

1. Legal Ad

Documents: [PB LGL AD 9-23-14.PDF](#)

2. Agenda

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3. 76 Congress Street

3.I. Congress St. - 76 (Applicants Submittal)

Documents: [ST. LAWRENCE ST. - 76 \(APPLICANTS SUBMITTAL\).PDF](#)

3.II. Congress St. - 76 (Memo)

Documents: [ST. LAWRENCE ST. - 76 \(MEMO\).PDF](#)

3.III. Congress St. - 76 (Plans)

Documents: [ST. LAWRENCE ST. - 76 \(PLANS\).PDF](#)

3.IV. Congress St. - 76 (Public Comment)

Documents: [ST. LAWRENCE ST. - 76 \(PUBLIC COMMENT\).PDF](#)

3.V. Congress St. - 76 (Report Attach.)

Documents: [ST. LAWRENCE ST. - 76 \(REPORT ATTACH.\).PDF](#)

4. 145 Washington Avenue

4.I. Washington Ave. - 145 (Memo)

Documents: [WASHINGTON AVE. - 145 \(MEMO\).PDF](#)

4.II. Washington Ave. - 145 (Attachments)

Documents: [WASHINGTON AVE. - 145 \(ATTACHMENTS\).PDF](#)

5. 89 Anderson Street

5.I. Anderson St. - 89 (PB Memo)

Documents: [ANDERSON ST. - 89 \(PB MEMO\) .PDF](#)

5.II. Anderson St. - 89 (Staff Attachments)

Documents: [ANDERSON ST. - 89 \(STAFF ATTACHMENTS\).PDF](#)

5.III. Anderson St. - 89 (Public Comments)

Documents: [ANDERSON ST. - 89 \(PUBLIC COMMENTS\).PDF](#)

**LEGAL ADVERTISEMENT
PORTLAND PLANNING BOARD MEETING**

The Portland Planning Board will hold a meeting on September 23, 2014, City Council Chambers, 2nd Floor, City Hall, 389 Congress Street. **Public comments will be taken at both the workshop and public hearing.**

The agenda includes the following items:

Workshop – 4:30 p.m.

- i. Amended Conditional Rezoning Agreement; 76 St. Lawrence Street; St. Lawrence Arts Center, Applicant. The Planning Board will consider proposed amendments to a conditional zoning agreement for the St. Lawrence Arts Center, including a proposed Transportation Demand Management Plan. The amendments have been proposed by the Friends of the St. Lawrence Church to allow an addition to their existing performance arts venue, including a 401 seat theater, lobby area, support spaces, and function rooms, on the site of the former St. Lawrence Church sanctuary.

Workshop Continued– 7:00 p.m.

- i. East Cove Townhomes, 145 Washington Avenue; Map Amendment; Ron Gan (Representing Munjoy Hill Homes), Applicant. The Board will consider a map amendment from Residential R-6 to B-2b or B-1 with text amendments for the property at 143, 145 and 155 Washington Avenue. The site has roughly 20,274 sq. ft. and is currently developed with a garage and auto sales lot. The applicant seeks the map amendment in order to develop a mixed use project with residential and commercial uses.
- ii. 89 Anderson Street; Map Amendment; Redfern Properties, Applicant. The Board will consider a proposal by the applicant to rezone 89 Anderson Street (the site has frontage along Anderson, Fox, and Everett Streets) from the Residential R-6 zone to the B-2b zone or B-1 zone with text amendments. The site is currently developed with a tire and auto service facility. The map amendment is proposed in order to enable a mixed use building at the site with ground floor commercial uses, including a restaurant, and with market-rate apartments on floors 2 through 4.

CITY OF PORTLAND, MAINE
PLANNING BOARD

Stuart G. O'Brien, Chair
Timothy Dean, Vice Chair
Elizabeth Boepple
Sean Dundon
Bill Hall
Carol Morrisette
Jack Soley

AGENDA
PORTLAND PLANNING BOARD

The Portland Planning Board will hold a meeting on September 23, 2014, Council Chambers, 2nd Floor, City Hall, 389 Congress Street. **Public comments will be taken at this meeting.**

There is no public hearing portion of this meeting.

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STUART O'BRIEN, CHAIR - PORTLAND PLANNING BOARD

From: Deirdre Nice <deirdre.nice@stlawrencearts.org>
To: Helen Donaldson <HCD@portlandmaine.gov>
CC: Julia Kirby <julia.kirby@stlawrencearts.org>, David Lloyd <lloyd@archetypepa.com>
Date: 9/2/2014 9:58 AM
Subject: Re: to-do list/plan moving forward

Nell,

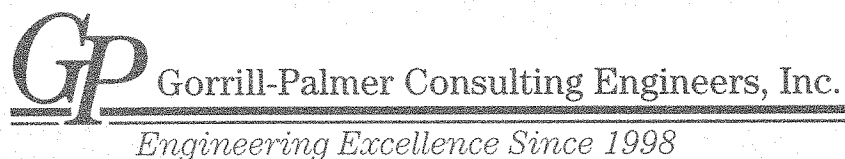
3. Other outstanding comments from staff: There are a couple of relatively minor site plan changes/information requests contained in the planning board memo (e.g. Marge's comments re clarification of uses in Promenade Room, verification of dimensional information, conceptual site plan edits, questions from earlier emails about total footprint & square footage numbers, bike parking numbers).

The primary use of the Promenade Room will be as a lobby for the 401 seat performance hall. Secondary uses will be as a space for SLA and other non-profits to hold events in line with our mission of arts and culture, community and neighborhood and historic preservation. These uses include fundraising, rentals and in house programming of music, theater, film, meetings, corporate and business rentals, and civic activities.

I believe the other questions within #3 have been answered in the TDM and the drawings David has provided. If not, I'll hunt that info down.

Thanks and hope you had a great weekend.

~Deirdre



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August 19, 2014

Deirdre Nice, Executive and Artistic Director
St Lawrence Art Center
76 Congress Street
Portland, ME 04101

Subject: Parking Demand Management Plan
 St. Lawrence Arts Center
 76 Congress Street Portland, Maine

Dear Ms Nice:

Gorrill-Palmer Consulting Engineers, Inc (GP) completed an evaluation of the parking demand anticipated when the capacity at St Lawrence Arts (SLA) on Congress Street in Portland is expanded from 110 to 485 seats and worked with SLA to develop a Parking Demand Management Plan. While maximum seating in the proposed auditorium is 401, there are other rooms that could be occupied at the same time with an additional capacity of 84 people. While this is unlikely, it will be the assumed case in our parking plan. This report takes into consideration the comments and suggestions provided by an outside peer review (Nelson Nygaard Consulting) on the first TDM completed January, 2014, as well as input from City of Portland planning staff. GP and SLA appreciate that the peer review focused on tangible solutions to discourage patrons of SLA from seeking parking primarily on residential streets directly near the building. SLA plans to implement a combination of solutions to successfully mitigate a parking problem for Munjoy Hill residents, and businesses, as well as patrons of SLA.

Estimate of Parking Demand

There are three potential sources to estimate the parking demand for the facility. Each of these sources is discussed below:

Institute of Transportation Engineers

The Institute of Transportation Engineers (ITE) publication, "Parking Generation, 4th Edition" presents parking rates for various land uses based on studies across the country. Land Use 441, Live Theater projects an average parking ratio of 0.38 vehicles per attendee with a range of 0.37 to 0.40 vehicles per attendee based on rural sites with an average of 800 attendees. The information was based on four studies. Since SLA is only projected to have 485 attendees and the trip rate increases with fewer attendees, the rate would likely be closer to 0.40 vehicles per attendee.

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St Lawrence Arts Survey Data

SLA has furnished our office with the results of surveys of attendees to two Friday night shows which started at 7:30 p.m. on October 25, 2013 and December 13, 2013. The results are summarized below:

DATE	ATTENDANCE	SURVEYS COMPLETED	PARKING RATIO	NO. OF VEHICLES
10-25-13	103	103	0.54	56
12-13-13	110	110	0.40	44

It is our understanding that the October show attracted an older crowd and therefore the number of people traveling by car may have been higher than other shows.

Staff Demand- Based on information provided by SLA, an attendance of 485 people will require 10 staff members. Assuming each staff member commutes in their own vehicle results in a need for 10 staff parking spaces.

Parking Observations

A parking study was conducted by Gorrill-Palmer Consulting Engineers, Inc. on October 25th, the same night as the first survey was distributed to attendees. Two counts were conducted, the first was done before the show (5:45 p.m. to 7:00 p.m.) and the second was completed during the show (7:40 p.m. to 9:10 p.m.). Parked vehicles were counted on all surrounding streets within a half-mile radius of SLA. However, vehicles parked in the vicinity of SLA were the main focus. A walking radius was measured from a one minute walk to the St Lawrence Arts Center up to a four minute walk, assuming the average person walks 3 feet per second (180 feet per minute).

The increase in parked vehicles during the show is provided below:

LENGTH OF WALK	WALKING RADIUS	# OF VEHICLES BEFORE SHOW	# OF VEHICLES DURING SHOW	DIFFERENCE (+/-)
1 minute	180 feet	36	45	+ 9
2 minutes	360 feet	129	147	+ 18
3 minutes	540 feet	293	336	+ 43
4 minutes	720 feet	415	490	+ 75
5 minutes	900 feet	544	664	+ 120

Although we might find these results informative and useful, we can't assume the entire difference of vehicles is representing SLA. The Front Room is a local restaurant and bar located across the street from

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SLA, a popular spot on a Friday evening. Venues, like The Front Room, located near SLA can also influence the demand. Based on these considerations, the 56 vehicles based on the survey appear reasonable.

Comparing Estimates

The parking rate of 0.40 based on ITE coincides with the 0.40 ratio determined from the December show but is less than the 0.54 determined from the October show. However, as previously mentioned, the October show attracted an older crowd and therefore the number of people traveling by car may have been higher than other shows. In addition, as a general principal, parking ratio can be expected to decline as the number of seats increases.

Recommendation for Number of Spaces

After consideration of these variations, our office estimates a demand of 218 spaces (0.45 vehicles per attendee) for the site. This recommendation is more than forecast by ITE for a live theater and observed during the December show but less than the 0.54 ratio derived from October show which attracted an older crowd. We recommend an additional 10 spaces be available for employees. Furthermore, employees of SLA will have a designated parking area on the street at a distance of at least 300 feet from the building. Nelson Nygaard's review of the parking demand for a 401-seat Performance Hall in the Munjoy Hill neighborhood estimates that SLA will need to provide 122 parking spaces. Our parking analysis cited a need for 218 parking spaces, which is based on occupancy of 485 people among the three different spaces (Parish Hall Theater, Performance Hall, and the Promenade Room) for one event. It should be noted the typical maximum audience will not exceed 401 people, and many times much less. However, it is the opinion of GP based on these analyses and discussions with SLA that Nelson Nygaard's figure is well below what will be needed. It is our opinion that 218 spaces is more realistic as it is based on statistically significant surveys conducted during sold-out performances of the current 110-seat Parish Hall Theater (10/25/2013 and 12/13/13) operated by SLA. Furthermore, an independent survey of needed parking spaces for the venue conducted by members of the Concerned Citizens of Munjoy Hill (CCMH) complemented the recommended 218 spaces and therefore, we have proceeded drafting the plan based on a need of 218 spaces.

Parking Supply

A count was also done of the total number of occupied parking spaces on each street within a 900 foot radius of the SLA on Tuesday evening, December 10th beginning at midnight. The purpose of the counts was to estimate the number of spaces used by the area residences and most of the parking that late at night should be associated with residences. The results of these parking observations are provided as follows.

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<i>Length of Walk</i>	<i>Walking Radius</i>	<i># of Spaces</i>	<i># Occupied 12:00 midnight Tuesday</i>	<i>Available Spaces</i>
1 minute	180 feet	42	30	12
2 minutes	360 feet	144	107	37
3 minutes	540 feet	345	273	72
4 minutes	720 feet	551	436	115
5 minutes	900 feet	838	659	179

The Cutter Street parking lots located on the Eastern Promenade were vacant during our surveys and have a capacity of 95 vehicles. Results of the Cutter Street parking lots are provided on the following page.

<i>Parking Area</i>	<i># of Available Spaces</i>
Lower Parking Lot	24
Middle Parking Lot	35
Upper Parking Lot	15
On-Street Parking	21
Total:	95

Combining the results of the available on-street parking and Cutter Street lot parking, a total of 274 spaces are available to attendees.

Parking Demand and Supply

As discussed in the "Recommendations for Number of Spaces" section, SLA will typically incur a parking demand of approximately 218 vehicles plus 10 employees during show events. Though these spaces have been identified, SLA plans to encourage patrons to park downtown and travel by public transportation to the facility.

The available parking in the vicinity of the site is as follows:

- 179 on-street automobile parking spaces
- 95 Cutter Street automobile parking spaces

This will provide 274 automobile parking spaces for attendees of each show. The 179 on-street parking spaces are based on a 5 minute walk radius around SLA.

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Transportation Demand Management (TDM)

Purpose of Plan

The City of Portland requires the creation of a Transportation Demand Management Plan for all projects in excess of 50,000 square feet, or with 100 or more employees or students. SLA meets these requirements. However, in the case of this project, the TDM Plan serves a series of important needs:

- Make maximum use of nearby existing transit infrastructure
- Reduce peak hour trip impacts to adjacent roadway infrastructure
- Reduce the amount of needed parking on-site, especially as land is limited
- Encourage healthy activities

It is important to note that this Plan should not be viewed as a series of fixed, or unchanging recommendations. It is a living document intended to be reviewed and updated on a regular basis as SLA works with changes in local transportation patterns, preferences, and prices. Ultimately, the goal will be to make significant reductions in peak hour single-occupancy vehicle (SOV) activity on the local street networks as well as the need for on-site parking.

TDM Coordinator

SLA has designated its Executive Director as the TDM Coordinator, charged with coordinating the TDM plan. The TDM coordinator will be responsible for the following:

- Coordinating and promoting rideshare opportunities
- Coordinating with and promoting Metro
- Monitoring parking usage
- Overseeing event scheduling
- Encouraging the greater use of bicycling, walking, and bus-based transit
- Overseeing ongoing monitoring and updating of the plan
- Filing annual reports with the City

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Single Occupancy Reduction Strategies

METRO Subsidies

SLA is located on Munjoy Hill in Portland on Congress Street. Its location is nearby the following transit services:

- *Metro Route #1, Congress Street:* Portland METRO provides twice an hour service to Munjoy Hill with other major stops including Monument Square and the State Theatre. It also allows access to the Greyhound Bus Station and the Elm Street METRO facility. A limited service combining Routes 1 and 5 is provided on Sundays.
- *Primary User:* Patrons of SLA and Community Members
- *Responsibility:* SLA, METRO

SLA is proposing that the core of its TDM be a partnership with Metro to both extend and enhance the service of the Art Line that travels up and down Congress Street. At present the Art Line runs on a thirty-minute frequency between 7:00 a.m. and 8:00 p.m. with less frequency between 8:00 p.m. and 10:00 p.m. Based on our conversations with SLA, they are mindful of the discussion taking place at the City of Portland on changes to the downtown's Tax Increment Finance (TIF) policy and that peninsula transit improvements are a potential use of this revenue. SLA recognizes that its proposed partnership with Metro and the revenue SLA proposes to bring to the table could be joined with TIF revenue to support a broader and more consequential transit improvement, one that could lead to 15 minute frequency on the Art Line all day and evening. The implications of this plan would not only serve the patrons of SLA, but would also allow residents the opportunity to take advantage of more frequent evening transit service on the peninsula.

With enhanced Metro service, patrons of SLA would be encouraged to utilize downtown parking lots, garages and street parking and use the Art Line to travel up to SLA. The Temple Street and Free Street garages are open until 10:00 p.m. Monday – Saturday and it is our understanding that both have plenty of available parking after 5:00 p.m. Both garages are within one block of stops along the Art Line. The number of parking spaces that these parking facilities provide should exceed the 219 spaces we recommend. Patrons of SLA would have their parking ticket validated for up to three-hours of free parking. It is our understanding that SLA will subsidize and encourage use of this remote parking.

SLA has met with representatives from Metro and it is our understanding that both organizations are highly enthusiastic about a partnership. The Nelson Nygaard review encourages SLA to create a “more specific and targeted PTDM” and part of doing so will be understanding what motivates patrons of SLA to drive and park close to SLA. For this approach to work, SLA and Metro will need to effectively communicate and market the transit option as convenient, affordable, easy, and fun. In particular, the

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marketing effort should promote transit as a key piece of a fun night out that includes both dining and entertainment. In addition to the higher frequency service on the Art Line proposed by this plan, Metro will be rolling out real-time bus arrival information in 2015. This technology will allow riders to get actual bus arrival information through smart phones, text, website and, in some places, message boards at bus shelters.

A financial investment by SLA to the Metro will enhance these kinds of conveniences to Portland's public transportation system. Another key of this partnership is making parking downtown and travelling to and from SLA easy by suggesting patrons park in a specific place (lot or garage) and wait for the Art Line bus at a specific spot to ride up Munjoy Hill to SLA. It is our understanding that SLA and Metro agree that a carefully laid out marketing plan is essential to the success of the TDM as well as making the parking and bus ride part of a ticket surcharge so that patrons do not incur extra charges along the way. Based on discussions with SLA, they have included in their financial projections that each patron will pay a ticket surcharge. Patrons then will show their ticket (paper or smart phone) to the bus driver to receive a free ride to SLA. The Metro will devise a system to ascertain how many SLA patrons used the transit system free of charge and will recoup the cost from SLA.

The cost for Metro to shorten its arrival frequency from 30 minutes to 20 minutes Monday – Saturday and extend this service to 11:00 p.m. is estimated by Metro at \$70,000 annually. Based on our discussions with SLA, this funding will be provided by SLA through its ticket surcharge. Also, by virtue of growing ridership and diversifying the transit system's revenue base, the partnership can make Metro more competitive in obtaining new federal grant funds that can support further transit expansion. In this manner, this partnership is truly strategic in that it can help achieve positive transportation outcomes for the broader community in addition to the specific goal of getting SLA patrons from point A to point B.

Valet Parking

➤ Primary User: Patrons

Gorrill-Palmer agrees with Nelson Nygaard's finding that a superior front-door valet service should be available to patrons who want to arrive at the Performance Hall with their car. SLA is proposing to work with Unified Parking Partners, a full service parking Management Company based in Portland, Maine and servicing all of New England. Their focus is garage, flat lot, healthcare, hotel and restaurant, and event parking management. This service will be available to patrons who wish to pay for exceptionally convenient parking on top of tickets to a concert. Patrons utilizing this service would be charged a minimal fee to cover the cost above the (parking) ticket surcharge as well as giving a tip. Every ticket buyer will pay either at the point of sale or at the door. The cost to bring valet service to SLA for events is \$25/\$30 an hour, which includes an environmentally safe and friendly vehicle shuttle for the valet parking staff. Unified Parking Partners manages several parking lots in Portland and their owner would also utilize the Cutter Street and its two parking lots (95 spaces).

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Bicycle Transportation

Portland is an extremely friendly pedestrian and biking city. SLA will encourage patrons who live within a walking and biking distance to access these TDM friendly modes of transportation. SLA will provide 10 bike racks outside the facility (20 spaces) encouraging patrons and staff members to bike to the Performance Hall. SLA will become a participating business in Bicycle Benefits (www.bicyclebenefits.org), a national program that offers incentives and rewards for patrons who show up to an establishment on a bicycle. Portland, Maine businesses already have strong membership in Bicycle Benefits.

- Primary User: Patrons
- Responsibility: SLA

SLA will also work with the City of Portland's Pedestrian-Bicycle Committee as well as The Bicycle Coalition of Maine, an organization that formed in 1992 to make Maine better for bicycling and promote bicycling in Maine.

Pedestrian Accommodations

Pedestrian connections currently surround the SLA building. Congress Street provides sidewalks on both sides of the street for pedestrians walking from in-town Portland. A majority of side streets provide sidewalks for guests who are walking from local neighborhoods. Crosswalks are also provided to nearby streets including Beckett Street, Munjoy Street, and Howard Street as well as on the Eastern Promenade at Moody and Wilson Streets.

- Primary User: Patrons
- Responsibility: City of Portland

Education for Patrons

As discussed, the SLA will provide route maps, schedules, and ticket information via the website with ticket reservations. Information about the METRO Route 1 and downtown parking will be provided. There will also be announcements before and after the show regarding the bus schedule, including real-time arrivals available in the lobby. It is important that this information also be provided on SLA's website along with a link to the METRO Route 1 webpage. A direct link to the parking information should be at the top of SLA's website, next to "Directions." This link should provide exact directions to parking and bus incentives encouraging attendees to carpool or use the transit system.

- Primary User: Patrons
- Responsibility: SLA

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Free Market Options

Transportation by Cabs and Pedicabs (bicycle cabs), will also be a viable option to patrons of SLA who live in Portland, or patrons who have parked downtown and elect to not use public transportation.

Carpooling

Some patrons will still travel by automobile up to Munjoy Hill and SLA will promote car sharing as an option to reduce the number of cars that travel to the facility for an event. SLA will provide information on its website for Go Maine, which is Maine's statewide commuter service providing access to low-cost, healthy, economical and eco-friendly options for commuting. SLA will promote ride share, a multi-modal, one-time ride share opportunity.

MARKETING

A carefully thought-out marketing plan that provides easily accessible information is the key to implementing a successful TDM for SLA. SLA will create a marketing strategy that complements and works closely with the other area Portland organizations that promote walking, bicycling, and public transit as alternative modes of transportation. SLA will also implement "honor system" strategies such as a button at the end of the online ticket system to check if you are carpooling or travelling by bus/foot/bike with an associated discount. An outline of the marketing plan is presented below:

- SLA will have a "Where to Park" tab clearly posted on its website that outlines instructions on utilizing the Metro system, including what downtown garage to park in and where to wait for the Art Line bus. Instructions on how to use public transportation, walk, and bike will be provided at the top of the page emphasizing it over travelling by automobile.
- SLA will have a travel information kiosk in its lobby
- All ticket holders will receive instructions on parking at the time of purchase.
- SLA's website will include a map of the neighborhood encouraging patrons NOT park within 300 feet of SLA citing the negative impact such congestion will have on residents and neighboring businesses.
- SLA's website will have easy to understand information (and links to Portland Trails and Metro) on how to bike or use transit to get to the Performance Hall. SLA will provide a link to Google Transit walk trip planner.
- SLA will try to establish its Performance Hall as a Green Certified event space, acknowledging that the biggest carbon element to an event is how people travel to and from the property (i.e. encourage people to leave cars behind).

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- SLA will work with Metro to create a catchy and green marketing campaign to target its audience. The marketing campaign will need to be developed, but will generally focus on the following key messages: Using the Art Line to get to SLA is easy, free, fast, green and connects dining and entertainment.

Monitoring

Parking Counts

As part of its TDM Plan monitoring program, SLA will assess the use of its various operational components, starting one month after the opening of the expansion and annually thereafter. As the most critical component of the TDM program will be to reduce parking demand, the first part of each monitoring effort will include a parking count of the surrounding streets before and during an event. This count will include the Cutter Street parking lots on the Eastern Promenade.

Surveys - Employees

One month after the expansion of the facility, SLA employees will be surveyed regarding their transportation choices such as automobile/bicycle ownership, parking demand, and the frequency of trips using bicycle, walking carpool/vanpool, and the bus. The survey will be developed in consultation with the City's TDM manager and conform to overall City TDM modeling planning.

The surveys will be conducted to determine:

- Mode of travel to and from work (car/carpool/biking/walking/bus)
- Preferences or concerns with mode of travel
- An important component of the survey will be to determine the flexibility of employees to utilizing various travel modes to access the facility

Surveys - Attendees

For attendees to SLA, surveys will be either conducted as patrons enter the site in the form of one or two questions from a volunteer, or patrons will be given a survey they can complete and return in exchange for a free gift.

The surveys will be conducted to determine:

- Mode of travel to and from the show (car/carpool/walking/bus)
- Preferences or concerns with model of travel
- Specify as a driver or a passenger

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Submission of Monitoring Information/Updated TDM Plan

Based upon the results of the monitoring, SLA will update the TDM Plan and submit a draft plan to the City's TDM Manager for review and comments. The primary goal of the initial year will be to reduce the parking demand five percent from the calculated demand.

Closure

The TDM plan and SLA's investment in Greater Portland Metro will be a tremendous benefit to the community at large as well as SLA patrons, emphasizing less reliance on automobile traffic, utilization of downtown structures, and investment in an important public infrastructure.

Please contact us with any questions.

Sincerely,

Gorrill-Palmer Consulting Engineers, Inc.



Thomas L Gorrill, P.E., PTOE
Principal



Memorandum

Planning and Urban Development Department

Planning Division

To: Chair O'Brien and Members of the Portland Planning Board
From: Nell Donaldson, Planner
Date: September 18, 2014
Re: Amendments to Conditional Rezoning Agreement, St. Lawrence Arts Center
CBL: 003-L-001
Project No.: 2014-009
Meeting Date: September 23, 2014

I. INTRODUCTION

The Friends of the St. Lawrence Arts Center appears before the Planning Board for a second workshop to review draft amendments to a conditional zoning agreement for their property at 76 Congress Street, formerly the St. Lawrence Congregational Church. The Friends of St. Lawrence previously came before the board in March of 2014. At that meeting, questions from both the public and the board focused largely on concerns with two components of the conditional zoning agreement: first, the style and scale of the proposed building and second, its parking and traffic impacts. In response to those concerns, the board requested that the applicant provide additional design drawings and further develop its preliminary transportation demand management (TDM) plan. The purpose of this workshop is to review those materials. Notice of this workshop appeared in the *Portland Press Herald* on September 15 and 16, 2014 and 285 notices were sent to 258 property owners within 500 feet and interested citizen list.



Figure 1: St. Lawrence Arts Center, zoning context

Applicant: Friends of the St. Lawrence Church

Consultants: David Lloyd, Archetype; Tom Gorrill, Gorrill-Palmer, Inc.

II. REQUIRED REVIEWS

Review	Applicable Statute
Conditional Zoning Agreement	MSRA Section 4352(8) City of Portland Code of Ordinances, Chapter 14, Division 1.5

III. PROJECT DATA

Existing Zoning	R-6 Residential with Conditional Zoning Agreement
Existing Use	Place of Assembly – Community Hall
Proposed Use	Place of Assembly – Community Hall
Parcel Size	10,565 SF (.24 acres)



Figure 2: St. Lawrence Arts Center (existing Parish Hall theater) at present

IV. CONTEXT

The St. Lawrence Arts Center sits on Congress Street in the heart of Munjoy Hill. While the site technically lies in an R-6 Residential zone, it abuts a B-1 Neighborhood Business zone, and lies directly across from an active restaurant use in a B-1b zone (Figure 1). The Rosemont Market and Hilltop Coffee sit on the Congress Street block immediately west. Residential uses surround the site to the north, east, and south. The site lies three blocks from the Eastern Promenade. As a historic

property on the National Register of Historic Places, development on the site is subject to Historic Preservation review.

V. BACKGROUND

The Saint Lawrence Arts Center building was initially comprised of two sections – the Parish Hall and the sanctuary, which were constructed simultaneously in 1897. The building served as a congregational church for almost a hundred years until its closure in 1986. In 2001, the Friends of the St. Lawrence renovated the Parish Hall into a live theater/ auditorium space under the zoning provisions for a community hall; the sanctuary portion of the building, however, was left vacant as the Friends of St. Lawrence sought the means for renovation. Ultimately, the sanctuary fell into disrepair. In 2006, the primary roof trusses partially collapsed; shortly thereafter, the sanctuary was deemed unsalvageable. It was dismantled in 2009, leaving the remainder of the Congress Street frontage of this Munjoy Hill block vacant. The Friends of the St. Lawrence recovered significant architectural features during the demolition with the intent of someday reconstructing the sanctuary building.

In 2010, the Friends of the St. Lawrence approached the city's Planning Division with a proposal to do just that – rebuild the former church sanctuary in much its original form for use as a 402-seat performance venue. The applicant proposed a plan for the sanctuary that included many of the historic details of the old church building, down to the curbing, rose windows, and stone work. In order to rebuild such a structure, the applicant required relief from several provisions of the underlying R-6 zone, including the dimensional requirements, and relief from the city's off-street parking requirements as well. A conditional zoning agreement was drafted and formally adopted in November of 2010.

In the years since the original conditional zoning agreement, however, the reconstruction plans were never realized. Following adoption of the agreement, the applicant embarked on a feasibility study with the intent of determining the extent of possible funding for the reconstruction project. It shortly became clear that the proposed reconstruction of the historic structure was cost prohibitive. Instead, the Friends of the St. Lawrence shifted their vision for the proposed addition, focusing on what has now evolved into a contemporary expansion. In this vein, the applicant applied for amendments to their original conditional zoning agreement in late January of 2014. The fundamental elements of the agreement remain unchanged – the applicant continues to desire to build an addition on the site of the former church sanctuary for the purposes of live theater. However, the original agreement requires modifications in order to allow the proposed addition in its new form.

VI. PROPOSED DEVELOPMENT and DESIGN

Development Program

The new development program remains much the same as in the previous reconstruction plan (*Table 1*). The plans include:

1. A 401-seat auditorium in the new sanctuary space;
2. The renovation of the existing Parish Hall auditorium to increase the seating capacity to 120 and add office spaces and a meeting room;
3. A new lobby to serve both the sanctuary and Parish Hall venues;
4. New support spaces including a catering kitchen, concession area, green room, dressing room, and bathrooms; and
5. A new function room, the Promenade Room, on the upper level.

At the March Planning Board workshop, there was some question regarding the proposed use of the Promenade Room. The applicant has provided documentation that the “primary use of the Promenade Room will be as a lobby for the 401 seat performance hall. Secondary uses will be as space for SLA and other non-profits to hold events in line with our mission of arts and culture, community and neighborhood and historic preservation. These uses include fundraising, rentals and in-house programming of music, theater, film, meetings, corporate and business rentals, and civic activities” (*Attachment A*).

Table 1: Development Program, St. Lawrence Arts Center, Past, Existing, and Proposed

	<i>St. Lawrence Church</i>	<i>Parish Hall Theater</i>	<i>2010 Reconstruction Plan, as proposed</i>	<i>Current Plan, as proposed</i>
<i>Footprint</i>		3,360 SF	Existing parish hall + 5,460 addition = 8,820 SF total	3,360 existing parish hall + 5,715 addition + 710 SF porch addition = 9,785 SF total
<i>Floor Area</i>	24,794 SF	8,714 SF	28,188 SF	14,745 SF (addition only)/23,459 total ¹
<i>Height</i>			53 ft. 1 in. + 89 ft. steeple	54 ft.
<i>Development Program</i>		110 seats	120 seats in Parish Hall 402 seats in sanctuary New lobby New support space (concession, kitchen, green room, workshop) New conference and office space New Promenade Room	120 seats in Parish Hall 401 seats in sanctuary New lobby New support space (green rooms, dressing rooms, bathroom, storage) New conference and office space New Promenade Room (to serve as lobby break area during performances, meeting space at other times)(200 person capacity)
<i>Bike Parking</i>		0	12	20
<i>Off-Street Car Parking</i>	0	0	0	0



Figures 3, 4, and 5: Proposed St. Lawrence Arts Center addition from Congress Street (top), Munjoy Street (middle), and Beckett Street (bottom)

Design

At the March workshop, neighbors expressed significant concerns regarding both the style and the scale of the proposed addition, and the board requested additional renderings and elevations, which have been provided (*Plans 1 - 19*). The major change in design from the original conditional zoning agreement is largely related to the style of the addition's exterior, which the Friends of St. Lawrence has modified to reflect a more contemporary vision. The newest design, shown in *Figures 3-5*, continues to be marked by strong rectilinear elements and geometric forms. While contemporary, the architect has attempted to design the building to reference the lines and materials of the existing Parish Hall. Thus the geometry of the proposed addition generally aligns with elements of the existing Parish Hall façade, and the architect has chosen a material palette which alludes to elements of the Parish Hall as well. The main entrance is oriented towards Congress Street.

Regarding height and scale of the proposed building, it should be noted that the underlying R-6 zone



Figure 6: Elevation showing the current plan transposed against the 2010 reconstruction plans

permits a height of 45' by right. Under the current plan, the bell tower element of the 2010 plans has been eliminated. The height of the addition is proposed at 54'. The applicant's original submittal narrative noted that the "major roof element" of the proposed addition is at approximately 41 feet 4 inches, which is below the maximum allowed by zoning. The Promenade Room, which is set back, stands 54 feet in height. The proposed elevation, set against the 2010 elevation, is shown in *Figure 6*. Renderings showing the proposed addition from Munjoy Street and Beckett Street appear in *Figures 4 and 5*.

Marge Schmuckal, zoning administrator, previously provided comments on the original plans with respect to the dimensional standards outlined in the conditional zoning agreement. The applicant has submitted revised drawings in an effort to address Ms. Schmuckal's comments. Given the timing of the submittal of these drawings, updated comments from Ms. Schmuckal were not available at the time of the writing of this memo. Any final comments will be addressed prior to the public hearing.

Given the historic landmark status of the existing structure, the applicant is required to obtain a certificate of appropriateness from the Historic Preservation Board for the proposed addition. On the advice of staff, the Friends of the St. Lawrence has submitted the most recent drawings to the Historic Preservation Board in order to continue this review process in tandem with the Planning Board review; the next Historic Preservation Board meeting on the design will likely occur in early October. Generally, Deb Andrews, the city's Historic Preservation Manager, has indicated the Board's comfort with the design's evolving direction.

The site plan ordinance exempts projects from design review when the development affects a designated historic landmark or is within a historic district and thus requires a certificate of appropriateness. As noted above, the building design has been presented at several workshops with the Historic Preservation Board and another workshop will be scheduled in October. However, given the design concerns expressed at the first workshop, the fact that the conditional zoning agreement speaks to matters of form, and the fact that the agreement will ultimately include drawings by reference, staff agreed to the utility of a design review on the part of the city's urban designer, Caitlin Cameron. Ms. Cameron has provided the following comments:

Overall Design: *The latest design is successful in breaking up the mass and height needed to accommodate the program in its use of materials and varying forms. The project mitigates its size and mass through the use of two-story stone forms that relate well to the scale of the residential architecture surrounding, especially on the Munjoy Street side of the*

building. The upper Promenade Room is made recessive through the use of storefront glazing and a stepback. The facade is softened by the landscaping and trellis component which has a finer grain and provides shadow lines, articulation, and a human scale. There is a balance of solid and transparency, a mix of materials and textures that add visual interest and make reference to the building's context while at the same time, creating its own modern identity. The project is respectful of its relationship to the Observatory, which should remain the focal point of Munjoy Hill - this project is several blocks away, downhill, and shorter in height, all of which reduce its prominence compared with the Observatory along Congress Street and on the city's skyline.

Materiality: *The use of stone is appropriate for grounding the project but also in its references to the historic St. Lawrence building adjacent. The stone provides a monumentality and is appropriate for a cultural building. The placement of the stone is thoughtful and reflects the scale of the neighborhood and neighboring building without becoming heavy or overpowering. The metal mesh material is unique to Portland and would make the project stand out as a modern and significant cultural destination on the peninsula. Ideally, the mesh material will have qualities of lightness and translucency that will alleviate the solid massing of the building. The mesh provides the potential use of lighting to create visual interest and a sense of liveliness and activity on the street at night. The mesh also affords some flexibility of expression when it comes to pattern and folding which, in the absence of fenestration, can provide visual interest and articulation to the building. The storefront glazing on the tallest form reduces its impact and makes for a pleasant, airy penthouse space. The green walls on the Munjoy Street facade have the potential add a balance rectilinear building and soften the hard edges of the stone and metal materials. These patches of green wall further break up the facade on the residential street and are a good solution for those parts of the facade that cannot accommodate fenestration.*

Tower Element: *As a corner building with a cultural program, the tower element should have dominance to signify the building on the approach and mark the entrance corner. Upon review, we felt the tower element could be emphasized more through the use of several strategies. First, the height of the tower in proportion to the rest of the building was little too low and we recommend that it increase slightly in height - possibly only the corner piece of the metal would be taller. The Promenade Room at 54' is and should remain the tallest mass of the building and the tower does not need to rise as tall as that - we are suggesting a small, incremental height increase. Secondly, emphasis on the tower could be created with folding mesh which will create a play of light and shadow similar to the roof lines of the existing St. Lawrence building and will also reflect the material qualities of the mesh facade. Third, the use of lights behind the mesh on the tower could emphasize the corner at night. The reviewers all liked the placement of the signage within the tower. Finally, the stone base of the tower should be differentiated more from the mesh portion of the tower - some options discussed included a rusticated belt course or by the stepping back of the mesh portion from the stone base.*

VII. TRANSPORTATION DEMAND MANAGEMENT PLAN

The proposed amended conditional zoning agreement incorporates a transportation demand management plan by reference. Following the March workshop, the city contracted with a TDM specialist, Nelson-Nygaard Consulting Associates, to review the applicant's TDM plan, prepared by Gorrill-Palmer Consulting Engineers, in detail. The objective of this review was to gain a sense of the viability of the SLAC's proposed TDM strategies and develop additional TDM concepts, informed by a national perspective, which might work in this context.

Nelson-Nygaard first reviewed the SLAC's original TDM plan, providing a memo with comments and recommendations in late April (*Attachment 2*). In response, the St. Lawrence revised their plan, developing a second iteration in early July. Nelson-Nygaard once again reviewed the revised plan, issuing additional comments in early August (*Attachment 3*). A third iteration of the TDM plan was developed by the St. Lawrence later that month (*Attachment B*). This is the iteration presented to the board for review here.

Parking Demand & Supply Estimates

The TDM plan continues to include a parking analysis which calculates parking demand based on a ratio developed from survey data gathered during a sample of two St. Lawrence shows and validated with observed parking counts and national best practice. The rate used, .45 vehicles/attendee, is more than forecasted by the Institute for Traffic Engineers (ITE) for a "live theater" and falls between the ratios derived from the two shows' survey data. Using this rate, the analysis calculates a demand under the peak proposed condition (e.g. a 485 attendee occupancy) of 218 spaces for visitors. When added to a presumed 10 parking spaces for employees, a total peak parking demand of 228 spaces results. Nelson-Nygaard has noted that the parking demand ratio used may in fact be high; based on figures from ITE, they suggest an alternative estimate of 122 parking spaces demanded (*Attachment 3*). Realizing the depth of neighborhood concerns, the St. Lawrence has not modified this parking demand estimate. As Nelson-Nygaard noted in their August comments, this should be stated in the monitoring provisions of the TDM plan in order to avoid a 'false positive' when reviewing the TDM plan's efficacy.

The plan also continues to include data regarding parking supply in the area surrounding the St. Lawrence Arts Center. The plan relies on a parking count from a typical weekday night (i.e. a night without a show) at midnight, when the cars on the street are likely to represent those of neighborhood residents, rather than visitors. This count showed 179 available on-street spaces within a five minute walk (900 feet) of the St. Lawrence Arts Center. The parking count also found a capacity of 95 off-street spaces at the Cutter Street parking lots on the Eastern Promenade. Assuming the use of the Cutter Street lots and all available on-street parking spaces, the parking study calculates a total parking supply, then, of 274 spaces, exceeding the peak demand.

It should be noted that neighbors have repeatedly raised concerns regarding the TDM plan's parking calculations, particularly with respect to parking supply. Residents of the surrounding area have noted that parking capacity is diminished during winter conditions and that the Cutter Street lots are often occupied at night during good weather months. They have also noted the potential for additional cars associated with performers at the venue, who were not included in the parking demand calculations.

Transportation Demand Management Strategies

Regardless of the adequacy of the on- and off-street parking supply surrounding the St. Lawrence Arts Center, the Saint Lawrence has stated in their TDM plan that they understand the necessity of robust transportation demand management program in order to reduce impacts to neighbors, mitigate negative impacts to the city's existing transportation infrastructure, and encourage healthier living more broadly (*Attachment B*). The current TDM plan includes a number of mechanisms designed to minimize the use of single-occupancy vehicles and thus reduce parking needs. Many of these strategies are a direct response to recommendations made by Nelson-Nygaard in their April memo, which encouraged subsidized remote parking, subsidized transit, valet parking, bicycle and pedestrian enhancements, and a strong marketing and education campaign as core elements of a successful transportation demand program (*Attachment NN*). In response to these recommendations, the St. Lawrence proposes the following:

- *METRO subsidies*: The central strategy of the revised TDM plan is a \$70,000 annual subsidy to METRO to improve its Route #1 service, both in terms of headways and in terms of extended hours. Assuming this subsidy, METRO has indicated that arrival frequencies could be shortened from 30 minutes to 20 minutes and that this regular service could be extended to 11 p.m. Monday through Saturday. The St. Lawrence has argued that this expansion of service will not only effectively serve their patrons but the greater neighborhood as well, and in this, reduce baseline parking demand. It

should be noted that METRO's #1 does not currently provide front door service to the St. Lawrence. The TDM plan should note the potential for route modifications, should they exist.

- *Remote parking and transit incentives:* The St. Lawrence proposes to offer St. Lawrence patrons free remote parking for up to three hours in several downtown garages and rides on the METRO's Route #1 both to and from the arts center. It should be noted that the current TDM plan refers to free rides on METRO. The applicant contacted staff on September 18 with some modification to the TDM plan related to this component of the METRO agreement. St. Lawrence has stated that the \$70,000 METRO contribution will include rides and thus the language from the TDM plan related to reimbursement from the St. Lawrence is unnecessary. Staff is recommending that the St. Lawrence provide some documentation of correspondence with METRO regarding the basic terms of an arrangement, including clarification regarding whether the \$70,000 will include free rides for patrons of the SLAC.
- *Valet parking:* The TDM plan also includes front-door valet service at a minimal fee to patrons. The valet would use off-site lots, such as the Cutter Street lots, in order to store vehicles during an event.
- *Free market options:* The TDM plan notes the existence of other mode choices, such as cabs and pedicabs, which will be available to patrons.
- *Bicycle parking:* The St. Lawrence also proposes to encourage bicycling by providing 10 racks (or 20 spaces) in front of the building on Congress Street and becoming a Bicycle Benefits partner.

In addition to the above, the St. Lawrence proposes a number of programmatic elements around education and marketing both at the facility and online. The TDM plan states that the St. Lawrence will provide information regarding these alternative mode choices on their website, at the point of purchase, and at a kiosk on site. The plan also includes a marketing campaign, to be developed in concert with METRO, to encourage use of the remote parking and METRO's Route #1.

Lastly, the plan also includes the designation of a TDM coordinator and provisions for long-term monitoring. Monitoring is proposed to begin one month following opening of the St. Lawrence addition, with annual monitoring thereafter. The Friends of St. Lawrence would monitor mode choice and parking supply through employee and attendee surveys as well as parking counts before and during events. The findings of the monitoring would be provided to the city in the form of an update to the TDM plan, with the initial goal of reducing parking demand by 5%. This would occur annually, as needed. As noted above, the monitoring should include a mechanism to verify actual parking demand numbers, so that progress can be accurately determined. The monitoring should also include metrics related to mode choice. It should be noted that neighbors have raised questions with regard to this monitoring arrangement, arguing that TDM monitoring should be conducted by a third party entity and not St. Lawrence staff, as proposed.

There are recommendations from Nelson-Nygaard's April and August memos which have not been incorporated in this version of the TDM plan. These include recommendations related to investigating the potential for a modified METRO Route #8 service, a greater valet service investment, further marketing of pedicabs and other mode choices, wayfinding and pedestrian infrastructure investments, and additional marketing through entertainment partnering (*Attachment NN*). However, city staff is satisfied that the TDM plan, as outlined above, is sufficiently developed to be incorporated by reference into the conditional zoning agreement. It is understood that further modification could and would occur at the time of site plan review, with further revisions possible under the monitoring arrangement thereafter. It is important to note that the Planning Board would review the TDM plan again at the time of site plan review; the Planning Authority, and the city's TDM coordinator, would review any changes to the plan as a result of annual monitoring.

VIII. SITE PLAN

The conditional zoning agreement also incorporates a site plan by reference (*Figure 7 and Plan 1*). The agreement language requires that, ultimately, the property be developed "substantially in accordance" with this plan. The site plan includes a number of site improvements, including street trees, brick sidewalks, crosswalks, and bike racks, associated with the language of the conditional zoning agreement. Some

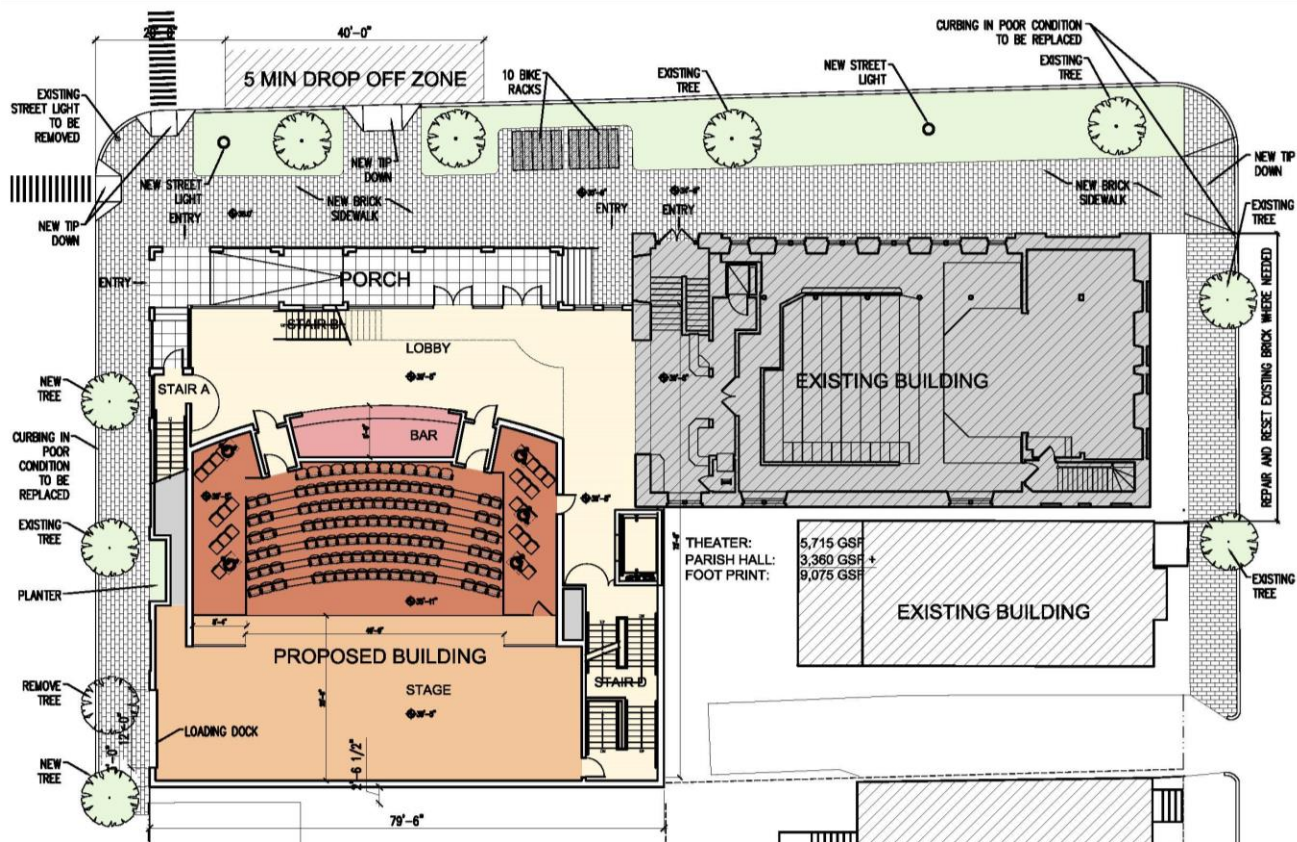


Figure 7: St. Lawrence Arts Center addition, conceptual site plan

modifications to the on-street parking schedule are implied. As with the original reconstruction plans, no off-street parking is proposed.

At the March workshop, staff had conducted a preliminary review of the conceptual site plan and recommended some minor modifications. In response, the applicant provided a revised site plan, which appears in Figure 7. The following details remain to be refined prior to a board hearing:

- Notes regarding the repairing and resetting of the Beckett Street sidewalk should be modified to reflect the language of the conditional zoning agreement, depicting a new brick sidewalk;
- Sidewalk ramps and crosswalks meeting the city’s technical standards should be depicted at Congress Street and Beckett Street, with notes in accordance with the draft conditional zoning agreement; and
- The crosswalk at Munjoy Street and Congress Street should be revised to show the landing on the opposite side of Congress Street.

In addition, the applicant should provide additional details regarding proposed arrangements for loading from Munjoy Street.

IX. CONDITIONAL REZONING AGREEMENT AMENDMENTS

In most terms, the conditional zoning agreement as currently proposed by the Friends of St. Lawrence contains very few amendments. There are, however, some basic changes proposed to the language of the agreement, which were previously reviewed at the workshop in March. In keeping with the design changes, the agreement now includes references to a “new structure which will respect the character-defining features of the historic property” (*Attachment C*). The revised language also more explicitly states the functions to be housed in the proposed addition, including “a performance arts hall on the site of the former sanctuary to provide a full basement for ‘back of house’ green rooms, ADA toilets and storage, a lobby that serves both the auditorium and theater space, a top floor ‘promenade room’/additional lobby, and a new four hundred and one (401) seat auditorium.”

As with the 2010 reconstruction proposal, the new plans do not conform with most of the dimensional standards of the underlying R-6 zone, and as such, modifications to these standards are necessary in the conditional zoning agreement (*Table 2*). The revised agreement increases the allowable lot coverage to 95% (up from 90%) to account for a larger footprint. The amendments likewise reduce the allowable height to 54 feet (from 65 ft.).

City staff has also made some edits in the time since the March workshop (*Attachment C*). These include:

Occupancy restriction: The agreement continues to include an occupancy restriction limiting the maximum number of attendees at any single event in the St. Lawrence Arts facility to 485 persons. The occupancy clause restricts the Parish Hall theater to 120 persons, the sanctuary auditorium to 401 persons (representing a slight decrease from 405 in the original agreement), and prevents separate audience events from being held in the Parish Hall and sanctuary auditorium at the same time. The provision, it should be noted, does allow simultaneous events to occur in the Promenade Room and either the Parish Hall or sanctuary. It also allows one event to occur in all three spaces, again provided that such an event is limited to 485 attendees total. Responding to the concerns of neighbors, Corporation Counsel has added language which explicitly states that “under no circumstances may more than 485 attendees of any single event or combination of events be present on the Property at the same time.”

Table 2: Conditional Zoning Agreement Amendments, Comparison to Original CZA and R-6 Zone

	R-6	2010 CZA	CZA Amendments
<i>Use</i>	Places of assembly conditional use	Notwithstanding section 14-137(b)(6)(e)(i), the use shall be a place of assembly/community hall	No change
<i>Min. Lot Size¹</i>	Large (unlim.) - 30 KSF Medium (<4,500 SF) – 15 KSF Small (<2,250 SF) - 7,500 SF	10,500 SF	No change
<i>Min. Front yard</i>	10 feet	0 ft.	No change
<i>Min. Rear Yard</i>	20 ft. (for structures >100SF)	0 ft.	No change
<i>Min. Side Yard</i>	10 – 15 ft. (based on height)		No change
<i>Min. Side Yard on Side St.</i>	10 ft.	0 ft.	No change
<i>Max. Lot Coverage</i>	40% (> 20 units) 50% (< 20 units)	90%	95%
<i>Max. Tower Height</i>	45 ft. (max structure height)	90 ft.	N/A
<i>Max. Sanctuary Structure Height</i>	45 ft. (max structure height)	65 ft.	54 ft.
<i>Open Space Ratio</i>	20%	0%	No change
<i>Min. Lot Width</i>	40 ft.	50 ft	No change
<i>Off-Street Parking Requirement²</i>	1/125 SF of building area used for assembly purposes; no additional required for structures subject to HP ordinance	Requirement of TDM plan shall supersede any and all parking requirements of the land use code	No change

¹ For places of assembly on a collector or arterial road. (Maximum Floor Area)

² The off-street parking requirement for places of assembly in Division 20 of the city’s land use ordinance is 1 space/125 SF used for assembly purposes. Division 20 includes an exception for historic structures subject to the Historic Preservation ordinance (*Section 14-332.2*).

- Pedestrian connections: On the advice of the city's consulting traffic engineer, the city has suggested changes to the language relating to pedestrian connections and sidewalk ramps. Originally, the conditional zoning agreement referenced sidewalks and ramps at Congress Street, Moody Street, and Eastern Promenade, assuming that the applicant would use parking lots on the Eastern Promenade as part of their TDM plan. These plans have changed, and as such, so has the proposed language of the agreement. Staff has added language requiring that the applicant "install any remaining crosswalks and ADA-compliant sidewalk ramps meeting City technical standards at the intersections of Congress Street and Beckett Street or Howard Street and Congress Street and Munjoy Street" instead.
- TDM plan: Staff has also added language to the portion of the agreement which speaks to the TDM plan with the intent of outlining a process for managing the St. Lawrence's annual contribution to METRO. The language states that the TDM plan will include the annual \$70,000 contribution, that that contribution will be made to the city's Sustainable Transportation Fund and designated for improvements to METRO's #1 line, and that, following monitoring, that contribution may be redesignated toward other strategies which may be deemed more effective in meeting the goals of the TDM plan. Staff has also added language relating to the review of future changes to the TDM plan.

The amendments also change the procedure for reporting parking and traffic complaints. In the adopted agreement, the language requires the property owner to institute a review process upon hearing five or more complaints regarding parking or traffic. The revised language modifies this arrangement slightly such that, if any complaints are received within a one-year timeframe, those will be reported to the Planning Division as part of an annual transportation demand management (TDM) review. It should be noted that this review process is institutionalized in the proposed TDM program, where monitoring is planned one month after opening and thereafter on an annual basis.

XI. PUBLIC COMMENT

The Planning Division has received a number of written comments regarding the project (*Public Comment PC-1-6*), which have been incorporated where relevant above. In summary, these comments generally focus on concerns regarding the proposed TDM program, particularly how successful it will be in generating the mode shift needed to mitigate parking demand, how its elements will function interdependently, and how it will be monitored; the size of the proposed facility and its implications; the lack of parking supply; and the need for a residential parking permit program for Munjoy Hill. Staff also continues to receive comments on the size of the proposed building.

It should be noted that, prior to the March workshop, there were also significant public comments regarding the project, including the submission of a petition by the Concerned Citizens of Munjoy Hill. A number of these public comments were positive and expressed support for the conditional zoning agreement. The petition, and many of the negative comments, expressed concerns regarding design, capacity, and parking. In sum, these include:

- Scale and Massing: Members of the public have raised concerns regarding the dimensional standards represented in the contract zone language, questioning the height and massing of the building in particular. Residents have stated that they consider the building out of scale with its surroundings and have expressed concerns about shadow impacts. Some residents have also stated that they find the architecture of the addition inconsistent with both the existing Parish Hall and the neighborhood.
- Capacity: Members of the public have also raised concerns regarding the content of the conditional zoning agreement as it relates to capacity figures. These questions have focused mainly on the clause which limits the combined occupancy to 485 people. As noted above, this clause is designed to preclude events from occurring in the Parish Hall and sanctuary auditoriums at the same time, but to allow events to occur in the Promenade Room at the same time as an event in either of the auditorium facilities and to allow a single event using all three spaces so long as it does not exceed 485 attendees. Neighbors have questioned the clarity of the agreement language with respect to this occupancy limit, and have further questioned the ability of the city to enforce such a limit. In response, the city has

- suggested an additional amendment to this clause. Related to this concern, some residents have also expressed a desire to “scale down” the proposed development to simply reflect a venue of smaller size.
- **Parking Supply:** The Planning Division has also fielded numerous concerns regarding the adequacy of the on-street parking supply. At a fundamental level, some residents have raised questions about the parking study methodology, calling into question the validity of the parking counts. Neighbors have repeatedly stated that insufficient on-street parking supply currently exists and have questioned the capacity of the on-street network to absorb more vehicles, particularly during winter conditions. Related to these concerns, neighbors have expressed fears regarding traffic safety and congestion resulting from visitors searching for on-street parking. It should be noted that other residents have suggested possible solutions to the parking supply concern, such as building a garage on Munjoy Hill or instituting a residential parking permit program. Others have stated that they see no parking problem under the proposed plans. Residents have also requested information as to the likely frequency of shows, implying that, if infrequent, some parking congestion might be deemed manageable.
 - **TDM Plan:** Lastly, there have been a variety of comments on the TDM plan itself, arguing that it is unlikely to be effective. At a fundamental level, neighbors have voiced doubts that the proposed strategies will ultimately promote significant changes in travel behavior. Neighbors have also noted the complexity of the plan and expressed concerns regarding its efficacy should any one component not come to fruition.

XII. REGULATORY CONSIDERATIONS

Consideration of the request for conditional rezoning is guided by both state statute and the city’s land use ordinance. The state statute (Title 30-A Section 4352(8)) requires that all conditional or contract zoning must:

- *Be consistent with the growth management program [adopted by state statute];*
- *Establish rezoned areas that are consistent with the existing and permitted uses within the original zones; and*
- *Only include conditions and restrictions that relate to the physical development or operation of the property.*

The city’s ordinance (Section 14-60) further states:

Pursuant to 30-A M.R.S.A. Section 4503(9), conditional or contract zoning is hereby authorized for rezoning of property where, for reasons such as the unusual nature or unique location of the development proposed, the city council finds it necessary or appropriate to impose, by agreement with the property owner or otherwise, certain conditions or restrictions in order to ensure that the rezoning is consistent with the city’s comprehensive plan. Conditional or contract zoning shall be limited to where a rezoning is requested by the owner of the property to be rezoned. Nothing in this division shall authorize either an agreement to change or retain a zone or a rezoning which is inconsistent with the city’s comprehensive plan.

The applicant has previously provided narrative elements relating to this regulatory framework (*Attachment D*), making the argument that the conditional zoning agreement as amended is necessary and appropriate in this instance, is consistent with the city’s comprehensive plan, and that it establishes rezoned areas consistent with the uses of the underlying zone. A summary of the applicant’s arguments follows:

A. Necessity of Conditional Zoning Agreement

The applicant has essentially argued in their narrative that unique conditions exist which make the conditional zoning agreement as amended necessary. Most explicitly, they link the conditional zoning agreement directly to the long-term viability of the historic landmark structure on site, stating that the agreement is needed to allow modifications in the R-6 dimensional standards in order to permit an expansion of the scale required to provide long-term financial sustainability for the St. Lawrence Arts Center, including the funding to maintain the historic Parish Hall. The narrative states, “to be a responsible steward, SLA needs to find a way to obtain funds to properly maintain this distinctive 19th

century stone structure [the Parish Hall]... The Parish Hall Theater does not have the capacity to generate significantly more revenue by itself; the potential of the currently vacant part of the site needs to be harnessed... The stream of revenue from the new performance hall will enable SLA to cover operating expenses and to generate the additional funds which are necessary to maintain the landmark Parish Hall” (*Attachment D*).

B. Consistency with the Comprehensive Plan

Likewise, the applicant has made the case that the conditional zoning agreement is consistent with the comprehensive plan. In their narrative, the applicant writes, “the link between the Comprehensive Plan goals and policies to be advanced by this proposal are squarely on target and beyond question in the areas of arts and culture, neighborhood and sustainable development, and historic preservation” (*Attachment D*). The narrative cites numerous goals from the city’s comprehensive plan related to these domains, relying heavily on the city’s *Celebrating Community: A Cultural Plan for Portland, Maine* (1998), *Downtown Vision* (1991), *Plan for Portland’s Arts District* (1995), *Housing: Sustaining Portland’s Future* (2002), *Community Commercial Policies and Land Use Plan* (1988), and the Historic Preservation ordinance.

These goals include explicit references to creating “a citywide approach where both neighborhoods and the Arts District are venues for heritage, performing, visual, and public art projects;” promoting and enhancing “the cultural community by retaining and encouraging arts and cultural organizations,” and supporting “the cultural community by retaining and expanding performance and exhibition space, housing, studio space, and office/support space for artists, institutions, and organizations.” The applicant also cites the 2006 Creative Economy Summit, through which an explicit priority was placed on developing “publicly supported and/or affordable public space for artists,” with an action item related to “[f]inishing St. Lawrence Arts.”

C. Consistency with Underlying Uses

Lastly, the Friends of St. Lawrence Arts has argued that the conditional zoning agreement establishes areas which are consistent with the uses of the underlying zone. The applicant’s narrative states that the proposed use qualifies as a “community hall,” as a building or portion of a building built for institutional use and occupied for “social, recreational, artistic, civic, or educational community functions” (*Section 14-47*). The language of the conditional zoning agreement refers to the use of the property as such. The applicant actually argues in their narrative that the addition meets the conditional use standards for a community hall under *Section 14-137(b)e*, contending that portions of the structure were in existence and operating as a community hall as of January 4, 2010, the original structure was built for institutional purposes, the structure is operated by a non-profit entity, and that the TDM plan supplied here could apply. It should be noted that the existing conditional zoning agreement language essentially renders the question of the conditional use standards obsolete, given its explicit reference to the use of the property as a community hall “notwithstanding” these conditions.

More generally, while the R-6 zone is essentially residential in nature, the applicant notes that “the zoning ordinance recognizes that a broad range of complementary non-residential uses should be allowed [in the R-6 zone], such as cemeteries, parks, and municipal uses (permitted uses), and schools, intermediate and long-term care facilities, hospitals, colleges, and trade schools, professional offices, and places of assembly...(conditional uses)” (*Attachment D*). Places of assembly, and specifically community halls as a defined type of place of assembly, are listed as conditional uses in the R-6 zone. Further, the narrative states, “there are numerous other churches, places of assembly, and community halls on the peninsula in the R-6 zones.”

XIII. NEXT STEPS

1. Identify and address any outstanding questions or concerns;
2. Schedule next meeting, public hearing or workshop

XIV. ATTACHMENTS

PLANNING BOARD REPORT ATTACHMENTS

1. Urban designer review (memo from Caitlin Cameron, 9/18/14)
2. TDM peer review (memo from Nelson-Nygaard, 4/18/14)
3. TDM peer review (memo from Nelson-Nygaard, 8/13/14)

APPLICANT'S SUBMITTALS

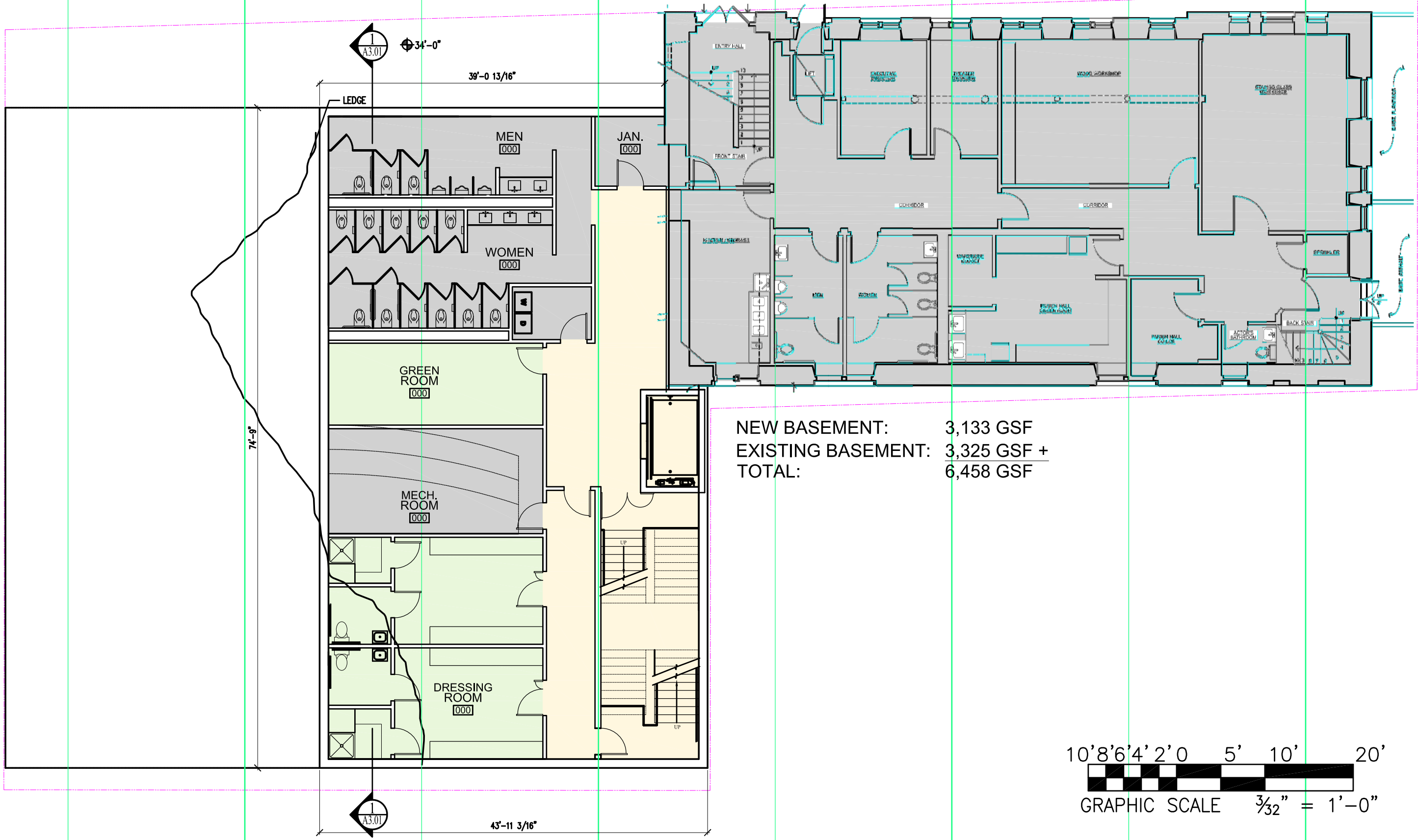
- A. Promenade room uses (memo from Deirdre Nice, 9/2/14)
- B. Parking Demand Management Plan
- C. Conditional Zoning Agreement

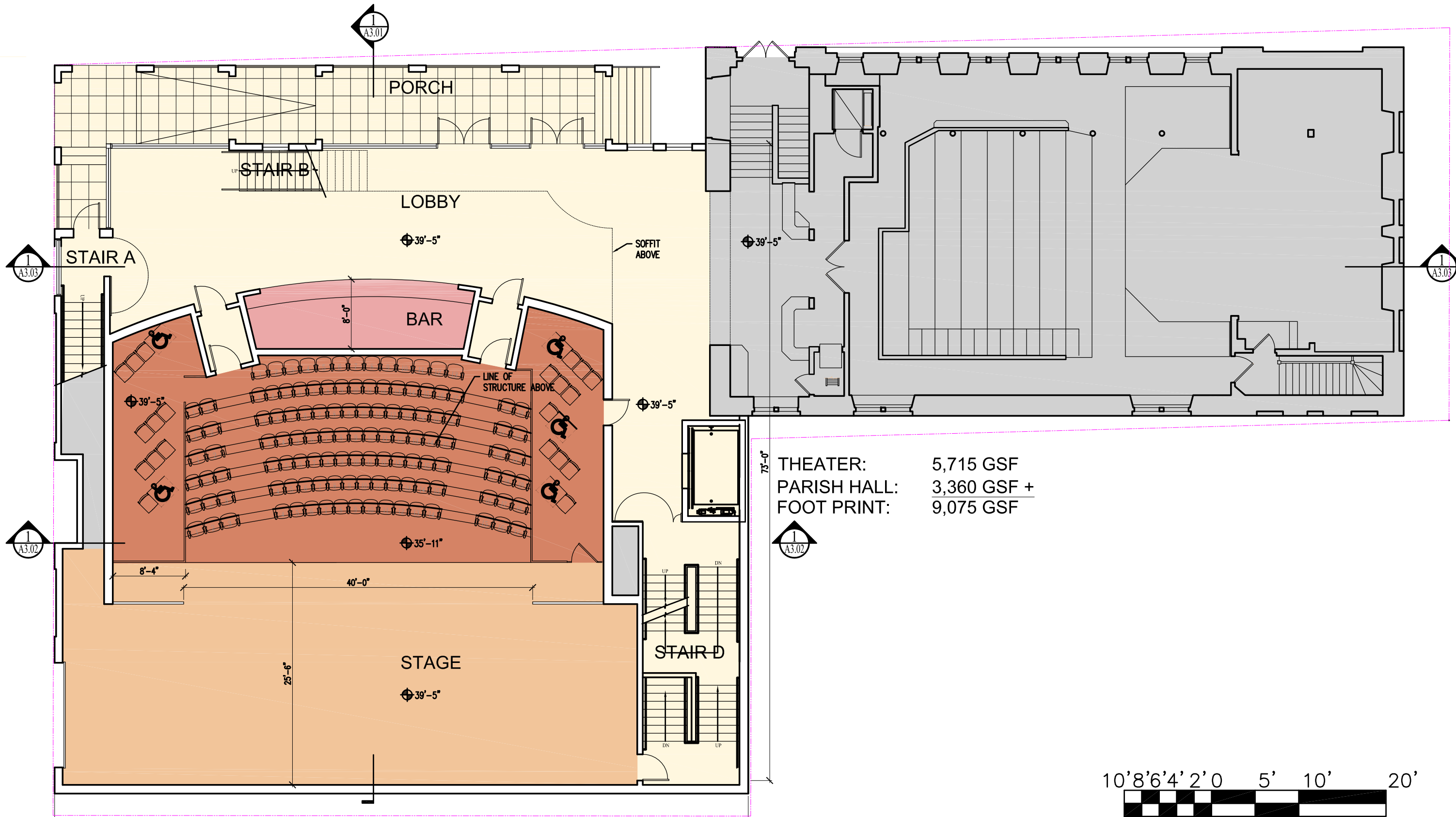
PUBLIC COMMENT

- PC-1. Email from Enoch Wenstrom, 9/16/14
PC-2. Email from Tim Baehr, 9/17/14
PC-3. Email from Ross Fields, 9/18/14
PC-4. Email from Steven Gaal, 9/18/14
PC-5. Email from Ann Landsberg, 9/18/14
PC-6. Email from Ralph Carmona, 9/18/14
PC-7 Letter from Leslie Gibbons, Portland Ballet, June 16, 2014
PC-8 Letter from Aimee M. Petrin, Portland Ovations, July 23, 2014
PC-9 Letter from Lauren Wayne, State Theater, August 6, 2014

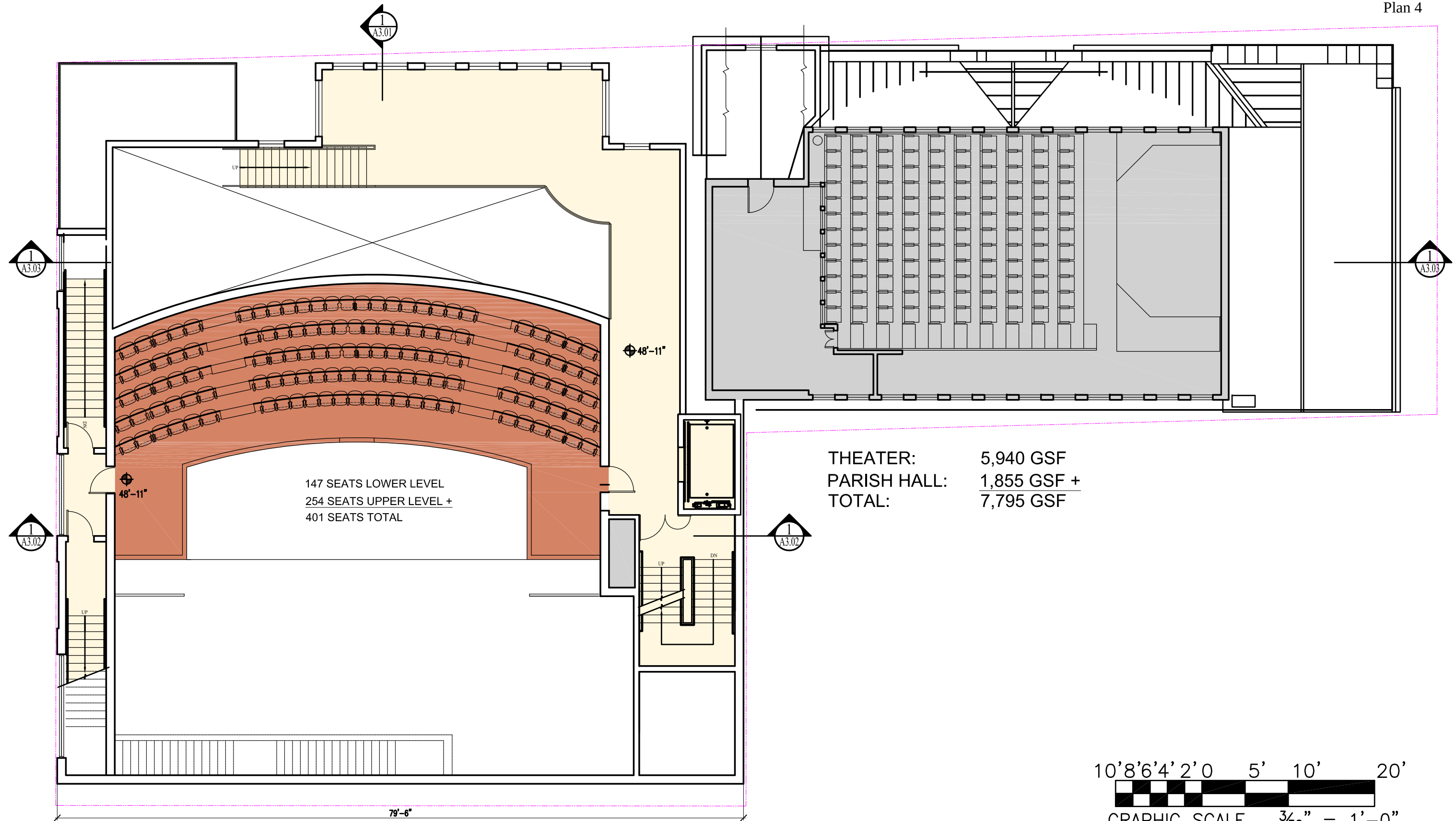
PLANS

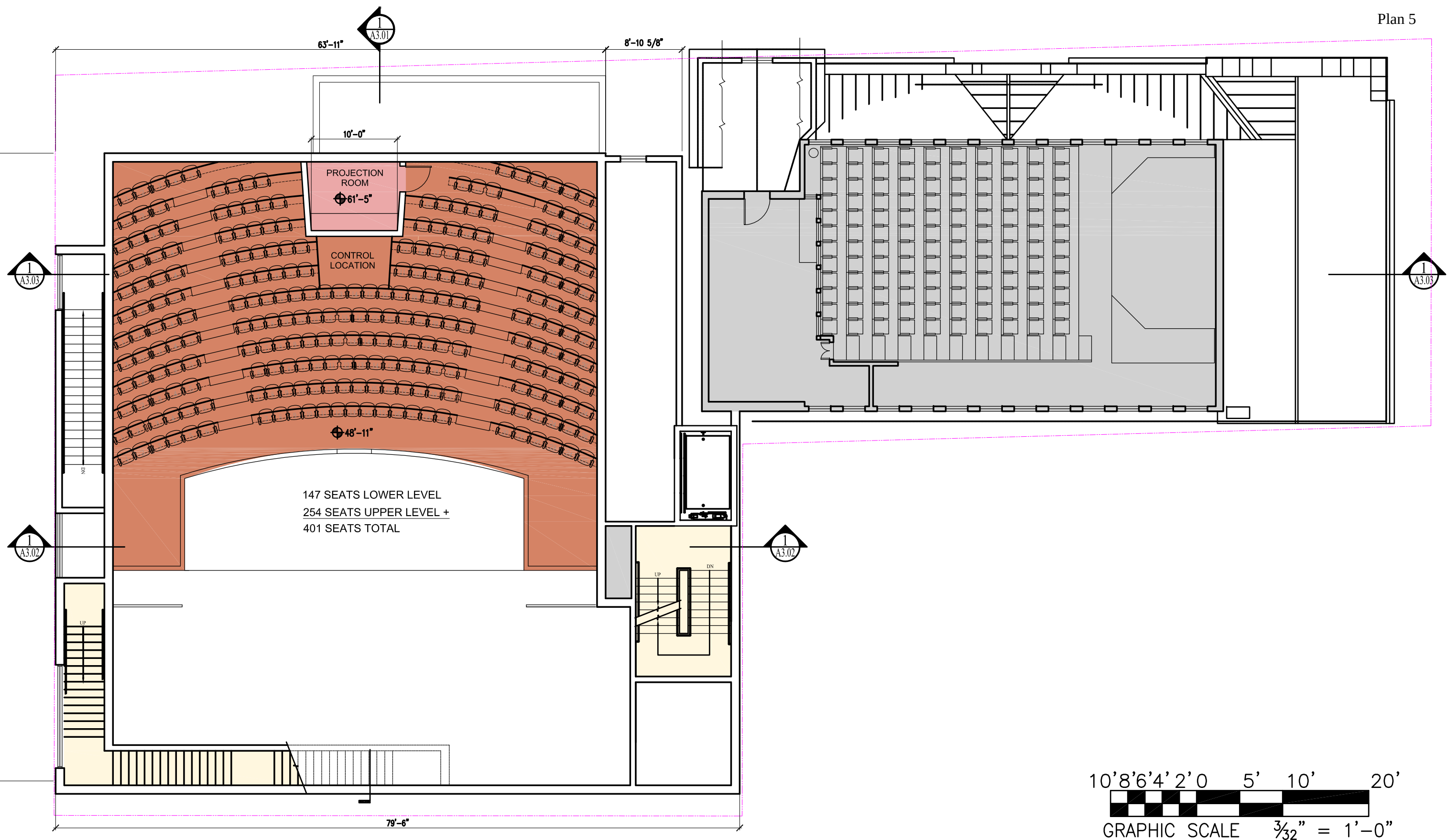
- Plan 1 Site Plan
Plan 2 Basement Plan
Plan 3 First Floor Plan
Plan 4 Upper Theater Level
Plan 5 Upper Theater Level Continued
Plan 6 Promenade Floor Plan
Plan 7 North Elevation
Plan 8 West Elevation
Plan 9 South Elevation
Plan 10 East Elevation
Plan 11 Building Section
Plan 12 Northeast Rendering
Plan 13 Looking East up Congress Street
Plan 14 Looking West up Congress Street
Plan 15 Munjoy Street View
Plan 16 Beckett Street View
Plan 17 Massing Diagram – Former Approved Scheme
Plan 18 Overlay Diagram – Proposed v. Former Scheme
Plan 19 Street View

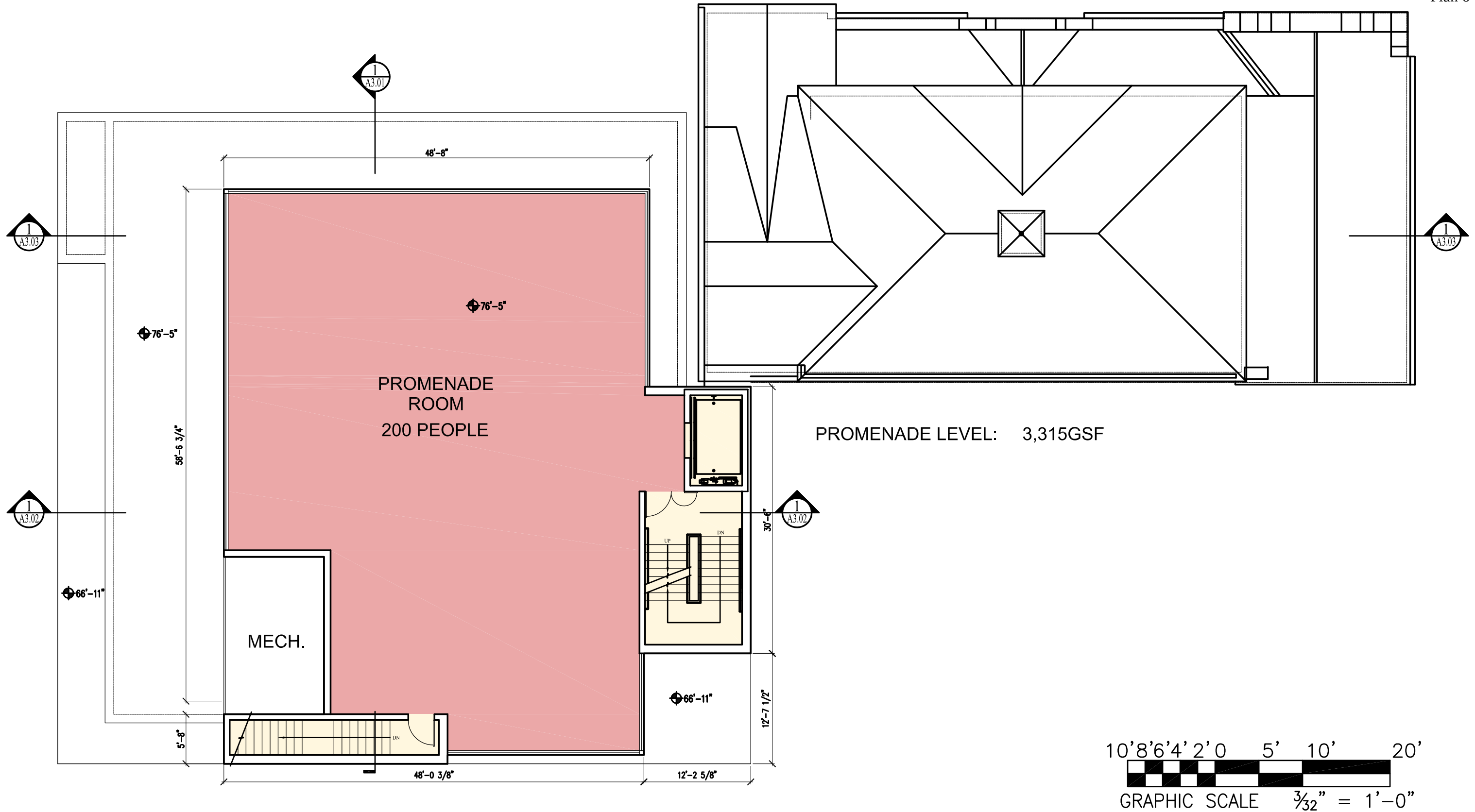




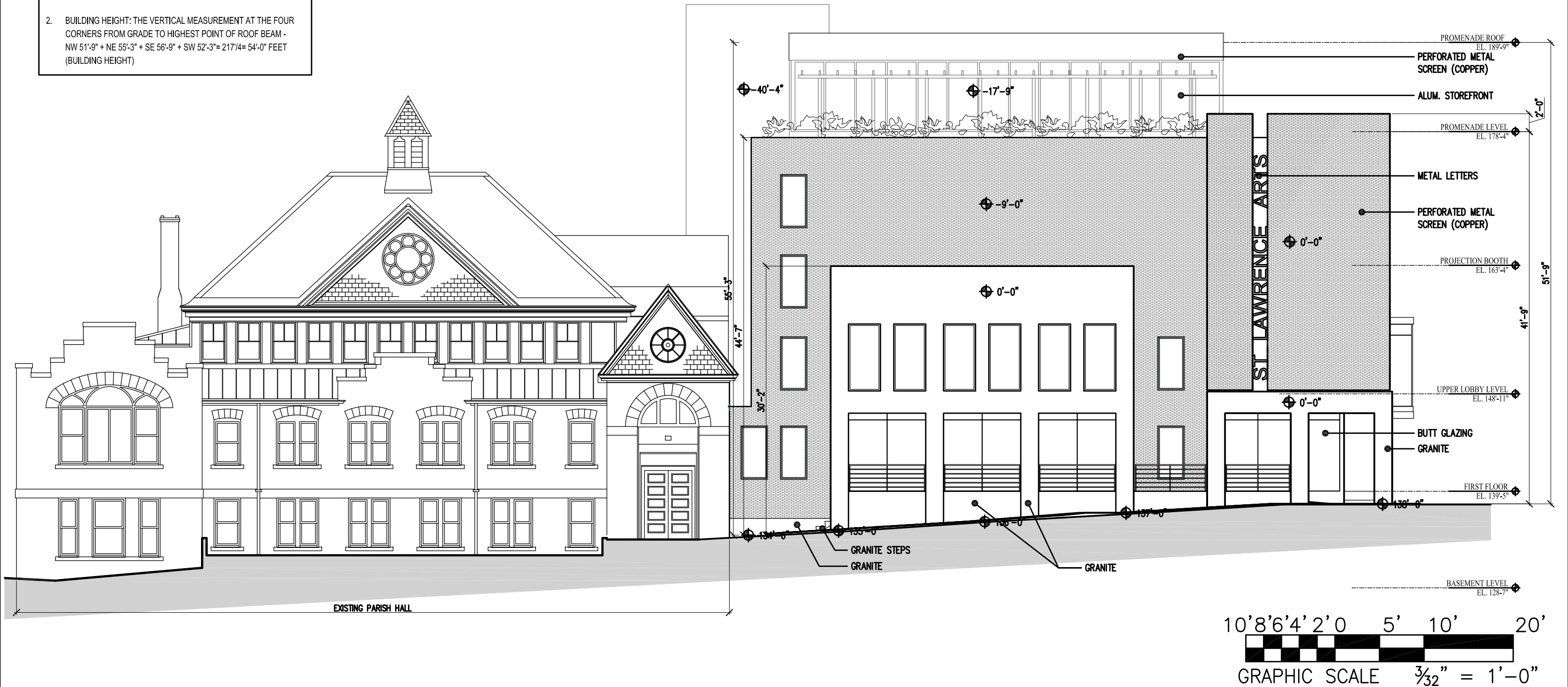
THEATER: 5,715 GSF
PARISH HALL: 3,360 GSF +
FOOT PRINT: 9,075 GSF

