AC Hotel

Level III Preliminary Site Plan and Subdivision Application

September 29, 2015

Submitted To:
CITY OF PORTLAND PLANNING DEPARTMENT

Applicant / Developer:
Portland Norwich Group, LLC
2330 Palm Ridge Road #305
Sanibel, FL 33957
and
Essex North Hospitality, LLC
PO Box 394
Topsfield, MA 01983

Prepared by:
Carroll Associates
217 Commercial Street, Portland, ME 04101
and
Ransom Consulting Engineers and Scientists
400 Commercial Street, Portland, ME 04101

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Drawings (Under Separate Cover)

1. Cover Letter

CARROLL ASSOCIATES
LANDSCAPE ARCHITECTS

September 29, 2015

Ms. Barbara Barhydt
City of Portland Planning Authority
4th Floor, City Hall
389 Congress Street
Portland, ME 04101

RE: AC Hotel
Fore Street / Hancock Street / Thames Street
Hotel, Retail, and Residential Condominiums
Chart, Block, Lot: 19-B-20

Dear Barbara,

On behalf of Portland Norwich Group LLC and Essex North Hospitality, LLC, we are pleased to submit this Level III Preliminary Site Plan and Subdivision Application along with supporting materials relating to the proposed hotel, ground floor retail or restaurant space, residential condominiums, and associated lot division.

The subject property, located in the B-6 Eastern Waterfront Mixed Zone, is a vacant, previously developed lot approximately 1.39 acres in size. The property is essentially void of vegetation except for sporadic grass and weed type vegetation. There are no significant natural features due to its intense level of past development. The entire lot slopes gently from southwest to northeast, from approx. elevation 18' down to 14'. The hotel portion of the site is moderately flat, limiting the need for significant earthwork. The parcel has recently been used as a gravel parking lot and historically as a portion of the Canadian National Railways Grand Trunk Railroad system. The main body of the lot is bound on three sides by streets; Fore to the west, Hancock to the north, and Thames (Commercial Street Extension) to the east. Other parcels on the block include an existing lot to the east (part of the City's Historic District) containing the former Grand Trunk Railroad office building and an existing lot to the west containing the Portland Water District Pump Station. Surrounding land uses include: a parking garage with ground floor retail space and a hotel to the west across Fore Street; commercial, office, and parking to the north across Hancock Street; and the Ocean Gateway Terminal to the east across Thames Street (Commercial Street Extension).

The proposed project will divide the existing parcel into two lots. Lot 1 (approx. 28,541 sf) will be developed as part of this application into a six (6) story building that fronts along the three adjacent streets, and will include a 150 room AC Hotel (by Marriott), 16 residential condominiums, and separate ground floor retail or restaurant space. An interior service area for the hotel and restaurant will be accessed from Hancock Street. The proposed site will have vehicular access from Fore Street by a shared two-way driveway that terminates in a formal cul-de-sac. New on street parking is proposed along Fore Street by a shift in the painted center line. Lot 2 (approx. 32,101 sf) will consist of the remaining land

and will remain undeveloped at this time. More details concerning the proposed development are available in the attached project description.

It is our hope to begin the review process with the City Staff and schedule a workshop with the Planning Board when appropriate at their next available meeting. Attached you will find one copy of the written documents (including application fee), one full size (24”x36”) copy of the plans, one reduced size (11”x17”) copy of the plans, and a CD with the entire application (written documents and plans).

We look forward to working with you, Planning Department staff, and the Planning Board in the review of this project. Please feel free to contact me to discuss any questions or concerns you may have regarding the attached application materials.

Sincerely,
CARROLL ASSOCIATES

Patrick J. Carroll
Principal

Enc.

Cc: Ara Aftandilian, Essex North Hospitality, LLC
Maureen McGlone, Ransom Consulting Engineers

2. Application

Level III – Preliminary and Final Site Plans
Development Review Application
Portland, Maine

Planning and Urban Development Department
Planning Division

Portland's Planning and Urban Development Department coordinates the development review process for site plan, subdivision and other applications under the City's Land Use Code. Attached is the application form for a Level III: Preliminary or Final Site Plan. Please note that Portland has delegated review from the State of Maine for reviews under the Site Location of Development Act, Chapter 500 Stormwater Permits, and Traffic Movement Permits.

Level III: Site Plan Development includes:

- New structures with a total floor area of 10,000 sq. ft. or more except in Industrial Zones.
- New structures with a total floor area of 20,000 sq. ft. or more in Industrial Zones.
- New temporary or permanent parking area(s) or paving of existing unpaved parking areas for more than 75 vehicles.
- Building addition(s) with a total floor area of 10,000 sq. ft. or more (cumulatively within a 3 year period) except in Industrial Zones.
- Building addition(s) with a total floor area of 20,000 sq. ft. or more in Industrial Zones.
- A change in the use of a total floor area of 20,000 sq. ft. or more in any existing building (cumulatively within a 3 year period).
- Multiple family development (3 or more dwelling units) or the addition of any additional dwelling unit if subject to subdivision review.
- Any new major or minor auto business in the B-2 or B-5 Zone, or the construction of any new major or minor auto business greater than 10,000 sq. ft. of building area in any other permitted zone.
- Correctional prerelease facilities.
- Park improvements: New structures greater than 10,000 sq. ft. and/or facilities encompassing 20,000 sq. ft. or more (excludes rehabilitation or replacement of existing facilities); new nighttime outdoor lighting of sports, athletic or recreation facilities not previously illuminated.
- Land disturbance of 3 acres or more (includes stripping, grading, grubbing, filling or excavation).

Portland's development review process and requirements are outlined in the Land Use Code (Chapter 14) which is available on our website:

Land Use Code: http://me-portland.civicplus.com/DocumentCenter/Home/View/1080
Design Manual: http://me-portland.civicplus.com/DocumentCenter/View/2355
Technical Manual: http://me-portland.civicplus.com/DocumentCenter/View/2356

Planning Division
Fourth Floor, City Hall
389 Congress Street
(207) 874-8719

Office Hours
Monday thru Friday
8:00 a.m. – 4:30 p.m.

Updated: June 1, 2015

PROJECT NAME: PROPOSED AC HOTEL

PROPOSED DEVELOPMENT ADDRESS:

FORE, HANCOCK, AND THAMES STREET (COMMERCIAL STREET EXTENSION)

PROJECT DESCRIPTION:

HOTEL, RETAIL, AND RESIDENTIAL CONDOMINIUMS

CHART/BLOCK/LOT: 019-B-20

PRELIMINARY PLAN X SEPT 29, 2015
FINAL PLAN

CONTACT INFORMATION:

Applicant – must be owner, Lessee or Buyer Name: ARA AFTANDILIAN Business Name, if applicable: PORTLAND NORWICH GROUP Address: 2330 PALM RIDGE ROAD City/State : SANIBEL, FL Zip Code: 33957	**Applicant Contact Information** Work # 978.887.3640 Home# Cell # 978.325.2900 Fax# e-mail: AA.SUMMIT@PRODIGY.NET
Owner – (if different from Applicant) Name: LRAR, LLC Address: 1270 SOLIDERS FIELD ROAD City/State : BOSTON, MA Zip Code: 02135	**Owner Contact Information** Work # Home# Cell # Fax# e-mail:
Agent/ Representative Name: PATRICK CARROLL CARROLL ASSOCIATES Address: 217 COMMERCIAL ST., SUITE 200 City/State : PORTLAND Zip Code: 04101	**Agent/Representative Contact information** Work # 207.772.1552 Cell # e-mail: PCARROLL@CARROLL-ASSOC.COM
Billing Information Name: NORWICH PARTNERS, LLC Address: 25 FOOTHILL STREET, SUITE 1A City/State : LEBANON, NH Zip Code: 03766	**Billing Information** Work # 603.643.2206 Cell # Fax# e-mail:

Engineer Name: STEPHEN BRADSTREET RANSOM CONSULTING ENGINEERS Address: 400 COMMERCIAL ST., SUITE 404 City/State : PORTLAND Zip Code: 04101	**Engineer Contact Information** Work # 207.772.2891 Cell # Fax# e-mail: STEPHEN.BRADSTREET@RANSOMENV.COM
Surveyor Name: JOHN SWAN OWEN HASKELL, INC. Address: 390 US ROUTE ONE City/State : FALMOUTH Zip Code: 04105	**Surveyor Contact Information** Work # 207.774.0424 Cell # Fax# e-mail: JSWAN@OWENHASKELL.COM
Architect Name: ROB FESTA GROUP ONE PARTNERS, INC. Address: 21 WEST THIRD STREET City/State : BOSTON, MA Zip Code: 02127	**Architect Contact Information** Work # 617.268.7000 Cell # Fax# e-mail: ROB@GROUPONEINC.COM
Attorney Name: LEE LOWRY JENSEN BAIRD GARDNER HENRY Address: 10 FREE STREET, PO BOX 4510 City/State : PORTLAND Zip Code: 04112-4510	**Attorney Contact Information** Work # 207.775.7271 Cell # Fax# e-mail: LLOWERY@JBGH.COM

APPLICATION FEES:

Check all reviews that apply. (Payment may be made by Credit Card, Cash or Check payable to the City of Portland.)

Level III Development (check applicable reviews)

___ Less than 50,000 sq. ft. ($500.00)
___ 50,000 - 100,000 sq. ft. ($1,000)
_X_ 100,000 – 200,000 sq. ft. ($2,000)
___ 200,000 – 300,000 sq. ft. ($3,000)
___ over $300,00 sq. ft. ($5,000)
___ Parking lots over 11 spaces ($1,000)
___ After-the-fact Review ($1,000.00 plus applicable application fee)

Plan Amendments (check applicable reviews)

___ Planning Staff Review ($250)
___ Planning Board Review ($500)

The City invoices separately for the following:

- Notices ($.75 each)
- Legal Ad (% of total Ad)
- Planning Review ($40.00 hour)
- Legal Review ($75.00 hour)

Third party review fees are assessed separately. Any outside reviews or analysis requested from the Applicant as part of the development review, are the responsibility of the Applicant and are separate from any application or invoice fees.

Other Reviews (check applicable reviews)

___ Traffic Movement ($1,000)
_X_ Stormwater Quality ($250)
_X_ Subdivisions ($500 + $25/lot)
# of Lots 18 x $25/lot = $450 **(16 residential condo units and 2 land lots)**
___ Site Location ($3,000, except for residential projects which shall be $200/lot)
# of Lots ___ x $200/lot = _____
___ Other _____
___ Change of Use
___ Flood Plain
___ Shoreland
___ Design Review
___ Housing Replacement
___ Historic Preservation

Total fee: $3200

Updated: June 1, 2015

APPLICATION SUBMISSION:

1. All site plans and written application materials must be submitted electronically on a CD or thumb drive with each plan submitted as separate files, with individual file which can be found on the **Electronic Plan and Document Submittal** page of the City's website at http://me-portland.civicplus.com/764/Electronic-Plan-and-Document-Submittal

2. **In addition, one (1) paper set of the plans (full size), one (1) paper set of plans (11 x 17), paper copy of written materials, and the application fee must be submitted to the Building Inspections Office to start the review process.**

The application must be complete, including but not limited to the contact information, project data, application checklists, wastewater capacity, plan for fire department review, and applicant signature. The submissions shall include one (1) paper packet with folded plans containing the following materials:

1. **One (1) full size site plans** that must be **folded.**
2. One (1) copy of all written materials or as follows, unless otherwise noted:
   a. Application form that is completed and signed.
   b. Cover letter stating the nature of the project.
   c. All Written Submittals (Sec. 14-525 2. (c), including evidence of right, title and interest.
3. A stamped standard boundary survey prepared by a registered land surveyor at a scale not less than one inch to 50 feet.
4. Plans and maps based upon the boundary survey and containing the information found in the attached sample plan checklist.
5. One (1) set of plans reduced to 11 x 17.

Please refer to the application checklist (attached) for a detailed list of submission requirements.

APPLICANT SIGNATURE:

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

This application is for a Level III Site Plan review. It is not a permit to begin construction. An approved site plan, a Performance Guarantee, Inspection Fee, Building Permit, and associated fees will be required prior to construction. Other Federal, State or local permits may be required prior to construction, which are the responsibility of the applicant to obtain.

Signature of Applicant:	**Date:**
	SEPTEMBER 29, 2015

PROJECT DATA

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

Total Area of Site	60,642 sq. ft.
Proposed Total Disturbed Area of the Site	32,820 sq. ft.
If the proposed disturbance is greater than one acre, then the applicant shall apply for a Maine Construction General Permit (MCGP) with DEP and a Stormwater Management Permit, Chapter 500, with the City of Portland.	
Impervious Surface Area	
Impervious Area (Total Existing)	entire parcel 60,642 sq. ft.
Impervious Area (Total Proposed)	Lot 1 - 27,767 sq. ft.
	Lot 2 - 32,101
Building Ground Floor Area and Total Floor Area	
Building Footprint (Total Existing)	0 sq. ft.
Building Footprint (Total Proposed)	20,385 sq. ft.
Building Floor Area (Total Existing)	0 sq. ft.
Building Floor Area (Total Proposed)	120,760 sq. ft.
Zoning	
Existing	B-6 and SHORELAND ZONE
Proposed, if applicable	B-6 and SHORELAND ZONE
Land Use	
Existing	VACANT
Proposed	COMMERCIAL / RESIDENTIAL
Residential, If applicable	
# of Residential Units (Total Existing)	0
# of Residential Units (Total Proposed)	16
# of Lots (Total Proposed)	two (2) lots
# of Affordable Housing Units (Total Proposed)	0
Proposed Bedroom Mix	
# of Efficiency Units (Total Proposed)	N/A
# of One-Bedroom Units (Total Proposed)	8
# of Two-Bedroom Units (Total Proposed)	8
# of Three-Bedroom Units (Total Proposed)	N/A
Parking Spaces	
# of Parking Spaces (Total Existing)	0
# of Parking Spaces (Total Proposed)	0 ON SITE, ALL AT OCEAN GATEWAY PARKING GARAGE
# of Handicapped Spaces (Total Proposed)	0 ON SITE, ALL AT OCEAN GATEWAY PARKING GARAGE
Bicycle Parking Spaces	
# of Bicycle Spaces (Total Existing)	0
# of Bicycle Spaces (Total Proposed)	4 ON SITE, REMAINDER AT PARKING GARAGE OR IN HOTEL
Estimated Cost of Project	$20,000,000

PRELIMINARY PLAN (Optional) - Level III Site Plan			
Applicant Checklist	Planner Checklist	# of Copies	**GENERAL WRITTEN SUBMISSIONS CHECKLIST**
X		1	Completed Application form
X		1	Application fees
X		1	Written description of project
X		1	Evidence of right, title and interest
X		1	Evidence of state and/or federal approvals, if applicable
X		1	Written assessment of proposed project's compliance with applicable zoning requirements
X		1	Summary of existing and/or proposed easement, covenants, public or private rights-of-way, or other burdens on the site
X		1	Written requests for waivers from site plan or technical standards, if applicable.
X		1	Evidence of financial and technical capacity
X		1	Traffic Analysis (may be preliminary, in nature, during the preliminary plan phase)
Applicant Checklist	Planner Checklist	# of Copies	**SITE PLAN SUBMISSIONS CHECKLIST**
X		1	Boundary Survey meeting the requirements of Section 13 of the City of Portland's Technical Manual
X		1	**Preliminary Site Plan including the following: (information provided may be preliminary in nature during preliminary plan phase)**
X		Proposed grading and contours;	
X		Existing structures with distances from property line;	
X		Proposed site layout and dimensions for all proposed structures (including piers, docks or wharves in Shoreland Zone), paved areas, and pedestrian and vehicle access ways;	
X		Preliminary design of proposed stormwater management system in accordance with Section 5 of the Technical Manual (note that Portland has a separate applicability section);	
X		Preliminary infrastructure improvements;	
X		Preliminary Landscape Plan in accordance with Section 4 of the Technical Manual;	
X		Location of significant natural features (including wetlands, ponds, watercourses, floodplains, significant wildlife habitats and fisheries or other important natural features) located on the site as defined in Section 14-526 (b) (1);	
X		Proposed buffers and preservation measures for significant natural features, as defined in Section 14-526 (b) (1);	
X		Location , dimensions and ownership of easements, public or private rights of way, both existing and proposed;	
X		Exterior building elevations.	

PORTLAND FIRE DEPARTMENT
SITE REVIEW
FIRE DEPARTMENT CHECKLIST

A separate drawing[s] shall be provided as part of the site plan application for the Portland Fire Department's review.

1. Name, address, telephone number of applicant **ARA AFTANDILIAN, PORTLAND NORWICH GROUP, LLC., PO BOX 394, TOPSFIELD MA 01983 978.887.3640**
2.
3. Name address, telephone number of architect **ROB FESTA, GROUP ONE PARTNERS, INC., 21 WEST 3RD ST., BOSTON, MA 02127, 617.268.7000**
4. Proposed uses of any structures [NFPA and IBC classification]
5. **HOTEL, RESIDENTIAL CONDOS, AND RETAIL**
6. Square footage of all structures [total and per story]
   FOOTPRINT = 20,385, TOTAL SF = 120,760 SF
7. Elevation of all structures
   ELEVATION = +/-16' + +/- 15'
8. Proposed fire protection of all structures
   - ***As of September 16, 2010 all new construction of one and two family homes are required to be sprinkled in compliance with NFPA 13D. This is required by City Code. (NFPA 101 2009 ed.)***

9. Hydrant locations **ACROSS FORE STREET AT OCEAN GATEWAY PARKING GARAGE, IN FRONT OF 144 FORE STREET, AND AT OCEAN GATEWAY TERMINAL**
10. Water main[s] size and location **12" MAIN IN FORE STREET AND 10" MAIN IN THAMES STREET**
11. Access to all structures [min. 2 sides] **YES, ACCESS TO ALL SIDES VIA STREETS AND DRIVEWAY**
12. A code summary shall be included referencing NFPA 1 and all fire department. Technical standards.

Some structures may require Fire flows using annex H of NFPA 1

CITY OF PORTLAND WASTEWATER CAPACITY APPLICATION

Department of Public Services,
55 Portland Street,
Portland, Maine 04101-2991

Date: SEPTEMBER 29, 2015

Mr. Frank J. Brancely,
Senior Engineering Technician,
Phone #: (207) 874-8832,
Fax #: (207) 874-8852,
E-mail:fjb@portlandmaine.gov

1. Please, Submit Utility, Site, and Locus Plans.

Site Address: FORE, HANCOCK, AND THAMES STREET (COMMERCIAL STREET EXT.)

