STATION 52+80", DATED JUNE 30, 1914, BY THE OFFICE OF VALUATION ENGINEER, BOSTON, MASS (NOT RECORDED).
- . "REVISED SEWER EASEMENT, KITTERY MAP 9, LOT 38", DATED MARCH 22, 1991, BY ANDERSON LIVINGSTON, (NOT RECORDED).





## I EGEND

	• EXISTING LOT LINE
	PROPOSED LOT LINE
	LOT LINE TO BE ABANDONED
•••••	•BUILDING SETBACK LINE
	- APPROXIMATE ABUTTERS LOT LINE
$\cdot \infty \infty$	STONE WALL
$\cdot$ 0 00 0	REMNANT STONE WALL
	RETAINING WALL
	STOCKADE FENCE
v	- PICKET FENCE
	- POST & RAIL FENCE
X	- WIRE FENCE
s	- SEWER LINE
Ø	FENCE POST
S	SEWER MANHOLE
CONC.	CONCRETE
DS	DOWN SPOUT
DYL	DOUBLE YELLOW LINE
EG	EDGE OF GRAVEL
GRAN.	GRANITE
RET. WALL	RETAINING WALL
VGC	VERTICAL GRANITE CURB
0	PIPE/ROD FOUND
Ē	5/8 <sup>*</sup> REBAR W/ID CAP TO BE SET



LOCATION MAP (n.t.s.)

## REFERENCE PLANS:

- 1. "PLAN OF LAND FOR MADBURY REAL ESTATE VENTURES, OF TAX MAP 9, LOTS 37 & 38, 27 & 29 WENTWORTH STREET, KITTERY, MAINE", BY DOUCET SURVEY LLC, DATED JUNE 15, 2023, Y.C.R.D. PLAN BOOK 433, PLAN 3.
- 2. "STATE OF MAINE DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS RIGHT OF WAY MAP, STATE HIGHWAY "100" KITTERY, YORK COUNTY FEDERAL AID PROJECT NO. M-4220(I) & M-4220(2)" DATED MAY 1981 Y.C.R.D. PLANS 139-57 & 58.
- SEE ADDITIONAL REFERENCE PLANS LISTED ON REFERENCE PLAN 1.

## NOTES: 1. REFERENCE:

- TAX MAP 9, LOTS 37 & 38 27 & 29 WENTWORTH STREET KITTERY, MAINE
- 2. TOTAL PARCEL AREA: (SEE NOTE 8) LOT 37 = 8,319 SQ. FT. OR 0.19 AC. LOT 38 = 13,389 SQ. FT. OR 0.31 AC.
- 3. OWNERS OF RECORD: TAX MAP 9, LOT 37 (27 WENTWORTH STREET) 27 WENTWORTH STREET, LLC 401 EDGEWATER PLACE, SUITE 570 WAKEFIELD, MA 01880 Y.C.R.D. BOOK 19297, PAGE 823

TAX MAP 9, LOT 38 (29 WENTWORTH STREET) MREV KITTERY INN, LLC 401 EDGEWATER PLACE, SUITE 570 WAKEFIELD, MA 01880 Y.C.R.D. BOOK 19297, PAGE 853

- 4. FIELD SURVEY PERFORMED BY J.P.E. & S.N.F. (DOUCET SURVEY) DURING ON APRIL 4, 2023 USING A TOTAL STATION AND A SURVEY GRADE GPS WITH A DATA COLLECTOR AND A DIGITAL LEVEL. TRAVERSE ADJUSTMENT BASED ON LEAST SQUARE ANALYSIS.
- 5. HORIZONTAL DATUM BASED ON NAD83(2011) MAINE WEST STATE PLANE COORDINATE ZONE (1802) DERIVED FROM REDUNDANT GPS OBSERVATIONS UTILIZING THE KEYNET GPS VRS NETWORK.
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- 10. THE DEED FOR LOT 38, Y.C.R.D. BOOK 4993, PAGE 227 HAS AN ERROR IN CLOSURE OF 11.98'.

Image: plan approved BY town of KITERY Planning Board         Image: plan approved by town of KITERY Planning Board         Image: plan approved by town of KITERY Planning Board         Image: plan approved by town of KITERY Planning Board         Image: plan approved by town of KITERY Planning Board         Image: plan approved by town of KITERY Planning Board         Image: plan approved by town of KITERY Line applications and the stream applications and town of KITERY Line applications and town of KITERY Line applications for app							
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MIN. OPEN SPACE ON SITE       40%         *SEE TOWN OF KITTERY LAND USE ZONE       *SEE TOWN OF KITTERY LAND USE ZONE         REGULATIONS FOR ADDITIONAL DIMANSIONAL       DIMANSIONAL         BY       M.T.L.       DATE: NOVEMBER 21, 2023         BY       M.W.F.       DRAWING NO.         BY       M.W.F.       DRAWING NO.         BY       8036       SHEET       1         JOB NO.       8036       SHEET       1	UP 1" NO CAP	MAX. BUILDING HEIGH	IT 40 FT. RAGE 60 %	2	27 & 29 WENTW	ORTH STRE	ET
*SEE TOWN OF KITTERY LAND USE ZONE REGULATIONS FOR ADDITIONAL DIMANSIONAL REQUIREMENTS.		MIN. OPEN SPACE OI	N SITE 40%		KITTERY	, MAINE	
DRAWN BY:       M.T.L.         DRAWN BY:       M.T.L.         DATE:       NOVEMBER 21, 2023         CHECKED BY:       M.W.F.         DRAWING NO.       8036C         JOB NO.       8036         SHEET       1         OF       0         Mttp://www.doucetsurvey.com		*SEE TOWN OF KITTE REGULATIONS FOR AE REQUIREMENTS.	RY LAND USE ZONE DDITIONAL DIMANSIONAL				°FT
DRAWN BY:       M.T.L.       DATE:       NOVEMBER 21, 2023         DRAWN BY:       M.W.F.       DATE:       NOVEMBER 21, 2023         CHECKED BY:       M.W.F.       DRAWING NO.       8036C         DRAWN BY       M.W.F.       DRAWING NO.       8036C         DB NO.       8036       SHEET       1       0F			-				
Image: March of the checked by:     M.W.F.     M.W.F.     8036C     Serving Your Professional Surveying & Mapping Needs       Image: BY     JOB NO.     8036     BHEET     0F     102 Kent Place, Newmarket, NH 03857 (603) 659-6560       Image: BY     JOB NO.     8036     SHEET     0F     1	DRAWN E	<sub>BY:</sub> M.T.L.	DATE: NOVEMBER 21,	2023		SURV	′ <b>EY</b> ≌
BY JOB NO. 8036 SHEET OF 1 OF 1 Offices in Bedford & Keene, NH and Kennebunk, ME http://www.doucetsurvey.com	CHECKE	<sub>DBY:</sub> M.W.F.	DRAWING NO. 8036	C Serv 102	ing Your Profession Kent Place, Newma	nal Surveying & arket, NH 03857	Mapping Needs (603) 659-6560
	BY JOB NO.	8036	SHEET 1 OF	0ff	ices in Bedford & K http://www	eene, NH and K .doucetsurvey.co	ennebunk, ME om



## **DEMOLITION NOTES**

1. ALL UNDERGROUND UTILITIES (ELECTRIC, GAS, TEL. WATER, SEWER DRAIN SERVICES) ARE SHOWN IN SCHEMATIC FASHION, THEIR LOCATIONS ARE NOT PRECISE OR NECESSARILY ACCURATE. NO WORK WHATSOEVER SHALL BE UNDERTAKEN USING THIS PLAN TO LOCATE THE ABOVE SERVICES. CONSULT WITH THE PROPER AUTHORITIES CONCERNED WITH THE SUBJECT SERVICE LOCATIONS FOR INFORMATION REGARDING SUCH. CALL DIG-SAFE AT 1-888-DIG-SAFE.

 DEMOLITION PERMIT REQUIRED PRIOR TO ANY BUILDING DEMOLITION ACTIVITIES. CONTRACTOR IS NOTIFIED THAT THIS PERMIT PROCESS MAY REQUIRE A 30-DAY LEAD TIME.

3. CONTRACTOR SHALL PRESERVE AND PROTECT ALL EXISTING UTILITIES SCHEDULED TO REMAIN.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE TIMELY NOTIFICATION OF ALL PARTIES, CORPORATIONS, COMPANIES, INDIVIDUALS AND STATE AND LOCAL AUTHORITIES OWNING AND/OR HAVING JURISDICTION OVER ANY UTILITIES RUNNING TO, THROUGH OR ACROSS AREAS TO BE DISTURBED BY DEMOLITION AND/OR CONSTRUCTION ACTIVITIES WHETHER OR NOT SAID UTILITIES ARE SUBJECT TO DEMOLITION, RELOCATION, MODIFICATION AND/OR CONSTRUCTION.

5. ALL UTILITY DISCONNECTIONS/DEMOLITIONS/RELOCATIONS SHALL BE COORDINATED BETWEEN THE CONTRACTOR, ALL APPROPRIATE UTILITY COMPANIES, KITTERY DPW AND ABUTTING PROPERTY OWNERS. UNLESS OTHERWISE SPECIFIED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELATED EXCAVATION, TRENCHING AND BACKFILLING.

6. WHERE SPECIFIED TO REMAIN, MANHOLE RIMS, CATCH BASIN GRATES, VALVE COVERS, HANDHOLES, ETC. SHALL BE ADJUSTED TO FINISH GRADE UNLESS OTHERWISE SPECIFIED.

7. ALL MATERIALS SCHEDULED FOR DEMOLITION OR REMOVAL ON PRIVATE PROPERTY SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE SPECIFIED.

8. ALL MATERIAL SCHEDULED TO BE REMOVED SHALL BE LEGALLY DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS/CODES.

9. NO BURNING SHALL BE PERMITTED PER LOCAL REGULATIONS.

10. HAZARDOUS MATERIALS ENCOUNTERED DURING DEMOLITION AND CONSTRUCTION ACTIVITIES SHALL BE ABATED IN STRICT ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL REGULATIONS.

11. EXISTING UTILITIES TO BE DISCONTINUED SHALL BE ABANDONED IN PLACE UNLESS OTHERWISE NOTED TO BE REMOVED OR ENCOUNTERED DURING THE INSTALLATION OF NEW WORK.

12. SHOULD GROUNDWATER BE ENCOUNTERED DURING EXCAVATION, APPROPRIATE BEST MANAGEMENT PRACTICES SHALL BE EMPLOYED TO ENSURE SEDIMENT LADEN WATER IS NOT DISCHARGED INTO THE TOWN DRAINAGE SYSTEM. A DISCHARGE PERMIT SHALL BE OBTAINED PRIOR TO DISCHARGING GROUNDWATER.

13. THIS PLAN IS INTENDED TO PROVIDE MINIMUM GUIDELINES FOR THE DEMOLITION OF EXISTING SITE FEATURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL BUILDINGS, PAVEMENT, CONCRETE, CURBING, SIGNS, POLES, UTILITIES, FENCES, VEGETATION AND OTHER EXISTING FEATURES AS NECESSARY TO FULLY CONSTRUCT THE PROJECT.

14. LOCATION OF EXISTING SEWER SERVICES ARE BASED ON TIES SHEETS PROVIDED BY KITTERY SEWER DISTRICT. SERVICES SHALL BE REUSE. LOCATIONS SHALL BE FIELD VERIFIED DURING CONSTRUCTION.

EGEND	
	EXISTING LOT LINE BUILDING SETBACK LINE APPROX ABUTTERS LOT LINE
— — 40 — — - — — 39 — — —	MAJOR CONTOUR LINE MINOR CONTOUR LINE
	REMNANT STONE WALL RETAINING WALL
00 v	STOCKADE FENCE PICKET FENCE POST & RAIL FENCE
X OHW S	WIRE FENCE OVERHEAD WIRE SEWER LINE
	TREE LINE SHRUB LINE
	CONCRETE
	PILE
	LEDGE OUTCROP
	PIPE/ROD FOUND 5/8" REBAR W/ID CAP TO BE SET
× 38.1 Ø	SPOT GRADE FENCE POST WOODEN POST
 ©	POST
م ج پ	UTILITY POLE & GUY WIRE UTILITY POLE W/LIGHT LIGHT POST
S XX XO	SEWER MANHOLE WATER GATE VALVE WATER SHUTOFF VALVE
	FAUCET ELECTRIC METER CONIFEROUS TREE
0 37407 M 1962	DECIDUOUS TREE
$\langle \phi \rangle$	DECIDUOUS BUSH
M	TREE STUMP
CONC. DS DYL EOG	CONCRETE DOWN SPOUT DOUBLE YELLOW LINE EDGE OF GRAVEL
GRAN. OFC PVC	GRANITE OIL FILL CAP POLYVINYL CHLORIDE PIPE
RD RET. WALL TH	ROOF DRAIN RETAINING WALL THRESHOLD ELEVATION
TMB VCP VGC	TIMBER EDGE / CURB VITREOUS CLAY PIPE VERTICAL GRANITE CURB
TBR	TO BE REMOVED/RAZED SEWER EASEMENT





S:						
E:	TAX MAP 9, LOT 27 & 29 WENTW	S 37 & 38 /ORTH STREET				
ARCEL AREA:	KITTERY, MAINE LOT $37 = 8,31$	9 SQ. FT. OR	0.19 AC.		ΔΤΤΤ	7
OF RECORD:	DRD: LOT 37 (27 WENTWORTH STREET) 27 WENTWORTH STREET, LLC 401 EDCEWATER PLACE SUITE 570					RING
	401 EDGEWATER WAKEFIELD, MA ( DEED BOOK 192	PLACE, SUITE 01880 97 PAGE 823 NTWORTH STRE	570 ET)		133 Court Street         Portsr           (603) 433-2335         www	nouth, NH 03801 7.altus-eng.com
	MREV KITTERY IN 401 EDGEWATER WAKEFIELD, MA (	IN, LLC PLACE, SUITE 01880	570			
	MIXED LISE - KI	TTERY FORES			STATE OF M	SAL DE CONTRACTOR
IAL REQUIREMENTS	S: <u>LOT</u>	<u>37</u> PROPOSED		38 PROPOSED	ERIC D. WEINRIEL	8
AREA 5,00 ITAGE 0	0 SF 8,319 SF 2 ±86.46'	10,792 SF ±96.16' ±11.0'	13,389 SF ±96.50' ±36'	10,916 SF ±86.80' ±36'	No. 6655	
SETBACK 10 SETBACK 10 SETBACK 10	$-\pm 3.2'$ $\pm 4.1'$	±11.0' >50'	±30' >50'	±30' >50'	ESSIONAL IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Englithin (
G. COVERAGE 60 G. HEIGHT 40 N SPACE 40	1% ±9.4% 0' – 1% ±60.8%	±13.9% <40' 40.6%	±13.0% _ ±54.0%	±15.6% <40' 40.1%		X
REQ.S: 1 SPACES	S PER GUEST ROO	DM (NOT INCL	UDING INNKEE	PER UNIT)	LO1	
18 SPACE 16 SPACE	ES REQ'D ES PROVIDED				NOT FOR CONST	RUCTION
K SHALL BE PER	FORMED IN ACCOF ED FOR THIS PRO	RDANCE WITH JECT.	LOCAL, STATE	, AND	ISSUED FOR: FINAL	
CTOR SHALL OBTA	AIN A "DIGSAFE" N ON.	NUMBER AT LE	AST 72 HOUF	RS PRIOR TO	ISSUE DATE:	ATTROVAL
ISLANDS SHALL E /IDE WHITE LINES. NES SEE DETAIL	BE 4"-WIDE DIAGO PARKING STALLS	NAL WHITE LI	NES 3'-0" 0.0 EPARATED BY	C. BORDERED 4"-WIDE	NOVEMBER	22, 2023
IT MARKINGS AND	SIGNS SHALL CO	NFORM TO TH	E REQUIREMEN	NTS OF THE	REVISIONS NO. DESCRIPTION	BY DATE
ND PAVEMENT MAP EDITIONS.	RKINGS" AND THE	AMERICANS W	ITH DISABILITI	ES ACT (ADA),	0 INITIAL SUBMISSION 1 TOWN COMMENTS 2 TOWN COMMENTS	EDW 08/2/4/23 EDW 10/05/23 EDW 11/03/23
ED TELEPHONE, EL ED UNDERGROUND.	LECTRIC AND CABI	LE SERVICES	AND CONDUITS	S SHALL BE	3 FINAL APPROVAL COMMENT	TS EDW 11/22/23
ALL BE SERVED E	BY KITTERY WATEF	R DISTRICT WA	TER AND KIT	IERY SEWER		
LATED SNOW WILL AS NOT TO HIND ONTO ABUTTING I	. BE PLOWED TO / DER SIGHT LINES A PROPERTY NOR S	AREAS ADJACH AT INTERSECTIO TORED WITHIN	ENT TO PAVEN ON. NO SNO 5' OF SHRUB	MENT IN A W SHALL BE IS AND TREES.		
SNOW SHALL BE	HAULED OFF-SITE	, AS NEEDED. ) MAINE WEST	STATE PLANE	E COORDINATE	DRAWN BY:	<u> </u>
NETWORK.	OM REDUNDANT G	E NAVD88(CEC	(0NS UTILIZING)	DERIVED FROM	DRAWING FILE:	5431SITE.dwg
ANT GPS OBSERVA	TIONS UTILIZING T	HE KEYNET G	PS VRS NETW	ORK.	<u>SCALE:</u> (22"×34")	1" – 10'
AZARD ZONE: X, PER FIRM MAP #2301710008D, DATED 7/3/1986 AND IS HIN A 100-YEAR FLOOD ZONE.				(11"x17")	1" = 10 1" = 20'	
ECHANICAL UNITS	LOCATION TO BE	DETERMINED.	FICKUPS.		OWNERS:	
ANDS FOUND ON	SITE.	ING DIMENSION	NS WITH THE		27 WENTWORTH S	TREET, LLC
CTURAL AND STRU ANCIES SHALL BE	UCTURAL PLANS F IMMEDIATELY BRO	PRIOR TO CON DUGHT TO THE	STRUCTION.	ALL OF THE	& MREV KITTERY	INN, LLC
AREA SHOWN IS	BASED ON FOOT	" PRINT MEASUR TERIOR SPACE	RED TO THE E	DGE OF	401 EDGEWATER	? PLACE,
ACTUAL INTERIOR SPACE WILL DIFFER.					SUITE 57	0
AL WAY FINDING	SIGN(S) WILL BE	ADDED, AS NE	EDED.		WAKEFIELD, MA	01880
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CONTACT MDOT F AN KEEZER NE DOT	OR SCHEDULE.				MADBURY REAL	ESTATE
STATE HOUSE STA GUSTA, ME 04333 L: (207) 462–06	ATION —0016 \$97				VENIURE	
NIL: BRAÍN.KEEZER N SHALL HAVE AN	@MAINE.GOV	IITE.			SUITE 57	'0
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:3 BUSIN 1.C.3.a 6" UN	NESS SIGN LOCATE NDERDRAIN PIPES,	D WITHIN 33' WHERE 12"	SETBACK REQUIRED		THE FORES	DE INN
RENCE:						29
23, 2023, PREP	PARED BY DOUCET	SURVEY, LLC	JRES, REVISIC	JN DATE	LOTS 37 8	£ 38
					27 & 29 WENTWOR KITTERY, M	TH STREET AINE
[					<u>TITLE:</u>	
TOWN	N OF KITTE	ERY, PLA	NNING E	BOARD		
CHAIR DATE					SITE PLAN	
<u> </u>	OWNER		DA	TE	SHEET NUMBER:	
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## EROSION AND SEDIMENT CONTROL NOTES:

1. DO NOT BEGIN CONSTRUCTION UNTIL ALL STATE AND LOCAL PERMITS HAVE BEEN APPLIED FOR AND RECEIVED.

2. THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE AND ARE BASED UPON THE FIELD LOCATION OF ALL VISIBLE STRUCTURES (IE. CATCH BASINS, MANHOLES, WATER GATES, ETC.) AND INFORMATION COMPILED FROM PLANS PROVIDED BY UTILITY PROVIDERS AND GOVERNMENTAL AGENCIES. AS SUCH, THEY ARE NOT INCLUSIVE AS OTHER UTILITIES AND UNDERGROUND STRUCTURES THAT ARE NOT SHOWN ON THE PLANS MAY EXIST. THE ENGINEER, SURVEYOR AND OWNER ACCEPT NO RESPONSIBILITY FOR POTENTIAL INACCURACIES IN THE PLAN AND/OR UNFORESEEN CONDITIONS.

3. PERIMETER SEDIMENT CONTROLS AND CULVERT AND CATCH BASIN INLET PROTECTION MEASURES SHALL BE INSTALLED AFTER TREE CLEARING OPERATIONS HAVE CEASED AND BEFORE ANY STUMPING, GRUBBING OR OTHER EARTH DISTURBANCE.

4. NO EARTHWORK SHALL COMMENCE UNTIL ALL APPROPRIATE SEDIMENT AND EROSION CONTROL MEASURES HAVE BEEN INSTALLED. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE PROPERLY MAINTAINED IN GOOD WORKING ORDER FOR THE DURATION OF CONSTRUCTION AND THE SITE IS STABILIZED.

5. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH THE DESIGN STANDARDS AND SPECIFICATIONS SET FORTH BY THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

6. CONTRACTOR SHALL CONTROL DUST BY SPRAYING WATER, SWEEPING PAVED SURFACES, PROVIDING TEMPORARY VEGETATION, AND/OR MULCHING EXPOSED AREAS AND STOCKPILES.

7. GRIND STUMPS AND REUSE GRINDINGS FOR EROSION CONTROL WHERE POSSIBLE. NO STUMPS SHALL BE BURIED ON SITE.

8. ORGANIC FILTER BERMS AND/OR OTHER PERIMETER CONTROLS MAY BE USED IN LIEU OF SILTFENCE IN CERTAIN APPLICATIONS WHEN APPROVED IN WRITING BY THE ENGINEER.

9. THE CONTRACTOR SHALL TAKE WHATEVER MEANS NECESSARY TO PREVENT EROSION, PREVENT SEDIMENT FROM LEAVING THE SITE AND ENSURE PERMANENT SOIL STABILIZATION.

10. ALL CATCH BASINS AND CULVERTS SHALL BE PROVIDED APPROPRIATE TEMPORARY INLET PROTECTION (SEE DETAILS).

11. ALL EROSION CONTROL BLANKETS AND FASTENERS SHALL BE

12. ALL EROSION CONTROL BLANKETS SHALL BE BY NORTH AMERICAN GREEN OR EQUAL AS APPROVED IN WRITING BY THE ENGINEER.

13. ALL SWALES, STORMWATER PONDS AND THEIR CONTRIBUTING AREAS SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.

14. ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE SIX (6") INCHES OF LOAM, LIMESTONE, FERTILIZER, SEED, AND MULCH USING APPROPRIATE SOIL STABILIZATION TECHNIQUES. SEE DETAILS FOR ADDITIONAL INFORMATION.

15. UPON COMPLETION OF CONSTRUCTION, ALL DRAINAGE INFRASTRUCTURE SHALL BE CLEANED OF ALL DEBRIS AND SEDIMENT.

16. UPON COMPLETION OF CONSTRUCTION, ALL TEMPORARY EROSION AND SEDIMENT CONTROLS SHALL BE REMOVED AND ANY AREAS DISTURBED BY THE REMOVAL SMOOTHED AND REVEGETATED.

## TEST PIT LOGS:

ESHWT: 36" REFUSAL: NONE OBSERVED WATER: 60" ESHWT: NONE REFUSAL 5"-32" RIPABLE OBSERVED WATER: NONE ESHWT: NONE REFUSAL: 40"-64" OBSERVED WATER: NONE ESHWT: NONE REFUSAL: 26"-40" OBSERVED WATER: NONE ESHWT: NONE REFUSAL: 55" OBSERVED WATER: NONE ESHWT: NONE 56" REFUSAL: OBSERVED WATER: NONE ESHWT: NONE REFUSAL: 6" RIPABLE OBSERVED WATER: NONE ESHWT: NONE 16" RIPABLE REFUSAL:

OBSERVED WATER: NONE NONE ESHWT: REFUSAL: 9" RIPABLE

OBSERVED WATER: NONE ESHWT: NONE

20"–53" RIPABLE REFUSAL: OBSERVED WATER: NONE

- —34— — — —	EXISTING CONTOUR
34	PROPOSED CONTOUR
TP #1	EXISTING TEST PIT
— PD ———	PROPOSED 6" CPE DRAIN
— UD ———	PROPOSED 6" PERF. UNDERDRAIN
— RL ———	PROPOSED 6" CPE ROOF LEADER
000	PROPOSED 6" CLEANOUT





1. DO NOT BEGIN CONSTRUCTION UNTIL ALL STATE AND LOCAL PERMITS HAVE BEEN APPLIED FOR AND RECEIVED.

2. CONTRACTOR SHALL OBTAIN A "DIGSAFE" NUMBER AT LEAST 72 HOURS PRIOR TO COMMENCING CONSTRUCTION.

3. ALL CONSTRUCTION SHALL MEET THE MINIMUM CONSTRUCTION STANDARDS OF THE TOWN OF KITTERY AND MDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION. THE MORE STRINGENT SPECIFICATION SHALL GOVERN.

4. UNLESS OTHERWISE AGREED IN WRITING, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING TEMPORARY BENCHMARKS (TBM) AND PERFORMING ALL CONSTRUCTION SURVEY

5. PRIOR TO CONSTRUCTION, FIELD VERIFY JUNCTIONS, LOCATIONS AND ELEVATIONS/INVERTS OF ALL EXISTING STORMWATER AND UTILITY LINES. PRESERVE AND PROTECT LINES TO BE RETAINED.

6. ALL BENCHMARKS AND TOPOGRAPHY SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO INITIATING CONSTRUCTION.

7. TEMPORARY INLET PROTECTION MEASURES SHALL BE INSTALLED IN ALL EXISTING AND PROPOSED CATCH BASINS WITHIN 100' OF THE PROJECT SITE WHEN SITE WORK WITHIN CONTRIBUTING AREAS IS ACTIVE OR SAID AREAS HAVE NOT BEEN STABILIZED.

PROTECTION OF SUBGRADE: THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN STABLE, DEWATERED SUBGRADES FOR FOUNDATIONS, PAVEMENT AREAS, UTILITY TRENCHES, AND OTHER AREAS DURING CONSTRUCTION. SUBGRADE DISTURBANCE MAY BE INFLUENCED BY EXCAVATION METHODS, MOISTURE, PRECIPITATION, GROUNDWATER CONTROL, AND CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL TAKE PRECAUTIONS TO PREVENT SUBGRADE DISTURBANCE. SUCH PRECAUTIONS MAY INCLUDE DIVERTING STORMWATER RUNOFF AWAY FROM CONSTRUCTION AREAS, REDUCING TRAFFIC IN SENSITIVE AREAS, AND MAINTAINING AN EFFECTIVE DEWATERING PROGRAM. SOILS EXHIBITING HEAVING OR INSTABILITY SHALL BE OVER EXCAVATED TO MORE COMPETENT BEARING SOIL AND REPLACED WITH FREE DRAINING STRUCTURAL FILL. IF THE EARTHWORK IS PERFORMED DURING FREEZING WEATHER, EXPOSED SUBGRADES ARE SUSCEPTIBLE TO FROST. NO FILL OR UTILITIES SHALL BE PLACED ON FROZEN GROUND. THIS WILL LIKELY REQUIRE REMOVAL OF A FROZEN SOIL CRUST AT THE COMMENCEMENT OF EACH DAY'S OPERATIONS. THE FINAL SUBGRADE ELEVATION WOULD ALSO REQUIRE AN APPROPRIATE DEGREE OF INSULATION

IF SUITABLE, EXCAVATED MATERIALS SHALL BE PLACED AS FILL WITHIN UPLAND AREAS ONLY AND SHALL NOT BE PLACED WITHIN WETLANDS. PLACEMENT OF BORROW MATERIALS SHALL BE PERFORMED IN A MANNER THAT PREVENTS LONG TERM DIFFERENTIAL SETTLEMENT. EXCESSIVELY WET MATERIALS SHALL BE STOCKPILED AND ALLOWED TO DRAIN BEFORE PLACEMENT. FROZEN MATERIAL SHALL NOT BE USED FOR CONSTRUCTION.

10. BLASTING OPERATIONS, IF REQUIRED, SHALL MEET THE AIR BLAST STANDARDS OF THE MDEP RULES, CHAPTER 375.10(C)(4)(C). GROUND VIBRATION AT STRUCTURES NOT OWNED OR CONTROLLED BY THE OWNER MUST BE NO GREATER THAN THE FREQUENCY-DEPENDENT LIMITS DEFINED IN FIGURE B-1 OF APPENDIX B, U.S. BUREAU OF MINES RI 8507. FLYROCK MAY NOT LEAVE PROPERTY OWNED OR CONTROLLED BY THE OWNER OR ENTER A PROTECTED RESOURCE.

DRAINAGE PIPE SHALL BE CORRUGATED POLYETHYLENE PIPE (CPP), TYPE ADS N-12 OR HANCOR H1-Q, OR DUCTILE IRON CLASS 52 WHERE

12. ALL CATCH BASIN, MANHOLE AND OTHER DRAINAGE RIMS SHALL BE SET FLUSH WITH OR NO LESS THAN 0.1' BELOW FINISH GRADE. ANY RIM ABOVE SURROUNDING FINISH GRADE SHALL NOT BE ACCEPTED.

13. ALL SPOT GRADES ARE AT FINISH GRADE AND BOTTOM OF CURB WHERE

14. ALL ROOF DRAIN RISERS SHALL BE LOCATED IN COORDINATION WITH THE ARCHITECTURAL PLANS TO MATCH GUTTER DOWNSPOUTS. RISERS SHALL BE SET TO FINISH GRADE PLUS 1' (MIN.).

15. IN ORDER TO PROVIDE VISUAL CLARITY ON THE PLANS, DRAINAGE AND OTHER UTILITY STRUCTURES MAY NOT BE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER SIZING AND LOCATION OF ALL STRUCTURES AND IS DIRECTED TO RESOLVE ANY POTENTIAL DISCREPANCY WITH THE ENGINEER PRIOR TO CONSTRUCTION.

16. WORK HOURS FOR CONSTRUCTION SHALL BE AS APPROVED BY TOWN OF KITTERY. STANDARD WORK HOURS SHALL BE 7AM TO 7PM, MONDAY -

EXISTING CONTOUR PROPOSED CONTOUR EXISTING SPOT GRADE PROPOSED SPOT GRADE ROW SIDEWALK ELEV. (APPROX.) PROP. TOP / BOTTOM OF WALL





## UTILITY NOTES:

THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE AND ARE BASED UPON THE FIELD LOCATION OF ALL VISIBLE STRUCTURES (IE. CATCH BASINS, MANHOLES, WATER GATES, ETC.) AND INFORMATION COMPILED FROM PLANS PROVIDED BY UTILITY PROVIDERS AND GOVERNMENTAL AGENCIES. AS SUCH, THEY ARE NOT INCLUSIVE AS OTHER UTILITIES AND UNDERGROUND STRUCTURES THAT ARE NOT SHOWN ON THE PLANS MAY EXIST. THE ENGINEER, SURVEYOR AND OWNER ACCEPT NO RESPONSIBILITY FOR POTENTIAL INACCURACIES IN THE PLAN AND/OR UNFORESEEN CONDITIONS. THE CONTRACTOR SHALL NOTIFY, IN WRITING, SAID AGENCIES, UTILITY PROVIDERS, TOWN OF KITTERY DPW AND OWNER'S AUTHORIZED REPRESENTATIVE AND CALL DIG SAFE AT 1 (800) DIG-SAFE AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO ANY EXCAVATION WORK.

PRIOR TO CONSTRUCTION, IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND FIELD VERIFY JUNCTIONS, LOCATIONS AND ELEVATIONS/INVERTS OF ALL EXISTING AND PROPOSED STORMWATER AND UTILITY LINES. CONFLICTS SHALL BE ANTICIPATED AND ALL EXISTING LINES TO BE RETAINED SHALL BE PROTECTED. ANY DAMAGE DONE TO EXISTING UTILITIES SHALL BE REPAIRED AND, IF NECESSARY, EXISTING UTILITIES SHALL BE RELOCATED AT NO EXTRA COST TO THE OWNER. ALL CONFLICTS SHALL BE RESOLVED WITH THE INVOLVEMENT OF THE ENGINEER, DPW AND APPROPRIATE UTILITIES.

ALL CONSTRUCTION SHALL MEET THE MINIMUM CONSTRUCTION STANDARDS OF THE TOWN OF KITTERY AND MDOT STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, LATEST EDITION. THE MORE STRINGENT SPECIFICATION SHALL GOVERN.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE POSTING OF ALL BONDS AND PAYMENT OF ALL TAP, TIE-IN AND CONNECTION FEES.