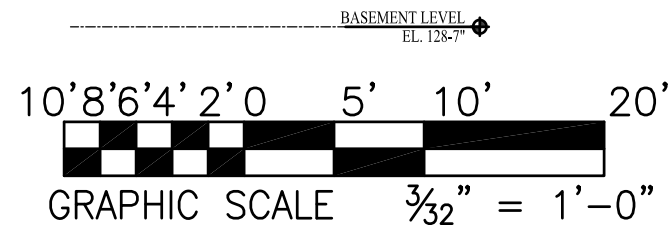
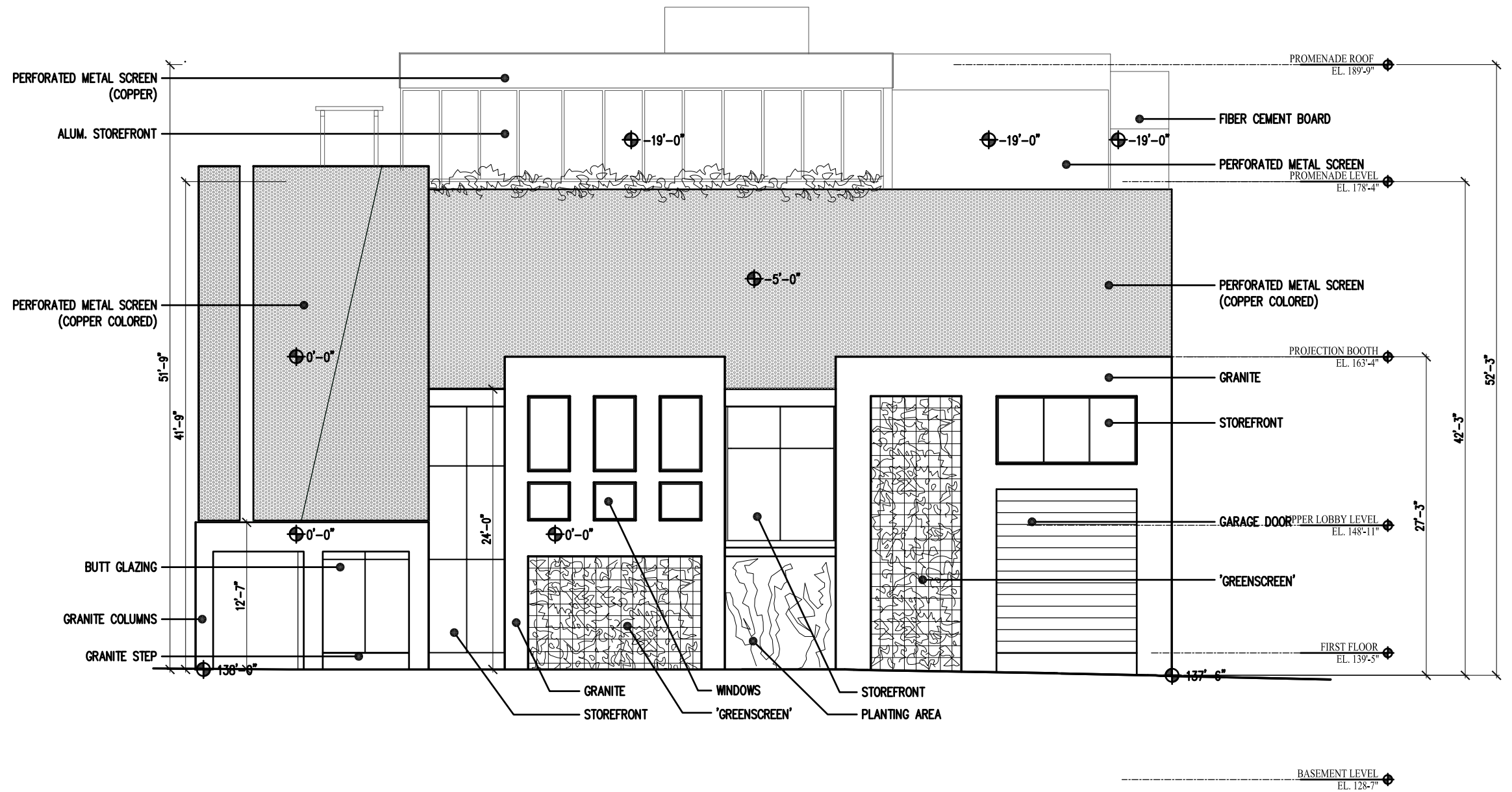


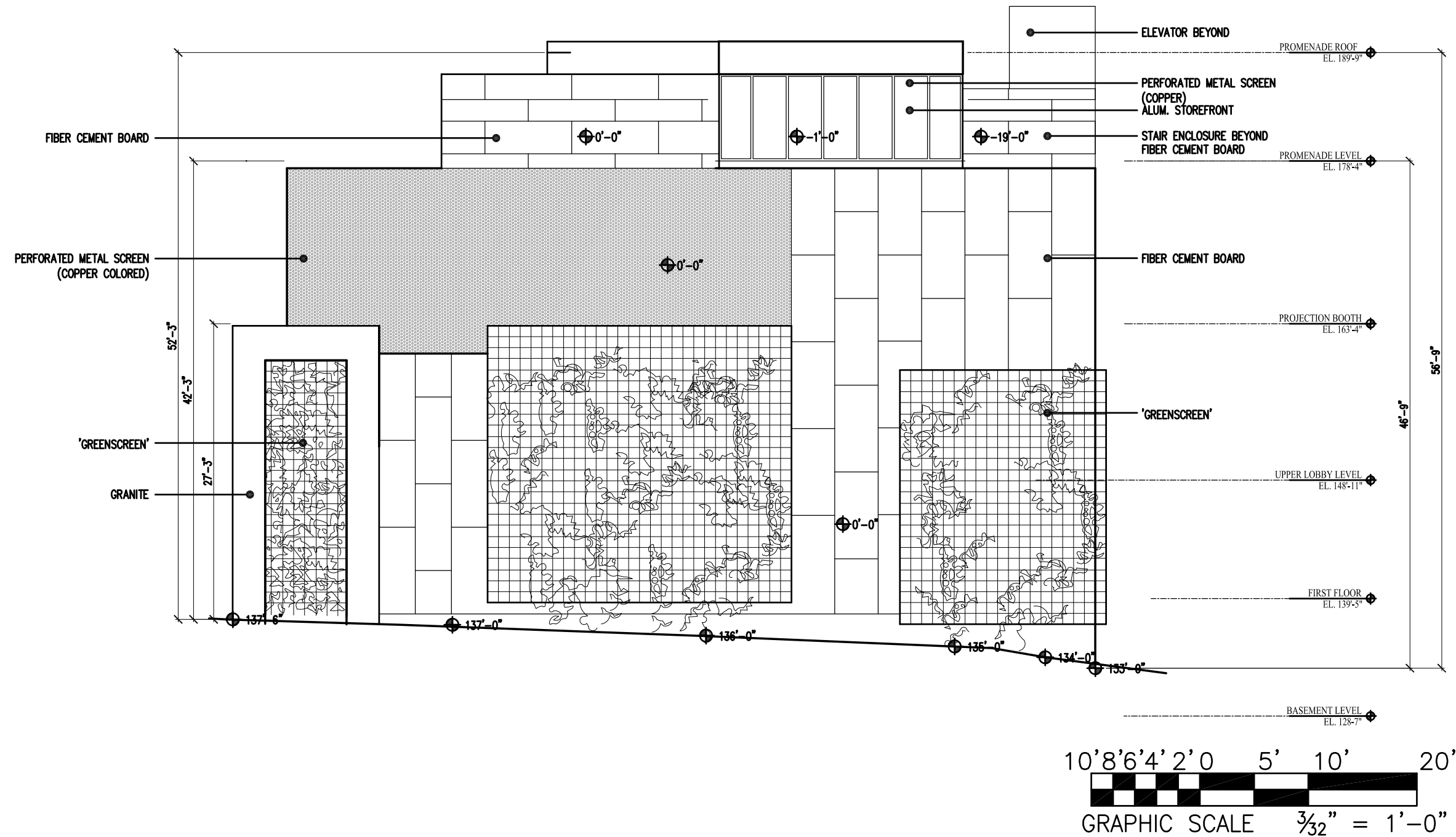


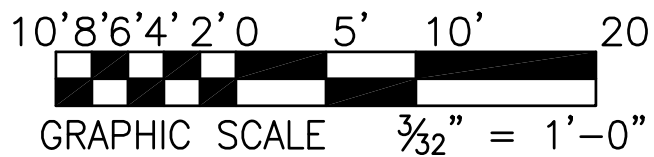
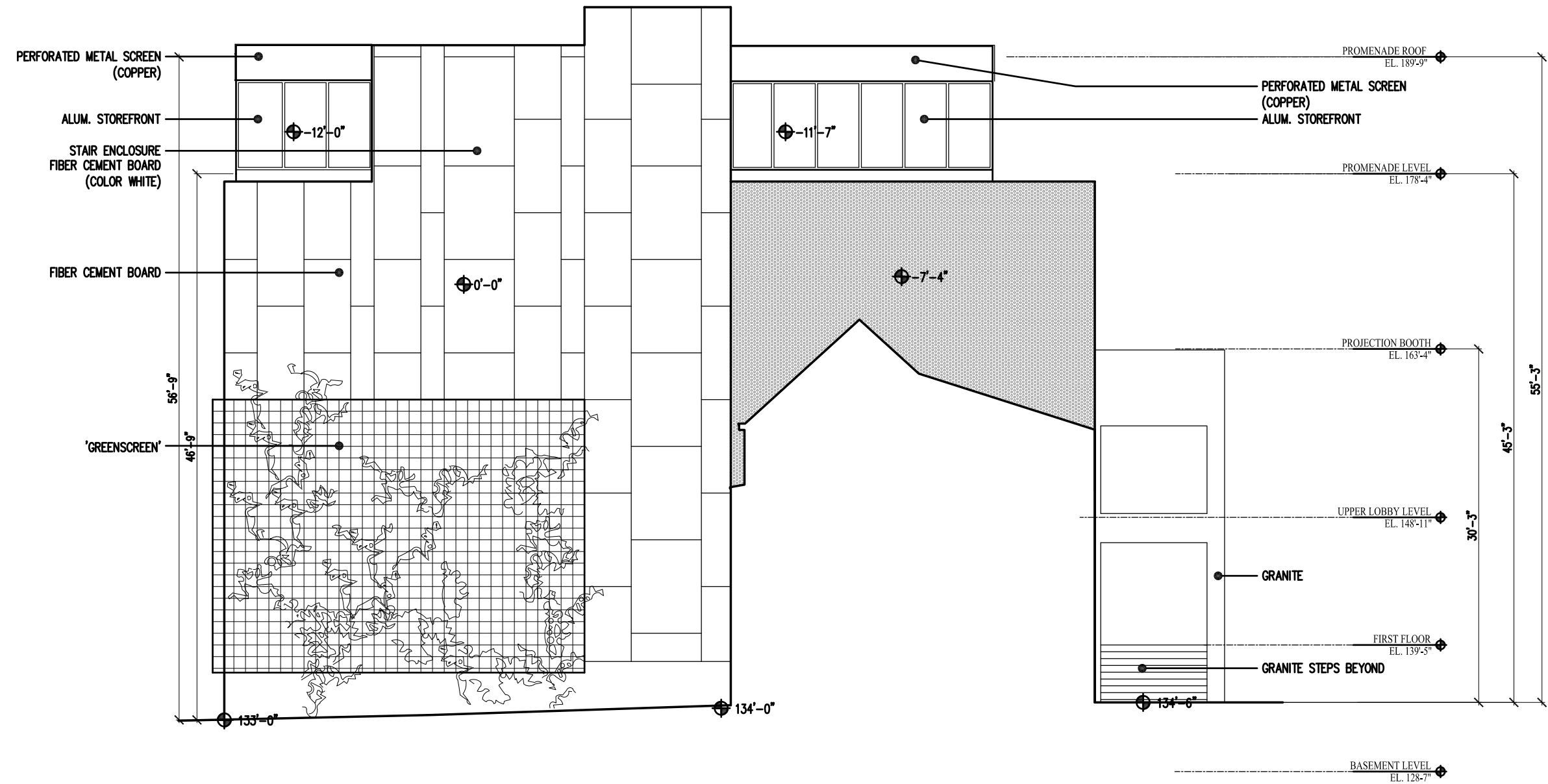


- GENERAL NOTES:
1. AVERAGE GRADE BY DEFINITION: 4 CORNER AVERAGE GRADE -
NW 138'-0" + NE 134'-6" + SE 133'-0" + SW 137'-6" = 136'-0" / 4 = 135'-9"
(AVERAGE GRADE)
 2. BUILDING HEIGHT: THE VERTICAL MEASUREMENT AT THE FOUR
CORNERS FROM GRADE TO HIGHEST POINT OF ROOF BEAM -
NW 51'-9" + NE 55'-3" + SE 56'-9" + SW 52'-3" = 217'/4 = 54'-0" FEET
(BUILDING HEIGHT)









Prepared for:
**FRIENDS OF THE
ST. LAWRENCE CHURCH**

76 CONGRESS STREET
PORTLAND, MAINE 04101

Consulting Engineer:

ARCHETYPE
architects

48 Union Wharf Portland, Maine 04101
(207) 772-6022 Fax (207) 772-4056

Project:
**ST. LAWRENCE ARTS
ADDITION**

76 CONGRESS STREET
PORTLAND, MAINE 04101

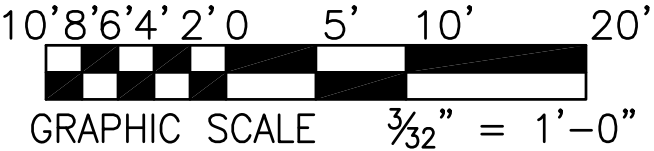
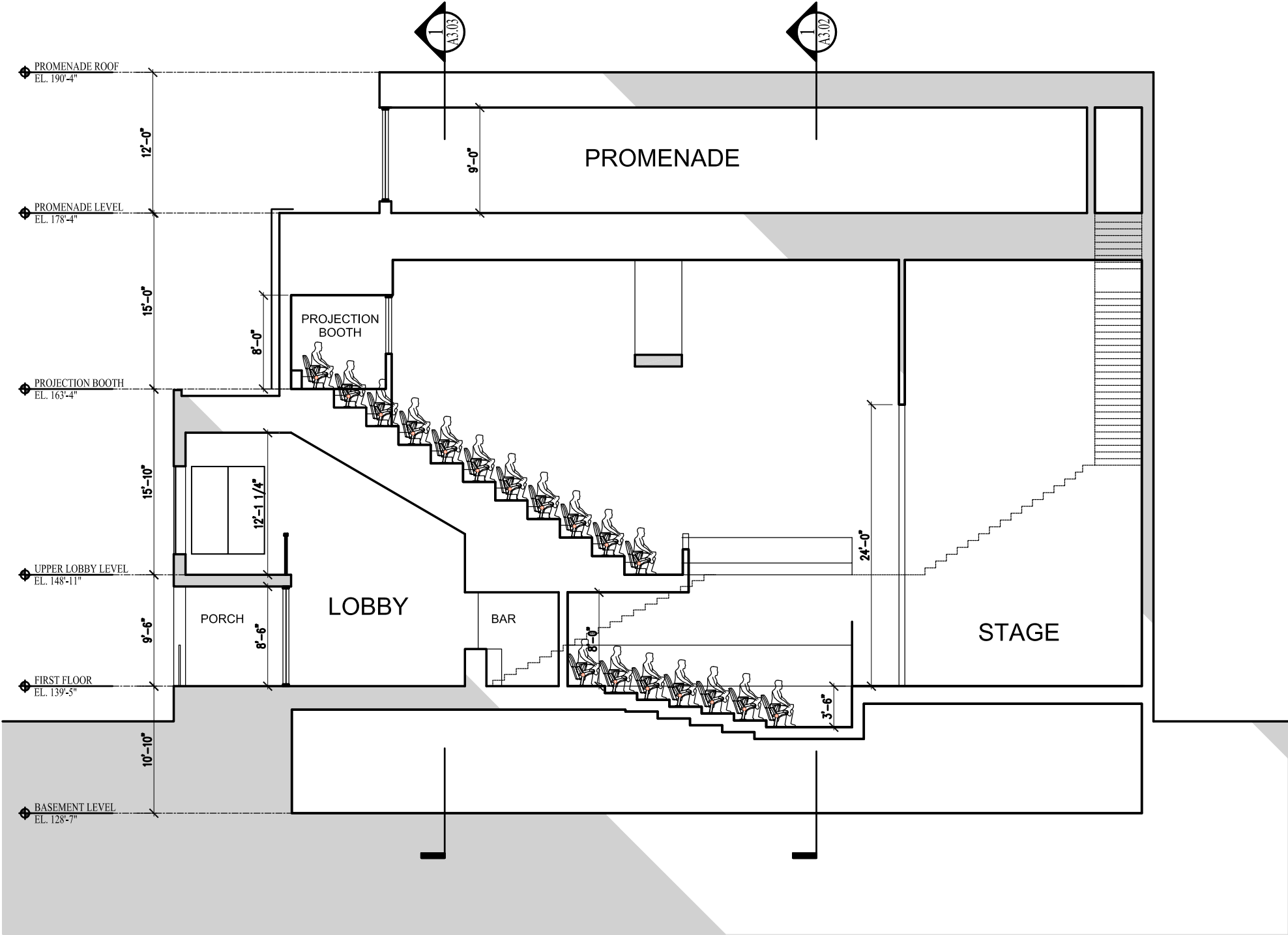
Revisions:

Date: 10 Sept. 2014

EAST ELEVATION

Scale: $\frac{3}{32}$ " = 1'-0"

A2.03





St. Lawrence Arts - North East Rendering



PERSPECTIVE B - LOOKING EAST UP CONGRESS STREET



PERSPECTIVE C - LOOKING WEST UP CONGRESS STREET



St. Lawrence Arts - Munjoy St. View



Saint Lawrence Arts - Beckett St. View



**FORMER APPROVED SCHEME
MASSING DIAGRAM**



**PROPOSED SCHEME WITH FORMER
APPOVED OVERLAY DIAGRAM**

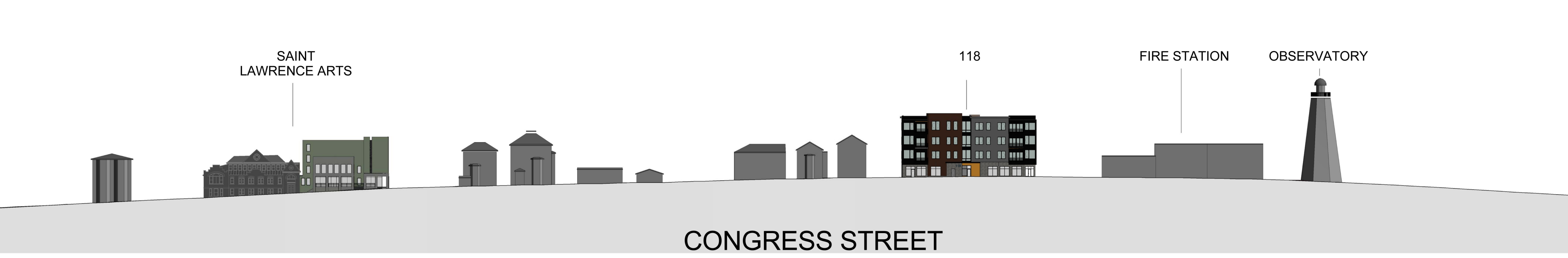
SAINT
LAWRENCE ARTS

118

FIRE STATION

OBSERVATORY

CONGRESS STREET



From: "ebw" <eenebw@gmail.com>
To: "Helen Donaldson" <HCD@portlandmaine.gov>
Date: 9/16/2014 9:41 AM
Subject: RE: St. Lawrence Arts - revised submittal and upcoming Planning Board workshop

In case I can't attend I would like to comment once again that the neighborhood especially Beckett Street can't support more cars parking on the street. There will be no place for tenants to park as there are approx. 200 people that live on the street and about 35 parking spaces since 1 car frequently parks in two spaces. I have tenants regularly complaining how there is no parking available for them because of the St. Lawrence which most of the time is just due to the staff. Also, the Transportation plan does not seem to take into account summer months that experience a higher than usual parking need due to tourists in the surrounding streets an cutter street. I am not sure why the plan indicates older people tend to use a car more than younger people. The base line is many people are concerned for their safety and will not want to park a long distance away young OR old. I know this is a relatively safe neighborhood but people I work with for example still equate Munjoy hill with crime so they will not tend to want to park blocks away from a show and walk back in the dark. I honestly do not understand why the St. Lawrence staff does not get the impact St. Lawrence currently has on Becket St, let alone what the future impact will be. I have to question how the staff would approach this if this was in the neighborhood they lived in.

Since it is likely this will get approved, I would ask the City Council to please consider issuing Resident Parking permits for Beckett, Munjoy and immediate surrounding areas. Regardless of what the transportation plan implies, the majority of people are not going to be "educated" to learn to park a long distance and walk in the cold or dark. Cutter street is a LONG walk and up a hill if there is no shuttle bus involved.

Thanks for giving me the opportunity to comment.

From: <TBaehr@aol.com>
To: <HCD@portlandmaine.gov>
CC: <JLEVINE@portlandmaine.gov>, <alecjaegerman@gmail.com>, <jbp@portlandmaine.gov>, <bab@portlandmaine.gov>, <jduson@maine.rr.com>, <jcoyne@portlandmaine.gov>, <kjdonoghue@gmail.com>, <dave@damfineart.com>, <edsuslovic@yahoo.com>, <NickM@cascobaylines.com>, <jhinck@lewissaul.com>, <cal4161@yahoo.com>, <mfpb@portlandmaine.gov>
Date: 9/17/2014 9:58 PM
Subject: Re: TDM - Proposed - St. Lawrence Arts Center

Dear Nell,

Thank you for meeting with us on Wednesday. Moving the new St. Lawrence Arts Center through the approval process has been a long journey that is still not at its destination. I think the drawn-out process indicates much passion and commitment among all the parties involved.

So that you have a written record of my small piece of our meeting, I offer the following:

What is striking in all the TDM plan iterations, and especially in the latest one, is the number and diversity of proposed solutions - most or all of which must work at the same time, and often in coordinated fashion.

The various solutions depend on the interlocking cooperation of several parties on a continuing, if not permanent, basis: valet parking, enhanced bus service (with a grant from St. Lawrence), pedi-cabs, parking at Cutter Street, co-promotions and discounts with in-town restaurants and parking garages, bicycle racks, and possibly permit parking on streets near the Arts Center.

Moreover, the solutions require cooperation among multiple parties, any of whom could either not join the venture from the start or, later on, seek to modify or eliminate their participation.

This mix of solutions creates a fairly fragile structure that could crumble if one or more of the individual items were to be withdrawn: the Metro subsidy may need to be cut or eliminated; the Metro could run into unrelated problems; Cutter Street may periodically fill with non-St. Lawrence cars (think snow emergency); restaurants and/or parking garages may withdraw their support.

We must consider two additional challenges in all this.

1. In addition to the Cutter Street lot being filled in a snow emergency, foul weather could make waiting for a bus unbearable and clog any available parking near the Center (as happens now in the winter with events in the ParishHall).
2. The TDM attempts to address the traffic and parking situation for people going to an event at the Arts Center. When a 400-customer event has ended, a large number of people may be vying for valets and bus seats. Oh, and add foul weather to that.

If TDMs in other situations have been more complicated, as was mentioned in our meeting, it would be good to keep in mind the actual, and not hypothetical, challenges posed by transforming a residential neighborhood in ways that are not good for either the neighborhood or the city. If the set of challenges for another location are not nearly identical, the comparison falls apart.

My concern also touches on an assumption that has been made, by both the St. Lawrence and people reviewing their plans: The desire for a 400-seat venue drives all other considerations, including parking. The size is part of a dream going back more than a decade by people sincerely committed to the arts on Munjoy Hill. Sadly, absolutely no flexibility about size has been expressed by the St. Lawrence or proposed by those reviewing their plans. It's hard to believe that a better plan cannot be conceived.

Sincerely,

Tim Baehr
 North Street

From: Ross or Kathleen Fields <fieldsofun@gmail.com>
To: Nel Donaldson <HCD@portlandmaine.gov>
Date: 9/18/2014 8:37 AM
Subject: Corrections to previous email

To Portland Planning Board and Staff

I continue to wrestle with the issues I see with the proposed 401 seat St. Lawrence Arts Center theater. I have listed my observations for your consideration as you move forward in this process.

1. I have a difficult time understanding why a business, St. Lawrence Arts Center (SLAC), would roll-the-dice on their success or failure. The huge unknown is that of how patrons will respond to the* inconvenience of parking options* being presented in the Transportation Demand Management plan. The risk seems high when considering increasing what is the current parking demand by a factor of four. From a systems approach if you increase any demand by a factor of four without any real attempt to allow for the increase you will most likely be faced with a failing system. If there were a parking facility for 200 cars we wouldn't be having these discussions.

It would be great if you could test the proposals in the TDM prior to making your decision.

2. The whole TDM* hinges on changing human behavior *from the current practice - driving to SLAC and parking as close as possible. What is presented in the TDM offers *no real incentive to change* this behavior. Portland, because of its size and layout, does not present any real obstacles to the continued use of privately owned vehicles.

The changing of human behavior could be forced if Residential Parking Stickers were required on Munjoy Hill around the theater. This would force the use of the alternatives presented in the TDM at the risk of turning patrons away.

I am pretty certain that those who will be affording the \$20+ a seat ticket will be driving their vehicle to the theater and searching out the most convenient parking spot they can find.

3. We all like convenience. So in order for the proposed TDM solutions to actually work they need to be convenient. *Ask yourself* -

- would you park at a downtown garage, wait for a bus that may or may not be on time, or even exist, ride 10 blocks, get off to walk a few more - hoping the weather is agreeable, and then reverse that process only to be competing with 400 people all wanting to get home quickly and "conveniently" at the end of a performance?

- if you are traveling from say the Deering area, or South Portland, Falmouth or Westbrook changing from the #4, #5, #6, #21 to the #1 and then in reverse, would you be willing to plan the time needed? Right now it would be challenging because several of these lines stop operating way before performances at the SLAC let out. Now add in winter traveling conditions.

On a recent Friday evening, my wife and I walked into town to attend a music performance up on Free Street. We checked the schedule of the #1 bus and decided that we would catch the 9:40 p.m., Congress/Elm stop, back up to Munjoy Hill. We arrived at the Congress/Elm bus stop at 9:30 p.m. At 9:55, no #1 buss had shown up, we decided to start walking. We made it to the top of Munjoy Hill around 10:15 p.m. and never saw the #1 bus.

Again, if you are basing your decision on all of these pieces coming together and working I think you are kidding yourself. It is time to get real. This TDM is requiring SLAC to put so much effort, say 80%, in an attempt to get less than 20% of its patrons to use alternative means of transportation/parking. It is not fair to them and not fair to the Munjoy Hill Neighborhood. The data that SLAC has all ready collected (100% participation) makes this extremely clear.

4. It seems as if the *approach is in reverse*. Instead of asking, is a 400 seat theater a viable enterprise for the location, the discussion is about how can we accommodate the amount of cars when space isn't really available or practical.

5. The TDM is more like a house of cards. If one card, one of the players - say downtown restaurants offering free bus tickets, or pedicabs making their way up Congress, decide it isn't worth it, then the whole *system begins to unravel*. Again, a private 200 car parking lot next to the theater would be way more committed.

6. When it comes to *monitoring the TDM* - the parking - and how everything is working, just how is that going to work? Example: It is my understanding that theater staff and performers will have a designated, off site, area to park. How do you know they are actually following through with this? Special tags on their vehicles? Will the monitor be going out during performances to check on adherence to the requirements? Seems a bit absurd.

7. Please also consider the impact of the *loading dock/door*. What standards will be required for this facility. Will there be any restrictions/guidelines concerning vehicle size, time of day it can be used, and length of time a truck can be parked to unload. Under the current plans it looks like a 30 foot van/truck would be blocking half of the street when loading or unloading.

8. One last item is that of *frequency of use*. The Friends of St. Lawrence board has yet to come up with any definitive response concerning the frequency of use of the 400 seat theater. Will it be once a month, once a week, 4 times a week? This would be valuable information. At one the more recent public meetings it was stated by Ms. Nice that SLAC was encouraged to have one performance per month, for the first 6 months in the new theater. Really? This is where I just don't get it. At every meeting I hear that the new 400 seat theater is needed to generate much needed revenue in order to maintain Parish Hall. One performance per month just doesn't make sense, does it?

Bottom line - The proposed TDM offers no real incentive for the changing of behavior of Portland area theater patrons.

Would each one of you be willing to use one of the alternatives presented when going to this theater - winter, spring, summer and fall?

Thank you,

Ross Fields - living in *Portland vehicle free* since 2011

46 Turner Street
 Portland, ME 04101

From: Stephen Gaal <steve@gaal.com>
To: "hcd@portlandmaine.gov" <HCD@portlandmaine.gov>
Date: 9/18/2014 9:40 AM
Subject: St. Lawrence Arts Center Contract Zoning hearing

Dear members of the Portland Planning Board:

I understand that there will be a meeting of the Planning Board on September 23, 2014 to again consider the application for a Revised Contract Zone Agreement with the St. Lawrence Arts Center. Regretfully, I am not able to attend. I respectfully request that you consider the following points as you deliberate on this request. I apologize for the length of this communication but there are many issues to be considered relating to this request.

1. A Contract Zone Agreement is not a right but an exception to current zoning. By definition, a Contract Zone Agreement is a variance from the carefully considered zoning laws of the City of Portland. Some would call it "spot zoning." The applicant is not entitled to this agreement. In fact, absent a compelling argument for community benefit without undo hardship, the default response should be to deny it.
2. The TDM concept is flawed here because if it doesn't work there is no remedy. Parking is, to me, the overriding issue with the proposed SLAC expansion. I won't recite the numbers involved. I am sure that you are all familiar with them. In fact, the TDM proposed by SLAC is full of data and numbers, but has precious little information about how to remedy the issues that will arise when an additional 200 cars try to park in an already crowded neighborhood. And that neighborhood that may get even more crowded if the proposed zoning changes allowing for higher density that are being discussed are passed. Once this is built, there is no going back.
3. The TDM relies on significant changes in human behavior - buses, bikes, carpooling, shuttles vs cars. As much as we would all like to see greater use of public transportation and people-powered transportation, we all know how difficult it is to change human behavior. And the automobile is at the heart of American behavior.
4. This is a regional performance venue in a residential neighborhood with most attendees coming from afar. SLAC has, themselves, described this is a Regional Performance Venue. They certainly are not going to fill a 401 seat theater, and a 200 person Promenade Room with local residents. Most of these people will be coming from some distance. It is highly unlikely that they will be willing to change modes of transportation to attend the theater. Would you drive to Saco, park in a lot some distance from a theater, wait for public transportation, and do the same on your way home?
6. Cutter St is often not available- snow days, summer evenings. I live on the Eastern Promenade overlooking the Cutter Street parking lot. It fills up by 3-4 PM on winter afternoons when there is a snow ban. It is often very busy during summer evenings. And I suspect the
7. SLA has never explained how often this will be used nor discussed the impact on the neighborhood. Despite many requests to SLAC, both in public and private meetings, requesting how often this venue will be used, no information has ever been forthcoming. If the venue were to be used once a month, the impact on the neighborhood is probably minimal. But it is unlikely that you would build a \$7 million dollar facility and use it sparingly.
8. The TDM is a "Golden Moment" plan with many disparate factions and players all required to work at the same time.
9. SLAC is being held to a lower standard with respect to parking. You are all aware of the significant development going on on Munjoy Hill. But even these developments come with parking. The closest to SLAC, 118 Congress Street, has 19 parking spaces for 12 units. 9 and 11 St. Lawrence has parking for each unit. The Sheridan Street development has parking for each unit. The Avesta housing on the site of the old Adams School has parking. I am involved with a small theater company in South Portland in a neighborhood similar to Munjoy Hill (Ferry Village) where we were required to show that we had 27 on-site parking spaces for a 50-seat performance venue. And yet we are contemplating allowing SLAC to create demand for an additional 150-200 cars without any additional parking.
10. There is another option. It has been suggested to SLAC that they modify their plans and reduce the expansion from a 401 seat theater and 200 capacity Promenade Room (in addition to the 114 seat existing theater space) to something more like a 200 seat theater that is more in keeping with what is primarily a residential neighborhood.. They have consistently refused saying "this is our plan."
11. There is an Arts District. And it isn't here. I admire the effort and energy that has gone into the St. Lawrence over the years. I am a subscriber to and supporter of The Good Theater. I like having the other cultural offerings available at the St. Lawrence. And I appreciate Ms. Nice's and the SLAC Board's desire to expand their offerings. But we already have an Arts District in Portland, and it isn't here. It is at the other end of Congress Street with the appropriate infrastructure, particularly parking, that is so obviously missing here.

I respectfully urge you to consider these points and those raised by others as you consider this request, and I urge in the strongest way possible to deny this application for a Revised Contract Zone Agreement relating to this expansion of the St. Lawrence.

Stephen Gaal
 176 Eastern Promenade
 Portland ME

steve@gaal.com
(603) 651-9183 mobile

From: <ALandsberg@aol.com>
To: <hcd@portlandmaine.gov>
CC: <JLEVINE@portlandmaine.gov>, <alecjaegerman@gmail.com>, <jbp@portlandmaine.gov>, <bab@portlandmaine.gov>, <jduson@maine.rr.com>, <jcoyne@portlandmaine.gov>, <kjdonoghue@gmail.com>, <dave@damfineart.com>, <edsuslovic@yahoo.com>, <NickM@cascobaylines.com>, <jhinck@lewissaul.com>, <cal4161@yahoo.com>, <mfpb@portlandmaine.gov>
Date: 9/18/2014 12:16 PM
Subject: St. Lawrence Arts Center proposal

To the City of Portland Planning Board and Staff:

I understand that the St. Lawrence Arts Center proponents will be presenting their latest design and TDM revisions to you next week. Before that happens I want to share some concerns I have about the status of the project and the most recent TDM that I have had a chance to review. I have, and have had since the very beginning, so many concerns about this project that it is hard to limit myself to just two areas. However I will give it my best effort.

1. At present, Munjoy Hill has a vibrant neighborhood theater and arts venue in the Parish Hall of the former St. Lawrence Church. Size, scale, and design are very appropriate for the location, tucked into a residential neighborhood of almost all three-story homes. For major musical, theatrical, and other types of bigger performance events, patrons from all around greater Portland and beyond know they can go into town and find a range of many venues of various sizes, all with convenient parking adjacent to the venues.

The St. Lawrence arts Center project, as currently proposed, threatens to turn this densely populated residential neighborhood into a second Arts District, complete with what will now be a regional theater whose management hopes – because there is grossly inadequate street parking available, hence the required TDM - to have many patrons avail themselves of an upgraded Metro “Arts Line.”

Where is the need for another Arts District? Where is the need, given that we have a flourishing one already, one which is supplied with convenient and abundant parking and almost none of which will take needed spaces away from those who live in town? There one can find both garages and open parking lots to accommodate the influx of vehicles: In the downtown business and retail area, where such venues so clearly belong.

2. Munjoy Hill is being crowded in on every side by new development - large developments, tall developments – developments which tower over the modest three-story homes that cover the Hill. I urge you to come up to the Hill, drive down Congress Street, and have a look at the new 118 Congress Street structure as it nears completion. It blends into that location about as well as those gigantic white cruise ships blend with the waterfront and the buildings that line Commercial Street. The St. Lawrence Arts Center will blend into its Munjoy Hill neighborhood in the same way. It won't: It will be a permanent looming presence, just like 118 Congress Street already is.

Please take these issues into consideration as you review the latest proposal from the St. Lawrence Arts Center. Please keep in mind the permanent and irreversible impact that this proposal will have on both Munjoy Hill and its residents if it is allowed to go forward at this size and with the currently proposed TDM. Once this building is up, it's not coming back down.

Thank you very much.

Ann S. Landsberg
 105 North Street
 899-1043

From: Ralph Carmona <ralphcarmona@gmail.com>
To: Nell Donaldson <hcd@portlandmaine.gov>
CC: Jill Duson <jduson@maine.rr.com>, John Coyne <jcoyne@portlandmaine.gov>, Michael Brennan <mfbp@portlandmaine.gov>, Kevin Donoghue <kjdonoghue@gmail.com>, David Marshall <dave@damfineart.com>, Ed Suslovic <edsuslovic@yahoo.com>, Nick Mavadones <NickM@cascobaylines.com>, Jon Hinck <jhinck@lewissaul.com>, Cheryl Leeman <cal4161@yahoo.com>, John Peverada <jbp@portlandmaine.gov>, Barbara Barhydt <bab@portlandmaine.gov>, Alex Jaegerman <aqj@portlandmaine.gov>, Jeff Levine <JLEVINE@portlandmaine.gov>, Erna Koch <ekoch4@maine.rr.com>, Rita Yarnold <cbayrea1@maine.rr.com>, Stephen Gaal <Steve@gaal.com>, Vana Carmona <vanacarmona@gmail.com>, Ann Landsberg <alandsberg@aol.com>, Cliff Gallant <gallant.cliff555@yahoo.com>, Tim Baehr Ann Landsberg <alandsberg@aol.com>, Leslie Bailey <legato@zwi.net>, Maia Greco <maiagreco@verizon.net>, Joan Sheedy <joaniesheedy@gmail.com>, Tom Kelley <thomas.kelley@maine.edu>, Bobbi Keppel <bobbik@zwi.net>, Tim Baehr <TBaehr@aol.com>, Ross Fields <ross.fields@munjoyhill.org>
Date: 9/18/2014 1:51 PM
Subject: ST. LAWRENCE PROPOSAL - PLANNING BOARD WORKSHOP - SEPT. 23

Dear Nell and Planning Board Members:

I believe most people on Munjoy Hill want this SLAC proposal to succeed. But the frustrations and concerns over the last 18 months continue to be fundamental in nature.

Beyond Munjoy Hill, CCMH is a committee that represents an increasing sense among residents and business people that growth for growth's sake can undermine the character of a neighborhood and city.

The St. Lawrence expansion, under its present plan, is going to profoundly influence what we can't measure: the character, streetscape, use and social climate on Munjoy Hill. There will be people who feel overwhelmed by the scale of the project, similar to that at 118 Street, and will object to its presence. Many are concerned that the character of Munjoy Hill is radically changing.

Councilor Donoghue is to be commended for seeking to have a public transportation plan to mitigate this problem. But bus scheduling, and other TDM-like fixes are not sufficient. We are faced with a complexity in this latest TDM that defies logic, as other emails to you have touched on.

Business people, like Rita Yarnold, a lifelong native, and Crandall Toothaker, know from personal real estate experience the inevitable effects that inadequate access to parking will have on the St. Lawrence development. Crandall, as you know, has proposed a parking facility. But the hostility toward more parking lots in a cities, like Portland, that face decreased car use in the future, works against that.

The scope of the new Arts center is regional - not neighborhood - in scale. This and other large-scale developments threaten to make Munjoy Hill a futuristic version of urban renewal that damaged the city over a generation ago. It is back to the future.

I want to address two problems in achieving compliance with the current TDM proposal. One is human nature and ingrained habits; the other is making the SLAC Executive Director responsible for maintaining compliance with TDM plan, on its face, a conflict interest.

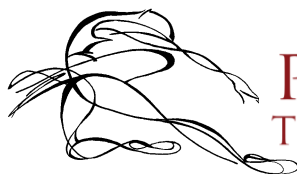
Some unpleasant realities may come into play if the current project is completed as planned. One nightmare scenario is that the new SLAC may become, like our Congress Square, an empty space as customers abandon the Arts Center because of a TDM plan that does not work, and the subsequent parking nightmare. Further large-scale developments, and the retail businesses they include or attract, are destined to ratchet up the need for customer parking.

Growth and development are needed to contribute to Portland's vitality. But unchecked growth raises questions about where Portland is going. The development experience of Munjoy Hill, including this SLAC proposal, may well represent a tipping point for the character of Portland's future.

Many thanks, Nell, for your generous efforts to work with us. See you next Tuesday.

Regards, Ralph

Ralph C. Carmona, Ph.D.
 Adjunct Professor
 Southern Maine Community College
 105 NORTH ST., UNIT 1
 Portland, Maine 04101
 Office: 207-518-9177
 Cell: 207-420-5916
 Email: ralphcarmona@gmail.com



PORTLAND BALLET
THE FUTURE OF DANCE IN MAINE

June 16, 2014

Deirdre Nice
St. Lawrence Arts
76 Congress St.
Portland, ME 04101

Dear Deirdre,

On behalf of Portland Ballet, it is my pleasure to write in support of the creation of the new St. Lawrence Arts Performing Arts Space. Portland is a magnet for the performing arts, and is lucky to be home to large theaters like the 1900 seat Merrill Auditorium and more intimate venues like the 74 seat Portland Ballet Studio Theater. What Portland is missing is the well appointed mid size theater – exactly what St. Lawrence Arts proposes to build. Portland needs this venue – an impressive home for dance, theater, and music that meets the needs of performers, audiences, and presenters. Its location on Munjoy Hill makes it convenient to patrons both on and off the peninsula.

The Board and staff of St. Lawrence Arts have diligently reached out to the performing community to inform their plans for this theater. Dance has many very specific needs, and these needs are met in the current building plans. Portland Ballet envisions utilizing both the theater and the reception space several times each year.

I am pleased to support the St. Lawrence Arts Performing Arts Space. If you have any questions, or would like to refer someone to speak with me, I can be reached at lgibbons@portlandballet.org or 772-9671.

Sincerely,

Leslie Gibbons
Director of Development



July 23, 2014

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Amy M. Taylor

Louise Thomas

June Vail

Alison Vanderhoof

April Ylvisaker

Aimée M. Petrin
Executive Director

Deirdre Nice
St. Lawrence Arts
76 Congress St.
Portland, ME 04101

Dear Deirdre,

We are always excited to hear the progress of St Lawrence Arts new 400-seat performing arts space!

As a multidisciplinary presenter without its own venue, Portland Ovation depends on the resources of the community to continue its legacy of 80+ years of presenting some of the finest artists in dance, music and theater from around the world to our community. This is why we find the vision for St. Lawrence Arts so compelling.

In recent years, Ovation has taken a more expansive view of its programming with greater consideration for working across different scales and venue formats. And while we have found great success with smaller scale (<500) presentations, we also have discovered that our venue options are severely limited beyond live music possibilities. We are unable to bring intimate theater and dance projects that require a more theatrical setting with all of the amenities. We look to the future development of St. Lawrence Arts to help fill that void.

We wish you the best as you continue with this ambitious endeavor and look forward to a day when St. Lawrence Arts is a viable venue partner for us.

Kindly,

A handwritten signature in blue ink, appearing to read "Aimée M. Petrin".

Aimée M. Petrin
Executive Director



August 6, 2014

Deirdre Nice
St. Lawrence Arts
76 Congress St.
Portland, ME 04101

Deirdre,

I am happy to submit this letter of support for the new St. Lawrence Performing Arts Space. As the general manager and talent buyer for both the State Theatre and Port City Music Hall, I can speak first hand for the need of a mid-size performing arts venue in Portland that can accommodate not just a certain type of live music, but theater, dance, and performance art.

As we present and promote over 220 events annually, there are many times during the year when I cannot accommodate a national touring artist at either of our venues whether it's due to date unavailability, or for the simple fact that the State Theatre (at 1,870 capacity) is too large. I would love to be able to present these types of musicians at an intimate and flexible space such as the St. Lawrence. As a promoter, I am excited by the venue plans you have shared with me and look forward to promoting many shows at the venue each year.

I am pleased to support the St. Lawrence Arts Performing Arts Space and hope that its current plans come to fruition. Please don't hesitate to reach out with any questions you may have.

All the best,

Lauren Wayne
General Manager/Talent Buyer
State Theatre & Port City Music Hall
207.956.6001
lauren@statetheatreportland.com

From: Caitlin Cameron
To: Barhydt, Barbara; Donaldson, Helen
CC: Andrews, Deb; Jaegerman, Alex
Date: 9/18/2014 12:53 PM
Subject: SLAC Design Review - 9/23

Design Review comments:

Overall Design: The latest design is successful in breaking up the mass and height needed to accommodate the program in its use of materials and varying forms. The project mitigates its size and mass through the use of two-story stone forms that relate well to the scale of the residential architecture surrounding, especially on the Munjoy Street side of the building. The upper Promenade Room is made recessive through the use of storefront glazing and a stepback. The facade is softened by the landscaping and trellis component which has a finer grain and provides shadow lines, articulation, and a human scale. There is a balance of solid and transparency, a mix of materials and textures that add visual interest and make reference to the building's context while at the same time, creating its own modern identity. The project is respectful of its relationship to the Observatory, which should remain the focal point of Munjoy Hill - this project is several blocks away, downhill, and shorter in height, all of which reduce its prominence compared with the Observatory along Congress Street and on the city's skyline.

Materiality: The use of stone is appropriate for grounding the project but also in its references to the historic St. Lawrence building adjacent. The stone provides a monumentality and is appropriate for a cultural building. The placement of the stone is thoughtful and reflects the scale of the neighborhood and neighboring building without becoming heavy or overpowering. The metal mesh material is unique to Portland and would make the project stand out as a modern and significant cultural destination on the peninsula. Ideally, the mesh material will have qualities of lightness and translucency that will alleviate the solid massing of the building. The mesh provides the potential use of lighting to create visual interest and a sense of liveliness and activity on the street at night. The mesh also affords some flexibility of expression when it comes to pattern and folding which, in the absence of fenestration, can provide visual interest and articulation to the building. The storefront glazing on the tallest form reduces its impact and makes for a pleasant, airy penthouse space. The green walls on the Munjoy Street facade have the potential add a balance rectilinear building and soften the hard edges of the stone and metal materials. These patches of green wall further break up the facade on the residential street and are a good solution for those parts of the facade that cannot accommodate fenestration.

Tower Element: As a corner building with a cultural program, the tower element should have dominance to signify the building on the approach and mark the entrance corner. Upon review, we felt the tower element could be emphasized more through the use of several strategies. First, the height of the tower in proportion to the rest of the building was little too low and we recommend that it increase slightly in height - possibly only the corner piece of the metal would be taller. The Promenade Room at 54' is and should remain the tallest mass of the building and the tower does not need to rise as tall as that - we are suggesting a small, incremental height increase. Secondly, emphasis on the tower could be created with folding mesh which will create a play of light and shadow similar to the roof lines of the existing St. Lawrence building and will also reflect the material qualities of the mesh facade. Third, the use of lights behind the mesh on the tower could emphasize the corner at night. The reviewers all liked the placement of the signage within the tower. Finally, the stone base of the tower should be differentiated more from the mesh portion of the tower - some options discussed included a rusticated belt course or by the stepping back of the mesh portion from the stone base.

Caitlin Cameron, LEED AP, Associate AIA
 Urban Designer | Planning & Urban Development Department
 City of Portland, Maine
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MEMORANDUM

To: Helen Donaldson, Jeff Levine & Barbara Barhydt, City of Portland
 From: Jason Schrieber & Cynthia Lin, Nelson\Nygaard
 Date: April 18, 2014
 Subject: Saint Lawrence Arts Center TDM Review

Nelson\Nygaard has begun its review of the planned Saint Lawrence Arts Center expansion and its program for mitigating potential parking and transportation impacts in the Munjoy Hill neighborhood of Portland, Maine. This memorandum summarizes our initial findings and outlines several potential measures that could be explored by the applicant and its traffic consultant to control parking demand on nearby residential streets and encourage the use of remote parking facilities and alternative modes of transportation.

Summary of Potential Impacts

The location of the arts center in Munjoy Hill has a number of distinct benefits that might not be found in other locations. Within walking distance of thousands of peninsula residents, a certain percentage of patrons will not seek to drive to the site for a performance. Meanwhile, nearby restaurants provide an attractive dual-purpose trip for other theater-goers who will drive and park nearby to dine before a performance and then walk to the venue. These “internally captured” trips represent no net new parking demand over existing restaurant demand.

Additionally, the site is within easy walking, biking, and transit distance of downtown Portland, where many patrons are likely to originate or conclude their entertainment trip to the city, potentially parking where downtown non-work hours parking availability is much greater, rather than near the Arts Center.

According to the applicant’s traffic analysis, the proposed expansion is estimated to create a parking demand of at least 225 cars during event peaks. This is well above conservative national estimates of only 122 cars at peak evening accumulation, per standard Institute of Parking Engineers (ITE) methodologies for a 485-seat theater¹. Given the inherent shared parking synergies of nearby residents who attend performances, dual-purpose restaurant and venue patrons, and those parking then traveling by other means from the downtown, the parking demand in the immediate vicinity could be lower still. Internal capture rates between restaurants and theaters approach one-to-one in settings like that found on this stretch of Congress Street.

Nonetheless, theater patrons are generally less-likely to travel to a performance by means other than the automobile. Many travel a distance beyond the range of walking, biking or transit and live in communities where such resources are scarce or non-existent, tilting their mode of choice

¹ 485 seats are based on the maximum number of patrons permitted by the conditional zoning approval. The ITE peak parking demand rate for a “rural live theater” is .25 per seat. Urban locations would expect less demand. Movie theaters have a similar peak rate of .26 per seat.

to the automobile. Furthermore, the propensity of patrons to dress-up to attend a show is often perceptually in conflict with walking far, biking, or riding a bus. Given the applicant's estimated parking demand is based on locally-observed theater data, it is an appropriately conservative or worst-case estimate of the maximum number of new cars seeking to park in the neighborhood, absent any incentives to do otherwise.

While the applicant has noted that sufficient spare on- and off-street capacity exists within a short walk of the arts center site, this has notable negative side effects on the neighborhood. First, the remaining number of spaces available at peak in the entire five-minute walk radius of the site is estimated by the applicant's traffic consultant to be less than 50 spaces. A quick supply estimate within a 1,300-foot (quarter-mile) walking path of the site reveals at least 1,000 on-street spaces, so leaving 50 free suggests there will be 5-percent or less availability, which is well below accepted reserve capacity thresholds of 10-percent. Secondly, patrons will seek to park as close as possible to the theater without incentives to do otherwise, creating an availability crunch on the closest blocks. Even though local residents may already experience some perceived parking impacts from existing restaurants, the decline in availability will be noticeable to many and drive negative perceptions of the nearby parking system and the theater's impact.

Finally, it is worth noting that the Cutter Street lots on the Eastern Promenade are not appropriate locations for theater parkers (unless through valet parking, as discussed below). These lots are in the opposite direction of the gravity of Arts Center and other Portland entertainment and arrival/departure patterns, plus the grade down to the lots is a notable real and perceptual barrier.

Mitigation Opportunities

Draft parking and transportation demand management (PTDM) measures described by the applicant's traffic consultant attempt to mitigate the effects of increased parking demand. These include incentives for biking and riding the bus, as well as a van shuttle to the more remote public parking at Cutter Street on the Eastern Promenade. Promotional materials for these measures are also proposed.

In order to become effective, a more specific and targeted PTDM plan is necessary. Success depends on understanding the characteristics of theater patrons that motivate their desire to drive and park as close as possible to the venue.

Characteristics of Theater Patrons

Besides the potential discomfort of using alternative modes when dressed for a theater event, patrons are typically less price-sensitive than employees or local residents might be, and they are far less price-sensitive on the date of a performance than they might be when purchasing tickets in advance. Therefore, nominal price reductions, such as reduced or free transit fares, are unlikely to motivate any change in behavior. Similarly, awareness of reduced cost or free remote parking on the day of an event is not likely to impact the desire to park nearby on residential streets, unless a substantial disincentive exists in the form of pricing or ticketing near the venue. Since adding pricing on residential streets is unlikely in the near future, other means to motivate behavior are necessary.

One unique aspect of theater patrons is the luxury of time when planning around an event. The length of a show automatically means a substantial time investment. Therefore, theater patrons

typically commit an entire evening to a performance, especially when other forms of entertainment are nearby, such as drinks and dining.

The following potential measures are tailored to recognize both the higher price-sensitivity of theater patrons when planning and purchasing an event versus on the event day, as well as their greater luxury of time on that event day.

Programmatic Measures

Entertainment Partnering

One of the best ways to reduce local parking demand is to encourage patrons to park near downtown Portland and enjoy other entertainment venues before or after a theater show, while leaving their car behind and traveling to and from the Arts Center by other means. Assuming means to convey travelers between these pairs are enhanced as described below, the importance of getting patrons to link the two together when planning for an Arts Center event is crucial.

Working in partnership with merchant and economic development organizations that represent downtown businesses, the Arts Center should promote dual-purpose visits not only to nearby Congress Street restaurants but to any venue in the nearby parts of downtown. Information in show advertisements, on the Arts Center website, as part of ticket packages, etc. should promote the benefits of visiting both destinations while parking in the downtown and getting to and from the Arts Center by alternatives to the automobile.

Alternative Parking & Travel Promotion

An additional part of advanced ticket marketing should be the clear promotion of walking, biking, transit, and remote parking options – specifically in that order of priority. Printed, web-based, phone, and other materials accompanying every show inquiry and ticket purchase should include features such as the walk time to downtown Portland, on-site bike parking and nearby bicycle network elements, bus stops and times of pre-show arrival and post-show departure, and walk times and prices for remote downtown parking – especially if a remote parking subsidy is arranged as suggested below. Helpful graphics and maps are essential components of this strategy and should be developed clearly in cooperation with downtown partners and the City well in advance of the venue's initial occupancy.

Subsidized Remote Parking

The Arts Center should work with downtown establishments to find a remote lot or garage convenient to partnered entertainment establishments that can be promoted for theater parking. This facility should be prominent in the Arts Center travel promotions, and patrons should be offered a discounted theater ticket price for using a remote facility plus be able to park for free at that facility by showing their ticket or a voucher. The Arts Center would most likely need to subsidize any remote downtown parking, though it would have a good negotiating position with most operators, since it can guarantee a minimum number of parkers. With advance payment, the Arts Center has an ability to pay a parking operator in advance of an event, increasing the theater's negotiating position.

Subsidized Event Transit

A free ride to and from an event should be arranged with GP Metrobus for all ticket-holders through advanced purchase, ticket validation, or other method. This should again be made available at ticket inquiry and purchase stages through a discounted ticket price. The necessary subsidy to GP Metrobus is likely to be on par if not less than the cost to operate the proposed van

shuttles, and the City should be willing to work with the applicant to negotiate a fair price with GP Metrobus. Combined with potential service changes as described below, transit options should be superior to an event van shuttle.

Valet Parking

Rather than providing no proximate parking other than nearby streets to theater-goers that drive, the Arts Center should provide a superior front-door valet service on Congress Street with off-site parking designated for valet use, such as on Cutter Street and at the Cutter Street lots. This service should be provided through a normal contractual arrangement with appropriate market prices paid by patrons, unless the Arts Center can afford to subsidize the service. Any subsidy should not make the valet parking free to ensure that remote self-park and transit options remain more financially attractive, though some degree of subsidy is appropriate if monitoring determines that patrons would otherwise self-park on neighborhood streets. Again, this service should be promoted behind other modal options during ticket inquiry and purchase stages to avoid last-minute on-street parking behavior.

Physical Measures

Walking Wayfinding and Lighting

One or two well-defined walking routes between the venue and downtown partnered destinations should be clearly mapped in advanced promotional materials and physically inspected and improved to ensure a minimal level of pedestrian amenity and attractiveness. These walking routes should be accessible, have wheelchair ramps in good repair, utilize international standard “zebra” crossings of all cross-streets, and have good pedestrian-level lighting – especially at intersections. The routes should have appropriate wayfinding at each turn and every 300-500 feet to guide walkers between downtown and the theater – ideally developed in coordination with other City wayfinding efforts.

Event Transit Service and Stops

The Arts Center and the City should work with GP Metrobus to modify and extend Route 1 (Congress Street) and/or Route 8 (Peninsula Loop) service to provide frequent front-door service immediately before and after an Arts Center event. Current headways on these routes are at least 30 minutes or 1-hour depending on time of day and day of week, which are insufficient for most theater-goers trying to get to a show on time. Furthermore, the closest stops are at least 3 blocks away and up to 6 blocks away.

With some degree of re-routing and subsidy, bi-directional Route 1 service can be brought to the venue on a doubled frequency, and Route 8 service can be extended to the venue and operated on greater frequency as a downtown to Munjoy Hill shuttle after normal service hours. All new services should include “Arts Center” on the bus information scrolls. With branded and pre-marketed service running more frequently all the way to the front-door, patrons are far more likely to bundle their theater trip with other downtown entertainment and ride the bus to remote venues and parking.

Front-Door Multi-Modal Center

With minimal site and curb modifications, the Arts Center can make an appealing front-door streetscape along a portion of Congress and maybe Munjoy Streets that is dedicated to alternative means of getting to the theater. Curb spaces should include a dedicated bus stop with direct walkway connection to the front door of the Arts Center. A shelter and benches should be installed unless there is an overhang or easy lobby access with seats within a short distance of the

stop. The curb should also have sufficient room to operate the valet service. Any remaining front-door curb space should be used for drop-off and pick-up only, with no long-term parking.

Meanwhile, no less than 100 prominently visible, covered, and APBP²-compliant bicycle parking spaces should be installed as close to the front door of the venue as possible, with direct path connections to Congress and Munjoy Street. Such highly-visible improvements also will help to make those who ignored marketing incentives and parked in the neighborhood consider alternatives for their next visit.

Travel Information Kiosk

A travel information kiosk should be installed in the front-door streetscape area or near the Arts Center entrance, with similar information posted inside the lobby. The kiosk(s) should include current transit schedules, walking routes, bike routes and facilities, remote parking options, and other information similar to that available in the venue's advanced-marketing and website.

Next Steps

While Nelson\Nygaard's baseline analysis suggests that parking demand will be somewhat lower than projected by the applicant's traffic consultant, the desire to park on nearby neighborhood streets will still remain a notable problem that should be mitigated beyond the measures proposed by the Arts Center. The recommended measures in this memorandum are designed to take advantage of Portland's multi-modal environment and the unique characteristics of event patrons. Theater-goers are not likely to shift away from cars and parking nearby unless options are incentivized in advance of the performance day. However, when packaged to incentivize walking, biking, transit, and remote parking, event patrons in Portland have a much greater propensity to behave like event patrons observed in other environments where parking demand is lower – including at “rural live theater” venues.

The mitigation measures described above should be discussed with City staff and representatives of the Arts Center before developing a finalized PTDM plan for the facility. The final PTDM plan should include a monitoring program designed to survey and observe patrons methods of arrival and departure during typical event days, determine necessary adjustments to marketing and subsidy programs, and identify additional programmatic and physical measures to reduce any adverse spill-over parking impacts.

² Association of Pedestrian and Bicycle Professionals.



MEMORANDUM

To: Nell Donaldson, City of Portland, ME
 From: Nelson\Nygaard
 Date: August 13, 2014
 Subject: Saint Lawrence TDM- Nelson\Nygaard Comments on Parking Management Plan (July 8, 2014)
 Updated Response

A summary of GP PTDM program recommendations and additional recommendations follows.

- **Projected Parking Demand**
 - Discussion: GP estimated that the theater will create a peak demand of 218 parking spaces, based on their average ratio of 0.45 space/ attendee from data collection in October and December 2013. This is contrary to an estimate of 122 spaces from the Institute of Transportation Engineers for a “rural live theater,” which generates more parked cars than an urban equivalent. However, the specific parking demand number is only relevant if a monitoring program is in place, which NN would recommend. If 218 parked cars are projected and only 122 are observed on a peak night during monitoring, it may be perceived that the proponent’s PTDM plan is successful, when in fact virtually no effect occurred if the conservative ITE estimates of 122 cars are correct. It would be far more protective of the residential neighborhood if a monitoring threshold is low, not high. However, if local studies show that the 218 car demand is appropriate, we would at least recommend that a goal of reducing this demand be put in place to reflect the impact of the proponent’s PTDM program.
 - Recommendation: To account for future shifts in mode share as a result of the proponent’s PTDM program and to assess the effectiveness of mitigation measures, a simple parking monitoring program should be developed with a goal of reducing demand below the proposed quantity of 218 cars. This would include annual parking occupancy counts within a certain radius of the site to determine if the goal was exceeded or not. Excess parking would require improved or additional mitigation. The occupancy counts should be supplemented by patron surveys on the same peak event day, with both online and intercept components, to develop a mode share and corroborate the parking counts.

GP’s Recommended PTDM Plan

- **Transit**
 - Transit investment on the Metro 1 Bus-
 - rerouting along Congress street

- creating a new bus stop location near the theater
- 20-minute frequencies (into the evening)

Recommendation: These are laudable and not insignificant investments on the part of the proponent, and there is a great opportunity to improve transit on the peninsula with this investment. Many patrons will appreciate and benefit from the improved transit service, especially those who live along Route 1. For non-peninsula patrons arriving by car, many will take advantage of the suggested program. Route 1 serves many other entertainment destinations in downtown, and improving to 20 or 15-minute headways will be beneficial. The proponent should also explore with GP Metrobus whether a modified Route 8 could be run in the evening to provide similar connections to the Old Port and Commercial Street. Meanwhile, given Portland's walkable downtown, any coordination with City officials to strategically improve walking routes between downtown and the theater – especially for nighttime walks – would be beneficial. For example, arts-based programs of wayfinding signs, bus shelters, crosswalk highlighting, supplemental pedestrian-scale lighting, and pedicabs have been developed at virtually no cost in other cities in cooperation with local artists.

- A strategic marketing plan
 - working closely with downtown businesses on a joint marketing strategy
- The future “art Line”
 - Amenities include clear information, incentives, and real time bus arrival information
- Patrons would park in downtown garages

Recommendation: Two-hours free parking with a theater ticket is a good incentive to take transit, but this time period is insufficient for most to safely arrive, catch a bus, attend a show, and ride back. Three-hours or more would be more appropriate.

- Financed through a ticket surcharge
 - Would cost approximately \$70K annually to shorten arrival frequencies
 - Patrons would pay a ticket surcharge and be able to ride on the bus for free (and park for two-hours for free)
 - Further frequency increases are possible with proposed downtown TIF

- **Valet**

- Valet would cost patrons “a minimal fee above the (parking) ticket surcharge”
 - Recommendation: In order to disincentivize spillover parking in the neighborhood, a minimal valet fee (if not zero plus tips) is appropriate. However, the price to drive in general should be noticeably higher than taking the bus from remote parking in downtown (or only taking the bus). As proposed, the financial benefit of riding the bus is only equal to

the round-trip bus ticket cost plus two-hours of free parking, or about \$5/person – less for those carpooling. Options for increasing this benefit include lengthening the free parking period and providing discounts and coupons (such as a free drink or snack) at the theater or a downtown partner to those presenting a valid Free Street garage ticket.

- Cost of \$25-\$30/hr.

Recommendation: Assuming this is cost to the theater, \$25-\$30/hr. for valet services suggests a three-person system, which would have only two runners and a manager. For peak demand, especially upon show conclusion, this is insufficient – especially if parking is more than a 30 second run away. Even if only about one-quarter of the anticipated 218 peak parkers seek their cars upon show conclusion, it would take two runners 30 minutes to move 60 cars to the pick-up stand. A greater investment is recommended.

- Includes an environmentally safe and friendly vehicle shuttle for valet parking staff

- Walking and Biking Improvements

- GP does not suggest any improvements directly surrounding the site other than additional bike parking

Recommendation: Only 6 bicycle parking spaces for a 485-seat venue is noticeably insufficient. The cost to install dozens of attractive bicycle racks (ideally done as an arts project) is nominal compared to the likely site development costs. Such an investment would truly be in keeping with the FSLC's commitment to Portland Trails, the City's committee, and the Bicycle Coalition of Maine. For comparison, Cambridge MA's current bicycle ordinance requires one secure bicycle parking space for every 1,000 sq. ft. of theater space, plus an indoor bike parking space for every 12,000 sq. ft.

- Coordination with Portland Trails and the City's Ped Bike Committee on encouraging walking and biking to the facility

- Free Market Options

- Pedicabs may be a potential option for those who park downtown and do not want to use transit

Recommendation: This is an excellent strategy that needs to be marketed along with other options on the proposed website, and a portion of the ticket surcharge subsidy should go to ensuring this service works well.

- Carpooling

- Promoting theater patrons to carpool through Maine's statewide commuter service, Go Maine.

Recommendation: The likelihood that theater patrons would invest in a one-time carpooling service for a theater event is highly unlikely, though promoting carpooling in general should continue. The proponent should

focus an organized Go Main strategy on theater employees, who have not been addressed yet by the proponent.

Marketing

- Marketing strategy from FSLC.

Recommendation: This is a great program outlined by GP. Additional details should be developed for the City to ensure its success and on-going commitments. Additional details that could be considered include a travel information kiosk on site and more specific discussion on partnerships with downtown businesses.

- GP excludes our recommendations of
 - Pedestrian infrastructure improvements
 - Details on entertainment partnering/ marketing
 - Subsidized remote parking
 - Walking wayfinding and lighting
 - Travel Information Kiosk



Memorandum
Planning and Urban Development Department
Planning Division

To: Chair O'Brien and Members of the Portland Planning Board
From: Christine Grimando, Senior Planner
Date: September 19, 2014
Re: 143/145/155 Washington Ave./East Cove Townhouse Rezone
CBLs: 012 G001, 012 G002, 012 G003, 012 G008, 012 G009, 020 G020
Application No.: PEZ.2014-128
Meeting Date: September 23, 2014

I. INTRODUCTION

This is a request for a zoning map amendment for property at 143, 145 & 155 Washington Avenue, on the easterly side of Washington Avenue, between E. Cove Street and Walnut Street. The property is zoned Residential R-6. The site currently is used for a legally non-conforming auto repair and used car lot business. The applicant is proposing a change to the B-2b zone so that they can then apply for a mixed use development consisting of commercial uses along Washington Avenue, and residences in the form of apartments and townhomes.

This application was previously before for the Board for a workshop on August 26th. There was overall support and a positive response to the proposed use and design brought forward by the applicants. A request was made to further explore zone options for the site .

A legal ad for the Planning Board workshop was posted on the city's web page and appeared in the *Portland Press Herald* on September 15 and September 16, 2014. Notices were also sent to 170 property owners within 500 feet of the site and to the interested citizen list. A neighborhood meeting was held on August 14th in anticipation of the first workshop. Notes from that meeting are included as Attachment 1.

II. BACKGROUND

143, 145 & 155 Washington consists of six parcels which are collectively occupied by Casale's Auto Sales. The site contains a 1,344 sf building, several sheds, and surface parking where vehicles are stored. The concrete block building dates to 1975. The nearest intersection, approximately 125 feet to the south, is the convergence of Washington Ave./Walnut St./Fox St.

This length of Washington Ave. is zoned R-6, a residential zone, and is faced on the western side of Washington Ave., directly across the street, with the B-2b, Community Business zone. From Walnut St. to the edge of the park to the north, is approximately 740 feet and is currently the only length of residential zoning on Washington Avenue.

Washington Ave. contains a truly eclectic mix of uses, building types, and scales, including single family and multi-family residential, and a wide span of non-residential uses such as restaurants, retail, offices, galleries, a meadery, auto repair, a redemption center, and light industrial uses – a diverse gamut on a half mile (+/-) stretch. The block the 143/145/155 Washington Ave. parcels are on contains a fairly concentrated pocket of residences than the blocks closer to Congress Street, but also contains a mixture of residential and commercial on both sides of the street. Commercial uses in this section include the Northern Burner Supply building (185 Washington Ave.) and the East End Redemption recycling center (174 Washington Ave.). The newly approved, not yet constructed Avesta Housing efficiencies (134 Washington Ave.) will be on the facing side of the street.



Figure 1, Aerial view of Washington Ave.

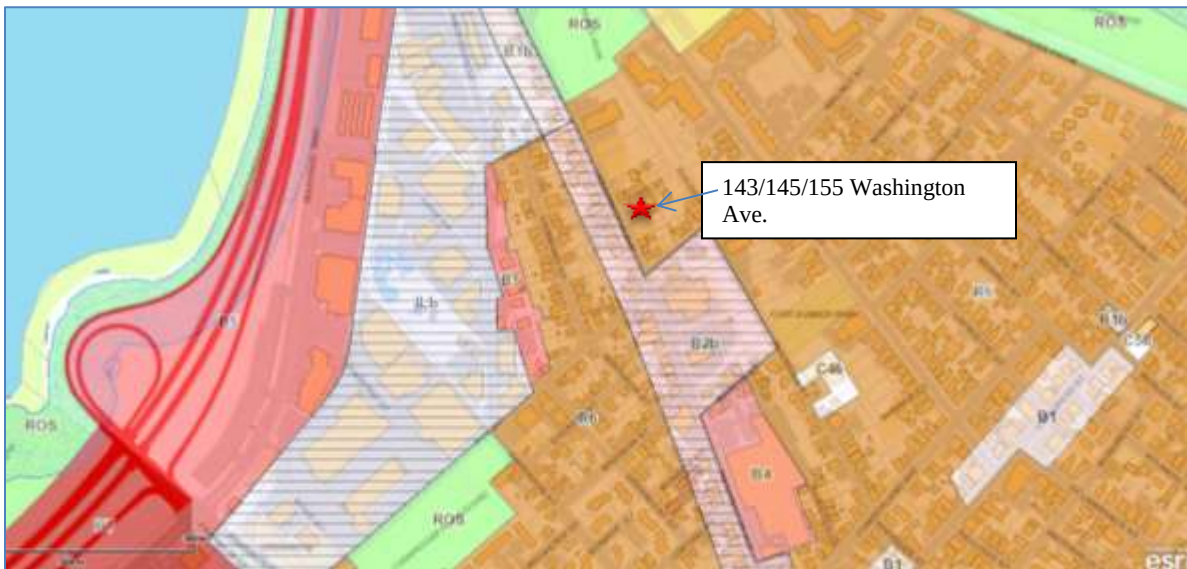


Figure 2, Zoning Context



Figure 3, Street Level Views

II. PROPOSED MAP AMENDMENT

Current Zoning:	R-6 (Residential)
Proposed Zoning:	B-2b (Community Business)
Current Uses:	Auto repair & sales
Proposed Uses:	Residential and commercial: townhouses and a mixed use building with commercial on the ground floor and residential above.
Total Parcel Area:	20,339 SF (approximate)
Area to be Rezoned:	20,339 SF (approximate)

III. ZONING ANALYSIS

Each of the zones discussed below are undergoing revisions. The following is a discussion focused predominantly on current zoning requirements, with a detailed discussion of changes being considered for each in **Other Zones** (R-6), and **Discussion Items** (B-1 and B-2).

The applicant proposes to develop housing on the site as well as first floor commercial space along Washington Avenue. The conceptual site plan for East Cove Townhomes, included with the map amendment application depicts fourteen townhomes, and a building with a ground floor commercial use with two dwelling units above.



Figure 4, Rendering of Proposed Development



Figure 5, Site Layout for Proposed Development

The current zoning district, R-6, allows for the construction of 17 units on this total land area of 20,339 SF, with a minimum lot area per dwelling unit of 1,000 sf for the first three units, and 1,200 square feet for every unit above three. The maximum R-6 density for this site allows for the applicant's proposed number of

dwelling units (text amendments to the R-6 zone are underway, and would allow for a maximum of 28 units on the site – the status of the R-6 revisions is outlined in greater detail below). The mixed-use element of the applicant’s proposal, with a proposed commercial ground floor use on the ground floor, is prohibited in the R-6 zone. R-6 allows certain very limited non-residential uses, such as institutional and small professional offices, but does not allow for retail, restaurant, or most other commercial uses. For this reason, the applicant has requested a rezoning to B-2b, which allows both higher residential density (1 unit/435 SF), and crucially a broad range of commercial uses, including retail and restaurant uses by right. The purpose, dimensional, and use requirements of the existing and proposed zones are explored in greater detail below.

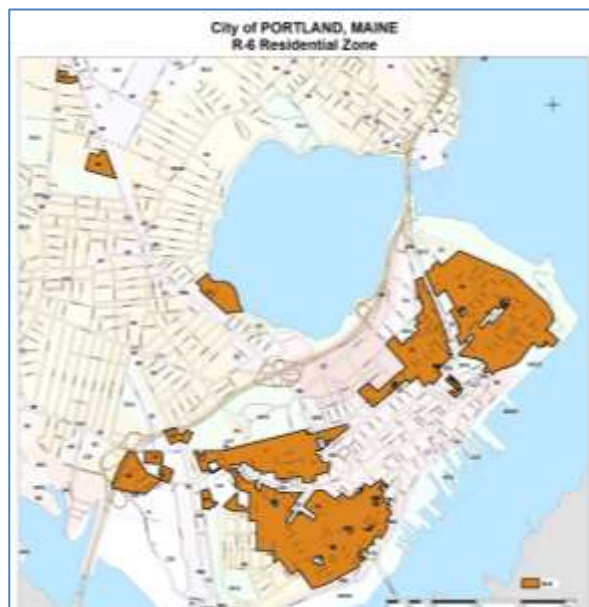


Figure 6, Map Highlighting the R-6 Zone

Purpose

As the primary residential zone on-peninsula, the R-6 zone is intended to promote dense, neighborhood-scale housing.

The purpose of the R-6 zone, which can currently be found predominantly in the East and West Ends of the city, is to “set aside areas...for housing characterized primarily by multi-family dwellings at a high density” and to “conserve the existing housing stock and residential character of neighborhoods by controlling the scale and external impacts of professional offices and other nonresidential uses” (*Section 14-135*).

The B-2b zone, in contrast, is written to encourage commercial development, particularly neighborhood and community retail, in a compact, urban form. The B-2 and B-2b are expressly written for “arterials and intersections with an existing urban or neighborhood oriented building pattern” (*Section 14-181*). The B-2b zone can be found on Washington Avenue, portions of Congress Street east and west of downtown, St John Street, and Forest Avenue. Though the purpose statement of the B-2b zone does not specifically address housing, the overarching B-2 purpose statement does twice: *To provide appropriate locations for the development and operation of community centers offering a mixture of commercial uses, housing and services serving the adjoining neighborhoods and the larger community* (Sec. 14-181.a.1)., and *The B-2 and B-2b will provide locations for moderate to high density housing in urban neighborhoods along arterials* (Sec. 14-181.a.4).

Permitted Uses

The R-6 zone explicitly encourages high-density housing, and permits most housing types by right. However, the R-6 zone does not permit most non-residential uses, and commercial uses are excluded entirely. Some institutional uses are conditionally permitted. The existing use at 145 Washington, auto sales and repairs, is legally non-conforming, and would not be permitted on the site as a new use today.

B-2b, a Community Business Zone, explicitly permits both the residential uses permitted in the R-6 zone as well as a host of commercial, institutional, and other establishments. The B-2b is slightly more permissive than the B-1 zones, as shown in Table 4, below.

Table 2: Permitted and Conditional Uses – Shown with X if listed in Zone

		R-6	B-2b
Single-family and two-family dwellings		x	x

Table 2: Permitted and Conditional Uses – Shown with X if listed in Zone

			R-6	B-2b
		Multi-family dwellings	x	x ¹
		Handicapped family units	x	x
		Single-family manufactured housing	x	
		Combined living/working spaces		x
		Lodging houses	x	x
	Institutional	Schools		x
		Clinics		x
		Places of assembly		x
		Long term, extended and intermediate care facilities		x
		Governmental buildings and uses/municipal uses	x	x
		College, university or trade schools		x
		Nursery schools, kindergartens		
		Day care facilities		x
	Business	General, business & professional offices		x
		Personal services		x
		Offices of building tradesmen		x
		Retail establishments		x
		Restaurants		x
		Drinking establishments		x
		Billiard parlors		x
		Mortuaries or funeral homes		x
		Miscellaneous repair services, excluding motor vehicle repair		x
		Communication studios or broadcast and receiving facilities		x
		Health clubs and gymnasiums		x
		Veterinary hospitals		x
		Theaters		x
		Hotels		x
		Dairies and bakeries		x
		Drive-throughs when accessory to a principal use		x
		Registered medical marijuana dispensaries		x
	Other	Accessory uses	x	x
		Cemeteries	x	
		Parks	x	
		Home occupation	x	
		Special needs independent living units	x	
		Conversion into bed and breakfast		
		Hostels	x	x
		Wind energy systems	x	x
		Utility substations		x
		Bed and breakfasts		x

Table 2: Permitted and Conditional Uses – Shown with X if listed in Zone

			R-6	B-2b
		Studios for artists and craftspeople		x
Conditional	Residential	Sheltered care group homes	x	
		Conversion into bed and breakfast (over 5 rooms)	x	
	Institutional	Schools	x	
		Long-term and extended care facilities	x	
		Intermediate care facility	x	
		Places of assembly	x	
		Hospital	x	
		College, university, trade schools	x	
	Business	Major and minor auto service stations existing as of 1999		x
		Car washes		x
		Drive-throughs associated with a permitted use adjacent to residential zones		x
		Automobile dealerships		x
	Other	Utility substations	x	
		Professional offices	x	
		Chancellery	x	
		Nursery school and kindergartens	x	
		Off-street parking for passenger cars for permitted uses	x	
		Day care facilities	x	
		Temporary wind anemometer towers	x	x
		Hostels	x	
		Wind energy systems	x	x
		Printing and publishing establishments		x
		Wholesale distribution establishments		x
		Research and developments and related production establishments		x

¹ If nearest residential zone is R-4, R-5, R-6, or R-7 or if first floor is used for commercial purposes.

Dimensional Requirements and Form

Though the R-6 explicitly encourages high density housing, the specific dimensional requirements of the current R-6 zone determine the minimum area per dwelling unit, maximum lot coverages, minimum street frontage, and minimum open space ratios that limit the build-out of any given parcel. The R-6's basic control for density, the minimum requirement of 1,000 SF of lot area per dwelling unit for the first three units with 1,200 SF of lot area required per dwelling unit thereafter, would limit the residential build-out of the parcel to 17 dwelling units. The R-6 setback requirements range from 10-20 feet (front setback: 10, rear: 20, side: 10-15, variable by height of buildings).

The B-2 zones encourage a relatively more compact urban form. The B-2b zone has no lot coverage limits or required open space ratio, smaller minimum street frontage and smaller setbacks than the R-6, as befits a commercial zone. Further, the B-2b allows one dwelling unit for each 435 SF of lot area; the maximum

allowable residential density for this property under the B-2b zone would be 38 units. The B-2b also allows a slightly taller building than the R-6, 50 feet, so long as the first floor of the structure is occupied by a commercial use.

Table 3: Dimensional Requirements

	R-6¹	B-2b
Min. Lot Size	4,500 SF+ (depending on use)	None
Min. Lot Area per D.U.	1,000 SF for first 3 units 1,200 SF thereafter	435 SF if active street frontage
Min. Street Frontage	40 ft.	25 ft.
Min. Lot Width	40 ft.	
Min. Front Yard	10 ft.	None
Max. Front yard		10 ft., except for irregularly shaped lots or lots with < 40 ft. of frontage
Min. Rear Yard	20 ft. (for structures >100SF)	10 ft.; 5 ft. for accessory structures
Min. Side Yard	10 – 15 ft. (based on height)	None; 5 ft. for accessory structures
Max. Structure Height	45 ft.	45 ft., except 50 ft. if first floor is occupied by a commercial use
Max. Floor Area		
Max. Lot Coverage	If < 20 DU, 50% of lot area If > 20 DU, 40% of lot area	
Open Space Ratio	If < 20 DU, 20% of lot area If > 20 DU, 30% of lot area	
Max. Impervious Surface		Residential: N/A Business and non-residential uses: 90%

¹ Additional dimensional requirements apply for small residential lot development, bed and breakfasts, places of assembly

Other Zones

For the August Planning Board workshop staff offered analysis of other plausible zones for this location, in addition to comparing current and requested zoning, so that the Board could evaluate the application in a broader policy context. These included an overview of the imminent amendments to the R-6 zone (after several months of meeting with neighborhood organizations and others, this amendment will be before the Board for a workshop in October), and consideration of the B-1 zone. Though the details of the R-6 amendments haven't been formalized yet, the proposal as it currently stands would increase residential density from 1,000-1,200 sf/dwelling unit to 725 sf/dwelling unit. The proposed new density standard would allow a maximum of 28 units on these parcels, exceeding the desired residential density for the site as presented by the applicant. Other changes include a reduction in the front setback from 10 feet to 5 feet (or up to the average setbacks of adjacent front yards), a reduction in the rear setback from 20 feet to 10 feet, and a reduction in the side setback from a variable 10-15 feet to 5 feet. Maximum lot coverage would be increased from a variable 40-50% to 60%, as well. No changes to the R-6 are being considered that would allow for a greater range of commercial uses than what is currently allowed. A table of the proposed changes

is included as Attachment 2, and a webpage on the initiative can be found here:

<http://www.portlandmaine.gov/1260/Amendments-to-the-R-6-Zone>

Changes to the R-6 zone still need to undergo a full review process and implementation that has not yet formally begun, and do not yet define the dimensional parameters of development in the zone.

Planning staff also evaluated the B-1 Neighborhood Business Zone for its potential suitability on this segment of Washington Avenue. The purpose of the B-1 zone is *to provide limited areas for the location of small-scale commercial establishments intended to serve a local market. As a result, uses shall be complimentary, quiet and generally do not disturb the comfort and enjoyment of the adjoining neighborhood environment. Uses shall be designed for the pedestrian scale and will provide convenient access for nearby residents and workers to walk in to purchase goods and services. Buildings and uses shall be designed with attractive storefronts or similar features, with windows and doors convenient to a public sidewalk....This zone shall encourage mixed use buildings such as commercial first floor with residential uses above or combined retail/office uses in a multistory structure. The zone also provides the opportunity for mixed use and high residential density in on-peninsula locations. Suitable locations for this zone may include street intersections and arterial streets with existing or proposed traditional neighborhood retail and service uses.* The B-1 zone aims to cultivate small-scale commercial and mixed-use buildings that can readily integrate into residential neighborhoods in scale and compatibility of uses. All of the small businesses on the eastern end of Congress Street, east of Washington Avenue, are in this zone – Hilltop Coffee, Rosemont Market, a small jewelry shop, etc.

Like the B-2b zone, the B-1 allows for high residential density – a minimum of 435 sf of land area per dwelling unit - and mixed uses. The primary differences between the B1 and B-2b zones:

- The overall footprint of any single building in this zone is limited as follows: single tenant buildings have a maximum ground floor area of 5,000 sf. Multi-tenant buildings have a maximum ground floor area of 10,000 sf. Floor area includes space enclosed by exterior or standard fire walls, exclusive of vent shafts and courts. B-2b has no such limits.
- The range of non-residential uses allowed in B-2b is much wider than that allowed in B-1. A list of where B-1 and B-2b non-residential uses converge and diverge is below.
- Restaurants are allowed in both zones, though in B-1 only as a conditional use. The conditions include a maximum floor area of use by the public (kitchen and storage not included) of 1,000 sf, hours are limited to 6am to 11pm, and a prohibition on drive-throughs.
- B-2b has a height maximum of 45 feet, except for buildings with a first floor commercial use, in which case the maximum height increases to 50 feet. B-1 similarly has a height maximum of 45 feet, with an allowed increase to 50 feet for buildings on Congress St. with a first floor commercial use.



- B-2b has a 25 foot minimum frontage requirement; current B-1 has a 50 foot minimum frontage requirement, or the average of lots w/in 200 ft. in same zone.

Table 4: Comparative Uses for B-1 and B-2 Zones

			B-1/B-1b ¹	B-2/B-2b/B-2c
Permitted	Institutional	Schools	•	•
		Clinics	•	•
		Places of assembly	•	•
		Long term, extended and intermediate care facilities		•
		Governmental buildings and uses/municipal uses	•	•
		College, university or trade schools		•
		Nursery schools, kindergartens	•	
		Day care facilities	•	•
	Business	General, business & professional offices	•	•
		Personal services	•	•
		Business services	•	
		Offices of building tradespeople	•	•
		Retail establishments	•	•
		Restaurants		•
		Drinking establishments		• ¹⁰
		Billiard parlors		•
		Mortuaries or funeral homes		•
		Miscellaneous repair services		• ⁴
		Communication studios or broadcast and receiving facilities		•
		Health clubs and gymnasiums		•
		Veterinary hospitals		• ¹¹
		Theaters		•
		Hotels		• ¹²
		Dairies and bakeries		•
		Drive-throughs when accessory to a principal use on the same lot		• ⁶
		Registered medical marijuana dispensaries		•
		Accessory uses	•	•
	Other	Studios for artists and craftspeople	•	•
		Bed and breakfasts	•	•
		Hostels	•	•

		Wind energy systems	•	•
		Utility substations	•	•
		Beverage dealers	•	
Conditional	Business	Major and minor auto service stations existing as of 1999		• ⁷
		Car washes		•
		Drive-throughs adjacent to residential uses or zones		• ⁸
		Automobile dealerships		•
		Restaurants	• ²	
		Temporary wind anemometer towers	•	•
		Wind energy systems	•	•
		Printing and publishing establishments		•
		Wholesale distribution establishments		•
		Research and development and related production establishments		•
		1 Permitted on ground floor of B-1b; above ground floor, residential uses of 14-162(a), bed and breakfasts, hostels permitted 2 Restaurants conditionally permitted, provided they have a max. floor area for use by public of 1,000 SF; hours limited to 6 am to 11 pm; food service and consumption is primary function; no drive-throughs. 4 excluding motor vehicle repair 6 permitted in B-2 or B-2b if not adjacent to residential use or zone 7 permitted in B-2, & permitted in the B-2b if in existence since 1999 8 permitted in B-2, & permitted in the B-2b if accessory 10 Except in B-2c 11 Excluding outdoor kennels 12 Of less than 150 rooms		

IV. POLICY ANALYSIS

Portland's housing policy is supportive of what the applicant proposes to do at 143/145/155 Washington Avenue. The applicant cites City's Comprehensive Plan element, Housing: Sustaining Portland's Future (2002), Policy #5, Sustainable Development, specifically the subsection *Infill Development: encourage development on vacant lots along accepted city streets*. The application also includes a less specific reference to Sustainable Portland (2009), which encourages increasing housing density. That same Policy #5 includes recommendations for redevelopment of underutilized parcels, building housing near transit and services, and encouraging mixed-use development. On-peninsula, mixed use infill development near services, that will access existing infrastructure, is widely supported by this document. Policy #3 emphasizes appropriately scaled non-residential development that is compatible with residential areas, as well allowing for a mix of commercial and residential development along arterials.

