Bayside Anchor
81 East Oxford Street
Portland, Maine

Application For:

Preliminary Site Plan Review
Subdivision Review

Submitted By:
Carroll Associates
217 Commercial Street, Suite 200
Portland, Maine 04101

Kaplan Thompson Architects
254 Fore Street
Portland, Maine 04101

For:
Bayside Anchor Development Company, LLC
14 Baxter Boulevard
Portland, ME 04101

Portland Housing Development Corporation, LLC
14 Baxter Boulevard
Portland, ME 04101

Date:
May 12, 2014

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PORTLAND HOUSING AUTHORITY

Mark B. Adelson
Executive Director

14 Baxter Boulevard
Portland, Maine 04101
Office: 207-773-4753
Fax: 207-761-5886
www.porthouse.org

May 12, 2014

Ms. Barbara Barhydt
Planning Division
City of Portland Maine
Fourth Floor – City Hall
389 Congress Street
Portland, ME 04101

Dear Ms. Barhydt,

On behalf of Portland Housing Authority we are pleased to submit this Application for Level 3 Site and Subdivision Review associated with the proposed Bayside Anchor project in East Bayside. The project envisions new construction of 45 rental apartments and relocation of several existing accessory community facilities including Head Start, neighborhood policing, and PHA Administration offices to the new building. We believe this project will provide needed affordable housing in Portland and become a community hub for the East Bayside neighborhood.

The project also includes reestablishment of the street edge through building placement and reconstruction/ improvements to the Oxford and Boyd Street sidewalks which will provide an enhanced pedestrian experience, development of an outdoor terrace on the west side of the building for use by the tenants and neighbors as a community gathering space.

Off-street parking is proposed to be provided through use of underutilized parking within PHA's existing neighborhood developments of Kennedy Park, Bayside Terrace and Bayside East. These neighborhoods are currently being managed as a campus by PHA, and studies indicate a low utilization rate of parking by residents consistent with other affordable projects in Portland. In an effort to minimize impervious coverage and reduce development costs, we have been looking into development of a Parking Management Plan for the entire campus that will allow the needs of all residents to be met without construction of new parking on the site. A preliminary parking study is attached to this application.

The project is being funded through the Maine Housing's Low-Income Housing Tax Credit (LIHTC) program, which competitively awards federal tax credits that are used to fund affordable housing in the State of Maine. The application for the 2014 round of tax credits is due in September, and securing local permitting approval is a key component necessary to being awarded funding through this program.

Attached and made part of this Application are the signed Application Form, Application Fee, and supporting documents and exhibits. We welcome the opportunity to begin the discussion with the Planning Staff and Planning Board on this project and look forward to working closely with you as this proposal moves forward. Please contact myself or Patrick Carroll if you have any questions or need additional information.

With Regards,

Enc.

CC: Seth Parker, Avesta Housing
Brooks More, Avesta Housing
Jesse Thompson, Kaplan Thompson Architects
Patrick Carroll, Carroll Associates

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 II: 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).

The Land Use Code (including Article V), the Technical Manual, and the Design Manual are available on the City's web site at http://www.portlandmaine.gov/planning/default.asp

Planning Division
Fourth Floor, City Hall
389 Congress Street
(207) 874-8721 or 874-8719

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

Updated: August 15, 2013

PROJECT NAME: BAYSIDE ANCHOR

PROPOSED DEVELOPMENT ADDRESS:

73 Oxford Street (verify with City)

PROJECT DESCRIPTION:

New construction of 45 rental apartments and community support spaces including relocation of the existing ~~Head Start program, PHA Administrative offices, and Neighborhood Policing Station in a new four s~~tory building located at the corner of Oxford and Boyd Streets in East Bayside, along with associated site development.

CHART/BLOCK/LOT: Map 22, Block 1, Lot 4 and 1

PRELIMINARY PLAN 05/12/2014 (date)
FINAL PLAN _____ (date)

CONTACT INFORMATION:

Applicant – must be owner, Lessee or Buyer Name: Mark Adelson Business Name, if applicable: Portland Housing Development Corporation Address: Bayside Anchor Development Company, LLC 14 Baxter Boulevard City/State : Portland, ME Zip Code: 04101	**Applicant Contact Information** Work # 207-773-4753 Home# Cell # Fax# 207-774-6471 e-mail: madelson@porthouse.org
Owner – (if different from Applicant) Name: Portland Housing Authority Address: same as applicant City/State : Zip Code:	**Owner Contact Information** Work # Home# Cell # Fax# e-mail:
Agent/ Representative Name: Patrick Carroll Carroll Associates Address: 217 Commercial Street City/State : Portland, ME 04101 Zip Code:	**Agent/Representative Contact information** Work # 207-772-1552 Cell # 207-329-8976 e-mail: pcarroll@carroll-assoc.com
Billing Information Name: Mark Adelson Portland Housing Authority Address: 14 Baxter Boulevard City/State : Portland, ME 04101 Zip Code:	**Billing Information** Work # 207-773-4753 Cell # Fax# 207-774-6471 e-mail: madelson@porthouse.org

Engineer Name: John Mahoney Ransom Consulting, Inc. Address: 400 Commercial Street, Suite 404 Portland, ME 04101 City/State : Zip Code:	**Engineer Contact Information** Work # 207-772-2891 Cell # 207-831-6165 Fax# 207-772-3248 e-mail: john.mahoney@ransomenv.com
Surveyor Name: Owen Haskell, Inc. Address: 390 US Route One Falmouth, ME 04105 City/State : Zip Code:	**Surveyor Contact Information** Work # 207-774-0424 Cell # Fax# e-mail: jswan@owenhaskell.com
Architect Name: Jesse Thompson Kaplan Thompson Architects Address: 424 Fore Street Portland, ME 04101 City/State : Zip Code:	**Architect Contact Information** Work # 207-842-2888 Cell # Fax# e-mail: jesse@kaplanthompson.com
Attorney Name: Address: City/State : Zip Code:	**Attorney Contact Information** Work # Cell # Fax# e-mail:

APPLICATION FEES:

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

Level III Development (check applicable reviews) _X_ Less than 50,000 sq. ft. ($500.00) ___ 50,000 - 100,000 sq. ft. ($1,000) ___ 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) ___ Stormwater Quality ($250) _X_ Subdivisions ($500 + $25/lot) # of Lots 45 x $25/lot = $ 1,125 ___ Site Location ($3,000, except for residential projects which shall be $200/lot) # of Lots ___ x $200/lot = _____ _X_ Other Reduction for Affordable Housing (-$ _____) ___ Change of Use ___ Flood Plain ___ Shoreland ___ Design Review ___ Housing Replacement ___ Historic Preservation Total Application Fee Due = $ _____

APPLICATION SUBMISSION:

1. **All site plans and written application materials must be submitted electronically on a CD or DVD with each plan submitted as separate files, with individual file names (see submittal requirements document attached).**
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 Planning Division 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.

Refer to the application checklist for a detailed list of submission requirements.
Portland's development review process and requirements are outlined in the Land Use Code (Chapter 14), which includes the Subdivision Ordinance (Section 14-491) and the Site Plan Ordinance (Section 14-521). Portland's Land Use Code is on the City's web site http://www.portlandmaine.gov/citycode/chapter014.pdf

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 II 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:
	05/12/2014

PROJECT DATA

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

Total Area of Site	20,147	sq. ft.
Proposed Total Disturbed Area of the Site	20,147	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)	7,532	sq. ft.
Impervious Area (Total Proposed)	13,767	sq. ft.
Building Ground Floor Area and Total Floor Area		
Building Footprint (Total Existing)	0.00	sq. ft.
Building Footprint (Total Proposed)	9,610	sq. ft.
Building Floor Area (Total Existing)	0.00	sq. ft.
Building Floor Area (Total Proposed)	38,770	sq. ft.
Zoning		
Existing	R6	
Proposed, if applicable	R7	
Land Use		
Existing	VACANT (PARKING LOT)	
Proposed	RESIDENTIAL/ ACCESSORY USES	
Residential, If applicable		
# of Residential Units (Total Existing)	0	
# of Residential Units (Total Proposed)	45	
# of Lots (Total Proposed)	1	
# of Affordable Housing Units (Total Proposed)	36	
Proposed Bedroom Mix		
# of Efficiency Units (Total Proposed)	5	
# of One-Bedroom Units (Total Proposed)	34	
# of Two-Bedroom Units (Total Proposed)	6	
# of Three-Bedroom Units (Total Proposed)	0	
Parking Spaces		
# of Parking Spaces (Total Existing)	26	
# of Parking Spaces (Total Proposed)	34- SEE CAMPUS PARKING PLAN	
# of Handicapped Spaces (Total Proposed)	2	
Bicycle Parking Spaces		
# of Bicycle Spaces (Total Existing)	0	
# of Bicycle Spaces (Total Proposed)	38 TOTAL, 30 INSIDE, 8 OUTSIDE	
Estimated Cost of Project	$ 5,293,654.00	

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
N/A		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;	
N/A		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);	
N/A		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.	

PROJECT DESCRIPTION

BAYSIDE ANCHOR
PROJECT DESCRIPTION

The Portland Housing Authority (PHA) has owned and managed affordable housing in the East Bayside neighborhood for over 40 years, and currently manages approximately 155 apartments, comprising the Kennedy Park, Bayside Terrace and Bayside East neighborhoods. In 2012 the PHA identified and designated .46 acre parcel of excess land within its East Bayside developments at the corner of Oxford and Boyd Streets as a prime redevelopment site. This property currently contains an overflow parking lot for the PHA properties and is the site for the proposed Bayside Anchor Project.

The Bayside Anchor program and design was developed in response to the national Lowering The Cost Competition (www.loweringcost.com). This competition has been organized and sponsored by the Enterprise Foundation and Deutche Bank to explore strategies to lower the cost of affordable housing. In July 2013, it was announced that Bayside Anchor was the first prize winner.

The development program for Bayside Anchor includes construction of 45 new rental apartments and relocation of additional accessory uses which are currently located in adjacent buildings to this site. The building will contain approximately 35,870 sf of residential space and 2,900 sf of non-residential space in a four story building that has a strong street frontage on Oxford and Boyd Streets. The building will occupy approximately 9,610 sf of footprint and will not exceed 45 feet in elevation. The following describes the development program in greater detail:

- **Apartments and mixed incomes:** Bayside Anchor features 45 new apartments, with mixed incomes and unit types ranging from studios serving residents with incomes at or below 40% of area median income (AMI) to two-bedroom units at market rents. Of the 45 apartments, 9 are envisioned to be market rate units. The unit and mixed income breakdown includes;

    - 5 studios: 3 at 50% AMI, 1 at 40% AMI, 1 MR
    - 34 one-BRs: 8 at 60% AMI, 13 at 50% AMI, 6 at 40% AMI, 7 MR
    - 6 two-BR's: 2 at 60% AMI, 2 at 50% AMI, 1 at 40% AMI, 1 MR

- **Mixed uses:** Bayside Anchor devotes a significant portion of the building's ground floor to community service facilities including Head Start and community policing, as well as a management and resource hub for residents in the building and the surrounding public housing neighborhoods. These services are currently provided on PHA property in the surrounding neighborhood. Bayside Anchor allows the consolidation of these services in a new building creating a community focal point for the neighborhood residents.

- Innovative **sustainable design** practices including incorporation of *Passivhaus* ultra-low-energy design principles, including plentiful fresh air, passive and active solar design, superinsulation and airtightness, used in conjunction with highly efficient energy recovery ventilation, to dramatically reduce energy demand and cost of expensive multifamily mechanical systems. In addition, treatment of all storm water will be on site without use of subsurface storm water management systems.

Site development for Bayside Anchor includes reconstruction of sidewalks along Oxford and Boyd Streets, providing such amenities as benches and bicycle racks, lighting, and enhanced crosswalks on the corner of Oxford and Boyd Streets by providing curb bump-outs, ramps and striping. We also propose development of an outdoor terrace on the west side of the building which is envisioned to provide outdoor community gathering space for residents and neighbors.

The property is served by public utilities including Portland Water Company, Central Maine Power, Unitil, and the City of Portland. An existing combined storm drain collecting runoff from the existing parking lot will be removed from service and all stormwater is proposed to be collected and treated prior to discharge on the site. A preliminary stormwater management plan has been completed for the proposed project and is attached to this application.

