1. Legal Ad

Documents: PB LEGAL AD 8-4-15.DOCX, PB LEGAL AD 8-4-15.PDF

2. Agenda

Documents: PB AGENDA 8-4-15.PDF

3. 17 Carleton Street

3.I. Memo And Attachments For 8-4-15 PB Meeting

3.I.i. Memo

Documents: CARLETON ST. - 17 (MEMO).PDF

3.I.ii. Memo Attachments

Documents: CARLETON ST. - 17 (MEMO ATTACHMENTS).PDF

3.I.iii. Applicants Submittal

Documents: CARLETON ST. - 17 (APPLICANTS SUBMISSION).PDF

3.II. Plans

Documents: CARLETON ST. - 17 (PLANS).PDF

3.III. Memo And Attachments From 7-14-15 PB Meeting

3.III.i. 7-14-15 Memo

Documents: CARLETON ST. - 17 (MEMO).PDF

3.III.ii. 7-14-15 Memo Attachments

Documents: CARLETON ST. - 17 (MEMO ATTACHMENTS).PDF

3.III.iii. 7-14-15 Applicants Submittal

Documents: CARLETON ST. - 17 (APPLICANTS SUBMITTAL).PDF

3.III.iv. 7-14-15 Public Comment

Documents: CARLETON ST. - 17 (PUBLIC COMMENT).PDF

LEGAL ADVERTISEMENT
PORTLAND PLANNING BOARD MEETING

The Portland Planning Board will hold a meeting on Tuesday, August 4, 2015, State of Maine Room, 2nd Floor, City Hall, 389 Congress Street. **Public comments will be taken at this meeting.**

Evening Workshop – 6:00 p.m.

1. Level III Site Plan and Subdivision; 17 Carleton Street; Avesta Housing, Applicant. The Board will hold a workshop on a 37 unit affordable housing project with a total floor area of 26,375 sq. ft. and a building footprint of 5,495 sq. ft. The bedroom mix is for 12 efficiency, 23 one-bedroom and 2 two-bedroom units. A total of 31 parking spaces are proposed for this project.

STUART O'BRIEN, CHAIR - PORTLAND PLANNING BOARD

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CITY OF PORTLAND, MAINE

PLANNING BOARD

Stuart G. O'Brien, Chair
Elizabeth Boepple, Vice Chair
Sean Dundon
Bill Hall
Carol Morrissette
Jack Soley
David Eaton

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WORKSHOP MEETING ONLY – THERE ARE NO PUBLIC HEARING ITEMS

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STUART O'BRIEN, CHAIR - PORTLAND PLANNING BOARD

Memorandum
Planning and Urban Development Department
Planning Division

To: Stuart O'Brien, Chair, and Members of the Portland Planning Board
From: Shukria Wiar, Planner
Date: July 31, 2015
Re: 17 Carleton Street, Avesta Housing Development
Project #: 2015-078 **CBL:** 055 A004001
Meeting Date: August 4, 2015

I. INTRODUCTION

Avesta Housing Development has submitted a Level III application for site plan and subdivision review for their property at 17 Carleton Street. The property is situated on Carleton Street and backs up to an alley passageway to West Street. The proposal is to construct a new building with thirty-seven (37) affordable housing units with a surface parking lot with thirty-one (31) spaces. The new building will be four stories along Carleton Street with the surface parking lot at the rear of the property.

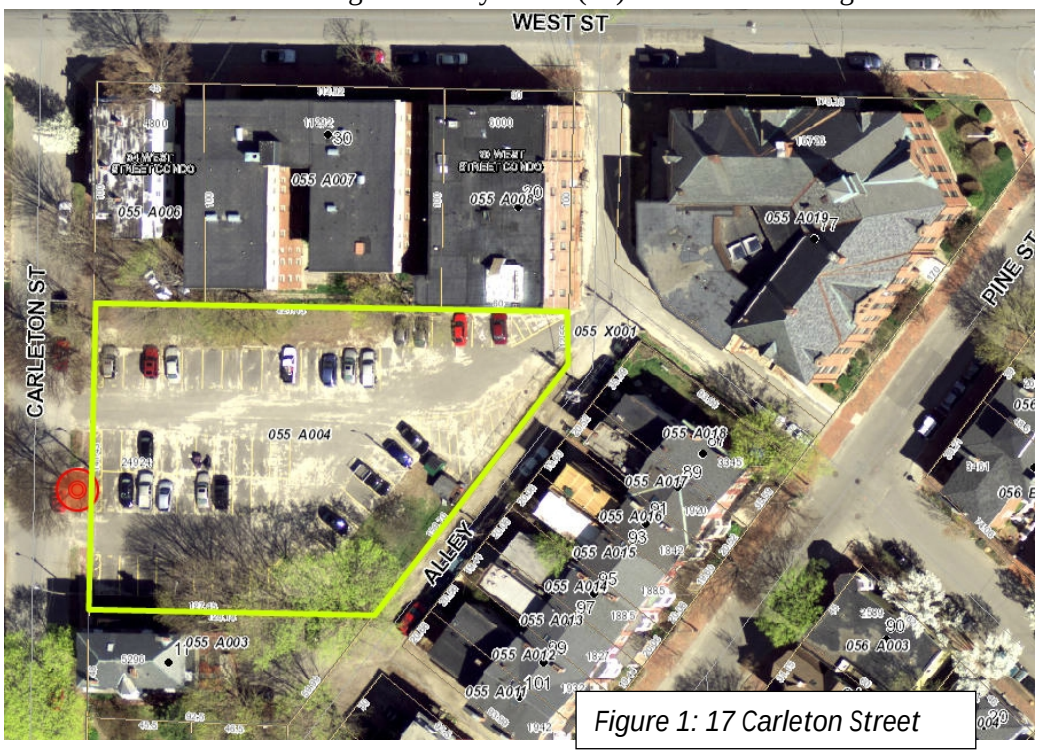


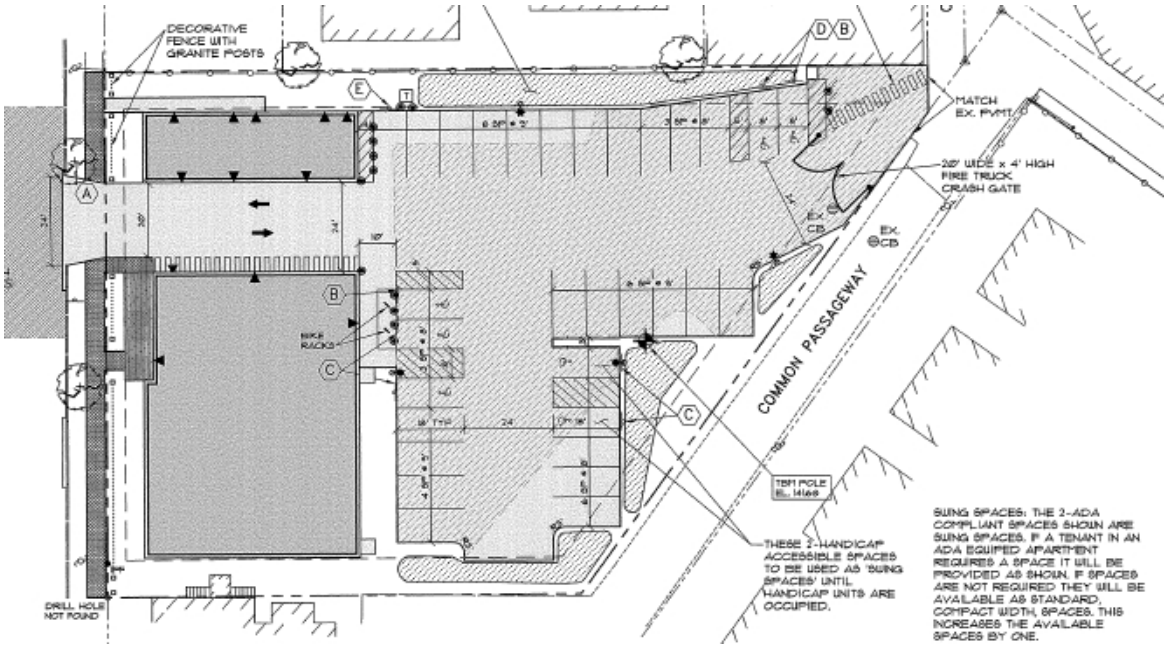
Figure 1: 17 Carleton Street

The site is currently a surface parking lot that consists of 25, 247 square feet. The property is located in the Residential R-6 zone and is in the West End Historic District. The project is being reviewed by the Historic Preservation Board for the design of the building and compatibility with the neighborhood. This proposal is being reviewed as a final plan and subject to the Site Plan and Subdivision Ordinance of the Land Use Code.

The Planning Board held a workshop on the item on July 14, 2015. At this workshop, the project was introduced by Planning staff and a presentation by the applicant. Public comments and questions were taken at the meeting. Due to time limitations, the Planning Board scheduled a second workshop to address the public questions. The Board directed City staff reviewers and the applicant to prepare responses and presentations for the workshop. The July 14th memorandum is included in the packet for the Board's reference. Since the July 14th meeting, Avesta has submitted revised site plans, updated building elevations, and responded to the questions (refer to applicant's

submission, Attachment A, 2 and 13).

II. SUMMARY OF REVISIONS TO SITE PLAN SINCE THE JULY 14TH WORKSHOP



Since the last workshop meeting, the applicant has revised the proposed development in regard to vehicle access. The applicant is no longer proposing to utilize the common passageway for traffic circulation. The development will now have access only via Carleton Street. To prohibit vehicles from using the common passage way to get to the 17 Carleton Street site, a gate will be placed at the rear access of the parking lot, however, pedestrian access will be available.

Another change to the proposal is that the building has been raised from 41' to 45' in height. The Fire Department

had requested that there be two accesses to the building: one at the front of the building and one at the rear of the building. In order to fulfill the second access requirement, the height of the driveway opening has increased to 13'9" to meet the Fire Department requirement. The fire truck can enter the driveway opening and get access to the back of the building. The revisions are in the applicant's proposal as Attachment 2 and 13.

The applicant has also submitted revisions to the proposed stormwater management system in order to meet the specifications of the Department of Public Services to remove 3,000 gallons of stormwater from the site rather than

direct that stormwater into the combined system. The revised plans and calculations are included in the Applicant's revised stormwater management report (Attachment B). The review is ongoing.

III. COMPILATION OF PUBLIC QUESTIONS

Following is the list of questions compiled at the July 14, 2015 workshop.

A. Access Rights and Function

1. Who has access/rights to the alley way and does the applicant have the right to use it for the proposed development?
2. What is the radius of a fire truck to get into the alley way?
3. How will the traffic flow work in the alley taking into consideration that vehicles are parked along the access way?
4. How will snow removal in the alley be handled?
5. How are the life safety requirements and fire access addressed for both 17 Carleton and Butler School?

B. Parking

1. How does the displacement of parking impact the neighborhood?
2. What is the legality of displacing the parking? If a project was approved with parking in this location, how does that obligation go away?
3. Were any of the parking spaces pledged to meet parking requirements for any other permit?
4. What data was used by Attorney Selinger to form his opinion?
5. What is the history and policy of leasing parking spaces in the lot? What were the practices for leasing in 2009? How many spaces were leased to West Street in 2001? How many spaces were being rented in the lot for 2009-2011? Has there been a change in usage of the parking lot, specifically for Butler residents?
6. What are the results of the parking study for this project?
7. When was ratio of one parking space per unit changed? What is the impact of this change on existing projects?
8. Does the parking study take into consideration the visitors and workers?
9. Has a comprehensive parking assessment been done? (Presumably this questioner means just with respect to the west end as opposed to city wide.)
10. What are the public transit options in the area?

C. Stormwater and Sewer Capacity –

1. Board requested a comprehensive presentation on Stormwater by Applicant and City
    a. Include a more detailed explanation of the Inflow & Infiltration requirements
2. When will a study of the stormwater issues of the West End be prepared?
3. Explain the City's mapping of the sanitary sewer lines in the West End, the purpose of the study, and when will it be started (and done)?
4. A (sanitary sewer/ stormwater) pipe was replaced in the area. When was this work done and what has been the impact on the neighborhood?
5. Has a stormwater study been done for the project? How will the 1900 s.f. of on the lot (or new impervious area?) be drained?_ The reduction of impervious surface area is 0.2%, but what are the impacts of this project on the stormwater in the neighborhood?
6. What is the status of the wastewater capacity letter?
7. An explanation of the 1" stormwater event should be presented.
8. Have alternative options in regard to drainage on the site, such as porous pavement or stormwater retention, been considered or proposed?
9. Does the proposal address storm surge conditions?

D. General Questions

1. What will the impact of this project be on the City's taxes?

2. How many vacancies have occurred due to the on-going renovations at the Butler School?
3. What is the benefit of this development to the neighborhood, the community, and to the city at large?

IV. RESPONSES TO QUESTIONS

This list of staff reviewers, third party-consultants and the applicant's representatives are listed below.

City of Portland Reviewers	
Corporation Counsel	Jennifer Thompson (Attachment 1)
Fire Department	Captain Keith Gautreau and Craig Messinger, (Attachment 2)
Parking and Traffic	Thomas Errico of TY Lin, (Attachment 3)
Stormwater and Sewer Capacity	David Margolis-Pineo, Department of Public Services (Attachment 4) and David Senus of Woodard and Curran (Attachment 5)
Planning	Shukria Wiar
Applicant Name	Avesta Housing Development Corporation
Avesta	Drew Wing and Seth Parker (Attachment A)
Engineer	Thomas Greer of Pinkham and Greer (Attachment B – revised stormwater management report)
Surveyor	Owen Haskell, Inc.
Architect	David Lloyd, Archetype Architects
Attorney	Cito Selinger

A. ACCESS RIGHTS AND FUNCTION

Background: The applicant is no longer proposing to utilize the common passageway for traffic circulation. The development will now have access only via Carleton Street. To prohibit vehicles from using the common passage way to get to the 17 Carleton Street site, a gate will be placed at the rear access of the parking lot, however, pedestrian access will be available.

1. *Who has access/rights to the alley way and does the applicant have the right to use it for the proposed development?*
   Applicant Response (Attachment A): After further discussion with Fire we have determined that the requirement to provide access to the back of the building will be fulfilled by the entrance on Carleton Street. The height of the opening is being increased to 13' 9". We are subsequently placing a gate at the rear of the lot from the common passageways, which will eliminate vehicles traveling from the common passageways to 17 Carleton Street. Therefore, the questions of legal access in the common passageways are no longer relevant. Pedestrian access between the common passageways and 17 Carleton Street will be maintained for the residents of the Butler School.

2. *What is the radius of a fire truck to get into the alley way*?
   The alleyway provides emergency access to the Butler School and it is signed as a fire lane with no parking. The existing condition will remain for the Butler building, but the applicant is no longer proposing to use the alleyway as an emergency access for the Carleton Street development. Instead, the building has been revised to accommodate fire trucks through the building to the rear of the structure.

3. *How will the traffic flow work in the alley taking into consideration that vehicles are parked along the access way?*
   Applicant Response: NA

   Shukria Wiar, Planner: The applicant is no longer using the alleyway as an entrance to the 17 Carleton Street site, thus at the Development Review meeting the closing of the entrance was acceptable to Tom Errico, Consultant Traffic Engineer and the Fire Department.

4. *How will snow removal in the alley be handled?*
   Applicant Response: NA

   Shukria Wiar, Planner: According to applicant, in regard to the Butler School, Avesta Housing plows the paved potions of the common passageway.

5. *How are the life safety requirements and fire access addressed for both 17 Carleton and Butler School*?

   Applicant Response: Life Safety and Fire will continue to serve residents of Butler School from Pine and West Streets or also from the common passageways entering either on Pine or West Streets. Life Safety and Fire will serve 17 Carleton Street from Carleton Street. The passage under the building is being raised to Fire Rescue to access the rear of the building.

   Shukria Wiar, Planner: As mentioned above, the common passageway will no longer be used for 17 Carleton Street and will be gated to limit vehicle access. Emergency services will continue to serve Butler School from Pine and West Streets, as well as the common passageway. Access to the Carleton Street site shall be from Carleton Street and through the building to the rear of the site. The Fire Department has reviewed the revisions to the vehicular access to the site and has confirmed that the second means of access is being met with the proposed driveway and the proposed building height clearance. Written comments addressing the specific public questions will be available at the workshop.

B. PARKING AND TRAFFIC

Background: The proposed project is located on a site that has access off of Carleton Street via one curb cut and has access via a common passageway from the rear of the property. There are two access points for this common passageway from the site; the passageway connects to West and Pine Streets.

It is understood that the applicant is using the site at present for parking for tenants from other properties, which are on a monthly rental. The neighborhood has raised concerns that the proposed development will impact the parking supply in the neighborhood. Currently, the lot accommodates 58 spaces of which 10 are being used by the Butler Street apartments and the 48 spaces will be displaced. The applicant is proposing to provide 13 spaces to Butler School.

The Off-Street Parking requirements of the Land Use Code (Section 14-332.1 (k)) establish minimum parking requirements for designated uses. The parking requirement for residential development on the peninsula and in the R-6 and R-6A Zones, is one space per dwelling unit with the first three units exempt from providing parking. This same section also states that:

> The planning board may establish a parking requirement that is less than the normally required number of spaces upon a finding of unique conditions that result in a lesser parking demand, such as housing for persons who cannot drive, housing that participates in a travel demand management program, availability of transit, or housing which includes permanent restrictions on automobile usage, and which is permanently restricted from utilizing resident on-street parking stickers.

The applicant is proposing to provide a ride share car, per Zoning Ordinance (Section 14-332.1 (k) 2), which allows the parking spaces to be reduced by eight spaces. The applicant will have to determine where the parking space will be provided for the vehicle.

Section 14-332.2 (b) - *Incentives for affordable housing- parking reductions*, the Planning Board may establish a parking requirement for affordable units that are less than the one parking per unit requirement, regardless of the size of the structure.

The proposed development is for 37 residential units with 31 parking spaces as part of this project. Following is the breakdown of the parking that is required by zoning versus the reduced ratio that the applicant is requesting:

	1:1 Ratio	.70 :1 Ratio (As requested by Applicant)
Parking spaces as required per zoning	37	26
U-car share	8	8
Total of Spaces Required	**29**	**18**

Of the thirty-one (31) parking spaces proposed, seven spaces are handicapped at the rear of the site, behind the proposed building. The applicant can meet the parking requirement at 1:1 ratio and at 0.7:1 ratio. Two handicapped spaces are required for Butler School under the rules of the Maine Housing Authority. The applicant is providing the two required parking spaces as well as eleven (11) other spaces for Butler School housing development for a total of thirteen (13) spaces. As part of the proposal, one of the curb cuts on Carleton Street will be closed and the one at the rear of the site will remain open.

Questions and Answers

1. *How does the displacement of parking impact the neighborhood?*
   Applicant Response: Avesta currently leases 45 spaces to neighborhood residents, the maximum impact to the neighborhood by displacement would be the same or possibly less if residents decide to not have a car or go from 2 cars to 1 car.

   Tom Errico, Consultant Traffic Engineer: The displacement of existing parked vehicles will have an impact on the neighborhood. In the immediate area of the project, on-street parking availability is limited during peak time periods (evening and weekend). There does appear to be on-street parking spaces near Western Promenade and MMC due to lower housing density and off-street parking options. While not convenient for the displaced vehicles, there does appear to be options. We have suggested that the applicant try to document on-street parking availability.

2. *What is the legality of displacing the parking? If a project was approved with parking in this location, how does that obligation go away?*
   Applicant Response: No project of Avesta's or its predecessors in title were approved with parking on the Carleton Street lot. Furthermore, the Applicant has no legal obligation to provide parking for other projects even if that parking was pledged as a condition of approval. The legal requirements for providing parking at 17 Carleton Street are determined by the land use approvals and no such requirements of approval exist.

   Jennifer Thompson, Associate Corporation Counsel: Jennifer Thompson has submitted a detailed history of the site and responses to Questions 2 and 3. Please refer to her memorandum, Attachment 1 for her response.

3. *Were any of the parking spaces pledged to meet parking requirements for any other permit?*
   Applicant Response: We cannot represent what other developers have pledged as a part of receiving their land use approvals; we can only verify that we have no agreements or legal obligations to provide such parking.

   Jennifer Thompson, Associate Corporation Counsel: Jennifer Thompson has submitted a detailed history of the site and responses to Questions 2 and 3. Please refer to her memorandum, Attachment 1 for her response.

4. *What data was used by Attorney Selinger to form his opinion?*
   Applicant Response: Attorney Selinger reviewed a 75 page packet of materials that were produced by the City under FOIA, invoice number 49935, dated July 6, 2015.

5. *What is the history and policy of leasing parking spaces in the lot? What were the practices for leasing in 2009? How many spaces were leased to West Street in 2001? How many spaces were being rented in the lot for 2009-2011? Has there been a change in usage of the parking lot, specifically for Butler residents?*
Applicant Response: We do not have historical data for the periods in question but would assume that the lot was full or could have been leased to capacity; therefore we do not understand the relevance of the information requested. We have seen a decline in parking for the Butler School Residents, when we acquired the property we had 13 residents who parked there, currently we have 10.

6. *What are the results of the parking study for this project?*
Applicant Response: Gorrill Palmer conducted a study on Thursday June 25th, starting at 10:00 PM. The study counted cars parked in the lots of similar Avesta properties on the Portland peninsula. The average parking rate per unit was .37- Avesta reported for the same properties a car to unit ratio of .59, based on their internal records of car ownership. The parking ratio requested by the Applicant is .70 parking spaces per unit. This would yield 16 required spaces, 31 spaces have been proposed. With no reduction the required parking would be 27 again 31 spaces are proposed. These calculations are based on a net 7 reduction for providing a car share if the net reduction is actually 8 the requirements would be 1 less.

   Tom Errico, Consultant Traffic Engineer: The applicant has determined that the proposed project will have adequate parking for their tenants given anticipated characteristics. I concur with this conclusion. A surplus parking supply will be provided and accordingly some of the future parking spaces will be allocated to the Butler School. Final allocation numbers need to be determined.

7. *When was ratio of one parking space per unit changed? What is the impact of this change on existing projects? (does Tom have any comment regard impact)*
Shukria Wiar, Planner: Staff researched the history of parking requirements for the R-6 zone, parking on the peninsula and for affordable housing projects. The chronology is as follows:

Zoning Ordinance	Requirements
1968	Section 602.14.A.1 Residential structures 1 parking space for each dwelling unit except that in an R-5 Residence Zone only one space need be provided for each lot under 5,000 square feet and in an R-6 Residence Zone only one space need be provided for each lot under 5,000 square feet and only two spaces for each lot of 5,000 square feet to 5,500 square feet.
1983	Sec. 14-332. Uses requiring off-street parking. In the those zones where off-street parking is required, the following minimum off –street parking requirements shall be provided and maintained in the case of new construction, alterations and change of use: (1) *Residential structure* One parking space for each dwelling unit except that in an R-5 Residence Zone only one space need be provided for each lot under five thousand (5,000) square feet and in an R-6 Residence Zone only one space need be provided for each lot under five thousand (5,000) square feet and only two spaces for each lot of five thousand (5,000) square feet to five thousand five hundred (5,500) square feet.
1989	Sec. 14-332. Uses requiring off-street parking. In all zones where off-street parking is required, the following minimum off –street parking requirements shall be provided and maintained in the case of new construction, alterations which increase the number of units, and change of use: *(1) Residential structure*: *a.* For new construction, two (2) parking spaces for every six (6) units or fraction thereof. *b.* For alterations or changes in existing structures, which create new or additional dwelling units in such structures, one and one half (1 ½) additional parking spaces for each such unit. Existing parking spaces

	shall not be used to meet the parking requirements of this paragraph, unless the existing parking spaces exceed one (1) space for each dwelling unit.
12/4/ 2006 (Council Adopted)	Sec. 14-488. Density, Parking and Dimensional Bonuses and Reductions. (b) Parking requirement reduction. For each affordable housing unit for rent or sale within an eligible project, no more than one (1) parking space shall be required. The Planning Board may establish a parking requirement for affordable housing units for rent or sale within an eligible project that is less than one (1) parking space per affordable housing unit, regardless of the size of the structure.
3/20/ 2008 (Council Adopted)	Sec. 14-322. Uses requiring off-street parking. 3. For residential development on the peninsula (area defined as southerly of I-295): A. One (1) space per unit; B. The required parking for multi-unit residential buildings may be partially met through provision of shared-use vehicles, which are vehicles owned and maintained by the owner/manager of the building and available for use on a fee basis to the residents of the building. One shared use vehicle shall be deemed to satisfy eight (8) required car spaces, but in no case shall more than 50% of the parking requirement be satisfied by shared vehicle use. The planning board may establish a parking requirement that is less than the normally required number of spaces upon a finding of unique conditions that result in a lesser parking demand, such as housing for persons who cannot drive, housing that participates in a Travel Demand Management program, availability of transit, or housing which includes permanent restrictions on automobile usage, and which is permanently restricted from utilizing resident on-street parking stickers.
2014	Sec. 14-332. Uses requiring off-street parking. Except as provided in Section 14-332.1, 14-332.2 (exceptions) and 14-345 (fee in-lieu of parking) of this division, for the uses listed below the following minimum off-street parking requirements shall be provided and maintained in the case of new construction, alterations which increase the number of units, and changes of use: (a) *Residential structures:* 1. For new construction, two, (2) parking spaces for each dwelling unit. 2. For alterations or changes of use in existing structures, which create new or additional dwelling units in such structures, and for accessory units pursuant to §§14-68,78,88, one (1) additional parking spaces for each such unit. Existing parking spaces shall not be used to meet the parking requirements of this paragraph, unless the existing parking spaces exceed one (1) space for each dwelling unit.

In terms of impacts on existing projects, the city would look at past approvals for specific parking requirements and look at conformance under current regulations.

Tom Errico, P.E. Traffic Engineer: I would note that the City incorporated that change to be cognizant of characteristics of affordable housing projects as it relates to parking demand. In particular the fact that lower parking generation rates have been observed in the City.

8. *Does the parking study take into consideration the visitors and workers?*
Applicant Response: Visitors and workers are not calculated into the parking analysis. Workers would typically be parking in the lot during working hours, this would be outside of the peak demand time for parking and it is expected that there would be vacant spaces in the lot putting no additional demand on street parking. The minimal amount of parking demand created by visitors will be absorbed into on-street parking.

Tom Errico, Consultant Traffic Engineer: It is my understanding that the proposed project will not require any specific services and thus only typical visitor activity is expected.

9. *Has a comprehensive parking assessment been done? (Presumably this questioner means just with respect to the west end as opposed to city wide.)*
   Applicant Response: Applicant, Traffic and Parking- The applicant has not conducted a comprehensive parking assessment for the West End but has done an assessment based on the parking demand created by the proposed project. We are in the process of doing a supply analysis for on street parking within a short walking distance to the proposed site. We will provide those findings when they are complete.

   Tom Errico, Consultant Traffic Engineer: The applicant has conducted an extensive evaluation of parking requirements for their development to ensure the off-street parking supply is adequate. A neighborhood parking study has not been conducted. The City has suggested that the applicant considering providing information on on-street parking supply.

10. *What are the public transit options in the area?*
    Response Applicant: The closest metro stop is less than a block away on the corner of Carleton and West. The metro bus provides service from roughly 7:00Am to 6:00PM.

C. STORMWATER AND SEWER CAPACITY

Background: The site is fully developed as a parking lot and drains to two catch basins on site which connect to the drainage system in Pine Street. With the proposed development, the amount of impervious surface on the site will be reduced. The developed site will have 6, 970 sq. ft. of roof, 6, 054 sq. ft. of landscaping, and 12, 240 sq. ft. of parking. The wastewater application indicates that this new project will be putting approximately 3,000 gallons per day of sanitary waste into the sewer.

The proposed stormwater management system will have an infiltration system for the runoff from the roof of the building and the flow from the parking will continue to go to the existing catch basin. As part of the new development, the applicant is proposing to have the stormwater from the parking lot match the existing conditions with flow going to the existing onsite catch basin. A series of field inlets, underdrains and catch basins will collect the runoff and convey it to the catch basin at the rear of the site. The drainage from the parking area will flow to Pine Street via the existing storm drain, as it currently does.

The roof drain will be discharged to a proposed infiltration system instead of a connection into the storm drain system, which ultimately connects to the City's combined sewer system. The Department of Public Services has not yet issued a sewer capacity letter and is requesting that the system be designed to infiltrate 3,000 gallons of stormwater from the site rather than direct that stormwater into the combined system. Tom Greer is seeking to design the on-site storm water system to infiltrate more than 3,000 gallons in any of the storms, 1", 2 year, 10 year, and 25 year storm events, see chart below taken from the revised stormwater management report (Attachment B):

	Peak Flows Cubic Feet Per Second		Total Gallons of Runoff Infiltrated
	Existing	Developed	
Design	0.27	0.15	3,258
2	1.45	0.97	11,404
10	2.48	1.75	14,662
25	2.89	2.24	15,965

This is in excess of the 3,000 gallons per day the wastewater generated by the occupants of the new building. According to the revised stormwater management report, the conclusion is stated:

> *This project minimizes the downstream impacts to the sewer system by infiltrating stormwater. This project will improve the sewer system by reducing the flow to the sewer by 15,965 gallons in the 25 year storm event.*

The review of this system by DPS and Woodard and Curran is on-going and their responses are below.

Questions and Answers

1. *Board requested a comprehensive presentation on Stormwater by Applicant and City*
   a. *Include a more detailed explanation of the Inflow & Infiltration requirements*

   David Margolis-Pineo, Deputy City Engineer: Infiltration is groundwater entering the sewer through cracks and breaks. Inflow is stormwater runoff entering the sewer through field drains, roofs and catchbasin including sump pump discharges. The City of Portland has not conducted an infiltration study. It is generally concluded that the City's sewer and treatment facilities can handle infiltration during high groundwater conditions without backups or overflows as long as it doesn't rain. Inflow analysis is completed on a site by site, project by project basis. Since the entire proposed AVESTA site is currently 100% impervious and will basically remain that way after development, the calculated stormwater runoff (Inflow) from the site will remain the same Pre and Post development. However after development, the City is requesting that the applicant remove the first 3,000 gallon of stormwater runoff from the developed site to the sewer system to offset the expected 3,000 of wastewater projected to be added to the sewer system from the development. This will result in no additional flows being added to the sewer system after the proposed project is constructed.

2. *When will a study of the stormwater issues of the West End be prepared?*

   David Margolis-Pineo, Deputy City Engineer: :A sewer study for the West End area bordered by Clifford Street, Pine Street, Thomas Street and Western Promenade was completed by Woodard and Curran and summarize in a report dated January 30, 2009. Since the sewer conditions in the Carlton Street neighborhood, i.e. Carlton Street, Pine Street and West Street reflect very similar sewer conditions studied by Woodard and Curran, the findings and conclusion stated in that report are applicable to this neighborhood. The Woodard and Curran report is available for review.

   The City of Portland is currently under a Consent Decree Order to address the City's Combined Sewer Overflows (CSO). This Decree refers to a "Combine Sewer Overflow Long Term Control Plan (CSO-LTCP) as to when, where and how much the City will spend to reduce or eliminate CSO discharges. This Order went into effect on April 19, 2013 and must be completed within 15 years. The first three projects of this Control Plan are around Back Cove to control CSO discharges into Back Cove. The sewer systems from the West End, during overflow events, discharge into Portland Harbor. The Control Plan states that "On or before December 31, 2021, the City shall complete the pre-design investigation for the 3.0 million gallon storage conduit project identified as Portland Harbor and begin design of the project…….with completion on or before December 31, 2023." Associated with that project will be sewer and green infrastructure construction to separate and reduce stormwater with the drainage area of the storage conduit. This is currently the time frame the City may be in a position to address backup issues in the East End.

3. *Explain the City's mapping of the sanitary sewer lines in the West End, the purpose of the study, and when will it be started (and done)?*

   David Margolis-Pineo, Deputy City Engineer: All known sewers on the West End have been mapped, subject to field verification.

4. *A (sanitary sewer/ stormwater) pipe was replaced in the area. When was this work done and what has been the impact on the neighborhood?*

   Applicant Response: Avesta repaired a collapsed catch basis, on 17 Carleton Street on 3/10/2015. We are unaware of any impact to the neighborhood that would or did result from the repair.