Chart Block Lot Number: 019-B-20

Proposed Use: HOTEL, RESIDENTIAL CONDOS, RETAIL

Previous Use: VACANT

Existing Sanitary Flows: N/A GPD

Existing Process Flows: N/A GPD

Description and location of City sewer that is to receive the proposed building sewer lateral.

12" LINE IN THAMES STREET

Site Category		
	Commercial	X
	Industrial *(complete part 5 below)*	
	Governmental	
	Residential	X
	Other *(specify)*	X

HOTEL + RESTAURANT

(Clearly, indicate the proposed connections, on the submitted plans)

2. Please, Submit Contact Information.

City Planner's Name: HELEN DONALDSON Phone: 874.8723

Owner/Developer Name:

Owner/Developer Address: ~~VACANT~~

Commercial *(see part 4 below)*

Phone: Fax: E-mail:

Engineering Consultant Name: STEPHEN BRADSTREET, RANSOM CONSULTING ENGINEERS

Engineering Consultant Address: 400 COMMERCIAL STREET, SUITE 404, PORTLAND, ME 04101

Phone: 207.772.2891 Fax: E-mail: STEPHEN.BRADSTREET@RANSOMENV.COM

(Note: Consultants and Developers should allow +/- 15 days, for capacity status, prior to Planning Board Review)

3. Please, Submit Domestic Wastewater Design Flow Calculations.

Estimated Domestic Wastewater Flow Generated: 20,000 GPD

Peaking Factor/ Peak Times: Included with above

Specify the source of design guidelines: *(i.e.* X *"Handbook of Subsurface Wastewater Disposal in Maine,"*
__ *"Plumbers and Pipe Fitters Calculation Manual,"* __ *Portland Water District Records,* _ *Other (specify)*

(Note: Please submit calculations showing the derivation of your design flows, either on the following page, in the space provided, or attached, as a separate sheet)

4. Please, Submit External Grease Interceptor Calculations.

Total Drainage Fixture Unit (DFU) Values: TBD

Size of External Grease Interceptor: 1,500 GAL.

Retention Time:

Peaking Factor/ Peak Times:

(Note: In determining your restaurant process water flows, and the size of your external grease interceptor, please use The Uniform Plumbing Code. Note: In determining the retention time, sixty (60) minutes is the minimum retention time. Note: Please submit detailed calculations showing the derivation of your restaurant process water design flows, and please submit detailed calculations showing the derivation of the size of your external grease interceptor, either in the space provided below, or attached, as a separate sheet)

5. Please, Submit Industrial Process Wastewater Flow Calculations

Estimated Industrial Process Wastewater Flows Generated: N/A 0 GPD

Do you currently hold Federal or State discharge permits? Yes ____ No ____

Is the process wastewater termed categorical under CFR 40? Yes ____ No ____

OSHA Standard Industrial Code (SIC): *http://www.osha.gov/oshstats/sicser.html*

Peaking Factor/Peak Process Times:

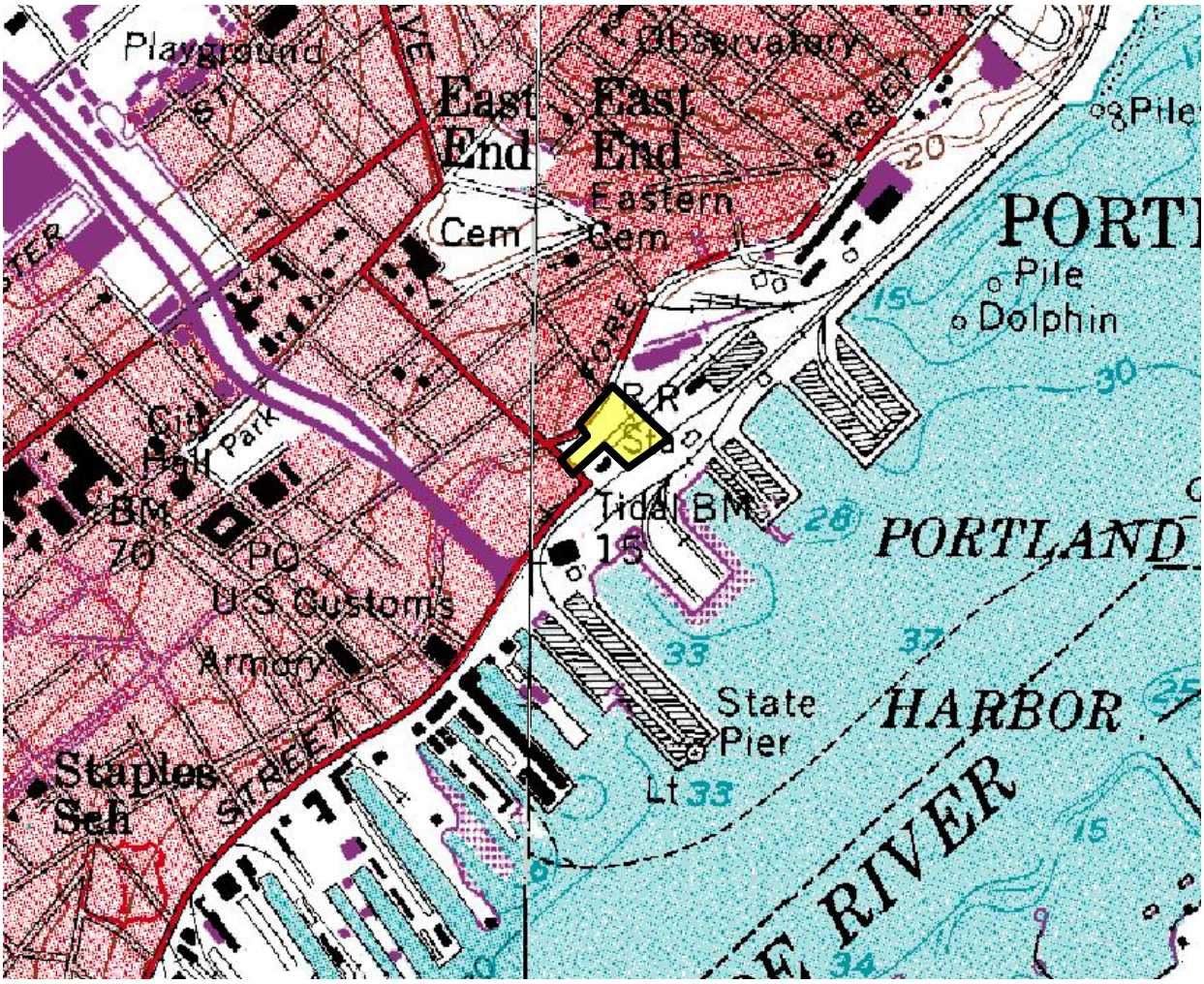
(Note: On the submitted plans, please show where the building's domestic sanitary sewer laterals, as well as the building's industrial-commercial process wastewater sewer laterals exits the facility. Also, show where these building sewer laterals enter the city's sewer. Finally, show the location of the wet wells, control manholes, or other access points; and, the locations of filters, strainers, or grease traps)

(Note: Please submit detailed calculations showing the derivation of your design flows, either in the space provided below, or attached, as a separate sheet)

Notes, Comments or Calculation

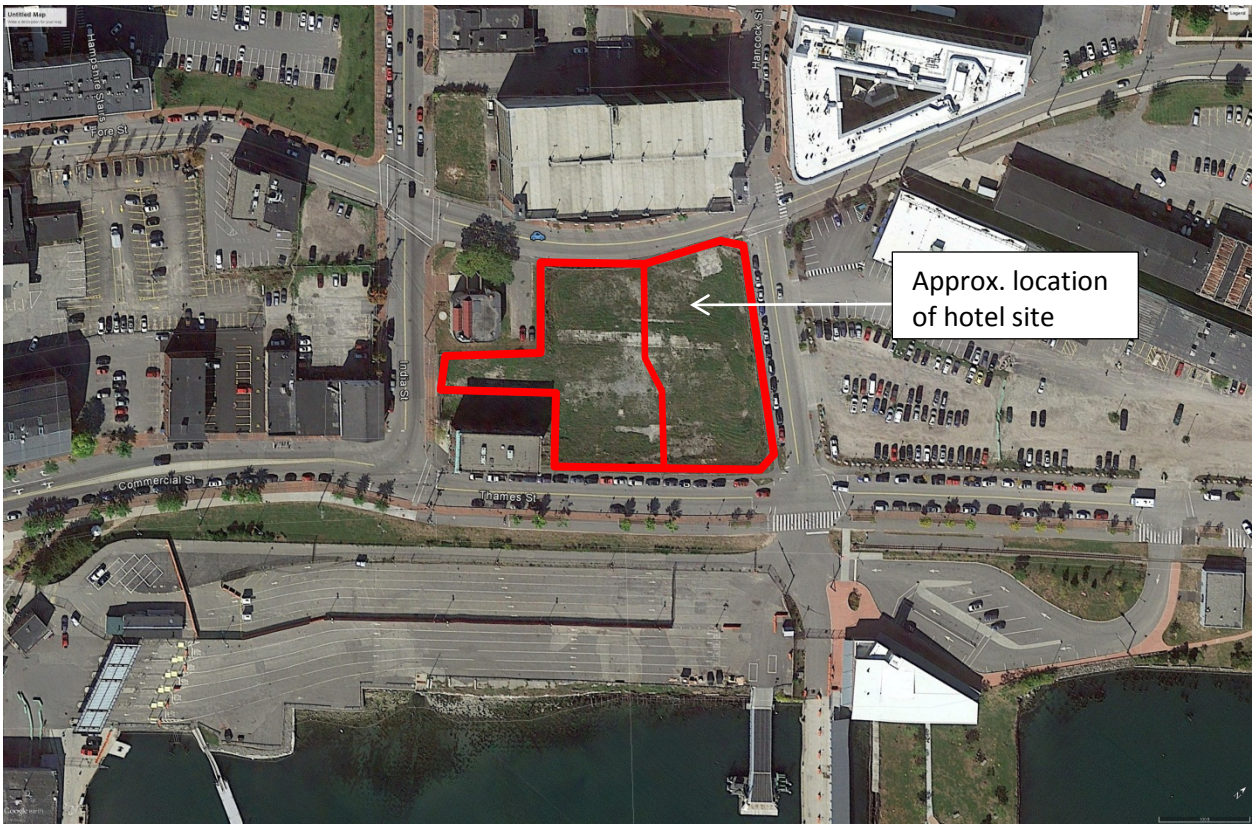
3. Location Maps

Location Map – USGS



USGS map of approximate subject property (outlined in black and filled with yellow).

Location Map – Aerial photograph



Aerial photograph of approximate vacant subject property (outlined in red).

4. Description of Project

Description of Project

Site: The proposed project will divide the existing parcel into two lots. Lot 1 (approx. 28,541 sf) will be developed as part of this application into a six (6) story building that fronts along the three abutting streets, and will include a 150 room AC Hotel (by Marriott), 16 residential condominiums, and separate ground floor retail or restaurant space. Lot 2 (approx. 32,101 sf) will consist of the remaining land and will remain undeveloped at this time.

New on-street parking (6 spaces), brick sidewalks, and other streetscape improvements are proposed along the existing property frontage on Fore Street, from the existing Portland Water District Pump Station lot north to the intersection with Hancock Street where a curb extension is proposed. By introducing on-street parking and a curb extension along Fore Street a section of lane and centerline restriping must occur, please see sheet C-1.0 - Site Plan (Gorrill-Palmer Traffic Engineers will be preparing more detailed street improvement plans at a later date). Hancock and Thames Streets are proposed to remain in their current lane configurations. New brick sidewalks, curb ramps, street trees, and lighting (updated and or relocated) will occur on all the three abutting streets.

The project will be accessed from Fore Street with a 22' driveway that terminates at a one-way cul-de-sac. The outermost portion of the cul-de-sac provides short term valet/drop-off/pick-up zone; the middle portion is an 18' one-way travel lane; and the inner most zone is a 10' radius raised island and 5' cobblestone buffer. This area has been designed for passenger and small delivery type vehicles. The driveway will provide access to one of the hotels entry/exit points, the residential condominiums main entry/exit, and an interior courtyard. The driveway, adjacent sidewalks, and courtyard will be paved with a combination of regular brick, pervious brick, and granite cobble stones.

It is proposed that long-term/permanent parking will occur across the street at the Ocean Gateway Parking Garage, which is under contract to purchase by the applicant. There is ample parking available in the garage with only 330 of 720 parking spaces currently subject to leases.

Landscaping: On the south side of the building, between the hotel and condominium entry/exit doors is a small, three season gathering space designed to take advantage of the southern exposure. It is defined by a building mounted steel trellis and flanked by landscaping which helps to soften edges and highlight the building access points with multi-season interest. The center island in the cul-de-sac will have space reserved for a piece of sculpture or art set in a bed of vegetation. All sidewalks will be planted with street trees either in flush tree grates or raised granite planters. The street trees will help

to reduce the mass of the building to a more pedestrian scale, define sidewalks, provide shade, and offer seasonal color/interest.

Utilities :

The majority of the utility connections for the hotel building will be made in Thames Street as the mechanical room and demarcation locations are on that end of the structure. With the hotel use (with kitchen) and the potential for a restaurant use in the retail space, it is estimated that water consumption could be on the order of 20,000 gallons per day. Water service connection will be made to the 10-inch water main in Thames Street and separated at the building for domestic and fire use. Sanitary discharge from the building will be into the 12-inch sanitary line in Thames Street. The potential restaurant kitchen and the hotel kitchen will have separate discharges to the system which include a grease trap. The discharge from the hotel kitchen can be made into the sanitary line in Hancock Street. Natural gas is available in Thames Street. Future development of the parcel will likely utilize service connections within Thames Street, but will consider a trunk line to the interior of the property and branch off to individual structures.

Three phase electric power is available in Fore Street. This project proposes to make a primary connection to the electric available in Fore Street, run it beneath the sidewalk on Hancock and Thames Street, and terminating in a subterranean transformer vault adjacent to the hotel. The secondary electric, along with telephone, data, and cable will enter the building at the mechanical room with the other utilities and terminate in an electrical room on the second floor. It is anticipated that the transformer and vault will be sized for future development.

Stormwater:

The existing site has been vacant for some time, but exists as a gravel site with several concrete pads at or close to the surface. The site was most recently used as a staging area for construction projects in the area completed within the last 10 years. The site is relatively flat with general grade sloping from south to north. Surface stormwater currently sheds off of the property and enters into the separated storm drain system within Hancock and Thames Street. This system discharges to the ocean adjacent to the Ocean Gateway terminal building. While Chapter 500 redevelopment standards would indicate that new development of the site would not specifically require treatment of stormwater, the developer has chosen to provide permeable pavers with a filter system within the driveway and drop-off area. Storage of the stormwater would be provided below the filter system (R-

Tank system is currently proposed). The hotel roof is not proposed to be treated; however, the roof drains will connect to the subsurface storage system and provide detention prior to discharge to the storm drain. The storage system has been oversized to include connection for buildings within the future development.

<u>Architecture</u>: The proposed building is a 6-story, 'C' shaped structure containing 5 levels of hotel and 1 level of residential, 120,760 gsf with 150 guestrooms and 16 residential units. Its longer axis fronts on Hancock Street and the two short legs front on Fore and Thames Streets.

The ground floor will be comprised of two uses: hotel and approximately 4,000 sf of retail or restaurant space. The hotel's lobby, reception, meeting room, lounge / bar, back of house areas, and two entry points (one at Hancock/Fore Street intersection and one from the interior courtyard) are all located on the ground floor. The retail or restaurant space is located on the east side facing Thames Street. The main access is from a door located at the intersection of Hancock and Thames Streets. There is a secondary door located on the south side which could serve as access for potential outdoor dining. Between the hotel and the separate retail/restaurant space there is a proposed interior, common receiving, delivery, and trash room. This service area will be accessed for service from Hancock Street.

The second floor would be comprised of 36 hotel rooms and a fitness room. Floors three through five would be comprised of 38 hotel rooms each. On the sixth (top) floor is where sixteen residential condominiums will be located. The breakdown of condominium units is 8-one bedroom units and 8-two bedroom units. The condominiums would have their own separate, private, entrance and lobby located off the inner courtyard.

Exterior façade materials on the ground floor will be precast concrete, aluminum storefront, metal and glass canopy at the tenant entry and glass vestibules at the hotel and residential entries. Other typical floors will use brick veneer, cast unit masonry, composite metal panel, metal shingle and punched aluminum "warehouse" style windows.

5. Evidence of Right, Title, or Interest

Execution Version

AGREEMENT FOR THE PURCHASE AND SALE OF REAL ESTATE

AGREEMENT made and entered into this 6th day of March, 2015 (the "Effective Date"), by and between with its principal place of business in and with its principal place of business in are sometimes each referred to herein as "Seller" and collectively referred to herein as "Sellers") and with its principal place of business in or its assigns ("Buyer").

WITNESSETH AS FOLLOWS:

1. PURCHASE AND SALE.

(a) agrees to sell, and Buyer agrees to buy, on the terms and conditions hereinafter set forth herein, certain real estate consisting of a development parcel of land approximately 1.34 acres in area, located across from the City of Portland's Ocean Gateway Marine Terminal in Portland, Maine on and between Fore Street, Hancock Street and Commercial Street Extension, as more particularly described in **Exhibit A** attached hereto and incorporated by reference herein and shown on the plan attached hereto as **Exhibit A-1**. The real estate to be conveyed pursuant to this Agreement by is hereinafter referred to herein as the "Development Parcel." Sellers and the Buyer acknowledge that with respect to the Development Parcel, has received approval to subdivide the land, of which a portion of the Development Parcel is now a part, that is subject to the Declaration of the Longfellow, a Condominium, dated September 29, 2006, and recorded in the Cumberland County Registry of Deeds in Book 24419, Page 122 (the "Condominium Declaration"), but has not yet recorded said approval. Final approval to subdivide the land consistent with the condominium plan attached hereto as **Exhibit A-2** (the "Subdivision Approval") shall be recorded by Sellers, and the recording of same shall be a condition of the Closing hereunder. The description of the Development Parcel on **Exhibit A** is the contemplated description of the parcel to be conveyed by as set forth in this Agreement. following recording of the Subdivision Approval as aforesaid. Following or simultaneously with the recording of the Subdivision Approval, shall execute and record a First Amendment to Declaration of the Longfellow, a Condominium, in the form attached hereto as **Exhibit J** (the "Condominium Declaration Amendment"). The execution and recording by of the Condominium Declaration Amendment shall be a condition of the Closing hereunder.