Parking for the Bayside Anchor project is proposed to be handled through development of a Parking Management Plan for Bayside Anchor and all of the adjacent PHA properties. Several parking counts and studies have indicated that there is a significant amount of underutilized off-street parking that exists within the existing Kennedy Park, Bayside Terrace, and Bayside East neighborhoods. All off-street parking is currently managed by PHA as a campus and we believe through continued management and implementation of the parking Management Plan the needs of the Bayside Anchor project can be easily met with the existing parking inventory. As such, we have developed a Parking Management Plan that identifies inventory, demand, and strategies for managing the current and future parking needs of the PHA campus. This study is attached to the application for City review.

The property is currently located in the R6 Residential Zone and is currently undergoing a map rezone to R7. The proposal was reviewed by the Planning Board in April and is scheduled for a second reading with the City Council on May 19. The project meets all requirements of the R7 Residential Overlay Zone District.

OPTION TO PURCHASE AGREEMENT

THIS OPTION TO PURCHASE AGREEMENT dated this 16th day of July, 2013, is by and among PORTLAND HOUSING AUTHORITY, a Maine nonprofit corporation having a mailing address of 14 Baxter Boulevard, Portland, ME 04101 (the "Seller"), and PORTLAND HOUSING DEVELOPMENT CORPORATION, a Maine nonprofit corporation having a mailing address of 14 Baxter Boulevard, Portland, ME 04101 or its assigns ("Buyer").

RECITALS

WHEREAS, Seller is the owner of a certain parcel of land, and all improvements, buildings and fixtures presently on the real estate, at the corner of Boyd and Oxford Streets in the City of Portland, Maine and being a portion of its Bayside East Public Housing Project ME 003005, shown as the cross hatched parcel on the Boundary Survey and Lot Division attached hereto as Exhibit A (the "Premises"); and

WHEREAS, Seller wishes to grant to Buyer, and Buyer wishes to accept, an option to purchase (the "Option") with respect to the Premises upon the terms and conditions as set forth herein.

NOW, THEREFORE, in consideration of one dollar ($1.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1. Option Period; Extension; Exercise of Option. Seller hereby grants Buyer the option to purchase the Premises for a period extending through July 31, 2015 (the "Option Period").

   a. The Option and the obligation of each of the Seller and Buyer shall be conditional upon (i) approval by the United States Department of Housing and Urban Development ("HUD") of a demolition disposition by Portland Housing Authority in order to remove the Premises from the Declaration of Trust currently encumbering the real estate and authority to transfer the Premises to Buyer or its assigns, for the development of multi-family housing thereon; (ii) receipt of all required municipal and state approvals for the development of a mixed-income family housing project of approximately 42 units to be located on the Premises; and (iii) and an award of Low Income Housing Tax Credits for such development.

   b. Buyer may exercise the Option at any time during the Option Period by giving written notice to Seller of its intent to exercise the Option (the "Purchase Notice"). Notice delivered to Seller or sent to Seller by certified mail, return receipt requested, at the above address shall be sufficient.

2. Purchase Price. Subject to adjustment as set forth below, Buyer shall pay Seller a purchase price of Two Hundred Ninety Three Thousand Nine Hundred Fifty Dollars ($293,950.00) (the "Purchase Price").

3. Closing. If Buyer exercises the Option, closing shall take place at a date and time and at a location agreed upon by the Buyer and the Seller, within ninety (90) days after the date of the Purchase Notice.

4. Conditions to Sale. If Buyer exercises the Option, the following terms and provisions shall apply:

a. Title to the Premises shall be conveyed to Buyer by good and sufficient Warranty Deed, which deed shall convey good and clear record and marketable title to the Premises, free from encumbrances except provisions of existing building and zoning laws and any covenants and/or easements of record provided same do not interfere with Buyer's intended use of the Premises; such real estate taxes for the then current tax period which are not due and payable on the date of delivery of such deed; utility and access easements in common with Seller's adjoining developments, and any matters of record which in Buyer's opinion do not interfere with Buyer's plans to develop the property. Buyer shall notify Seller of any defects in title that would make Seller unable to give title to the Premises as herein stipulated. Seller shall be obligated to proceed in good faith to cure any such title defect(s). If required, the closing shall be extended to allow Seller time to cure any such title defects, but in no event shall the closing be extended more than thirty (30) days for such purposes. If a title defect exists, Buyer may elect, by written notice to Seller, either (i) to accept title to the Premises subject to any uncured defects in title or (ii) to terminate the Option, whereupon any extension fee(s) paid by Buyer to Seller shall be immediately refunded to Buyer, the obligations of all parties hereunder shall cease, and neither party shall have any claim against the other by reason of this Agreement.

b. Each party shall pay one-half of the Maine state transfer tax.

5. Representations. Seller represents, covenants and warrants to and agrees with Buyer as follows:

a. Seller is the current owner of the Premises, and; subject to approval by HUD, has the legal right, power and authority to enter into this Agreement and to perform all of its obligations hereunder, and the execution and delivery of this Agreement and the performance by Seller of the obligations hereunder will not conflict with, or result in breach of any regulation, order, judgment, injunction or decree of any court or governmental authority or any agreement or instrument to which Seller is a party or by which Seller is bound.

b. There are no agreements or contracts affecting the Premises or any use of the Premises that would not be terminable at will by Buyer without penalty from and after the Closing, other than those for which Seller will be seeking

approval from HUD in connection with its demolition disposition application.

Buyer represents, covenants and warrants to Seller that Buyer has the legal right, power and authority to enter into this Agreement and to perform all of its obligations hereunder, and the execution and delivery of this Agreement and the performance by Buyer of its obligations hereunder: (i) have been duly authorized by all requisite action; and (ii) will not conflict with, or result in a breach of, any of the terms, covenants and provisions of the by-laws or articles of organization of Buyer or any law or any regulation, order, judgment, writ, injunction or decree of any court or governmental authority, or any agreement or instrument to which Buyer is a party or by which it is bound.

6. Notice. Whenever notice is given or required to be given by either of the parties hereto to the other, it shall be deemed to have been given if in writing and mailed by certified or registered mail, return receipt requested, postage prepaid, or hand delivered, addressed to the parties at the address set forth in the first paragraph above or to such other address(es) as either party shall have last designated by like notice in writing. All notices shall be effective upon hand delivery or mailing, whichever first occurs.

7. Further Assurances. The parties agree that up to and after the date of closing, they shall do such things and execute, acknowledge and deliver any and all additional instruments, documents and materials as either party may reasonably request to fully effectuate the purposes of this Agreement.

8. Buyer's Access. Buyer and others whom Buyer may designate shall have the right, at all reasonable times, at Buyer's sole cost and expense, risk and hazard, to enter upon the Premises to examine and/or show the same and make, or cause to be made, engineering studies with respect thereto, including, without limitation, surveying, conducting test borings in order to determine sub-soil conditions, and in general conducting all other tests, analysis and studies of the Premises which Buyer deems prudent in connection with Buyer's intended development or use of the Premises. Buyer shall restore the Premises following any testing as reasonably as possible to its pre-existing condition, unless otherwise agreed by Seller.

9. Construction of Agreement. This instrument, executed in duplicate, is to be construed as a Maine contract, is to take effect as a sealed instrument, sets forth the entire contract between the parties, is binding upon and inures to the benefit of the parties hereto and their respective heirs, devisees, executors, administrators, successors and assigns, and may be canceled, modified or amended only by a written instrument executed by both the Seller and Buyer. The captions are used only as a matter of convenience and are not to be considered a part of this Agreement or to be used in determining the intent of the parties to it. Time is of the essence with respect to all dates set forth in this Agreement.

10. Risk of Loss. The risk of loss shall remain on Seller at all times until closing.

11. Assignment. Buyer may assign this Agreement to any party affiliated with Buyer on in which Buyer or an affiliate of Buyer has an interest.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

SELLER: PORTLAND HOUSING AUTHORITY

By: _____
Mark Adelson
Its Executive Director

BUYER: PORTLAND HOUSING DEVELOPMENT CORPORATION

By: _____
Its President

STATE OF MAINE
COUNTY OF CUMBERLAND, SS. July 16, 2013

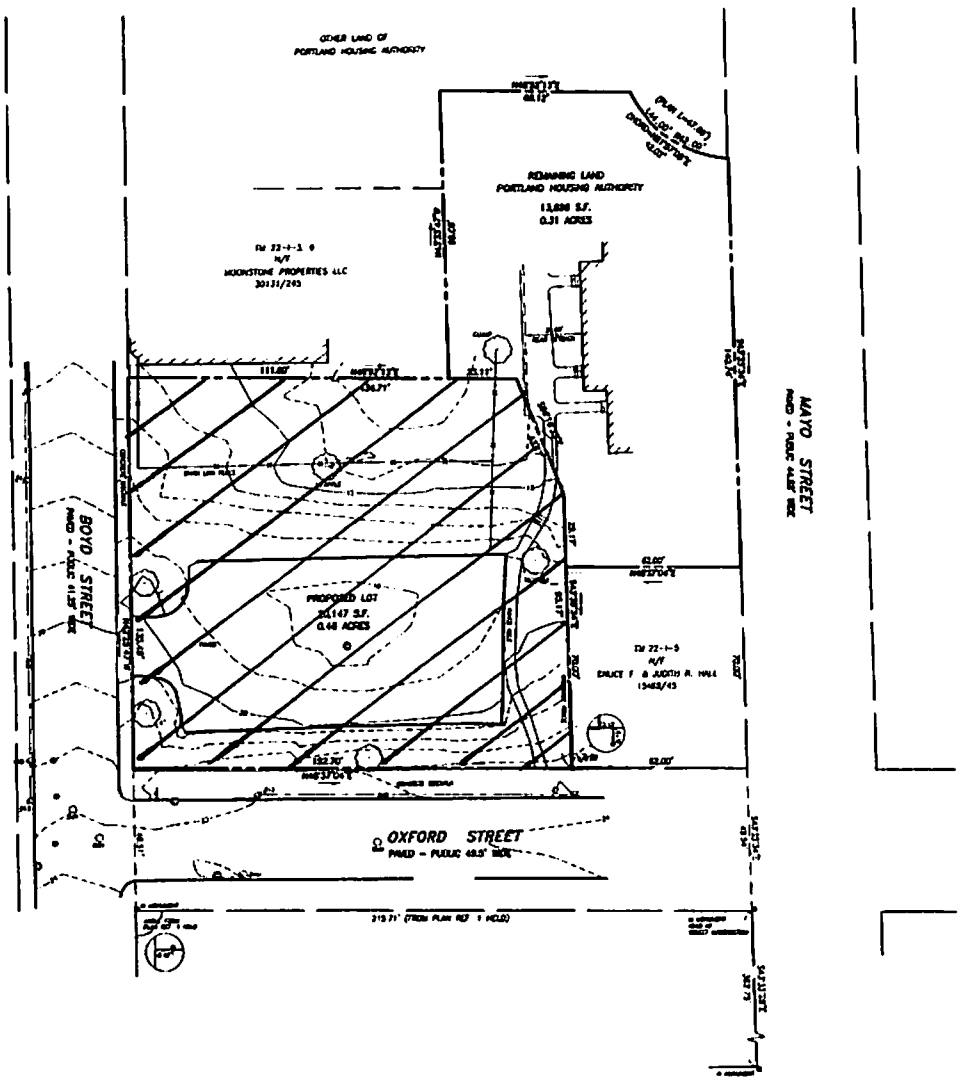
Personally appeared the above-named, Mark Adelson, Executive Director of Portland Housing Authority and acknowledged the foregoing instrument to be his free act and deed and the free act and deed of said Portland Housing Authority.

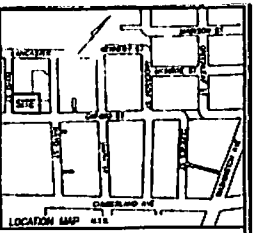
Before me,

_____
Notary Public/Attorney at Law

SHARON E.B. BUFFINTON
NOTARY PUBLIC OF MAINE
My Commission Expires February 28, 2019

_____
Printed Name





LEGEND

IRON PIPE OR ROD FOUND
MONUMENT FOUND
DRILL HOLE SET
HYDRANT
UTILITY POLE
MANHOLE
MANHOLE
SIGN
DECIDUOUS TREE
FENCE
CURB
OVERHEAD WIRES

PLAN REFERENCES

1. "PLAN OF PROPERTY, TOPOGRAPHIC & UTILITIES PORTLAND HOUSING AUTHORITY, PORTLAND, CUMBERLAND COUNTY, MAINE W.O. # E.C. JORDAN - SURVEYORS JULY 1988"

2. "STANDARD BOUNDARY SURVEY FOR PARCELS FOR INSURANCE OF GREATER PORTLAND IN PORTLAND, MAINE APRIL 10, 1992 OWEN HASKELL, INC. JOB NO. 9200.29"

NOTES

1. OWNER OF RECORD: PORTLAND HOUSING AUTHORITY, 14 BAXTER BOULEVARD, PORTLAND, MAINE BOOK 3128/344, 3137/302, 3111/222, 3111/223, AND 13128/152.