5. IF REQUIRED, ALL ROAD/LANE CLOSURES OR OTHER TRAFFIC INTERRUPTIONS SHALL BE COORDINATED WITH THE KITTERY POLICE DEPARTMENT, DPW, MDOT AND ABUTTING PROPERTY OWNERS (WHERE APPROPRIATE) AT LEAST TWO WEEKS PRIOR TO COMMENCING RELATED CONSTRUCTION.

ALL TRENCHING, PIPE LAYING AND BACKFILLING SHALL CONFORM TO FEDERAL OSHA AND CITY REGULATIONS.

CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRENCHING, BEDDING, BACKFILL & COMPACTION FOR ALL UTILITY TRENCHING IN ADDITION TO ALL CONDUIT INSTALLATION AND COORDINATION OF ALL REQUIRED INSPECTIONS.

DETECTABLE WARNING TAPE SHALL BE PLACED OVER THE ENTIRE LENGTH OF ALL BURIED UTILITIES, COLORS PER THE RESPECTIVE UTILITY PROVIDERS.

SEE ARCHITECTURAL/MECHANICAL DRAWINGS FOR EXACT LOCATIONS & ELEVATIONS OF UTILITY CONNECTIONS AT BUILDING. COORDINATE ALL WORK WITHIN FIVE (5) FEET OF BUILDINGS WITH BUILDING CONTRACTOR AND ARCHITECTURAL/MECHANICAL DRAWINGS. ALL CONFLICTS AND DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY AND PRIOR TO COMMENCING RELATED WORK.

UTILITY PROVIDERS: WATER: KITTERY WATER DISTRICT, (207) 439–1128 SEWER: KITTERY WASTEWATER, (207) 439–4646 CABLE/INTERNET/TELECOMMS: PROVIDER PER OWNER ELECTRIC: CENTRAL MAINE POWER, (800) 565-3181 PROPANE: PROVIDER PER OWNER

ALL WATER AND SEWER INSTALLATIONS SHALL BE CONSTRUCTED AND TESTED PER THE TOWN OF KITTERY'S STANDARDS AND SPECIFICATIONS. ALL OTHER UTILITIES SHALL BE TO THE STANDARDS AND SPECIFICATIONS OF THE RESPECTIVE UTILITY PROVIDERS.

WHERE WATER LINES CROSS, RUN ADJACENT TO OR ARE WITHIN 5' OF STORM DRAINAGE PIPES OR STRUCTURES, 2"-THICK CLOSED CELL RIGID BOARD INSULATION SHALL BE INSTALLED FOR FROST PROTECTION.

WHERE WATER OR SEWER LINES ARE INSTALLED WITH LESS THAT 5' OF COVER, 2"-THICK CLOSED CELL RIGID BOARD INSULATION SHALL BE INSTALLED FOR THE FULL WIDTH OF THE TRENCH FOR FROST PROTECTION.

14. WATER AND SANITARY SEWER LINES SHALL BE LOCATED AT LEAST 10' HORIZONTALLY FROM EACH OTHER. WHERE CROSSING, 18" MINIMUM VERTICAL CLEARANCE SHALL BE PROVIDED WITH WATER INSTALLED OVER SEWER.

15. CONTRACTOR TO PROVIDE BOLLARDS AT SERVICE ENTRANCES PER THE SPECIFICATIONS OF THE RESPECTIVE UTILITY PROVIDERS.

CONTRACTOR TO COORDINATE WITH K.W.D. FOR THE FILING OF REQUIRED MEDOT LOCATION PERMIT AND HIGHWAY OPENING PERMIT.

ELECTRICAL CONTRACTOR TO PROVIDE CONDUIT LAYOUT PLAN FOR SITE LIGHTING FIXTURES.

18. SEWER CLEANOUT(S) TO BE PROVIDED IF REQUESTED BY K.S.D.

— PE ———	PROPOSED	ELECTRIC
— UTC	PROPOSED	ELECTRIC/COMM./CABLE
— PG ———	PROPOSED	GAS
HVAC	PROPOSED	HEATING/VENTILATION/AIR CONDITION
— PS ———	PROPOSED	SEWER
— PW ———	PROPOSED	WATER
**	PROPOSED	SHUTOFF VALVE
• D <sub>S4</sub>	PROPOSED	POLE LIGHT
© <sub>B</sub>	PROPOSED	BOLLARD LIGHT (7 TOTAL)
Ĩw	PROPOSED	WALL LIGHT (6 TOTAL)
• P	PROPOSED	PATH LIGHT
<sup>-</sup> DS	PROPOSED	STEP LIGHT (7 TOTAL)
▼U	PROPOSED	UP LIGHT (2 TOTAL)
0 <sub>SL</sub>	PROPOSED	SIGN LIGHT (2 TOTAL)





12"_C.I.	WATER MAIN
Plan	nt bist
I iai	

						PERENNI	ALS
TREES	Potonical Namo	Common Namo	Quantity	Sizo	Commonto	Symbol	
Symbol	Bolanical Name	Common Name	Quantity	Size	Comments	Cymbol	
Am	Amelanchier grandiflora 'Robin Hill'	Robin Hill Serviceberry	4	2.5-3" cal.	BB	Aj	Ajuga reptans 'B
Ag	Acer griseum	Paperbark Maple	2	3-3.5" cal.	BB	Cal	Calamagrostis 'K
Cff	Carpinus betulus 'Frans Fontaine'	Frans Fontaine Hornbeam	2	3" cal.	BB	Day	Hemerocallis 'Big
Cv	Chionanthus virginicus	Fringetree	2	8-10' ht.	BB matched		Hemerocallis 'Ch
JvES	Juniperus virginiana 'Emerald Sentinel'	Emerald Sentinel Eastern Red Cedar	6	7-8' ht.	BB		Hemerocallis 'So
Ls	Liquidambar styraciflua	American Sweetgum	4	3" cal.	BB	H1	Hosta sieboliana
TH	Thuja plicata 'Green Giant'	Green Giant Western Red Cedar	15	8-10' ht	B&B	H2	Hosta 'Frances V
Z	Zelkova serrata 'Green Vase'	Green Vase Zelkova	2	3" cal.	BB	H3	Hosta 'Dream We
						H4	Hosta 'Krosa Reg
SHRUBS						Nep	Nepeta Little Tru
Symbol	Botanical Name	Common Name	Quantity	Size	Comments	Rud	Rudbeckia 'Early
						VMB	Vinca monor 'Bo
Hs	Hibiscus syriacus 'Blue Satin'	Blue Satin Rose of Sharon	1	5-6' ht	BB		
HyB	Hydrangea 'Bloomstruck'	Bloomstruck Hydrangea	12	3 gal.			
Hyl	Hydrangea 'Incrediball'	Incrediball Hydrangea	17	5 gal.			
HyP	Hydrangea paniculata 'Limelight'	Limelight Hydrangea	2	15 gal.	Treeform BB		
Js	Juniperus scopulorum 'Skyrocket'	Skyrocket Juniper	1	5-6' ht	BB		
Rhs	Rhododendron 'Scintillation'	Scintillation Rhododendron	11	5 gal			
Rhus	Rhus amoratica 'Grow Low'	Grow Low Sumac	27	3 gal.			
Ros1	Rosa 'Apricot Drift'	Apricot Drift Rose	13	3 gal.			
Ros2	Rosa 'Blush Knockout'	Blush Knockout Rose	5	3 gal.			
SpDD	Spirea 'Double Play Doozie'	Double Play Doozie Spirea	14	3 gal/			
Tax	Taxus media 'Everlow'	Everlow Yew	33	18-24" BB			

Botanical Name	Common Name	Quantity	Size	Comments
Ajuga reptans 'Burgandy Glow'	Burgandy Glow Ajuga	16	1 qt	12" o.c.
Calamagrostis 'Karl Foerster'	Karl Foerster Feather Reed Grass	25	1 gal	
Hemerocallis 'Big Tyme Happy'	Big Tyme Happy Daylily	13	1 gal	
Hemerocallis 'Chicago Apache'	Chigaco Apache Daylily	14	1 gal	
Hemerocallis 'South Seas'	South Seas Daylily	12	1 gal	
Hosta sieboliana 'Elegans'	Elegans Hosta	5	1 gal	
Hosta 'Frances Williams'	Frances Williams Hosta	4	1 gal	
Hosta 'Dream Weaver'	Dream Weaver Hosta	4	1 gal	
Hosta 'Krosa Regal'	Krossa Regal Hosta	4	1 gal	
Nepeta Little Trudy'	Little Trudy Catmint	23	1 gal	
Rudbeckia 'Early Bird Gold'	Early Bird Gold Black Eyed Susan	1	1 gal	
/inca monor 'Bowles'	Bowles Periwinkle	510	2" pots	8" o.c.

# Landscape Notes

- the site from erosion.
- changes in layout and/or grade relationships prior to construction.

- DIGSAFE at 811 or 888-DIG-SAFE.

- 15. All plants shall be legibly tagged with proper botanical name.
- species used in this work.
- 19. All landscaping shall be provided with the following: An underground irrigation system, or
- prepared to a depth of 12" with 75% loam and 25% compost.
- 24. Drip strip shall extend to 6" beyond roof overhang and shall be edged with 3/16" thick metal edger.
- over the root ball of any plant.
- the canopies shall be raised to 8' min. 27. Snow shall be stored a minimum of 5' from shrubs and trunks of trees.

Prune only cross-over limbs, o-dominant leaders, and broken or dead branches

Mark the north side of the tree in the nursery. Rotate the tree to face north at the site whenever possible.

Set top of root ball flush with grade or 1–2" (25–50 mm) higher in slowly draining soils.

50 MM (2 IN.) max. Mulch. Do NOT place mulch in contact with tree trunk. Maintain the mulch weed-free for a minimum of three years after planting.

Tamp soil around root ball base firmly with foot pressure so that root ball does not shift.

Place root ball on unexcavated or tamped soil

## Tree Detail NTS

Set shrub to display best face towards the primary view whenever possible.

50 MM (2 IN.) max. mulch over the ball of the shrub. Maintain the mulch weed-free for a minimum of three years after planting.

Set top of root ball 3-4" above surrounding grade and feather planting soil towards the crown of the plant

Tamp soil around root ball base firmly with foot pressure so that root ball does not shift. -

Place root ball on unexcavated or tamped soil.

## Shrub Detail NTS

Design is based on drawings by Altus Engineering dated August 2023 and may require adjustment due to actual field conditions. The contractor shall follow best management practices during construction and shall take all means necessary to stabilize and protect

Erosion Control shall be in place prior to construction. See Engineer's drawings and specifications. The Contractor shall verify layout and grades and inform the Landscape Architect or Client's Representative of any discrepancies or

It is the contractor's responsibility to verify drawings provided are to the correct scale prior to any bid, estimate or installation. A graphic scale bar has been provided on each sheet for this purpose. If it is determined that the scale of the drawing is incorrect, the landscape architect will provide a set of drawings at the correct scale, at the request of the contractor.

6. Trees to Remain within the construction zone shall be protected from damage for the duration of the project by snow fence or other suitable means of protection to be approved by Landscape Architect or Client's Representative. Snow fence shall be located at the drip line at a minimum and shall include any and all surface roots. Do not fill or mulch on the trunk flare. Do not disturb roots. In order to protect the integrity of the roots, branches, trunk and bark of the tree(s) no vehicles or construction equipment shall drive or park in or on the area within the drip line(s) of the tree(s). Do not store any refuse or construction materials or portalets within the tree protection area. If excavation is to occur within the root zone then the contractor shall cleanly prune the roots prior to excavations. This plan is for review purposes only, NOT for Construction. Construction Documents will be provided upon request. Location, support, protection, and restoration of all existing utilities and appurtenances shall be the responsibility of the Contractor. The Contractor shall verify exact location and elevation of all utilities with the respective utility owners prior to construction. Call

10. The Contractor shall procure any required permits prior to construction.

11. Prior to any landscape construction activities Contractor shall test all existing loam and loam from off-site intended to be used for lawns and plant beds using a thorough sampling throughout the supply. Soil testing shall indicate levels of pH, nitrates, macro and micro nutrients, texture, soluble salts, and organic matter. Contractor shall provide Landscape Architect with test results and

recommendations from the testing facility along with soil amendment plans as necessary for the proposed plantings to thrive. All loam to be used on site shall be amended as approved by the Landscape Architect prior to placement. 12. Contractor shall notify landscape architect or owner's representative immediately if at any point during demolition or construction a site

condition is discovered which may negatively impact the completed project. This includes, but is not limited to, unforeseen drainage problems, unknown subsurface conditions, and discrepancies between the plan and the site. If a Contractor is aware of a potential issue and does not bring it to the attention of the Landscape Architect or Owner's Representative immediately, they may be responsible for the labor and materials associated with correcting the problem.

13. The Contractor shall furnish and plant all plants shown on the drawings and listed thereon. All plants shall be nursery-grown under climatic conditions similar to those in the locality of the project. Plants shall conform to the botanical names and standards of size, culture, and quality for the highest grades and standards as adopted by the American Association of Nurserymen, Inc. in the American Standard of Nursery Stock, American Standards Institute, Inc. 230 Southern Building, Washington, D.C. 20005. 14. A complete list of plants, including a schedule of sizes, quantities, and other requirements is shown on the drawings. In the event that quantity discrepancies or material omissions occur in the plant materials list, the planting plans shall govern.

16. The Contractor shall guarantee all plants including seeding, for not less than one year from time of acceptance.

17. Owner or Owner's Representative will inspect plants upon delivery for conformity to Specification requirements. Such approval shall not affect the right of inspection and rejection during or after the progress of the work. The Owner reserves the right to inspect and/or select all trees at the place of growth and reserves the right to approve a representative sample of each type of shrub, herbaceous perennial, annual, and ground cover at the place of growth. Such sample will serve as a minimum standard for all plants of the same

18. No substitutions of plants may be made without prior approval of the Owner or the Owner's Representative for any reason.

a. Outside hose attachments spaced a maximum of 150 feet apart, and

A temporary irrigation system designed for a two-year period of plant establishment

20. If an automatic irrigation system is installed, all irrigation valve boxes shall be located within planting bed areas.

21. The contractor is responsible for all plant material from the time their work commences until final acceptance. This includes but is not limited to maintaining all plants in good condition, the security of the plant material once delivered to the site, watering of plants,

including seeding and weeding. Plants shall be appropriately watered prior to, during, and after planting. It is the Contractor's responsibility to provide clean water suitable for plant health from off site, should it not be available on site. 22. All disturbed areas will be dressed with 6" of loam and planted as noted on the plans or seeded except plant beds. Plant beds shall be

23. Trees, ground cover, and shrub beds shall be mulched to a depth of 2" with one-year-old, well-composted, shredded native bark not longer than 4" in length and ½" in width, free of woodchips and sawdust. Mulch for ferns and herbaceous perennials shall be no longer than 1" in length. Trees in lawn areas shall be mulched in a 5' diameter min. saucer. Color of mulch shall be black.

25. In no case shall mulch touch the stem of a plant nor shall mulch ever be more than 3" thick total (including previously applied mulch)

26. Secondary lateral branches of deciduous trees overhanging vehicular and pedestrian travel ways shall be pruned up to a height of 6' to allow clear and safe passage of vehicles and pedestrians under tree canopy. Within the sight distance triangles at vehicle intersections

28. Landscape Architect is not responsible for the means and methods of the Contractor.



less than a 3' wide radius from the base of the tree



2 times the diameter of the root ball

Trees shall be staked evenly around the trunk and secured with rope. Soft fabric or webbing sections shall be used at attachment to trees. Each secure shall be flagged with a visual marker. 60" Wooden stakes shall be used to anchor the securing ropes. Stakes shall be driven outside the edge of the root ball. Remove all staking NO LATER than the end of the first growing season after planting.

6" Corrugated PVC tree sock

Each tree must be planted such that the trunk flare is visible at the top of the ro ball. Trees where the trunk flare is not visible shall be rejected. Do NOT cover th top of the root ball with soil.

100 mm (4 in.) high earth saucer beyond edge of root ball

Backfill with existing soil, in sandy soils add 20% max. by volume composted organic material to the existing soil.

Remove all twine, rope, and burlap from top half of root ball. Wire cages shall be removed entirely.

Each shrub must be planted such that the trunk flare is visible at the top of the root ball. Shrubs where the trunk flare is not visible shall be rejected.

100 mm (4 in.) high earth saucer beyond edge of root ball

- 100 mm (4 in.) max mulch outside the saucer between shrubs in a bed. Maintain the mulch weed-free for a minimum of three years after planting.

Backfill with existing soil, in sandy soils add 20% max. by volume composted organic material to the existing soil.

Remove all twine, rope, wire, and burlap from top half of root ball

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## PROJECT NAME AND LOCATION

Inn Redevelopment Map 9 Lots 37 & 38 27 & 29 Wentworth Street Kittery, Maine

## Latitude: 043° 05' 17" N Longitude: 070° 44' 32" W

## DESCRIPTION

The project consists of razing two (2) existing multi-family residences and a portion of existing Inn to construct two (2) 12-unit inns with one caretaker unit on two lots. The project will be completed in a single phase.

## DISTURBED AREA

The total area to be disturbed is approximately 0.5 acres for new construction of driveway and associated improvements. Prior to lot clearing and soil disturbance, sedimentation barrier shall be installed to prevent sediment leaving the lot.

## SEQUENCE OF MAJOR ACTIVITIES

- 1. Install temporary erosion control measures, including silt fences and stabilized construction entrances.
- 2. Upon completion of Items 1, demo existing structures, clear and grub wooded areas, strip and stockpile loam. Stockpiles shall be temporarily stabilized with hay bales mulch and surrounded by a hay bale or silt fence barrier until material is removed and final grading is complete. Construct ditches and stabilize prior to directing flow to them.
- Construct drainage structures, swales & driveway base materials. 5. Ditches and swales with grades over 5% shall have sides and bottom reinforced with excelsion matting.
- 6. Grade and shape lots to finish elevations.
- Stabilize disturbed areas.
- 8. When all construction activity is complete and site is stabilized, remove all hay bales, storm check dams, silt fences and sediment that has been trapped by these devices.

## NAME OF RECEIVING WATER

Closed municipal drainage systems discharging to tidal waters of Piscataqua River.

## TEMPORARY EROSION AND SEDIMENT CONTROLS AND STABILIZATION PRACTICES

All work shall be in accordance with state and local permits. Work shall conform to the practices described in the "Maine Erosion and Sediment Control BMPs, 2003" published by the Maine Department of Environmental Protection.

As indicated in the sequence of Major Activities, the hay bales and silt fences shall be installed prior to commencing any clearing or grading of the site. Structural controls shall be installed concurrently with the applicable activity. Once construction activity ceases permanently in an area, silt fences and hay bale barriers and any earth/dikes will be removed once permanent measures are established.

During construction, runoff will be diverted around the site with stabilized channels where possible. Sheet runoff from the site will be filtered through hay bale barriers, stone check dams, and silt fences. All storm drain inlets shall be provided with hay bale filters or stone check dams. Stone rip rap shall be provided at the outlets of drain pipes and culverts where shown.

Temporary and permanent vegetation and mulching is an integral component of the erosion and sedimentation control plan. All areas shall be inspected and maintained until desires vegetative cover is established. These control measures are essential to erosion prevention and also reduce costly rework of graded and shaped areas.

Temporary vegetation shall be maintained in these areas until permanent seeding is applied. Additionally, erosion sedimentation measures shall be maintained until permanent vegetation is established.

## INSTALLATION, MAINTENANCE AND INSPECTION PROCEDURES FOR TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES

## A. GENERAL

- Perimeter controls shall be installed prior to earth moving operations. The smallest practical portion of the site will be denuded at one time and no more than be mulched in one day. All disturbed areas must be stabilized by temporary measures within 5 days
- of initial disturbance and stabilized by permanent measures immediately after final grading. Sediment barriers shall be installed downgradient of stockpiles and diversion swales installed upgradient of stockpiles to prevent movement of soil.
- Built-up sediment shall be removed from sedimentation barrier or other barriers when it has
- reached one-third the height of the tubular barrier or bale, or when "bulges" occur in sedimentation barrier.
- 4. All diversion dikes shall be inspected and any breaches promptly repaired.
- 5. Temporary seeding and planting shall be inspected for bare spots, washouts, and unhealthy growth. 6. The owner's authorized engineer shall inspect the site on a periodic basis to review compliance
- with the plans.
- 7. All ditches and swales shall be stabilized prior to directing runoff to them. All diversion dikes will be inspected and any breaches promptly repaired. 8. Temporary water diversion (swales, basins, etc) shall be used as necessary until areas are
- stabilized.
- 9. Ponds and swales shall be installed early on in the construction sequence (before rough grading site).
- 10. All cut and fill slopes shall be seeded/loamed within 72 hours of achieving finished grade. 11. An area shall be considered stable if one of the following has occurred:
  - a. Base coarse gravels have been installed in areas to be paved;
  - b. A minimum of 90% vegetated growth as been established;
  - c. A minimum of 3 inches of non-erosive material such as stone of riprap has been installed: or d. Erosion control blankets have been properly installed.

## B. MULCHING

- <u>Application</u> \* In sensitive areas (within 100 ft of streams, wetlands and in lake watersheds) temporary mulch shall be applied within 7 days of exposing soil or prior to any storm event. Areas, which have been temporarily or permanently seeded, shall be mulched immediately
- following seeding.
- Areas which cannot be seeded within the growing season shall be mulched for over-winter protection and the area should be seeded at the beginning of the growing season. \* Mulch anchoring should be used on slopes greater than 5% in late fall (past September
- 15), and over-winter (September 15 April 15).

### <u>Type of Mulch</u> Hay or Straw Mulches

Organic mulches, including hay and straw, shall be air-dried, free of undesirable seeds and coarse materials. Application rate shall be 2 bales (70-90 pounds) per 1000 sq. ft. or 1.5 to 2 tons (90–100 bales) per acre to cover 75 to 90 % of the ground surface. Hay mulch subject to wind blowing shall be anchored via: netting; peg and twine or tracking.

## Erosion Control Mix

Erosion control mix shall consist primarily of organic material and shall include any of the following: shredded bark, stump grindings, composted bark or other acceptable products based on a similar raw source. Wood or bark chips, ground construction debris or reprocessed wood products shall not be acceptable as the organic component of the mix.

- It can be used as a stand-alone reinforcement:
- \* On slopes 2 horizontal to 1 vertical or less. \* On frozen ground or forested areas.
- \* At the edge of gravel parking areas and areas under construction.
- Other reinforcement BMPs (i.e. riprap) should be used:
- On slopes with groundwater seepage;
- At low points with concentrated flows and in gullies; At the bottom of steep perimeter slopes exceeding 100 feet in length; \*
- Below culvert outlet aprons; and
- Around catch basins and closed storm systems.

- Composition
- less than 4" in diameter. Erosion control mix must be free of refuse, physical contaminants, and material toxic to plant growth. The mix composition shall meet the following standards: \* The organic matter content shall be between 80 and 100%, dry weight basis.
- \* Particle size by weight shall be 100% passing a 6" screen and a minimum of 70%,
- maximum of 85%, passing a 0.75" screen. \* The organic portion needs to be fibrous and elongated.
- \* Large portions of silts, clays or fine sands are not acceptable in the mix.
- Installation
- \* Erosion control mix shall not be used on slopes steeper than 2:1. \* On slopes of 3:1 or less; 2 inches plus an additional 1/2 inch per 20 feet of slope up to 100 feet
- \* On slopes between 3:1 and 2:1, 4 inch plus an additional 1/2 inch per 20 feet of slope up to 100 feet.
- The thickness of the mulch at the bottom of the slope needs to be: <3:1 slope
  - <20' of slope 2.0" <60' of slope 3.0" 4.0" <100' of slope
- invisible

Any required repairs shall be made immediately, with additional erosion control mix placed on top of the mulch to reach the recommended thickness. When the mix is decomposed, clogged with sediment, eroded or ineffective, it shall be replaced or repaired. Erosion control mix mulch shall be left in place. If the mulch needs to be removed spread it out into the landscape.

## <u>Maintenance</u>

All mulches must be inspected periodically, in particular after rainstorms, to check for rill erosion. If less than 90% of the soil surface is covered by mulch, additional mulch shall be immediately applied. Nets shall be inspected after rain events for dislocation or failure. If washouts or breakage occur, re-install the nets as necessary after repairing damage to the slope. Inspections shall take place until grasses are firmly established (95% soil surface covered with grass). Where mulch is used in conjunction with ornamental plantings, inspect periodically throughout the year to determine if mulch is maintaining coverage of the soil surface. Repair as needed.

## C. TEMPORARY VEGETATION

## <u>Considerations</u>

- \* Proper seedbed preparation and the use of quality seed are important in this practice just as in permanent seeding. Failure to carefully follow sound agronomic recommendations will often result in an inadequate stand of vegetation that provides little or no erosion control.
- \* Nutrients and pesticides used to establish and maintain a vegetation cover shall be managed to protect the surface and ground water quality.
- \* Temporary seeding shall be used extensively in sensitive areas (ponds and lake watersheds, steep slopes, streambanks, etc.).
- \* Late fall seeding may fail and cause water quality deterioration in spring runoff events, thus
- other measures such as mulching shall be implemented.

### <u>Specifications</u> Seedbed Preparation

Apply limestone and fertilizer according to soil test recommendations. If soil testing is not feasible on small or variable sites, or where timing is critical, fertilizer may be applied at the rate of 600 pounds per acre or 13.8 pounds per 1,000 square feet of 10-10-10 (N-P20S-K20) or equivalent. Apply limestone (equivalent to 50 percent calcium plus magnesium oxide) at a rate of 3 tons per acre (138 lb. per 1,000 square feet).

## Seedina

\* Select seed from recommendations in enclosed table. \* Where the soil has been compacted by construction operations, loosen soil to a depth of 2 inches before applying fertilizer, lime and seed. \* Apply seed uniformly by hand, cyclone seeder, drill, cultipacker type seeder or hydroseeder (slurry including seed and fertilizer). Hydroseeding that includes mulch may be left on soil surface. Seeding rates must be increased 10% when hydroseeding.

## Mulchina Apply mulch over seeded area according to the TEMPORARY MULCHING BMP.

## <u>Maintenance</u>

Temporary seeding shall be periodically inspected. At a minimum, 95% of the soil surface should be covered by vegetation. If any evidence of erosion or sedimentation is apparent, repairs shall be made and other temporary measures used in the interim (mulch, filter barriers, check dams, etc.).

<u>Temporary Se</u> Seed	<mark>eding Rates and</mark> Lb./Ac	<u>d Dates</u> Seeding Depth	Recommended Seeding Dates	Remarks
Winter Rye	112 (2.0 bu)	1-1.5 in	8/15-10/1	Good for fall seeding. Selec a hardy species, such as Aroostook Rye.
Oats	80 (2.5 bu)	1-1.5 in	4/1-7/1 Early fall 8/15- winter protection.	Best for spring seeding. 9/15 seeding will die when weather moved in, bu mulch will provide
Annual Ryegrass	40	.25 in	4/1-7/1	Grows quickly but is of short duration. Use where appearance is important. With mulch, seeding may be done throughout growing season.
Sudangrass	40 (1.0 bu)	.5-1 in	5/15-8/15	Good growth during hot summer periods.
Perennial	40 (2.0 bu)	.25 in	8/15-9/15	Good cover, longer lasting than Annual Ryegrass. Mulching will allow seeding throughout growing season.
Temporary mulch with	h or		10/1-4/1	Refer to TEMPORARY

## MULCHING BMP and/or without dormant seeding PERMANENT VEGETATION BMP.

## D. FILTERS

<u>Tubular Sediment Barrier</u> a. To be provided by an approved manufacturer or supplier: b. Installed per manufacturer's specifications;

## <u>Straw/Hay\_Bales</u>

Bales shall be placed in a single row, lengthwise on the contour, with ends of adjacent bales tightly abutting one another. \* All bales shall be either wire-bound or string-tied. Bales shall be installed so that bindings are oriented around the sides, parallel to the ground surface to prevent

upslope areas has been permanently stabilized.

- deterioration of the bindings. \* The barrier shall be entrenched and backfilled. A trench shall be excavated the width of
- \* After the bales are staked and chinked, the excavated soil shall be backfilled against the barrier. Backfill soil shall conform to the ground level on the downhill side and shall be
- build up to 4 inches against the uphill side of the barrier. \* At least two stakes or rebars driven through the bale shall securely anchor each bale. The first stake in each bale shall be driven toward the previously laid bale to force the bales together. Stakes or re-bars shall be driven deep enough into the ground to
- securely anchor the bales. \* The gaps between bales shall be chinked (filled by wedging) with hay to prevent water from escaping between the bales.

Erosion control mix shall contain a well-graded mixture of particle sizes and may contain rocks

slopes between 3:1 and 2:1

4.0' 5.0' 6.0'

\* It shall be placed evenly and must provide 100% soil coverage, with the soil totally

c. Barrier shall be removed when they have served their useful purpose but not before the

a bale and the length of the proposed barrier to a minimum depth of 4 inches.

\* Sediment barriers shall be installed along the down gradient side of proposed ground disturbance areas prior to any construction activities. \* The barrier must be placed along a relatively level contour.

<u>Maintenance</u>

- \* Hay bale barriers, sedimentation barriers and filter berms shall be inspected immediately after each rainfall and at least daily during prolonged rainfall. They shall be repaired immediately if there are any signs of erosion or sedimentation below them. If there are signs of undercutting at the center or the edges of the barrier, or impounding of large volumes of water behind them, sediment barriers shall be replaced with a temporary check dam.
- \* Should the fabric on a sedimentation barrier or filter barrier decompose or become ineffective prior to the end of the expected usable life and the barrier still is necessary, the fabric shall be replaced promptly.
- \* Sediment deposits should be removed when deposits reach approximately one third (1/3) the height of the barrier
- \* Filter berms should be reshaped as needed. \* Any sediment deposits remaining in place after the sedimentation barrier or filter barrier is no longer required shall be dressed or removed to conform to the existing grade, prepared and seeded.
- \* Additional stone may have to be added to the construction stabilized entrance, rock barriers, stone lined swales, etc., periodically to maintain proper function of the erosion control structure.

E. PERMANENT SEEDING

- 1. Bedding stones larger than  $1\frac{1}{2}$ ", trash, roots, and other debris that will interfere with seeding and future maintenance of the area should be removed. Where feasible, the soil should be tilled to a depth of 6" to prepare a seedbed and mix fertilizer (refer to Landscape Drawings and Specifications) into the soil.
- 2. Fertilizer (refer to Landscape Drawings and Specifications) lime and fertilizer should be applied evenly over the area prior to or at the time of seeding and incorporated into the soil. Kinds and amounts of lime and fertilizer should be based on an evaluation of soil tests.
- 3. Seed Mixture (See Landscape Drawings for additional information):
  - 3.1. Lawn seed mix shall be a fresh, clean new seed crop. The Contractor shall furnish a dealer's guaranteed statement of the composition of the mixture and the percentage of purity and germination of each variety.
- 3.2. Seed mixture shall conform to landscape specifications 4. Sodding - sodding is done where it is desirable to rapidly establish cover on a disturbed area. Sodding an area may be substituted for permanent seeding procedures anywhere on site. Bed preparation, fertilizing, and placement of sod shall be performed according to the S.C.S. Handbook. Sodding is recommended for steep sloped areas, areas immediately adjacent to sensitive water courses, easily erodible soils (fine sand/silt), etc.

DEWATERING

A dewatering plan shall be implemented to address excavation de-watering following heavy rainfall events or where the excavation may intercept the groundwater table during construction. The collected water needs treatment and a discharge point that will not cause downgradient erosion and offsite sedimentation or within a resource.

All dewatering discharge locations shall be located on relatively flat ground at least 75' from streams and 25' from wetlands. The contractor shall utilize "Dirtbags", erosion control mix berms, or similar methods for filtration of dewatering and shall conform to the Maine Erosion and Sediment Control BMPs.

Placement of "Dirtbags" shall be located such that they can be removed intact upon completion of construction with no discharge of silt at the site and properly disposed.

MONITORING SCHEDULE The contractor shall be responsible for installing, monitoring, maintaining, repairing, replacing and removing all of the erosion and sedimentation controls or appointing a qualified subcontractor to do so. Maintenance measures will be applied as needed during the entire construction cycle. immediately following any significant rainfall, and at least once a week, a visual inspection will be made of all erosion and sedimentation controls as follows:

1. sedimentation barrier shall be inspected and repaired. Sediment trapped behind these barriers shall be excavated when it reaches a depth of 6" and redistributed to areas undergoing final

2. Construction entrance shall be visually inspected and repaired as needed. Any areas subject to rutting shall be stabilized immediately. If the voids of the construction entrance become filled with mud, more crushed stone shall be added as needed. The public roadway shall be swept should mud be deposited/tracked onto them.