(b) agrees to sell, and Buyer agrees to buy, on the terms and conditions set forth herein, certain real estate and the parking garage constructed thereon consisting of a parking garage with seven hundred twenty (720) spaces located on a parcel of land approximately thirty-seven thousand (37,000) square feet in area situated at 161 Fore Street, Portland, Maine, as more particularly described in **Exhibit B** attached hereto and incorporated by reference herein and shown on the plan attached hereto as **Exhibit B-1**. The real

estate to be conveyed pursuant to this Agreement by ; hereinafter referred to herein as the "; Parcel or Garage Parcel."

(c) Sellers agree to sell, and Buyer agrees to buy the Development Parcel and the Parcel together as a package on the terms and conditions set forth in this Agreement. The Development Parcel and the Parcel are hereafter collectively referred to herein as the "Premises."

2. PURCHASE PRICE. Subject to any adjustments and prorations hereinafter described, Buyer agrees to pay for the Premises the sum of (the "Purchase Price"), which shall be payable as follows:

(a) The sum of))
to be paid simultaneously with the execution of this Agreement, as earnest money deposit (the "Deposit"), by wire transfer pursuant to the wiring instructions attached as **Exhibit C-1**, which shall be held by (the "Escrow Agent"), pursuant to an escrow agreement attached as **Exhibit C** and shall be credited towards the Purchase Price at Closing;

(b) Intentionally omitted;

(c) The balance of
to be paid in immediately available funds at Closing by wire transfer into escrow with the Escrow Agent to be paid to the Sellers pursuant to wire instructions provided by Sellers pursuant to the terms of this Agreement; and

(d) , and Buyer shall each have the right to allocate the Purchase Price as it relates to said party between the Parcel and the Development Parcel as such party shall consider appropriate in its sole discretion.

3. REMOVAL OF USE RESTRICTIONS; VRAP/CANADIAN NATIONAL RESTRICTIONS.

(a) (i) Buyer acknowledges that the Development Parcel is subject to certain covenants benefiting as set forth in a certain Declaration of Covenants and Restrictions by and between Canadian National and One India Street Associates acknowledged June 6, 1996 and recorded in the Cumberland County Registry of Deeds in Book 12565, Page 32, as affected by Declaration of One India Street Associates dated September 10, 1998 and recorded in the Cumberland County Registry of Deeds in Book 14151, Page 258 (collectively, the "Use Restrictions"). Sellers shall arrange, in coordination with Buyer and), for the issuance by the Maine Department of Environmental Protection (the "DEP") of a Certificate of Completion of Remedial Actions Under a Voluntary Response Action Plan ("India Street Certificate of Completion") for the One India Street parcel encumbered by the Use Restrictions; and Sellers shall obtain from a Declaration of Environmental Covenant in statutory form and approved in advance by Buyer and Development Parcel Covenant"), for the benefit of Buyer and which Development Parcel Covenant shall be in recordable form and shall remove any provisions prohibiting the use of the Development

Parcel for residential purposes and any provisions prohibiting the excavation of the soil below one foot subsurface, provided that any prospective residential uses of the Development Parcel and any excavation of soil below one foot of subsurface on the Development Parcel shall remain subject to such terms and conditions as the DEP shall impose under the Development Parcel Covenant.

(ii) As a condition of the Closing hereunder, Sellers shall have arranged for the modification of the current VRAP application such that the DEP shall have issued a site-specific No Action Assurance Letter ("Assurance Letter") to Buyer for the Development Parcel separate from any other parcel. Buyer shall submit the application to effect this modification as soon as reasonably feasible. Sellers shall have the right to review the application, and the Buyer and the Sellers shall cooperate with each other in connection with this application.

(b) Garage Parcel Certificates. As a condition of the Closing, Sellers shall have obtained from the DEP a Certificate of Completion of Remedial Actions Under a Voluntary Response Action Plan for the Garage Parcel ("Garage Parcel Certificate of Completion") and an executed a site-specific Declaration of Environmental Covenant in a form consistent with the DEP Draft VRAP Environmental Covenant Template authorizing the current use and operation of the Garage Parcel ("Garage Parcel Covenant"), which Garage Parcel Covenant explicitly supersedes the State of Maine Department of Environmental Protection Maine Hazardous Waste Seepage and Solid Waste Management Act Findings of Fact and Order dated December 18, 1990 and recorded in the Cumberland County Registry of Deeds in Book 9936, Page 205 and the Declaration of Restrictive Covenant by Amdura Corporation dated March 9, 1992 and recorded in the Cumberland County Registry of Deeds in Book 9973, Page 122, as amended by Amended and Restated Declaration of Restrictive Covenant dated March 29, 2004 and recorded in the Cumberland County Registry of Deeds in Book 21111, Page 26.

(c) Cooperation by Sellers and Buyer. Sellers shall provide Buyer an opportunity to review and approve in advance all written submittals to the DEP and the opportunity to participate in all meetings and phone conferences with DEP relating to the matters addressed in subparagraph 3(b) of this Agreement.

4. TITLE. Sellers shall convey the Premises to Buyer at Closing in fee simple with good and marketable title, free and clear of all mortgages, liens, and encumbrances except for the following (collectively, the "Permitted Encumbrances"):

As to the Development Parcel:

(a) The matters set forth on **Exhibit D** annexed hereto and incorporated herein by reference.

As to the Parcel:

(a) The matters set forth on **Exhibit E** annexed hereto and incorporated herein by reference, as the same may be subject to any provision of this Agreement which provides for amendment or modification of any such matters.

Buyer has had the opportunity prior to the execution of this Agreement to review the title and survey for the Premises. Buyer is currently undertaking to have surveys of both the Development Parcel and the Garage Parcel (the "New Surveys") completed by , but the Buyer acknowledges that the existing surveys for each of the Development Parcel and the Garage Parcel identified on **Exhibit F** (the "Existing Surveys") are acceptable, subject to the adjustments required as a result of the subdivision of the Development Parcel. Buyer's obligation to close hereunder is subject to the Sellers' obligation to deliver the Garage Parcel and the Development Parcel with no additional matters being depicted on the New Surveys except for those matters contemplated by this Agreement.

Except as contemplated by the terms of this Agreement, Sellers agree that they shall not further encumber or permit to be encumbered the Premises by any liens, mortgages, attachments, covenants, restrictions or easements or other matters of record after the Effective Date.

5. DUE DILIGENCE.

(a) Buyer has had the opportunity to inspect the physical condition of the Development Parcel and the Garage Parcel including conducting tests, studies, appraisals, and examinations of the Development Parcel and the Garage Parcel and Buyer is accepting the Development Parcel and the Garage Parcel in their current "as is" condition as of the Effective Date. Notwithstanding the foregoing, Buyer shall have the right to enter upon the Development Parcel and the Garage Parcel for purposes of completing a so-called "Phase I Site Assessment" for each Parcel and for the purposes of completing the New Surveys as heretofore set forth. Such matters shall not extend or create any additional due diligence periods for the purposes of this Agreement, provided that the Sellers are obligated to deliver the Development Parcel and the Garage Parcel in conformance with the terms of this Agreement. Buyer shall not commence any ground water or soils testing, make any borings, install any monitoring wells or perform any other invasive testing without first obtaining the applicable Seller's written consent, which consent shall not be unreasonably withheld (collectively, the "Inspections"), Buyer may also seek to obtain, at its sole cost and expense, all zoning changes, site and subdivision approvals, variances, environmental and land use permits, and all other governmental licenses, permits and approvals that shall be desired for the use, operation, and development of the Garage Parcel and/or the Development Parcel by Buyer as Buyer deems necessary or desirable, in its sole judgment (collectively, the "Permits"). Buyer shall be solely responsible for the cost and expense of the Inspections and Permits.

Sellers shall deliver the Premises at the Closing in the condition as of the Effective Date, subject to reasonable wear and tear and any changes to the Premises as a result of the actions of the Buyer or those claiming under the Buyer, and further subject to the provisions of this Agreement.

(b) Buyer and its agents shall have a right of entry upon the Development Parcel and the Garage Parcel from and after the Effective Date until the Closing for purposes set forth herein, and agrees promptly to restore the Garage Parcel and/or the Development Parcel to the condition existing immediately prior to the entry. Buyer agrees to indemnify, defend and save the applicable Seller harmless from and against any and all claims, demands or causes of action or other liability, damage, cost or expense (including, without limitation, reasonable attorneys' fees) resulting from damage or injury to persons or property caused by Buyer, its agents, servants or its independent contractors while on the Garage Parcel and/or the Development Parcel, except to the extent resulting from the negligence or willful misconduct of the Sellers or either one of them. Upon request of the applicable Seller, Buyer shall furnish evidence that it (or its contractor) carries reasonable amounts of liability insurance before Buyer (or its contractor) enters the Garage Parcel or the Development Parcel. The provisions of this subparagraph 5(b) shall survive the Closing and/or the termination of this Agreement.

(c) Sellers acknowledge that the Buyer will be filing applications with the City of Portland in connection with Buyer's contemplated development of the Development Parcel. The Buyer shall provide the Sellers in advance of any filing with copies of all such application documents and the Sellers shall cooperate with the Buyer, at no cost to Sellers, in connection with such applications, including execution of all documents to be filed with the municipality or other governmental agencies as the "owner" of the Development Parcel; provided that any such filings shall not be binding upon the Sellers or the Development Parcel if the Closing does not occur.

6. CLOSING.

(a) The closing of the transaction contemplated by this Agreement (the "Closing") shall take place at the offices of on that date (the "Closing Date") which is the earlier of (i) the date which is sixty (60) days after the satisfaction of all conditions to Closing set forth in this Agreement, and (ii) Sellers shall provide notice of the satisfaction of such conditions to the Buyer, together with evidence of such satisfaction, as and when each such condition is satisfied. The Closing Date is subject to Buyer's right to extend under subparagraph 6(c) below.

(b) At Closing, Sellers shall execute and deliver to Buyer, against payment of the Purchase Price, Warranty Deeds conveying good clear record and marketable title to the Premises, in accordance with the Short Form Deeds Act, 33 M.R.S.A. §§ 761 *et seq.* (collectively, the "Deed"). Each Seller further agrees to execute (if and as applicable) and deliver to Buyer at Closing the following documents for each of the parcels of the Premises: (i) a Certificate of Non-Foreign Status (as required by Internal Revenue Service regulations); (ii) a title insurance "Seller's Affidavit" regarding mechanics liens and persons in possession; (iii) an affidavit regarding underground storage tanks (as required by Maine law); (iv) documents demonstrating Seller's authority to convey and good standing as evidenced by attested and/or certified copies of Seller's resolution(s) authorizing the transaction contemplated herein and a copy of the relevant portions of their respective Operating Agreements; (v) the Assignment and Assumption of Leases and Rents; (vi) the Estoppels; (vii) broker's lien waivers in customary form executed by the brokers identified in this Agreement; (viii) Maine REW forms evidencing Seller's residency for purposes of withholding tax as required by Maine law; and (ix) if not

previously provided to Buyer, an original (or, if recorded, a copy bearing evidence that such document was recorded), of each of the documents required under this Agreement to be obtained, executed, and/or recorded by Sellers, or either one of them, including, without limitation, the Subdivision Approval, the Condominium Declaration Amendment, the India Street Certificate of Completion, the Development Parcel Covenant, the Garage Parcel Certificate of Completion, the Garage Parcel Covenant, the Survival Agreement Termination, the Release, and the Standard Parking Termination. All leases related to the Parcel shall be delivered to the Buyer at the Closing, together with copies of all permits, records and documents related to the Premises in either Seller's possession and not previously delivered to the Buyer.

(c) Buyer shall have the one-time option to extend the time for Closing for up to an additional ninety (90) days to a date chosen by Buyer by notice to the Sellers and by making an additional deposit in the amount of the "Closing Extension Deposit"). To exercise such extension option, Buyer shall give Sellers written notice of the exercise of the option ("Closing Extension Notice"), and shall within one (1) business day after the delivery of the Closing Extension Notice deposit the Closing Extension Deposit with the Escrow Agent by wire transfer in accordance with the wire instructions included as **Exhibit C-1**. The Closing Extension Deposit once made shall be deemed part of the Deposit under this Agreement.

7. ASSIGNMENTS AND ASSUMPTIONS OF PARKING LEASES/DELIVERY OF ESTOPPELS. At Closing, Buyer and shall execute a Parking Lease Assignment and Assumption Agreement (the "Assignment and Assumption of Leases and Rents") in the form annexed hereto and incorporated herein as **Exhibit G-1**, whereby shall assign and Buyer shall assume rights and obligations of under the parking leases set forth on **Exhibit G**. Sellers shall deliver at the Closing to the Buyer Estoppels (the "Estoppels") from each of the parking tenants identified in items 1 through 6 on **Exhibit G**, said Estoppels to be in the form attached hereto as **Exhibit H**, or in such other form as is reasonably approved by the Buyer, such approval not to be unreasonably withheld, delayed or conditioned. Buyer shall have the option to close notwithstanding the lack of receipt of all Estoppels. It is acknowledged by the parties that the East India Lease and the Eight Middle Lease (each as defined in **Exhibit G**) were executed in connection with certain abutters agreements applicable to the Garage Parcel and certain properties adjacent to the Garage Parcel and, although such leases have been executed and are in effect as of the Effective Date, no rights to "draw down" parking spaces thereunder have been exercised as of the Effective Date. The parties acknowledge that a parking lease by and between , as owner, and as tenant, is contemplated as of the Effective Date, and Buyer hereby consents to execution of such a parking lease in the form attached hereto as **Exhibit I**.

8. RISK OF LOSS, DAMAGE AND INSURANCE.

(a) All risk of loss to the Development Parcel and the Garage Parcel prior to the Closing Date shall be borne by Sellers. Sellers shall keep the Premises insured against fire and other extended coverage risks up to and including the Closing Date consistent with the present

insurance in place for each of said parcels and including full replacement cost for the Garage Parcel.

(b) In the event that the Development Parcel or the Garage Parcel are destroyed or damaged and are not restored prior to Closing, Buyer shall have the right to terminate this Agreement and to receive a refund of all Deposits, and in that case, Sellers shall be solely entitled to any insurance proceeds payable for or on account of any such destruction. In the event that Buyer should choose to close notwithstanding such damage or destruction, Buyer shall be entitled to any insurance proceeds payable for or on account of any such destruction provided that Sellers shall assign all such insurance to the Buyer at Closing.

(c) If, prior to the Closing, all or any material portion of the Premises shall be taken for any public use (other than minor takings for street widening) or access to or from the Premises shall be permanently taken or materially impaired, or any change(s) to public way(s) or the grade(s) thereof shall be made which materially and adversely affect or is likely to materially and adversely affect the Premises in Buyer's judgment for its anticipated development, or notice of any of the foregoing shall be made public or otherwise come to Buyer's attention (unless such action is terminated by the Closing), then, and in any of said events, by written notice to Sellers within ten (10) business days after Buyer receives notice of the same, Buyer shall either (i) terminate this Agreement, in which event this Agreement shall terminate, the Deposit, including the Closing Extension Deposit, if previously made, shall be refunded to Buyer, and the parties shall have no further liability or responsibility to each other, or (ii) elect to consummate the sale without reduction of the Purchase Price on account of same, in which event Sellers shall assign to Buyer all claims and rights, if any, on account of or arising out of any of the foregoing.

9. CONDITION OF THE PREMISES. Buyer agrees and acknowledges that Sellers make no representation concerning the condition or permitted uses of the Premises (other than as to title upon and subject to the terms and conditions set forth in Paragraph 4 of this Agreement) and that Buyer shall take the Premises at Closing in its "as is", "where is" and "with all faults" conditions as of the Effective Date, subject to the obligations of the Sellers for Closing as set forth in this Agreement.

10. POSSESSION OF THE PREMISES. Except as provided in Paragraph 7 above and **Exhibit G** referenced therein, the Premises shall be delivered to the Buyer at Closing free and clear of all tenancies or occupancies by any other person or entity.

11. ZONING AND DEVELOPMENT MATTERS. Upon Buyer's written request, Sellers shall provide Buyer with access to Sellers' applications for any permits or approvals relating to the Premises. Sellers make no warranty or representation to Buyer concerning the compliance of the Development Parcel or of the Parcel with any federal, state or municipal land-use regulatory matters, including without limitation land-use statutes, zoning, permitted uses, conditional uses, environmental compliance or any similar matters. Sellers make no warranty or representation, express or implied or arising by operation of law, including, without limitation, any warranty of condition, habitability, merchantability, or fitness for a particular purpose in connection with the Premises, except as expressly set forth herein. Sellers shall not be liable for, or be bound by, any verbal or written statements, representations, real estate broker's "setups" or information pertaining to the Premises furnished by any real

estate broker, agent, employee, servant or any other person unless the same are specifically set forth in writing in this Agreement.

Sellers shall record prior to Closing and as a condition of Closing (i) a termination of the Survival Agreement recorded in the Cumberland County Registry of Deeds in Book 24420, Page 31 (the "Survival Agreement Termination") and (ii) a release of the City of Portland's right to repurchase the Development Parcel as set forth in Quitclaim Deed without Covenant from the City of Portland to LRAR LLC dated July 19, 2006, recorded with the Cumberland County Registry of Deeds in Book 24191, Page 218 (the "Release").

12. REPRESENTATIONS OF SELLERS. Sellers represent to the Buyer (as the sole representations made by Sellers or their respective members relating to the subject matter of this Agreement) the following as of the date hereof and which shall be true as of the date of the Closing hereunder:

(a) Sellers have received no written notice from the City of Portland or other governmental body of any alleged violation at the Premises respecting any zoning ordinances or other laws.

(b) All outstanding bills and/or accounts payable concerning the Premises are either paid or will be paid prior to or at Closing.

(c) Except as set forth on **Exhibit G**, there are no leases or other occupancy agreements affecting the Premises. The leases and/or occupancy agreements set forth in **Exhibit G** affect only the Garage Parcel, and there are no leases or other occupancy agreements affecting the Development Parcel.