   David Margolis-Pineo, Deputy City Engineer: Other than the repair of one or two catch basins, the City is not aware of any sewer pipe replacement in this area.

5. *Has a stormwater study been done for the project? How will the 1900 s.f. of on the lot (or new impervious area?) be drained? The reduction of impervious surface area is 0.2%, but what are the impacts of this project on the stormwater in the neighborhood?*
Applicant Response: A storm water report has been completed. It analyzed the site for peak flows and total flows. The infiltration system will reduce both peak flows and total flows going to the sewer. In the 25 year storm event, a 5.4" rainstorm, the total flow is reduced by 15,965 gallons, a 23% reduction. Well above the expected wastewater volume of the building. The flow is reduced in smaller storms to less than the daily wastewater flow of 3,000 gallons.

David Margolis-Pineo, Deputy City Engineer:
-A stormwater runoff study, required for all developments of this nature, is being prepared by the applicant and will be reviewed by the City.
-As stated previously, the calculated stormwater runoff will remain the same Pre and Post Development. Please see response number one.
-Site drainage for this proposed project will remain the same when completed.

David Senus, Consultant Engineer with Woodard and Curran: In general we agree with the Applicant's approach of including an infiltration basin on the site to capture, store, and infiltrate at least 3,000 gallons of stormwater to reduce inflow into the City's combined sewer system to effectively offset the increase in wastewater flow generated by the development. Because such a system will reduce the peak flow rate of discharge from the site, it will have a net positive impact on the City's combined sewer system as compared to existing conditions; albeit the benefit to the City's combined sewer system will be minor given the size of the site in context to the overall combined sewer watershed area. In summary, such a system will reduce the volume and rate of water that enters the City's Combined Sewer System during storm events when compared to existing conditions and when considering the additional wastewater flows that will be generated by the development. We do request that the Applicant re-visit the design and the HydroCAD model to address the following comments:

a) HydroCAD Pond 4P: Infiltration System – The subgrade elevation of the infiltration system in the model is listed as 137.5; however, the "Infiltration Basin Longitudinal Section" on Sheet C2.2 shows a subgrade elevation of 138.5 (System elevation of 140.0 minus 6" loam minus 12" of crushed stone = 138.5)
b) HydroCAD Pond 4P: Infiltration System – The incremental storage and cumulative storage volume numbers do not appear to reflect solely the volume of the voids below elevation 140
c) HydroCAD Pond 4P: Infiltration System – The invert elevation of the 4" Round Culvert is reported to be 139.50'; however, this invert elevation is called out as 139.16 on the "Infiltration Basin Longitudinal Section" on Sheet C2.2
d) As requested by the Department of Public Services, the infiltration system should have the capacity to store at least 3,000 gallons below the invert elevation of the Primary Outflow

6. *What is the status of the wastewater capacity letter?*
Response Applicant:
David Margolis-Pineo, Deputy City Engineer: The Wastewater Capacity letter will not be issued until the applicant and City agree on how the first 3,000 gallons of stormwater runoff will be removed from the sewer system.

7. *An explanation of the 1" stormwater event should be presented.*
Applicant Response: The site was analyzed for the 1" rain storm as well as the 3.0", 4.7" and the 5.4" storm events. The larger the storm the more the site infiltrates reducing the impacts on the existing sewer.

David Margolis-Pineo, Deputy City Engineer: Chapter 500 of the State's Department of Environmental Protection rules require the stormwater runoff from the first one inch of rain from all newly created impervious areas be detained and Applicant Response. Since no new impervious areas are proposed for

this project, stormwater treatment is not required. As stated previously, removing the first 3,000 gallons of stormwater runoff will be required to offset the proposed addition of 3,000 gallons wastewater.

8. *Have alternative options in regard to drainage on the site, such as porous pavement or stormwater retention, been considered or proposed?*
   Applicant Response: Yes the applicant has considered several methods to reduce the impacts of storm water on the sewer. The use of an infiltration system was selected which will result in a 23% reduction in total flow going to the sewer in a 25 year rain event yielded excellent results.

9. *Does the proposal address storm surge conditions?*
   Applicant Response: Yes, the system will reduce the surge to the sewer by infiltrating storm water.

   David Margolis-Pineo, Deputy City Engineer: Storm Surge refers to land areas at sea level and is not applicable in this case. However this question have been intended to ask about rain storm intensity. If so, once the first 3,000 gallons on stormwater runoff has be removed from the sewer system, and should the rain event intensify, depending on the magnitude, sewer backup issues can be expected to reoccur.

D. General Questions

1. *What will the impact of this project be on the City's taxes?*
   Applicant Response: The proposed project will increase the taxable valuation of the property by an estimated. $2,238,34.00 - The Applicant is applying for an Affordable Housing TIF District that would result in approximately $ 18,441.00 annual increase to the City's general fund with an additional savings of $11,204.00 in avoided impact losses.

2. *How many vacancies have occurred due to the on-going renovations at the Butler School?*
   Applicant Response: We have maintained 2 vacant units to function as hospitality suites during the rehab of the Butler School. General turnover of units during construction is consistent with historical trends and the project will maintain a vacancy rate of less than 5%. This indicates that the rehab has not had any significant impact on the demand for parking. We have been maintaining a vacancy rate of up to 5 spaces in the Carleton Lot to assist in the parking of construction vehicles during the rehab.

3. *What is the benefit of this development to the neighborhood, the community, and to the city at large?*
   Applicant Response: The development, 17 Carleton Street, provides multiple benefits to the neighborhood, community and city at large. The primary benefit is the creation of new housing stock to meet the incredible need for affordable housing. This need is clearly documented in the City's Housing Plan and Comprehensive Plan and is corroborated by Avesta Housing which recently reported a waiting list of 2432 individuals or families who were in need of housing. Meeting this need benefits the city by helping to achieve the betterment, of the health, welfare and safety of its inhabitants. Furthermore, it allows people to continue to live in neighborhoods where they have been part of the community. It may also provide the needed housing for Portland newcomers, who are also an integral part of building and maintaining a vibrant city.

   The proposed project will increase the taxable valuation of the property by an estimated. $2,238,340.00 - The Applicant is applying for an Affordable Housing TIF District that would result in approximately $ 18,441.00 annual increase to the City's general fund with an additional savings of $11,204.00 in avoided impact losses.

   17 Carleton Street is a privately owned piece of property in a prime location on the West End. Such a property typically finds its usage determined by a market analysis identifying its highest and best use. Our analysis of the property is driven by additional considerations, specifically our mission to provide affordable housing for people in need. This analysis yields a project that serves the needs as stated previously while also ensuring that other allowable uses on the property will not occur. For example, as of

right, the project could be developed as a market rate project creating a much higher impact to on street parking and traffic than the proposed project. The proposed project has been thoughtfully scaled with consideration to density and unit mix thereby providing the much needed housing while minimizing the impact of parking and traffic on the surrounding neighborhood.

In addition to bringing certainty to this infill site, the project will become a supporting piece of architecture in a historic neighborhood. The Public Process and Review by the Historical Preservation Board will yield a building and site that is not only compatible with the neighborhood but also enhances Carleton Street. The proposed project will eliminate a curb cut and replace an asphalt parking lot with an attractive building where people live. The building will become a contributing piece of architecture with its own narrative about Portland's aesthetics and priorities.

IV. NEXT STEPS

1. Address staff comments;
2. Address additional comments of the Planning Board;
3. Prepare final plan submission for review by the Planning Authority and Planning Board; and
4. Hold final Planning Board Hearing on August 11, 2015.

ATTACHMENTS

PLANNING BOARD MEMO ATTACHMENTS

1. Jennifer Thompson Email dated 07.30.2015
2. Fire Department, Craig Messinger, dated 07.30.2015
3. Traffic Engineering Review (Tom Errico, T Y Lin), comments dated 07.31.2015
4. Department of Public Services Review, David Margolis-Pineo, dated 07.22.2015
5. Civic Engineer Review, David Senus, dated 07.30.2015
6. Planning Board Documents from 11.08.1976
    a. PB Workshop Minutes October 26, 1976
    b. November 9, 1976 PB Agenda
    c. PB Meeting Minutes- November 9, 1976
    d. Planning Report 1976
7. Deeds
    a. Butler School Associates
    b. Myerson/Allen and Company
    c. Butler/ Payson Company
    d. Avesta Housing
    e. Avesta Butler Payson LP
8. Complete Report Compressed- 2009.01.30

APPLICANT'S SUBMITTAL

A. Public Questions - 7.29.2015
B. Stormwater Management Report- Revised July 28, 2015
C. Stormwater Drainage System Maintenance Agreement
D. Inspection And Maintenance Of Stormwater Management Facilities
E. Housekeeping Report

PLANS

Plan1	C1.0	REV3,072915
Plan2	C1.1	REV3,072915
Plan3	C1.2	REV3,072915
Plan4	C1.3	REV4,072915
Plan5	C1.4	REV3,072915
Plan6	C1_3	

Plan7	C2.1	REV3,072915
Plan8	C2.2	REV3,072815
Plan9	C2.3	REV3,072915
Plan10	C2.4	REV3,072915
Plan11	C2_2	REV3
Plan12	Carleton Street - A2.1 – ELEVATIONS	
Plan13	Carleton Street - STRAIGHT ON ELEVATION	
Plan14	Carleton Street - STRAIGHT ON ELEVATION FROM BACK	

MEMORANDUM

TO: Shukria Wiar and City of Portland Planning Board
FROM: Jennifer L. Thompson
DATE: July 31, 2015
RE: 17 Carleton Street

As you know, in connection with Avesta Housing's application to develop the lot currently serving as a parking lot at 17 Carleton Street, questions have arisen regarding Avesta's obligation to continue using that lot to provide parking to neighboring properties and the extent to which its rights to develop the lot as proposed might be limited by any such obligations. This memo will address those questions by first outlining the historical ownership and land use approvals and then discussing the significance of those.

I. Factual Background

- Prior to 1975, the "Butler School Property" was owned by the City of Portland.
- On September 18, 1974, the Portland City Council authorized the sale of the "Butler School Property" to Community Development Services (CDS).[1] According to historical documents, the City's expectation was that the Butler School would be converted into apartments and the adjacent Butler School Playground lot would provide parking for those apartments and neighboring properties. See Memo to ZBA dated January 31, 1975.
- In January 1975, CDS submitted a conditional use appeal to the City's Zoning Board of Appeals to permit the conversion of the parcel at 13-23 Carleton Street (hereinafter "17 Carleton Street") from a playground to a parking lot for 64 passenger cars. This approval was required because the proposed use (private parking lot) was not a permitted use in the zone. CDS's application was granted on February 12, 1975.
- Notwithstanding the approvals, the property was not conveyed to CDS and it appears that its 1975 approvals expired.
- In a deed dated April 1, 1975, the City of Portland conveyed the Butler School Property to Butler School Associates. That deed to the Butler School Associates included conditions relating to the development and use of the property. Specifically, it required that the property be developed and rehabilitated within 1 year to accommodate 12-13 dwelling units and contemplated that the playground area would be developed "for parking purposes." The deed also provided that the property was not to be developed or used for any other purpose for a period of 15 years and that if construction was not completed within the 1 year timeframe, the City would be entitled to repurchase the property.

[1] For the purposes of this memo, the "Butler School Property" appears to include 3 parcels of land, including the lot on which the Butler School sits and what is now the parking lot at 17 Carleton Street. When the City put the property up for sale, the 17 Carleton Street lot (then referred to as "13-23 Carleton Street") was being used as a playground for the Butler School.

- According to historical documents (November 9, 1976 Planning Board report), Butler School Associates did not complete construction within one year. Butler School Associates did, however, arrange with a company called the Myerson/Allen & Company to include the Butler School in a bid for federal HUD funding aimed at converting existing buildings into Section 8 elderly housing – a use that was consistent with use contemplated in the deed from the City.
- Conditional Use Approval of Parking Lots- 17 Carleton. On October 22, 1976 Butler School Associates and Myerson/Allen & Company filed two applications for conditional use approval, to allow the parcel at 17 Carleton Street to be used as a parking lot. The first application sought approval to use a portion of the parcel for 34 off-street parking spaces. The second application sought approval to use another portion of the lot for 15 parking spaces. Again, just as in CDS's case, this conditional approval was required because private parking lots were not permitted uses in the zone. The ZBA approved Butler School Associates' applications on November 10, 1976 such that it was permitted to convert and use that parcel as a private parking lot. Those approvals included one condition: to screen the 34-space lot against headlights.
- Variance from Parking and Dimensional Requirements – Butler School. Also in October 1976, Butler School Associates applied for a variance from the space and bulk requirements of the City Code (i.e. relief from 39,000 square foot requirement for lots that applied at the time) to allow the conversion of the Butler School to apartment units. The application also included a request for a variance from the off street parking requirement of 1 space per dwelling unit. That approval was granted without conditions on November 10, 1976. According to the ZBA's decision, the exceptional physical characteristics of the property, the fact that its unique physical condition existed at the time the parking and dimensional requirements were adopted, and because complying with the requirements of the Code otherwise create an undue hardship, the Butler School was not required to meet the dimensional and parking requirements. Again, the variance from the usual standard was granted without conditions.
- Site Plan & Architectural Review for 17 Carleton Street & Butler School. Also in October 1976, Butler School Associates and Myerson/Allen & Company applied for site plan and architectural plan review by the Planning Board. In that application, Butler School Associates sought approval of the site design and architectural plans to create the parking lot and rehabilitate/convert the Butler School. Although the proposed findings of fact acknowledge that the parking lots were intended to provide parking to neighboring properties, including the Butler School, the approval is not conditioned on that nor is there any express requirement, for example, that any number of spots be reserved or provided to any particular property or person.
- Notwithstanding these approvals, the Butler School property was re-conveyed from Butler School Associates back to the City on December 1, 1976 (Book 3950/Page 36) under the reservation of its right to repurchase contained in the deed to the Butler School Associates. According to historical documents, however, (see Planning Department Report to Planning Board Dated November 9, 1976) the City simultaneously granted Myerson/Allen & Company an option to purchase the property.

- In a deed dated June 13, 1977, the City did in fact convey the Butler School Property to Myerson/Allen & Company. (Book 4034/Page 134). There are no conditions contained in that deed relating to development of the parking lot or the school.
- The next day, on June 14, 1977, Myerson/Allen & Company conveyed the Butler School Property to the "Butler/Payson Company." (Book 4034/Page 137) I presume, but cannot confirm, that "Butler/Payson Company" was a successor or assign of Butler School Associates and that it took over the approvals granted by the ZBA in November 1976 (generally speaking, once granted, variances run with the land).

II. Discussion

Although the original deed from the City to Butler School Associates in 1975 contained requirements relating to the development and use of the property, those requirements were nullified when the property was re-conveyed to the City in 1976. There do not appear to be any similar restrictions in the deed that later conveyed the property to Myerson/Allen & Company. Even if those requirements did somehow survive and run with the land when the City conveyed it to Myerson/Allen & Company, by their terms, the restrictions contained in the original deed expired after 15 years. Therefore, if there are any restrictions on the use that may be made of the Butler School Property and the 17 Carleton Street lot, they will need to be found in an approval by some City administrative body.

As outlined above, the rehabilitation of the Butler School to dwelling units was approved in 1976 and a variance from the then-existing parking requirements was granted after the ZBA concluded that compliance with those requirements would create an undue hardship. As the Maine Municipal Association's Planning Board Manual explains: "After a variance is granted and a building is constructed or activity conducted based on that variance, the building or activity thereafter should be treated as a legally conforming structure or use for the purposes of deciding which ordinance provisions govern it in the future." PB Manual at 71-72 (citing *Sawyer Environmental Recovery Facilitates, Inc., v. Town of Hampden*, 2000 ME 179, 760 A.2d 257). There is no condition in the variance approved by the ZBA on November 10, 1976 that the Butler School must provide off-street parking for its units.

As also outlined above, the conversion of the playground to a private parking lot was also approved by the ZBA on November 10, 1976. That approval permitted a parking lot at 17 Carleton Street as a conditional use. As you know, "conditional use provisions in a zoning ordinance deal with uses which the legislative body generally has decided to permit in a particular area of the community. The purpose of the special exception or conditional use review procedure is to allow the planning board or board of appeals to determine whether conditions should be imposed on the way the use is conducted or constructed, in order to ensure that the use is consistent with and has no adverse impact on the surrounding neighborhood." PB Manual at 71. When the ZBA approved a private parking lot at 17 Carleton Street as a conditional use, it imposed conditions relating to screening and lights but did not require that the parking spaces be provided to any particular property.

Further, the fact that a use has previously been approved (here, use as a parking lot) does not mean that that use has to continue to exist in perpetuity. Property owners are permitted to change the uses they make of their property, so long as that use is permitted under zoning and other requirements of the Code. Therefore, even if the conditional use approval had been conditioned on providing parking to the Butler School or surrounding properties, that condition would not be applicable to a subsequent change of the use (i.e. to an apartment building).

With respect to site plan approval by the Planning Board, although it is clear that Butler School Associates intended to use a portion of the 17 Carleton Street property to provide parking to the Butler School apartment units, there is no indication in any of the historical documents that the Planning Board conditioned its approval of the site plan for the construction of the parking lots on the dedication of any number of spaces to the Butler School or others.

In sum, after a review of the historical documents, it does not appear to me that there is any obligation that Avesta continue to use the property at 17 Carleton Street as private parking or that it provide parking to particular properties or the public at large.

Att. 3

From: Tom Errico <thomas.errico@tylin.com>
To: Shukria Wiar <SHUKRIAW@portlandmaine.gov>
CC: David Margolis-Pineo <DMP@portlandmaine.gov>, Katherine Earley <KAS@portlandmaine.gov>, Jeremiah Bartlett <JBartlett@portlandmaine.gov>, "Tarling, Jeff" <JST@portlandmaine.gov>
Date: 7/31/2015 8:28 AM
Subject: 17 Carleton Street - Traffic Comments

Hi Shukria - I have reviewed the application materials and offer the following status update from my July 2nd comments.

* The applicant should provide dimensions of driveway width, parking aisles, etc. for review and comment.
July 2nd Status: The revised plans include dimensions and I find details to be acceptable. I would note that the compact parking spaces do not meet City standards, but because they are slightly longer, I support a waiver.
Status: I have reviewed the revised site plan and find it to be acceptable with similar waivers as noted previously.

* It is my understanding that a traffic study is being prepared and I will review traffic specific issues upon receipt of the study.
July 2nd Status: I have reviewed the traffic study and find the methods and conclusions to be acceptable. The project is estimated to generate 8 new AM peak hour trips and 10 new PM peak hours trips. Capacity analyses were conducted at the Carleton Street intersections with West Street and Pine Street and results indicate both intersections will operate at excellent levels of service. A review of crash data indicated there are no High Crash Locations in the vicinity of the project. Accordingly, the project is not anticipated to have a significant impact on traffic mobility and safety.
Status: I have no further comment.

* The following outlines my comments as it relates to the review of parking conditions for the project:

o The applicant should specifically note details of vehicles parking in the existing lot. It should be noted whether any of the vehicles are using the lot as part of a site plan approval requirement.

o Given parking concerns in the neighborhood and limited parking opportunities, the applicant should conduct an updated parking generation survey at existing similar sites on the Portland Peninsula. The survey is intended to confirm parking demand requirements. The scope and details of the survey shall be coordinated with City staff.
July 2nd Status: The applicant has provided updated parking demand analysis information that indicates the proposed site will require 0.37 parking spaces per residential unit, but is suggesting a parking supply - for 17 Carleton Street only - of 0.48 parking spaces per unit or 18 parking spaces. I would note that the parking rates developed by the applicant are based on cars observed to be parked. According to their data, at many sites the number vehicles parked did not closely correlate to tenant automobile ownership. If automobile ownership was used, the average parking demand rate would be 0.59 parking spaces per residential units. I need to continue to review this and historical parking information, before I render a conclusion on the parking demand analysis.
Status: The project will be providing 32 on-site parking spaces. In my professional opinion the project will provide sufficient parking for the proposed 37 units given proposed tenant characteristics and should have excess parking for the nearby Butler Building. The challenge is determining how much can be allocated to the Butler Building. I will continue to review data regarding Butler Building parking

allocation, so that an appropriate parking number can be determined.

I would further note that we have suggested that the applicant consider providing information regarding on-street parking availability in the neighborhood in conjunction with the displacement of vehicles using the existing parking lot. My general observations of the West End area is that there is available on-street parking toward the Western Promenade and MMC where housing density is less and off-street parking is more prevalent. I do recognize that these streets would certainly be less convenient, but may provide some general area-wide parking supply opportunities.

* A brief paragraph has been provided in respect to a construction management plan. It isn't noted, but the plan will likely require the closure of the abutting sidewalk and a temporary sidewalk detour will be required. Other specific details can be reviewed at the Pre-Construction meeting.
July 2nd Status: The applicant has added a note to the Plan and I have no further comment.
Status: I have no further comment.

* Changes to the on-street parking schedule for Carleton Street will be required in conjunction with changes to existing driveway conditions. This will require City Council action and the applicant shall provide supporting documentation at the time of the request.
Status: I have no further comment.

* The applicant should provide information on the proposed location of the Car-Share vehicle for review and approval.
Status: The applicant is proposing to locate the Car-Share space on-site which I find to be acceptable. The applicant should provide information how the general public will be granted access rights to the vehicle and how to locate the vehicle.

* I have reviewed the revised site plan and the applicant should provide information on the accessibility of the pedestrian walkway when a handicapped vehicle is occupying the adjacent parking space.

Please contact me if you have any questions.

Best regards,

Thomas A. Errico, PE
Senior Associate
Traffic Engineering Director
[T.Y. Lin International]T.Y. Lin International
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"One Vision, One Company"
Please consider the environment before printing.

17 Carleton Street
Questions from the July 14, 2015 workshop

A. Stormwater and Sewer Capacity –

1. **Board requested a comprehensive presentation on Stormwater by Applicant and City**
   a. **<u>Include a more detailed explanation of the Infiltration and Inflow requirements</u>**
2. When will a study of the stormwater issues of the West End be prepared? ***Response: Public Services***
3. Explain the City's mapping of the sanitary sewer lines in the West End, the purpose of the study, and when will it be started (and done)? ***Response: Public Services***
4. A (sanitary sewer/ stormwater) pipe was replaced in the area. When was this work done and what has been the impact on the neighborhood? ***Response: Public Services***
5. Has a stormwater study been done for the project? <u>How will the 1900 sq.ft. of on the lot (or new impervious area?) be drained?</u> The reduction of impervious surface area is 0.2%, but what are the impacts of this project on the stormwater in the neighborhood? ***Response: Applicant, Public Services, and Consulting Civil Engineer***
6. What is the status of the wastewater capacity letter? ***Response: Applicant and Public Services***
7. An explanation of the 1" stormwater event should be presented. ***Response: Applicant and Public Services***
8. Have alternative options in regard to drainage on the site, such as porous pavement or stormwater retention, been considered or proposed? **Response: Applicant**
9. Does the proposal address storm surge conditions? **Response: Applicant and review by Public Services and Consulting Civil Engineer**

July 22, 2015

Memo To: Planning Board
From: David Margolis-Pineo, Public Services
Re: Response to Stormwater and Sewer Capacity Questions from the July 14, 2015 workshop

1. Infiltration is groundwater entering the sewer through cracks and breaks. Inflow is stormwater runoff entering the sewer through field drains, roofs and catchbasin including sump pump discharges. The City of Portland has not conducted an infiltration study. It is generally concluded that the City's sewer and treatment facilities can handle infiltration during high groundwater conditions without backups or overflows as long as it doesn't rain. Inflow analysis is completed on a site by site, project by project basis. Since the entire proposed AVESTA site is currently 100% impervious and will basically remain that way after development, the calculated stormwater runoff (Inflow) from the site will remain the same Pre and Post development. However after development, the City is requesting that the applicant remove the first 3,000 gallon of stormwater runoff from the developed site to the sewer system to offset the expected 3,000 of wastewater projected to be added to the sewer system from the development. This will result in no additional flows being added to the sewer system after the proposed project is constructed.
2. A sewer study for the West End area bordered by Clifford Street, Pine Street, Thomas Street and Western Promenade was completed by Woodard and Curran and summarize in a report dated January 30, 2009. Since the sewer conditions in the Carlton Street neighborhood, i.e. Carlton Street, Pine Street and West Street reflect very similar sewer conditions studied by Woodard and

Curran, the findings and conclusion stated in that report are applicable to this neighborhood. The Woodard and Curran report is available for review.
The City of Portland is currently under a Consent Decree Order to address the City's Combined Sewer Overflows (CSO). This Decree refers to a "Combine Sewer Overflow Long Term Control Plan (CSO-LTCP) as to when, where and how much the City will spend to reduce or eliminate CSO discharges. This Order went into effect on April 19, 2013 and must be completed within 15 years. The first three projects of this Control Plan are around Back Cove to control CSO discharges into Back Cove. The sewer systems from the West End, during overflow events, discharge into Portland Harbor. The Control Plan states that "On or before December 31, 2021, the City shall complete the pre-design investigation for the 3.0 million gallon storage conduit project identified as Portland Harbor and begin design of the project…….with completion on or before December 31, 2023." Associated with that project will be sewer and green infrastructure construction to separate and reduce stormwater with the drainage area of the storage conduit. This is currently the time frame the City may be in a position to address backup issues in the East End.

3. All known sewers on the West End have been mapped, subject to field verification.
4. Other than the repair of one or two catchbasins, the City is not aware of any sewer pipe replacement in this area.
5. -A stormwater runoff study, required for all developments of this nature, is being prepared by the applicant and will be reviewed by the City.
   -As stated previously, the calculated stormwater runoff will remain the same Pre and Post Development. Please see response number one.
   -Site drainage for this proposed project will remain the same when completed.
6. The Wastewater Capacity letter will not be issued until the applicant and City agree on how the first 3,000 gallons of stormwater runoff will be removed from the sewer system.
7. Chapter 500 of the State's Department of Environmental Protection rules require the stormwater runoff from the first one inch of rain from all newly created impervious areas be detained and Applicant Response. Since no new impervious areas are proposed for this project, stormwater treatment is not required. As stated previously, removing the first 3,000 gallons of stormwater runoff will be required to offset the proposed addition of 3,000 gallons wastewater.
8. The applicant is being asked to respond to this question as to what alternatives options were considered to deal with stormwater runoff.
9. Storm Surge refers to land areas at sea level and is not applicable in this case. However this question have been intended to ask about rain storm intensity. If so, once the first 3,000 gallons on stormwater runoff has be removed from the sewer system, and should the rain event intensify, depending on the magnitude, sewer backup issues can be expected to reoccur.

COMMITMENT & INTEGRITY
DRIVE RESULTS

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F 207.774.6635

Att. 5

MEMORANDUM

TO: Shukria Wiar, Planner
FROM: David Senus, P.E.
DATE: July 30, 2015
RE: 17 Carleton Street, Final Level III Site Plan Application

---

Woodard & Curran has reviewed the July 29th submittal for the Final Level III Site Plan Application for the proposed development project located at 17 Carleton Street in Portland, Maine. The project involves the construction of 37 affordable housing units with 31 parking spaces and associated site improvements.

Documents Reviewed by Woodard & Curran

- Stormwater Management Report, REV dated July 28, 2015, prepared by Pinkham & Greer on behalf of Avesta Housing.
- Engineering Plans, Sheets C1.0, C1.1, C1.2, C1.3, C1.4, C2.1, C2.2, C2.3, & C2.4, REV dated July 29, 2015, prepared by Pinkham & Greer on behalf of Avesta Housing.

Comments

1) The Applicant had previously provided a letter confirming capacity to serve the proposed development from the Portland Water District; we anticipate that the Applicant is awaiting a letter from the City of Portland confirming capacity to serve sanitary sewer flows.

2) In general we agree with the Applicant's approach of including an infiltration basin on the site to capture, store, and infiltrate at least 3,000 gallons of stormwater to reduce inflow into the City's combined sewer system to effectively offset the increase in wastewater flow generated by the development. Because such a system will reduce the peak flow rate of discharge from the site, it will have a net positive impact on the City's combined sewer system as compared to existing conditions; albeit the benefit to the City's combined sewer system will be minor given the size of the site in context to the overall combined sewer watershed area. In summary, such a system will reduce the volume and rate of water that enters the City's Combined Sewer System during storm events when compared to existing conditions and when considering the additional wastewater flows that will be generated by the development.

   We do request that the Applicant re-visit the design and the HydroCAD model to address the following comments:

   a) HydroCAD Pond 4P: Infiltration System – The subgrade elevation of the infiltration system in the model is listed as 137.5; however, the "Infiltration Basin Longitudinal Section" on Sheet C2.2 shows a subgrade elevation of 138.5 (System elevation of 140.0 minus 6" loam minus 12" of crushed stone = 138.5)
   b) HydroCAD Pond 4P: Infiltration System – The incremental storage and cumulative storage volume numbers do not appear to reflect solely the volume of the voids below elevation 140
   c) HydroCAD Pond 4P: Infiltration System – The invert elevation of the 4" Round Culvert is reported to be 139.50'; however, this invert elevation is called out as 139.16 on the "Infiltration Basin Longitudinal Section" on Sheet C2.2
   d) As requested by the Department of Public Services, the infiltration system should have the capacity to store at least 3,000 gallons below the invert elevation of the Primary Outflow

3) A stormwater inspection and maintenance plan should be prepared for the infiltration basin in accordance with *Article III – Post Construction Stormwater Management* of *Chapter 32 – Stormwater* of the City of Portland Code of Ordinances.

   All other comments contained in previous review memorandums prepared by Woodard & Curran have been adequately addressed.

Att. 6A

PLANNING BOARD WORKSHOP MINUTES
TUESDAY, OCTOBER 26, 1976 AT 3:30 P.M.
ROOM 209, CITY HALL, PORTLAND, MAINE

Roll Call: Cadigan, Cummings, Gilpatrick, Holden, Conway and Pratt (3:45)

1. Vortisch - Open Space - Cliff Island

The Director summarized the proposal and said there may be some major ramifications regarding the development of Cliff Island due to the ground water table. He said representatives of the Council of Governments, the State Bureau of Geology and Department of Health & Welfare were present to answer questions raised by the Board.

Mr. Vortisch said he was concerned about sewage on Cliff Island. He said the Island will never have mainland water and islanders have to depend on water from the same ground their sewage goes into. He also said the land in question was less than forty acres.

John McGrail of the Council of Governments said their basic approach was that people generate waste water that must be disposed of either by municipal or individual action. He said Cliff Island was more rural than most of the islands and the soils were generally poor or unsuitable for ground disposal. He also said there were presently some marginal discharges on Cliff Island that have been waived by the State, however, this only applied to presently existing properties and any new construction would require secondary treatment.

Mr. Megathlin asked if secondary treatment would preclude new single family homes from being constructed on Cliff Island.

Mr. McGrail said no, however, it would be possible but very expensive ($3,000 - $6,000). He said the water problem was probably more critical.

Mr. A. J. Wilson, City Manager, said $3,000 - $6,000 was not infeasible when added to the mortgage on a new home. Mr. Vortisch said no bank will take a mortgage on Island property.

Mr. Cummings asked if improvements made to septic systems would make development more feasible. Mr. McGrail said improvements have been made and are more reliable, however, costs have also increased.

Mr. Bradford Caswell, a Hydro-Geologist for the State Bureau of Geology, said he had been involved with ground water studies over the past five years and although he had not dealt with Cliff Island specifically that he felt the main concern was how much water can be pumped out of the ground before seawater comes in. He said the island's only source of water was from precipitation and the water source was much more vulnerable on the island than on the mainland.

Mr. Megathlin asked Mr. Caswell if he could estimate the amount of development that could be constructed on Cliff Island before these problems would become acute. Mr. Caswell said no, it depends upon the porosity and he did not have that information. Questions were also asked by Board members regarding salt water intrusion and whether or not the Bureau of Geology could undertake a quick and inexpensive study of the island. Mr. Caswell said there is no answer on salt water intrusion at this time and they would be unable to do a study due to cost.

Mr. Paul Matthews and Mr. Benjamin Reed of the Maine Department of Health & Welfare said they had no specific comments on Cliff Island, a soils site evaluation would have to be done. He said when the plumbing inspector felt the land was not suitable for septic tank disposal he could call them in to inspect the system.