2. LOCUS IS SHOWN AS PORTLAND PROPERTY MAP 22 BLOCK 1 LOT 6 AND A PORTION OF LOT 1.

3. BEARINGS ARE BASED ON MAINE STATE PLANE WEST NAD 83.

4. BENCH MARK: MONUMENT TAGS 22-1 AT NORTHWEST CORNER OF MADISON STREET AND EAST LANCASTER STREET, ELEVATION 19.57 CITY DATUM.

5. STREET LINES ARE BASED ON MONUMENTS FOUND ON OXFORD STREET AND HELD AS SHOWN AND PLAN REFERENCE 1.

6. SURVEY WAS PERFORMED UNDER WINTER CONDITIONS.

CERTIFICATE

OWEN HASKELL, INC. HEREBY CERTIFIES THAT THIS PLAN IS BASED ON, AND THE RESULTS OF, AN ON THE GROUND FIELD SURVEY AND THAT TO THE BEST OF OUR KNOWLEDGE, INFORMATION AND BELIEF IT CONFORMS TO THE BOARD OF LICENSURE FOR PROFESSIONAL LAND SURVEYORS CURRENT STANDARDS OF PRACTICE.

DATE

JOHN C. BOHANDA, PLS 1252

GRAPHIC SCALE
0 15' 30' 45' 60'

BOUNDARY SURVEY AND LOT DIVISION

OXFORD STREET & BOYD STREET, PORTLAND, MAINE
MADE FOR
PORTLAND HOUSING AUTHORITY

OWEN HASKELL, INC.
390 U.S. Route One, Freeport, ME 04032 (207) 774-0424
Professional Land Surveyors

	Date	Job No.
Drwn By: JCB	MAY 7, 2013	2012 102P
Drawn By: AH	Scale	Dwg. No.
Check By: JCB	1" = 30'	1
Book No. 1115,1116		

Feb 17 A

BAYSIDE ANCHOR
RESPONSE TO ZONING REQUIREMENTS

The Bayside Anchor Project cannot meet the current R6 zoning for the project and has proposed a map change to the Zoning Map to change the existing R6 Zone to R7. This process has begun and the rezoning is currently before the City Council. We understand that the final approval of the project cannot undertaken until the rezone is approved, but request that technical review of the project begin anticipating this map change.

The following is a response to a review of the current zoning requirements for R7:

Consistency with Comprehensive Plan:

Bayside Anchor is consistent with the City's Comprehensive Plan. Portland continues to struggle with an inadequate supply of apartments serving all incomes. Bayside Anchor will increase the supply of rental housing at rents serving a wide range of residents.

Consistency with Purpose of the R-7 Zone:

Bayside Anchor development will be located at the corner of Boyd and Oxford Streets in Portland's East Bayside neighborhood. The development will be adjacent to Portland Housing Authority's Bayside East, Bayside Terrace, and Kennedy Park developments.

East Bayside's boundaries are roughly those of Census Tract 5 with the exception of the India Street neighborhood and that Congress Street acts as the neighborhood's southern boundary. East Bayside is predominantly low income. The 2010 census indicates that census tract 5 has a poverty rate of 54.1%. In 2012, the 178 families living in public housing in the East Bayside neighborhood had an average annual household income under $20,000.

The Bayside Anchor site is within walking distance of downtown and all its amenities. Additionally, it is a short walk away from the #1, #6, #7 and #8 Metro bus lines.

Meeting the Requirements of the R-7 Zone:

- The proposed Bayside Anchor building conforms to the dimensional and height requirements of the R-7 zone.
- The 45 units proposed fall within the maximum of 46 units permitted under the R-7 density restriction of 435 square feet of land area per unit.
- All of the units exceed the 400 square feet per unit floor area requirement of the R-7.
- Required off-street automobile parking will be delivered as part of an overall PHA Campus Transportation Demand Management plan. Our TDM plan outlines how automobile parking, bicycle parking and Public Transportation will be accommodated. The development team believes that the Bayside Anchor proposal presents an excellent opportunity to pursue progressive alternatives to off-street automobile parking using proven and documented demand reduction strategies.

SUMMARY OF EASEMENTS

BAYSIDE ANCHOR
SUMMARY OF EXISTING AND/OR PROPOSED EASEMENTS, COVENANTS, RIGHTS-OF-WAY OR OTHER BURDENS ON THE SITE

Existing:

The proposed .46 acre Bayside Anchor site is currently part of the larger Bayside East Public Housing development owned and managed by the Portland Housing Authority (PHA). Although owned by PHA, the U.S. Department of Housing and Urban Development (HUD) holds a Declaration of Trust on all public housing properties. At time the property is conveyed from PHA to PHDC/Bayside Anchor Development Company LLC, HUD's Declaration of Trust will be removed from this portion of the property.

There are no other existing easements, covenants, rights-of-way or other burdens on the property.

Proposed:

There are no proposed easements, covenants, rights-of-way or other burdens planned for the proposed Bayside Anchor site.

The site plan contemplates using existing excess off-street parking spaces in the neighborhood currently owned by PHA. Upon approval and according to the proposed Parking Management Plan, the PHDC/Bayside Anchor Development Company LLC will enter into a formal agreement with PHA for the long term use of these spaces.

7
REQUESTS FOR WAIVERS

BAYSIDE ANCHOR
REQUEST FOR WAIVERS

The Applicant is requesting the following Waivers from the Site Plan and Technical Standards:

1. a waiver from the Off Street Parking Standards to allow required off-street parking demands to be met by development of a Parking Management Plan and utilization of existing parking within the Portland Housing Authority controlled neighborhoods. We believe approaching the PHA controlled properties as a campus and developing an overall management plan for all properties will allow the project to utilize existing parking that is not being currently used, reducing pavement, allowing more green space, and controlling construction costs. A Parking Management Plan is attached to this application for City review.

BAYSIDE ANCHOR
FINANCIAL CAPACITY

Financial Capacity

The General Partner for the proposed Bayside Anchor Project is Bayside Anchor Development Company, LLC, a special purpose limited partnership created to take advantage of the Low-Income Housing Tax Credit (LIHTC) Program. The Developer and Guarantor of the project is the Portland Housing Development Corporation (PHDC), a Maine non-profit corporation controlled by the Portland Housing Authority (PHA). PHDC will act as developer of the project. In its role as developer, PHDC will be responsible for the successful completion of the project and will provide financial guarantees to both the construction lender and the investor limited partner. PHA is a financially sound non-profit corporation with a positive net worth and ample cash reserves to assure the successful completion of the project in the event of any difficulties during construction.

The total estimated development cost of the Bayside Anchor Project development is approximately $ 5,300,000. The property will be sole to the PHDC by its current owner, Portland Housing Authority. The primary source of capital for the project will come from equity raised by selling tax credits. The remaining funds will come from a combination of subsidy sources including the Northern New England Housing Investment Fund and other financial investors. Application to MSHA for tax credits and subsidy financing is due in October, 2014 with results expected before yearend.

Letters of Interest from NNEHI and Bangor Savings have been requested and will be submitted to the City as part of this application when received.

TERM SHEET
THIS IS NOT A COMMITMENT TO LEND
May 12, 2014
(Effective through September 12, 2014)

Mark B. Adelson
Executive Director
Portland Housing Authority
14 Baxter Blvd.
Portland, ME 04101

Re: Bayside Anchor Apartments Low Income Housing Tax Credit project

Dear Mark,

We are pleased at the prospect of presenting this proposal for financing for the proposed Bayside Anchor Apartments ("Project"), a low income housing tax credit family housing project that Bayside Anchor Apartments, LP ("Borrower") and Portland Housing Development Corporation ("Developer") wish to develop in Portland, Maine. The proposed terms and conditions are provided for discussion purposes only and do not constitute an offer, agreement, or commitment to lend. The actual terms and conditions upon which the Bank may extend credit to the borrower are subject to the satisfactory completion of due diligence, formal credit approval, satisfactory review of loan documentation, and such other terms and conditions as determined by the Bank.

This term sheet is issued to accompany the Borrower's application for MaineHousing subsidy and low income housing tax credit allocation and the Sponsors application to the Federal Home Loan Bank of Boston's Affordable Housing Program (AHP) for the Project described below and will give a general idea of the terms upon which Bangor Savings Bank ("Bank") would extend this loan, with the understanding that this letter does not constitute a commitment to extend financing.

Borrower: Bayside Anchor Apartments, LP

General Partner: Bayside Anchor Development Company, LLC

Project Developer: Portland Housing Development Corporation

Project Sponsors: Portland Housing Development Corporation
Portland Housing Authority

Project: Bayside Anchor Apartments, a 45 unit multi-family rental housing project to be constructed under the Low Income Housing Tax Credit program and other sources including MaineHousing subsidy to be located at Boyd & Oxford streets, Portland, Maine

Loan Amount: Up to $3,399,280

Type: Construction Line of Credit

Purpose: To provide construction financing for improvements to a 45 unit family LIHTC subsidized affordable housing project to be located in Portland, Maine.

Maturity: Twelve (12) months

Repayment: Monthly payments of interest with principal due upon construction completion of project.

Rate: A variable rate at 1-Month LIBOR plus 2.75%.

Loan Fee: $10,000 payable at construction loan closing

Inspection Fees: $600.00 per month while construction is in process. This is based on one funding remittance per month

Collateral: 1. First mortgage on real estate and improvements at Boyd & Oxford Streets, Portland, Maine.

2. First security interest and collateral assignment and pledge of all contracts, plans, permits, leases, rents, business assets and accounts related to the project and rights related thereto.

3. Collateral assignment and pledge of permanent sources of funding and equity contributions sufficient to fully fund completion of the project and pay Bank construction loan in full.

Guarantees: Unlimited corporate guarantee for completion and repayment by:

- General Partner, Bayside Anchor Development Company
- Project Developer, Portland Housing Development Corporation

Guarantee: Limited non-recourse guarantee for completion and repayment by Project Sponsor, Portland Housing Authority, with recourse limited to certain unrestricted non-federal funds of Portland Housing Authority.

Conditions:

1. Subject to approval and confirmation acceptable to the Bank of the proposed equity sources, grants, MaineHousing subsidy awards, or other equivalent funding sources sufficient for 100% completion of the project and repayment in full of the Bank's construction loan at construction completion.

2. Subject to an award and allocation of Low Income Housing Tax Credits by the Maine State Housing Authority and such other subsidy or MaineHousing loan program awards sufficient to provide 100% of the permanent funding for the project.

3. Subject to an "As Is", "Investment Value", "Upon Completion-Subsidized", and "Upon Completion Stabilized" Fair Market Value appraisal of the proposed affordable housing LIHTC Project in Portland, Maine indicating a maximum LTV of 85%.

4. Subject to Bank receipt and satisfactory review of a Phase I Environmental Risk Assessment and such other follow-up analysis that may be determined to be necessary by the Bank in its sole discretion.

5. Subject to Bank receipt and satisfactory review of the Market Feasibility Study, final development and construction budget, project pro-forma financial statements, project plans, drawings, and specifications, and a fixed price or guaranteed maximum price construction contract from a bonded general contractor.

6. Subject to satisfactory review of project plans, specifications, and construction contract by a construction engineer acceptable to the Bank.

7. Subject to conformity with any construction procedures, requirements, and inspections required under agreements with governmental authorities, the Maine State Housing Authority, the LIHTC equity investors , City of Portland, and all permanent funding providers.

8. Subject to terms and conditions of a construction loan agreement including establishment and maintenance of borrower's construction deposit, construction escrow, and reserve deposit accounts with the Bank, control and disbursement of all funds necessary for construction completion according to standard Bank policy and procedures, and inspection by a construction engineer selected by the Bank.

Other General Conditions:

a. Subject to receipt and review of the Borrower's and Guarantors financial statements and all other information required by the Bank for underwriting and credit review. The Bank will thereafter require annual financial statements of the Borrower and Guarantor within 120 days of fiscal year end with copies of audited statements by the date required by HUD & MSHA.