(d) Other than as addressed in Paragraph 3 of this Agreement and in the Use Restrictions, Sellers have received no written notice from any governmental entity or agency of any special wastes, underground storage tanks, asbestos containing materials, waste oil, petroleum and any other hazardous substances, materials or wastes in or on the Premises. The terms used in the foregoing sentence shall include, without limitation, all substances, materials, etc., designated by such terms under any laws, ordinances or regulations, whether federal, state or local.

(e) There are no outstanding or pending liens, claims, rights of first refusal, or mortgages encumbering the Premises.

(f) Sellers have taken all corporate actions necessary to authorize the execution and delivery of this Agreement and to perform all of their respective obligations due to Buyer hereunder and they have the full right and power to consummate all of the transactions contemplated for it to be performed under this Agreement.

13. DEFAULT AND REMEDIES. If (a) Sellers shall refuse or fail to convey the Premises as herein provided for any reason other than (i) a default by Buyer and the expiration of any cure period; or (ii) the occurrence or application of any other provision of this Agreement or which permits Sellers to terminate this Agreement or which otherwise relieves Sellers of the

obligation to convey the Premises, or (b) either Seller otherwise fails to perform its obligations under this Agreement, provided that Buyer shall give Sellers seven (7) business days' notice of any such failure, then Buyer may elect either to (x) terminate this Agreement and recover the Deposit, including the Closing Extension Deposit, if previously made; or (y) enforce Sellers' obligations to convey the Premises by filing suit for specific performance within ninety (90) days of Buyer's actual knowledge of Sellers' default. Notwithstanding anything to the contrary, in the event the Premises, or any part thereof, is sold by Sellers or either one of them to a third party, and, as a result, the remedy of specific performance is not available to Buyer, then, in addition to the rights set forth in this Agreement, Buyer shall have the right to pursue damages against Sellers.

In the event that Buyer shall refuse or fail to close as required under this Agreement, Sellers shall retain the Deposit as liquidated damages for Buyer's failure to close and this shall be each Seller's sole remedy against Buyer at law and in equity. Sellers and Buyer acknowledge that the damages to Sellers for Buyer's failure to close as required under this Agreement is difficult to ascertain and Sellers and Buyer agree that the Deposit is a fair assessment of such damages.

14. CONDITIONS PRECEDENT TO BUYER'S OBLIGATION TO CLOSE. The Buyer's obligation to close is contingent upon all representations of Sellers contained in this Agreement being true as of the Closing and the Sellers having satisfied all of the obligations of the Sellers as a condition of the Closing as set forth herein. In the event the foregoing contingency is not satisfied and Buyer is not willing to waive the same, the Buyer shall have the right to pursue its remedies set forth in Paragraph 13 hereof. In the event the Buyer elects to terminate this Agreement, it shall do so by notifying Sellers in writing of the specific representations of Sellers or Closing conditions that are not true and/or have not been satisfied and by providing information to support the same at any time prior to or at the Closing. Upon such termination elected by the Buyer, the Deposit, including the Closing Extension Deposit, if previously made, shall be immediately returned to Buyer, and no party shall have any further obligations hereunder except for such obligations as shall survive the termination of this Agreement.

15. BROKERAGE. Sellers and the Buyer represent and warrant to each other that neither party has engaged the services of any real estate broker with respect to this transaction, except . Sellers agree to indemnify and hold harmless Buyer for any claim made by against Buyer for brokerage services. In addition, each party agrees to indemnify and hold harmless the other parties from any claim made by any broker other than claiming by or through them. The foregoing indemnity shall include all legal fees and costs incurred in defending any claim therefor.

16. ADJUSTMENTS, PRORATIONS AND CLOSING COSTS.

(a) Real estate taxes, assessments, and charges shall be prorated as of the Closing Date.

(b) Metered utilities, such as water and sewer, shall be paid by Sellers through the date of Closing.

(c) The Maine real estate transfer tax shall be paid by Sellers and Buyer in accordance with 36 M.R.S.A. § 4641-A, which provides that each of the Buyer and Sellers shall pay a like amount.

(d) The recording fee for the Deeds will be paid by Buyer. All other recording fees shall be paid by Sellers.

(e) Rents under all leases and occupancy agreements and any security deposits under said leases and/or occupancy agreements.

(f) Maine withholding tax shall be deducted from Sellers' proceeds and remitted to the State of Maine as may be required.

(g) Commissions payable to real estate brokers involved in the transaction shall be paid in accordance with the agreements of such brokers.

17. GENERAL PROVISIONS.

(a) Time. Time is of the essence of this Agreement.

(b) Notices. Any notice or communication given pursuant to this Agreement by either of the parties to the other shall be in writing and delivered in person or mailed by overnight courier for next business day delivery, express mail via the United States Postal Service, postage prepaid, or sent via email communication followed with an overnight/next business day delivery or a hand delivery, as follows and all communications shall be deemed given as of the date of hand delivery, or as of the date of delivery to the overnight carrier or United States Postal Service for next business day delivery, or as of the date of transmission of the Email communication followed by overnight next day or hand delivery:

TO SELLERS:

WITH COPIES TO:

TO BUYER:

WITH COPIES TO:

Any party may change its address for the purposes of this subparagraph by giving the other parties notice of the new address in accordance with this Paragraph 17.

(a) Binding Effect. This Agreement will inure to the benefit of, and bind, the respective successors and assigns of Sellers and Buyer.

(b) Construction. As used in this Agreement, the singular number shall include the plural, the plural the singular, and the use of one gender shall be deemed applicable to all genders. This Agreement shall be governed by and construed in accordance with the laws of Maine. If any provision of this Agreement is determined to be invalid or unenforceable, it shall not affect the validity or enforcement of the remaining provisions hereof. It is hereby agreed that all representations set forth in this Agreement shall survive Closing.

(c) Counterparts/Facsimile Signatures. This Agreement may be simultaneously executed in any number of counterparts, each of which when so executed and delivered shall be an original, but such counterparts shall constitute one and the same instrument. This Agreement may be transmitted between the parties by facsimile and signatures appearing on such facsimile documents shall be treated as original signatures.

(d) Effective Date. The Effective Date of this Agreement shall be deemed to be the date first above written herein.

(e) Sellers' Management. Except as otherwise expressly provided herein, Sellers shall continue to manage, maintain and operate the Premises in their usual course of business until the Closing. All management agreements in effect at the time of the Closing shall be terminated by the Sellers effective as of the date of the Closing. At or before the Closing, Sellers shall provide the Buyer with a copy of the termination of the existing Management Agreement with _ o be effective as of the Closing Date (the "; Termination").

(f) Further Assurances. In addition to the actions recited herein and contemplated to be performed, executed and delivered by each party, each party shall perform, execute and deliver or cause to be performed, executed and delivered at the Closing or thereafter any and all further acts, deeds and assurances as the other party or the Escrow Agent may reasonably require to consummate or evidence the consummation of the transaction contemplated herein.

(g) Buyer's Nominee. Buyer may transfer all or a portion of its rights under this Agreement to an entity or the nominee which is controlled or under common control with . Buyer shall, however, remain jointly and severally liable with such transferee for all of the Buyer's obligations under this Agreement, and such transferee shall be required to assume joint and several liability for all such obligations. Buyer shall give Sellers prompt written notice of any such transfer, which notice shall include sufficient information to identify the transferee entity or nominee and certified copies of its organizational documents.

(h) Intentionally Omitted.

(i) No Waiver. The waiver by either party of the performance of any covenant, condition or promise shall not invalidate this Agreement, nor shall it be construed as a waiver of any other covenant, condition or promise herein. The waiver by any party of the time for performing any act shall not constitute a waiver of the time for performing any other act or any incidental act required to be performed at a later time. The delay or forbearance by either party in exercising any remedy or right, the time for the exercise of which is not specifically and expressly limited or specified in this Agreement shall not be considered a waiver of or an estoppel against the later exercise of such remedy or right.

[Signatures Located on Following Page]

IN WITNESS WHEREOF, Sellers and Buyer have executed this Agreement as of the Effective Date first above written.

SELLERS:

LRAR LLC

By: Riverwalk Venture LLC, Its Manager

By: Intercontinental Fund IV Ocean Gateway LLC, Its Manager

By: Intercontinental Real Estate Investment Fund IV, LLC, Its Manager

By: Intercontinental Real Estate Corporation, Its Manager

Witness

By: _____
Peter Palandjian
Its President and Treasurer

OCEAN GATEWAY GARAGE LLC

By: Riverwalk Venture LLC, Its Manager

By: Intercontinental Fund IV Ocean Gateway LLC, Its Manager

By: Intercontinental Real Estate Investment Fund IV, LLC, Its Manager

By: Intercontinental Real Estate Corporation, Its Manager

Witness

By: _____
Peter Palandjian
Its President and Treasurer

BUYER:

PORTLAND NORWICH GROUP LLC

Witness

By: _____
David Leatherwood
duly authorized

#34910317_v3

SCHEDULE OF EXHIBITS

Exhibit A	Development Parcel Legal Description
Exhibit A-1	Plan of Development Parcel
Exhibit A-2	Plan of Condominium Parcel
Exhibit B	Parcel Legal Description
Exhibit B-1	Plan of Parcel
Exhibit C	Title Insurance Escrow Agreement
Exhibit C-1	Wire Instructions
Exhibit D	Development Parcel Title Matters (Permitted Encumbrances)
Exhibit E	Title Matters (Permitted Encumbrances)
Exhibit F	Identification of Existing Surveys
Exhibit G	List of Parking Leases
Exhibit G-1	Form of Assignment and Assumption Agreement
Exhibit H	Form of Estoppel Certificate
Exhibit I	Form of Parking Lease
Exhibit J	Form of Condominium Declaration Amendment

6. Evidence State and/or Federal Permits

Evidence of State and/or Federal Permits

No State or Federal permits are anticipated as part of this project due to the City's delegated review authority over the stormwater component. See attached Stormwater Memo, exhibit #13.

No State or Federal permits are anticipated as part of this project due to the City's delegated review authority over traffic component. See attached Trip Generation and Parking Demand Analysis, exhibit #12.

7. Summary of Compliance with Zoning Requirements

Summary of Compliance with Zoning Requirements:

DIVISION 15.1
B-6 Eastern Waterfront Mixed Zone

Sec. 14-269. Permitted uses.
The following uses are permitted in the B-6 zone:

(a) Commercial:

1. Professional, business and general offices; **N/A**

2. Restaurants and other eating and drinking establishments, except that no drinking establishments as defined in section 14-47 that are located east of Waterville Street shall be permitted within fifty feet (50') of Fore Street, and provided that restaurants that are located east of Waterville Street and within fifty feet (50') of Fore Street must meet the following requirements:

a. The hours of operation shall be limited to between 5:00 a.m. and 11:00 p.m. each day; and

b. Food service and consumption are the primary function of the restaurant;

Applicable – restaurant space on 1st floor, fronting on Thames Street

3. Hotels and inns limited to no more than 150 rooms; **Applicable – floors 1 to 5 fronting on Fore & Hancock Streets**

4. Craft and specialty shops, including the on premises production of handcrafted goods; **N/A**

5. Retail and retail service establishments, excluding those with gas pumps;

6. Theatres; **N/A**

7. Banking services, excluding vehicular drive-up services; **N/A**

8. Cabinet and carpentry shops; **N/A**

9. Personal services; **N/A**

10. Business services; **N/A**

11. Offices of business trades people; **N/A**

12. Miscellaneous repair services, excluding all types of automotive repair except for automobile repair and service establishments; **N/A**

13. Telecommunication and broadcast and receiving facilities, except as prohibited in section 14-271 (prohibited uses); In addition, building mounted telecommunications antennas, discs, transmitting and receiving equipment and the like shall adhere to the following criteria. Such roof-mounted equipment shall be: **N/A**

a. No taller than 15 feet above the highest structural steel of the building roof; and

b. Set back no less than 15 feet from the building perimeter; and

c. Integrated into the architecture of the building in placement, form, color, and material so as to screen or camouflage such equipment from public view.

14. Brew pubs and microbreweries without associated bottling facilities; and brewpubs and microbreweries with associated bottling facilities limited to 5,000 bottles per year output, except that no brew pubs or microbreweries that are located east of Waterville Street shall be permitted within fifty feet (50') of Fore Street;

15. Electronic data storage; **N/A**

16. Marine products wholesaling and retailing; **N/A**

17. Harbor and marine supplies and services, chandlery and ship supply; **N/A**

18. Underground marine fuel storage provided that fuel storage structures shall be used solely for the purpose of fueling vessels; **N/A**
19. Bakeries, coffee roasters, and commercial kitchens with building footprints limited to fifteen thousand (15,000) square feet of contiguous building space. **Applicable, hotel kitchen**
20. Printing establishments. **N/A**

(b) Residential: **Applicable – condominium units on 6th floor**
1. Attached dwellings including row houses, two-family and multifamily dwellings;
2. Handicapped family units;
3. Combined living/working spaces, including but not limited to artist residences w/ studio space;
4. Mixed use residential and commercial structures.

(c) Public: **N/A**
1. Utility substations, including sewage collection and pumping stations, water pumping stations, transformer stations, telephone electronic equipment enclosures and other similar structures;
2. Landscaped pedestrian parks, plazas and other similar outdoor pedestrian spaces;
3. Pedestrian and multi-use trails;

(d) Other: **N/A**
1. Studios for artists, photographers and craftspeople including but not limited to, painters, sculptors, dancers, graphic artists and musicians;
2. Accessory uses customarily incidental and subordinate to the location, function and operation of permitted uses, except that parking lots shall not be considered a permitted accessory use and such parking is subject to the conditional use section of the B-6 zone.
3. Health clubs, martial arts and meditation facilities.
4. Intermodal transportation facilities.
5. Nursery schools, kindergartens, and daycare facilities or home babysitting services.
6. Private clubs or nonprofit social and recreational facilities, as defined in 14-47.
7. Educational facilities.
8. Temporary events, provided that all such events on a lot do not exceed a combined total of (60) days per year and that the total floor area utilized for such uses does not exceed seventy thousand (70,000) square feet at any one (1) time.
9. Museums and art galleries.

e) Wind energy systems, as defined and allowed in Article X, Alternative Energy. **N/A**

Sec. 14-270. Conditional uses.

(a) The following uses shall be permitted as conditional uses in the B-6 zone as provided in 14-474 (conditional uses), provided that, notwithstanding section 14-474(a) or any other provision of this code, the planning board shall be substituted for the board of appeals as the reviewing authority:

(1) Commercial: **N/A**
a. Meeting and exhibition facilities limited to a total of 20,000 gross square feet of interior floor area.
b. Wholesaling, providing the wholesale operation is associated with an onsite retail establishment and that the wholesaling component of the facility occupies a building footprint of less than 15,000 square feet.

(2) Parking:

a. All surface parking lots shall meet the applicable conditions outlined below. **N/A**

i. No surface parking lot shall be encumbered by lease or other use commitment exceeding a twenty-four month term.

ii. Any such parking shall in its lease stipulate that developer/owner reserves the right to relocate said parking (to a parking structure) or convert surface parking to structured parking as long as the replacement parking is located a reasonable distance from the associated use.

iii. Surface lots shall be laid out in a manner conducive to development of future buildings, and/or structured parking.

b. All structured parking, including multi-level parking garages shall meet the applicable conditions outlined below. **Applicable – all required parking to be provided at Ocean Gateway Garage which is under contract to purchase by applicant.**

i. Parking garages shall incorporate first floor retail space or other mixed use (an active use other than parking) along all street frontages unless the applicant requests from the planning board a waiver of this provision subject to the following criteria:

ii. Waivers: the planning board may waive the requirement for first floor mixed use upon demonstration that the project meets one or more of the criteria listed under provisions a, b, and c below. Where the board allows a waiver of first floor mixed use, garages shall display architecture that enhances the pedestrian experience and disguises the parking use to the extent possible. Standards for waiving first floor mixed use:

a. That the applicant demonstrates that steepness of grade or the character of the adjacent street will not support retail or first-floor mixed use in the foreseeable future.

b. That the first floor of the garage is set back a minimum of 35 feet from the street right of way and its design does not provide an impediment for development of such space for mixed use in the future. Such space (between the garage and the street) shall, in the interim, not be used for surface parking.

c. Where the applicant can demonstrate to the satisfaction of the Planning Board that a market for first floor mixed uses currently does not exist, the Planning Board may grant a waiver of this condition, provided that the structure of the garage is designed to accommodate retail and or mixed uses in the future. The Planning Board will need to find that on the street level deck of a proposed parking garage a minimum of twenty (20) feet horizontal distance of depth from the street and nine (9) feet finished floor to finished ceiling clearance could in future house retail and or mixed use. The applicant will further need to demonstrate that the garage design anticipates the future development of utilities and circulation necessary for non-parking uses. Where a parking garage fronts on more than one public street and where there is a existing change in grade elevation of over 5% across the footprint of the garage, the nine foot floor to ceiling requirement of this section only applies to the primary (higher traffic volume) street.

Sec. 14-272. Dimensional requirements.

In addition to the provisions of article III, division 25 of City this Code, lots in the B-6 Eastern Waterfront Business Zone shall meet the following requirements:

(a) Minimum lot size: None. 60,642 sf (1.392 acres)

(b) Minimum frontage: None. **Fore Street = +200'**
Hancock Street = +225'
Thames Street = +231'

(c) Yard dimensions:

1. Minimum yards in the B-6 zone:
Front setback: None required except as provided in 3. below:
Fore Street: 5'
Hancock Street: <1'
Thames Street: 3.5'
Side setback: None required. **N/A**
Rear setback: None required. **10'**

2. Maximum building setback from street line except for parking garages, public transportation facilities and provided in 3. below: 10 feet. **Fore Street: 8'**
Hancock Street: <1'
Thames Street: 4.8'

a. For lots fronting on more than one street, the setback can be increased more than ten (10) feet if all of the following conditions are met:

i. The increased setback occurs at the intersection of the streets;
ii. The increased setback area is the primary pedestrian entrance to the building;
iii. Seventy-five (75) percent of the total building wall length facing the abutting streets shall be setback no greater than ten (10) feet; and
iv. All building wall segments, which make up the increased setback shall be included in the calculation of the total building wall length noted in subsection iii above.

In addition, for any new construction on a lot abutting three or more streets, the maximum setback shall apply only to the two most major streets. (For purposes of this section, major street shall mean that street with the highest traffic volume or the greatest street width in comparison with the remaining streets).