Mr. Cadigan said he felt that the burden of proof was on the owner and asked Mr. Vortisch if he would be willing to have a soils analysis done. Mr. Cummings also said he felt that anyone claiming their land to be unbuildable would have to have a site evaluation done, the burden of proof is on the owner.

Mr. A. J. Wilson said he had read the staff report and listened to the information presented at the meeting and felt that the questions raised on valuation were not pertinent to the Open Space law. He said the intent of the Open Space law was to benefit the general public and he would not like to see all land unsuitable for building or septic tank disposal classified as open space. He said his opinion was that the question of tax abatement due to undevelopable land should be taken up with the tax assessor.

2. Review of Planning Board Agenda

The Planning Director reviewed the items on the public agenda for the Board's information.

3. Land Development Plan Brochure

The Planning Director said he would like to review the Board's comments on the Land Development Plan as soon as possible.

Mr. Cummings said his comments from the last meeting still remain. He said he still felt the report had a lot of duplication and was unworthy, however, it would spoil the whole thing if he made his comments since he had too many.

Jean Gilpatrick said she also felt the report was not well written and although she had not finished the report she gave the comments she had completed to Mr. Megathlin.

Other members of the Board had no comments to make and Mr. Cadigan told the Director to incorporate Jean Gilpatrick's comments as much as possible and to go ahead with the printing of the report.

4. DiMillo Zone Change - Cumberland Avenue

Following considerable discussion and review of past action on this area by the Board and City Council, Mr. Emory, attorney for the applicant, said they wished to go ahead with the zone change and was informed that the zone change would be considered as a communication at the November 9th meeting at which time a date would be set for a public hearing.

5. Maine Surgical Supply - Sale of City-Owned Land

The Director informed the Board that only one bid had been received on the land, that of Maine Surgical Supply. He said the bid was $10 more than previously offered and the proposal the same, therefore he would forward it to City Council on November 1, 1976.

6. Jewish Synagogue - Newbury Street - Atlantic Sails

The Director explained the complexity of the proposed zone change and asked their direction in the area to be advertised.

Mr. Peter Murray explained the proposed use and the desirability of the large floor area. He said the applicant proposes to restore the exterior of the building (one of 19 recommended for the National Register by the City). He said the operation employed approximately 30 people, was not noisy and he felt would improve the neighborhood as well as put a piece of property onto the tax rolls. He said they would approach the church and neighborhood once a decision was made as to which route to take and he felt B-2 with a text change would be best.

Mr. Stone was requested to be prepared to give the Board assurances that the rehabilitation of the building would be carried out. The Board agreed to the B-2 zone for purposes of advertising. This item will be placed on the November 9th agenda.

7. Butler School

Mr. David Schurman, architect for the developers, reviewed the proposal to change the building from two floors to three and the proposed exterior changes.

Mr. James Crane from Landmarks said this was his first opportunity to view the plans and preferred to reserve judgement for the public meeting.

The developer requested that the site plan approval be scheduled for the November 9th meeting.

11-9-76

Att. 6B

6. NEW BUSINESS

a. Land Development Plan [illegible]

b. Zoning

1. Public Hearing - Application for a Change of Zone from R-3 Residence to R-5 Residence in the Vicinity of Forest Avenue near Avalon Road - and Preliminary Site Plan Approval - E. J. Rollins, Applicant

Mr. E. J. Rollins has applied for a change of zone from R-3 Residence to R-5 Residence in the vicinity of Forest Avenue near Avalon Road. The applicant proposes to construct four two-story buildings on a 3.69 acre site on which he holds an option. Of the fifty-three proposed units, fifty-two will be one bedroom apartments. Five are designed for use by the handicapped. One additional two bedroom apartment is proposed for use by the superintendent. The site plan is presently being reviewed and the staff has set up a meeting with the applicant's attorney to work out some site plan inadequacies.

Forty-eight letters have been sent to property owners and residents in the area. A staff report is enclosed.

c. Site Plan Review

1. Site Plan and Architectural Plan Review - Butler School - Myerson-Allen Company/Butler School Association

At the Planning Board workshop meeting of October 26, 1976, architectural concept plans for the renovations of the Butler School were presented to the Planning Board for review and comment. The Myerson-Allen Company proposes to renovate the Butler School for thirty-nine Section 8 Elderly Housing Units. The applicant has suggested Planning Board review which is subject to City Council and City Manager negotiations presently underway. The Board suggested to the proponents that the concept for replacing two existing floors with three appeared sound and directed them to more fully develop the plans for the Planning Board's formal review.

The architectural plans are submitted to the Planning Board as a requirement of conditions established by the City Council in the original transfer of the property. The site plan for the parking lot on the former Butler School play area is governed by the Site Plan Ordinance. A conditional use permit from the Board of Appeals is also required for the parking lot and review of architectural plans by the City Council is mandated in deed transfer conditions.

A planning staff report is enclosed regarding the site plan. [illegible] the Greater Portland Landmarks plans to submit their comments [illegible] the Board regarding the architectural plans.

[illegible] Commission on Historic Preservation.

These four buildings, once approved as National Register properties, will be eligible to receive National Register funds which total $180,000 for FY 1977. Development funds can be used for the protection, rehabilitation, restoration and reconstruction of these properties.

In addition, a National Register Listing carries positive tax benefits to the owner of commercial properties. Under the latest provision of the Tax Reform Act, the Internal Revenue Service allows accelerated depreciation for renovated properties on the National Register.

The Planning Board endorsement will be submitted to the City Council.

4. Announcement of Decisions Made at Previous Meeting

a. Change of Zone From B-2 Business and R-6 Residence to B-3 Business - Area Bounded by Federal, Franklin, Middle and Church Streets - Thompson Block Associates

At its meeting of November 23, 1976, the Planning Board voted unanimously to recommend to the City Council that the proposed zone change be adopted. The reasons for the recommendation are contained in the enclosed memo to the Board.

5. Unfinished Business

a. Review of Final Architectural Plans for the Butler School and Review of Proposals for Andrews Square - Butler School Association

Under the conditions of the deed, the Planning Board approvals of architectural plans for the Butler School and proposals for the improvement to Andrews Square Monument are required. At its November 9, 1976 meeting, the Planning Board conceptually approved three basic architectural changes to the building as follows:

PLANNING BOARD WORKSHOP AGENDA
TUESDAY, OCTOBER 26, 1976 AT 3:30 P.M.
ROOM 209, CITY HALL, PORTLAND, MAINE

3:30 to 4:00 P.M. - Vortisch - Open Space - Cliff Island

Mr. Vortisch and representatives from the Greater Portland Council of Governments and Maine Department of Environmental Protection will be present.

4:00 to 4:45 P.M. - Review of Planning Board Agenda

4:45 to 5:00 P.M. - Final Review of Land Development Plan Brochure

5:00 to 5:15 P.M. - DiMillo Zone Change - Cumberland Avenue

Applicant and Attorney will be present.

5:15 to 5:45 P.M. - Jewish Synagogue - Newbury Street - Atlantic Sails

Applicant and Attorney will be present.

5:45 to 6:10 P.M. - Butler School

Myerson & Allen will be present.

6:10 to 6:15 P.M. - Maine Surgical Supply - Sale of City-Owned Land

6:25 P.M. - Dinner - The Village

8:00 P.M. - Evening Session

Att. 6C

PLANNING BOARD MINUTES
TUESDAY, NOVEMBER 9, 1976 AT 7:30 P.M.
ROOM 209, CITY HALL, PORTLAND, MAINE

1. ROLL CALL AND DECLARATION OF QUORUM

Conway (Acting Chairman), Rand, Gilpatrick, Pratt and Holden

PRESENTATION OF PLAQUE HONORING PREVIOUS PLANNING BOARD CHAIRMEN - MAYOR DONALD SLIPP

The Mayor made a presentation of a plaque with the names and terms of all Planning Board Chairmen to the acting Chairman. The plaque is to be displayed in the Planning office. The Mayor said he wished to express the City's appreciation to these dedicated people who had given so unselfishly of their time to the City of Portland.

2. APPROVAL OF MINUTES OF OCTOBER 26, 1976

Jean Gilpatrick moved that the minutes of October 26th be approved as written. Mr. Holden seconded the motion and it passed unanimously (5-0).

3. COMMUNICATIONS

a. Application for a Change of Zone from R-6 Residence to B-2 Business In the Vicinity of Newbury Street Between Franklin and India Streets And a Change in the Text of the Zoning Ordinance Re: Uses in B-2 Zones - Graham Stone, Applicant

The Acting Chairman introduced the item and it was summarized by the Planning Director. Peter Murray, attorney for the applicant, said he wished to have the proposed change reflect a maximum of fifty employees.

Jean Gilpatrick moved that the public hearing be set for November 23rd and that the area to be advertised be as delineated on the map prepared by the staff. Mr. Holden seconded the motion and it passed unanimously (5-0).

b. Proposed Zone Change - B-2 Business to B-3 Business - 119-123 Middle Street (Thompson Block) - Thompson Block Associates

The Acting Chairman introduced the item and it was summarized by the Planning Director. Mr. Pratt moved that the date for public hearing be set for November 23rd and the area to be advertised be as delineated on the map prepared by the staff. Jean Gilpatrick seconded the motion and it passed unanimously (5-0).

4. ANNOUNCEMENT OF DECISIONS MADE AT PREVIOUS MEETING (none)

5. UNFINISHED BUSINESS

a. Open Space Amendment to the Land Development Plan - Re: Application for Open Space Classification on Cliff Island by Adelaid M. and Herbert A. Vortisch

This item was introduced by the Acting Chairman and summarized by the Planning Director. Following a discussion of the request, Mr. Pratt moved that the application be denied since it does not meet the intent of the Open Space Law, there are no economic pressures for development and no compelling need for open space on Cliff Island. Jean Gilpatrick seconded the motion and it passed unanimously (5-0).

Mr. Pratt also moved that the Board recommend to the Tax Assessor that the tax assessment on this property be re-examined. Jean Gilpatrick seconded the motion and it passed unanimously (5-0).

b. Sale of City-Owned Property

The Planning Director summarized the bids and the staff's recommendations. Francis Drake said, although his bid on Item #2 (St. John Street) was lower, he wished the Board to consider accepting it due to the fact that it would produce tax income whereas the other bid would not.

Mr. Holden moved that the recommendation of the staff be accepted. This included acceptance of six bids. Jean Gilpatrick seconded the motion and it passed unanimously (5-0). Mr. Pratt moved that the decision on Item #2 be deferred for further review. Jean Gilpatrick seconded the motion and it passed by a vote of 3-2 (Conway & Holden).

6. NEW BUSINESS

a. Land Development Plan (none)

b. Zoning

1. Public Hearing - Application for a Change of Zone from R-3 Residence to R-5 Residence in the Vicinity of Forest Avenue near Avalon Road - and Preliminary Site Plan Approval - E. J. Rollins, Applicant

The Acting Chairman introduced the item and it was summarized by the Planning Director.

Mr. Richard Davis, attorney for the applicant, explained that the site plan had been revised and the entrance had been widened as required by the Fire Department. He said parking plans had been revised slightly although the number of parking spaces were the same. The applicant agreed to meet with the City Arborist regarding landscaping. He also said the plan was very preliminary and the developer intends to grade and plant the slope along the flood plain area and to use rip-rapping or whatever is necessary to avoid erosion on the slope. The applicant has abandoned plans for a senior citizens development. A more accurate estimated rental cost will be $235 - $245 mont and the development will be of a higher quality than Forest Glen.

Peter Abeles said that they intend to spend $15,000 to $20,000 on landscaping. He said Forest Glen presently has a waiting list and there is already a shortage of one bedroom units.

Mr. Vernon Boyd of 52 Hicks Street asked how much land was to be included in the zone change. The Director answered, only the parcel proposed for the development.

Mr. Holden said he was concerned about the fill. Mr. Abeles said they intend to remove some of it.

Mr. Pratt expressed concern that once the zone was changed, there was no way of assuring that the developer would go through with his proposal.

Mr. Conway said he felt the fact that the front land was already zoned R-5 was an important factor.

Jean Gilpatrick moved approval of the change of zone from R-3 Residence to R-5 Residence and that the preliminary site plan be approved with the following conditions:

1. Detailed landscaping plans showing sizes and varieties of proposed plantings and specific proposals for any fencing be reviewed by the City Arborist.

2. Specific proposals for the stabilization of landfill particularly along the banks of the existing stream.

Mr. Conway seconded the motion and it passed by a vote of 4-1 (Pratt).

c. Site Plan Review

1. Site Plan and Architectural Plan Review - Butler School - Myerson-Allen Company/Butler School Association

The Planning Director summarized the Site Plan for the Butler School. Mr. David Shurman also requested conceptual approval from the Board for three components of the architectural plans for the building.

Following Mr. Shurman's presentation of the proposal and discussion by the Board, Mr. Pratt moved approval of the site plan and approval in concept of the following:

1. Replacement of the present two floors of the building with three floors.

2. The removal of the exterior brick spandrels between the existing first and second floor windows.

3. Utilization of glass and bronze colored metal as replacement materials for the windows relating to the three floors.

and that the architect be encouraged to involve Landmarks and the Maine Historic Preservation Commission in the development of details which will be brought back to the Board for final approval once completed. The monument is also to be brought back to the Board.

Jean Gilpatrick seconded the motion and it passed unanimously (5-0).

2. Site Plan Review - Regional Solid Waste Baler Station - Outer Congress Street - Solid Waste Management Board

The Director summarized the site plan. Following a brief discussion, Mr. Pratt moved approval of the final site plan. Jean Gilpatrick seconded the motion and it passed unanimously (5-0).

3. Review of Planning Department Decision - Minor Site Plan 127-137 Commercial Street - Antonio DiMillo

The Planning Director reviewed his action on the site plan and explained the use is compatible with the development of the waterfront but the "bulk" of the building is not. He explained that, although this was a minor site plan and did not require Planning Board involvement, he wished to give Mr. DiMillo an opportunity to express his opinion prior to the processing of an appeal under the site plan ordinance to the City Council. The Director did not request any position by the Planning Board.

Mr. DiMillo summarized his proposal and said that he was proposing an addition to an existing building, that building had been approved by the Building Inspector in 1973, and the continuation of the canopy was necessary to blend with the existing building. He said Mr. Megathlin asked to meet with his architect but he saw no reason for it. Mr. DIMillo said he was not willing to bring in his architect.

Mr. Valentino, builder, said he did not know how the building addition could be compatible with the present building if the canopy was not allowed. He said there are nine criteria to be met and Mr. Megathlin had brouhgt up only one. He said Mr. Megathlin had stated that the building would be detrimental to surrounding private development if built as proposed and asked if it was up to the developer to prove that it was not or up to the planner to prove that it was.

Mr. Pratt asked if Mr. Valentino was the architect. (He replied no) and requested that the architect be asked if it could be done. He also asked Mr. DiMillo why he was not willing to bring in his architect.

Mr. DiMillo said Mr. Megathlin was opposed to the canopy and he felt if he was allowed to have it on the existing building, it should be allowed on the addition as an exception.

Mr. Frank Akers said two meetings had been held by the Old Port Exchange Association and the officers and Board had voted to support the DiMillo plan. He then said four officers and six directors of the association voted unanimously to support Mr. DiMillo. He said he felt there was a need to fill the scar on Commercial Street. The question of whether or not it depicts a waterfront flavor was questionable. He said the Old Port Exchange area has had a slow, long, hard pull and they did not need controversy at this time and he would like to see Mr. DiMillo's plan go forward.

Mr. Joel Ross of Landmarks said there was no question that this area is one of the most exciting and economically proficient areas of the City due to private investment, the City Options Program and the City Edges Program. Its historic perspective and expanding rejuvenation are unique. He said the type of use proposed by Mr. DiMillo should be encouraged, however, the style is incompatible with the area and inconsistent with the City Edges Program and he would hope a compromise that would not have a detrimental impact on the area could be worked out.

Mr. Joseph Lovegren said, as a neighbor and customer of Mr. DiMillo, he was opposed to the architecture of the building and although he favored the uses, he felt the architecture was not aesthetically in keeping with the neighborhood and what was hoped to be accomplished in the area. He said he felt Mr. DiMillo was missing an opportunity to do something of long range value for the area by not considering the alternatives of design.

Mr. DiMillo said everyone is brushing over the fact that he was proposing an addition to an existing building and wished to keep it the same.

Mr. Pratt said it is unfortunate that there is presently no Historic District Ordinance and he would like to see a compromise worked out to the satisfaction of all. He said he was somewhat disappointed in the stand taken by the Old Port Exchange Association Officers and Directors. He also said we "can't add on to past mistakes". He said it was unfortunate to have to be placed in this position since this kind of development is important to the area, but should be compatible with the area.

Mr. Conway said he felt Mr. DiMillo was within his rights and it was his privilege to build the addition with the overhang since the other part of the property was designed that was and he did not see it as incompatible.

Jean Gilpatrick said she recognized what Mr. DiMillo was saying and and had no argument that he was within his rights, however, if a Historic District Ordinance were in effect, all of this would be precluded. She said she disagreed with Mr. Conway and felt the area was going to improve.

Mr. Rand said he had no strong feelings either way and wished to take no stand.

Mr. Pratt said the question had been raised as to who has the burden of proof and he felt it was Mr. DiMillo. He said Mr. DiMillo's refusal to let the staff or Board meet with his architect complicated the issue and he was not satisfied that it could not be made compatible.

Mr. Megathlin said he did not like having to take this position and would prefer to meet with the architect. He agreed that the present proposal with the canopy may be the only alternative, but he was not convinced at this point and would like to meet with the architect.

Mr. Pratt moved that the Board accept the position of the staff as set forth in Mr. Megathlin's letter of November 1, 1976 and for the reasons stated therein, disapprove the site plan. The motion failed to receive a second.

Mr. Pratt then moved that the Board recommend to the City Council that they explore the possibility of an agreed solution between Mr. DiMillo, the Planning staff, representatives of Old Port Exchange and Landmarks and to strongly urge Mr. DiMillo to enter into this process. Jean Gilpatrick seconded the motion and it failed by a vote of 2-2 (Conway & Holden - Mr. Rand abstained).

Mr. Conway moved that the Board recommend to the City Council that the minor site plan as proposed by Mr. DiMillo be approved as submitted. Jean Gilpatrick seconded the motion and it failed by a vote of 2-2 (Gilpatrick & Pratt - Rand abstained).

d. Public Projects

1. Sale of City Owned Land at the Corner of Wilmot and Oxford Streets

The Planning Director said the E. W. Noyes Company had requested that the City release for bid a parcel of City-owned land at the corner of Wilmot and Oxford Streets.

Ms. Dorothy Seeley of 58 Wilmot Street said she was also interested in purchasing the parcel.

Mr. Pratt moved that the subject parcel be released for sale by competitive bid. Jean Gilpatrick seconded the motion and it passed unanimously (5-0).

e. Capital Improvements Program

1. 1977 Capital Improvements Program

The Board voted to accept the City Manager's report and to set a workshop date of November 23rd to review the 1977 CIP.

f. Subdivisions

1. Preliminary Approval of Subdivision Plat for a Commercial Development Between Ashmont and Coyle Streets - ASHCO, Inc.

Following a brief discussion, Mr. Rand moved approval of the preliminary site plan for Ashco, Inc. between Ashmont and Coyle Streets. Mr. Holden seconded the motion and it passed by a vote of 4-0 (Pratt abstained).

7. ADJOURNMENT

Att. 6D

Planning Report #108-76

PLANNING DEPARTMENT REPORT

Site Plan and Architectural Plan Review -
Butler School - Myerson Allen Co./ Butler School Association

Submitted to:

City Planning Board
Portland, Maine

November 9, 1976

INTRODUCTION

Following intensive review by both the Planning Board and City Council, the Butler School and the Butler School play yard were transferred to Community Development Services Inc. (now known as Butler School Association) for conversion of the building to residential use and use of the play yard for parking. This took place on April 1, 1975 and the deed stipulated that the City had the option to repurchase the property if no substantial rehabilitation took place within a year. Shortly after the year period, HUD advertised locally for proposals to develop Section 8 elderly housing in rehabilitated buildings and the Myerson Allen Company arranged with Butler School Association to include the Butler School in a bid for this funding. By the time the item was brought before the City Council regarding potential repurchase, HUD had approved Myerson Allen Company's bid. At the recommendation of the City Manager, the City Council voted on September 8, 1976 to repurchase the building and grant Myerson Allen an option, while giving the City Manager the flexibility to negotiate the repurchase and the subsequent resale. These negotiations are not as yet complete.

The City Council order of September 18, 1974 which transferred the property to Butler School Associates (enclosed) required both Planning Board and City Council approval of architectural plans. Furthermore, the order requires Planning Board approval of the parking plan for the play yard and proposals for the upgrading and refurbishing of the Andrews Square Monument in front of the building.

The Myerson Allen Company proposal involves 39 residential units for elderly housing. These would be accommodated in the main portion of the building and in what is now the gymnasium. Parking for this facility is provided in the play yard area with 15 spaces devoted to the tenants of the Butler School and 34 spaces available to neighborhood residents.

The proposal is within the area identified as the Western Promenade Historic District in the Portland City Options Program. It is zoned R-6 Residential and is proposed to remain so in the Land Development Plan.

FINDINGS OF FACT

1. Architectural Plans

At the Planning Board's October 26, 1976 workshop meeting, John Allen of Myerson Allen Company and his architect presented an architectural concept for facade treatment of the building which involved replacing the existing two interior floors with three floors. The effect on the exterior was a need to install three levels of windows in the place of the existing two levels.

The Planning staff met with the architect on two occasions prior to the Ocotber 26th workshop. The staff stressed its opinion of the importance of retaining the horizontal lines on the facade of the building and that the vertical lines should not overwhelm its appearance. A concept was presented to the Board on October 26 and the Board directed the applicant to more fully develop the plans.

Greater Portland Landmarks has been involved in reviewing the architectural plans and representatives attended the Board's October 26th meeting. Greater Portland Landmarks intends to have members of its organization review the plans and submit a report to the Planning Board on November 9th. Additionally, the comments of Earle Shettleworth, the State Historic Preservation officer, have been requested by the Planning Department.

2. Site Plan

The site plan for the parking area is proposed in two sections. The portion of the property nearest the Butler School is proposed to contain thirteen 10 x 20 stalls for elderly tenants of the Butler School and two 12 x 20 feet stalls for handicapped tenants. Access to the parking area is proposed via the driveway next to the school which empties onto Pine Street.

The portion of the site adjacent to Carleton Street is proposed to contain 34 parking spaces which will be available to neighborhood residents on a lease basis. The stalls in this area are designed with 8 x 18 feet dimensions. This is considered minimal and would normally be recommended for disapproval if the lot was available to the general public. In this case, however, each space will be leased by a neighborhood resident for his or her sole use. As a result, the parking area will have very light traffic and each user will have a high degree of familiarity with the parking lot. Even under these conditions, an 8 x 18 foot stall is considered too narrow and the staff has recommended that a 9 x 20 foot stall be utilized. Access to this portion of the lot will be via two 12 foot curb cuts on Carleton Street. An entrance gate controlled by a card/key mechanism will be installed at the more southerly curb cut. The internal circulation will be one way with an exit at the northerly curb cut which will also contain a similar gate mechanism. Therefore, both entrance and exit to the lot will be controlled so as to guarantee resident use and to provide security from theft.

Landscaping is proposed to include retention of existing trees, in accordance with the conditions of the City Council order. Additional landscaping is planned and the firm of Moriece and Gary has been retained to develop these plans. The details of the landscaping plans were not available at the time of report writing. The applicant has been requested to provide landscaping plans prior to the November 9th meeting. Due to the nature of the use, the density of the neighborhood, and the historic character of area, the retention of existing trees and the provision of additional quality plantings is highly important in this case. When landscaping details are provided, review and comments by the City Arborist will be requested.

Lighting is shown in concept and proposed to be directional. No traffic safety hazard would result from lighting on this site and the use of directional lighting coupled with sufficient planting materials should effectively reduce the likelihood that lighting will be a nuisance to abutters.

The Department of Public Works has approved the site plan. The Department of Public Works has suggested that areas where parking is not proposed be used to collect water. Much of the water will percolate through the soils with existing catch basins on site to collect the overflow. The site plan reflects this suggesion.

3. Andrews Square Monument

The applicant has been advised of its responsibility to improve this facility. The Planning Department has suggested that the applicant be prepared to discuss proposals for upgrading the monument on November 9th for the Board's consideration.

4. Notice

Letters were sent to 12 abutting property owners concerning the Planning Board review of this proposal on November 5, 1976.

RECOMMENDATION

It is somewhat difficult for the Planning Department to make a recommendation with regard to the architectural plans. The concept submitted to the Planning Board on October 26, 1976 appears sound and seems to meet the objectives initially suggested by the Planning Department. The Planning Department, however, suggests that the Board give special attention to the comments and opinions of Earle Shettleworth and the Greater Portland Landmarks in reviewing the architectural plans. The Planning Department believes that adaptive re-use of the proposed building is the most important consideration, but the recommendations of these two experts can more effectively suggest to the Board the most appropriate way in which its re-use can be accomplished. The Planning Board's recommendation on the architectural plans will be forwarded to City Council for its consideration.

The Planning Department recommends that the site plan for the parking area be approved. If landscaping plans are not available on November 9th, the Planning Board should either give it preliminary approval or table the item in order that Planning Board review of this very important element can be accommodated.

REASONS FOR RECOMMENDATION

As an important structure and focal point in the neighborhood, the Butler School's re-use for elderly housing is highly recommended.

2. The Butler School is listed as an element of the proposed Western Promenade Historic District and, as such, adaptive re-use of the building is important.

3. The neighborhood is identified as a high priority area for section 8 rehabilitation housing in the City's Housing Assistance Plan.

4. The City's need for additional subsidized housing for its elderly population has long been identified.

5. On-street parking in the West End and the demand for off-street parking in this area continues to be a chronic problem for neighborhood residents.

6. The design of the proposed parking area is functionally sound and the applicant has shown a strong interest in providing sufficient landscaping so as to make the parking area attractive.

City of Portland, Maine

IN THE CITY COUNCIL

[illegible] the Director of Finance be and hereby is [illegible] execute [illegible] and on behalf of the City of [illegible] Community Development [illegible] Property and adjacent Playground [illegible] City [illegible] ($20,000.00) Dollars, said deed to be subject to the following conditions:

1. CDS shall within one year from the date of said deed rehabilitate the building to accommodate twelve to thirteen dwelling units and [illegible] all work to be performed in compliance with the provisions of the Municipal Code and in accordance with architectural plans approved by the Planning Board of the City [illegible] shall before work is undertaken. In performing said work, the [illegible] original features of the building and its relationship with [illegible] shall be preserved.

2. Adequate [illegible] located on the premises shall be established and [illegible] to the satisfaction of the Planning Board.

3. In developing the playground area for parking purposes, all work shall be performed in compliance with the provisions of the Municipal Code and subject to the approval of the Planning Board. All significant trees within said area shall be retained and maintained.

4. In the event of failure of the Grantee to complete or substantially complete the work as noted above within said period, the Grantee shall be [illegible] the election of the Grantor to reconvey to the Grantor all [illegible] herein conveyed at the sale purchase price of $20,000.00.

5. In the event CDS shall within a period of 15 years desire to dispose of said premises, or any part thereof, it shall notify the City in writing of its desire to dispose of said premises, or any part thereof, and the City shall have the right within a period of sixty (60) days after receipt of said notice, to elect to purchase said premises, or any part thereof. If CDS and the City shall be financially able to agree upon a mutually satisfactory purchase price, said price shall be determined by a board of three arbitrators, after which the City shall have a period of thirty (30) days to determine whether it will exercise its election to purchase.

6. CDS shall not during said period of 15 years, without Council approval, mortgage or otherwise encumber said premises, or any part thereof, except that necessary for the initial rehabilitation work, which mortgage or encumbrance shall retain the obligation of CDS, its successors and assigns.

7. CDS shall not develop the premises herein conveyed for any purposes other than set forth above without the prior written approval of the City Council within a period of 15 years from the date of said deed.

C E R T I F I C A T E

O F

C O M P L I A N C E

[illegible]

[illegible]TY OF PORTLAND

[illegible]partment of Neighborhood Conservation And Inspection Services
[illegible]using Inspections Division
[illegible]phone: 775-5451 - Extension 448 - 358

[illegible]
[illegible]ocean House Rd
[illegible] Elizabeth, Maine [illegible]

[illegible]: Premises located at 130A [illegible] Street, Portland, Maine [illegible]

[illegible]

[illegible]-inspection of the premises noted above was made on October [illegible]
[illegible] Housing Inspector [illegible].

[illegible] is to certify that you have complied with our request to correct the violatio[illegible] [illegible] the Municipal Codes relating to housing conditions as described in our "Notice of [illegible]using Conditions" dated [illegible].

[illegible] you for your cooperation and your efforts to help us maintain decent, safe and [illegible]ary housing for all Portland residents.

In order to aid in the preservation of Portland's existing housing inventory, it shall be the policy of this department to inspect each residential building at least once every five years. Although a property is subject to re-inspection at any time during the said five-year period, the next regular inspection of this property is scheduled for [illegible].

Sincerely yours,

Joseph E. Gray, Jr. Director
Urban Development

By [illegible]
Lyle D. Noyes
Housing Code Administrator

Inspector [illegible]
Merlin Leary

C E R T I F I C A T E

O F

C O M P L I A N C E

[illegible]

CITY OF PORTLAND

Department of Neighborhood Conservation And Inspection Services
Housing Inspections Division
Telephone: 775-5451 - Extension 448 - 358

[illegible] Harrison
[illegible] Ocean House [illegible]
[illegible] Elizabeth, Maine [illegible]

Re: Premises located at 1200 [illegible] Street, Portland, Maine [illegible]

Dear Mr. & Mrs. [illegible]

A re-inspection of the premises noted above was made on October [illegible]
by Housing Inspector [illegible].

This is to certify that you have complied with our request to correct the violation of the Municipal Codes relating to housing conditions as described in our "Notice of Housing Conditions" dated December 14, 197[illegible].

Thank you for your cooperation and your efforts to help us maintain decent, safe and sanitary housing for all Portland residents.

In order to aid in the preservation of Portland's existing housing inventory, it shall be the policy of this department to inspect each residential building at least once every five years. Although a property is subject to re-inspection at any time during the said five-year period, the next regular inspection of this property is scheduled for October 19[illegible].

Sincerely yours,

Joseph E. Gray, Jr. Director
Urban Development

By [illegible]
Lyle D. Noyes
Housing Code Administrator

Inspector [illegible]
Merlin Leary

jcr

ORDER

AUTHORIZING PURCHASE BUTLER SCHOOL PROPERTY
Y.C.D.C.

(City Manager)
Mr. Cox (City)

IN THE CITY COUNCIL

September 18, 19 74

Given first reading. Second reading on separate date failed to be dispensed with by vote of 6 Yeas, 3 Nays (MacWilliams, MacVane and Bernstein). Voted to reconsider, 7 Yeas, 2 Nays

Attest: [signature]
City Clerk.

Yeas Nays

(MacWilliams and MacVane). Second reading on separate date dispensed with by vote of 7 Yeas, 2 Nays (MacWilliams and MacVane) and passed, 6 Yeas, 3 Nays (MacWilliams, MacVane and Bernstein).

36

Return Corp Counsel
City Hall
Portland Maine

30066

KNOW ALL MEN BY THESE PRESENTS, That BUTLER SCHOOL ASSOCIATES, a Maine Limited Partnership, and JOHN B. DUNN, individually and as Sole General Partner of Butler School Associates, of Portland, County of Cumberland and State of Maine, and MARCIA R. DUNN, individually and as Sole Limited Partner in said Butler School Associates, also of Portland, County of Cumberland and State of Maine, in consideration of One Dollar ($1.00) and other valuable considerations paid by CITY OF PORTLAND, a body politic and corporate located in the County of Cumberland and State of Maine, the receipt whereof it does hereby acknowledge, does hereby remise, release, bargain, sell and convey, and forever quit-claim unto the said CITY OF PORTLAND, its successors and assigns forever, a certain lot or parcel of land together with the buildings and improvements thereon, located in said Portland, and being bounded and described as follows:

Beginning at the northwesterly corner of Pine and West Streets in the said City of Portland, thence running southwesterly on the northerly sideline of Pine Street a distance of 175 feet to a passageway now 15 feet wide, thence northwesterly at right angles with said line of Pine Street on northeasterly side of said passageway a distance of 113.87 feet to the Easterly line of a passageway 20 feet wide, thence southwesterly at right angles with last described line a distance of 16.83 feet to the center of last named passageway, thence north on included angle of 36 degrees 27 minutes on said center line a distance of 98.91 feet to the southerly line of West Street, thence southeasterly at right angles on the said line of West Street a distance of 188.38 feet to angle in said line of West Street, thence with an included angle of 144 degrees 42 minutes a distance of 21.1 feet to the point of beginning, containing by calculation an area of 188.25 square feet. A strip of the aforesaid land 5 feet wide and adjoining said first named passageway and extending from said Pine Street to said last named passageway is to be forever kept open as a passageway in connection with said first named passageway widening the same to 20 feet; said lot shall always have the use of said last named passageway to Pine Street and said lot is subject to all sewer and sidewalk assessments upon the same and to the common use of all said passageways by all the land adjoining the same including all the land of said John and Philip or either of them within the tract bounded by West, Pine and Carleton Streets.