Any commitment that Bangor Savings Bank issues, will be subject to the terms of its usual loan documentation, as approved by counsel for the Bank in connection with this particular transaction, and may include terms and conditions that are different from, or that are in addition to, the terms and conditions stated in this letter. The Borrower is responsible for all out-of-pocket costs and expenses incurred by the Bank in connection with the proposed loan including appraisal, legal fees, filing fees, environmental due diligence as required, etc. As mentioned above, this letter is intended only to give you a general idea of the Bank's current thinking regarding a structure for this transaction that may be appropriate.

We look forward to hearing from you, and appreciate the opportunity to present this term sheet to you. We appreciate the important commitment to affordable housing and the community development effort involved in this project and we hope to proceed further with our discussions and the underwriting process.

Sincerely,

Laura Huddy
Vice President
Commercial Lending Group

BAYSIDE ANCHOR
TECHNICAL CAPACITY

Technical Capacity

The Portland Housing Development Corporation (PHDC) is the non-profit development arm and component corporation of the Portland Housing Authority (PHA). It was created in 1983 to develop and finance affordable housing in Portland, and assist in implementing PHA's strategic goals in this area, which include; expand the inventory of affordable housing, modernize and redevelop PHA existing housing stock, and utilize excess PHA property to accomplish this.

PHA has granted PHDC an option to purchase the land for this purpose. PHDC has convened some of Maine's most forward-thinking development, construction and design firms to create a proposal that provides the neighborhood with much-needed services and affordable apartments.

Development Team:

- **Owner/Developer: Bayside Anchor Development Company LLC** is a subsidiary of PHDC created specifically for the development and ownership of Bayside Anchor.
- **Development Partner and Consultant: Avesta Housing** has developed over 2,000 units in Maine over the last 40 years including several hundred in Portland. Avesta brings its extensive experience as a consultant, development partner and property manager to Bayside Anchor. For this project Avesta Housing Development Corporation will provide consulting services relating to design, permitting, construction and management of the project for a defined period of time upon occupancy.
- **Architect: Kaplan Thompson** Architects is a leader in Maine and the nation in building super-efficient residences at attainable costs. Kaplan Thompson is the lead designer on the project.
- **Landscape Architect: Carroll Associates;** Patrick Carroll brings his extensive urban design and planning experience to the project.
- **Construction Manager: Wright Ryan** is the leading builder of affordable apartments in Maine. They completed the initial estimates which include the innovative cost saving and construction techniques that make the project unique.

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STORMWATER MANAGEMENT

BAYSIDE ANCHOR
STORMWATER MANAGEMENT

Submitted by Ransom Consulting, Inc.

Existing Conditions:
The site is a 20,147 SF (.46 acres) acre parcel on the northern corner of Boyd and Oxford Streets that is sloped moderately to the northwest from elevation 24 at Oxford Street to elevation 13 in the northern corner. The property contains a 7,000 square foot paved parking lot and a paved path, while the remaining land cover is grass.

Stormwater runoff from the parking lot and the upland grass strip drains to a catch basin in the parking lot, which drains to a separated stormdrain system in Boyd Street. As can be seen in the attached drainage plan (developed from the City's GIS data) this stormdrain discharges to the City's combined sewer system at the bottom of Boyd Street. As such, discharge from this portion of the site is essentially into the combined sewer.

Stormwater runoff from the grass area on the lowland portion of the site discharges on the surface leaving the site to the northwest and flowing to a low area in the backyards of multiple buildings. This low area is shown as an enclosed 12' contour on the attached drainage plan. It is our understanding that stormwater from the subject property (as well as other adjacent properties) drains to this low area and infiltrates.

This low area has been observed during heavy rainfall and no ponding has been noted. Residents in adjacent apartments have indicated that they have never seen the area flood. The USDA medium intensity soil survey classifies this area as moderately well drained (Hydrological Group B). Also, soil borings on the subject property identified a sand layer of variable thickness (0 to 5') beginning at the ground surface.

It should be noted that that this low area and the surrounding residences as well as the subject properties are all under control, management and/or ownership of Portland Housing Authority.

Proposed Development:
The owner proposes to construct a 4 story apartment apartment building on a 10,000 SF footprint with a patio, pathway and other hardscape areas; while the northwestern lowland portion of the site will remain lawn. The proposed development will increase the site's impervious area by approximately 7,000 square feet.

Stormwater Management - Quality:
At a minimum, 1" of rainfall from the site's new impervious area will be treated. We propose to use the FocalPoint biofiltration system for stormwater treatment. This system is similar in configuration to a standard rain garden system where stormwater runoff flows through a soil filter that removes pollutants and reduces temperature. Where standard rain gardens have permeability rates in the range of 2 – 3 inches per hour; the FocalPoint system's engineered soil filter media provides permeability rates in excess of 100 inches per hour. This permeability rate is guaranteed by the manufacturer and they provide testing at no additional cost. This high permeability facilitates treatment of relatively large impervious areas with small rain gardens making the FocalPoint system ideal for compact urban developments.

FocalPoint is approved by Maine DEP and will be sized and designed in accordance with Chapter 7.5 in Volume III of the Maine Stormwater Best Management Practices Manual.

Additionally, the City recently used the FocalPoint system on a sewer separation project in Victor Road area adjacent to Payson Park. It is our understanding that the system is working well and we would greatly appreciate any input from City staff on how the installation went. Are there things we should be considering to ensure a successful installation?

Stormwater Management - Quantity:

We propose to disconnect the existing stormdrain that discharges to the combined sewer and outlet stormwater runoff to the surface only. This outlet would be in the location of the existing surface discharge described above. Detention will be provided in order to temporarily store stormwater and release it slowly over time, thus keeping the post development discharge rates below the existing rates.

Storage will be provided with the R-Tank tank system. R-Tank is a modular box underdrain system with high void space (95%) that can be stacked like Lego's beneath the proposed patio to provide the required storage volume.

It should be noted that, although flow rates will be decreased, the volume of water discharged to the downstream basin area may increase. We will provide an opinion on this in the final site plan application.

Because the area we are draining to has been observed to infiltrate without ponding, it is our opinion that disconnecting the existing stormdrain is a "true" disconnection from the combined sewer and not a situation where stormwater will flow overland and enter the system downstream. We are requesting guidance on how our decision not to connect to the combined sewer would impact future stormwater utility fees. We realize the City is in the process of finalizing its stormwater utility fee structure and that providing a determination may prove challenging. That said, any guidance that staff can provide will help us to balance the projects upfront costs with long term costs.

Although we propose to disconnect the existing stormdrain, the applicant is requesting the ability to reconnect should unanticipated future conditions require the use of this drain. We realize that the ability to reconnect and/or reconnecting may have permitting implications.

10
TRAFFIC AND PARKING MANAGEMENT

Traffic Forecast, Parking Assessment and TDM Plan

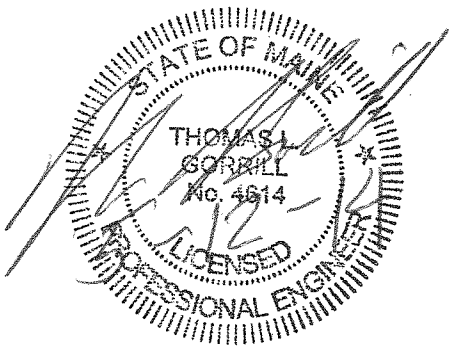
for

Bayside Anchor
Portland, Maine

Prepared for:

Portland Housing Corporation
14 Baxter Blvd
Portland, ME 04101

May 2014



Prepared by:

GP Gorrill-Palmer Consulting Engineers, Inc.

Engineering Excellence Since 1998

P.O. Box 1237
15 Shaker Road., Gray, ME 04039

(207) 657-6910
FAX (207) 657-6912
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Traffic Forecast, Parking Study and Transportation Demand Management Plan
Bayside Anchor
Portland, Maine

Index

Executive Summary

The following Executive Summary is prepared for the reader's convenience, but is not intended to be a substitute for reading the full report.

Gorrill-Palmer Consulting Engineers, Inc. was retained by Portland Housing Corporation (PHA) to prepare this traffic forecast, parking study and Transportation Demand Management Plan for their proposed Bayside Anchor project. The project consists of 45 residential units, including 36 affordable units, a relocated head start program, administration offices for Portland Housing and a neighborhood police office. The site is located in the northwest quadrant of the intersection of Oxford and Boyd Streets. The site currently consists of a 26 space paved parking lot. Based on this study, our office has determined the following:

1. The proposed development is forecast to generate 24 and 29 trip ends in the weekday AM and PM peak hours respectively. (Note: A trip end is either a trip in or out of the site. Thus a round trip would equal two trip ends). At this level of trip generation, this project does **not** require a Maine Department of Transportation (MaineDOT) Traffic Movement Permit.

2. Gorrill-Palmer Consulting Engineers, Inc. referenced the Maine DOT collision records to determine if there were any high crash locations in the project vicinity. No high crash locations were identified in the vicinity of the project site.

3. Gorrill-Palmer Consulting Engineers, Inc. completed a parking inventory of the East Bayside Portland Housing Authority Properties. Based on this study, we found that there is sufficient parking within this "campus" area to accommodate the additional uses proposed with this project.

4. PHA is proposing a Transportation Demand Management (TDM) Plan which will support the City's transportation and environmental sustainability goals by encouraging and promoting bicycling, walking, and use of transit.

Based on these findings, it is the opinion of Gorrill-Palmer Consulting Engineers, Inc. that the proposed project can be accommodated by the City's transportation system.

I. *Existing and Proposed Site*

The proposed site is located on the northwest quadrant of the intersection of Oxford Street and Boyd Street in Portland. The site currently consists of a paved 26 space parking lot.

Proposed for the site are 45 units of residential housing including 36 affordable units, a relocated head start program, administration offices for Portland Housing and a neighborhood police office. Parking for the project will be accommodated within the existing parking lots on the PHA properties and on street.

II. *Background Conditions*

Gorrill-Palmer Consulting Engineers, Inc. based the study on the following information:

- A site plan prepared by Carroll Associates.
- Crash data for 2010-2012 provided by the Maine Department of Transportation.
- Parking inventory performed at the existing East Bayside PHA properties, the adjacent streets, and at similar projects in Portland.

III. *Trip Generation*

Gorrill-Palmer Consulting Engineers, Inc. used the Institute of Transportation Engineers (ITE) publication *Trip Generation*, 9th Edition to estimate the potential trip generation for each land use component of the proposed building.

Apartments: The proposed project will have 45 units with 36 of those being affordable. The project includes 5 efficiency units, 34 one bedroom and 6 two bedroom units. Based on Land Use Code (LUC) 220, Apartment, with 45 units, the proposed housing is anticipated to generate the following trips (note- a trip end is a trip into or out of the site; thus a round trip is equal to two trip ends):

Weekday	396 trip ends
AM Peak Hour	26 trip ends
PM Peak Hour	42 trip ends

ITE trip rates are based on surveys of predominantly suburban locations rather than urban. In addition, these surveys to not take into account the high percentage of affordable units which typically have less cars. Therefore, our office reviewed a trip generation count we had on file for Pearl Place which was taken on Tuesday, October 5, 2010 from 3:30 to 5:30. Based upon the counts, the actual trip generation was low; only twenty peak hour trips were recorded at the site driveway for the 60 units in place when the count was done, and no on-street parking associated with the facility was observed during the count. It should be noted that significant pedestrian trips to and from the site were observed which is also anticipated for the Bayside Anchor project. This results in a

PM peak hour trip rate of .33 for this existing facility. Applying this rate to the proposed 45 units yields 15 trip ends during the PM peak hour.

Given these results and the fact that the project is in an urban area, that 80 % of the units will be affordable, and that the area is very bikeable and walkable, our office has reduced the rates derived from the ITE LUC 220 for apartments by 50% resulting in the following forecast for the housing component of the project:

Weekday	198 trip ends
AM Peak Hour	13 trip ends
PM Peak Hour	21 trip ends

Head Start Program: The head start program anticipates that there will be 17 children enrolled with three staff during the school year only. Based on Land Use Code (LUC) 520, Elementary School with 17 students, the proposed head start is anticipated to generate the following trips:

Weekday	22 trip ends
AM Peak Hour	8 trip ends
PM Peak Hour	5 trip ends

This estimate is likely high given that many of the students who will be attending are living in the neighborhood and will walk.