V. PUBLIC COMMENT/NEIGHBORHOOD MEETING

The meeting notes reflect an overall quite positive reception of this proposal, but several issues/areas of concern were mentioned, including landscaping/buffers at property lines, impacts on views, trash pickup, commercial deliveries and related traffic concerns, and loss of auto repair services. Public comment at the August Workshop was largely supportive of the proposed development, though there were general concerns about cumulative development impacts to neighborhood traffic and overall change.

VI. DISCUSSION ITEMS

The Planning Board requested that options be explored for discussion at a second workshop. Further investigation into B-1 and the possibility of a combination of zones to split the property were mentioned as possibilities.

Over the course of extensive discussions among staff and with the applicant, existing and proposed R-6 were both removed from consideration. Existing R-6 was removed for two primary reasons –1) because there is agreement that this property, and Washington Avenue, would benefit from the mixed-use potential that R-6 does not offer, and 2) though R-6 offers sufficient density for the applicant's project, the required setbacks would not allow for the site layout and configuration that they are planning on submitting for Site Plan/Subdivision review. The proposed R-6 includes reduced setbacks, alleviating the second issue, but adding the additional issue of an uncertain and longer timeline.

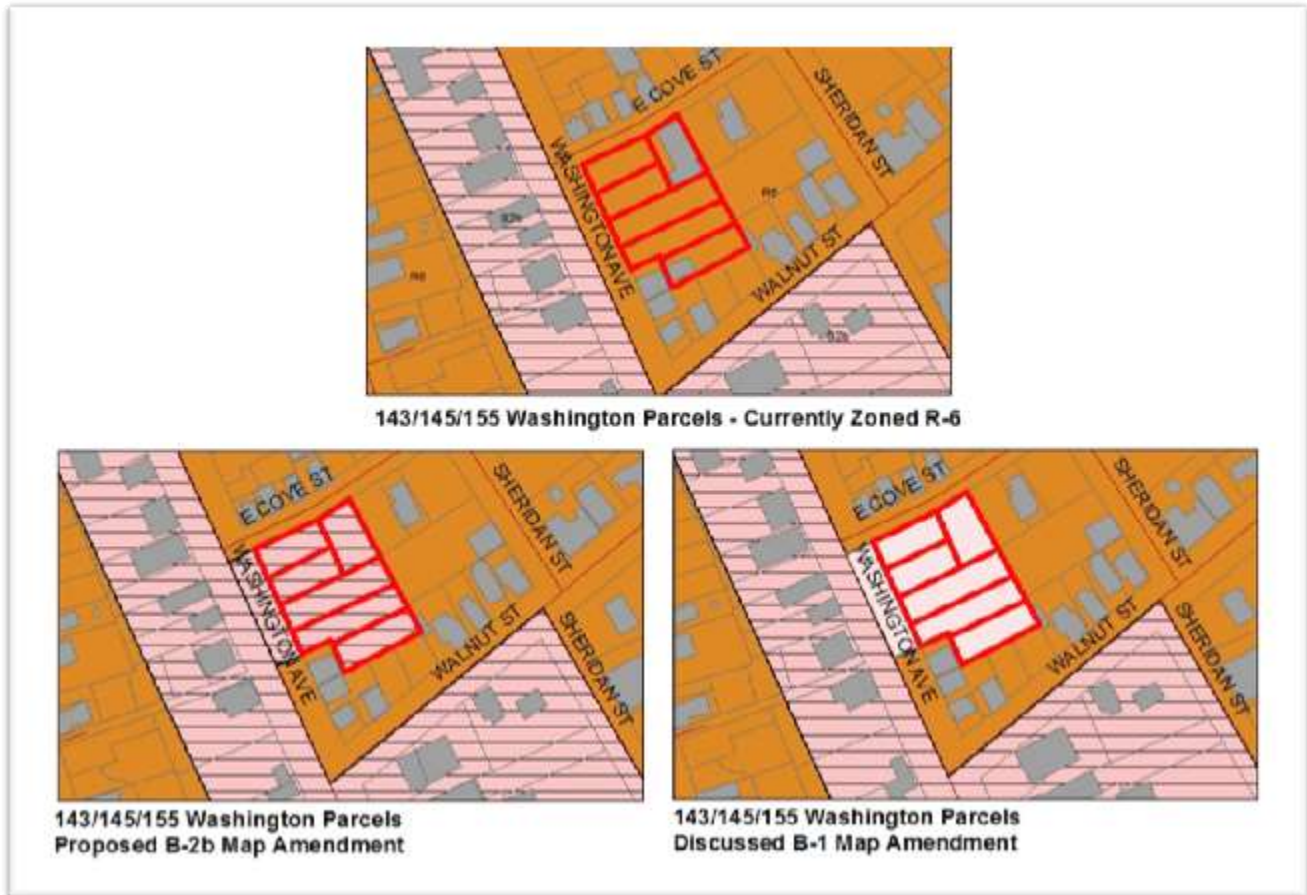


Figure 7, Proposed Map Amendment Extent

Splitting the parcels with two zones similarly was evaluated and discussed, and determined to not be a practical option. Chapter 14 has a provision for lots split by zone boundaries: *the less restricted portion of such lot shall extend not more than thirty (30) feet into the more restricted portion, provided that the lot has at least twenty (20) feet of street frontage in the less restricted zone when taken together with adjacent premises which are under the same or equivalent ownership or control.* Though it is possible to split a lot with two zones, the department prefers to have properties to properties within one zoning designation where feasible.

In looking for a solution that worked cohesively for this lot, and would also fit in the context of Washington Ave., both B-1 and B-2b remained the two practical zones for this property. Staff is proposing two options for this site, with the possibility of expanding the map amendment to replace the remaining R-6 area on Washington Avenue (see Figure 2, Zoning Context).

B-1, Neighborhood Business Zone.

All of the examples of B-1 businesses mentioned above are uses within existing structures, and not the result of new construction. Planning staff has evaluated the B-1 for possible changes to make it a more feasible, incentivized zone for the future. To that end, the following substantive changes are being proposed as text amendments to the B-1 and B-1b zones (a full draft of the amendment is included as Attachment 5):

- Dimensional Standards. Six modifications to the existing dimensional standards are proposed.
 1. Minimum street frontage is reduced from 50 ft. to 20 ft. A smaller minimum street frontage lends itself to the fine grained, small lot development pattern that constitutes so much of the peninsula and so many walkable commercial areas. Most lots along this particular stretch of Washington Ave. have frontages in the 30 ft. range – the intent of lowering this standard is to not disqualify small lots from being utilized where they do occur (or are proposed to be created).
 2. Rear Setback. Current setback is none, except 20 feet when abutting a residential zone or a first floor residential use. Proposed are none, except 10 feet when abutting a residential zone – the variable setback is no longer dependent on current use. The rear setback for accessory structures is none, except when abutting a residential use or zone – the only change to this standard is the elimination of the setback determined by an adjacent use.
 3. Side Setbacks are none, except 10 feet (None/5 ft for accessory structures) when abutting a residential zone or first floor residential use. Proposed are none, except 5 feet when abutting a residential zone (none/5 ft for accessory structures) with the residential use provision removed for both principal and accessory structures.
 4. Side Yard on Side Street. Currently the side yard on side street setback is a maximum of 10 ft. Proposed is a required setback of None. The reason for this change is that if a lot had two side yards on side streets this standard would require maximizing the width of a building across the width of the lot, to meet both 10 ft maximum standards on two sides. It's also generally consistent with other zones to give side yards this flexibility.
 5. Steppbacks are proposed as a new dimensional standard for the B-1 zone – portions of structures above 35 feet will be required to be stepped back an additional five feet on side and rear lot lines when those lot lines abut a residential zone, for a total distance from those lot lines of 15 feet from rear, and 10 feet from the side yard above 35 feet.
 6. Maximum floor areas. The B-1 zone currently has maximum first floor areas, variable by number of tenants. The intent of this language is to limit the overall first floor non-residential footprint in a development. Aside from the more limited list of allowed uses, this is the crux of how B-1 distinguishes itself as a smaller scale commercial zone. This intent is a sound one, but modification of this language is proposed. Instead of controlling for floor area by number of tenants in a building, a total maximum first floor area for non-residential uses is limited to 10,000 sf per structure. Existing structures are exempt from this standard. Finally, total maximum floor area per retail establishment is limited to 5,000 sf total floor area. Floor area for a use does not include bulk storage, kitchen areas, vent shafts. Some examples, not all in the B-1 zone, include the Hilltop Superette (former Colucci's) - approximately 3,000 square feet. The Rite Aid at the base of Congress St. -approximately 14,000 sf. Creighton & Sons Wholesale Florist (121 Washington) - approximately 17,000 sf. The Northern Burner property – 10,000 square feet. The first floor of Micucci's is just under 5,000 sf. A typical Home Depot is about 125,000 sf, and supermarkets are often in the 40,000 to 80,000 sf range. The intent of this standard is not to imply there is not economic or potential aesthetic value in and need for larger commercial spaces, but only to cultivate

smaller increments of non-residential development in particular areas where this seems most in keeping with certain neighborhood contexts.

- Restaurants. Currently restaurants are limited to 1,000 sf (not including kitchen and storage), and are allowed as a conditional use only. This amendment proposes a maximum restaurant floor area of 2,000 sf, and makes restaurant an allowed use, though the conditional use criteria, such as traffic standards and limited hours of operation, have migrated with the use. The intent of this change is consistent with the other B-1 changes that strive to give that zone more utility while still maintaining it as a small-scale commercial option. According to City assessing data, there is currently no East End restaurant that exceeds this square footage (Two examples are Blue Spoon, on Congress Street - approximately 1,100 sf (inclusive of kitchen and other non-dining areas) and The Front Room – approximately 1,600 sf (inclusive of kitchen and non-dining areas, but other restaurants on Washington and at the base of Congress were sampled, as well).; this new maximum would not exclude most of the City's local restaurant size requirements, and is a suitable cap for what the B-1 zone is intended for.
- Two uses have been added because it has been recently pointed out they are not included in B-1, and warrant inclusion:
 1. *Combined living/working spaces including, but not limited to, artist residences with studio space.* The Code allows living and working, but not simultaneously when in a B-1 zone. Other business and industrial zones allow this.
 2. *Professional, business, and general offices, but excluding veterinarians.* B-1 currently allows professional offices, excluding veterinarians. Professional Office is defined as *The office of a doctor, dentist, optometrist, psychologist, accountant, lawyer, architect, engineer or similar professional.* Professional Office is highly restrictive as an office category, and B-1 can accommodate other varieties of offices.
- Lastly, the dimensional standards have been converted to a table format. This sheds some pages from the code as a whole, and makes this section more concise and accessible over all. This is consistent with formatting changes made to other sections as they have undergone amendments.

Planning staff sees the B-1 as a zone that can serve local neighborhood needs well. However, unlike the B-2b zone, the B-1 is not immediately contiguous to any other B-1 zone on Washington Avenue, though there is an approximately 1,500 foot section of B-1b nearby that extends from Gould St. to Tukey's Bridge. The existing pattern of B-1 zones is for them to be placed at intersections and relatively short corridors – the B-2b, on the other hand, is applied to several long corridors, such as Forest Ave. and the smaller but still significant length of Washington Ave.

Whether the Planning Board determines this is the appropriate zone to apply to this application, we view these zoning text changes as positive for the zone as a whole and worthy of adoption on their own merits. Similar to recent efforts to modernize the B-2 zones, and the current initiative to do the same with the R-6, these amendments will result in a zone that more substantively aligns with its purpose. B-1 as proposed is one possible fit for this application and one the Planning Division supports.

B-2b, Community Business Zone

B-2b is currently the dominant zone along Washington Ave., which also includes small sections of B-4, R-6, and B-1b. A change to B-2b would be a contiguous and consistent extension of current zoning. Significant text amendments to the B-2b zone were adopted in July 2014. Staff is proposing the following minor but substantive text amendments to the B-2 zone (a full draft of the amendment is included as Attachment 6):

- Drive-throughs to be prohibited in B-2b. Currently a conditional use, the provision to allow for them is being struck, as drive-throughs are not compatible with walkability, traffic pattern, or aesthetic goals for the B-2b areas.
- 20 ft. is being proposed as the minimum street frontage; 25 ft. is the current minimum frontage. Prior to July the frontage requirement was None for developments that were entirely residential, and 50 ft for mixed use or entirely non-residential sites. In an effort to both streamline the dimensional requirements, to move away from neighboring use-based dimensional standards, and to allow for smaller lots to be created and/or built upon, a single number of 25 ft. was decided upon. Since then, we've received feedback from property owners with lots with frontage just under 25 ft., and on closer examination of existing patterns there seems to be enough of these to warrant a modified frontage requirement.
- Stepbacks are proposed as a new dimensional standard for the B-2b zone – portions of structures above 35 feet will be required to be stepped back an additional five feet on side and rear lot lines when those lot lines abut a residential zone, for a total distance from those lot lines of 15 feet from rear, and 10 feet from sides above 35 feet.

Like the proposed B-1 text changes, we view these B-2 changes as positive for the zone as a whole and worthy of adoption on their own merits.

Table 5: Existing and Proposed Dimensional Standards, B-1 and B-2 Zones

	Existing B-1/B-1b	Proposed B-1/B-1b	Existing B-2/B-2b/B-2c	Proposed B-2/B-2b/B-2c
Min. Lot Size	School: 20,000 SF	School: 20,000 SF	None	None
	Place of Assembly: 10,000 SF	Place of Assembly: 10,000 SF		
	Other Non-Res Uses: None	Other Non-Res Uses: None		
	Residential: None	Residential: None		
Min. Lot Area per D.U.	On-peninsula: 435 SF	On-peninsula: 435 SF	On-peninsula: 435 SF	On-peninsula: 435 SF
	Off-peninsula: min. lot area of nearest residential zone, except 1,000 SF for multi-family dwellings above first floor	Off-peninsula: min. lot area of nearest residential zone, except 1,000 SF for multi-family dwellings above first floor	Off-peninsula: 1,500 SF, or 435 SF if active street frontage	Off-peninsula: 1,500 SF, or 435 SF if active street frontage
Min. Street Frontage	50 ft., or the average of lots w/in 200 ft. in same zone	20 ft.	25 ft.	20 ft.
Min. Lot Width	None	None	None	None
Min. Front Yard	None	None	None	None
Max. Front yard	10 ft., or the maximum front yard setback shall not exceed the average depth of nearest developed lots if that average depth is less than 10 ft.	10 ft., or the maximum front yard setback shall not exceed the average depth of nearest developed lots if that average depth is less than 10 ft.	No more than 10 feet, except that the Planning Board or Planning Authority may approve a different amount for irregularly shaped lots or lots with frontage less than 40 feet provided this standard is met to the maximum extent practicable.	No more than 10 feet, except that the Planning Board or Planning Authority may approve a different amount for irregularly shaped lots or lots with frontage less than 40 feet provided this standard is met to the maximum extent practicable.
Min. Rear Yard	Principal: None, except 20 ft. if abutting residential zone or first floor residential use	Principal: None, except 10 ft. if abutting a residential zone.	Principal: 10 ft.	Principal: 10 ft.
	Accessory: None, except 5 ft. if abutting a residential zone or first floor residential use	Accessory: None, except 5 ft. if abutting a residential zone	Accessory: 5 ft.	Accessory: 5 ft.
Min. Side Yard	Principal: None, except 10 ft. if abutting residential zone or first floor residential use	Principal: None, except 5 ft. if abutting residential zone.	Principal: None	Principal: None
	Accessory: None, except 5 ft. if abutting a residential zone or first floor residential use	Accessory: None, except 5 ft. if abutting a residential zone	Accessory: 5 ft.	Accessory: 5 ft.
Side Yard on Side Street	10 ft maximum setback (if on three streets, only applies to two 'most major' streets)	None	None	None
Structure Setbacks		Portions of a structure above 35 ft shall be no closer than 10 ft from the side property line and no closer than 15 feet from the rear property line when such property line abuts a residential zone.		Portions of a structure above 35 ft shall be no closer than 10 ft from the side property line and no closer than 15 feet from the rear property line when such property line abuts a residential zone.
Max. Structure Height ¹	Off- peninsula: 35 ft., except where abutting R-6, where max. height shall be the max. height of R-6	Off- peninsula: 35 ft., except where abutting R-6, where max. height shall be the max. height of R-6.	45 feet except as provided for below:	45 feet except as provided for below:
	On-peninsula: 45 ft., except 50 ft. along Congress Street if commercial first floor & residential upper floors	On-peninsula: 45 ft. except 50 ft. along Congress Street if commercial first floor & residential upper floors.	a. 50 feet if first floor is partially or wholly occupied by a commercial use.	a. 50 feet if first floor is partially or wholly occupied by a commercial use.
Max. Floor Area	Single-tenant: 5,000 SF (first floor only)	Total maximum first floor area for non-residential uses per structure: 10,000 SF ²	b. 65 feet in B-2 and B-2c zones on lots >5 acres provided that all setbacks, except for front yard setbacks and side yard on side street setbacks, increase by 1 foot for each foot of height over 45 feet.	b. 65 feet in B-2 and B-2c zones on lots >5 acres provided that all setbacks, except for front yard setbacks and side yard on side street setbacks, increase by 1 foot for each foot of height over 45 feet.
	Multi-tenant: 10,000 SF (first floor only)	Total maximum floor area per retail establishment: 5,000 SF	c. 65 feet within 65 feet of Franklin St.	c. 65 feet within 65 feet of Franklin St.
Max. Lot Coverage			None	None
Open Space Ratio			Residential: None	Residential: None
Max. Impervious Surface	90%	90%	Other uses in B-2 and B-2c: 80%	Other uses in B-2 and B-2c: 80%
			Other uses in B-2b: 90%	Other uses in B-2b: 90%

1. The commercial first floor uses shall utilize at least 75 percent of the first floor frontage along Congress Street and shall have an average depth of at least 20 feet.

2. Structures which existed prior to date of enactment of the B-1/B-1b zones are exempt.

Since the proposed amendment to the B-1 zones includes previously unseen, substantial changes, Planning staff recommends that if the B-1 text amendments will require multiple workshops or a protracted time frame for review, that B-2b, with the short list of modifications proposed, be supported for this site. B-2b is the zone contiguous to this site, and would make for a cohesive pattern on Washington Ave. After proposed text amendments to both B-1 and B-2, the substantive areas of difference between them will be the list of allowed uses, and the cap on commercial square footage in B-1. Both have the same allowable density and will have consistent setbacks and stepbacks. Building heights are comparable – B-2b has an allowable height of 50 feet in this area when occupied wholly or in part by a commercial use, compared to B-1's 45 ft maximum. Both prohibit parking in the front yard, and neither allows drive-throughs.

The memo for this application that was included for the August workshop noted that a zone amendment was not bound to the project the applicant is proposing. Only a contract zone would tie a development proposal to a zone change, and so the Board is always considering the broader question of whether the proposed change is consistent with other policy goals. B-1 and B-2b are both consistent with Comprehensive Plan goals outlined above. Though there is this broader policy question, it is significant that the applicant has brought forward extensive documentation of a plan for the property that is well below allowed density and below maximum heights, and also demonstrates overall thoughtful site design and an active relationship to an evolving Washington Avenue.

Staff has focused on this specific application and generating text amendments to both the B-1 and B-2 zones that speak to both the needs of the site, and the zones as a whole. At this time the Planning Division is not making a recommendation on rezoning a larger area of the street. If the Board wishes to extend the map amendment over a larger area there will be an opportunity at the September 23rd workshop to discuss appropriate zone boundaries. The facing side of Washington Avenue extends a fairly consistent, approximate 100 feet of depth off of those property lines, but the eastern side of the street has a much more diverse lot pattern, which would lead to a more variable zone extension. The variety of both lot sizes and uses in this area may warrant its own, later discussion of an appropriate zone change for the larger area between Walnut Street and the beginning of the park. The map below shows this area generally, and the blue dotted line is not meant to indicate a new zoning boundary.

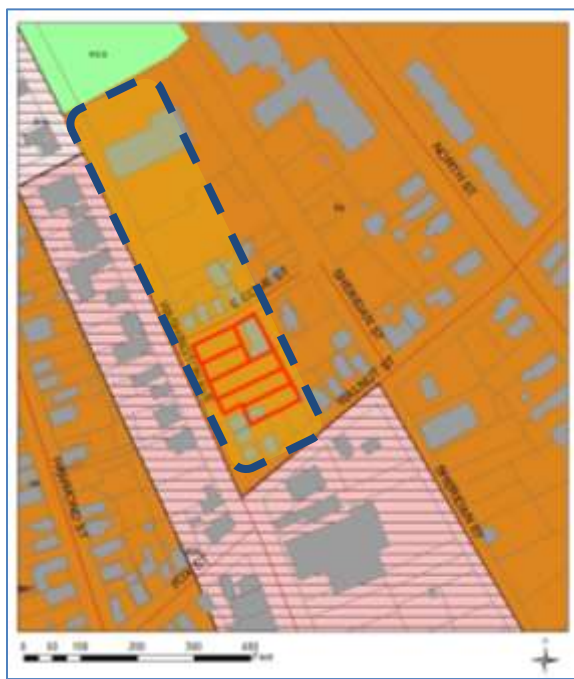


Figure 8, Potential Area for Map Amendment Discussion

VII. NEXT STEPS

The applicant has applied for a map amendment from R-6 to B-2b, and the next step in the application process is to hold a public hearing on the application. If there is agreement on the B-1 changes and their suitability for this site, the public hearing could be noticed for a map change from R-6 to B-1. The Board will be looked to for direction on both the specific zone amendment and which parcels to advertise for in the event the map amendment is extended to a wider geography. Any changes suggested at the September 23 workshop to either the proposed B-1 or B-2 text amendments will be incorporated into subsequent drafts for Board review.

VIII. ATTACHMENTS

1. Developer's Neighborhood Meeting notes
2. Table of potential R-6 Zone Amendments
3. Zoning Map of B1 and B2 areas
4. Dimensional Comparison Table
5. B1 Draft Amendment
6. B2 Draft Amendment
7. Amendment Application
8. Amendment Drawings

Neighborhood meeting / East Cove Townhomes:

East End Elementary School

August 14, 2014

There were a total of 9 people in attendance. Several abutting neighbors, some from the surrounding neighborhood and one representative from the Munjoy Hill Neighborhood Association. There was one member of the media in attendance.

Jed Rathband, partner in the development led the discussion. Wade Flemming, took notes for the developer.

Jed introduced the project and the need for the zone change, discussing some of the history and how Jed and his partner Ron Gan decided to focus on this lot as an important place for a mixed use development for the neighborhood. Jed explained that the zone change was necessary to incorporate the commercial as well as adhere to the zoning surrounding the parcel. The mixed use is encouraged to create more commercial uses in this part of the city.

The issues focused on the size of the development, height, number of units, parking and affordability. Michelle Perejda, from Washington Ave. has concerns about what sort of landscaping the developer would be putting up between her property and the townhomes. She also offered her support for non-subsidized housing. She referenced the 18 units being built across from her house on Washington Ave. by Avesta Housing as ample affordable housing.

Brendon O'Neil, a neighbor on Walnut St. was concerned about his views out to the north and west looking down Washington Street. He asked if the developer could deed restrict the height to 35 feet. The developer said he would not be willing to do that.

Mr. O'Neil also had concerns about where the trash for the development would be managed and if deliveries for the commercial space would tie up traffic at rush hour. Many of his concerns focused on the height of the buildings. The developer said he was only proposing to go 34 feet and that the current zoning allows for 45 feet.

Laura Balludur, also from Walnut Street said she was optimistic but wanting to learn as much as possible about the project as it might have an impact on her property. She generally supported the project.

Cynthia Cochran and Ellen Bailey from nearby Hammond Street said that of all the projects proposed in the neighborhood, they thought East Cove Townhomes was the nicest and the most sensitive to the concerns of the neighborhood.

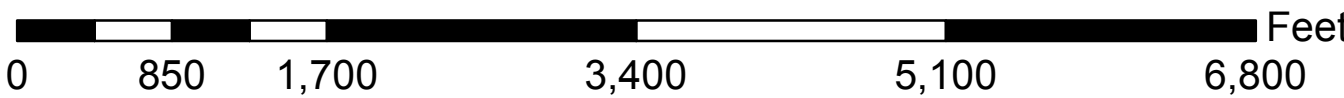
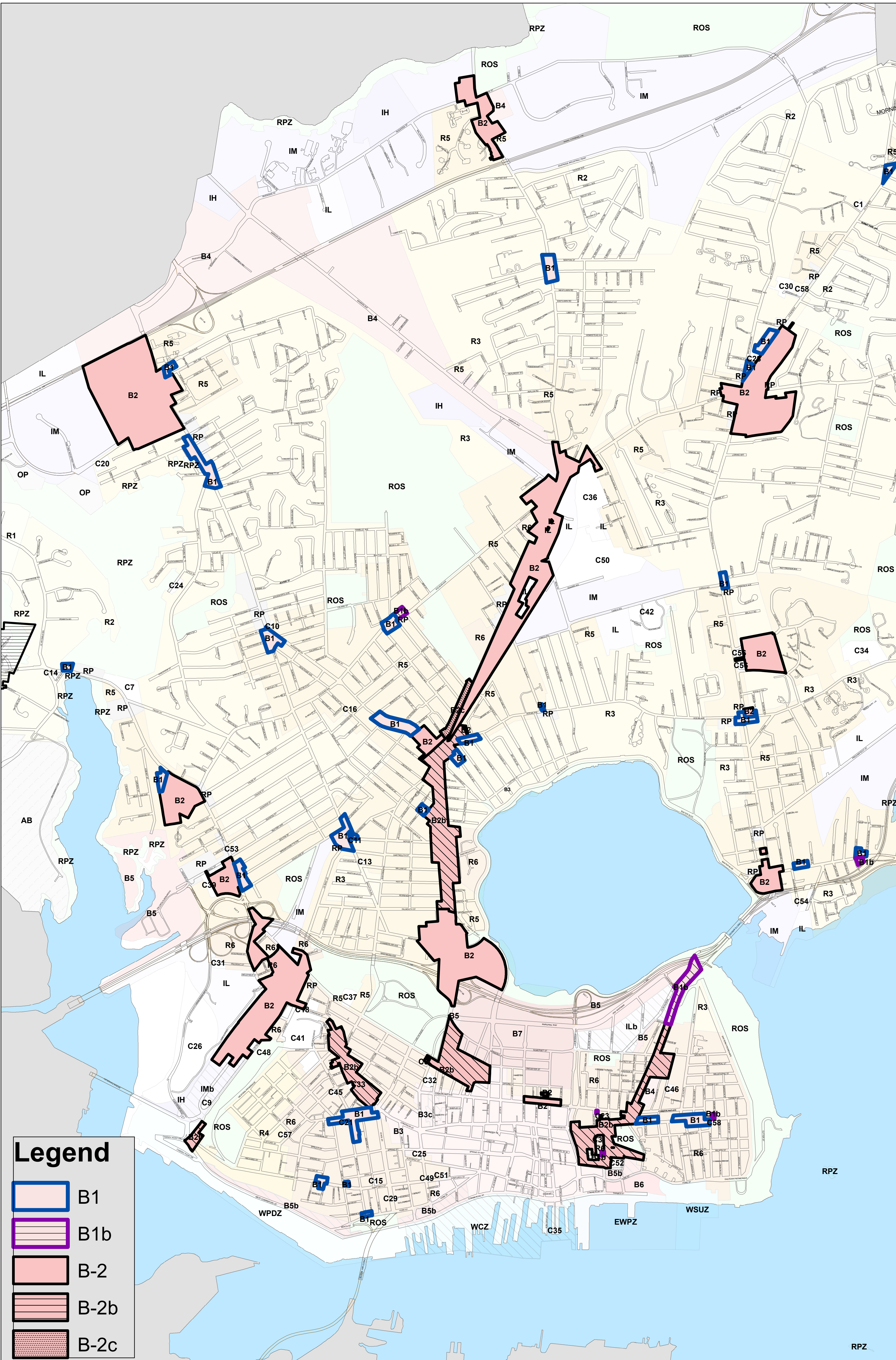
Bobbi and Adam Cope, who are building a 15 unit project across the street from East Cove Townhomes were also in attendance. They offered their support for the zone change and said they welcomed more development and unit mix on the street.

Carroll McCracken lamented that she would not be able to get her car fixed at Casales Garage any longer. The developer recommended either going to the Cumberland Ave. Garage at the corner of Cumberland and Washington Ave. or AAA on Marginal Way. 3G's is also currently operating at a garage just one block down from the proposed site.

Generally everyone was in favor of the project, recognizing that the developers are not going as high or as densely as they could under the current R-6 zone. Everyone was in favor of more commercial uses and amenities.

Proposed R-6 Amendments to Dimensional Requirements		
<i>Residential Dimensional Requirements</i>	<i>Existing</i>	<i>Proposed</i>
Lot Size	4,500 sf	2,500 sf
Min. Lot Area/Dwelling Unit	1,000-1,200 sf	725 sf
Lot Area/Lodging House Rooming Unit	250 s.f	250 s.f
Street Frontage	40 feet	30 feet
Front Yard Setback	10 feet, or no more than average depths of adjacent front yards	5 feet, or no more than average depths of adjacent front yards
Rear Yard Setback	20 feet	10 feet
Side Yard Setback	10-15 feet, variable by height	5 feet
Side Yard on Side Street	10 feet	0 feet
Maximum Lot Coverage	40-50%, variable by # of dwelling units/lot	60%
Minimum Lot Width	40 feet	30 feet
Maximum Height	45 feet	45 feet
Landscaped Open Space	20-30%, variable by # of dwelling units/lot	20%
Parking	1 space/unit	1 space/unit, except none required for first 3 units

City of PORTLAND, MAINE
ZONING
B-1, B-1b, B-2, B-2b & B-2c Zones



	Existing B-1/B-1b	Proposed B-1/B-1b	Existing B-2/B-2b/B-2c	Proposed B-2/B-2b/B-2c
Min. Lot Size	School: 20,000 SF	School: 20,000 SF	None	None
	Place of Assembly: 10,000 SF	Place of Assembly: 10,000 SF		
	Other Non-Res Uses: None	Other Non-Res Uses: None		
	Residential: None	Residential: None		
Min. Lot Area per D.U.	On-peninsula: 435 SF	On-peninsula: 435 SF	On-peninsula: 435 SF	On-peninsula: 435 SF
	Off-peninsula: min. lot area of nearest residential zone, except 1,000 SF for multi-family dwellings above first floor	Off-peninsula: min. lot area of nearest residential zone, except 1,000 SF for multi-family dwellings above first floor	Off-peninsula: 1,500 SF, or 435 SF if active street frontage	Off-peninsula: 1,500 SF, or 435 SF if active street frontage
Min. Street Frontage	50 ft., or the average of lots w/in 200 ft. in same zone	20 ft.	25 ft.	20 ft.
Min. Lot Width	None	None	None	None
Min. Front Yard	None	None	None	None
Max. Front yard	10 ft., or the maximum front yard setback shall not exceed the average depth of nearest developed lots if that average depth is less than 10 ft.	10 ft., or the maximum front yard setback shall not exceed the average depth of nearest developed lots if that average depth is less than 10 ft.	No more than 10 feet, except that the Planning Board or Planning Authority may approve a different amount for irregularly shaped lots or lots with frontage less than 40 feet provided this standard is met to the maximum extent practicable.	No more than 10 feet, except that the Planning Board or Planning Authority may approve a different amount for irregularly shaped lots or lots with frontage less than 40 feet provided this standard is met to the maximum extent practicable.
Min. Rear Yard	Principal: None, except 20 ft. if abutting residential zone or first floor residential use	Principal: None, except 10 ft. if abutting a residential zone.	Principal: 10 ft.	Principal: 10 ft.
	Accessory: None, except 5 ft. if abutting a residential zone or first floor residential use	Accessory: None, except 5 ft. if abutting a residential zone	Accessory: 5 ft.	Accessory: 5 ft.
Min. Side Yard	Principal: None, except 10 ft. if abutting residential zone or first floor residential use	Principal: None, except 5 ft. if abutting residential zone.	Principal: None	Principal: None
	Accessory: None, except 5 ft. if abutting a residential zone or first floor residential use	Accessory: None, except 5 ft. if abutting a residential zone	Accessory: 5 ft.	Accessory: 5 ft.
Side Yard on Side Street	10 ft maximum setback (if on three streets, only applies to two 'most major' streets)	None	None	None
Structure Stepbacks		Portions of a structure above 35 ft shall be no closer than 10 ft from the side property line and no closer than 15 feet from the rear property line when such property line abuts a residential zone.		Portions of a structure above 35 ft shall be no closer than 10 ft from the side property line and no closer than 15 feet from the rear property line when such property line abuts a residential zone.
Max. Structure Height ¹	Off- peninsula: 35 ft., except where abutting R-6, where max. height shall be the max. height of R-6	Off- peninsula: 35 ft., except where abutting R-6, where max. height shall be the max. height of R-6.	45 feet except as provided for below:	45 feet except as provided for below:
	On-peninsula: 45 ft., except 50 ft. along Congress Street if commercial first floor & residential upper floors	On-peninsula: 45 ft. except 50 ft. along Congress Street if commercial first floor & residential upper floors.	a. 50 feet if first floor is partially or wholly occupied by a commercial use.	a. 50 feet if first floor is partially or wholly occupied by a commercial use.
Max. Floor Area	Single-tenant: 5,000 SF (first floor only)	Total maximum first floor area for non-residential uses per structure: 10,000 SF ²	b. 65 feet in B-2 and B-2c zones on lots >5 acres provided that all setbacks, except for front yard setbacks and side yard on side street setbacks, increase by 1 foot for each foot of height over 45 feet.	b. 65 feet in B-2 and B-2c zones on lots >5 acres provided that all setbacks, except for front yard setbacks and side yard on side street setbacks, increase by 1 foot for each foot of height over 45 feet.
	Multi-tenant: 10,000 SF (first floor only)	Total maximum floor area per retail establishment: 5,000 SF	c. 65 feet within 65 feet of Franklin St.	c. 65 feet within 65 feet of Franklin St.
Max. Lot Coverage			None	None
Open Space Ratio				
Max. Impervious Surface	90%	90%	Residential: None	Residential: None
			Other uses in B-2 and B-2c: 80%	Other uses in B-2 and B-2c: 80%
			Other uses in B-2b: 90%	Other uses in B-2b: 90%

1. The commercial first floor uses shall utilize at least 75 percent of the first floor frontage along Congress Street and shall have an average depth of at least 20 feet.
2. Structures which existed prior to date of enactment of the B-1/B-1b zones are exempt.

DIVISION 9. B-1 AND B-1b NEIGHBORHOOD BUSINESS ZONES*

***Editor's note**--Ord. No. 292-88, adopted Apr. 4, 1988, with an effective date of July 1, 1988, repealed §§ 14-161--14-167 of Div. 9, B-1 Business Zone, of this article and enacted in lieu thereof similar new provisions as set out in §§ 14-161--14-167. Formerly, such sections derived from §§ 602.8.A--602.8.G of the city's 1968 Code and from Ord. No. 74-72, adopted Mar. 6, 1972, and Ord. No. 499-74, § 4, adopted Aug. 19, 1974.

Sec. 14-161. Purpose.

(a) B-1 Neighborhood Business Zone

The purpose of the B-1 neighborhood business zone is to provide limited areas for the location of small-scale commercial establishments intended to serve a local market. As a result, uses shall be complimentary, quiet and generally do not disturb the comfort and enjoyment of the adjoining neighborhood environment. Uses shall be designed for the pedestrian scale and will provide convenient access for nearby residents and workers to walk in to purchase goods and services. Buildings and uses shall be designed with attractive storefronts or similar features, with windows and doors convenient to a public sidewalk. Building additions are encouraged but not required to meet the maximum setbacks of 14-165(c)(3). This zone shall encourage mixed use buildings such as commercial first floor with residential uses above or combined retail/office uses in a multistory structure. The zone also provides the opportunity for mixed use and high residential density in on-peninsula locations.

Suitable locations for this zone may include street intersections and arterial streets with existing or proposed traditional neighborhood retail and service uses.

(b) B-1b Neighborhood Business Zone

The purpose of the B-1b neighborhood business zone is to provide appropriate opportunities for the establishment of small-scale ground floor commercial uses to serve ~~in existing buildings, serving~~ a local market, while preserving residential uses and character above the ground floor of structures. The zone also provides the opportunity for mixed use and high residential density in on-peninsula locations. Building additions are encouraged but not required to meet the maximum setbacks of 14-165(c)(3).

Suitable locations for this zone may include street intersections, arterial streets, and sites with existing or traditional neighborhood retail and service uses.

(Ord. No. 292-88, 4-4-88; Ord. No. 133-93, § 1, 11-15-93; Ord. No. 94-99, 11-15-99; Ord. No. 281-10/11, 7-18-11)

Sec. 14-162. Permitted uses.

(a) The following uses are permitted in the B-1 zone and on the ground floor level of buildings in the B-1b zone. For permitted uses in the upper stories of buildings in the B-1b zone, refer to subsection (5) below: in existence on November 15, 1993:

1. Residential

~~a.~~ ~~a.~~ Any residential use permitted in the residential zone abutting the lot is permitted. If there is no abutting residential zone, any residential use permitted in the nearest residential zone to the lot is permitted. In the case of two (2) or more abutting residential zones, any residential use permitted in the most restrictive such zone is permitted.

b. In any structure with commercial use on the first floor, multifamily dwellings are permitted above the first floor.

c. Combined living/working spaces including, but not limited to, artist residences with studio space.

2. *Business:* Business uses listed below are permitted, provided that such use which generates in excess of a ratio of 100 peak hour vehicle trips per 2000 sq.ft. of space, and generates in excess of 100 peak hour vehicle trips is prohibited. As set forth in the City of Portland Technical Manual, section I, the city traffic engineer shall require a traffic study when it calculates the proposed use will generate in excess of a total of 50 peak hour vehicle trips.

a. Professional, business, and general offices
~~Professional offices, as defined in section 14-47,~~ but excluding veterinarians.

- b. Business services, as defined in section 14-47, but excluding beverage container redemption centers.
- c. Personal services, as defined in section 14-47.
- d. Offices of building tradesmen, provided there is no exterior storage of building materials.
- e. Retail establishments, provided such do not include drive-through sales or services and do not operate between the hours of eleven (11) p.m. and six (6) a.m. and do not accept deliveries or services between the hours of ten (10) p.m. to seven (7) a.m.
- f. Beverage dealers (as defined in 32 M.R.S.A. 1862) provided they meet the following requirements:
 - i. Maximum total floor area for beverage container redemptions, including the storage of spent beverage containers, shall be no greater than five hundred (500) sq. ft. or ten (10) percent of the total floor area of the facility, whichever is less;
 - ii. Beverage container redemption is an accessory use to a principal retail use that includes beverage sales. Local beverage container redemption centers as defined in 32 M.R.S.A. 1867, as may be amended, are not allowed as a principal use.
 - iii. Storage of all beverage containers shall be contained entirely within the building providing retail sales.
- g. Studios for artists, photographers and craftspeople including but not limited to, painters, sculptors, dancers, graphic artists and musicians.
- h. Restaurants are permitted in the B-1 zone and on the ground floor level of buildings in the B-1b

zone provided they meet the following additional requirements in addition to the vehicle trips standards of in Sec. 14-162.a.2:

- a. As set forth in the City of Portland Technical Manual, section I, the city traffic engineer shall require a traffic study when it calculates the proposed use will generate in excess of a total of 50 peak hour vehicle trips.
- b. Maximum total floor area for use of the public shall be two thousand (2,000) square feet.
- c. The hours of operation shall be limited to between 6:00 a.m. and 11:00 p.m. each day.
- d. Food service and consumption are the primary function of the restaurant.
- e. There shall be no drive-through service.

3. *Institutional:*

- a. Places of religious assembly;
- b. Municipal offices;
- c. Elementary, middle and secondary schools;
- d. Nursery schools and kindergarten;
- e. Clinics of less than three thousand (3,000) square feet of total floor space.

4. *Other:*

- a. Lodging houses;
- b. Utility substations, as defined in section 14-47, subject to the standards of article V (site plan), sections 14-522 and 14-523 notwithstanding;

- c. Day care facilities or babysitting services;
 - d. Accessory uses as provided in section 14-404;
 - e. Bed and breakfast, subject to the standards of article V (site plan), sections 14-522 and 14-523 notwithstanding.
 - f. Hostels, provided the applicant submits a site plan and operations plan demonstrating compliance with the following conditions:
 - i. No more than twenty (20) overnight transient guests shall be permitted in the facility at any one time.
 - ii. All applicable provisions of Article V of this chapter shall be met.
 - iii. Parking shall be provided in compliance with Division 20 of this Article.
 - iv. No unaccompanied minors under the age of eighteen (18) shall be permitted in the facility.
 - v. The length of stay for transient guests shall not exceed fifteen (15) days out of any sixty-day period.
 - vi. The building shall meet the applicable occupant load requirements as defined by the International Building Code and the NFPA Life Safety Code, as such codes are amended or adopted by the city.
 - g. Neighborhood center.
5. Uses permitted above the ground floor level of buildings in the B-1b zone:
- a. Any residential use set forth in section 14-162(a);

- b. Bed and breakfast, subject to the standards of article V (site plan), sections 14-522 and 14-523 notwithstanding.
- c. Hostels, provided the applicant submits a site plan and operations plan demonstrating compliance with the following conditions:
 - i. No more than twenty (20) overnight transient guests shall be permitted in the facility at any one time.
 - ii. All applicable provisions of Article V of this chapter shall be met.
 - iii. Parking shall be provided in compliance with Division 20 of this Article.
 - iv. No unaccompanied minors under the age of eighteen (18) shall be permitted in the facility.
 - v. The length of stay for transient guests shall not exceed fifteen (15) days out of any sixty-day period.
 - vi. The building shall meet the applicable occupant load requirements as defined by the International Building Code and the NFPA Life Safety Code, as such codes are amended or adopted by the city.

6. Wind energy systems, as defined and allowed in Article X, Alternative Energy.

(Ord. No. 292-88, 4-4-88; Ord. No. 133-93, § 2, 11-15-93; Ord. No. 125-97, § 5, 3-3-97; Ord. No. 94-99, 11-15-99; Ord. No. 74-06/07, 12-4-06; Ord. No. 127-09/10, 1-4-10 emergency passage; Ord. No. 278-09/10, 7-19-10, Ord. 10 10/11, 8-2-10; Ord. No. 279-09/10, 6-6-11; Ord. No. 33-11/12, 1-18-12; Ord. No. 162-12/13, 4-1-13)

***Editor's Note-** Pursuant to Ord. No. 74-06/07, enacted on 12-4-06 changes made in (2) *Business* are effective October 16, 2006.

Sec. 14-163. Conditional uses.

~~(a) The following uses are permitted in the B-1 zone and~~

~~on the ground floor level of buildings in the B-1b zone, as provided in section 14-474 (conditional uses), if they meet the following requirements provided that such use which generates in excess of a ratio of 100 peak hour vehicle trips per 2000 sq. ft. of space, and generates in excess of 100 peak hour vehicle trips is prohibited. As set forth in the City of Portland Technical Manual, section I, the city traffic engineer shall require a traffic study when it calculates the proposed use will generate in excess of a total of 50 peak hour vehicle trips:~~

~~1. Restaurants, provided they meet the following requirements:~~

~~a. Maximum total floor area for use of the public shall be one thousand (1,000) square feet;~~

~~b. The hours of operation shall be limited to between 6:00 a.m. and 11:00 p.m. each day;~~

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

~~d. There shall be no drive-through service.~~

(a) ~~(b)~~ The following use shall be permitted only upon the issuance of a conditional use permit, subject to the provisions of section 14-474 (conditional uses) and any special provisions, standards or requirements specified below:

1. Temporary wind anemometer towers, as defined in sec. 14-47, are permitted provided the following standards are met in addition to sec. 14-430:

a. Towers may be installed for the purpose of wind data collection for no more than two (2) years after the issuance of a certificate of occupancy for the tower. At the conclusion of the aforementioned two (2) years, the tower must be dismantled and removed from the site within sixty (60) days; and

b. Towers shall be constructed according to plans and specifications stamped by a licensed professional engineer, which shall be provided to

the board of appeals with the application; and

- c. Towers shall be set back from habitable buildings by a distance equal to 1.1 times the tower height; and
- d. The applicant shall provide a safety report prepared and stamped by a licensed professional engineer to the Board of Appeals with their application for conditional use, which demonstrates how the proposed temporary wind anemometer tower is safe in terms of strength, stability, security, grounding, icing impacts and maintenance; and
- e. The applicant shall provide evidence of commercial general liability insurance, such insurance to be satisfactory to Corporation Counsel and cover damage or injury resulting from construction, operation or dismantling of any part of the temporary wind anemometer tower; and
- f. Towers and associated guy wires shall be sited to minimize their prominence from and impacts on public ways (including pedestrian ways); and
- g. Towers shall be used for installing anemometers and similar devices at a range of heights from the ground to measure wind characteristics (speed, direction, frequency) and related meteorological data, but shall not be used for any other purpose; and
- h. A performance guarantee shall be required for the cost of removal of the tower, guy wires and anchors. This requirement may be satisfied by surety bond, letter of credit, escrow account or by evidence, acceptable to the City, or the financial and technical ability and commitment of the applicant or its agents to remove the facility at the end

of the use period.

2. Wind energy systems, as defined and allowed in
Article X, Alternative Energy.

(Ord. No. 292-88, 4-4-88; Ord. No. 133-93, § 3, 11-15-93; Ord. No. 94-99, 11-15-99; Ord. No. 74-06/07, 12-4-06; Ord. No. 29-09/10, 8-3-09, emergency passage; Ord. No. 278-09/10, 7-19-10; Ord. No. 33-11/12, 1-18-12)

***Editor's Note-** Pursuant to Ord. No. 74-06/07, enacted on 12-4-06 changes made in (2) *Business* are effective October 16, 2006.

Sec. 14-164. Prohibited uses.

Uses not enumerated in sections 14-162 and 14-163 as either permitted or conditional uses are prohibited.

(Ord. No. 292-88, 4-4-88)

Sec. 14-165. Dimensional requirements.

In addition to the provisions of division 25 (space and bulk regulations and exceptions) of this article, residential uses in off-peninsula locations, permitted under section 14-162(a) shall meet the requirements of such abutting or nearest residential zone except ~~as noted in Sec. 14-165(h)~~ (minimum lot area per dwelling unit). Residential uses in on-peninsula locations, as defined in Section 14-47, and nonresidential uses in the B-1 and B1-b zones shall meet the following minimum requirements:

-	<u>Proposed B-1/B-1b</u>
<u>Min. Lot Size</u>	<u>School: 20,000 SF</u>
	<u>Place of Assembly: 10,000 SF</u>
	<u>Other Non-Res Uses: None</u>
	<u>Residential: None</u>
<u>Min. Lot Area per D.U.</u>	<u>On-peninsula: 435 SF</u>
	<u>Off-peninsula: min. lot area of nearest residential zone, except 1,000 SF for multi-family dwellings above first floor</u>
<u>Min. Street Frontage</u>	<u>20 ft.</u>
<u>Min. Lot Width</u>	<u>None</u>
<u>Min. Front Yard</u>	<u>None</u>
<u>Max. Front yard</u>	<u>10 ft., or the maximum front yard setback shall not exceed the average depth of nearest developed lots if that average depth is less than 10 ft.</u>
<u>Min. Rear Yard</u>	<u>Principal: None, except 10 ft. if abutting a residential zone.</u>

	<u>Accessory: None, except 5 ft. if abutting a residential zone</u>
<u>Min. Side Yard</u>	<u>Principal: None, except 5 ft. if abutting residential zone.</u>
	<u>Accessory: None, except 5 ft. if abutting a residential zone</u>
<u>Min. Side Yard on Side Street</u>	<u>None</u>
<u>Structure Stepbacks</u>	<u>Portions of a structure above 35 ft shall be no closer than 10 ft from the side property line and no closer than 15 feet from the rear property line when such property line abuts a residential zone.</u>
<u>Max. Structure Height¹</u>	<u>Off- peninsula: 35 ft., except where abutting R-6, where max. height shall be the max. height of R-6.</u>
	<u>On-peninsula: 45 ft. except 50 ft. along Congress Street if commercial first floor & residential upper floors.</u>
<u>Max. Floor Area</u>	<u>Total maximum first floor area for non-residential uses per structure: 10,000 SF²</u>
	<u>Total maximum floor area per retail establishment: 5,000 SF</u>
<u>Max. Lot Coverage</u>	-
<u>Open Space Ratio</u>	-
<u>Max. Impervious Surface</u>	<u>90%</u>

1. The commercial first floor uses shall utilize at least 75 percent of the first floor frontage along Congress Street and shall have an average depth of at least 20 feet.

2. Structures which existed prior to date of enactment of the B-1/B-1b zones are exempt.

~~(a) Minimum lot size:~~

- ~~1. School: Twenty thousand (20,000) square feet.~~
- ~~2. Places of religious assembly: Ten thousand (10,000) square feet.~~
- ~~3. All other nonresidential uses: None.~~
- ~~4. Residential uses: None.~~

~~(b) Minimum street frontage: Fifty (50) feet, except that if the average street frontages of all lots within two hundred (200) feet of the boundaries of the lot in question on the same side of the street and within the B-1 or B-1b zone is less than fifty (50) feet, then~~

~~the minimum street frontage for the lot in question may be reduced to the average frontage of such lots.~~

~~(c) Yard dimensions: (Yard dimensions are required setbacks for structures from property lines and setbacks of structures from one another. No structure shall occupy the minimum yard of another structure.)~~

~~1. Maximum front yard:~~

~~Principal or accessory structure: The maximum front yard setback shall either be: (i) ten feet; or (ii) in cases where the average depth of the front yards of the nearest developed lots on either side of the lot in question is less than ten feet, the front yard setback of the lot in question shall not exceed such average depth. A "developed lot" means a lot on which a principal structure has been erected.~~

~~Building additions are not required to meet this maximum setback.~~

~~2. Rear yard:~~

~~a. Principal structures: None, except where a rear yard abuts a residential zone or first floor residential use, a minimum of twenty (20) feet is required.~~

~~b. Accessory structures (detached): None, except where the rear yard abuts a residential zone or first floor residential use, a minimum of five (5) feet is required.~~

~~3. Side yard:~~

~~a. Principal and accessory structures: None, except that where a side yard abuts a residential zone or a first floor residential use, a minimum of ten (10) feet is required.~~

~~b. Accessory structures (detached): None, except that where the side yard abuts a~~

~~residential zone or a first floor residential use, a minimum of five (5) feet is required.~~

~~e. Side yards on side streets (corner lot): Principal or accessory structures: Ten (10) feet maximum setback, except that for any new construction on a lot abutting more than two streets, the maximum setback shall not apply beyond the two most major streets. (For purposes of this section, "major street" shall mean that street with the highest traffic volume and the greatest street width in comparison with the remaining streets). This maximum setback shall not apply to building additions.~~

~~(d) Minimum lot width: None.~~

~~(e) Maximum structure height:~~

~~1. Off-peninsula locations, as defined in Section 14-47: Thirty-five (35) feet. Where the lot abuts an R-6 residential zone, the maximum height shall be the maximum permitted height in the R-6 residential zone.~~

~~2. On peninsula B-1 and B-1b locations, as defined in Section 14-47: Forty-five (45) feet except in the case of a building in a B-1 zone along Congress Street with commercial first floor and residential upper floors where fifty (50) feet is allowed. The commercial first floor uses shall utilize at least 75 percent of the first floor frontage along Congress Street and shall have an average depth of at least 20 feet.~~

~~(f) Maximum impervious surface ratio: Ninety (90) percent.~~

~~(g) Floor area:~~

~~1. The maximum first floor area of a single tenant building shall be no greater than five thousand (5,000) square feet.~~

~~2. The maximum first floor area of a multi-tenant building shall be no greater than ten thousand (10,000) square feet.~~

~~(h) Minimum lot area per dwelling unit:~~

~~1. On peninsula locations, as defined in Section 14-47: Four hundred and thirty-five (435) square feet of land area per dwelling unit.~~

~~2. Off-peninsula locations, as defined in Section 14-47: Minimum lot area per dwelling unit requirements of the abutting or nearest residential zone shall apply. In the case of multi-family dwellings above the first floor: 1,000 square feet of land area per dwelling unit.~~

(Ord. No. 292-88, 4-4-88; Ord. No. 52-96, § 1, 7-15-96; Ord. No. 94-99, 11-15-99; Ord. No. 281-10/11, 7-18-11; Ord. No. 118-13/14, §165 (e), 1-15-14)

Sec. 14-166. Other requirements.

All nonresidential uses in B-1 and B-1b zones shall meet the requirements of division 25(space and bulk regulations and exceptions) of this article in addition to the following requirements:

- (a) *Landscaping and screening:* The site shall be suitably landscaped for parking, surrounding uses and accessory site elements, including storage and solid waste receptacles where required by article IV (subdivisions) and article V (site plan).
- (b) *Curbs and sidewalks:* Curbs and sidewalks as specified in article VI of chapter 25.
- (c) *Off-street parking and loading:* Off-street parking and loading are required as provided in division 20 and division 21 of this article.
- (d) *Front yard parking:* There shall be no off street parking in the front yard between the street line and the required maximum setback line. Where an existing building setback exceeds the maximum front yard setback, a maximum of ten (10) percent of the total

parking provided on the site may be located between the principal structure and the street.

- (e) *Signs*: Signs shall be subject to the provisions of division 22 of this article.
- (f) *Exterior storage*: There shall be no exterior storage with the exception of fully enclosed containers or receptacles for solid waste disposal. Such containers or receptacles shall be shown on the approved site plan. In no event shall vehicles, or truck trailers with or without wheels, be used for on-site storage. Truck load sales shall not be considered outside storage provided that such activity does not extend beyond three (3) consecutive days nor occur more frequently than three (3) times a calendar year.
- (g) *Storage of vehicles*: Storage of vehicles is subject to the provisions of section 14-335.
- (h) *Shoreland and flood plain management regulations*: If the lot is located in a shoreland zone or in a flood hazard zone, then the requirements of division 26 and/or division 26.5 apply.

(Ord. No. 292.88, 4-4-88; Ord. No. 94-99, 11-15-99)

Sec. 14-167. External effects.

Every use in a B-1 or B-1b zone shall be subject to the following requirements:

- (a) *Enclosed structure*: The use shall be operated within a completely enclosed structure, except for those specific open air activities licensed by the City, including but not limited to outdoor seating, sidewalk sales, etc.
- (b) *Noise*: The volume of sound, measured by a sound level meter with frequency weighting network (manufactured according to standards prescribed by the American Standards Association), generated shall not exceed fifty-five (55) decibels on the A scale, on impulse (less than one (1) second), at lot boundaries, excepting air raid sirens and similar warning devices.

- (c) *Vibration and heat*: Vibration inherently and recurrently generated and heat shall be imperceptible without instruments at lot boundaries.
- (d) *Glare, radiation or fumes*: Glare, radiation or fumes shall not be emitted to an obnoxious or dangerous degree beyond lot boundaries.
- (e) *Smoke*: Smoke shall not be emitted at a density in excess of twenty (20) percent opacity level as classified in Method 9 (Visible Emissions) of the Opacity Evaluation System of the U.S. Environmental Protection Agency.
- (f) *Materials or wastes*: No materials or wastes shall be deposited on any lot in such form or manner that they are clearly visible from neighbors' properties or may be transferred beyond the lot boundaries by natural causes or forces. All solid waste disposal, including materials which might cause fumes or dust, or constitute a fire hazard if stored out-of-doors, shall be only in fully enclosed containers or receptacles. Areas attracting large numbers of birds, rodents or insects are prohibited.

(Ord. No. 292-88, 4-4-88; Ord. No. 94-99, 11-15-99)

Sec. 14-168 - Sec. 14-180 Reserved.

DIVISION 10. B-2 AND B-2b COMMUNITY BUSINESS ZONES*

*Editor's note—Ord. No. 293-88, adopted Apr. 4, 1988, with an effective date of July 1, 1988, repealed §§ 14-181-14-187 of Div. 10, B-2 Business Zone, of this article and enacted in lieu thereof similar new provisions as set out in §§ 14-181-14-187. Formerly, such sections derived from §§ 602.9.A-602.9.G of the city's 1968 Code and from Ord. No. 74-72, adopted Mar. 6, 1972; Ord. No. 499-74, § 4, adopted Aug. 19, 1974; Ord. No. 334-76, § 6, adopted July 7, 1976; and Ord. No. 274-77, adopted May 16, 1977.

Sec. 14-181. Purpose.

(a) B-2 Community Business Zone

The purpose of the B-2 community business zone is:

1. To provide appropriate locations for the development and operation of community centers offering a mixture of commercial uses, housing and services serving the adjoining neighborhoods and the larger community.
2. The variety, sites and intensity of the permitted commercial uses in the B-2 zone are intended to be greater than those permitted in the B-1 neighborhood business zone.
3. The B-2 zone will provide a broad range of goods and services and general businesses with a mixture of large and small buildings such as grocery stores, shops and services located in major shopping centers and along arterial streets. Such establishments should be readily accessible by automobile, by pedestrians and by bicycle. Development in the B-2 zone should relate to the surrounding neighborhoods by design, orientation, and circulation patterns.
4. The B-2 and B-2b will provide locations for moderate to high density housing in urban neighborhoods along arterials.

(b) B-2b Community Business Zone

The B-2b zone is intended to provide neighborhood and community retail, business and service establishments that are oriented to and built close to the street. The B-2b zone is

appropriate in areas where a more compact urban development pattern exists such as on-peninsula or in areas off-peninsula where a neighborhood compatible commercial district is established which exhibits a pedestrian scale and character. Such locations may include the peninsula and other arterials and intersections with an existing urban or neighborhood oriented building pattern.

(c) B-2c Community Business Zone

To protect and enhance the quiet enjoyment of adjoining residential neighborhoods from the impacts of businesses that serve liquor and from other uses that are incompatible with adjoining neighborhoods due to noise.

(Ord. No. 293-88, 4-4-88; Ord. No. 25, 7-07-99: emergency enactment of 120-day moratorium, effective 7/07/99 thru 11/04/99; Ord. No. 94A, 11-01-99: emergency enactment of 44-day extension of moratorium enacted on 7-07-99, effective date 11/01/99 thru 12/15/99; Ord. No. 94-99, 11-15-99; Substitute Ord. No. 189-00, §2, 4-24-00; Ord. No. 151-03/04, 02/23/04; Ord. No. 244-09/10, 6-21-10)

***Editor's Note:** Order No. 25, adopted 7-07-99, enacted an emergency 120-day moratorium on drive-through facilities on lots in B-2 Zone adjacent to lots with residential uses effective 7-07-99 through 11-1-99; Ord. No. 94A, adopted 11-01-99 extended the moratorium on said drive-through facilities through December 15, 1999.

Sec. 14-182. Permitted uses.

The following uses are permitted in the B-2, B-2b and B-2c zones except that any use involving a drive-through is prohibited in these zones unless otherwise provided in section 14-183:

(a) *Residential:*

1. Attached single-family and two-family dwellings;
2. Multi-family dwellings;
3. Handicapped family units;
4. Combined living/working spaces including, but not limited to, artist residences with studio space; and

(b) *Business:*

1. General, business and professional offices, as defined in section 14-47;
2. Personal services, as defined in section 14-47;
3. Offices of building tradesmen;
4. Retail establishments;
5. Restaurants, except that restaurants shall close for all purposes including the service of alcohol no later than 11:00 p.m.;
6. Drinking establishments, except that drinking establishment as defined in section 14-47, and bars as defined in section 14-217.5 (a)(1), shall not be permitted in the B-2c zone;
7. Billiard parlors;
8. Mortuaries or funeral homes;
9. Miscellaneous repair services, excluding motor vehicle repair services;
10. Communication studios or broadcast and receiving facilities;
11. Health clubs and gymnasiums;
12. Veterinary hospitals, but excluding outdoor kennels;
13. Theaters and performance halls;
14. Hotels or motels of less than one hundred fifty (150) rooms;
15. Dairies in existence as of November 15, 1999;
16. Bakeries in existence as of November 15, 1999;
17. Bakeries established after November 15, 1999, provided the bakeries include retail sales within the principal structures. Bakeries in the B-2b

zone shall be no greater than seven thousand (7,000) square feet in size;

18. Drive-throughs associated with a permitted use in the B-2 zone provided that such do not include drive-throughs on any lot adjacent to any residential use or zone. For purposes of this section, only, "adjacent to" shall include uses across a street if within 100 feet of the subject lot boundary;

~~19. Drive-throughs associated with a permitted use in the B-2b zone, when accessory to a principal use located on the same lot, provided that such do not include drive-throughs on any lot adjacent to any residential use or zone. For purposes of this section, only, "adjacent to" shall include uses across a street if within 100 feet of the subject lot boundary.~~

~~20.~~ Registered medical marijuana dispensaries.

(c) *Institutional:*

- facility;
1. Long term, extended and intermediate care
 2. Clinics, as defined in section 14-47;
 3. Places of assembly;
 4. Kindergarten, elementary, middle and secondary schools;
 5. College, university, trade schools; and
 6. Municipal buildings and uses.

(d) *Other:*

1. Lodging houses;
2. Day care facilities or babysitting services;
3. Utility substations, as defined in section 14-47,

subject to the requirements of article V (site plan), sections 14-522 and 14-523 notwithstanding;

4. Accessory uses, as provided in section 14-404;
5. Bed and breakfast, subject to the standards of article V (site plan), sections 14-522 and 14-523 notwithstanding. A bed and breakfast may include a meeting facility if the facility meets the following standards:
 - a. The meeting facility shall be limited to the following types of uses:
 - i. Private parties.
 - ii. Business meetings.
 - iii. Weddings.
 - iv. Reception.
 - v. Seminars.
 - vi. Business and educational conferences.
 - b. The building in which the bed and breakfast and the meeting facility will be located was in existence on March 3, 1997, and was greater than four thousand (4,000) square feet in floor area on that date.
6. Studios for artists and craftspeople, provided that the area of such studios does not exceed four thousand (4000) square feet for each studio space.
7. Hostels, provided the applicant submits a site plan and operations plan demonstrating compliance with the following conditions:
 - a. All applicable provisions of Article V of this chapter shall be met.
 - b. Parking shall be provided in compliance with Division 20 of this Article.
 - c. No unaccompanied minors under the age of

eighteen (18) shall be permitted in the facility.

- d. The length of stay for transient guests shall not exceed fifteen (15) days out of any sixty-day period.
- e. The building shall meet the applicable occupant load requirements as defined by the International Building Code and the NFPA Life Safety Code, as such codes are amended or adopted by the city.

8. Wind energy systems, as defined and allowed in Article X, Alternative Energy.

(Ord. No. 293-88, 4-4-88; Ord. No. 39-96, § 2, 10-7-96; Ord. No. 125-97, § 6, 3-3-97; Ord. No. 164-97, § 2, 12-1-97; Ord. No. 25, 7-07-99: emergency enactment of 120-day moratorium, effective 7/07/99 thru 11/04/99; Ord. No. 94A, 11-01-99: emergency enactment of 44-day extension of moratorium enacted on 7-07-99, effective date 11/01/99 thru 12/15/99; Ord. No. 94-99, 11-15-99; Ord. No. 118-00, 11-20-00; Ord. No. 151-03/04, 02/23/04; Ord. No. 127-09/10, 1-4-10 emergency passage; Ord. No. 244-09/10, 6-21-10; Ord. No. 283-09/10, 7-19-10 emergency passage; Ord. 10 10/11, 8-2-10; Ord. No. 279-09/10, 6-6-11; Ord. No. 33-11/12, 1-18-12; Ord. No. 113-11/12, 2-22-12; Ord. No. 41-12/13, 9-5-12; Ord. No. 263-13/14, 6-16-14)

Sec. 14-183. Conditional uses.

The following uses are permitted in the B-2, B-2b and B-2c zone, as provided in section 14-474 (conditional uses), if they meet the following requirements:

- (a) *Business.* Any of the following conditional uses, provided that, notwithstanding section 14-474(a) of this article or any other provision of this code, the Planning Board shall be substituted for the board of appeals as the reviewing authority over conditional business uses:
 - 1. Major and minor auto service stations in the B-2 zone, only;
 - 2. Major or minor auto service stations in the B-2b zone in existence as of November 15, 1999;
 - 3. Car washes;

4. Drive-throughs in the B-2 or B-2b zones which are adjacent to any residential use or zone, provided that, in the B-2b drive-throughs must be accessory to a principal use located on the same site;
5. Automobile dealerships.

In addition to approval by the Planning Board with respect to the requirements of article V (site plan), sections 14-522 and 14-523 notwithstanding, these uses shall comply with the following conditions and standards in addition to the provisions of section 14-474:

- a. Signs: Signs shall not adversely affect visibility at intersections or access drives. Such signs shall be constructed, installed and maintained so as to ensure the safety of the public. Such signs shall advertise only services or goods available on the premises.
 - b. Circulation: No ingress and egress driveways shall be located within thirty (30) feet from an intersection. No entrance or exit for vehicles shall be in such proximity to a playground, school, church, other places of public assembly, or any residential zone that the nearness poses a threat or potential danger to the safety of the public.
6. Drive-throughs, where permitted, shall also specifically comply with the following conditions:
 - a. Location of Drive-throughs: Features, such as windows, vacuum cleaners and menu/order boards, stacking lanes, must be placed, where practicable, to the side and rear of the principal building except where such placement will be detrimental to an adjacent residential zone or use, and shall be located no nearer than forty (40) feet from

any adjoining property located in a residential zone. This distance shall be measured from the outermost edge of the outside drive-through feature to such property line. In addition, drive-through features shall not extend nearer than twenty-five (25) feet to the street line. The site must have adequate stacking capacity for vehicles waiting to use these service features without impeding vehicular circulation or creating hazards to vehicular circulation on adjoining streets.

- b. Noise: Any speakers, intercom systems, or other audible means of communication shall not play prerecorded messages. Any speakers, intercom systems, audible signals, computer prompts, or other noises generated by the drive-through services or fixtures shall not exceed 55 dB or shall be undetectable above the ambient noise level as measured by a noise meter at the property line, whichever is greater.
- c. Lighting: Drive-through facilities shall be designed so that site and vehicular light sources shall not unreasonably spill over or be directed onto adjacent residential properties and shall otherwise conform to the lighting standards set forth in 14-526.
- d. Screening and Enclosure: Where automobiles may queue, waiting for drive-through services, their impacts must be substantially mitigated to protect adjacent residential properties from headlight glare, exhaust fumes, noise, etc. As deemed necessary by the reviewing authority, mitigation measures shall consist of installation of solid fencing with landscaping along any residential property line which is exposed to the drive-through or the enclosure of the drive-through fixtures and lanes so as to buffer abutting residential properties and to further

contain all associated impacts; and

- e. Pedestrian access: Drive-through lanes shall be designed and placed to minimize crossing principal pedestrian access-ways or otherwise impeding pedestrian access.
- f. Hours of Operation: The Board, as part of its review, may take into consideration the impact hours of operation may have on adjoining uses.
- g. Conditions specific to major or minor auto service stations, car washes and automobile dealerships:
 - i. A landscaped buffer, no less than five (5) feet wide, shall be located along street frontages (excluding driveways). The buffer shall consist of a variety of plantings in accordance with the City of Portland Technical Manual;
 - ii. Car washes shall be designed to avoid the tracking of residual waters into the street.

(b) *Other:*

- 1. Printing and publishing establishments except as provided in subsection b. below;
- 2. Printing and publishing establishments in continuous operation at their current location since April 4, 1988, or earlier and which exceeded ten thousand (10,000) square feet of aggregate gross floor area at that time;
- 3. Wholesale distribution establishments; and
- 4. Research and development and related production establishments.

Uses listed in this paragraph (b) (other) 1, 3 and 4 shall be limited to ten thousand (10,000)

square feet of aggregate gross floor area, and uses listed in this paragraph (b) (other) 1, 2, 3 and 4 shall be subject to the following conditions and standards in addition to the provision of section 14-474:

- a. Traffic circulation: The site shall have an adequate traffic circulation pattern designed to avoid hazards to vehicular circulation on adjoining streets. All stacking of motor vehicles shall be on site, and loading facilities shall be located to the rear of the building and shall not be visible from the street.
 - b. Building and site design: The exterior design of the structures, including architectural style, facade materials, roof pitch, building form, established setbacks and height, shall be of a commercial rather than industrial character. The site shall contain screening and landscaping which shall meet the requirements of section 14-526 for screening between land uses and the City of Portland Technical Manual.
5. Temporary wind anemometer towers, as defined in Sec 14-47, are permitted provided the following standards are met in addition to Sec 14-430:
- a. Towers may be installed for the purpose of wind data collection for no more than two (2) years after the issuance of a Certificate of Occupancy for the tower. At the conclusion of the aforementioned two (2) years, the tower must be dismantled and removed from the site within sixty (60) days; and
 - b. Towers shall be constructed according to plans and specifications stamped by a licensed professional engineer, which shall be provided to the Board of Appeals with the application; and

- c. Towers shall be set back from habitable buildings by a distance equal to 1.1 times the tower height; and
- d. The applicant shall provide a safety report prepared and stamped by a licensed professional engineer to the Board of Appeals with their application for conditional use, which demonstrates how the proposed temporary wind anemometer tower is safe in terms of strength, stability, security, grounding, icing impacts and maintenance; and
- e. The applicant shall provide evidence of commercial general liability insurance, such insurance to be satisfactory to Corporation Counsel and cover damage or injury resulting from construction, operation or dismantling of any part of the temporary wind anemometer tower; and
- f. Towers and associated guy wires shall be sited to minimize their prominence from and impacts on public ways (including pedestrian ways); and
- g. Towers shall be used for installing anemometers and similar devices at a range of heights from the ground to measure wind characteristics (speed, direction, frequency) and related meteorological data, but shall not be used for any other purpose; and
- h. A performance guarantee shall be required for the cost of removal of the tower, guy wires and anchors. This requirement may be satisfied by surety bond, letter of credit, escrow account or by evidence, acceptable to the City, or the financial and technical ability

and commitment of the applicant or its agents to remove the facility at the end of the use period.

6. Wind energy systems, as defined and allowed in Article X, Alternative Energy.

(Ord. No. 293-88, 4-4-88; Ord. No. 16-92, 6-15-92; Ord. No. 39-96, § 3, 10-7-96; Ord. No. 25, 7-07-99: emergency enactment of 120-day moratorium, effective 7/07/99 thru 11/04/99; Ord. No. 94A, 11-01-99: emergency enactment of 44-day extension of moratorium enacted on 7-07-99, effective date 11/01/99 thru 12/15/99; Ord. No. 94-99, 11-15-99; Ord. No. 151-03/04, 02-23-04; Ord. No. 29-09/10, 8-3-09, emergency passage; Ord. No. 276 -09/10, 7-19-10; Ord. No. 278-09/10, 7-19-10; Ord. No. 10 10/11, 8-2-10; Ord. No. 33-11/12, 1-18-12)

Sec. 14-184. Prohibited uses.

Uses not enumerated in sections 14-182 and 14-183 as either permitted uses or conditional uses are prohibited.
(Ord. No. 293-88, 4-4-88)

Sec. 14-185. Dimensional requirements.

In addition to the provisions of division 25 (space and bulk regulations and exceptions) of this article, lots in the B-2, B-2b, and B-2c zones shall meet the following dimensional requirements:

Minimum Lot Size	None
Minimum Street Frontage	25 ft. 20 ft.
Front Yard Setback Minimum	None
Rear Yard Setback Minimum	10 feet, except as provided for below: a. 5 feet for accessory structures
Side Yard Setback Minimum	None required, except as provided for below: a. 5 feet for accessory structures
Side Yard on Side Street Setback Minimum	None
Front Yard Maximum¹	No more than 10 feet, except that the Planning Board or Planning Authority may approve a different amount for irregularly shaped lots or lots with frontage less than 40 feet provided this standard is met to the maximum extent practicable. ²

<u>Structure Stepbacks</u>	<u>-Portions of a structure above 35 ft shall be no closer than 10 ft from the side property line and no closer than 15 feet from the rear property line when such property line abuts a residential zone.</u>
Height Maximum	45 feet except as provided for below:
	a. 50 feet if first floor is partially or wholly occupied by a commercial use.
	b. 65 feet in B-2 and B-2c zones on lots >5 acres provided that all setbacks, except for front yard setbacks and side yard on side street setbacks, increase by 1 foot for each foot of height over 45 feet.
	c. 65 feet within 65 feet of Franklin St.
Maximum Impervious Surface Ratio	a. For residential uses: None
	b. For all other permitted uses: 80% in B-2 and B-2c
	c. For all other permitted uses: 90% in B-2b
Minimum Lot Area per Dwelling Unit	Off-peninsula locations, as defined in section 14-47: 1,500 square feet, except as provided for in (b) below.
	On-peninsula locations (as per 14-47) and projects with active street frontages, as defined in section 14-188, below: 435 square feet.

1[1] Building additions do not have to meet this section.

1[2] If lot has less than 40 feet of frontage and is more than 100 feet deep then no maximum setback is required. If existing structures are within 20 feet of the street or meet the front yard maximum, and remainder of lot has less than 40 feet of frontage, then no maximum setback is required. Where setbacks exceed 10 feet, a continuous, attractive, and pedestrian-scaled edge treatment shall be constructed along the street, consisting of street trees spaced at no more than 15 feet on center, approved by City arborist, and a combinations of landscaping no less than 4 feet deep, ornamental brick or stone walls or ornamental fencing.

(Ord. No. 293-88, 4-4-88; Ord. No. 52-96, § 2, 7-15-96; Ord. No. 94-99, 11-15-99; Ord. No. (Substitute)189-00, §3, 4-24-00; Ord. No. 151-03/04, 02/23/04; Ord. No. 244-09/10, 6-21-10; Ord. No. 41-12/13, 9-5-12; Ord. No. 163-13/14, 6-16-14)

Sec. 14-186. Other requirements.

All nonresidential uses in the B-2 and B-2b zone shall meet the requirements of division 25 (space and bulk regulations and exceptions) of this article in addition to the following requirements:

- (a) *Landscaping and screening:* The site shall be suitably landscaped for parking, surrounding uses and accessory site elements, including storage and solid waste receptacles where required by article IV (subdivisions) and article V (site plan).
- (b) *Curbs and sidewalks:* Curbs and sidewalks as specified in article VI of chapter 25.
- (c) *Off-street parking and loading:* Off-street parking and loading are required by division 20 and division 21 of this article;
- (d) *Front yard parking:*

There shall be no off-street parking in the front yard between the street line and the required minimum setback line in the B-2, B-2b and B-2c. Where existing buildings exceed the minimum front yard setback, a maximum of ten (10) percent of the total

parking provided on the site may be located between the principal structure and the street.

- (e) *Signs*: Signs shall be subject to the provisions of division 22 of this article.
- (f) *Exterior storage*: There shall be no exterior storage with the exception of fully enclosed containers or receptacles for solid waste disposal. Such containers or receptacles shall be shown on the approved site plan. Vehicles or truck trailers with or without wheels shall not be used for on-site storage (1) except where such storage is located in a designated loading zone identified on an approved site plan; or (2) such storage is not visible from the street or adjacent residences during winter months and such storage area is identified on an approved site plan. Truck load sales shall not be considered outside storage provided that such activity does not extend beyond three (3) consecutive days nor occurs more frequently than three (3) times a calendar year.
- (g) *Storage of vehicles*: Storage of vehicles is subject to the provisions of section 14-335.
- (h) *Shoreland and flood plain management regulations*: If the lot is located in a shoreland zone or in a flood hazard zone, then the requirements of division 26 and/or division 26.5 apply.

(Ord. No. 293-88, 4-4-88; Ord. No. 51-96, 7-15-96; Ord. No. 94-99, 11-15-99; Substitute Ord. No. 189-00, §4, 4-24-00; Ord. No. 151-03/04, 02/23/04; Ord. No. 263-13/14, 6-16-14)

Sec. 14-187. External effects.

Every use in a B-2, B-2b and B-2c zone shall be subject to the following requirements:

- (a) *Enclosed structure*: The use shall be operated within a completely enclosed structure except for those specific open air activities licensed by the City, including but not limited to outdoor seating, sidewalk sales, etc.

- (b) Noise: Except as provided in 14-183(1)(iii)(2) (relating to Drive-throughs), the volume of sound, measured by a sound level meter with frequency weighting network (manufactured according to standards prescribed by the American Standards Association), generated shall not exceed sixty (60) decibels on the A scale between 7:00 a.m. and 9:00 p.m. and fifty-five (55) decibels on the A scale between 9:00 p.m. and 7:00 a.m., on impulse (less than one (1) second), at lot boundaries, excepting air raid sirens and similar warning devices.
- (c) Vibration and heat: Vibration inherently and recurrently generated and heat shall be imperceptible without instruments at lot boundaries.
- (d) Glare, radiation or fumes: Glare, radiation or fumes shall not be emitted to an obnoxious or dangerous degree beyond lot boundaries.
- (e) Smoke: Smoke shall not be emitted at a density in excess of twenty (20) percent opacity level as classified in Method 9 (Visible Emissions) of the Opacity Evaluation System of the U.S. Environmental Protection Agency.
- (f) Materials or wastes: No materials or wastes shall be deposited on any lot in such form or manner that they may be transferred beyond the lot boundaries by natural causes or forces. All material which might cause fumes or dust, or constitute a fire hazard if stored out-of-doors, shall be only in closed containers. Areas attracting large numbers of birds, rodents or insects are prohibited.

(Ord. No. 293-88, 4-4-88; Ord. No. 94-99, 11-15-99; Ord. No. 03/04, 02/23/04)

Sec. 14-188. Active street frontages

A building will be determined to have an active street frontage upon meeting the following guidelines to the greatest extent practicable as determined by the Planning Board or Planning Authority: the primary building façade shall be within ten feet of the front street line; there shall be no parking on the lot within 35 feet of the front street line; no more than

City of Portland
Code of Ordinances
Sec. 14-186

Land Use
Chapter 14
Rev.7-16-14

25% of the first floor primary façade shall consist of access to garages, unutilized space, service entrances, storage or mechanicals, and the remaining minimum 75% shall have an average depth of a minimum of 20 feet for residential or commercial uses; all primary ground floor entries to multi-family buildings must orient to street, not to interior blocks or parking lots.
(Ord. No. 263-13/14, 6-16-14)

munjoyhill • homes

July 21st, 2014

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

Dear Barbara:

Please find attached a Zoning Map Amendment Application related to 145-155 Washington Ave.

We are proposing to re-zone the property from R-6 to B-2b and our current plans call for a mixed-use development of residential and commercial on a property that is currently being used as a legally non-conforming auto repair and used car lot.

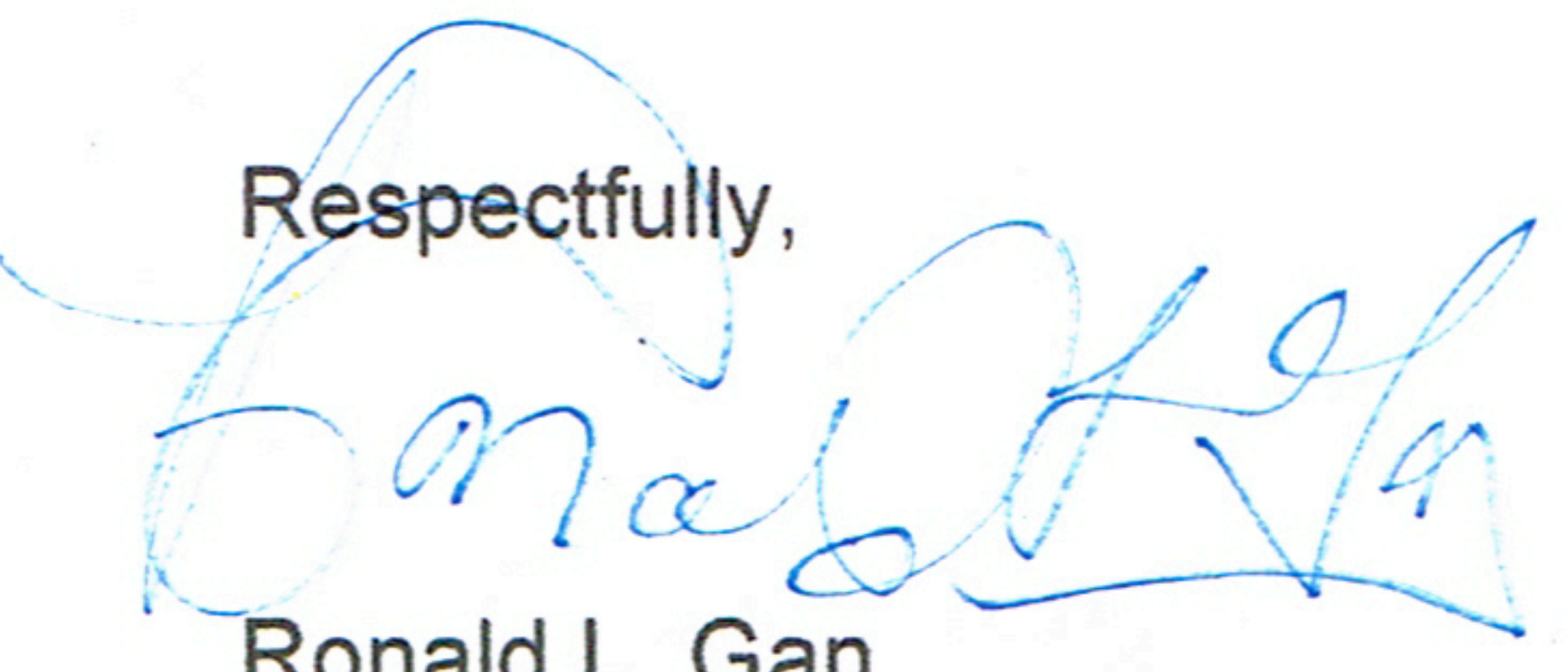
The Application and related development plans would support the goals as outlined in the City's Comprehensive Plan.

"In 2002, the housing component of the comprehensive plan embraced as a goal the creation of more housing in the City to achieve and maintain a 25% share of Cumberland County's population. Among the strategies adopted to achieve this goal were to increase the amount of higher density housing in strategic locations and to "encourage development on vacant lots along accepted city streets." (Housing: Sustaining Portland's Future, Policy #5, Infill Development, p. 20, 2002) The goal of increasing housing density in the urban core, particularly as a way to provide viable transit alternatives to single occupancy vehicles, was again endorsed as a goal in 2009. (Sustainable Portland, p. 25, September 24, 2009). "

Enclosed is the following:

1. Zoning Map Amendment Application Form
2. Copy of option agreements
3. Vicinity Map Showing Current Zoning
4. Rendering of Proposed Building
5. Proposed Site Plan

Respectfully,



Ronald L. Gan

PROJECT ADDRESS: 145-155 WASHINGTON

CHART/BLOCK/LOT: 12-6-9 / 12-6-1-2-3-8

DESCRIPTION OF PROPOSED ZONE CHANGE AND PROJECT:

changing the zoning from R-6 to B2B - we are proposing to build a mixed use project.

CONTACT INFORMATION:

Applicant's Contact for electronic plans

Name: RONALD L. GAN
e-mail Address MUNJOYHILLHOMES@GMAIL.CO
work # 207-233-3753

Applicant - must be owner, Lessee or Buyer

Name: RONALD GAN & TED BATHBAND
Business Name, if applicable:
Address: 202 WASHINGTON
City/State: PORTLAND Zip Code: 04101

Applicant Contact Information

Work #
Home#
Cell # 207-233-3753 Fax#
e-mail: MUNJOYHILLHOMES@GMAIL.COM

Owner - (if different from Applicant)

Name: WENDY BALDWIN
MAUREEN FENTON
Address: 115 MADELINE PORTLAND
145 WASHINGTON
City/State: PORTLAND Zip Code: 04103
04101

Owner Contact Information

Work #
Home#
Cell # Fax#
e-mail:

Agent/ Representative

Name:
Address:
City/State: Zip Code:

Agent/Representative Contact information

Work #
Cell #
e-mail:

Billing Information

Name: RON GAN
Address: 202 WASHINGTON
City/State: PORTLAND Zip Code: 04101

Billing Information

Work #
Cell # 207-233-3753 Fax#
e-mail: MUNJOYHILLHOMES@GMAIL.COM

Engineer

Name:
Address:
City/State: Zip Code:

Engineer Contact Information

Work #
Cell # Fax#
e-mail:

Surveyor Name: R.W. EATON & ASS Address: 58 PLEASANT ST. City/State: WESTBROOK Zip Code: 04092	Surveyor Contact Information Work # 207-854-2402 Cell # Fax# 2-856-7167 e-mail: RW.EATON@MAINE.PR.COM
Architect Name: PDT Address: 49 DARTMOUTH ST City/State: PORTLAND Zip Code: 04101	Architect Contact Information Work # 207-775-1059 Cell # Fax# e-mail: WEBSTER@PDTARCHS.COM
Attorney Name: BARBARA VESTAL Address: 107 CONGRESS City/State: PORTLAND Zip Code: 04101	Attorney Contact Information Work # 207-772-7426 Cell # Fax# e-mail: VESTAL@CHESTERANDVESTAL.

Right, Title, or Interest: Please identify the status of the applicant's right, title, or interest in the subject property:

WE CURRENTLY HOLD OPTIONS ON ALL PARCELS

Provide documentary evidence, attached to this application, of applicant's right, title, or interest in the subject property. (For example, a deed, option or contract to purchase or lease the subject property.)

Vicinity Map: Attach a map showing the subject parcel and abutting parcels, labeled as to ownership and/or current use. (Applicant may utilize the City Zoning Map or Parcel Map as a source.)

Existing Use: Describe the existing use of the subject property:

THE CURRENT USE IS AN AUTO REPAIR & USED CAR LOT.

Current Zoning Designation(s):

R-6

Proposed Use of Property: Please describe the proposed use of the subject property. If construction or development is proposed, please describe any changes to the physical condition of the property.