Also, one other certain lot or parcel of land in said Portland, bounded and described as follows: Beginning on the easterly sideline of Carleton Street at the most northerly corner of land conveyed by Jessie D. Wright to Harrison C. Josslyn by deed dated August 18, 1926, recorded in Cumberland County Registry of Deeds in Book 1243, Page 375; thence northerly on Carleton Street sixty-nine (69) feet to a stake; thence southeasterly and parallel with the northerly line of a certain lot of land conveyed to the said Harrison C. Josslyn about one hundred and seventy-nine (179) feet to a common passageway; thence southwesterly on said passageway about eighty-six (86) feet to said Josslyn land and thence westerly on said Josslyn land to the first bound on Carleton Street.

Also, one other certain lot or parcel of land in said Portland bounded as follows: Beginning on the easterly side of Carleton

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Street at the northerly corner of the lot or parcel of land herein before described, said point being about one hundred seventy (170) feet southerly of West Street; thence northerly by Carleton Street to land now or formerly of one Black at a point one hundred (100) feet southerly of West Street; thence by said Black land and other land formerly belonging to the Trustees under the Will of John B. Brown, keeping the distance of one hundred (100) feet southerly of West Street and two hundred twenty-five (225) feet more or less to a proposed way as delineated on Plan 55 of Assessors Plans of Portland; thence by the westerly side of said passageway to the lot of land herein before in this deed described; thence by the northerly line of said land one hundred seventy-nine (179) feet more or less to the point begun at.

Subject to the covenants and agreements as more fully set forth in a deed from City of Portland to Butler School Associates dated April 1, 1975 and recorded in the Cumberland County Registry of Deeds in Book 3663, Page 181, to which reference is made for a more particular description of said covenants and agreements.

Being the same premises conveyed to Butler School Associates by deed of City of Portland dated April 1, 1975, said deed being recorded in aforesaid Registry of Deeds in Book 3663, Page 181.

TO HAVE AND TO HOLD the same, together with all the privileges and appurtenances thereunto belonging, to the said CITY OF PORTLAND, its successors and assigns forever. And the said Grantor Corporation does covenant with the said CITY OF PORTLAND, its successors and assigns, that it will Warrant and Forever Defend the premises to it, the said Grantee, its successors and assigns forever, against the lawful claims and demands of all persons claiming by, through, or under it, or them.

IN WITNESS WHEREOF, the said BUTLER SCHOOL ASSOCIATES, and JOHN B. DUNN, individually and as Sole Limited Partner in said Butler School Associates, and MARCIA R. DUNN, individually and as Sole Limited Partner in said Butler School Associates (said John B. Dunn and Marcia R. Dunn being husband and wife and releasing any rights by descent) have caused this instrument to be signed, this 1st day of December in the year one thousand nine hundred and seventy-six.

SIGNED, SEALED and DELIVERED
in presence of

Georgia M Shea

Georgia M Shea

BUTLER SCHOOL ASSOCIATES

By John B. Dunn
John B. Dunn, Sole General Partner

BUTLER SCHOOL ASSOCIATES

By: Marcia R. Dunn
Marcia R. Dunn, Sole Limited Partner

John B. Dunn
John B. Dunn, Individually

Marcia R. Dunn
Marcia R. Dunn, Individually

STATE OF MAINE
Cumberland, ss.

December 1, 1976

Personally appeared the above named John B. Dunn and acknowledged the within Deed to be his free act and deed and

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his free act and deed in said capacity as General Partner of said Limited Partnership and the free act and deed of said Limited Partnership.

Before me,

George M. Shea

Justice of the Peace
~~Notary Public~~

DEC 13 1976
REGISTRY OF DEEDS, CUMBERLAND COUNTY, MAINE
Received at 11 H 38 M AM, and recorded in
BOOK 3950 PAGE 36 . Margaret L. Stebbins Acting Register

134

13745

KNOW ALL MEN BY THESE PRESENTS, That the CITY OF PORTLAND, a body politic and corporate located in the County of Cumberland and State of Maine, in consideration of One Dollar ($1.00) and other good and valuable considerations paid by MYERSON/ALLEN and COMPANY, a Massachusetts general partnership, located in Dedham, in the County of Norfolk and Commonwealth of Massachusetts, whose mailing address is Box 7320, One Canal Plaza, Portland, Maine, 04112, the receipt whereof it does hereby acknowledge, does hereby give, grant, bargain, sell and convey unto the said MYERSON/ALLEN and COMPANY, its successors and assigns forever.

Parcel 1

A certain lot or parcel of land and the buildings thereon, situated on West and Pine Streets in the City of Portland, County of Cumberland and State of Maine, bounded and described as follows:

Beginning at the intersection of the Southerly sideline of West Street and the Northwesterly sideline of Pine Street; thence S 54° 49' 50" W along said Northwesterly sideline of Pine Street 175.00 feet to a railroad spike in a common passageway; thence N 35° 10' 10" W within said common passageway 113.98 feet to a railroad spike; thence S 54° 49' 50" W within said common passageway 16.83 feet to a railroad spike; thence N 18° 25' 00" E within said common passageway 98.91 feet to a railroad spike and said Southerly sideline of West Street; thence S 71° 35' 00" E along said Southerly sideline of West Street 188.38 feet to an angle point; thence S 36° 17' 00" E along said Southerly sideline of West Street 21.10 feet to the point of beginning; all bearings are magnetic in the year 1976.

The above described premises are subject to common passageways from West Street and from Pine Street as described in a deed to the City of Portland dated August 14, 1878 and recorded in Cumberland County Registry of Deeds, Book 451, Page 345.

Together with the right in common to use said common passageways including, without limitation, the right to pass and to repass to and from said premises from and to Pine Street and West Street.

Parcel 2

Also, a certain lot or parcel of land situated on the Easterly side of Carleton Street in the City of Portland, County of Cumberland and State of Maine bounded and described as follows:

Beginning at an iron pipe on the Easterly sideline of said Carleton Street at the Southwesterly Corner of land now or formerly of Irving McCalmon, said iron pipe also being 100.00 feet distant as measured along said Easterly sideline of said Carleton Street on a bearing of S 18° 38' 00" W from the intersection of the Southerly sideline of West Street and said Easterly sideline of Carleton Street; thence from said point of beginning S 71° 35' 00" E along said Irving McCalmon land, land now or formerly of Lund Development Company, and land now or formerly of National Casket Company Incorporated 221.34 feet to a common passageway and an iron pipe; thence S 18° 25' 00" W along said common passageway 12.55 feet to an iron pipe; thence S 54° 39' 40" W along a common passageway 159.70 feet to land now or formerly of Wesley A. Kinney et al and an iron pipe; thence N 71° 37' 10" W along said Wesley A. Kinney et al land 127.45 feet to said Easterly sideline of Carleton Street and a drill hole; thence N 18° 38' 00" E along said Easterly sideline of Carleton Street 141.43 feet to the point of beginning; all bearings are magnetic in the year 1976.

Together with the right in common to use the common passageways referred to in Parcel 1 above, including, without limitation, the right to pass and repass to and from said premises from and to Pine Street and West Street.

Parcels 1 and 2 being the premises conveyed to Butler School Associates by deed recorded in the Cumberland County Registry of Deeds, Book 3661, Page 181, and reconveyed to the City of Portland by deed recorded in said Registry of Deeds, Book 3950, Page 36.

TO HAVE AND TO HOLD the same, together with all the privileges and appurtenances thereunto belonging, to the MYERSON/ALLEN and COMPANY, its successors and assigns forever.

AND the said Grantor Corporation does covenant with the said MYERSON/ALLEN and COMPANY, its successors and assigns, that it will warrant and forever defend the premises to it the said Grantee, its successors and assigns forever, against the lawful claims and demands of all persons claiming by, through, or under it.

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IN WITNESS WHEREOF, the said CITY OF PORTLAND has caused this instrument to be sealed with its corporate seal and signed in its corporate name by JOHN G. DE PALMA, its Director of Finance, thereunto duly authorized this 13th day of June in the year one thousand nine hundred and seventy-seven.

Signed, Sealed and Delivered
In Presence Of:

CITY OF PORTLAND

Pamela A. Stankiewicz

By John G. De Palma
Director of Finance

STATE OF MAINE
CUMBERLAND, ss.

June 13, 1977

Personally appeared the above named John G. De Palma, Director of Finance of said Grantor Corporation as aforesaid, and acknowledged the foregoing instrument to be his free act and deed in his said capacity and the free act and deed of said corporation.

Before me,

Justice of the Peace
~~Notary Public~~

JUN 14 1977
REGISTRY OF DEEDS, CUMBERLAND COUNTY, MAINE
Received at 4 H 05 M P.M. and recorded in
BOOK 4034 PAGE 134 Margaret L. Fisher Register

Att. 7C

(2)
137

13746 (101)

Know all Men by these Presents,

That MYERSON/ALLEN AND COMPANY, a Massachusetts general partnership of Dedham, Norfolk County, Massachusetts

in consideration of One and no/100 Dollar ($1.00) and other good and valuable considerations

paid by BUTLER/PAYSON COMPANY, a Maine limited partnership

and whose mailing address is Box 7320, One Canal Plaza, Portland, Maine 04112

the receipt whereof it do/es hereby acknowledge, do/es hereby remise, release, bargain, sell and convey and forever quit-claim unto the said BUTLER/PAYSON COMPANY,

its successors ~~heirs~~ and assigns forever, the following described real estate:

~~a certain lot or parcel of land~~

Parcel 1

A certain lot or parcel of land and the buildings thereon, situated on West and Pine Streets in the City of Portland, County of Cumberland and State of Maine, bounded and described as follows:

Beginning at the intersection of the Southerly sideline of West Street and the Northwesterly sideline of Pine Street; thence S 54° 49' 50" W along said Northwesterly sideline of Pine Street 175.00 feet to a railroad spike in a common passageway; thence N 35° 10' 10" W within said common passageway 113.98 feet to a railroad spike; thence S 54° 49' 50" W within said common passageway 16.83 feet to a railroad spike; thence N 18° 25' 00" E within said common passageway 98.91 feet to a railroad spike and said Southerly sideline of West Street; thence S 71° 35' 00" E along said Southerly sideline of West Street 188.38 feet to an angle point; thence S 36° 17' 00" E along said Southerly sideline of West Street 21.10 feet to the point of beginning; all bearings are magnetic in the year 1976.

The above described premises are subject to common passageways from West Street and from Pine Street as described in a deed to the City of Portland dated August 14, 1878 and recorded in Cumberland County Registry of Deeds, Book 451, Page 345.

Together with the right in common to use said common passageways including, without limitation, the right to pass and to repass to and from said premises from and to Pine Street and West Street.

Parcel 2

Also, a certain lot or parcel of land situated on the Easterly side of Carleton Street in the City of Portland, County of Cumberland and State of Maine bounded and described as follows:

Beginning at an iron pipe on the Easterly sideline of said Carleton Street at the Southwesterly Corner of land now or formerly of Irving McCalmon, said iron pipe also being 100.00 feet distant as measured along said Easterly sideline of said Carleton Street on a bearing of S 18° 38' 00" W from the intersection of the Southerly sideline of West Street and said Easterly sideline of Carleton Street; thence from said point of beginning S 71° 35' 00" E along said Irving McCalmon land, land now or formerly of Lund Development Company, and land now or formerly of National Casket Company Incorporated 221.34 feet to a common passageway and an iron pipe; thence S 18° 25' 00" W along said common passageway 12.55 feet to an iron pipe; thence S 54° 39' 40" W along a common passageway 159.70 feet to land now or formerly of Wesley A. Kinney et al and an iron pipe; thence N 71° 37' 10" W along said Wesley A. Kinney et al land 127.45 feet to said Easterly sideline of Carleton Street and a drill hole; thence N 18° 38' 00" E along said Easterly sideline of Carleton Street 141.43 feet to the point of beginning; all bearings are magnetic in the year 1976.

Together with the right in common to use the common passageways referred to in Parcel 1 above, including, without limitation, the right to pass and repass to and from said premises from and to Pine Street and West Street.

Parcels 1 and 2 being the premises conveyed to Butler School Associates by deed recorded in the Cumberland County Registry of Deeds, Book 3661, Page 181, reconveyed to the City of Portland by deed recorded in said Registry of Deeds, Book 3950, Page 36, and conveyed to Myerson/Allen and Company by deed from the City of Portland dated June 13, 1977 recorded in said Registry of Deeds.

To have and to hold, the same, together with all the privileges and appurtenances thereunto belonging, to the said BUTLER/PAYSON COMPANY, its successors

~~heirs~~ and assigns forever.

And I / ~~do~~ said Grantor partnership ~~covenant~~ with the said grantee , its successors ~~heirs~~ and assigns, that it will warrant and forever defend the premises to the said grantee , its successors ~~heirs~~ and assigns forever, against the lawful claims and demands of all persons claiming by, through, or under it.

In Witness Whereof, the said MYERSON/ALLEN AND COMPANY

~~and~~

~~wife~~ ~~of the said~~

~~joining in this deed as Grantor, and relinquishing and conveying all rights by descent and all other rights in the above described premises~~, have hereunto set its hand and seal this 14th day of June in the year of our Lord one thousand nine hundred and seventy-seven by its partner thereunto duly authorized.

Signed, Sealed and Delivered in presence of

MYERSON/ALLEN AND COMPANY

By ..... a partner

State of Maine, Cumberland, } ss. June 14 1977.

Personally appeared the above named Morton Myerson and acknowledged the above instrument to be his free act and deed. as partner on behalf of said Myerson/Allen and Company, a partnership. Before me,

Justice of the Peace.
~~Notary Public~~.
Attorney at Law.

JUN 14 1977
REGISTRY OF DEEDS, CUMBERLAND COUNTY, MAINE
Received at 4 H 06 M PM, and recorded in
BOOK 4034 PAGE 137. Margaret L. Weber Register.

Att. 7D

QUITCLAIM DEED WITH COVENANT

KNOW ALL PEOPLE BY THESE PRESENTS, that Butler/Payson Company Limited Partnership, a Maine limited partnership, having an office c/o Keen Development Corporation, 6 Bennett St, Cambridge, Massachusetts 02138, for consideration paid by Avesta Housing Development Corporation, a Maine non-profit corporation, having an office at 307 Cumberland Avenue, Portland, Maine, the receipt and sufficiency of which is hereby acknowledged, does grant, bargain, sell, convey, set over and transfer unto said Avesta Housing Development Corporation, its successors and assigns forever, three parcels of land and the buildings thereon, situated in the City of Portland, County of Cumberland, State of Maine, bounded and described as follows:

Parcel 1:

A certain lot or parcel of land and the buildings thereon, situated on West and Pine Streets in the City of Portland, County of Cumberland and State of Maine, bounded and described as follows:

Beginning at the intersection of the Southerly sideline of West Street and the Northwesterly sideline of Pine Street;

Thence S 54°49'50" W along said Northwesterly sideline of Pine Street 175.00 feet to a railroad spike in a common passageway;

Thence N 35°10'10" W within said common passageway 113.98 feet to a railroad spike;

Thence S 54°49'50" W within said common passageway 16.83 feet to a railroad spike;

Thence N 18°25'00" E within said common passageway 98.91 feet to a railroad spike and said Southerly sideline of West Street;

Thence S 71°35'00" E along said Southerly sideline of West Street 188.38 feet to an angle point;

Thence S 36°17'00" E along said Southerly sideline of West Street 21.10 feet to the point of beginning;

All bearings are magnetic in the year 1976.

The above-described premises are subject to common passageways from West Street and from Pine Street as described in a deed to the City of Portland dated August 14, 1878 and recorded in the Cumberland County Registry of Deeds in Book 451, Page 345.

Together with the right in common to use said common passageways including, without limitation, the right to pass and to repass to and from said premises from and to Pine Street and West Street.

Parcel 2:

A certain lot or parcel of land situated on the Easterly side of Carleton Street in the City of Portland, County of Cumberland, and State of Maine bounded and described as follows:

MAINE REAL ESTATE TAX PAID

Beginning at an iron pipe on the Easterly sideline of said Carleton Street at the Southwesterly corner of land now or formerly of Irving McCalmon, said iron pipe also being 100.00 feet distant as measured along said Easterly sideline of said Carleton Street on a bearing of S 18°38'00" W from the intersection of the Southerly sideline of West Street and said Easterly sideline of Carleton Street;

Thence from said point of beginning S 71°35'00" E along said Irving McCalmon land, land now or formerly of Lund Development Company, and land now or formerly of National Casket Company Incorporated 221.34 feet to a common passageway and an iron pipe;

Thence S 18°25'00" W along said common passageway 12.55 feet to an iron pipe;

Thence S 54°39'40" W along a common passageway 159.70 feet to land now or formerly of Wesley A. Kinney et al and an iron pipe;

Thence N 71°37' 10" W along said Wesley A. Kinney et al land 127.45 feet to said Easterly sideline of Carleton Street and a drill hole;

Thence N 18°38'00" E along said Easterly sideline of Carleton Street 141.43 feet to the point of beginning;

All bearings are magnetic in the year 1976.

Together with the right in common to use the common passageways referred to in Parcel 1 above, including, without limitation, the right to pass and repass to and from said premises from and to Pine Street and West Street.

Parcel 3:

A certain lot or parcel of land and the buildings thereon, situated at Deering and State Streets in the City of Portland, County of Cumberland, and State of Maine, bounded and described as follows:

Beginning at the intersection of the Southerly sideline of Deering Street and the Westerly sideline of State Street at an iron pipe;

Thence S 01°50'00" W along the Westerly sideline of State Street 97.82 feet to an iron pipe and land now or formerly of Masada Trust;

Thence N 85°47'00" W along said land now or formerly of Masada Trust 100.00 feet to land formerly of Eben Steele;

Thence N 01°50'00" E along land now or formerly of Donald F. Files 100.00 feet to said Southerly sideline of Deering Street and a drill hole;

Thence S 84°32'00" E along said Southerly sideline of Deering Street 100.12 feet to the point of beginning;

All bearings are magnetic in the year 1976.

The above premises being the premises conveyed to Butler/Payson Company Limited Partnership by deeds recorded in Cumberland County Registry of Deeds at Book 3979, Page 343 and Book 4034, Page 137. See also confirmatory deed recorded in Cumberland County Registry of Deeds at Book 4005, Page 279.

To have and to hold the same together with all the privileges and appurtenances thereunto belonging to the said Butler/Payson Company Limited Partnership, its successors and assigns forever.

And said Butler/Payson Company Limited Partnership does covenant with the said grantee, its successors and assigns, that it will warrant and forever defend the premises to the said grantee, its successors and assigns forever, against the lawful claims and demands of all persons claiming by, through or under it.

[signature page follows]

IN WITNESS WHEREOF, this Deed has been duly signed and sealed by the Butler/Payson Company Limited Partnership as of this 31st day of October, 2011.

Butler Payson Company Limited Partnership

By: KAM LLC, its General Partner

By: the Estate of Robert H. Kuehn, Jr., its Manager

By: _____
Daniel A. Taylor, as Executor and not individually

COMMONWEALTH OF MASSACHUSETTS
Suffolk, SS.

October 21, 2011

Personally appeared the above-named Daniel A. Taylor, Executor of the Estate of Robert H. Kuehn, Jr., Manager of KAM LLC, General Partner of Butler/Payson Company Limited Partnership as aforesaid, and acknowledged the foregoing instrument to be his free act and deed in his said capacity and the free act and deed of said limited liability company and limited partnership.

Before me, _____
Notary Public/Attorney-at-Law

LINDA A. MESSICK
Notary Public
Commonwealth of Massachusetts
My Commission Expires
February 20, 2015

SEAL

Received
Recorded Register of Deeds
Oct 31,2011 01:21:11P
Cumberland County
Pamela E. Lovley

Att. 7E

Doc#: 13352 Bk:32169 Ps: 143

SHORT FORM QUITCLAIM DEED WITH COVENANT

KNOW ALL PERSONS BY THESE PRESENTS, THAT AVESTA HOUSING DEVELOPMENT CORPORATION, a Maine nonprofit corporation, doing business in Portland, Maine, FOR CONSIDERATION PAID, grants to AVESTA BUTLER PAYSON LP, a Maine limited partnership whose mailing address is 307 Cumberland Avenue, Portland, ME 04101, WITH QUITCLAIM COVENANT, the land located on West, Pine, Deering and State Streets in the City of Portland, County of Cumberland and State of Maine, more particularly described on Exhibit A attached hereto.

Being the same premises conveyed to Avesta Housing Development Corporation, by deed of Butler/Payson Company Limited Partnership dated October 21, 2011 and recorded in the Cumberland County Registry of Deeds in Book 29079, Page 282.

IN WITNESS WHEREOF, Avesta Housing Development Corporation has caused this instrument to be executed by Eric Boucher, its Chief Financial Officer thereunto duly authorized, this 30th day of March, 2015.

MAINE REAL ESTATE TAX PAID

WITNESS:

AVESTA HOUSING DEVELOPMENT CORPORATION

By: _____
Eric Boucher, its Chief Financial Officer

STATE OF MAINE
COUNTY OF CUMBERLAND, SS. March 30, 2015

Personally appeared the above-named Eric Boucher, Chief Financial Officer of Avesta Housing Development Corporation, as aforesaid, and acknowledged the foregoing instrument to be his free act and deed in his said capacity and the free act and deed of said Avesta Housing Development Corporation.

Before me,

_____
~~Notary Public~~/Attorney-at-Law
Print name: Amy N. Devin
My commission expires: N/A

EXHIBIT A

Parcel 1 - 77 Pine Street, "School Lot":

A certain lot or parcel of land and the buildings thereon, situated on West and Pine Streets in the City of Portland, County of Cumberland and State of Maine, bounded and described as follows:

Beginning at the intersection of the southerly sideline of West Street and the northwesterly sideline of Pine Street;

Thence S 54°49'50" W along said northwesterly sideline of Pine Street 175.00 feet to a railroad spike in a common passageway;

Thence N 35°10'10" W within said common passageway 113.98 feet to a railroad spike;

Thence S 54°49'50" W within said common passageway 16.83 feet to a railroad spike;

Thence N 18°25'00" E within said common passageway 98.91 feet to a railroad spike and said southerly sideline of West Street;

Thence S 71°35'00" E along said southerly sideline of West Street 188.38 feet to an angle point;

Thence S 36°17'00" E along said southerly sideline of West Street 21.10 feet to the point of beginning.

All bearings are magnetic in the year 1976.

Together with the right in common to use common passageways from West Street and from Pine Street as described in a deed to the City of Portland dated August 14, 1878 and recorded in the Cumberland County Registry of Deeds in Book 451, Page 345, including, without limitation, the right to pass and to repass to and from said premises from and to Pine Street and West Street.

Parcel 2 - 218 State Street:

A certain lot or parcel of land and the buildings thereon, situated at Deering and State Streets in the City of Portland, County of Cumberland, and State of Maine, bounded and described as follows:

Beginning at the intersection of the southerly sideline of Deering Street and the westerly sideline of State Street at an iron pipe;

Thence S 01°50'00" W along the westerly sideline of State Street 97.82 feet to an iron pipe and land now or formerly of LF Associates LLC described in a deed recorded in the Cumberland County Registry of Deeds in Book 25869, Page 326;

Thence N 85°47'00" W along said land now or formerly of LF Associates LLC 100.00 feet to a point marking the southwesterly corner of the within described premises and the southeasterly corner of land now or formerly of LCB38, LLC described in a deed recorded in said Registry of Deeds in Book 28686, Page 115;

Thence N 01°50'00" E along land now or formerly of said LCB38, LLC 100.00 feet to said southerly sideline of Deering Street and a drill hole;

Thence S 84°32'00" E along said southerly sideline of Deering Street 100.12 feet to the point of beginning.

All bearings are magnetic in the year 1976.

O:\MAS\99475 Avesta\Butler Payson Apartments\Transfer Docs\Quitclaim Deed.docx

Received
Recorded Register of Deeds
Mar 31,2015 10:24:12A
Cumberland County
Nancy A. Lane

Att. 8

WOODARD &CURRAN

Western Promenade Sewer Evaluation Report

STATE OF MAINE
DAVID A. SENUS
No. 10791
LICENSED
PROFESSIONAL ENGINEER

1/30/2009

203943.54
City of Portland
January 30, 2009

woodardcurran.com
COMMITMENT & INTEGRITY DRIVE RESULTS

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EXECUTIVE SUMMARY

The Western Promenade Neighborhood Association (WPNA) has expressed concerns and issued complaints of sewer back-ups and basement flooding at properties within the Western Promenade neighborhood to the City of Portland Department of Public Services (DPS). The City of Portland DPS agreed to study the issue, and through a request-for-proposal, retained the services of the consultant team of Woodard & Curran, Inc. and Jordan Environmental Engineering. The purpose of the Western Promenade sewer evaluation is to develop recommendations, that, when implemented, reduce sewer back-up and basement flooding issues in the Western Promenade neighborhood without increasing overflows from the combined sewer system to the Fore River.

Over the course of the study, a number of assessments were undertaken to identify the factors contributing to the back-up and basement flooding issues. These assessments included review of property owner complaints, monitoring and modeling of the sewer system, condition inspection of the sewer system and modeling of building rooftop stormwater collection systems. In addition, the City DPS performed sewer cleaning in areas where solids had deposited in the sewer and installed additional hydro-brakes in catch basins, a means of reducing the rate of stormwater inflow into the combined sewer system.

The assessments undertaken by the City and consultant team helped to identify the factors contributing to sewer back-ups and basement flooding in the study area. The following factors, either individually or in combination, contribute to sewer back-ups and flooding of basements within the Western Promenade neighborhood:

- Excessive Stormwater Inflow
  - Paved area runoff to street catch basins
  - Rooftop runoff to sewer service laterals
- Combined Sewer System Hydraulics
  - Pipe size constraints
  - Poor alignment at main intersections
  - Deposited materials
- Building plumbing and drainage
  - Flow from roof leaders
  - Condition of service laterals
  - Open floor drains
  - Surface and groundwater leaks into basements

No single improvement will abate or alleviate all of the factors that contribute to sewer back-ups and flooding in all locations. Instead, it is recommended that a number of improvements be implemented to aid in the reduction of sewer back-up issues, while not increasing flow to the Emery Street Combined Sewer Overflow. The WPNA will continue to play an important role in the implementation of these recommendations to reduce back-ups and protect the water quality of Casco Bay. In an effort to identify the responsibility for implementing each of these recommendations, the recommendations were separated into City Initiatives, Joint Opportunities and Homeowner Suggestions. The recommendations identified within the report include:

City Initiatives

- TV inspection and cleaning of combined sewer mains
- Flow slippage through the addition of hydro-brakes
- Structural improvements to combined sewer system
- Re-evaluation of area during CSO Master Planning Update (Tier III)
- Evaluation of flow “relief” through new piped connections to Vaughan Street system

Joint Opportunities

- Information & outreach
- Disconnection and redirection of roof leaders
- Low-Impact-Development demonstration projects (Roadway & Driveways)

Homeowner Suggestions

- Inspection and cleaning / repairing sewer laterals
- Plugging basement drains and adding disconnected sump pumps or removable drain caps
- Installation of backflow preventers
- Waterproofing basements

The following table provides a prioritization ranking for the proposed recommendations outlined in this report:

Priority Rank	City Initiative	Joint Opportunity	Homeowner Suggestion
1	TV inspection & cleaning of combined sewer mains		
2	Flow slippage through the addition of hydro-brakes		
3	Structural improvements to combined sewer system		
4		Information & outreach	
5			Inspection and cleaning / repairing sewer laterals
6			Plugging basement drains, adding sump pumps or caps
7	Re-evaluation of area during Tier III CSO Master-Planning		
8		Disconnection and redirection of roof leaders	
9			Installation of backflow preventers (upon disconnection of roof leaders)
10		LID demonstration projects	
11	Evaluation of flow relief via connection to Vaughan CSO		
N/A			Waterproofing basements*

*Waterproofing basements has not been assigned with a priority ranking, as this recommendation addresses the issue of ground or surface water infiltration or inflow into basements, a separate issue from sewer back-ups. Addressing water infiltration and inflow into basements can be performed independent of the other recommendations outlined herein.

These recommendations should be implemented in order of highest priority. Periodic monitoring should take place to determine the effectiveness of implementing these recommendations and to determine if it is necessary to implement the remaining recommendations. It is important to note that two of these recommendations have been implemented over the course of the study, including inspection and cleaning of sewer mains and flow slippage through the addition of hydro-brakes. Since the time that these recommendations were implemented, the WPNA has reported no complaints from property owners relative to sewer back-ups despite several sizeable rainfall events in late summer and fall of 2008.

1. INTRODUCTION

1.1 PURPOSE AND DESCRIPTION

The Western Promenade neighborhood occupies the southwestern portion of the Portland "peninsula". This historic residential area contains many large, well maintained mid-19th century homes and townhouses, tree-lined streets and a community park. The neighborhood is serviced by a combined sewer system which conveys both stormwater and sanitary wastewater to the Portland Water District's Wastewater Treatment Facility on the Eastern Promenade, with overflow discharges into the Fore River.

The Western Promenade Neighborhood Association (WPNA) has been an active participant in the preservation of the neighborhood since 1973. Over the past few years, the WPNA has expressed concerns and made complaints of sewer back-ups and basement flooding at properties within the Western Promenade neighborhood to the City of Portland Department of Public Services (DPS). The City of Portland agreed to study the issue, and through a request-for-proposal, retained the services of the consultant team of Woodard & Curran, Inc. and Jordan Environmental Engineering. The purpose of the Western Promenade sewer evaluation is to develop recommendations, that, when implemented, reduce sewer back-up and basement flooding issues in the Western Promenade neighborhood without increasing overflows from the combined sewer system to the Fore River. This report provides an outline of the efforts, findings and recommendations generated under the WPNA sewer evaluation study.

As the study area falls under one of the City's Combined Sewer Overflow (CSO) drainage areas, recommendations will consider the impact of proposed actions on downstream CSOs. As such, the recommendations for the Western Promenade that are specific to stormwater management may serve as a model for other neighborhoods in Portland with similar combined sewer related issues.

1.2 PROJECT LOCATION

The Western Promenade study area is shown in Figure 1.1. The study area is approximately 42 acres in size and includes roughly 100 single-family and multi-family homes. The study area occupies the areas between Pine Street, Clifford Street, Western Promenade and Thomas Street and ranges in elevation between 145' and 160' above sea level. The USDA Soil Survey, Cumberland County Maine maps indicate that the study area is underlain by the Hinckley series soil which consists of deep, excessively drained soil of moderately coarse textured glacial outwash. It is likely that significant urban fill exists in various depths across the study area as a result of historic development. The neighborhood can generally be characterized as medium-density (50% impervious area) with an average lot size of 0.17 acres.

The study area represents 62% of the land area within the Emery Street Outfall (CSO 28) drainage area. The Emery Street CSO is a moderately active overflow. During 2007, it is estimated that there were 49 days on which overflows occurred at the Emery Street CSO. Approximately 7,400 linear feet of combined sewer pipe, 21 manhole structures, 50 catch basin inlets and sewer services from approximately 100 buildings provide stormwater and wastewater drainage within the study area.

1.3 BACKGROUND INFORMATION

1.3.1 Combined Sewer Systems

Combined sewers that convey both stormwater and sanitary wastewater are a vestige of the interest of municipal governments in the 19th and 20th century to safely convey stormwater and wastewater away from developed areas.