Offices: The Portland Housing Authority office and a community police station will also be located within the building. The total square footage of these two uses combined is 1502. Based on Land Use Code (LUC) 715, Single Tenant Office Building with 1502 square feet, the proposed office component of the building is anticipated to generate the following trips:

Weekday	17 trip ends
AM Peak Hour	3 trip ends
PM Peak Hour	3 trip ends

Total Traffic Forecast: Combining the trip generation forecast for each component of the building results in the following traffic forecast for the project:

Weekday	237 trip ends
AM Peak Hour	24 trip ends
PM Peak Hour	29 trip ends

This level of traffic increase will not have a notable effect on the adjacent roadway system.

IV. Crash Data

In order to evaluate whether a location has a crash problem, Maine DOT uses two criteria to define High Crash Locations (HCL). Both criteria must be met in order to be classified as an HCL.

1. A critical rate factor of 1.00 or more for a three-year period. (A Critical Rate Factor {CRF} compares the actual accident rate to the rate for similar intersections in the State. A CRF of less than 1.00 indicates a rate less than average) and:

2. A minimum of 8 crashes over a three-year period.

Our office reviewed the 2010-2012 crash data in this area and found there were no high crash locations in the vicinity of the project site. A copy of the collision history is included in the Appendix.

V. Parking Evaluation

While PHA wants to provide adequate parking for the project, parking results in loss of open space and increasing stormwater impacts, and uses valuable urban land. At the same time, providing too little parking would have adverse impacts on residents and the surrounding neighborhood. The applicant's goal through the parking demand analysis process is to find the appropriate ratio of parking spaces. Our office has data suggesting actual parking demand will be well below one space per unit. To estimate the parking demand for the proposed project, Gorrill-Palmer Consulting Engineers, Inc. consulted two additional sources; a parking use inventory completed by our office for the existing East Bayside PHA properties; and secondly, relevant parking studies we have completed. Each of these are summarized below:

Parking study of existing East Bayside PHA Properties and On Street Parking- Our office completed an inventory of occupied and available parking spaces for the East Bayside PHA Properties as well as the adjacent neighborhood streets on Sunday evening, May 4th 2014 for each hour from 9 PM to midnight. This represents a time period when most residents would be parked in the neighborhood. A summary of the results for the peak period at 12 midnight is presented below. A summary of the complete parking survey is included in the Appendix of this report:

Parking Survey Results within East Bayside PHA Properties
Highest Demand observed in PHA Parking Lots: 91 spaces
Total Parking Lot Spaces: 157 spaces
Total Available Spaces in Parking Lots: 66 spaces

According to occupancy information furnished by PHA, 162 units of the 164 total were occupied as of May 1, 2014. Therefore, the parking ratio within the PHA off street lots was 0.56 spaces per unit.

On Street Parking for Area Bounded by Anderson, Cumberland and Boyd Streets

Highest On Street Demand observed: 137 spaces
Total on Street Spaces: 298 spaces
Total Available Spaces on street: 161 spaces

This data clearly shows that there is substantial available parking within the neighborhood today. While there are 66 spaces available within the PHA parking lots, some residents are parking on the streets. Therefore, to estimate the total parking demand associated with the existing PHA properties, we have included the number of spaces which were occupied adjacent to PHA properties which were estimated to be 58 spaces. Adding these additional spaces to the 91 spaces occupied in the existing PHA lots results in an overall existing parking ration of 0.92 spaces per occupied unit today for the PHA housing properties. This is likely a high rate since we have been conservative (estimated on the high side) when attributing the on street parking to the existing PHA properties.

As can be seen from the parking data in the Appendix compiled for this report, our office also determined the number of unoccupied on and off street spaces available within 300 and 500 feet of the proposed building. This data is summarized below for 12 midnight, which was the peak period observed:

Unoccupied parking within 300 feet of the project:

- Parking lots: 18
- On Street spaces: 73
- Total: 91

Unoccupied parking within 500 feet of the project:

- Parking lots: 58
- On Street spaces: 130
- Total: 188

Other Relevant Parking Studies

Our office also reviewed data from other projects we have on file in our office in estimating an appropriate parking ration for this project which is summarized below:

- Island View Apartments in Portland- This inventory was performed on July 12, 2004 from 6:00 to 9:00 PM. Island View Apartments is a 70-unit apartment building on the corner of North Road and Walnut Road in Portland. It contains a total of 84 parking spaces, 29 of which are designated visitor parking only, and 2 of which are handicap. In the peak half-hour period, a maximum of 49 parking spaces were occupied. This translates to a demand of 0.70 parking spaces per dwelling unit.

- As part of studies for similar projects in the past, our office examined the parking occupancy of apartment buildings in downtown Portland with dedicated parking lots, either behind or within the building as part of another application. Our office completed parking occupancy counts from 10-11 PM (within the peak period, based on ITE and ULI data) at 53 Danforth Street, 645 Congress Street, and Walker Terrace (at the corner of Congress and Walker Street) on Tuesday, October 26, 2010.

  In addition, we referenced the parking supply for Franklin Towers and the recently-completed Oak Street Lofts. Franklin Towers has 200 units, and based upon aerial data, a parking supply of 56 spaces. Oak Street Lofts has 37 units, and 16 parking spaces, although it should be noted that half of these spaces (eight) are for motorcycles. For the purposes of this letter, it is assumed that peak demand at both of these facilities is at 100 percent occupancy.

  Based on the occupancy counts, the following parking demand was determined:

53 Danforth:	43 units, 29 spaces occupied	=	0.67 spaces/unit
645 Congress:	56 units, 28 spaces occupied	=	0.50 spaces/unit
Walker Terrace:	40 units, 20 spaces occupied	=	0.50 spaces/unit
Oak Street Lofts:	37 units, 16 spaces occupied*	=	0.43 spaces/unit
Franklin Towers:	200 units, 58 spaces occupied**	=	0.29 spaces/unit
	AVERAGE:		0.48spaces/unit

*Assumes 100% occupancy at Oak Street.
** Assumes 58 spaces based upon aerial imagery, and 100% occupancy at Franklin Towers.

- This information indicates an average need for 0.48 spaces per apartment within the Portland Peninsula.

Recommended Parking Ratio - Based on the level of demand at the above referenced studies, and the planned implementation of the proposed Transportation Demand Management Plan, it is the opinion of Gorrill Palmer that appropriate parking demand for the proposed Bayside Anchor Project as well as the existing PHA "Bayside campus" properties is 0.75 spaces per unit for the proposed housing.

Evaluation of Parking Supply vs. Demand- The proposed project will result in the loss of the 26 space parking lot currently on the project site. The comparison of the available parking supply vs the anticipated demand upon completion of the project is summarized below:

Parking Supply: The available off and on street parking supplies within 300 and 500 feet upon completion of the project are summarized below:

- Within 300 feet of the project: 118 spaces on street; 36 in PHA lots
- Within 500 feet of the project: 227 spaces on street; 109 in PHA lots

- Combined Totals
  - Within 300 feet:154
  - Within 500 feet:336

Parking Demand: Based on the recommended parking ratio of 0.75 spaces per unit, the proposed 45 unit project is estimated to generate an additional demand of 34 spaces. The resulting parking demands within 300 and 500 feet of the project are summarized below:

- Within 300 feet of the project: 123 spaces
- Within 500 feet of the project: 208 spaces

Comparison of Parking Demand vs Supply: A comparison of the parking demand and supply shows that there is projected to be 31, and 128 spaces within 300 and 500 feet respectively upon completion of the project. It is noted that while the proposed head start and office components of the project will also require parking, these uses are not expected to coincide with the peak parking period which occurs during the evening when residents return from work.

VI. Transportation Demand Management Plan

PHA Housing has requested development of a Transportation Demand Management (TDM) Plan for their campus which will support the City's transportation and environmental sustainability goals by encouraging and promoting bicycling, walking, and use of transit. Avesta will be managing the project for PHA and is very familiar with the importance of a TDM plan. Following is a description of the elements of the Plan.

TDM Coordinator

PHA Housing has a Property Manager who will coordinate the TDM plan. The TDM coordinator will be responsible for posting changes and updates to the Metro schedule and U Car information in the lobby as well as other information relevant to promoting and encouraging the greater use of bicycling, walking, and bus-based transit.

Parking Limits within the Lease

PHA Housing plans to adopt parking policies limiting each household to no more than a single parking permit, i.e. one (1) vehicle per residence.

Automobile Parking Reduction Strategies

The Applicant proposes to take the following measures to reduce the demand for vehicles.

Bicycle Parking

PHA Housing plans to provide a total of 38 parking spaces for bicycles with 30 of these located within the building. These spaces are envisioned to be wall-mounted lockable racks

Maine Department Of Transportation - Traffic Engineering, Crash Records Section

Crash Summary Report

Report Selections and Input Parameters

REPORT SELECTIONS

☑ Crash Summary I ☐ Section Detail ☑ Crash Summary II ☐ 1320 Public ☐ 1320 Private ☐ 1320 Summary

REPORT DESCRIPTION

Boyd St area

REPORT PARAMETERS

Year 2010, Start Month 1 through Year 2012 End Month: 12

Route: **0560293**	Start Node: **18521**	Start Offset: **0**	☑ Exclude First Node
	End Node: **18929**	End Offset: **0**	☐ Exclude Last Node
Route: **0560847**	Start Node: **18929**	Start Offset: **0**	☑ Exclude First Node
	End Node: **19463**	End Offset: **0**	☐ Exclude Last Node
Route: **0561238**	Start Node: **18919**	Start Offset: **0**	☐ Exclude First Node
	End Node: **19463**	End Offset: **0**	☑ Exclude Last Node
Route: **0560069**	Start Node: **18919**	Start Offset: **0**	☑ Exclude First Node
	End Node: **18921**	End Offset: **0**	☐ Exclude Last Node
Route: **0560493**	Start Node: **18922**	Start Offset: **0**	☑ Exclude First Node
	End Node: **18924**	End Offset: **0**	☐ Exclude Last Node
Route: **0560666**	Start Node: **18915**	Start Offset: **0**	☑ Exclude First Node
	End Node: **18918**	End Offset: **0**	☐ Exclude Last Node
Route: **0560834**	Start Node: **18918**	Start Offset: **0**	☑ Exclude First Node
	End Node: **18924**	End Offset: **0**	☑ Exclude Last Node
Route: **0560234**	Start Node: **18917**	Start Offset: **0**	☑ Exclude First Node
	End Node: **18932**	End Offset: **0**	☑ Exclude Last Node
Route: **0560235**	Start Node: **19464**	Start Offset: **0**	☑ Exclude First Node
	End Node: **18916**	End Offset: **0**	☑ Exclude Last Node
Route: **0560235**	Start Node: **18916**	Start Offset: **0**	☑ Exclude First Node
	End Node: **18923**	End Offset: **0**	☑ Exclude Last Node

Maine Department Of Transportation - Traffic Engineering, Crash Records Section

Crash Summary Report

Report Selections and Input Parameters

REPORT SELECTIONS

☑ **Crash Summary I** ☐ **Section Detail** ☑ **Crash Summary II** ☐ **1320 Public** ☐ **1320 Private** ☐ **1320 Summary**

REPORT DESCRIPTION

Boyd St area

REPORT PARAMETERS

Year 2010, Start Month 1 through Year 2012 End Month: 12

Route: **0560235**	Start Node: **18923**	Start Offset: **0**	☑ **Exclude First Node**
	End Node: **18920**	End Offset: **0**	☑ **Exclude Last Node**