3. View Corridors and Key Street Wall Development Notwithstanding sections 1. and 2. above, new structures located in the blocks located south of Fore Street and north of Commercial Street and its extension, shall build to the key building envelopes shown on the B6 Building Height Overlay & Building Envelopes map .Buildings located in the easternmost key building envelope, shall not have a maximum front setback, and shall not be required to build to the key building envelope perimeter. Parking structures and the buildings for public transportation facilities may, however, set back beyond the key building envelopes (toward the interior of blocks), but may not occupy the land between the key building envelope and the street right of way.

(d) Minimum length of building wall required to be located along street frontage of lot (except that buildings located in the easternmost key building envelope, as shown on the B6 Building Height Overlay & Building Envelopes map, shall not be subject to this requirement).

i. 70% of lot street frontage; or
ii. 25% of building perimeter,

iii. For buildings fronting on two or more streets, the minimum building wall on one street may be decreased so long as the frontage is proportionally increased on other streets in so far that the building wall on the secondary street is not reduced to less than 25 feet.

(e) Maximum lot coverage: One hundred (100) percent. **52.89%**

(f) Maximum building height: 65 feet, or as otherwise governed by a Building Height Overlay map (for example, in the Eastern Waterfront). Building Height Overlay maps are found in the Planning and Development Department Office. **65'**

(g) Minimum building height: No new construction of any building shall have less than three (3) floors of habitable space above the average adjacent grade within twenty five (25) feet of any public street (except that buildings located in the easternmost key building envelope, as shown on the B6 Building Height Overlay & Building Envelopes map, shall not be subject to a minimum building height). This provision shall not apply to: **N/A**

i. Parking attendant booths,

ii. Information kiosks and ticketing booths,

iii. Parking garages,

iv. Public transportation facilities,

v. Additions to buildings existing as of December 8, 2004 provided that the cumulative additions since December 8, 2004 does not exceed 25% of the building footprint on December 8, 2004 except that such restriction shall not apply to those portions of the building addition that are constructed closer to the street line than the building footprint existing as of December 8, 2004,

vi. Buildings or building additions of less than 2,000 square feet footprint, on lots or available building sites of less than 2,000 square feet, vii. Utility substations, including sewage collection and pumping stations, water pumping stations, transformer stations, telephone electronic equipment enclosures and other similar structures, and viii.Additions to and/or relocations of designated historic structures. Ord. 184-14/15, 6-1-2015

Sec. 14-273 Performance standards.

All new development in the B-6 Eastern Waterfront Business Zone shall comply with the following standards:

(a) Storage: Any storage of new materials, finished products, or related equipment must be suitably screened from the public way and from abutting properties by a solid fence at least five (6) feet in height. All waste shall be stored in covered containers that do not leak or otherwise permit liquids or solids to escape from the container. All food processing waste shall be stored within a completely enclosed structure and if not refrigerated shall be removed from the site in an enclosed container within forty-eight (48) hours of its generation. All enclosed and exterior areas shall be cleaned and sanitized on a regular basis. Outdoor storage of refuse or debris shall be in an appropriate container or located within a designated, screened area. **Applicable - there is a proposed interior, common receiving, delivery, and trash room between the hotel and the tenant space. This service area will be accessed from Hancock Street.**

(b) Noise:

1. Definitions:

a. Tonal sounds are defined as sound waves usually perceived as a hum or whine because their instantaneous sound pressure varies essentially as a simple sinusoidal function of time.

b. Impulse sounds are defined as sound events characterized by brief excursions of sound pressure, each with duration of less than one (1) second.

2. Measurement: Sound levels shall be measured with a sound level meter with a frequency weighting network manufactured according to standards prescribed by the American National Standards Institute (ANSI) or its successor body. Measurements shall be made at all major lot lines of the site, at a height of at least four (4) feet above the ground surface. In measuring sound levels under this section, sounds with a continuous duration of less than sixty (60) seconds shall be measured by the maximum reading on a sound level meter set to the A weighted scale and the fast meter response (L maxfast). Sounds with a continuous duration of sixty (60) seconds or more shall be measured on the basis of the energy average sound level over a period of sixty (60) seconds (LEQ1).

3. Maximum permissible sound levels: The maximum permissible sound level of any continuous, regular or frequent source of sound produced by an activity shall be as follows:

a. Sixty (60) dBA between the hours of 7:00 a.m. and 10:00 p.m.

b. Fifty (50) dBA between the hours of 10:00 p.m. and 7:00 a.m., as measured at or within the boundaries of any residential zone. In addition to the sound level standards established above, all uses located within this zone shall employ best practicable sound abatement techniques to prevent tonal sounds and impulse sounds or, if such tonal and impulse sounds cannot be prevented, to minimize the impact of such sounds in residential zones. **Applicable - all mechanical equipment will be located on the roof or underground in a vault. Cut sheets showing anticipated sound levels will be submitted once the equipment has been selected.**

4. Exemptions:

a. Noises created by construction and maintenance activities between 7:00 a.m. and 10:00 p.m. are exempt from the maximum permissible sound levels set forth in subsection (a)3 of this section. Construction activities on a site abutting any residential use between the hours of 10:00 p.m. of one (1) day and 7:00 a.m. of the following day shall not exceed fifty (50) dBA.

b. The following uses and activities shall also be exempt from the requirements of subsection (a) 3 of this section:

i. The noises of safety signals, warning devices, emergency pressure relief valves, and any other emergency devices.

ii. Traffic noise on public roads or noise created by airplanes and railroads.

iii. Noise created by refuse and solid waste collection, provided that the activity is conducted between 6:00 a.m. and 7:00 p.m.

iv. Emergency construction or repair work by public utilities, at any hour.

v. Noise created by any temporary activities which are permitted by law and for which a license or permit has been granted by the city, including but not limited to parades, sporting events, fireworks displays, festivals, events and concerts.

(c) Vibration: Vibration inherently and recurrently generated shall be imperceptible without instruments at lot boundaries. **N/A**

(d) Federal and state environmental regulations: All uses shall comply with federal and state environmental statutes and regulations regarding emissions into the air, except where provisions of this Code are more stringent. **All Federal and State environmental regulations will be met.**

(e) Storage of vehicles: Outdoor storage of any unregistered automotive vehicle on the premises for more than ten (10) days, and outdoor storage of any used automotive tires on the premises shall not be permitted. **N/A**

(f) Off-street parking and loading: Off street parking is required as provided in division 20 (off-street parking) of this article. Division 21 (off-street loading) of this article shall not apply. **Applicable – see Off Street Parking section following.**

(g) Shoreland and flood plain management regulations: Any lot or portion of a lot located in a shoreland zone as identified on the city shoreland zoning map or in a flood hazard zone shall be subject to the requirements of division 26 and/or division 26.5. **Applicable – see Shoreland Zone section following.**

(h) Glare, radiation or fumes: Glare, radiation or fumes shall not be emitted to an obnoxious or dangerous degree beyond lot boundaries. **N/A**

(i) Enclosure of uses: All uses shall be operated within a fully enclosed structure, except for those customarily operated in open air. **N/A**

(j) Materials or wastes: Any permitted outdoor storage of materials shall be done in such a manner as to prevent the breeding and harboring of insects or vermin, to prevent the transfer of such materials from the site by natural causes or forces and to contain fumes, dust, or other materials which constitute a fire hazard. This storage shall be accomplished within enclosed containers or by one (1) or more of the following methods: raising materials above ground, separating materials, preventing stagnant water, or by some other means. Any areas used for permitted outdoor storage of materials shall be screened from view of any adjoining properties and public rights-of-way. No outdoor storage shall be permitted between the front of any building on the site and the street. **N/A**

(k) Odor: Uses in the B-6 zone shall adhere to the odor regulations of the IL zone. **N/A**

(l) Smoke: Discharges of smoke shall not exceed opacity percentage of forty (40) percent or number 2 on the ringelman chart. **N/A**

(m) Discharge into sewers: No discharge shall be permitted at any point into any private sewage disposal system, or surface drain, or into the ground, of any materials in such a way or of such nature or temperature as to contaminate any water supply, or the harbor, or otherwise cause the emission of dangerous or objectionable elements, except in accordance with standards approved by the health authority or by the public works authority. **Applicable – all discharges into public sewer will be legal, permitted, and approved by the City.**

(n) Lighting: All lighting shall be designed and installed with cut-off fixtures to direct illumination onto the site and to prevent illumination from such fixtures on neighboring properties and as otherwise governed by the site lighting standards of the City of Portland Technical Manual. **Applicable – all proposed interior property lighting will be full cut-off and meet City standards. All roadway lighting will be City approved lights for the various streets.**

Sec. 14-274. Affordable Housing

Amendments to Division 30 related to affordable housing that are enacted prior to April 1, 2016 shall apply to any site plan review application on the Portland Company (58 Fore Street) portion of this zone received after April 1, 2015. **N/A**

DIVISION 20 OFF STREET PARKING

Section 14-332 Uses requiring off-street parking.

In all zones where off street parking is required the following minimum off-street parking requirements shall be provided. Except as provided in Section 14-332.1, 14-332.2 (exceptions) and 14-345 (fee in-lieu of parking) of this division, for the uses listed below the following minimum off-street parking requirements shall be provided and maintained in the case of new construction, alterations which increase the number of units, and changes of use:

(a) Residential structures:

1. For new construction, two, (2) parking spaces for each dwelling unit.

See attached Trip Generation and Parking Demand Analysis, exhibit #12.

(c) Hotels: One (1) parking space for each four (4) guest rooms.

See attached Trip Generation and Parking Demand Analysis, exhibit #12.

(h) Retail stores: One (1) parking space for each two hundred (200) square feet of first floor area in excess of two thousand (2,000) square feet not used for bulk storage and one (1) parking space for each seven hundred (700) square feet, or major fraction thereof, for each floor above the first floor not used for bulk storage. **N/A**

(i) Restaurants or establishments constructed and intended for the dispensing of food and drink as the principal activity: One (1) parking space for each one hundred fifty (150) square feet, or major fraction thereof, of floor area not used for bulk storage or food preparation.

See attached Trip Generation and Parking Demand Analysis, exhibit #12.

Section 14-332.1 Zone specific off-street parking exceptions and modifications.

The off street parking requirements established for uses are hereby modified for the following zones according to the revisions as described below.

(h) B-6 Eastern Waterfront Mixed Use Zone: Off-street parking for all projects regardless of size shall be governed by 14-332.2(c) of this article. **See below.**

Sec. 14-332.2. Categorical exceptions and modifications to off-street parking requirements.

Regardless of which zone a project of use is located, the following exceptions to the off-street parking requirements listed above in section 14-332 are additionally hereby established.

(c) Site plans over 50,000 square feet and projects in the B-6, B-7, and USM Overlay Zones: Where construction is proposed of new structures having a total floor area in excess of fifty thousand (50,000) square feet, the planning board shall establish the parking requirement for such structures. <u>The parking requirement shall be determined based upon a parking analysis submitted by the applicant and upon the recommendation of the city transportation engineer.</u>

This exception and modification applies to the proposed project. See attached Trip Generation and Parking Demand Analysis, exhibit #12.

Section 14-332.3 Uses requiring off-street bicycle parking.

In all zones where of-street motor vehicle parking is required, minimum off-street bicycle parking shall be provided and maintained.....as specified in Section 14 - 526(a) (2) (Site Plan Standards).

See attached Trip Generation and Parking Demand Analysis, exhibit #12. This project will not provide on-site vehicle parking as it will be provided at Ocean Gateway Garage, across Fore Street, which is under contract to purchase by applicant. Bicycle parking for at least four bikes will be provided on-site as part of this project and additional bike parking will be provided internally and at the Ocean Gateway Parking Garage. See Site Plan.

DIVISION 26 SHORELAND REGULATIONS
Section 14-449 Land Use Standards

(a) Principal and accessory structures: All principal and accessory structures shall be set back at least seventy-five (75) feet horizontal distance, from the normal high water line of water bodies..... except that in the following zones the setback shall be as indicated: W-PD Zone:
No setback required.
The project does not propose to locate any structures within the 75' of the normal high water line.

(b) Piers, docks, wharves, bridges and other structures and uses extending over below the normal high water line of a water body or within a wetland: New permanent structures, and expansions thereof, projecting into or over water bodies shall require a permit from the D.E.P.
N/A

(c) Clearing of vegetation.
The existing project site is completely void of any significant vegetation. It in only sparsely covered by grass and grass type weeds growing over a gravel surface.

(d) Erosion & Sedimentation Control:
Both temporary and permanent erosion and sedimentation control devices/application conforming to the current best management practices will be used. Please see attached sheet C-103 Grading, Drainage, and Erosion Control Plan.

(e) Soils:
According to the Soil Survey of Cumberland County, published by the United States Department of Agriculture (1974); the project soils are generally cut/fill over marine clay.

(f) Water Quality:
No pollutants will be deposited into State waters as a result of this project. As part of this project the proposed stormwater system will ultimately tie into an existing City owned stormwater outfall which discharges into the Fore River; only after it filters through a crushed stone filter layer and is detained in the proposed underground chamber system.

(g) Archaeological Sites:
The project site has been completely disturbed by its past uses and the hotel site is not within the City's Historic District. However, the adjacent property does contain a building from the Grand Trunk Railroad complex and we understand it is a historic building. We will be making contact with the City's Historic Preservation Board to review and provide an Advisory Review Opinion.

(h) Installation of Public Utility Service:
This is a pre-disturbed, vacant site that will require many new utility connections which are available to tie into in the adjacent streets. All applicable utility service companies will be contacted and worked with to install any necessary new services to both their and the City's standards. As part of this project it is proposed to tie the stormwater system into an existing City owned stormwater outfall that eventually discharges into the Fore River after going through a downstream defender and our private stormwater system.

(i) Essential Services:

This is a pre-disturbed, vacant site. All applicable essential service companies and the City will be contacted and worked with to install any necessary new services.

(j) Roads & Driveways:

Roads: The project does not propose any new roads; instead it uses the adjacent established road network. The project proposes some adjustments to the road lanes, striping, and curb line along Fore Street and some curb line adjustments along Hancock Streets. New on street parking is proposed for the portion of Fore Street from the Portland Water District Pump Station driveway to the intersection with Hancock Street. The street centerline will be shifted to the west to accommodate for the 8' on-street parking lane, single 12' outbound lane, and single 12' inbound lane. In conjunction to the lane shifting/restriping the project proposes to bump out the curb at the corner of Fore and Hancock Streets. This will provide a larger pedestrian space at the hotel entrance, provide definition and protection to cars parked on the street and makes the pedestrian crossing shorter and safer. All road improvements will occur outside the Shoreland Zone. All improvements will take place within the right-of-way or within the applicant's property.

Internal Driveway: The project calls for a single, 22' driveway which terminates at a one way cul-de-sac. The outermost portion of the loop is an 8' valet drop-off/pick-up zone; the middle portion is an 18' one-way, travel lane; and the inner most zone is a 10' radius landscaped island and 5' cobblestone buffer. This area has been designed for passenger and small delivery type vehicles. No portion of the drive or loop will be located within the Shoreland Zone.

(k) Parking Areas:

The project does not include any permanent or long term vehicle parking on-site, but it does include an area for short term valet drop-off/pick-up. No portion of the short term drop-off/pick-up will be located within the Shoreland Zone.

(l) Septic Waste Disposal:

New wastewater connections are a part of this project. New connections are proposed from the hotel and residential units (6" gravity sewer), from the Thames Street retail space (4" gravity sewer including a grease trap), and from the hotel kitchen space (4" gravity sewer including a grease trap). Part of this application includes a waste water analysis application to be reviewed by the City staff. We will work closely with the City to determine best methods of handling waste water.

(m) Stormwater runoff:

The existing project site is a gravel surface. The proposed condition will contain less impervious area than the current site does, thus a reduction in stormwater runoff. A large portion of the internal driveway has been designed with a pervious paver system for stormwater treatment and storage. As part of this project it is proposed to tie the stormwater system into an existing City owned stormwater outfall that eventually discharges into the Fore River after going through a downstream defender and our private stormwater system.

(n) Agriculture:

Not Applicable.

(o) General site plan features:

The applicant feels that the proposed project meets the intent of the Shoreland Zone regulations.

8. Summary of Existing and Proposed Easements

Summary of Proposed & Existing Easements

Existing easements, encumbrances, and other burdens: There are no known on the subject property.

Proposed easements: Access and Utility easements will be required for this project as part of the overall master plan for the property. These easements are to be formulated at a later date.

9. Written Requests for Waivers

Written Requests for Waivers

Waiver Request 1: Landscaping

Technical Manual Standard, Section 4.5.2 Screening and Buffers

Where required, buffer areas shall be comprised of existing trees and vegetation, new landscaping or a combination thereof to create a dense, mixed buffer City of Portland Technical Manual 124 Section 4 - Landscaping and Landscape Preservation Adopted 7/19/10. Rev. 6/17/11 incorporating both understory and tree canopy layers. While primarily of benefit from a ground level pedestrian viewpoint, such screening should also effectively provide screening when viewed from upper floors of surrounding properties, where applicable. New shrubs shall be approximately three (3) feet in mature height and shall be spaced 6-8 feet apart. Specification IV-3 provides an example of buffering between compatible uses. Buffers between contrasting land uses may incorporate earthen berms not exceeding 4:1 slope, opaque fencing, masonry wall or a combination thereof, in addition to landscape plantings. Where fencing or masonry wall is proposed as part of a buffer, less landscaping density is acceptable; however, buffers shall still include trees, shrubs and other vegetation. Landscaped buffers within the site shall complement and enhance and structures and site amenities, provide screening between structures, and buffer undesirable views from general public areas, from existing structures and from residents of proposed units. Accessory site elements such as parking and loading areas, utility structures, dumpsters, storage areas and other hardscaped or unvegetated areas, shall be located and screened from view from public areas and adjacent properties. Screening shall be accomplished with opaque fencing of high architectural quality, masonry wall and/or dense evergreen landscaping. Where fencing or masonry wall is proposed as part of a buffer, less landscaping density is acceptable; however, buffers shall still include trees, shrubs and other vegetation. Specification IV-7 provides an example of screening of accessory site elements.

The abutting land uses, office and public utility are compatible uses to the proposed hotel, commercial, top floor residential, and remaining land of Lot 2. In the future when Lot 2 is developed, due to the lack of zoning yard setbacks, buildings will be built adjacent to the property lines. Due to this it is requested that a waiver be granted for the screening/buffer requirement.