Figure 1-1
Study Area

SCALE: 1" = 350'	JOB NO.: 203943.54
DATE: OCT 2008	DRAWN BY: ZLH

Initially, these combined sewers discharged directly into receiving waters without treatment. The combined sewer systems in Portland discharged into Back Cove, Capisic Brook, Fore River, Presumpscot Estuary and Portland Harbor. As centralized wastewater treatment became available, adjustments have been made to the combined sewer system to divert flows to the wastewater treatment facility, operated by the Portland Water District, on Portland's Eastern Promenade. As these systems are a combination of stormwater and wastewater, occasionally heavy rain will force the combined sewer system to overflow, resulting in Combined Sewer Overflows (CSOs). Without overflows, the combined wastewater and stormwater would overwhelm the capacity of the down-stream conveyance and pumping systems creating back-ups into city streets and potentially into the basements of homes and buildings.

1.3.2 Combined Sewer Overflow Abatement

In 1989, the US Environmental Protection Agency (EPA) adopted a CSO Control Strategy to comply with the Clean Water Act (CWA). The objectives of this strategy were to ensure that CSOs only occurred in wet weather, to ensure compliance of all CSO discharges with the requirements of the CWA and to minimize CSOs in order to reduce impact on water quality and human health. In 1991, the City of Portland entered into an agreement with the Maine Department of Environmental Protection (DEP) with the goal to reduce and eliminate a large portion of CSOs from Portland's sewer system. In 1991 a long-term plan to evaluate and cost-effectively abate CSOs in Portland was initiated. The resulting Combined Sewer Overflow Abatement Study was delivered in 1993 and outlined a strategy to eliminate 33 of 39 CSOs in three stages of planned construction (Tiers I, II and III). In 1994, the EPA adopted a Combined Sewer Overflow Control Policy designed to reduce and eliminate combined sewer overflows nationwide. In 1997, the City prepared a Tier I implementation Plan and in 2003 prepared a Tier II implementation plan. Currently, the City has constructed 38 of 45 Tier I projects and 6 of 75 Tier II projects.

The Western Promenade study area and subsequently CSO 28 is not currently a part of the City's Tier II program for structural separation or storage. Initial recommendations for this CSO drainage area in the CSO Master Plan include flow-slippage and in-system flow reduction efforts.

Structural options identified in the Tier I and Tier II plans for eliminating CSOs in other areas of the City include separation via new piping networks or storage of combined flows in underground tanks. Increasingly, municipalities are recognizing that these structural options are not the only opportunities for making water quality improvements and eliminating CSO discharges. Many municipalities and are considering lower-cost methods, starting by reducing the generation of stormwater runoff through flow slippage, rooftop disconnection, or multiple small, site-scale projects.

1.3.3 Sewer Back-ups and Basement Flooding

Of the roughly 100 single-family and multi-family homes in the study area, approximately 30 have logged complaints with the City related to problems with sewer back-ups or basement flooding during storm events. Sewer back-ups are typically associated with a lack of hydraulic capacity in either the sewer service or within the sewer main itself due to a blockage or surcharged hydraulic condition. A surcharge hydraulic condition occurs when more flow is attempting to pass through a pipe or structure than the carrying capacity of that pipe or structure. Surcharge conditions can result from a lack of hydraulic capacity (e.g. pipe size versus storm flow) or from "downstream" conditions which cause reduced capacity and, in turn, water to back-up in the sewer pipe or building service.

Cellar flooding can occur due to sewer back-ups, high groundwater infiltration, rainfall-derived infiltration leaking into cellars through foundation walls or floors or surface stormwater inflow through openings in foundation walls. The native Hinckley gravelly sandy loam reported by soil survey maps to be present in the study area is a free draining soil with low groundwater and limited potential for bedrock issues. This soil type is unlikely to contribute to high groundwater issues; however, perched water tables can occur during wet periods when a layer of low permeable soil

or bedrock prevents deep infiltration of rainwater and snow melt, thus causing localized high groundwater conditions, which may be the case in some locations within the study area. Additionally, poor grading and insufficient drainage around a building can contribute to rainwater inflow and infiltration into basements and flooding regardless of native soil type.

2. SEWER ASSESSMENT

The sewer assessment undertaken in the study area included review of complaints logs, monitoring and modeling of the sewer system, inspection of the sewer system and modeling of building rooftop collection systems. The following section identifies the methods and analyses performed under each component of the assessment.

2.1 COMPLAINTS RESEARCH AND HOUSE VISITS

The City of Portland DPS maintains a running log of all requests and complaints filed by residents of the City. The complaints logged through DPS vary from issues with winter maintenance, to potholes to basement flooding. At the start of this study, the complaint log was the only source of data on file with the City relative to sewer back-up and basement flooding issues in the Western Promenade neighborhood. To supplement the information contained in the log, the WPNA provided a list of homeowners who have experienced issues with sewer back-ups in recent years. A total of 33 homeowners were included on the list provided by the WPNA. Because both lists did not provide a significant amount of detail relative to the problems experienced by the homeowners, it was jointly agreed at a meeting on December 7, 2007 between the WPNA Steering Committee members Anne Pringle and Pam Amberson and the project team to distribute a mailer with specific questions aimed at identifying the sewer back-up and basement flooding issues experienced by homeowners within the study area. The mailer was distributed to all 100 properties within the study area and some properties outside the study area. Based on the results of the returned mailers, a total of twenty five (25) properties were identified for obtaining additional information. The City performed property visits or made phone contact with the twenty five (25) homeowners. During the property visits, the City observed basement conditions, sewer lateral size (if above basement slab), roof connections to sewer and other applicable observations. Site visits were recorded on questionnaire forms and logged in a spreadsheet. Figure 2.1 depicts properties in the study area that have logged complaints with either WPNA or the City DPS related to sewer back-ups or basement flooding.

2.2 FLOW MODELING AND MONITORING

A simple sewer system model was developed and monitoring data was used to help analyze the combined sewers within the Western Promenade study area. The sewer model allowed the project team to analyze the theoretical capacity of the combined sewer pipes in the study area. Monitoring data was collected through the installation of in-place sewer monitoring devices and provided the observed storm event flow data for the assessment. Comparing the modeling data with the monitoring data allowed the project team to determine if flow restrictions existed in the sewer mains. The following is a brief description of the model and monitoring program.

2.2.1 Modeling

In order to estimate the flow capacity for each portion of the sewer system within the study area, a spreadsheet based model using the Manning's equation was developed. Manning's equation is described in further detail within the Building Hydraulic Model section of this report. Most of the data required for the model was obtained from the City of Portland Infiltration-Inflow Analysis System Base Maps, 1988. The City of Portland DPS performed additional data collection efforts by surveying the inverts of sewer manholes either not identified or not labeled on the system base maps. The model estimates the flow capacity of each length of sewer pipe within the study area; however, the model alone is not capable of estimating the flow reduction caused by obstructions within the sewer pipes or at junction points.

2.2.2 Monitoring

The City of Portland monitored the sewer system using automated flow meters in four locations during the study period. The automated flow meters collected flow data within the sewer pipe at 5 or 15 minute intervals and stored

Figure 2-1
Property Complaints

SCALE: 1" = 150'	JOB NO.: 203943.54
DATE: OCT 2008	DRAWN BY: ZLH

the data. After major precipitation events, City personnel collected the data and made it available for analysis.

The four locations that were monitored are depicted on Figure 2-1. These locations were:

- Carroll Street near the intersection of Thomas
- Carroll Street near the intersection of Vaughan
- Neal Street near the intersection of Bowdoin
- Thomas Street near the intersection of Spring

The Portland Water District maintains several rain gages within the City of Portland. The data from these rain gages was also used in the analysis of the sewer system.

The monitoring data was plotted to determine peak flows and depth of flow for each major rain storm event. The observed peak flows provided an estimate of how much storm water was entering the sewer system upstream of the monitoring point. The depth of flow observations indicate to what extent the sewer was surcharging.

At each monitoring location the flow data from selected storm events was compared to the results from the sewer model to determine if the observed flow depths were as anticipated or if they were greater than anticipated, thus indicating a downstream obstruction or flow restriction.

2.2.3 Sewer Inspection, Cleaning & Modifications

The City of Portland DPS performed visual manhole inspections and television inspection of approximately 5,200 linear feet of combined sewer mains and laterals within the study area using DPS crews and EcoClean, LLC. Visual manhole inspections provided pipe invert elevations which were necessary in preparing the sewer pipe model. In addition, manhole inspections allowed for the observation of sewer connections and channels at pipe intersections. Television inspections identified areas of deposited solids, misaligned pipe joints, protruding service laterals and poorly constructed sweeps, bends and tees. In areas where television inspection identified heavy solids depositing, the City performed cleaning of the sewer. The information collected during these inspections allowed the project team to identify areas of potential flow restrictions within the sewer mains.

Prior to the start of the study, the City of Portland DPS had installed hydro-brakes within 13 of the 50 catch basins that fall within the study area. During the study, the City DPS installed an additional 6 hydro-brakes within the study area. Hydro-brakes are devices that are attached to the outlet pipe of a catch basin and limit the flow rate exiting the catch basin. Additional information relative to hydro-brakes, including a figure of a hydro-brake, can be found in the recommendations section of this report. Figure 2.1 depicts the location of hydro-brakes installed in the study area.

2.3 BUILDING HYDROLOGIC AND HYDRAULIC MODEL

As a means of determining the potential effects of stormwater inflow on the capacity of individual property owner's sewer services, a sewer building model was developed. Individual building rooftops represent small catchment areas with fast, direct inputs into either a building's private service lateral or onto/into the ground (if disconnected). Ultimately, roof runoff from most of the WPNA study area enters the City's combined sewer conveyance system, with the exception of any homes that might infiltrate rooftop runoff into the ground. It is possible that peak flows within a service lateral could impede the flow of sanitary waste from a private home creating a localized back-up.

Hydrologic and hydraulic models were prepared to evaluate stormwater rooftop runoff and lateral capacity for those properties that logged complaints in response to the mailer, both within and outside of the study area. A total of fifteen (15) buildings were evaluated in the model. The model evaluated rooftop runoff from rainfall generated during

the two, ten and twenty five year, 24-hour design storm events for the City of Portland (2 year storm = 3.0 inches, 10 year storm = 4.7 inches, 25 year storm = 5.5 inches) using a Type III rainfall distribution. The Rational Method, Q_p=CIA, was utilized to evaluate rooftop hydrology.

Rational Method: $Q_p = C*I*A$

Q_p = peak discharge corresponding to a given rainfall intensity
C = runoff coefficient, a dimensionless empirical coefficient related to the abstractive and diffusive properties of the catchment
I = rainfall intensity
A = catchment area

The Rational Method is the most widely used and commonly accepted method of modeling rainfall runoff response from a small catchment area[1] and therefore, the Rational Method was considered an appropriate means of modeling rooftop runoff. The value assigned to the runoff coefficient, C, was 0.95. The C value typically ranges between 0.0 and 1.0. The C value of 0.95 represents a catchment with very low hydrologic abstraction and diffusion. Hydrologic abstractions include means of interception, infiltration, surface storage, evaporation and evapotranspiration. Runoff diffusion is a measure of the catchment's ability to attenuate peak flows. Rooftops, having little to no detention capacity and quick, direct inputs into the closed pipe system are assigned high runoff coefficients. The model reflects an estimated rooftop area generated from aerial photos and Geographic Information System (GIS) photometric digitization. During many of the City's property visits, Department staff noted the number of roof leaders connected to the house sewer lateral. From this information, a direct ratio was assumed between roof area and the percentage of connected roof leaders. If a house had two of four roof leaders connected to the sewer system, it was assumed that 50% of the roof area was connected to the building sewer service, and modeled accordingly. For those buildings where no roof leader information was noted, 100% of the overall roof area was assumed to be connected to the building sewer service.

The hydraulics of each house sewer lateral was evaluated using the Manning's formula.

Manning formula: $V=(1/n)*R^{2/3}*S^{1/2}$

V = mean flow velocity
R = hydraulic radius
S = channel slope
n = Manning friction coefficient

The City of Portland DPS provided records of sewer lateral installations for many of the properties. The sewer installation cards for these properties include information on sewer lateral size and material. To evaluate the hydraulic capacity of these sewer laterals, assumptions were made on the slope of the sewer service lateral. A Manning friction coefficient was assigned based on sewer lateral pipe material type. In certain cases, no sewer card existed and assumptions were made on sewer lateral size, material, slope and roughness coefficient. These assumptions were noted in the model spreadsheet. A copy of the spreadsheet is included in Appendix A.

[1] Ponce, V.M. "Hydrology of Small Catchments" in Engineering Hydrology – Principles and Practices. Prentice Hall. Englewood Cliffs, New Jersey. 1989.

2.4 LAND COVER EVALUATION

A land cover assessment was performed for the study area to identify the relative percentage of land use within the study area. Land cover of the study area is shown in Figure 2.2. Land cover, specifically impervious surfaces (paved

Figure 2-2
Land Cover

SCALE: 1" = 150'	JOB NO.: 203943.54
DATE: OCT 2008	DRAWN BY: ZLH

or other hardened surfaces), influence rainfall-runoff characteristics and inflow rates into the sewer system. In general, areas of impervious cover generate more surface runoff over shorter periods of time than areas of lawn or forest cover.

In order to evaluate the study area land cover, GIS base layers were obtained from the City including the edge of pavement and building/rooftops. Sidewalk impervious areas were not accounted for in this analysis. The surface land cover of the study area is shown in Table 2.1 as follows:

Table 2.1: Land Cover Percentages

	Acres	Percent of Project Area
Project Study Area	42	-
Public Roadway	8.8	21%
Private Pavement	3	7%
Buildings	6.5	15%
Lawn/Open Space	24	57%

3. FINDINGS

3.1 COMPLAINTS RESEARCH AND HOUSE VISITS

Review of the City DPS complaints log and the WPNA list of property owners revealed that there are at least thirty (30) properties in the study area that have experienced sewer back-up issues or basement flooding. Subsequent mailers distributed by the WPNA indicated that a total of twenty five (25) properties were experiencing ongoing problems that required further review and visits by the City of Portland. The City of Portland DPS visited the twenty five (25) properties or conducted phone interviews with the property owners. During the property visits, the City catalogued their observations. Because the sewer back-up or basement flooding conditions were not directly witnessed as part of the study, it is impossible to conclude whether individual sewer back-ups and basement flooding conditions were the result of a surcharged sewer main or problems resulting from conditions on the specific property. The findings outlined in the following sections indicate that back-ups and basement flooding issues have occurred as a result of several factors, as further described herein.

During the site visits and meetings with property owners, the City DPS provided guidance and suggestions to individual property owners on ways to minimize flooding and back-up conditions in the future. These suggestions included plugging basement floor drains with removable water tight caps; hiring a plumber to inspect, clean and / or repair the property's sewer service; disconnecting roof leaders from the property sewer service and installing backflow preventers; sloping surface grades away from exterior foundation walls and repairing basement foundation walls and floors.

3.2 FLOW MODELING AND MONITORING

3.2.1 Modeling

Comparing the capacities estimated within the flow model with the actual conditions reported using the flow monitoring data revealed that the combined sewer system is not performing as predicted (optimum capacity) in the model. As one could expect, over time, flow capacity decreases in piped networks as a result of increased roughness and development of restrictions. The flow observed at monitoring locations during surcharge conditions was revealed to be less than the capacity estimated using the sewer pipe model. This information indicates that flow restrictions exist within the combined sewer system.

3.2.2 Monitoring

The flow monitoring data indicated that when rainfall intensities were generally greater than 1 inch per hour, the combined sewer system started to surcharge. The extent of surcharging was dependent upon the rainfall intensity and to a lesser extent the duration for which the most intense rainfall lasted. A surcharge of 2 feet above the crown of the sewer pipe was observed at the Carroll Street monitoring site for a rain event on September 6, 2008. The nature of the observed surcharges within the sewer system, when compared to the modeling data, indicated that there are flow restrictions within the sewer system.

3.2.3 Sewer Inspection, Cleaning & Modifications

The analysis of the sewer model compared against the flow monitoring data indicated that there are flow restrictions within the sewer system. Television inspection of the system revealed heavily deposited solids in the 12" combined sewer within Neal Street, between Pine and Carroll Streets. The City performed cleaning in this area to remove the deposited solids.

Field inspection of the sewer system identified three locations where the sewer system has poor pipe alignment, specifically at the intersection of Neal and Clifford, at the intersection of Thomas and Clifford and at the intersection of Neal and Bowdoin. The flow restrictions appear to be due to poorly constructed pipe connections, including locations where the combined sewer pipe in one street is connected with a hard angle to the combined sewer pipe in the intersecting street.

According to the City DPS, the existing sewer main in Chadwick Street, from near the intersection with Bowdoin Street running north, has historically experienced problems with solids settling, creating back-up issues for the properties at the high end of the sewer main. The primary reason for the solids depositing within the sewer line appears to be a lack of adequate flushing volume, as the sewer in this area solely receives sanitary wastewater.

3.3 BUILDING HYDROLOGIC AND HYDRAULIC MODEL

The building hydrologic model provides an estimate of rainfall runoff rates from building rooftops. The building sewer model provides an estimate of the conveyance capacity of building sewer services. Based on the findings of the building sewer models, the majority of the properties analyzed have adequate capacity within their service lateral to convey the 2, 10 and 25 year storm events. The two exceptions are 148 Pine Street and the four-plex multiunit building that incorporates addresses 21-27 West Street. The model indicated that the building at 148 Pine Street may experience rooftop runoff in excess of the building service lateral capacity in the 10 and 25 year storm events. Similarly, the aforementioned four-plex multiunit building on West Street may experience rooftop runoff in excess of the building service lateral capacity in the 2, 10 and 25 year storm events. Several assumptions were made with these two properties, including an assumption that the total roof area contributes flow to the service lateral and that there is only one service lateral for each property.

It should be noted that the building pipe models were analyzed assuming clean service laterals installed at proper design slope with no misaligned joints or root penetrations. Any building with roof leaders connected to the sewer service lateral may experience back-up issues if the service lateral has significant roots, misaligned joints, deposited material or collapsed sections of pipe. A copy of the building model spreadsheet is appended to this report in Appendix A.

3.4 PROJECT AREA HYDROLOGY

3.4.1 Inflow

The land cover classes (rooftops, driveways, streets, and lawns), and relative percentages of each, are the basis of evaluation for rainfall-runoff relationships. In the study area, the streets, adjacent driveways/paved areas, and directly connected rooftops are likely to contribute stormwater runoff almost immediately to the combined sewer. As precipitation intensity increases or as the precipitation event continues over a period of hours, the hydrology and contribution from various land cover changes. Figure 3.1 provides an overview of the partition of flow contributions within typical urban residential development[2]. In short duration, high-intensity storm events typical of summer and early fall, streets, buildings and paved area runoff are likely to be the primary contributor to peak flow discharges within the drainage infrastructure. During longer, sustained rainfall or snowmelt events, lawns and other pervious areas contribute an increasing portion of the flow to drainage infrastructure, particularly in areas with high water tables.

[2] Pitt, Robert and John Voorhees. "SLAMM, the Source Loading and Management Model" in Wet-Weather Flow in the Urban Watershed: Technology and Management. CRC Press. Boca Raton, FL. 2002.

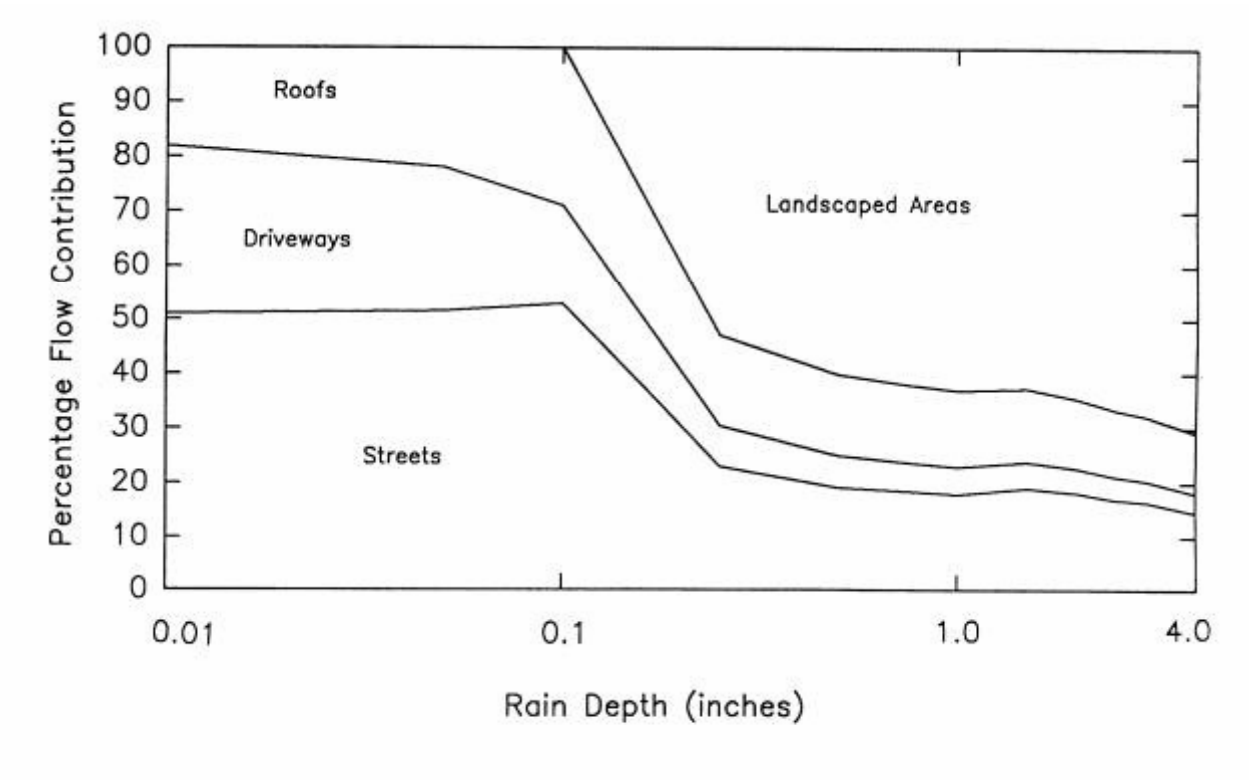


Figure 3.1: Partition of Flow Contributions within Typical Urban Residential Development

Overall, the study area is covered by close to 50% impervious surface. This density and nature of development in this area will strongly influence the peak flow within the combined sewer system. Pipe hydraulics evaluations conducted during this study indicate that peak flows within the combined sewer are highly correlated with rainfall rate peaks and that minimal lag time exists between rainfall and peak flows within the drainage system (Figure 3.2). This indicates that runoff from directly connected impervious surfaces are the primary contributors to flow peaks within the combined sewer system, which would be expected in a densely developed residential area.

The Emery Street Overflow is monitored for combined sewer overflow discharges as a part of the City's compliance with the MaineDEP Combined Sewer Overflow Program. The timing of overflow discharges at this "downstream" location provides a surrogate measure for additional peak pipe flow rates within the study area. CSO annual reports indicate that the Emery Street Overflow discharged 33 times in 2006 and 49 times in 2007. Of the 82 overflow events occurring in 2006-2007, 54 events occurred during the growing season (May-October). Growing season precipitation events eliminate the variable of rain-on-snow and more clearly accounts for direct rainfall-runoff relationships. The growing season storm events contributing to CSOs had a median rainfall intensity of 0.23 inches per hour and 0.74 inches per 24 hours. Of these precipitation events, 18 were less than 0.5 inches in 24 hours. It appears that high intensity, short duration precipitation events are the most common contributor to CSOs from this drainage area.

It appears that storm events contributing to CSO overflows are more frequent than the storm events contributing to surcharge conditions in the study area. It is probable that flow restrictions within the study area actually reduce the probability and/or quantity of CSO events at the Emery Street outfall.

Reducing flow restrictions within the study area combined sewer system is necessary to reduce back-ups, but may result in more frequent downstream combined sewer overflow events at the Emery Street CSO. In order to avoid possible increases of CSO events at Emery Street and reduce "back-up" potential in the study area, it is essential to

maximize flow reduction strategies in specific, appropriate locations and/or reduce surface flow into the combined sewer in combination with reducing flow restrictions within the system.

3.4.2 Infiltration

Excess infiltration into the sewer system as a result of high water tables and leaky sewers can contribute to sewer surcharges. In Maine, excess infiltration is typically a problem in the spring season when snow melt and spring rains result in seasonally high water tables. Given the nature of the parent soils and terrain in the study area, excess infiltration is not a likely contributor to sewer surcharges. The monitoring portion of the study did not start at an appropriate time of year to verify that excess infiltration is not occurring.

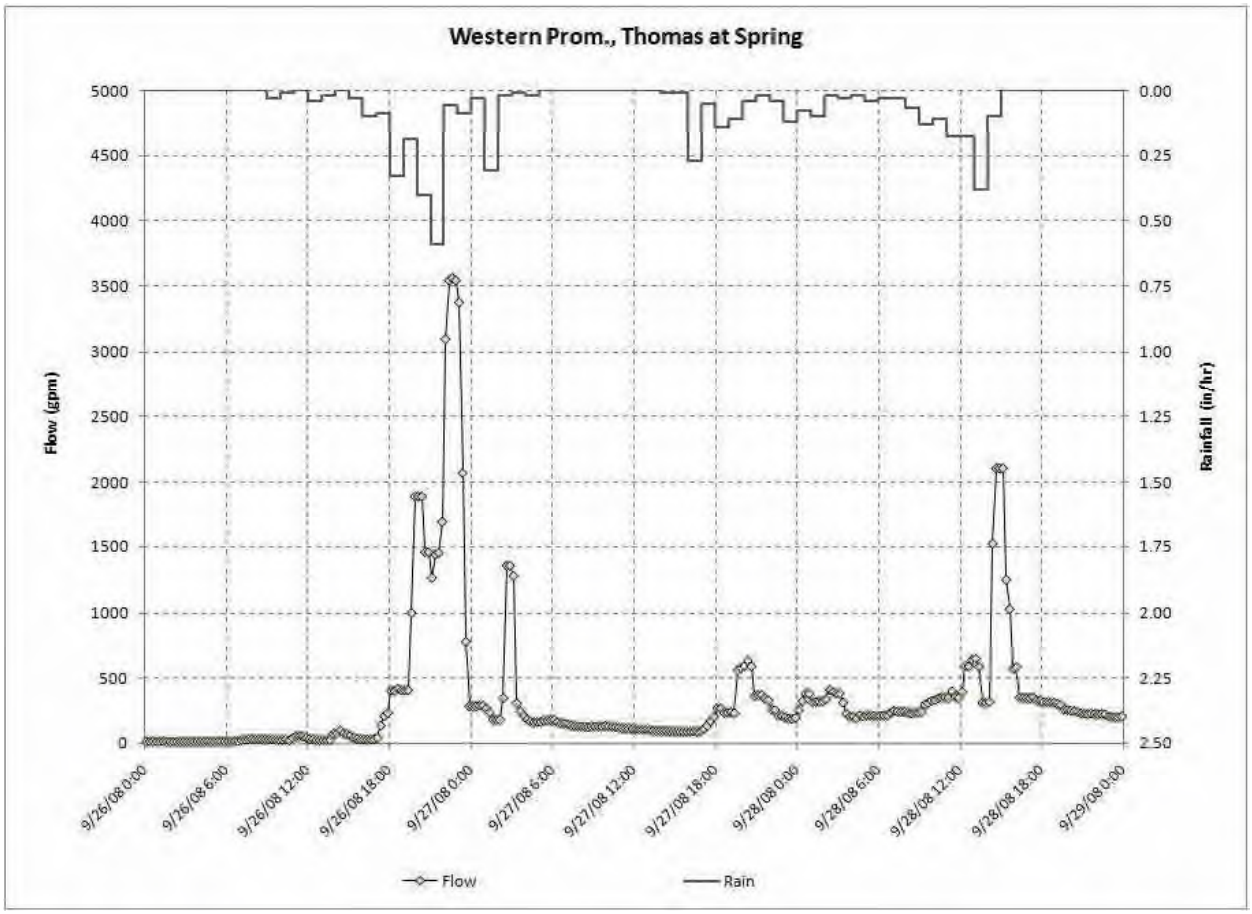


Figure 3.2: Monitoring Data from WPNA Study, Thomas Street at Spring

3.5 SUMMARY OF FINDINGS

Based on the data collected by the City coupled with the analyses performed by our team, the following factors, either individually or in combination, contribute to sewer back-ups and flooding of basements within the Western Promenade Neighborhood:

- Excessive Stormwater Inflow
  - Paved area runoff to street catch basins
  - Rooftop runoff to service laterals

- Combined Sewer System Hydraulics
    - Pipe size constraints
    - Poor alignment at main intersections
    - Deposited materials
- Building plumbing and drainage
    - Flow from roof leaders
    - Condition of service laterals
    - Open floor drains
    - Surface and groundwater leaks into basements

Excessive stormwater inflow into the combined sewer system is the primary factor contributing to surcharge conditions in the combined sewer system. Peak flow rates within the combined sewer system can be directly correlated to the direct entry of stormwater runoff generated from impervious ground and roof surfaces within the study area. The land cover of the study area is approximately 22% private impervious areas consisting or roofs and driveways and approximately 21% public impervious areas consisting of roadways. Reducing the direct amount of inflow into the system in any way will help to alleviate the sewer surcharge conditions and reduce downstream CSOs.

Combined sewer system hydraulic restrictions, such as deposited materials within sewer pipes and poor pipe alignment at main intersections, are likely to contribute to pipe surcharge conditions in specific locations. Cleaning sewer lines with high solids deposits along with spot repairs to address system hydraulic constraints will help to alleviate flow restrictions, and may reduce surcharge conditions and back-ups.

Unfortunately, addressing surcharge conditions at the main will not address back-up or basement flooding issues that are generated at an individual property. Although the building model indicated that many service laterals appear to have sufficient capacity to safely convey runoff, the model could not account for obstructions or blockages. Many of the sewer laterals in the Western Promenade Neighborhood are old. Root intrusion, misaligned joints and structural collapse of a building service lateral coupled with connected roof leader could result in sewer back-up issues. The high inflow of roof water in peak intensity storm conditions coupled with the poor hydraulic conditions of the service lateral can generate a condition where a combination of stormwater and sanitary wastewater backs-up into the building basement. Clean water infiltration through building foundation walls is another possible factor associated with some of the problems experienced by residents of the Western Promenade.

4. IMPROVEMENTS RECOMMENDATIONS

The findings detailed in Section 3 of this report reveal that the sewer back-up and basement flooding issues experienced by homeowners of the Western Promenade neighborhood relate to the following factors: sewer system inflow, sewer system hydraulics and property plumbing and drainage issues. No single improvement will abate or alleviate all of these factors in all locations. Instead, it is recommended that a number of improvements be implemented to aid in the reducing or eliminating sewer back-up issues while not increasing flow to the Emery Street CSO.

In an effort to identify the responsibility for implementing each of these recommendations, this section has been broken out into City Initiatives, Joint Opportunities and Homeowner Suggestions. The Western Promenade Neighborhood Association can play an important role in the implementation of these recommendations to reduce back-ups and protect the water quality of Casco Bay. An overview of locations for some of the structural recommendations is depicted in Figure 4.1.

4.1 CITY INITIATIVES

4.1.1 TV Inspection and Cleaning

The City of Portland DPS has performed 5,200 lf of sewer main and lateral television inspection within the Western Promenade Neighborhood study area during this study. The results of these television inspection efforts have revealed a number of areas that required cleaning or, in certain cases, point repairs through the addition of manhole structures. The City has cleaned the area of high solids deposit identified during the television inspection in the combined sewer within Neal Street between Pine and Carroll.

The City has an active program of television inspection and maintenance of their sewer system that is ongoing throughout the City. The City DPS averages 50,000 lf of sewer television inspection per year following an inspection and maintenance plan that encompasses the entire system. As issues are identified within the sewer system during these TV inspections, the City performs the necessary cleaning or point repairs. As such, the sewer within the Western Promenade neighborhood will continue to be serviced by the City as part of the City's inspection and maintenance program. Any issues that may arise within the sewer system outside of the inspection and maintenance program are addressed by the City on an individual basis. We recommend the City inspect and/or clean the sewers within the study area identified to have issues with excess solids accumulations on an annual basis, specifically Chadwick Street from Bowdoin Street to Carroll Street and Neal Street from Carroll Street to Pine Street.