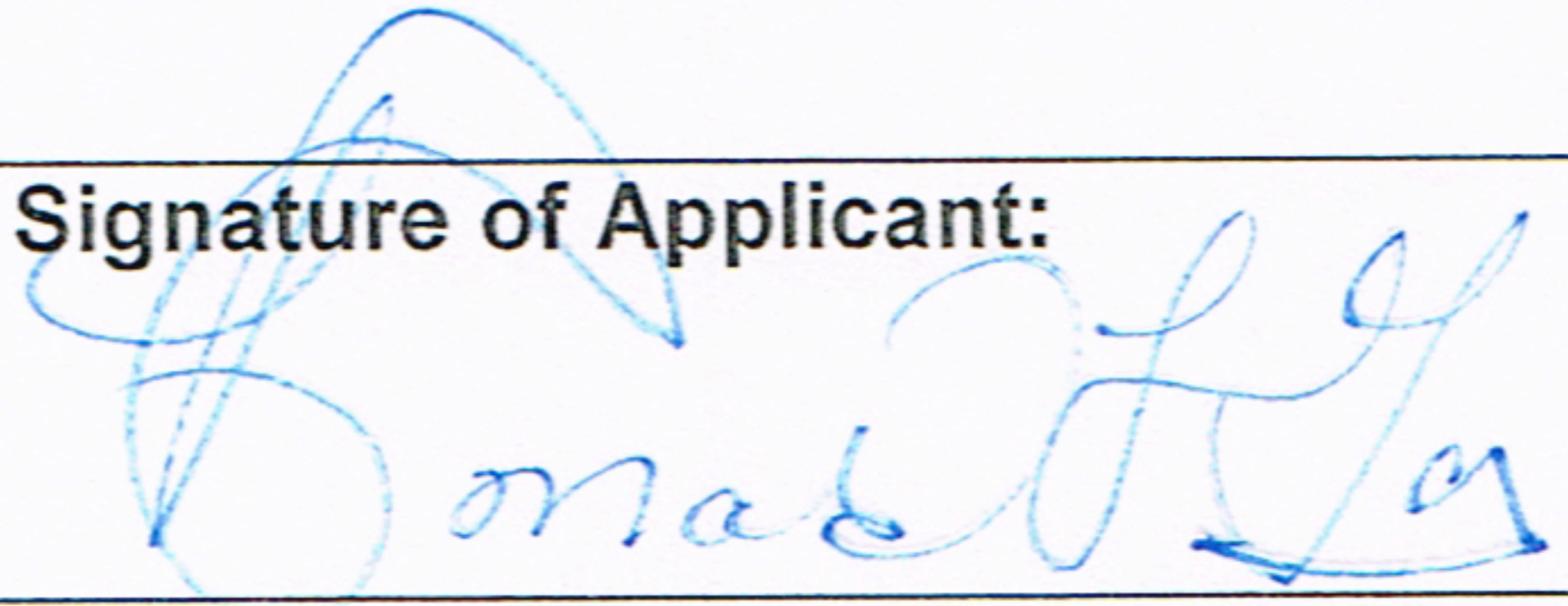
The property will be changed from a single use GARAGE BUILDING WITH PARKING LOT TO A MIXED USE development OF RESIDENCES & COMMERCIAL

Site Plan: On a separate sheet, please provide a site plan of the property showing existing and proposed improvements, including such features as buildings, parking, driveways, walkways, landscape and property boundaries. This may be a professionally drawn plan, or a carefully drawn plan, to scale, by the applicant. (Scale to suit, range from 1" = 10' to 1' = 50'.) Contract and conditional rezoning applications may require additional site plans and written material that address physical development and operation of the property to ensure that the rezoning and subsequent development are consistent with the comprehensive plan, meet applicable land use regulations, and compatible with the surrounding neighborhood.

APPLICATION FEE:

Check the type of zoning review that applies. Payment may be made in cash or check payable to the City of Portland.

Zoning Map Amendment ✓ \$2,000.00 (from <u>RL</u> zone to <u>B2B</u> zone)	Fees Paid (office use) —	The City invoices separately for the following: • Notices (\$.75 each) (notices are sent to neighbors upon receipt of an application, workshop and public hearing meetings for Planning Board and public hearing meeting for City Council) • Legal Ad (% of total Ad) • Planning Review (\$40.00 hour) • Legal Review (\$75.00 hour) Third party review is assessed separately.
Zoning Text Amendment ___ \$2,000.00 (to Section 14-___) (For a zoning text amendment, attach on a separate sheet the exact language being proposed, including existing relevant text, in which language to be deleted is depicted as crossed out (<u>example</u>) and language to be added is depicted as underline (<u>example</u>))	—	
Combination Zoning Text Amendment and Zoning Map Amendment ___ \$3,000.00	—	
Conditional or Contract Zone ___ \$3,000.00 (A conditional or contract rezoning map be requested by an applicant in cases where limitations, conditions, or special assurances related to the physical development and operation of the property are needed to ensure that the rezoning and subsequent development are consistent with the comprehensive plan, meet applicable land use regulations, and compatible with the surrounding neighborhood. Please refer to Division 1.5, Sections 14-60 to 62.)	—	

Signature of Applicant: 	Date: 7-14-14
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Further Information

In the event of withdrawal of the zoning amendment application by the applicant, a refund of two-thirds of the amount of the zone change fee will be made to the applicant as long as the request is submitted to the Planning Division prior to the advertisement being submitted to the news paper.

OPTION AGREEMENT

THIS AGREEMENT is dated this 12th day of November, 2013 between Wendy Morse-Baldwin whose address is 115 Madeline Street, Portland, Maine ("Owner") and Ronald L. Gan, whose address is 15 Cumberland Ave, Portland, Maine ("Purchaser").

WHEREAS, Owner owns real estate located at 155 Washington Ave, Portland, Maine as more fully described on Exhibit "A" attached hereto and made a part hereof (the "Property"); and

WHEREAS, Purchaser desires to purchase an option to acquire the Property;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is acknowledged, the parties agree as follows:

1. Grant of Option. Owner grants to Purchaser an exclusive option to purchase the Property on the terms set forth herein (the "Option").

2. Option Fee. Purchaser shall pay a total of [REDACTED] for the Option (the "Option Fee"). The Option Fee shall be paid upon the execution of this Agreement and it will not be applied to the purchase price and it is completely nonrefundable.

3. Exercise of Option. Purchaser may exercise the Option on or before [REDACTED] (the "Exercise Period"). The Option may be exercised by the delivery of a written notice of exercise to Owner ("Option Notice"). In the event Purchaser delivers the Option Notice to Owner, the transaction contemplated by this Agreement shall close in accordance with the provisions of Paragraph 5 below and the attached Purchase and Sale Agreement. In the event the Option is not exercised within the Exercise Period, this Agreement shall be canceled and have no further force or effect.

4. Property Purchase Price. The purchase price payable by Purchaser to Owner upon the exercise of this Option shall be [REDACTED] (the "Property Purchase Price").

5. Closing. After receipt of the Option Notice required by Section 3 of this Agreement, Owner shall convey all of its right, title and interest in and to the Property pursuant to a Warranty Deed to Purchaser at a closing (the "Closing"). Owner shall execute at the Closing any and all documents reasonably necessary to transfer the ownership of the Property to Purchaser. The Closing shall be conducted by Maine Coast Title, Portland, Maine. The Closing shall take place at a time mutually agreed to by Owner and Purchaser.

6. Closing Costs. At Closing, Owner shall be responsible only for those closing costs as stated in the in the attached Purchase and Sale Agreement.

7. Purchaser's Inspection. Commencing with the Effective Date, Purchaser shall have the right, at Purchaser's sole expense, to fully inspect the Property and make determinations relating to the environmental conditions, soils, water table and such other matters, as Purchaser deems appropriate in order to determine the feasibility of utilizing the Property. Purchaser agrees, at Purchaser's expense, to fix and repair any damages made to the Property that occur during or as the result of such inspections. Purchaser may only make such inspections after giving Owner at least 48 hours advance notice. Purchaser acknowledges that he must make every effort to protect the confidentiality of this Agreement and the attached Purchase and Sale Agreement. Purchaser understands that Owner has signed a 12 month Lease for the subject premises and Purchaser agrees to bound by all Owner's obligations under said Lease. If the result of any investigation or other condition is unsatisfactory to Purchaser during the Due Diligence Period, Purchaser may terminate this Option Agreement by notifying Owner in writing prior to the end of the 45 day Due Diligence Period. Under no circumstances will the Option Fee be refundable. In the event that Purchaser decides not to exercise this Option, then he shall give copies of all inspection results, and all other data he acquires about the subject premises to Owner prior to the termination of this Option Agreement.

8. Owner's Negative Covenants. During the term of this Agreement:

- a. Owner shall not mortgage or otherwise encumber the Property provided that owner may rent or lease the property. Owner shall not undertake any activities on the Property that, under applicable law or regulation, constitutes an environmental violation.
- b. The Owner warrants and represents that aside from the current Tenant, there are no parties that have any interest of any type in the property either for lease, sale or any other vested interest.

Nothing herein shall be construed to limit Owner's use of the Property through Closing, subject to the Owner's compliance with applicable statutes, rules, and regulations.

9. Notices. All notices required or permitted under this Agreement shall be in writing and shall be effective upon personal delivery to Owner or Purchaser or upon receipt after being sent by registered or certified mail, return receipt requested, postage fully prepaid and addressed to the respective parties as follows:

Owner:

Wendy Morse-Baldwin
115 Madeline Street
Portland, Maine 04103

Lewis A. Holman, Esq.
Holman & Howard
298 Main St.
Yarmouth, ME 04096
207-846-6111

With a copy to:

Ronald L. Gan
15 Cumberland Ave
Portland, Maine 04101

With a copy to:

or to such other address as either party shall, from time to time, specify in writing.

10. Binding Effect. This Agreement shall be binding upon the parties, their heirs, legal representatives, successors, and assigns.

11. Entire Agreement. This Agreement supersedes all agreements previously made between the parties relating to its subject matter except the Purchase and Sale Agreement. There are no other understandings or agreements between them except the Purchase and Sale Agreement.

12. Non-waiver. No delay of failure by either party to exercise any right under this Agreement, and no partial or single exercise of that right, shall constitute a waiver of that or any other right, unless otherwise expressly provided herein.

13. Governing Law. This Agreement shall be construed in accordance with and governed by the laws of the State of Maine.

14. Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original but all of which together shall constitute one and the same instrument.

15. Defaults.

(a) Owner Default. If Owner fails to perform in accordance with the terms of this Agreement, Purchaser shall have the right of specific enforcement since Purchaser would otherwise be without an adequate remedy

(b) Purchaser Default. If Purchaser fails to perform in accordance with the terms of this Agreement, Owner's remedy shall be the retention of the Option Fee

16. Status Updates: Purchaser agrees to provide Seller with status updates every 30 days.

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

SELLER: *[Signature]*
Wendy Morse-Baldwin
Dated 11-11-13

PURCHASER: *[Signature]*
Ronald L. Gan
Dated 11-11-13

December 2, 2013

State of Maine
County of Cumberland

Then personally appeared Ronald L. Gan and
acknowledged this instrument to be his
free act and deed.

Before me:

[Signature]
Thomas S. Conway
Notary Public.

MY COMMISSION EXPIRES
DECEMBER 30, 2016

OPTION AGREEMENT

THIS AGREEMENT is dated this 29th day of April, 2014 between Maureen Fenton whose address is 143R Washington Ave, Portland, Maine ("Owner") and Ronald L. Gan and Jed Rathband PURCHASERS OF OPTION AGREEMENT, whose address is 15 Cumberland Ave, Portland, Maine. ("Purchasers").

WHEREAS, Owner owns 143R and 145 Washington Ave, Portland, Maine as more fully described on Exhibit "A" attached hereto and made a part hereof (the "Property"); and

WHEREAS, Purchasers desire to purchase an option to acquire the Property.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is acknowledged, the parties agree as follows:

1. Grant of Option. Owner irrevocably grants to Purchasers an exclusive option to purchase the Property on the terms set forth herein (the "Option").

2. Option Purchase Price. Purchasers shall pay a total of [REDACTED] Dollars ([REDACTED]) for the Option (the "Option Purchase Price"). The Option Purchase Price shall be paid upon the execution of this Agreement.

3. Exercise of Option. Purchasers may exercise the Option at any time prior to [REDACTED]. The Option may be exercised by the delivery of a written notice of exercise to Owner ("Option Notice"). In the event Purchaser delivers the Option Notice to Owner, the transaction contemplated by this Agreement shall close in accordance with the provisions of Paragraph 5 below and the attached Purchase and Sale Agreement. In the event the Option is not exercised within the Exercise Period, this Agreement shall be canceled and have no further force or effect, and Owner shall be entitled to retain the Option Purchase Price.

4. Property Purchase Price. The purchase price payable by Purchaser to Owner upon the exercise of this Option shall be [REDACTED] (the "Property Purchase Price").

5. Closing. After receipt of the Option Notice required by Section 3 of this Agreement, within 45 days, Owner shall convey all of its right, title and interest in and to the Property pursuant to a Warranty Deed to Purchaser at a closing (the "Closing"). Owner shall execute at the Closing any and all documents reasonably necessary to transfer the ownership of the Property to Purchaser. The Closing shall be conducted at the offices of Barbara Vestal, 107 Congress St, Portland, Maine. The Closing shall take place at 3pm in the afternoon.

6. Closing Costs. At Closing, Purchaser and Seller shall be responsible for their respective closing costs as stated in the attached Purchase and Sale Agreement

7. Purchaser's Inspection. Commencing with the Effective Date, Purchaser shall have the right, at Purchaser's sole expense, to fully inspect the Property and make determinations relating to the environmental conditions, soils, water table and such other matters, as Purchaser deems appropriate in order to determine the feasibility of utilizing the Property. If the result of any investigation or other condition is unsatisfactory to Purchaser during the Due Diligence Period, Purchaser will declare this Option Agreement to be null and void by notifying Seller in writing prior to the end of the 60 day Due Diligence Period.

8. Owner's Negative Covenants. During the term of this Agreement:

- a. Owner shall not mortgage or otherwise encumber the Property.
- b. Owner shall not undertake any activities on the Property that, under applicable law or regulation, constitutes an environmental violation.
- c. Owner agrees to maintain all proper insurances on the property.
- d. The Owner warrants and represents that there are no other parties that have any interest of any type in the property either for lease, sale or any other vested interest.

Nothing herein shall be construed to limit Owner's use of the Property through Closing, subject to the Owner's compliance with applicable statutes, rules, and regulations.

9. Notices. All notices required or permitted under this Agreement shall be in writing and shall be effective upon personal delivery to Owner or Purchaser or upon receipt after being sent by registered or certified mail, return receipt requested, postage fully prepaid and addressed to the respective parties as follows:

Owner:

Maureen Fenton
143R Washington Ave
Portland, Maine 04101

With a copy to:

Purchasers:

Ronald L. Gan
Jed Rathband
15 Cumberland Ave
Portland, Maine 04101

With a copy to:

or to such other address as either party shall, from time to time, specify in writing.

10. Binding Effect. This Agreement shall be binding upon the parties, their heirs, legal representatives, successors, and assigns.

11. Entire Agreement. This Agreement supersedes all agreements previously made between the parties relating to its subject matter. There are no other understandings or agreements between them.

12. Non-waiver. No delay of failure by either party to exercise any right under this Agreement, and no partial or single exercise of that right, shall constitute a waiver of that or any other right, unless otherwise expressly provided herein.

13. Governing Law. This Agreement shall be construed in accordance with and governed by the laws of the State of Maine.

14. Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original but all of which together shall constitute one and the same instrument.

15. Defaults.

(a) Owner Default. If Owner fails to perform in accordance with the terms of this Agreement, Purchaser shall have the right of specific enforcement since Purchaser would otherwise be without an adequate remedy

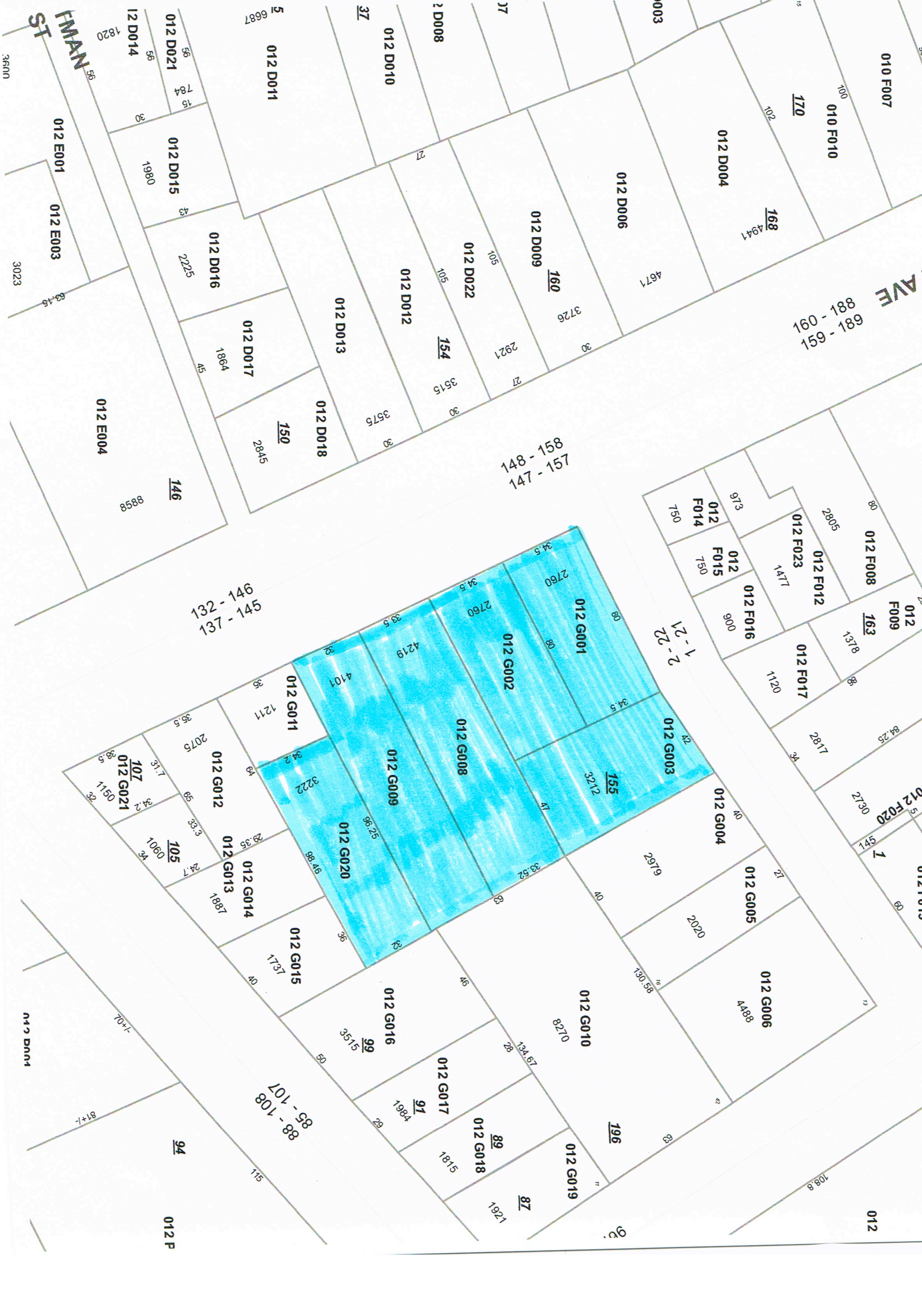
(b) Purchaser Default. If Purchaser fails to perform in accordance with the terms of this Agreement, Owner's remedy shall be the retention of the Option Purchase Price.

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

Seller: Maureen Fenton date 10 May 2014
Maureen Fenton

Purchaser: Ronald L. Gan date 5-16-14
Ronald L. Gan

Purchaser: Jed Rathband date 5-16-14
Jed Rathband





AERIAL VIEW I
EAST COVE TOWNHOMES

EAST COVE LLC
July 14, 2014



WASHINGTON AVENUE ELEVATION
EAST COVE TOWNHOMES

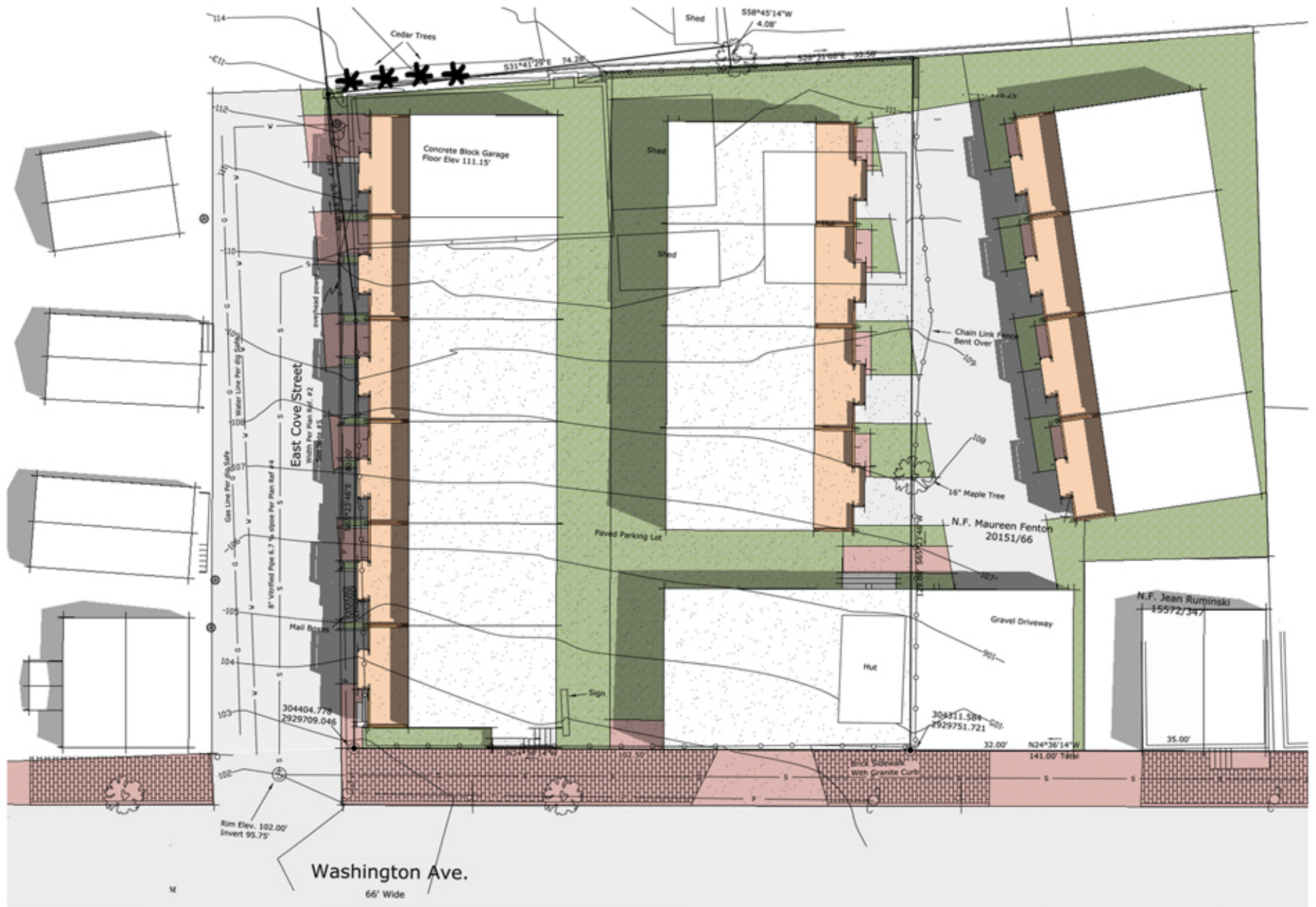
EAST COVE LLC
July 14, 2014





EAST COVE STREET VIEW I
EAST COVE TOWNHOMES

EAST COVE LLC
July 14, 2014



SITE PLAN
(Not to scale)
EAST COVE TOWNHOMES

EAST COVE LLC

July 14, 2014



WASHINGTON AVENUE VIEW 3
EAST COVE TOWNHOMES



WASHINGTON AVENUE VIEW 4
EAST COVE TOWNHOMES

EAST COVE LLC
July 14, 2014



Memorandum

Planning and Urban Development Department

Planning Division

To: Chair O'Brien and Members of the Portland Planning Board
From: Nell Donaldson, Planner
Date: September 19, 2014
Re: 89 Anderson Street rezone
CBLs: 12 I 001001, 005
Project No.: 2014-113
Meeting Date: September 23, 2014

I. INTRODUCTION

Redfern Properties appears before the Planning Board for a second workshop related to a proposed zoning map amendment for their property at 89 Anderson Street. The property lies at the corner of Anderson and Fox Streets in East Bayside and is currently zoned Residential R-6. In their most recent submittal, the applicant has revised their proposal to request a rezoning to Neighborhood Business B-1b, rather than the Community Business B-2b zone originally requested, given a pending city initiative to modify the B-1 dimensional requirements to better support dense, neighborhood scale mixed-use buildings. Redfern has

argued that rezoning the site to B-1b will allow them to develop a mixed use building on their site at 89 Anderson Street, that the rezoning is particularly appropriate for this location, and that the proposed map amendment is consistent with the goals of the Comprehensive Plan.

At a previous workshop, the Planning Board considered a preliminary proposal to rezone to B-2b. There was extensive discussion about the proposed zoning designation, with numerous neighbors expressing a desire to retain the R-6 zone. Neighbors also expressed significant concerns regarding the potential traffic and traffic safety implications of a zone change, the scale of building allowed under a zone



Figures 1(top) & 2: 89 Anderson Street from corner of Anderson and Fox; site from Anderson Street looking east.

change, and gentrification. In response, the board requested additional information regarding potential zoning designations, including the Residential R-7, trip generation, and traffic. The applicant also provided supplemental design drawings. This information provides the subject matter for this workshop.

A legal ad for the Board workshop was posted on the city's web page and appeared in the *Portland Press Herald* on September 15 and 16, 2014. Notices were also sent to 150 property owners within 500 feet of the site and to the interested citizen list.

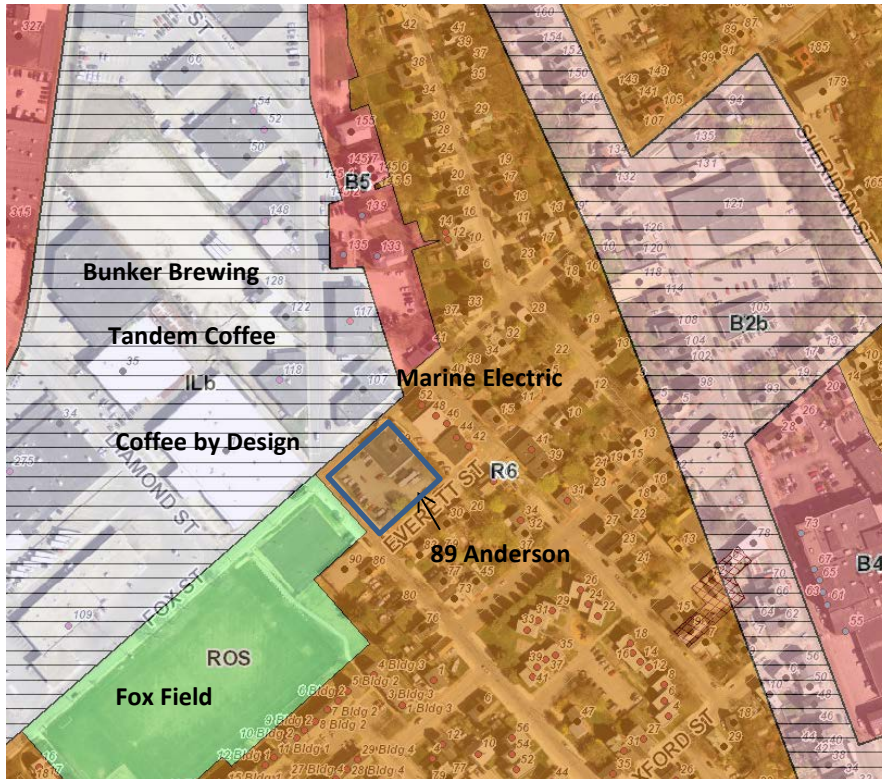


Figure 3: 89 Anderson zoning context

II. BACKGROUND

89 Anderson Street, which consists of two parcels, is currently occupied by 3Gs Tire and Auto Service. The eastern half of the site houses a one-story brick garage building. The remainder of the site, including the corner of Anderson and Fox Streets, is dedicated to surface parking. There is some evidence that the site has long housed a garage; the tax records indicate this as the property's use as far back as 1924. Currently, auto repair is technically not a permitted use in the R-6 zone.

The site lies at the intersection of several zones. The property itself is zoned R-6; as such, it is surrounded on two sides by mostly

residential uses, including some large multi-family housing to the east. Most of the adjacent housing is of a smaller scale, with a mix of single and two-family buildings characteristic of the city's East End. A sizable Recreation Open Space (ROS) parcel, the site of the Kennedy Park basketball courts and Fox Field, sits directly to the southwest. An Industrial IL-b zone, with uses typical of the evolving East Bayside, including Coffee By Design's roastery, Tandem coffee roasters, and Bunker Brewery, lies across Fox Street. The Urban Commercial Business B-5 zone is the nearest commercial zone; portions of Anderson Street north of Fox are zoned B-5. This B-5 zone is home to numerous multi-family properties, including a recent condominium development. There is a B-2b zone east of the site on Washington Avenue.

III. PROPOSED MAP AMENDMENT

Current Zoning:	R-6 (Residential)
Proposed Zoning:	B-1b (Neighborhood Business)
Current Uses:	Auto repair
Proposed Uses:	Mixed-use with first floor commercial (restaurant) and upper floor residential
Parcel Area:	23,357 SF

IV. ZONING ANALYSIS

Redfern Properties continues to propose to develop 53 units of high-density, market rate rental housing on the site as well as first floor commercial space and, in particular, a restaurant. As noted previously, the underlying zone precludes this plan on at least two counts. The existing R-6 zoning allows a density of 1 unit/1,000 SF of lot area for the first three units and 1 unit/1,200 SF thereafter, a density that the applicant

has stated is too low to support the project. Secondly, restaurant uses are not permitted in the R-6 zone, nor are other commercial establishments, such as office, which the applicant continues to include in the proposal. Originally, the applicant requested a rezoning to the Community Business B-2b zone. However, given the neighborhood's response, current efforts on the part of the city to amend the B-1 zone, and the nature of the project, the applicant has modified their request to consider a map amendment to B-1b, which they have argued is "a more appropriate zone for this neighborhood location, providing more security to neighbors in terms of business uses" (*Attachment A*).

At the request of the board, city staff has prepared a more comprehensive analysis of potential zoning designations here. Though the applicant has requested a map amendment to change the zoning for their parcel to B-1b, board members also expressed interest in an R-7 zoning designation. Where the B-1b is proposed to be amended under a concurrent process being undertaken by the city, those amendments are highlighted here. Proposed R-6 amendments are also noted in the analysis.

Purpose Statements

The existing R-6 zoning is designed to promote dense, urban housing characteristic of the city's peninsula. The purpose of the R-6 zone, which can currently be found predominantly in the East and West Ends of the city, is to "set aside areas...for housing characterized primarily by multi-family dwellings at a high density" and to "conserve the existing housing stock and residential character of neighborhoods by controlling the scale and external impacts of professional offices and other nonresidential uses."

The Compact Urban Residential Overlay Zone, or the R-7 zone, is designed as a floating zone to be applied to locations in existing R-6 zones which might support additional residential density and a slightly more urban form, "pursuant to the New Vision for Bayside element of the comprehensive plan and housing plans of the City of Portland." The R-7 was first used for the Unity Village project on Cumberland Avenue. It has since been applied in other peninsula locations through map amendments or conditional zoning agreements. Examples include residential projects on Gilman Street, Danforth Street, State Street, and the recent rezoning for Bayside Anchor on Bond Street. The purpose statement for the R-7 reads, "[l]ocations for siting the R-7 Zone are intended to be located on the peninsula of Portland, in the area encompassed in the Bayside plan, and other peninsula R-6 locations characterized by moderate to high density multi-family housing in a form and density exceeding that allowed in the R-6 Zone and where infill development opportunities exist; and areas on the peninsula with mixed business and residential zoning and uses which can accommodate higher density infill residential development without negatively impacting the existing neighborhood or adjacent properties."

The proposed B-1b zoning designation, in contrast, is more explicitly designed for mixed-use development. The purpose statement reads, "[t]he purpose of the B-1b neighborhood business zone is to provide appropriate opportunities for the establishment of small-scale ground floor commercial uses in existing buildings, serving a local market, while preserving residential uses and character above the ground floor of structures." While this portion of the purpose statement plainly references existing buildings, it should be noted that the city's proposed B-1b amendments would eliminate this distinction in an effort to promote small-scale mixed use buildings whether existing or new. The purpose statement continues, "[t]he zone also provides the opportunity for mixed use and high residential density in on-peninsula locations." Many of the city's traditional, small-scale neighborhood commercial nodes lie in B-1 or B-1b zoning designations, including portions of Congress Street in Munjoy Hill and portions of Pine Street in the West End.

Permitted Uses & Potential Impacts

In keeping with the intent to encourage high-density housing, the R-6 permits most housing types by right. Some institutional uses and professional offices are permitted conditionally, but otherwise the R-6 zone does not permit most non-residential uses, and commercial uses are excluded entirely. It should be noted that the auto repair use which currently occupies 89 Anderson is technically non-conforming.

The R-7 zone is identical to the R-6 in terms of permitted uses, meaning that the R-7 almost exclusively permits residential development. No commercial development is permitted.

Table 1: Purposes

R-6 Residential	R-7	B-1	B-1b
To set aside areas on the peninsula for housing characterized primarily by multifamily dwellings at a high density providing a wide range of housing for differing types of households; and to conserve the existing housing stock and residential character of neighborhoods by controlling the scale and external impacts of professional offices and other nonresidential uses. In cases of qualifying small, vacant, underutilized lots located in the urban residential and business zone, to encourage new housing development consistent with the compact lot development pattern typically found on the peninsula.	To encourage and accommodate compact residential development on appropriate locations on the Portland peninsula, pursuant to the New Vision for Bayside element of the comprehensive plan and housing plans of the City of Portland. Sites suitable for in-city living should be within walking distance of downtown or other work places, shopping and community facilities and have access to public or private off-site parking or transit service. The intent of this zone is to foster increased opportunities for compact in-city living for owners and renters representing a variety of income levels and household types. Locations for siting the R-7 Zone are intended to be located on the peninsula of Portland, in the area encompassed in the Bayside plan, and other peninsula R-6 locations characterized by moderate to high density multi-family housing in a form and density exceeding that allowed in the R-6 Zone and where infill development opportunities exist; and areas on the peninsula with mixed business and residential zoning and uses which can accommodate higher density infill residential development without negatively impacting the existing neighborhood or adjacent properties. It may be appropriate in some cases to rezone to R-7 overlay through conditional or contract zoning to ensure that the new development is architecturally appropriate and compatible with the surrounding neighborhood.	To provide limited areas for the location of small-scale commercial establishments intended to serve a local market. As a result, uses shall be complimentary, quiet and generally do not disturb the comfort and enjoyment of the adjoining neighborhood environment. Uses shall be designed for the pedestrian scale and will provide convenient access for nearby residents and workers to walk in to purchase goods and services. Buildings and uses shall be designed with attractive storefronts or similar features, with windows and doors convenient to a public sidewalk. Building additions are encouraged but not required to meet the maximum setbacks of 14-165(c)(3). This zone shall encourage mixed use buildings such as commercial first floor with residential uses above or combined retail/office uses in a multistory structure. The zone also provides the opportunity for mixed use and high residential density in on-peninsula locations. Suitable locations for this zone may include street intersections and arterial streets with existing or proposed traditional neighborhood retail and service uses.	To provide appropriate opportunities for the establishment of small-scale ground floor commercial uses in existing buildings, serving a local market, while preserving residential uses and character above the ground floor of structures. The zone also provides the opportunity for mixed use and high residential density in on-peninsula locations. Building additions are encouraged but not required to meet the maximum setbacks of 14-165(c)(3).

The B-1 and B-1b zone, in contrast, permits commercial uses, including offices, personal services, business services, and retail establishments, by right. It also permits places of assembly, clinics, municipal uses, and schools. However, in the B-1b zone, these uses are permitted on the first floor only. Upper floor uses are limited exclusively to residential. In this way, the B-1b is intended to promote mixed-use buildings. Restaurants are permitted conditionally so long as their hours are limited to 6 a.m. to 11 p.m, food service and consumption are their primary functions, and there are no drive-throughs. The current ordinance also limits first floor area for use by the public in a restaurant in the B-1b zone to 1,000 SF. Amendments to this floor area limit are currently being considered.

The change in permitted uses associated with the proposed map amendment clearly poses the potential to generate new and different impacts on the neighborhood. At the previous board workshop and in the time thereafter, numerous neighbors have raised questions and concerns regarding trip generation and traffic impacts to Fox Street/Washington Avenue, Fox Street/Anderson Street, Fox Street itself, as well as the neighborhood more broadly. Given these concerns, the applicant elected to conduct a preliminary traffic impact study for the proposed development which provides the impetus for this zone change request.

Traffic Impacts

The applicant's traffic impact study, conducted by Traffic Solutions, includes summaries of existing bicycle and pedestrian volumes and safety trends at several locations near the 89 Anderson site; estimated trip generation from the proposed site uses; and existing and future anticipated level of service at several intersections in the vicinity, taking into account traffic to be generated by other approved projects in the vicinity (*Attachment D*). The study finds the following:

- There are "moderate" bicycle and pedestrian volumes through study area intersections, with higher volumes occurring in the PM peak hour than in the AM peak hour. Of the three intersections studied, the highest bicycle volumes were observed at the Washington Avenue/Fox Street intersection and the highest pedestrian volumes were observed at the Anderson Street/Cumberland Avenue intersection.
- Of the roadway segments and intersections studied, the Washington Avenue/Fox Street intersection meets MaineDOT's criteria for a high crash location. Of the nine accidents observed at this location over a three year timeframe, the plurality involved vehicles heading eastbound on Fox Street turning left onto Washington Avenue;
- Fox Street at Anderson Street, where the 89 Anderson Street parcel is located, had two accidents in the three year period observed;
- A preliminary signal warrant analysis for the Washington Avenue/Fox Street intersection found that the intersection does not satisfy warrants for signalization;
- A trip generation analysis for the proposed development at 89 Anderson Street yielded 27 estimated AM peak hour trips and 33 estimated PM peak hour trips. It should be noted that the trip generation calculations did not include the proposed restaurant or office uses;
- Based on this estimated trip generation, future traffic operations are not anticipated to experience significant degradation in service as a result of the proposed development. The Fox Street approach to the Washington Avenue/Fox Street intersection, which currently experiences a high level of delay, will continue to experience traffic;

The study finds that "[p]edestrian crosswalk markings and stop bars should be installed at the Anderson Street/Fox Street intersection on all four approaches of the intersection."

A supplemental document from Traffic Solutions calculates the net change in estimated trip generation from the proposed development taking into account existing peak hour traffic volumes from the 3Gs site. This analysis results in a net change in estimated trip generation of 15 AM and 9 PM peak hour trips (*Attachment E*). This document states, "the traffic impact study conducted for the proposed project...was based upon the full vehicle trip generation of the 53-unit apartment project with no deduction applied for vehicle trips [currently] generated by the 3Gs auto repair garage. The results presented in the noted report represent an extremely conservative assessment of the project's traffic impact."

Table 2: Permitted Uses

			R-6	R-7	B-1/B-1b¹
Permitted	Residential	Single-family and two-family dwellings	•	•	Any use permitted in nearest residential zone; if commercial first floor multi-family permitted by right
		Multi-family dwellings	•	•	
		Handicapped family units	•	•	
		Single-family manufactured housing	•	•	
		Lodging houses	•	•	
	Institutional	Governmental buildings and uses/municipal uses	•	•	•
		Schools			•
		Clinics			•
		Places of assembly			•
		Nursery schools, kindergartens			•
		Day care facilities			•
	Business	General, business & professional offices			•
		Personal services			•
		Business services			•
		Offices of building tradespeople			•
		Retail establishments			•
	Other	Accessory uses	•	•	•
		Hostels	•	•	•
		Wind energy systems	•	•	•
		Cemeteries	•	•	
		Parks	•	•	
		Home occupation	•	•	
		Special needs independent living units	•	•	
		Conversion into bed and breakfast	•	•	
		Utility substations			•
		Beverage dealers			•
		Bed and breakfasts			•
		Studios for artists and craftspeople			•
		Neighborhood center			•
Conditional		Sheltered care group homes	•	•	
	Institutional	Schools	•	•	
		Long-term and extended care facilities	•	•	
		Intermediate care facility	•	•	
		Places of assembly	•	•	
		Hospitals	•	•	
		Nursery schools and kindergartens	•	•	
		Day care facilities	•	•	
		College, university, trade schools	•	•	
	Other	Restaurants			• ²
		Conversion into bed and breakfast (over 5 rooms)	•	•	
		Utility substations	•	•	
		Professional offices	•	•	
		Chancellery	•	•	
		Off-street parking	• ³	• ³	
		Hostels	•	•	
		Temporary wind anemometer towers	•	•	•
		Wind energy systems	•	•	•

¹ Permitted on ground floor of B-1b; above ground floor, only residential uses of 14-162(a), bed and breakfasts, hostels permitted

² Restaurants conditionally permitted, provided they meet the following requirements: max. floor area for use by public of 1,000 SF; hours limited to 6 am to 11 pm; food service and consumption is primary function; no drive-throughs

³ for passenger cars for uses permitted in the R-6 zone.

The applicant's traffic impact study has been reviewed by the city's consulting traffic engineer, Tom Errico. Of the study, Mr. Errico writes,

The study collected traffic volumes at the Washington Avenue/Fox Street/Walnut Street intersection during the summer time period and not when area schools were in session. It is requested that the traffic counts be updated to include school activity.

An estimated traffic signal warrant evaluation was conducted at the Washington Street/Fox Street/Walnut Street intersection and could not conclusively determine whether a traffic signal should be installed. The applicant should conduct a full comprehensive traffic signal warrant study and render a decision on traffic signalization.

The traffic study should be revised to account for all development land uses. It is my understanding that a restaurant is being proposed and therefore should be included in the analysis.

It should be noted that the traffic study assumed access and egress from the parking lot for the project is via a driveway on Everett Street. I find this to be acceptable.

It should be noted that neighborhood residents have raised concerns regarding methodology and assumptions of the traffic impact study in their public comments (Attachment PC-5 and 6).

In addition to the applicant's traffic impact study, city staff requested that Tom Errico, the city's consulting traffic engineer, conduct a general comparative trip generation analysis based on the potential buildout of the 89 Anderson site under each of the zoning designations under consideration. This analysis shows approximately 30 more AM and PM peak hour trips could be generated under the proposed B-1b zoning than under the existing R-6. Mr. Errico writes,

I have conducted a trip generation comparison analysis between the existing and proposed zoning. Based upon information provided by you, the two zoning scenarios will consist of the following with the associated AM and PM peak hour traffic volumes (combined entering and exiting):

§ Existing Zoning – 20 Residential Units

- AM Peak Hour – 10 vehicles*
- PM Peak Hour – 12 vehicles*

§ Proposed Zoning – 53 Residential Units and 5,255 square feet of Office Space

- AM Peak Hour – 37 vehicles*
- PM Peak Hour – 43 vehicles*

It should be noted that the city is currently in the process of bidding a construction project related to improvements to the Anderson/Fox Street intersection. This project, the Anderson Neighborhood Byway Project, is anticipated to commence in the fall of 2014 and will include construction work to create sidewalks, permanent pedestrian crossings and utility upgrades at the Anderson Street/Fox Street intersection and along Anderson Street in this vicinity. At the present time, the drawings for the Byway Project have left the right-of-way at the Redfern property at the corner of Fox and Anderson Streets unresolved, pending the outcome of this zone change request.

As a product of this zone change proposal, residents have raised concerns regarding the existing geometry of this intersection, noting the acute angles as a safety concern. Staff requested that Mr. Errico examine the intersection in this light. Mr. Errico writes,

There have been concerns expressed regarding the geometric alignment of the Fox Street/Anderson Street intersection (the northerly Anderson Street approach) and that it is non-compliant from an intersection design perspective. The existing configuration of the intersection does make two specific movements difficult from a turning perspective. The right-

turn movement from westbound Fox Street and the left-turn movement from southbound Anderson Street. Because these two movements are low volume turns, crash data has not identified any safety problems, and that it is a four-way STOP intersection, I do not find the geometry to be a concern.

It should be noted that, under site plan review, the city routinely assesses traffic impacts and requires mitigation where necessary. The city is currently examining the Fox Street/Washington Avenue intersection in an effort to address existing concerns there. A contribution or improvements relative to any impacts posed by the Redfern development would be identified at the time of site plan review. Mr. Errico writes,

Given that the Washington Avenue/Fox Street/Walnut Street intersection is a High Crash Location, the applicant should expect to participate in implementation of mitigation improvements at this location.

In this vein, neighborhood residents have routinely raised concerns regarding width and profile of Fox Street as well. Mr. Errico writes,

There have been concerns raised regarding the width of Fox Street and general overall safety given traffic volume increases, on-street parking, etc. Fox Street east of Anderson Street is approximately 30 feet wide. Parking is permitted on both sides of the street. Assuming parking lane widths of 7 feet, 16 feet of travel width would be available under a worst-case condition (where cars are parked opposite each other). This width issue should be reviewed further in respect the most appropriate layout of travel lanes and parking lanes for Fox Street.

Other Potential Impacts

As with traffic, there are other potential impacts associated with the change in permitted uses under the proposed zone change. In that the B-1b allows ground floor retail and, conditionally, restaurant uses, there is the potential for night time activity and the concomitant light and noise. It should be noted that, as with traffic impacts, the city regulates light and, to some extent, noise impacts through the site plan review process.

Dimensional Requirements and Form

The purpose of the existing R-6 zoning is to encourage high density housing. The R-6's basic control for density, the minimum requirement of 1,000 SF of lot area per dwelling unit for the first three units with 1,200 SF of lot area required per dwelling unit thereafter, would limit the residential buildout of the 89 Anderson parcel to 19 units. However, city staff is currently proposing text amendments to the R-6 which would allow it to better foster the type of development that originated prior to zoning and can be found in many of the city's R-6 zones. Under these amendments, a density of one unit/725 SF of lot area would be permitted. This would allow the development of 32 units on site. The current R-6 allows a lot coverage of 50% and poses setback requirements of 10 feet on the front yard, 20 feet on the rear yard, and 10-15 feet on the side yard, which guarantees that buildings will be separated both from each other and the street with a significant amount of open space. A height of 45 feet is allowed. The proposed R-6 dimensional requirements would increase the lot coverage to 60%, reduce the setbacks to 5 feet for the front yard, 10 feet for the rear yard, and 5 feet for the side yard. The height limit would not change.

The R-7, in contrast, allows a much denser building envelope. The R-7 permits a density of one unit/435 SF of lot area, which would equate to 53 units on the 89 Anderson Street site. The allowable lot coverage is 100%, which means that a building could occupy most of the lot, save for a five foot side and rear setback. The permitted height is 50 feet.

Table 3: Dimensional Requirements¹

	R-6	Proposed R-6²	R-7	B-1/B-1b	Proposed B-1/B-1b²
Min. Lot Area per D.U.	1,000 SF; 1,200 SF after first three ³	725 SF	435 SF	<i>On-peninsula:</i> 435 SF	No change
Min. Lot Width	40 ft.	30 ft.		None	No change
Min. Front Yard	10 ft., except where average depth of adjacent front yards is less	5 ft., except where average depth of adjacent front yards is less	None		No change
Max. Front yard				10 ft., or average depth of nearest developed lots	No change
Min. Rear Yard	<i>Principal >100 SF footprint:</i> 20 ft.	<i>Principal >100 SF footprint:</i> 10 ft.	5 ft.	<i>Principal:</i> None; 20 ft. if abutting residential zone or use	<i>Principal:</i> None; 10 ft. if abutting a residential zone
	<i>Detached accessory < 144 SF footprint:</i> 5 ft.	No change		<i>Accessory:</i> None; 5 ft. if abutting a residential zone or use	<i>Accessory:</i> None; 5 ft. if abutting a residential zone
Min. Side Yard	1-3 stories: 10 ft. ⁴	5 ft.	5 ft.	<i>Principal:</i> None; 10 ft. if abutting residential zone or use	<i>Principal:</i> None; 5 ft. if abutting residential zone
	4 stories: 12 ft. ⁴			<i>Accessory:</i> None; 5 ft. if abutting a residential zone or use	<i>Accessory:</i> None; 5 ft. if abutting a residential zone
	5 stories: 15 ft. ⁴			<i>Corner lot:</i> 10 feet max. ⁵	<i>Side yard on side street:</i> None
	Side yard on side street: 10 ft.				
Max. Structure Height	Principal: 45 ft.	No change	50 ft.	<i>On-peninsula:</i> 45 ft. ⁶	No change ³
	Accessory detached: 18 ft.				
Structure Stepbacks					Above 35 ft.: 10 ft. from side and 15 ft. from rear property line if abutting a residential zone
Max. Floor Area	See footnote ⁷			<i>Single-tenant:</i> 5,000 SF (first floor only)	<i>Total max. first floor area for non-residential uses per structure:</i> 10,000 SF
				<i>Multi-tenant:</i> 10,000 SF (first floor only)	<i>Total max. first floor area per retail estab.:</i> 5,000 SF
Max. Lot Coverage	> 20 units: 40%	60%	100%		
	< 20 units: 50%				
Open Space Ratio	< 20 units: 20% ⁶	20%			
	> 20 units: 30%				
Max. Impervious				90%	No change

¹ Table only includes relevant dimensional standards. Note that other dimensional standards apply.

² These amendments have yet to be brought to the Planning Board for review, and are subject to change.

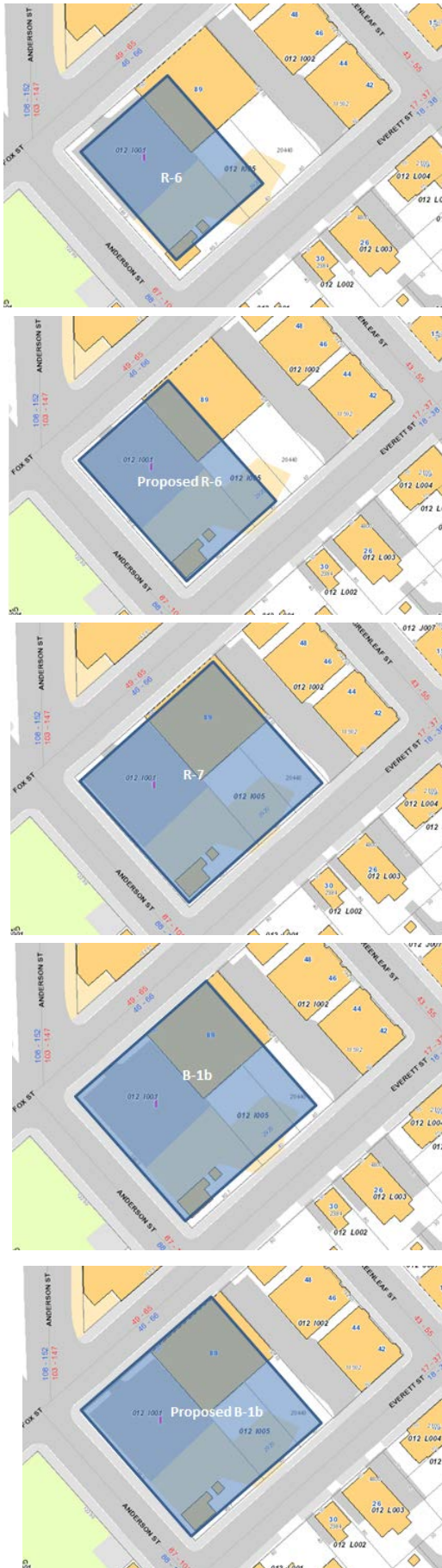
³ Other restrictions apply for lodging houses, intermediate care facilities

⁴ The width of one (1) side yard may be reduced one (1) foot for every foot that the other side yard is correspondingly increased, but no side yard shall be less than ten (10) feet. Other exceptions apply.

⁵ Except that for any new construction on a lot abutting more than two streets, the maximum setback shall not apply beyond the two most major streets.

⁶ Except 50 ft. along Congress Street if commercial first floor & residential upper floors. The commercial first floor uses shall utilize at least 75 percent of the first floor frontage along Congress Street and shall have an average depth of at least 20 feet.

⁷ Minimum/maximum gross floor area requirements exist for places of assembly and bed and breakfasts.



The city's business zones generally encourage a similar dense, urban form. The B-1b zone allows 90% impervious surface and permits a density of one unit/435 SF of lot area. A rezoning to B-1b would thus, as the applicant proposes, allow 53 units on site. As in the R-6, the maximum height allowed is 45 feet. Side setbacks of 10 feet and rear setbacks of 20 feet are required if abutting residential uses. There is a maximum 10 foot front yard setback. Under currently proposed amendments, these side and rear yard setbacks are being reviewed; proposed changes to the B-1 zone would bring these side and rear setbacks to 5 feet and 10 feet respectively. This would allow Redfern to develop the 89 Anderson Street site as currently proposed. It should be noted that the proposed B-1b zoning does include a stepback provision, which would require an increase in setback to 15 feet above 35 feet in height on the rear of the property if abutting a residential zone.

At the previous workshop and in email correspondence, neighbors have raised concerns regarding potential height and massing under the zone change. It should be noted that the height limits of the R-6 and the B-1, even under proposed amendments, are the same at 45 feet. The B-1 has the added protection of a stepback when a building is greater than 35 feet in height. Regarding lot coverage, however, there is a significant difference between the existing and the proposed zoning. The proposed R-6 amendments allow a lot coverage of 60%; the R-7 allows 100%, and the B-1b effectively allows 90%. Staff has developed conceptual diagrams to depict the rough building envelope on the 89 Anderson Street site under each of these potential zoning designations (*Figure 4*). In addition, the applicant has provided photosimulated elevations in an attempt to depict the proposed building under the dimensional requirements of the B-1b zone, as proposed (*Attachment C and Figure 5*).

It should be noted that neighbors have also raised particular concerns with regard to the setbacks under the proposed zoning, expressing a concern that sight lines will be obstructed and cause safety issues, particularly at the Fox Street/Anderson Street intersection. Mr. Errico was consulted regarding this concern. He writes,

There have been concerns expressed regarding sight distance adequacy at the Fox Street/Anderson Street intersection. Given that all movements must stop, I find sight distance conditions to be acceptable.

V. GEOGRAPHY

Redfern Properties has requested a rezoning for their property at 89 Anderson Street. Staff conducted a cursory analysis to consider whether the proposed designation makes rational sense for a broader area. In this instance, there is a compelling case that the surrounding zones should remain as they currently exist. The R-6 zone in this area of East Bayside is largely intact with residential properties, save for the 89 Anderson site, and there are longstanding comprehensive plan policies which seek to limit commercial expansion into residential zones. With respect to the nearby IL-b, recent policy papers on the part of the city's Economic

Figure 4: Conceptual diagrams depicting building envelopes under potential zoning designations, 89 Anderson Street site



ANDERSON STREETSCAPE



EVERETT STREETSCAPE

Figure 5: Proposed 89 Anderson Street elevation in context

Development division have strongly advocated for retaining industrially-zoned land in the city. Likewise, the ROS zone at Fox Field is clearly a valuable community resource that city policy would encourage to leave in its current state. Furthermore, it should be noted that the city's B-1 zones are generally small and circumscribed, part of makes them attractive as neighborhood retail and residential nodes. The B-1 purposes statement refers particularly to "street intersections and arterial streets with existing or proposed traditional neighborhood retail and service uses" as suitable locations. Staff is suggesting advertising just the 89 Anderson Street site for the proposed map amendment (*Figure 6*).

VI. POLICY ANALYSIS

The applicant argues in their cover letter that the "site lies at the convergence of several zones and represents an opportunity to improve an underdeveloped property in a way that will contribute to the neighborhood and city" (*Attachment A*). In their most recent submittal, Redfern includes a comprehensive plan analysis (*Attachment B*). In this analysis, they attest that the proposed zone change will meet numerous goals of the city's comprehensive plan, most particularly those of the city's housing plan, *Housing: Sustaining Portland's Future*.

First in their analysis, Redfern argues that the proposed market-rate rental housing project which the proposed zone change will allow will help to meet the city's goal of "[e]nsur[ing] that an adequate supply of housing is available to meet the needs, preferences, and financial capabilities of all Portland households, now and in the future." They further elaborate that, by providing rental housing at projected rents below 30% of HUD's median income for the Portland metro region, the zone change would allow the city to actualize an objective under this goal: "ensur[ing] the construction of a diverse mix of housing types that offers a continuum of options across all income levels, which are both renter and owner-occupied."

Redfern also cites goals from *Housing: Sustaining Portland's Future* related to "encourag[ing] higher density housing for both rental and home ownership opportunities, particularly located near services, such as schools, businesses, institutions, employers, and public transportation" and "increas[ing] Portland's rental housing stock."



Figures 6: Potential area of rezoning

More relevant to the rezoning request, Redfern cites objectives from *Housing: Sustaining Portland's Future* related to “support[ing] Portland’s livable neighborhoods by encouraging a mix of uses that provide goods and services needed and are within walking distance of most residents,” writing that the B-1b zoning designation will encourage “uses and services compatible with residential neighborhoods, thus supporting the planning concept of ‘walkable neighborhoods.’” The applicant also quotes the objective regarding “encourage[ing] neighborhood business centers throughout the city to reduce dependence on the car and make neighborhood life without a car more practical,” writing that “the B-1b zone is designed to create neighborhood business centers. Mixed-use buildings...both provide residence and neighborhood business/services that create

excellent ‘traditional’ neighborhoods less dependent on the automobile.”

It should also be noted that *Housing: Sustaining Portland's Future* advises against commercial encroachment with policies such as “[w]hile accommodating needed services and facilities, protect the stability of Portland residential neighborhoods from excessive encroachment by inappropriately scaled and obtrusive commercial, institutional, governmental, and other non-residential uses.”

VII. PUBLIC COMMENT

As of the writing of this memo, the Planning Division had received several additional public comments on the proposal (*Attachments PC-1-6*). As with the prior board workshop and as noted above, many of the questions and concerns expressed in this correspondence focused on issues regarding traffic generation and impacts to Fox/Washington, Fox/Anderson, and Fox Street itself; geometry and sight lines at Fox/Anderson and Fox/Washington, particularly with respect to pedestrian (but also vehicular) safety; and Fox Street width, in combination with the existing parking situation, grades, speeds, and snow. Nearby residents have called for traffic calming, pedestrian upgrades, signal improvements, and the elimination of tractor trailer parking along lower Fox as a way to mitigate some of these concerns. Safety is a general, overriding issue. Residents have also continued to express opposition regarding the proposed zoning designation and any change from the existing R-6 zoning.

VIII. NEXT STEPS

- Provide initial feedback on zone change request
- Schedule a public hearing or a second workshop

IX. ATTACHMENTS

PLANNING BOARD REPORT ATTACHMENTS

1. Traffic engineer review (email from Tom Errico, 9/17/14)

APPLICANT’S SUBMITTALS

- A. Cover letter
- B. Comprehensive Plan Analysis
- C. Supplemental Renderings
- D. Preliminary Traffic Impact Study
- E. Traffic Study Revision

PUBLIC COMMENT

PC-1. Emails from Ellen Bailey, 9/16/14

PC-2. Email from Lamm, 9/17/14

PC-3. Email from Rzepka, 9/18/14

PC-4. Email from Snyder, 9/18/14

PC-5. Markups on Traffic Impact Study, Cynthia Cochran

PC-6. Email from Cynthia Cochran, 9/18/14



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September 11, 2014

Nell Donaldson
Planning Division, City of Portland
389 Congress Street, 4th Floor
Portland, ME 04101

Re: 89 Anderson Street, Zone Change Application

Dear Nell:

Please find attached revisions and supplemental materials related to our Zone Change Application for 89 Anderson Street.

First, please note that based on feedback from the Planning Board Workshop, and City Staff, we are prepared to revise our Zone Change Application to request B-1b (Neighborhood Business Zone), where we were previously seeking B-2b. This revision is conditioned upon text amendments to the B-1b that would reduce the 'rear yard' setback requirement to 10' or less, and any other required amendments arising from an interpretation by the Zoning Administrator. We understand that the process of making a series of text amendments to the B-1b is underway, and that 'rear yard' setback would be included in the proposed changes.

We agree with City Staff that the B-1b is, in many ways, a more appropriate zone for this neighborhood location, providing more security to neighbors in terms of potential business uses. Further, the zone appears to be designed specifically for locations such as 89 Anderson, per the following excerpt from the Zoning Ordinance (page 14-239 of the Land Use Code):

"The Zone also provides the opportunity for mixed-use and high residential density in on-peninsula locations....Suitable locations for this zone may include street intersections, arterial streets, and site with existing or traditional neighborhood retail and service uses"

Clearly 89 Anderson meets the criteria for B-1b suitability as stated in the Ordinance, as it is located at an intersection, on an arterial street (Fox Street), and the neighborhood has many existing businesses.

Also attached to this letter is a ***Traffic Impact Study***, prepared by William Bray, P.E. Though not typically required for a Zone Change application, we hope that the Traffic Impact Study can provide comfort to neighbors and the Planning Board that the proposed development will not create adverse impacts. The study concludes that:

“The operational analysis conducted for the three study intersections clearly shows that traffic generated by the proposed apartment complex has virtually no impact on traffic operations at any of the three study intersections.”

However, the study also identifies some problems on Fox Street that should be addressed. Should our project go forward, we would hope to work closely with the neighborhood and the City, to advocate for safety improvements along the Fox Street corridor, and particularly at the Fox/Washington intersection.

Please also find attached a more detailed ***Comprehensive Plan Analysis***. The analysis focuses on the City’s Housing Goals, and how the proposed project will have an important impact in meeting the stated Policy objectives. While the 2002 Comprehensive Plan document entitled *Housing: Sustaining Portland’s Future* emphasizes the need for new housing, it is important to note that this need has become far more pressing in recent years. Availability and affordability of housing in Portland is at or near crises levels. Experts generally agree that new housing supply is the best way to address these challenges. In particular, new market-rate rental housing, such as our proposed project is a vital component of any solution to Portland’s housing problems.

Finally, attached are a series of ***Architectural Renderings*** that show the proposed building in the context of the surrounding built environment. We believe that these images demonstrate a wide variety of forms and massings in the immediate neighborhood, and that the proposed building is appropriate in size and scale.

Please do not hesitate to contact me with any questions about the attached.

Sincerely,



Jonathan Culley
Redfern Properties LLC

Attachments: Traffic Impact Study (52 pages)
Comprehensive Plan Analysis (5 pages)
Architectural Renderings (9 pages)

89 Anderson Street Zone Change Application Comprehensive Plan Analysis

The City of Portland's Comprehensive Plan articulates goals for a denser, more populous, and more vibrant City. The proposed project at 89 Anderson is consistent with the Plan's goals and objectives in many ways, including those included in this document. This document demonstrates the 89 Anderson Street project's consistency with the document entitled *Housing: Sustaining Portland's Future* which was adopted as part of Portland's Comprehensive Plan in 2002. Please note that the Housing shortage in Portland has become far more pronounced since this Comprehensive Plan document was created in 2002. Relevant excerpts from the Comprehensive Plan document are shown in bold, while our responses are in regular (non-bold) type.

Document: *Housing: Sustaining Portland's Future* Adopted November 18, 2002

Portland Today: A Shortage of Housing

Condition One: Portland has a shortage of housing units because nearly two households were formed for every new housing unit created since 1990. (page 26)

The proposed development addresses the housing shortage by adding housing supply.

Condition Two: Lack of housing supply causes price increases for both renters and owners. (page 26)

The proposed project creates new housing supply which will contribute to improving housing affordability.

Condition Three: Portland has limited vacant land suitable for new development, thus infill sites and redevelopment options are the primary opportunities for creating new housing. (page 27)

The proposed project is the redevelopment of a currently underutilized site and with a non-conforming use.

Ensure and Adequate and Diverse Supply of Housing for All

Policy #1: Ensure that an adequate supply of housing is available to meet the needs, preferences, and financial capabilities of all Portland households, now and in the future. (page 29)

The only way to ensure adequate housing supply is to create new housing. Further, the 89 Anderson project fulfills the currently unmet need for market-rate rental housing.

Housing development in Portland in the last several decades has been mostly either low-income subsidized housing or condominium housing, while the number of market-rate rental apartments has declined due to demolition or conversion to other ownership types.

Objective 1.a: Ensure construction of a diverse mix of housing types that offers a continuum of options across all income levels for both renter and owner-occupied. (page 29)

Per above, there has been very little new construction of market-rate rental apartments. The 89 Anderson project will meet the housing demand for renters who earn around the median income for the region.

Objective 1.b: A variety of housing choices should be available such that no one should have to spend more than 30% of their income for housing. (page 30)

Per above, there is ample supply of condominium homes in the Portland market, and there have been several hundred new subsidized units completed in the last several years (though there is still unmet demand), but almost zero new market-rate units. The projected (pro forma) rents for the 89 Anderson project are below 30% of the U.S. Government's established Median Income for the Portland ME HUD Metro FMR Area (source: <http://www.huduser.org/portal/datasets/il/il2014/2014summary.odn>). Per the 'huduser' website, the Median Incomes for various family sizes and 30% of income levels are as follows:

Family Size	Median Income (Per HUD)	30% Median Income	89 Anderson Projected Rent
1	\$54,200	\$1,355	\$1,000
2	\$61,900	\$1,548	\$1,300
3	\$69,600	\$1,740	\$1,600
4	\$77,300	\$1,933	\$1,750

Note: The 89 Anderson Projected Rent contemplates a 'Studio' apartment for the 1 person family, a 'one-bedroom' for the 2 person family, a smaller 'two-bedroom' for the 3 person family, and the largest 'two-bedroom' for the 4 person family.

The table above demonstrates that our projected rents are less than 30% of the Median Income as defined by HUD. So by definition, the 89 Anderson apartments would target those near the middle of the income strata.

Objective 1.c: Encourage higher density housing for both rental and home ownership opportunities, particularly located near services, such as schools, businesses, institutions, employers, and public transportation. (page 30)

The 89 Anderson project is located a short walk from downtown (about 13 minutes by foot), and near public transportation, grocery stores, schools (Portland High School, East End Community School), and other services. It represents an ideal location for higher density housing.

Objective 1.d: Increase Portland's rental housing stock to maintain a reasonable balance between supply and demand yielding consumer choice, affordable rents, and reasonable return to landlords. (page 31)

89 Anderson will increase the rental housing stock, providing new construction housing, with exceptional energy efficiency, and modern amenities, creating a new type of housing, not currently available.

Objective 1.g: Identify vacant land and redevelopment opportunities throughout the city to facilitate the construction of new housing. (page 33)

The proposed project is the redevelopment of a currently underutilized site and with a non-conforming use.

Objective 1.h: Promote Portland as a Pro-Housing Community. (page 33)

Providing Zoning that would make feasible a market-rate rental housing project would demonstrate that Portland is serious about addressing its Housing needs.

Neighborhood Stability and Integrity

Policy #3: Maintain and enhance the livability of Portland's neighborhoods as the City grows and evolves through careful land use regulation, design and public participation that respects neighborhood integrity. (page 43)

89 Anderson meets Portland's housing needs on neighborhood scale (i.e. without altering current block design). By adding ground floor commercial uses at a location on a key intersection and across from a major public park, 89 Anderson adds to 'sense of place' in the East Bayside neighborhood.

Objective 3.a: While accommodating needed services and facilities, protect the stability of Portland residential neighborhoods from excessive encroachment by inappropriately scaled and obtrusive commercial, institutional, governmental, and other non-residential uses. (page 43)

The current use of 89 Anderson is non-conforming. B1-b Zoning limits the type of businesses to those that are compatible with residential neighborhoods.

Objective 3.b: Support Portland's livable neighborhoods by encouraging a mix of needed uses and services within walking distance of most residents. (Page 43)

The B1-b zone encourages uses and services compatible with residential neighborhoods, thus supporting the planning concept of 'walkable neighborhoods'.

Objective 3.c: Encourage innovative new housing development, which is designed to be compatible with the scale, character, and traditional development patterns of each individual residential neighborhood. (Page 44)

East Bayside is an eclectic neighborhood with a wide range of buildings ranging from large multi-family (Bayside East at Smith/Oxford St., Portland Housing Authority), mid-sized multi-family (Greenleaf Apartments abutting 89 Anderson), small multi-family and

single family homes, and large industrial buildings across Fox Street from 89 Anderson. The new building at 89 Anderson will be similar in scale and character to Bayside East and the recently approved Bayside Anchor, while creating a connection to the larger industrial buildings across Fox Street.

Objective 3.d: Encourage new housing development in proximity to neighborhood assets such as open space, schools, community services and public transportation. (Page 44)

89 Anderson is adjacent to a large public park/open space and is in close proximity to many services and bus routes.

Objective 3.e: Ensure the integrity and economic value of Portland's neighborhoods. (Page 45)

The substantial investment in the 89 Anderson project should serve to improve safety and security in the neighborhood, while potentially increasing the value of nearby properties.

Objective 3.g: Encourage neighborhood populations that are economically, socially, culturally and ethnically diverse. (Page 46)

East Bayside is currently largely populated by owner-occupied homes and subsidized housing. New market-rate housing would add a new type of housing and increase economic diversity in the neighborhood.

Sustainable Development

Policy #5: Portland's Comprehensive Plan encourages a manageable level of growth that will sustain the City as a healthy urban center in which to live and work and to achieve a shared vision for Portland. Portland should encourage sustainable development patterns and opportunities within the City by promoting efficient land use, conservation of natural resources, and easy access to public transportation, services, and public amenities. (page 53)

The planning of 89 Anderson is based on the principles of 'smart growth' development. By creating high-density housing on the Portland peninsula in a previously developed, but non-conforming parcel, the project is consistent with sustainable development patterns.

Objective 5a: Encourage growth in Portland that strives for a dynamic balance of the essential elements of the city, such as excellent schools, diverse housing choices, proximity to services and employment, increased public transit usage, expanded economic base, high quality services, and an affordable tax rate. (page 53)

The mixed-use project at 89 Anderson will create a new type of housing choice (adding to diversity of housing options), close to employment centers and public transit. The project will provide substantial new tax revenue, likely with minimal associated expense.

Objective 5 b: Maximize development where public infrastructure and amenities, such as schools, parks, public/alternative transportation, sewer lines, and roads exist or may be expanded at minimal costs. (page 53)

89 Anderson Street is across the street from a large public park/open space, and is built on existing roads with existing utility infrastructure.

Objective 5.c.: Create new housing to support Portland as an employment center and to achieve an improved balance between jobs and housing. (page 54)

By helping to alleviate Portland's housing crunch, 89 Anderson helps Portland become a more attractive home for employers.

Objective 5.d.:Encourage neighborhood business centers throughout the city to reduce dependence on the car and to make neighborhood life without a car more practical. (page 54)

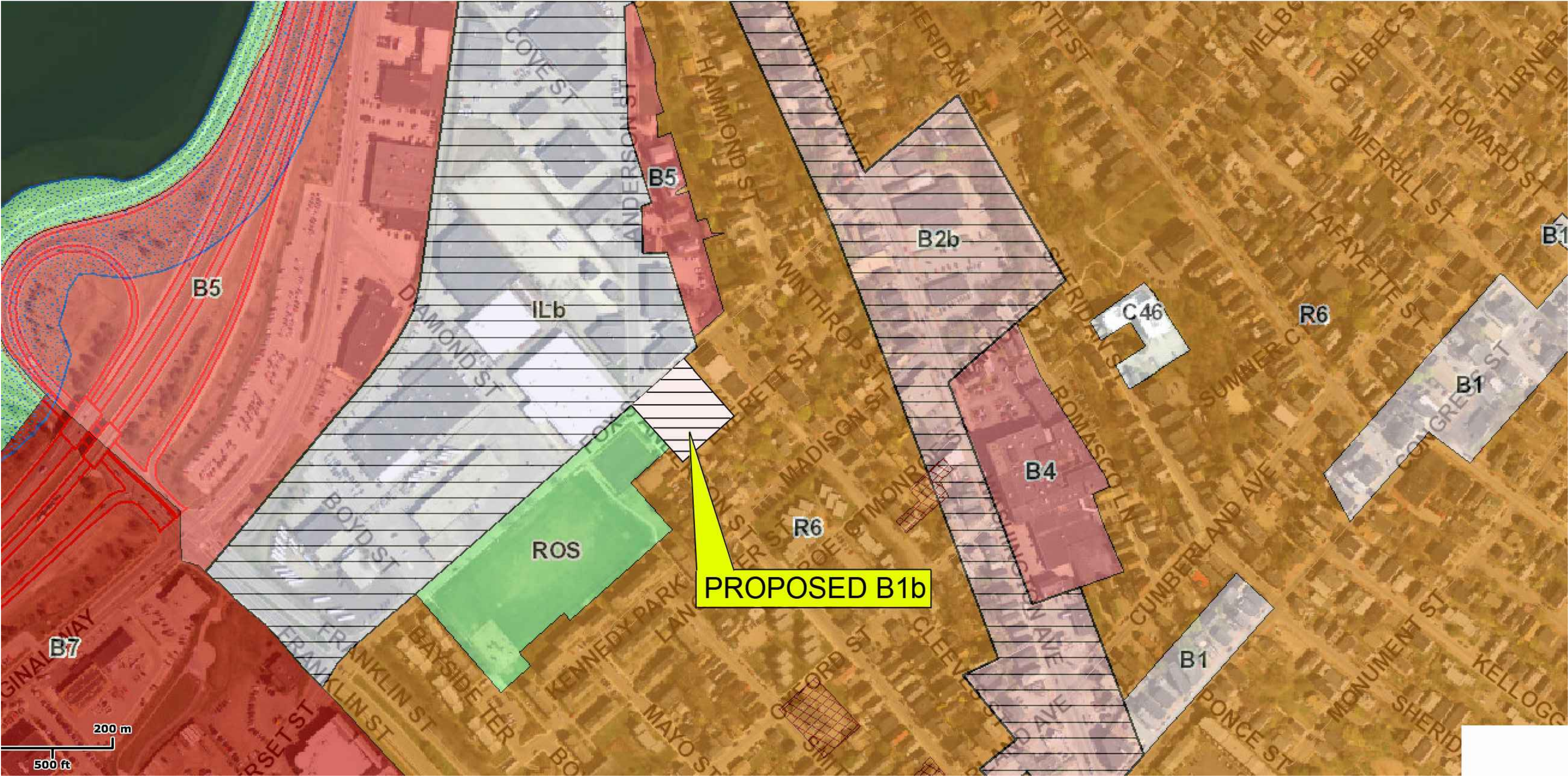
The B1-b zone is designed to create neighborhood business centers. Mixed-use buildings such as 89 Anderson, provide both residence and neighborhood business/services that create excellent 'traditional' neighborhoods less dependent on the automobile.

Objective 5.e: Locate and design housing to reduce impacts on environmentally sensitive areas. (page 54)

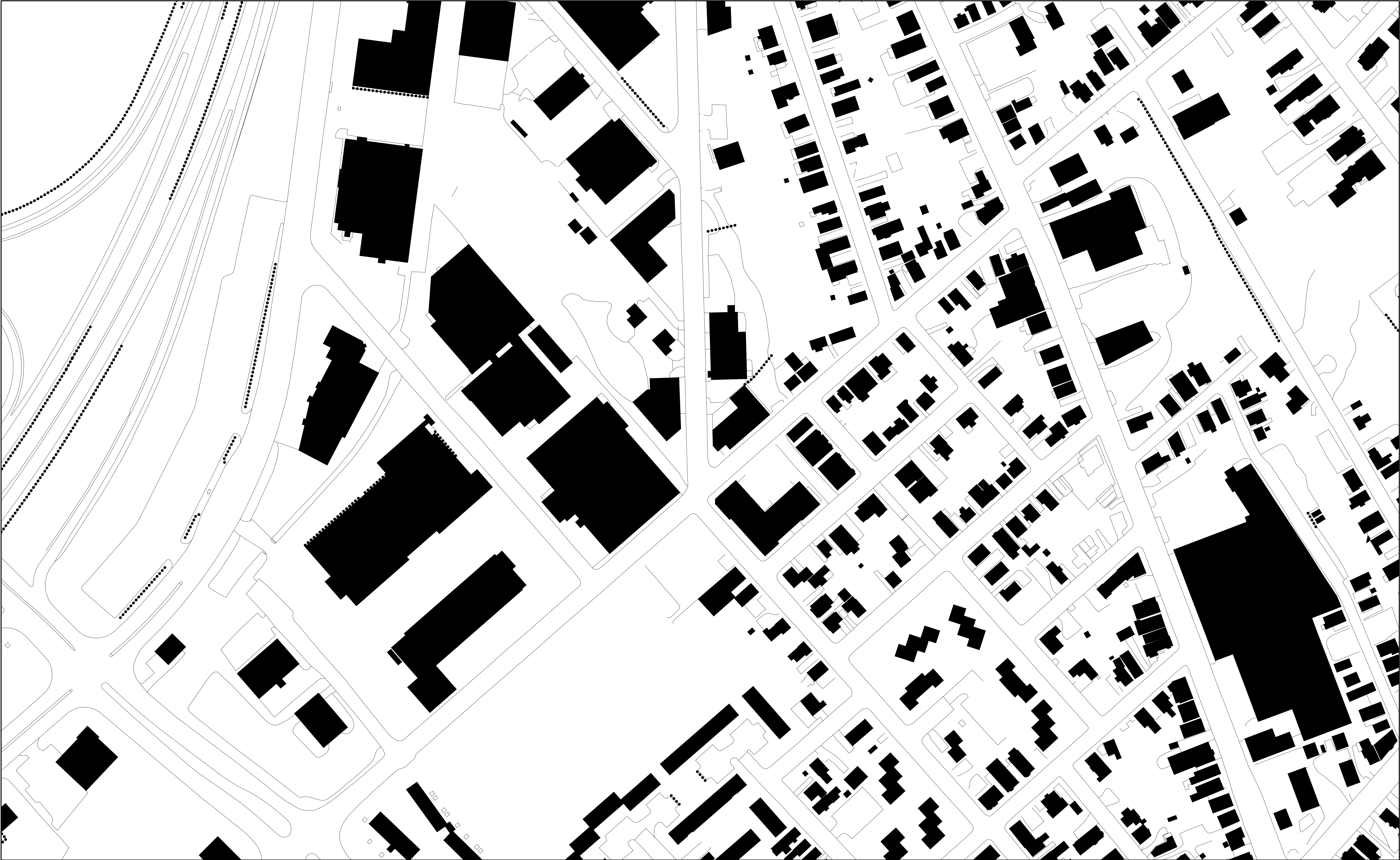
The 89 Anderson site is currently an auto garage with a large asphalt parking area, with little environmental value. Housing on such properties reduces the need to create housing on more environmentally sensitive areas.

Objective 5.f: Design housing using new technologies and materials that reduce costs and increase energy efficiency. (page 55)

Redfern Properties believes deeply in building the most energy efficient buildings possible. Some of our previous projects have won honors for energy efficiency and sustainability. Like our past and current projects, we plan to build 89 Anderson to an exceedingly high environmental standard.











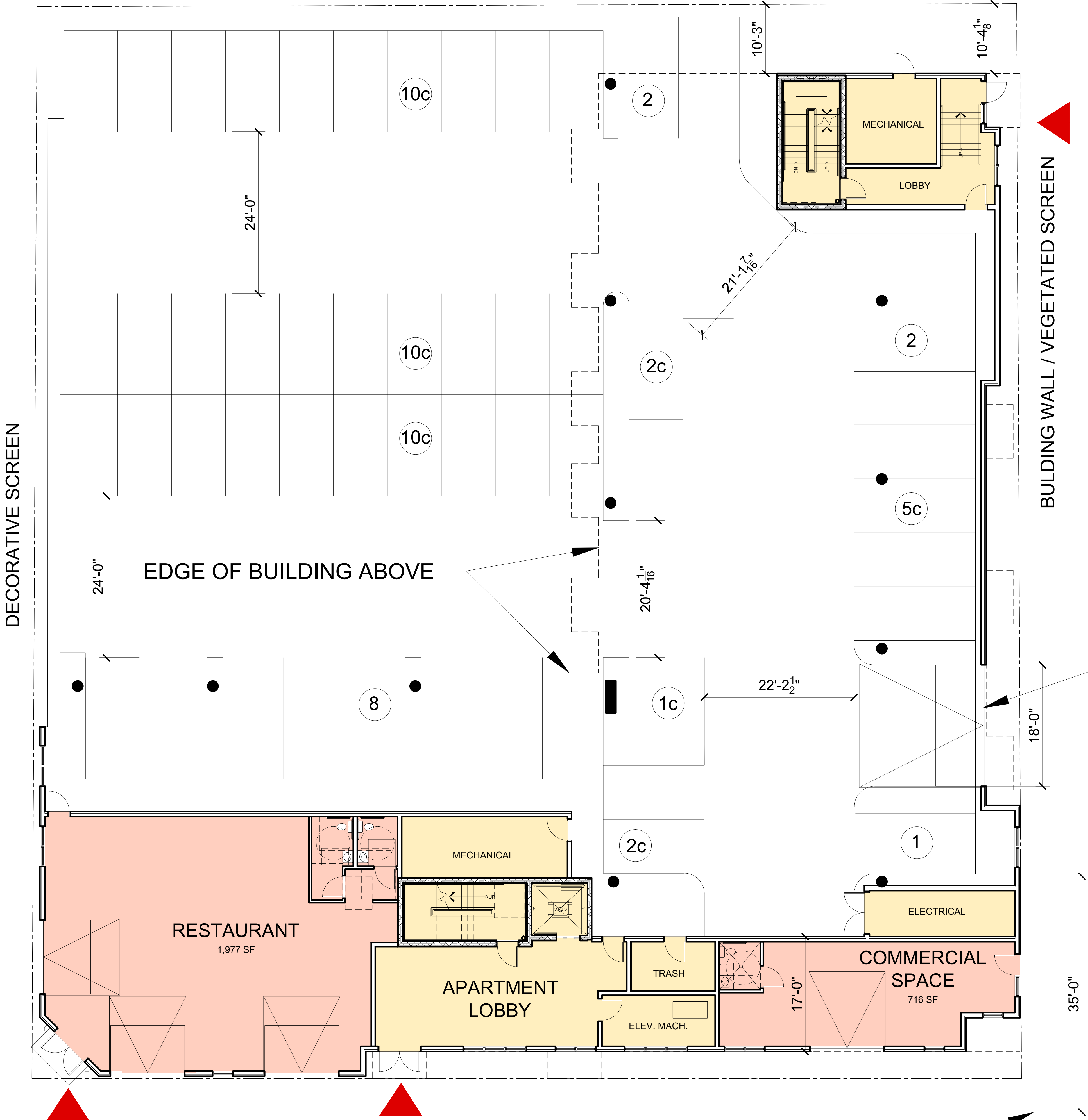


ANDERSON STREETSCAPE



EVERETT STREETSCAPE

FOX STREET

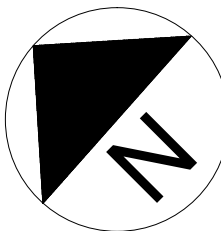


EVERETT STREET

ANDERSON STREET

SITE PLAN
SCALE 1/8" = 1'-0"

FRONT STREET LINE
/ EDGE OF CURB



From: Tom Errico <thomas.errico@tylin.com>
To: Helen Donaldson <HCD@portlandmaine.gov>
CC: David Margolis-Pineo <DMP@portlandmaine.gov>, Katherine Earley <KAS@portlandmaine.gov>, Jeremiah Bartlett <JBartlett@portlandmaine.gov>, Jeff Tarling <JST@portlandmaine.gov>
Date: 9/17/2014 7:09 PM
Subject: 89 Anderson Street - Preliminary Traffic Review

Hi Nell - I have reviewed the traffic study prepared by Bill Bray, P.E. for the project, responded to some neighborhood comments, and provided a trip generation comparison summary between the existing and proposed land use zones. The following presents my comments.

- The study collected traffic volumes at the Washington Avenue/Fox Street/Walnut Street intersection during the summer time period and not when area schools were in session. It is requested that the traffic counts be updated to include school activity.

- A estimated traffic signal warrant evaluation was conducted at the Washington Street/Fox Street/Walnut Street intersection and could not conclusively determine whether a traffic signal should be installed. The applicant should conduct a full comprehensive traffic signal warrant study and render a decision on traffic signalization.

- The traffic study should be revised to account for all development land uses. It is my understanding that a restaurant is being proposed and therefore should be included in the analysis.

- It should be noted that the traffic study assumed access and egress from the parking lot for the project is via a driveway on Everett Street. I find this to be acceptable.

- Given that the Washington Avenue/Fox Street/Walnut Street intersection is a High Crash Location, the applicant should expect to participate in implementation of mitigation improvements at this location.

- There have been concerns expressed regarding sight distance adequacy at the Fox Street/Anderson Street intersection. Given that all movements must stop, I find sight distance conditions to be acceptable.

- There have been concerns expressed regarding the geometric alignment of the Fox Street/Anderson Street intersection (the northerly Anderson Street approach) and that it is non-compliant from an intersection design perspective. The existing configuration of the intersection does make two specific movements difficult from a turning perspective. The right-turn movement from westbound Fox Street and the left-turn movement from southbound Anderson Street. Because these two movements are low volume turns, crash data has not identified any safety problems, and that it is a four-way STOP intersection, I do not find the geometry to be a concern.