Technical Manual Standard, Section 4.6 Street Trees

4.6.1. Residential Development: Multi-family residential: Multi-family residential developments shall provide a minimum of one tree per unit, planted in the City right of way unless otherwise approved and spaced thirty (30) to forty five (45) on center.

There are 16 proposed condominium units in the building which would require 16 street trees. There is not enough road frontage to plant the required 16 trees with appropriate spacing. The project has proposed to plant 13 street trees to satisfy the commercial development component of the project. Six additional street trees are planting along the interior of the site along the driveway and turning circle. Due to this fact it is requested that a waiver be granted for the full requirement of 1 street tree per unit.

4.6.3. Commercial, industrial and institutional developments shall provide street trees thirty (30) to forty five (45) feet apart on center in the City right of way along all street frontages unless otherwise approved.

The Landscape Plan shows a total of 13 street trees spaced approximately 40' on center. The 13 trees do a good job of defining the street frontages. The 13 trees avoid utilities, building awnings, and other site encumbrances.

10. Evidence of Financial Capacity

Citizens
Commercial Banking

September 24, 2015

David Leatherwood
CEO and Managing Member
Norwich Partners
25 Foothill Street, Suite 1A
Lebanon, NH 03766

Dear Mr. Leatherwood:

I am writing on behalf of Citizens Bank, N.A. ("Citizens") to express our interest in providing both construction and permanent financing for the proposed Portland Ocean Gateway AC Hotel to be developed by an affiliate of Norwich Partners. Based on information provided to date, we believe strongly in the location, the product, and the sponsorship and would look forward to continuing our successful working relationship with you in Portland. We understand that the loan amount would be in the range of $30+/- million on total development costs of approximately $46 million.

As you know, we recently financed the very successful Marriott Residence Inn Downtown Boston/Seaport project and the Envoy Hotel / Marriott Autograph Collection Seaport project with Norwich Partners. It would be a pleasure to continue our banking relationship in furtherance of this exciting project in Portland.

Yours very truly,

Philip Wadleigh
Senior Vice President

11. Evidence of Technical Capacity

Evidence of Technical Capacity

The applicant has assembled a highly qualified team of professionals for the preparation of this project. All members of this team have significant experience with this type of project and many have worked together on other similar projects. The project is being designed by a multi-disciplinary team of design professionals. All members of the design team have proven experience working on projects located in the city of Portland.

The applicant is the same development team as for the Residence Inn by Marriott on Fore Street that opened in 2009.

Portland Norwich Group, LLC — **Applicant / Developer**
2330 Palm Ridge Road #305
Sanibel, FL 33957
Contact: Ara Aftandilian

Group One Partners, Inc. — **Architect**
21 West Third Street
Boston, MA 02127
617-268-7000
Contact: Rob Festa

Carroll Associates — **Landscape Architect**
217 Commercial Street, Suite 200
Portland, ME 04101
207-772-1552
Contact: Pat Carroll

Ransom Consulting Engineers — **Consulting Engineer (Civil)**
400 Commercial Street, Suite 404
Portland, ME 04101
207-772-2891
Contact: Stephen Bradstreet

Gorrill-Palmer Consulting Engineers — **Consulting Engineer (Traffic)**
15 Shaker Road
Gray Road, ME 04039
207-657-6910
Contact: Randy Dunton

Owen Haskell, Inc. — **Surveyor**
390 US Route One, Unit 10
Falmouth, ME 04105
207-774-0424
Contact: John Swan

Jensen Baird Gardner Henry — **Attorney**
10 Free Street
PO Box 4510
Portland, ME 04112-4510
207-775-7271
Contact: Lee Lowry

12. Trip Generation and Parking Demand Analysis

Preliminary
Trip Generation and Parking Demands
Portland Gateway Hotel Project – Portland, ME
JN 2969

Date: September 28, 2015
Subject: Trip Generation and Parking Demand Summary
Portland Gateway Hotel Project
To: Ara Aftandilian
From: Randy Dunton, Gorrill Palmer (JN 2969)

The following is a preliminary assessment of potential trip generation and parking demands for the proposed land uses in the Portland Gateway Hotel. The calculations are based on the Institute of Transportation Engineers' publication *Trip Generation*, Seventh Edition and the Portland City Ordinances. The assessment includes 16 Condominiums, 150 room Business Hotel, and 4,000 sf that can be retail or restaurant. For the purposes of this assessment, a restaurant has been assumed for the 4,000 sf. The following is a summary of assumptions, trip generations, and parking demands:

Trip Generation:

Assumptions:

Residential Condominium / Townhouse – Land Use Code (LUC) 230

- 16 Dwelling Units
- All Units Occupied

Business Hotel – LUC 312

- 150 Rooms
- All Rooms Occupied

High Turnover (Sit Down) Restaurant – LUC 932

- 4,000 SF

Trip Generation Summary

	AM Gen	AM Adj St	PM Gen	PM Adj St
Proposed				
Condos (16 units)	7	8	7	8
Hotel (150 rooms)	84	87	86	93
Restaurant (4,000 SF)	54	46	75	44
Proposed Total	**145**	**141**	**168**	**145**
Trip Generation Reductions				
Urban Reduction (5%)*	7	7	9	7
Shared-Use Reduction (5%)**	7	7	9	7
Reductions Total	14	14	18	14
Net Total	**131**	**127**	**150**	**131**

*Being in the downtown, there is a higher potential for alternate means of getting to the site (transit, walking, biking, etc.), so in our opinion a reduction can be made.
**Due to the mixed use and the compatibility of the different uses on the site, in our opinion a reduction can be made. For instance, it can be assumed that some people staying in the hotel would eat at the restaurant.

Based on this forecast trip generation, a MaineDOT Traffic Movement Permit will be required since the trip generation is greater than 99 trip ends during a peak hour. The City of Portland has delegated review authority from MaineDOT so they will be able to review the Traffic Movement Permit Application at the City level.

Parking Demand:

Parking Demand Summary

	Parking Variable	Ordinance Requirement	Required Parking per Ordinance	Shared Use Reduction (5%)	Offset Parking Peaks (5%)	Reduced Parking Demand
Proposed Uses						
Condos	16 Units	1 / Unit*	16 spaces	1 spaces	1 spaces	14 spaces
Hotel	150 Rooms	1 / 4 Rooms	38 spaces	2 spaces	2 spaces	34 spaces
Restaurant	2,800 SF	1 / 150 SF**	19 spaces	1 spaces	1 spaces	17 spaces
Proposed Total			**73 spaces**	**4 spaces**	**4 spaces**	**65 spaces**

*Condos - The City's standard requirement for residential units is 2 spaces per unit (Sec. 14-332 (a)). Under Sec. 14-332.2 (c): "Site plans over 50,000 square feet and projects in the B-6, B-7, and USM Overlay Zones: Where construction is proposed of new structures having a total floor area in excess of fifty thousand (50,000) square feet, the planning board shall establish the parking requirement for such structures. The parking requirement shall be determined based upon a parking analysis submitted by the applicant and upon the recommendation of the city transportation engineer." The site is located in Zone B-6 and the proposed building has greater than 50,000 sf total floor area. For this analysis we used 1 parking space per unit.

**Restaurant - This requirement is per sf of "area not used for bulk storage or food preparation". For this parking estimate, we have assumed 30% of the sf will be used for this purpose, resulting in 2,800 sf for determining parking (4,000 – 1,200 = 2,800).

Bicycle Parking:

Per City Ordinance, non-residential structures are required to provide bicycle accommodations in proportion to the vehicular parking. For residential structures 2 bicycle parking spaces are required for every 5 dwelling units and for non-residential structures 2 bicycle parking spaces are required for every 10 vehicle parking spaces. Based on the ordinance, this project would require 10 (4 residential + 6 non-residential) bicycle parking spaces.

Conclusions:

Based on the "Net Total" trip generation results as summarized previously, this project will generate over 99 trip ends in a peak hour and will therefore require a MaineDOT Traffic Movement Permit. The Traffic Movement Permit Application can be reviewed and the permit issued by the City since they have delegated review authority. Based on the parking evaluation, this project is forecast to require approximately 65 vehicular parking spaces and 10 bicycle parking spaces to meet City ordinance.

It should be noted that this preliminary evaluation has not been reviewed by the City or their peer review engineer so is subject to change.

13. Stormwater Management Narrative

RANSOM Consulting, Inc.

Consulting Engineers and Scientists

AC Hotels
Stormwater Management Narrative

Date:	September 28, 2015
To:	City of Portland
From:	Maureen P. McGlone, P.E.
Peer Review:	Stephen J. Bradstreet, P.E.
Location:	Hancock and Fore Streets, Portland, Maine

List of Appendices:

Appendix A: Pre-and Post-Development Stormwater Plans
Appendix B: Pre Development Hydro CAD Calculations
Appendix C: Post Development Hydro CAD Calculations
Appendix D: Stormwater Inspection and Maintenance Report

Existing Conditions:

The site is a 60,654 SF (1.39 acres) acre parcel that is bordered by Fore Street, Hancock Street, Thames Street and India Street. The site's topography is generally flat and slopes from the south to the north and drains into catch basins on Fore Street, Hancock Street and Thames Street. The parcel is currently vacant, but has historical use as a rail yard for shipping and was most recently being utilized as a staging area for several construction projects completed in the surrounding area. The entire parcel is considered impervious with concrete pads or gravel surfaces.

Stormwater runoff from the existing parcel (Sub-catchment 1) flows in two directions. A portion flows toward the intersection of Fore Street and Hancock Street to a closed drainage system . The remaining area appears to flow to the intersection of Thames Street and Hancock Street to the same closed drainage system. The closed drainage system discharges to the ocean adjacent to the Ocean Gateway terminal building after first going through a Downstream Defender treatment system, which primarily removes suspended solids from the stormwater.

Proposed Development:

The applicant, Portland Norwich Group, LLC proposes to construct a 6 story hotel/retail/residential condominium building. The building will have hotel conference rooms and common areas as well as the retail space on the first floor along with kitchen area and storage. The second through fifth floors will house 150 hotel rooms, while the sixth floor is anticipated to house 16 condominium units. Future

development on the remaining property is anticipated to consist of multiple structures for retail/office/residential use, with landscaped areas and walking paths.

With the addition of landscaped areas, it is anticipated that the proposed development will decrease the site's overall impervious area. The non-impervious area will be a combination of landscaped planting areas or lawn.

Stormwater Management – Basic Standards:

Erosion and sedimentation control measures are detailed within the design plans. Good housekeeping practices will be in accordance with Maine DEP Best Management Practices. A post construction stormwater management plan is provided in *Appendix A*. Stormwater BMP inspection and maintenance requirements are provided in *Appendix B*.

Stormwater Management - Quality:

The existing site is currently all gravel and basically an impervious site. Per Chapter 500, there is no requirement for treatment for a redevelopment project on this parcel. However, the applicant has chosen to provide permeable pavers with a filter system for the treatment of surface runoff in the driveway and dropoff area. The discharge from the filter system will be collected in subsurface storage tanks (R-tank system currently proposed) which will subsequently enter the closed storm drainage system in Thames Street.

The site's impervious area will be reduced with the addition of landscaped areas, however with the proposed surface water treatment the stormwater quality would improve greatly over the existing condition. It is anticipated that this additional treatment provided will be used to provide water quality credits to offset the City's new stormwater fee.

Stormwater Management - Quantity:

The pervious paver filter system proposed included subsurface storage of treated surface water runoff. Additionally, it is anticipated that the roof drains from the proposed structures will be connected to the subsurface system to provide additional detention prior to discharge to the storm drain system within Thames Street. It is anticipated that this additional treatment provided will be used to provide water quantity credits to offset the City's new stormwater fee.

Hydraulic Analysis:

Stormwater runoff calculations for quantity were made using the HydroCAD 10.0 computer program, which is based on the Soil Conservation Service's TR-20 methodology. Runoff hydrographs are generated based on a standard Type III 24 hour storm.

Five storm events were modeled as follows:

1. 1" storm: The 1" storm event was analyzed to simulate a heavy weather event that would typically happen multiple times over a given year and may impact the CSO frequency and volume.

2. 1-year frequency flood event: 2.5" rainfall

3. 2-year frequency flood event: 3" rainfall

4. 10-year frequency flood event: 4.7" rainfall

5. 25-year frequency flood event: 5.5" rainfall

Runoff Curve numbers were determined based on land coverage and soil type based on a geotechnical report generated by Haley and Aldrich in May, 2007. Soils were typically urban fill underlain by organic material, sand and soft clays to rock. Due to the size of the lot and the land coverage, a minimum time of concentration (Tc) of 5 minutes was set in the HydroCAD model.

Peak runoff flow rates and runoff volumes are provided for a single analysis point, which represents the discharge to the closed system and are identified on the Pre and Post-Development plans. The analysis point shows a reduction in runoff rates and volumes.

Peak runoff rates and runoff volumes for the above analysis points and storm events are tabulated in the following tables. HydroCAD calculations can be found in *Appendices C & D*. Pre- and Post-Development plans (SWP1.0 and SWP2.0) can be found in the appendices.

Storm Event	PRE-Development Peak Runoff RATES cubic feet per second (CFS)
1" Storm	1.18
1 Year Frequency Storm	3.65
2 Year Frequency Storm	4.46
10 Year Frequency Storm	7.19
25 Year Frequency Storm	8.47

Storm Event	POST-Development Peak Runoff RATES cubic feet per second (CFS)
1" Storm	0.0
1 Year Frequency Storm	1.76
2 Year Frequency Storm	1.59
10 Year Frequency Storm	5.90
25 Year Frequency Storm	7.21

Storm Event	PRE-Development Peak Runoff VOLUME acre feet (AF) volume of water 1'deep over one acre
1" Storm	.07
1 Year Frequency Storm	0.23
2 Year Frequency Storm	0.28
10 Year Frequency Storm	0.46
25 Year Frequency Storm	0.55

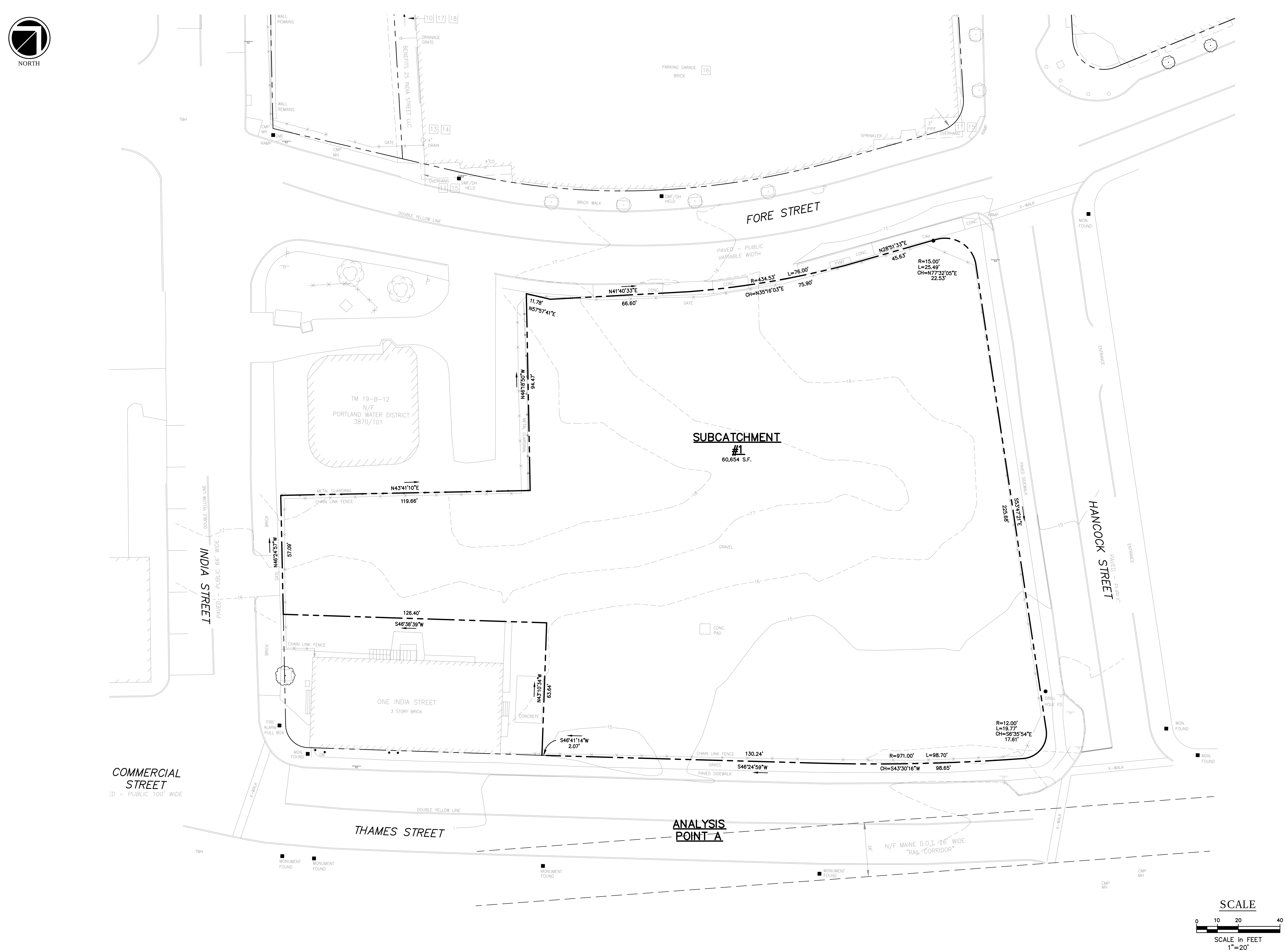
Storm Event	POST-Development Peak Runoff VOLUME acre feet (AF) volume of water 1'deep over one acre)
1" Storm	0.0
1 Year Frequency Storm	0.022
2 Year Frequency Storm	0.013
10 Year Frequency Storm	0.18
25 Year Frequency Storm	0.28

APPENDIX A

Pre- and Post- Development Stormwater Plans

City of Portland
Hancock/Thames/Fore Street
Portland, Maine

Ransom Consulting, Inc.
Project 151.06094


NORTH
FORE STREET
PAVED - PUBLIC VARIABLE WIDTH
HANCOCK STREET
INDIA STREET
PAVED - PUBLIC 66' WIDE
THAMES STREET
COMMERCIAL STREET
PAVED - PUBLIC 100' WIDE
SUBCATCHMENT #1
60,654 S.F.
ANALYSIS POINT A
TM 19-B-12
N/F
PORTLAND WATER DISTRICT
3870/101
ONE INDIA STREET
3 STORY BRICK
N/F MAINE D.O.T. 26' WIDE "RAIL CORRIDOR"
PARKING GARAGE
BRICK
BENEFITS 25 INDIA STREET LLC
DOUBLE YELLOW LINE
BRICK WALK
CHAIN LINK FENCE
METAL GUARDRAIL
GRAVEL
CONC. PAD
PAVED SIDEWALK
N41°40'33"E
66.60'
R=434.53'
L=76.00'
CH=N35°16'03"E
75.90'
N28°51'33"E
45.63'
R=15.00'
L=25.49'
CH=N77°32'05"E
22.53'
11.78'
N57°57'41"E
N46°18'50"W
94.47'
N43°41'10"E
119.66'
N46°24'57"W
57.09'
126.40'
S46°38'39"W
N43°10'34"W
63.64'
S46°41'14"W
2.07'
S53°47'21"E
225.68'
R=12.00'
L=19.77'
CH=S6°35'54"E
17.61'
130.24'
S46°24'59"W
R=971.00'
L=98.70'
CH=S43°30'16"W
98.65'
SCALE
0 10 20 40
SCALE in FEET
1"=20'

Site:

PROPOSED AC HOTEL

FORE STREET /
HANCOCK STREET /
THAMES STREET
PORTLAND, MAINE

Prepared for:

PORTLAND NORWICH
GROUP, LLC
2330 PALM RIDGE ROAD
#305
SANIBEL, FL 33957

RANSOM
Consulting Engineers and Scientists
400 Commercial Street, Suite 404
Portland, ME 04101
Tel. (207) 772-2891
Fax (207) 772-3248
www.ransomenv.com

PRE-DEVELOPMENT PLAN

No.	Revision/Issue	Date
A	PRELIMINARY SUBMISSION	09/29/15

Design by: MPM	Checked by: SJB
Drawn by: JAR	Approved by: SJB
Project: 150.06094	Date: AUGUST 2015

Sheet No:

SWP1.0

Sheet 1 of 2

NORTH

FORE STREET

INDIA STREET

HANCOCK STREET

COMMERCIAL STREET

THAMES STREET

SUBCATCHMENT #1
20,385 S.F.