4.1.2 Flow Slippage

The City of Portland DPS has installed hydro-brakes within 19 of the 50 catch basins that fall within the study area, six of which have been installed during the course of this study. Hydro-brakes are devices that are attached to the outlet pipe of a catch basin and limit the flow rate exiting the catch basin. Hydro-brakes allow a catch basin to function at a reduced capacity, limiting the high inflow rate that a catch basin contributes to a sewer main. By installing hydro-brakes at appropriate locations within the study area, the peak flow rates within the sewer mains are reduced, effectively reducing the surcharge in the main, sewer back-up potential and, potentially CSOs. The term "slippage" refers to the runoff that backs up in the basin, surcharges and overtops the grate, and runs along the curbline to the next downstream catch basin.

Figure 4-1
Recommended Alternatives

SCALE: 1" = 150'	JOB NO.: 203943.54
DATE: OCT 2008	DRAWN BY: ZLH

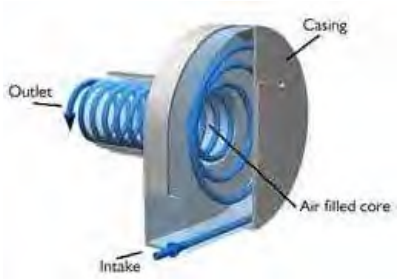


Figure 4.2: Typical Hydrobrake

Prior to installing hydro-brakes, it is important to consider whether the particular catch basin contributes a significant amount of flow to the main sewer line, whether the main sewer line at that location undergoes or directly contributes to surcharge conditions, and whether limiting surface capture by reducing the hydraulic capacity of the catch basin may cause adverse conditions in that local area. Catch basins with limited capacity may result in the reduced ability to capture surface runoff. Areas with low curb reveal or areas with flooding potential, either within the roadway or at adjacent properties, are not good locations for hydro-brakes.

We recommend installing up to an additional ten hydro-brakes at the intersection of Bowdoin Street and Vaughan Street and at the intersection of Bowdoin Street and Neal Street. The catch basins at these intersections provide direct inflow into a sewer main which experiences surcharge conditions in certain storm events. Prior to the installation of hydro-brakes, it is important to ensure that that the potential for reduced surface water capture will not contribute to excessive surface flooding of the roadway or adjacent properties. Figure 4.1 depicts current and potential future hydro-brake installation locations.

4.1.3 Improve System Hydraulics

Field work by DPS through the use of TV inspection equipment and inspection of accessible manholes revealed a total of three locations within the main sewer network that have poor sewer alignments at main intersections. These locations were noted at the intersections of Neal Street and Clifford Street, Thomas Street and Clifford Street, and Neal Street and Bowdoin Street. The flow monitoring that occurred during the study in proximity to these locations, when compared against the sewer pipe model, verified that flow conditions in these areas were less than ideal. The sewers at these intersections tee together at hard angles instead of utilizing channels with smooth sweeps in the direction of flow. We recommend the City consider new manholes at these locations or enhancements to allow for a better hydraulic condition, reducing the hydraulic losses currently experienced in this area. As stated previously, improvements in system hydraulic within the upstream portions of CSO 28 may only exacerbate downstream CSO problems and this recommendation should be implemented in combination with hydrobrake and/or disconnection projects. Figure 4.1 depicts the locations for these structural improvements.

4.1.4 Re-Evaluation during CSO Master Planning Update

The City's CSO Tier II Implementation Plan does not identify structural infrastructure improvements to reduce impacts on the Emery Street CSO. We recommend the City reevaluate this CSO within the next phase of Master Planning (Tier III) to determine if portions of the study area should be part of the Tier III plan for future sewer and drain infrastructure enhancement. Original recommendations in the CSO Master Plan, 1993 included flow slippage and in-system modifications for CSOs in this portion of the City. The considerations that are made as part of an updated Long-Term Control Plan could focus on the direct impact that the area has on combined sewer overflows.

4.1.5 Evaluate Flow "Relief"

Stormwater and sanitary wastewater from the entire project study area is collected and conveyed through the Emery Street CSO. Portions of the project study area, specifically Bowdoin Street, southern sections of Vaughan Street and southern sections of Neal Street, have sewer mains that fall in close proximity to the Vaughan Street CSO sewer collection area. We recommend the City consider the possibility for hard piped connections from the sewer mains within Bowdoin Street and / or Clifford Street to the Vaughan Street sewer collection system. These piped connections could be configured to act as overflows from the study area or to convey base flows from the study area. Prior to considering this approach, monitoring and modeling analyses would need to be performed on the Vaughan Street sewer collection system to determine if the system has adequate capacity to accept flows from the study area. Consideration would also need to be made relative to adding flow to the Vaughan Street CSO. These analyses were not performed as part of this study, as they fall outside of the study area. However, we recommend the capacity of the Vaughan Street sewer area and the Vaughan Street CSO be evaluated to determine if either the overflow or the base flow from the sewer mains in Bowdoin Street and / or Clifford Street could diverted to this sewer system. Figure 4.1 depicts possible locations for diversion piping from the study area sewers to the Vaughan Street sewer.

4.2 JOINT OPPORTUNITIES

4.2.1 Information & Outreach

The community's understanding of combined sewer systems plays an important role in the success of reducing the impact of sewer back-ups and reducing the impact of combined sewers on the environment. As close to 70% of the land area within the study area is privately owned and managed, the importance of citizen cooperation is evident. The development and distribution of educational materials outlining the basics of combined sewer systems, the hydrology of urban catchments, private and public system maintenance needs and the efforts that landowners can contribute in reducing stormwater flows to the combined sewer system can be cost-effective remedies to minimize sewer system back-ups and overflow events. The cooperative effort to develop and implement an outreach program targeted for the Western Promenade neighborhood is consistent with the City's CSO abatement program and also the State's CSO and non-point pollution control program. An outreach program would require local support and community initiative to be successful. An example of web-based outreach materials developed for citizens within combined sewer overflow areas can be seen at http://www.kcmo.org/water.nsf/web/citmain?opendocument .

4.2.2 Rooftop Disconnection

Inflow of stormwater into the combined sewer system is a significant contributor to back-ups and downstream combined sewer overflows. Rooftops make up 35% of the impervious area within the study area. Responses to the mailers and the City's property visits indicate that as much as 75% of rooftop downspouts may be directly connected to the combined sewer system.

In order to reduce the potential for back-ups and combined sewer overflow frequency, rooftop downspout inflow sources should be removed from the combined sewer system whenever possible. A roof drain disconnection program can be a cost-effective solution to combined sewer back-ups and CSOs, and is currently utilized in many communities across the country with great success. A rooftop disconnection program should include performance standards by which a parcel can be evaluated for its suitability to disconnect roof downspouts. Typical performance standards for a disconnection program include property slope, property soils/water table, setbacks from buildings, access complications related to downspout surface extensions, and flow paths from the disconnected outlet. Certain parcels will not be appropriate for rooftop disconnection due to limited potential to store, infiltrate or provide overland flow for rooftop runoff. If a parcel is not appropriate for rooftop disconnection, disconnecting the roof leaders from the

sanitary sewer lateral and connecting to the sewer system by means of a separated storm drain pipe will eliminate the potential of sewer back-ups caused by the building's roof drains.

Preliminary review of the land cover within the study area indicates that sufficient pervious areas may exist on some parcels for appropriate downspout disconnection. We recommend the City consider the development of a pilot program to accomplish roof drain disconnections in the CSO 28 (Emery Street Outfall) drainage area. This recommendation is consistent with the 1993 CSO Master Plan recommendations for this CSO area. This pilot disconnection program could enhance the map of private connections, identify specific, appropriate opportunities for separation and provide outreach, incentives and technical support to landowners willing to consider disconnection. An overview of an example program for the Western Promenade can be found in Appendix B.

4.2.3 Low Impact Development Demonstration Projects

Low Impact Development (LID) is a term used to describe development methods that are hydrologically sensitive. The minimization of impervious areas, separation and treatment of small stormwater flows and maintenance of the hydrological integrity of an area are the basis for LID.

The potential for site-specific temporary storage and infiltration of stormwater within the Western Promenade study area appears to be a viable option. According to USDA soil maps, the native soils of the study area are excessively drained, coarse textured Hinckley sands. Additionally recent excavation for water service on Chadwick Street indicated that the first six to eight feet of native material was well-graded sand or gravel. These soils are well-suited for stormwater infiltration systems. Unfortunately, above grade locations for mid-size to large scale stormwater storage is limited due to dense residential development and mature urban street trees; therefore, larger structural stormwater retrofits would need to be located below-grade.

Locations for subsurface storage are limited due to utility infrastructure within the City streets. Two locations within the study area that appear to offer opportunities for subsurface storage and infiltration are the road edges between street curblines and sidewalks and the privately owned alley ways between Bowdoin Street and Pine Street.

We recommend consideration be given to stormwater detention retrofits within the city streets, which could include at grade inlets to open bottom below-grade storage units such as StormTech chambers. These systems are commonly used in Maine for below grade storage (Figure 4.3).

Figure 4.3: Below-Grade Storage Units

Another option we recommend is consideration for resurfacing private alleys with pervious concrete pavement or pavers along with tree box inlets or other at grade inlets for high intensity rain events (Figure 4.3). The "Green Alleys" program in Chicago provides a good model for the redevelopment of these shared thoroughfares in similar climatic conditions (http://brandavenue.typepad.com/brand_avenue/files/greenalleyhandbook.pdf). Green Alley creation could address runoff from up to 10% of the study drainage area.

Figure 4.4: Green Alley Example

Subsurface detention and storage systems have high cost to benefit ratios when compared with rooftop disconnection, hydrobrakes, and the flow restriction enhancements. Pervious pavement systems can cost up to $20-$30 per square foot installed depending on the construction of the subsurface detention area and the surfacing material. Subsurface detention and storage areas, such as StormTech chambers, can cost as much as $100,000 per 1 acre-inch impervious runoff detained. Both systems do provide ancillary benefits such as enhanced drainage within poorly drained residential areas and Clean Water Act compliance for stormwater and CSO programs. In

comparison to new separated stormwater infrastructure, we recommend the City consider detention retrofits which could be a more viable option and an alternative during long-term CSO master planning.

Due to high cost-benefit, we recommend that stormwater detention retrofits only be considered as an alternative in the Western Promenade study area as demonstration projects with community support and grant-funding.

4.3 HOMEOWNER SUGGESTIONS

4.3.1 Inspection, Cleaning, Repair of Sewer Services

Property owners that experience basement flooding from sewer back-ups that can be directly associated with their building sewer service, such as water flowing out of plumbing on the lowest floor of the house, should contact the City of Portland DPS to allow the City to inspect the issue during, or immediately after the back-up event. If upon inspection of the sewer main, the City does not find evidence of surcharge or flow restrictions at the main, the problem might be the result of a clogged, misaligned or broken service lateral. The property owner should consider contacting a qualified plumber to inspect and clean their service lateral.

4.3.2 Plugging Basement Drains

Property owners that have open basement drains connected to their sewer service should consider installing water-tight caps on the basement floor drains to prevent water from backing up on the basement floor. Threaded, removable water-tight caps can be installed on basement floor drains. These caps can be removed to allow collected water to drain out of the basement after a storm event has subsided. Sump pumps connected to separated storm drain lines or to an exterior surface that drains away from the building foundation provide an alternative means of draining water from the basement floor than gravity drains. Plugging basement floor drains also eliminates potential issues with sewer gas odors entering the basement.

4.3.3 Backflow Preventers

Backflow preventers are devices installed on the sanitary sewer service that allow wastewater to flow from the house to the sewer main, but do not allow water from the sewer main to flow back into the house plumbing. Backflow preventers can only be installed on a sewer service that does not have roof water or other stormwater connections to the sewer servicel. A backflow preventer, if installed by an experienced plumber, is a good measure of insurance to guard against sewer back-up issues and should be considered by homeowners experiencing back-up issues.

4.3.4 Waterproofing

Storm and groundwater inflow and infiltration through basement walls and floor slabs is a notably different condition than sewer back-ups from sanitary sewer laterals. If a homeowner is experiencing basement flooding not associated with back-ups from sewer piping, it is likely caused by water seeping through basement walls, floors, or surface grade openings into basements, such as bulkheads & windows. If a homeowner is experiencing these conditions, they should consider contacting a contractor experienced in assessing and remediating foundation leaks. If the condition is caused by surface water ponding in close proximity to the exterior foundation walls, the homeowner should consider grading their property in proximity to their building foundation away from their foundation walls. If ponding is occurring as a result of runoff from the City right-of-way and grading cannot be performed to divert the drainage away from the building foundation due to proximity to City property, the City DPS should be contacted.

4.4 IMPROVEMENTS RECOMMENDATIONS RANKING

The following table provides a prioritization ranking for the proposed recommendations outlined in this report:

Table 4.1: Recommendations Ranking

Priority Rank	City Initiative	Joint Opportunity	Homeowner Suggestion
1	TV inspection & cleaning of combined sewer mains		
2	Flow slippage through the addition of hydro-brakes		
3	Structural improvements to combined sewer system		
4		Information & outreach	
5			Inspection and cleaning / repairing sewer laterals
6			Plugging basement drains, adding sump pumps or caps
7	Re-evaluation of area during Tier III CSO Master-Planning		
8		Disconnection and redirection of roof leaders	
9			Installation of backflow preventers (upon disconnection of roof leaders)
10		LID demonstration projects	
11	Evaluation of flow relief via connection to Vaughan CSO		
N/A			Waterproofing basements*

*Waterproofing basements has not been assigned with a priority ranking, as this recommendation addresses the issue of ground or surface water infiltration or inflow into basements, a separate issue from sewer back-ups. Addressing water infiltration and inflow into basements can be performed independent of the other recommendations outlined herein.

These recommendations should be implemented in order of highest priority. Periodic monitoring should take place to determine the effectiveness of implementing these recommendations and to determine if it is necessary to implement the remaining recommendations. It is important to note that two of these recommendations have been implemented over the course of the study, including inspection and cleaning of sewer mains and flow slippage through the addition of hydro-brakes. Since the time that these recommendations were implemented, the WPNA has reported no complaints from property owners relative to sewer back-ups despite several sizeable rainfall events in late summer and fall of 2008.

Appendix D provides an overview of peak hourly rainfall intensities on days of significant landowner complaints and compares them with peak hourly rainfall intensities occurring during the study period. It appears that there were at least two precipitation events in 2008 with maximum hourly rainfall rates that exceeded hourly rainfall rates resulting in homeowner complaints in 2005-2007. This provides evidence that the hydrobrakes, cleaning, and homeowner efforts implemented during the study period have resulted in increased system performance. It is important to note however, that high intensity storms are often very isolated with large variation in precipitation intensity over small areas. The summary rainfall data shown in Appendix D is based on hourly intervals from the Portland Jetport and the rain gage at Franklin Street Pump Station, and may not represent exact rainfall rates in the Western Promenade study area.

APPENDIX A: BUILDING MODEL SPREADSHEET

COMMITMENT & INTEGRITY DRIVE RESULTS
WOODARD & CURRAN
41 HUTCHINS DRIVE
PORTLAND, MAINE 04102
TEL.(207)774-2112

CLIENT	City of Portland		
PROJECT	Western Promenade Sewer Evaluation		
	Building Sewer Model		
DESIGNED BY	LJS	DATE	2/11/2008
CHECKED BY	DAS	DATE	11/7/2008
PROJECT NO.	203943.54	SHEET NO.	1 of 9

The following information and assumptions were used to analyze the capacity of building sewer service laterals to convey roof runoff from the 2, 10 and 25 year storm events
Buildings analyzed in these tables represent properties logging complaints with the City relative to back-ups or basement flooding in response to the WPNA mailer distributed in December 2007
Building rooftop areas represent building footprint areas measured from the City of Portland planimetric data
Planimetric and topographic data, provided by the Portland Engineering Department, was compiled using 2001 Citipix aerial images by Bradstreet Consultants of Manchester, Maine.

The following lateral information is known about the multi-unit buildings within the study area. Multi unit homes were assumed to only have one sewer latera (lateral evaluated highlighted with **bold** lettering).

1 Carroll	? vit
3 Carroll	**6 cem**
5 Carroll	5 cast iron
7 Carroll	7 cast iron

83 Carroll	**8 vit**
87 Carroll	8 vit

62 Neal	**6 vit**
64 Neal	**6 vit**

145 Pine	? ?
149 Pine	**? ?**

21 West	? ?
23 West	? ?
25 West	**4 cast iron**
27 West	? ?

The rational method has been used to calculate flow generated by each building's roof area.
Rational method: Q = C x I x A
Q = Peak discharge (cfs)
C = Runoff coefficient for asphalt and roofs (from Ponce, Victor (1989), *Engineering Hydrology Principles and Practices* , "Average Runoff Coefficients for Urban Areas," pg 122)
I = Rainfall intensity (in/hr) calculated for 25, 10, and 2 year storms
A = Roof Area

Intensity values were obtained from the attached graph sheets showing rainfall versus time for Type III distribution storm events.
The service lateral percent full values have been determined using the attached capacity check calculation sheets for 6" vitrified clay, 8" vitrified clay, 4" cast iron, and 5" cast iron pipes.
Manning's roughness coefficients used to model sewer pipe service laterals assume a clean lateral with no misaligned joints, collapses or root penetrations.

TABLE 1: BUILDING PIPE MODEL, ASSUMING ALL ROOF WATER ENTERS SEWER LATERAL

								25 Year Storm			10 Year Storm			2 Year Storm		
Number	Street	Multiple Addresses in Same Building	Building Footprint Area (SF)	Building Footprint Area (acres) *A*	Lateral Size (in)	Lateral Type	Runoff Coefficient *C*	Intensity (in/hr) *I*	Flow (cfs) *q*	Service Lateral Percent Full	Intensity (in/hr) *I*	Flow (cfs) *q*	Service Lateral Percent Full	Intensity (in/hr) *I*	Flow (cfs) *q*	Service Lateral Percent Full
6	Bowdoin		2052	0.047	6	vit	0.95	4.62	0.207	41%	3.948	0.177	38%	2.52	0.113	30%
3	Carroll	w/1,5,7	5928	0.136	6	cem [2]	0.95	4.62	0.597	86%	3.948	0.510	73%	2.52	0.326	54%
22	Carroll		6273	0.144	5	cast iron	0.95	4.62	0.632	100%	3.948	0.540	100%	2.52	0.345	72%
83	Carroll	w/87	4602	0.106	8	vit	0.95	4.62	0.464	42%	3.948	0.396	39%	2.52	0.253	31%
90	Carroll		1982	0.046	6	vit	0.95	4.62	0.200	40%	3.948	0.171	38%	2.52	0.109	29%
27	Chadwick		3501	0.080	4	cast iron	0.95	4.62	0.353	100%	3.948	0.301	100%	2.52	0.192	73%
44	Neal		1326	0.030	6	vit	0.95	4.62	0.134	33%	3.948	0.114	31%	2.52	0.073	24%
46	Neal	48?	1265	0.029	4	vit	0.95	4.62	0.127	59%	3.948	0.109	54%	2.52	0.070	42%
49	Neal		2374	0.054	4	cast iron	0.95	4.62	0.239	100%	3.948	0.204	76%	2.52	0.130	56%
62	Neal	w/64	2550	0.059	6	vit	0.95	4.62	0.257	47%	3.948	0.220	43%	2.52	0.140	34%
148	Pine		3037	0.070	4	cast iron	0.95	4.62	0.306	100%	3.948	0.261	100%	2.52	0.167	65%
149	Pine [1]	w/145	2848	0.065	*6*	*vit*	0.95	4.62	0.287	50%	3.948	0.245	46%	2.52	0.157	36%
151	Pine		1994	0.046	4	cast iron	0.95	4.62	0.201	50%	3.948	0.172	67%	2.52	0.110	50%
25	West	w/21,23,27	4933	0.113	4	cast iron	0.95	4.62	0.497	100%	3.948	0.425	100%	2.52	0.271	100%
92	West		3099	0.071	4	cast iron	0.95	4.62	0.312	100%	3.948	0.267	100%	2.52	0.170	67%

1. No lateral size information has been provided for 149 Pine Street
2. The 6" cement pipe at 3 Carroll street was analyzed as a 6" vitrified clay pipe

TABLE 2: BUILDING PIPE MODEL, ASSUMING A PERCENTAGE OF ROOF WATER ENTERS SEWER LATERAL BASED ON INFO COLLECTED BY CITY DURING HOUSE VISITS (SEE COMMENTS)

								25 Year Storm			10 Year Storm			2 Year Storm				
Number	Street	Multiple Addresses in Same Building	Building Footprint Area (SF)	Building Footprint Area (acres) *A*	Lateral Size (in)	Lateral Type	Runoff Coefficient *C*	Intensity (in/hr) *I*	Flow (cfs) *q*	Service Lateral Percent Full	Intensity (in/hr) *I*	Flow (cfs) *q*	Service Lateral Percent Full	Intensity (in/hr) *I*	Flow (cfs) *q*	Service Lateral Percent Full	Roof Drain Comments	Assumption
6	Bowdoin	8?	2052	0.047	6	vit	0.95	4.62	0.083	26%	3.948	0.071	24%	2.52	0.045	19%	3 to ground, 2 to sewer	40% of Roof Area to Sewer
3	Carroll	w/1,5,7	5928	0.136	6	cem [2]	0.95	4.62	0.597	86%	3.948	0.510	73%	2.52	0.326	54%	No Info Provided	100% of Roof Area to Sewer
22	Carroll		6273	0.144	5	cast iron	0.95	4.62	0.158	44%	3.948	0.135	40%	2.52	0.086	32%	Majority to ground	25% of Roof Area to Sewer
83	Carroll	w/87	4602	0.106	8	vit	0.95	4.62	0.185	26%	3.948	0.158	24%	2.52	0.101	20%	3 to ground, 2 to sewer	40% of Roof Area to Sewer
90	Carroll		1982	0.046	6	vit	0.95	4.62	0.200	40%	3.948	0.171	38%	2.52	0.109	29%	No Info Provided	100% of Roof Area to Sewer
27	Chadwick		3501	0.080	4	cast iron	0.95	4.62	0.159	63%	3.948	0.136	57%	2.52	0.087	44%	7 to ground, 5 to sewer	45% of Roof Area to Sewer
44	Neal		1326	0.030	6	vit	0.95	4.62	0.134	33%	3.948	0.114	31%	2.52	0.073	24%	All to sewer	100% of Roof Area to Sewer
46	Neal	48?	1265	0.029	4	vit	0.95	4.62	0.127	59%	3.948	0.109	54%	2.52	0.070	42%	All to sewer	100% of Roof Area to Sewer
49	Neal		2374	0.054	4	cast iron	0.95	4.62	0.000	0%	3.948	0.000	0%	2.52	0.000	0%	None to sewer	0% of Roof Area to Sewer
62	Neal	w/64	2550	0.059	6	vit	0.95	4.62	0.257	47%	3.948	0.220	43%	2.52	0.140	34%	All to sewer	100% of Roof Area to Sewer
148	Pine		3037	0.070	4	cast iron	0.95	4.62	0.306	100%	3.948	0.261	100%	2.52	0.167	65%	No Info Provided	100% of Roof Area to Sewer
149	Pine [1]	w/145	2848	0.065	*6*	*vit*	0.95	4.62	0.287	50%	3.948	0.245	46%	2.52	0.157	36%	No Info Provided	100% of Roof Area to Sewer
151	Pine		1994	0.046	4	cast iron	0.95	4.62	0.201	50%	3.948	0.172	67%	2.52	0.110	50%	No Info Provided	100% of Roof Area to Sewer
25	West	w/21,23,27	4933	0.113	4	cast iron	0.95	4.62	0.497	100%	3.948	0.425	100%	2.52	0.271	100%	No Info Provided	100% of Roof Area to Sewer
92	West		3099	0.071	4	cast iron	0.95	4.62	0.156	63%	3.948	0.133	57%	2.52	0.085	44%	Some to ground and sewer	50% of Roof Area to Sewer

1. No lateral size information has been provided for 149 Pine Street
2. The 6" cement pipe at 3 Carroll street was analyzed as a 6" vitrified clay pipe

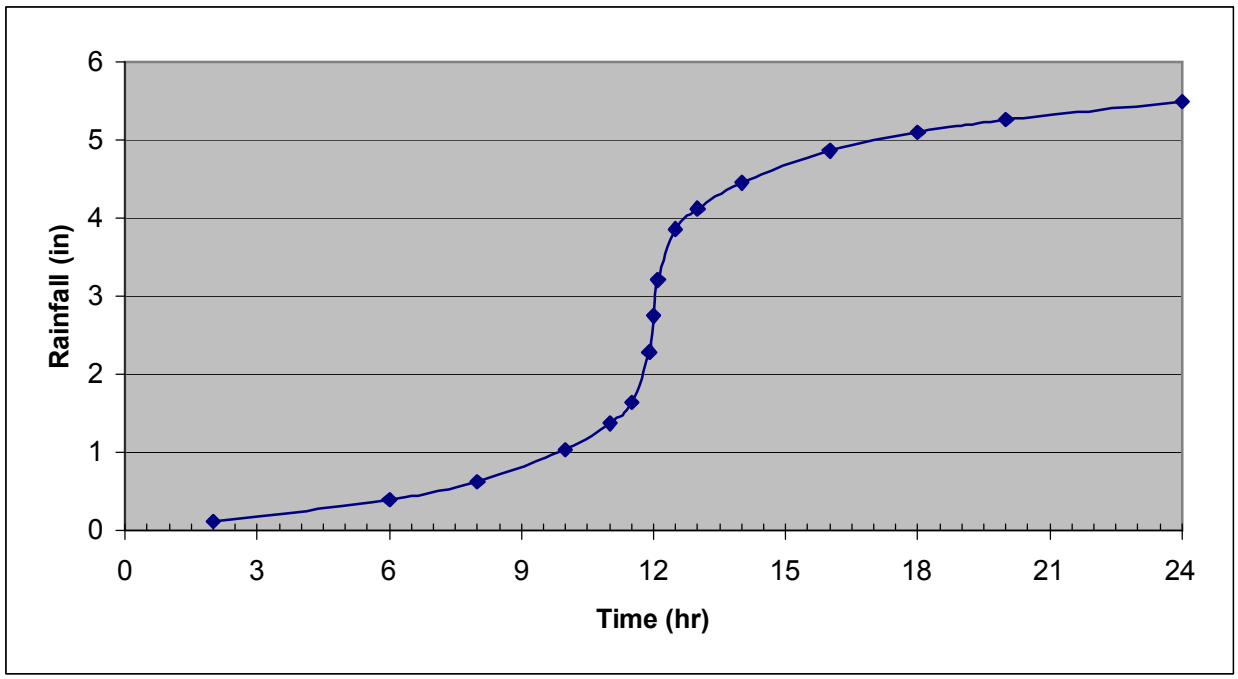
COMMITMENT & INTEGRITY DRIVE RESULTS
41 HUTCHINS DRIVE
PORTLAND, MAINE 04102
TEL.(207)774-2112

CLIENT	City of Portland		
PROJECT	Western Promenade Sewer Evaluation		
DESIGNED BY	LJS	DATE	2/11/2008
CHECKED BY	DAS	DATE	11/7/2008
PROJECT NO.	203943.54	SHEET NO.	2 of 9

TYPE III Intensity 25 Year Storm

0	0	0	0	0	0	Intensity (in/hr)
0	0.01	0	0	2	0.11	0.055
0.003	0.007	0.00075	0	6	0.396	0.0715
0.066	-0.014	0.0025	0	8	0.627	0.1155
0.274	-0.066	0.00575	0	10	1.0395	0.20625
0.899	-0.191	0.012	0	11	1.375	0.3355
5.013	-0.939	0.046	0	11.5	1.639	0.528
57.1195	-10.001	0.44	0	11.9	2.288	1.6225
517.352	-87.351	3.69	0	12	2.75	4.62
-545.368	89.769	-3.69	0	12.1	3.212	4.62
-69.5355	11.119	-0.44	0	12.5	3.861	1.6225
-7.973	1.269	-0.046	0	13	4.125	0.528
-2.227	0.385	-0.012	0	14	4.4605	0.3355
-1.002	0.21	-0.00575	0	16	4.873	0.20625
-0.17	0.106	-0.0025	0	18	5.104	0.1155
0.397	0.043	-0.00075	0	20	5.2635	0.07975
0.472	0.0355	-0.0005625	0	24	5.5	0.059125

25 year storm 5.5 inch



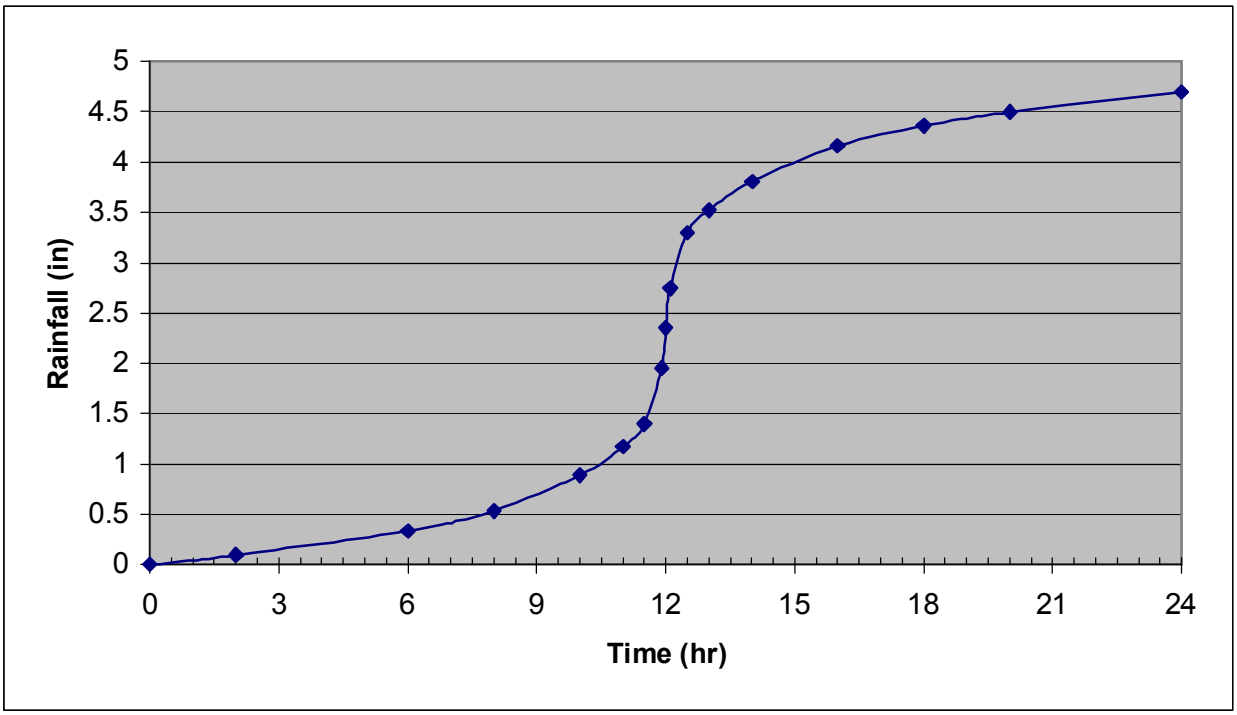
COMMITMENT & INTEGRITY DRIVE RESULTS
41 HUTCHINS DRIVE
PORTLAND, MAINE 04102
TEL.(207)774-2112

CLIENT	City of Portland		
PROJECT	Western Promenade Sewer Evaluation		
DESIGNED BY	LJS	DATE	2/11/2008
CHECKED BY	DAS	DATE	11/7/2008
PROJECT NO.	203943.54	SHEET NO.	3 of 9