- There have been concerns raised regarding the width of Fox Street and general overall safety given traffic volume increases, on-street parking, etc. Fox Street east of Anderson Street is approximately 30 feet wide. Parking is permitted on both sides of the street. Assuming parking lane widths of 7 feet, 16 feet of travel width would be available under a worst-case condition (where cars are parked opposite each other). This width issue should be reviewed further in respect the most appropriate layout of travel lanes and parking lanes for Fox Street.

- I have conducted a trip generation comparison analysis between the existing and proposed zoning. Based upon information provided by you, the two zoning scenarios will consist of the following with the associated AM and PM peak hour traffic volumes (combined entering and exiting):

§ Existing Zoning - 20 Residential Units

- o AM Peak Hour - 10 vehicles
- o PM Peak Hour - 12 vehicles

§ Proposed Zoning - 53 Residential Units and 5,255 square feet of Office Space

- o AM Peak Hour - 37 vehicles
- o PM Peak Hour - 43 vehicles

If you have any questions, please contact me.

Best regards,

Thomas A. Errico, PE
Senior Associate
Traffic Engineering Director
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Twitter | Facebook | LinkedIn | YouTube

"One Vision, One Company"

Please consider the environment before printing.



Traffic Solutions

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September 17, 2014

Jonathan Culley
Redfern Properties, LLC
P.O. Box 8816
Portland, Maine 04104

RE: Portland Anderson Street Apartment Project – Trip Generation 3G's Garage

Dear Jonathan:

In an effort to accurately measure the existing volume of peak hour traffic generated by the 3G's auto repair garage, in-field traffic counts were conducted on Thursday, September 11 (Field data summary sheets from that effort are attached for documentation of the results). Manual traffic counts were conducted between the hours of 7:30 to 9:00 AM and again between 3:30 to 5:30 PM. From a summary of the data during each peak travel period, the total volume of trips entering or exiting the garage was determined. A total of 12 vehicle trips was recorded entering/exiting the garage during the morning peak hour (7:30 to 8:30 AM) and a total of 24 trips was measured in the evening peak hour of 3:30 to 4:30 PM.

Your proposed 53-unit apartment project, which will raze the existing 3G's garage, is projected to generate a total of 27 trips in the AM peak hour and 33 trips during the PM peak hour. Accordingly, the "net" increase in vehicle trips generated by the proposed 53-unit apartment project is 15 trips during the AM peak hour and 9 trips in the PM peak hour.

The Traffic Impact Study conducted for the proposed project by Traffic Solutions was prepared based upon the full vehicle trip generation of the 53-unit apartment project with no deduction applied for vehicle trips generated by the existing 3G's auto repair garage. The results presented in the noted report represent an extremely conservative assessment of the projects traffic impact.

I spoke to Tom Errico, P.E.; the City's Peer Traffic Consultant, yesterday and promised him a copy of this letter to further assist him in his review of the traffic impacts of the proposed project.

Very truly yours,

William J. Bray, P.E.

Cc: Thomas Errico, P.E.

I rewound each time

930-3909
Paddy & Camberant Inc.

JOB NO. _____

INTERSECTION PLAN
WITH NUMBERED MOVEMENTS:INTERSECTION Fox Napa AutocareDATE 7/11DAY OF WEEK Thursday

WEATHER _____

REMARKS:

Napa

COUNT SUMMARY
MOVEMENT

In Out

	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
:00	5	4											
:15													
:15	2												
:30													
3 :30	5	4											9
3 :45													
3 :45	2	4											6
4 :00													
4 :00	1	3											4
4 :15													
4 :15	2	3											5
4 :30													
4 :30	2	3											5
4 :45													
4 :45	2	1											3
5 :00													
5 :00	-	1											1
5 :15													
5 :15	-	2											2
5 :30													
:30													
:45													
:45													
:00													

PEAK HOUR COUNT

11

TIME:

TO:

1111

JOB NO.

INTERSECTION

Fox News Advisor

DATE 9/11

DAY OF WEEK

WEATHER

REMARKS:

- Nara cars delivering parts

N a / a

COUNT SUMMARY
MOVEMENT
$$I_n \quad O_n +$$
[illegible]

PEAK HOUR COUNT

TIME: 7:30 TO: 8:30

[illegible]

TRAFFIC IMPACT STUDY

FOR

PROPOSED

Includes annotations added by
Cynthia Cochran on 9/11/2014

89 Anderson Street Apartment Complex

Please Note: This study does not address sight-line issues at any of the intersections identified as being impacted by the proposed development. Most specifically, it does not address the sight-line issues at the intersection of Fox/Anderson Streets, which will be created by the location of the building, planned for 89 Anderson Street, and shown on the developer's architectural site drawings.

Prepared For: Redfern Properties, Inc.
Prepared By: William James Bray, P.E.



INTRODUCTION

Redfern Properties, LLC is proposing to construct a 53-unit apartment building on a parcel of property located at 89 Anderson Street. A total of 53 parking spaces will be provided under the cover of the proposed apartment building. Access to the covered parking spaces will be provided through a single entrance located on Everett Street.

The purpose of this study is to examine existing traffic conditions in the general vicinity of the proposed project, estimate the total number of site trips generated by the project, and make a determination as to whether the existing transportation system can safely accommodate the added traffic demand generated by the project.

EXISTING CONDITIONS

Existing Traffic: Manual turning movement counts were conducted at three study area intersections per direction received from the City's Traffic Peer Review Consultant. The intersections included the following locations:

1. Anderson Street @ Fox Street
2. Washington Avenue/Fox Street/Walnut Street
3. Anderson Street @ Cumberland Avenue

All vehicular traffic entering each intersection was recorded in 15-minute intervals between the hours of 7:00 to 9:00 AM and between 3:00 to 6:00 PM (Copies of the field data summary sheets are attached). In addition, both pedestrian and bicycle data was gathered at each location both directionally and time of day. From a summary of the data, it was determined that the morning peak hour occurs between 8:00 and 9:00 AM at each study area location; the PM peak hour falls between 4:30 and 5:30 at each of the locations.

Bicycle and pedestrian volume totals recorded during the vehicular peak hour(s) at each study location are summarized in the following tables:

Bicycle Volumes **(Street Peak Hour)**

<u>Intersection/Approach</u>	<u>AM Peak Hour</u>	<u>PM Peak Hour</u>
Washington Ave./Walnut St./Fox St.		
- Washington Avenue EB	1	9
- Washington Avenue WB	2	13
- Walnut Street	0	1
- Fox Street	2	2
Anderson St./Fox St.		
- Anderson Street EB	1	6
- Anderson Street WB	3	9
- Fox Street NB	0	11
- Fox Street SB	0	7
Anderson St./Cumberland Ave.		
- Anderson Street	1	0
- Cumberland Avenue NB	2	4
- Cumberland Avenue SB	5	5

Bicycle travel through the study intersections was somewhat moderate during the afternoon peak hour; volumes recorded in the morning peak hour were very low at each of the three study intersections. The highest volume of bicycle trips in the PM peak hour were recorded traveling along the Washington Avenue corridor (22

two-way trips) and a second predominate travel route was along Fox Street with a total two-way volume of 18 trips.

**Pedestrian Volumes
(Street Peak Hour)**

<u>Intersection/Approach</u>	<u>AM Peak Hour</u>	<u>PM Peak Hour</u>
Washington Ave./Walnut St./Fox St.		
- Crossing Washington Ave. @ Walnut St.	2	0
- Crossing Washington Ave. @ Fox St.	6	8
- Crossing Walnut St.	5	4
- Crossing Fox St.	4	18
Anderson St./Fox St.		
- Crossing East Anderson St.	9	14
- Crossing West Anderson St.	4	2
- Crossing North Fox St.	12	6
- Crossing South Fox St.	7	9
Anderson St./Cumberland Ave.		
- Crossing Anderson St.	21	29
- Crossing Cumberland Ave. @ Anderson St.	14	30

The volume of pedestrian movements recorded at each of the three study intersections was highest at the Anderson Street/Cumberland Avenue intersection where a total of 35 pedestrian movements were recorded in the morning peak hour and 59 pedestrian movements were recorded in the afternoon peak hour.

Traffic data collected during the months of July and August are generally representative of “peak” travel conditions and further adjustment is not required. Figures 1 and 2 are “line-diagrams” presenting “peak” hour vehicular traffic volumes for the AM and PM peak hours, respectively, for the study area intersections. **PDF pages 23-24**

Existing Safety Trends: The Maine Department of Transportation’s (MaineDOT) Accident Records Section provided the latest three-year (2011 through 2013) crash data for the following roadway segments:

1. Fox Street between Franklin Arterial and Washington Avenue
2. Washington Avenue/Fox Street/Walnut Street intersection
3. Anderson Street between Fox Street and Cumberland Avenue
4. Everett Street between Anderson Street and Greenleaf Street

Their report is summarized as follows and attached as an appendix to the report:

It is not known if increased traffic volumes during athletic events on Fox Field (Kennedy Park) was included in this assessment.

Additional traffic volume due to the redesign of the Franklin/Marginal Way intersection was not included in this assessment.

Additional traffic volume from East Cove Townhomes development at 145-155 Washington Avenue was not included in this assessment.

Additional traffic volume from development at 192 Washington Avenue was not included in this assessment.

See "Future Traffic" section PDF page 5 below

2011 -2013 Traffic Accident Summary

<u>Location</u>	<u>Total Crashes</u>	<u>Critical Rate Factor</u>
1. Fox Street @ Franklin Arterial	20	0.58
2. Fox Street and N. Boyd Street	3	1.03
3. Fox Street @ Diamond Street	1	0.34
4. Fox Street @ Anderson Street	2	0.73
5. Fox Street @ Greenleaf Street	2	0.98
6. Fox Street @ Winthrop Street	2	1.06
7. Washington Avenue/Fox Street/Walnut Street	9	1.98
8. Fox Street btw. Cove Street and Greenleaf Street	1	0.54
9. Fox Street btw. Winthrop Street and Washington Avenue	1	0.48
10. Anderson Street @ Madison Street	1	4.63
11. Anderson Street @ Oxford Street	1	4.09
12. Anderson Street @ Cumberland Avenue	2	0.71
13. Anderson Street btw. Fox Street and Everett Street	1	4.42
14. Anderson Street btw. E. Lancaster Street and E. Oxford Street	4	16.00
15. Anderson Street btw. E. Oxford Street and Cumberland Avenue	4	11.44

The MaineDOT considers any roadway intersection or segment a high crash location if both of the following criteria are met:

- **8 or more accidents**
- **A Critical Rate Factor greater than 1.00**

As the data presented in the table shows (location highlighted in yellow), the Washington Avenue/Walnut Street/Fox Street intersection meets MaineDOT's criteria for a high crash location. A total of 9 crashes and a Critical Rate Factor (CRF) of 1.98 were reported for the intersection. A more in-depth review (preparation of detailed vehicle collision diagrams) was prepared for the intersection to determine if a clear pattern of accident is occurring (Copies of the Collision Diagrams are attached as an appendix to the report).

The detailed review of the vehicle crash reports for the intersection would suggest two clear patterns of concern: 1) Four of the nine accidents involved vehicles on the Fox Street approach turning left onto Washington Avenue being struck by thru vehicles traveling eastbound on Washington Avenue; 2) A total of three collisions involved vehicles approaching Washington Avenue from the Walnut Street approach sliding through the intersection and striking a thru vehicle on Washington Avenue.

Implementation of one or more of the suggested remediation measures should help reduce the frequency of traffic crashes occurring at this "off-set" intersection:

- Utilization of an anti-icing agent on the full length of Walnut Street would potentially reduce vehicle skidding problems on Walnut Street.
- Alternatively, or in conjunction with utilization of the anti-icing agent, the City may want to consider closure of Walnut Street at North Street during periods of severe winter road conditions using a remotely operated flashing "Street Closed" beacon placed at the top of the Walnut Street "hill".
- Replace and/or update existing pedestrian crossing equipment (equipment presently inoperative) at both existing Washington Avenue crosswalks to improve safety of pedestrians crossing "busy" Washington Avenue.

In addition to the aforementioned recommendations, preliminary evaluation was given to full traffic signalization of the intersection; however, present intersection traffic volumes and/or other factors do not appear to satisfy the warrants for traffic signals.

See PDF pages 49-52

SITE TRAFFIC

Site Trip Generation: The eighth edition of the Institute of Transportation Engineers (ITE) “TRIP GENERATION” manual was used to determine the volume of site traffic generated by the proposed 53-unit residential apartment complex project. The ITE publication provides numerous land-use categories and the average volume of trips that are generated by each category. The following trip rates were used to calculate the trip generation of the proposed project:

Land Use #220 - Apartment

AM Peak Hour	= 0.51 trips per occupied unit
PM Peak Hour	= 0.62 trips per occupied unit.

Accordingly, the proposed 53-unit apartment complex can be expected to generate a total of 27 trips in the morning peak hour and 33 trips during the afternoon peak hour.

Site Trip Distribution: The Institute of Transportation Engineers handbook provides the following directional distribution rates for an apartment unit during the AM and PM peak hours:

AM Peak Hour	= 20% enter site and 80% exit site
PM Peak Hour	= 65% enter site and 35% exit site

Based upon the noted directional distribution patterns, 22 trips during the morning peak hour and 12 trips in the evening peak hour will exit the site and the remaining trips (5 AM trips and 21 PM trips) during both peak time periods will enter the site.

Site Trip Assignment: Vehicle trips generated by the proposed project were assigned through the three study intersections on the basis of existing travel patterns and the Consultants knowledge of travel patterns in the City of Portland. Figures 3 and 4 graphically depict the assignment for both peak commuter time periods.

PDF
pages
25-26

FUTURE TRAFFIC

Other Development Traffic: Traffic generated by projects that have been approved by the Local Planning Board and/or the Maine Department of Transportation, yet are not opened, must be included in the estimate of pre-development traffic. At the direction of the City’s Development Review Services Manager, trips generated by the following projects were appropriately added to the base travel conditions at the site driveway intersections.

- Washington Avenue Efficiencies
- PHA Bayside Anchor Project
- Munjoy Heights
- Intermodal “Staging” Area

See comments on PDF page 3 above

Figures 5 and 6 illustratively present the Other Development traffic assignment for the study intersections.

PDF pages
27-28

2014 Pre-Development Traffic: The 2014 Pre-Development traffic forecasts were prepared for the study intersections by combining the 2014 Design Hour traffic volumes shown on Figures 1 and 2 with the Other Development traffic values displayed on Figures 5 and 6. Figures 7 and 8 present the 2014 pre-development traffic forecasts at each of the three study intersections. PDF pages 29-30

2014 Post-Development Traffic: Estimated 2014 Pre-Development traffic forecasts prepared for the study intersections, as depicted on Figures 7 and 8, were combined with the site traffic projections highlighted on Figures 3 and 4 to create estimated 2014 Post-Development traffic forecasts for the study intersections. Figures 9 (AM Peak Hour) and 10 (PM Peak Hour) are line diagrams that present the estimated 2014 Post-Development traffic conditions for the study intersections. **PDF pages 31-32**
See comments at PDF page 3 above

MOBILITY ANALYSIS

Capacity analyses of both 2014 Pre and Post-Development traffic conditions were performed for each of the three study intersections utilizing the Synchro and SimTraffic computer models. Levels of Service rankings are similar to the academic grading system, where an “A” is very good with little delay and “F” represents very poor conditions.

The following table summarizes the relationship between delay and Level of Service for an unsignalized intersection:

Level of Service Criteria for Unsignalized Intersections

<u>Level of Service</u>	<u>Total Control Delay (sec/veh)</u>
A	Up to 10.0
B	10.1 to 15.0
C	15.1 to 25.0
D	25.1 to 35.0
E	35.1 to 50.0
F	Greater than 50.0

The result of the capacity analysis is presented in the following table:

Level of Service Summary 2014 Pre and Post-Development Conditions

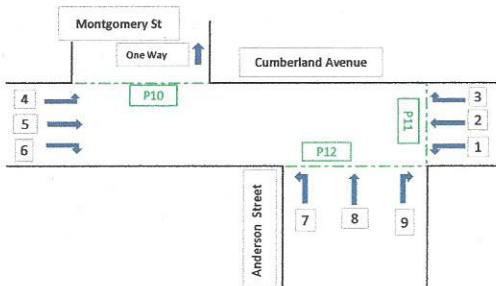
<u>Intersection/Approach</u>	<u>2014 Pre-Development</u>				<u>2014 Post-Development</u>			
	<u>AM Peak Hour</u>		<u>PM Peak Hour</u>		<u>AM Peak Hour</u>		<u>PM Peak Hour</u>	
	<u>Delay (sec.)</u>	<u>LOS</u>	<u>Delay (sec.)</u>	<u>LOS</u>	<u>Delay (sec.)</u>	<u>LOS</u>	<u>Delay (sec.)</u>	<u>LOS</u>
1. Washington Ave./ Walnut St./Fox St.								
- Washington Ave. EB	1 sec.	A	2 sec.	A	1 sec.	A	2 sec.	A
- Washington Ave. WB	1 sec.	A	4 sec.	A	4 sec.	A	4 sec.	A
- Walnut St.	13 sec.	B	16 sec.	C	15 sec.	B	17 sec.	C
- Fox St.	11 sec.	B	27 sec.	D	13 sec.	B	27 sec.	D
2. Fox St. @ Anderson St.								
- Anderson St. EB	5 sec.	A	5 sec.	A	5 sec.	A	5 sec.	A
- Anderson St. WB	6 sec.	A	6 sec.	A	6 sec.	A	6 sec.	A
- Fox St. NB	6 sec.	A	7 sec.	A	6 sec.	A	7 sec.	A
- Fox St. SB	6 sec.	A	7 sec.	A	7 sec.	A	7 sec.	A
3. Anderson St. @ Cumberland Ave.								
- Anderson St.	4 sec.	A	3 sec.	A	4 sec.	A	3 sec.	A
- Cumberland Ave. NB	1 sec.	A	1 sec.	A	1 sec.	A	1 sec.	A
- Cumberland Ave. SB	1 sec.	A	1 sec.	A	1 sec.	A	1 sec.	A

As presented in the chart above, the proposed project has no measurable impact on traffic operations at any of the three study intersections. Each intersection was found to operate at acceptable levels of service under both pre-development and post-development conditions.

SUMMARY

1. The proposed 53-unit apartment complex can be expected to generate a total of 27 vehicle trips during the AM peak hour and a slight increase of 33 trips in the afternoon peak hour. Twenty-two (22) trips during the morning peak hour and 12 trips in the evening peak hour will exit the site and the remaining trips (5 AM trips and 21 PM trips) during both peak time periods will enter the site.
2. MaineDOT's Traffic Safety Bureau's latest three-year safety report for the identified portions of Washington Avenue, Fox Street, and Anderson Street shows that all roadway segments and intersections, with the exception of the Washington Avenue/Fox Street/Walnut Street intersection, experience fewer traffic crashes than the threshold criteria for identification of a high crash location. The noted traffic intersection, based upon the most recent three-year data, meets both of MaineDOT's criteria for identification of a high crash location. A total of 9 vehicle crashes were reported at the intersection during the study time period and the Critical Rate Factor, which compares operations at the intersection with a statewide average for similar locations, exceeds 1.00 at 1.98. Detailed vehicle collision diagrams were prepared for each of the reported 9 vehicle crashes to determine if a correctable pattern of vehicle crash is occurring at the intersection. The detailed analysis identified two crash patterns; four "angle" collisions involving vehicles entering Washington Avenue from Fox Street being struck by motorists traveling eastbound on Washington Avenue. The second pattern involved three crashes that resulted from vehicles approaching Washington Avenue on Walnut Street skidding, during inclement weather, into thru vehicles traveling west on Washington Avenue.
3. It would appear that all modes of transportation would benefit from full traffic signalization of the Washington Avenue/Fox Street/Walnut Street intersection; an abbreviated preliminary assessment of existing travel conditions was conducted and it was determined that prevailing traffic conditions at the noted intersection do not appear to meet the minimum travel conditions required for traffic signalization (Copy of abbreviated traffic signal warrant study is attached as an appendix to the report). The City may want to monitor traffic conditions on an annual basis to determine if prevailing conditions change meeting one or more of the warrants for traffic signalization. This report does identify three improvement strategies that, with implementation, should improve overall safety at the intersection, they include the following:
 - Utilization of an anti-icing agent on the full length of Walnut Street would potentially reduce vehicle skidding problems on Walnut Street.
 - Alternatively, or in conjunction with utilization of the anti-icing agent, the City may want to consider closure of Walnut Street at North Street during periods of severe winter road conditions using a remotely operated flashing "*Street Closed*" beacon placed at the top of the Walnut Street "hill".
 - Replace and/or update existing pedestrian crossing equipment (equipment presently inoperative) at both existing Washington Avenue crosswalks to improve safety of pedestrians crossing "busy" Washington Avenue.
4. The operational analysis conducted for the three study intersections clearly shows that traffic generated by the proposed apartment complex has virtually no impact on traffic operations at any of the three study intersections. Each study intersection was found to operate at acceptable levels of service during both the pre-development and post-development conditions.
5. Pedestrian crosswalk markings and stop bars should be installed at the Anderson Street/Fox Street intersection on all four approaches of the intersection.

**INTERSECTION PLAN
WITH NUMBERED MOVEMENTS:**



Portland
Intersection: Cumberland Ave./Anderson St./Montgomery St.
Date: 8/13/14
Day of Week: Wednesday
Weather: _____
Remarks: _____

Count Summary Movement

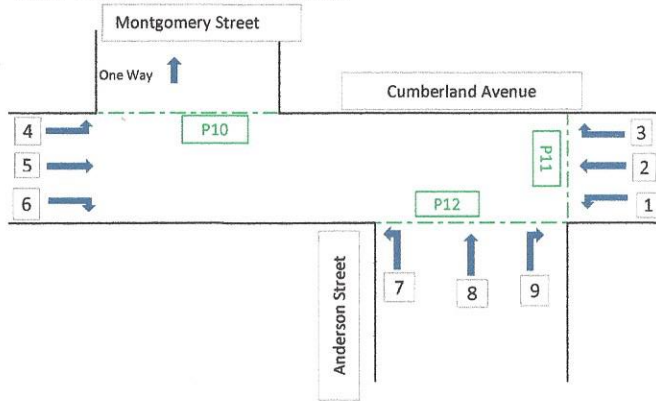
Start	End	1	2	3	4	5	6	7	8	9	10	11	12	Total	P10	P11	P12	C2	C4	C5	C6	C7	C9
7:00	7:15	1	16	0	0	29	0	1	0	3	0	0	0	50	0	0	3	0	1	1	0	0	1
Truck Count		0	1	1	0	1	0	0	0	1	0	0	0	4									
7:15	7:30	0	18	0	0	16	1	2	0	6	0	0	0	43	4	1	4	0	0	0	1	0	0
Truck Count		0	0	0	0	0	1	0	0	0	0	0	0	1									
7:30	7:45	1	13	1	0	25	3	2	0	3	0	0	0	48	4	5	3	0	0	0	0	0	0
Truck Count		0	0	1	0	0	0	0	0	0	0	0	0	1									
7:45	8:00	3	18	1	1	39	0	1	1	3	0	0	0	67	3	3	4	0	0	2	0	0	0
Truck Count		0	0	0	0	0	0	0	0	0	0	0	0	0									
8:00	8:15	4	28	0	1	54	3	1	0	10	0	0	0	101	7	3	5	0	0	0	0	0	0
Truck Count		0	2	0	0	2	0	0	0	0	0	0	0	4									
8:15	8:30	3	23	0	3	55	1	0	0	11	0	0	0	96	8	5	4	1	0	2	0	0	0
Truck Count		0	0	0	0	3	0	1	0	1	0	0	0	5									
8:30	8:45	1	16	0	1	59	1	0	0	10	0	0	0	88	2	0	9	1	1	2	0	1	0
Truck Count		1	3	0	0	1	0	0	0	1	0	0	0	6									
8:45	9:00	2	32	2	0	38	1	3	0	15	0	0	0	93	5	6	3	0	0	0	0	0	0
Truck Count		0	3	0	0	1	0	0	0	0	0	0	0	4									

PEAK HOUR COUNT

TIME: 8:00 TO: 9:00

11	107	2	5	213	6	5	0	48	0	0	0	397
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**INTERSECTION PLAN
WITH NUMBERED MOVEMENTS:**



Portland
Intersection: Cumberland Ave/Anderson St/Montgomery St
Date: 8/13/14
Day of Week: Wednesday
Weather: _____
Remarks: _____

Red = Bicycle Movement
Green = Pedestrian Movement

Count Summary Movement

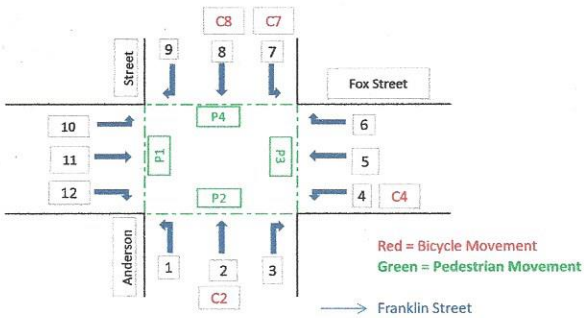
Start	End	1	2	3	4	5	6	7	8	9	10	11	12	Total	P10	P11	P12	C1	C2	C4	C5	C6
3:00	3:15	5	52	0	2	43	1	1	0	11	0	0	0	115	12	7	11	1	1	0	2	0
Truck Count		0	0	0	0	0	0	0	0	0	0	0	0	0								
3:15	3:30	2	46	0	1	38	2	4	0	9	0	0	0	102	10	13	7	0	0	1	0	0
Truck Count		0	1	0	0	0	0	0	0	0	0	0	0	1								
3:30	3:45	4	42	4	1	32	1	1	1	5	0	0	0	91	6	6	7	1	1	0	0	0
Truck Count		1	0	0	1	2	0	0	0	0	0	0	0	4								
3:45	4:00	5	68	2	2	43	3	3	0	13	0	0	0	139	12	5	12	0	0	0	1	0
Truck Count		0	0	0	0	1	0	0	0	0	0	0	0	1								
4:00	4:15	7	40	2	0	28	4	3	0	4	0	0	0	88	3	3	11	0	0	0	0	1
Truck Count		0	0	0	0	1	0	0	0	0	0	0	0	1								
4:15	4:30	5	64	0	1	32	3	3	0	11	0	0	0	119	6	8	7	0	1	0	0	0
Truck Count		0	1	0	0	1	0	0	0	0	0	0	0	2								
4:30	4:45	8	60	2	0	61	2	3	1	11	0	0	0	148	20	3	7	0	1	0	2	0
Truck Count		0	1	0	0	0	0	0	0	0	0	0	0	1								
4:45	5:00	3	67	3	0	60	2	5	1	10	0	0	0	151	10	19	14	0	1	0	1	2
Truck Count		0	2	0	0	2	0	0	0	0	0	0	0	4								
5:00	5:15	2	76	1	3	48	1	1	1	14	0	0	0	147	5	6	2	0	1	0	0	0
Truck Count		0	0	0	0	0	0	0	0	0	0	0	0	0								
5:15	5:30	7	117	4	2	80	4	6	0	13	0	0	0	233	4	2	6	0	1	0	0	0
Truck Count		0	0	0	0	1	0	0	0	0	0	0	0	1								
5:30	5:45	5	89	1	0	46	3	1	0	7	0	0	0	152	3	2	1	0	0	0	0	0
Truck Count		0	0	0	0	0	0	0	0	0	0	0	0	0								
5:45	6:00	2	78	2	1	47	4	3	0	12	0	0	0	149	2	0	2	0	0	0	0	0
Truck Count		0	0	0	0	0	0	0	0	0	0	0	0	0								

PEAK HOUR COUNT

TIME: 4:30 TO: 5:30

20	323	10	5	252	9	15	3	48	0	0	0	685
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**INTERSECTION PLAN
WITH NUMBERED MOVEMENTS:**



Portland
 Intersection: Fox Street/Anderson Street
 Date: 8/12/14
 Day of Week: Tuesday
 Weather: _____
 Remarks: _____

Count Summary Movement

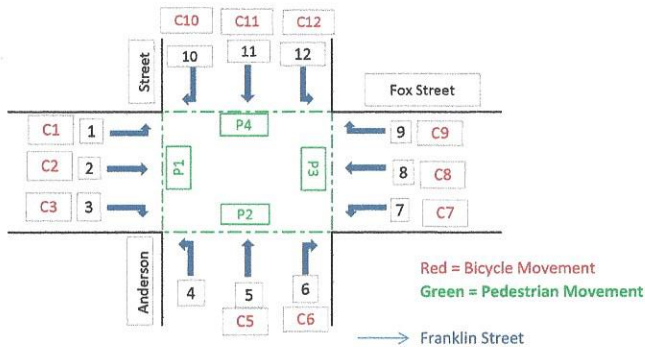
Start	End	1	2	3	4	5	6	7	8	9	10	11	12	Total	P1	P2	P3	P4	C2	C4	C7	C8
7:00	7:15	1	3	8	2	15	3	3	1	0	0	19	6	61	1	1	3	1	0	0	1	0
	Truck Count	0	0	1	0	0	0	0	1	0	0	0	0	2								
7:15	7:30	1	1	3	1	12	3	9	3	1	0	25	1	60	1	0	0	2	0	1	0	0
	Truck Count	0	0	1	0	0	0	0	0	0	0	0	0	1								
7:30	7:45	6	8	15	1	16	1	7	4	1	0	33	3	95	0	0	0	0	0	0	0	0
	Truck Count	0	1	2	0	0	0	0	0	0	0	1	0	4								
7:45	8:00	1	11	17	3	20	7	12	1	0	3	40	1	116	0	0	0	0	0	0	1	0
	Truck Count	0	0	0	0	0	0	0	0	0	0	0	0	0								
8:00	8:15	4	9	21	3	18	4	14	2	1	0	39	1	116	4	1	5	3	0	0	1	0
	Truck Count	0	0	0	0	0	0	0	0	0	0	0	0	0								
8:15	8:30	2	10	17	6	16	11	14	2	0	0	40	3	121	4	0	0	5	0	0	0	0
	Truck Count	0	1	2	0	0	0	0	0	0	0	0	0	3								
8:30	8:45	3	12	35	3	20	8	20	0	1	1	29	2	134	4	3	0	0	1	0	0	0
	Truck Count	0	0	2	0	1	0	0	0	0	1	1	0	5								
8:45	9:00	7	21	22	1	21	8	13	6	2	1	32	0	134	0	0	2	1	0	0	1	1
	Truck Count	0	0	0	0	1	0	0	0	0	0	0	0	1								

PEAK HOUR COUNT

TIME: 8:00 TO: 9:00

16	53	99	13	77	31	61	10	4	3	141	6	514
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**INTERSECTION PLAN
WITH NUMBERED MOVEMENTS:**



Portland
Intersection: Fox Street/Anderson Street
Date: 8/12/14
Day of Week: Tuesday
Weather: _____
Remarks: _____

Count Summary Movement

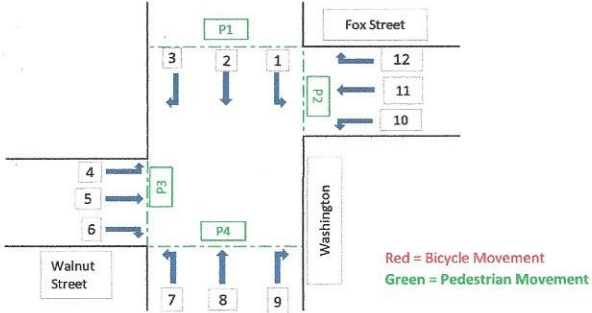
Start	End	1	2	3	4	5	6	7	8	9	10	11	12	Total	P7	P8	P9	P4	C1	C2	C3	C5	C6	C7	C8	C9	C10	C11	C12
3:00	3:15	1	27	2	3	6	14	4	34	12	2	9	12	126	2	0	0	1	2	3	0	1	1	0	2	0	0	0	1
Truck Count		0	0	0	0	0	0	0	0	0	0	0	0	0															
3:15	3:30	0	27	2	11	10	21	8	28	13	1	5	9	135	2	1	2	2	0	0	0	1	1	0	0	0	0	2	4
Truck Count		0	0	0	0	0	1	0	0	0	0	0	0	1															
3:30	3:45	0	28	5	6	9	16	10	31	15	2	7	17	146	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0
Truck Count		0	1	0	0	0	1	0	1	0	0	0	0	3															
3:45	4:00	1	36	3	6	8	13	5	29	18	3	4	10	136	3	2	2	0	0	2	0	0	0	1	1	0	0	0	0
Truck Count		0	1	0	0	0	0	0	0	0	0	0	0	1															
4:00	4:15	3	26	0	6	11	16	9	34	15	1	4	10	135	1	1	0	3	0	0	0	0	1	2	0	0	0	0	0
Truck Count		0	0	0	1	0	1	0	0	0	0	0	0	2															
4:15	4:30	1	26	4	5	14	9	10	41	16	2	5	12	145	0	0	2	2	0	0	0	0	0	1	0	0	0	0	0
Truck Count		0	0	0	0	0	1	0	0	0	0	0	0	1															
4:30	4:45	2	49	2	6	2	10	9	30	23	3	3	14	153	2	0	1	2	0	0	0	0	5	3	2	0	0	1	0
Truck Count		0	0	0	0	0	0	0	0	0	0	0	0	0															
4:45	5:00	3	40	5	4	9	21	8	45	20	3	9	11	178	1	0	3	5	0	0	1	0	2	0	1	0	0	3	0
Truck Count		0	0	0	0	0	0	0	0	0	0	0	0	0															
5:00	5:15	2	34	2	5	6	17	7	38	18	4	2	17	152	2	1	0	3	0	2	1	0	1	0	0	0	1	1	0
Truck Count		0	0	0	0	0	0	0	0	0	0	0	0	0															
5:15	5:30	3	35	1	9	14	22	9	49	18	0	5	17	182	1	1	6	4	0	1	2	0	1	5	0	0	0	0	0
Truck Count		0	0	0	0	0	0	0	0	0	0	0	0	0															
5:30	5:45	1	27	3	5	7	17	8	40	15	5	2	12	142	3	5	1	2	0	1	0	1	1	0	2	1	0	1	0
Truck Count		0	0	0	0	0	1	0	0	0	0	0	0	1															
5:45	6:00	1	30	1	3	9	13	4	46	12	0	0	17	136	3	1	0	6	1	1	0	1	2	1	0	0	0	0	0
Truck Count		0	0	0	0	0	1	0	0	0	0	0	0	1															

PEAK HOUR COUNT

TIME: 4:30 TO: 5:30

10	158	10	24	31	70	33	162	79	10	19	59	665
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**INTERSECTION PLAN
WITH NUMBERED MOVEMENTS:**



Portland
 Intersection: Washington Ave./Fox St./Walnut St.
 Date: 8/14/14
 Day of Week: Thursday
 Weather: _____
 Remarks: Construction

Count Summary Movement

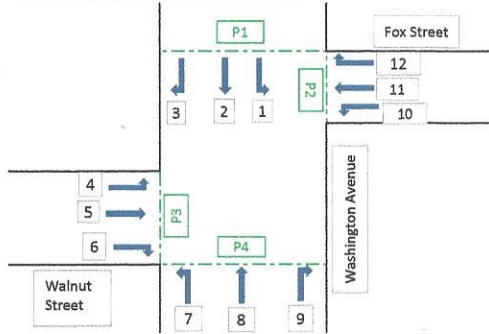
Start	End	1	2	3	4	5	6	7	8	9	10	11	12	Total	P1	P2	P3	P4	C2	C8	C11	C12
7:00	7:15	7	24	1	2	6	3	6	74	1	5	7	5	141	1	1	2	0	0	0	0	0
Truck Count		0	1	0	0	0	0	1	6	0	0	0	0	8								
7:15	7:30	3	26	1	1	10	5	6	78	3	10	10	5	158	0	0	1	0	0	0	0	0
Truck Count		1	2	0	0	0	0	0	4	0	0	0	0	7								
7:30	7:45	9	36	2	4	14	4	2	85	12	1	5	9	183	0	1	0	1	0	0	0	0
Truck Count		0	5	0	1	0	0	0	3	0	0	0	0	9								
7:45	8:00	10	47	2	2	11	6	3	142	8	7	2	11	251	0	4	3	2	0	0	0	0
Truck Count		1	1	0	0	0	0	0	4	0	0	0	0	6								
8:00	8:15	10	39	2	3	11	9	2	159	19	10	4	9	277	4	1	1	1	1	0	0	1
Truck Count		0	3	0	0	0	0	0	1	0	0	0	0	4								
8:15	8:30	19	43	2	5	16	10	4	126	8	8	1	11	253	1	2	3	1	0	0	0	0
Truck Count		0	2	0	1	0	0	1	7	0	0	0	2	13								
8:30	8:45	15	40	2	1	13	2	2	114	9	8	2	15	223	1	0	1	0	0	1	0	0
Truck Count		0	2	0	0	0	0	0	1	1	1	0	0	5								
8:45	9:00	16	60	6	2	21	6	2	117	7	9	2	15	263	0	1	0	0	0	1	1	0
Truck Count		0	2	1	0	0	0	0	5	2	0	0	0	10								

PEAK HOUR COUNT

TIME: 8:00 TO: 9:00

60	191	13	12	61	27	11	530	46	36	9	52	1,048
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**INTERSECTION PLAN
WITH NUMBERED MOVEMENTS:**



Portland
 Intersection: Washington Ave./Fox St./Walnut St.
 Date: 8/14/14
 Day of Week: Thursday
 Weather: _____
 Remarks: _____

Count Summary Movement

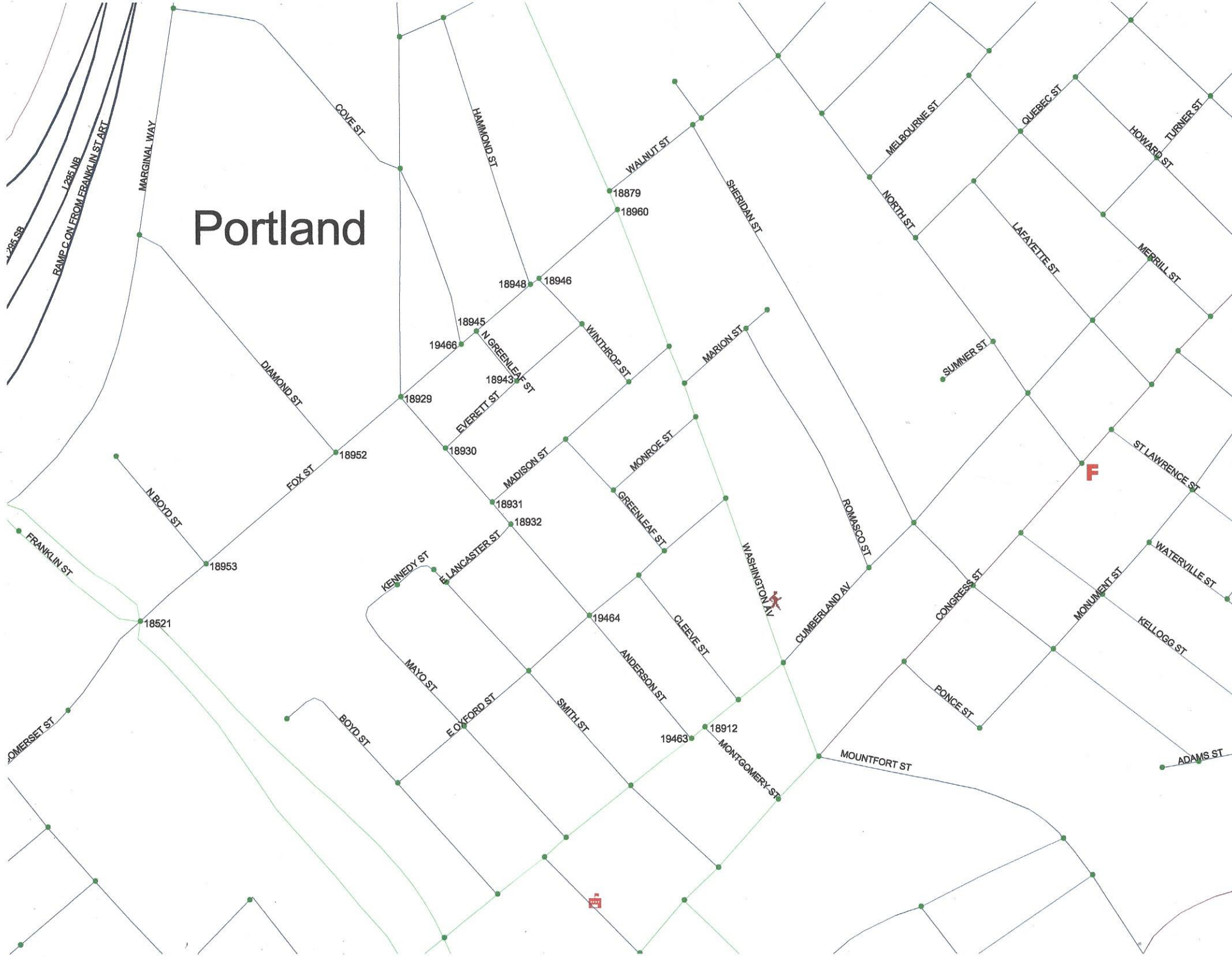
Start	End	1	2	3	4	5	6	7	8	9	10	11	12	Total	P1	P2	P3	P4	C1	C2	C4	C6	C8	C9	C11	C12
3:00	3:15	20	83	4	0	8	3	10	63	19	5	11	10	236	4	1	3	0	0	2	1	0	1	0	1	0
Truck Count		0	0	0	0	0	0	0	2	0	1	0	0	3												
3:15	3:30	14	57	1	4	9	5	4	58	6	11	15	13	197	0	3	2	1	0	0	0	0	1	0	0	0
Truck Count		0	1	0	0	0	0	0	0	0	0	0	0	1												
3:30	3:45	21	110	6	0	13	11	2	66	13	9	22	15	288	3	4	1	0	0	1	1	0	1	0	0	0
Truck Count		0	0	0	1	0	0	0	1	0	0	0	0	2												
3:45	4:00	19	68	3	3	10	0	3	67	8	9	6	8	204	1	4	2	1	0	0	0	0	2	0	0	0
Truck Count		0	0	0	0	1	0	0	0	0	0	0	0	1												
4:00	4:15	36	108	6	0	6	3	5	90	8	15	18	17	312	0	2	0	1	0	1	0	0	0	0	0	0
Truck Count		0	3	0	0	0	0	0	0	0	0	0	0	3												
4:15	4:30	16	104	8	2	15	3	7	76	12	9	17	9	278	1	4	0	0	0	1	0	0	1	0	0	0
Truck Count		0	0	0	0	1	0	0	2	0	0	1	0	4												
4:30	4:45	23	136	7	2	14	11	3	73	19	11	9	16	324	0	3	1	0	0	4	0	0	2	0	0	1
Truck Count		0	0	0	0	0	0	0	0	0	0	0	0	0												
4:45	5:00	16	139	4	2	14	9	7	81	6	5	17	23	323	2	3	1	0	0	3	0	1	4	0	0	0
Truck Count		0	1	0	0	0	0	0	0	0	0	0	0	1												
5:00	5:15	22	148	8	1	7	3	7	83	6	12	19	8	324	2	3	1	0	1	1	0	0	1	0	0	0
Truck Count		0	1	0	0	0	0	0	0	0	0	0	0	1												
5:15	5:30	15	154	7	2	11	1	9	76	12	15	14	11	327	4	9	1	0	0	4	0	0	1	1	1	0
Truck Count		0	0	0	0	0	0	0	0	0	0	0	0	0												
5:30	5:45	30	130	8	5	13	4	5	93	8	9	21	15	341	1	4	0	1	0	2	0	0	1	0	0	0
Truck Count		0	0	0	0	0	0	0	0	0	0	0	0	0												
5:45	6:00	9	84	3	0	9	3	8	75	9	6	14	7	227	3	2	4	1	1	2	0	0	1	0	0	0
Truck Count		0	1	0	0	0	0	0	0	0	0	0	0	1												

PEAK HOUR COUNT

TIME: **4:30** TO: **5:30**

76	579	26	7	46	24	26	313	43	43	59	58	1,300
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Portland



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

#1

REPORT PARAMETERS

Year 2011, Start Month 1 through Year 2013 End Month: 12

Route: 0560293	Start Node: 18521 End Node: 18960	Start Offset: 0 End Offset: 0	☐ Exclude First Node ☐ Exclude Last Node
Route: 0026X	Start Node: 18960 End Node: 18879	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☐ 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	Percent Annual M			Crash Rate	Critical Rate	CRF			
					K	A	B	C	PD	Injury	Ent-Veh				
18521	0560293 - 0	Int of FOX ST FRANKLIN ST	9	20	0	0	2	8	10	50.0	11.697	0.57	0.99	0.00	
												Statewide Crash Rate:	0.65		
18953	0560293 - 0.06	0509373 POR,N.BOYD,FOX ST.	2	3	0	0	0	0	3	0.0	2.209	0.45	0.44	1.03	
												Statewide Crash Rate:	0.14		
18952	0560293 - 0.16	0509372 POR,FOX,DIAMOND ST.	2	1	0	0	0	0	1	0.0	2.178	0.15	0.44	0.00	
												Statewide Crash Rate:	0.14		
18929	0560293 - 0.21	0509349 POR,ANDERSON,FOX ST.	2	2	0	0	0	0	2	0.0	1.996	0.33	0.45	0.00	
												Statewide Crash Rate:	0.14		
19466	0560293 - 0.25	0509888 POR,FOX STREET,COVE STREET	2	0	0	0	0	0	0	0.0	1.531	0.00	0.48	0.00	
												Statewide Crash Rate:	0.14		
18945	0560293 - 0.26	0509365 POR,FOX,N.GREENLEAF ST.	2	2	0	0	0	1	0	100.0	1.381	0.48	0.49	0.00	
												Statewide Crash Rate:	0.14		
A18948	0560293 - 0.30	0509368 POR,FOX,HAMMOND ST.	2	0	0	0	0	0	0	0.0	0.000	0.00	0.00	0.00	
												Statewide Crash Rate:	0.14		
P18946	0560293 - 0.31	0509366 POR,FOX,WINTHROP ST.	2	2	0	0	0	0	2	0.0	1.248	0.53	0.50	1.06	
												Statewide Crash Rate:	0.14		
A18960	0560293 - 0.36	Int of FOX ST WASHINGTON AV	2	0	0	0	0	0	0	0.0	0.000	0.00	0.00	0.00	
												Statewide Crash Rate:	0.14		
P18879	0026X - 0.28	Int of WALNUT ST, WASHINGTON AV	2	9	0	0	0	2	7	22.2	4.034	0.74	0.38	1.98	
												Statewide Crash Rate:	0.14		
Study Years: 3.00		NODE TOTALS:		39	0	0	2	11	25	33.3	26.274	0.49	0.54	0.92	

Maine Department Of Transportation - Traffic Engineering, Crash Records Section

Crash Summary I

Sections																
Start Node	End Node	Element	Offset Begin - End	Route - MP	Section U/R Length	Total Crashes	K	Injury Crashes				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	0.00138	0.00	971.45	0.00
Int of FOX ST, FRANKLIN ST				RD INV 05 60293										Statewide Crash Rate: 346.84		
18952	18953	194637	0 - 0.10	0560293 - 0.06	0.10	2	0	0	0	0	0	0.0	0.00201	0.00	881.52	0.00
0509372 POR, FOX, DIAMOND ST.				RD INV 05 60293										Statewide Crash Rate: 346.84		
18929	18952	194603	0 - 0.05	0560293 - 0.16	0.05	2	0	0	0	0	0	0.0	0.00097	0.00	1064.25	0.00
0509349 POR, ANDERSON, FOX ST.				RD INV 05 60293										Statewide Crash Rate: 346.84		
18929	19466	194604	0 - 0.04	0560293 - 0.21	0.04	2	0	0	0	0	0	0.0	0.00061	0.00	1195.29	0.00
0509349 POR, ANDERSON, FOX ST.				RD INV 05 60293										Statewide Crash Rate: 346.84		
18945	19466	194628	0 - 0.01	0560293 - 0.25	0.01	2	0	0	0	0	0	0.0	0.00015	0.00	1497.37	0.00
0509365 POR, FOX, N. GREENLEAF ST.				RD INV 05 60293										Statewide Crash Rate: 346.84		
18945	18948	194627	0 - 0.04	0560293 - 0.26	0.04	2	1	0	0	0	1	0.0	0.00049	681.12	1258.33	0.00
0509365 POR, FOX, N. GREENLEAF ST.				RD INV 05 60293										Statewide Crash Rate: 346.84		
18946	18948	194629	0 - 0.01	0560293 - 0.30	0.01	2	0	0	0	0	0	0.0	0.00012	0.00	1483.19	0.00
0509366 POR, FOX, WINTHROP ST.				RD INV 05 60293										Statewide Crash Rate: 346.84		
18946	18960	194630	0 - 0.05	0560293 - 0.31	0.05	2	1	0	0	0	1	0.0	0.00058	575.63	1210.04	0.00
0509366 POR, FOX, WINTHROP ST.				RD INV 05 60293										Statewide Crash Rate: 346.84		
18879	18960	3123723	0 - 0.01	0026X - 0.27	0.01	2	0	0	0	0	0	0.0	0.00036	0.00	793.55	0.00
Int of WALNUT ST, WASHINGTON AV				ST RTE 26										Statewide Crash Rate: 186.16		
Study Years:		3.00	Section Totals:		0.37	2	0	0	0	0	2	0.0	0.00666	100.05	648.35	0.15
			Grand Totals:		0.37	41	0	0	2	11	27	31.7	0.00666	2050.99	796.08	2.58

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

#3

REPORT PARAMETERS

Year 2011, Start Month 1 through Year 2013 End Month: 12

Route: 0560847	Start Node: 18929 End Node: 19463	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☐ Exclude Last Node
Route: 0561238	Start Node: 19463 End Node: 18912	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☒ 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	K	Injury A	Crashes B	Percent C	Annual M PD	Crash Rate	Critical Rate	CRF		
18930	0560847 - 0.53	0509350 POR,ANDERSON,EVERETT ST.	2	0	0	0	0	0	0.0	0.159	0.00	0.49	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	0.153	2.18	0.47	4.63
											Statewide Crash Rate:	0.14		
18932	0560847 - 0.59	0509352 POR,E.LANCASTER,ANDERSON ST.	2	0	0	0	0	0	0	0.0	0.133	0.00	0.41	0.00
											Statewide Crash Rate:	0.14		
19464	0560847 - 0.65	0509886 POR,ANDERSON ST,E.OXFORD STR.	2	1	0	0	0	0	1	0.0	0.164	2.03	0.50	4.09
											Statewide Crash Rate:	0.14		
19463	0560847 - 0.74	Int of ANDERSON ST CUMBERLAND AV	2	2	0	0	0	0	2	0.0	2.068	0.32	0.45	0.00
											Statewide Crash Rate:	0.14		
Study Years: 3.00		NODE TOTALS:		4	0	0	0	1	3	25.0	2.677	0.50	0.42	1.19

Maine Department Of Transportation - Traffic Engineering, Crash Records Section

Crash Summary I

Sections																	
Start Node	End Node	Element	Offset Begin - End	Route - MP	Section U/R Length	Total Crashes	K	Injury Crashes				Percent Injury	Annual HMVM	Crash Rate	Critical Rate	CRF	
18929	18930	194602	0 - 0.04	0560847 - 0.49	0.04	2	1	0	0	0	0	1	0.0	0.00006	5272.76	1194.07	4.42
0509349 POR,ANDERSON,FOX ST.				RD INV 05 60847											Statewide Crash Rate: 346.84		
18930	18931	194605	0 - 0.03	0560847 - 0.53	0.03	2	0	0	0	0	0	0	0.0	0.00004	0.00	682.58	0.00
0509350 POR,ANDERSON,EVERETT ST.				RD INV 05 60847											Statewide Crash Rate: 346.84		
18931	18932	194607	0 - 0.03	0560847 - 0.56	0.03	2	0	0	0	0	0	0	0.0	0.00004	0.00	441.48	0.00
0509351 POR,ANDERSON,MADISON ST.				RD INV 05 60847											Statewide Crash Rate: 346.84		
18932	19464	194609	0 - 0.06	0560847 - 0.59	0.06	2	4	0	0	1	0	3	25.0	0.00007	19896.34	1243.30	16.00
0509352 POR,E.LANCASTER,ANDERSON ST.				RD INV 05 60847											Statewide Crash Rate: 346.84		
19463	19464	195146	0 - 0.09	0560847 - 0.65	0.09	2	4	0	0	0	0	2	0.0	0.00008	15854.90	1385.36	11.44
Int of ANDERSON ST CUMBERLAND AV				RD INV 05 60847											Statewide Crash Rate: 346.84		
18912	19463	194577	0 - 0.01	0561238 - 0.98	0.01	2	0	0	0	0	0	0	0.0	0.00020	0.00	785.75	0.00
Int of CUMBERLAND AV, MONTGOMERY ST				RD INV 05 61238											Statewide Crash Rate: 186.16		
Study Years:		3.00		Section Totals:		0.26	9	0	0	1	0	6	11.1	0.00049	6102.75	1070.96	5.70
				Grand Totals:		0.26	13	0	0	1	1	9	15.4	0.00049	8815.08	1357.90	6.49

COLLISION DIAGRAM

SHEET 1 OF 2

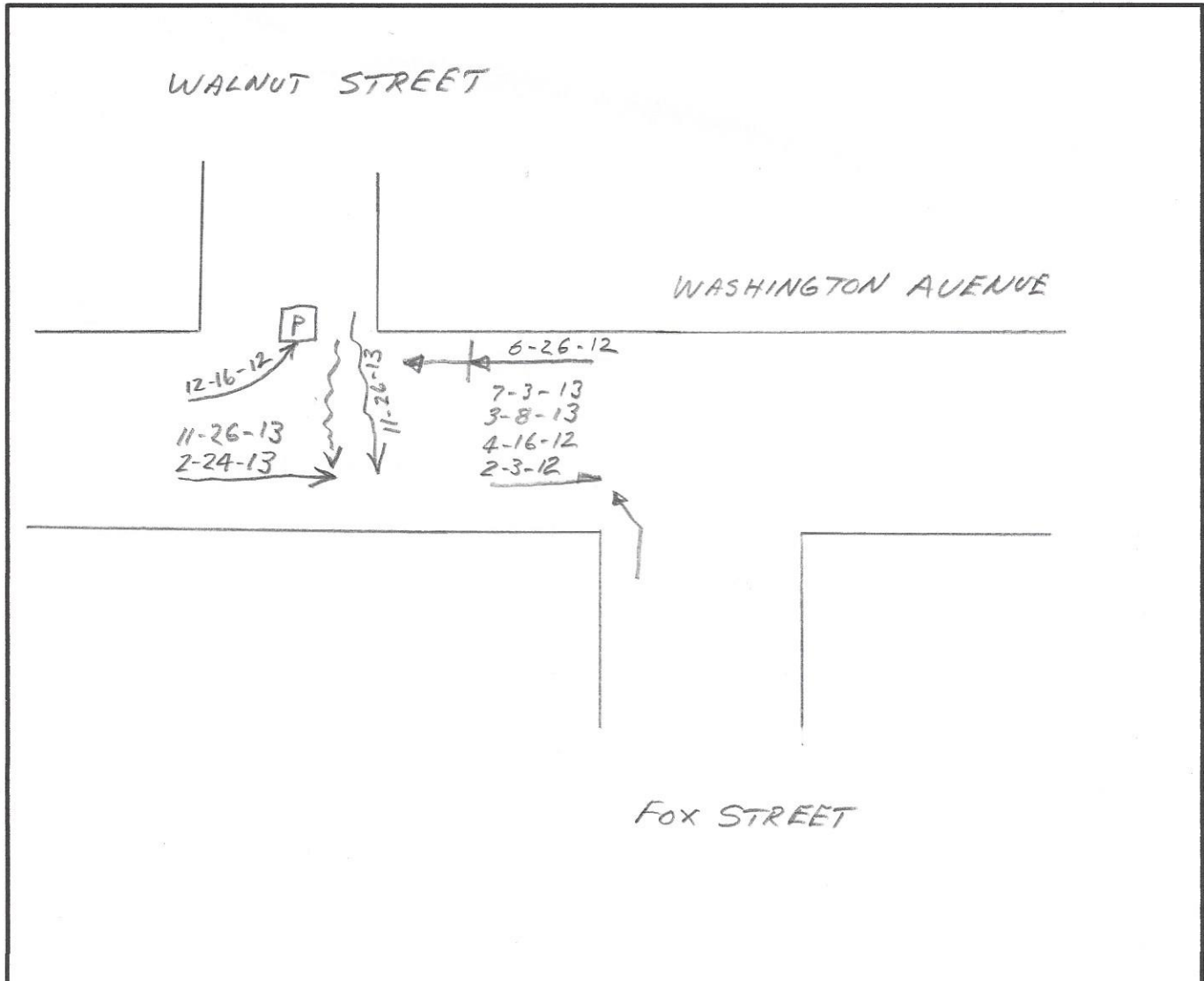
LOCATION WASHINGTON AVE./WALNUT ST./FOX ST.

TOWN PORTLAND

NODE NO(S) P18879

YEARS REVIEWED 2011-2014

DATE PREPARED 8-23-2014



CRITICAL RATE FACTOR _____ EQUIV. PROP. DAMAGE ACC/YEAR _____ ACC/MEV _____

LIGHT

- | | | |
|-------------------------|-------------------------|--------------------------|
| 1. DAWN (MORNING) | 2. DAYLIGHT | 3. DUSK (EVENING) |
| 4. DARK (ST. LIGHTS ON) | 5. DARK (NO ST. LIGHTS) | 6. DARK (ST. LIGHTS OFF) |
| 7. OTHER | | |

ROAD SURFACE

- | | | |
|---------------------------|--------------------------|-----------------------------|
| 1. DRY | 2. WET | 3. SNOW/SLUSH-SANDED |
| 4. ICE/PACKED SNOW-SANDED | 5. MUDDY | 6. DEBRIS |
| 7. OILY | 8. SNOW/SLUSH-NOT SANDED | 9. ICE-PKD. SNOW-NOT SANDED |
| 10. OTHER | | |

APPARENT CONTRIBUTING FACTORS - HUMAN

- | | | |
|--------------------------------------|-------------------------------------|--------------------------------------|
| 1. NO IMPROPER ACTION | 2. FAIL TO YLD. RIGHT OF WAY | 3. ILLEGAL UNSAFE SPEED |
| 4. FOLLOW TOO CLOSE | 5. DISREGARD TRAFFIC CONTROL DEVICE | |
| 6. DRIVING LEFT OF CENTER-NO PASSING | 7. IMPROPER PASS-OVERTAKING | |
| 8. IMP. UNSAFE LANE CHANGE | 9. IMP. PARKING START/STOP | 10. IMPROPER TURN |
| 11. UNSAFE BACKING | 12. NO SIGNAL OR IMP. SIGNAL | 13. IMPEDING TRAFFIC |
| 14. DRIVER INATTENTION-DISTRACTION | 15. DRIVER INEXPERIENCE | |
| 16. PEDEST. VIOLATION ERROR | 17. PHYSICAL IMPAIRMENT | 18. VISION OBSCURED-WINDSHIELD GLASS |
| 19. VISION OBSCURED-SUN/HEADLIGHTS | 20. OTHER VISION OBSCUREMENT | 30. OTHER HUMAN VIOLATION FACTOR |
| 31. HIT AND RUN | 51. UNKNOWN | |

VEHICULAR

- | | | |
|------------------------------------|----------------------------|--------------------------|
| 41. DEFECTIVE BRAKES | 42. DEFECTIVE TIRE/FAILURE | 43. DEFECTIVE LIGHTS |
| 44. DEFECTIVE SUSPENSION OR FACTOR | 45. DEFECTIVE STEERING | 50. OTHER VEHICLE DEFECT |
| | 51. UNKNOWN | |

SYMBOLS

- | | | | | | |
|----------------|---|----------------|-----|------------------|-------|
| ANGLE | ↓ | PEDESTRIAN | → P | FATAL ACCIDENT | ● |
| BACKING | ↔ | REAR END | → | | |
| FIXED OBJECT | → | SIDE SWIPE | → | VEHICLE (MOVING) | → |
| HEAD ON | ↔ | TURNING MOVE | ↗ | BICYCLE | --- B |
| OVERTURN | ↻ | CHANGE LANE | ↗ | ANIMAL | --- A |
| PARKED VEHICLE | □ | OUT OF CONTROL | ↗ | SLED | --- S |

C = CLEAR
SL = SLEET

WEATHER

F = FOG
S = SNOW

R = RAIN
CL = CLOUDY
XW = CROSS WINDS

INJURIES

K = FATAL
A = INCAPACITATING

B = NON-INCAPACITATING
C = POSSIBLE INJURY

COLLISION DIAGRAM

SHEET 2 OF 2

LOCATION WASHINGTON AVE. / WALNUT ST. / FOX ST.

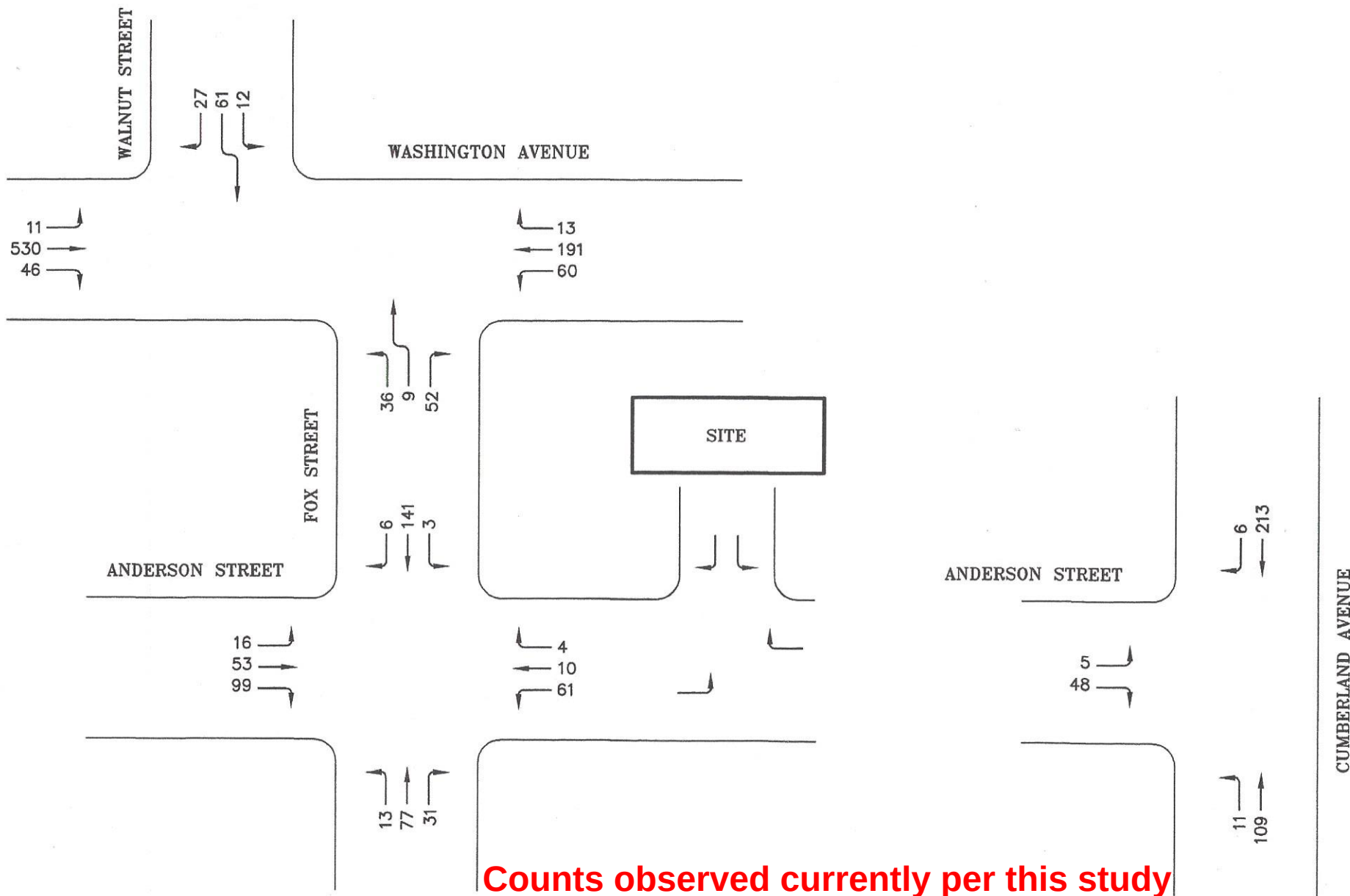
TOWN PORTLAND

NODE NO(S) P18879

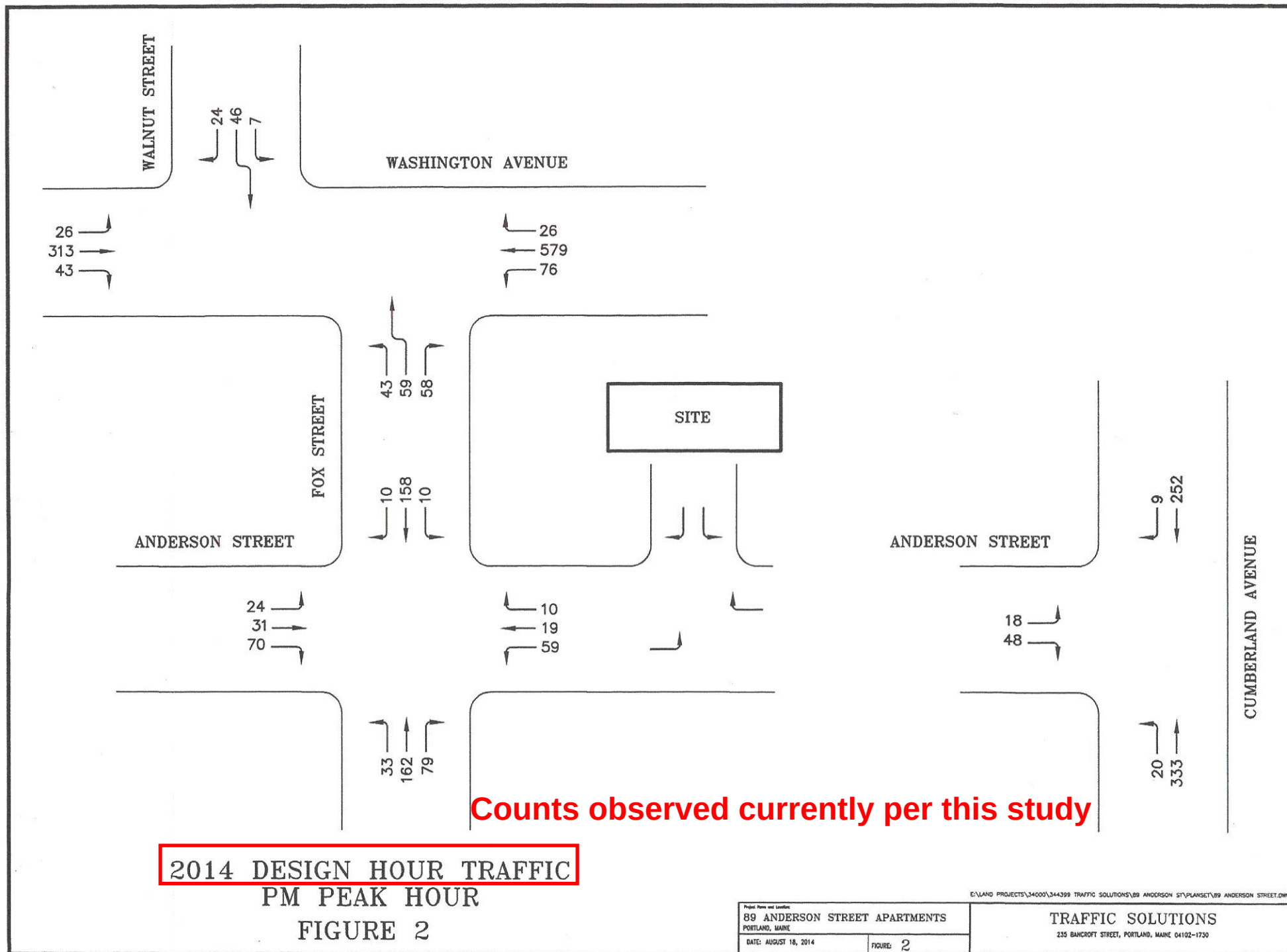
YEARS REVIEWED 2011-2014

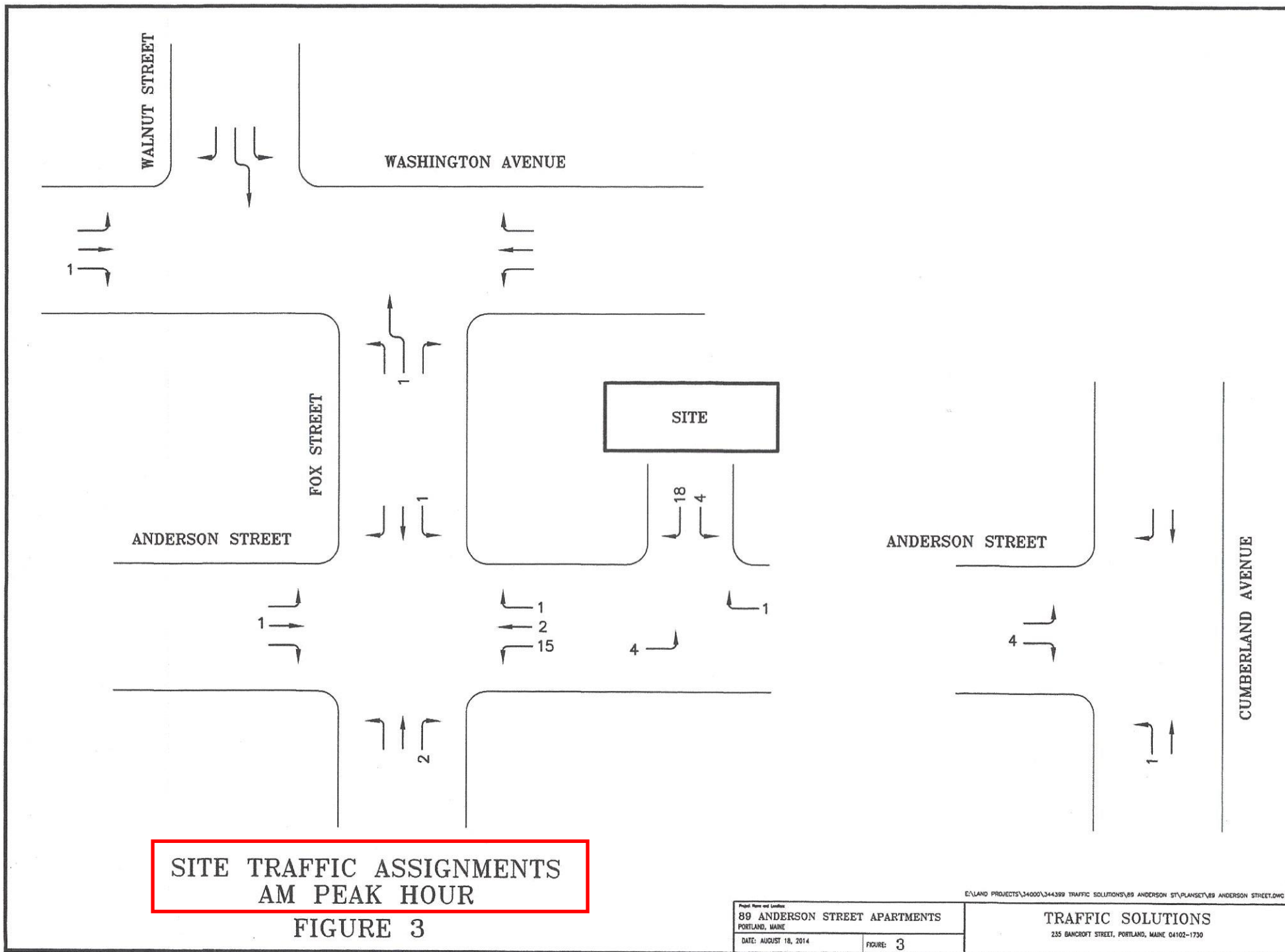
DATE PREPARED 8-23-2014

[illegible]



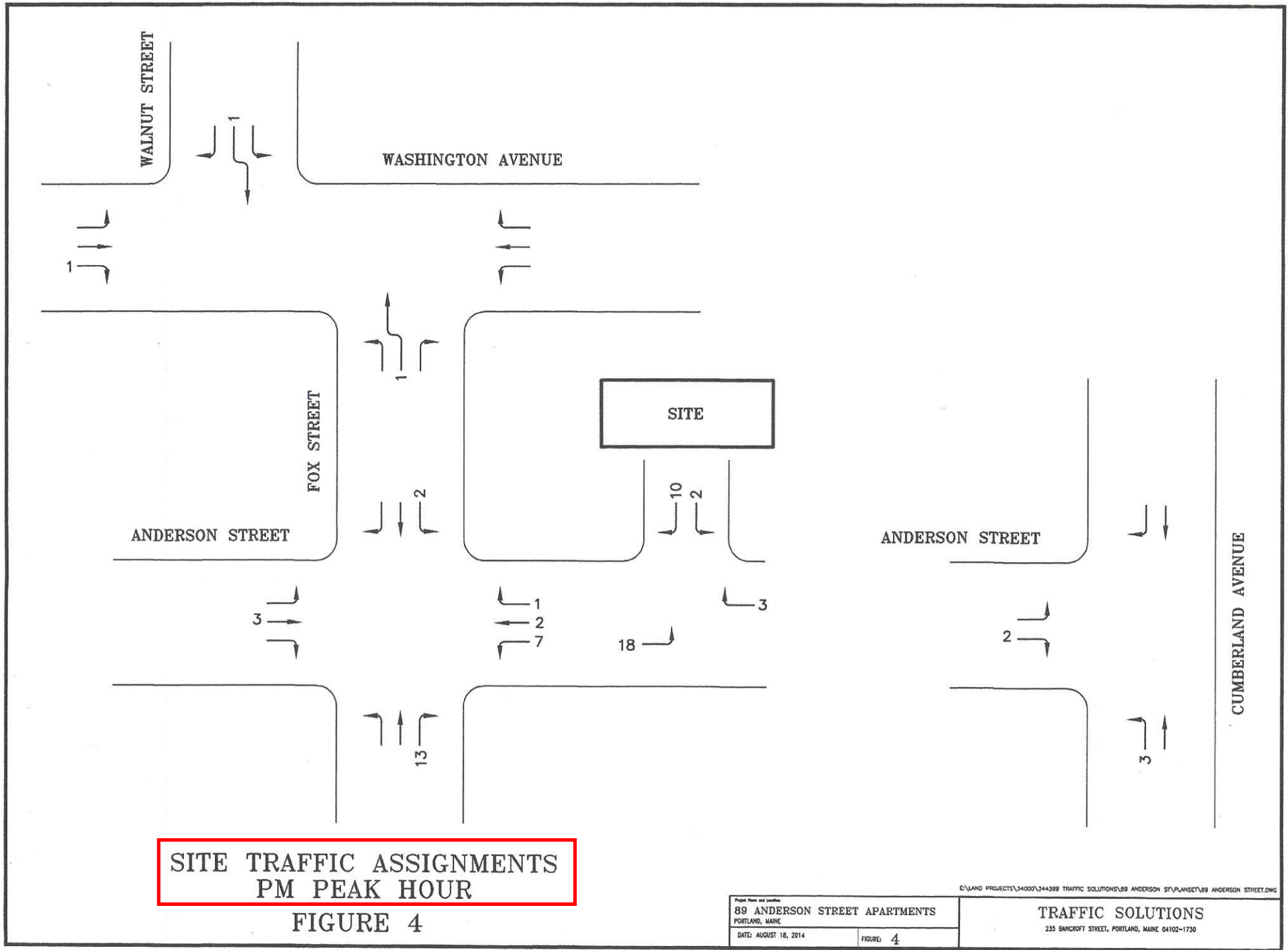
2014 DESIGN HOUR TRAFFIC
AM PEAK HOUR
FIGURE 1





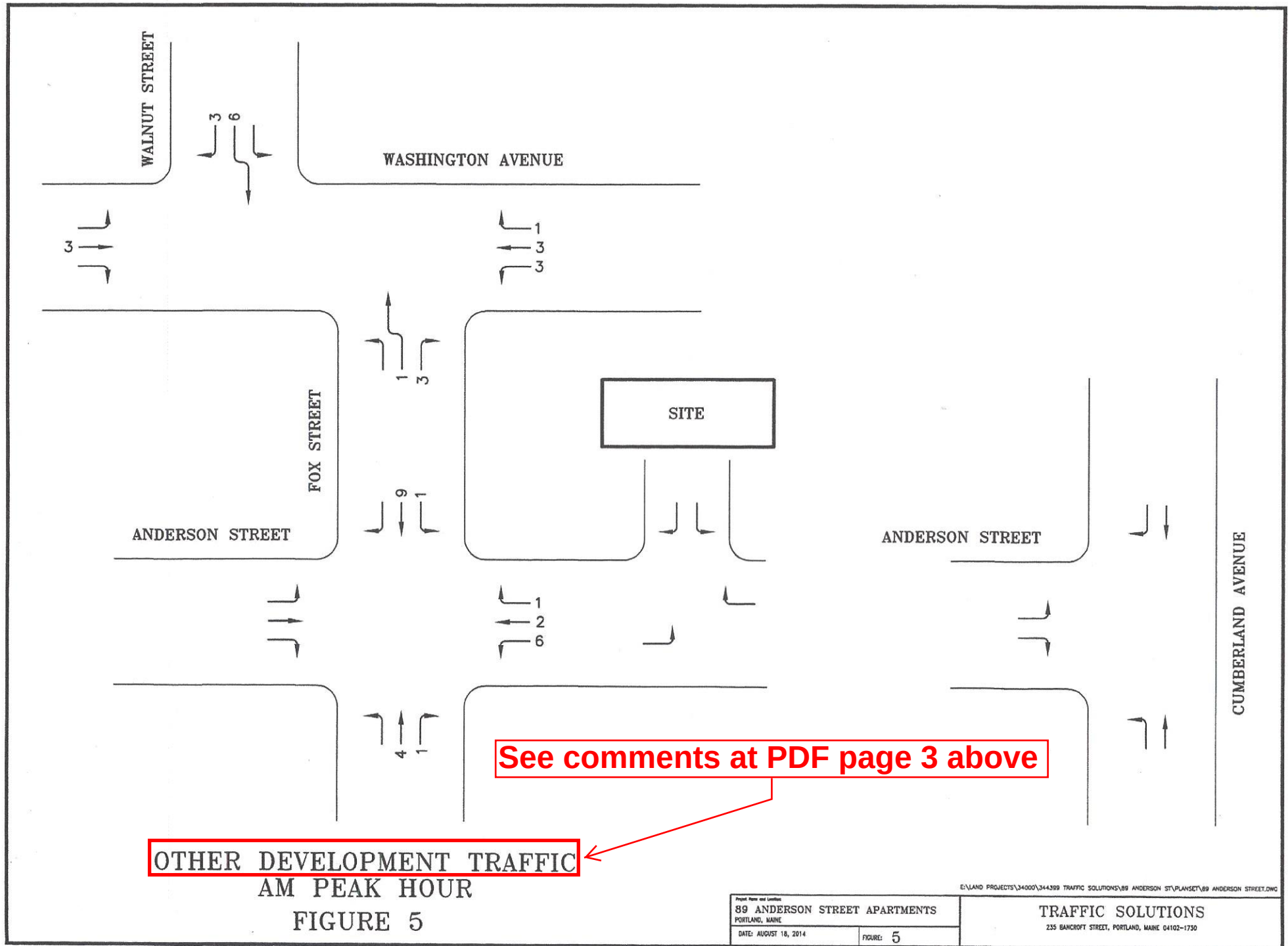
**SITE TRAFFIC ASSIGNMENTS
AM PEAK HOUR**