SUBCATCHMENT #2
12,989 S.F.

SUBCATCHMENT #3
27,280 S.F.

ANALYSIS POINT A

ONE INDIA STREET
3 STORY BRICK

TM 19-B-12
N/F
PORTLAND WATER DISTRICT
3870/101

PARKING GARAGE
BRICK
16

BENEFITS 25 INDIA STREET LLC

WALL REMAINS

DRAINAGE GRATE

GATE

4" DRAIN

4"CO

CMP MH

CMF

RAMP

OVERHANG

CMF/DH HELD

BRICK WALK

SPRINKLER

3" PIPE

RAMP

PAVED - PUBLIC VARIABLE WIDTH

X-WALK

CIRF

MON. FOUND

ENTRANCE

N41°40'33"E
66.60'

11.78'
N57°57'41"E

N46°18'50"W
94.47'

METAL GUARDRAIL

CHAIN LINK FENCE

N43°41'10"E
119.66'

DOUBLE YELLOW LINE

PAVED - PUBLIC 66' WIDE

BRICK

N43°42'54"W
57.09'

126.40'
S46°38'39"W

CHAIN LINK FENCE

N43°10'54"W
63.64'

CONCRETE

FIRE ALARM PULL BOX

MON. FOUND

S46°41'14"W
2.07'

CHAIN LINK FENCE

GRASS

PAVED SIDEWALK

130.24'
S46°24'59"W

CONC. PAD

R=84.53'
CH=N35°16'03"E
75.90'

N28°31'33"E
45.53'

R=15.00'
L=25.49'
CH=N77°32'05"E
22.53'

S53°47'24"E
225.68'

R=12.00'
L=19.77'
CH=S6°35'54"E
17.61'

R=971.06'
L=98.70'
CH=S43°30'16"W
98.65'

DRILL HOLE FD

MON. FOUND

MON. FOUND

X-WALK

DOUBLE YELLOW LINE

N/F MAINE D.O.T. 26' WIDE
"RAIL CORRIDOR"

MONUMENT FOUND

MONUMENT FOUND

MONUMENT FOUND

MONUMENT FOUND

TMH

CMP MH

SCALE

0 10 20 40

SCALE in FEET
1"=20'

Site:

PROPOSED AC HOTEL

FORE STREET /
HANCOCK STREET /
THAMES STREET
PORTLAND, MAINE

Prepared for:

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Fax (207) 772-3248
www.ransomenv.com

POST-DEVELOPMENT PLAN

No.	Revision/Issue	Date
A	PRELIMINARY SUBMISSION	09/29/15

Design by: MPM	Checked by: SJB
Drawn by: JAR	Approved by: SJB
Project: 150.06094	Date: AUGUST 2015

Sheet No: SWP2.0

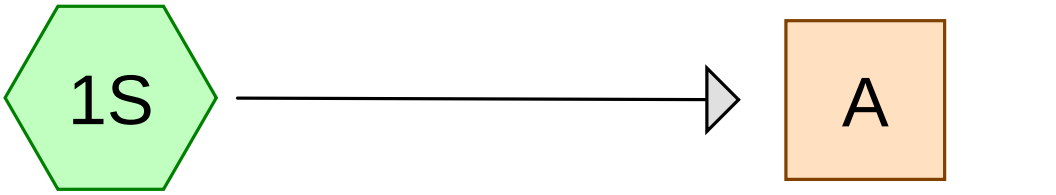
Sheet 2 of 2

APPENDIX B

Pre Development Hydro CAD Calculations

City of Portland
Hancock/Thames/Fore Street
Portland, Maine

Ransom Consulting, Inc.
Project 151.06094



existing full lot

outlet to System

Subcat Reach Pond Link

Routing Diagram for existing site

Prepared by {enter your company name here}, Printed 9/29/2015

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
1.392	96	Paved parking, HSG B (1S)
1.392	**96**	**TOTAL AREA**

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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: existing full lot Runoff Area=60,650 sf 0.00% Impervious Runoff Depth>0.59"
Tc=0.0 min CN=96 Runoff=1.18 cfs 0.069 af

Reach A: outlet to System Inflow=1.18 cfs 0.069 af
Outflow=1.18 cfs 0.069 af

Total Runoff Area = 1.392 ac Runoff Volume = 0.069 af Average Runoff Depth = 0.59"
100.00% Pervious = 1.392 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment 1S: existing full lot

[46] Hint: Tc=0 (Instant runoff peak depends on dt)

Runoff = 1.18 cfs @ 12.00 hrs, Volume= 0.069 af, Depth> 0.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-inch Rainfall=1.00"

	Area (sf)	CN	Description
*	60,650	96	Paved parking, HSG B
	60,650		100.00% Pervious Area

Summary for Reach A: outlet to System

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 1.392 ac, 0.00% Impervious, Inflow Depth > 0.59" for 1-inch event
Inflow = 1.18 cfs @ 12.00 hrs, Volume= 0.069 af
Outflow = 1.18 cfs @ 12.00 hrs, Volume= 0.069 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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: existing full lot Runoff Area=60,650 sf 0.00% Impervious Runoff Depth>1.95"
Tc=0.0 min CN=96 Runoff=3.65 cfs 0.226 af

Reach A: outlet to System Inflow=3.65 cfs 0.226 af
Outflow=3.65 cfs 0.226 af

Total Runoff Area = 1.392 ac Runoff Volume = 0.226 af Average Runoff Depth = 1.95"
100.00% Pervious = 1.392 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment 1S: existing full lot

[46] Hint: Tc=0 (Instant runoff peak depends on dt)

Runoff = 3.65 cfs @ 12.00 hrs, Volume= 0.226 af, Depth> 1.95"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-year Rainfall=2.50"

	Area (sf)	CN	Description
*	60,650	96	Paved parking, HSG B
	60,650		100.00% Pervious Area

Summary for Reach A: outlet to System

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 1.392 ac, 0.00% Impervious, Inflow Depth > 1.95" for 1-year event
Inflow = 3.65 cfs @ 12.00 hrs, Volume= 0.226 af
Outflow = 3.65 cfs @ 12.00 hrs, Volume= 0.226 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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: existing full lot Runoff Area=60,650 sf 0.00% Impervious Runoff Depth>2.41"
Tc=0.0 min CN=96 Runoff=4.46 cfs 0.280 af

Reach A: outlet to System Inflow=4.46 cfs 0.280 af
Outflow=4.46 cfs 0.280 af

Total Runoff Area = 1.392 ac Runoff Volume = 0.280 af Average Runoff Depth = 2.41"
100.00% Pervious = 1.392 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment 1S: existing full lot

[46] Hint: Tc=0 (Instant runoff peak depends on dt)

Runoff = 4.46 cfs @ 12.00 hrs, Volume= 0.280 af, Depth> 2.41"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=3.00"

	Area (sf)	CN	Description
*	60,650	96	Paved parking, HSG B
	60,650		100.00% Pervious Area

Summary for Reach A: outlet to System

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 1.392 ac, 0.00% Impervious, Inflow Depth > 2.41" for 2-year event
Inflow = 4.46 cfs @ 12.00 hrs, Volume= 0.280 af
Outflow = 4.46 cfs @ 12.00 hrs, Volume= 0.280 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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: existing full lot Runoff Area=60,650 sf 0.00% Impervious Runoff Depth>3.98"
Tc=0.0 min CN=96 Runoff=7.19 cfs 0.462 af

Reach A: outlet to System Inflow=7.19 cfs 0.462 af
Outflow=7.19 cfs 0.462 af

Total Runoff Area = 1.392 ac Runoff Volume = 0.462 af Average Runoff Depth = 3.98"
100.00% Pervious = 1.392 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment 1S: existing full lot

[46] Hint: Tc=0 (Instant runoff peak depends on dt)

Runoff = 7.19 cfs @ 12.00 hrs, Volume= 0.462 af, Depth> 3.98"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=4.70"

	Area (sf)	CN	Description
*	60,650	96	Paved parking, HSG B
	60,650		100.00% Pervious Area

Summary for Reach A: outlet to System

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 1.392 ac, 0.00% Impervious, Inflow Depth > 3.98" for 10-year event
Inflow = 7.19 cfs @ 12.00 hrs, Volume= 0.462 af
Outflow = 7.19 cfs @ 12.00 hrs, Volume= 0.462 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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: existing full lot Runoff Area=60,650 sf 0.00% Impervious Runoff Depth>4.72"
Tc=0.0 min CN=96 Runoff=8.47 cfs 0.547 af

Reach A: outlet to System Inflow=8.47 cfs 0.547 af
Outflow=8.47 cfs 0.547 af

Total Runoff Area = 1.392 ac Runoff Volume = 0.547 af Average Runoff Depth = 4.72"
100.00% Pervious = 1.392 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment 1S: existing full lot

[46] Hint: Tc=0 (Instant runoff peak depends on dt)

Runoff = 8.47 cfs @ 12.00 hrs, Volume= 0.547 af, Depth> 4.72"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=5.50"

	Area (sf)	CN	Description
*	60,650	96	Paved parking, HSG B
	60,650		100.00% Pervious Area

Summary for Reach A: outlet to System

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 1.392 ac, 0.00% Impervious, Inflow Depth > 4.72" for 25-year event
Inflow = 8.47 cfs @ 12.00 hrs, Volume= 0.547 af
Outflow = 8.47 cfs @ 12.00 hrs, Volume= 0.547 af, Atten= 0%, Lag= 0.0 min

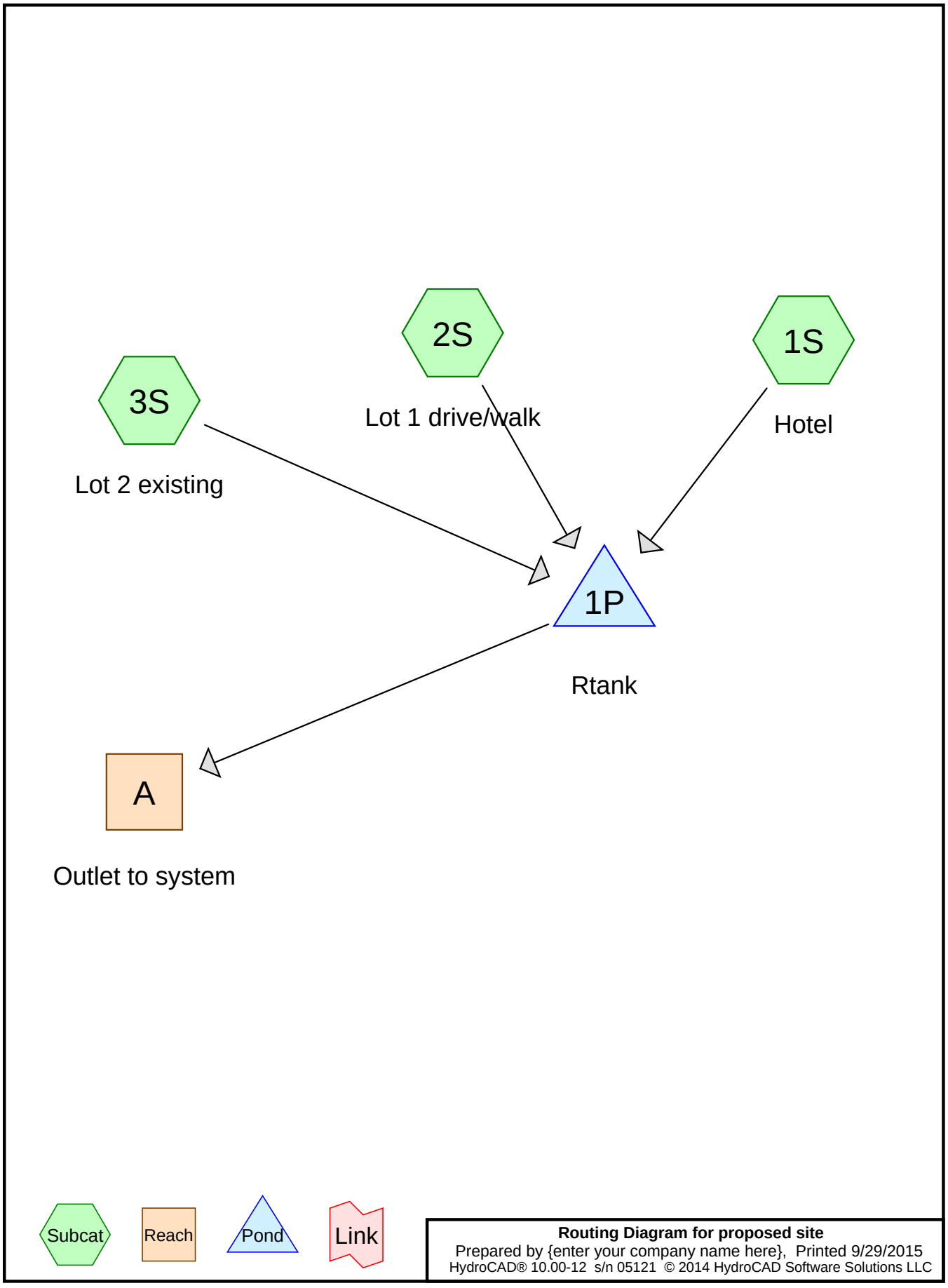
Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

APPENDIX C

Post Development Hydro CAD Calculations

City of Portland
Hancock/Thames/Fore Street
Portland, Maine

Ransom Consulting, Inc.
Project 151.06094



Routing Diagram for proposed site

Prepared by {enter your company name here}, Printed 9/29/2015

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.298	98	(2S)
0.626	96	(3S)
0.468	98	roof (1S)
1.392	**97**	**TOTAL AREA**

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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: Hotel Runoff Area=20,385 sf 100.00% Impervious Runoff Depth>0.75"
Tc=5.0 min CN=98 Runoff=0.42 cfs 0.029 af

Subcatchment2S: Lot 1 drive/walk Runoff Area=12,989 sf 100.00% Impervious Runoff Depth>0.75"
Tc=5.0 min CN=98 Runoff=0.27 cfs 0.019 af

Subcatchment3S: Lot 2 existing Runoff Area=27,280 sf 0.00% Impervious Runoff Depth>0.59"
Tc=5.0 min CN=96 Runoff=0.46 cfs 0.031 af

Reach A: Outlet to system Inflow=0.00 cfs 0.000 af
Outflow=0.00 cfs 0.000 af

Pond 1P: Rtank Peak Elev=1.94' Storage=3,421 cf Inflow=1.15 cfs 0.079 af
8.0" Round Culvert n=0.010 L=100.0' S=0.0085 '/' Outflow=0.00 cfs 0.000 af

Total Runoff Area = 1.392 ac Runoff Volume = 0.079 af Average Runoff Depth = 0.68"
44.98% Pervious = 0.626 ac 55.02% Impervious = 0.766 ac

Summary for Subcatchment 1S: Hotel

Runoff = 0.42 cfs @ 12.07 hrs, Volume= 0.029 af, Depth> 0.75"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-inch Rainfall=1.00"

	Area (sf)	CN	Description
*	20,385	98	roof
	20,385		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment 2S: Lot 1 drive/walk

Runoff = 0.27 cfs @ 12.07 hrs, Volume= 0.019 af, Depth> 0.75"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-inch Rainfall=1.00"

	Area (sf)	CN	Description
*	12,989	98	
	12,989		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment 3S: Lot 2 existing

Runoff = 0.46 cfs @ 12.08 hrs, Volume= 0.031 af, Depth> 0.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-inch Rainfall=1.00"

	Area (sf)	CN	Description
*	27,280	96	
	27,280		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Reach A: Outlet to system

Inflow Area = 1.392 ac, 55.02% Impervious, Inflow Depth = 0.00" for 1-inch event
Inflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Pond 1P: Rtank