Maine Department Of Transportation - Traffic Engineering, Crash Records Section

Crash Summary I

Nodes

Node	Route - MP	Node Description	U/R	Total Crashes	Injury Crashes K	A	B	C	PD	Percent Injury	Annual M Ent-Veh	Crash Rate	Critical Rate	CRF
18953	0560293 - 0.06	0509373 POR,N.BOYD,FOX ST.	2	3	0	0	1	0	2	33.3	1.997	0.50	0.45	1.11
												Statewide Crash Rate:	0.14	
18952	0560293 - 0.16	0509372 POR,FOX,DIAMOND ST.	2	1	0	0	0	0	1	0.0	1.968	0.17	0.45	0.00
												Statewide Crash Rate:	0.14	
18929	0560293 - 0.21	0509349 POR,ANDERSON,FOX ST.	2	2	0	0	0	1	1	50.0	1.808	0.37	0.46	0.00
												Statewide Crash Rate:	0.14	
18930	0560847 - 0.53	0509350 POR,ANDERSON,EVERETT ST.	2	0	0	0	0	0	0	0.0	0.148	0.00	0.46	0.00
												Statewide Crash Rate:	0.14	
18931	0560847 - 0.56	0509351 POR,ANDERSON,MADISON ST.	2	1	0	0	0	1	0	100.0	0.150	2.22	0.47	4.75
												Statewide Crash Rate:	0.14	
18932	0560847 - 0.59	0509352 POR,E.LANCASTER,ANDERSON ST.	2	0	0	0	0	0	0	0.0	0.132	0.00	0.41	0.00
												Statewide Crash Rate:	0.14	
19464	0560847 - 0.65	0509886 POR,ANDERSON ST,E.OXFORD STR.	2	0	0	0	0	0	0	0.0	0.163	0.00	0.50	0.00
												Statewide Crash Rate:	0.14	
19463	0560847 - 0.74	Int of ANDERSON ST CUMBERLAND AV	2	3	0	0	0	1	2	33.3	2.054	0.49	0.42	1.15
												Statewide Crash Rate:	0.13	
18919	0561238 - 0.84	Int of BOYD ST CUMBERLAND AV	2	3	0	0	0	1	2	33.3	2.449	0.41	0.40	1.01
												Statewide Crash Rate:	0.13	
18910	0561238 - 0.87	Int of CUMBERLAND AV, LOCUST ST	2	2	0	0	0	0	2	0.0	2.390	0.28	0.41	0.00
												Statewide Crash Rate:	0.13	
18922	0561238 - 0.89	Int of CUMBERLAND AV MAYO ST	2	0	0	0	0	0	0	0.0	2.241	0.00	0.41	0.00
												Statewide Crash Rate:	0.13	
18915	0561238 - 0.94	Int of CUMBERLAND AV, SMITH ST	2	3	0	0	0	0	3	0.0	2.266	0.44	0.41	1.07
												Statewide Crash Rate:	0.13	
18920	0560069 - 0.08	0509340 POR,BOYD,E,OXFORD ST.	2	1	0	0	0	0	1	0.0	0.170	1.96	0.51	3.85
												Statewide Crash Rate:	0.14	
18921	0560069 - 0.15	0509341 POR,LANCASTER 1,BOYD ST.	2	0	0	0	0	0	0	0.0	0.068	0.00	-0.18	0.00
												Statewide Crash Rate:	0.14	
18923	0560493 - 0.08	0509343 POR,MAYO,E.OXFORD ST.	2	0	0	0	0	0	0	0.0	0.131	0.00	0.40	0.00
												Statewide Crash Rate:	0.14	
18924	0560493 - 0.16	0509344 POR,KENNEDY,MAYO ST.	2	0	0	0	0	0	0	0.0	0.050	0.00	-0.70	0.00
												Statewide Crash Rate:	0.14	
18916	0560666 - 0.14	0509336 POR,SMITH,E.OXFORD ST.	2	1	0	0	0	0	1	0.0	0.170	1.96	0.51	3.85
												Statewide Crash Rate:	0.14	
18917	0560666 - 0.21	0509337 POR,SMITH,E.LANCASTER ST	2	0	0	0	0	0	0	0.0	0.084	0.00	0.08	0.00
												Statewide Crash Rate:	0.14	
18918	0560666 - 0.22	0509338 POR,KENNEDY,SMITH ST.	2	0	0	0	0	0	0	0.0	0.045	0.00	-0.96	0.00
												Statewide Crash Rate:	0.14	
Study Years: 3.00		**NODE TOTALS:**		20	0	0	1	4	15	25.0	18.484	0.36	0.25	1.43

Crash Summary I

Sections

Start Node	End Node	Element	Offset Begin - End	Route - MP	Section Length	U/R	Total Crashes	Injury Crashes K	A	B	C	PD	Percent Injury	Annual HMVM	Crash Rate	Critical Rate	CRF
18521	18953	194034	0 - 0.06	0560293 - 0	0.06	2	0	0	0	0	0	0	0.0	0.00125	0.00	974.19	0.00
Int of FOX ST FRANKLIN ST				RD INV 05 60293											Statewide Crash Rate: 336.58		
18952	18953	194637	0 - 0.10	0560293 - 0.06	0.10	2	1	0	0	1	0	0	100.0	0.00181	184.16	885.84	0.00
0509372 POR,FOX,DIAMOND ST.				RD INV 05 60293											Statewide Crash Rate: 336.58		
18929	18952	194603	0 - 0.05	0560293 - 0.16	0.05	2	0	0	0	0	0	0	0.0	0.00088	0.00	1068.04	0.00
0509349 POR,ANDERSON,FOX ST.				RD INV 05 60293											Statewide Crash Rate: 336.58		
18929	18930	194602	0 - 0.04	0560847 - 0.49	0.04	2	0	0	0	0	0	0	0.0	0.00006	0.00	1031.16	0.00
0509349 POR,ANDERSON,FOX ST.				RD INV 05 60847											Statewide Crash Rate: 336.58		
18930	18931	194605	0 - 0.03	0560847 - 0.53	0.03	2	0	0	0	0	0	0	0.0	0.00004	0.00	525.37	0.00
0509350 POR,ANDERSON,EVERETT ST.				RD INV 05 60847											Statewide Crash Rate: 336.58		
18931	18932	194607	0 - 0.03	0560847 - 0.56	0.03	2	1	0	0	0	0	0	0.0	0.00004	8875.04	351.26	25.27
0509351 POR,ANDERSON,MADISON ST.				RD INV 05 60847											Statewide Crash Rate: 336.58		
18932	19464	194609	0 - 0.06	0560847 - 0.59	0.06	2	5	0	0	1	0	4	20.0	0.00007	25034.05	1177.21	21.27
0509352 POR,E.LANCASTER,ANDERSON ST.				RD INV 05 60847											Statewide Crash Rate: 336.58		
19463	19464	195146	0 - 0.09	0560847 - 0.65	0.09	2	2	0	0	0	0	1	0.0	0.00008	7958.54	1328.15	5.99
Int of ANDERSON ST CUMBERLAND AV				RD INV 05 60847											Statewide Crash Rate: 336.58		
18910	18919	3129300	0 - 0.03	0561238 - 0.84	0.03	2	3	0	0	0	1	2	33.3	0.00069	1442.26	702.55	2.05
Int of CUMBERLAND AV, LOCUST ST				RD INV 05 61238											Statewide Crash Rate: 181.66		
18910	18922	3118713	0 - 0.02	0561238 - 0.87	0.02	2	0	0	0	0	0	0	0.0	0.00045	0.00	757.37	0.00
Int of CUMBERLAND AV, LOCUST ST				RD INV 05 61238											Statewide Crash Rate: 181.66		
18915	18922	3117967	0 - 0.05	0561238 - 0.89	0.05	2	2	0	0	0	1	1	50.0	0.00108	616.01	636.99	0.00
Int of CUMBERLAND AV, SMITH ST				RD INV 05 61238											Statewide Crash Rate: 181.66		
18915	19463	3131702	0 - 0.04	0561238 - 0.94	0.04	2	2	0	0	0	0	2	0.0	0.00082	808.89	677.68	1.19
Int of CUMBERLAND AV, SMITH ST				RD INV 05 61238											Statewide Crash Rate: 181.66		
18919	18920	194589	0 - 0.08	0560069 - 0	0.08	2	4	0	0	0	0	3	0.0	0.00013	10594.45	1444.47	7.33
Int of BOYD ST CUMBERLAND AV				RD INV 05 60069											Statewide Crash Rate: 336.58		
18920	18921	194590	0 - 0.07	0560069 - 0.08	0.07	2	4	0	0	0	0	3	0.0	0.00010	13990.69	1382.73	10.12
0509340 POR,BOYD,E,OXFORD ST.				RD INV 05 60069											Statewide Crash Rate: 336.58		
18922	18923	194592	0 - 0.08	0560493 - 0	0.08	2	1	0	0	1	0	0	100.0	0.00007	4476.68	1260.29	3.55
Int of CUMBERLAND AV MAYO ST				RD INV 05 60493											Statewide Crash Rate: 336.58		
18923	18924	194593	0 - 0.08	0560493 - 0.08	0.08	2	1	0	0	0	0	0	0.0	0.00005	6486.09	899.65	7.21
0509343 POR,MAYO,E.OXFORD ST.				RD INV 05 60493											Statewide Crash Rate: 336.58		
18915	18916	194580	0 - 0.08	0560666 - 0.06	0.08	2	2	0	0	0	0	2	0.0	0.00009	7068.44	1379.02	5.13
Int of CUMBERLAND AV, SMITH ST				RD INV 05 60666											Statewide Crash Rate: 336.58		
18916	18917	194583	0 - 0.07	0560666 - 0.14	0.07	2	1	0	0	0	0	0	0.0	0.00006	5551.62	1082.04	5.13
0509336 POR,SMITH,E.OXFORD ST.				RD INV 05 60666											Statewide Crash Rate: 336.58		
18917	18918	194586	0 - 0.01	0560666 - 0.21	0.01	2	0	0	0	0	0	0	0.0	0.00001	0.00	-	0.00
0509337 POR,SMITH,E.LANCASTER ST				RD INV 05 60666											Statewide Crash Rate: 336.58	18946.64	
18918	18924	194588	0 - 0.04	0560834 - 0	0.04	2	1	0	0	0	0	1	0.0	0.00001	23296.99	-4098.52	0.00
0509338 POR,KENNEDY,SMITH ST.				RD INV 05 60834											Statewide Crash Rate: 336.58		

Crash Summary I

Sections

Start Node	End Node	Element	Offset Begin - End	Route - MP	Section Length	U/R	Total Crashes	Injury Crashes K	A	B	C	PD	Percent Injury	Annual HMVM	Crash Rate	Critical Rate	CRF
18917	18932	194587	0 - 0.04	0560234 - 0	0.04	2	0	0	0	0	0	0	0.0	0.00001	0.00	-6213.23	0.00
0509337 POR,SMITH,E.LANCASTER ST				RD INV 05 60234											Statewide Crash Rate: 336.58		
18916	19464	194585	0 - 0.02	0560235 - 0.07	0.02	2	0	0	0	0	0	0	0.0	0.00002	0.00	-3362.02	0.00
0509336 POR,SMITH,E.OXFORD ST.				RD INV 05 60235											Statewide Crash Rate: 336.58		
18916	18923	194584	0 - 0.05	0560235 - 0.09	0.05	2	2	0	0	0	0	1	0.0	0.00003	23267.31	-382.86	0.00
0509336 POR,SMITH,E.OXFORD ST.				RD INV 05 60235											Statewide Crash Rate: 336.58		
18920	18923	194591	0 - 0.05	0560235 - 0.14	0.05	2	0	0	0	0	0	0	0.0	0.00002	0.00	-1152.75	0.00
0509340 POR,BOYD,E,OXFORD ST.				RD INV 05 60235											Statewide Crash Rate: 336.58		
Study Years: 3.00				**Section Totals:**	1.27		32	0	0	3	2	20	15.6	0.00787	1355.10	534.30	2.54
				Grand Totals:	1.27		52	0	0	4	6	35	19.2	0.00787	2202.03	676.00	3.26