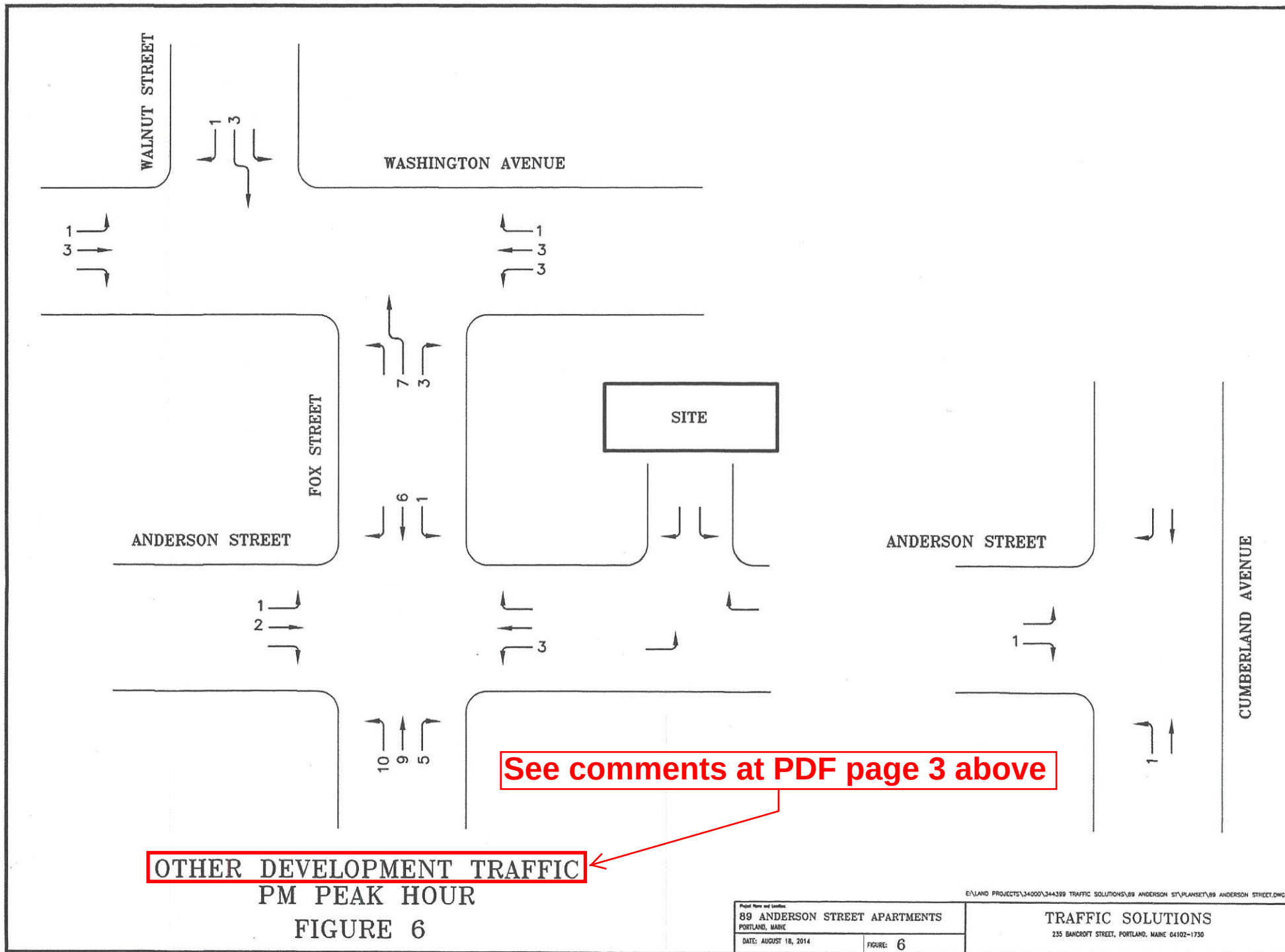
FIGURE 3



**SITE TRAFFIC ASSIGNMENTS
PM PEAK HOUR**

FIGURE 4

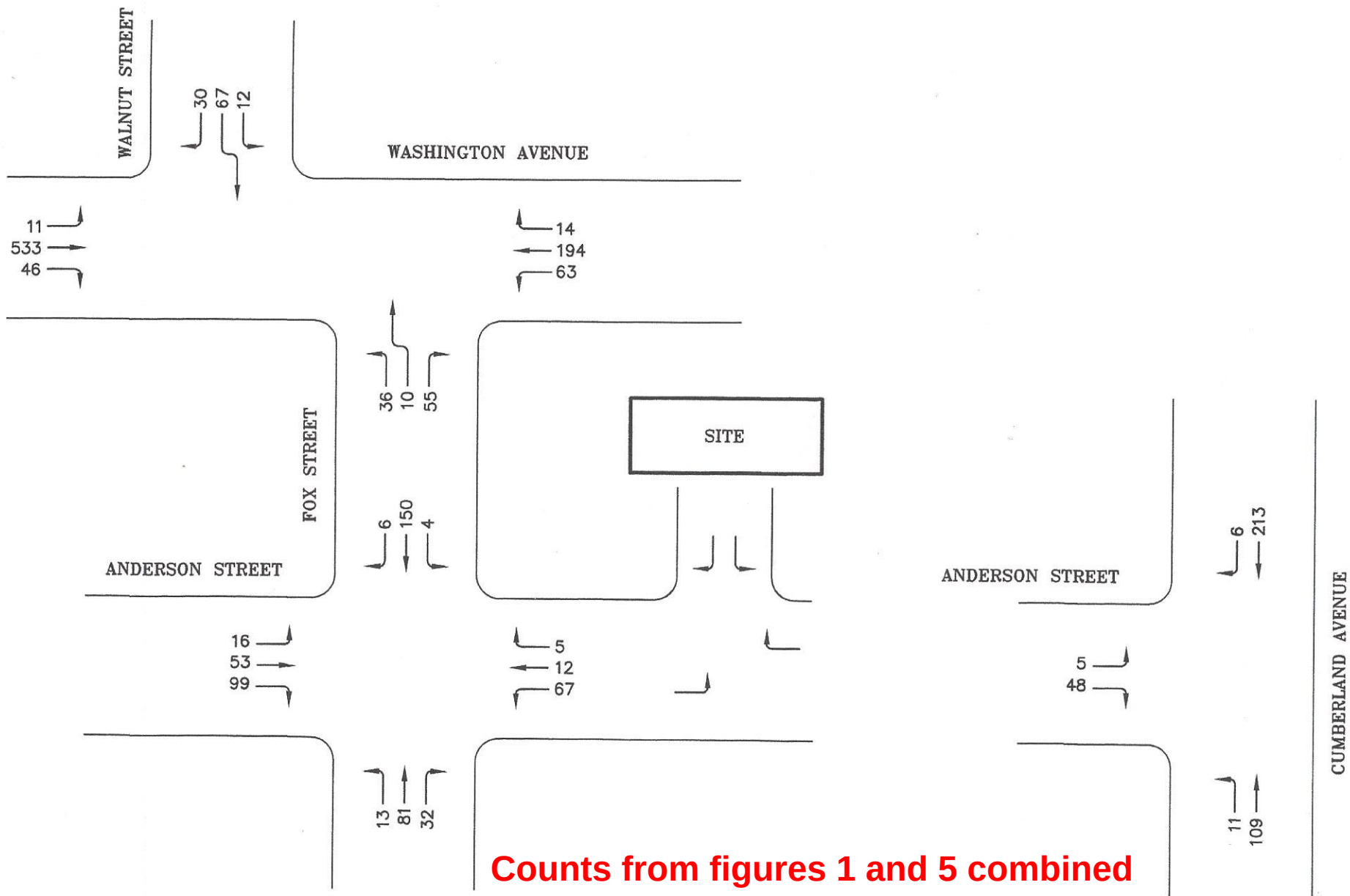




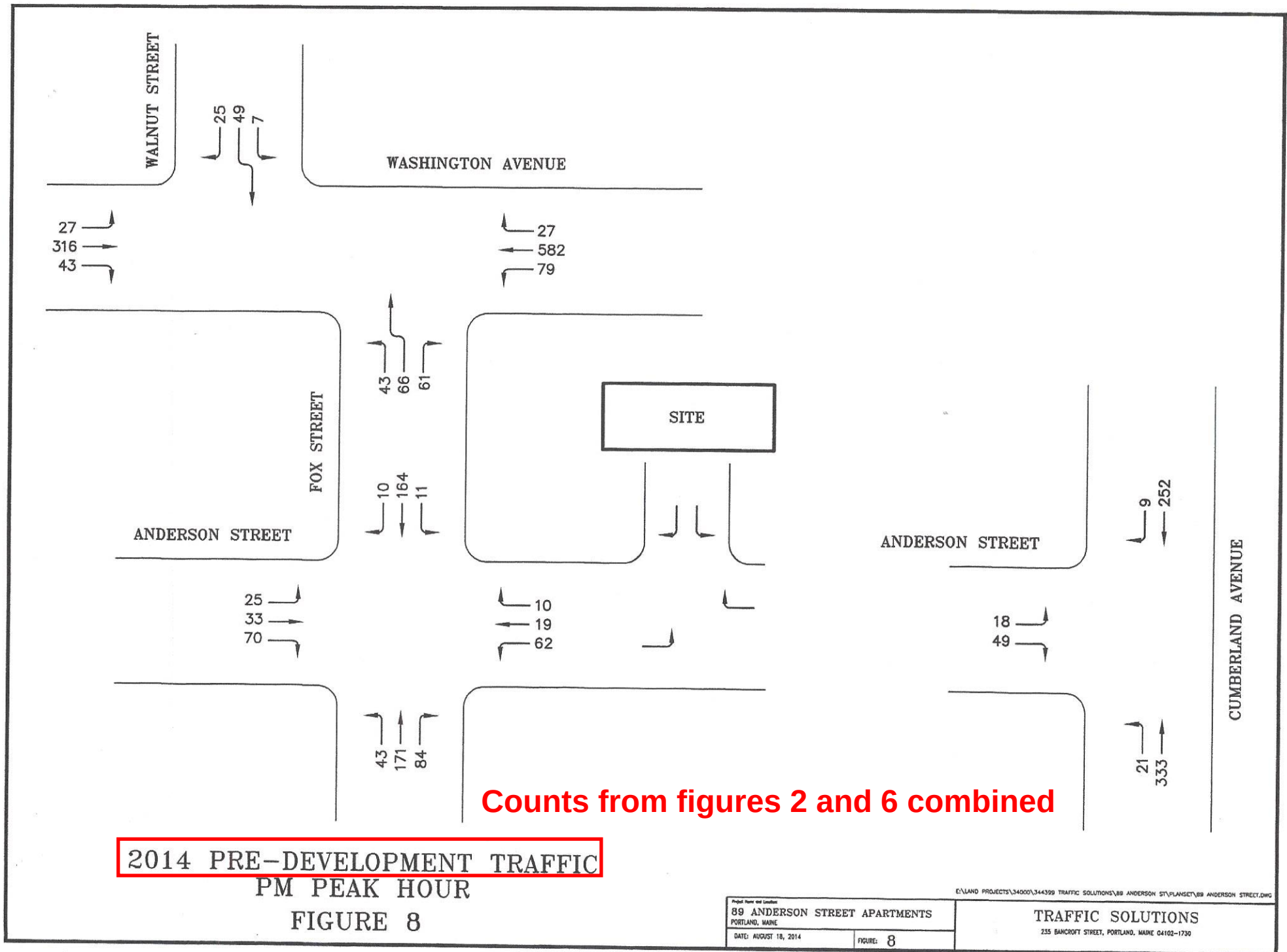
OTHER DEVELOPMENT TRAFFIC

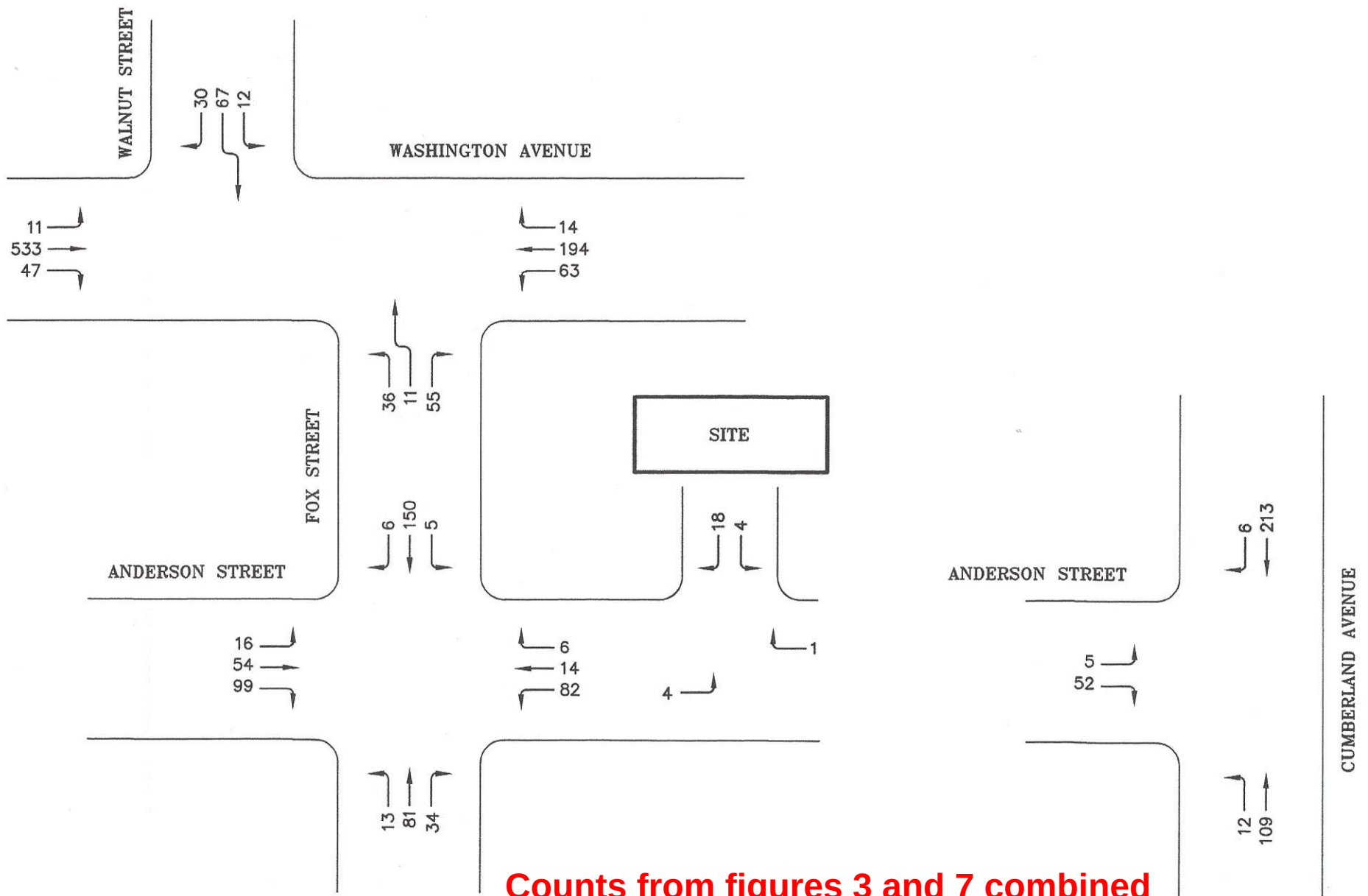
PM PEAK HOUR

FIGURE 6

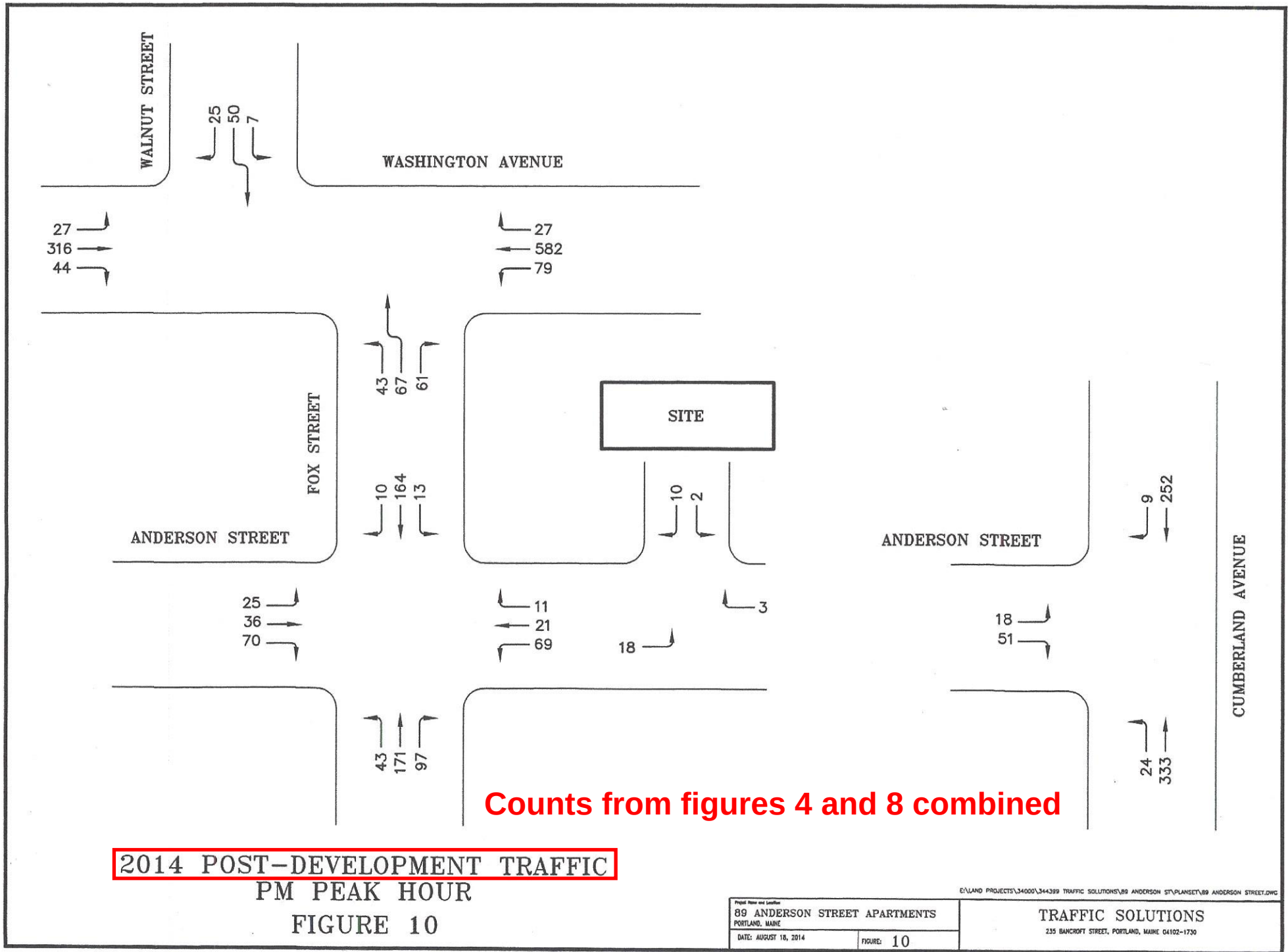


2014 PRE-DEVELOPMENT TRAFFIC
AM PEAK HOUR
FIGURE 7





2014 POST-DEVELOPMENT TRAFFIC
AM PEAK HOUR
FIGURE 9



Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	4:25	4:25	4:25	4:25	4:25	4:25
End Time	5:30	5:30	5:30	5:30	5:30	5:30
Total Time (min)	65	65	65	65	65	65
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	2238	2298	2292	2198	2271	2261
Vehs Exited	2235	2292	2270	2189	2267	2251
Starting Vehs	25	20	18	18	23	18
Ending Vehs	28	26	40	27	27	27
Travel Distance (mi)	593	612	608	573	609	599
Travel Time (hr)	26.2	26.7	27.5	24.9	27.0	26.5
Total Delay (hr)	5.1	4.8	5.8	4.4	5.3	5.1
Total Stops	1099	1188	1241	1098	1182	1162
Fuel Used (gal)	21.7	22.4	22.6	20.9	22.3	22.0

Interval #0 Information Seeding

Start Time 4:25
End Time 4:30
Total Time (min) 5

Volumes adjusted by Growth Factors.
No data recorded this interval.

Interval #1 Information Recording

Start Time 4:30
End Time 5:30
Total Time (min) 60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	2238	2298	2292	2198	2271	2261
Vehs Exited	2235	2292	2270	2189	2267	2251
Starting Vehs	25	20	18	18	23	18
Ending Vehs	28	26	40	27	27	27
Travel Distance (mi)	593	612	608	573	609	599
Travel Time (hr)	26.2	26.7	27.5	24.9	27.0	26.5
Total Delay (hr)	5.1	4.8	5.8	4.4	5.3	5.1
Total Stops	1099	1188	1241	1098	1182	1162
Fuel Used (gal)	21.7	22.4	22.6	20.9	22.3	22.0

2: Washington Ave & Walnut Street Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.3	0.0	0.3	0.1
Total Del/Veh (s)	1.9	0.6	17.3	2.1

4: Fox Street & Washington Ave Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.0	0.5	0.0	0.3
Total Del/Veh (s)	0.5	3.6	26.0	6.2

5: Fox Street & Anderson Street Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.2	0.1	0.3	0.0	0.2
Total Del/Veh (s)	5.0	5.7	6.8	6.8	6.3

6: Cumberland Ave & Anderson Street Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.3	0.2	0.2
Total Del/Veh (s)	3.1	0.5	0.3	1.0

Total Network Performance

Approach	EB	NB	SB	All
Denied Del/Veh (s)			0.4	
Total Del/Veh (s)			7.7	

Intersection: 2: Washington Ave & Walnut Street

Movement	EB	WB	SB
Directions Served	LT	TR	LR
Maximum Queue (ft)	122	38	113
Average Queue (ft)	23	8	43
95th Queue (ft)	75	30	85
Link Distance (ft)	422	12	156
Upstream Blk Time (%)		0	0
Queuing Penalty (veh)		1	0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Fox Street & Washington Ave

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	33	146	179
Average Queue (ft)	4	41	81
95th Queue (ft)	22	112	152
Link Distance (ft)	12	1288	760
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	0		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: Fox Street & Anderson Street

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	62	58	118	75
Average Queue (ft)	37	35	60	42
95th Queue (ft)	58	53	92	67
Link Distance (ft)	764	1258	282	760
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 6: Cumberland Ave & Anderson Street

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	56	45
Average Queue (ft)	31	6
95th Queue (ft)	52	29
Link Distance (ft)	1258	289
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 2

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	4:25	4:25	4:25	4:25	4:25	4:25
End Time	5:30	5:30	5:30	5:30	5:30	5:30
Total Time (min)	65	65	65	65	65	65
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	2201	2294	2276	2197	2254	2246
Vehs Exited	2200	2291	2257	2193	2246	2238
Starting Vehs	28	21	18	26	18	21
Ending Vehs	29	24	37	30	26	27
Travel Distance (mi)	581	608	599	569	600	592
Travel Time (hr)	25.3	26.7	27.4	25.0	26.3	26.1
Total Delay (hr)	4.6	5.0	6.1	4.6	4.8	5.0
Total Stops	1096	1118	1161	1055	1133	1113
Fuel Used (gal)	21.2	22.2	22.2	20.7	21.8	21.6

Interval #0 Information Seeding

Start Time 4:25
End Time 4:30
Total Time (min) 5

Volumes adjusted by Growth Factors.
No data recorded this interval.

Interval #1 Information Recording

Start Time 4:30
End Time 5:30
Total Time (min) 60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	2201	2294	2276	2197	2254	2246
Vehs Exited	2200	2291	2257	2193	2246	2238
Starting Vehs	28	21	18	26	18	21
Ending Vehs	29	24	37	30	26	27
Travel Distance (mi)	581	608	599	569	600	592
Travel Time (hr)	25.3	26.7	27.4	25.0	26.3	26.1
Total Delay (hr)	4.6	5.0	6.1	4.6	4.8	5.0
Total Stops	1096	1118	1161	1055	1133	1113
Fuel Used (gal)	21.2	22.2	22.2	20.7	21.8	21.6

2: Washington Ave & Walnut Street Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.3	0.0	0.2	0.1
Total Del/Veh (s)	1.7	0.6	16.0	2.0

4: Fox Street & Washington Ave Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.0	0.5	0.0	0.3
Total Del/Veh (s)	0.5	3.8	27.0	6.5

5: Fox Street & Anderson Street Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.2	0.1	0.3	0.0	0.2
Total Del/Veh (s)	4.6	5.6	6.8	6.7	6.2

6: Cumberland Ave & Anderson Street Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.3	0.2	0.2
Total Del/Veh (s)	3.3	0.5	0.3	0.9

Total Network Performance

Approach	EB	NB	SB	All
Denied Del/Veh (s)			0.3	
Total Del/Veh (s)			7.6	

Intersection: 2: Washington Ave & Walnut Street

Movement	EB	WB	SB
Directions Served	LT	TR	LR
Maximum Queue (ft)	95	47	113
Average Queue (ft)	19	7	42
95th Queue (ft)	63	31	84
Link Distance (ft)	422	12	156
Upstream Blk Time (%)		0	0
Queuing Penalty (veh)		1	0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Fox Street & Washington Ave

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	31	199	208
Average Queue (ft)	5	45	83
95th Queue (ft)	23	135	161
Link Distance (ft)	12	1288	737
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	0		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: Fox Street & Anderson Street

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	62	55	107	72
Average Queue (ft)	22	33	57	35
95th Queue (ft)	45	50	89	57
Link Distance (ft)	662	1258	281	737
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 6: Cumberland Ave & Anderson Street

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	52	44
Average Queue (ft)	30	5
95th Queue (ft)	48	25
Link Distance (ft)	1258	289
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 1

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	6:55	6:55	6:55	6:55	6:55	6:55
End Time	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	65	65	65	65	65	65
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	1738	1660	1705	1739	1659	1701
Vehs Exited	1737	1662	1708	1735	1648	1697
Starting Vehs	16	16	20	23	14	14
Ending Vehs	17	14	17	27	25	17
Travel Distance (mi)	483	459	475	474	456	469
Travel Time (hr)	20.8	19.2	20.5	20.2	19.4	20.0
Total Delay (hr)	3.3	2.8	3.4	3.1	3.0	3.1
Total Stops	982	883	963	926	870	926
Fuel Used (gal)	17.7	16.6	17.4	17.3	16.4	17.1

Interval #0 Information Seeding

Start Time 6:55
End Time 7:00
Total Time (min) 5

Volumes adjusted by Growth Factors.
No data recorded this interval.

Interval #1 Information Recording

Start Time 7:00
End Time 8:00
Total Time (min) 60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1738	1660	1705	1739	1659	1701
Vehs Exited	1737	1662	1708	1735	1648	1697
Starting Vehs	16	16	20	23	14	14
Ending Vehs	17	14	17	27	25	17
Travel Distance (mi)	483	459	475	474	456	469
Travel Time (hr)	20.8	19.2	20.5	20.2	19.4	20.0
Total Delay (hr)	3.3	2.8	3.4	3.1	3.0	3.1
Total Stops	982	883	963	926	870	926
Fuel Used (gal)	17.7	16.6	17.4	17.3	16.4	17.1

2: Washington Ave & Walnut Street Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.4	0.0	0.1	0.3
Total Del/Veh (s)	1.3	0.4	15.3	2.7

4: Fox Street & Washington Ave Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.0	0.2	0.0	0.1
Total Del/Veh (s)	0.5	3.5	13.1	2.6

5: Fox Street & Anderson Street Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.2	0.2	0.2	0.0	0.1
Total Del/Veh (s)	5.2	5.9	5.7	6.5	5.8

6: Cumberland Ave & Anderson Street Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.2	0.1
Total Del/Veh (s)	3.7	0.4	0.2	1.0

Total Network Performance

Denied Del/Veh (s)	0.3
Total Del/Veh (s)	6.3

Intersection: 2: Washington Ave & Walnut Street

Movement	EB	WB	SB
Directions Served	LT	TR	LR
Maximum Queue (ft)	62	24	112
Average Queue (ft)	4	1	50
95th Queue (ft)	27	12	95
Link Distance (ft)	422	12	156
Upstream Blk Time (%)		0	0
Queuing Penalty (veh)		0	0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Fox Street & Washington Ave

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	31	112	92
Average Queue (ft)	8	37	41
95th Queue (ft)	30	89	71
Link Distance (ft)	12	1288	735
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	2		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: Fox Street & Anderson Street

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	68	69	71	72
Average Queue (ft)	27	36	37	36
95th Queue (ft)	55	58	59	58
Link Distance (ft)	600	1258	281	735
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 6: Cumberland Ave & Anderson Street

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	63	34
Average Queue (ft)	28	3
95th Queue (ft)	50	19
Link Distance (ft)	1258	289
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 2

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	6:55	6:55	6:55	6:55	6:55	6:55
End Time	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	65	65	65	65	65	65
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	1614	1713	1638	1725	1629	1663
Vehs Exited	1602	1717	1640	1711	1632	1659
Starting Vehs	11	17	21	14	17	14
Ending Vehs	23	13	19	28	14	18
Travel Distance (mi)	451	478	461	482	455	465
Travel Time (hr)	18.7	19.8	19.3	20.2	19.2	19.4
Total Delay (hr)	2.6	2.8	2.8	2.9	2.9	2.8
Total Stops	805	859	877	844	849	849
Fuel Used (gal)	16.0	17.2	16.5	17.1	16.3	16.6

Interval #0 Information Seeding

Start Time 6:55
End Time 7:00
Total Time (min) 5

Volumes adjusted by Growth Factors.
No data recorded this interval.

Interval #1 Information Recording

Start Time 7:00
End Time 8:00
Total Time (min) 60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1614	1713	1638	1725	1629	1663
Vehs Exited	1602	1717	1640	1711	1632	1659
Starting Vehs	11	17	21	14	17	14
Ending Vehs	23	13	19	28	14	18
Travel Distance (mi)	451	478	461	482	455	465
Travel Time (hr)	18.7	19.8	19.3	20.2	19.2	19.4
Total Delay (hr)	2.6	2.8	2.8	2.9	2.9	2.8
Total Stops	805	859	877	844	849	849
Fuel Used (gal)	16.0	17.2	16.5	17.1	16.3	16.6

2: Washington Ave & Walnut Street Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.5	0.0	0.2	0.3
Total Del/Veh (s)	1.2	0.4	13.2	2.4

4: Fox Street & Washington Ave Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.0	0.2	0.0	0.1
Total Del/Veh (s)	0.5	3.3	11.3	2.2

5: Fox Street & Anderson Street Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.2	0.1	0.2	0.0	0.1
Total Del/Veh (s)	4.7	5.5	5.5	6.0	5.4

6: Cumberland Ave & Anderson Street Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.2	0.2	0.1
Total Del/Veh (s)	3.5	0.3	0.2	0.9

Total Network Performance

Denied Del/Veh (s)		0.3
Total Del/Veh (s)		5.7

Intersection: 2: Washington Ave & Walnut Street

Movement	EB	WB	SB
Directions Served	LT	TR	LR
Maximum Queue (ft)	43	24	117
Average Queue (ft)	4	1	46
95th Queue (ft)	23	10	85
Link Distance (ft)	422	12	156
Upstream Blk Time (%)		0	0
Queuing Penalty (veh)		0	0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Fox Street & Washington Ave

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	38	130	98
Average Queue (ft)	8	33	38
95th Queue (ft)	30	87	69
Link Distance (ft)	12	1288	740
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	2		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: Fox Street & Anderson Street

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	61	57	74	56
Average Queue (ft)	25	31	36	31
95th Queue (ft)	49	51	60	46
Link Distance (ft)	647	1258	281	740
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 6: Cumberland Ave & Anderson Street

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	52	31
Average Queue (ft)	25	2
95th Queue (ft)	47	16
Link Distance (ft)	1258	289
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 2



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August, 2014

Traffic Signal Warrant Assessment

Washington Avenue/Fox Street/Walnut Street Intersection Portland, Maine

INTRODUCTION

An abbreviated traffic signal warrant analysis was conducted for the Washington Avenue/Fox Street/Walnut Street intersection based upon traffic data gathered in the month of August 2014 between the hours of 7:00 to 9:00 AM and, again, between the hours of 3:00 to 6:00 PM. The traffic data was adjusted by a factor of 13%, which represents the approximate variation between “peak” traffic collected during the week of August 14 and “average” travel conditions during the month of November (Adjustment factor based upon MaineDOT’s Weekly Group Mean Factors; refer to attached copy of MaineDOT factors). The abbreviated or preliminary traffic signal warrant analysis is based upon a total of 5-hours of traffic data; a formal traffic signal warrant study is generally prepared based upon 12-hours of traffic data and traffic information.

TRAFFIC SIGNAL WARRANT ASSESSMENT

The abbreviated traffic signal warrant analysis follows the guidelines presented in the 2009 edition of the Manual on Uniform Traffic Control Devices (MUTCD) in Chapter 4C. The MUTCD provides nine separate traffic signal warrants, whereby, prevailing conditions at an intersection can be evaluated to determine if sequenced traffic signals are warranted. Each of the nine warrants is listed as follows:

- Warrant 1 – Eight Hour Vehicular Volume
- Warrant 2 – Four Hour Vehicular Volume
- Warrant 3 – Peak Hour
- Warrant 4 – Pedestrian Volume
- Warrant 5 – School Crossing
- Warrant 6 – Coordinated Signal System
- Warrant 7 – Crash Experience
- Warrant 8 – Roadway Network
- Warrant 9 – Intersection near a Grade Crossing

The federal publication clearly states that, ***“the satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal”***. Guidance is specifically provided in the MUTCD on the conduct of the required engineering study and the judgment required in completing the signal warrant assessment. The direction provided, specific to prevailing conditions found at the study intersection, is summarized as follows:

A traffic signal should not be installed unless an engineering study indicates that the signal will improve the overall safety and/or operation of the intersection.

A signal should not be installed if it will seriously disrupt traffic flow.

Estimated 2014 “Average” Hourly Traffic Data

The presentation of the traffic volume data presented in Table 1 has been adjusted, as necessary, to project the hourly “major” and “minor” street volumes used in the conduct of the traffic signal warrant study.

Table 1
Abbreviated Traffic Signal Warrant Study
“Average” Conditions-Traffic Values⁽¹⁾
Washington Avenue/Fox Street/Walnut Street Intersection

<u>Time of Day</u>	Major Street Volume⁽²⁾ (Both Approaches) <u>Washington Avenue</u>	Minor Street Volume⁽³⁾ <u>Fox Street</u>	Minor Street Volume⁽³⁾ <u>Walnut Street</u>
7:00 - 8:00 AM	562	73	67
8:00 - 9:00 AM	740	87	84
3:00 - 4:00 PM	634	59	117
4:00 - 5:00 PM	867	71	145
5:00 - 6:00 PM	880	41	131

Notes:

⁽¹⁾ “Average traffic values were computed applying a 13% reduction of August 2014 Traffic Data (refer to copy of August traffic count cards for subject intersection), which is based upon the Maine Department of Transportation’s Weekly Group Mean Factors.

⁽²⁾ Washington Avenue has been defined as the “major” street.

⁽³⁾ Minor Street approaches are both Fox Street and Walnut Street. All right-turn movements were included in hourly Minor Street volumes.

Traffic Safety Data: The Washington Avenue/Walnut Street/Fox Street intersection meets MaineDOT’s criteria for a high crash location. A total of 9 crashes and a Critical Rate Factor (CRF) of 1.98 were reported for the intersection. A more in-depth review (preparation of detailed vehicle collision diagrams) was prepared for the intersection to determine if a clear pattern of accident is occurring (Copies of the Collision Diagrams are attached as an appendix to the report). The detailed review of the vehicle crash reports for the intersection would suggest two clear patterns of concern: 1) four of the nine accidents involved vehicles on the Fox Street approach turning left onto Washington Avenue being struck by thru vehicles traveling eastbound on Washington Avenue; 2) the second pattern, with a total of three collisions, involved vehicles approaching Washington Avenue from Walnut Street sliding through the intersection striking a thru vehicle on Washington Avenue.

Traffic Signal Warrant Analyses: The evaluation was conducted for Warrants 1, 2, 3, and 7 and was based upon the 5-hours of traffic data presented in Table 1 only.

Each of the three traffic signal warrants used in the analyses are briefly described below followed by a determination of whether forecast conditions meet or fail required conditions.

Warrant 1: Eight Hour Vehicular Volume

Condition A - Warrant requires 500 vehicles per hour on major roadway (combination of both directions) and a total of 150 vehicles per hour on the highest minor street approach.

Condition B - Warrant requires 750 vehicles per hour on major roadway (combination of both directions) and a total of 75 vehicles per hour on the highest minor street approach.

Condition A+B - Warrant requires 80% of values stated for both Conditions A & B.

Warrant Likely Not Satisfied

Warrant 2: Four Hour Vehicular Volume

If travel conditions for any four hours of an average day representing the volume per hour on the major street and the corresponding vehicles per hour on the higher volume minor street approach all fall above the applicable curve in Figure 4C-1 then warrant is met.

Warrant Likely Not Satisfied

Warrant 3: Peak Hour

If travel conditions for one hour of an average day representing the volume per hour on the major street and the corresponding vehicles per hour on the higher volume minor street approach fall above the applicable curve in Figure 4C-3 then warrant is met.

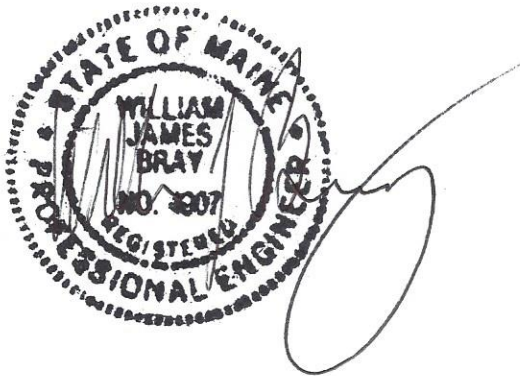
Warrant Likely Not Satisfied

Warrant 7: Crash Experience

Analysis based upon conclusions of safety evaluation conducted in Safety History Section above. Each of the following criteria must be met to consider the need for a traffic control signal:

- A. Adequate trial of alternatives with satisfactory observance and enforcement has failed to reduce the crash frequency; and
- B. Five or more reported crashes, of types susceptible to correction by a traffic control signal, have occurred within a 12-month period; and
- C. For each of any 8 hours of an average day the vehicles per hour given in the 80% column for Condition A in Table 4C-1 or the vph in both of the columns of Condition B in Table 4C-1 exists on both the major and minor street approaches.

Warrant Likely Not Satisfied



2012
Weekly Group Mean Factors
Average: 2009, 2010, 2011

Month	Start Date	Dates	Month	Urban	Arterial	Recreational	Group	Group	Group	Year
Month	Start Date	Dates	Week #	Group I	Group II	Group III	I + II	II + III	I + III	Week #
Jan	01	2,3,4,5,6	1	1.02	1.11	1.35	1.07	1.23	1.19	1
	08	9,10,11,12	2	1.09	1.21	1.50	1.15	1.36	1.30	2
	15	16,17,18,19	3	1.10	1.23	1.53	1.17	1.38	1.32	3
	22	23,24,25,26	4	1.05	1.18	1.46	1.12	1.32	1.26	4
	29	30,31,1,2,3	5	1.12	1.26	1.57	1.19	1.42	1.35	5
Feb	05	6,7,8,9,10	1	1.02	1.14	1.41	1.08	1.28	1.22	6
	12	13,14,15,16	2	1.02	1.12	1.36	1.07	1.24	1.19	7
	19	20,21,22,23	3	1.06	1.15	1.38	1.11	1.27	1.22	8
	26	27,28,29,30	4	1.06	1.17	1.38	1.12	1.28	1.22	9
Mar	04	5,6,7,8,9	1	1.06	1.16	1.39	1.11	1.28	1.23	10
	11	12,13,14,15	2	1.00	1.10	1.33	1.05	1.22	1.17	11
	18	19,20,21,22	3	1.02	1.13	1.35	1.08	1.24	1.19	12
	25	26,27,28,29	4	1.01	1.12	1.32	1.07	1.22	1.17	13
Apr	01	2,3,4,5,6	1	0.98	1.09	1.26	1.04	1.18	1.12	14
	08	9,10,11,12	2	0.97	1.08	1.22	1.03	1.15	1.10	15
	15	16,17,18,19	3	0.97	1.04	1.12	1.01	1.08	1.05	16
	22	23,24,25,26	4	0.97	1.05	1.17	1.01	1.11	1.07	17
	29	30,1,2,3,4	5	0.93	1.02	1.10	0.98	1.06	1.02	18
May	06	7,8,9,10,11	1	0.92	1.00	1.08	0.96	1.04	1.00	19
	13	14,15,16,17	2	0.92	0.98	1.04	0.95	1.01	0.98	20
	20	21,22,23,24	3	0.89	0.93	0.92	0.91	0.93	0.91	21
	27	28,29,30,31	4	0.90	0.94	0.96	0.92	0.95	0.93	22
Jun	03	4,5,6,7,8	1	0.89	0.93	0.91	0.91	0.92	0.90	23
	10	11,12,13,14	2	0.90	0.92	0.90	0.91	0.91	0.90	24
	17	18,19,20,21	3	0.90	0.89	0.81	0.90	0.85	0.86	25
	24	25,26,27,28	4	0.89	0.86	0.77	0.88	0.82	0.83	26
Jul	01	2,3,4,5,6	1	0.87	0.81	0.70	0.84	0.76	0.79	27
	08	9,10,11,12	2	0.88	0.83	0.71	0.86	0.77	0.80	28
	15	16,17,18,19	3	0.88	0.82	0.69	0.85	0.76	0.79	29
	22	23,24,25,26	4	0.88	0.81	0.67	0.85	0.74	0.78	30
	29	30,31,1,2,3	5	0.87	0.79	0.64	0.83	0.72	0.76	31
Aug	05	6,7,8,9,10	1	0.87	0.78	0.65	0.83	0.72	0.76	32
	12	13,14,15,16	2	0.87	0.79	0.66	0.83	0.73	0.77	33
	19	20,21,22,23	3	0.88	0.81	0.70	0.85	0.76	0.79	34
	26	27,28,29,30	4	0.88	0.85	0.78	0.87	0.82	0.83	35
Sep	02	3,4,5,6,7	1	0.89	0.88	0.86	0.89	0.87	0.88	36
	09	10,11,12,13	2	0.90	0.90	0.89	0.90	0.90	0.90	37
	16	17,18,19,20	3	0.91	0.91	0.92	0.91	0.92	0.92	38
	23	24,25,26,27	4	0.92	0.91	0.96	0.92	0.94	0.94	39
	30	1,2,3,4,5	5	0.91	0.89	0.98	0.90	0.94	0.95	40
Oct	07	8,9,10,11,12	1	0.92	0.90	0.98	0.91	0.94	0.95	41
	14	15,16,17,18	2	0.93	0.95	1.05	0.94	1.00	0.99	42
	21	22,23,24,25	3	0.95	1.00	1.12	0.98	1.06	1.04	43
	28	29,30,31,1	4	0.95	1.02	1.18	0.99	1.10	1.07	44
Nov	04	5,6,7,8,9	1	0.96	1.04	1.21	1.00	1.13	1.09	45
	11	12,13,14,15	2	0.97	1.04	1.23	1.01	1.14	1.10	46
	18	19,20,21,22	3	1.00	1.04	1.25	1.02	1.15	1.13	47
	25	26,27,28,29	4	0.97	1.03	1.24	1.00	1.14	1.11	48
Dec	02	3,4,5,6,7	1	1.00	1.13	1.32	1.07	1.23	1.16	49
	09	10,11,12,13	2	1.01	1.12	1.34	1.07	1.23	1.18	50
	16	17,18,19,20	3	0.98	1.08	1.30	1.03	1.19	1.14	51
	23	24,25,26,27	4	1.08	1.14	1.34	1.11	1.24	1.21	52

USE 0.13 Factor To Create "Average" Conditions

From: Ellen Bailey <efbailey66@gmail.com>
To: Helen Donaldson <HCD@portlandmaine.gov>
CC: Christine Grimando <CDG@portlandmaine.gov>
Date: 8/18/2014 12:01 PM
Subject: Re: Question about Sight Lines and How that Relates to Buildings and Parking in a B-1 Zone

Hi Nell,

Thank you for this message. I vaguely remembered that you are not in the office on Fridays, so no concerns and Christine did answer my initial questions. We did receive a notice from Jonathan that he is seeking B-1 zoning now and he is in the process of planning another neighborhood meeting. We haven't gotten a date for that meeting yet.

Mostly though, there are a number of us who live here in East Bayside who are becoming increasingly alarmed at what we are seeing, and experiencing on Fox Street. I was almost in an accident myself on Saturday (the 16th), pulling out of Hammond Street onto Fox because the cars parked on Fox blocked my view of those coming down the hill. The corners are confusing, visibility is poor already and there is a lot more traffic here. And we are looking at Nova Star conducting up to sixty tractor trailer trips through Fox/Anderson daily from May to November; looking at the Munjoy Heights development; at the Avesta development (134 Washington); the possible new townhouse development on 145-155 Washington; and then having 75 or so residents move in right on that corner (89 Anderson Street). What we would really like to see is Fox Street made safer BEFORE hundreds more people are using it. We would also like to have some assurance that someone is looking at these projects collectively rather than in isolation. We get the reply often that the city doesn't look at the big picture, that these concerns are only dealt with on a project-by-project basis.

I (and several of us who live here) am now getting a little clearer picture of some of the regulations that really need to be taken seriously on this corner, like the 200 feet of visibility (in a 25 mph zone) required by new streets and even driveways. So buildings certainly should not block a driver from seeing 200 feet down adjacent streets. That really means that no zoning change should be made that allows for building up to the street in that location. Building up to the street there is quite dangerous and the Maine DOT is verifying that.

There is another violation on that corner that I became aware of when reading the "Transportation Systems and Street Design Standards". The angle there does not meet the standards. Collector streets (which Fox Street should be changed to) are required to meet at 90 degree angles. Neighborhood streets should be meeting at an acute angle no less than 75 degrees and an obtuse angle no greater than 105 degrees. I measured the Fox/Anderson Street angle and got around a 55/125 degree angle there. So, the angle is 20 degrees away from what is considered safe on little neighborhood streets and 35 degrees away from what is considered safe on a collector. That is significant! So, I am seeing that our concerns are supported by the data.

If a building goes in that corner which limits sight view to less than 200 feet, then we will have two major violations of safety codes. The street angle and the sight view. Let's add the tractor trailer trucks; the pedestrians (including a lot of children); athletes and spectators using the fields and on street parking on Fox Street; business traffic for Rising Tide, Maine Crafts, etc.; tractor trailer trucks parking on Fox Street for days at a time; the through traffic; and a large number of new residents and we see (again, I am not alone here) some major congestion and accidents waiting to happen.

I am not against development. In fact, I really like the townhouse project I heard about for 145 Washington Avenue. It is only 17 units and there will be no problem with visibility there. It is a reasonable number of new residents, and there will be on-site parking, so there wouldn't be a huge impact on traffic. In contrast, this particular location at the Fox/Anderson Street intersection and the large number of people who will live in the proposed building directly on the intersection is a huge problem. We need to work on safety at this corner BEFORE we start bringing in a bunch of tractor trailer trucks and build a 53-unit apartment building, which translates to around 75 people living there. Of course, I don't really think it is an appropriate location to build such a large apartment complex or to have any zoning that is more permissive than what is already there (R-6). We want everyone to be safe and it's not even safe now.

I know we won't have a workshop for a bit, but this is about more than just the 89 Anderson Street project. Although this project will add significantly to the danger.

I really appreciate you reading this. I was wondering if you could pass this on to the appropriate people in Traffic. I am cc-ing Christine as well.

I was sad to hear there is not a committee working on Fox Street. I think there must have been some miscommunication somewhere along the line, because I was told that someone from Traffic said to a couple of our community members that a City Staff committee was working on Fox Street safety. People were told that Christine was coordinating it. I have tried to correct that misconception with a couple of people who told me about it. I think Fox Street needs some attention, so I was disappointed to find out there really isn't any committee looking at this street which already has six different zones on it (IL-B, B-5, R-OS, R-6, B-2b and a recent addition of R-7 for PHA).

Thank you for your time Nell (and Christine). I appreciate you keeping the residents "in the loop" about what is happening down here and paying attention to our increasing concern.

Ellen Bailey-resident of East Bayside

<<<On Mon, Aug 18, 2014 at 8:47 AM, Helen Donaldson HCD@portlandmaine.gov wrote:

Ellen,

I apologize that I wasn't in the office on Friday and so didn't respond. I trust that Christine's email addresses your questions, but if you have additional concerns, feel free to let me know.

We are waiting on more information from Jonathan before scheduling another planning board workshop. I will be sure to let you and others know as soon as that workshop date is set.

Best,
Nell

Nell Donaldson
City of Portland Planning Division
389 Congress Street
Portland, Maine 04101
874-8723
hcd@portlandmaine.gov

<<<Christine Grimando 8/15/2014 4:34 PM >>>

Hi Ellen,

In answer to your first question, parking standards are addressed in Division 20 of the Land Use Code. It sounds like you already found that document, but just in case, it can be accessed here: <http://www.portlandmaine.gov/DocumentCenter/Home/View/1080>. I've also attached Division 20 as a pdf. New residential development > on-peninsula, in the B-1 zone, has a requirement of a minimum of one space per dwelling unit, unless the application demonstrates it meets criteria for altering that 1 per unit number. Non-residential uses have different parking requirements which are listed by use and square footage, generally.

In answer to your second, I will answer broadly that the sight distance standard you reference does indeed apply to new driveways and new streets. I will forward your comments about the building's impact on sight distances to the City's Traffic Engineer, so that he can incorporate your questions and concerns in his overall traffic review of the proposal at 89 Anderson Street. After the recent Planning Board workshop the applicant is having additional traffic analysis completed for the proposal, and it has not yet been submitted for review by the consulting traffic engineer. Like all other application materials, it will be available to the public for review.

Nell Donaldson, Planner, is reviewing the proposal for 89 Anderson Street, so I will defer to her any other specific questions you might have about that application, and I have cc'd her on this email.

I was recently sent an email message that referenced my being Chair of a Parking Staff Committee, and I assume this is likely the reason these questions were directed to me. I want to clarify that there is no such official group, and that I have no overarching role in regard to parking and traffic in the neighborhood. I did recently engage City staff in a preliminary discussion about potential improvements to the Washington/Fox/Walnut intersection due to development proposals I am reviewing. There is no formal proposal as of this time.

Best,
Christine

Christine Grimando, AICP
Senior Planner
Planning & Urban Development Department
389 Congress Street
Portland, Maine 04101
cdg@portlandmaine.gov
Ph: (207) 874-8608

<<<Ellen Bailey <efbailey66@gmail.com> 8/14/2014 3:06 PM >>>

Hi Nell (and I was told Christine Grimando is also a person to send this to),

My name is Ellen Bailey and I am a resident of East Bayside. I have communicated with you before about Jonathan Culley's proposal to rezone 89 Anderson Street. He just recently sent out an e-mail letting us know that he is seeking B-1 zoning now.

I have been reading up on B-1 zoning, but am unclear about a couple of details. I was wondering if you could answer my questions and then let me know where I can find the information. I am looking for the correct document and the correct section.

1. My first question is about parking in a B-1 zone. It is not clear to me how many parking spaces must be provided for anyone. I was wondering if you could tell me how many on-site parking spaces are required for the residents and how many are required for whatever business is located on the first floor.

2. My second question relates to sight lines or what I have read in the "Transportation Systems and Street Design Standards" as Sight Distance. This document states, "Where driveways or new streets enter an existing street, vehicular sight-distance shall conform to standards established by the Maine DOT as contained in their publication, Chapter 299, Highway Driveway and Entrances Rules and noted below for entrances with standard vehicles." In the table referred to, it states that for a 25 mph speed limit, a sight-distance of 200 feet is required. My question is this: Do new buildings have to maintain this same guideline? Of course, it would make sense to me that they should, since the Maine DOT has determined the safest distances for sight distance, whether it be a new street, new driveway or new building. Specifically, I am very concerned that the building proposed at 89 Anderson Street will significantly limit drivers' sight-distances because the building will directly obstruct the driver's view. I pointed out the danger inherent in the Fox St./ Anderson St. intersection due to the angle at which the two streets meet in the last planning workshop for this proposal.

This is what I stated:

"Here is the situation: Anderson Street meets Fox Street at a fairly sharp angle on its north side and at a right angle on its south side. 89 Anderson Street is on the south side. Unfortunately, this means the four corners of this intersection are substantially out of alignment.

The lack of visibility will be most pronounced for people coming down Fox Street from Washington Avenue. To their right will be the angled part of the intersection and to their left, several feet beyond their stop sign will be the other part of Anderson Street. The fact that the left hand part of Anderson Street is several feet ahead of the stop sign is what creates the obstructed view. I actually measured the distance between the stop sign's location on Fox Street and the potential corner of the Redfern building. It is about 40 feet.

This lack of alignment means that if 45-50 walls are built flush with the sidewalk in that location, drivers coming down Fox from Washington will have a mostly obstructed view to their left. In fact, from what I have observed, only a portion of the first car will be visible. Nothing behind it will be visible, including pedestrians, cyclists and children. This lack of visibility will be even worse in the winter with the addition of snow banks."

If this building goes up as proposed, then drivers from the east side of Fox Street and the south side of Anderson will probably not even be able to see 30 feet down the adjoining street, let alone 200 feet. I am also concerned about allowing any zoning in there that allows the owner to build right up to the street because of this. I was wondering if you could clarify how far is required by law in terms of sight-distance and if it is legal for a building to obstruct the view of the driver sitting at the stop sign.

I am really trying to see the issues before they happen, as I use this intersection frequently, both as a driver and as a pedestrian.

Thank you for your help with these two questions Nell.

Sincerely,
Ellen Bailey (17 Hammond Street)

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From: Kevin Donoghue <kjdonoghue@portlandmaine.gov>
To: Rosalee Lamm <nosasaurus@hotmail.com>
CC: <tobyrzepka@gmail.com>, Jeremiah Bartlett <JBartlett@portlandmaine.gov>, Bruce Hyman <BHYMAN@portlandmaine.gov>, Jeff Levine <JLEVINE@portlandmaine.gov>, Alex Jaegerman <AQJ@portlandmaine.gov>, Christine Grimando <CDG@portlandmaine.gov>, John Peverada <jbp@portlandmaine.gov>
Date: 8/19/2014 8:53 PM
Subject: Re: Housing development and traffic in East Bayside

Hi Rosalee,

While I'm very supportive of new housing in our increasingly costly part of town, as a father of four-year-old, safe streets are also paramount. There are major intersection safety improvements at Fox and Anderson set to begin this fall and pedestrian beacons at Fox/Walnut/Washington are new but coming under pressure and may deserve a warrant analysis for full signalization. I'll look into that. With regards to speed on Fox Street, I'm open to all suggestions, perhaps a centerline and narrower travel lanes like on Congress from Washington to North Street with a climbing bike lane? Today, a neighbor of yours suggested to me limiting parking on this stretch, yet parking is precious. Again, I'm open to your suggestion here, especially re: traffic calming, some of which could be made to be conditions of approval for pending housing developments in the area.

Thanks for writing,
Kevin

On Aug 19, 2014 8:36 PM, "Rosalee Lamm" <nosasaurus@hotmail.com> wrote:

Dear Councillor Donoghue,

I own a house at 13 Fox Street, where I live with my husband and 3-yr-old daughter. I am concerned about the new housing units being built in my neighborhood (Walnut street development; Avesta housing on Washington; and the lot that 3Gs currently occupies).

The biggest concern for me and my neighbors is traffic on Fox street. Already, there is barely room for 2-way traffic—cars must slow way down to pass each other when vehicles are parked on both sides of the street, and our side mirror has been broken 3 times in 4 months by passing cars when we have parked on the street. The intersection of Washington and Fox is already very congested, and it will only get worse with the new developments going in. Above all, it is unsafe; cars speed up and down Fox street, there is no traffic light for cars or pedestrians, and it can be nerve-wracking to cross the street with my 3-year-old.

Please, before the new housing on Washington st and on Anderson St. gets approved, the city needs to analyze and resolve the traffic and parking issues in the neighborhood, particularly on Washington st. and Fox st. Building without considering the traffic patterns would be doing things in the wrong order. Please make sure the neighborhood can safely and appropriately accommodate the new housing first.

Thank you,

Rosalee Lamm
13 Fox St.
Portland, ME 04101

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From: Kevin Donoghue <kjdonoghue@portlandmaine.gov>
To: Toby Rzepka <tobyrzezka@gmail.com>
CC: Lamm Rosalee <nosasaurus@hotmail.com>, Tom Errico <thomas.errico@tylin.com>, Jeff Levine <JLEVINE@portlandmaine.gov>, Mike Bobinsky <mbobinsky@portlandmaine.gov>, Jeremiah Bartlett <JBartlett@portlandmaine.gov>, John Peverada <jbp@portlandmaine.gov>, Helen Donaldson <HCD@portlandmaine.gov>, Bruce Hyman <BHYMAN@portlandmaine.gov>, Sheila Christian <SHC@portlandmaine.gov>
Date: 8/25/2014 10:47 PM
Subject: Re: Housing development and traffic in East Bayside

Hi Toby,

Thanks for your reply. You're correct to observe that a well-developed street grid helps spread traffic regardless of whether there are one-way streets, but is especially necessary in those instances. You're also correct that it is not as wide as Congress on the Hill, but the experience of narrower striped lanes may offer some options short of removing parking residents depend on. Absent a climbing bike lane, a center line yielding a broad climbing lane and a narrow coasting lane may well help address these concerns. A peer-reviewed traffic study has been commissioned by Jonathan Culley here and I will ask that his contracted engineer, or at least peer reviews on staff, consider this.

Thanks,
Kevin

On Thu, Aug 21, 2014 at 10:47 AM, Toby Rzepka <tobyrzezka@gmail.com> wrote:

Dear Kevin,

This is Toby Rzepka, a resident of 13 Fox St. and husband of Rosalee Lamm, who emailed you a couple of days ago after the EBNO meeting--I could not attend because I was home with our 3-year old. We've been talking a lot with each other and with our neighbors about traffic issues and I wanted to join the conversation. I appreciated your thoughtful response to Rosalee's email and would like to express my concerns and hopes for the neighborhood.

I agree with the need for more housing on the peninsula, and have no objection to a higher density R6. But like Rosalee and many of our neighbors, I think the traffic situation needs to be sorted. While the intersection of Walnut/Washington/Fox is dangerous, I'm more concerned with the increased volume of traffic racing up Fox St. as much of the hill uses it as a connector to Franklin Art and 295. With both the Hill and East Bayside increasing in density, I believe there will be an eventual need to make Fox one-way. Obviously, this would require opening up other connectors, either by connecting Gould St. to Washington or connecting Marginal to Washington--but Fox St. is not wide enough to support the kind of traffic that will be using it after all the new (and future) developments go in. As the neighborhood increases in density, Fox St. will become congested and dangerous, not to mention frustrating for drivers, who often have to stop and pull over to allow oncoming vehicles to pass as it is. This street was clearly never meant for this kind of heavy traffic, especially considering the parking on both sides.

In the meantime, I love your idea about a yellow line and a bike lane--and we could even consider speed bumps, as people tend to tear down the street (especially motorcycles). But because cars often have to pull over to let each other pass, I'm not sure how there would be room for strict lanes plus a bike lane and two rows of parking. This illustrates the problem--the street's not big enough for what it is being asked to do and we need to spread the burden.

The other big issue potentially affecting Fox St. traffic is the Nova Star truck storage behind Bunker Brewing. I can't imagine how the feel of the neighborhood would change with a dozen large semis rolling through it daily. This neighborhood is currently a great place for families (and getting better!) and I'm worried that will change for the worse with more traffic and more industrial trucking. I realize that, as a brownfield site, the uses for the owner are limited, but surely the answer is not to further industrialize the street adjacent to the PHA complex where so many families with children live.

I am really excited for the Fox/Anderson intersection changes. If this could be combined with a ban on tractor trailer parking on lower Fox St., it has the potential to transform the area adjacent to the PHA housing complex from a gritty industrial-looking street to a lovely, park-side, pedestrian area. Though obviously the other side of Fox is de facto industrial, the businesses there are largely pedestrian/retail friendly as well (i.e. Coffee By Design, Rising Tide, Maine Craft Distilling, Tandem Coffee, etc.). If we can push toward the human scale and away from the industrial scale of lower Fox, we could draw more business, more tourism, and make East Bayside a better place to live.

To sum up: My vision for Fox St. is a densely populated, pedestrian-friendly street with sidewalks throughout and reduced traffic. This can be accomplished by:

1. Making Fox St. one way by connecting Gould St. or Marginal to Washington
2. Banning tractor trailer parking on lower Fox St.
3. Preventing the Nova Star trucking project from going forward
4. Installing sidewalks on lower Fox and Anderson

I hope you and others share my vision--with each meeting focusing on one specific issue, it's hard to lose site of the big picture.

All the best,

Toby Rzepka

From: Karen Snyder <karsny@yahoo.com>
To: Helen Donaldson <hcd@portlandmaine.gov>
Date: 9/10/2014 3:49 PM
Subject: Re: Concerns for last July 22nd meeting and proposed map amendment, 89 Anderson Street

Hi Nell,

Firstly, the link you provided only got us to the front page of the Portland Planning web site. Were you trying to send us a link to Jonathon's last agenda? Secondly, Jonathon's traffic study which was scanned was partially cut off and not complete so one could not read it entirely.

I am sorry but I guess I am kind of confused by Jonathon's emails regarding latest traffic information for the intersection of Fox and Washington and his latest proposal of asking for zone B1B instead of B2B in a zone which is primarily zoned R6. It appears that Jonathon did not hear the concerns of the neighborhood residents as well as some of the planning board members concerns regarding the first planning meeting held on July 22, 2014.

Majority of the local residents that attended the July 22, 2014 meeting expressed their opinions and disagreed with Jonathon's proposal.

Point 1: Majority of the local residents in that neighborhood specifically expressed they zoning should be kept at R6 at 89 Anderson.
Point 2: Even some of the planning board members, specifically Bill Hall, expressed that there should NOT be 'spot zoning' in neighborhoods where residential R6 zoning is the only zone.
Point 3: Traffic congestion is all ready dangerous in this intersection (Fox & Anderson) but it is still workable. Any more complexity and traffic to this intersection and it will have to be reworked (Especially Jonathon's poor design of spilling out the apt garage onto Fox Street). Why should our tax payer/ property taxes monies be used to repair this traffic corner if this proposal is approved for some reason? It is an barely acceptable intersection now but if Jonathon builds on this site, Jonathon needs to be pay for this traffic intersection redesign and construction and NOT THE TAXPAYERS of the city of Portland.
Point 4: The reason why Jonathon wants to have 89 Anderson zoned a B1 or R7 is based strictly on his profit margin even though the local residents want it kept as a R6. Because he wants the highest amount of apartments jammed into that space.

Some additional comments heard from the planning board member, Carol Morrisette kept on repeating the fact that she wants "diversity" in this neighborhood. I would like to specifically ask her what is she talking about? That East Bayside neighborhood has an amazing diversification of people all ready. There are blue collar workers, teachers, artists, electricians, nurses, immigrants from Africa and Asia, etc. What does she mean she wants diversity? It must be diversity of income since these are expensive apartments starting at 1,000/ month for a studio unit at this proposed development.

Ultimately, I think it comes down to accountability and living in these neighborhoods. The Portland Planning Board members and the developer, Jonathon Culley, spout "infill is good" yet they themselves do not live on the peninsula. Additionally, they really don't care about the ramifications of the development or if it hurts the quality of life for the current residents because it appears their primary concerns are the developer's profit margin and increased property taxes for the city. As a local resident of the City of Portland and multiple property owner, this is very disappointing to watch again and again by the current city of Portland establishment of planning board members and the developers with all these backdoor wheeling and dealing that is going on.

When will the local resident voices be heard and considered?

Regards,
K. Snyder
East End Resident

On Tuesday, September 9, 2014 9:21 AM, Helen Donaldson <HCD@portlandmaine.gov> wrote:

To Whom It May Concern,

Please be advised that the City of Portland has received additional materials related to the proposed zoning map amendment for 89 Anderson Street. These materials include a traffic impact analysis. The applicant has indicated the intent to provide further supplemental information, including an analysis of consistency with the Comprehensive Plan, in the coming days.

If you are interested in seeing these materials, please don't hesitate to contact me. I am happy to either send pdfs or provide an opportunity for you to view a paper copy in person.

We have tentatively scheduled this proposal for a second workshop with the planning board on September 23. You can follow the board's agenda and find workshop materials on the city's website: <http://www.portlandmaine.gov/211/Planning-Board>

As always, we appreciate your input on this and other projects.

Best,
Nell Donaldson

Nell Donaldson
City of Portland Planning Division
389 Congress Street
Portland, Maine 04101
874-8723
hcd@portlandmaine.gov

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September 18, 2014

To Nell Donaldson (City Planner)

Thank you for the opportunity to submit comment on Redfern's rezoning request for 89 Anderson Street.

I have previously submitted comment on this proposal (July 20). Since then, many things have occurred that have, or will have, impact on this area of East Bayside, as follows:

1. The intermodal transportation facility at 122 Anderson Street has been conditionally approved by the Planning Authority;
2. East Cove Townhomes proposal for rezoning/development at 145-155 Washington Avenue is under consideration by the Planning Board;
3. The Franklin Redesign Committee has unveiled proposals to help "fix" the Marginal Way/Franklin Arterial intersection;
4. I've become aware of yet another development in the works for 192 Washington Avenue for 15 market rate apartments;
5. Redfern has changed its rezoning request from B2-b to B1-b and conducted a traffic impact study;
6. I have taken the time to research, analyze, document, and discuss/share with City staff, City Councilors, East Bayside residents, business owners, and visitors to Fox Field (Kennedy Park), a number of safety concerns that relate to the entire length of Fox Street.

On the advice of City Councilor, Kevin Donoghue, I am submitting the most recent version of the research, referred to in #6 above, as part of my comments today regarding Redfern's proposal for rezoning 89 Anderson Street. It is my intention to make this information available to all of the Planning Board members for consideration at this time, and this is the method that Councilor Donoghue suggested to accomplish that goal.

Yesterday, I met with Jonathan Culley and William Bray, the traffic consultant hired by Redfern to conduct the Traffic Impact Study related to the rezoning request for 89 Anderson Street. At that meeting I was shown, and later emailed, an addition to the original study. This addendum provides traffic volume counts for the existing business (3G's), located at 89 Anderson Street, that should be subtracted from the traffic volume numbers, previously reported in the study, that will be generated by Redfern's proposed development of 53 housing units, in order to arrive at the net increase in traffic volume.

These are my comments about the Traffic Impact Study:

1. In paragraph one, on page one of the study, it is stated that "Access to the covered parking spaces will be provided through a single entrance located on Everett Street."

This statement indicates a change from the original plan to provide access from Fox Street. As this addresses one of my previously submitted concerns, I want to express my gratitude for this change.

2. It is my understanding that this traffic study was conducted at the same time as gas line upgrade construction was being conducted on Washington and Cumberland Avenue. This construction certainly would have impacted the traffic volumes counted at this time because traffic was diverted and drivers were likely to choose to “stay away” from this congestion.
3. It is also my understanding that the PM Peak Hour traffic counts did not include traffic volumes generated by athletic events, (i.e. games and/or practices of the Portland Youth Football League, Portland Area Youth Soccer, Portland Adult and Women’s Rugby, etc.) on Fox Field (Kennedy Park).
4. I appreciate that this traffic study included an analysis of “traffic generated by projects that have been approved by the Local Planning Board and/or the Maine Department of Transportation, yet are not opened.” However, the following proposals for development are not included, yet are most likely to be approved, and will impact this area, one of them (the “fix” for the Marginal Way/Franklin intersection), quite significantly:
 - a. The option for “fixing” the Marginal Way/Franklin intersection that was “least hated” by East Bayside residents and business owners who attended a September 4 neighborhood meeting would bring a substantial amount of additional traffic volume to this area because:

Vehicles, driving west on Marginal Way, from East Bayside will not be able to go straight, or turn left, at the Franklin Street intersection; they will only be able to turn right, to access Rte. 295, north or south. Vehicles will still be able to enter East Bayside, turning right or left, from Franklin Street, or heading straight through on Marginal Way from Bayside. However, they must use connecting streets, through the industrial zone, to Fox Street, in order to leave.

- b. Additional traffic volume from East Cove Townhomes, the proposed rezoning/development at 145-155 Washington Avenue, also being considered at this Planning Board meeting, on September 23, 2014;
 - c. Additional traffic volume from an upcoming development for 15 market-rate apartments at 192 Washington Avenue.
5. I also appreciate the attention paid in this traffic study to the intersection at Walnut/Washington/Fox Streets, including the updated designation of this intersection as a “high crash location,” and the suggested remediation measures for Walnut Street and the dysfunctional pedestrian crossing equipment at both existing Washington Avenue crosswalks. However, the preliminary traffic warrant evaluation for full traffic signalization at this intersection, conducted under this study concludes that:

“ . . . present intersection traffic volumes and/or other factors do not appear to satisfy the warrants for traffic signals.”

Perhaps a study done when there is no gas line construction along this section of Washington Avenue would produce a different result. However, even full signalization, at this intersection, would not adequately address the conditions that contribute to its designation as a high crash location. Parking restrictions along “upper” Fox Street, east of Anderson Street are needed, as well as suitable, and doable, remediation measures for Walnut Street.

6. In summary, about the traffic study: I greatly appreciate this effort to analyze the traffic impact of the proposed rezoning/development at 89 Anderson Street. However, this study, although conducted using current, applicable industry standards, is still simply a snapshot in time, and more art, than science. Yes, there are lots of numbers involved, but, my 28 year career as a public accountant has taught me that numbers, even though presented according to all professional compliance standards, are only representations, much like any piece of artwork. Human, common sense interpretation, and knowledge of the larger context within which they are presented, must be applied for these representations to be utilized as effective tools for decision-makers.

There are two more comments I wish to make today for this 2nd Planning Board Public Workshop on Redfern’s proposal for rezoning/development at 89 Anderson Street, as follows:

1. Sight-line issues at the Fox/Anderson Street corner would be caused by the building, as currently depicted in the architectural drawings presented at the July 16 neighborhood meeting, at this location. My research about this issue revealed that this corner does not meet the City of Portland’s Transportation Systems and Street Design Standards for the “Horizontal Alignment of Streets,” stated in Section 1.3 of the City of Portland Technical Manual, as:

“When two streets intersect and one street is an arterial or collector street, or both streets are arterial or collector streets, the angle of intersection shall be 90 degrees. When two streets intersect and neither street is an arterial or collector street, the angle of intersection shall be at least 75 degrees and no greater than 105 degrees.”

Streets are classified in accordance with the Federal Highway Administration Functional Classification Guidelines. Fox and Anderson Streets are currently classified as “Local Streets.” However, these classifications have not been updated since 2005. Fox Street has likely become a “Collector Street” since then. If it isn’t now, then it will be very soon.

Yesterday, when I met with Jonathan Culley and William Bray, I was informed that a different standard, than the one quoted above, applies to an intersection which has 4-way stop signs. Apparently, the intersection meets this different standard if a driver, stopped in-line with the stop sign, can see the cars, at all, that are also stopped in-line with the stop signs at any of the intersecting street segments. I can only assume that this same standard applies equally to 4-way stop intersections that meet at 90 degree

angles. I sincerely hope that the Planning Board will seriously question the applicability of this standard for this specific situation:

- a. The northern street segment of Anderson Street intersects Fox at roughly a 45 degree angle;
 - b. The stop sign on the eastern street segment of Fox Street is located approximately 35-40 feet from the right-angle line of intersection with the southern street segment of Anderson Street;
 - c. Currently, there are four different land use zones that converge at this corner: Residential Zone R-6; Recreation and Open Space Zone R-OS; Urban Commercial Business Mixed Use Zone B5; and Low Impact Industrial Zone IL-b. The convergence, at this corner, of all of these land use zones, already creates a challenging situation in regards to safeguarding residential, business, and industrial vehicular traffic and parking, as well as Fox Field visitor vehicular traffic and parking, and all pedestrian, and bicyclist traffic. Redfern's request to rezone 89 Anderson Street from R-6 to B1-b will certainly increase this challenge.
 - d. The community center/mosque, located within the IL-b zone, at this corner, conducts frequent, outdoor gatherings and activities for its members, families, and children, creating an additional safety consideration.
2. Why B1-b? I still do not understand the rationale for requesting this specific zone for a 53 unit housing development. As I stated in my previous comments to the Planning Board on July 20, the community space does not seem sufficient for anything other than an office; and the commercial space seems like an after-thought to justify the zone. Placing a restaurant, with its additional traffic and parking requirements at this corner does not make any sense in relation to the safety challenges already discussed and already present at this location. Therefore, I do not support this request for rezoning, and most certainly do not support any extension of the B1-b zone further east up Fox Street or in any direction along Anderson Street.

Thank you for your consideration of my comments. I hope you will take the time to look through the other documents I have submitted as comment, as well. I look forward to further discussions with you at the workshop on September 23.

Sincerely,

Cynthia L. Cochran
17 Hammond Street
Portland, ME 0410
(207) 773-0522
ccochran@maine.rr.com

Fox/Anderson Street Safety Concerns & Other Important Issues

Contents List

Street Design Issues

Traffic Lights & Traffic Calming Issues **UPDATED!**

Parking Issues **UPDATED!**

Redfern's Rezoning/Development at 89 Anderson Street **UPDATED!**

Cardente's Land Use Proposal - 122 Anderson Street **UPDATED!**

Franklin Street Redesign - Fix Marginal Way/Franklin Streets
Intersection – Impacts on East Bayside? **UPDATED!**

Proposed Revision - Residential R-6 Zoning Ordinance

Other Issues for Discussion:

School Children - Traffic & Related Safety Issues

Multiple Zones/Land Uses along Fox Street

Does the IL-b Zoning Ordinance Need an Update?

WOW! There's an awful lot going on!

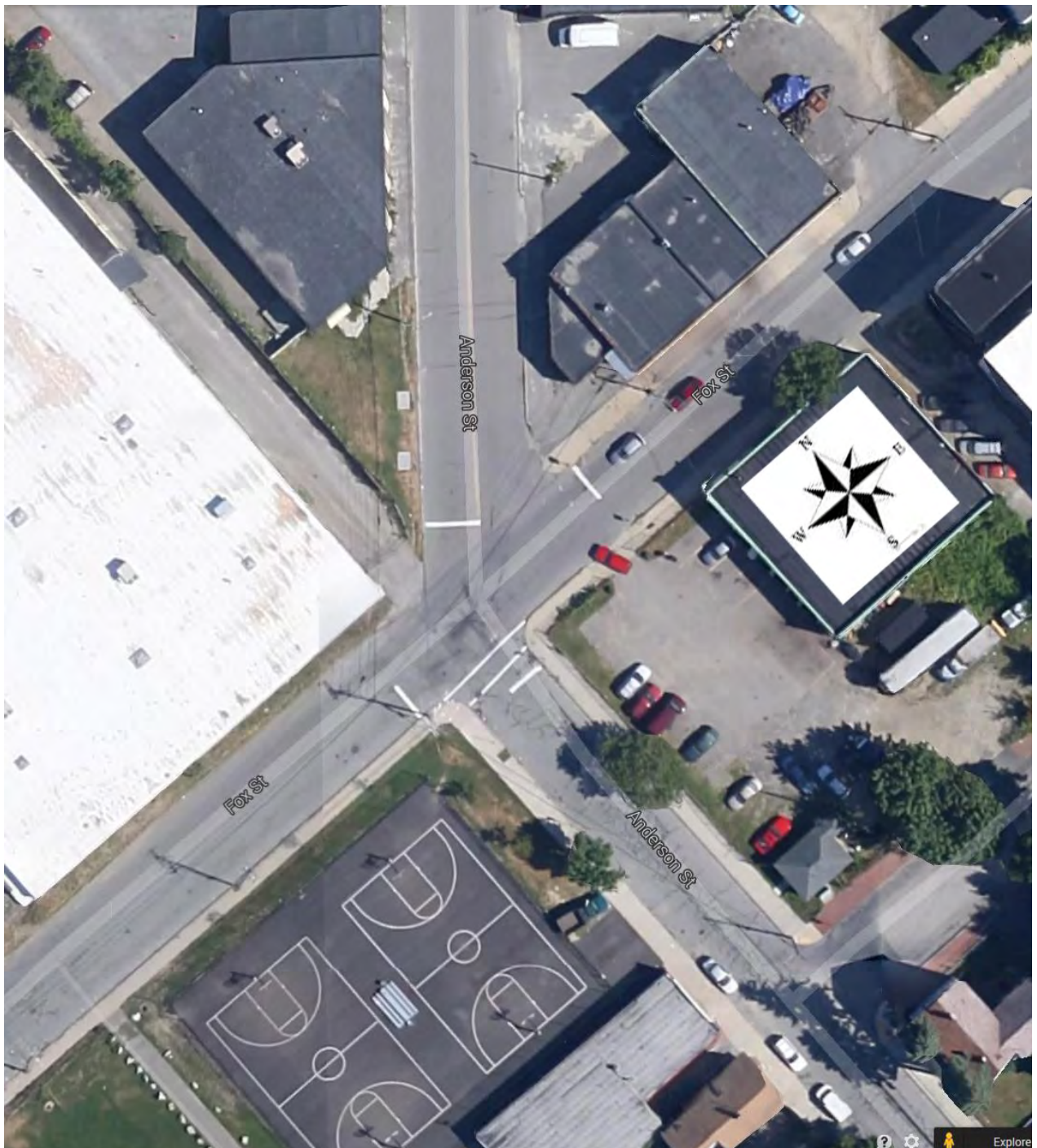
Contacts & Links

I. Street Design

A) Fox/Anderson Streets Corner

- 1) This corner does not meet the City of Portland's Transportation Systems and Street Design Standards for the "Horizontal Alignment of Streets," stated in Section 1.3 of the City of Portland Technical Manual, as:

"When two streets intersect and one street is an arterial or collector street, or both streets are arterial or collector streets, the angle of intersection shall be 90 degrees. When two streets intersect and neither street is an arterial or collector street, the angle of intersection shall be at least 75 degrees and no greater than 105 degrees."



- a) Streets are classified in accordance with the Federal Highway Administration Functional Classification Guidelines.
 - b) Fox and Anderson Streets are currently classified as “Local Streets.” However, these classifications have not been updated since 2005. Fox Street has likely become a “Collector Street” since then. If not now, then soon. **(See Attachment A)**
- 2) If Redfern’s proposals for rezoning and development of 89 Anderson Street are approved, this corner will not meet Maine DOT’s or the City of Portland’s Transportation Systems and Street Design Standards for “Sight Distance,” stated in Section 1.6 of the City of Portland Technical Manual, as a measured distance of 200 or 250 feet for speed limits of 25 or 30 mph, respectively. The walls of the proposed building will obstruct these required sight distances. **(See IV,A, 1-3 below and Photos at Attachment F).**

B) Fox Street/Washington Avenue Corner

- 1) This corner does not meet the City of Portland’s Transportation Systems and Street Design Standards for “Street Grades,” stated in Section 1.4 of the City of Portland Technical Manual, as follows:
- “Street grades at intersections shall not be more than three (3) percent for a distance of one hundred (100) feet from the center of the intersection.”**
- 2) Due to the downhill slope of Fox Street from its intersection with Washington Avenue, as well as allowed on-street parking, this corner does not meet Maine DOT’s or the City of Portland’s Transportation Systems and Street Design Standards for “Sight Distance,” stated in Section 1.6 of the City of Portland Technical Manual, as a measured distance of 200 or 250 feet for speed limits of 25 or 30 mph, respectively. **(See III,A,2 below)**

II. Traffic Lights & Traffic Calming Issues

A) Crosswalks/Curbs/Sidewalks **UPDATES! (See #1-4 below) (See Larger Map of Area - Attachment B)**

- 1) A request was sent on 9/11/2014, to Bruce Hyman and Tom Errico to provide the latest, detailed description and time-line projections for all phases of this long-awaited project.
- 2) Clarification received from Tom Errico, private consultant, thomas.errico@tylin.com on 9/10/2014.
 - a) Work this fall (Nov) will be sub-surface level (i.e. below ground level).
 - b) There are different phases to these planned improvements; details are dynamic.
 - c) We won’t see any sidewalks or curb extensions until next year.
- 3) Bruce Hyman, (Public Works, BHYMAN@portlandmaine.gov, 874-8833) projected earlier that:
 - a) New sidewalks on north side of Fox/west side of Anderson Streets and the west side of Anderson/ north side of Fox Streets (to just beyond the Community Center building) are scheduled to begin ~~(Oct)~~. **Updated date is next spring.**
 - b) Crosswalks and curb extensions on three sides of the Fox/Anderson Streets corner are scheduled to begin ~~(Oct)~~. **Updated date is next spring.**
 - c) Additional sidewalks on Anderson Street and curb extensions/crosswalks at the fourth corner (3Gs corner) at Fox/Anderson Streets will be scheduled for 2015.

- 4) Crosswalks (at least paint lines and related signage to restrict parking) are needed for corners of Diamond and Fox Streets. **Something like this is supposedly included in phase 2 of this project.**
 - a) Increased pedestrian patronage at Coffee By Design, Rising Tide Brewing Company, and other area business require safer passage across these streets.
 - b) Increased pedestrian and bicyclist traffic accessing the East Bayside portions of the Portland Trails.
- 5) Crosswalks (at least paint lines and related signage to restrict parking) are needed for corners of Anderson and Madison Streets. Many children cross at this location from PHA's Kennedy Park campus to attend activities at The Root Cellar on Washington Avenue.
- 6) Traffic Lights should be installed at corners of Fox/Anderson and Fox/Washington in light of the failures, cited above, to meet street design safety standards, and increased residential, recreational, commuter, pedestrian, and bicyclist traffic all along Fox Street.

III. Parking Issues (See Larger Map of Area - Attachment B)

A) Parking Along Fox Street from Anderson Street to Washington Avenue

- 1) Parking on both sides of "upper" Fox Street causes persistent obstruction to a safe flow of two way traffic. Winter snow and parked vehicles restrict traffic flow to one lane only.
- 2) Although parking is restricted as far down as 50 ft. from Washington Avenue on the South side of "upper" Fox Street, this is not the case for the North side, where parking is allowed for an additional 35 feet from the "No Parking from Here to Corner" sign. This contributes to the failure to meet Maine DOT's or the City of Portland's Transportation Systems and Street Design Standards for "Sight Distance," stated in Section 1.6 of the City of Portland Technical Manual at the corner of Fox and Washington Avenue. **(See I,B,2 above)**
- 3) The "No Parking – Here to Corner" signage is missing (i.e. not there) on Fox Street corners with Hammond and Winthrop Streets and on Hammond Street corners with Fox Street. Cars parked consistently within 25 ft. of these corners block drivers' vision as they pull out onto Fox Street, creating a safety hazard.

Recommendations:

- (a) Restrict parking further down the North side of Fox Street from its corner with Washington Avenue to the edge of the Gallery Parking Lot driveway.
- (b) Restricting parking to one side only of Fox Street, East of Anderson Street
- (c) Put up the missing "No Parking" signs

B) Parking Along Fox Field **UPDATE! (See Recommendations, a-b below)**

- 1) Up to 4-5 tractor trailers consistently park along Fox Field, often for 2-7 days at a time **(Photos at Attachment C)**
 - a) Greatly reduces availability of parking for participants in Fox Field activities
 - b) Greatly reduces safety due to decreased sightlines for all users on Fox Street (pedestrians, bicyclists, and vehicular traffic)
 - c) These tractor trailers do not belong to, nor conduct business for the industrial zone businesses across the street.

Recommendations:

- a) 3 hour limit on south side of Fox Street between Franklin and Anderson Streets. This allows adequate parking time for field event participants
 - b) Petitions and supportive signatures, in support of this proposal, were collected and submitted to Jeremiah Bartlett. These, along with Kevin Donoghue's sponsorship, will be reviewed by the Transportation, Sustainability, and Energy Committee (TSEC) at their Sept. 17 meeting
- 2) There is no off-street parking available for participants or spectators using the basketball courts and/or Fox Field. This situation results in cars parked illegally, as well as cars parked on the business lots across the street. The business lots are restricted for business patrons and are clearly marked as such. **(Photos at Attachment D1 and D2)**
- a) Fox Field is a City owned Recreation and Open Space (R-OS) Zone. Division 20, Sec 14-332.1 of City Zoning Code states:

"Recreation open space zone: Off-street parking adequate to serve projected employee and visitor needs shall be provided."
 - b) Fox Field use has increased substantially over the past few years.
 - c) Traffic volume on Fox Street has substantially increased over the past few years and will increase further due to current, and on-going housing developments in the area
 - d) Field users, opening driver-side doors to unload multiple passengers and athletic equipment, create numerous traffic hazards
 - e) Children and adults walking between vehicles into the Fox Street roadway create a safety hazards for all users on Fox Street due to the reduced sightlines between vehicles, and often, the sudden and unexpected nature of these movements.

Recommendations: **(Photos at Attachment E)**

- a) Create an off-street, parking area behind the facilities building and two residential properties at 80 - 90 Anderson Street with gated access from Fox Street, between the basketball courts and the athletic field.
- b) A locked gate should be installed to allow use only during athletic events. Discuss possibility with Ethan Owens, City's Athletic Facilities Manager, ewens@portlandmaine.gov.
- c) Use grasscrete instead of pavement to retain a permeable surface area. Keeps the grass growing! See description and examples of grasscrete [here](#).

IV. Redfern's Rezoning/Development at 89 Anderson Street

A) Restricted sight-lines at Fox/Anderson Street corner **(See I,A, 1-2 above and Photos at Attachment F)**

- 1) Architectural drawings presented at the Neighborhood Meeting on July 16 locate the building walls at the edges of the sidewalks along Fox and Anderson Streets
- 2) Due to the angle at which Anderson Street intersects Fox Street from the North, the Stop Sign at the foot of Fox, when headed west, is located 35-40 feet back from the location of the end of the sidewalk on the opposing corner.
- 3) 45-50 foot walls would obstruct the view of vehicles coming to Fox Street from the residential area south on Anderson Street, as well as those coming down the hill from Washington Avenue on Fox Street.

B) On-site parking to be accessed from Fox Street UPDATE! Access now from Everett Street! (See separate PDF file: Traffic Impact Study provided by Jonathan Culley on 9/9/2014)

- 1) Architectural drawings presented at the Neighborhood Meeting on July 16 locate the entrance/exit for the 53 proposed, on-site parking on Fox Street
- 2) This creates substantial, additional safety hazards for all users of Fox Street.
- 3) Locating the parking access on Everett Street is a reasonable alternative.

C) Overflow parking for residents and patrons of the proposed restaurant

- 1) This has not yet been addressed. At the Neighborhood Meeting on July 16, Jonathan mentioned the possibility of obtaining parking, directly across Fox Street, from same property owner (as 3Gs). However, it has become common practice for “on-peninsula” developers to take advantage of an option to pay fees to the City instead of providing the number of parking spaces required by zoning ordinances. (See City of Portland Code of Ordinances, Chapter 14 - Land Use, Division 20 – Off-Street Parking, Sec. 14-345).
- 2) Parking requirements for B1 zone: 1 for each residential unit; 12 for the restaurant space and 1-4 additional for other commercial space, depending on use of occupant, totaling 66-69.

D) Information Resources: UPDATE!

- 1) Planning Board Workshop #2: September 23, 2014, 7pm, City Council Chambers. Documents and materials have not yet been posted, but will be available from [here](#).
- 2) Email Update from Redfern’s Jonathan Culley on August 4, 2014 (Attachment G)
- 3) Architectural drawings presented at July 16 Neighborhood Meeting (Attached)
- 4) Proposal Documents for July 22 Public Workshop:
 - a) [Planning Staff Memo](#)
 - b) [Applicant's Submittal](#)
 - c) [Neighborhood Meeting Packet](#)
 - d) [Public Comment](#)

V. Cardente Realty’s Land Use Proposal for 122 Anderson Street

A) Intermodal Transportation Facility for staging up to 30 tractor trailers for the Nova Star Ferry operations from mid-May thru early November UPDATE! (See #1 below)

- 1) Clarification was obtained from Tom Errico regarding monitoring process outlined in Section B, iv of the conditional approval at 9/10 meeting with City staff.
 - a) Monitoring time-frames will be coordinated with information from Recreation & Facilities management to include days & times when Fox Field is in use.
 - b) Monitoring will be conducted within the two week period of commencement of operations (i.e. in Sept/Oct 2014) and will also be conducted during the 2015 season, once operations have become more established (i.e. July/August, 2015).
- 2) This land use proposal received conditional approval from the City Planning Authority on August 15, 2014. (See attached approval letter for waivers and conditions)
- 3) Only 15 tractor trailers are allowed during 2014.

- 4) It appears that each trailer will pass through the Fox/Anderson Street corner twice daily, on its journeys to and from this staging site (i.e. 15 trucks = 30 trips). **(See attached map)**

VI. Franklin Street Redesign – Impact on East Bayside? **UPDATE!**

A) Fixing the Marginal Way/Franklin Arterial intersection: **(See new attachments, #1-2 below)**

- 1) Meeting held Sept 4 at Zero Station, 222 Anderson Street:
 - a) Meeting flyer, meeting notes, and graphic illustrations of proposed solutions are presented in attachments. **(See attachments pages 22-28)**
 - b) **Please note:** The solution titled “Restricting Out-Movements from East Marginal Way,” that was “disliked the least,” will increase traffic volumes on Fox Street. **(See attach, page 25)**
- 2) **Follow up meeting to discuss these options further:** Franklin Street Public Workshop will be held on Wednesday, October 1 at Rines Auditorium/Portland Public Library from 5:30 to 7 pm.

B) Franklin Street Redesign Committee – City web site is [here](#).

C) Documents currently available from this site:

- 1) [Alternative Cross Sections](#)
- 2) [Station Graphics](#)
- 3) [Minutes of April 3, 2014 Meeting](#)
- 4) [Minutes of January 29, 2014 Public Workshop](#)

VII. Proposed Revision of Residential R-6 Zoning Ordinance

A) R-6 Zone changes web site: <http://www.portlandmaine.gov/1260/Amendments-to-the-R-6-Zone>

B) Cliff Notes (underlying details are not yet available): **(See attached City Zoning Map)**

Potential R-6 Amendments to Dimensional Requirements		
<i>Residential Dimensional Requirements</i>	<i>Existing</i>	<i>Proposed</i>
Lot Size	4,500 sf	2,500 sf
Min. Lot Area/Dwelling Unit	1,000-1,200 sf	725 sf
Lot Area/Lodging House Rooming Unit	250 s.f	250 s.f
Street Frontage	40 feet	30 feet
Front Yard Setback	10 feet, or no more than average depths of adjacent front yards	5 feet, or no more than average depths of adjacent front yards
Rear Yard Setback	20 feet	10 feet
Side Yard Setback	10-15 feet, variable by height	5 feet
Side Yard on Side Street	10 feet	0 feet
Maximum Lot Coverage	40-50%, variable by # of dwelling units/lot	60%
Minimum Lot Width	40 feet	30 feet
Maximum Height	45 feet	45 feet
Landscaped Open Space	20-30%, variable by # of dwelling units/lot	20%
Parking	1 space/unit	1 space/unit, except none required for first 3 units

Date: June 17, 2014

VIII. Other Issues for Discussion

A) School Children - Traffic & Related Safety Issues.

- 1) Could this stop be relocated to a safer place? Greenleaf Street? Could the bus be re-routed down Madison, instead of stopping to let children off the bus on upper Fox Street?
- 2) Need for crossing guards at appropriate times and locations for East Bayside school children
- 3) What are the issues and needs for parents, children, bus drivers, etc.?

B) Multiple Zones/Land Uses along Fox Street (See attached City Zoning Map)

- 1) Six zones are currently represented on Fox Street:
 - a) Residential Zone R-6;
 - b) Residential Zone R-7;
 - c) Recreation and Open Space Zone [R-OS];
 - d) Community Business Zone B-1b;
 - e) Urban Commercial Mixed Use Zone B5;
 - f) Low Impact Industrial Zone IL-b
- 2) What opportunities and challenges does this convergence bring to our neighborhood?