TYPE III Intensity 10 Year Storm

0	0	0	0	0	0	Intensity (in/hr)
0	0.01	0	0	2	0.094	0.047
0.003	0.007	0.00075	0	6	0.3384	0.0611
0.066	-0.014	0.0025	0	8	0.5358	0.0987
0.274	-0.066	0.00575	0	10	0.8883	0.17625
0.899	-0.191	0.012	0	11	1.175	0.2867
5.013	-0.939	0.046	0	11.5	1.4006	0.4512
57.1195	-10.001	0.44	0	11.9	1.9552	1.3865
517.352	-87.351	3.69	0	12	2.35	3.948
-545.368	89.769	-3.69	0	12.1	2.7448	3.948
-69.5355	11.119	-0.44	0	12.5	3.2994	1.3865
-7.973	1.269	-0.046	0	13	3.525	0.4512
-2.227	0.385	-0.012	0	14	3.8117	0.2867
-1.002	0.21	-0.00575	0	16	4.1642	0.17625
-0.17	0.106	-0.0025	0	18	4.3616	0.0987
0.397	0.043	-0.00075	0	20	4.4979	0.06815
0.472	0.0355	-0.0005625	0	24	4.7	0.050525

10 year storm 4.7 inch



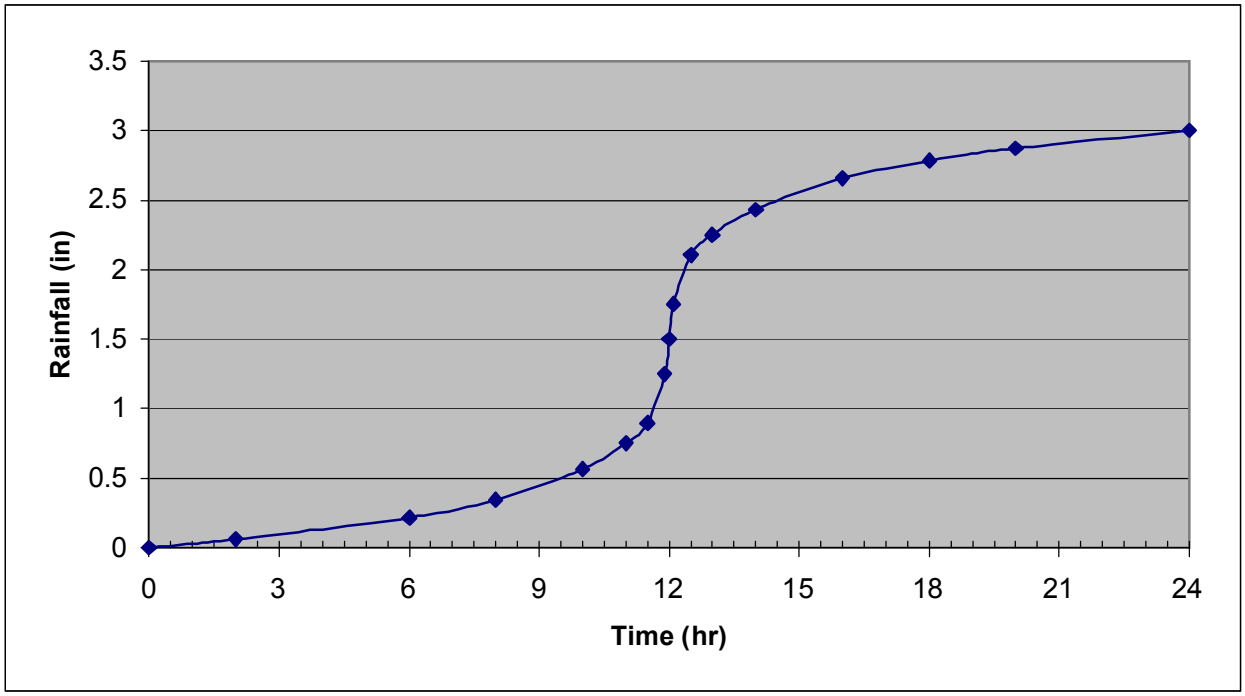
COMMITMENT & INTEGRITY DRIVE RESULTS
41 HUTCHINS DRIVE
PORTLAND, MAINE 04102
TEL.(207)774-2112

CLIENT	City of Portland		
PROJECT	Western Promenade Sewer Evaluation		
DESIGNED BY	LJS	DATE	2/11/2008
CHECKED BY	DAS	DATE	11/7/2008
PROJECT NO.	203943.54	SHEET NO.	4 of 9

TYPE III Intensity 2 Year Storm

0	0	0	0	0	0	Intensity (in/hr)
0	0.01	0	0	2	0.06	0.03
0.003	0.007	0.00075	0	6	0.216	0.039
0.066	-0.014	0.0025	0	8	0.342	0.063
0.274	-0.066	0.00575	0	10	0.567	0.1125
0.899	-0.191	0.012	0	11	0.75	0.183
5.013	-0.939	0.046	0	11.5	0.894	0.288
57.1195	-10.001	0.44	0	11.9	1.248	0.885
517.352	-87.351	3.69	0	12	1.5	2.52
-545.368	89.769	-3.69	0	12.1	1.752	2.52
-69.5355	11.119	-0.44	0	12.5	2.106	0.885
-7.973	1.269	-0.046	0	13	2.25	0.288
-2.227	0.385	-0.012	0	14	2.433	0.183
-1.002	0.21	-0.00575	0	16	2.658	0.1125
-0.17	0.106	-0.0025	0	18	2.784	0.063
0.397	0.043	-0.00075	0	20	2.871	0.0435
0.472	0.0355	-0.0005625	0	24	3	0.03225

2 year storm 3 inch



COMMITMENT & INTEGRITY DRIVE RESULTS
WOODARD & CURRAN
41 HUTCHINS DRIVE
PORTLAND, MAINE 04102
TEL.(207)774-2112

CLIENT	City of Portland		
PROJECT	Western Promenade Sewer Evaluation		
DESIGNED BY	LJS	DATE	2/11/2008
CHECKED BY	DAS	DATE	11/7/2008
PROJECT NO.	203943.54	SHEET NO.	5 of 9

Checking Sewer Lateral Capacity - 4" Vitrified Clay Pipe

Percent Full	Flow Rate (gpd)	Flow Rate (cfs)	Velocity (fps)	Wetted Perimeter	Hydraulic Radius (feet)	Flow Area (sq. ft.)
0	0	0	0	0	0	0
1	19	0.000	0.199	0.067	0.002	0.000
2	85	0.000	0.314	0.095	0.004	0.000
3	203	0.000	0.411	0.116	0.007	0.001
4	376	0.001	0.496	0.134	0.009	0.001
5	605	0.001	0.574	0.150	0.011	0.002
10	2,631	0.004	0.896	0.215	0.021	0.005
15	6,126	0.009	1.154	0.265	0.031	0.008
19	9,945	0.015	1.332	0.301	0.038	0.012
24	15,917	0.025	1.529	0.341	0.047	0.016
30	24,678	0.038	1.733	0.386	0.057	0.022
33	29,638	0.046	1.825	0.408	0.062	0.025
40	42,466	0.066	2.015	0.456	0.071	0.033
42	46,403	0.072	2.063	0.470	0.074	0.035
50	63,009	0.097	2.233	0.524	0.083	0.044
54	71,638	0.111	2.305	0.550	0.087	0.048
59	82,500	0.128	2.382	0.584	0.092	0.054
65	95,321	0.147	2.455	0.625	0.096	0.060
70	105,507	0.163	2.501	0.661	0.099	0.065
75	114,913	0.178	2.532	0.698	0.101	0.070
80	123,178	0.191	2.546	0.738	0.101	0.075
85	129,854	0.201	2.540	0.782	0.101	0.079
90	134,309	0.208	2.511	0.833	0.099	0.083
95	135,408	0.209	2.446	0.897	0.095	0.086
100	126,018	0.195	2.233	1.047	0.083	0.087

Diam. (in)	4	
Manning n	0.018	vitrified clay pipe
Slope(ft/ft)	0.02	1/4"/ft minimum slope

COMMITMENT & INTEGRITY DRIVE RESULTS
41 HUTCHINS DRIVE
PORTLAND, MAINE 04102
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CLIENT	City of Portland		
PROJECT	Western Promenade Sewer Evaluation		
DESIGNED BY	LJS	DATE	2/11/2008
CHECKED BY	DAS	DATE	11/7/2008
PROJECT NO.	203943.54	SHEET NO.	6 of 9

Checking Sewer Lateral Capacity - 6" Vitrified Clay Pipe

Percent Full	Flow Rate (gpd)	Flow Rate (cfs)	Velocity (fps)	Wetted Perimeter	Hydraulic Radius (feet)	Flow Area (sq. ft.)
0	0	0	0	0	0	0
1	56	0.000	0.260	0.100	0.003	0.000
2	250	0.000	0.412	0.142	0.007	0.001
3	597	0.001	0.538	0.174	0.010	0.002
4	1,107	0.002	0.650	0.201	0.013	0.003
5	1,784	0.003	0.752	0.226	0.016	0.004
10	7,757	0.012	1.174	0.322	0.032	0.010
15	18,060	0.028	1.512	0.398	0.046	0.018
19	29,320	0.045	1.746	0.451	0.058	0.026
24	46,929	0.073	2.003	0.512	0.071	0.036
30	72,759	0.113	2.271	0.580	0.085	0.050
33	87,382	0.135	2.392	0.612	0.092	0.057
40	125,205	0.194	2.640	0.685	0.107	0.073
45	154,758	0.239	2.793	0.735	0.117	0.086
50	185,771	0.287	2.927	0.785	0.125	0.098
55	217,616	0.337	3.042	0.835	0.132	0.111
60	249,617	0.386	3.139	0.886	0.139	0.123
65	281,037	0.435	3.217	0.938	0.144	0.135
70	311,069	0.481	3.277	0.991	0.148	0.147
75	338,801	0.524	3.317	1.047	0.151	0.158
80	363,170	0.562	3.336	1.107	0.152	0.168
85	382,852	0.592	3.329	1.173	0.152	0.178
90	395,988	0.612	3.290	1.249	0.149	0.186
95	399,227	0.617	3.205	1.345	0.143	0.193
100	371,542	0.575	2.927	1.571	0.125	0.196

Diam. (in)	6	
Manning n	0.018	vitrified clay pipe
Slope(ft/ft)	0.02	1/4"/ft minimum slope

COMMITMENT & INTEGRITY DRIVE RESULTS
WOODARD & CURRAN
41 HUTCHINS DRIVE
PORTLAND, MAINE 04102
TEL.(207)774-2112

CLIENT	City of Portland		
PROJECT	Western Promenade Sewer Evaluation		
DESIGNED BY	LJS	DATE	2/11/2008
CHECKED BY	DAS	DATE	11/7/2008
PROJECT NO.	203943.54	SHEET NO.	7 of 9

Checking Sewer Lateral Capacity - 8" Vitrified Clay Pipe

Percent Full	Flow Rate (gpd)	Flow Rate (cfs)	Velocity (fps)	Wetted Perimeter	Hydraulic Radius (feet)	Flow Area (sq. ft.)
0	0	0	0	0	0	0
1	121	0.000	0.315	0.134	0.004	0.001
2	538	0.001	0.499	0.189	0.009	0.002
3	1,286	0.002	0.652	0.232	0.013	0.003
4	2,384	0.004	0.787	0.268	0.017	0.005
5	3,842	0.006	0.911	0.301	0.022	0.007
10	16,706	0.026	1.422	0.429	0.042	0.018
19	63,144	0.098	2.115	0.601	0.077	0.046
24	101,068	0.156	2.427	0.683	0.094	0.064
26	118,450	0.183	2.540	0.713	0.101	0.072
30	156,697	0.242	2.752	0.773	0.114	0.088
35	210,394	0.325	2.989	0.844	0.129	0.109
40	269,645	0.417	3.199	0.913	0.143	0.130
45	333,291	0.515	3.384	0.980	0.155	0.152
50	400,081	0.619	3.545	1.047	0.167	0.175
55	468,663	0.725	3.685	1.114	0.177	0.197
60	537,580	0.831	3.802	1.181	0.185	0.219
65	605,249	0.936	3.897	1.250	0.192	0.240
70	669,925	1.036	3.970	1.322	0.197	0.261
75	729,649	1.129	4.019	1.396	0.201	0.281
80	782,131	1.210	4.041	1.476	0.203	0.299
85	824,518	1.275	4.033	1.564	0.202	0.316
90	852,810	1.319	3.986	1.665	0.199	0.331
95	859,785	1.330	3.882	1.794	0.191	0.343
100	800,162	1.238	3.545	2.094	0.167	0.349

Diam. (in)	8	
Manning n	0.018	vitrified clay pipe
Slope(ft/ft)	0.02	1/4"/ft minimum slope

COMMITMENT & INTEGRITY DRIVE RESULTS
WOODARD & CURRAN
41 HUTCHINS DRIVE
PORTLAND, MAINE 04102
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PROJECT NO.	203943.54	SHEET NO.	8 of 9

Checking Sewer Lateral Capacity - 4" Cast Iron Pipe

Percent Full	Flow Rate (gpd)	Flow Rate (cfs)	Velocity (fps)	Wetted Perimeter	Hydraulic Radius (feet)	Flow Area (sq. ft.)
0	0	0	0	0	0	0
1	21	0.000	0.224	0.067	0.002	0.000
2	95	0.000	0.354	0.095	0.004	0.000
3	228	0.000	0.462	0.116	0.007	0.001
4	422	0.001	0.558	0.134	0.009	0.001
5	681	0.001	0.645	0.150	0.011	0.002
10	2,960	0.005	1.008	0.215	0.021	0.005
15	6,891	0.011	1.298	0.265	0.031	0.008
20	12,415	0.019	1.545	0.309	0.040	0.012
25	19,420	0.030	1.761	0.349	0.049	0.017
30	27,763	0.043	1.950	0.386	0.057	0.022
35	37,277	0.058	2.118	0.422	0.064	0.027
43	54,461	0.084	2.348	0.477	0.075	0.036
45	59,051	0.091	2.398	0.490	0.078	0.038
50	70,885	0.110	2.513	0.524	0.083	0.044
56	85,482	0.132	2.629	0.564	0.089	0.050
62	100,085	0.155	2.723	0.604	0.094	0.057
65	107,236	0.166	2.762	0.625	0.096	0.060
70	118,695	0.184	2.814	0.661	0.099	0.065
75	129,277	0.200	2.848	0.698	0.101	0.070
80	138,575	0.214	2.864	0.738	0.101	0.075
85	146,085	0.226	2.858	0.782	0.101	0.079
90	151,098	0.234	2.825	0.833	0.099	0.083
95	152,334	0.236	2.751	0.897	0.095	0.086
100	141,770	0.219	2.513	1.047	0.083	0.087

Diam. (in)	4	
Manning n	0.016	cast iron pipe
Slope(ft/ft)	0.02	1/4"/ft minimum slope

COMMITMENT & INTEGRITY DRIVE RESULTS
WOODARD & CURRAN
41 HUTCHINS DRIVE
PORTLAND, MAINE 04102
TEL.(207)774-2112

CLIENT	City of Portland		
PROJECT	Western Promenade Sewer Evaluation		
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CHECKED BY	DAS	DATE	11/7/2008
PROJECT NO.	203943.54	SHEET NO.	9 of 9

Checking Sewer Lateral Capacity - 5" Cast Iron Pipe

Percent Full	Flow Rate (gpd)	Flow Rate (cfs)	Velocity (fps)	Wetted Perimeter	Hydraulic Radius (feet)	Flow Area (sq. ft.)
0	0	0	0	0	0	0
1	39	0.000	0.259	0.083	0.003	0.000
2	173	0.000	0.411	0.118	0.006	0.001
3	413	0.001	0.536	0.145	0.008	0.001
4	766	0.001	0.648	0.168	0.011	0.002
5	1,234	0.002	0.749	0.188	0.014	0.003
10	5,367	0.008	1.170	0.268	0.026	0.007
15	12,495	0.019	1.507	0.331	0.039	0.013
20	22,510	0.035	1.793	0.386	0.050	0.019
25	35,211	0.054	2.043	0.436	0.061	0.027
32	57,001	0.088	2.344	0.501	0.075	0.038
35	67,588	0.105	2.458	0.528	0.081	0.043
40	86,621	0.134	2.630	0.571	0.089	0.051
45	107,067	0.166	2.783	0.613	0.097	0.060
50	128,523	0.199	2.916	0.654	0.104	0.068
55	150,554	0.233	3.030	0.696	0.110	0.077
60	172,694	0.267	3.127	0.738	0.116	0.085
65	194,431	0.301	3.205	0.781	0.120	0.094
70	215,208	0.333	3.265	0.826	0.123	0.102
75	234,394	0.363	3.305	0.873	0.126	0.110
84	262,460	0.406	3.320	0.966	0.127	0.122
85	264,870	0.410	3.316	0.978	0.126	0.124
90	273,958	0.424	3.278	1.041	0.124	0.129
95	276,199	0.427	3.193	1.121	0.119	0.134
100	257,046	0.398	2.916	1.309	0.104	0.136

Diam. (in)	5	
Manning n	0.016	cast iron pipe
Slope(ft/ft)	0.02	1/4"/ft minimum slope

APPENDIX B: WESTERN PROMENADE ROOFTOP DISCONNECTION PROGRAM

Western Promenade Rooftop Disconnection Program

The following steps could be considered as a part of the pilot program:

1. Use the GIS maps developed for this study as a basis for further investigation of CSO 28. GIS analysis within the target drainage areas would include an evaluation of hydrologic soil groups present, parcel size and type of land cover, a refined subcatchment delineation and existing storm and sanitary sewer infrastructure.
2. Based on preliminary analysis of the drainage area, disconnection performance standards should be established to avoid creation of other problems (e.g. basement infiltration, sidewalk icing, etc). Performance standards could include; property slope, property soils, setbacks from buildings depending on basement or slab foundations, access complications related to downspout surface extensions, and probable flow paths from disconnected outlet (see the attached example from Portland, Oregon). The development of appropriate performance standards should be developed with consultation from public works, plumbing/code enforcement and the Western Promenade Neighborhood Association. It is likely that some parcels are not appropriate for disconnection due to performance criteria and are therefore dropped from future steps and program incentives.
3. Conduct door-to-door surveys within target drainage areas to supplement existing parcel information. Surveys could be conducted by summer interns with specific training related to project background, information to be collected, how to approach landowners, effective homeowner education tips, personal safety and data collection technologies. We suggest the development of digital data collection forms where appropriate in order to streamline data entry and quality control.
4. Once surveys are complete the City should determine the appropriate level of a rebate/incentive program for private disconnection. The rebate/incentive program may apply only to priority disconnection areas or may apply across the drainage area.
5. Develop outreach letters and/or education materials to be sent to landowners. The outreach information would include a letter/pamphlet outlining the importance of disconnection and an overview of the disconnection program and policies. The outreach material could also include a "how-to" for do-it-yourself disconnection and "how to" on the development of a property map that will assist city program managers with the implementation of a disconnection project. The development of a web-based link on design and installation of more complex systems such as raingardens, soakage trenches, drywells and others should be considered as a part of the outreach development program (http://www.portlandonline.com/shared/cfm/image.cfm?id=144648).
6. Conduct follow-up with voluntary participants for implementation of disconnection projects.

Note: CSO 28 would act as a pilot to consider the efficacy of the above recommendations for other parts of the city where soils appear appropriate.

Approximate Program Development Cost: $15,000-30,000 for GIS base map development, interns, outreach materials and staff/consultant time.

APPENDIX C: WPNA MEETING MINUTES

<PARTIAL> Minutes of Meeting of the
Western Prom Neighborhood Association
held at Williston West
June 5, 2008

The meeting was opened by President Peter Murray. Approximately 50 residents were in attendance.

The minutes of the prior meeting were approved.

Mike Bobinksy, Director of Public Services, was introduced to discuss the sewer problems in the West End. He explained there are two areas at issue. First, there is the sewer separation ("CSO") situation overall in the City. Mr. Bobinsky reported that the City is working on approximately 62 projects currently. There is a consent decree in place that dictates much of the initial focus, which is in the Fall Brook and Deering areas. None of the work or current direction involves separating any sewers in the Western Prom area. In addition, there is now a developing concern with storm water run-off and new regulations on that subject. Secondly, there is the specific sewer situation in the Western Prom area. Mr. Bobinksy reported that larger CSO concerns do not involve changes in the West End area of the City.

Next, David Margolis-Pineo from the city engineering department spoke. Some homes have basement drains that go directly into the sewer, which they recommend be closed or fitted with plugs. The last 10 or 15 years have also produced more intense storms. With respect to possible solutions, additional hydro-brakes on the street intercepts might be installed. This retards water flow into the storm sewers to allow flows to enter sewers on a delayed basis. A question was raised as to whether the "lining" of the pipes in the area reduced the diameter of the sewers. It was felt this would not have a significant impact.

Mark Jordon from Woodard & Curran then spoke. He made a basic outline of how sewers operate, and how they receive rain and run-off from various entry points. Some houses have undersize service entrances that can affect backup. Apart from the service entrances, they have identified sewer flow restrictions. One point or problem area is the sewer line down Carroll Street. Another is the line coming down Neal. They recommend a) disconnecting roof drains that go into the sewer system and b) use of back-flow preventers and c) closing basement floor drains that connect to the system, either permanently or with removable plugs.

Anne Pringle then raised the point that the solutions recommended are not a substitute for the City providing adequate sewers meeting basic public health

concerns. Some of the recommendations can simply shift the problem to a different neighbor.

Mr. Bobinsky stated they have been doing a TV survey over the last 6 months, with a report due in the fall. To the extent that an individual collapse or defect in a sewer has occurred, that would be a city issue.

<ADDITIONAL MEETING MINUTES UNRELATED TO SEWER STUDY NOT INCLUDED>

<PARTIAL>Minutes of General Meeting of the
Western Prom Neighborhood Association
Williston West Church
November 18, 2008

The meeting was opened by President Peter Murray. Approximately 35 residents were in attendance, as well as our Councilor, David Marshall, and Representative Jon Hinck. Peter welcomed those in attendance and introduced the WPNA Board and noted the issue assignments for each.

Minutes The Minutes of June 5, 2008 were approved as submitted.

<ADDITIONAL MEETING MINUTES UNRELATED TO SEWER STUDY NOT INCLUDED>

Combined Sewage Overflow Issue Peter Murray introduced the issue of sewage backup into basements during torrential downpours, which now occur more frequently than in the past. Mike Bobinksy introduced the City's study of the issue, helped by WPNA information on properties which had experienced backups. David Sensus of Woodward & Curran, the City's consulting engineers, reported that a study area was identified and City staff and Woodward & Curran were in touch with each property to evaluate the individual circumstances. The City also inspected, cleaned and repaired mains. A number of additional hydrobrakes were installed (which hold the water in the street during initial downpours). The sewer main capacity was monitored and modeled. Individual building service capacity was also modeled, including roof drains. The hydrology of the study area was also evaluated and it was noted that there is a pretty dense land cover in the neighborhood, from building footprints, to driveways, sidewalks, roads, and roofs.

The study finding are that street runoff and roof drains are the major contributing factors overloading the system. Some property laterals had blockage issues and need to be addressed by the homeowner. A summary report (attached and made a part of these minutes) identified: the need for ten more hydrobrakes, fixing poor system alignment, disconnection of roofdrains for some properties (but not all, as circumstances differ), a priority ranking of all solutions, and reevaluating the area for inclusion in the City's next CSO master plan.

Anne Pringle reported that she had not received any complaints since the study process got well underway and the improvement were made. She suggested that the hrdrobrakes and the cleaning effort made by the City may be working. There were several major downpours in the early fall and it was felt that they were a good test of the new system. Anne asked the City to continue to monitor rainfalls for comparison to past problems.

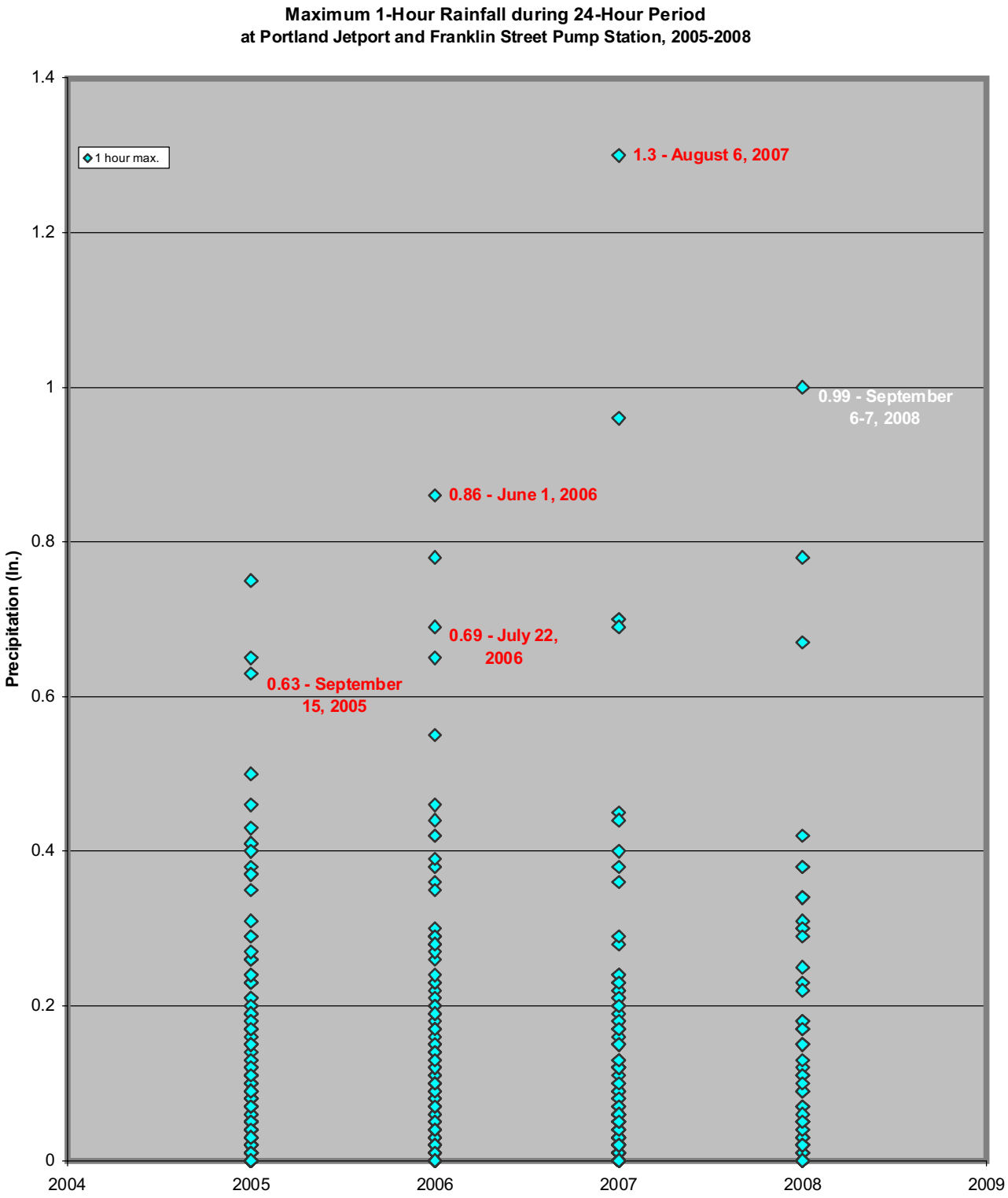
During overflow, the combined stormwater and sewage goes down the Emery Street CSO and then into the Fore River, a situation that the City must address. There is the potential for a Vaughan Street CSO, to reduce the flow to Emery Street. It was suggested that

perhaps some flow could be diverted to the Western Prom, which could be evaluated, but would likely be very costly.

<ADDITIONAL MEETING MINUTES UNRELATED TO SEWER STUDY NOT INCLUDED>

Meeting adjourned at approximately 9:00.

APPENDIX D: 2005-2008 PEAK 1-HOUR RAINFALL SUMMARY



Note: Red dates represent more than one complaint from the Western Promenade neighborhood filed with the City.
2005-May 2008 data from the Portland Jetport. August-September 2008 data from Franklin Street PS.

17 Carleton Street
Questions from the July 14, 2015 workshop

1. **Access Rights and Function**- ***After further discussion with Fire we have determined that the requirement to provide access to the back of the building will be fulfilled by the entrance on Carleton Street. The height of the opening is being increased to 13' 9". We are subsequently placing a gate at the rear of the lot from the common passageways, which will eliminate vehicles traveling from the common passageways to 17 Carleton Street. Therefore, the questions of legal access in the common passageways are no longer relevant. Pedestrian access between the common passageways and 17 Carleton Street will be maintained for the residents of the Butler School.***
2. ***Response: Applicant and review by Legal- NA***
3. What is the radius of a fire truck to get into the alley way? ***Response: Fire and Traffic-***
4. How will the traffic flow work in the alley taking into consideration that vehicles are parked along the access way? ***Response: Applicant and review by Traffic and Fire- NA-***
5. How will snow removal in the alley be handled? ***Response: Applicant and review by Traffic and Fire. NA***
6. How are the life safety requirements and fire access addressed for both 17 Carleton and Butler School? ***Response: Applicant and review by Fire- Life Safety and Fire will continue to serve residents of Butler School from Pine and West Streets or also from the common passageways entering either on Pine or West Streets. Life Safety and Fire will serve 17 Carleton Street from Carleton Street. The passage under the building is being raised to Fire Rescue to access the rear of the building.***

Parking

1. How does the displacement of parking impact the neighborhood? ***Response: Applicant, Traffic and Parking-Avesta currently leases approximately 45 spaces to neighborhood residents, the maximum impact to the neighborhood by displacement would be the same or possibly less if residents decide to not have a car or go from 2 cars to 1 car.***
2. What is the legality of displacing the parking? If a project was approved with parking in this location, how does that obligation go away? ***Response: Applicant and Legal- Legal No project of Avesta's or its predecessors in title were approved with parking on the Carleton Street lot. Furthermore, the Applicant has no legal obligation to provide parking for other projects even if that parking was pledged as a condition of approval. The legal requirements for providing parking at 17 Carleton Street are determined by the land use approvals and no such requirements of approval exist.***
3. Were any of the parking spaces pledged to meet parking requirements for any other permit? ***Response: Applicant and Legal- We cannot represent what other developers have pledged as a part of receiving their land use approvals; we can only verify that we have no agreements or legal obligations to provide such parking.***
4. What data was used by Attorney Selinger to form his opinion? ***Response: Applicant Attorney Selinger reviewed a 75 page packet of materials that were produced by the City under FOIA, invoice number 49935, dated July 6, 2015.***

5. What is the history and policy of leasing parking spaces in the lot? What were the practices for leasing in 2009? How many spaces were leased to West Street in 2001? <u>How many spaces were being rented in the lot for 2009-2011?</u> Has there been a change in usage of the parking lot, specifically for Butler residents? ***We do not have historical data for the periods in question but would assume that the lot was full or could have been leased to capacity; therefore we do not understand the relevance of the information requested. We have seen a decline in parking for***

the Butler School Residents, when we acquired the property we had 13 residents who parked there, currently we have 10.