## STANDARDS FOR STABILIZING SITES FOR THE WINTER

- The following standards and methodologies shall be used for stabilizing the site during the winter construction period: 1. Standard for the timely stabilization of disturbed slopes (any area having a grade greater than
- 25%) the contractor will seed and mulch all slopes to be vegetated by September 15th. If the contractor fails to stabilize any slope to be vegetated by September 15th, then the contractor will take one of the following actions to stabilize the slope for late fall and winter. A. <u>Stabilize the soil with temporary vegetation and erosion control mats</u>: by October 1st the
- contractor will seed the disturbed slope with winter rye at a rate of 3 pounds per 1000 square feet and then install erosion control mats or anchored hay mulch over the seeding. The contractor will monitor growth of the rye over the next 30 days.
- B. <u>Stabilize the slope with wood-waste compost</u>: the contractor will place a six-inch layer of wood-waste compost on the slope by November 15th. The contractor will not use wood-waste compost to stabilize slopes having grades greater than 50% (2h:iv) or having groundwater seeps on the slope face.
- C. <u>Stabilize the slope with stone riprap</u>: the contractor will place a layer of stone riprap on the slope by November 15th. The development's owner will hire a registered professional engineer to determine the stone size needed for stability on the slope and to design a filter layer for underneath the riprap.
- 2. Standard for the timely stabilization of disturbed soils by September 15th the contractor will seed and mulch all disturbed soils on the site. If the contractor fails to stabilize these soils by this date, then the contractor will take on of the following actions to stabilize the soil for late fall and winter.
- A. <u>Stabilize the soil with temporary vegetation</u>: by October 1st the contractor will seed the disturbed soil with winter rye at a seeding rate of 3 pounds per 1000 square feet, lightly mulch the seeded soil with hay or straw at 75 pounds per 1000 square feet, and anchor the mulch with plastic netting. The contractor will monitor growth of the rye over the next 30 days. If the rye fails to grow at least three inches or fails to cover at least 75% of the disturbed soil before November 1, then the contractor will mulch the area for over-winter protection as described in item iii of this standard.
- B. <u>Stabilize the soil with sod</u>: the contractor will stabilize the disturbed soil with properly installed sod by October 1st. proper installation includes the contractor pinning the sod onto the soil with wire pins, rolling the sod to guarantee contact between the sod and underlying soil, and watering the sod to promote root growth into the disturbed soil.
- C. <u>Stabilize the soil with mulch</u>: by November 15th the contractor will mulch the disturbed soil by spreading hay or straw at a rate of at least 150 pounds per 1000 square feet on the area so that no soil is visible through the mulch. Immediately after applying the mulch, the contractor will anchor the mulch with netting or other method to prevent wind from moving the mulch off the disturbed soil.

Winter inspections shall be preformed after, each rainfall, snowstorm or thawing and at least once a week. All areas within 75 feet of a protected natural resource must be protected with a double row of sediment barrier.

## EROSION CONTROL REMOVAL

- An area is considered stable if it is paved or if 90% growth of planted seeds is established. once an area is considered stable, the erosion control measures can be removed as follows: 1. <u>sedimentation barrier</u>: sedimentation barrier shall be disposed of legally and properly off-site. all sediment trapped behind these controls shall be distributed to an area undergoing final grading or
- removed and relocated off-site. 2. <u>Stabilized Construction Entrance</u>: The stabilized construction entrance shall be removed once the compacted roadway base in in place. Stone and sediment from the construction entrance shall be redistributed to an area undergoing grading or removed and relocated offsite.
- 3. <u>Miscellaneous</u>: Once all the trapped sediments have been removed from the temporary sedimentation devices the disturbed areas must be regraded in an aesthetic manner to conform to the surrounding topography. Once graded these disturbed areas must be loamed (if necessary), fertilized, seeded and mulched in accordance with the rates previously stated.

The above erosion controls must be removed within 30 days of final stabilization of the site. Conformance with this plan and following these practices will result in a project that complies with the state regulations and the standards of the natural resources protection act, and will protect water quality in areas downstream from the project.

## INSPECTION AND MAINTENANCE

- approved by the Owner and MDEP.
- stabilized.

HOUSEKEEPING

- destabilization.
- used for dust control.
- accordance with manufacturers recommendations.

6. Non-stormwater discharges: Identify and prevent contamination by non-stormwater discharges. Where allowed non-stormwater discharges exist, they must be identified and steps should be taken to ensure the implementation of appropriate pollution prevention measures for the non-stormwater component(s) of the discharge. Authorized non-stormwater discharges are: • Discharges from firefighting activities

- Fire hydrant flushings

- involve detergents

- Uncontaminated excavation dewatering
- Unauthorized non-stormwater discharges are:

  - Toxic or hazardous substances from a spill or other release.

Allowable non-stormwater discharges cannot be authorized under this permit unless they are directly related to and originate from a construction site or dedicated support activity.

This project has a written erosion control plan and stormwater maintenance plan. Modifications to the plan must be approved by the Town.

Maintenance of stormwater treatment and control systems must occur regularly. The stormwater maintenance report provides inspection details and time lines for doing the inspections and reporting to the Town and DEP.

1. All sediment control measures shall be inspected at least once each week and following any storm event of 0.25 inches or greater. An inspection report shall be made after each inspection by a qualified inspector engaged by the Owner. The qualified inspector shall be a Professional Engineer licensed in Maine or be a Certified Professional in Erosion and Sediment Control

2. All measures shall be maintained in acod working order; if a repair is necessary, it will be initiated within 24 hours and completed within 72 hours.

3. Inspection and maintenance requirements: Inspect disturbed and impervious areas, erosion and stormwater control measures, areas used for storage that are exposed to precipitation, and locations where vehicles enter or exit the site. Inspect these areas at least once a week as well as before and after a 0.5 inches or greater storm event and prior to completion of permanent stabilization measures. A person with knowledge of erosion and stormwater control, including the standards in the Maine Construction General Permit and any departmental companion document to the MCGP, must conduct the inspection. This person must be identified in the inspection log. If best management practices (BMPs) need to be modified or if additional BMPs are necessary, implementation must be completed within 7 calendar days and prior to any storm event (rainfall). All measures must be maintained in effective operating condition until areas area permanently

4. Inspection Log (report): A log (report) must be kept summarizing the scope of the inspection, name(s) and qualifications of the personnel making the inspection, the date(s) of the inspection, and major observations relating to operation of erosion and sedimentation controls and pollution prevention measures. Major observations must include BMPs that need maintenance, BMPs that failed to operate as designed or proved inadequate for a particular location, and locations(s) where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the inspection log the correct action taken and when it was taken. The log must be made accessible to the department staff and a copy must be provided upon request. The permittee shall retain a copy of the log for a period of at least three years from the completion of the permanent stabilization.

1. Spill prevention: Controls must be used to prevent pollutants from construction and waste materials stored onsite, including storage practices to minimize exposure of the materials to stormwater and appropriate spill prevention, containment, and response planning implementation. The contractor and owners need to take care with construction and waste materials such that contaminates do not enter the stormwater. The storage of materials such as paint, petroleum products, cleaning agents and the like are to be stored in watertight containers. The use of the products should be in accordance with manufacturer recommendations. When fueling equipment, including snowblowers and lawnmowers, have oil absorbent pads available below the fueling. Refueling of small engines by the owner should occur in the garage or on a paved surface. Any spill or release of toxic or hazardous substances must be reported to the department. For oil spills, call 1-800-482-0777 which is available 24 hours a day. For spills of toxic or hazardous material, call 1-800-452-4664 which is available 24 hours a day. For more information, visit the department's website at: HTTP://WWW.MAINE.GOV/DEP/SPILLS/EMERGSPILLRESP/

2. Groundwater protection: Protection of the groundwater is required by the contractor and owner. 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. Petroleum products should be stored in manufactured cans designed for the purpose. 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. Spill preventions procedures should be followed.

Note: Lack of appropriate pollutant removal BMPs may result in violations of the groundwater quality standard established by 39 M.R.S.A. §465-C(1). Any project proposing infiltration of stormwater must provide adequate pre-treatment of stormwater prior to discharge of stormwater to the infiltration area, or provide treatment within the infiltration area, in order to prevent accumulation of fines, reductions in infiltration rate, and consequent flooding and

3. Fugitive sediment and dust: Actions must be taken to ensure that activities do not result in noticeable erosion of soils or fugitive dust emissions during or after construction. Oil may not be

Note: Dewatering a stream without a permit from the department violates state water quality standards and the Natural Resources Protection Act.

4. Debris and other materials: Litter, construction debris, and construction chemicals exposed to stormwater must be prevented from becoming a pollutant source. Construction materials and construction debris should be covered to prevent rainwater from washing contaminants off the site. Any fertilizers, cleaning products, herbicides should be protected from the weather and used in

Note: Any contaminants that are washed off the site by rainwater is a violation of the Clean Waters Act. To prevent these materials from becoming a source of pollutants, construction activities related to a project may be required to comply with applicable provisions of rules related to solid, universal, and hazardous waste, including, but not limited to, the Maine Solid Waste and Hazardous Waste Management Rules; Maine Hazardous Waste Management Rules; Maine Oil Conveyance and Storage Rules; and Maine Pesticide requirements.

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

Note: For guidance on dewatering controls, consult the Maine Erosion and Sediment Control BMPs, published by the Maine Department of Environmental Protection.

• Vehicle washwater if detergents are not used and washing is limited to the exterior of vehicles (engine, undercarriage, and transmission washing is prohibited • Dust control runoff in accordance with permit conditions

• Routine external building washdown, not including surface paint removal, that does not

• Pavement washwater (where spills/leaks of toxic or hazardous materials have not occurred, unless all spilled material had been removed) if detergents are not used • Uncontaminated air conditioning or compressor condensate Uncontaminated groundwater or spring water

• Foundation or footer drain-water where flows are not contaminated

• Potable water sources including waterline flushings

7. Unauthorized non-stormwater discharges: Identify and prevent contamination from discharges that is mixed with a source of non-stormwater, other than those discharges in compliance with 6.

• Wastewater from the washout or cleanout of concrete, stucco, paint, form release oils, curing compounds or other construction materials; • Fuels, oils, or other pollutants used in vehicle and equipment operations and maintenance; • Soaps, solvents or detergents used in vehicle and equipment wash;







1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME,

2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP BY 6" WIDE TRENCH

WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE

BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO

COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES

3. ROLL THE BLANKETS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY

4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" OVERLAP

FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN

DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE

5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE

STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH

STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12"

APART ACROSS ENTIRE BLANKET WIDTH. NOTE: IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR

COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND

SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.

<u>NOTES</u>

FERTILIZER, AND SEED.

IN THE STAPLE PATTERN GUIDE.

ON THE PREVIOUSLY INSTALLED BLANKET.



## INSTALLATION AND MAINTENANCE:

INSTALLATION: REMOVE THE GRATE FROM CATCH BASIN. IF USING OPTIONAL OIL ABSORBENTS; PLACE ABSORBENT PILLOW IN UNIT. STAND GRATE ON END. MOVE THE TOP LIFTING STRAPS OUT OF THE WAY AND PLACE THE GRATE INTO CATCH BASIN INSERT SO THE GRATE IS BELOW THE TOP STRAPS AND ABOVE THE LOWER STRAPS. HOLDING THE LIFTING DEVICES, INSERT THE GRATE INTO THE INLET.

MAINTENANCE: REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS FROM VICINITY OF THE UNIT AFTER EACH STORM EVENT. AFTER EACH STORM EVENT AND AT REGULAR INTERVALS, LOOK INTO THE CATCH BASIN INSERT. IF THE CONTAINMENT AREA IS MORE THAN 1/3 FULL OF SEDIMENT. THE UNIT MUST BE EMPTIED. TO EMPTY THE UNIT, LIFT THE UNIT OUT OF THE INLET USING THE LIFTING STRAPS AND REMOVE THE GRATE. IF USING OPTIONAL ABSORBENTS; REPLACE ABSORBENT WHEN NEAR SATURATION.

## UNACCEPTABLE INLET PROTECTION METHOD:

A SIMPLE SHEET OF GEOTEXTILE UNDER THE GRATE IS NOT ACCEPTABLE.

















2.5'(MIN)

- EROSION CONTROL MIXTURE

#57 STONE AGGREGATE

EXISTING GRADE

- 7. ORGANIC FILTER BERMS MAY BE LEFT IN PLACE ONCE THE SITE IS STABILIZED PROVIDED ANY SEDIMENT DEPOSITS TRAPPED BY THEM ARE REMOVED AND DISPOSED OF PROPERLY.

3. ORGANIC FILTER BERMS SHALL BE INSTALLED ALONG A RELATIVELY LEVEL CONTOUR. IT MAY BE

4. ON SLOPES LESS THAN 5%, OR AT THE BOTTOM OF SLOPES NO STEEPER THAN 3:1 AND UP TO 20' LONG, THE BERM SHALL BE A MINIMUM OF 12" HIGH (AS MEASURED ON THE UPHILL SIDE) AND A

NECESSARY TO CUT TALL GRASSES OR WOODY VEGETATION TO AVOID CREATING VOIDS AND BRIDGES

8. FILTER BERMS ARE PROHIBITED AT THE BASE OF SLOPES STEEPER THAN 8% OR WHERE THERE IS FLOWING WATER WITHOUT THE SUPPORT OF ADDITIONAL MEASURES SUCH AS SILTFENCE.

# **ORGANIC FILTER BERM**

FLOW

PASSING A 0.75" SCREEN.

EXCEED 2').

ARFA

f) THE pH SHALL BE BETWEEN 5.0 AND 8.0.

THAT WOULD ENABLE FINES TO WASH UNDER THE BERM.

# GROUND -CONSTRUCTION SPECIFICATIONS

EXISTING

- 2. LENGTH DETAILED ON PLANS (50 FOOT MINIMUM).
- 3. <u>THICKNESS</u> SIX (6) INCHES (MINIMUM).

- ENGINEER.







## NOT TO SCALE

<u>SIEVE SIZE</u>	<u>% PASSING BY WEIGHT</u>
1"	100
3/4"	90 - 100
3/8"	20 - 55
# 4	0 - 10
# 8	0 - 5



NON-PAVED AREA | PAVED AREA

SAND BLANKET/BARRIER					
<u>SIEVE SIZE</u>	<u>% FINER BY WEIGHT</u>				
1/2"	90 - 100				
200	0 — 15				

## <u>NOTES</u>

6" COMPACTED LOAM

AND SEED OR OTHER

- 1. BACKFILL MATERIAL BELOW PAVED OR CONCRETE AREAS, BEDDING MATERIAL, AND SAND BLANKET SHALL BE COMPACTED TO NOT LESS THAN 95% OF AASHTO T 99, METHOD C. SUITABLE BACKFILL MATERIAL BELOW LOAM AREAS SHALL BE COMPACTED TO NOT LESS THAN 90% OF AASHTO T 99, METHOD C.
- 2. ALL TRENCHING AND BACKFILL SHALL CONFORM WITH THE STANDARDS OF THE KITTERY WATER DISTRICT.

## WATER MAIN TRENCH

## NOT TO SCALE

## STANDARD TRENCH NOTES

- ORDERED EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE: BACKFILL AS STATED IN THE TECHNICAL SPECIFICATIONS OR AS SHOWN ON THE DRAWING.
- BEDDING: SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING THE GRADATION SHOWN IN THE TRENCH DETAIL. WHERE ORDERED BY THE ENGINEER TO STABILIZE THE BASE, SCREENED GRAVEL OR CRUSHED STONE 1-1/2 INCH TO 1/2 INCH SHALL BE USED.
- 3. SAND BLANKET: CLEAN SAND FREE FROM ORGANIC MATTER MEETING THE GRADATION SHOWN IN THE TRENCH DETAIL. BLANKET MAY BE REPLACED WITH BEDDING MATERIAL FOR CAST-IRON, DUCTILE IRON, AND REINFORCED CONCRETE PIPE PROVIDED THAT NO STONE LARGER THAN 2" IS IN CONTACT WITH THE PIPE AND THE GEOTEXTILE IS RELOCATED ACCORDINGLY.
- 4. SUITABLE MATERIAL: IN ROADS, ROAD SHOULDERS, WALKWAYS AND TRAVELED WAYS, SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING THE COURSE OF CONSTRUCTION, BUT SHALL EXCLUDE DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOP SOIL, ALL WET OR SOFT MUCK, PEAT, OR CLAY, ALL EXCAVATED LEDGE MATERIAL ALL ROCKS OVER 6 INCHES IN LARGEST DIMENSION, AND ANY MATERIAL WHICH, AS DETERMINED BY THE ENGINEER, WILL NOT PROVIDE SUFFICIENT SUPPORT OR MAINTAIN THE COMPLETED CONSTRUCTION IN A STABLE CONDITION. IN CROSS COUNTRY CONSTRUCTION, SUITABLE MATERIAL SHALL BE AS DESCRIBED ABOVE, EXCEPT THAT THE ENGINEER MAY PERMIT THE USE OF TOP SOIL, LOAM, MUCK, OR PEAT, IF SATISFIED THAT THE COMPLETED CONSTRUCTION WILL BE ENTIRELY STABLE AND PROVIDED THAT EASY ACCESS TO THE SEWER FOR MAINTENANCE AND POSSIBLE RECONSTRUCTION WILL BE PRESERVED.
- BASE COURSE AND PAVEMENT SHALL MEET THE REQUIREMENTS OF THE MAINE DEPARTMENT OF TRANSPORTATION'S LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES - DIVISION 700.
- 6. SHEETING, IF REQUIRED: WHERE SHEETING IS PLACED ALONGSIDE THE PIPE AND EXTENDS BELOW MID-DIAMETER, IT SHALL BE CUT OFF AND LEFT IN PLACE TO AN ELEVATION 1 FOOT ABOVE THE TOP OF PIPE. WHERE SHEETING IS ORDERED BY THE ENGINEER TO BE LEFT IN PLACE, IT SHALL BE CUT OFF AT LEAST 3 FEET BELOW FINISHED GRADE, BUT NOT LESS THAT 1 FOOT ABOVE THE TOP OF THE PIPE.
- 7. W = MAXIMUM ALLOWABLE TRENCH WIDTH TO A PLANE 12 INCHES ABOVE THE PIPE. FOR PIPES 15 INCHES NOMINAL DIAMETER OR LESS, W SHALL BE NO MORE THAN 36 INCHES. FOR PIPES GREATER THAN 15 INCHES IN NOMINAL DIAMETER, W SHALL BE 24 INCHES PLUS PIPE OUTSIDE DIAMETER (O.D.) ALSO, W SHALL BE THE PAYMENT WIDTH FOR LEDGE EXCAVATION AND FOR ORDERED EXCAVATION BELOW GRADE.
- 8. FOR CROSS COUNTRY CONSTRUCTION, BACKFILL, FILL AND/OR LOAM SHALL BE MOUNDED TO A HEIGHT OF 6 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
- 9. CONCRETE FOR ENCASEMENT SHALL CONFORM TO THE MAINE DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS STANDARD SPECIFICATION REQUIREMENTS FOR CLASS A (3000#) CONCRETE AS FOLLOWS:
  - CEMENT: 6.0 BAGS PER CUBIC YARD WATER: 5.75 GALLONS PER BAG CEMENT MAXIMUM SIZE OF AGGREGATE: 1 INCH CONCRETE ENCASEMENT IS NOT ALLOWED FOR PVC PIPE.
- 10. CONCRETE FULL ENCASEMENT: IF FULL ENCASEMENT IS UTILIZED, DEPTH OF CONCRETE BELOW PIPE SHALL BE 1/4 I.D. (4" MINIMUM). BLOCK SUPPORT SHALL BE SOLID CONCRETE BLOCKS.
- 11. MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION DESIGN STANDARDS REQUIRE TEN FEET (10') SEPARATION BETWEEN WATER AND SEWER. REFER TO TOWN'S STANDARD SPECIFICATIONS FOR METHODS OF PROTECTION IN AREAS THAT CANNOT MEET THESE REQUIREMENTS.



## <u>NOTES</u>

- ASTM D-1557.



CONC	RETE FOUNDATION
BOLT	TEMPLATE BY
POLE	MANUFACTURER



NOT TO SCALE



## <u>NOTES:</u>

- 1. SEE PLANS FOR CURB LOCATION. 2. ADJOINING STONES SHALL HAVE THE SAME OR APPROXIMATELY THE SAME LENGTH.
- 3. MINIMUM LENGTH OF CURB STONES = 3'
- 4. MAXIMUM LENGTH OF CURB STONES = 10'
- 5. MAXIMUM LENGTH OF STRAIGHT CURB
- STONES LAID ON CURVES SEE CHART. 6. CURB ENDS TO ROUNDED AND BATTERED FACES TO BE CUT WHEN CALLED FOR ON THE PLANS.

RADIUS	MAX. LENGTH
21'	3'
22'-28'	4'
29'-35'	5'
36'-42'	6'
43'-49'	7'
50'-56'	8'
57'-60'	9'
OVER 60'	10'
	1

# FINISH GRADE SEE PAVEMENT CROSS SECTION-6" COMPACTED CRUSHED GRAVEL MDOT TYPE "A" COMPACTED NATIVE SUBGRADE OR FILL

## <u>NOTES</u>

SLOPED GRANITE CURB

ALUMINUM SIGN

BLANK (TYP)

- 1. SEE SITE PLAN FOR LIMITS OF CURBING
- 2. ADJOINING STONES OF STRAIGHT CURB LAID ON CURVES
- SHALL HAVE THE SAME OR APPROXIMATELY THE SAME LENGTH
- 3. MINIMUM LENGTH OF STRAIGHT CURB STONES = 18"
- 4. MAXIMUM LENGTH OF STRAIGHT CURB STONES = 8'
- 5. MAXIMUM LENGTH OF STRAIGHT CURB STONES LAID ON CURVES -SEE CHART

RADIUS FOR STONES WITH SQUARE JOINTS	MAXIMUM LENGTH
16'-28'	1'-6"
29'-41'	2'
42'-55'	3'
56'-68'	4'
69'-82'	5'
83'-96'	6'
97'—110'	7'
OVER 110'	8'

1 - 9/16

## VERTICAL GRANITE CURB

## NOT TO SCALE



NOTE: ALL MATERIALS AND SPECIFICATIONS SHALL CONFORM TO KITTERY WATER DEISTRICT STANDARDS AND REQUIREMENTS. VERIFY PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES.





### 2.5" BASE COURSE (MAINE DOT 19.0mm SUPERPAVE) 2' MIN. (AREAS WITHOUT CURB w/COMPACTED LOAM AND SEED R7-8 7' MIN. 12" x 18" NO VAN PARKING ACCESSIBLE FINISH GRADE PER PLANS 18" x 12" R7-8P 18" x 9" LENGTH: AS REQUIRED WEIGHT PER LINEAR FOOT: 2.50 LBS (MIN.) · 4· 4 90° CUT OPTION HOLES: 3/8" DIAMETER, 1" C-C FULL LENGTH 1/3 POSTEEL: SHALL CONFORM TO ASTM A-499 (GRADE . HEIGH⁻ 60) OR ASTM A-576 (GRADE 1070 - 1080) NOTE ALL SIGNS SHALL MEET THE REQUIREMENTS OF AND BE INSTALLED AS INDICATED IN THE MANUAL ON UNIFORM TRAFFIC . ∆. . . . ⊿ . . · · · · · 6" COMPACTED LOAM AND CONTROL DEVICES, LATEST EDITION. SEED (TYP) SIGN DETAILS NOT TO SCALE MEDOT TYPE "A" AGGREGATE - 6" CRUSHED GRAVEL MEDOT TYPE "D" AGGREGATE - 12" GRAVEL COMPACTED NATIVE SUBGRADE OR FILL WHERE REQUIRED <u>NOTES</u> 1. PROJECT GEOTECHNICAL REPORT MAY REQUIRE A DIFFERENT PAVEMENT CROSS SECTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR READING AND FOLLOWING ALL RECOMMENDATIONS IN THE GEOTECHNICAL REPORT. IN THE EVENT THAT THE REPORT AND CIVIL PLANS DIFFER, THE MORE BUILDIN STRINGENT SPECIFICATION SHALL APPLY. 2. ALL EXISTING FILL, BURIED ORGANIC MATTER, CLAY, LOAM, MUCK, AND/OR OTHER QUESTIONABLE MATERIAL SHALL BE REMOVED FROM BELOW ALL PAVEMENT, SHOULDERS AND UNDERGROUND PIPING/UTILITIES TO DEPTHS RECOMMENDED IN GEOTECHNICAL REPORT. WATER SHUT OFF, TYP. 3. SUBGRADE SHALL BE PROOFROLLED A MINIMUM OF 6 PASSES WITH A 10-TON VIBRATORY COMPACTOR OPERATING AT PEAK RATED FREQUENCY OR BY MEANS APPROVED BY THE ENGINEER. 4. FILL BELOW PAVEMENT GRADES SHALL BE GRANULAR BORROW COMPACTED PER MDOT REQUIREMENTS. 5. SITEWORK CONTRACTOR SHALL COORDINATE GEOTECHNICAL ENGINEERING INSPECTIONS WITH THE CONSTRUCTION MANAGER PRIOR TO PLACING GRAVELS. 6. TACK COAT SHALL BE APPLIED BETWEEN SUCCESSIVE LIFTS OF ASPHALT. TAP AND SLEEVE <u>NOTES</u> INSTALLATION BY K.W.D. 7. THE BITUMINOUS PAVEMENT SHALL BE COMPACTED TO 92 TO 97 PERCENT OF ITS THEORETICAL UP TO PROPERTY LINE MAXIMUM DENSITY AS DETERMINED BY ASTM D-2041. THE BASE AND SUBBASE MATERIALS SHOULD EXISTING WATER MAIN BE COMPACTED TO AT LEAST 95 PERCENT OF THEIR MAXIMUM DRY DENSITIES AS DETERMINED BY ASTM D-1557. ——— W WATER SERVICE HOUSE CONNECTION SITE PAVEMENT CROSS SECTION NOT TO SCALE N.T.S.



NOT TO SCALE

## NOT TO SCALE



LOAM & SEED

(SEE SITE PLANS)

GRANITE CURE

-3,000 psi CONCRETE WITH

CONCRETE BRICK SUPPORTS

# CURB RAMP NOTES

11. CURB RAMPS SHALL HAVE A FLAT 2% MAX LANDING AT THE TOP AND BOTTOM OF THE RAMPS WHEN THERE IS A CHANGE IN DIRECTION.

NOT TO SCALE

HOT-MIX BITUMINOUS PAVEMENT (4" COMPACTED) 1.5" SURFACE COURSE (MAINE DOT 9.5mm SUPERPAVE)

- 10. NO RAMP SHALL BE LESS THAN 4' IN WIDTH.
- 9. EDGES OF CONCRETE SIDEWALK FOOTINGS ALONG FLUSH CURBS SHALL BE HAUNCHED SO AS TO EXTEND TO A MINIMUM DEPTH OF 1' BELOW FINISH GRADE.
- 8. FLUSH CURB SECTIONS SHALL HAVE A MAXIMUM LIP REVEAL OF 1/4" WITH A BEVEL AT THE EDGE OF PAVEMENT.
- 7. ALL CURB RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH AMERICANS WITH DISABILITIES ACT (ADA), PROWAG R305.21 AND ALL APPLICABLE CODES.
- 6. SEE CONCRETE SIDEWALK SECTION FOR RAMP CONSTRUCTION.
- 5. BASE OF RAMP SHALL BE GRADED TO PREVENT THE PONDING OF WATER.
- 4. CURB TREATMENT VARIES, SEE PLANS FOR CURB TYPE.
- SHALL BE 8.3% FOR A MAXIMUM ELEVATION CHANGE OF 6".
- 3. THE MAXIMUM ALLOWABLE RUNNING SLOPE OF AN ACCESSIBLE ROUTE (SIDEWALK) CURB RAMP
- 2. THE MAXIMUM ALLOWABLE RUNNING SLOPE OF AN ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%.
- 1. THE MAXIMUM ALLOWABLE CROSS SLOPE OF AN ACCESSIBLE ROUTE (SIDEWALK) AND CURB SHALL BE 2%.

## NOTES APPLICABLE TO ALL CURB RAMPS:







- DETECTABLE WARNING PANEL WHERE

SPECIFIED ("IRON DOME" OR EQUAL)

# ∕⊪⊸



# 27-29 WENTWORTH STREET

# KITTERY, MAINE 03904

# SITE CONTEXT:





**29 WENTWORTH - PROJECT SITE** 



**27 WENTWORTH - PROJECT SITE** 







**8 WENTWORTH STREET** 

# PROJECT 27 - 29 WENTWORTH STREET







**TITLE SHEET** 

10/05/2023

7 WALLINGFORD SQUARE UNIT 2099 KITTERY, ME 03904 207.994.3104

WINTER HOLBEN

# PROJECT 27 - 29 WENTWORTH STREET

	ROOM #	ROOM TYPE	AREA			
BASEMENT FLOOR						
	B01	SUITE	403 SF			
	B02	SUITE	449 SF			
FIRST FLOOR						
	101	BUSINESS	278 SF			
	102	BUSINESS	274 SF			
	103	SUITE	364 SF			
	104 (ADA)	BUSINESS	384 SF			
SECOND FLOOR						
	201	BUSINESS	310 SF			
	202	BUSINESS	310 SF			
	203	SUITE	374 SF			
	204	SUITE	374 SF			
THIRD FLOOR						
	301	SUITE	452 SF			
	302	SUITE	452 SF			
ROOM TOTALS						
	BUSINESS 5					
		SUITES	7			
		TOTAL	12			

27 WENTWORTH ST





WENTWORTH STREET

FIRST FLOOR PLAN SCALE: 1/4"=1'-0"



02



7 WALLINGFORD SQUARE UNIT 2099 KITTERY, ME 03904 207.994.3104

WINTER HOLBEN

(2)

# PROJECT 27 - 29 WENTWORTH STREET

27 WENTWORTH ST							
ROOM # ROOM TYPE AREA							
BASEMENT FLOOR							
B01 SUITE 403 SF							
B02 SUITE 449 SF							
FIRST FLOOR							
	101 BUSINESS 278 SF						
	102	BUSINESS	274 SF				
	103	SUITE	364 SF				
	104 (ADA) BUSINESS 384 SF						
SECOND FLOOR							
201 BUSINESS 310 SF							
202 BUSINESS 310 SF							
203 SUITE 374 SF							
	204	SUITE	374 SF				
THIRD FLOOR							
	301	SUITE	452 SF				
	302	SUITE	452 SF				
ROOM TOTALS							
BUSINESS 5							
		SUITES	7				
		TOTAL	12				

SECOND FLOOR PLAN SCALE: 1/4"=1'-0"





55'-0"

7'-3<u>1</u>"

9'-4<u>1</u>"

THIRD FLOOR PLAN SCALE: 1/4"=1'-0"

10/05/2023



10'-0"

1'-6", 3'-0"

7 WALLINGFORD SQUARE UNIT 2099 KITTERY, ME 03904 207.994.3104

WINTER HOLBEN

03










# PROJECT 27 - 29 WENTWORTH STREET

		$\searrow$	
	X		
			//////
$\mathbf{X}$			
20			
29			
		RUUMITE	AREA
DASEMILINI I LOOK	B01		520 SE
	DOI		529 51
FIRST FLOOR			
	101 (ADA)	SUITE	426 SF
	102	BUSINESS	316 SF
	103	SUITE	403 SF
	100	BUSINESS	316 SF
SECOND FLOOR			
	201	SUITE	432 SF
	202	BUSINESS	316 SF
	203	SUITE	417 SF
	204	BUSINESS	316 SF
THIRD FLOOR			
	301	SUITE	396 SF
	302	BUSINESS	316 SF
	303	SUITE	382 SF
	304	BUSINESS	316 SF
ROOM TOTALS	-		
		BUSINESS	6
		SUITES	6
		SUITES	6 12



DRAWING (29 WENTWORTH) FLOOR PLANS

10/05/2023

Ō

2'-0" BALCONY 7'-0" 14'-11<u>1</u>" UNIT 102 316 SF  $-5\frac{1}{4}$ "  $\frac{31}{2}$  $5\frac{1}{4}$ " UNIT 104 316 SF 7'-0" 14'-11<u>4</u>" BALCONY 14'-23'-10<u>3</u>" 30'-4<u>1</u>" (2)16' 7 WALLINGFORD SQUARE UNIT 2099 KITTERY, ME 03904 207.994.3104 WINTER HOLBEN 05

24'-4<u>1</u>"

9'-6"

10'-0"

# PROJECT 27 - 29 WENTWORTH STREET

	ROOM #	ROOM TYPE	AREA
BASEMENT FLOOR			
	B01	INNKEEPER	529 SF
FIRST FLOOR			
	101 (ADA)	SUITE	426 SF
	102	BUSINESS	316 SF
	103	SUITE	403 SF
	104	BUSINESS	316 SF
SECOND FLOOR			
	201	SUITE	432 SF
	202	BUSINESS	316 SF
	203	SUITE	417 SF
	204	BUSINESS	316 SF
THIRD FLOOR			
	301	SUITE	396 SF
	302	BUSINESS	316 SF
	303	SUITE	382 SF
	304	BUSINESS	316 SF
ROOM TOTALS			
		BUSINESS	6
		SUITES	6
		TOTAL	12

29 WENTWORTH ST

9'-6"

UNIT 201 432 SF

UNIT 203 417 SF

BALCONY









ROOF PLAN SCALE: 1/4"=1'-0"

 $\left(1\right)$ 

7 WALLINGFORD SQUARE UNIT 2099 KITTERY, ME 03904 207.994.3104

WINTER HOLBEN 07

16'



NORTH EXTERIOR ELEVATION

SCALE: 1/4"=1'-0"

 $\left(1\right)$ 



# \_

EAST EXTERIOR ELEVATION SCALE: 1/4"=1'-0"

DRAWING (27 WENTWORTH) EXTERIOR ELEVATIONS

10/05/2023

(REF.) ELEV.) 72.20 TOP OF WALL ((REF.) ELEV.) 70.20' 
 THIRD FLOOR

 ((REF.) ELEV.)
 SECOND FLOOR ((REF.) ELEV.) 54.37' \_ \_\_ \_\_ FIRST FLOOR ((REF.) ELEV.) 45.03' BASEMENT - TOP OF SLAB ((REF.) ELEV.) 35.70'

 $\binom{2}{2}$ 

WINTER HOLBEN

7 WALLINGFORD SQUARE UNIT 2099 KITTERY, ME 03904 207.994.3104

08

SCALE: 1/4"=1'-0"



1





2 7 WALLINGFORD SQUARE UNIT 2099 KITTERY, ME 03904 207.994.3104 WINTER HOLBEN 09





WINTER HOLBEN 10





WINTER HOLBEN 11











WINTERHOLBEN 13





WINTER HOLBEN 14





WINTER HOLBEN 15



VIEW LOOKING WEST FROM WENTWORTH STREET SCALE: N.T.S.