Inflow Area = 1.392 ac, 55.02% Impervious, Inflow Depth > 0.68" for 1-inch event
Inflow = 1.15 cfs @ 12.07 hrs, Volume= 0.079 af
Outflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs / 4
Peak Elev= 1.94' @ 20.00 hrs Surf.Area= 2,208 sf Storage= 3,421 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1A	0.00'	1,417 cf	**43.37'W x 50.92'L x 3.42'H Field A** 7,542 cf Overall - 4,000 cf Embedded = 3,542 cf x 40.0% Voids
#2A	0.25'	3,800 cf	**ACF R-Tank HD 1.5** x 600 Inside #1 Inside= 15.7"W x 26.0"H => 2.70 sf x 2.35'L = 6.3 cf Outside= 15.7"W x 26.0"H => 2.84 sf x 2.35'L = 6.7 cf 30 Rows of 20 Chambers
		5,217 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	8.85'	**8.0" Round Culvert** L= 100.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 8.85' / 8.00' S= 0.0085 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.35 sf

Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=0.00' (Free Discharge)
↑—**1=Culvert** (Controls 0.00 cfs)

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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: Hotel Runoff Area=20,385 sf 100.00% Impervious Runoff Depth>2.13"
Tc=5.0 min CN=98 Runoff=1.13 cfs 0.083 af

Subcatchment2S: Lot 1 drive/walk Runoff Area=12,989 sf 100.00% Impervious Runoff Depth>2.13"
Tc=5.0 min CN=98 Runoff=0.72 cfs 0.053 af

Subcatchment3S: Lot 2 existing Runoff Area=27,280 sf 0.00% Impervious Runoff Depth>1.95"
Tc=5.0 min CN=96 Runoff=1.44 cfs 0.102 af

Reach A: Outlet to system Inflow=1.76 cfs 0.022 af
Outflow=1.76 cfs 0.022 af

Pond 1P: Rtank Peak Elev=11.47' Storage=5,217 cf Inflow=3.30 cfs 0.238 af
8.0" Round Culvert n=0.010 L=100.0' S=0.0085 '/' Outflow=1.76 cfs 0.022 af

Total Runoff Area = 1.392 ac Runoff Volume = 0.238 af Average Runoff Depth = 2.05"
44.98% Pervious = 0.626 ac 55.02% Impervious = 0.766 ac

Summary for Subcatchment 1S: Hotel

Runoff = 1.13 cfs @ 12.07 hrs, Volume= 0.083 af, Depth> 2.13"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-year Rainfall=2.50"

	Area (sf)	CN	Description
*	20,385	98	roof
	20,385		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment 2S: Lot 1 drive/walk

Runoff = 0.72 cfs @ 12.07 hrs, Volume= 0.053 af, Depth> 2.13"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-year Rainfall=2.50"

	Area (sf)	CN	Description
*	12,989	98	
	12,989		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment 3S: Lot 2 existing

Runoff = 1.44 cfs @ 12.07 hrs, Volume= 0.102 af, Depth> 1.95"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-year Rainfall=2.50"

	Area (sf)	CN	Description
*	27,280	96	
	27,280		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Reach A: Outlet to system

Inflow Area = 1.392 ac, 55.02% Impervious, Inflow Depth = 0.19" for 1-year event
Inflow = 1.76 cfs @ 12.16 hrs, Volume= 0.022 af
Outflow = 1.76 cfs @ 12.16 hrs, Volume= 0.022 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Pond 1P: Rtank

Inflow Area = 1.392 ac, 55.02% Impervious, Inflow Depth > 2.05" for 1-year event
Inflow = 3.30 cfs @ 12.07 hrs, Volume= 0.238 af
Outflow = 1.76 cfs @ 12.16 hrs, Volume= 0.022 af, Atten= 47%, Lag= 5.5 min
Primary = 1.76 cfs @ 12.16 hrs, Volume= 0.022 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs / 4
Peak Elev= 11.47' @ 12.17 hrs Surf.Area= 2,208 sf Storage= 5,217 cf

Plug-Flow detention time= 251.7 min calculated for 0.022 af (9% of inflow)
Center-of-Mass det. time= (not calculated: outflow precedes inflow)

Volume	Invert	Avail.Storage	Storage Description
#1A	0.00'	1,417 cf	**43.37'W x 50.92'L x 3.42'H Field A** 7,542 cf Overall - 4,000 cf Embedded = 3,542 cf x 40.0% Voids
#2A	0.25'	3,800 cf	**ACF R-Tank HD 1.5** x 600 Inside #1 Inside= 15.7"W x 26.0"H => 2.70 sf x 2.35'L = 6.3 cf Outside= 15.7"W x 26.0"H => 2.84 sf x 2.35'L = 6.7 cf 30 Rows of 20 Chambers
		5,217 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	8.85'	**8.0" Round Culvert** L= 100.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 8.85' / 8.00' S= 0.0085 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.35 sf

Primary OutFlow Max=1.57 cfs @ 12.16 hrs HW=10.59' (Free Discharge)
↑—**1=Culvert** (Inlet Controls 1.57 cfs @ 4.51 fps)

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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: Hotel Runoff Area=20,385 sf 100.00% Impervious Runoff Depth>2.59"
Tc=5.0 min CN=98 Runoff=1.37 cfs 0.101 af

Subcatchment2S: Lot 1 drive/walk Runoff Area=12,989 sf 100.00% Impervious Runoff Depth>2.59"
Tc=5.0 min CN=98 Runoff=0.87 cfs 0.064 af

Subcatchment3S: Lot 2 existing Runoff Area=27,280 sf 0.00% Impervious Runoff Depth>2.41"
Tc=5.0 min CN=96 Runoff=1.76 cfs 0.126 af

Reach A: Outlet to system Inflow=1.59 cfs 0.013 af
Outflow=1.59 cfs 0.013 af

Pond 1P: Rtank Peak Elev=11.23' Storage=5,217 cf Inflow=4.00 cfs 0.291 af
8.0" Round Culvert n=0.010 L=100.0' S=0.0085 '/' Outflow=1.59 cfs 0.013 af

Total Runoff Area = 1.392 ac Runoff Volume = 0.291 af Average Runoff Depth = 2.51"
44.98% Pervious = 0.626 ac 55.02% Impervious = 0.766 ac

Summary for Subcatchment 1S: Hotel

Runoff = 1.37 cfs @ 12.07 hrs, Volume= 0.101 af, Depth> 2.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=3.00"

	Area (sf)	CN	Description
*	20,385	98	roof
	20,385		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment 2S: Lot 1 drive/walk

Runoff = 0.87 cfs @ 12.07 hrs, Volume= 0.064 af, Depth> 2.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=3.00"

	Area (sf)	CN	Description
*	12,989	98	
	12,989		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment 3S: Lot 2 existing

Runoff = 1.76 cfs @ 12.07 hrs, Volume= 0.126 af, Depth> 2.41"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-year Rainfall=3.00"

	Area (sf)	CN	Description
*	27,280	96	
	27,280		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Reach A: Outlet to system

Inflow Area = 1.392 ac, 55.02% Impervious, Inflow Depth = 0.11" for 2-year event
Inflow = 1.59 cfs @ 12.07 hrs, Volume= 0.013 af
Outflow = 1.59 cfs @ 12.07 hrs, Volume= 0.013 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Pond 1P: Rtank

Inflow Area = 1.392 ac, 55.02% Impervious, Inflow Depth > 2.51" for 2-year event
Inflow = 4.00 cfs @ 12.07 hrs, Volume= 0.291 af
Outflow = 1.59 cfs @ 12.07 hrs, Volume= 0.013 af, Atten= 60%, Lag= 0.1 min
Primary = 1.59 cfs @ 12.07 hrs, Volume= 0.013 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs / 4
Peak Elev= 11.23' @ 12.07 hrs Surf.Area= 2,208 sf Storage= 5,217 cf

Plug-Flow detention time= 317.4 min calculated for 0.013 af (4% of inflow)
Center-of-Mass det. time= (not calculated: outflow precedes inflow)

Volume	Invert	Avail.Storage	Storage Description
#1A	0.00'	1,417 cf	**43.37'W x 50.92'L x 3.42'H Field A** 7,542 cf Overall - 4,000 cf Embedded = 3,542 cf x 40.0% Voids
#2A	0.25'	3,800 cf	**ACF R-Tank HD 1.5** x 600 Inside #1 Inside= 15.7"W x 26.0"H => 2.70 sf x 2.35'L = 6.3 cf Outside= 15.7"W x 26.0"H => 2.84 sf x 2.35'L = 6.7 cf 30 Rows of 20 Chambers
		5,217 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	8.85'	**8.0" Round Culvert** L= 100.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 8.85' / 8.00' S= 0.0085 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.35 sf

Primary OutFlow Max=1.41 cfs @ 12.07 hrs HW=10.31' (Free Discharge)
↑—**1=Culvert** (Inlet Controls 1.41 cfs @ 4.03 fps)

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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: Hotel Runoff Area=20,385 sf 100.00% Impervious Runoff Depth>4.15"
Tc=5.0 min CN=98 Runoff=2.16 cfs 0.162 af

Subcatchment2S: Lot 1 drive/walk Runoff Area=12,989 sf 100.00% Impervious Runoff Depth>4.15"
Tc=5.0 min CN=98 Runoff=1.38 cfs 0.103 af

Subcatchment3S: Lot 2 existing Runoff Area=27,280 sf 0.00% Impervious Runoff Depth>3.98"
Tc=5.0 min CN=96 Runoff=2.84 cfs 0.208 af

Reach A: Outlet to system Inflow=5.90 cfs 0.181 af
Outflow=5.90 cfs 0.181 af

Pond 1P: Rtank Peak Elev=31.01' Storage=5,217 cf Inflow=6.39 cfs 0.472 af
8.0" Round Culvert n=0.010 L=100.0' S=0.0085 '/' Outflow=5.90 cfs 0.181 af

Total Runoff Area = 1.392 ac Runoff Volume = 0.472 af Average Runoff Depth = 4.07"
44.98% Pervious = 0.626 ac 55.02% Impervious = 0.766 ac

Summary for Subcatchment 1S: Hotel

Runoff = 2.16 cfs @ 12.07 hrs, Volume= 0.162 af, Depth> 4.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=4.70"

	Area (sf)	CN	Description
*	20,385	98	roof
	20,385		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment 2S: Lot 1 drive/walk

Runoff = 1.38 cfs @ 12.07 hrs, Volume= 0.103 af, Depth> 4.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=4.70"

	Area (sf)	CN	Description
*	12,989	98	
	12,989		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment 3S: Lot 2 existing

Runoff = 2.84 cfs @ 12.07 hrs, Volume= 0.208 af, Depth> 3.98"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=4.70"

	Area (sf)	CN	Description
*	27,280	96	
	27,280		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Reach A: Outlet to system

Inflow Area = 1.392 ac, 55.02% Impervious, Inflow Depth = 1.56" for 10-year event
Inflow = 5.90 cfs @ 12.07 hrs, Volume= 0.181 af
Outflow = 5.90 cfs @ 12.07 hrs, Volume= 0.181 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Pond 1P: Rtank

Inflow Area = 1.392 ac, 55.02% Impervious, Inflow Depth > 4.07" for 10-year event
Inflow = 6.39 cfs @ 12.07 hrs, Volume= 0.472 af
Outflow = 5.90 cfs @ 12.07 hrs, Volume= 0.181 af, Atten= 8%, Lag= 0.0 min
Primary = 5.90 cfs @ 12.07 hrs, Volume= 0.181 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs / 4
Peak Elev= 31.01' @ 12.07 hrs Surf.Area= 2,208 sf Storage= 5,217 cf

Plug-Flow detention time= 107.2 min calculated for 0.181 af (38% of inflow)
Center-of-Mass det. time= (not calculated: outflow precedes inflow)

Volume	Invert	Avail.Storage	Storage Description
#1A	0.00'	1,417 cf	**43.37'W x 50.92'L x 3.42'H Field A** 7,542 cf Overall - 4,000 cf Embedded = 3,542 cf x 40.0% Voids
#2A	0.25'	3,800 cf	**ACF R-Tank HD 1.5** x 600 Inside #1 Inside= 15.7"W x 26.0"H => 2.70 sf x 2.35'L = 6.3 cf Outside= 15.7"W x 26.0"H => 2.84 sf x 2.35'L = 6.7 cf 30 Rows of 20 Chambers
		5,217 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	8.85'	**8.0" Round Culvert** L= 100.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 8.85' / 8.00' S= 0.0085 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.35 sf

Primary OutFlow Max=5.67 cfs @ 12.07 hrs HW=29.51' (Free Discharge)
↑—**1=Culvert** (Barrel Controls 5.67 cfs @ 16.24 fps)

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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: Hotel Runoff Area=20,385 sf 100.00% Impervious Runoff Depth>4.87"
Tc=5.0 min CN=98 Runoff=2.54 cfs 0.190 af

Subcatchment2S: Lot 1 drive/walk Runoff Area=12,989 sf 100.00% Impervious Runoff Depth>4.87"
Tc=5.0 min CN=98 Runoff=1.62 cfs 0.121 af

Subcatchment3S: Lot 2 existing Runoff Area=27,280 sf 0.00% Impervious Runoff Depth>4.71"
Tc=5.0 min CN=96 Runoff=3.35 cfs 0.246 af

Reach A: Outlet to system Inflow=7.21 cfs 0.280 af
Outflow=7.21 cfs 0.280 af

Pond 1P: Rtank Peak Elev=42.00' Storage=5,217 cf Inflow=7.50 cfs 0.557 af
8.0" Round Culvert n=0.010 L=100.0' S=0.0085 '/' Outflow=7.21 cfs 0.280 af

Total Runoff Area = 1.392 ac Runoff Volume = 0.557 af Average Runoff Depth = 4.80"
44.98% Pervious = 0.626 ac 55.02% Impervious = 0.766 ac

Summary for Subcatchment 1S: Hotel

Runoff = 2.54 cfs @ 12.07 hrs, Volume= 0.190 af, Depth> 4.87"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=5.50"

	Area (sf)	CN	Description
*	20,385	98	roof
	20,385		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment 2S: Lot 1 drive/walk

Runoff = 1.62 cfs @ 12.07 hrs, Volume= 0.121 af, Depth> 4.87"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=5.50"

	Area (sf)	CN	Description
*	12,989	98	
	12,989		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment 3S: Lot 2 existing

Runoff = 3.35 cfs @ 12.07 hrs, Volume= 0.246 af, Depth> 4.71"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-year Rainfall=5.50"

	Area (sf)	CN	Description
*	27,280	96	
	27,280		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Reach A: Outlet to system

Inflow Area = 1.392 ac, 55.02% Impervious, Inflow Depth = 2.41" for 25-year event
Inflow = 7.21 cfs @ 12.07 hrs, Volume= 0.280 af
Outflow = 7.21 cfs @ 12.07 hrs, Volume= 0.280 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Pond 1P: Rtank

Inflow Area = 1.392 ac, 55.02% Impervious, Inflow Depth > 4.80" for 25-year event
Inflow = 7.50 cfs @ 12.07 hrs, Volume= 0.557 af
Outflow = 7.21 cfs @ 12.07 hrs, Volume= 0.280 af, Atten= 4%, Lag= 0.0 min
Primary = 7.21 cfs @ 12.07 hrs, Volume= 0.280 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs / 4
Peak Elev= 42.00' @ 12.07 hrs Surf.Area= 2,208 sf Storage= 5,217 cf

Plug-Flow detention time= 89.8 min calculated for 0.280 af (50% of inflow)
Center-of-Mass det. time= (not calculated: outflow precedes inflow)

Volume	Invert	Avail.Storage	Storage Description
#1A	0.00'	1,417 cf	**43.37'W x 50.92'L x 3.42'H Field A** 7,542 cf Overall - 4,000 cf Embedded = 3,542 cf x 40.0% Voids
#2A	0.25'	3,800 cf	**ACF R-Tank HD 1.5** x 600 Inside #1 Inside= 15.7"W x 26.0"H => 2.70 sf x 2.35'L = 6.3 cf Outside= 15.7"W x 26.0"H => 2.84 sf x 2.35'L = 6.7 cf 30 Rows of 20 Chambers
		5,217 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	8.85'	**8.0" Round Culvert** L= 100.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 8.85' / 8.00' S= 0.0085 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.35 sf

Primary OutFlow Max=6.93 cfs @ 12.07 hrs HW=39.83' (Free Discharge)
↑—**1=Culvert** (Barrel Controls 6.93 cfs @ 19.86 fps)

APPENDIX D

Stormwater Inspection and Maintenance Report

City of Portland
Hancock/Thames/Fore Street
Portland, Maine

Ransom Consulting, Inc.
Project 151.06094

RANSOM Consulting, Inc.

Consulting Engineers and Scientists

AC Hotel Stormwater System
Inspection and Maintenance Report

Inspection and Maintenance Contract:

Long-term inspection and maintenance by a DEP approved stormwater maintenance inspector shall be regularly provided under a five-year binding inspection and maintenance contract that must be renewed prior to contract expiration. A legal agreement shall be established with responsibility for inspection and maintenance and should list specific maintenance responsibilities (including timetables) as well as provide for funding for the long-term inspection and maintenance. Debris and sediment buildup shall be removed from the paver system as needed.

Inspection schedule:

During the first year of operation, filtration BMPs shall be inspected twice annually and following major storm events. Thereafter, the filter should be inspected every six months to ensure that it is draining within 48 hours following a 1-inch storm. Additionally, a storm that fills the system to overflow should be monitored to confirm it drains in no less than 36 hours and within 60 hours.

R-Tank Stormwater Detention:

Inspection and Maintenance of the R-Tank shall be in accordance with the manufacturer's recommended practices to provide the performance required by the design. The R-Tank system includes inspection ports and maintenance ports, each of which has a cover at the surface. A visual inspection of all ports should be used to determine the depth of sediments deposited in the R-Tank system. The system should be back-flushed once the sediment accumulation has reached the manufacturer's limits. Once removed, sediment-laden water must be disposed of properly.

Manmade Pervious Surfaces:

Long-term inspection and maintenance by a DEP approved stormwater maintenance inspector shall be regularly provided under a five-year binding inspection and maintenance contract that must be renewed prior to contract expiration. Maintenance criteria for manmade pervious surfaces are as follows:

- Debris and sediment buildup shall be removed from the paver system using a vac truck as needed and shall be disposed properly.
- Remove sediment when the surface infiltration rates of more than 75% of the surface area fall below 10% of the post-installation verified surface infiltration rate.
- Remove sediment when surface ponding remains for more than 24 hours after the storm event in an area larger than 10 square feet.
- Restrain vehicles with muddy wheels from accessing pervious pavement areas.
- Limit salt use for deicing and do not use sand.
- Remove leaves and organic debris in the fall.
- Sweep, vacuum and/or pressure wash pavement twice annually at a minimum.