C) Does the IL-b Zoning Ordinance Need an Update?

- 1) The purpose of this zoning is stated as follows in Chapter 14, Division 13 of the City of Portland Code of Ordinances:

“The low impact industrial zone is intended to provide areas in which low impact industrial uses and limited other uses serving employees and residents of the surrounding neighborhood will be compatible with adjacent residential uses, will provide a buffer between residential neighborhoods and the I-M or I-H industrial zones, or will stand alone as a smaller scale industrial district.”
- 2) Can permitted uses be updated and/or expanded to allow greater flexibility to property owners and tenants
- 3) Can additional “other uses serving employees and residents of the surrounding neighborhood” be identified and included?
- 4) Are certain currently permitted uses really “compatible” with the adjacent Recreation and Open Space (R-OS) and Residential R-6 and R-7 Zones?
- 5) Other issues and concerns?

IX. WOW! There’s an awful lot going on!

(See attached street map with known developments as of 8/31/2014)

Email Contact Information and Links to Information

City Web Site: <http://www.portlandmaine.gov/>

Portland's Comprehensive Plan: <http://me-portland.civicplus.com/562/Comprehensive-Plan>

Mayor: Michael Brennan, mfpb@portlandmaine.gov

Mayor's Office: <http://me-portland.civicplus.com/338/Mayors-Office>

District 1 City Councilor: Kevin Donoghue, kjdonoghue@portlandmaine.gov

At Large City Councilors: Jon Hinck, jhinck@portlandmaine.gov

Nicholas Mavodones, NMM@portlandmaine.gov

Jill Duson, jduson@portlandmaine.gov%20

Planning & Urban Development: <http://www.portlandmaine.gov/314/Planning-Urban-Development>

Department Head: Jeff Levine, jlevine@portlandmaine.gov

Planning Division Director: Alex Jaegerman, aqj@portlandmaine.gov

Traffic Engineer: Jeremiah Bartlett, JBartlett@portlandmaine.gov

Parking: <http://www.portlandmaine.gov/351/Parking>

Manager: John Peverada, jbp@portlandmaine.gov

Codes, Regulations & Ordinances: <http://www.portlandmaine.gov/756/Codes-Regulations-Ordinances>

Chapter 14 – Land Use: <http://www.portlandmaine.gov/DocumentCenter/Home/View/1080>

City Technical Manual: <http://me-portland.civicplus.com/DocumentCenter/View/2211>

Fox/Anderson Street Safety Concerns & Other Important Issues

Attachments List

- A - Street classification map
- B - Earth view map of Fox/Anderson Streets
- C - Photos of tractor trailers parking along Fox Field
- D1 - Photos of parking situation when Fox Field is in use
- D2 - Business parking lots filled with field use overflow
- E - Photos of possible area for off-street parking for Fox Field
- F - Photos of Fox/Anderson intersection **UPDATE!** Now shows building outline in red
- G - Email update on 89 Anderson Street proposal **UPDATE!** Emails and Traffic Study (See PDF file)

Architectural drawings of proposed building at 89 Anderson Street (3 pages)

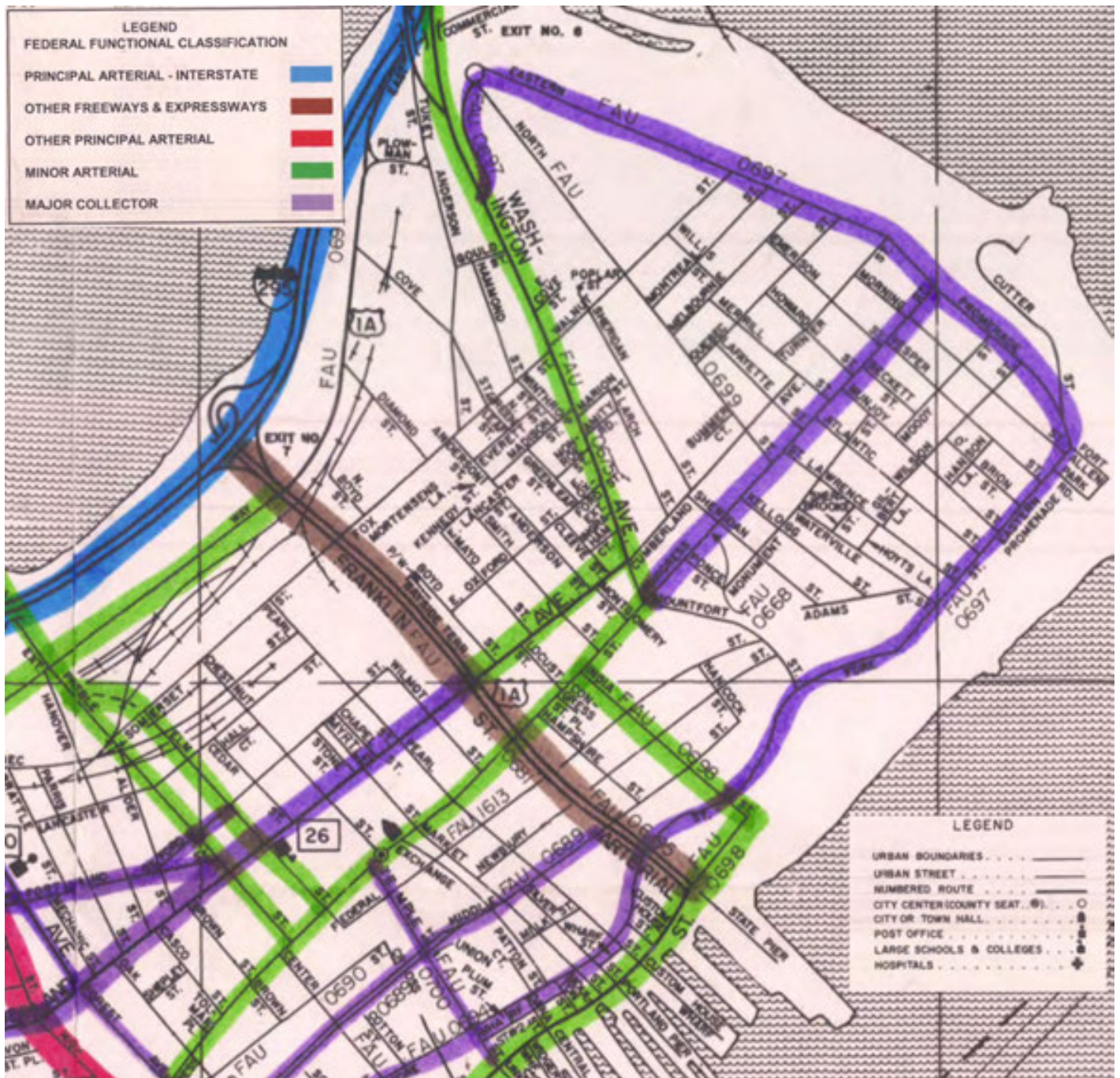
Conditional approval letter for intermodal staging at 122 Anderson Street (6 pages)

Map of Nova Star tractor trailer route through East Bayside

Franklin Redesign Committee meeting about fixing the Marginal Way/Franklin intersection **UPDATE!** (Now 7 pages)

Zoning Map of East Bayside/Munjoy Hill

East Bayside/Munjoy Hill street map showing known developments as of 8/31/2014







Tractor trailers
parked along
Fox Field





**Business
parking lots
filled with
overflow
parking during
field use**



Possible area for off-street
parking for Fox Field users





Line of sight
issues at Fox/
Anderson Street
corner
(Redfern's
proposed
building site
outlined in red)



Subject: 89 Anderson - Update and Traffic Study
From: Jonathan Culley <jonathan@redfernproperties.com>
Date: 9/9/2014 9:03 AM
To: Jonathan Culley <jonathan@redfernproperties.com>

Last update received by neighborhood residents about Redfern's proposed rezoning/ development at 89 Anderson

Dear East Bayside Resident:

You are included on this email if you provided your email address on the sign-in sheet at the July 16th neighborhood meeting, or if I have otherwise communicated with you on the proposed 89 Anderson Street project.

To give you an update, we have been waiting for the results of a Traffic Study, which we have recently received and is attached. The Study took a comprehensive look at Fox Street from Franklin to Washington, looking at the three intersections (including Fox/Anderson). This is a far more comprehensive study that is required by the Zoning process, and is a response to concerns expressed by neighbors and the Planning Board. The study makes some important recommendations, that we intend to advocate for, should our project go forward. We understand that Tom Errico, the City's traffic engineer (actually employed by T.Y. Lin by contracts to the City) is conducting a peer review of this Study this week.

Second, we have decided to modify our Zoning request to ask for B1b as opposed to B2b Zoning, the rationale for which is discussed in the email below.

We have not yet scheduled a subsequent workshop with the Planning Board, but expect to do so soon. I will send a subsequent email when we have a workshop scheduled.

I would welcome additional discussion on the attached Traffic Study or any other matters that are of concern to you. Please do not hesitate to call or email me. Thanks!

Jonathan Culley
Redfern Properties LLC
 Cell: 207-776-9715
 Office: 207-221-5746
 Fax: 207-221-2822

jonathan@redfernproperties.com
www.redfernproperties.com
www.redfernhomes.com
www.munjoyheights.com

From: Jonathan Culley <jonathan@redfernproperties.com>
Sent: Monday, August 04, 2014 12:46 PM
To: Jonathan Culley <jonathan@redfernproperties.com>
Subject: 89 Anderson update

Dear East Bayside Resident:

You are included on this email if you provided your email address on the sign-in sheet at the July 16th neighborhood meeting, or if I have otherwise communicated with you on the proposed 89 Anderson Street project. I wanted to provide an update on our process. We have taken two meaningful steps since the July 22nd Planning Board meeting.

First, in response to what seemed like the loudest concerns during Public Comment at the July 22nd meeting, we have commissioned a traffic (and parking) study for the neighborhood including Fox Street from Franklin to Washington. Bill Bray of Traffic Solutions Inc. will be conducting the study; you may see him seeing his traffic counting equipment on Fox Street in the near future. We have asked the City to have their traffic engineer provide a 'peer review' of the study, once complete, and they have agreed. We hope to have some preliminary results by the 3rd week of August and I would

be pleased to host a meeting for concerned neighbors once we have a Draft of the report. I have asked Bill Bray to consider things like traffic lights and other traffic calming devices that could alleviate some of the pressure on Fox Street. My ultimate hope would be to go the City, in conjunction with you, the neighbors, to press for some changes that could dramatically improve the traffic situation.

Second, while our sense was that the Planning Board was generally supportive of the project, we sensed some hesitation about the B2b zone in this location. So we are working with City staff to potentially revise our request to ask for B1 Neighborhood Zone (instead of B2b). While this would allow our proposed building to go forward, it seems more appropriate for the neighborhood. In fact, this zone was written for situations such as this and it is considerably more restrictive on the types of allowable commercial uses on the ground floor, and thus would offer some additional protections for the neighborhood, preventing non-compatible uses. I will paraphrase from Section 14-161 of the Land Use Code - page 14-239 at <http://www.portlandmaine.gov/DocumentCenter/View/3430>

“The purpose of the B-1 neighborhood business zone is to provide limited areas for the location of small-scale commercial establishments intended to serve a local market. As a result, uses shall be complementary, quiet and generally do not disturb the comfort and enjoyment of the adjoining neighborhood environment....

This zone shall encourage mixed use buildings such as commercial first floor with residential uses above....The zone also provides the opportunity for mixed use and high residential density in on-peninsula locations.

Suitable locations for this zone may include street intersections and arterial streets with existing or proposed traditional neighborhood retail and service uses.”

We do not expect to have another Planning Board workshop until after we receive the Traffic Study, and make a final decision on whether we will seek B1 Neighborhood Zone (but it looks like it is going this way). So I am guessing the next workshop will not be until September.

As always, I welcome dialogue with all of you. Please call or email me anytime to share thoughts, ideas, and concerns. Otherwise, I will be back in touch once we have more information on the Traffic Study.

Jonathan Culley
Redfern Properties LLC
Cell: 207-776-9715
Office: 207-221-5746
Fax: 207-221-2822

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www.munjoyheights.com

**Architectural drawing's of Redfern's proposed development at 89 Anderson Street
presented at July 16 neighborhood meeting (3 pages)**







UNIT	AREA (SF)	TYPE
201	915	2 BEDROOM
202	952	2 BEDROOM
203	582	1 BEDROOM
204	616	1 BEDROOM
205	582	1 BEDROOM
206	667	1 BEDROOM
207	686	1 BEDROOM
208	396	STUDIO
209	418	STUDIO
210	894	2 BEDROOM
211	418	STUDIO
212	638	1 BEDROOM
213	418	STUDIO
214	582	1 BEDROOM
215	668	1 BEDROOM
216	582	1 BEDROOM
217	615	1 BEDROOM
218	617	1 BEDROOM



Alex Jaegerman, FAICP
Division Director, Planning Division

**Conditional approval for
Intermodal Transportation
Facility at 122 Anderson
(pages 13-18)**

August 15th, 2014

Douglas Cardente
Anderson Street Realty, LLC
322 Fore Street, 3rd floor
Portland, ME 04101

Michael Cardente
322 Fore Street, 3rd floor
Portland, ME 04101

Project Name: **Change of use to Intermodal Transportation Facility for up to 30 vehicles**
Project ID: #2014-112 CBL: 10 H005001
Address: 122 Anderson Street, Portland
Applicant: Douglas Cardente, Anderson Street Realty LLC
Planner: Jean Fraser

Dear Messrs Cardente:

On August 15th, 2014, the Planning Authority approved, with waivers and conditions as listed below, a Level II site plan for the use of the site for Intermodal Transportation for up to 30 vehicles at 122 Anderson Street. The approval includes the use of the northernmost drive for trucks accessing the intermodal part of the site. The decision is based upon the application, documents and plans submitted by Anderson Street Realty LLC and shown on the attached plan submitted July 18, 2014. The proposal was reviewed for conformance with the standards of Portland's site plan ordinance, particularly the Transportation Standards (see the Traffic Review Comments of August 4th, 2014 attached).

A. WAIVERS

1. Sidewalks

The Site Plan standards require a sidewalk along all frontages of the site. The Planning Authority has waived this requirement as the proposal meets two of the waiver criteria set out in section 14-506 (b):

3. A safe alternative-walking route is reasonably and safely available, for example, by way of a sidewalk on the other side of the street that is lightly traveled.
4. The reconstruction of the street is specifically identified and approved in the first or second year of the current Capital Improvement Program or has been funded through an earlier CIP or through other sources.

The City's Anderson Street Neighborhood Byway Project is anticipated to commence in September 2014 and will include construction work to create sidewalks, permanent pedestrian crossings and utility upgrades at the Anderson Street/Fox Street intersection, including a sidewalk along the frontage of the proposal site and along Anderson Street.

2. Location and Spacing of Driveways

Section 1.7.1.7 of the City's Technical Manual establishes spacing requirements for driveways. These are not fully met by the proposals as they are utilizing the existing driveways and curb cuts that currently serve other users as well as the proposed use. The Planning Authority supports a waiver from these standards in view of the existing conditions and the constraint on any substantial modification, and subject to the conditions of approval for the site plan.

Next Page

B. SITE PLAN REVIEW

The Planning Authority finds the plan is in conformance with the Site Plan Standards of the Land Use Code subject to the following conditions of approval, and the standard conditions of approval, listed below:

- i. That this approval is for the use of the site for an intermodal transportation facility as presented in application #2014-112, ie for trucks waiting to load onto the Nova Star Ferry at Ocean Gateway (known as a staging area). Any other use of the site shall be subject to any city required reviews and approvals, licenses, and permits, as applicable; and
- ii. The trucks departing the site to go to the Ocean Gateway facility shall use the route from the site to Anderson Street to Fox Street to Franklin Street to Commercial Street; and
- iii. That the intermodal transportation facility trucks shall access the site only via the northernmost drive access, and that trucks entering or exiting the site over a delivery day time period (trucks arriving in advance of ship departure during the day and leaving the site to get to the ship) shall be limited to 15 trucks during 2014 operations. The applicant/operator shall be required to submit to the Planning Authority, on a monthly basis, a written record of the number of trucks using the site each day. Following the results of the monitoring study outlined in Condition iv., the number of trucks may be increased to a maximum number of 30 trucks either entering or exiting the site over a 24-hour period. Otherwise the maximum will remain 15 trucks at any one time; and
- iv. That the applicant shall fund a traffic and pedestrian monitoring study (maximum cost \$1500) to be conducted by the Planning Authority. The monitoring study shall be conducted within two weeks after operations begin and at a later date in the 2014 season. The monitoring study will ensure the conditions of this approval are being met and identify any issues that may need resolution. It should be noted that the monitoring study shall include all roadways / intersections between 122 Anderson Street and the Ocean Gateway site. If the monitoring study identifies safety concerns, the applicant shall be fully responsible for implementation of mitigation measures. It is anticipated that possible mitigation measures may include, but are not limited to, additional warning signs and pavement marking, traffic signal modifications at intersections along Franklin Street, truck arrival/departure management by personnel at the site, and route adjustments; and
- v. The applicant or operator shall implement, from the commencement of truck staging operations, a departure management plan that limits the truck departure rate to a maximum frequency of one truck per minute, to take place between the hours of 7:00pm and 9:30pm. The westbound Fox Street signal phase at Franklin Street will not likely be able to process more than one truck and therefore is currently a limiting factor. The departure management plan may be adjusted in agreement with the Planning Authority based on the monitoring study, which will review this departure rate and recommend adjustments, as necessary; and
- vi. That between the hours of 10pm and 7am no trucks shall access or leave the site, and any new lighting shall be turned off during these hours. Refrigerator trucks shall only utilize the site between 7am and 10pm, shall be parked as far as possible from Anderson Street and meet the sound standards of the ILb zone. All other trucks shall turn off their engines when on the site to minimize fumes; and

- vii. The applicant shall implement temporary pedestrian enhancements to the Anderson Street/Fox Street intersection to be implemented in advance of the commencement of the truck staging operation. These improvements shall include the following and be carried out in accordance with City standards:
- o A crosswalk shall be painted on the westerly Fox Street approach. The crosswalk shall be aligned with the apex on the southwest corner of the intersection and the Coffee By Design Driveway on the northwest corner (half of the crosswalk would be in the driveway).
 - o A crosswalk shall be painted on the easterly Fox Street approach. The crosswalk shall be aligned with each corner apex.
 - o STOP bars shall be re-painted on the eastbound Fox Street approach and the southbound Anderson Street approach.

It should be noted that the permanent improvements at this intersection are expected to be under construction beginning later this summer; if the temporary pedestrian enhancements are impacted by the construction activity, they will be reinstated per city requirements by the utility or city contractors until the permanent pedestrian measures are installed; and

- viii. That the monitoring study identified in Condition iv. shall include the driveway access/egress conditions for both site driveways. Currently, Tandem Coffee and Bunker Brewery use both driveways and this will continue in the future. If deemed necessary from the monitoring study, on-site circulation and access provisions will need to be formally regulated and controlled. An outcome of the monitoring study could be that the northerly driveway (with the truck scale) be used for trucks and employees only and the southerly driveway be used for Tandem Coffee and Bunker Brewery customers and the Community Center. Changes may require both regulatory and wayfinding signage and the applicant would be required to propose how to physically separate the two driveways, internally, so that vehicles are controlled; and
- ix. The applicant shall be responsible for providing a fully paved driveway of a minimum width of 22 feet wide from the right-of-way boundary extending into the site for 50 feet, prior to the commencement of the truck staging operation. A plan of the construction details for this improvement shall be provided for review and approval by the Planning Authority prior to installation. The remainder of the site shall be maintained with a surface that does not allow the creation of dust. In addition, the applicant shall install truck entering warning signs at the site driveway that are compliant with the Manual on Uniform Traffic Control Devices, Federal Highway Administration. Final details of signs shall be reviewed and approved by the Planning Authority; and
- x. That the applicant shall advise the lessees on the site and the Muslim Community Center in advance of the start date for the proposed truck staging operation, and provide details of the likely truck activity and a contact person if there are any problems on the site; and
- xi. That this approval is for an intermodal transportation facility based on the specific Nova Star operations as described in the submissions in July 2014 as part of #2014-112. Any proposed changes in the operator, timing of the truck departures or other operational characteristics shall be advised to the Planning Authority prior to commencement and may be subject to further review; and

- xii. That separate permits from the Inspections Division shall be required for any new or revised signage (except those meeting MUTCD as installed for traffic and pedestrian safety). Other required permits include a Street Opening Permit from the Department of Public Services for any work in the right of way (eg curb cuts); a Change of Use Permit from the Inspections Division; and a Building Permit for Site Work only from the Inspections Division.

The approval is based on the submitted site plan for application #2014-112. If you need to make any modifications to the approved site plan, you must submit a revised site plan for staff review and approval. The standard conditions of approval are listed below.

NOTE

The applicant and operator should note that the Anderson Neighborhood Byway Project is anticipated to commence in September 2014 and will include construction work to create sidewalks, permanent pedestrian crossings and utility upgrades at the Anderson Street/Fox Street intersection and along the frontage of the proposal site and Anderson Street. The construction will necessitate limitations on vehicle and pedestrian access to the site during the construction activities, such as single lane alternative flow scenarios. It is anticipated this would be less of an issue at the time of the trucks departure from the site in the evening, but would impact trucks arriving at the Intermodal Transportation facility as well as other users of the property.

STANDARD CONDITIONS OF APPROVAL

Please note the following standard conditions of approval and requirements for all approved site plans:

1. **Develop Site According to Plan** The site shall be developed and maintained as depicted on the site plan and in the written submission of the applicant. Modification of any approved site plan or alteration of a parcel which was the subject of site plan approval after May 20, 1974, shall require the prior approval of a revised site plan by the Planning Board or Planning Authority pursuant to the terms of Chapter 14, Land Use, of the Portland City Code.
2. **Separate Building Permits Are Required** A separate building permit for Site Work only is required from the Inspections Division, and permits for work in the right of way are required from the Department of Public Services. This approval does not constitute approval of building plans, which must be reviewed and approved by the City of Portland's Inspection Division.
3. **Site Plan Expiration** The site plan approval will be deemed to have expired unless work has commenced within one (1) year of the approval or within a time period up to three (3) years from the approval date as agreed upon in writing by the City and the applicant. Requests to extend approvals must be received before the one (1) year expiration date.
4. **Performance Guarantee and Inspection Fees** A performance guarantee covering the site improvements, inspection fee payment of 2.0% of the guarantee amount or a minimum of \$300. and four (4) final sets of plans must be submitted to and approved by the Planning Division and Public Services Department prior to the release of a building permit, street opening permit or certificate of occupancy for site plans. If you need to make any modifications to the approved plans, you must submit a revised site plan application for staff review and approval.
5. **Defect Guarantee** A defect guarantee, consisting of 10% of the performance guarantee, must be posted before the performance guarantee will be released.

6. **Preconstruction Meeting** Prior to the release of a building permit or site construction, a pre-construction meeting shall be held at the project site. This meeting will be held with the contractor, Development Review Coordinator, Public Service's representative and owner to review the construction schedule and critical aspects of the site work. At that time, the Development Review Coordinator will confirm that the contractor is working from the approved site plan. The site/building contractor shall provide three (3) copies of a detailed construction schedule to the attending City representatives. It shall be the contractor's responsibility to arrange a mutually agreeable time for the pre-construction meeting.
7. **Department of Public Services Permits** If work will occur within the public right-of-way such as utilities, curb, sidewalk and driveway construction, a street opening permit(s) is required for your site. Please contact Carol Merritt at 874-8300, ext. 8828. (Only excavators licensed by the City of Portland are eligible.)
8. **As-Built Final Plans** Final sets of as-built plans shall be submitted digitally to the Planning Division, on a CD or DVD, in AutoCAD format (*.dwg), release AutoCAD 2005 or greater.

The Development Review Coordinator must be notified five (5) working days prior to the date required for final site inspection. The Development Review Coordinator can be reached at the Planning Division at 874-8632. All site plan requirements must be completed and approved by the Development Review Coordinator prior to issuance of a Certificate of Occupancy. Please schedule any property closing with these requirements in mind.

The proposals have been reviewed as a Level II Staff level review in accordance with the current ordinance requirements, as summarized in the attached "*Report of Findings*".

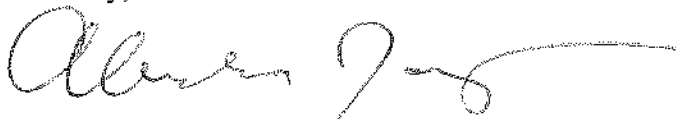
The site plan ordinance includes a provision regarding appeals of an administrative decision, as follows:

Sec. 14-529. Appeals.

(a) When the planning authority has approved, approved with conditions, or denied a site plan, or has approved a request to extend the expiration date of a Master Development Plan, any person aggrieved may appeal the decision to the planning board within thirty (30) calendar days of the date of the written decision of the planning authority. Upon the taking of such an appeal, the application or request for an extension shall be reviewed as a new application or request.

If there are any questions, please contact Jean Fraser at (207) 874- 8728.

Sincerely,



Alexander Jaegerman, FAICP
Planning Division Director

Attachments:

1. Staff Report of Findings
2. Site Plan and narratives submitted July 2014
3. Traffic Review comments from Tom Errico dated August 4, 2014, as amended 8.11.2014

cc list below

Next Page

CC:

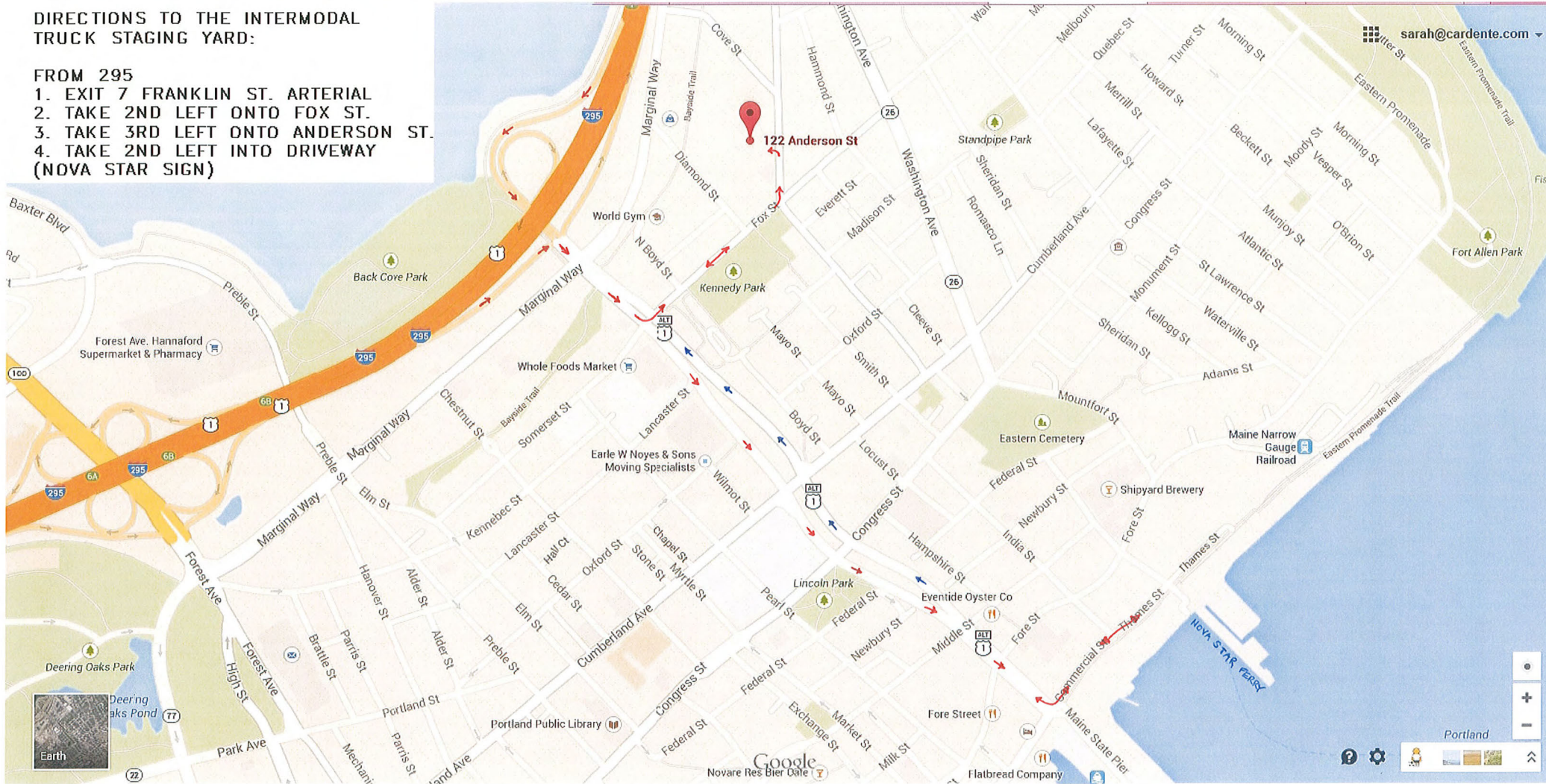
Jeff Levine, AICP, Director of Planning and Urban Development
Alexander Jaegerman, FAICP, Planning Division Director
Barbara Barhydt, Development Review Services Manager
Jean Fraser, Planner
Philip DiPierro, Development Review Coordinator, Planning
Marge Schmuckal, Zoning Administrator, Inspections Division
Tammy Munson, Inspections Division Director
Jonathan Rioux, Inspections Division Deputy Director
Jeanie Bourke, Plan Reviewer/CDO, Inspections Division
Lannie Dobson, Administration, Inspections Division
Brad Saucier, Administration, Inspections Division
Michael Bobinsky, Public Services Director
Katherine Earley, Engineering Services Manager, Public Services
Bill Clark, Project Engineer, Public Services
David Margolis-Pineo, Deputy City Engineer, Public Services

Doug Roncarati, Stormwater Coordinator, Public Services
Greg Vining, Associate Engineer, Public Services
Michelle Sweeney, Associate Engineer
John Low, Associate Engineer, Public Services
Rhonda Zazzara, Field Inspection Coordinator, Public Services
Mike Farmer, Project Engineer, Public Services
Jane Ward, Administration, Public Services
Jeff Tarling, City Arborist, Public Services
Jeremiah Bartlett, Public Services
Captain Chris Pirone, Fire Department
Danielle West-Chubta, Corporation Counsel
Thomas Errico, P.E., TY Lin Associates
David Senus, P.E., Woodard and Curran
Rick Blackburn, Assessor's Department
Approval Letter File

Intermodal Transportation Facility at 122 Anderson Street - conditionally approved route for Nova Star tractor trailers to/from East Bayside to Ocean Gateway facility

DIRECTIONS TO THE INTERMODAL TRUCK STAGING YARD:

- FROM 295
1. EXIT 7 FRANKLIN ST. ARTERIAL
 2. TAKE 2ND LEFT ONTO FOX ST.
 3. TAKE 3RD LEFT ONTO ANDERSON ST.
 4. TAKE 2ND LEFT INTO DRIVEWAY (NOVA STAR SIGN)



(See related "Fact Sheet" on page 21)



Help us Fix the Marginal Way-Franklin St. Intersection!

- The intersection is choked with vehicles during peak travel times and is very uncomfortable for bicyclists and pedestrians to cross
- Traffic projections show that congestion at the intersection will get worse in coming years
- Moving around within East Bayside is not always easy for vehicles, bikes OR pedestrians!

Please come hear about possible solutions and tell the City of Portland representatives your thoughts on **how traffic affects customers, employees and residents.**

East Bayside
Neighborhood Meeting
Sept. 4, 5:30 pm at Zero Station

FMI Carol Morris/329-6502

See page 28 for more contact info for Carol Morris

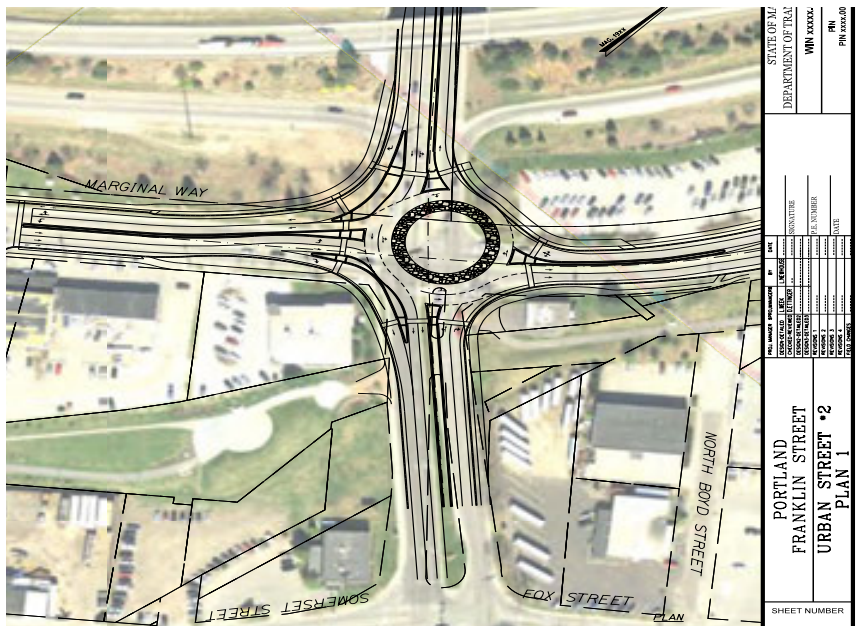
Franklin Street Feasibility Study **East Bayside Neighborhood Meeting** **September 4, 2014**

Purpose of Meeting: To Provide Information to the East Bayside Neighborhood on a Series of Possible Solutions to the Traffic Congestion on Marginal Way.

General Comments Made on Traffic

- A suggestion was made to reduce traffic in the intersection by shutting off I-295 to be accessible in only one direction, northbound OR southbound, diverting traffic to other nearby intersections.
- A suggestion was made to add an exit ramp northbound of the intersection so that I-295 northbound traffic could get off at Washington Street, as right now this exit is the only way to get to the Hill.
- A suggestion was made to add shuttle services
- Fox Street is dangerous and new development will make it more so
- Fox is becoming a real corridor and there are a lot of kids there, so it is not safe. We do not need more traffic on Fox.
- Pedestrians need to be able to cross more safely at the Bayside Trail, it is now stop and go and not ideal to have more traffic on Franklin.

Comments on Roundabout **See #1 on related Fact Sheet - page 25**



- Would the roundabout fit into the current street space? (*No, it would not, it would be bigger. However, it would not impact any buildings.*)

- How quickly can people adapt to a roundabout? That would be a concern, as people in Maine are not used to roundabouts.
- This is potentially hazardous in terms of pedestrian safety.
- We need to draw commuter traffic into other parts of the city – look at the city as a whole and provide incentives for traffic to use different routes.
- The traffic is backed up most days at 6:45 am and at 4:30 pm
- Can't we limit the number of cars that come into the city? Put a cap on the number?
- Was new development in Bayside factored into this (Yes.)
- How does traffic here compare to Forest Avenue? *(It is not an apple- to-apples comparison for a number of reasons, but the northbound Forest Ave. peak hour traffic at the State and Marginal intersection is 1528 vehicles; at the Franklin and Marginal intersection it is 1127.)*
- **Summary: Roundabout here is too big and not safe.**

Comments on New Ramps **See #2 on related Fact Sheet - page 25**



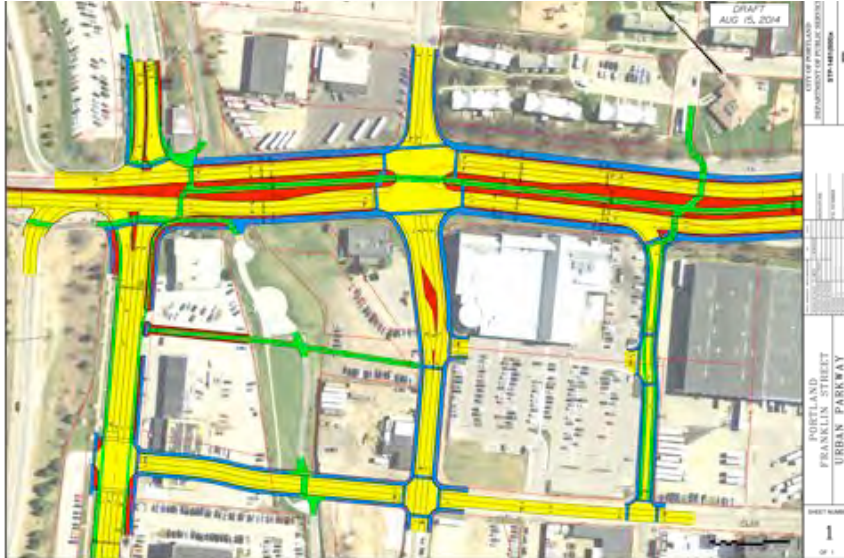
- Generally do not like having all that traffic entering into East Marginal Way and dividing the Park and Ride.
- Marginal Way is already a mess.
- Maybe have all the traffic just turn left off the ramps?
- Does not seem like a good solution.
- **Summary: Not a good solution – too much diversion of traffic**

Comments on Rephasing Signals **See #3 on related Fact Sheet - page 25**

- ***It was noted that this is not enough by itself to solve the problems***
- Question asked if this has already been done to improve traffic flow? The answer was yes, and discussion ensued as to the objective of keeping traffic to a reasonable speed – signals are not supposed to be timed so everyone can hit all the lights green and go fast.
- It was noted that with Franklin Towers at the top of the hill, it would not be a good thing to have drivers traveling very fast through that intersection.
- The city noted that the design speed for the new Franklin will be 25 mph.

- It was noted that the speed on Somerset is slated to be 30 mph and that does not make sense if Franklin is 25 mph. (*City staff to look into this.*)

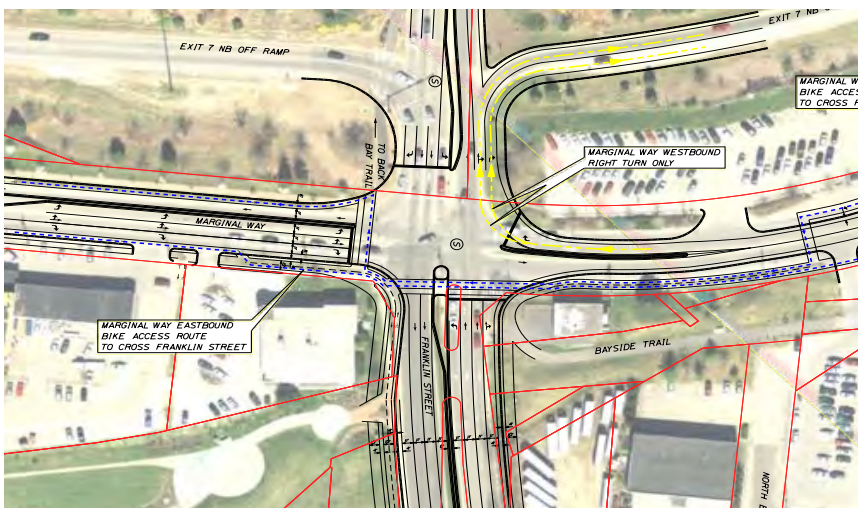
Comments on a Center Median on Franklin Blocking Marginal Way Through-Traffic



See #4 on related Fact Sheet - page 25

- This just moves the pain up the corridor.
- What will this do to all the new development in Bayside? Cuts off East Bayside.
- The traffic should be kept as close to the north end of the corridor as possible.
- This is not a safe solution for Bayside or East Bayside
- **Summary: Not a safe or useful solution**

Comments on Restricting Out-Movements from East Marginal Way



See #5 on related Fact Sheet - page 25

Further clarification about this option:

Vehicles, driving west on Marginal Way, from East Bayside will not be able to go straight, or turn left, at the Franklin Street intersection; they will only be able to turn right, to access Rt 295, north or south. Vehicles will still be able to enter East Bayside, turning right or left, from Franklin Street, or heading straight through on Marginal Way from Bayside. However, they must use connecting streets, through the industrial zone, to Fox Street, in order to leave.

- Generally, people disliked this solution the least. But if it is built, there MUST be improvements to Fox St. so people do not treat it as a raceway.
- The corner at Anderson and Washington is not safe now.
- Question about what changes on Fox might look like (*Answer: Not yet designed.*)
- ***Summary: Not wonderful but the best of the solutions as long as safety improvements are made to Fox Street as part of the mix - slowing down traffic and adding pedestrian amenities.***

Comments on Which Cross Street Traffic Should Use?

- Businesses will need to weigh in on this question.
- Diamond has increasing number of pedestrians, but is a loading zone for trucks – right now not safe
- Cove St. has an odd angle into Anderson Street.
- Boyd did not seem to be a popular choice as it is too narrow.
- ***But generally group not sure of best solution, but noted that the more sidewalks, the better in terms of safety and handling more through-traffic safely.***

Franklin Street/Marginal Way Intersection Fact Sheet

- Initial traffic analysis of Franklin Street, as part of the Franklin Street Redesign Study, showed serious problems with the Marginal Way intersection by 2035.
- We know this intersection is already congested during peak travel times and does not function well for bikes and pedestrians either.
- The challenge at the intersection is based partly on high traffic volumes (this is one of the highest traffic volume intersections in the state) and also on the number of conflicts, i.e., vehicles turning in multiple directions and the signal time needed to process them through the traffic movement.
- The below solutions have been analyzed:
 1. *A large-scale (2-3 lane) roundabout in one of two intersections (Marginal Way or Fox/Somerset)*
 2. *Relocating I-295 northbound off-ramps directly onto Marginal Way*
 3. *Retiming and rephasing traffic signals to move more traffic more efficiently on Franklin Street*
 4. *A raised center median on Franklin Street prohibiting through and left-turn access to Marginal Way*
 5. *Restricting left turn and through-movements out of east Marginal Way*
- Here is an overview of what we found:
 1. *A large-scale roundabout in one of two intersections (Marginal Way or Fox/Somerset):* This works from a traffic perspective. Traffic volumes are such that the roundabouts would be three lanes wide in some parts, which would impact adjacent properties and challenge bike and pedestrian safety.
 2. *Relocating the I-295 northbound off-ramps directly onto Marginal Way:* This worked very well to reduce traffic on Franklin but there is concern about the effects on I-295 as a result of shorter ramps: for example, inadequate deceleration and vehicles backed up onto the highway.
 3. *Retiming/rephasing of traffic signals to move more traffic on Franklin Street:* Due to the amount of traffic, this by itself did not make enough difference.
 4. *A raised center median on Franklin Street prohibiting access to Marginal Way:* This worked from a traffic perspective. It impeded access to/from East Marginal Way and diverted the traffic to areas such as the Fox/Somerset intersection).
 5. *Restricting left turn and straight-ahead movements out of East Marginal Way:* All vehicles *entering* east Marginal Way would get there the same way as now. Vehicles *leaving* East Marginal Way would still be able to make a right-hand turn to access I-295 north or south, but could not take a left to go up Franklin or continue straight onto West Marginal. Vehicles wanting to travel to another location on the peninsula would be re-routed to Fox Street. The traffic model shows only a small number of people travel in this direction. This works from a traffic perspective.
 6. **We want to hear from the businesses, customers and residents in the neighborhood regarding any changes.**

PLEASE JOIN US AT ZERO STATION, 222 ANDERSON STREET< ON SEPTEMBER 4 AT 5:30 PM TO HEAR DETAILS AND PROVIDE NEEDED FEEDBACK ON POTENTIAL SOLUTIONS!

[philosophy](#) [the company](#) [services](#) [case studies](#) [contact](#)



Photo by David A.
Rodgers:motate.com

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Evan Richert
AICP
Community Planner

contact

Carol Morris, President
Morris Communications
12 High Tide Road
Kennebunkport, ME 04046

Phone: 207-329-6502
Fax: 207-283-8433

Email: cmorris@morriscomm.net

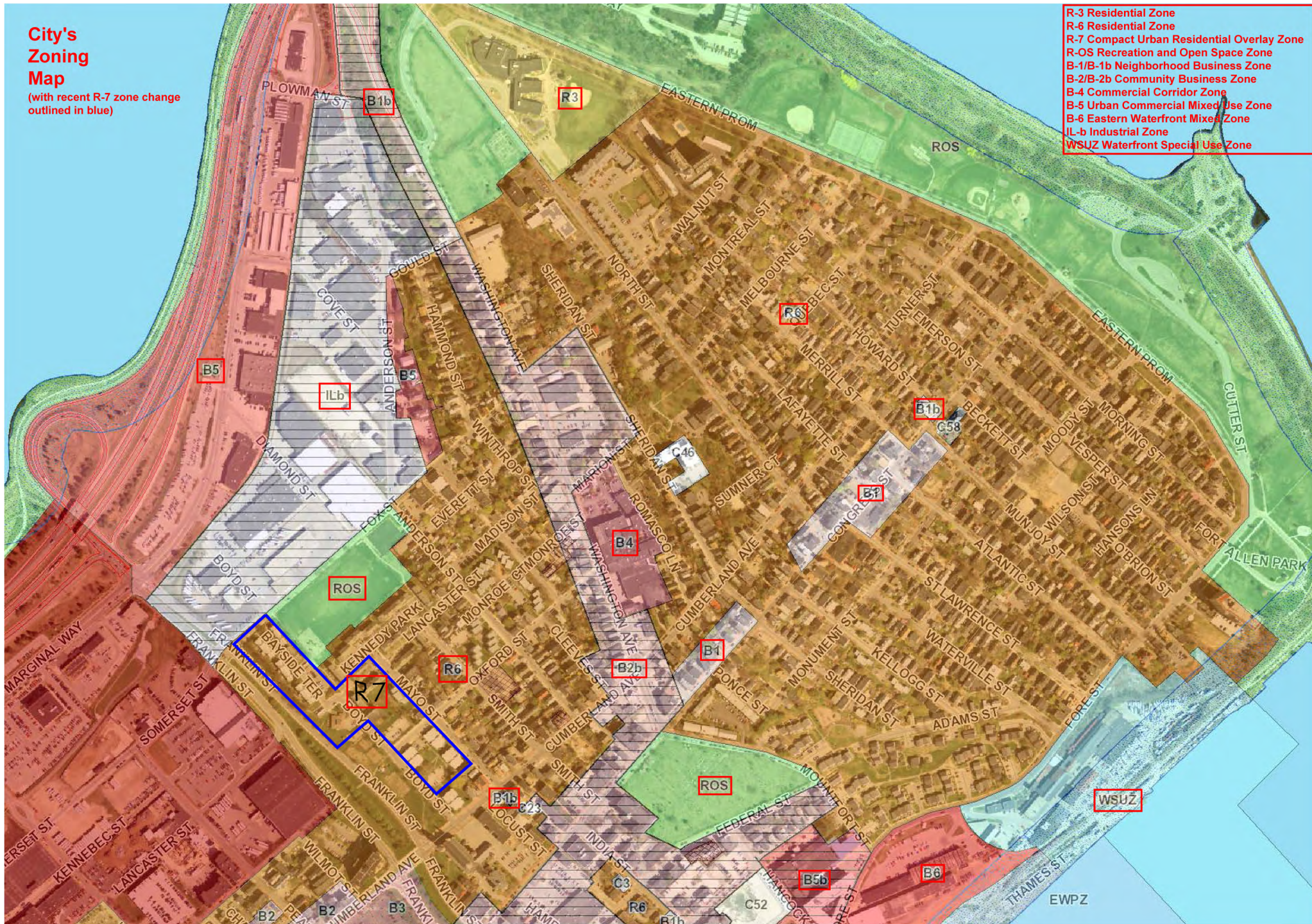
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[Home](#) ▲

City's Zoning Map

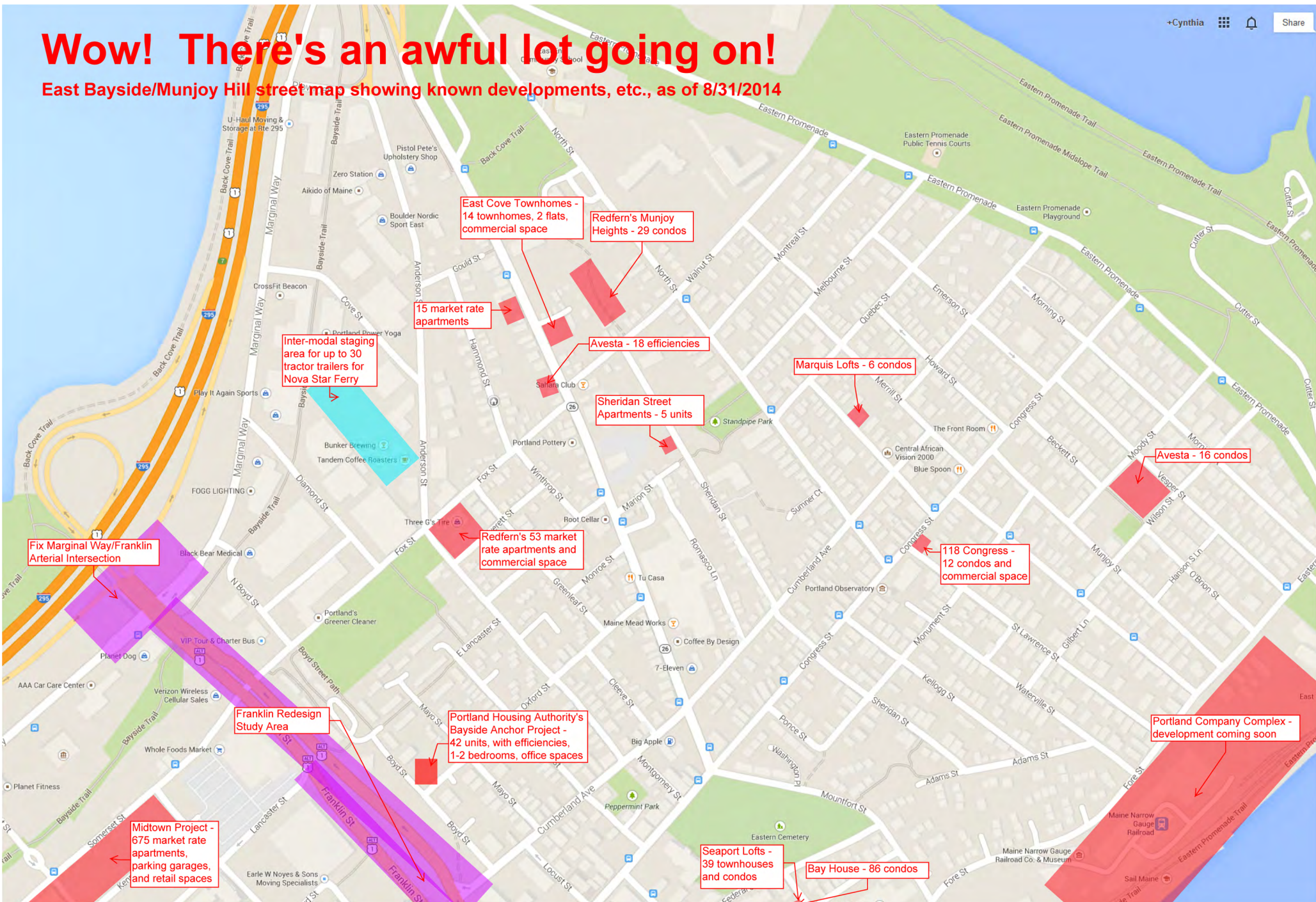
(with recent R-7 zone change outlined in blue)

- R-3 Residential Zone
- R-6 Residential Zone
- R-7 Compact Urban Residential Overlay Zone
- R-OS Recreation and Open Space Zone
- B-1/B-1b Neighborhood Business Zone
- B-2/B-2b Community Business Zone
- B-4 Commercial Corridor Zone
- B-5 Urban Commercial Mixed Use Zone
- B-6 Eastern Waterfront Mixed Zone
- IL-b Industrial Zone
- WSUZ Waterfront Special Use Zone



Wow! There's an awful lot going on!

East Bayside/Munjoy Hill street map showing known developments, etc., as of 8/31/2014



Please note: The map location of the 15 market rate apartments on Washington Avenue is incorrect. It should be located at 192 Washington Avenue, which is further north, past the blocked off Gould Street intersection.

TRAFFIC IMPACT STUDY

FOR

PROPOSED

Includes annotations added by
Cynthia Cochran on 9/11/2014

89 Anderson Street Apartment Complex

Please Note: This study does not address sight-line issues at any of the intersections identified as being impacted by the proposed development. Most specifically, it does not address the sight-line issues at the intersection of Fox/Anderson Streets, which will be created by the location of the building, planned for 89 Anderson Street, and shown on the developer's architectural site drawings.

Prepared For: Redfern Properties, Inc.
Prepared By: William James Bray, P.E.



INTRODUCTION

Redfern Properties, LLC is proposing to construct a 53-unit apartment building on a parcel of property located at 89 Anderson Street. A total of 53 parking spaces will be provided under the cover of the proposed apartment building. Access to the covered parking spaces will be provided through a single entrance located on Everett Street.

The purpose of this study is to examine existing traffic conditions in the general vicinity of the proposed project, estimate the total number of site trips generated by the project, and make a determination as to whether the existing transportation system can safely accommodate the added traffic demand generated by the project.

EXISTING CONDITIONS

Existing Traffic: Manual turning movement counts were conducted at three study area intersections per direction received from the City's Traffic Peer Review Consultant. The intersections included the following locations:

1. Anderson Street @ Fox Street
2. Washington Avenue/Fox Street/Walnut Street
3. Anderson Street @ Cumberland Avenue

All vehicular traffic entering each intersection was recorded in 15-minute intervals between the hours of 7:00 to 9:00 AM and between 3:00 to 6:00 PM (Copies of the field data summary sheets are attached). In addition, both pedestrian and bicycle data was gathered at each location both directionally and time of day. From a summary of the data, it was determined that the morning peak hour occurs between 8:00 and 9:00 AM at each study area location; the PM peak hour falls between 4:30 and 5:30 at each of the locations.

Bicycle and pedestrian volume totals recorded during the vehicular peak hour(s) at each study location are summarized in the following tables:

Bicycle Volumes **(Street Peak Hour)**

<u>Intersection/Approach</u>	<u>AM Peak Hour</u>	<u>PM Peak Hour</u>
Washington Ave./Walnut St./Fox St.		
- Washington Avenue EB	1	9
- Washington Avenue WB	2	13
- Walnut Street	0	1
- Fox Street	2	2
Anderson St./Fox St.		
- Anderson Street EB	1	6
- Anderson Street WB	3	9
- Fox Street NB	0	11
- Fox Street SB	0	7
Anderson St./Cumberland Ave.		
- Anderson Street	1	0
- Cumberland Avenue NB	2	4
- Cumberland Avenue SB	5	5

Bicycle travel through the study intersections was somewhat moderate during the afternoon peak hour; volumes recorded in the morning peak hour were very low at each of the three study intersections. The highest volume of bicycle trips in the PM peak hour were recorded traveling along the Washington Avenue corridor (22

two-way trips) and a second predominate travel route was along Fox Street with a total two-way volume of 18 trips.

**Pedestrian Volumes
(Street Peak Hour)**

<u>Intersection/Approach</u>	<u>AM Peak Hour</u>	<u>PM Peak Hour</u>
Washington Ave./Walnut St./Fox St.		
- Crossing Washington Ave. @ Walnut St.	2	0
- Crossing Washington Ave. @ Fox St.	6	8
- Crossing Walnut St.	5	4
- Crossing Fox St.	4	18
Anderson St./Fox St.		
- Crossing East Anderson St.	9	14
- Crossing West Anderson St.	4	2
- Crossing North Fox St.	12	6
- Crossing South Fox St.	7	9
Anderson St./Cumberland Ave.		
- Crossing Anderson St.	21	29
- Crossing Cumberland Ave. @ Anderson St.	14	30

The volume of pedestrian movements recorded at each of the three study intersections was highest at the Anderson Street/Cumberland Avenue intersection where a total of 35 pedestrian movements were recorded in the morning peak hour and 59 pedestrian movements were recorded in the afternoon peak hour.

Traffic data collected during the months of July and August are generally representative of “peak” travel conditions and further adjustment is not required. Figures 1 and 2 are “line-diagrams” presenting “peak” hour vehicular traffic volumes for the AM and PM peak hours, respectively, for the study area intersections. **PDF pages 23-24**

Existing Safety Trends: The Maine Department of Transportation’s (MaineDOT) Accident Records Section provided the latest three-year (2011 through 2013) crash data for the following roadway segments:

1. Fox Street between Franklin Arterial and Washington Avenue
2. Washington Avenue/Fox Street/Walnut Street intersection
3. Anderson Street between Fox Street and Cumberland Avenue
4. Everett Street between Anderson Street and Greenleaf Street

Their report is summarized as follows and attached as an appendix to the report:

It is not known if increased traffic volumes during athletic events on Fox Field (Kennedy Park) was included in this assessment.

Additional traffic volume due to the redesign of the Franklin/Marginal Way intersection was not included in this assessment.

Additional traffic volume from East Cove Townhomes development at 145-155 Washington Avenue was not included in this assessment.

Additional traffic volume from development at 192 Washington Avenue was not included in this assessment.

See "Future Traffic" section PDF page 5 below

2011 -2013 Traffic Accident Summary

<u>Location</u>	<u>Total Crashes</u>	<u>Critical Rate Factor</u>
1. Fox Street @ Franklin Arterial	20	0.58
2. Fox Street and N. Boyd Street	3	1.03
3. Fox Street @ Diamond Street	1	0.34
4. Fox Street @ Anderson Street	2	0.73
5. Fox Street @ Greenleaf Street	2	0.98
6. Fox Street @ Winthrop Street	2	1.06
7. Washington Avenue/Fox Street/Walnut Street	9	1.98
8. Fox Street btw. Cove Street and Greenleaf Street	1	0.54
9. Fox Street btw. Winthrop Street and Washington Avenue	1	0.48
10. Anderson Street @ Madison Street	1	4.63
11. Anderson Street @ Oxford Street	1	4.09
12. Anderson Street @ Cumberland Avenue	2	0.71
13. Anderson Street btw. Fox Street and Everett Street	1	4.42
14. Anderson Street btw. E. Lancaster Street and E. Oxford Street	4	16.00
15. Anderson Street btw. E. Oxford Street and Cumberland Avenue	4	11.44

The MaineDOT considers any roadway intersection or segment a high crash location if both of the following criteria are met:

- **8 or more accidents**
- **A Critical Rate Factor greater than 1.00**

As the data presented in the table shows (location highlighted in yellow), the Washington Avenue/Walnut Street/Fox Street intersection meets MaineDOT's criteria for a high crash location. A total of 9 crashes and a Critical Rate Factor (CRF) of 1.98 were reported for the intersection. A more in-depth review (preparation of detailed vehicle collision diagrams) was prepared for the intersection to determine if a clear pattern of accident is occurring (Copies of the Collision Diagrams are attached as an appendix to the report).

The detailed review of the vehicle crash reports for the intersection would suggest two clear patterns of concern: 1) Four of the nine accidents involved vehicles on the Fox Street approach turning left onto Washington Avenue being struck by thru vehicles traveling eastbound on Washington Avenue; 2) A total of three collisions involved vehicles approaching Washington Avenue from the Walnut Street approach sliding through the intersection and striking a thru vehicle on Washington Avenue.

Implementation of one or more of the suggested remediation measures should help reduce the frequency of traffic crashes occurring at this "off-set" intersection:

- Utilization of an anti-icing agent on the full length of Walnut Street would potentially reduce vehicle skidding problems on Walnut Street.
- Alternatively, or in conjunction with utilization of the anti-icing agent, the City may want to consider closure of Walnut Street at North Street during periods of severe winter road conditions using a remotely operated flashing "Street Closed" beacon placed at the top of the Walnut Street "hill".
- Replace and/or update existing pedestrian crossing equipment (equipment presently inoperative) at both existing Washington Avenue crosswalks to improve safety of pedestrians crossing "busy" Washington Avenue.

In addition to the aforementioned recommendations, preliminary evaluation was given to full traffic signalization of the intersection; however, present intersection traffic volumes and/or other factors do not appear to satisfy the warrants for traffic signals.

See PDF pages 49-52

SITE TRAFFIC

Site Trip Generation: The eighth edition of the Institute of Transportation Engineers (ITE) “TRIP GENERATION” manual was used to determine the volume of site traffic generated by the proposed 53-unit residential apartment complex project. The ITE publication provides numerous land-use categories and the average volume of trips that are generated by each category. The following trip rates were used to calculate the trip generation of the proposed project:

Land Use #220 - Apartment

AM Peak Hour	= 0.51 trips per occupied unit
PM Peak Hour	= 0.62 trips per occupied unit.

Accordingly, the proposed 53-unit apartment complex can be expected to generate a total of 27 trips in the morning peak hour and 33 trips during the afternoon peak hour.

Site Trip Distribution: The Institute of Transportation Engineers handbook provides the following directional distribution rates for an apartment unit during the AM and PM peak hours:

AM Peak Hour	= 20% enter site and 80% exit site
PM Peak Hour	= 65% enter site and 35% exit site

Based upon the noted directional distribution patterns, 22 trips during the morning peak hour and 12 trips in the evening peak hour will exit the site and the remaining trips (5 AM trips and 21 PM trips) during both peak time periods will enter the site.

Site Trip Assignment: Vehicle trips generated by the proposed project were assigned through the three study intersections on the basis of existing travel patterns and the Consultants knowledge of travel patterns in the City of Portland. Figures 3 and 4 graphically depict the assignment for both peak commuter time periods.

PDF
pages
25-26

FUTURE TRAFFIC

Other Development Traffic: Traffic generated by projects that have been approved by the Local Planning Board and/or the Maine Department of Transportation, yet are not opened, must be included in the estimate of pre-development traffic. At the direction of the City’s Development Review Services Manager, trips generated by the following projects were appropriately added to the base travel conditions at the site driveway intersections.

- Washington Avenue Efficiencies
- PHA Bayside Anchor Project
- Munjoy Heights
- Intermodal “Staging” Area

See comments on PDF page 3 above

Figures 5 and 6 illustratively present the Other Development traffic assignment for the study intersections.

PDF pages
27-28

2014 Pre-Development Traffic: The 2014 Pre-Development traffic forecasts were prepared for the study intersections by combining the 2014 Design Hour traffic volumes shown on Figures 1 and 2 with the Other Development traffic values displayed on Figures 5 and 6. Figures 7 and 8 present the 2014 pre-development traffic forecasts at each of the three study intersections. PDF pages 29-30

2014 Post-Development Traffic: Estimated 2014 Pre-Development traffic forecasts prepared for the study intersections, as depicted on Figures 7 and 8, were combined with the site traffic projections highlighted on Figures 3 and 4 to create estimated 2014 Post-Development traffic forecasts for the study intersections. Figures 9 (AM Peak Hour) and 10 (PM Peak Hour) are line diagrams that present the estimated 2014 Post-Development traffic conditions for the study intersections. **PDF pages 31-32**

See comments at PDF page 3 above

MOBILITY ANALYSIS

Capacity analyses of both 2014 Pre and Post-Development traffic conditions were performed for each of the three study intersections utilizing the Synchro and SimTraffic computer models. Levels of Service rankings are similar to the academic grading system, where an “A” is very good with little delay and “F” represents very poor conditions.

The following table summarizes the relationship between delay and Level of Service for an unsignalized intersection:

Level of Service Criteria for Unsignalized Intersections

<u>Level of Service</u>	<u>Total Control Delay (sec/veh)</u>
A	Up to 10.0
B	10.1 to 15.0
C	15.1 to 25.0
D	25.1 to 35.0
E	35.1 to 50.0
F	Greater than 50.0

The result of the capacity analysis is presented in the following table:

Level of Service Summary 2014 Pre and Post-Development Conditions

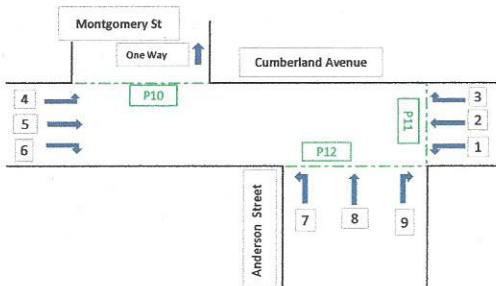
<u>Intersection/Approach</u>	<u>2014 Pre-Development</u>				<u>2014 Post-Development</u>			
	<u>AM Peak Hour</u>		<u>PM Peak Hour</u>		<u>AM Peak Hour</u>		<u>PM Peak Hour</u>	
	<u>Delay (sec.)</u>	<u>LOS</u>	<u>Delay (sec.)</u>	<u>LOS</u>	<u>Delay (sec.)</u>	<u>LOS</u>	<u>Delay (sec.)</u>	<u>LOS</u>
1. Washington Ave./ Walnut St./Fox St.								
- Washington Ave. EB	1 sec.	A	2 sec.	A	1 sec.	A	2 sec.	A
- Washington Ave. WB	1 sec.	A	4 sec.	A	4 sec.	A	4 sec.	A
- Walnut St.	13 sec.	B	16 sec.	C	15 sec.	B	17 sec.	C
- Fox St.	11 sec.	B	27 sec.	D	13 sec.	B	27 sec.	D
2. Fox St. @ Anderson St.								
- Anderson St. EB	5 sec.	A	5 sec.	A	5 sec.	A	5 sec.	A
- Anderson St. WB	6 sec.	A	6 sec.	A	6 sec.	A	6 sec.	A
- Fox St. NB	6 sec.	A	7 sec.	A	6 sec.	A	7 sec.	A
- Fox St. SB	6 sec.	A	7 sec.	A	7 sec.	A	7 sec.	A
3. Anderson St. @ Cumberland Ave.								
- Anderson St.	4 sec.	A	3 sec.	A	4 sec.	A	3 sec.	A
- Cumberland Ave. NB	1 sec.	A	1 sec.	A	1 sec.	A	1 sec.	A
- Cumberland Ave. SB	1 sec.	A	1 sec.	A	1 sec.	A	1 sec.	A

As presented in the chart above, the proposed project has no measurable impact on traffic operations at any of the three study intersections. Each intersection was found to operate at acceptable levels of service under both pre-development and post-development conditions.

SUMMARY

1. The proposed 53-unit apartment complex can be expected to generate a total of 27 vehicle trips during the AM peak hour and a slight increase of 33 trips in the afternoon peak hour. Twenty-two (22) trips during the morning peak hour and 12 trips in the evening peak hour will exit the site and the remaining trips (5 AM trips and 21 PM trips) during both peak time periods will enter the site.
2. MaineDOT's Traffic Safety Bureau's latest three-year safety report for the identified portions of Washington Avenue, Fox Street, and Anderson Street shows that all roadway segments and intersections, with the exception of the Washington Avenue/Fox Street/Walnut Street intersection, experience fewer traffic crashes than the threshold criteria for identification of a high crash location. The noted traffic intersection, based upon the most recent three-year data, meets both of MaineDOT's criteria for identification of a high crash location. A total of 9 vehicle crashes were reported at the intersection during the study time period and the Critical Rate Factor, which compares operations at the intersection with a statewide average for similar locations, exceeds 1.00 at 1.98. Detailed vehicle collision diagrams were prepared for each of the reported 9 vehicle crashes to determine if a correctable pattern of vehicle crash is occurring at the intersection. The detailed analysis identified two crash patterns; four "angle" collisions involving vehicles entering Washington Avenue from Fox Street being struck by motorists traveling eastbound on Washington Avenue. The second pattern involved three crashes that resulted from vehicles approaching Washington Avenue on Walnut Street skidding, during inclement weather, into thru vehicles traveling west on Washington Avenue.
3. It would appear that all modes of transportation would benefit from full traffic signalization of the Washington Avenue/Fox Street/Walnut Street intersection; an abbreviated preliminary assessment of existing travel conditions was conducted and it was determined that prevailing traffic conditions at the noted intersection do not appear to meet the minimum travel conditions required for traffic signalization (Copy of abbreviated traffic signal warrant study is attached as an appendix to the report). The City may want to monitor traffic conditions on an annual basis to determine if prevailing conditions change meeting one or more of the warrants for traffic signalization. This report does identify three improvement strategies that, with implementation, should improve overall safety at the intersection, they include the following:
 - Utilization of an anti-icing agent on the full length of Walnut Street would potentially reduce vehicle skidding problems on Walnut Street.
 - Alternatively, or in conjunction with utilization of the anti-icing agent, the City may want to consider closure of Walnut Street at North Street during periods of severe winter road conditions using a remotely operated flashing "*Street Closed*" beacon placed at the top of the Walnut Street "hill".
 - Replace and/or update existing pedestrian crossing equipment (equipment presently inoperative) at both existing Washington Avenue crosswalks to improve safety of pedestrians crossing "busy" Washington Avenue.
4. The operational analysis conducted for the three study intersections clearly shows that traffic generated by the proposed apartment complex has virtually no impact on traffic operations at any of the three study intersections. Each study intersection was found to operate at acceptable levels of service during both the pre-development and post-development conditions.
5. Pedestrian crosswalk markings and stop bars should be installed at the Anderson Street/Fox Street intersection on all four approaches of the intersection.

**INTERSECTION PLAN
WITH NUMBERED MOVEMENTS:**



Portland
Intersection: Cumberland Ave./Anderson St./Montgomery St.
Date: 8/13/14
Day of Week: Wednesday
Weather:
Remarks:

Count Summary Movement

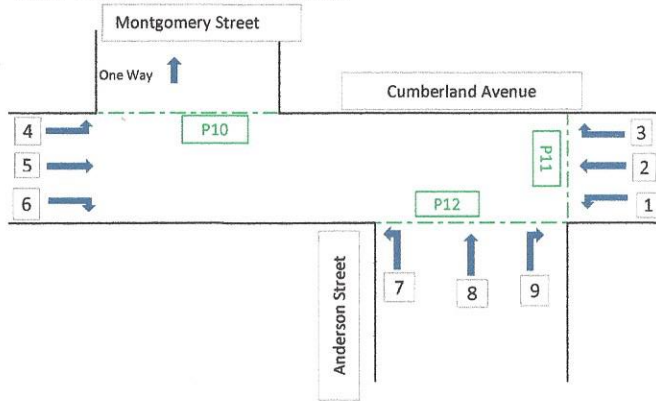
Start	End	1	2	3	4	5	6	7	8	9	10	11	12	Total	P10	P11	P12	C2	C4	C5	C6	C7	C9
7:00	7:15	1	16	0	0	29	0	1	0	3	0	0	0	50	0	0	3	0	1	1	0	0	1
Truck Count		0	1	1	0	1	0	0	0	1	0	0	0	4									
7:15	7:30	0	18	0	0	16	1	2	0	6	0	0	0	43	4	1	4	0	0	0	1	0	0
Truck Count		0	0	0	0	0	1	0	0	0	0	0	0	1									
7:30	7:45	1	13	1	0	25	3	2	0	3	0	0	0	48	4	5	3	0	0	0	0	0	0
Truck Count		0	0	1	0	0	0	0	0	0	0	0	0	1									
7:45	8:00	3	18	1	1	39	0	1	1	3	0	0	0	67	3	3	4	0	0	2	0	0	0
Truck Count		0	0	0	0	0	0	0	0	0	0	0	0	0									
8:00	8:15	4	28	0	1	54	3	1	0	10	0	0	0	101	7	3	5	0	0	0	0	0	0
Truck Count		0	2	0	0	2	0	0	0	0	0	0	0	4									
8:15	8:30	3	23	0	3	55	1	0	0	11	0	0	0	96	8	5	4	1	0	2	0	0	0
Truck Count		0	0	0	0	3	0	1	0	1	0	0	0	5									
8:30	8:45	1	16	0	1	59	1	0	0	10	0	0	0	88	2	0	9	1	1	2	0	1	0
Truck Count		1	3	0	0	1	0	0	0	1	0	0	0	6									
8:45	9:00	2	32	2	0	38	1	3	0	15	0	0	0	93	5	6	3	0	0	0	0	0	0
Truck Count		0	3	0	0	1	0	0	0	0	0	0	0	4									

PEAK HOUR COUNT

TIME: 8:00 TO: 9:00

11	107	2	5	213	6	5	0	48	0	0	0	397
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INTERSECTION PLAN WITH NUMBERED MOVEMENTS:



Portland
Intersection: Cumberland Ave/Anderson St/Montgomery St
Date: 8/13/14
Day of Week: Wednesday
Weather: _____
Remarks: _____

Count Summary Movement

Start	End	1	2	3	4	5	6	7	8	9	10	11	12	Total	P10	P11	P12	C1	C2	C4	C5	C6
3:00	3:15	5	52	0	2	43	1	1	0	11	0	0	0	115	12	7	11	1	1	0	2	0
Truck Count		0	0	0	0	0	0	0	0	0	0	0	0	0								
3:15	3:30	2	46	0	1	38	2	4	0	9	0	0	0	102	10	13	7	0	0	1	0	0
Truck Count		0	1	0	0	0	0	0	0	0	0	0	0	1								
3:30	3:45	4	42	4	1	32	1	1	1	5	0	0	0	91	6	6	7	1	1	0	0	0
Truck Count		1	0	0	1	2	0	0	0	0	0	0	0	4								
3:45	4:00	5	68	2	2	43	3	3	0	13	0	0	0	139	12	5	12	0	0	0	1	0
Truck Count		0	0	0	0	1	0	0	0	0	0	0	0	1								
4:00	4:15	7	40	2	0	28	4	3	0	4	0	0	0	88	3	3	11	0	0	0	0	1
Truck Count		0	0	0	0	1	0	0	0	0	0	0	0	1								
4:15	4:30	5	64	0	1	32	3	3	0	11	0	0	0	119	6	8	7	0	1	0	0	0
Truck Count		0	1	0	0	1	0	0	0	0	0	0	0	2								
4:30	4:45	8	60	2	0	61	2	3	1	11	0	0	0	148	20	3	7	0	1	0	2	0
Truck Count		0	1	0	0	0	0	0	0	0	0	0	0	1								
4:45	5:00	3	67	3	0	60	2	5	1	10	0	0	0	151	10	19	14	0	1	0	1	2
Truck Count		0	2	0	0	2	0	0	0	0	0	0	0	4								
5:00	5:15	2	76	1	3	48	1	1	1	14	0	0	0	147	5	6	2	0	1	0	0	0
Truck Count		0	0	0	0	0	0	0	0	0	0	0	0	0								
5:15	5:30	7	117	4	2	80	4	6	0	13	0	0	0	233	4	2	6	0	1	0	0	0
Truck Count		0	0	0	0	1	0	0	0	0	0	0	0	1								
5:30	5:45	5	89	1	0	46	3	1	0	7	0	0	0	152	3	2	1	0	0	0	0	0
Truck Count		0	0	0	0	0	0	0	0	0	0	0	0	0								
5:45	6:00	2	78	2	1	47	4	3	0	12	0	0	0	149	2	0	2	0	0	0	0	0
Truck Count		0	0	0	0	0	0	0	0	0	0	0	0	0								

PEAK HOUR COUNT

TIME:

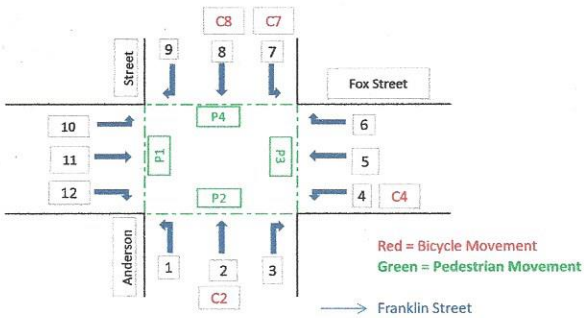
4:30

TO:

5:30

20	323	10	5	252	9	15	3	48	0	0	0	685
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**INTERSECTION PLAN
WITH NUMBERED MOVEMENTS:**



Portland
 Intersection: Fox Street/Anderson Street
 Date: 8/12/14
 Day of Week: Tuesday
 Weather: _____
 Remarks: _____

Count Summary Movement

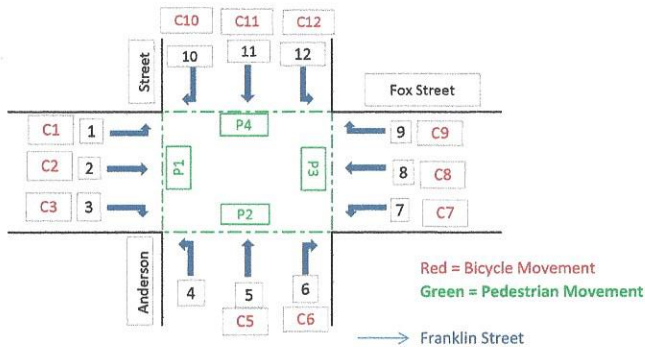
Start	End	1	2	3	4	5	6	7	8	9	10	11	12	Total	P1	P2	P3	P4	C2	C4	C7	C8
7:00	7:15	1	3	8	2	15	3	3	1	0	0	19	6	61	1	1	3	1	0	0	1	0
	Truck Count	0	0	1	0	0	0	0	1	0	0	0	0	2								
7:15	7:30	1	1	3	1	12	3	9	3	1	0	25	1	60	1	0	0	2	0	1	0	0
	Truck Count	0	0	1	0	0	0	0	0	0	0	0	0	1								
7:30	7:45	6	8	15	1	16	1	7	4	1	0	33	3	95	0	0	0	0	0	0	0	0
	Truck Count	0	1	2	0	0	0	0	0	0	0	1	0	4								
7:45	8:00	1	11	17	3	20	7	12	1	0	3	40	1	116	0	0	0	0	0	0	1	0
	Truck Count	0	0	0	0	0	0	0	0	0	0	0	0	0								
8:00	8:15	4	9	21	3	18	4	14	2	1	0	39	1	116	4	1	5	3	0	0	1	0
	Truck Count	0	0	0	0	0	0	0	0	0	0	0	0	0								
8:15	8:30	2	10	17	6	16	11	14	2	0	0	40	3	121	4	0	0	5	0	0	0	0
	Truck Count	0	1	2	0	0	0	0	0	0	0	0	0	3								
8:30	8:45	3	12	35	3	20	8	20	0	1	1	29	2	134	4	3	0	0	1	0	0	0
	Truck Count	0	0	2	0	1	0	0	0	0	1	1	0	5								
8:45	9:00	7	21	22	1	21	8	13	6	2	1	32	0	134	0	0	2	1	0	0	1	1
	Truck Count	0	0	0	0	1	0	0	0	0	0	0	0	1								

PEAK HOUR COUNT

TIME: 8:00 TO: 9:00

16	53	99	13	77	31	61	10	4	3	141	6	514
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**INTERSECTION PLAN
WITH NUMBERED MOVEMENTS:**



Portland
Intersection: Fox Street/Anderson Street
Date: 8/12/14
Day of Week: Tuesday
Weather: _____
Remarks: _____

Count Summary Movement

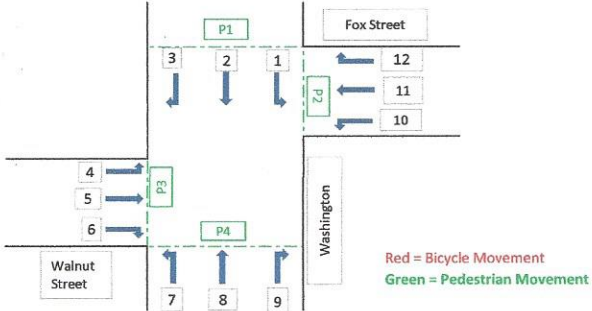
Start	End	1	2	3	4	5	6	7	8	9	10	11	12	Total	P7	P8	P9	P4	C1	C2	C3	C5	C6	C7	C8	C9	C10	C11	C12
3:00	3:15	1	27	2	3	6	14	4	34	12	2	9	12	126	2	0	0	1	2	3	0	1	1	0	2	0	0	0	1
Truck Count		0	0	0	0	0	0	0	0	0	0	0	0	0															
3:15	3:30	0	27	2	11	10	21	8	28	13	1	5	9	135	2	1	2	2	0	0	0	1	1	0	0	0	0	2	4
Truck Count		0	0	0	0	0	1	0	0	0	0	0	0	1															
3:30	3:45	0	28	5	6	9	16	10	31	15	2	7	17	146	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0
Truck Count		0	1	0	0	0	1	0	1	0	0	0	0	3															
3:45	4:00	1	36	3	6	8	13	5	29	18	3	4	10	136	3	2	2	0	0	2	0	0	0	1	1	0	0	0	0
Truck Count		0	1	0	0	0	0	0	0	0	0	0	0	1															
4:00	4:15	3	26	0	6	11	16	9	34	15	1	4	10	135	1	1	0	3	0	0	0	0	1	2	0	0	0	0	0
Truck Count		0	0	0	1	0	1	0	0	0	0	0	0	2															
4:15	4:30	1	26	4	5	14	9	10	41	16	2	5	12	145	0	0	2	2	0	0	0	0	0	1	0	0	0	0	0
Truck Count		0	0	0	0	0	1	0	0	0	0	0	0	1															
4:30	4:45	2	49	2	6	2	10	9	30	23	3	3	14	153	2	0	1	2	0	0	0	0	5	3	2	0	0	1	0
Truck Count		0	0	0	0	0	0	0	0	0	0	0	0	0															
4:45	5:00	3	40	5	4	9	21	8	45	20	3	9	11	178	1	0	3	5	0	0	1	0	2	0	1	0	0	3	0
Truck Count		0	0	0	0	0	0	0	0	0	0	0	0	0															
5:00	5:15	2	34	2	5	6	17	7	38	18	4	2	17	152	2	1	0	3	0	2	1	0	1	0	0	0	1	1	0
Truck Count		0	0	0	0	0	0	0	0	0	0	0	0	0															
5:15	5:30	3	35	1	9	14	22	9	49	18	0	5	17	182	1	1	6	4	0	1	2	0	1	5	0	0	0	0	0
Truck Count		0	0	0	0	0	0	0	0	0	0	0	0	0															
5:30	5:45	1	27	3	5	7	17	8	40	15	5	2	12	142	3	5	1	2	0	1	0	1	1	0	2	1	0	1	0
Truck Count		0	0	0	0	0	1	0	0	0	0	0	0	1															
5:45	6:00	1	30	1	3	9	13	4	46	12	0	0	17	136	3	1	0	6	1	1	0	1	2	1	0	0	0	0	0
Truck Count		0	0	0	0	0	1	0	0	0	0	0	0	1															

PEAK HOUR COUNT

TIME: 4:30 TO: 5:30

10	158	10	24	31	70	33	162	79	10	19	59	665
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**INTERSECTION PLAN
WITH NUMBERED MOVEMENTS:**



Portland
 Intersection: Washington Ave./Fox St./Walnut St.
 Date: 8/14/14
 Day of Week: Thursday
 Weather:
 Remarks: Construction

Count Summary Movement

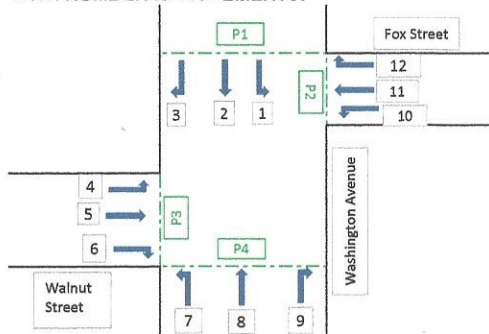
Start	End	1	2	3	4	5	6	7	8	9	10	11	12	Total	P1	P2	P3	P4	C2	C8	C11	C12
7:00	7:15	7	24	1	2	6	3	6	74	1	5	7	5	141	1	1	2	0	0	0	0	0
Truck Count		0	1	0	0	0	0	1	6	0	0	0	0	8								
7:15	7:30	3	26	1	1	10	5	6	78	3	10	10	5	158	0	0	1	0	0	0	0	0
Truck Count		1	2	0	0	0	0	0	4	0	0	0	0	7								
7:30	7:45	9	36	2	4	14	4	2	85	12	1	5	9	183	0	1	0	1	0	0	0	0
Truck Count		0	5	0	1	0	0	0	3	0	0	0	0	9								
7:45	8:00	10	47	2	2	11	6	3	142	8	7	2	11	251	0	4	3	2	0	0	0	0
Truck Count		1	1	0	0	0	0	0	4	0	0	0	0	6								
8:00	8:15	10	39	2	3	11	9	2	159	19	10	4	9	277	4	1	1	1	1	0	0	1
Truck Count		0	3	0	0	0	0	0	1	0	0	0	0	4								
8:15	8:30	19	43	2	5	16	10	4	126	8	8	1	11	253	1	2	3	1	0	0	0	0
Truck Count		0	2	0	1	0	0	1	7	0	0	0	2	13								
8:30	8:45	15	40	2	1	13	2	2	114	9	8	2	15	223	1	0	1	0	0	1	0	0
Truck Count		0	2	0	0	0	0	0	1	1	1	0	0	5								
8:45	9:00	16	60	6	2	21	6	2	117	7	9	2	15	263	0	1	0	0	0	1	1	0
Truck Count		0	2	1	0	0	0	0	5	2	0	0	0	10								

PEAK HOUR COUNT

TIME: 8:00 TO: 9:00

60	191	13	12	61	27	11	530	46	36	9	52	1,048
----	-----	----	----	----	----	----	-----	----	----	---	----	-------

**INTERSECTION PLAN
WITH NUMBERED MOVEMENTS:**



Portland
 Intersection: Washington Ave./Fox St./Walnut St.
 Date: 8/14/14
 Day of Week: Thursday
 Weather: _____
 Remarks: _____