10/05/2023

 $\begin{pmatrix} 1 \end{pmatrix}$ 



WINTER HOLBEN 16

### **DRAINAGE ANALYSIS**

# The Foreside Inn

#### Tax Map 49, Lots 37 & 38 27 & 29 Wentworth Street Kittery, Maine

#### November 22, 2023

Prepared For:

#### **Madbury Real Estate Ventures**

c/o Taylor McMaster 401 Edgewater Place, Suite 570 Wakefield, MA 001880 (617) 290-1269

Prepared By:

#### **ALTUS ENGINEERING**

133 Court Street Portsmouth, NH 03801 Phone: (603) 433-2335



## Table of Contents

Section 1 Narrative **Project Description** Site Overview Site Soils Proposed Site Design **Calculation Methods** Disclaimer Drainage Analysis Conclusions **USGS** Location Map Section 2 Aerial Photo Section 3 Drainage Analysis, Pre-Development Section 4 Drainage Analysis, Post-Development Section 5 **Precipitation Table** Section 6 NRCS Soils Report Section 7 Stormwater Operations and Maintenance Plan Section 8 Watershed Plans Pre-Development Watershed Plan

Post-Development Watershed Plan



# Section 1

# Narrative



#### **PROJECT DESCRIPTION**

The property is located at 27 & 29 Wentworth Street. This redevelopment project proposes to construct a 12-unit inn with a 13<sup>th</sup> innkeeper's suite taker unit on each parcel together with associated site improvements. Both inns will share a 16-space parking lot and access drive on 29 Wentworth Street. The structure at 27 Wentworth will be demolished with a new building constructed closer to the street. The property at 29 Wentworth will be partially demolished during renovation with the intention to maintain the original 1800's era structure. The lot lines will be modified to maintain the Town's open space requirements.

The stormwater management system proposed will include porous pavement to filter and infiltrate all runoff flowing to it; and a 13'x52' underground stormwater management gallery (SMG) consisting of 3 rows of 36-inch pipe and 8'x22' SMG consisting of 3 rows of 18-inch pipe to infiltrate runoff from rooves and lawn area. The perimeter underdrain system will be wrapped with non-woven filter fabric to minimize sediment entering the SMG.

#### Site Soils

The Natural Resources Conservation Service (NRCS) classifies the site soils as Urban Land (Ur) with a hydrological soil group (HSG) designation of C.

#### **Pre-Development (Existing Conditions)**

The Pre-Development Watershed Plan (Sheet WS-1) reflects the current conditions of the site which include the existing building and parking areas. The current site can be divided into two (2) subcatchments which northeast discharge to the Boston & Maine Railroad property and east to Wentworth Street. The nearest closed drainage system is approximately 300 feet downgradient of the site.

#### Post-Development (Proposed Conditions)

The proposed project will construct two (2) commercial units, a new drainage system and associated site improvements.

As shown on the attached Post-Development Watershed Plan (Sheet WS-2), the site was divided into six (6) subcatchment areas in the post-development conditions. The same points of analysis that were used in the Pre-Development model (POA #'s 1 and 2) were used for comparison of the Pre- and Post-development conditions.

#### **CALCULATION METHODS**

The drainage study was completed using the USDA SCS TR-20 Method within the HydroCAD Stormwater Modeling System. Reservoir routing was performed with the Dynamic Storage Indication method with automated calculation of tailwater conditions. A Type III 24-hour rainfall distribution was utilized in analyzing the data for the 2- and 25-year 24-hour storm events using Extreme Precipitation rainfall data provided by Cornell University.

The following conservative modeling approaches and assumptions were incorporated into the analysis:

- Model based on extreme precipitation values for Portsmouth published by Cornell/UNH.
- Used Tc of 6 minutes for those subcatchments where measured Tc was less than 6 minutes. SCS TR-55 Urban Hydrology for Small Watersheds indicates that the minimum Tc should be 0.1 hour or 6 minutes. The Federal Highway Administration <u>Hydraulic Engineering</u> states that minimum time of concentration (Tc) for urbanized areas should not be less than 5-minutes. Extremely short Tc times can lead to improbable runoff values and are not appropriate for design.
- Infiltration rates through biofilter media of the porous pavement and from the stormwater gallery is set at 4.0 in/hr with a phase-in depth of 0.01'.

#### Disclaimer

Altus Engineering notes that stormwater modeling is limited in its capacity to precisely predict peak rates of runoff and flood elevations. Results should not be considered to represent actual storm events due to the number of variables and assumptions involved in the modeling effort. Surface roughness coefficients (n), entrance loss coefficients (ke), velocity factors (kv) and times of concentration (Tc) are based on subjective field observations and engineering judgment using available data. For design purposes, curve numbers (Cn) describe the average conditions. However, curve numbers will vary from storm to storm depending on the antecedent runoff conditions (ARC) including saturation and frozen ground. Also, higher water elevations than predicted by modeling could occur if drainage channels, closed drain systems or culverts are not maintained and/or become blocked by debris before and/or during a storm event as this will impact flow capacity of the structures. Structures should be re-evaluated if future changes occur within relevant drainage areas in order to assess any required design modifications.

#### Drainage Analysis

A complete summary of the drainage model is included in the appendix of this report. The following table compares pre- and post-development peak rates at the Point of Analysis identified on the plans for the 2 and 25-year storm events:

	2-Yr Storm	25-Yr Storm
	(3.21 inch)	(6.17 inch)
POA #1 (East property line)		
Pre	0.72	1.77
Post	0.19	0.57
Change	-0.53	-1.20
POA #2 (NE Property Line)		
Pre	0.18	0.56
Post	0.14	0.34
Change	-0.04	-0.22

#### Stormwater Modeling Summary Peak Q (cfs) for Type III 24-Hour Storm Events

As the above table demonstrates, the proposed peak rates of runoff will be decreased from the existing conditions for all analyzed storm events.

#### CONCLUSION

This proposed roadway and site development will have minimal adverse effect on abutting properties and infrastructure as a result of stormwater runoff or siltation. Post-construction peak rates of runoff from the site will be lower than the existing conditions for all analyzed storm events. The new stormwater management system will also provide appropriate treatment to runoff from 84% of the proposed impervious surfaces from the site where none previously existed. Appropriate steps will be taken to properly mitigate erosion and sedimentation using temporary and permanent Best Management Practices for sediment and erosion control, including a porous pavement, SMG and roofline drip strips.

# Section 2

# USGS Map and Aerial Photo







# Section 3

# Drainage Calculations

Pre-Development 2-Year, 24-Hour Summary 25-Year, 24-Hour Summary





#### Area Listing (all nodes)

Area	CN	Description
(acres)		(subcatchment-numbers)
0.189	74	>75% Grass cover, Good, HSG C (1S, 2S)
0.098	96	Gravel surface, HSG C (1S, 2S)
0.020	98	Ledge, HSG C (1S, 2S)
0.025	98	Paved parking, HSG C (1S, 2S)
0.062	98	Roofs, HSG C (1S, 2S)
0.102	70	Woods, Good, HSG C (1S, 2S)
0.497	83	TOTAL AREA

Time span=0.00-30.00 hrs, dt=0.05 hrs, 601 points Runoff by SCS TR-20 method, UH=SCS, Weighted-CN Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: (new Subcat)	Runoff Area=15,418 sf 23.71% Impervious Runoff Depth=1.77" Flow Length=105' Tc=6.0 min CN=85 Runoff=0.72 cfs 0.052 af
Subcatchment2S: (new Subcat)	Runoff Area=6,222 sf 15.99% Impervious Runoff Depth=1.22" Flow Length=200' Tc=7.9 min CN=77 Runoff=0.18 cfs 0.015 af
Total Runoff Area = 0.49	7 ac Runoff Volume = 0.067 af Average Runoff Depth = 1.61

Total Runoff Area = 0.497 ac Runoff Volume = 0.067 af Average Runoff Depth = 1.61" 78.51% Pervious = 0.390 ac 21.49% Impervious = 0.107 ac

#### Summary for Subcatchment 1S: (new Subcat)

Runoff = 0.72 cfs @ 12.09 hrs, Volume= 0.052 af, Depth= 1.77"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type III 24-hr 2-yr Rainfall=3.21"

	Area (sf)	CN	Description						
	2,062	98	Roofs, HSG C						
	4,175	96	Gravel surfa	Gravel surface, HSG C					
	878	98	Paved park	Paved parking, HSG C					
*	715	98	Ledge, HS0	GĊ					
	4,868	74	>75% Gras	s cover, Go	bod, HSG C				
	2,720	70	Woods, Go	od, HSG C					
	15,418	85	Weighted A	verage					
	11,763		76.29% Pervious Area						
	3,655		23.71% Impervious Area						
٦	Fc Length	Slope	e Velocity	Capacity	Description				
(mi	n) (feet)	(ft/ft	) (ft/sec)	(cfs)					
5	.3 65	0.0400	0.21		Sheet Flow,				
					Grass: Short n= 0.150 P2= 3.21"				
0	.2 40	0.0700	) 4.26		Shallow Concentrated Flow,				
					Unpaved Kv= 16.1 fps				
5	.5 105	Total,	Increased t	to minimum	Tc = 6.0 min				

#### Summary for Subcatchment 2S: (new Subcat)

Runoff = 0.18 cfs @ 12.12 hrs, Volume= 0.015 af, Depth= 1.22"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type III 24-hr 2-yr Rainfall=3.21"

	Area (sf)	CN	Description					
	620	98	Roofs, HSG C					
	107	96	Gravel surface, HSG C					
	220	98	Paved parking, HSG C					
*	155	98	Ledge, HSG C					
	3,376	74	>75% Grass cover, Good, HSG C					
	1,744	70	Woods, Good, HSG C					
	6,222	77	Weighted Average					
	5,227		84.01% Pervious Area					
	995		15.99% Impervious Area					

#### 5431 Pre

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 Type III 24-hr
 2-yr Rainfall=3.21"

 Printed
 8/22/2023

 C
 Page 5

To (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.1	25	0.0200	0.06	×	Sheet Flow,
					Woods: Light underbrush n= 0.400 P2= 3.21"
0.3	65	0.0600	3.67		Shallow Concentrated Flow,
					Grassed Waterway Kv= 15.0 fps
0.5	5 110	0.0500	3.35		Shallow Concentrated Flow,
					Grassed Waterway Kv= 15.0 fps
7.0	200	Tatal			

7.9 200 Total

Time span=0.00-30.00 hrs, dt=0.05 hrs, 601 points Runoff by SCS TR-20 method, UH=SCS, Weighted-CN Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: (new Subcat)	Runoff Area=15,418 sf 23.71% Impervious Runoff Depth=4.46" Flow Length=105' Tc=6.0 min CN=85 Runoff=1.77 cfs 0.132 af
Subcatchment2S: (new Subcat)	Runoff Area=6,222 sf 15.99% Impervious Runoff Depth=3.63" Flow Length=200' Tc=7.9 min CN=77 Runoff=0.56 cfs 0.043 af
Total Runoff Area = 0.49	7 ac Runoff Volume = 0 175 af Average Runoff Depth = 4 22

Total Runoff Area = 0.497 ac Runoff Volume = 0.175 af Average Runoff Depth = 4.22" 78.51% Pervious = 0.390 ac 21.49% Impervious = 0.107 ac

#### Summary for Subcatchment 1S: (new Subcat)

Runoff = 1.77 cfs @ 12.09 hrs, Volume= 0.132 af, Depth= 4.46"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type III 24-hr 25-yr Rainfall=6.17"

	Area (sf)	CN	Description						
	2,062	98	8 Roofs, HSG C						
	4,175	96	Gravel surface, HSG C						
	878	98	Paved park	Paved parking, HSG C					
*	715	98	Ledge, HS0	ΞĊ					
	4,868	74 :	>75% Gras	s cover, Go	ood, HSG C				
	2,720	70	Woods, Go	od, HSG C					
	15,418	85	Weighted A	verage					
	11,763		76.29% Pervious Area						
	3,655	:	23.71% Impervious Area						
Т	c Length	Slope	Velocity	Capacity	Description				
(min	) (feet)	(ft/ft)	(ft/sec)	(cfs)					
5.	3 65	0.0400	0.21		Sheet Flow,				
					Grass: Short n= 0.150 P2= 3.21"				
0.	2 40	0.0700	4.26		Shallow Concentrated Flow,				
					Unpaved Kv= 16.1 fps				
5.	5 105	Total,	Increased t	to minimum	Tc = 6.0 min				

#### Summary for Subcatchment 2S: (new Subcat)

Runoff = 0.56 cfs @ 12.11 hrs, Volume= 0.043 af, Depth= 3.63"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs Type III 24-hr 25-yr Rainfall=6.17"

	Area (sf)	CN	Description					
	620	98	Roofs, HSG C					
	107	96	Gravel surface, HSG C					
	220	98	Paved parking, HSG C					
*	155	98	Ledge, HSG C					
	3,376	74	>75% Grass cover, Good, HSG C					
	1,744	70	Woods, Good, HSG C					
	6,222	77	Weighted Average					
	5,227		84.01% Pervious Area					
	995		15.99% Impervious Area					

#### 5431 Pre

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Type III 24-hr 25-yr Rainfall=6.17" Printed 8/22/2023 LC Page 8

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.1	25	0.0200	0.06		Sheet Flow,
0.3	65	0.0600	3.67		Shallow Concentrated Flow,
0.5	110	0.0500	2.25		Grassed Waterway Kv= 15.0 fps
0.5	110	0.0500	3.35		Grassed Waterway Kv= 15.0 fps
7.0	000	Tatal			

7.9 200 Total

# Section 4

# Drainage Calculations

Post-Development 2-Year, 24-Hour Summary 25-Year, 24-Hour Summary





#### Area Listing (all nodes)

Ar	rea CN	Description
(acro	es)	(subcatchment-numbers)
0.2	05 74	>75% Grass cover, Good, HSG C (10S, 11S, 12S, 20S, 21S)
0.2	06 98	Paved parking, HSG C (10S, 11S, 12S, 20S, 21S)
0.0	86 98	Roofs, HSG C (10S, 11S, 12S, 20S, 22S)
0.4	97 88	TOTAL AREA

#### Soil Listing (all nodes)

Area	Soil	Subcatchment
(acres)	Group	Numbers
0.000	HSG A	
0.000	HSG B	
0.497	HSG C	10S, 11S, 12S, 20S, 21S, 22S
0.000	HSG D	
0.000	Other	
0.497		TOTAL AREA

5431 Post3	7
Prepared by Altus Engineering, Inc.	
HvdroCAD® 10.00-26 s/n 01222 © 2020 HvdroCAD Software Solutions	LLC

Time span=0.00-100.00 hrs, dt=0.05 hrs, 2001 points Runoff by SCS TR-20 method, UH=SCS, Weighted-CN Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment10S: (new Subcat)	Runoff Area=1,717 sf 39.08% Impervious Runoff Depth=1.62" Flow Length=75' Tc=6.0 min CN=83 Runoff=0.07 cfs 0.005 af
Subcatchment11S: (new Subcat) Flow Length=55'	Runoff Area=4,423 sf 46.05% Impervious Runoff Depth=1.77" Slope=0.1400 '/' Tc=6.0 min CN=85 Runoff=0.21 cfs 0.015 af
Subcatchment12S: (new Subcat) Flow Length=65'	Runoff Area=2,992 sf 77.61% Impervious Runoff Depth=2.46" Slope=0.0400 '/' Tc=6.0 min CN=93 Runoff=0.19 cfs 0.014 af
Subcatchment 20S: Upper Parking Lot	Runoff Area=8,910 sf 64.20% Impervious Runoff Depth=2.09" Tc=6.0 min CN=89 Runoff=0.49 cfs 0.036 af
Subcatchment21S: (new Subcat) Flow Length=60'	Runoff Area=2,970 sf 44.31% Impervious Runoff Depth=1.77" Slope=0.1000 '/' Tc=6.0 min CN=85 Runoff=0.14 cfs 0.010 af
Subcatchment22S: Roof Flow Length=30'	Runoff Area=628 sf 100.00% Impervious Runoff Depth=2.98" Slope=0.1400 '/' Tc=6.0 min CN=98 Runoff=0.04 cfs 0.004 af
Pond 1P: Porous Pavement Discarded=0.17 cf	Peak Elev=36.14' Storage=254 cf Inflow=0.49 cfs 0.036 af s 0.036 af Primary=0.00 cfs 0.000 af Outflow=0.17 cfs 0.036 af
Pond 2P: Shallow Depression Discarded=0.01 cf	Peak Elev=36.91' Storage=68 cf Inflow=0.07 cfs 0.005 af s 0.005 af Primary=0.04 cfs 0.001 af Outflow=0.05 cfs 0.005 af
Pond 3P: 36" SMG	Peak Elev=34.12' Storage=399 cf Inflow=0.21 cfs 0.015 af Outflow=0.01 cfs 0.015 af
Pond 4P: 18" SMG	Peak Elev=40.94' Storage=82 cf Inflow=0.04 cfs 0.004 af Outflow=0.00 cfs 0.004 af
Link 3L: Roadside curb line POA #1	Inflow=0.19 cfs 0.015 af Primary=0.19 cfs 0.015 af
Link 4L: Grass Swale along RR tracks POA	#2         Inflow=0.14 cfs         0.010 af           Primary=0.14 cfs         0.010 af
Total Punoff Area = 0.497 a	c Punoff Volume = 0.084 af Average Punoff Donth = 2.02

Total Runoff Area = 0.497 ac Runoff Volume = 0.084 af Average Runoff Depth = 2.02" 41.34% Pervious = 0.205 ac 58.66% Impervious = 0.291 ac

#### Summary for Subcatchment 10S: (new Subcat)

Runoff = 0.07 cfs @ 12.09 hrs, Volume= 0.005 af, Depth= 1.62"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.05 hrs Type III 24-hr 2-yr Rainfall=3.21"

A	rea (sf)	CN	Description			
	507	98	98 Roofs, HSG C			
	164	98	Paved parking, HSG C			
	1,046	74	>75% Ġras	s cover, Go	bod, HSG C	
	1,717	83	Weighted A	verage		
	1,046		60.92% Pervious Area			
	671	;	39.08% Impervious Area			
Tc	Length	Slope	Velocity	Capacity	Description	
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)		
2.6	50	0.1400	0.32		Sheet Flow,	
					Grass: Short n= 0.150 P2= 3.21"	
0.1	25	0.3000	8.22		Shallow Concentrated Flow,	
					Grassed Waterway Kv= 15.0 fps	
2.7	75	Total,	Increased t	o minimum	1 Tc = 6.0 min	

#### Summary for Subcatchment 11S: (new Subcat)

Runoff = 0.21 cfs @ 12.09 hrs, Volume= 0.015 af, Dep	oth= 1.77"
--	------------

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.05 hrs Type III 24-hr 2-yr Rainfall=3.21"

Α	rea (sf)	CN	Description					
	1,699	98	Roofs, HSC	G C				
	338	98	Paved parking, HSG C					
	2,004	74	>75% Ġras	s cover, Go	ood, HSG C			
	382	74	>75% Gras	s cover, Go	ood, HSG C			
	4,423	85	Weighted A	verage				
	2,386		53.95% Pervious Area					
	2,037		46.05% Impervious Area					
Tc	Length	Slope	e Velocity	Capacity	Description			
(min)	(feet)	(ft/ft)	) (ft/sec)	(cfs)				
2.8	55	0.1400	0.33		Sheet Flow,			
					Grass: Short	n= 0.150	P2= 3.21"	
2.8	55	Total,	Increased t	o minimum	Tc = 6.0 min			
### Summary for Subcatchment 12S: (new Subcat)

Runoff = 0.19 cfs @ 12.09 hrs, Volume= 0.014 af, Depth= 2.46"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.05 hrs Type III 24-hr 2-yr Rainfall=3.21"

A	rea (sf)	CN	Description					
	183	98	Roofs, HSG	G C				
	2,139	98	Paved park	ing, HSG C				
	670	74	>75% Gras	s cover, Go	od, HSG C			
	2,992	93	Weighted A	verage				
	670		22.39% Per	vious Area				
	2,322		77.61% Imp	pervious Are	ea			
Tc	Length	Slope	e Velocity	Capacity	Description			
(min)	(feet)	(ft/ft	:) (ft/sec)	(cfs)				
0.6	65	0.040	0 1.67		Sheet Flow,			
					Smooth surfaces	n= 0.011	P2= 3.21"	
0.6	65	Total,	Increased t	o minimum	Tc = 6.0 min			

### Summary for Subcatchment 20S: Upper Parking Lot

Runoff = $0.49 \text{ cfs} (a) 12.09 \text{ hrs}$ , Volume= $0.036 \text{ at}$ , Depth= 2.	lunoff =	0.49 cfs @ 1	12.09 hrs, Vol	ume= 0.036 a	f, Depth= 2.09	)"
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Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.05 hrs Type III 24-hr 2-yr Rainfall=3.21"

6.0	(	(141)	(14000)	(0.0)	Direct Entry, Porous Pavement			
Tc (min)	Length (feet)	Slop (ft/ft	e Velocity (ft/sec)	Capacity (cfs)	Description			
	8,910 3,190 5,720	89 Weighted Average 35.80% Pervious Area 64.20% Impervious Area						
	0,130	70	Woods, Go	Voods, Good, HSG C				
	5,006	98 74	>75% Gras	2aved parking, HSG C				
	714	98	Roofs, HSC					
A	rea (sf)	CN	Description					

### Summary for Subcatchment 21S: (new Subcat)

Runoff = 0.14 cfs @ 12.09 hrs, Volume= 0.010 af, Depth= 1.77"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.05 hrs Type III 24-hr 2-yr Rainfall=3.21"

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Ar	rea (sf)	CN	Description		
	0	98	Roofs, HSG	ЭС	
	1,316	98	Paved park	ing, HSG C	
	1,654	74	>75% Gras	s cover, Go	ood, HSG C
	0	70	Woods, Go	od, HSG C	
	2,970	85	Weighted A	verage	
	1,654		55.69% Per	vious Area	
	1,316		44.31% Imp	pervious Are	ea
Tc	Length	Slope	e Velocity	Capacity	Description
(min)	(feet)	(ft/ft	) (ft/sec)	(cfs)	
0.4	60	0.1000	) 2.37		Sheet Flow,
					Smooth surfaces n= 0.011 P2= 3.21"
0.4	60	Total,	Increased t	o minimum	Tc = 6.0 min

### Summary for Subcatchment 22S: Roof

Runoff =	0.04 cfs @	12.09 hrs,	Volume=	0.004 af, Depth= 2.98"
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Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.05 hrs Type III 24-hr 2-yr Rainfall=3.21"

A	rea (sf)	CN	Description				
	628	98	Roofs, HSG	G C			
	628		100.00% Im	npervious A	rea		
Tc (min)	Length (feet)	Slope (ft/ft	e Velocity ) (ft/sec)	Capacity (cfs)	Description		
0.2	30	0.1400	) 2.36		Sheet Flow, Smooth surfaces	n= 0.011	P2= 3.21"
0.2	30	Total,	Increased t	o minimum	Tc = 6.0 min		

### **Summary for Pond 1P: Porous Pavement**

Inflow Area	=	0.205 ac, 6	4.20% Impe	ervious, Inflo	ow Depth =	2.09'	" for 2-	yr event
Inflow	=	0.49 cfs @	12.09 hrs,	Volume=	0.036	af		
Outflow	=	0.17 cfs @	11.95 hrs,	Volume=	0.036	af, A	tten= 66%	6, Lag= 0.0 min
Discarded	=	0.17 cfs @	11.95 hrs,	Volume=	0.036	af		
Primary	=	0.00 cfs @	0.00 hrs,	Volume=	0.000	af		

Routing by Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.05 hrs Peak Elev= 36.14' @ 12.39 hrs Surf.Area= 1,782 sf Storage= 254 cf

Plug-Flow detention time= 8.7 min calculated for 0.036 af (100% of inflow) Center-of-Mass det. time= 8.7 min (819.6 - 811.0)

Volume	Invert	Avail.Storage	Storage Description
#1	35.78'	1,867 cf	Custom Stage Data (Prismatic)Listed below (Recalc)

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Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
35.78	1,782	0.0	0	0
37.28	1,782	40.0	1,069	1,069
39.03	1,782	5.0	156	1,225
39.39	1,782	100.0	642	1,867

Routing	Invert	Outlet Devices
Discarded	35.78'	4.000 in/hr Exfiltration over Surface area above 35.50'
		Excluded Surface area = 0 sf Phase-In= 0.01'
Primary	38.72'	2.0' long x 5.0' breadth Broad-Crested Rectangular Weir
		Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
		2.50 3.00 3.50 4.00 4.50 5.00 5.50
		Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65
		2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88
	Routing Discarded Primary	RoutingInvertDiscarded35.78'Primary38.72'

**Discarded OutFlow** Max=0.17 cfs @ 11.95 hrs HW=35.82' (Free Discharge) **1=Exfiltration** (Exfiltration Controls 0.17 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=35.78' (Free Discharge) 2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

### Summary for Pond 2P: Shallow Depression

Inflow Area	=	0.039 ac, 3	9.08% Impervious	, Inflow Depth =	1.62" fe	or 2-yr event	
Inflow	=	0.07 cfs @	12.09 hrs, Volum	e= 0.005	af		
Outflow	=	0.05 cfs @	12.22 hrs, Volum	e= 0.005	af, Atten	= 29%, Lag=	7.3 min
Discarded	=	0.01 cfs @	12.22 hrs, Volum	e= 0.005	af		
Primary	=	0.04 cfs @	12.22 hrs, Volum	e= 0.001	af		

Routing by Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.05 hrs Peak Elev= 36.91' @ 12.20 hrs Surf.Area= 220 sf Storage= 68 cf

Plug-Flow detention time= 93.0 min calculated for 0.005 af (100% of inflow) Center-of-Mass det. time= 93.3 min ( 926.1 - 832.8 )

Volume	Inver	t Avail.Sto	rage Storage	Description		
#1	36.50	' ;	88 cf Custom	Stage Data (Cor	nic)Listed below	(Recalc)
Elevatio	on S et)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft <u>)</u>	
36.9 37.0	50 00	115 246	0 88	0 88	115 248	
Device	Routing	Invert	Outlet Devices	3		
#1	Discarded	36.50'	4.000 in/hr Ex Excluded Wet	tiltration over W ted area = 115 sf	Vetted area abov Phase-In= 0.01	/e 36.50' '
#2	Primary	36.90'	<b>10.0' long x 2</b> Head (feet) 0. 2.50 3.00 3.5 Coef. (English 2.85 3.07 3.2	2.0' breadth Broa 20 0.40 0.60 0. 50 ) 2.54 2.61 2.6' 20 3.32	ad-Crested Rect .80 1.00 1.20 1 1 2.60 2.66 2.7	a <b>ngular Weir</b> .40 1.60 1.80 2.00 0 2.77 2.89 2.88

**Discarded OutFlow** Max=0.01 cfs @ 12.22 hrs HW=36.91' (Free Discharge) **1=Exfiltration** (Exfiltration Controls 0.01 cfs)

**Primary OutFlow** Max=0.04 cfs @ 12.22 hrs HW=36.91' (Free Discharge) **2=Broad-Crested Rectangular Weir** (Weir Controls 0.04 cfs @ 0.29 fps)

### Summary for Pond 3P: 36" SMG

Inflow Area	a =	0.102 ac, 4	6.05% Impe	rvious, Inflo	w Depth = 1.77"	for 2-yr event	
Inflow	=	0.21 cfs @	12.09 hrs,	Volume=	0.015 af		
Outflow	=	0.01 cfs @	15.27 hrs, '	Volume=	0.015 af, Atte	en= 95%, Lag=	190.4 min
Discarded	=	0.01 cfs @	15.27 hrs, 1	Volume=	0.015 af	-	

Routing by Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.05 hrs Peak Elev= 34.12' @ 15.27 hrs Surf.Area= 676 sf Storage= 399 cf

Plug-Flow detention time= 618.2 min calculated for 0.015 af (100% of inflow) Center-of-Mass det. time= 618.0 min (1,444.0 - 826.0)

Volume	Invert	Avail.Sto	orage	Storage D	Description			
#1	33.00'	6	57 cf	Custom S	Stage Data (Coni	<b>c)</b> Listed below (Recalc)		
#2	33.50'	1,0	60 cf	2,704 cf Overall - 1,060 cf Embedded = 1,644 cf x 40.0% Void 0 cf <b>36.0" Round Pipe Storage</b> x 3 Inside #1 L= 50.0'				
		1,7	18 cf	Total Ava	ilable Storage			
Elevatio (fee	on Su et)	rf.Area (sq-ft)	Inc (cubie	.Store c-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)		
33.0 37.0	00 00	676 676		0 2,704	0 2,704	676 1,045		
Device	Routing	Invert	Outle	et Devices				
#1	Discarded	33.00'	<b>4.00</b> Excl	0 in/hr Exf uded Wette	filtration over We	tted area above 33.00' Phase-In= 0.01'		

**Discarded OutFlow** Max=0.01 cfs @ 15.27 hrs HW=34.12' (Free Discharge) **1=Exfiltration** (Exfiltration Controls 0.01 cfs)

### Summary for Pond 4P: 18" SMG

Inflow Area	a =	0.014 ac,10	0.00% Impe	ervious,	Inflow Depth =	2.98"	for 2-yr e	event
Inflow	=	0.04 cfs @	12.09 hrs,	Volume	= 0.004	af	-	
Outflow	=	0.00 cfs @	12.92 hrs,	Volume	= 0.004	af, At	ten= 91%,	Lag= 50.2 mir
Discarded	=	0.00 cfs @	12.92 hrs,	Volume	= 0.004	af		-

Routing by Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.05 hrs Peak Elev= 40.94' @ 12.92 hrs Surf.Area= 176 sf Storage= 82 cf

Plug-Flow detention time= 295.2 min calculated for 0.004 af (100% of inflow) Center-of-Mass det. time= 294.5 min (1,050.9 - 756.3)

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Volume	Inve	rt Avail.Sto	orage	Storage D	Description				
#1	40.0	D' 1	34 cf	cf Custom Stage Data (Conic)Listed below (Recalc)					
				440 cf Ov	erall - 106 cf En	nbedded = 334 cf >	40.0% Voids		
#2	40.5	D' 1	06 cf	18.0" Ro	und Pipe Stora	ge x 3 Inside #1			
що.	40 E		0 of	L= 20.0'			am dia wa		
#3	42.5			1.50 D X	1.25 H Vertical	Cone/Cylinder-imp	ervious		
#4	43.7	5	27 CT	Custom	Stage Data (Co	nic)Listed below (R	ecalc)		
		2	269 cf	Total Ava	ilable Storage				
		~ ~ ^ ~		<b>.</b>	<b>a a</b>				
Elevatio	on	Surf.Area	Inc	Store	Cum.Store	Wet.Area			
(fee	et)	(sq-ft)	(cubio	c-feet)	(cubic-feet)	(sq-ft)			
40.0	00	176		0	0	176			
42.5	50	176		440	440	294			
				_					
Elevatio	on s	Surf.Area	Inc	.Store	Cum.Store	Wet.Area			
(fee	et)	(sq-ft)	(cubio	c-feet)	(cubic-feet)	(sq-ft)			
43.7	75	200		0	0	200			
43.8	30	1,000		27	27	1,000			
Device	Routina	Invert	Outle	et Devices					
#1	Discarde	d 40.00'	4.00	0 in/hr Ext	iltration over W	letted area above	40.00'		
			Exclu	uded Wette	ed area = 176 sf	Phase-In= 0.01'			