Crash Summary

Section Details

Start Node	End Node	Element	Offset Begin - End	Route - MP	Total Crashes	Injury Crashes K	A	B	C	PD	Crash Report	Crash Date	Crash Mile Point	Injury Degree
18521	18953	194034	0 - 0.06	0560293 - 0	0	0	0	0	0	0				
18952	18953	194637	0 - 0.10	0560293 - 0.06	1	0	0	1	0	0	2010-14202C	07/09/2010	0.07	B
18929	18952	194603	0 - 0.05	0560293 - 0.16	0	0	0	0	0	0				
18929	18930	194602	0 - 0.04	0560847 - 0.49	0	0	0	0	0	0				
18930	18931	194605	0 - 0.03	0560847 - 0.53	0	0	0	0	0	0				
18931	18932	194607	0 - 0.03	0560847 - 0.56	1	0	0	0	0	0	2010-5508C	02/25/2010	0.57	
18932	19464	194609	0 - 0.06	0560847 - 0.59	5	0	0	1	0	4	2012-904	01/13/2012	0.61	PD
											2010-8633C	04/27/2010	0.61	PD
											2012-42600	10/31/2012	0.62	PD
											2011-8643C	06/05/2011	0.64	B
											2010-4524C	02/27/2010	0.64	PD
19463	19464	195146	0 - 0.09	0560847 - 0.65	2	0	0	0	0	1	2011-3003C	02/11/2011	0.66	PD
											2011-960C	01/21/2011	0.70	
18910	18919	3129300	0 - 0.03	0561238 - 0.84	3	0	0	0	1	2	2011-4295C	02/25/2011	0.85	PD
											2011-3566C	02/15/2011	0.85	PD
											2011-3255	06/23/2011	0.86	C
18910	18922	3118713	0 - 0.02	0561238 - 0.87	0	0	0	0	0	0				
18915	18922	3117967	0 - 0.05	0561238 - 0.89	2	0	0	0	1	1	2010-7683C	03/30/2010	0.90	C
											2010-18272C	08/21/2010	0.90	PD
18915	19463	3131702	0 - 0.04	0561238 - 0.94	2	0	0	0	0	2	2011-3474	06/24/2011	0.95	PD
											2012-48363	12/21/2012	0.97	PD
18919	18920	194589	0 - 0.08	0560069 - 0	4	0	0	0	0	3	2012-32126	07/06/2012	0.02	PD
											2011-6502	08/03/2011	0.04	PD
											2012-25406	04/01/2012	0.07	
											2012-42011	10/26/2012	0.07	PD
18920	18921	194590	0 - 0.07	0560069 - 0.08	4	0	0	0	0	3	2012-45906	12/02/2012	0.10	PD
											2011-20488	12/29/2011	0.13	PD
											2011-19176	12/15/2011	0.14	
											2011-14468	11/03/2011	0.14	PD
18922	18923	194592	0 - 0.08	0560493 - 0	1	0	0	1	0	0	2011-11163	09/27/2011	0.06	B
18923	18924	194593	0 - 0.08	0560493 - 0.08	1	0	0	0	0	0	2012-47097	12/13/2012	0.10	
18915	18916	194580	0 - 0.08	0560666 - 0.06	2	0	0	0	0	2	2011-5271C	03/04/2011	0.10	PD
											2011-2931C	02/06/2011	0.10	PD
18916	18917	194583	0 - 0.07	0560666 - 0.14	1	0	0	0	0	0	2011-21044	12/31/2011	0.16	

Crash Summary

Section Details

Start Node	End Node	Element	Offset Begin - End	Route - MP	Total Crashes	Injury Crashes K	A	B	C	PD	Crash Report	Crash Date	Crash Mile Point	Injury Degree
18917	18918	194586	0 - 0.01	0560666 - 0.21	0	0	0	0	0	0				
18918	18924	194588	0 - 0.04	0560834 - 0	1	0	0	0	0	1	2010-9926C	05/16/2010	0.01	PD
18917	18932	194587	0 - 0.04	0560234 - 0	0	0	0	0	0	0				
18916	19464	194585	0 - 0.02	0560235 - 0.07	0	0	0	0	0	0				
18916	18923	194584	0 - 0.05	0560235 - 0.09	2	0	0	0	0	1	2012-2926	02/04/2012	0.12	
											2010-16408C	08/06/2010	0.13	PD
18920	18923	194591	0 - 0.05	0560235 - 0.14	0	0	0	0	0	0				
				Totals:	32	0	0	3	2	20				

Maine Department Of Transportation - Traffic Engineering, Crash Records Section

Crash Summary II - Characteristics

Crashes by Day and Hour

	AM												PM													
	Hour of Day																									
Day Of Week	**12**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**Un**	**Tot**
SUNDAY	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	2	0	1	0	7
MONDAY	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	3
TUESDAY	0	0	0	0	0	0	0	0	0	1	1	1	0	0	1	1	1	1	1	1	0	0	0	0	0	9
WEDNESDAY	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	1	0	0	0	2	0	0	0	0	0	6
THURSDAY	1	1	0	0	0	0	1	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	7
FRIDAY	0	2	0	0	0	0	0	0	0	3	0	1	0	3	2	0	1	0	1	1	0	0	2	0	0	16
SATURDAY	0	0	0	0	1	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	4
Totals	2	3	0	0	1	0	1	1	2	4	2	4	4	3	5	3	2	1	2	4	2	2	3	1	0	**52**

Vehicle Counts by Type

Unit Type	Total
1-Passenger Car	59
2-(Sport) Utility Vehicle	14
3-Passenger Van	3
4-Cargo Van (10K lbs or Less)	1
5-Pickup	9
6-Motor Home	0
7-School Bus	0
8-Transit Bus	1
9-Motor Coach	0
10-Other Bus	0
11-Motorcycle	0
12-Moped	0
13-Low Speed Vehicle	0
14-Autocycle	0
15-Experimental	0
16-Other Light Trucks (10,000 lbs or Less)	0
17-Medium/Heavy Trucks (More than 10,000 lbs)	3
18-ATV - (4 wheel)	0
20-ATV - (2 wheel)	0
21-Snowmobile	0
22-Pedestrian	3

Unit Type	Total
23-Bicyclist	2
24-Witness	12
25-Other	7
Total	**114**

Maine Department Of Transportation - Traffic Engineering, Crash Records Section

Crash Summary II - Characteristics

Crashes by Driver Action at Time of Crash

Driver Action at Time of Crash	Dr 1	Dr 2	Dr 3	Dr 4	Dr 5	Other	Total
No Contributing Action	10	10	1	0	0	0	21
Ran Off Roadway	1	0	0	0	0	0	1
Failed to Yield Right-of-Way	6	4	0	0	0	0	10
Ran Red Light	0	0	0	0	0	0	0
Ran Stop Sign	0	0	0	0	0	0	0
Disregarded Other Traffic Sign	0	0	0	0	0	0	0
Disregarded Other Road Markings	0	0	0	0	0	0	0
Exceeded Posted Speed Limit	2	0	0	0	0	0	2
Drove Too Fast For Conditions	1	1	0	0	0	0	2
Improper Turn	2	1	0	0	0	0	3
Improper Backing	4	1	0	0	0	0	5
Improper Passing	0	0	0	0	0	0	0
Wrong Way	0	0	0	0	0	0	0
Followed Too Closely	0	0	0	0	0	0	0
Failed to Keep in Proper Lane	0	1	0	0	0	0	1
Operated Motor Vehicle in Erratic, Reckless, Careless, Negligent or Aggressive Manner	0	0	0	0	0	0	0
Swerved or Avoided Due to Wind, Slippery Surface, Motor Vehicle, Object, Non-Motorist in Roadway	0	0	0	0	0	0	0
Over-Correcting/Over-Steering	0	0	0	0	0	0	0
Other Contributing Action	0	0	0	0	0	0	0
Unknown	0	2	0	0	0	0	2
Total	**26**	**20**	**1**	**0**	**0**	**0**	**47**

Crashes by Apparent Physical Condition And Driver

Apparent Physical Condition	Dr 1	Dr 2	Dr 3	Dr 4	Dr 5	Other	Total
Apparently Normal	38	32	1	0	0	1	72
Physically Impaired or Handicapped	0	0	0	0	0	0	0
Emotional(Depressed, Angry, Disturbed, etc.)	0	0	0	0	0	0	0
Ill (Sick)	0	0	0	0	0	0	0
Asleep or Fatigued	0	1	0	0	0	0	1
Under the Influence of Medications/Drugs/Alcohol	3	1	0	0	0	0	4
Other	0	3	0	0	0	0	3
Total	**41**	**37**	**1**	**0**	**0**	**1**	**80**

Driver Age by Unit Type

Age	Driver	Bicycle	SnowMobile	Pedestrian	ATV	Total
09-Under	0	0	0	0	0	0
10-14	0	0	0	0	0	0
15-19	2	0	0	0	0	2
20-24	14	0	0	0	0	14
25-29	21	0	0	0	0	21
30-39	17	0	0	0	0	17
40-49	15	0	0	0	0	15
50-59	10	0	0	0	0	10
60-69	5	0	0	0	0	5
70-79	3	0	0	0	0	3
80-Over	0	0	0	0	0	0
Unknown	10	2	0	3	0	15
Total	**97**	**2**	**0**	**3**	**0**	**102**

Crash Summary II - Characteristics

Most Harmful Event

Most Harmful Event	Total
1-Overturn / Rollover	0
2-Fire / Explosion	0
3-Immersion	0
4-Jackknife	0
5-Cargo / Equipment Loss Or Shift	0
6-Fell / Jumped from Motor Vehicle	0
7-Thrown or Falling Object	0
8-Other Non-Collision	2
9-Pedestrian	0
10-Pedalcycle	0
11-Railway Vehicle - Train, Engine	0
12-Animal	0
13-Motor Vehicle in Transport	30
14-Parked Motor Vehicle	12
15-Struck by Falling, Shifting Cargo or Anything Set in Motion by Motor Vehicle	0
16-Work Zone / Maintenance Equipment	0
17-Other Non-Fixed Object	0
18-Impact Attenuator / Crash Cushion	0
19-Bridge Overhead Structure	0
20-Bridge Pier or Support	0
21-Bridge Rail	0
22-Cable Barrier	0
23-Culvert	0
24-Curb	0
25-Ditch	0
26-Embankment	0
27-Guardrail Face	0
28-Guardrail End	0
29-Concrete Traffic Barrier	0
30-Other Traffic Barrier	0
31-Tree (Standing)	0
32-Utility Pole / Light Support	0
33-Traffic Sign Support	0
34-Traffic Signal Support	0
35-Fence	0
36-Mailbox	0
37-Other Post Pole or Support	0
38-Other Fixed Object (wall, building, tunnel, etc.)	0
39-Unknown	6
40-Gate or Cable	0
41-Pressure Ridge	0
Total	**50**

Traffic Control Devices

Traffic Control Device	Total
1-Traffic Signals (Stop & Go)	0
2-Traffic Signals (Flashing)	0
3-Advisory/Warning Sign	0
4-Stop Signs - All Approaches	5
5-Stop Signs - Other	9
6-Yield Sign	0
7-Curve Warning Sign	0
8-Officer, Flagman, School Patrol	0
9-School Bus Stop Arm	0
10-School Zone Sign	0
11-R.R. Crossing Device	0
12-No Passing Zone	0
13-None	38
14-Other	0
Total	**52**

Injury Data

Severity Code	Injury Crashes	Number Of Injuries
K	0	0
A	0	0
B	4	5
C	6	7
PD	35	0
Total	**45**	**12**

Road Character

Road Grade	Total
1-Level	34
2-On Grade	15
3-Top of Hill	1
4-Bottom of Hill	2
5-Other	0
Total	**52**

Light

Light Condition	Total
1-Daylight	29
2-Dawn	0
3-Dusk	1
4-Dark - Lighted	20
5-Dark - Not Lighted	0
6-Dark - Unknown Lighting	1
7-Unknown	1
Total	**52**

Maine Department Of Transportation - Traffic Engineering, Crash Records Section

Crash Summary II - Characteristics

Crashes by Year and Month

Month	2010	2011	2012	Total
JANUARY	1	2	2	5
FEBRUARY	2	6	1	9
MARCH	2	1	0	3
APRIL	1	0	1	2
MAY	1	0	1	2
JUNE	0	3	0	3
JULY	1	0	3	4
AUGUST	4	1	1	6
SEPTEMBER	1	2	1	4
OCTOBER	1	1	3	5
NOVEMBER	1	2	0	3
DECEMBER	0	3	3	6
Total	**15**	**21**	**16**	**52**

Report is limited to the last 10 years of data.