Count Summary Movement

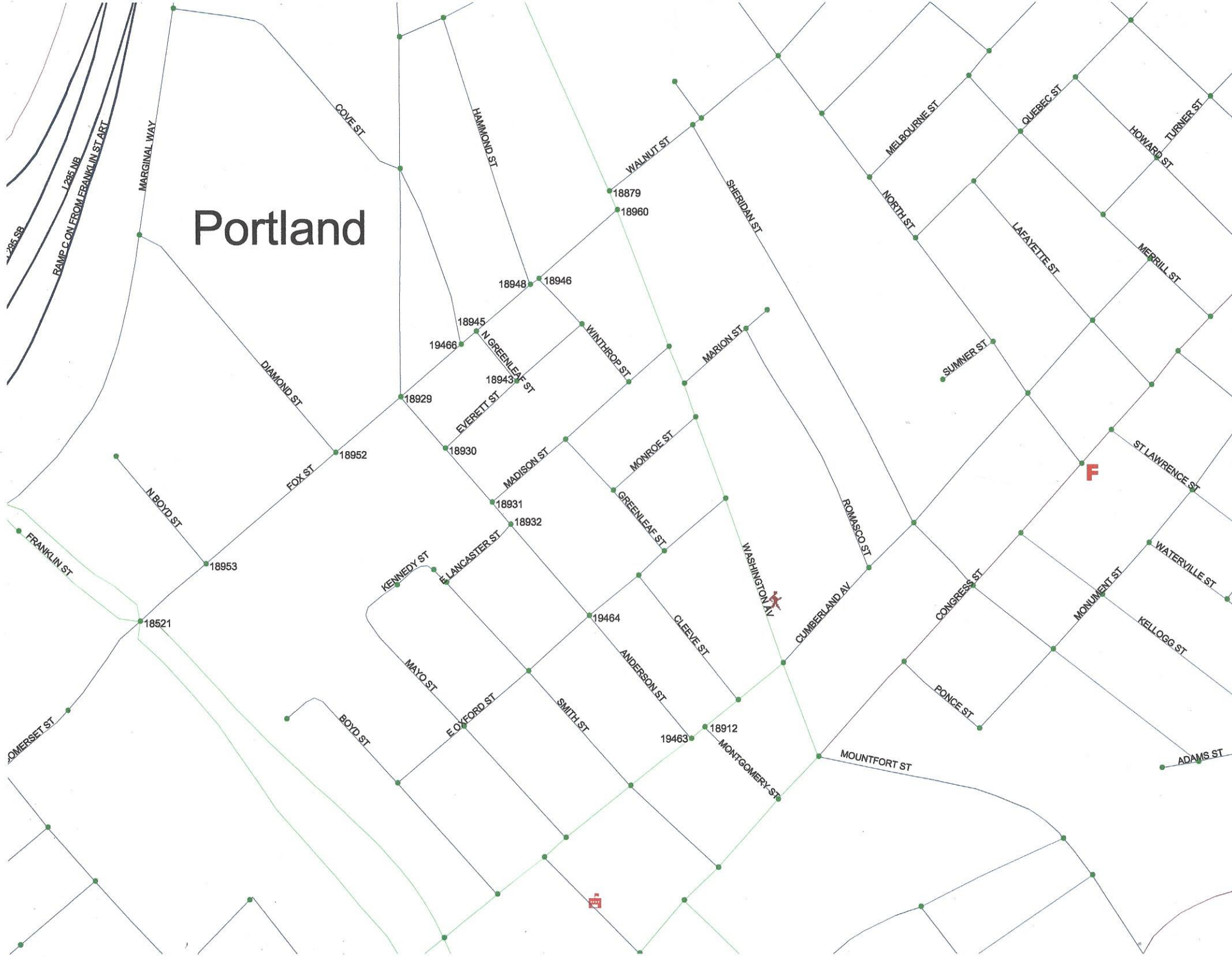
Start	End	1	2	3	4	5	6	7	8	9	10	11	12	Total	P1	P2	P3	P4	C1	C2	C4	C6	C8	C9	C11	C12
3:00	3:15	20	83	4	0	8	3	10	63	19	5	11	10	236	4	1	3	0	0	2	1	0	1	0	1	0
Truck Count		0	0	0	0	0	0	0	2	0	1	0	0	3												
3:15	3:30	14	57	1	4	9	5	4	58	6	11	15	13	197	0	3	2	1	0	0	0	0	1	0	0	0
Truck Count		0	1	0	0	0	0	0	0	0	0	0	0	1												
3:30	3:45	21	110	6	0	13	11	2	66	13	9	22	15	288	3	4	1	0	0	1	1	0	1	0	0	0
Truck Count		0	0	0	1	0	0	0	1	0	0	0	0	2												
3:45	4:00	19	68	3	3	10	0	3	67	8	9	6	8	204	1	4	2	1	0	0	0	0	2	0	0	0
Truck Count		0	0	0	0	1	0	0	0	0	0	0	0	1												
4:00	4:15	36	108	6	0	6	3	5	90	8	15	18	17	312	0	2	0	1	0	1	0	0	0	0	0	0
Truck Count		0	3	0	0	0	0	0	0	0	0	0	0	3												
4:15	4:30	16	104	8	2	15	3	7	76	12	9	17	9	278	1	4	0	0	0	1	0	0	1	0	0	0
Truck Count		0	0	0	0	1	0	0	2	0	0	1	0	4												
4:30	4:45	23	136	7	2	14	11	3	73	19	11	9	16	324	0	3	1	0	0	4	0	0	2	0	0	1
Truck Count		0	0	0	0	0	0	0	0	0	0	0	0	0												
4:45	5:00	16	139	4	2	14	9	7	81	6	5	17	23	323	2	3	1	0	0	3	0	1	4	0	0	0
Truck Count		0	1	0	0	0	0	0	0	0	0	0	0	1												
5:00	5:15	22	148	8	1	7	3	7	83	6	12	19	8	324	2	3	1	0	1	1	0	0	1	0	0	0
Truck Count		0	1	0	0	0	0	0	0	0	0	0	0	1												
5:15	5:30	15	154	7	2	11	1	9	76	12	15	14	11	327	4	9	1	0	0	4	0	0	1	1	1	0
Truck Count		0	0	0	0	0	0	0	0	0	0	0	0	0												
5:30	5:45	30	130	8	5	13	4	5	93	8	9	21	15	341	1	4	0	1	0	2	0	0	1	0	0	0
Truck Count		0	0	0	0	0	0	0	0	0	0	0	0	0												
5:45	6:00	9	84	3	0	9	3	8	75	9	6	14	7	227	3	2	4	1	1	2	0	0	1	0	0	0
Truck Count		0	1	0	0	0	0	0	0	0	0	0	0	1												

PEAK HOUR COUNT

TIME: **4:30** TO: **5:30**

76	579	26	7	46	24	26	313	43	43	59	58	1,300
----	-----	----	---	----	----	----	-----	----	----	----	----	-------

Portland



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

#1

REPORT PARAMETERS

Year 2011, Start Month 1 through Year 2013 End Month: 12

Route: 0560293	Start Node: 18521 End Node: 18960	Start Offset: 0 End Offset: 0	☐ Exclude First Node ☐ Exclude Last Node
Route: 0026X	Start Node: 18960 End Node: 18879	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☐ 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	Percent Annual M			Crash Rate	Critical Rate	CRF		
				K	A	B	C	PD	Injury	Ent-Veh				
18521	0560293 - 0	Int of FOX ST FRANKLIN ST	9	20	0	0	2	8	10	50.0	11.697	0.57	0.99	0.00
											Statewide Crash Rate:	0.65		
18953	0560293 - 0.06	0509373 POR,N.BOYD,FOX ST.	2	3	0	0	0	0	3	0.0	2.209	0.45	0.44	1.03
											Statewide Crash Rate:	0.14		
18952	0560293 - 0.16	0509372 POR,FOX,DIAMOND ST.	2	1	0	0	0	0	1	0.0	2.178	0.15	0.44	0.00
											Statewide Crash Rate:	0.14		
18929	0560293 - 0.21	0509349 POR,ANDERSON,FOX ST.	2	2	0	0	0	0	2	0.0	1.996	0.33	0.45	0.00
											Statewide Crash Rate:	0.14		
19466	0560293 - 0.25	0509888 POR,FOX STREET,COVE STREET	2	0	0	0	0	0	0	0.0	1.531	0.00	0.48	0.00
											Statewide Crash Rate:	0.14		
18945	0560293 - 0.26	0509365 POR,FOX,N.GREENLEAF ST.	2	2	0	0	0	1	0	100.0	1.381	0.48	0.49	0.00
											Statewide Crash Rate:	0.14		
A18948	0560293 - 0.30	0509368 POR,FOX,HAMMOND ST.	2	0	0	0	0	0	0	0.0	0.000	0.00	0.00	0.00
											Statewide Crash Rate:	0.14		
P18946	0560293 - 0.31	0509366 POR,FOX,WINTHROP ST.	2	2	0	0	0	0	2	0.0	1.248	0.53	0.50	1.06
											Statewide Crash Rate:	0.14		
A18960	0560293 - 0.36	Int of FOX ST WASHINGTON AV	2	0	0	0	0	0	0	0.0	0.000	0.00	0.00	0.00
											Statewide Crash Rate:	0.14		
P18879	0026X - 0.28	Int of WALNUT ST, WASHINGTON AV	2	9	0	0	0	2	7	22.2	4.034	0.74	0.38	1.98
											Statewide Crash Rate:	0.14		
Study Years:	3.00	NODE TOTALS:		39	0	0	2	11	25	33.3	26.274	0.49	0.54	0.92

Maine Department Of Transportation - Traffic Engineering, Crash Records Section

Crash Summary I

Sections																	
Start Node	End Node	Element	Offset Begin - End	Route - MP	Section U/R Length	Total Crashes	K	Injury Crashes				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	0.00138	0.00	971.45	0.00
Int of FOX ST, FRANKLIN ST				RD INV 05 60293										Statewide Crash Rate: 346.84			
18952	18953	194637	0 - 0.10	0560293 - 0.06	0.10	2	0	0	0	0	0	0	0.0	0.00201	0.00	881.52	0.00
0509372 POR,FOX,DIAMOND ST.				RD INV 05 60293										Statewide Crash Rate: 346.84			
18929	18952	194603	0 - 0.05	0560293 - 0.16	0.05	2	0	0	0	0	0	0	0.0	0.00097	0.00	1064.25	0.00
0509349 POR,ANDERSON,FOX ST.				RD INV 05 60293										Statewide Crash Rate: 346.84			
18929	19466	194604	0 - 0.04	0560293 - 0.21	0.04	2	0	0	0	0	0	0	0.0	0.00061	0.00	1195.29	0.00
0509349 POR,ANDERSON,FOX ST.				RD INV 05 60293										Statewide Crash Rate: 346.84			
18945	19466	194628	0 - 0.01	0560293 - 0.25	0.01	2	0	0	0	0	0	0	0.0	0.00015	0.00	1497.37	0.00
0509365 POR,FOX,N.GREENLEAF ST.				RD INV 05 60293										Statewide Crash Rate: 346.84			
18945	18948	194627	0 - 0.04	0560293 - 0.26	0.04	2	1	0	0	0	0	1	0.0	0.00049	681.12	1258.33	0.00
0509365 POR,FOX,N.GREENLEAF ST.				RD INV 05 60293										Statewide Crash Rate: 346.84			
18946	18948	194629	0 - 0.01	0560293 - 0.30	0.01	2	0	0	0	0	0	0	0.0	0.00012	0.00	1483.19	0.00
0509366 POR,FOX,WINTHROP ST.				RD INV 05 60293										Statewide Crash Rate: 346.84			
18946	18960	194630	0 - 0.05	0560293 - 0.31	0.05	2	1	0	0	0	0	1	0.0	0.00058	575.63	1210.04	0.00
0509366 POR,FOX,WINTHROP ST.				RD INV 05 60293										Statewide Crash Rate: 346.84			
18879	18960	3123723	0 - 0.01	0026X - 0.27	0.01	2	0	0	0	0	0	0	0.0	0.00036	0.00	793.55	0.00
Int of WALNUT ST, WASHINGTON AV				ST RTE 26										Statewide Crash Rate: 186.16			
Study Years:		3.00		Section Totals:		0.37	2	0	0	0	0	2	0.0	0.00666	100.05	648.35	0.15
				Grand Totals:		0.37	41	0	0	2	11	27	31.7	0.00666	2050.99	796.08	2.58

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

#3

REPORT PARAMETERS

Year 2011, Start Month 1 through Year 2013 End Month: 12

Route: **0560847**Start Node: **18929**Start Offset: **0**☒ Exclude First NodeEnd Node: **19463**End Offset: **0**☐ Exclude Last NodeRoute: **0561238**Start Node: **19463**Start Offset: **0**☒ Exclude First NodeEnd Node: **18912**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	K	Injury A	Crashes B	Percent Annual M C	Crash Rate PD	Critical Rate	CRF					
18930	0560847 - 0.53	0509350 POR,ANDERSON,EVERETT ST.	2	0	0	0	0	0	0.0	0.159	0.00	0.49	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	0.153	2.18	0.47	4.63		
											Statewide Crash Rate:	0.14				
18932	0560847 - 0.59	0509352 POR,E.LANCASTER,ANDERSON ST.	2	0	0	0	0	0	0	0.0	0.133	0.00	0.41	0.00		
											Statewide Crash Rate:	0.14				
19464	0560847 - 0.65	0509886 POR,ANDERSON ST,E.OXFORD STR.	2	1	0	0	0	0	1	0.0	0.164	2.03	0.50	4.09		
											Statewide Crash Rate:	0.14				
19463	0560847 - 0.74	Int of ANDERSON ST CUMBERLAND AV	2	2	0	0	0	0	2	0.0	2.068	0.32	0.45	0.00		
											Statewide Crash Rate:	0.14				
Study Years: 3.00				NODE TOTALS:		4	0	0	0	1	3	25.0	2.677	0.50	0.42	1.19

Maine Department Of Transportation - Traffic Engineering, Crash Records Section

Crash Summary I

Sections																	
Start Node	End Node	Element	Offset Begin - End	Route - MP	Section U/R Length	Total Crashes	K	Injury Crashes				Percent Injury	Annual HMVM	Crash Rate	Critical Rate	CRF	
18929	18930	194602	0 - 0.04	0560847 - 0.49	0.04	2	1	0	0	0	0	1	0.0	0.00006	5272.76	1194.07	4.42
0509349 POR,ANDERSON,FOX ST.				RD INV 05 60847	Statewide Crash Rate: 346.84												
18930	18931	194605	0 - 0.03	0560847 - 0.53	0.03	2	0	0	0	0	0	0	0.0	0.00004	0.00	682.58	0.00
0509350 POR,ANDERSON,EVERETT ST.				RD INV 05 60847	Statewide Crash Rate: 346.84												
18931	18932	194607	0 - 0.03	0560847 - 0.56	0.03	2	0	0	0	0	0	0	0.0	0.00004	0.00	441.48	0.00
0509351 POR,ANDERSON,MADISON ST.				RD INV 05 60847	Statewide Crash Rate: 346.84												
18932	19464	194609	0 - 0.06	0560847 - 0.59	0.06	2	4	0	0	1	0	3	25.0	0.00007	19896.34	1243.30	16.00
0509352 POR,E.LANCASTER,ANDERSON ST.				RD INV 05 60847	Statewide Crash Rate: 346.84												
19463	19464	195146	0 - 0.09	0560847 - 0.65	0.09	2	4	0	0	0	0	2	0.0	0.00008	15854.90	1385.36	11.44
Int of ANDERSON ST CUMBERLAND AV				RD INV 05 60847	Statewide Crash Rate: 346.84												
18912	19463	194577	0 - 0.01	0561238 - 0.98	0.01	2	0	0	0	0	0	0	0.0	0.00020	0.00	785.75	0.00
Int of CUMBERLAND AV, MONTGOMERY ST				RD INV 05 61238	Statewide Crash Rate: 186.16												
Study Years:		3.00		Section Totals:		0.26	9	0	0	1	0	6	11.1	0.00049	6102.75	1070.96	5.70
				Grand Totals:		0.26	13	0	0	1	1	9	15.4	0.00049	8815.08	1357.90	6.49

COLLISION DIAGRAM

SHEET 1 OF 2

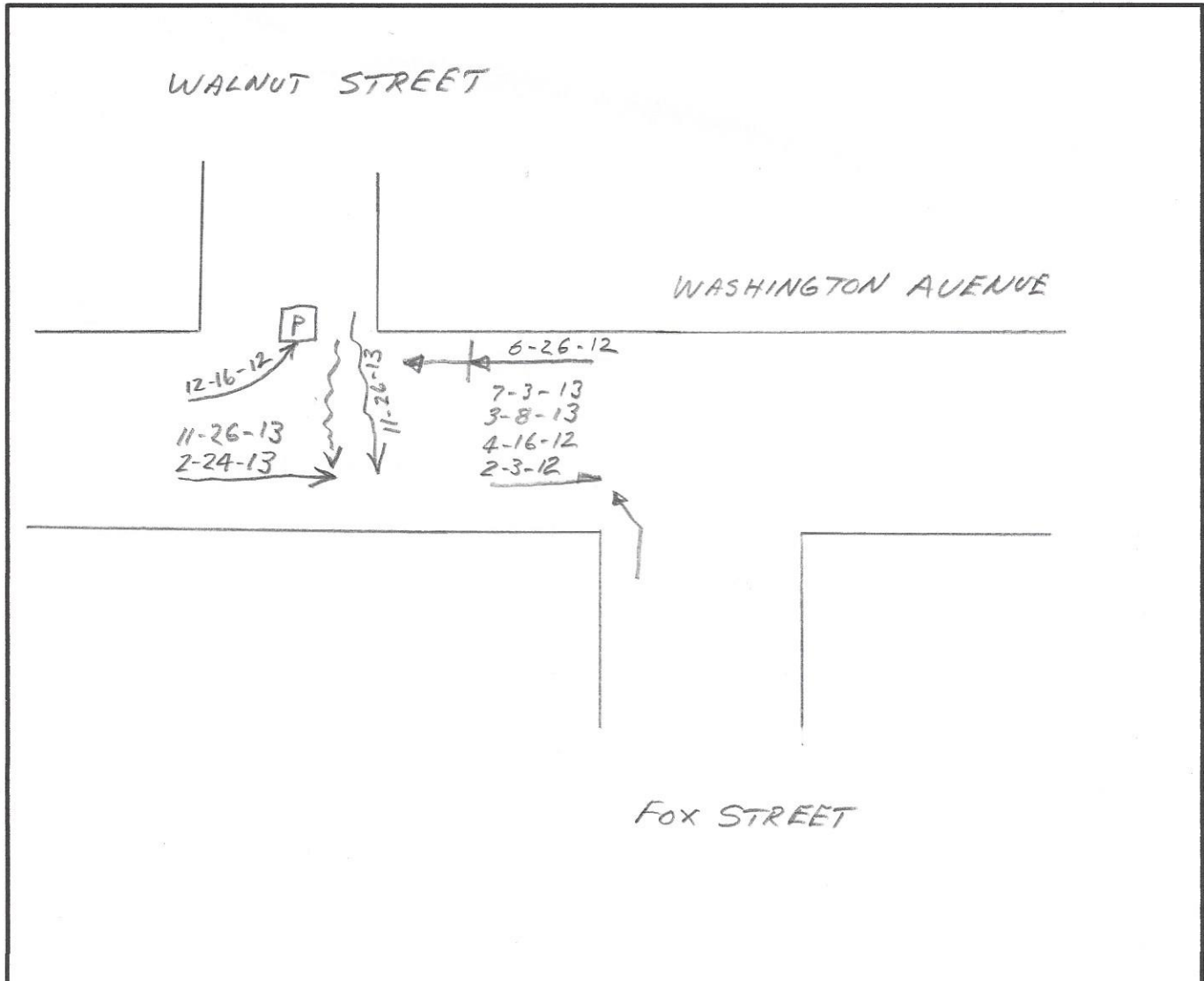
LOCATION WASHINGTON AVE./WALNUT ST./FOX ST.

TOWN PORTLAND

NODE NO(S) P18879

YEARS REVIEWED 2011-2014

DATE PREPARED 8-23-2014



CRITICAL RATE FACTOR _____ EQUIV. PROP. DAMAGE ACC/YEAR _____ ACC/MEV _____

LIGHT

- | | | |
|-------------------------|-------------------------|--------------------------|
| 1. DAWN (MORNING) | 2. DAYLIGHT | 3. DUSK (EVENING) |
| 4. DARK (ST. LIGHTS ON) | 5. DARK (NO ST. LIGHTS) | 6. DARK (ST. LIGHTS OFF) |
| 7. OTHER | | |

ROAD SURFACE

- | | | |
|---------------------------|--------------------------|-----------------------------|
| 1. DRY | 2. WET | 3. SNOW/SLUSH-SANDED |
| 4. ICE/PACKED SNOW-SANDED | 5. MUDDY | 6. DEBRIS |
| 7. OILY | 8. SNOW/SLUSH-NOT SANDED | 9. ICE-PKD. SNOW-NOT SANDED |
| 10. OTHER | | |

APPARENT CONTRIBUTING FACTORS - HUMAN

- | | | |
|--------------------------------------|-------------------------------------|--------------------------------------|
| 1. NO IMPROPER ACTION | 2. FAIL TO YLD. RIGHT OF WAY | 3. ILLEGAL UNSAFE SPEED |
| 4. FOLLOW TOO CLOSE | 5. DISREGARD TRAFFIC CONTROL DEVICE | |
| 6. DRIVING LEFT OF CENTER-NO PASSING | 7. IMPROPER PASS-OVERTAKING | |
| 8. IMP. UNSAFE LANE CHANGE | 9. IMP. PARKING START/STOP | 10. IMPROPER TURN |
| 11. UNSAFE BACKING | 12. NO SIGNAL OR IMP. SIGNAL | 13. IMPEDING TRAFFIC |
| 14. DRIVER INATTENTION-DISTRACTION | 15. DRIVER INEXPERIENCE | |
| 16. PEDEST. VIOLATION ERROR | 17. PHYSICAL IMPAIRMENT | 18. VISION OBSCURED-WINDSHIELD GLASS |
| 19. VISION OBSCURED-SUN/HEADLIGHTS | 20. OTHER VISION OBSCUREMENT | 30. OTHER HUMAN VIOLATION FACTOR |
| 31. HIT AND RUN | 51. UNKNOWN | |

VEHICULAR

- | | | |
|------------------------------------|----------------------------|--------------------------|
| 41. DEFECTIVE BRAKES | 42. DEFECTIVE TIRE/FAILURE | 43. DEFECTIVE LIGHTS |
| 44. DEFECTIVE SUSPENSION OR FACTOR | 45. DEFECTIVE STEERING | 50. OTHER VEHICLE DEFECT |
| | 51. UNKNOWN | |

SYMBOLS

- | | | | | | |
|----------------|---|----------------|-----|------------------|-------|
| ANGLE | ↓ | PEDESTRIAN | → P | FATAL ACCIDENT | ● |
| BACKING | ↔ | REAR END | → | | |
| FIXED OBJECT | → | SIDE SWIPE | → | VEHICLE (MOVING) | → |
| HEAD ON | ↔ | TURNING MOVE | ↗ | BICYCLE | --- B |
| OVERTURN | ↻ | CHANGE LANE | ↗ | ANIMAL | --- A |
| PARKED VEHICLE | □ | OUT OF CONTROL | ↗ | SLED | --- S |

C = CLEAR
SL = SLEET

WEATHER

F = FOG
S = SNOW

R = RAIN
CL = CLOUDY
XW = CROSS WINDS

INJURIES

K = FATAL
A = INCAPACITATING

B = NON-INCAPACITATING
C = POSSIBLE INJURY

COLLISION DIAGRAM

SHEET 2 OF 2

LOCATION WASHINGTON AVE. / WALNUT ST. / FOX ST.

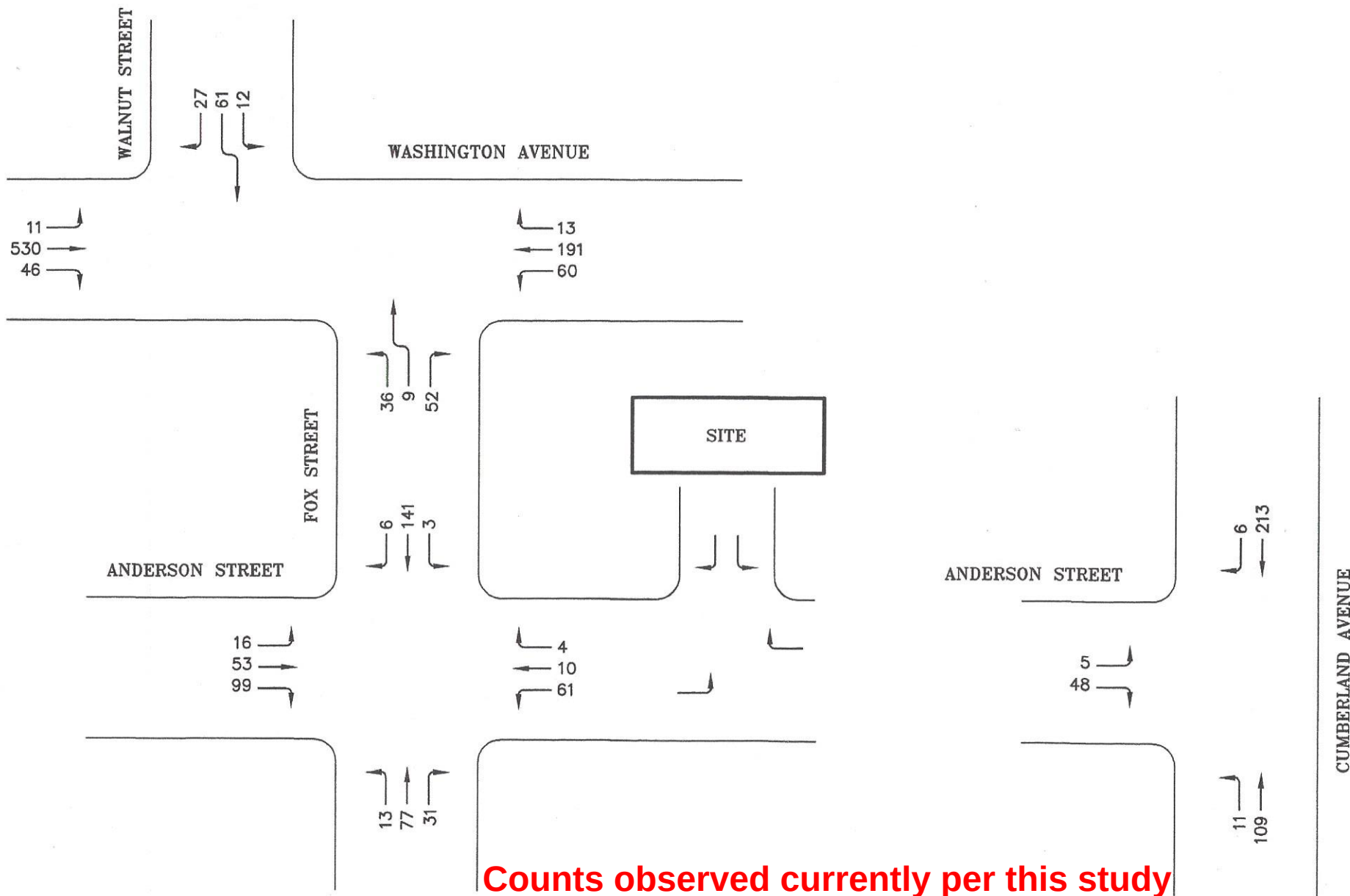
TOWN PORTLAND

NODE NO(S) P18879

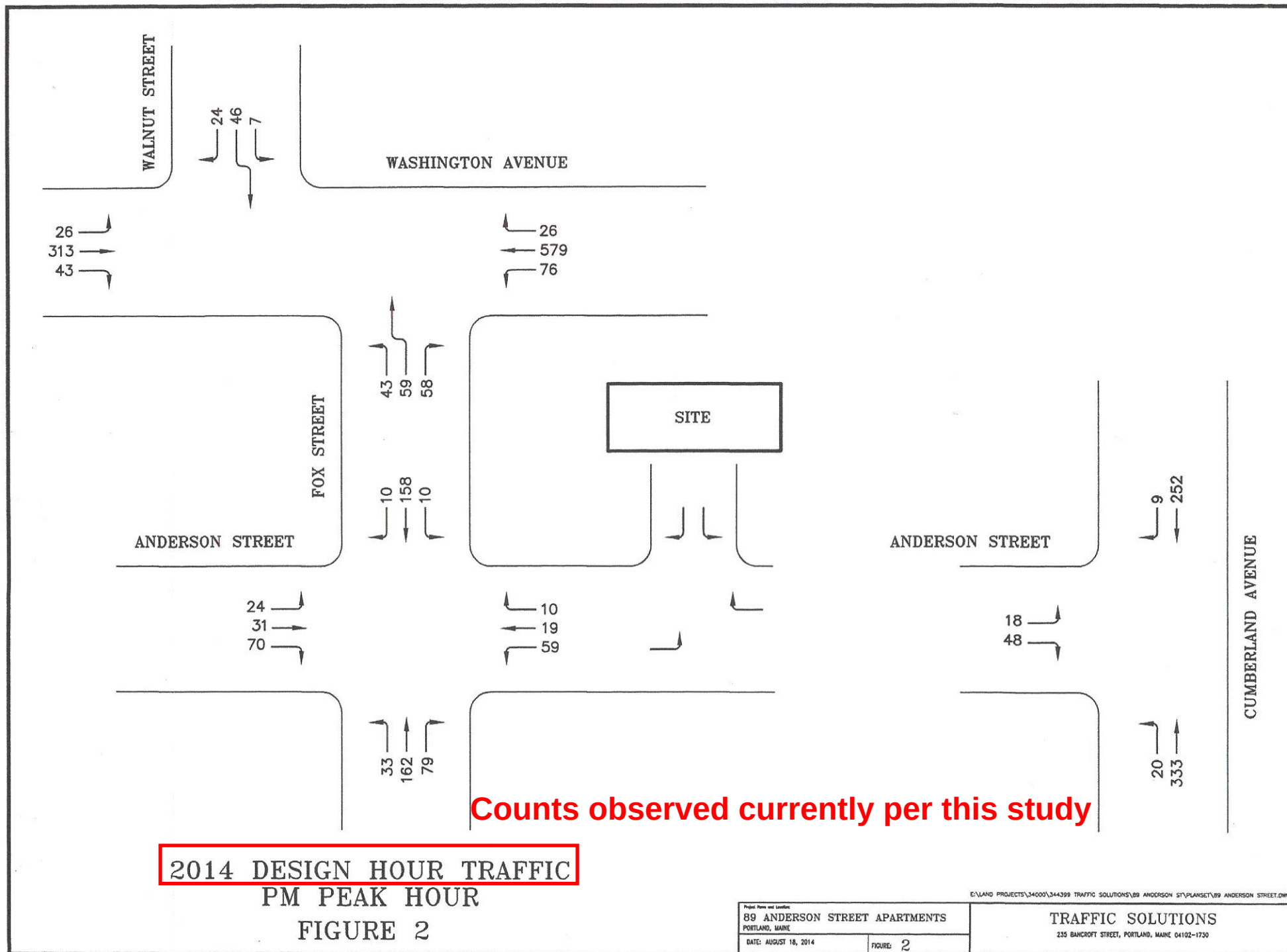
YEARS REVIEWED 2011-2014

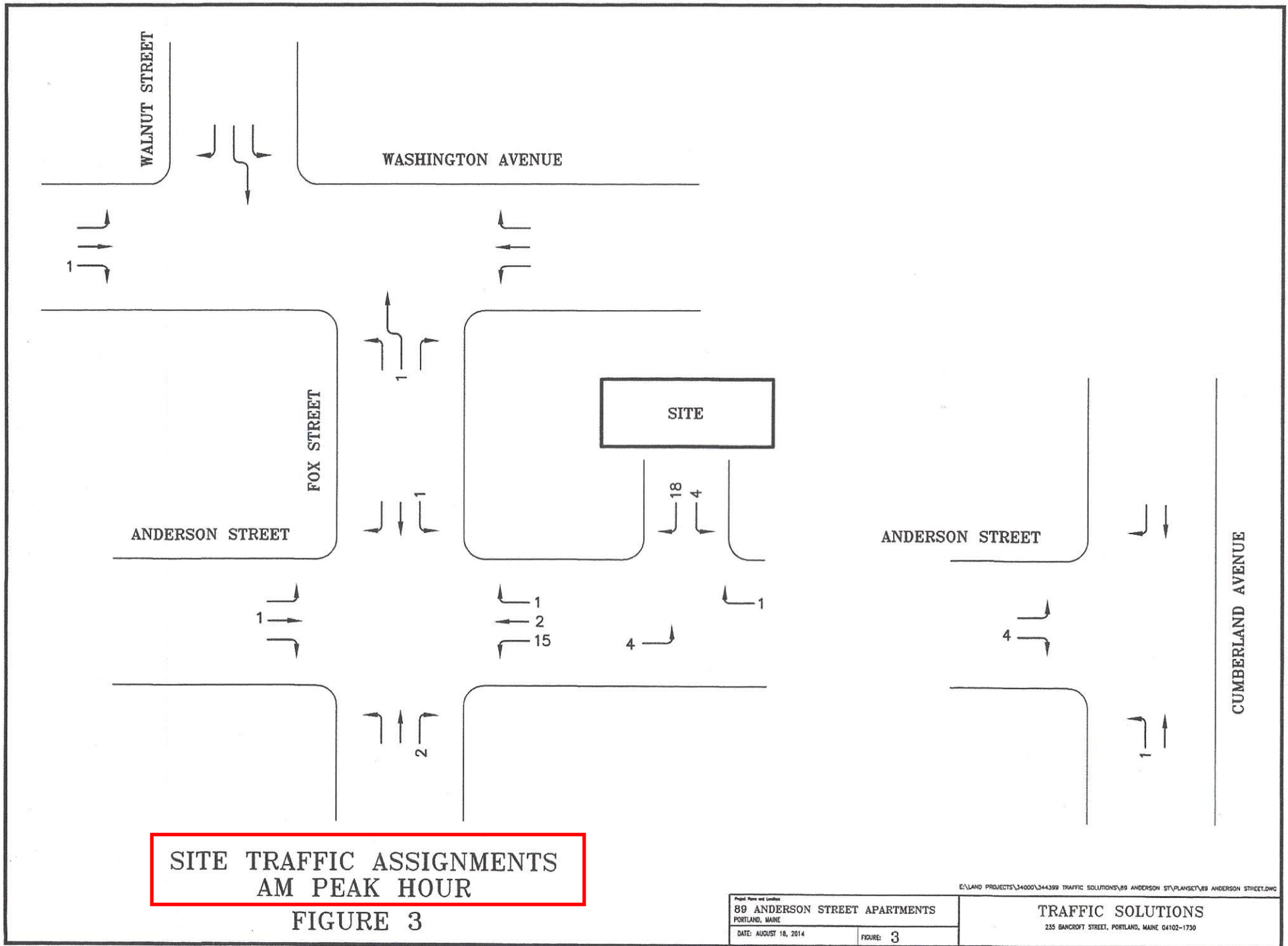
DATE PREPARED 8-23-2014

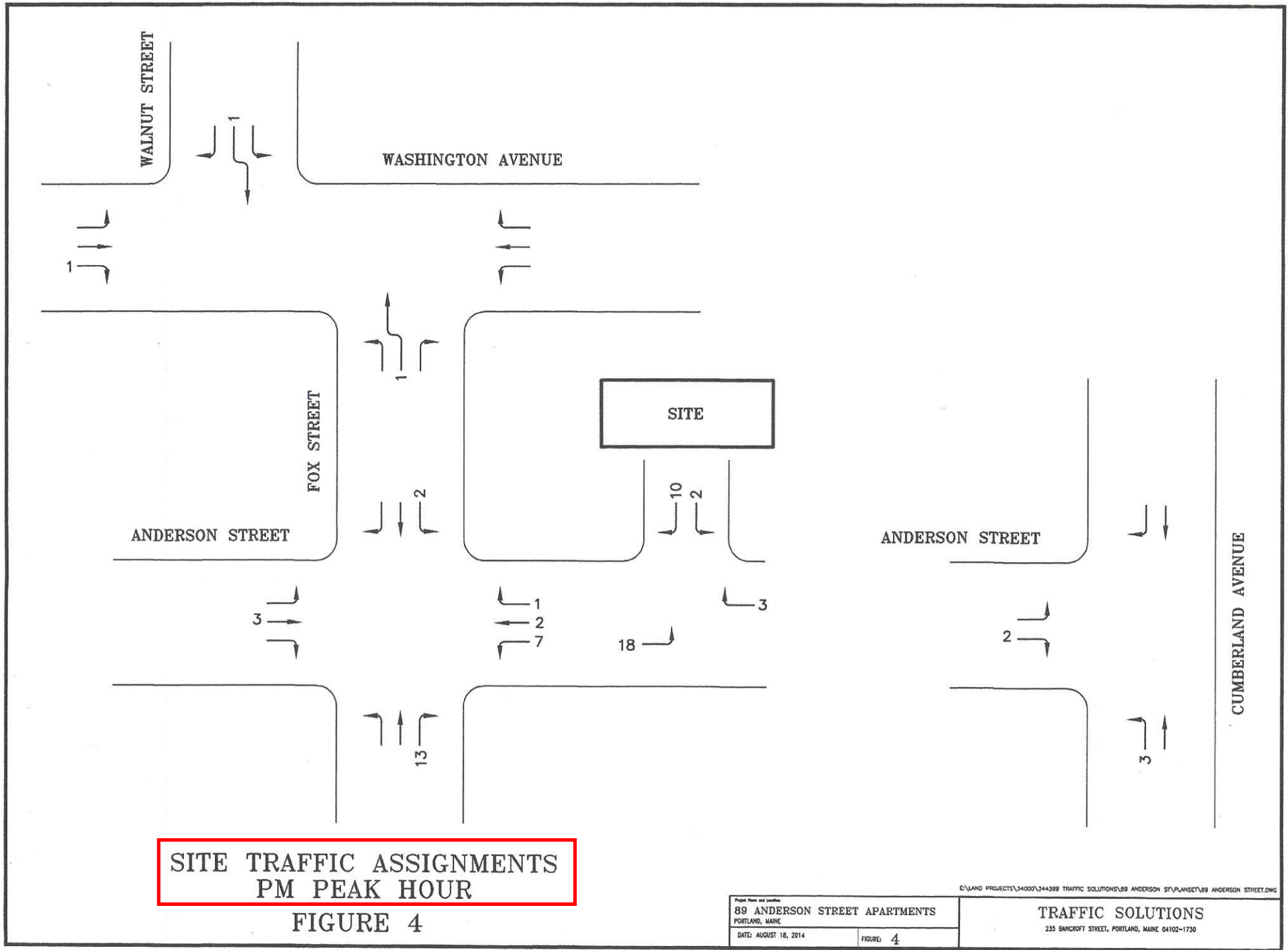
[illegible]



2014 DESIGN HOUR TRAFFIC
AM PEAK HOUR
FIGURE 1

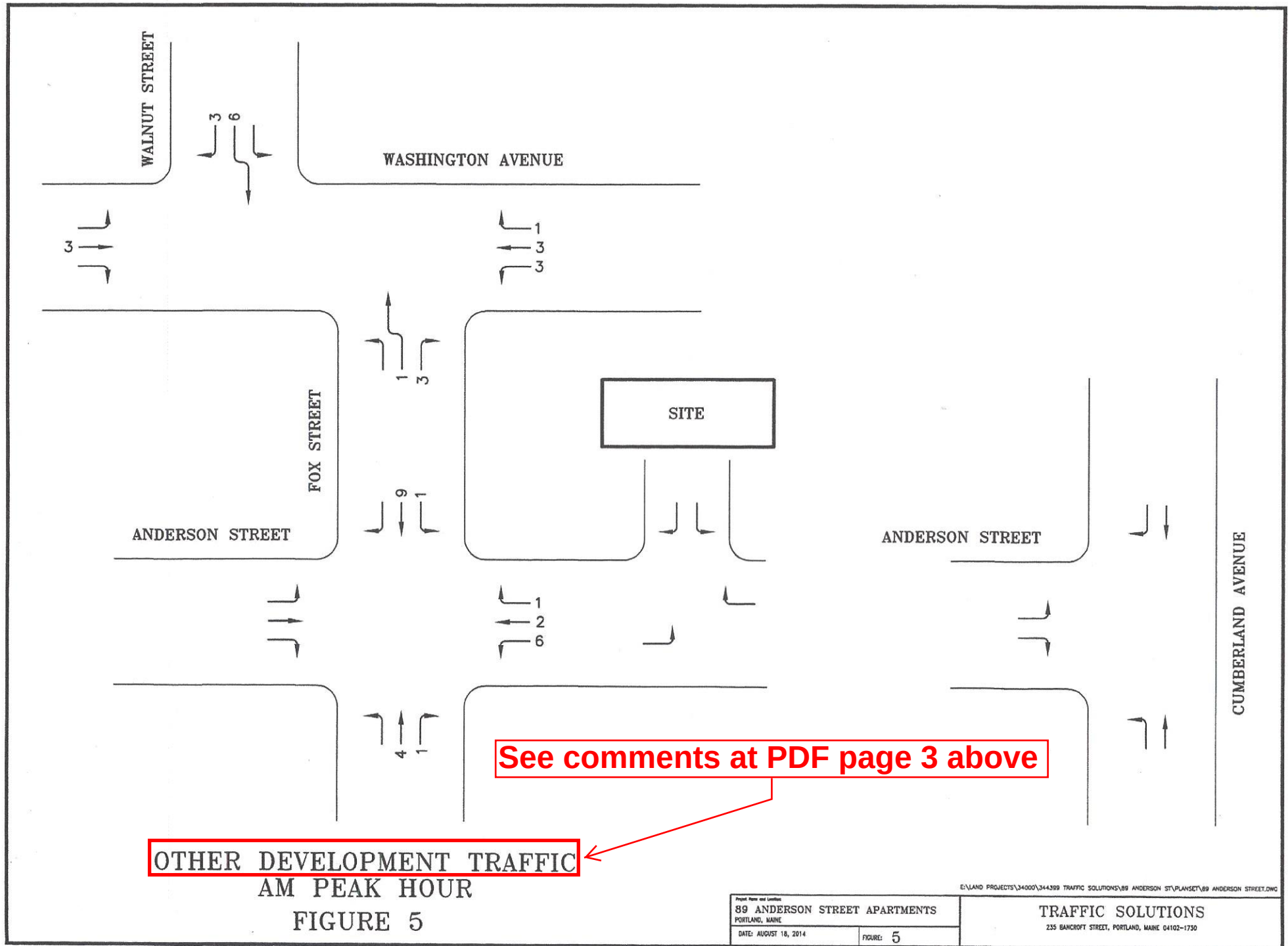


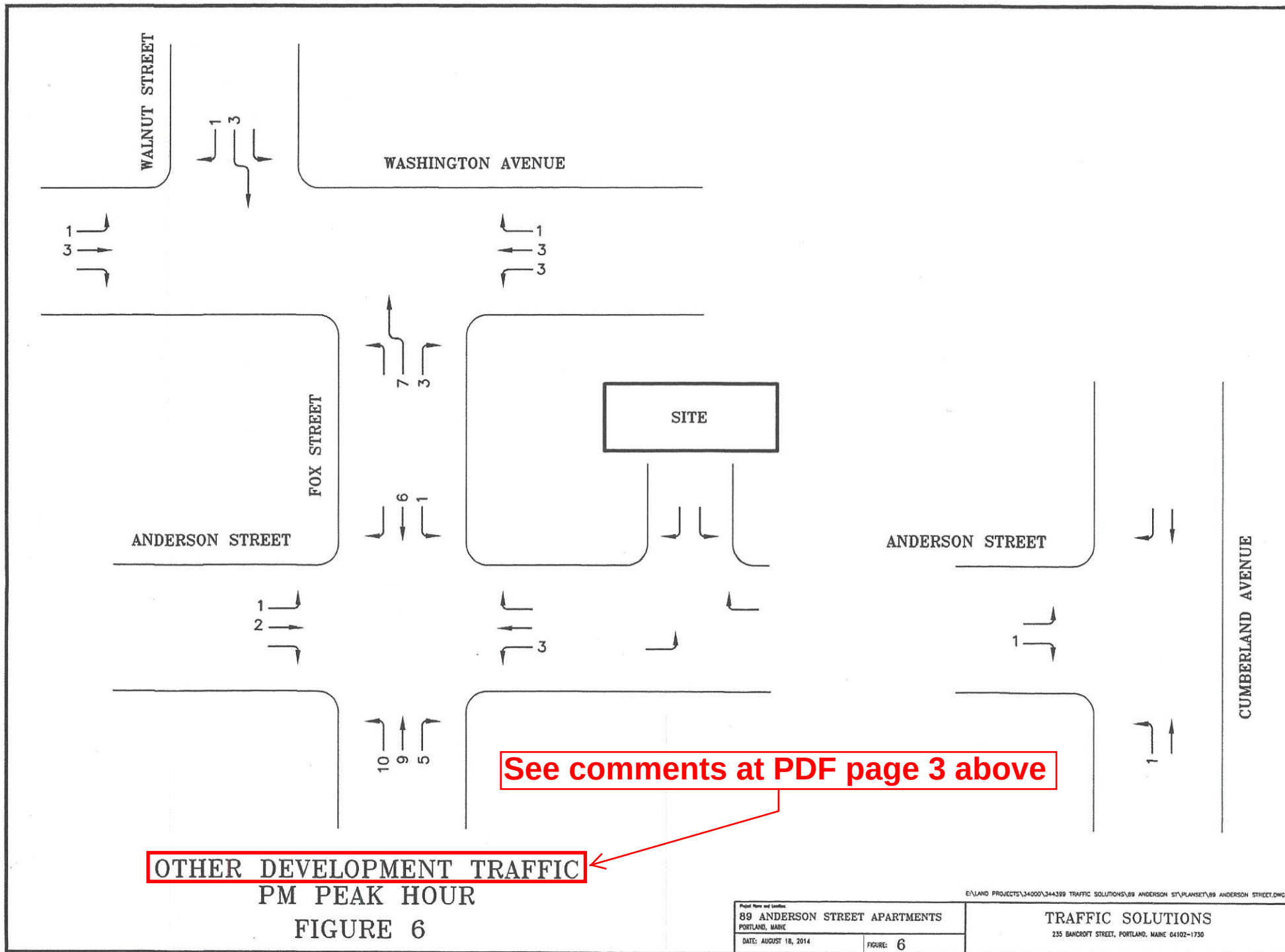




**SITE TRAFFIC ASSIGNMENTS
PM PEAK HOUR**

FIGURE 4



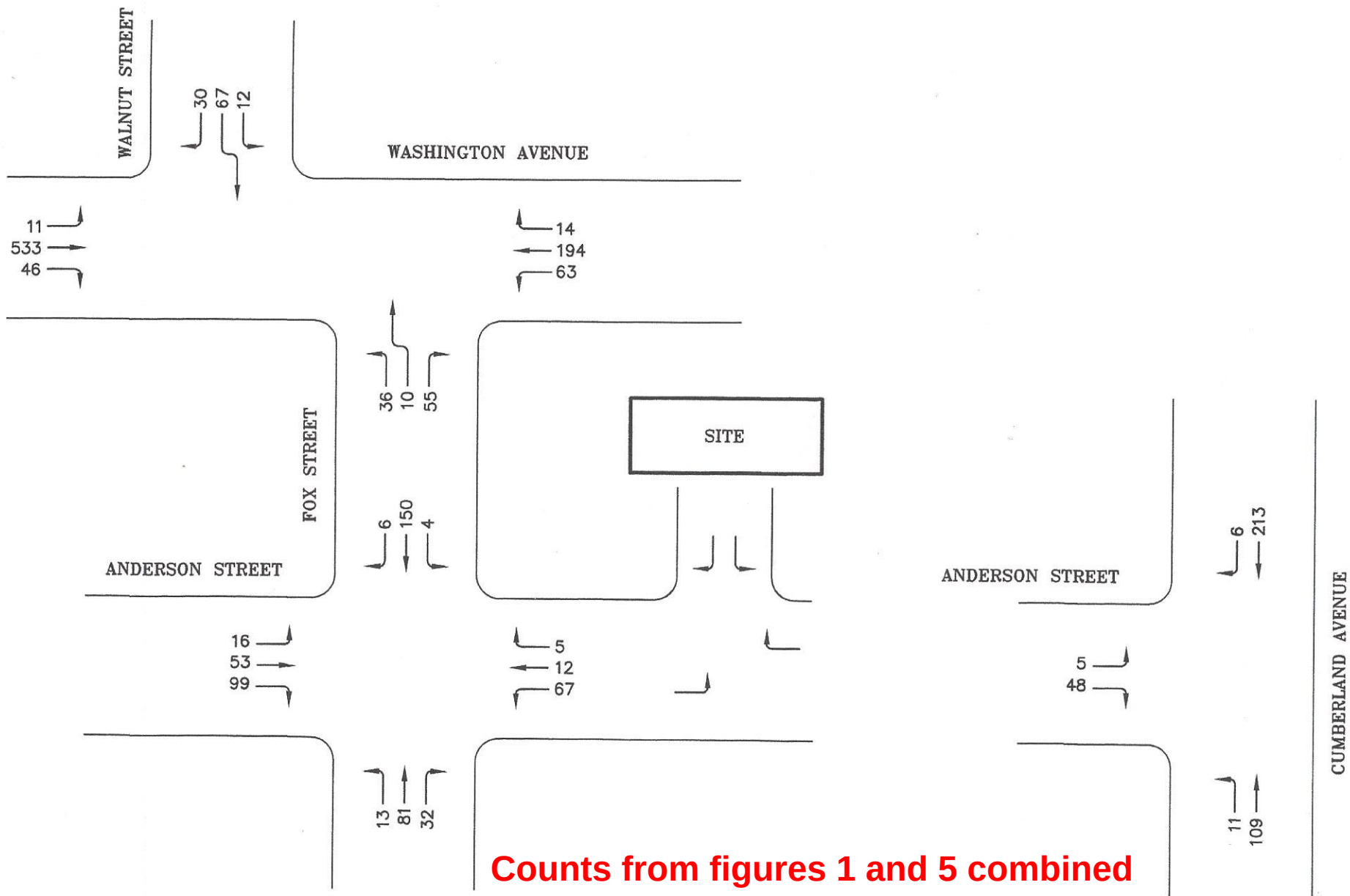


See comments at PDF page 3 above

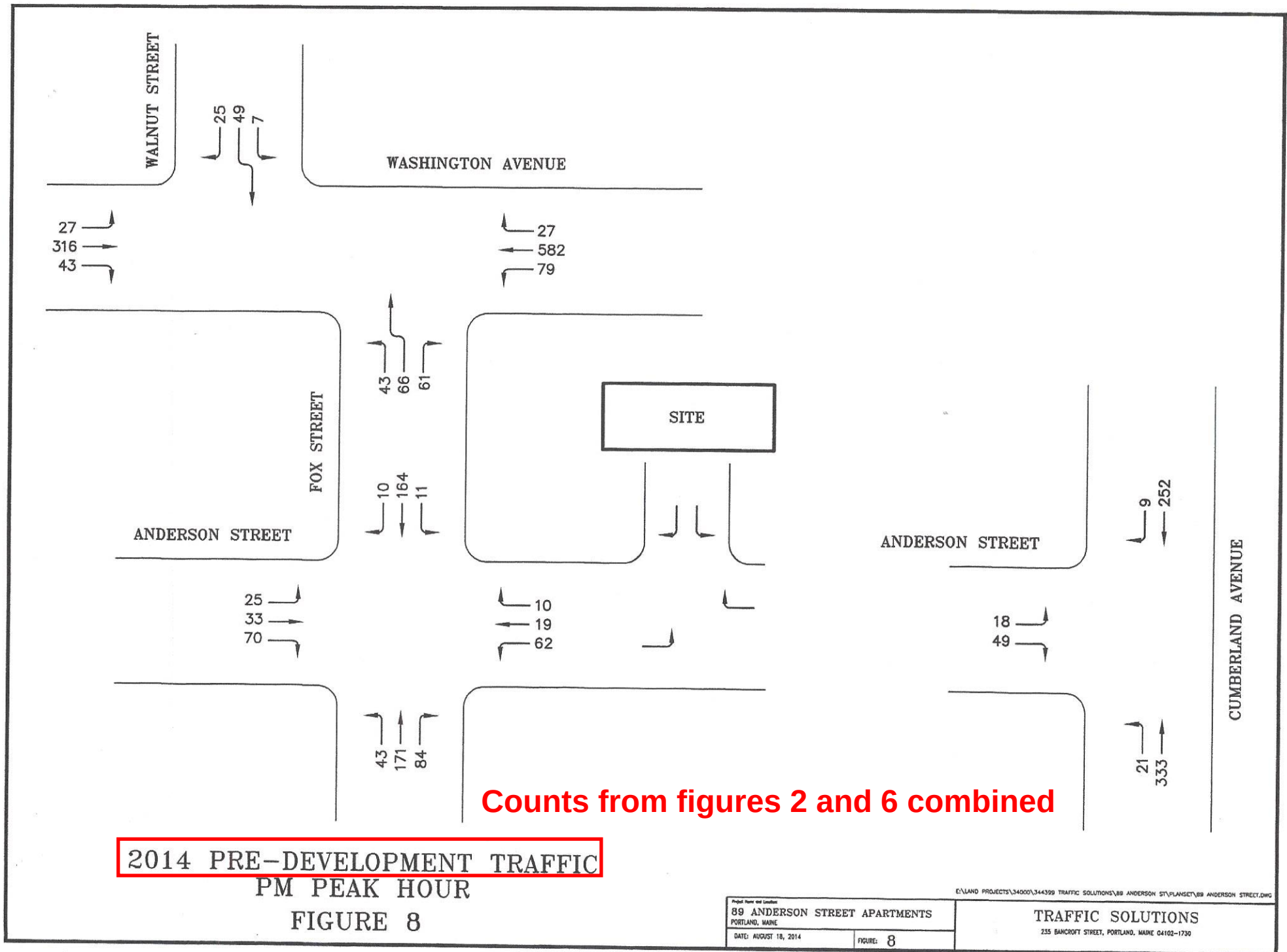
OTHER DEVELOPMENT TRAFFIC

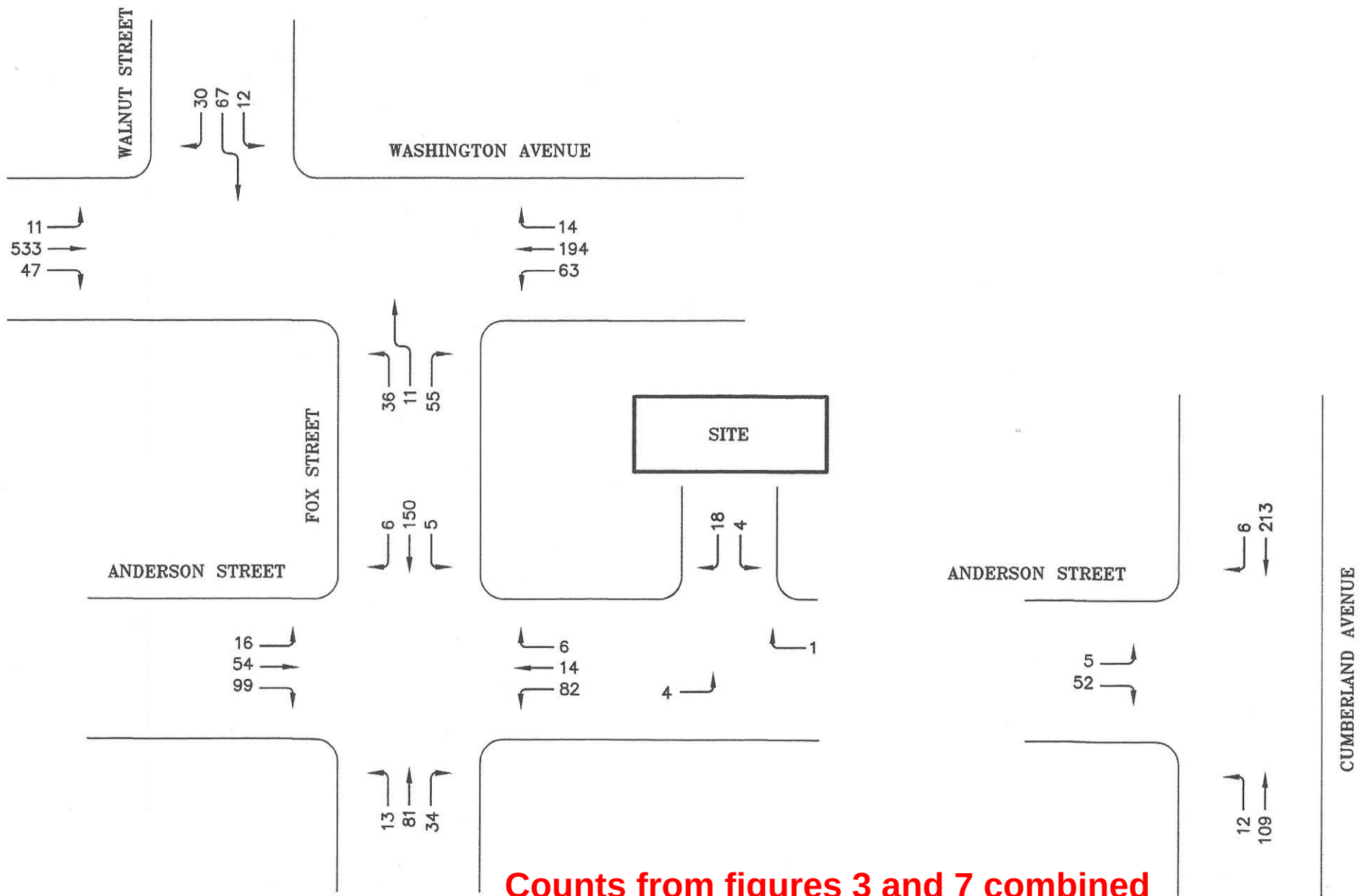
PM PEAK HOUR

FIGURE 6

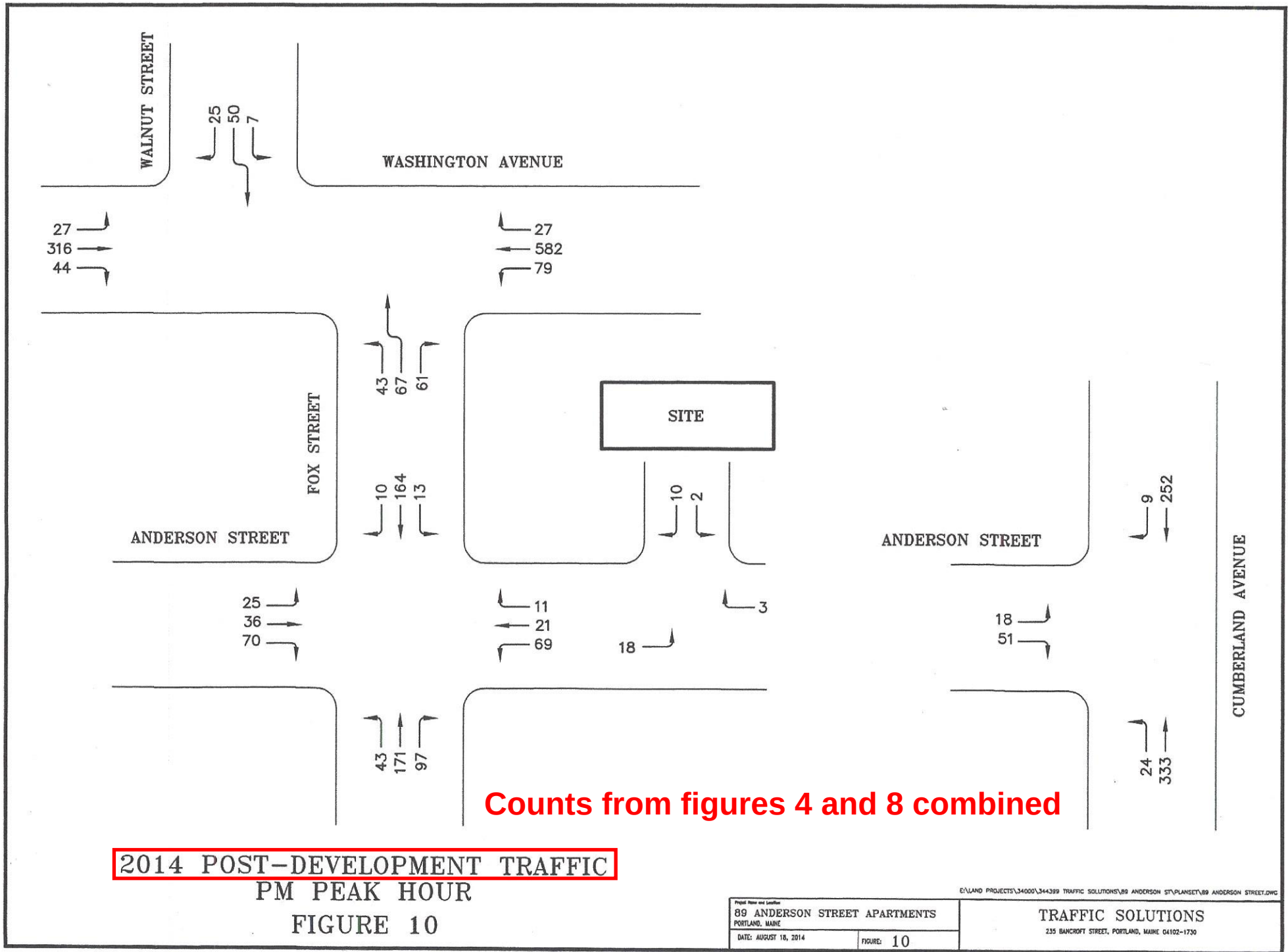


2014 PRE-DEVELOPMENT TRAFFIC
AM PEAK HOUR
FIGURE 7





2014 POST-DEVELOPMENT TRAFFIC
AM PEAK HOUR
FIGURE 9



Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	4:25	4:25	4:25	4:25	4:25	4:25
End Time	5:30	5:30	5:30	5:30	5:30	5:30
Total Time (min)	65	65	65	65	65	65
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	2238	2298	2292	2198	2271	2261
Vehs Exited	2235	2292	2270	2189	2267	2251
Starting Vehs	25	20	18	18	23	18
Ending Vehs	28	26	40	27	27	27
Travel Distance (mi)	593	612	608	573	609	599
Travel Time (hr)	26.2	26.7	27.5	24.9	27.0	26.5
Total Delay (hr)	5.1	4.8	5.8	4.4	5.3	5.1
Total Stops	1099	1188	1241	1098	1182	1162
Fuel Used (gal)	21.7	22.4	22.6	20.9	22.3	22.0

Interval #0 Information Seeding

Start Time 4:25
End Time 4:30
Total Time (min) 5

Volumes adjusted by Growth Factors.
No data recorded this interval.

Interval #1 Information Recording

Start Time 4:30
End Time 5:30
Total Time (min) 60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	2238	2298	2292	2198	2271	2261
Vehs Exited	2235	2292	2270	2189	2267	2251
Starting Vehs	25	20	18	18	23	18
Ending Vehs	28	26	40	27	27	27
Travel Distance (mi)	593	612	608	573	609	599
Travel Time (hr)	26.2	26.7	27.5	24.9	27.0	26.5
Total Delay (hr)	5.1	4.8	5.8	4.4	5.3	5.1
Total Stops	1099	1188	1241	1098	1182	1162
Fuel Used (gal)	21.7	22.4	22.6	20.9	22.3	22.0

2: Washington Ave & Walnut Street Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.3	0.0	0.3	0.1
Total Del/Veh (s)	1.9	0.6	17.3	2.1

4: Fox Street & Washington Ave Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.0	0.5	0.0	0.3
Total Del/Veh (s)	0.5	3.6	26.0	6.2

5: Fox Street & Anderson Street Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.2	0.1	0.3	0.0	0.2
Total Del/Veh (s)	5.0	5.7	6.8	6.8	6.3

6: Cumberland Ave & Anderson Street Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.3	0.2	0.2
Total Del/Veh (s)	3.1	0.5	0.3	1.0

Total Network Performance

Approach	EB	NB	SB	All
Denied Del/Veh (s)			0.4	
Total Del/Veh (s)			7.7	

Intersection: 2: Washington Ave & Walnut Street

Movement	EB	WB	SB
Directions Served	LT	TR	LR
Maximum Queue (ft)	122	38	113
Average Queue (ft)	23	8	43
95th Queue (ft)	75	30	85
Link Distance (ft)	422	12	156
Upstream Blk Time (%)		0	0
Queuing Penalty (veh)		1	0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Fox Street & Washington Ave

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	33	146	179
Average Queue (ft)	4	41	81
95th Queue (ft)	22	112	152
Link Distance (ft)	12	1288	760
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	0		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: Fox Street & Anderson Street

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	62	58	118	75
Average Queue (ft)	37	35	60	42
95th Queue (ft)	58	53	92	67
Link Distance (ft)	764	1258	282	760
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 6: Cumberland Ave & Anderson Street

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	56	45
Average Queue (ft)	31	6
95th Queue (ft)	52	29
Link Distance (ft)	1258	289
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 2

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	4:25	4:25	4:25	4:25	4:25	4:25
End Time	5:30	5:30	5:30	5:30	5:30	5:30
Total Time (min)	65	65	65	65	65	65
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	2201	2294	2276	2197	2254	2246
Vehs Exited	2200	2291	2257	2193	2246	2238
Starting Vehs	28	21	18	26	18	21
Ending Vehs	29	24	37	30	26	27
Travel Distance (mi)	581	608	599	569	600	592
Travel Time (hr)	25.3	26.7	27.4	25.0	26.3	26.1
Total Delay (hr)	4.6	5.0	6.1	4.6	4.8	5.0
Total Stops	1096	1118	1161	1055	1133	1113
Fuel Used (gal)	21.2	22.2	22.2	20.7	21.8	21.6

Interval #0 Information Seeding

Start Time	4:25
End Time	4:30
Total Time (min)	5
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	4:30
End Time	5:30
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	2201	2294	2276	2197	2254	2246
Vehs Exited	2200	2291	2257	2193	2246	2238
Starting Vehs	28	21	18	26	18	21
Ending Vehs	29	24	37	30	26	27
Travel Distance (mi)	581	608	599	569	600	592
Travel Time (hr)	25.3	26.7	27.4	25.0	26.3	26.1
Total Delay (hr)	4.6	5.0	6.1	4.6	4.8	5.0
Total Stops	1096	1118	1161	1055	1133	1113
Fuel Used (gal)	21.2	22.2	22.2	20.7	21.8	21.6

2: Washington Ave & Walnut Street Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.3	0.0	0.2	0.1
Total Del/Veh (s)	1.7	0.6	16.0	2.0

4: Fox Street & Washington Ave Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.0	0.5	0.0	0.3
Total Del/Veh (s)	0.5	3.8	27.0	6.5

5: Fox Street & Anderson Street Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.2	0.1	0.3	0.0	0.2
Total Del/Veh (s)	4.6	5.6	6.8	6.7	6.2

6: Cumberland Ave & Anderson Street Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.3	0.2	0.2
Total Del/Veh (s)	3.3	0.5	0.3	0.9

Total Network Performance

Denied Del/Veh (s)			0.3	
Total Del/Veh (s)			7.6	

Intersection: 2: Washington Ave & Walnut Street

Movement	EB	WB	SB
Directions Served	LT	TR	LR
Maximum Queue (ft)	95	47	113
Average Queue (ft)	19	7	42
95th Queue (ft)	63	31	84
Link Distance (ft)	422	12	156
Upstream Blk Time (%)		0	0
Queuing Penalty (veh)		1	0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Fox Street & Washington Ave

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	31	199	208
Average Queue (ft)	5	45	83
95th Queue (ft)	23	135	161
Link Distance (ft)	12	1288	737
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	0		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: Fox Street & Anderson Street

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	62	55	107	72
Average Queue (ft)	22	33	57	35
95th Queue (ft)	45	50	89	57
Link Distance (ft)	662	1258	281	737
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 6: Cumberland Ave & Anderson Street

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	52	44
Average Queue (ft)	30	5
95th Queue (ft)	48	25
Link Distance (ft)	1258	289
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 1

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	6:55	6:55	6:55	6:55	6:55	6:55
End Time	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	65	65	65	65	65	65
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	1738	1660	1705	1739	1659	1701
Vehs Exited	1737	1662	1708	1735	1648	1697
Starting Vehs	16	16	20	23	14	14
Ending Vehs	17	14	17	27	25	17
Travel Distance (mi)	483	459	475	474	456	469
Travel Time (hr)	20.8	19.2	20.5	20.2	19.4	20.0
Total Delay (hr)	3.3	2.8	3.4	3.1	3.0	3.1
Total Stops	982	883	963	926	870	926
Fuel Used (gal)	17.7	16.6	17.4	17.3	16.4	17.1

Interval #0 Information Seeding

Start Time 6:55
End Time 7:00
Total Time (min) 5

Volumes adjusted by Growth Factors.
No data recorded this interval.

Interval #1 Information Recording

Start Time 7:00
End Time 8:00
Total Time (min) 60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1738	1660	1705	1739	1659	1701
Vehs Exited	1737	1662	1708	1735	1648	1697
Starting Vehs	16	16	20	23	14	14
Ending Vehs	17	14	17	27	25	17
Travel Distance (mi)	483	459	475	474	456	469
Travel Time (hr)	20.8	19.2	20.5	20.2	19.4	20.0
Total Delay (hr)	3.3	2.8	3.4	3.1	3.0	3.1
Total Stops	982	883	963	926	870	926
Fuel Used (gal)	17.7	16.6	17.4	17.3	16.4	17.1

2: Washington Ave & Walnut Street Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.4	0.0	0.1	0.3
Total Del/Veh (s)	1.3	0.4	15.3	2.7

4: Fox Street & Washington Ave Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.0	0.2	0.0	0.1
Total Del/Veh (s)	0.5	3.5	13.1	2.6

5: Fox Street & Anderson Street Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.2	0.2	0.2	0.0	0.1
Total Del/Veh (s)	5.2	5.9	5.7	6.5	5.8

6: Cumberland Ave & Anderson Street Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.2	0.1
Total Del/Veh (s)	3.7	0.4	0.2	1.0

Total Network Performance

Denied Del/Veh (s)	0.3
Total Del/Veh (s)	6.3

Intersection: 2: Washington Ave & Walnut Street

Movement	EB	WB	SB
Directions Served	LT	TR	LR
Maximum Queue (ft)	62	24	112
Average Queue (ft)	4	1	50
95th Queue (ft)	27	12	95
Link Distance (ft)	422	12	156
Upstream Blk Time (%)		0	0
Queuing Penalty (veh)		0	0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Fox Street & Washington Ave

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	31	112	92
Average Queue (ft)	8	37	41
95th Queue (ft)	30	89	71
Link Distance (ft)	12	1288	735
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	2		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: Fox Street & Anderson Street

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	68	69	71	72
Average Queue (ft)	27	36	37	36
95th Queue (ft)	55	58	59	58
Link Distance (ft)	600	1258	281	735
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 6: Cumberland Ave & Anderson Street

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	63	34
Average Queue (ft)	28	3
95th Queue (ft)	50	19
Link Distance (ft)	1258	289
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 2

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	6:55	6:55	6:55	6:55	6:55	6:55
End Time	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	65	65	65	65	65	65
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	1614	1713	1638	1725	1629	1663
Vehs Exited	1602	1717	1640	1711	1632	1659
Starting Vehs	11	17	21	14	17	14
Ending Vehs	23	13	19	28	14	18
Travel Distance (mi)	451	478	461	482	455	465
Travel Time (hr)	18.7	19.8	19.3	20.2	19.2	19.4
Total Delay (hr)	2.6	2.8	2.8	2.9	2.9	2.8
Total Stops	805	859	877	844	849	849
Fuel Used (gal)	16.0	17.2	16.5	17.1	16.3	16.6

Interval #0 Information Seeding

Start Time 6:55
End Time 7:00
Total Time (min) 5

Volumes adjusted by Growth Factors.
No data recorded this interval.

Interval #1 Information Recording

Start Time 7:00
End Time 8:00
Total Time (min) 60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1614	1713	1638	1725	1629	1663
Vehs Exited	1602	1717	1640	1711	1632	1659
Starting Vehs	11	17	21	14	17	14
Ending Vehs	23	13	19	28	14	18
Travel Distance (mi)	451	478	461	482	455	465
Travel Time (hr)	18.7	19.8	19.3	20.2	19.2	19.4
Total Delay (hr)	2.6	2.8	2.8	2.9	2.9	2.8
Total Stops	805	859	877	844	849	849
Fuel Used (gal)	16.0	17.2	16.5	17.1	16.3	16.6

2: Washington Ave & Walnut Street Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.5	0.0	0.2	0.3
Total Del/Veh (s)	1.2	0.4	13.2	2.4

4: Fox Street & Washington Ave Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.0	0.2	0.0	0.1
Total Del/Veh (s)	0.5	3.3	11.3	2.2

5: Fox Street & Anderson Street Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.2	0.1	0.2	0.0	0.1
Total Del/Veh (s)	4.7	5.5	5.5	6.0	5.4

6: Cumberland Ave & Anderson Street Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.2	0.2	0.1
Total Del/Veh (s)	3.5	0.3	0.2	0.9

Total Network Performance

Denied Del/Veh (s)		0.3
Total Del/Veh (s)		5.7

Intersection: 2: Washington Ave & Walnut Street

Movement	EB	WB	SB
Directions Served	LT	TR	LR
Maximum Queue (ft)	43	24	117
Average Queue (ft)	4	1	46
95th Queue (ft)	23	10	85
Link Distance (ft)	422	12	156
Upstream Blk Time (%)		0	0
Queuing Penalty (veh)		0	0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Fox Street & Washington Ave

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	38	130	98
Average Queue (ft)	8	33	38
95th Queue (ft)	30	87	69
Link Distance (ft)	12	1288	740
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	2		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: Fox Street & Anderson Street

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	61	57	74	56
Average Queue (ft)	25	31	36	31
95th Queue (ft)	49	51	60	46
Link Distance (ft)	647	1258	281	740
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 6: Cumberland Ave & Anderson Street

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	52	31
Average Queue (ft)	25	2
95th Queue (ft)	47	16
Link Distance (ft)	1258	289
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 2



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August, 2014

Traffic Signal Warrant Assessment

Washington Avenue/Fox Street/Walnut Street Intersection Portland, Maine

INTRODUCTION

An abbreviated traffic signal warrant analysis was conducted for the Washington Avenue/Fox Street/Walnut Street intersection based upon traffic data gathered in the month of August 2014 between the hours of 7:00 to 9:00 AM and, again, between the hours of 3:00 to 6:00 PM. The traffic data was adjusted by a factor of 13%, which represents the approximate variation between “peak” traffic collected during the week of August 14 and “average” travel conditions during the month of November (Adjustment factor based upon MaineDOT’s Weekly Group Mean Factors; refer to attached copy of MaineDOT factors). The abbreviated or preliminary traffic signal warrant analysis is based upon a total of 5-hours of traffic data; a formal traffic signal warrant study is generally prepared based upon 12-hours of traffic data and traffic information.

TRAFFIC SIGNAL WARRANT ASSESSMENT

The abbreviated traffic signal warrant analysis follows the guidelines presented in the 2009 edition of the Manual on Uniform Traffic Control Devices (MUTCD) in Chapter 4C. The MUTCD provides nine separate traffic signal warrants, whereby, prevailing conditions at an intersection can be evaluated to determine if sequenced traffic signals are warranted. Each of the nine warrants is listed as follows:

- Warrant 1 – Eight Hour Vehicular Volume
- Warrant 2 – Four Hour Vehicular Volume
- Warrant 3 – Peak Hour
- Warrant 4 – Pedestrian Volume
- Warrant 5 – School Crossing
- Warrant 6 – Coordinated Signal System
- Warrant 7 – Crash Experience
- Warrant 8 – Roadway Network
- Warrant 9 – Intersection near a Grade Crossing

The federal publication clearly states that, “*the satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal*”. Guidance is specifically provided in the MUTCD on the conduct of the required engineering study and the judgment required in completing the signal warrant assessment. The direction provided, specific to prevailing conditions found at the study intersection, is summarized as follows:

A traffic signal should not be installed unless an engineering study indicates that the signal will improve the overall safety and/or operation of the intersection.

A signal should not be installed if it will seriously disrupt traffic flow.

Estimated 2014 “Average” Hourly Traffic Data

The presentation of the traffic volume data presented in Table 1 has been adjusted, as necessary, to project the hourly “major” and “minor” street volumes used in the conduct of the traffic signal warrant study.

Table 1
Abbreviated Traffic Signal Warrant Study
“Average” Conditions-Traffic Values⁽¹⁾
Washington Avenue/Fox Street/Walnut Street Intersection

<u>Time of Day</u>	Major Street Volume⁽²⁾ (Both Approaches) <u>Washington Avenue</u>	Minor Street Volume⁽³⁾ <u>Fox Street</u>	Minor Street Volume⁽³⁾ <u>Walnut Street</u>
7:00 - 8:00 AM	562	73	67
8:00 - 9:00 AM	740	87	84
3:00 - 4:00 PM	634	59	117
4:00 - 5:00 PM	867	71	145
5:00 - 6:00 PM	880	41	131

Notes:

⁽¹⁾ “Average traffic values were computed applying a 13% reduction of August 2014 Traffic Data (refer to copy of August traffic count cards for subject intersection), which is based upon the Maine Department of Transportation’s Weekly Group Mean Factors.

⁽²⁾ Washington Avenue has been defined as the “major” street.

⁽³⁾ Minor Street approaches are both Fox Street and Walnut Street. All right-turn movements were included in hourly Minor Street volumes.

Traffic Safety Data: The Washington Avenue/Walnut Street/Fox Street intersection meets MaineDOT’s criteria for a high crash location. A total of 9 crashes and a Critical Rate Factor (CRF) of 1.98 were reported for the intersection. A more in-depth review (preparation of detailed vehicle collision diagrams) was prepared for the intersection to determine if a clear pattern of accident is occurring (Copies of the Collision Diagrams are attached as an appendix to the report). The detailed review of the vehicle crash reports for the intersection would suggest two clear patterns of concern: 1) four of the nine accidents involved vehicles on the Fox Street approach turning left onto Washington Avenue being struck by thru vehicles traveling eastbound on Washington Avenue; 2) the second pattern, with a total of three collisions, involved vehicles approaching Washington Avenue from Walnut Street sliding through the intersection striking a thru vehicle on Washington Avenue.

Traffic Signal Warrant Analyses: The evaluation was conducted for Warrants 1, 2, 3, and 7 and was based upon the 5-hours of traffic data presented in Table 1 only.

Each of the three traffic signal warrants used in the analyses are briefly described below followed by a determination of whether forecast conditions meet or fail required conditions.

Warrant 1: Eight Hour Vehicular Volume

Condition A - Warrant requires 500 vehicles per hour on major roadway (combination of both directions) and a total of 150 vehicles per hour on the highest minor street approach.

Condition B - Warrant requires 750 vehicles per hour on major roadway (combination of both directions) and a total of 75 vehicles per hour on the highest minor street approach.

Condition A+B - Warrant requires 80% of values stated for both Conditions A & B.

Warrant Likely Not Satisfied

Warrant 2: Four Hour Vehicular Volume

If travel conditions for any four hours of an average day representing the volume per hour on the major street and the corresponding vehicles per hour on the higher volume minor street approach all fall above the applicable curve in Figure 4C-1 then warrant is met.

Warrant Likely Not Satisfied

Warrant 3: Peak Hour

If travel conditions for one hour of an average day representing the volume per hour on the major street and the corresponding vehicles per hour on the higher volume minor street approach fall above the applicable curve in Figure 4C-3 then warrant is met.

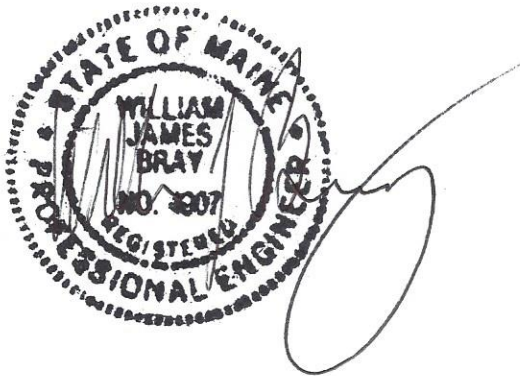
Warrant Likely Not Satisfied

Warrant 7: Crash Experience

Analysis based upon conclusions of safety evaluation conducted in Safety History Section above. Each of the following criteria must be met to consider the need for a traffic control signal:

- A. Adequate trial of alternatives with satisfactory observance and enforcement has failed to reduce the crash frequency; and
- B. Five or more reported crashes, of types susceptible to correction by a traffic control signal, have occurred within a 12-month period; and
- C. For each of any 8 hours of an average day the vehicles per hour given in the 80% column for Condition A in Table 4C-1 or the vph in both of the columns of Condition B in Table 4C-1 exists on both the major and minor street approaches.

Warrant Likely Not Satisfied



2012
Weekly Group Mean Factors
Average: 2009, 2010, 2011

Month	Start Date	Dates	Month	Urban	Arterial	Recreational	Group	Group	Group	Year
Month	Start Date	Dates	Week #	Group I	Group II	Group III	I + II	II + III	I + III	Week #
Jan	01	2,3,4,5,6	1	1.02	1.11	1.35	1.07	1.23	1.19	1
	08	9,10,11,12	2	1.09	1.21	1.50	1.15	1.36	1.30	2
	15	16,17,18,19	3	1.10	1.23	1.53	1.17	1.38	1.32	3
	22	23,24,25,26	4	1.05	1.18	1.46	1.12	1.32	1.26	4
	29	30,31,1,2,3	5	1.12	1.26	1.57	1.19	1.42	1.35	5
Feb	05	6,7,8,9,10	1	1.02	1.14	1.41	1.08	1.28	1.22	6
	12	13,14,15,16	2	1.02	1.12	1.36	1.07	1.24	1.19	7
	19	20,21,22,23	3	1.06	1.15	1.38	1.11	1.27	1.22	8
	26	27,28,29,30	4	1.06	1.17	1.38	1.12	1.28	1.22	9
Mar	04	5,6,7,8,9	1	1.06	1.16	1.39	1.11	1.28	1.23	10
	11	12,13,14,15	2	1.00	1.10	1.33	1.05	1.22	1.17	11
	18	19,20,21,22	3	1.02	1.13	1.35	1.08	1.24	1.19	12
	25	26,27,28,29	4	1.01	1.12	1.32	1.07	1.22	1.17	13
Apr	01	2,3,4,5,6	1	0.98	1.09	1.26	1.04	1.18	1.12	14
	08	9,10,11,12	2	0.97	1.08	1.22	1.03	1.15	1.10	15
	15	16,17,18,19	3	0.97	1.04	1.12	1.01	1.08	1.05	16
	22	23,24,25,26	4	0.97	1.05	1.17	1.01	1.11	1.07	17
	29	30,1,2,3,4	5	0.93	1.02	1.10	0.98	1.06	1.02	18
May	06	7,8,9,10,11	1	0.92	1.00	1.08	0.96	1.04	1.00	19
	13	14,15,16,17	2	0.92	0.98	1.04	0.95	1.01	0.98	20
	20	21,22,23,24	3	0.89	0.93	0.92	0.91	0.93	0.91	21
	27	28,29,30,31	4	0.90	0.94	0.96	0.92	0.95	0.93	22
Jun	03	4,5,6,7,8	1	0.89	0.93	0.91	0.91	0.92	0.90	23
	10	11,12,13,14	2	0.90	0.92	0.90	0.91	0.91	0.90	24
	17	18,19,20,21	3	0.90	0.89	0.81	0.90	0.85	0.86	25
	24	25,26,27,28	4	0.89	0.86	0.77	0.88	0.82	0.83	26
Jul	01	2,3,4,5,6	1	0.87	0.81	0.70	0.84	0.76	0.79	27
	08	9,10,11,12	2	0.88	0.83	0.71	0.86	0.77	0.80	28
	15	16,17,18,19	3	0.88	0.82	0.69	0.85	0.76	0.79	29
	22	23,24,25,26	4	0.88	0.81	0.67	0.85	0.74	0.78	30
	29	30,31,1,2,3	5	0.87	0.79	0.64	0.83	0.72	0.76	31
Aug	05	6,7,8,9,10	1	0.87	0.78	0.65	0.83	0.72	0.76	32
	12	13,14,15,16	2	0.87	0.79	0.66	0.83	0.73	0.77	33
	19	20,21,22,23	3	0.88	0.81	0.70	0.85	0.76	0.79	34
	26	27,28,29,30	4	0.88	0.85	0.78	0.87	0.82	0.83	35
Sep	02	3,4,5,6,7	1	0.89	0.88	0.86	0.89	0.87	0.88	36
	09	10,11,12,13	2	0.90	0.90	0.89	0.90	0.90	0.90	37
	16	17,18,19,20	3	0.91	0.91	0.92	0.91	0.92	0.92	38
	23	24,25,26,27	4	0.92	0.91	0.96	0.92	0.94	0.94	39
	30	1,2,3,4,5	5	0.91	0.89	0.98	0.90	0.94	0.95	40
Oct	07	8,9,10,11,12	1	0.92	0.90	0.98	0.91	0.94	0.95	41
	14	15,16,17,18	2	0.93	0.95	1.05	0.94	1.00	0.99	42
	21	22,23,24,25	3	0.95	1.00	1.12	0.98	1.06	1.04	43
	28	29,30,31,1	4	0.95	1.02	1.18	0.99	1.10	1.07	44
Nov	04	5,6,7,8,9	1	0.96	1.04	1.21	1.00	1.13	1.09	45
	11	12,13,14,15	2	0.97	1.04	1.23	1.01	1.14	1.10	46
	18	19,20,21,22	3	1.00	1.04	1.25	1.02	1.15	1.13	47
	25	26,27,28,29	4	0.97	1.03	1.24	1.00	1.14	1.11	48
Dec	02	3,4,5,6,7	1	1.00	1.13	1.32	1.07	1.23	1.16	49
	09	10,11,12,13	2	1.01	1.12	1.34	1.07	1.23	1.18	50
	16	17,18,19,20	3	0.98	1.08	1.30	1.03	1.19	1.14	51
	23	24,25,26,27	4	1.08	1.14	1.34	1.11	1.24	1.21	52

USE 0.13 Factor To Create "Average" Conditions