**Discarded OutFlow** Max=0.00 cfs @ 12.92 hrs HW=40.94' (Free Discharge) **1=Exfiltration** (Exfiltration Controls 0.00 cfs)

#### Summary for Link 3L: Roadside curb line POA #1

Inflow Area	a =	0.108 ac, 6	63.56% Imp	ervious,	Inflow	Depth =	1.6	4" for 2-	yr event	
Inflow	=	0.19 cfs @	12.09 hrs,	Volume	=	0.015	af			
Primary	=	0.19 cfs @	12.09 hrs,	Volume	=	0.015	af,	Atten= 0%	, Lag= 0.	0 min

Primary outflow = Inflow, Time Span= 0.00-100.00 hrs, dt= 0.05 hrs

### Summary for Link 4L: Grass Swale along RR tracks POA #2

Inflow Area	a =	0.273 ac, 5	9.23% Impe	ervious,	Inflow De	epth = (	).44"	for 2-y	r event
Inflow	=	0.14 cfs @	12.09 hrs,	Volume	=	0.010 a	ſ		
Primary	=	0.14 cfs @	12.09 hrs,	Volume	=	0.010 a	if, At	tten= 0%,	Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-100.00 hrs, dt= 0.05 hrs

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Time span=0.00-100.00 hrs, dt=0.05 hrs, 2001 points Runoff by SCS TR-20 method, UH=SCS, Weighted-CN Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment10S: (new Subcat)	Runoff Area=1,717 sf 39.08% Impervious Runoff Depth=4.25" Flow Length=75' Tc=6.0 min CN=83 Runoff=0.19 cfs 0.014 af
Subcatchment 11S: (new Subcat) Flow Length=55'	Runoff Area=4,423 sf 46.05% Impervious Runoff Depth=4.46" Slope=0.1400 '/' Tc=6.0 min CN=85 Runoff=0.51 cfs 0.038 af
Subcatchment 12S: (new Subcat) Flow Length=65'	Runoff Area=2,992 sf 77.61% Impervious Runoff Depth=5.35" Slope=0.0400 '/' Tc=6.0 min CN=93 Runoff=0.39 cfs 0.031 af
Subcatchment 20S: Upper Parking Lot	Runoff Area=8,910 sf 64.20% Impervious Runoff Depth=4.90" Tc=6.0 min CN=89 Runoff=1.10 cfs 0.084 af
Subcatchment 21S: (new Subcat) Flow Length=60'	Runoff Area=2,970 sf 44.31% Impervious Runoff Depth=4.46" Slope=0.1000 '/' Tc=6.0 min CN=85 Runoff=0.34 cfs 0.025 af
Subcatchment 22S: Roof Flow Length=30'	Runoff Area=628 sf 100.00% Impervious Runoff Depth=5.93" Slope=0.1400 '/' Tc=6.0 min CN=98 Runoff=0.09 cfs 0.007 af
Pond 1P: Porous Pavement Discarded=0.17 cfs	Peak Elev=37.51' Storage=1,090 cf Inflow=1.10 cfs 0.084 af 0.084 af Primary=0.00 cfs 0.000 af Outflow=0.17 cfs 0.084 af
Pond 2P: Shallow Depression Discarded=0.01 cfs	Peak Elev=36.94' Storage=73 cf Inflow=0.19 cfs 0.014 af 0.008 af Primary=0.18 cfs 0.006 af Outflow=0.19 cfs 0.014 af
Pond 3P: 36" SMG	Peak Elev=35.41' Storage=1,077 cf Inflow=0.51 cfs 0.038 af Outflow=0.02 cfs 0.038 af
Pond 4P: 18" SMG	Peak Elev=41.63' Storage=166 cf Inflow=0.09 cfs 0.007 af Outflow=0.01 cfs 0.007 af
Link 3L: Roadside curb line POA #1	Inflow=0.57 cfs 0.037 af Primary=0.57 cfs 0.037 af
Link 4L: Grass Swale along RR tracks POA	<b>#2</b> Inflow=0.34 cfs 0.025 af Primary=0.34 cfs 0.025 af
Total Runoff Area = 0.497 ac	Runoff Volume = 0.198 af Average Runoff Depth = 4.79"

41.34% Pervious = 0.205 ac 58.66% Impervious = 0.291 ac

### Summary for Subcatchment 10S: (new Subcat)

Runoff = 0.19 cfs @ 12.09 hrs, Volume= 0.014 af, Depth= 4.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.05 hrs Type III 24-hr 25-yr Rainfall=6.17"

A	rea (sf)	CN	Description					
	507	98	Roofs, HSC	G C				
	164	98	Paved park	ing, HSG C				
	1,046	74	>75% Ġras	75% Grass cover, Good, HSG C				
	1,717	83	Weighted A	verage				
	1,046		60.92% Pei	rvious Area				
	671		39.08% Imp	pervious Ar	ea			
Tc	Length	Slope	Velocity	Capacity	Description			
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)				
2.6	50	0.1400	0.32		Sheet Flow,			
					Grass: Short n= 0.150 P2= 3.21"			
0.1	25	0.3000	8.22		Shallow Concentrated Flow,			
					Grassed Waterway Kv= 15.0 fps			
2.7	75	Total,	Increased t	o minimum	1 Tc = 6.0 min			

### Summary for Subcatchment 11S: (new Subcat)

Runoff	=	0.51 cfs @	12.09 hrs,	Volume=	0.038 af, Depth= 4.46"
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Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.05 hrs Type III 24-hr 25-yr Rainfall=6.17"

Α	rea (sf)	CN	Description					
	1,699	98	Roofs, HSC	G C				
	338	98	Paved park	ing, HSG C	,			
	2,004	74	>75% Ġras	s cover, Go	ood, HSG C			
	382	74	>75% Gras	s cover, Go	od, HSG C			
	4,423	85	Weighted Average					
	2,386		53.95% Pervious Area					
	2,037		46.05% Imp	46.05% Impervious Area				
Tc	Length	Slope	e Velocity	Capacity	Description			
(min)	(feet)	(ft/ft	) (ft/sec)	(cfs)				
2.8	55	0.1400	0.33		Sheet Flow,			
					Grass: Short	n= 0.150	P2= 3.21"	
2.8	55	Total,	Increased t	o minimum	Tc = 6.0 min			

### Summary for Subcatchment 12S: (new Subcat)

Runoff = 0.39 cfs @ 12.09 hrs, Volume= 0.031 af, Depth= 5.35"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.05 hrs Type III 24-hr 25-yr Rainfall=6.17"

A	rea (sf)	CN	Description					
	183	98	Roofs, HSG	Roofs, HSG C				
	2,139	98	Paved park	vaved parking, HSG C				
	670	74	>75% Gras	>75% Grass cover, Good, HSG C				
	2,992	93	3 Weighted Average					
	670		22.39% Per	vious Area				
	2,322		77.61% Imp	ervious Are	ea			
Tc	Length	Slop	e Velocity	Capacity	Description			
(min)	(feet)	(ft/ft	t) (ft/sec)	(cfs)				
0.6	65	0.040	0 1.67		Sheet Flow,			
					Smooth surfaces	n= 0.011	P2= 3.21"	
0.6	65	Total,	Increased t	o minimum	Tc = 6.0 min			

### Summary for Subcatchment 20S: Upper Parking Lot

Runoff = $1.10 \text{ cfs} @ 12.09 \text{ hrs}$ , Volume= $0.084 \text{ af}$ ,	Depth= 4.90"
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Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.05 hrs Type III 24-hr 25-yr Rainfall=6.17"

A	rea (sf)	CN	Description					
	714	98	Roofs, HSC	G C				
	5,006	98	Paved park	ing, HSG C	C			
	3,190	74	>75% Gras	s cover, Go	ood, HSG C			
	0	70	Woods, Go	/oods, Good, HSG C				
	8,910	89	39 Weighted Average					
	3,190		35.80% Pervious Area					
	5,720		64.20% Imp	pervious Ar	rea			
Tc	Length	Slope	e Velocity	Capacity	Description			
(min)	(feet)	(ft/ft	) (ft/sec)	(cfs)				
6.0					Direct Entry, Porous Pavement			

### Summary for Subcatchment 21S: (new Subcat)

Runoff = 0.34 cfs @ 12.09 hrs, Volume= 0.025 af, Depth= 4.46"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.05 hrs Type III 24-hr 25-yr Rainfall=6.17"

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A	rea (sf)	CN	Description					
	0	98	Roofs, HSC	G C				
	1,316	98	Paved park	ing, HSG C	)			
	1,654	74	>75% Gras	s cover, Go	ood, HSG C			
	0	70	Woods, Go	od, HSG C				
	2,970	85	Weighted A	verage				
	1,654		55.69% Per	vious Area				
	1,316		44.31% Imp	pervious Ar	ea			
Тс	Length	Slope	e Velocity	Capacity	Description			
(min)	(feet)	(ft/ft	) (ft/sec)	(cfs)				
0.4	60	0.1000	) 2.37		Sheet Flow,			
					Smooth surfaces	n= 0.011	P2= 3.21"	
0.4	60	Total,	Increased t	o minimum	Tc = 6.0 min			
		-						
			Summ	nary for S	ubcatchment 22	2S: Roof		

Runoff = 0.09 cfs @ 12.09 hrs, Volume= 0.007 af, Depth= 5.93"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.05 hrs Type III 24-hr 25-yr Rainfall=6.17"

A	rea (sf)	CN	Description					
	628	98	Roofs, HSG	G C				
	628		100.00% Im	npervious A	rea			
Tc (min)	Length (feet)	Slope (ft/ft	e Velocity ) (ft/sec)	Capacity (cfs)	Description			
0.2	30	0.1400	2.36		Sheet Flow, Smooth surfaces	n= 0.011	P2= 3.21"	
0.2	30	Total,	Increased t	o minimum	Tc = 6.0 min			

### **Summary for Pond 1P: Porous Pavement**

Inflow Area	a =	0.205 ac, 6	4.20% Impe	ervious,	Inflow Depth =	4.9	90" for	25-yr	event	
Inflow	=	1.10 cfs @	12.09 hrs,	Volume=	= 0.08	4 af				
Outflow	=	0.17 cfs @	11.70 hrs,	Volume=	= 0.08	4 af,	Atten=	85%,	Lag= 0.0 r	min
Discarded	=	0.17 cfs @	11.70 hrs,	Volume=	= 0.08	4 af			-	
Primary	=	0.00 cfs @	0.00 hrs,	Volume=	= 0.00	0 af				

Routing by Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.05 hrs Peak Elev= 37.51' @ 12.59 hrs Surf.Area= 1,782 sf Storage= 1,090 cf

Plug-Flow detention time= 41.9 min calculated for 0.084 af (100% of inflow) Center-of-Mass det. time= 41.9 min ( 829.1 - 787.3 )

Volume	Invert	Avail.Storage	Storage Description
#1	35.78'	1,867 cf	Custom Stage Data (Prismatic)Listed below (Recalc)

### 5431 Post3

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Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
35.78	1,782	0.0	0	0
37.28	1,782	40.0	1,069	1,069
39.03	1,782	5.0	156	1,225
39.39	1,782	100.0	642	1,867

Device	Routing	Invert	Outlet Devices
#1	Discarded	35.78'	4.000 in/hr Exfiltration over Surface area above 35.50'
			Excluded Surface area = 0 sf Phase-In= 0.01'
#2	Primary	38.72'	2.0' long x 5.0' breadth Broad-Crested Rectangular Weir
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
			2.50 3.00 3.50 4.00 4.50 5.00 5.50
			Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65
			2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

**Discarded OutFlow** Max=0.17 cfs @ 11.70 hrs HW=35.82' (Free Discharge) **1=Exfiltration** (Exfiltration Controls 0.17 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=35.78' (Free Discharge) 2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

### Summary for Pond 2P: Shallow Depression

Inflow Area	=	0.039 ac, 3	9.08% Imp	ervious, In	flow Depth	= 4.2	25" for 25-	yr event
Inflow	=	0.19 cfs @	12.09 hrs,	Volume=	0.0	14 af		
Outflow	=	0.19 cfs @	12.10 hrs,	Volume=	0.0	14 af,	Atten= 0%,	Lag= 0.6 min
Discarded	=	0.01 cfs @	12.10 hrs,	Volume=	0.0	08 af		
Primary	=	0.18 cfs @	12.10 hrs,	Volume=	0.0	06 af		

Routing by Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.05 hrs Peak Elev= 36.94' @ 12.10 hrs Surf.Area= 227 sf Storage= 73 cf

Plug-Flow detention time= 61.1 min calculated for 0.014 af (100% of inflow) Center-of-Mass det. time= 61.4 min ( 866.6 - 805.2 )

Volume	Inver	t Avail.Sto	rage Storage	Description						
#1	36.50	)' ;	88 cf Custom	Stage Data (Cor	nic)Listed below	(Recalc)				
Elevatio (fee	on S et)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)					
36.9 37.0	50 00	115 246	0 88	0 88	115 248					
Device	Routing	Invert	Outlet Devices	3						
#1	Discarded	36.50'	<b>4.000 in/hr Exfiltration over Wetted area above 36.50'</b> Excluded Wetted area = 115 sf Phase-In= 0.01'							
#2	Primary	36.90'	<b>10.0' long x 2.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32							

**Discarded OutFlow** Max=0.01 cfs @ 12.10 hrs HW=36.94' (Free Discharge) **1=Exfiltration** (Exfiltration Controls 0.01 cfs)

**Primary OutFlow** Max=0.18 cfs @ 12.10 hrs HW=36.94' (Free Discharge) **2=Broad-Crested Rectangular Weir** (Weir Controls 0.18 cfs @ 0.49 fps)

### Summary for Pond 3P: 36" SMG

Inflow Area	a =	0.102 ac, 4	6.05% Impe	ervious, In	Iflow Depth =	4.46" 1	for 25-yr	event	
Inflow	=	0.51 cfs @	12.09 hrs,	Volume=	0.038 a	af			
Outflow	=	0.02 cfs @	15.32 hrs,	Volume=	0.038 a	af, Atter	n= 96%,	Lag= 193.8	min
Discarded	=	0.02 cfs @	15.32 hrs,	Volume=	0.038 a	af		-	

Routing by Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.05 hrs Peak Elev= 35.41' @ 15.32 hrs Surf.Area= 676 sf Storage= 1,077 cf

Plug-Flow detention time= 759.6 min calculated for 0.038 af (100% of inflow) Center-of-Mass det. time= 761.2 min (1,560.8 - 799.6)

Volume	Invert	Avail.Sto	rage	Storage Description							
#1	33.00'	6	57 cf	f Custom Stage Data (Conic)Listed below (Recalc)							
#2	33.50'	1,0	60 cf	2,704 cf Overall - 1,060 cf Embedded = 1,644 cf x 40.0% Volds <b>36.0" Round Pipe Storage</b> x 3 Inside #1 L= 50.0'							
		1,7	18 cf	Total Ava	ailable Storage						
Elevatio (fee	on Su et)	rf.Area (sq-ft)	Inc (cubie	.Store c-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)					
33.0 37.0	00 00	676 676		0 2,704	0 2,704	676 1,045					
Device	Routing	Invert	Outle	et Devices							
#1	Discarded	33.00'	33.00' <b>4.000 in/hr Exfiltration over Wetted area above 33.</b> Excluded Wetted area = 676 sf Phase-In= 0.01'								

**Discarded OutFlow** Max=0.02 cfs @ 15.32 hrs HW=35.41' (Free Discharge) **1=Exfiltration** (Exfiltration Controls 0.02 cfs)

### Summary for Pond 4P: 18" SMG

Inflow Area	a =	0.014 ac,10	0.00% Imp	ervious,	Inflow Depth =	5.93'	for 25-yr	event	
Inflow	=	0.09 cfs @	12.09 hrs,	Volume	= 0.007	af	-		
Outflow	=	0.01 cfs @	13.03 hrs,	Volume	= 0.007	af, A	tten= 92%,	Lag= 56.3	min
Discarded	=	0.01 cfs @	13.03 hrs,	Volume	= 0.007	af		•	

Routing by Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.05 hrs Peak Elev= 41.63' @ 13.03 hrs Surf.Area= 176 sf Storage= 166 cf

Plug-Flow detention time= 336.1 min calculated for 0.007 af (100% of inflow) Center-of-Mass det. time= 336.9 min (1,081.6 - 744.7)

### 5431 Post3

Type III 24-hr 25-yr Rainfall=6.17"

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Volume	Inv	/ert	Avail.Stor	rage	Storage D	escription						
#1	40	.00'	13	34 cf	Custom Stage Data (Conic)Listed below (Recalc)							
					440 cf Overall - 106 cf Embedded = $334$ cf x 40.0% Voids							
#2	40	.50'	10	)6 cf	18.0" Roi	und Pipe Sto	orage x 3	Inside #1				
#2	40	50'		0 of	$L = 20.0^{\circ}$		l Cono/Ci	<b>din d e r</b> los	nonviouo			
#3 #4	42	.3U 75'	~	Z CI	1.50 D X 1	.25 H Vertica		/IInder-Im	ipervious Decele)			
	43	.75			Custom S	stage Data (C	onic)Liste		Recaic)			
			26	69 cf	Total Avai	lable Storage						
Elevatio	าท	Surf Ar	ea	Inc	Store	Cum Store	W	et Area				
(fee	et)	(sq	-ft)	(cubic	etere	(cubic-feet)		(sa-ft)				
40 (	)()	1	76	(00.010	0	0		176				
42.5	50	1	76		440	440		294				
Elevatio	on	Surf.Ar	ea	Inc.	Store	Cum.Store	W	et.Area				
(fee	et)	(sq	-ft)	(cubic	-feet)	(cubic-feet)		(sq-ft)				
43.7	75	2	00		0	0		200				
43.8	30	1,0	00		27	27		1,000				
Device	Routing		Invert	Outle	et Devices							
#1	Discard	ed	40.00'	00' <b>4.000 in/hr Exfiltration over Wetted area above 40.00'</b> Excluded Wetted area = 176 sf Phase-In= 0.01'				e 40.00'				

**Discarded OutFlow** Max=0.01 cfs @ 13.03 hrs HW=41.63' (Free Discharge) **1=Exfiltration** (Exfiltration Controls 0.01 cfs)

### Summary for Link 3L: Roadside curb line POA #1

Inflow Area	a =	0.108 ac, 6	63.56% Imp	ervious,	Inflow <b>E</b>	Depth =	4.08	3" for 25-	-yr event	
Inflow	=	0.57 cfs @	12.09 hrs,	Volume	=	0.037	af		-	
Primary	=	0.57 cfs @	12.09 hrs,	Volume	=	0.037	af, /	Atten= 0%,	Lag= 0.0	) min

Primary outflow = Inflow, Time Span= 0.00-100.00 hrs, dt= 0.05 hrs

### Summary for Link 4L: Grass Swale along RR tracks POA #2

Inflow Area	a =	0.273 ac, 🗄	59.23% Imp	ervious,	Inflow Dep	oth = 1.	12" for 2	5-yr event
Inflow	=	0.34 cfs @	12.09 hrs,	Volume	= (	0.025 af		
Primary	=	0.34 cfs @	12.09 hrs,	Volume	= (	0.025 af,	Atten= 0%	6, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-100.00 hrs, dt= 0.05 hrs

# Section 5

Precipitation Table



## **Extreme Precipitation Tables**

## Northeast Regional Climate Center

Data represents point estimates calculated from partial duration series. All precipitation amounts are displayed in inches.

### **Metadata for Point**

Smoothing	Yes
State	NH
Location	Portsmouth
Latitude	43.075 degrees North
Longitude	70.759 degrees West
Elevation	0 feet
Date/Time	Mon Sep 25 2023 13:11:25 GMT-0400 (Eastern Daylight
Time)	

### **Extreme Precipitation Estimates**

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.26	0.40	0.50	0.65	0.81	1.04	1yr	0.70	0.98	1.21	1.56	2.03	2.66	2.92	1yr	2.35	2.81	3.22	3.94	4.55	1yr
2yr	0.32	0.50	0.62	0.81	1.02	1.30	2yr	0.88	1.18	1.52	1.94	2.49	3.21	3.57	2yr	2.84	3.43	3.94	4.68	5.33	2yr
5yr	0.37	0.58	0.73	0.98	1.25	1.61	5yr	1.08	1.47	1.89	2.43	3.14	4.07	4.58	5yr	3.60	4.40	5.04	5.94	6.70	5yr
10yr	0.41	0.65	0.82	1.12	1.45	1.89	10yr	1.25	1.73	2.23	2.89	3.75	4.87	5.53	10yr	4.31	5.32	6.09	7.11	7.98	10yr
25yr	0.48	0.76	0.97	1.34	1.77	2.34	25yr	1.53	2.14	2.78	3.63	4.74	6.17	7.10	25yr	5.46	6.83	7.80	9.03	10.05	25yr
50yr	0.54	0.86	1.10	1.54	2.07	2.76	50yr	1.79	2.53	3.29	4.32	5.66	7.39	8.58	50yr	6.54	8.25	9.42	10.81	11.98	50yr
100yr	0.60	0.97	1.25	1.77	2.42	3.26	100yr	2.09	2.98	3.90	5.16	6.77	8.85	10.38	100yr	7.83	9.98	11.38	12.96	14.27	100yr
200yr	0.67	1.10	1.43	2.05	2.82	3.83	200yr	2.44	3.52	4.62	6.13	8.08	10.61	12.55	200yr	9.39	12.07	13.76	15.55	17.02	200yr
500yr	0.80	1.31	1.71	2.48	3.48	4.76	500yr	3.00	4.38	5.76	7.70	10.22	13.48	16.14	500yr	11.93	15.52	17.67	19.78	21.49	500yr

# Section 6

# NRCS Soil Survey





Page 1 of 3

**Conservation Service** 

Web Soil Survey National Cooperative Soil Survey

I	MAP LEGEND	MAP INFORMATION
Area of Interest (AOI) Area of Interes	t (AOI) Stony Spot	The soil surveys that comprise your AOI were mapped at 1:20,000.
Image: Solis       Soil Map Unit I         Image: Soli Map Unit I       Soil Map Unit I         Image: Soli Map Unit I       Soil Map Unit I         Image: Soli Map Unit I       Soil Map Unit I         Image: Soli Map Unit I       Soil Map Unit I         Image: Soli Map Unit I       Soil Map Unit I         Image: Soli Map Unit I       Soil Map Unit I         Image: Soli Map Unit I       Soil Map Unit I         Image: Soli Map Unit I       Soil Map Unit I         Image: Soli Map Unit I       Soil Map Unit I         Image: Soli Map Unit I       Soil Map Unit I         Image: Soli Map Unit I       Soil Map Unit I         Image: Soli Map Unit I       Soil Map Unit I         Image: Soli Map Unit I       Soil Map Unit I         Image: Soli Map Unit I       Soil Map Unit I         Image: Soli Map Unit I       Soil Map Unit I         Image: Soli Map Unit I       Soli Map Unit I         Image: Soli Map Unit I       Soli Map Unit I         Image: Soli Map Unit I       Soli Map Unit I         Image: Soli Map Unit I       Soli Map Unit I         Image: Soli Map Unit I       Soli Map Unit I         Image: Soli Map Unit I       Soli Map Unit I         Image: Soli Map Unit I       Marsh or swan         Im	t (AOI)   Stony Spot  Polygons Polygons Points Poin	<ul> <li>1:20,000.</li> <li>Warning: Soil Map may not be valid at this scale.</li> <li>Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.</li> <li>Please rely on the bar scale on each map sheet for map measurements.</li> <li>Source of Map: Natural Resources Conservation Service Web Soil Survey URL:</li> <li>Coordinate System: Web Mercator (EPSG:3857)</li> <li>Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.</li> <li>This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.</li> <li>Soil Survey Area: York County, Maine Survey Area Data: Version 21, Aug 30, 2022</li> <li>Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.</li> <li>Date(s) aerial images were photographed: Jun 19, 2020—Sep 20, 2020</li> <li>The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor</li> </ul>
Slide or Slip		snifting of map unit boundaries may be evident.



## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Ur	Urban land	1.1	100.0%
Totals for Area of Interest	·	1.1	100.0%



# Section 7

Stormwater Operations & Maintenance Plan



### **STORMWATER INSPECTION AND MAINTENANCE MANUAL**

### The Foreside Inn 27 & 29 Wentworth Street Kittery Assessor's Map 9 Lots 37 & 38

### OWNERS AT TIME OF APPROVAL: 27 Wentworth Street, LLC & MREV Kittery Inn, LLC 401 Edgewater Place, Suite 570 Wakefield, MA 01880

Proper inspection, maintenance, and repair are key elements in maintaining a successful stormwater management program on a developed property. Routine inspections ensure permit compliance and reduce the potential for deterioration of infrastructure or reduced water quality. Inspections should also be carried out after any rainfall of 1" or more. Qualified inspectors shall be Professional Engineers licensed in the State of Maine or Certified Professionals in Erosion and Sediment Control. The following responsible parties shall be in charge of managing the stormwater facilities:

### **RESPONSIBLE PARTIES:**

Owner:	27 Wentworth Street,	LLC & MREV Kittery Inn, LLC	(617) 290-1269
	Name	Company	Phone
Inspection:	27 Wantwarth Streat	LIC & MPEV/Kitton/Inp. LIC	(617) 200 1260
inspection.	Name	Company	(017) 290-1209 Phone
Maintenance:	27 Wentworth Street,	LLC & MREV Kittery Inn, LLC	(617) 290-1269
	Name	Company	Phone

### NOTES:

Inspection and maintenance responsibilities shall transfer to any future property owner(s).

This manual shall be updated as needed to reflect any changes related to any transfer of ownership and/or any delegation of inspection and maintenance responsibilities to any entity other than those listed above.



### **POROUS PAVEMENT**

*Function* – Porous pavement is designed to capture rainwater runoff containing suspended solids, nutrients and pollutants. Proper maintenance of porous pavement is crucial for ensuring its longevity and functionality to infiltrate runoff.

Maintenance

- New porous pavement shall be inspected several times in the first month after construction and at least annually thereafter. Inspections shall be conducted after major storms to check for surface ponding that might indicate possible clogging.
- Inspect annually for pavement deterioration or spalling.
- Vacuum sweeping shall be performed 2-4 times a year (spring /fall or quarterly). Power washing may be required prior to vacuum sweeping to dislodge trapped particles.
- Sand and abrasives shall not be used for winter maintenance, as they will clog the pores; de-icing materials shall be used instead.
- Never reseal or repave with impermeable materials. If the porous pavement is damaged, it can be repaired using conventional, non-porous patching mixes as long as the cumulative area repaired does not exceed 10 percent of the paved area.

### **STONE LINED SWALE**

*Function* – Rip rap provides protection of soil from erosive velocities at pipe outlets *Maintenance* 

- Check for signs of erosion or channelization at and adjacent to the rip rap
- Replace any displaced stones and add new stones as necessary
- Inspect for any signs of Channelization downgradient and immediately repair

### LANDSCAPED AREAS - FERTILIZER MANAGEMENT

*Function* – Fertilizer management involves controlling the rate, timing and method of fertilizer application so that the nutrients are taken up by the plants thereby reducing the chance of polluting the surface and ground waters. Fertilizer management can be effective in reducing the amounts of phosphorus and nitrogen in runoff from landscaped areas, particularly lawns.

Maintenance

- Have the soil tested by your landscaper or local Soil Conservation Service for nutrient requirements and follow the recommendations.
- Do not apply fertilizer to frozen ground.
- Clean up any fertilizer spills.
- Do not allow fertilizer to be broadcast into water bodies.
- When fertilizing a lawn, water thoroughly, but do not create a situation where water runs off the surface of the lawn.

### LANDSCAPED AREAS - LITTER CONTROL

*Function* – Landscaped areas tend to filter debris and contaminates that may block drainage systems and pollute the surface and ground waters.

Maintenance

- Litter Control and lawn maintenance involves removing litter such as trash, leaves, lawn clippings, pet wastes, oil and chemicals from streets, parking lots, and lawns before materials are transported into surface waters.
- Litter control shall be implemented as part of the ground's maintenance program.

### STREET/PARKING LOT SWEEPING (DENSE PAVEMENT)

*Function* – Parking lots accumulate sand and debris. Street sweeping removes the sand and debris, which lowers transport of sediment and pollutants the stormwater systems and into the environment.

Maintenance

• A regular periodic cleaning schedule is recommended. The more frequent, the greater the sediment and pollutant removal. Regular cleaning of paved areas reduces the frequency of cleaning catch basins and drainage systems. It is recommended that the parking lots and access ways shall be swept at least once a month during winter months.

### **DRIP STRIPS**

*Function* – Drip strips are to provide erosion control of surface where impervious surfaces meet non-impervious surfaces, such as building or roadway edges. They also can provide for the infiltration and treatment of runoff and are particularly effective for roof-generated stormwater.

Maintenance

- Drip strips should be inspected annually for erosion, rutting, and migration of stone. Any areas experiencing erosion shall be properly maintained by replacing or adding additional stone to the area of concern.
- Remove litter such as trash, leaves, lawn clippings and pet wastes in the spring and fall.

### **STORMWATER MANAGEMENT GALLERIES**

*Function* – Stormwater management galleries (SMG), as referred to for this project, are subsurface stormwater storage chambers with open graded stone. The SMGs provide several important stormwater functions including pre-treatment in "isolator rows" and detains stormwater to attenuate peak rates of runoff as well as provide water quality treatment by binding runoff pollutants to soil particles beneath the basin as water percolates into the subsurface.

#### Maintenance

Maintaining a clean and obstruction-free retention/detention system helps to ensure the system performs the intended function of the primary design. Buildup of debris may obstruct flow through the laterals in a retention system or block the entranceway of the outlet pipe in a detention system. This may result in ineffective operation or complete failure of the system. Additionally, surrounding areas may potentially run the risk of

damage due to flooding or other similar issues. All retention/detention systems must be cleaned and maintained. Underground systems may be maintained more cost effectively if these simple guidelines are followed. Inspection should be performed at a minimum of once per year. Cleaning should be done at the discretion of individuals responsible for maintaining proper storage and flow. While maintenance can generally be performed yearround, it should be scheduled during a relatively dry season.

### **GENERAL CLEAN UP**

- Upon completion of the project, the contractor shall remove all temporary stormwater structures (i.e., temporary stone check dams, silt fence, temporary diversion swales, catch basin inlet filter, etc.). Any sediment deposits remaining in place after the silt fence or filter barrier is no longer required shall be dressed to conform to the existing grade, prepared, and seeded. Remove any sediment in catch basins and clean drainpipes that may have accumulated during construction.
- Once in operation, all paved areas of the site should be swept at least once annually at the end of winter/early spring prior to significant spring rains.

### **MUNICIPAL REPORTING**

The Owner shall retain a qualified post-construction stormwater inspector to inspect the site's stormwater infrastructure. By July 1 of each year, said inspector shall provide a completed and signed certification to the Town's Code Enforcement Officer that the inspection has been completed. The notification shall include a determination of the ongoing maintenance and functionality of the infrastructure, describe any deficiencies, and outline any necessary corrective action taken or recommended to the Owner.

### APPPENDIX

- A. Stormwater System Operations and Maintenance Report
- B. Site Grading and Drainage Plan

### STORM WATER SYSTEM OPERATION AND MAINTENANCE REPORT

General Information					
Project Name		The Foreside Inn			
Owner					
Inspector's Name(s)					
Inspector's Contact Information					
Date of Inspection		Start Time:	End Time:		
Type of Inspection:         Annual Report       Post-storm event         Due to a discharge of significant amounts of sediment					
Notes:					

General Site Questions and Discharges of Significant Amounts of Sediment						
Sul	oject	Status	Notes			
A d	A discharge of significant amounts of sediment may be indicated by (but is not limited to) observations of the following.					
Not	Note whether any are observed during this inspection:					
	Notes/ Action taken:					
1	Do the current site conditions reflect	□Yes				
	the attached site plan?	□No				
2	Is the site permanently stabilized,	□Yes				
	temporary erosion and sediment	□No				
	controls are removed, and stormwater					
	discharges from construction activity					
	are eliminated?					
3	Is there evidence of the discharge of	□Yes				
	significant amounts of sediment to	□No				
	surface waters, or conveyance					
	systems leading to surface waters?					