Maine Department Of Transportation - Traffic Engineering, Crash Records Section

Crash Summary II - Characteristics

Crashes by Crash Type and Type of Location

Crash Type	Straight Road	Curved Road	Three Leg Intersection	Four Leg Intersection	Five or More Leg Intersection	Driveways	Bridges	Interchanges	Other	Parking Lot	Private Way	Cross Over	Railroad Crossing	Total
Object in Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rear End / Sideswipe	13	3	2	2	0	4	0	0	0	0	0	0	0	24
Head-on / Sideswipe	4	0	0	0	0	0	0	0	0	0	0	0	0	4
Intersection Movement	0	0	8	3	0	2	0	0	0	0	0	0	0	13
Pedestrians	1	0	1	1	0	0	0	0	0	0	0	0	0	3
Train	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Went Off Road	2	0	1	0	0	0	0	0	0	0	0	0	0	3
All Other Animal	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycle	1	0	1	0	0	0	0	0	0	0	0	0	0	2
Other	2	0	1	0	0	0	0	0	0	0	0	0	0	3
Jackknife	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rollover	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fire	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Submersion	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thrown or Falling Object	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bear	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Deer	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Moose	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Turkey	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**23**	**3**	**14**	**6**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**52**

Crash Summary II - Characteristics

Crashes by Weather, Light Condition and Road Surface

Weather / Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
Blowing Sand, Soil, Dirt												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Blowing Snow												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Clear												
Dark - Lighted	11	0	0	0	0	0	0	0	0	0	0	11
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	12	1	0	0	0	0	0	0	0	0	1	14
Dusk	1	0	0	0	0	0	0	0	0	0	0	1
Unknown	1	0	0	0	0	0	0	0	0	0	0	1
Cloudy												
Dark - Lighted	2	0	0	0	0	0	0	0	0	0	2	4
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	2	0	0	0	0	0	0	0	0	0	2	4
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0

Maine Department Of Transportation - Traffic Engineering, Crash Records Section

Crash Summary II - Characteristics

Crashes by Weather, Light Condition and Road Surface

Weather / Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
Fog, Smog, Smoke												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Other												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Rain												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	4	4
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	7	7
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Severe Crosswinds												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0

Maine Department Of Transportation - Traffic Engineering, Crash Records Section

Crash Summary II - Characteristics

Crashes by Weather, Light Condition and Road Surface

Weather / Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
Sleet, Hail (Freezing Rain or Drizzle)												
Dark - Lighted	0	1	0	0	0	0	0	0	0	0	0	1
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	1	0	0	0	0	0	0	0	0	0	1
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	1	0	0	0	1
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Snow												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	1	0	0	0	0	0	2	0	0	0	3
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	**29**	**4**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**52**

JN:2876
Project Description: Bayside Anchor, Portland
Project Location: Corner of Oxford and Boyd
Date:5-11-14

Gorrill-Palmer Consulting Engineers, Inc.
P.O. Box 1237
15 Shaker Road
Gray, Maine 04039

Apartment
Land Use Code (LUC) 220

Dwelling Units: 45

Average Rate

Time Period	ITE Trip Rate	Sample Size	Trip Ends		Directional Split * IN	Directional Split * OUT	Directional Distribution IN	Directional Distribution OUT	R^2
Weekday	T = 6.65 (X)	88	299		50%	50%	150	149	N/A
AM Peak Hour of Adj. Street Traffic	T = 0.51 (X)	78	23		20%	80%	5	18	N/A
PM Peak Hour of Adj. Street Traffic	T = 0.62 (X)	90	28		65%	35%	18	10	N/A
AM Peak Hour of Generator	T = 0.55 (X)	83	25		30%	70%	8	17	N/A
PM Peak Hour of Generator	T = 0.67 (X)	85	30		60%	40%	18	12	N/A
Saturday	T = 6.39 (X)	15	288		50%	50%	144	144	N/A
Saturday Peak Hour of Gen.	T = 0.52 (X)	14	23	**	50%	50%	12	11	N/A

* Percentages rounded to nearest 5%
** Not Available (Assumption)

Fitted Curve Equation

Time Period	ITE Trip Rate	Sample Size	Trip Ends		Directional Split * IN	Directional Split * OUT	Directional Distribution IN	Directional Distribution OUT	R^2
Weekday	T = 6.06 (X) + 123.56	88	396		50%	50%	198	198	0.88
AM Peak Hour of Adj. Street Traffic	T = 0.49 (X) + 3.73	78	26		20%	80%	5	21	0.83
PM Peak Hour of Adj. Street Traffic	T = 0.55 (X) + 17.65	90	42		65%	35%	28	14	0.77
AM Peak Hour of Generator	T = 0.54 (X) + 2.45	83	27		30%	70%	8	19	0.82
PM Peak Hour of Generator	T = 0.60 (X) + 14.91	85	42		60%	40%	25	17	0.80
Saturday	T = 7.85 (X) - 256.19	15	97		50%	50%	49	48	0.85
Saturday Peak Hour of Gen.	T = 0.41 (X) + 19.23	14	38	**	50%	50%	19	19	0.56

* Percentages rounded to nearest 5%
** Not Available (Assumption)

JN:2876
Project Description:Bayside Anchor
Project Location: Boyd and Oxford, Portland
Date:5-11-14

Gorrill-Palmer Consulting Engineers, Inc.
P.O. Box 1237
15 Shaker Road
Gray, Maine 04039

Single Tenant Office Building
Land Use Code (LUC) 715

Gross Floor Area (ft^2): 1,502

Average Rate

Time Period	ITE Trip Rate	Trip Ends	Directional Split *		Directional Distribution	
			IN	OUT	IN	OUT
Weekday	T = 11.65 (X)	17	50%	50%	9	8
AM Peak Hour	T = 1.80 (X)	3	90%	10%	3	0
PM Peak Hour	T = 1.74 (X)	3	15%	85%	0	3

* Percentages rounded to nearest 5%

Fitted Curve

Time Period	ITE Trip Rate	Trip Ends	Directional Split *		Directional Distribution	
			IN	OUT	IN	OUT
Weekday	Ln (T) = 0.60 Ln (X) + 4.30	94	50%	50%	47	47
AM Peak Hour	T = 1.67(X) + 21.93	24	90%	10%	22	2
PM Peak Hour	T = 1.52 (X) + 34.60	37	15%	85%	6	31

* Percentages rounded to nearest 5%

JN:2876
Project Description:Bayside Anchor
Project Location: corner of Oxford and Boyd, Portland
Date:

Gorrill-Palmer Consulting Engineers, Inc.
P.O. Box 1237
15 Shaker Road
Gray, Maine 04039

Elementary School
Land Use Code (LUC) 520

Students 17

Average Rate

Time Period	ITE Trip Rate	Trip Ends	Sample Size	Directional Split *		Directional Distribution		R^2
				IN	OUT	IN	OUT	
Weekday	T = 1.29 (X)	22	33	50%	50%	11	11	---
AM Peak Hour of Adj. Street Traffic	---	---	---	---	---	---	---	---
PM Peak Hour of Adj. Street Traffic	T = 0.15 (X)	3	20	50%	50%	2	1	---
AM Peak Hour of Generator	T = 0.45 (X)	8	48	55%	45%	4	4	---
PM Peak Hour of Generator	T = 0.28 (X)	5	44	45%	55%	2	3	---

Saturday	---	---	---	---	---	---	---	---
Saturday Peak Hour of Generator	---	---	---	---	---	---	---	---

* Percentages rounded to nearest 5%

Fitted Curve Equation

Time Period	ITE Trip Rate	Trip Ends	Sample Size	Directional Split *		Directional Distribution		R^2
				IN	OUT	IN	OUT	
Weekday	---	---	---	---	---	---	---	---
AM Peak Hour of Adj. Street Traffic	---	---	---	---	---	---	---	---
PM Peak Hour of Adj. Street Traffic	---	---	---	---	---	---	---	---
AM Peak Hour of Generator	Ln(T) = 1.14Ln (X) - 1.86	4	48	55%	45%	2	2	0.5
PM Peak Hour of Generator	Ln(T) = 1.09Ln (X) - 1.92	3	37	45%	55%	1	2	0.54
Saturday	---	---	---	---	---	---	---	---
Saturday Peak Hour of Generator	---	---	---	---	---	---	---	---

* Percentages rounded to nearest 5%

East Bayside Properties - Parking Study
Date: 5/4/2014
JN: 2876

9:00 PM

	Location	Total Parked Vehicles	# Parked Vehicles within 300' of Bayside Anchor	# Parked Vehicles within 500' of Bayside Anchor
PARKING LOTS				
	Kennedy Park lots	27	14	27
	Bayside Terrace lots	20	6	20
	Bayside East lots	32	15	20
	Total Parked Vehicles:	**79**	**35**	**67**
	Total Parking Spaces:	**157**	**62**	**135**
	Total Available Spaces:	**78**	**27**	**68**
ON-STREET PARKING				
	Boyd Street	14	9	14
	Mayo Street	26	22	26
	Smith Street	24	0	24
	Anderson Street (E Lancaster to Cumberland)	22	0	0
	E Lancaster Street	2	0	2
	Oxford Street (Anderson to Boyd)	6	4	6
	Cumberland Avenue (Anderson to Franklin)	26	0	8
	Total Parked Vehicles:	**120**	**35**	**80**

East Bayside Properties - Parking Study
Date: 5/4/2014
JN: 2876

10:00 PM

	Location	Total Parked Vehicles	# Parked Vehicles within 300' of Bayside Anchor	# Parked Vehicles within 500' of Bayside Anchor
PARKING LOTS				
	Kennedy Park lots	28	19	28
	Bayside Terrace lots	23	6	23
	Bayside East lots	32	16	21
	Total Parked Vehicles:	**83**	**41**	**72**
	Total Parking Spaces:	**157**	**62**	**135**
	Total Available Spaces:	**74**	**21**	**63**
ON-STREET PARKING				
	Boyd Street	15	10	15
	Mayo Street	29	23	29
	Smith Street	27	0	27
	Anderson Street (E Lancaster to Cumberland)	25	0	0
	E Lancaster Street	3	0	3
	Oxford Street (Anderson to Boyd)	7	5	7
	Cumberland Avenue (Anderson to Franklin)	22	0	10
	Total Parked Vehicles:	**128**	**38**	**91**

East Bayside Properties - Parking Study
Date: 5/4/2014
JN: 2876

11:00 PM

	Location	Total Parked Vehicles	# Parked Vehicles within 300' of Bayside Anchor	# Parked Vehicles within 500' of Bayside Anchor
PARKING LOTS				
	Kennedy Park lots	27	17	27
	Bayside Terrace lots	25	8	25
	Bayside East lots	36	18	23
	Total Parked Vehicles:	**88**	**43**	**75**
	Total Parking Spaces:	**157**	**62**	**135**
	Total Available Spaces:	**69**	**19**	**60**
ON-STREET PARKING				
	Boyd Street	18	12	18
	Mayo Street	33	26	33
	Smith Street	28	0	28
	Anderson Street (E Lancaster to Cumberland)	27	0	0
	E Lancaster Street	4	0	3
	Oxford Street (Anderson to Boyd)	9	6	9
	Cumberland Avenue (Anderson to Franklin)	20	0	9
	Total Parked Vehicles:	**139**	**44**	**100**

East Bayside Properties - Parking Study
Date: 5/4/2014
JN: 2876

12:00 AM

	Location	Total Parked Vehicles	# Parked Vehicles within 300' of Bayside Anchor	# Parked Vehicles within 500' of Bayside Anchor
PARKING LOTS				
	Kennedy Park lots	29	19	29
	Bayside Terrace lots	25	7	25
	Bayside East lots	37	18	23
	Total Parked Vehicles:	**91**	**44**	**77**
	Total Parking Spaces:	**157**	**62**	**135**
	Total Available Spaces:	**66**	**18**	**58**
ON-STREET PARKING				
	Boyd Street	18	12	18
	Mayo Street	34	27	34
	Smith Street	28	0	24
	Anderson Street (E Lancaster to Cumberland)	25	0	0
	E Lancaster Street	5	0	3
	Oxford Street (Anderson to Boyd)	9	6	9
	Cumberland Avenue (Anderson to Franklin)	18	0	9
	Total Parked Vehicles:	**137**	**45**	**97**

East Bayside Properties - Parking Study
Date: 5/4/2014
JN: 2876

Within 300' of Bayside Anchor

	9:00 PM	10:00 PM	11:00 PM	12:00 AM
Parked Cars In Lots	35	41	43	44
Total Lot Spaces	62	62	62	62
Available Lot Spaces	27	21	19	18
Parked Cars On-Street	35	38	44	45

Within 500' of Bayside Anchor

	9:00 PM	10:00 PM	11:00 PM	12:00 AM
Parked Cars In Lots	67	72	75	77
Total Lot Spaces	135	135	135	135
Available Lot Spaces	68	63	60	58
Parked Cars On-Street	80	91	100	97

On-Street Parking

Total On-Street Parking Spaces	Street Name	Street Segment
11	Cumberland Ave	Anderson St to Smith St
13	Cumberland Ave	Smith St to Mayo St
8	Cumberland Ave	Mayo St to Boyd St
0	Cumberland Ave	Boyd St to Franklin St
15	Oxford St	Anderson St to Smith St
12	Oxford St	Smith St to Mayo St
18	Oxford St	Mayo St to Boyd St
15	E Lancaster St	Anderson St to Smith St
31	Boyd St	Cumberland Ave to Oxford St
25	Boyd St	Oxford St to Bayside Terrace
31	Mayo St	Cumberland Ave to Oxford St
22	Mayo St	Oxford St to Kennedy Park lot
27	Smith St	Cumberland Ave to Oxford St
23	Smith St	Oxford St to Kennedy Park lot
28	Anderson St	Cumberland Ave to Oxford St
19	Anderson St	Oxford St to E Lancaster St

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Total: **298** **On Street Parking Spaces**

within 300' 118 ~~spaces~~ spaces w/in 300'

within 500' 227 spaces within 500'

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DRAWINGS