Permit Coverage and Plans				
#	BMP/Facility	Inspected	Corrective Action Needed and Notes	Date Corrected
	Porous Pavement	□Yes □No		
	Stone Lined Swale	□Yes □No		
	Parking Lot (paved surfaces)	□Yes □No		
	Drip Strips	□Yes □No		
	Vegetated Areas	□Yes □No		
	Stormwater Management Gallery – A (Infiltration Basin)	□Yes □No		
	Stormwater Management Gallery – B (Infiltration Basin)	□Yes □No		



# Section 8

# Watershed Plans

Pre-Development Drainage Area Plan Post-Development Drainage Area Plan





ALTUS NGINEE Portsmouth, NH 03801 www.altus-eng.com ENRIE 0.763 NOT FOR CONSTRUCTION APPROVAL AUGUST 24, 2023 BY DATE EDW 08/24/23 RMB EDW 5433SITE.dwg  $(22^{*}x34^{*}) 1^{*} = 10^{*}$  $(11^{"}x17")$  1" = 20' NANCY P. BOGENBERGER 29 WENTWORTH STREET KITTERY, MAINE 03904 MADBURY REAL ESTATE VENTURES 401 EDGEWATER PLACE, SUITE 570 WAKEFIELD, MA 01880 INN **RE-DEVELOPMENT** TAX MAP 9 LOTS 37 & 38 27 & 29 WENTWORTH STREET KITTERY, MAINE PRE-DEVELOPMENT WATERSHED PLAN



APPROVAL

BY DATE

EDW 07/11/23 EDW 10/05/23 EDW 11/03/23

RMB

EDW

5431SITE.dwg

#### Letter of Authorization

Madbury Real Estate Ventures LLC, Option Holder, hereby authorizes Altus Engineering, LLC, Doucet Survey, LLC, Woodburn & Company Landscape Architecture, LLC and Winter Holben Design, LLC to represent us in all matters concerning the engineering, surveying and architecture, and related permitting of improvements to the property located at 27 & 29 Wentworth Street in Kittery, Maine on Assessors Map 9, Lots 37 & 38. This authorization shall include any signatures required for Federal, State and Municipal permit applications.

McMarter

B. Taylor McMaster

June 1, 2023

Date

Witness

Date

NANCY E HAMMOND, REGISTER OF DEEDS E-RECORDED Bk 19297 PG 823 Instr # 2023025809 08/22/2023 02:03:25 PM Pages 2 YORK CO

Return to:

Mehall Law 401 Edgewater Place, Suite 105 Wakefield, MA 01880 Attention: Philip S. Mehall

DLN: 1002340246169

### WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS, that Nancy P. Bogenberger, an unmarried woman, ("Grantor"), with an address of 29 Wentworth Street, Kittery, ME 03903, for consideration paid, grants to 27 Wentworth Street, LLC, a Maine limited liability company ("Grantee"), with an address of 401 Edgewater Place, Suite 570, Wakefield, MA 01880, with WARRANTY COVENANTS,

A certain tract of land, with buildings thereon, situated on the westerly side of Wentworth Street in Kittery, York County, State of Maine, and described as follows:

A certain parcel of land being shown as Lot 37 on a plan entitled "Plan of Land for Madbury Real Estate Ventures of Tax Map 9, Lots 37 and 38, 27 & 29 Wentworth Street, Kittery, Maine" dated; June 15, 2023; scale: 1"= 10'; prepared by: Doucet Survey LLC; recorded at the York County Registry of Deeds in Plan Book 433, Plan No. 3.

Said parcel of land containing 8,319 square feet (0.19 acres), more or less.

Meaning and intending to describe the same premises conveyed to Grantor by Warranty Deed from Jeanne L. Stadelman dated April 29, 1993, and recorded in the York County Registry of Deeds on May 13, 1993, in Book 6527, Page 279.

THIS IS NOT HOMESTEAD PROPERTY OF THE GRANTOR.

[Signature Page Follows]

Executed this  $\mathcal{L}$  day August, 2023.

Witness

STATE OF \_ COUNTY O ster field

Many P. Boundary Nancy P/Bogenberger 8-21-23

On this  $\frac{1}{2}$  day  $\frac{1}{2}$ , 2023, personally appeared before me, the above-named Nancy P. Bogenberger, known () me or satisfactorily proven to be the person whose name is subscribed to the within instrument and acknowledged that she executed same for the purposes therein contained, being duly authorized.

Fustice of the Peace / Notary Public My Commission Expires: 12 3 2026 Seal or Stamp: DUBRU PUBLIC 994771 A CHINA COMMEALTH

5

Return to:

Mehall Law 401 Edgewater Place, Suite 105 Wakefield, MA 01880 Attention: Philip S. Mehall

DNL: 1002340246173

### WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS, that Nancy P. Bogenberger, an unmarried woman, ("Grantor"), with an address of 29 Wentworth Street, Kittery, ME 03903, for consideration paid, grants to MREV Kittery Inn, LLC, a Maine limited liability company ("Grantee"), with an address of 401 Edgewater Place, Suite 570, Wakefield, MA 01880, with WARRANTY COVENANTS,

A certain tract of land, with buildings thereon, situated on the westerly side of Wentworth Street in Kittery, York County, State of Maine, being the Easterly part of the homestead of the late Nancy W. Adams, deceased, and described as follows:

A certain parcel of land being shown as Lot 38 on a plan entitled "Plan of Land for Madbury Real Estate Ventures of Tax Map 9, Lots 37 and 38, 27 & 29 Wentworth Street, Kittery, Maine" dated; June 15, 2023; scale: 1"= 10'; prepared by: Doucet Survey LLC; recorded at the York County Registry of Deeds Plan Book 433, Plan No. 3.

Said parcel of land containing 13,389 square feet (0.31 acres), more or less.

Meaning and intending to describe the same premises conveyed to Grantor by Warranty Deed from Paul D. Murphy and Joanne M. Murphy dated October 13, 1987, and recorded in the York County Registry of Deeds on October 15, 1987, in Book 4493, Page 227.

THIS IS NOT HOMESTEAD PROPERTY OF THE GRANTOR.

[Signature Page Follows]

Executed this 2 day August, 2023.

Witness

Mancy P. Bogenberger

8-21-23

STATE OF COUNTY OI

On this  $\underline{\geq}$  day  $\underline{\qquad}$ , 2023, personally appeared before me, the above-named Nancy P. Bogenberger, known to me or satisfactorily proven to be the person whose name is subscribed to the within instrument and acknowledged that she executed same for the purposes therein contained, being duly authorized.

Justice of the Peace / Notary Public

My Commission Expires:  $|2|^{3}|$  2026 Seal or Stamp:








\* 150 foot Abutters List Report Kittery, ME August 22, 2023

#### **Subject Properties:**

Parcel Number: CAMA Number: Property Address:	9-37 9-37 27 WENTWORTH STREET	Mailing Address:	BOGENBERGER, NANCY P BOGENBERGER, NANCY P 29 WENTWORTH STREET KITTERY, ME 03904-1720
Parcel Number: CAMA Number: Property Address:	9-38 9-38 29 WENTWORTH STREET	Mailing Address:	BOGENBERGER, NANCY P BOGENBERGER, NANCY P 29 WENTWORTH STREET KITTERY, ME 03904-1720
Abutters:			
Parcel Number: CAMA Number: Property Address:	9-24 9-24 6-8 WHIPPLE ROAD	Mailing Address:	R C BISHOP OF PORTLAND R C BISHOP OF PORTLAND 510 OCEAN AVENUE PORTLAND, ME 04103
Parcel Number: CAMA Number: Property Address:	9-24 9-24A 6-8 WHIPPLE ROAD	Mailing Address:	SAINT RAPHAELS CHURCH SAINT RAPHAELS CHURCH 6 WHIPPLE ROAD KITTERY, ME 03904-1739
Parcel Number: CAMA Number: Property Address:	9-25 9-25 28 WENTWORTH STREET	Mailing Address:	KOLK, MARTIN H & WOLFE, KYLE A KOLK, MARTIN H & WOLFE, KYLE A 28 WENTWORTH STREET KITTERY, ME 03904-1721
Parcel Number: CAMA Number: Property Address:	9-26 9-26 24 WENTWORTH STREET	Mailing Address:	ELBROCH, VICTORIA TR ELBROCH, VICTORIA TR 24 WENTWORTH STREET KITTERY, ME 03904
Parcel Number: CAMA Number: Property Address:	9-32 9-32 19 TRAIP AVENUE	Mailing Address:	NIELSEN, CAROLYN NIELSEN, CAROLYN 19 TRAIP AVENUE KITTERY, ME 03904
Parcel Number: CAMA Number: Property Address:	9-33 9-33 18-20 WENTWORTH STREET	Mailing Address:	WILSON FAMILY IRR. KITTERY TRUST WILSON FAMILY IRR. KITTERY TRUST 37 HUNTINGTON WAY KITTERY, ME 03904
Parcel Number: CAMA Number: Property Address:	9-34 9-34 16 WENTWORTH STREET	Mailing Address:	DENNETT, FRANK A DENNETT, FRANK A 272 ROLLINGWOOD DRIVE ELIOT, ME 03903
Parcel Number: CAMA Number: Property Address:	9-35 9-35 21 WENTWORTH STREET	Mailing Address:	FITZGERALD TR, CARL E FITZGERALD TR, CARL E 21 WENTWORTH STREET KITTERY, ME 03904-1720
Parcel Number: CAMA Number: Property Address:	9-36 9-36 23-25 WENTWORTH STREET	Mailing Address:	FAIR TIDE FAIR TIDE 4 PINE GROVE LANE YORK, ME 03909

CAI Technologies

www.cai-tech.com

8/22/2023

Data shown on this report is provided for planning and informational purposes only. The municipality and CAI Technologies are not responsible for any use for other purposes or misuse or misrepresentation of this report.

Concernant of the concernat of the concernat of the concernati of the concernati of	0 foot Abutters List Re ery, ME ust 22, 2023	port	
Parcel Number: CAMA Number: Property Address:	9-40 9-40 1 LOVE LANE	Mailing Address:	RANDLETT, RUTH RANDLETT, RUTH 1 LOVE LN KITTERY, ME 03904
Parcel Number: CAMA Number: Property Address:	9-42 9-42 18 PINE STREET	Mailing Address:	KEITH H. & MARY S. SIMPSON TR 2017 KEITH H. & MARY S. SIMPSON TR 2017 69 CAMP SCHOOL ROAD WOLFEBORO, NH 03894
Parcel Number: CAMA Number: Property Address:	9-43 9-43 10-12 PINE STREET	Mailing Address:	HARRISON-GREEN, LLC HARRISON- GREEN, LLC C/O UNIVERSAL PROPERTY MANAGEMENT 750 LAFAYETTE RD #201 PORTSMOUTH, NH 03801
Parcel Number: CAMA Number: Property Address:	9-44 9-44 6 PINE STREET	Mailing Address:	TUTTLE, LINDA S TUTTLE, LINDA S 6 PINE STREET KITTERY, ME 03904-1714
Parcel Number: CAMA Number: Property Address:	9-45 9-45 4 CENTRAL AVENUE	Mailing Address:	MUCCIO, FRANK MUCCIO, FRANK 4 CENTRAL AVENUE KITTERY, ME 03904-1707
Parcel Number: CAMA Number: Property Address:	9-49 9-49 6 CENTRAL AVENUE	Mailing Address:	WRIGHT, MATTHEW DAVID WRIGHT, MATTHEW DAVID 6 CENTRAL AVENUE KITTERY, ME 03904
Parcel Number: CAMA Number: Property Address:	9-50 9-50 1 PINE STREET	Mailing Address:	FULTON, TIMOTHY FULTON, TIMOTHY 1 PINE STREET KITTERY, ME 03904
Parcel Number: CAMA Number: Property Address:	9-51 9-51 PINE STREET	Mailing Address:	MCCALLION, JANINE MCCALLION, JANINE 15 PINE STREET KITTERY, ME 03904
Parcel Number: CAMA Number: Property Address:	9-52 9-52 15 PINE STREET	Mailing Address:	MCCALLION, JANINE MCCALLION, JANINE 15 PINE STREET KITTERY, ME 03904-1713



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From:	Timothy Babkirk
To:	Ron Beal
Subject:	RE: [kitteryme] 27 & 29 Wentworth Street (Sent by Ronald M. Beal, Altus Engineering, rbeal@altus-eng.com)
Date:	Wednesday, August 16, 2023 12:34:42 PM
Attachments:	image002.png
	image003.png
	image004.png

#### Hi Ronald,

Foundation work can be done inside the easement if it does not interfere with or undermine the sewer line, and access must remain in place should the line ever need maintenance or repair.

Thank you



**Tim Babkirk** Superintendent Kittery Sewer department

Phone: 207-439-4646 Email: <u>tbabkirk@kitteryme.org</u>

200 Rogers Road Kittery, ME 03904

www.kitteryme.gov



From: Ron Beal <rbeal@altus-eng.com>
Sent: Tuesday, August 15, 2023 2:14 PM
To: Timothy Babkirk <TBabkirk@kitteryme.org>
Subject: RE: [kitteryme] 27 & 29 Wentworth Street (Sent by Ronald M. Beal, Altus Engineering,
rbeal@altus-eng.com)

Timothy,

The main question is what are KSD Mean & Methods for with foundation work within sewer easement?



STATE OF MAINE DEPARTMENT OF TRANSPORTATION 16 STATE HOUSE STATION AUGUSTA, MAINE 04333-0016

Janet T. Mills

Bruce A. Van Note COMMISSIONER

July 6, 2022

Nancy P. Bogenberger 29 Wentworth Street Kittery, ME 03904 WIN:018653.00Parcel:32Route#:Route 103Town:Kittery

#### Dear Property Owner(s):

The Maine Department of Transportation is currently working on plans for a transportation improvement project located in Kittery, Maine. This letter informs you of the proposed project and your involvement as a property owner. The plans indicate the Department will acquire a portion of your property and/or rights in land as part of this project. A Department representative will contact you in the near future regarding the project and its impact on your property.

You are entitled to due process and just compensation as outlined on pages 8 through 10 in the accompanying "MaineDOT Projects and Your Property", which summarizes the property acquisition process.

If you decide to sell your property, state law requires that you inform the potential buyer that the Department intends to acquire an interest in this property.

If you have questions pertaining to the procedures you can contact me at this office by telephone, (207) 624-3345. Our intention is to have you understand what is being done and why it is being done, with the least amount of inconvenience to you as an involved property owner.

Thank you for taking your time to understand our procedures.

Sincerely,

uonen.

Andrew G. Johnson Senior Property Officer

THE NFORMEVL: 24-3000 TTY USERS CALL MAINE RELAY 711 FAX: (207) 624-3001



STATE OF MAINE Department of Transportation 16 State House Station Augusta, Maine 04333-0016

Janet T. Mills GOVERNOR Bruce A. Van Note

July 6, 2022

Nancy P. Bogenberger 29 Wentworth Street Kittery, ME 03904 WIN:018653.00Parcel:34Route#:Route 103Town:Kittery

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The Maine Department of Transportation is currently working on plans for a transportation improvement project located in Kittery, Maine. This letter informs you of the proposed project and your involvement as a property owner. The plans indicate the Department will acquire a portion of your property and/or rights in land as part of this project. A Department representative will contact you in the near future regarding the project and its impact on your property.

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Thank you for taking your time to understand our procedures.

Sincerely,

Andrew G. Johnson Senior Property Officer

THE NFORMEVL 624 ARTMENT OF TRANSPORTATION IS AN AFFIRMATIVE ACTION - EQUAL OPPORTUNITY EMPLOYER PHONE: (207) 624-3000 TTY USERS CALL MAINE RELAY 711 FAX: (207) 624-3001

Date: 4/2/2023

Nancy P Bogenberger 29 Wentworth Street Kittery, ME. 03904

WIN:18653.00 Street: Walker St.-Wentworth St. Town: Kittery Parcel/Item: 34

Dear Sir /Madam:

The Maine DOT's improvement project on Walker & Wentworth St's is ready to move forward. Improvements consist of construction/reconstruction of sidewalks along both sides of Walker Street from approximately 365 feet east of Route 1 / State Road, progressing east to Wallingford Square, then progressing north along Wentworth Street to Whipple Road. Parking will be striped along both sides of Walker and along the west side of Wentworth. Improvements will include resetting/replacement of existing curb to the appropriate height and offset, installation of cross walks across side streets and large driveway openings, curb extensions (i.e. bump outs), paving of the travel lanes/parallel parking areas, and improvements to the traffic signal system at the intersection of Walker and Wentworth Street. This letter informs you of the proposed project and your involvement as a property owner. The plans indicate that the Department will acquire some rights in land from your property as part of this project.

I have been hired by the Department to conduct an analysis of the real estate market in the area and estimate the value of the rights to be acquired for the project. The objective is to estimate the amount of compensation to be paid each owner for the land and rights acquired for the project. As part of the valuation process, the areas to be acquired on all the involved properties will be inspected and photographed. Maine Law, Title 23 MRSA Section 153-B (2) provides the owner be offered a right to accompany the appraiser during the inspection of the property for the purpose of completing an appraisal.

I am planning to be in Kittery April 18-20 and could arrange to meet during that timeframe. In lieu of meeting in person, I can email you a plan set, and we can discuss it over the phone. I recommend you give me a call at 207-557-3201 or email me at <u>rowray@fairpoint.net</u> and we can discuss how to move forward. After our discussion, I would be happy to set up an in-person meeting while in town if that is mutually agreeable.

If you decide to sell the property, state law requires that you inform the potential buyer that the Department intends to acquire an interest in this property. Following the completion of the appraisal, a representative of the Department will contact you to present the State's offer and explain the details of the valuation process, the acquisition process and the proposed construction. The objective is to reach a settlement based on the Department's offer of just compensation.

Please give me a call at 207-557-3201 if you have questions or would like to meet.

Very truly yours,

Raymond E Quimby, Jr. Certified General Appraiser.

Date: 4/2/2023

Nancy P Bogenberger 29 Wentworth Street Kittery, ME. 03904

WIN:18653.00 Street: Walker St.-Wentworth St. Town: Kittery Parcel/Item: 32 27

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Please give me a call at 207-557-3201 if you have questions or would like to meet.

Very truly yours,

Raymond E Quimby, Jr. Certified General Appraiser.

Date: 7/15/2022

Town: Kittery: WIN:18653.00, Walker/Wentworth Streets Item: 32

Nancy P Bogenberger 29 Wentworth Street Kittery, ME. 03904

Dear Sir /Madam:

As you may already know, the Maine Department of Transportation is currently working on plans to improve pedestrian facilities, access management, safety, and drainage on Walker and Wentworth Streets. This letter informs you of the proposed project and your involvement as a property owner. The plans indicate that the Department will acquire some rights in land from your property as part of this project.

I have been hired by the Department to conduct an analysis of the real estate market in the area and estimate the value of the rights to be acquired for the project. The objective is to estimate the amount of compensation to be paid each owner for the rights acquired for the project. As part of the valuation process, the areas to be acquired on all the involved properties will be inspected and photographed. Maine Law, Title 23 MRSA Section 153-B (2) provides the owner be offered a right to accompany the appraiser during the inspection of the property for the purpose of completing an appraisal.

I am planning to be in Kittery August 9-11, and could arrange to meet during that timeframe. I recognize we are still collectively dealing with the COVID-19 pandemic and some risk exists for in person meetings In lieu of meeting in person, I can email you a plan set, and we can discuss it over the phone, or we can set up a meeting by ZOOM. I recommend you give me a call at 207-557-3201 or email me at rowray@fairpoint.net and we can discuss how to move forward. After our discussion, I would be happy to set up an in-person meeting while in town if that is mutually agreeable.

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The Department's intention is to have you understand what is being done and why it is being done, with the least amount of inconvenience to you as an owner.

Please give me a call at 207-557-3201 if you have questions or would like to meet.

Verv truk rou

Raymond E Quimby, Jr. Certified General Appraiser.

Date: 7/15/2022

Town: Kittery: WIN:18653.00, Walker/Wentworth Streets Item: 34

Nancy P Bogenberger 29 Wentworth Street Kittery, ME. 03904

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Please give me a call at 207-557-3201 if you have questions or would like to meet.

Raymond É Quimby, Ir. Certifjed General Appraiser.

A DAREN & I TALKED TO MR. QUIMBY 1) The project will start Spring of 24 2) The State is not going to take any of the paper land 3) The state is going to recurb t install 10' of the drivency so the street will drain properly eter





I	MAP LEGEND	MAP INFORMATION
Area of Interest (AOI) Area of Interes	t (AOI) Stony Spot	The soil surveys that comprise your AOI were mapped at 1:20,000.
Image: Solis       Soil Map Unit I         Image: Soli Map Unit I       Soil Map Unit I         Image: Soli Map Unit I       Soil Map Unit I         Image: Soli Map Unit I       Soil Map Unit I         Image: Soli Map Unit I       Soil Map Unit I         Image: Soli Map Unit I       Soil Map Unit I         Image: Soli Map Unit I       Soil Map Unit I         Image: Soli Map Unit I       Soil Map Unit I         Image: Soli Map Unit I       Soil Map Unit I         Image: Soli Map Unit I       Soil Map Unit I         Image: Soli Map Unit I       Soil Map Unit I         Image: Soli Map Unit I       Soil Map Unit I         Image: Soli Map Unit I       Soil Map Unit I         Image: Soli Map Unit I       Soil Map Unit I         Image: Soli Map Unit I       Soil Map Unit I         Image: Soli Map Unit I       Soil Map Unit I         Image: Soli Map Unit I       Soli Map Unit I         Image: Soli Map Unit I       Soli Map Unit I         Image: Soli Map Unit I       Soli Map Unit I         Image: Soli Map Unit I       Soli Map Unit I         Image: Soli Map Unit I       Soli Map Unit I         Image: Soli Map Unit I       Soli Map Unit I         Image: Soli Map Unit I       Marsh or swan         Im	t (AOI)   Stony Spot  Polygons Polygons Points Poin	<ul> <li>1:20,000.</li> <li>Warning: Soil Map may not be valid at this scale.</li> <li>Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.</li> <li>Please rely on the bar scale on each map sheet for map measurements.</li> <li>Source of Map: Natural Resources Conservation Service Web Soil Survey URL:</li> <li>Coordinate System: Web Mercator (EPSG:3857)</li> <li>Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.</li> <li>This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.</li> <li>Soil Survey Area: York County, Maine Survey Area Data: Version 21, Aug 30, 2022</li> <li>Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.</li> <li>Date(s) aerial images were photographed: Jun 19, 2020—Sep 20, 2020</li> <li>The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor</li> </ul>
Slide or Slip		snifting of map unit boundaries may be evident.



# Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Ur	Urban land	1.1	100.0%
Totals for Area of Interest	·	1.1	100.0%



# **TEST PIT LOGS**

THE FORESIDE INN 27-29 WENTWORTH STREET KITTERY, MAINE P5431

AUGUST 14, 2023 LOGGED BY: ERIC WEINRIEB, PE

#### **TEST PIT 1**

0 - 14"	CLEAN GRAVEL, 3'" MINUS
14 - 29"	MIXED GRAVELLY FILL WITH ASH – SHOULD BE REMOVED FOR DRIVEWAY
	CONSTRUCTION – LIMITS OF ASH NOT DETERMINED
39 – 36"	SILTY LOAM, FRIABLE
36 – 65"	MIXED GRAVELLY FILL WITH ASH – SHOULD BE REMOVED FOR DRIVEWAY
	CONSTRUCTION – LIMITS OF ASH NOT DETERMINED
65″	STOPPED
ESHWT: 36"	
NO REFUSAL	
<b>OBSERVED WATER: 60</b>	)"

#### TEST PIT 2

LEDGE ENCOUNTERED BETWEEN 5 AND 32" – TOP PORTION POSSIBLY RIPABLE FINE SANDY LOAM WITH STONES TO 4" ESHWT: NONE OBSERVED WATER: NONE

#### **TEST PIT 3**

0 - 8"	FINE SANDY LOAM AND GRASS MAT, FRIABLE, GRANULAR
8 – 26"	FINE SANDY LOAM, FRIABLE, GRANULAR
26–40" (64)	LOAMY COMPACTED SAND, FIRM WITH STONES TO ${\%}^{\prime\prime}$ , VARIABLE DEPTH TO
	LEDGE
40/64"	REFUSAL
ESHWT: NONE	
OBSERVED WATER: N	ONE
PERC RATE: 4 MIN/IN	СН

#### **TEST PIT 4**

LEDGE ENCOUNTERED BETWEEN 22 AND 30" – TOP PORTION POSSIBLY RIPABLE FINE SANDY LOAM ESHWT: NONE OBSERVED WATER: NONE

#### **TEST PIT 5**

0 – 6" FINE SANDY LOAM AND GRASS MAT, FRIABLE, GRANULAR

6 – 55" LOAMY COMPACTED SAND 55" REFUSAL

ESHWT: NONE OBSERVED WATER: NONE PERC RATE: 4 MIN/INCH

#### **TEST PIT 6**

0 - 6"	FOREST MAT AND FINE SANDY LOAM, FRIABLE
6 – 12"	FINE SANDY LOAM, FRIABLE, GRANULAR
12 – 38"	LOAMY SAND, SINGLE GRAIN
38 – 56"	SILTY SAND, FIRM
56"	REFUSAL
ESHWT: NONE	
NO OBSERVED WATER	
PERC RATE: 4 MIN/INCI	Н

#### **TEST PIT 7**

0 – 6" LEDGE – NOT APPARENTLY RIPABLE WITH MINI EXCAVATOR ESHWT: NONE NO OBSERVED WATER

#### **TEST PIT 8**

16" LEDGE – RIPABLE WITH MINI EXCAVATOR ESHWT: NONE NO OBSERVED WATER

#### **TEST PIT 9**

9" LEDGE – RIPABLE WITH MINI EXCAVATOR ESHWT: NONE NO OBSERVED WATER

#### **TEST PIT 10**

20 TO 53" LEDGE – RIPABLE WITH MINI EXCAVATOR ESHWT: NONE NO OBSERVED WATER

# The Foreside Inn

## 27 & 29 Wentworth Street Kittery, Maine

# **Traffic Generator Summary**

## August 24, 2023

(Institute of Transportation Engineers, Trip Generation, 9th Edition).

Section 312 - Business Hotel - residential traffic

Peak hour per employee Peak hour per occupied room 7.60 trips per day (weekday between 4 pm & 6 pm) 0.62 trips per day (weekday between 4 pm & 6 pm)

Road Name	Quantity	Peak hour ADT
Employee	1	8
Occupied rooms	24	15
Total	25	23

John C. Perry, President James E. Golter, Treasurer Robert A. Gray, Clerk Michael H. Melhorn, Trustee Carla J. Robinson, Trustee



Michael S. Rogers, Superintendent Carl B. Palm, Assistant Superintendent Melissa J. Locke, Office Manager

OFFICE OF

# **KITTERY WATER DISTRICT**

17 State Road Kittery, ME 03904-1565 TEL: 207-439-1128 FAX: 207-439-8549 Email: info@kitterywater.org

Kittery Planning Board 200 Rogers Road Kittery, ME 03904

August 15, 2023

Re: Inn Re-Development – 27 & 29 Wentworth Street

Dear Planning Board Members,

Please accept this letter as verification that the Kittery Water District does have the capacity to supply the proposed inn re-development, located at 27 & 29 Wentworth Street, Kittery with Municipal Water Service.

Sincerely,

Michael . Rog

Michael S. Rogers Superintendent

cc: Ron Beal, P.E. - Altus Engineering



133 Court Street Portsmouth, NH 03801-4413

August 22, 2023

Timothy Babkirk, Superintendent Kittery Sewer Department 200 Rogers Road Kittery, Maine 03904

Re: The Foreside Inn Map 9 Lots 37 & 38 27 & 29 Wentworth Street Kittery, Maine

Dear Mr. Babkirk:

Per the requirements of the Town of Kittery <u>Land Use and Development</u> 16.10.5.2.C.12, this letter is to inform you of the pending Site Plan Review Application before the Planning Board. The applicant, Madbury Real Estate Ventures, is permitting the redevelopment of two (2) parcels identified as Tax Map 9, Lots 37 & 38, located at 27 & 29 Wentworth Street. The applicant proposes to construct a 12-unit inn on each parcel with a 13<sup>th</sup> innkeeper's suite taker unit on 29 Wentworth Street. Both inns will share an 18-space parking lot and access drive on 29 Wentworth Street. The structure at 27 Wentworth will be demolished with a new building constructed closer to the street. The property at 29 Wentworth will be partially demolished during renovation with the intention to maintain the original 1800's era structure. Enclosed for your review is a partial set of the engineered drawings to be submitted to the Planning Board for preliminary approval.

The building at 29 Wentworth encroaches into an existing sewer easement that runs through the parcel,  $\pm 2.0$  feet at the rear face and  $\pm 0.0$  feet on the front face. This new addition will not encroach beyond the existing footprint within the sewer easement. The project also proposes two (2) sewer connections into the existing 8" sewer main that runs through Lot 38 via an "inserta" tee connections.

Please review and provide a letter indicating the department's ability to service the project to Mazim Zakian, Town Planner. Please call if you have any questions, need additional information, or would like to meet to discuss the project.

Sincerely,

102 mg

Ronald M. Beal, P.E. Project Engineer

5431.11a Dept.KSD.ltr.docx

Enclosure

cc: Mazim Zakian, Town Planner Taylor McMaster, Madbury Real Estate Ventures



133 Court Street Portsmouth, NH 03801-4413

August 22, 2023

Chief Robert V. Richter Kittery Police Department 200 Rogers Road Kittery, Maine 03904

Re: The Foreside Inn Map 9 Lots 37 & 38 27 & 29 Wentworth Street Kittery, Maine

Dear Chief Richter:

Per the requirements of the Town of Kittery Land Use and Development 16.10.5.2.C.12.b, this letter is to inform you of the pending Site Plan Review Application before the Planning Board. The applicant, Madbury Real Estate Ventures, is permitting the redevelopment of two (2) parcels identified as Tax Map 9, Lots 37 & 38, located at 27 & 29 Wentworth Street. The applicant proposes to construct a 12-unit inn on each parcel with a 13<sup>th</sup> innkeeper's suite taker unit on 29 Wentworth Street. Both inns will share an 18-space parking lot and access drive on 29 Wentworth Street. The structure at 27 Wentworth will be demolished with a new building constructed closer to the street. The property at 29 Wentworth will be partially demolished during renovation with the intention to maintain the original 1800's era structure. Enclosed for your review is a partial set of the engineered drawings to be submitted to the Planning Board for preliminary approval.

Please review and provide a letter of evaluation to Bart McDonough, Town Planner. Please call if you have any questions, need additional information, or would like to meet to discuss the project.

Sincerely,

Rooms

Ronald M. Beal, P.E. Project Engineer

5431.11b Dept.PD.ltr.docx

Enclosure

cc: Mazim Zakian, Town Planner Taylor McMaster, Madbury Real Estate Ventures



133 Court Street Portsmouth, NH 03801-4413

August 22, 2023

Chief David O'Brien Kittery Fire Department 3 Gorges Road Kittery, Maine 03904

Re: The Foreside Inn Map 9 Lots 37 & 38 27 & 29 Wentworth Street Kittery, Maine

Dear Chief O'Brien:

Per the requirements of the Town of Kittery Land Use and Development 16.10.5.2.C.12.b, this letter is to inform you of the pending Site Plan Review Application before the Planning Board. The applicant, Madbury Real Estate Ventures, is permitting the redevelopment of two (2) parcels identified as Tax Map 9, Lots 37 & 38, located at 27 & 29 Wentworth Street. The applicant proposes to construct a 12-unit inn on each parcel with a 13<sup>th</sup> innkeeper's suite taker unit on 29 Wentworth Street. Both inns will share an 18-space parking lot and access drive on 29 Wentworth Street. The structure at 27 Wentworth will be demolished with a new building constructed closer to the street. The property at 29 Wentworth will be partially demolished during renovation with the intention to maintain the original 1800's era structure. Enclosed for your review is a partial set of the engineered drawings to be submitted to the Planning Board for preliminary approval.

Please review and provide a letter of evaluation to Mazim Zakian, Town Planner. Please call if you have any questions, need additional information, or would like to meet to discuss the project.

Sincerely,

Room B

Ronald M. Beal, P.E. Project Engineer

5431.11c Dept.FD.ltr.docx

Enclosure cc: Mazim Zakian, Town Planner Taylor McMaster, Madbury Real Estate Ventures



133 Court Street Portsmouth, NH 03801-4413

August 22, 2023

Mr. David Rich Commissioner of Public Works 200 Rogers Road Kittery, Maine 03904

Re: The Foreside Inn Map 9 Lots 37 & 38 27 & 29 Wentworth Street Kittery, Maine

Dear Mr. Rich:

Per the requirements of the Town of Kittery Land Use and Development 16.10.5.2.C.12.b, this letter is to inform you of the pending Site Plan Review Application before the Planning Board. The applicant, Madbury Real Estate Ventures, is permitting the redevelopment of two (2) parcels identified as Tax Map 9, Lots 37 & 38, located at 27 & 29 Wentworth Street. The applicant proposes to construct a 12-unit inn on each parcel with a 13<sup>th</sup> innkeeper's suite taker unit on 29 Wentworth Street. Both inns will share an 18-space parking lot and access drive on 29 Wentworth Street. The structure at 27 Wentworth will be demolished with a new building constructed closer to the street. The property at 29 Wentworth will be partially demolished during renovation with the intention to maintain the original 1800's era structure.

MDOT is proposing improvements to Wentworth Street beginning as early as the fall of 2023. It is the intent of this design that any utility service work within the right-of-way is completed prior to or in conjunction with MDOT's work. Enclosed for your review is a partial set of the engineered drawings to be submitted to the Planning Board for preliminary approval.

Please review and provide a letter of evaluation to Bart McDonough, Town Planner. Please call if you have any questions, need additional information, or would like to meet to discuss the project.

Sincerely,

Room B

Ronald M. Beal, P.E. Project Engineer

5431.11d Dept.PW.ltr.docx

Enclosure

cc:

Mazim Zakian, Town Planner Taylor McMaster, Madbury Real Estate Ventures



# VISIBLELIGHT

1in	Avg/Min
1	12.0:1
	N/A

	Number Lamps	Lamp Output		Input Power
urity bollard	1	589	0.9	8
ROUND DOWNLIGHT, 80 CRI, 1000LM, MED WIDE DIST, CLEAR EC	1	1895	0.9	19.5
ing - In grade luminaire. Product DPTICAL # 6892 Operating at 120 60 Hz	21	10	0.9	8
	1	214	0.9	4.1
Size 0 Area Luminaire P1 nce Package 3000K CCT 80 CRI xtreme Backlight Control	1	3135	0.9	33.21
20 4000K 35 DEGREE BEAM	1	1280	0.9	18
	1	530	0.9	7.5



Street Inn Wentworth

Designer
Scott E Drouin
Date
11/02/2023
Scale
Not to Scale
Drawing No.



# WARE SECURITY RATED LIT BOLLARD CODE: A-760-KK-FF-BB-QQ-RR-JJ-

# CODE:

A-760

# **DIMENSIONS:**

Height (KK):46"/48" / 56" / 62" / CUS\*

Diameter(FF): 8"/10"/12"(choose depending on a security rating needed\*)

# **BOLLARD COVER MATERIAL(BB):**

- 01. Stainless steel
- 02. Carbon Steel
- 03. Aluminum

# FINISHES(QQ):

- 11 316 Stainless steel with a #4 swirl brushed stainless surface finish
- 12 Custom RAL

Stainless powder coated standard colors:

- 30. Black
- 33. White
- 36. Dark Grey
- 40. Light Grey

#### **SECURITY RATING(RR):** Please Read our Crash Rating guidence

3000K

4000K

ASTM C40 CRASH RATED FIXED BOLLARD

ASTM M30 CRASH RATED FIXED BOLLARD

ASTM PU40 CRASH RATED FIXED BOLLARD

ASTM H40 CRASH RATED FIXED BOLLARD

ASTM H30 CRASH RATED FIXED BOLLARD

ASTM C40 CRASH RATED REMOVABLE BOLLARD

ASTM M30 CRASH RATED REMOVABLE BOLLARD

ASTM M30 CRASHED RATED SHALLOW BOLLARD

ASTM M30 CRASHED RATED SHALLOW BOLLARD

ASTM PU40 CRASH RATED REMOVABLE BOLLARD

ASTM H40 CRASH RATED REMOVABLE BOLLARD

ASTM H30 CRASH RATED REMOVABLE BOLLARD

BDS-C40FB36-ST BDS-C40RB36-ST BDS-M30-FB-ST BDS-M30-RB-ST BDS-M30FB-SH BDS-M30FB-SH BDS-PU40FB36-ST BDS-PU40RB36-ST **BDS-H40FB-ST BDS-H40RB-ST BDS-H30FB-ST BDS-H30RB-ST** 

COLOUR TEMPERATURE(JJ):

31 32

# **GENERAL CHARACTERISTICS:**

110-277V Voltage: 9W Wattage: LED Source Type: -22°F~122°F **Operating Temperature: IP** Rating: IP 65 CRI 90 FLUX: 720lm 0-10V Dimmable

g@gordonbullard.com

1-877-964-4646



991 South Gull Lake Dr Richland, MI 49083 USA





#### Path Light MODEL PA1 12/120V, 4W Integral LED 12/120V, 3W T3 Bi-pin LED

# LIGHTING

#### Specifications:

#### Construction

Aluminum, brass, or stainless steel with 18-8 stainless steel hardware. Also available with copper shade (all other components brass).

#### Stem

Stems machined from 6061-T6 aluminum, C36000 brass, or 304 stainless steel and are available in lengths of 6", 12", 18", 24", 30", 36", 42" and 48".

#### Finish

TGIC thermo set polyester powder coat paint available in 14 standard colors. On aluminum model, finish is applied over a corrosion resistant, hexavalent chromium free. RoHS compliant coating. Aluminum model available in one additional metal finish: Clear Anodized. Brass model available in three additional metal finishes: Natural, Polished, and Aged. Stainless steel model available in

three additional metal finishes: Natural, Polished, and Brushed. Copper model available in Natural finish only.

#### Lens

1/8" wall tempered borosilicate tube, secured to cap with a high temperature, UV curing silicone adhesive. Available with clear or frosted finish.

#### Lamp

Integral LED: 12 VAC, 4W LED module with integral driver. LED module features patented LEDSense® thermal management, an input voltage range of 9.6 to 14.4 VAC, an L70 of 60,000 hrs., a CRI > 80, and compatibility with magnetic and low load electronic transformers (see Transformer Compatibility List). Note: LED is not dimmable. LED module is not field replaceable.

T3 Bi-pin LED: 12 VAC/DC, 3W (330lm) T3 LED with an input range of 9 to 15 VAC/DC, a CRI > 80, field

replaceable, has a rated life span of 25,000 hrs, dimmable, and compatible with magnetic and low load electronic transformers (see LED specification sheet for transformer and dimmer compatibility information).

#### Electrical

Supplied standard with 24" of 16-2 cable beyond stem for connection to a remote low voltage power supply. Also available with integral 120V, 60VA low load electronic transformer in certain mount options.

#### Certification

CSA tested & certified to US and Canadian safety standards for wet location landscape use per UL1838 and UL1598

All ratings subject to change without notice. See web site or contact V3 for most current info



# **D-Series Size 0** LED Area Luminaire



d"series

## **Specifications**



# 

#### Catalog Number

Notes

Туре

## Introduction

The modern styling of the D-Series features a highly refined aesthetic that blends seamlessly with its environment. The D-Series offers the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. D-Series outstanding photometry aids in reducing the number of poles required in area lighting applications, with typical energy savings of 70% and expected service life of over 100,000 hours.

Order	ing Informa	tion	EXA	MPLE: DSX0 LED	P6 40K 70CRI T3N	1 MVOLT SPA I	NLTAIR2 I	PIRHN DDBXD
DSX0 LED								
Series	LEDs	Color temperature <sup>2</sup>	Color Rendering Index <sup>2</sup>	Distribution		Voltage	Mountin	ıg
DSX0 LED	Forward optics         P1       P5         P2       P6         P3       P7         P4       Fotated optics         P10 <sup>1</sup> P12 <sup>1</sup> P11 <sup>1</sup> P13 <sup>1</sup>	(this section 70CRI only)           30K         3000K           40K         4000K           50K         5000K           (this section 80CRI only, extended lead times apply)         27K           27K         2700K           30K         3000K           35K         3500K           40K         4000K           50K         5000K	70CRI 70CRI 80CRI 80CRI 80CRI 80CRI 80CRI 80CRI	AFRAutomotive front rowT1SType I shortT2MType II mediumT3MType III nediumT3LGType III low glare 3T4MType IV mediumT4LGType IV low glare 3TFTMForward throw medium	<ul> <li>T5M Type V medium</li> <li>T5LG Type V low glare</li> <li>T5W Type V wide</li> <li>BLC3 Type III backlight control<sup>3</sup></li> <li>BLC4 Type IV backlight control<sup>3</sup></li> <li>LCC0 Left corner cutoff<sup>3</sup></li> <li>RCC0 Right corner cutoff<sup>3</sup></li> </ul>	MVOLT (120V-277V) HVOLT (347V-480V) XVOLT (277V-480V)	<ul> <li>Shipper</li> <li>SPA</li> <li>RPA</li> <li>SPA5</li> <li>RPA5</li> <li>SPA8N</li> <li>WBA MA</li> </ul>	d included Square pole mounting (#8 drilling, 3.5" min. SQ pole) Round pole mounting (#8 drilling, 3" min. RND pole) Square pole mounting (#5 drilling, 3" min. SQ pole) <sup>9</sup> Round pole mounting (#5 drilling, 3" min. RND pole) <sup>9</sup> Square narrow pole mounting (#8 drilling, 3" min. SQ pole) Wall bracket <sup>10</sup> Mast arm adapter (mounts on 2 3/8" OD horizontal tenon)
Control opti	ons				Other options		Finish (required)	)
<b>Shipped in</b> : NLTAIR2 PIR	stalled HN nLight AIR gen 2 er ambient sensor, 8-4 sensor enabled at 2	nabled with bi-level motion / 40' mounting height, ambient fc. <sup>11, 12, 18, 19</sup>	PER7 Seven- ordered FAO Field a BL30 Bi-leve	pin receptacle only (controls d separate) <sup>14, 19</sup> djustable output <sup>15, 19</sup> el switched dimming, 30% <sup>16, 19</sup>	Shipped installed       HS     Houseside shield (black       L90     Left rotated optics <sup>1</sup> D00     Picht rotated optics <sup>1</sup>	finish standard) <sup>20</sup>	DDBXD Da DBLXD Bla DNAXD Na	ırk Bronze ack ıtural Aluminum
PIR PER	High/low, motion/a height, ambient sen NEMA twist-lock re separate) <sup>14</sup>	mbient sensor, 8–40' mounting sor enabled at 2fc <sup>13, 18, 19</sup> cceptacle only (controls ordered	BL50 Bi-leve DMG 0-10v fixture	I switched dimming, 50% <sup>16, 19</sup> dimming wires pulled outside (for use with an external control, d concretely) <sup>17</sup>	CCE Coastal Construction <sup>21</sup> HA 50°C ambient operation     Shipped separately	22	DDBTXD Te DBLBXD Te DNATXD Te	nne xtured dark bronze xtured black xtured natural aluminum

PER5 Five-pin receptacle only (controls ordered separate) 14, 19



DWHGXD Textured white

EGSR External Glare Shield (reversible, field install required, matches housing finish) BSDB Bird Spikes (field install required)

#### Accessories

dered and shipped separately.
Photocell - SSL twist-lock (120-277V) 23
Photocell - SSL twist-lock (347V) 23
Photocell - SSL twist-lock (480V) 23
Shorting cap 23
House-side shield (enter package number P1-7, P10-13 in place of #)
Round pole adapter (#8 drilling, specify finish)
Round pole adapter #5 drilling (specify finish)
Square pole adapter #5 drilling (specify finish)
External glare shield (specify finish)
Bird spike deterrent bracket (specify finish)

#### NOTES

- NOTES
  Rotated optics available with packages P10, P11, P12 and P13. Must be combined with option L90 or R90.
  30K, 40K, and 50K available in 70CRI and 80CRI. 27K and 35K only available with 80CRI. Contact Technical Support for other possible combinations.
  T3LG, T4LG, BLC3, BLC4, LCCO, RCCO not available with option H5.
  MVOLT driver operates on any line voltage from 120-277V (50/60 H2).
  HVOLT driver operates on any line voltage from 347-480V (50/60 H2).
  HVOLT or available with package P1, P2 and P10 when combined with option NLTAIR2 PIRHN or option PIR.
  XVOLT operates with any voltage between 277V and 480V (50/60 H2).
  XVOLT not available in packages P1, P2 or P10.
  SPA5 and RPA5 for use with #5 drilling only (Not for use with #8 drilling).
  WBA cannot be combined with type 5 distributions plus photocell (PER).
  NLTAIR2 PIRHN not available with opties performed to a preference in a straight with option on LIGHT A: 2.
  NLTAIR2 PIRHN not available with P1, P2 and P10 using XVOLT.
  PIR not available with NLTAIR2, PER, PER5, PER7, FAO BL30, BL50 and DMG. NLTAIR2 PIRHN not available with P1, P2 and P10 using XVOLT.
  PIR not available with NLTAIR2, PIR, BL30, BL50. Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included.
  FAO not available with therd imming control options NLTAIR2 PIRHN, PIR, PER5, PER7, BL30, BL50, or DMG.
  BL30 and BL50 are not available with NLTAIR2 PIRHN, PIR, PERF, PER7, PER7, PER3, DER7, FAO and DMG.
  DMG not available with NLTAIR2 PIRHN, PIR, PER, PER7, PER7, PER3, DES0, and PMG.
  BL30 and BL50 are not available with NLTAIR2 PIRHN, PIR, PER5, PER7, FAO and DMG.
  DMG not available with NLTAIR2 PIRHN, PIR, PER, PER7, PER3, BL50 and PG0.
  Reference Motion Sensor Default Settings table on page 4 to see functionality.
- 16 17 18 19 20 21 DMG not available with NLIAIK2 PIRTN, PIK, PEK7, PEK7, BL30, BL30 and PAO. Reference Motion Sensor Default Settings table on page 4 to see functionality. Reference Controls Options table on page 4. Option HS not available with 71G, T4LG, BLC3, BLC4, LCCO and RCCO distribution. Also available as a separate accessory; see Accessories information. CCE option not available with option BS and EGSR. Contact Technical Support for availability. Option HA not available with performance packages P6, P7, P12 and P13. Requires luminaire to be specified with PER, PER5 or PER7 option. See Controls Table on page 4.

  - 22 23

#### **Shield Accessories**



External Glare Shield (EGSR)

#### Drilling

**HANDHOLE ORIENTATION** (from top of pole) ( D

Α Handhole





House Side Shield (HS)

#### **Tenon Mounting Slipfitter**

	-	-					
Tenon O.D.	Mounting	Single Unit	2 @ 180	2 @ 90	3 @ 90	3 @120	4 @ 90
2-3/8"	RPA	AS3-5 190	AS3-5 280	AS3-5 290	AS3-5 390	AS3-5 320	AS3-5 490
2-7/8"	RPA	AST25-190	AST25-280	AST25-290	AST25-390	AST25-320	AST25-490
4"	RPA	AST35-190	AST35-280	AST35-290	AST35-390	AST35-320	AST35-490

		-8		₽	∎ਾੋੋ	¥	■╂■
Mounting Option	Drilling Template	Single	2 @ 180	2 @ 90	3 @ 90	3 @ 120	4 @ 90
Head Location		Side B	Side B & D	Side B & C	Side B, C & D	Round Pole Only	Side A, B, C & D
Drill Nomenclature	#8	DM19AS	DM28AS	DM29AS	DM39AS	DM32AS	DM49AS
			М	inimum Acceptable	Outside Pole Dimen	sion	
SPA	#8	3.5"	3.5"	3.5"	3.5"		3.5"
RPA	#8	3"	3"	3"	3"	3"	3"
SPA5	#5	3"	3"	3"	3"		3"
RPA5	#5	3"	3"	3"	3"	3"	3"
SPA8N	#8	3"	3"	3"	3"		3"

#### DSX0 Area Luminaire - EPA

\*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

Fixture Quantity & Mounting Configuration	Single DM19	2 @ 180 DM28	2 @ 90 DM29	3 @ 90 DM39	3 @ 120 DM32	4 @ 90 DM49
Mounting Type	-	■■	┖╸	<b>₽</b> ┸₽	*	<b>₽</b> <u></u> <b>1</b>
DSX0 with SPA	0.44	0.88	0.96	1.18		1.16
DSX0 with SPA5, SPA8N	0.51	1.02	1.06	1.26		1.29
DSX0 with RPA, RPA5	0.51	1.02	1.06	1.26	1.24	1.29
DSX0 with MA	0.64	1.28	1.24	1.67	1.70	1.93



Isofootcandle plots for the DSX0 LED P7 40K 70CRI. Distances are in units of mounting height (20').





#### Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40  $^\circ$  C (32-104  $^\circ$  F).

Ambi	Lumen Multiplier	
0°C	32°F	1.04
5°C	41°F	1.04
10°C	50°F	1.03
15°C	50°F	1.02
20°C	68°F	1.01
25°C	77°C	1.00
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97

#### **Projected LED Lumen Maintenance**

Data references the extrapolated performance projections for the platforms noted in a **25°C** ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	Lumen Maintenance Factor
0	1.00
25,000	0.94
50,000	0.89
100,000	0.80

#### **FAO Dimming Settings**

FAO Position	% Wattage	% Lumen Output
8	100%	100%
7	93%	95%
6	80%	85%
5	66%	73%
4	54%	61%
3	41%	49%
2	29%	36%
1	15%	20%

\*Note: Calculated values are based on original performance package data. When calculating new values for given FAO position, use published values for each package based on input watts and lumens by optic type.

#### **Motion Sensor Default Settings**

Option	Unoccupied Dimmed Level	High Level (when occupied)	Phototcell Operation	Dwell Time	Ramp-up Time	Dimming Fade Rate
PIR	30%	100%	Enabled @ 2FC	7.5 min	3 sec	5 min
NLTAIR2 PIRHN	30%	100%	Enabled @ 2FC	7.5 min	3 sec	5 min

#### **Controls Options**

Nomenclature	Description	Functionality	Primary control device	Notes
FAO	Field adjustable output device installed inside the luminaire; wired to the driver dimming leads.	Allows the luminaire to be manually dimmed, effectively trimming the light output.	FAO device	Cannot be used with other controls options that need the 0-10V leads
DS (not available on DSX0)	Drivers wired independently for 50/50 luminaire operation	The luminaire is wired to two separate circuits, allowing for 50/50 operation.	Independently wired drivers	Requires two separately switched circuits. Consider nLight AIR as a more cost effective alternative.
PER5 or PER7	Twist-lock photocell receptacle	Compatible with standard twist-lock photocells for dusk to dawn operation, or advanced control nodes that provide 0-10V dimming signals.	Twist-lock photocells such as DLL Elite or advanced control nodes such as ROAM.	Pins 4 & 5 to dimming leads on driver, Pins 6 & 7 are capped inside luminaire. Cannot be used with other controls options that need the 0-10V leads.
PIR	Motion sensor with integral photocell. Sensor suitable for 8' to 40' mounting height.	Luminaires dim when no occupancy is detected.	Acuity Controls rSBG	Cannot be used with other controls options that need the 0-10V leads.
NLTAIR2 PIRHN	nLight AIR enabled luminaire for motion sensing, photocell and wireless communication.	Motion and ambient light sensing with group response. Scheduled dimming with motion sensor over-ride when wirelessly connected to the nLight Eclypse.	nLight Air rSBG	nLight AIR sensors can be programmed and commissioned from the ground using the CIAIRity Pro app. Cannot be used with other controls options that need the 0-10V leads.
BL30 or BL50	Integrated bi-level device that allows a second control circuit to switch all light engines to either 30% or 50% light output	BLC device provides input to 0-10V dimming leads on all drivers providing either 100% or dimmed (30% or 50%) control by a secondary circuit	BLC UVOLT1	BLC device is powered off the 0-10V dimming leads, thus can be used with any input voltage from 120 to 480V



D3A0-LED
Rev. 04/25/23
Page 4 of 9

Electrical	Load				Current (A)									
	Performance Package	LED Count	Drive Current (mA)	Wattage	120V	208V	240V	277V	347V	480V				
Forward Optics (Non-Rotated)	P1	20	530	34	0.28	0.16	0.14	0.12	0.10	0.07				
	P2	20	700	45	0.38	0.22	0.19	0.16	0.13	0.09				
	P3	20	1050	69	0.57	0.33	0.29	0.25	0.20	0.14				
	P4	20	1400	94	0.78	0.45	0.39	0.34	0.27	0.19				
	P5	40	700	89	0.75	0.43	0.38	0.33	0.26	0.19				
	P6	40	1050	136	1.14	0.66	0.57	0.49	0.39	0.29				
	P7	40	1300	170	1.42	0.82	0.71	0.62	0.49	0.36				
	P10	30	530	51	0.42	0.24	0.21	0.18	0.15	0.11				
Rotated Optics	P11	30	700	67	0.57	0.33	0.28	0.25	0.20	0.14				
(Requires L90 or R90)	P12	30	1050	103	0.86	0.50	0.43	0.37	0.30	0.22				
	P13	30	1300	129	1.07	0.62	0.54	0.46	0.37	0.27				

### LED Color Temperature / Color Rendering Multipliers

	70 CRI		80	DCRI	90CRI				
	Lumen Multiplier	Availability	Lumen Multiplier	Availability	Lumen Multiplier	Availability			
5000K	102%	Standard	92%	Extended lead-time	71%	(see note)			
4000K	100%	Standard	92%	Extended lead-time	67%	(see note)			
3500K	100%	(see note)	90%	Extended lead-time	63%	(see note)			
3000K	96%	Standard	87%	Extended lead-time	61%	(see note)			
2700K	94%	(see note)	85%	Extended lead-time	57%	(see note)			

Note: Some LED types are available as per special request. Contact Technical Support for more information.

#### Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of configurations shown within the tolerances described within LM-79. Contact factory for performance data on any configurations not shown here.

Forward Optics																				
					1		30K			1		40K			50K					
Performance Package	Performance System Watts LED Count		Current (mA)	Distribution Type		(30	00K, 70	CRI)			(40	00K, 70	CRI)			(50	00K, 70	CRI)		
				Tac	Lumens	B	U	G	LPW	Lumens	В	U	G	LPW	Lumens	B	U	G	LPW	
				TIS	4,906	1	0	2	148	5,113	1	0	2	154	5,213	1	0	1	157	
				T3M	4,597	1	0	2	137	4,791	1	0	2	143	4,885	1	0	2	147	
				T3LG	4,107	1	0	1	124	4,280	1	0	1	129	4,363	1	0	1	131	
				T4M	4,666	1	0	2	141	4,863	1	0	2	146	4,957	1	0	2	149	
				T4LG	4,244	1	0	1	128	4,423	1	0	1	133	4,509	1	0	1	136	
P1 33W				TFTM	4,698	1	0	2	141	4,896	1	0	2	147	4,992	1	0	2	150	
	33W	20	530	T5M	4,801	3	0	1	145	5,003	3	0	1	151	5,101	3	0	1	154	
				15W	4,8/8	3	0	1	14/	5,084	3	0	2	153	5,183	3	0	 1	150	
				BIC3	3 344	0	0	1	145	3 485	0	0	1	105	3 553	0	0	1	107	
				BLC4	3,454	0	0	2	101	3,599	0	0	2	103	3,670	0	0	2	111	
				RCCO	3,374	0	0	1	102	3,517	0	0	1	106	3,585	0	0	1	108	
				LCCO	3,374	0	0	1	102	3,517	0	0	1	106	3,585	0	0	1	108	
				AFR	4,906	1	0	1	148	5,113	1	0	1	154	5,213	1	0	1	157	
				T1S	6,328	1	0	1	140	6,595	1	0	1	146	6,724	1	0	1	149	
			700	T2M	5,862	1	0	2	130	6,109	1	0	2	135	6,228	1	0	2	138	
				13M	5,930	1	0	3	131	6,180	1	0	3	13/	6,301	1	0	3	140	
		20		TAM	5,297	1	0	2	117	6 272	1	0	2	122	5,020	1	0	3	1/2	
P2 -				T4LG	5,474	1	0	1	133	5.705	1	0	1	126	5.816	1	0	1	142	
				TFTM	6,060	1	0	3	134	6,316	1	0	3	140	6,439	1	0	3	143	
	45W			T5M	6,192	3	0	1	137	6,453	3	0	2	143	6,579	3	0	2	146	
				T5W	6,293	3	0	2	139	6,558	3	0	2	145	6,686	3	0	2	148	
				T5LG	6,210	2	0	1	138	6,472	3	0	1	143	6,598	3	0	1	146	
				BLC3	4,313	0	0	2	96	4,495	0	0	2	100	4,583	0	0	2	102	
				BLC4	4,455	0	0	2	99	4,643	0	0	2	103	4,733	0	0	2	105	
					4,352	0	0	2	96	4,530	0	0	2	100	4,024	0	0	2	102	
				AFR	6.328	1	0	1	140	6.595	1	0	1	146	6.724	1	0	1	149	
			1050	T1S	9,006	1	0	2	131	9,386	1	0	2	136	9,569	1	0	2	139	
				T2M	8,343	2	0	3	121	8,694	2	0	3	126	8,864	2	0	3	129	
				T3M	8,439	2	0	3	122	8,795	2	0	3	128	8,967	2	0	3	130	
				T3LG	7,539	1	0	2	109	7,857	1	0	2	114	8,010	1	0	2	116	
				I4M	8,565	2	0	3	124	8,926	2	0	3	129	9,100	2	0	3	132	
				14LG TETM	8 624	1	0	2	113	8,119	1	0	2	118	0 163	2	0	2	120	
P3	69W	20		TSM	8,812	3	0	2	125	9,184	4	0	2	130	9,363	4	0	2	136	
15				T5W	8.955	4	0	2	120	9,333	4	0	2	135	9.515	4	0	2	138	
				T5LG	8,838	3	0	1	128	9,211	3	0	1	134	9,390	3	0	1	136	
				BLC3	6,139	0	0	2	89	6,398	0	0	2	93	6,522	0	0	2	95	
				BLC4	6,340	0	0	3	92	6,607	0	0	3	96	6,736	0	0	3	98	
				RCCO	6,194	1	0	2	90	6,455	1	0	2	94	6,581	1	0	2	95	
					6,194	1	0	2	90	0,455	1	0	2	94	6,581	1	0	2	95 120	
				TIS	11 396	1	0	2	127	11 877	1	0	2	130	12 109	2	0	2	139	
				T2M	10.557	2	0	3	113	11.003	2	0	3	118	11.217	2	0	3	121	
				T3M	10,680	2	0	3	115	11,130	2	0	3	120	11,347	2	0	3	122	
				T3LG	9,540	1	0	2	103	9,942	1	0	2	107	10,136	1	0	2	109	
				T4M	10,839	2	0	3	117	11,296	2	0	3	121	11,516	2	0	4	124	
				T4LG	9,858	1	0	2	106	10,274	1	0	2	110	10,474	1	0	2	113	
R4	0314	20	1400	IFTM	10,914	2	0	3	117	11,374	2	0	3	122	11,596	2	0	3	125	
P4	93W	20	1400	TSW/	11,152	4	0	2	120	11,622	4	0	2	125	17,849	4	0	2	12/	
				TSIG	11,352	4	0	1	122	11,656	4	0	2	127	11,883	4	0	2	129	
				BLC3	7,768	0	0	2	83	8,096	0	0	2	87	8,254	0	0	2	89	
				BLC4	8,023	0	0	3	86	8,362	0	0	3	90	8,524	0	0	3	92	
				RCCO	7,838	1	0	2	84	8,169	1	0	2	88	8,328	1	0	2	90	
				LCCO	7,838	1	0	2	84	8,169	1	0	2	88	8,328	1	0	2	90	
				AFR	11 396	1	0	2	122	11 877	1	0	2	128	12 109	2	0	2	130	



#### Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of configurations shown within the tolerances described within LM-79. Contact factory for performance data on any configurations not shown here.

Forward Optics																			
						30K					40K						50K		
Performance System Watts		LED Count	Drive	Distribution Type	(3000K, 70 CRI)							(5000K, 70 CRI)							
Раскаде			current (mA)		Lumens	В	U	G	LPW	Lumens	В	U	G	LPW	Lumens	В	U	G	LPW
				T1S	12,380	2	0	2	137	12,902	2	0	2	143	13,154	2	0	2	146
				T2M	11,468	2	0	3	127	11,952	2	0	3	133	12,185	2	0	3	135
				T3M	11,601	2	0	3	129	12,091	2	0	3	134	12,326	2	0	4	137
				T3LG	10,363	2	0	2	115	10,800	2	0	2	120	11,011	2	0	2	122
				T4M	11,774	2	0	4	131	12,271	2	0	4	136	12,510	2	0	4	139
				T4LG	10,709	1	0	2	119	11,160	2	0	2	124	11,378	2	0	2	126
				TFTM	11,856	2	0	3	132	12,356	2	0	4	137	12,596	2	0	4	140
P5	90W	40	700	T5M	12,114	4	0	2	134	12,625	4	0	2	140	12,871	4	0	2	143
				T5W	12,310	4	0	3	137	12,830	4	0	3	142	13,080	4	0	3	145
				T5LG	12,149	3	0	2	135	12,662	3	0	2	141	12,908	3	0	2	143
				BLC3	8,438	0	0	2	94	8,794	0	0	2	98	8,966	0	0	2	99
				BLC4	8,715	0	0	3	97	9,083	0	0	3	101	9,260	0	0	3	103
				RCCO	8,515	1	0	2	94	8,8/4	1	0	2	98	9,047	1	0	2	100
				LLLO	8,515	1	0	2	94	8,8/4	1	0	2	98	9,04/	1	0	2	100
			AFK	12,380	2	0	2	13/	10,205	2	0	2	143	13,154	2	0	2	140	
					16 252	2	0	3	128	16,285	2	0	3	133	18,042	2	0	3	130
				12IVI T2M	16,233	2 2	0	4	119	10,939	2	0	4	124	17,209	2	0	4	120
				TRIG	10,442	2	0	4	120	17,155	2	0	4	123	17,409	2 2	0	4	120
				TAM	16 687	2	0	1	107	17 301	2	0	5	172	17,005	2	0	5	174
				T4IG	15 177	2	0	7	111	15 817	2	0	2	115	16 125	2	0	2	125
		40	1050	TETM	16 802	2	0	4	123	17 511	2	0	4	178	17 852	2	0	5	130
P6	137W			T5M	17,168	4	0	2	125	17,893	5	0	3	131	18,241	5	0	3	133
				T5W	17,447	5	0	3	127	18,183	5	0	3	133	18,537	5	0	3	135
				T5LG	17.218	4	0	2	126	17,944	4	0	2	131	18,294	4	0	2	134
				BLC3	11.959	0	0	3	87	12,464	0	0	3	91	12,707	0	0	3	93
				BLC4	12,352	0	0	4	90	12,873	0	0	4	94	13,124	0	0	4	96
				RCCO	12,067	1	0	3	88	12,576	1	0	3	92	12,821	1	0	3	94
				LCCO	12,067	1	0	3	88	12,576	1	0	3	92	12,821	1	0	3	94
				AFR	17,545	2	0	3	128	18,285	2	0	3	133	18,642	2	0	3	136
				T1S	20,806	2	0	3	122	21,683	2	0	3	127	22,106	2	0	3	129
				T2M	19,273	3	0	4	113	20,086	3	0	4	118	20,478	3	0	4	120
				T3M	19,497	3	0	5	114	20,319	3	0	5	119	20,715	3	0	5	121
				T3LG	17,416	2	0	2	102	18,151	2	0	2	106	18,504	2	0	2	108
				T4M	19,787	3	0	5	116	20,622	3	0	5	121	21,024	3	0	5	123
				T4LG	17,997	2	0	2	105	18,756	2	0	2	110	19,121	2	0	2	112
				TFTM	19,924	3	0	5	117	20,765	3	0	5	122	21,170	3	0	5	124
P7	171W	40	1300	T5M	20,359	5	0	3	119	21,217	5	0	3	124	21,631	5	0	3	127
				T5W	20,689	5	0	3	121	21,561	5	0	3	126	21,982	5	0	3	129
				1516	20,418	4	0	2	120	21,279	4	0	2	125	21,694	4	0	2	127
				BLC3	14,182	0	0	3	83	14,/80	0	0	3	8/	15,068	0	0	3	88
				BLC4	14,04/	1	0	4	80	15,205	1	0	4	89	15,562	1	0	4	91
					14,309	1	0	5	ŏ4	14,913	1	0	5	<u>ة/</u>	15,204	1	0	5	89 80
				ΔFR	20 806	7	0	3 2	84 122	21 683	2	0	5 2	8/ 127	22 106	2	0	3	89 129



#### Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of configurations shown within the tolerances described within LM-79. Contact factory for performance data on any configurations not shown here.

Rotated Optics																				
							30K			1		40K			50K					
Performance Package	Performance Package System Watts LED Cou		Drive Current (mA)	Distribution Type		(30	00K, 70	CRI)			(40	00K, 70	CRI)			(50	00K, 70	CRI)		
ruchuge			Current (IIIA)		Lumens	В	U	G	LPW	Lumens	В	U	G	LPW	Lumens	В	U	G	LPW	
				T1S	7,399	3	0	3	145	7,711	3	0	3	151	7,862	3	0	3	154	
				12M T2M	6,854	3	0	3	135	7,144	3	0	3	140	7,283	3	0	3	143	
P10				T3IG	6.194	2	0	2	130	6 455	2	0	2	142	6.581	2	0	2	145	
				T4M	7,036	3	0	3	138	7,333	3	0	3	144	7,476	3	0	3	147	
				T4LG	6,399	2	0	2	126	6,669	2	0	2	131	6,799	2	0	2	134	
				TFTM	7,086	3	0	3	139	7,385	3	0	3	145	7,529	3	0	3	148	
	51W	30	530	T5M	7,239	3	0	2	142	7,545	3	0	2	148	7,692	3	0	2	151	
				15W	7,357	3	0	2	145	7,66/	3	0	2	151	7,816	4	0	2	154	
				BIC3	5.043	3	0	3	99	5.256	3	0	3	103	5.358	3	0	3	105	
				BLC4	5,208	3	0	3	102	5,428	3	0	3	103	5,534	3	0	3	109	
				RCCO	5,089	0	0	2	100	5,303	0	0	2	104	5,407	0	0	2	106	
				LCCO	5,089	0	0	2	100	5,303	0	0	2	104	5,407	0	0	2	106	
				AFR	7,399	3	0	3	145	7,711	3	0	3	151	7,862	3	0	3	154	
				115	9,358	3	0	3	138	9,753	3	0	3	143	9,943	3	0	3	146	
			700	T2M T3M	8,009	3 2	0	3	12/	9,034	3	0	3	133	9,211	3 2	0	3	135	
				T3IG	7.833	3	0	3	115	8.164	3	0	3	120	8.323	3	0	3	122	
		30		T4M	8,899	3	0	3	131	9,274	3	0	3	136	9,455	3	0	3	139	
				T4LG	8,093	3	0	3	119	8,435	3	0	3	124	8,599	3	0	3	126	
				TFTM	8,962	3	0	3	132	9,340	3	0	3	137	9,522	3	0	3	140	
P11	68W			T5M	9,156	4	0	2	135	9,542	4	0	2	140	9,728	4	0	2	143	
				T5W	9,304	4	0	2	137	9,696	4	0	2	143	9,885	4	0	2	145	
				RIC3	9,182	3	0	2	0/	9,509	3	0	2	08	9,/30	3	0	2	143	
				BIC4	6.587	3	0	3	97	6.865	3	0	3	101	6,999	3	0	3	100	
				RCCO	6,436	0	0	2	95	6,707	0	0	2	99	6,838	0	0	2	101	
				LCCO	6,436	0	0	2	95	6,707	0	0	2	99	6,838	0	0	2	101	
				AFR	9,358	3	0	3	138	9,753	3	0	3	143	9,943	3	0	3	146	
			1050	T1S	13,247	3	0	3	128	13,806	3	0	3	134	14,075	3	0	3	136	
				12M	12,271	4	0	4	119	12,789	4	0	4	124	13,038	4	0	4	126	
		30		13M T3IG	12,412	4	0	4	120	12,935	4	0	4	125	13,18/	4	0	4	128	
				T4M	12,597	4	0	4	107	13,128	4	0	4	127	13,384	4	0	4	129	
				T4LG	11,457	3	0	3	111	11,940	3	0	3	116	12,173	3	0	3	118	
				TFTM	12,686	4	0	4	123	13,221	4	0	4	128	13,479	4	0	4	130	
P12	103W			T5M	12,960	4	0	2	125	13,507	4	0	2	131	13,770	4	0	2	133	
				T5W	13,170	4	0	3	127	13,726	4	0	3	133	13,994	4	0	3	135	
				I SLG	0.020	3	0	2	07	13,546	3	0	2	01	0.502	3	0	2	02	
				BLC3	9,324	4	0	4	90	9,718	4	0	4	94	9,907	4	0	4	96	
				RCCO	9,110	1	0	2	88	9,495	1	0	2	92	9,680	1	0	2	94	
				LCCO	9,110	1	0	2	88	9,494	1	0	2	92	9,680	1	0	2	94	
				AFR	13,247	3	0	3	128	13,806	3	0	3	134	14,075	3	0	3	136	
				TIS	15,704	3	0	3	122	16,366	3	0	3	127	16,685	4	0	4	130	
				T2M	14,54/	4	0	4	113	15,161	4	0	4	118	15,45/	4	0	4	120	
				T3IG	14,/14	4	0	4	102	13,333	4	0	4	106	13,034	4	0	4	121	
				T4M	14.933	4	0	4	116	15,563	4	0	4	100	15,867	4	0	4	123	
				T4LG	13,582	3	0	3	105	14,155	3	0	3	110	14,431	3	0	3	112	
				TFTM	15,039	4	0	4	117	15,673	4	0	4	122	15,979	4	0	4	124	
P13	129W	30	1300	T5M	15,364	4	0	2	119	16,013	4	0	2	124	16,325	4	0	2	127	
				T5W	15,613	5	0	3	121	16,272	5	0	3	126	16,589	5	0	3	129	
				ISLG RIC2	15,409	3	0	2	120	10,059	3	0	2	125	10,3/2	4	0	2	12/	
				BICA	11 054	4	0	4	86	11,155	4	0	4	87	11,372	4	0	4	00 91	
				RCCO	10,800	1	0	2	84	11,256	1	0	2	87	11,475	1	0	3	89	
				LCCO	10,800	1	0	2	84	11,255	1	0	2	87	11,475	1	0	3	89	
				AER	15 704	3	0	3	122	16 366	2	0	3	127	16 685	4	0	4	130	







DSX0 with RPA, RPA5, SPA5, SPA8N mount Weight: 25 lbs





DSX0 with WBA mount Weight: 27 lb





DSX0 with MA mount Weight: 28 lbs







SPA5



SPA8N




### nLight Control - Sensor Coverage and Settings



### FEATURES & SPECIFICATIONS

### INTENDED USE

The sleek design of the D-Series Size 0 reflects the embedded high performance LED technology. It is ideal for many commercial and municipal applications, such as parking lots, plazas, campuses, and pedestrian areas.

### CONSTRUCTION

Single-piece die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. Modular design allows for ease of maintenance and future light engine upgrades. The LED driver is mounted in direct contact with the casting to promote low operating temperature and long life. Housing driver compartment is completely sealed against moisture and environmental contaminants (IP66). Vibration rated per ANSI C136.31 for 3G. Low EPA (0.44 ft<sup>2</sup>) for optimized pole wind loading.

### FINISH

Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Available in both textured and non-textured finishes.

### COASTAL CONSTRUCTION (CCE)

Optional corrosion resistant construction is engineered with added corrosion protection in materials and/or pre-treatment of base material under super durable paint. Provides additional corrosion protection for applications near coastal areas. Finish is salt spray tested to over 5,000 hours per ASTM B117 with scribe rating of 10. Additional lead-times may apply.

### OPTICS

Precision-molded proprietary silicone lenses are engineered for superior area lighting distribution, uniformity, and pole spacing. Light engines are available in 3000 K, 4000 K or 5000 K (70 CRI) configurations. 80CRI configurations are also available. The D-Series Size 0 has zero uplight and qualifies as a Nighttime Friendly<sup>™</sup> product, meaning it is consistent with the LEED<sup>®</sup> and Green Globes<sup>™</sup> criteria for eliminating wasteful uplight.

### ELECTRICAL

Light engine(s) configurations consist of high-efficacy LEDs mounted to metalcore circuit boards to maximize heat dissipation and promote long life (up to L80/100,000 hours at 25°C). Class 1 electronic drivers are designed to have a power factor >90%, THD <20%, and an expected life of 100,000 hours with <1% failure rate. Easily serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

### STANDARD CONTROLS

The DSX0 LED area luminaire has a number of control options. DSX Size 0, comes standard with 0-10V dimming driver. Dusk to dawn controls can be utilized via optional NEMA twist-lock photocell receptacles. PIR integrated motion sensor with on-board photocell feature field-adjustable programing and are suitable for mounting heights up to 40 feet. Control option BL features a bi-level device that allows a second control circuit to switch all light engines to either 30% or 50% light output.

### nLIGHT AIR CONTROLS

The DSX0 LED area luminaire is also available with nLight® AIR for the ultimate in wireless control. This powerful controls platform provides out-of-the-box basic motion sensing and photocontrol functionality and is suitable for mounting heights up to 40 feet. Once commissioned using a smartphone and the easy-touse CLAIRITY app, nLight AIR equipped luminaries can be grouped, resulting in motion sensor and photocell group response without the need for additional equipment. Scheduled dimming with motion sensor over-ride can be achieved when used with the nLight Eclypse. Additional information about nLight Air can be found here.

### INSTALLATION

Integral mounting arm allows for fast mounting using Lithonia standard #8 drilling and accommodates pole drilling's from 2.41 to 3.12" on center. The standard "SPA" option for square poles and the "RPA" option for round poles use the #8 drilling. For #5 pole drillings, use SPA5 or RPA5. Additional mountings are available including a wall bracket (WBA) and mast arm (MA) option that allows luminaire attachment to a 2 3/8" horizontal mast arm.

### LISTINGS

UL listed to meet U.S. and Canadian standards. UL Listed for wet locations. Light engines are IP66 rated; luminaire is IP66 rated. Rated for -40°C minimum ambient.

DesignLights Consortium<sup>®</sup> (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/ QPL to confirm which versions are qualified.

International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color temperature only.

### WARRANTY

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

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



### LED Sealed Ingrade **MODEL IG6** 100-277V 20W Max. LED w/ Integral Driver 16W Max. COB LED w/ Driver



### Housing

Cast C84400 bronze housing. Four 3/4" NPT conduit entries allow for side entry or bottom entry conduit connection. Water tight pass-thru, in conjunction with included silicone filled wire-nuts, prevents water from entering the housing in the event of the wiring compartment becoming flooded. IP68 rated to a depth of 1 ft. for 60 hours. Optional concrete pour collar available in material and finish to match the faceplate.

S

### Mounting

Optional mount stand, with or without grout mask, can be used as a stand alone installation mount or tied to a rebar grid for easy mounting and alignment.

### Lens

Tempered, 1/4" thick, stepped lens allows for flush mounting. Optional Slip Reduction Lens increases wet lens friction by over 50%. Molded, high temperature, silicone lens gasket compresses around lens between faceplate and housing for a water tight seal. Both lens and seal are removable for cleaning or replacement.

### Faceplate

Available in cast or machined C84400 bronze or machined 316 stainless steel. Attaches using six 18-8 stainless steel captive screws. Optional Glare Shield, Half Dome, Marker Light, and Rock Guard faceplates available in cast C84400 bronze and allow 360° of rotational alignment. Optional Flanged faceplate available in machined brass or 316 stainless steel.

### Lamp Module & Aiming

Lamp Module allows for one tool 'hot aiming' with 18° vertical and 360° rotational adjustment without having to touch hot LED. Module brackets constructed from black anodized 6061-T6 aluminum. Accessory holder is integral to Lamp Module and accepts up to two lens options.

### Finish

Available in 14 standard TGIC thermo set polyester powder coat paint colors. Cast Bronze faceplates available in two additional finishes: Natural and Aged. Machined Brass faceplates available in three additional finishes: Natural, Aged, and Polished.



0 00								
Ordering Informati	ion							
Model G6C - Cast Bronze Faceplate G6B - Machined Brass Faceplate G6S - Machined Stainless Faceplate Fini Powder Coat Finist BLT - Textured Br BLT - Textured Br BAT - Textured Br GRT - Textured Gr GNT - Textured Gr SAT - Textured Gr SAT - Textured Gr	Housing Style SH - Short SH-PC - Short w/ Pour Colla sh <sup>1</sup> nes: ck BL - Black shi nze BN - Bronze rk WI - White een SI - Silver anite GY - Grey d BE - Belge	Lens Style     STD - Standard     SLR - Slip Reduction     Faceplate Style     STD - Standard     HD - Half Dome (IG6C only)     RG - Rock Guard (IG6C only)     GS - Glare Shield (IG6C only)     FL - Flanged (IG6B & IG6S only) 5     ML1 - Marker Light, 1 port (IG6C only)	Light Engine Integral Driver LED <sup>3</sup> : 137 - 15°, 3000K, >80 CRI 138 - 23°, 3000K, >80 CRI 139 - 35°, 3000K, >80 CRI 140 - 51°, 3000K, >80 CRI COLED <sup>4</sup> : COLX-XX-XX CRI CCT Optics 8 ->80 27 - 2700K 20 - 20° 9 ->90 30 - 3000K 30 - 30° 35 - 3500K 50 - 50°	Driver Integral Driver LED: 0 - None <u>COB LED:</u> 16-URV-350-Z - 16 16-120-350-P - 16V	Lens Accy <sup>2</sup> 0 - None L1 - Spread L2 - Linear L3 - Softening W, 120-277V, 350mA, V, 120V, 350mA, phas	Filter <sup>2,4</sup> 0 - None F1 - Red F2 - Blue F3 - Lt. Blue F4 - Green F5 - Amber F6 - Pink no dimming e dimming	Louver <sup>2</sup> 0 - None H1 - Hex	Accessories 0 - None MS - Mount Stand GM - Mount Stand w/ Grout Mask
PAT - Textured Pat EAT - Textured Ea <u>Metal Finishes:</u> NAT - Natural POL - Polished (IC AGE - Aged (IG6C BRU - Brushed (IC Example: <b>IG6C - NAT</b>	tina tth & IG6S only) & IG6B only) G6S only) - SH - GS - S	ML2 - Marker Light, 2 ports@180° (l/G6C ML4 - Marker Light, 4 ports@90° (l/G6C o STD - C01-8-27-20 - 16	only) 40 - 4000K nly) 5-120-350-P - 0 - 0	<u>- H1 - MS</u>	Notes: 1. Finish applies 2. Only two lens 3. Integral Drive temperatures 4. Color filter op 5. Flanged (FL) 6. Specifications to change. Pli	to faceplate and options may be s r LED lamp optior and / or CRI's (co tion can not be us faceplate can not , certifications, ar ease check websi	pour collar only, pecified. Is available in o ntact V3 for info ed with COB LE be used with th id ordering infor te for latest spe	, ther color ). ED options. e pour collar option. mation are subject cification sheets.
©2009 - 2020 <b>Vision3 Li</b>	ghting <sup>®</sup> I	P.O. Box 607, Fowler, CA	93625 (559) 834	-5749 (55	59) 834-4779	fax w	ww.vision rev	3lighting.com

Machined Stainless faceplates available in three additional finishes: Natural, Brushed, and Polished. Optional pour collar finished to match faceplate.

### LED

LIGHTING

Integral Driver LED: 100 to 277 VAC (50/60 Hz) input, 20W max. power (17W@120V, 20W@277V). LED lamp features: integral driver, 1280 lm max output, 75 lm/W max efficacy, field changeable optics (15°, 23°, 35° & 51°), push button selection of light level (100%, 80%, 55% & 18%), 120V phase dimming at highest (100%) light level (see Dimmer Compatibility List), an L70 of 60,000 hrs., and patented LEDSense® thermal management to ensure reliability and lumen maintenance. Note: thermal management system may cause power input and light output to vary slightly depending on fixture material, orientation, lens accessories, mounting, and ambient temperature.

COB LED: COB LED package includes a COB LED module and a 350mA driver module, both field replaceable. COB LED options use modular industry standard components to simplify future upgrades and includes features like: performance of 1800 lm, 16W max input (@350mA), field replaceable optics (20°, 30° & 50°), and an L70 > 55,000 hrs.

### Certification

IP68 rated to a depth of 1 ft. for 60 hours. Drive over durable for up to 5300 lb vehicles, at up to 10 mph ('STD', 'ML1', 'ML2', or 'ML4' faceplates only. Other faceplate options are not suitable for drive over applications). CSA tested & certified to US and Canadian safety standards for wet location landscape use.





with either halogen or LED lamp options

Octagonal Box: For mounting to industry

standard 4" sheet metal octagonal boxes

drawing at left to make sure the proper

depth of box is used. Can only be used

with Integral LED lamp options and one

TGIC thermo set polyester powder coat

paint available in 14 standard colors.

On aluminum model, finish is applied

over a corrosion resistant, hexavalent

Aluminum model available in one

chromium free, RoHS compliant coating.

additional metal finish: Clear Anodized.

metal finishes: Natural, Polished, and

three additional metal finishes: Natural,

GY-6.35 porcelain socket with 600V,

MR16 Halogen: 12V bi-pin up to 20W

250°C, PTFE coated 18 ga leads.

(See Certification heading).

Ø5

Round (RND)

Square (SQ)

Cover Options

1/2

Aged. Stainless model available in

Polished, and Brushed.

Brass model available in three additional

(box & hardware not included). See

and up to two lens accessories.

lens accessory.

Finish

Socket

# VISIO

### Specifications

### Faceplate

A 1/8" thick, tempered, lens is secured to the faceplate with a high temperature, UV curing, silicone adhesive for a water tight seal. Included gasket seals between faceplate and wall. Internal accessory lenses held in place by stainless steel clip.

### Covers

Cover is mounted to faceplate using three stainless steel set screws around the perimeter, allowing full rotational adjustment.

Cast Covers: Cast covers available in aluminum or brass and come in two cutoffs. Can be specified with integral spread lens to allow maximum light output and distribution. Alternatively, can be specified without integral spread lens and internal lens accessories can be used. Machined Covers: Machined cosmetic covers and cutoffs available in aluminum, brass, or stainless steel and mount over aluminum faceplate. Each available in multiple styles that can be configured as desired.

### **Mount Style**

Cast Box: Comes with faceplate mounted to an industry standard 4" round cast aluminum box and extension. Can be used (See C

Cast Cover - Cutoff Options (available with or without integral spread lens)



### Ordering Information

Model       Mount         PA5B - Aluminum       PA5B - Brass 7         PA5B - Brass 7       (box & extension included)         PA5S - Stainless 1/7       CB - With Cast Box 2         Image: Stainless 1/7       (box & extension included)         Powder Coat Finishes:       Difference         BLT - Textured Black       BL - Black         BNT - Textured Bark       BL - Black         BAT - Textured Bark       WI- White         GRT - Textured Bark       WI - White         GRT - Textured Green       SI - Silver         GNT - Textured Granite       GY - Grey         SAT - Textured Patina       BE - Beige         PAT - Textured Patina       BE - Beige         PAT - Textured Patina       EAT - Staured Patina         EAT - Textured Patina       BE - Soliver         CLA - Clear Anodized (PA5A with Machined Covers & Cutoffs only)       NAT - Natural (PA5B & PA5S only)         POL - Polished (PA5B only)       BRU - Brushed (PA5B with Machined Covers & Cutoffs only)         AGE - Aged (PA5B only)       BRU - Brushed (PA5S with Machined Covers & Cutoffs only)	Cover <sup>4</sup> C- Cast Cover (w/ integral spread lens) CNL - Cast Cover (w/o integral spread lens) <u>Machined</u> : 7 RND - Machined Round Cover SQ - Machined Square Cover	Cutoff <sup>4</sup> Cast: 1 - 1/2 Cutoff 2 - 3/4 Cutoff Machined: <sup>7</sup> DM - Dome HDA - Angled Hood HDR - Round Hood HDR - Round Hood HDR - Sotted Louver M0 - Marker M3 - 3-Bar Marker M4 - 4-Bar Marker	Lamp Integral LED (3000K, >80 ( 116 - 6W, 12° 117 - 6W, 21° 118 - 6W, 41° 141 - 10W, 12° 142 - 10W, 21° 143 - 10W, 41° Retrofit MR16 LED (3000K 156 - 7.5W, 10° 156 - 7.5W, 25° 157 - 7.5W, 36° MR16 Halogen: <sup>3</sup> 0 - None 01 - ESX, 20W, 12° 02 - BAB, 20W, 40°	Lens Accy <sup>2,3</sup> Ell): <sup>5,6</sup> 0 - None L1 - Spread L2 - Linear L3 - Softening Notes <u>90 CRI</u> ): <sup>3,5,6,8</sup> 1. M: Cu 2. CC 3. OF an 4. Cover and Cutoff types Machined only). 5. Only power LED option transformers (contact V 6. LED lamp options avail (contact V3 for info). 7. When using Machined cutoff parts are brass o 8. Use only approved Ret otherwise LED may ove 9. Specifications, certifica	Filter <sup>2,3</sup> 0 - None F4 - Green F1 - Red F5 - Amber F2 - Blue F6 - Pink F3 - Light F7 - Mercury Blue Vapor del PASS only available with 1 toff options. mount can only use 2 lens ar a mount only use 2 lens access must match (Cast with Cast 8 s with magnetic or V3 approve 3 for transformer & dimmer cc able in other color temperatur Cover & Cutoff options, only the stringth MR16 LED lamps and sug- whet. ions, and ordering informations	Louver <sup>2,3</sup> 0 - None H1 - Hex nachined Cover / ccessories. egral LED lamp options ry. & Machined with ad electronic mpatibility info). es and / or CRI's re cosmetic cover and a are coated aluminum. pplied heat sink mount, n are subject to change.
Example: <b>PA3A - BLI - CB - C - Z - UZ - (</b>	J-F1-U			FIEASE CHECK WEDSILE I	u latest specification sheets.	

### Step Light, Box Mount **MODEL PA5** 12V 20W Max., MR16 Halogen 12V 7.5W, 12/24V 6W, or 12V 10W LED

Integral LED: 12-24V AC/DC 6W (400lm) or 12V AC/DC 10W (700lm) LED options include integral driver with High/Low switch for 35W/20W (6W) or 50W/35W (10W) halogen equivalent outputs. LED Modules are field replaceable and feature replaceable lenses, an L70 > 60,000 hrs., dynamic transformer recognition, phase dimming (see Transformer and Dimmer Compatibility List), and patented LEDSense\* thermal management.

Retrofit MR16 LED: 12V 7.5W (600lm) bi-pin retrofit Soraa<sup>™</sup> MR16 LED lamp with specially engineered heat sink mount to ensure proper heat transfer to body. Note: Retrofit LED will overheat without supplied heat sink mount.

### Certification

CSA tested & certified to for wet location wall mount use (UL1598): PA5 - LED or 20W Max. MR16

### Halogen lamp.

Angled Hood

(HDA)

Dome

(DM)

For MR16 halogen versions: Not for use in contact with combustible materials or thermal insulation. Power supply wires and wire connectors must be rated for 105°C minimum. For Octagonal Box (OB) mount versions: Power supply wires and wire connectors must be rated for 90°C minimum.

Round Hood

(HDR)

Machined Cover - Cutoff Options

Cutoff Options

Louve

(LVR)

Square Hood

(HDS)



Marker

(M0)

3-Bar Marke

(M3)

0

4-Bar Marker

(M4)

 $\oplus$ 

Mount Options

(559) 834-5749

(559) 834-4779 fax

# 27-29 WENTWORTH STREET

# KITTERY, MAINE 03904

## SITE CONTEXT:





**29 WENTWORTH - PROJECT SITE** 



**27 WENTWORTH - PROJECT SITE** 







**8 WENTWORTH STREET** 

# PROJECT 27 - 29 WENTWORTH STREET







23-25 WENTWORTH STREET

**TITLE SHEET** 



### **PROJECT DESCRIPTION:**

REDEVELOPMENT OF TWO SEPARATE INNS LOCATED AT 27 AND 29 WENTWORTH STREET. THE SITES WILL BE OPERATED AS TWO INDEPENDENT BOUTIQUE INNS.

WORK AT 27 WENTWORTH WILL INCLUDE: • DEMOLITION OF THE CURRENT, NON-CONFORMING STRUCTURE. CONSTRUCTION OF TWELVE RENTAL UNITS DEVELOPMENT OF THE SITE TO PROVIDE OFF STREET PARKING FOR THE INN.

WORK AT 29 WENTWORTH WILL INCLUDE:

• PARTIAL DEMOLITION WILL ALLOW FOR RENOVATION OF THE ORIGINAL 1800s ERA STRUCTURE AND AN ADDITION TO THIS INTO TWELVE RENTAL UNITS AND AN ADDITIONAL INN KEEPER'S UNIT. • DEVELOPMENT OF THE SITE TO PROVIDE OFF STREET PARKING FOR THE INN.

### DRAWING INDEX:

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TITLE SHEET AND SITE CONTEXT

- 27 WENTWORTH ST FLOOR PLANS
- 27 WENTWORTH ST FLOOR PLANS CONTINUED 27 WENTWORTH ST - ROOF PLAN
- 29 WENTWORTH ST FLOOR PLANS
- 29 WENTWORTH ST FLOOR PLANS CONTINUED
- 27 WENTWORTH ST ROOF PLAN
- **27 WENTWORTH ST EXTERIOR ELEVATIONS** 27 WENTWORTH ST - EXTERIOR ELEVATIONS
- 29 WENTWORTH ST EXTERIOR ELEVATION
- 29 WENTWORTH ST EXTERIOR ELEVATION
- 29 WENTWORTH ST EXTERIOR ELEVATION
- 29 WENTWORTH ST EXTERIOR ELEVATION PERSPECTIVE VIEW
- PERSPECTIVE VIEW
- PERSPECTIVE VIEW



### SITE ABUTTERS WITHIN 1000' OF SITE

7 WALLINGFORD SQUARE UNIT 2099 KITTERY, ME 03904 207.994.3104

WINTER HOLBEN

	ROOM #	ROOM TYPE	AREA			
BASEMENT FLOOR						
	B01	INNKEEPER	403 SF			
	B02	BUSINESS	260 SF			
	B03	BUSINESS	288 SF			
FIRST FLOOR						
	101	BUSINESS	278 SF			
	102	BUSINESS	274 SF			
	103	SUITE	364 SF			
	104 (ADA)	BUSINESS	384 SF			
SECOND FLOOR						
	201	BUSINESS	310 SF			
	202	BUSINESS	310 SF			
	203	SUITE	374 SF			
	204	SUITE	374 SF			
THIRD FLOOR						
	301	SUITE	452 SF			
	302	SUITE	452 SF			
ROOM TOTALS						
	7					
	5					
	12					

27 WENTWORTH ST

BASEMENT FLOOR PLAN SCALE: 1/4"=1'-0"



DRAWING (27 WENTWORTH) FLOOR PLANS



WENTWORTH STREET

FIRST FLOOR PLAN SCALE: 1/4"=1'-0"



UNIT <u>B01</u> 449 SF

10/26/2023



02



7 WALLINGFORD SQUARE UNIT 2099 KITTERY, ME 03904 207.994.3104

WINTER HOLBEN

(2)

	ROOM #	ROOM TYPE	AREA		
BASEMENT FLOOR					
	B01	INNKEEPER	403 SF		
	B02	BUSINESS	260 SF		
	B03	BUSINESS	288 SF		
FIRST FLOOR					
	101	BUSINESS	278 SF		
	102	BUSINESS	274 SF		
	103	SUITE	364 SF		
	104 (ADA)	BUSINESS	384 SF		
SECOND FLOOR					
	201	BUSINESS	310 SF		
	202	BUSINESS	310 SF		
	203	SUITE	374 SF		
	204	SUITE	374 SF		
THIRD FLOOR					
	301	SUITE	452 SF		
	302	SUITE	452 SF		
ROOM TOTALS					
BUSINESS 7					
SUITES 5					
		τοται	10		

27 WENTWORTH ST

SECOND FLOOR PLAN SCALE: 1/4"=1'-0"





55'-0"

7'-3<u>1</u>"

9'-4<u>1</u>"



THIRD FLOOR PLAN SCALE: 1/4"=1'-0"



10'-0"

1'-6", 3'-0"

7 WALLINGFORD SQUARE UNIT 2099 KITTERY, ME 03904 207.994.3104

WINTER HOLBEN

03











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29	WENTWO	ORTH ST	
	ROOM #	ROOM TYPE	AREA
BASEMENT FLOOR			
	B01	INNKEEPER	529 SF
FIRST FLOOR			
	101 (ADA)	SUITE	426 SF
	102	BUSINESS	316 SF
	103	SUITE	403 SF
	104	BUSINESS	316 SF
SECOND FLOOR	0.04	0.075	400.05
	201	SUILE	432 SF
	202	BUSINESS	316 SF
	203	SUILE	417 SF
	204	BUSINESS	316 SF
THIRD FLOOR	004	OLUTE	000.05
	301	SUILE	396 SF
	302	BUSINESS	316 SF
	303		382 SF
	304	ROSINESS	310 51
RUUWI IUTALS		DIIGINIFOO	e
		DUSINESS	0
		CITECT	
		SUIIES	0



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2'-0" BALCONY 7'-0" 14'-11<u>1</u>" UNIT 102 316 SF  $-5\frac{1}{4}$ "  $\frac{31}{2}$  $5\frac{1}{4}$ " UNIT 104 316 SF 7'-0" 14'-11<u>4</u>" BALCONY 14'-23'-10<u>3</u>" 30'-4<u>1</u>" (2)16' 7 WALLINGFORD SQUARE UNIT 2099 KITTERY, ME 03904 207.994.3104 WINTER HOLBEN 05

24'-4<u>1</u>"

9'-6"

10'-0"

	ROOM #	ROOM TYPE	AREA
BASEMENT FLOOR			
	B01	INNKEEPER	529 SF
FIRST FLOOR			
	101 (ADA)	SUITE	426 SF
	102	BUSINESS	316 SF
	103	SUITE	403 SF
	104	BUSINESS	316 SF
SECOND FLOOR			
	201	SUITE	432 SF
	202	BUSINESS	316 SF
	203	SUITE	417 SF
	204	BUSINESS	316 SF
THIRD FLOOR			
	301	SUITE	396 SF
	302	BUSINESS	316 SF
	303	SUITE	382 SF
	304	BUSINESS	316 SF
ROOM TOTALS			
		BUSINESS	6
		SUITES	6
		TOTAL	12

29 WENTWORTH ST

9'-6"

UNIT 201 432 SF

UNIT 203 417 SF

BALCONY







# ROOF PLAN SCALE: 1/4"=1'-0" (1)

7 WALLINGFORD SQUARE UNIT 2099 KITTERY, ME 03904 207.994.3104

WINTER HOLBEN 07

16'



NORTH EXTERIOR ELEVATION

SCALE: 1/4"=1'-0"

 $\left(1\right)$ 



# \_

EAST EXTERIOR ELEVATION SCALE: 1/4"=1'-0"

DRAWING (27 WENTWORTH) EXTERIOR ELEVATIONS

10/26/2023

(REF.) ELEV.) 72.20 TOP OF WALL ((REF.) ELEV.) 70.20' 
 THIRD FLOOR

 ((REF.) ELEV.)
 SECOND FLOOR ((REF.) ELEV.) 54.37' \_ \_\_ \_\_ FIRST FLOOR ((REF.) ELEV.) 45.03' BASEMENT - TOP OF SLAB ((REF.) ELEV.) 35.70'

 $\binom{2}{2}$ 

WINTER HOLBEN

7 WALLINGFORD SQUARE UNIT 2099 KITTERY, ME 03904 207.994.3104

08



1



WINTER HOLBEN





WINTER HOLBEN 10





WINTER HOLBEN 11











WINTERHOLBEN 13



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WINTER HOLBEN 14



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WINTER HOLBEN 15



VIEW LOOKING WEST FROM WENTWORTH STREET SCALE: N.T.S.

10/26/2023

 $\begin{pmatrix} 1 \end{pmatrix}$ 

WINTER HOLBEN 16



35 Bow Street Portsmouth New Hampshire 03801-3819

P: 603|431|6196 www.cmaengineers.com

December 6, 2023

Maxim Zakian, Town Planner Town of Kittery 200 Rogers Road Kittery, Maine 03904

RE: Town of Kittery, Planning Board Services
 Site Plan Review #3
 The Foreside Inn at 27 & 29 Wentworth Street (Tax Map 9, Lots 37 & 38)
 CMA #591.163

Dear Max:

CMA Engineers has received the following information for Assignment #163 for the site plan review #3 for the proposed The Foreside Inn at 27 and 29 Wentworth Street in Kittery (Tax Map 9, Lots 37 & 38):

 Response letter dated October 22, 2023, and supporting material including revised plans, letters from Kittery Water District and the sewer department, a lighting plan, and an updated drainage analysis.

We have reviewed the information submitted for conformance with the Kittery Land Use and Development Code (LUDC) and general engineering practices and offer the comments below.

### <u>General</u>

The proposed project includes construction of two 12-unit inns (one on each lot) and an innkeeper's suite (a 13<sup>th</sup> unit at 29 Wentworth Street). The existing structure at 27 Wentworth Street will be demolished and a new structure built closer to the street. The structure at 29 Wentworth Street will be partially demolished with the intention of maintaining the original 1800s structure. Both inns will share a 16-space parking lot and access drive on 29 Wentworth Street. There are no wetlands on the site.

The applicant has reduced the parking area in accordance with the waiver allowing 16 spaces and has added an underground stormwater management gallery to compensate for the loss of porous pavement.

### 16.7 General Development Requirements

### 16.7.11 Performance standards and approval criteria *16.7.11.C. Stormwater and surface drainage*

The applicant has presented an updated Drainage Analysis for the project. Stormwater management and treatment are accomplished through the use of porous pavement, a depression, stone drip strips and an underground stormwater management gallery.



We have the following comment on the drainage analysis:

- 1. The elevations in the model are not the same as those shown on the detail Stormwater Management Gallery A on Sheet C-8 (Detail Sheet).
- 2. The stormwater management galleries are modeled differently, Gallery B shows storage above the crushed stone elevation and Gallery A does not. Please clarify.

### 16.7.11.H. Exterior lighting requirements

### 16.7.11.H.(2)(a)

Comments: The lighting as proposed may exceed the uniformity ration for access drives and parking lots. The table contains values for "paved area" only. Please clarify.

We have the following comments on the plans:

- 1. The plans should include a detail for the rounded riverstone swale.
- 2. The elevations shown on the Stormwater Management Gallery A are different from those shown in the model.

Should you have any questions, please do not hesitate to call.

Very truly yours,

CMA ENGINEERS, INC.

adie Branktrickland

bdie Bray Strickland, P.E. Project Manager

cc: Erice Weinrieb, Altus Engineering