6. What are the results of the parking study for this project? ***Response: Applicant and Traffic- Gorrill Palmer conducted a study on Thursday June 25th, starting at 10:00 PM. The study counted cars parked in the lots of similar Avesta properties on the Portland peninsula. The average parking rate per unit was .37- Avesta reported for the same properties a car to unit ratio of .59, based on their internal records of car ownership. The parking ratio requested by the Applicant is .70 parking spaces per unit. This would yield 16 required spaces, 31 spaces have been proposed. With no reduction the required parking would be 27 again 31 spaces are proposed. These calculations are based on a net 7 reduction for providing a car share if the net reduction is actually 8 the requirements would be 1 less.***
7. When was ratio of one parking space per unit changed? What is the impact of this change on existing projects? ***Response: Planning and Legal***
8. Does the parking study take into consideration the visitors and workers? ***Response: Applicant and review by Traffic- Visitors and workers are not calculated into the parking analysis. Workers would typically be parking in the lot during working hours, this would be outside of the peak demand time for parking and it is expected that there would be vacant spaces in the lot putting no additional demand on street parking. The minimal amount of parking demand created by visitors will be absorbed into on street parking.***
9. Has a comprehensive parking assessment been done? (Presumably this questioner means just with respect to the west end as opposed to city wide.) ***Response: Applicant, Traffic and Parking- The applicant has not conducted a comprehensive parking assessment for the West End but has done an assessment based on the parking demand created by the proposed project. We are in the process of doing a supply analysis for on street parking within a short walking distance to the proposed site. We will provide those findings when they are complete.***
10. <u>What are the public transit options in the area?</u> ***Response: Applicant- The closest metro stop is less than a block away on the corner of Carleton and West. The metro bus provides service from roughly 7:00Am to 6:00PM.***

Stormwater and Sewer Capacity –

1. **Board requested a comprehensive presentation on Stormwater by Applicant and City**
   a. **<u>Include a more detailed explanation of the Inflow & Infiltration requirements</u>**
2. When will a study of the stormwater issues of the West End be prepared? ***Response: Public Services***
3. Explain the City's mapping of the sanitary sewer lines in the West End, the purpose of the study, and when will it be started (and done)? ***Response: Public Services***
4. A (sanitary sewer/ stormwater) pipe was replaced in the area. When was this work done and what has been the impact on the neighborhood? ***Response: Public Services, Applicant- Avesta repaired a collapsed catch basis, on 17 Carleton Street on 3/10/2015. We are unaware of any impact to the neighborhood that would or did result from the repair.***
5. Has a stormwater study been done for the project? <u>How will the 1900 s.f. of on the lot (or new impervious area?) be drained?</u> The reduction of impervious surface area is 0.2%, but what are the impacts of this project on the stormwater in the neighborhood? ***Response: Applicant, Public Services, and Consulting Civil Engineer- A storm water report has been completed. It analyzed the site for peak flows and total flows. The infiltration system will reduce both peak flows and total flows going to the sewer. In the 25 year storm event, a 5.4" rainstorm, the total flow is reduced by 15,965 gallons, a 23% reduction. Well above the expected wastewater volume of the building. The flow is reduced in smaller storms to less than the daily wastewater flow of 3,000 gallons.***

6. What is the status of the wastewater capacity letter? ***Response: Applicant and Public Services***

7. An explanation of the 1" stormwater event should be presented. ***Response: Applicant and Public Services- The site was analyzed for the 1" rain storm as well as the 3.0", 4.7" and the 5.4" storm events. The larger the storm the more the site infiltrates reducing the impacts on the existing sewer. All of the runoff from the roof is infiltrated in the 1" rain storm.***

8. Have alternative options in regard to drainage on the site, such as porous pavement or stormwater retention, been considered or proposed? **Response: Applicant- Applicant** ***Yes the applicant has considered several methods to reduce the impacts of storm water on the sewer. The use of an infiltration system was selected which will result in a 23% reduction in total flow going to the sewer in a 25 year rain event yielded excellent results.***

9. Does the proposal address storm surge conditions? **Response: Applicant and review by Public Services and Consulting Civil Engineer** ***Yes, the system will reduce the surge to the sewer by infiltrating storm water.***

General Questions

What will the impact of this project be on the City's taxes? **Response: Applicant-** ***The proposed project will increase the taxable valuation of the property by an estimated. $2,238,34.00 - The Applicant is applying for an Affordable Housing TIF District that would result in approximately $ 18,441.00 annual increase to the City's general fund with an additional savings of $11,204.00 in avoided impact losses.***

1. How many vacancies have occurred due to the on-going renovations at the Butler School? **Response: Applicant-** ***We have maintained 2 vacant units to function as hospitality suites during the rehab of the Butler School. General turnover of units during construction is consistent with historical trends and the project will maintain a vacancy rate of less than 5%. This indicates that the rehab has not had any significant impact on the demand for parking. We have been maintaining a vacancy rate of up to 5 spaces in the Carleton Lot to assist in the parking of construction vehicles during the rehab.***
2. What is the benefit of the development to the neighborhood, the community, and to the city at large? **Response: Applicant**- ***The development, 17 Carleton Street, provides multiple benefits to the neighborhood, community and city at large. The primary benefit is the creation of new housing stock to meet the incredible need for affordable housing. This need is clearly documented in the City's Housing Plan and Comprehensive Plan and is corroborated by Avesta Housing which recently reported a waiting list of 2432 individuals or families who were in need of housing. . Meeting this need benefits the city by helping to achieve the betterment, of the health, welfare and safety of its inhabitants. Furthermore, it allows people to continue to live in neighborhoods where they have been part of the community. It may also provide the needed housing for Portland newcomers, who are also an integral part of building and maintaining a vibrant city.***

   The proposed project will increase the taxable valuation of the property by an estimated. $2,238,340.00 - The Applicant is applying for an Affordable Housing TIF District that would result in approximately $ 18,441.00 annual increase to the City's general fund with an additional savings of $11,204.00 in avoided impact losses.

   17 Carleton Street is a privately owned piece of property in a prime location on the West End. Such a property typically finds its usage determined by a market analysis identifying its highest and best use. Our analysis of the property is driven by additional considerations, specifically our mission to provide affordable housing for people in need. This analysis yields a project that

serves the needs as stated previously while also ensuring that other allowable uses on the property will not occur. For example, as of right, the project could be developed as a market rate project creating a much higher impact to on street parking and traffic than the proposed project. The proposed project has been thoughtfully scaled with consideration to density and unit mix thereby providing the much needed housing while minimizing the impact of parking and traffic on the surrounding neighborhood.

In addition to bringing certainty to this infill site, the project will become a supporting piece of architecture in a historic neighborhood. The Public Process and Review by the Historical Preservation Board will yield a building and site that is not only compatible with the neighborhood but also enhances Carleton Street. The proposed project will eliminate a curb cut and replace an asphalt parking lot with an attractive building where people live. The building will become a contributing piece of architecture with its own narrative about Portland's aesthetics and priorities.

PINKHAM & GREER
CIVIL ENGINEERS
28 VANNAH AVE. PORTLAND, ME. 04103
Tel: 207.781.5242 Fax: 207.781.4245

Att. B

STORMWATER MANAGEMENT REPORT
17 CARLETON STREET
PORTLAND, MAINE
July 21, 2015
(Revised July 22, 2015)
(Revised July 28, 2015)

Project Description:

The existing Carleton Street site consists of 19,245 sq. ft. of parking for 58 cars. The remainder of the 0.58 acre site is landscaped. The proposed 37 unit apartment building will be constructed at the front of the site. The developed site will have 6,970 sq. ft. of roof, 6,054 sq. ft. of landscaping and 12,240 sq. ft. of parking.

Analysis:

The concern of neighbors is peak flow flooding of the sewer during large storm events. The new stormwater management system will have an infiltration system for the runoff from the roof of the building and the flow from the parking will continue to go to the existing catch basin.

Below is a table showing peak flows for the 1", 2 year, 10 year, and 25 year storm events. The peak flows are reduced and the total volume of flow is reduced in all storms. The infiltration system infiltrates more than 3,000 gallons in any of the storms, well in excess of the 3,000 gallons per day the wastewater generated by the occupants of the building.

TABLE 1

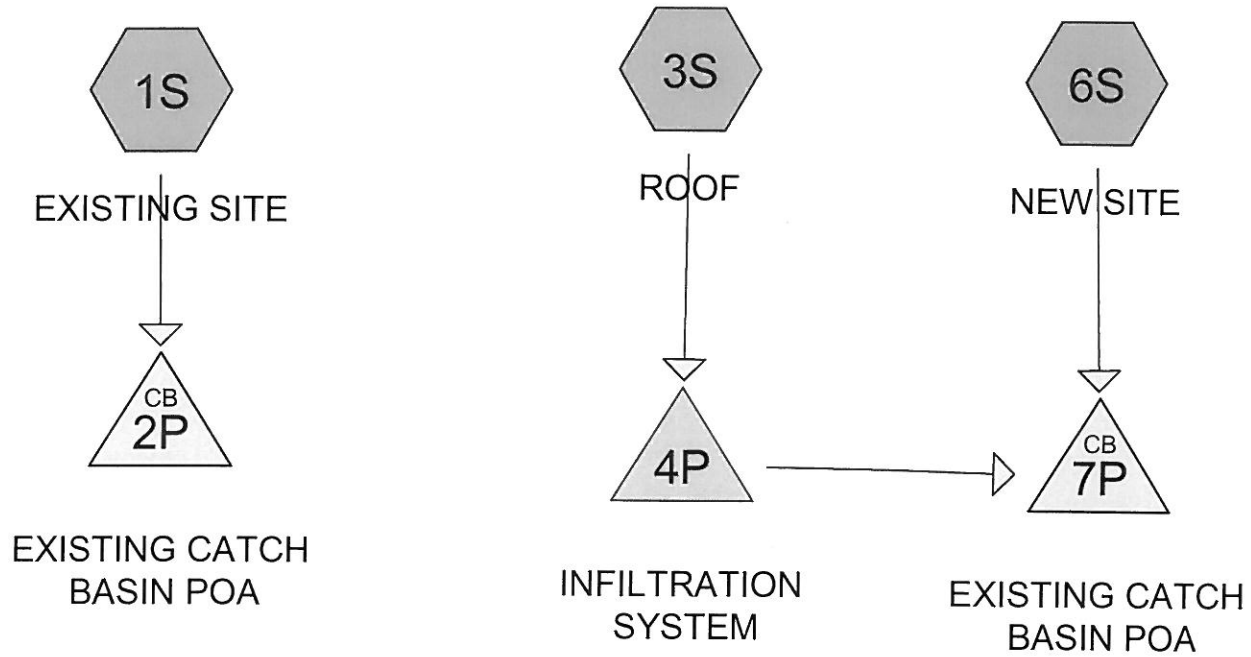
	Peak Flows Cubic Feet Per Second		Total Gallons of Runoff Infiltrated
	Existing	Developed	
Design	0.27	0.15	3,258
2	1.45	0.97	11,404
10	2.48	1.75	14,662
25	2.89	2.24	15,965

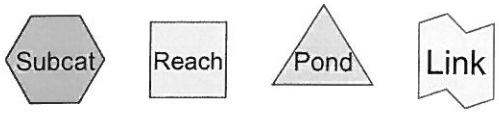
Conclusions:

This project minimizes the downstream impacts to the sewer system by infiltrating stormwater. This project will improve the sewer system by reducing the flow to the sewer by 15,965 gallons in the 25 year storm event.

STATE OF MAINE
THOMAS S. GREER
No. 4206
LICENSED PROFESSIONAL ENGINEER

Thomas S. Greer, P.E.
7/28/15





Drainage Diagram for CARLETON TSG JULY 20 2015
Prepared by Hewlett-Packard Company, Printed 7/28/2015
HydroCAD® 9.10 s/n 01454 © 2010 HydroCAD Software Solutions LLC

Summary for Subcatchment 1S: EXISTING SITE

Runoff = 1.45 cfs @ 12.07 hrs, Volume= 0.098 af, Depth> 2.04"

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

	Area (sf)	CN	Description
*	19,245	98	PAVING
*	6,019	74	LANDSCAPING
	25,264	92	Weighted Average
	6,019		23.82% Pervious Area
	19,245		76.18% Impervious Area

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

Summary for Subcatchment 3S: ROOF

Runoff = 0.47 cfs @ 12.07 hrs, Volume= 0.035 af, Depth> 2.59"

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

	Area (sf)	CN	Description
*	6,970	98	ROOF
	6,970		100.00% Impervious Area

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

Summary for Subcatchment 6S: NEW SITE

Runoff = 0.97 cfs @ 12.07 hrs, Volume= 0.065 af, Depth> 1.86"

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

	Area (sf)	CN	Description
*	12,240	98	PARKING
*	6,054	74	LANDSCAPED
	18,294	90	Weighted Average
	6,054		33.09% Pervious Area
	12,240		66.91% Impervious Area

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

Summary for Pond 2P: EXISTING CATCH BASIN POA

Inflow Area = 0.580 ac, 76.18% Impervious, Inflow Depth > 2.04" for 2 YEAR event
Inflow = 1.45 cfs @ 12.07 hrs, Volume= 0.098 af
Outflow = 1.45 cfs @ 12.07 hrs, Volume= 0.098 af, Atten= 0%, Lag= 0.0 min
Primary = 1.45 cfs @ 12.07 hrs, Volume= 0.098 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 137.47' @ 12.07 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	136.40'	**8.0" Round Culvert** L= 20.0' Ke= 0.500 Inlet / Outlet Invert= 136.40' / 136.20' S= 0.0100 '/' Cc= 0.900 n= 0.010

Primary OutFlow Max=1.39 cfs @ 12.07 hrs HW=137.42' (Free Discharge)
└**1=Culvert** (Inlet Controls 1.39 cfs @ 4.00 fps)

Summary for Pond 4P: INFILTRATION SYSTEM

Inflow Area = 0.160 ac,100.00% Impervious, Inflow Depth > 2.59" for 2 YEAR event
Inflow = 0.47 cfs @ 12.07 hrs, Volume= 0.035 af
Outflow = 0.06 cfs @ 12.59 hrs, Volume= 0.035 af, Atten= 87%, Lag= 31.3 min
Discarded = 0.06 cfs @ 12.59 hrs, Volume= 0.034 af
Primary = 0.00 cfs @ 12.59 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 139.53' @ 12.59 hrs Surf.Area= 178 sf Storage= 499 cf

Plug-Flow detention time= 59.3 min calculated for 0.034 af (100% of inflow)
Center-of-Mass det. time= 58.7 min (797.1 - 738.5)

Volume	Invert	Avail.Storage	Storage Description
#1	137.50'	891 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
137.50	400	0	0
139.00	150	413	413
140.00	203	177	589
141.00	400	302	891

Device	Routing	Invert	Outlet Devices
#1	Discarded	137.50'	**6.000 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 0.00'
#2	Primary	139.50'	**4.0" Round Culvert** L= 15.0' Ke= 0.500 Inlet / Outlet Invert= 139.50' / 137.25' S= 0.1500 '/' Cc= 0.900

			n= 0.010
#3	Primary	140.50'	**5.0' long x 2.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

Discarded OutFlow Max=0.06 cfs @ 12.59 hrs HW=139.53' (Free Discharge)
└─**1=Exfiltration** (Controls 0.06 cfs)

Primary OutFlow Max=0.00 cfs @ 12.59 hrs HW=139.53' (Free Discharge)
├─**2=Culvert** (Inlet Controls 0.00 cfs @ 0.54 fps)
└─**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 7P: EXISTING CATCH BASIN POA

Inflow Area =	0.580 ac, 76.04% Impervious, Inflow Depth > 1.35" for 2 YEAR event				
Inflow =	0.97 cfs @	12.07 hrs, Volume=	0.065 af		
Outflow =	0.97 cfs @	12.07 hrs, Volume=	0.065 af, Atten= 0%, Lag= 0.0 min		
Primary =	0.97 cfs @	12.07 hrs, Volume=	0.065 af		

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 137.07' @ 12.07 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	136.40'	**8.0" Round Culvert** L= 20.0' Ke= 0.500 Inlet / Outlet Invert= 136.40' / 136.20' S= 0.0100 '/' Cc= 0.900 n= 0.010

Primary OutFlow Max=0.94 cfs @ 12.07 hrs HW=137.05' (Free Discharge)
└─**1=Culvert** (Barrel Controls 0.94 cfs @ 3.42 fps)

Summary for Subcatchment 1S: EXISTING SITE

Runoff = 2.48 cfs @ 12.07 hrs, Volume= 0.173 af, Depth> 3.59"

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

	Area (sf)	CN	Description
*	19,245	98	PAVING
*	6,019	74	LANDSCAPING
	25,264	92	Weighted Average
	6,019		23.82% Pervious Area
	19,245		76.18% Impervious Area

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

Summary for Subcatchment 3S: ROOF

Runoff = 0.74 cfs @ 12.07 hrs, Volume= 0.055 af, Depth> 4.15"

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

	Area (sf)	CN	Description
*	6,970	98	ROOF
	6,970		100.00% Impervious Area

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

Summary for Subcatchment 6S: NEW SITE

Runoff = 1.72 cfs @ 12.07 hrs, Volume= 0.119 af, Depth> 3.39"

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

	Area (sf)	CN	Description
*	12,240	98	PARKING
*	6,054	74	LANDSCAPED
	18,294	90	Weighted Average
	6,054		33.09% Pervious Area
	12,240		66.91% Impervious Area

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

Summary for Pond 2P: EXISTING CATCH BASIN POA

Inflow Area = 0.580 ac, 76.18% Impervious, Inflow Depth > 3.59" for 10 YEAR event
Inflow = 2.48 cfs @ 12.07 hrs, Volume= 0.173 af
Outflow = 2.48 cfs @ 12.07 hrs, Volume= 0.173 af, Atten= 0%, Lag= 0.0 min
Primary = 2.48 cfs @ 12.07 hrs, Volume= 0.173 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 138.88' @ 12.07 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	136.40'	**8.0" Round Culvert** L= 20.0' Ke= 0.500 Inlet / Outlet Invert= 136.40' / 136.20' S= 0.0100 '/' Cc= 0.900 n= 0.010

Primary OutFlow Max=2.38 cfs @ 12.07 hrs HW=138.74' (Free Discharge)
└**1=Culvert** (Inlet Controls 2.38 cfs @ 6.83 fps)

Summary for Pond 4P: INFILTRATION SYSTEM

Inflow Area = 0.160 ac,100.00% Impervious, Inflow Depth > 4.15" for 10 YEAR event
Inflow = 0.74 cfs @ 12.07 hrs, Volume= 0.055 af
Outflow = 0.36 cfs @ 12.22 hrs, Volume= 0.055 af, Atten= 52%, Lag= 9.1 min
Discarded = 0.07 cfs @ 12.22 hrs, Volume= 0.045 af
Primary = 0.29 cfs @ 12.22 hrs, Volume= 0.010 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 140.14' @ 12.22 hrs Surf.Area= 231 sf Storage= 620 cf

Plug-Flow detention time= 53.2 min calculated for 0.055 af (100% of inflow)
Center-of-Mass det. time= 52.5 min (787.2 - 734.8)

Volume	Invert	Avail.Storage	Storage Description
#1	137.50'	891 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
137.50	400	0	0
139.00	150	413	413
140.00	203	177	589
141.00	400	302	891

Device	Routing	Invert	Outlet Devices
#1	Discarded	137.50'	**6.000 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 0.00'
#2	Primary	139.50'	**4.0" Round Culvert** L= 15.0' Ke= 0.500 Inlet / Outlet Invert= 139.50' / 137.25' S= 0.1500 '/' Cc= 0.900

			n= 0.010
#3	Primary	140.50'	**5.0' long x 2.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

Discarded OutFlow Max=0.07 cfs @ 12.22 hrs HW=140.13' (Free Discharge)
└─**1=Exfiltration** (Controls 0.07 cfs)

Primary OutFlow Max=0.29 cfs @ 12.22 hrs HW=140.13' (Free Discharge)
├─**2=Culvert** (Inlet Controls 0.29 cfs @ 3.28 fps)
└─**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 7P: EXISTING CATCH BASIN POA

Inflow Area =	0.580 ac, 76.04% Impervious, Inflow Depth > 2.66" for 10 YEAR event				
Inflow =	1.75 cfs @	12.09 hrs, Volume=	0.129 af		
Outflow =	1.75 cfs @	12.09 hrs, Volume=	0.129 af, Atten= 0%, Lag= 0.0 min		
Primary =	1.75 cfs @	12.09 hrs, Volume=	0.129 af		

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 137.82' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	136.40'	**8.0" Round Culvert** L= 20.0' Ke= 0.500 Inlet / Outlet Invert= 136.40' / 136.20' S= 0.0100 '/' Cc= 0.900 n= 0.010

Primary OutFlow Max=1.72 cfs @ 12.09 hrs HW=137.78' (Free Discharge)
└─**1=Culvert** (Inlet Controls 1.72 cfs @ 4.93 fps)

Summary for Subcatchment 1S: EXISTING SITE

Runoff = 2.89 cfs @ 12.07 hrs, Volume= 0.205 af, Depth> 4.23"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 YEAR Rainfall=5.40"

	Area (sf)	CN	Description
*	19,245	98	PAVING
*	6,019	74	LANDSCAPING
	25,264	92	Weighted Average
	6,019		23.82% Pervious Area
	19,245		76.18% Impervious Area

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

Summary for Subcatchment 3S: ROOF

Runoff = 0.85 cfs @ 12.07 hrs, Volume= 0.064 af, Depth> 4.78"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 YEAR Rainfall=5.40"

	Area (sf)	CN	Description
*	6,970	98	ROOF
	6,970		100.00% Impervious Area

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

Summary for Subcatchment 6S: NEW SITE

Runoff = 2.03 cfs @ 12.07 hrs, Volume= 0.141 af, Depth> 4.03"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 YEAR Rainfall=5.40"

	Area (sf)	CN	Description
*	12,240	98	PARKING
*	6,054	74	LANDSCAPED
	18,294	90	Weighted Average
	6,054		33.09% Pervious Area
	12,240		66.91% Impervious Area

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

Summary for Pond 2P: EXISTING CATCH BASIN POA

Inflow Area = 0.580 ac, 76.18% Impervious, Inflow Depth > 4.23" for 25 YEAR event
Inflow = 2.89 cfs @ 12.07 hrs, Volume= 0.205 af
Outflow = 2.89 cfs @ 12.07 hrs, Volume= 0.205 af, Atten= 0%, Lag= 0.0 min
Primary = 2.89 cfs @ 12.07 hrs, Volume= 0.205 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 139.67' @ 12.07 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	136.40'	**8.0" Round Culvert** L= 20.0' Ke= 0.500 Inlet / Outlet Invert= 136.40' / 136.20' S= 0.0100 '/' Cc= 0.900 n= 0.010

Primary OutFlow Max=2.79 cfs @ 12.07 hrs HW=139.48' (Free Discharge)
└**1=Culvert** (Inlet Controls 2.79 cfs @ 7.99 fps)

Summary for Pond 4P: INFILTRATION SYSTEM

Inflow Area = 0.160 ac,100.00% Impervious, Inflow Depth > 4.78" for 25 YEAR event
Inflow = 0.85 cfs @ 12.07 hrs, Volume= 0.064 af
Outflow = 0.44 cfs @ 12.21 hrs, Volume= 0.064 af, Atten= 48%, Lag= 8.3 min
Discarded = 0.08 cfs @ 12.21 hrs, Volume= 0.049 af
Primary = 0.36 cfs @ 12.21 hrs, Volume= 0.015 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 140.42' @ 12.21 hrs Surf.Area= 286 sf Storage= 691 cf

Plug-Flow detention time= 52.0 min calculated for 0.063 af (100% of inflow)
Center-of-Mass det. time= 51.1 min (785.1 - 734.0)

Volume	Invert	Avail.Storage	Storage Description
#1	137.50'	891 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
137.50	400	0	0
139.00	150	413	413
140.00	203	177	589
141.00	400	302	891

Device	Routing	Invert	Outlet Devices
#1	Discarded	137.50'	**6.000 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 0.00'
#2	Primary	139.50'	**4.0" Round Culvert** L= 15.0' Ke= 0.500 Inlet / Outlet Invert= 139.50' / 137.25' S= 0.1500 '/' Cc= 0.900

			n= 0.010
#3	Primary	140.50'	**5.0' long x 2.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

Discarded OutFlow Max=0.08 cfs @ 12.21 hrs HW=140.41' (Free Discharge)
└─**1=Exfiltration** (Controls 0.08 cfs)

Primary OutFlow Max=0.36 cfs @ 12.21 hrs HW=140.41' (Free Discharge)
├─**2=Culvert** (Inlet Controls 0.36 cfs @ 4.16 fps)
└─**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 7P: EXISTING CATCH BASIN POA

Inflow Area =	0.580 ac, 76.04% Impervious, Inflow Depth > 3.22" for 25 YEAR event				
Inflow =	2.24 cfs @	12.09 hrs, Volume=	0.156 af		
Outflow =	2.24 cfs @	12.09 hrs, Volume=	0.156 af, Atten= 0%, Lag= 0.0 min		
Primary =	2.24 cfs @	12.09 hrs, Volume=	0.156 af		

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 138.50' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	136.40'	**8.0" Round Culvert** L= 20.0' Ke= 0.500 Inlet / Outlet Invert= 136.40' / 136.20' S= 0.0100 '/' Cc= 0.900 n= 0.010

Primary OutFlow Max=2.19 cfs @ 12.09 hrs HW=138.43' (Free Discharge)
└─**1=Culvert** (Inlet Controls 2.19 cfs @ 6.27 fps)

Summary for Subcatchment 1S: EXISTING SITE

Runoff = 0.27 cfs @ 12.08 hrs, Volume= 0.018 af, Depth> 0.37"

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

	Area (sf)	CN	Description
*	19,245	98	PAVING
*	6,019	74	LANDSCAPING
	25,264	92	Weighted Average
	6,019		23.82% Pervious Area
	19,245		76.18% Impervious Area

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

Summary for Subcatchment 3S: ROOF

Runoff = 0.14 cfs @ 12.07 hrs, Volume= 0.010 af, Depth> 0.75"

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

	Area (sf)	CN	Description
*	6,970	98	ROOF
	6,970		100.00% Impervious Area

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

Summary for Subcatchment 6S: NEW SITE

Runoff = 0.15 cfs @ 12.09 hrs, Volume= 0.010 af, Depth> 0.29"

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

	Area (sf)	CN	Description
*	12,240	98	PARKING
*	6,054	74	LANDSCAPED
	18,294	90	Weighted Average
	6,054		33.09% Pervious Area
	12,240		66.91% Impervious Area

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

Summary for Pond 2P: EXISTING CATCH BASIN POA

Inflow Area = 0.580 ac, 76.18% Impervious, Inflow Depth > 0.37" for DESIGN event
Inflow = 0.27 cfs @ 12.08 hrs, Volume= 0.018 af
Outflow = 0.27 cfs @ 12.08 hrs, Volume= 0.018 af, Atten= 0%, Lag= 0.0 min
Primary = 0.27 cfs @ 12.08 hrs, Volume= 0.018 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 136.69' @ 12.08 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	136.40'	**8.0" Round Culvert** L= 20.0' Ke= 0.500 Inlet / Outlet Invert= 136.40' / 136.20' S= 0.0100 '/' Cc= 0.900 n= 0.010

Primary OutFlow Max=0.26 cfs @ 12.08 hrs HW=136.69' (Free Discharge)
└**1=Culvert** (Barrel Controls 0.26 cfs @ 2.66 fps)

Summary for Pond 4P: INFILTRATION SYSTEM

Inflow Area = 0.160 ac,100.00% Impervious, Inflow Depth > 0.75" for DESIGN event
Inflow = 0.14 cfs @ 12.07 hrs, Volume= 0.010 af
Outflow = 0.06 cfs @ 12.30 hrs, Volume= 0.010 af, Atten= 61%, Lag= 13.5 min
Discarded = 0.06 cfs @ 12.30 hrs, Volume= 0.010 af
Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 137.67' @ 12.30 hrs Surf.Area= 372 sf Storage= 65 cf

Plug-Flow detention time= 7.9 min calculated for 0.010 af (100% of inflow)
Center-of-Mass det. time= 7.3 min (765.1 - 757.8)

Volume	Invert	Avail.Storage	Storage Description
#1	137.50'	891 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
137.50	400	0	0
139.00	150	413	413
140.00	203	177	589
141.00	400	302	891

Device	Routing	Invert	Outlet Devices
#1	Discarded	137.50'	**6.000 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 0.00'
#2	Primary	139.50'	**4.0" Round Culvert** L= 15.0' Ke= 0.500 Inlet / Outlet Invert= 139.50' / 137.25' S= 0.1500 '/' Cc= 0.900

			n= 0.010
#3	Primary	140.50'	**5.0' long x 2.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

Discarded OutFlow Max=0.06 cfs @ 12.30 hrs HW=137.67' (Free Discharge)
└─**1=Exfiltration** (Controls 0.06 cfs)

Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=137.50' (Free Discharge)
├─**2=Culvert** (Controls 0.00 cfs)
└─**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 7P: EXISTING CATCH BASIN POA

Inflow Area =	0.580 ac, 76.04% Impervious, Inflow Depth > 0.21" for DESIGN event				
Inflow =	0.15 cfs @	12.09 hrs, Volume=	0.010 af		
Outflow =	0.15 cfs @	12.09 hrs, Volume=	0.010 af,	Atten= 0%,	Lag= 0.0 min
Primary =	0.15 cfs @	12.09 hrs, Volume=	0.010 af		

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 136.61' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	136.40'	**8.0" Round Culvert** L= 20.0' Ke= 0.500 Inlet / Outlet Invert= 136.40' / 136.20' S= 0.0100 '/' Cc= 0.900 n= 0.010

Primary OutFlow Max=0.15 cfs @ 12.09 hrs HW=136.61' (Free Discharge)
└─**1=Culvert** (Inlet Controls 0.15 cfs @ 1.56 fps)

Att. C

STORMWATER DRAINAGE SYSTEM
MAINTENANCE AGREEMENT

For SUBDIVISIONS

IN CONSIDERATION OF the site plan and subdivision approval granted by the Planning Board of the City of Portland to the proposed _____Avesta Housing Development Corp. shown on the Subdivision Recording Plat (Exhibit A) recorded in Cumberland Registry of Deeds in Plan Book ____, Page ____ submitted by Pinkham & Greer, Civil Engineers, and associated Grading & Utilities Plan (Exhibit B) prepared by Pinkham & Greer, Civil Engineers of 28 Vannah Avenue, Portland ME. 04103, dated and pursuant to a condition thereof, Avesta Housing Development Corp. with a principal place of business in Portland, Maine, and having a mailing address of 307 Cumberland Avenue, Portland, ME 04101, the owner of the subject premises, does hereby agree, for itself, its successors and assigns (the "Owner"), as follows:

Maintenance Agreement

That it, its successors and assigns, will, at its own cost and expense and at all times in perpetuity, maintain in good repair and in proper working order the infiltration system and storm drainage piping, (hereinafter collectively referred to as the "stormwater system"), as shown on the Grading & Utilities Plan (C1.3) in Exhibit B and in strict compliance with the approved Inspection and Maintenance of Stormwater Management Facilities prepared for the Owner by Pinkham & Greer, Civil Engineers (Exhibit C) and Chapter 32 of the Portland City Code.

Owner of the subject premises further agrees, at its own cost, to keep a Stormwater Maintenance Log. Such log shall be made available for inspection by the City of Portland upon reasonable notice and request.

Said agreement is for the benefit of the said City of Portland and all persons in lawful possession of said premises and abutters thereto; further, that the said City of Portland and said persons in lawful possession may enforce this Agreement by an action at law or in equity in any court of competent jurisdiction; further, that after giving the Owner written notice and a stated time to perform, the said City of Portland, by its authorized agents or representatives, may, but is not obligated to, enter upon said premises to maintain, repair, or replace said stormwater system in the event of any failure or neglect thereof, the cost and expense thereof to be reimbursed in full to the said City of Portland by the Owner upon written demand. Any funds owed to the City under this paragraph shall be secured by a lien on the property.

This Agreement shall also not be construed to allow any change or deviation from the requirements of the subdivision and/or site plan most recently and formally approved by the Planning Board of the City of Portland.

This agreement shall bind the undersigned only so long as it retains any interest in said premises, and shall run with the land and be binding upon the Owner's successors and assigns as their interests may from time to time appear.

The Owner agrees to record a copy of this Agreement in the Cumberland County Registry of Deeds within thirty (30) days of final execution of this Agreement. The Owner further agrees to provide a copy of this Agreement to any successor or assign and to forward to the City an Addendum signed by any successor or assign in which the successor or assign states that the successor or assign has read the Agreement, agrees to all its terms and conditions and the successor or assign will obtain and forward to the City's Department of Public Services and Department of Planning and Urban Development a similar Addendum from any other successor or assign.

For the purpose of this agreement and release "Owner" is any person or entity who is a successor or assign and has a legal interest in part, or all, of the real estate and any building. The real estate shown by chart, block and lot number in the records on file in the City Assessor's office shall constitute "the property" that may be entered by the City and liened if the City is not paid all of its costs and charges following the mailing of a written demand for payment to the owner pursuant to the process and with the same force and effect as that established by 36 M.R.S.A. §§ 942 and 943 for real estate tax liens.

Any written notices or demands required by the agreement shall be complete on the date the notice is attached to one or more doors providing entry to any buildings and mailed by certified mail, return receipt requested or ordinary mail or both to the owner of record as shown on the tax roles on file in the City Assessor's Office.

If the property has more than one owner on the tax rolls, service shall be complete by mailing it to only the first listed owner. The failure to receive any written notice required by this agreement shall not prevent the City from entering the property and performing maintenance or repairs on the stormwater system, or any component thereof, or liening it or create a cause of action against the City.

Dated at Portland, Maine this _____ day of _____, 2015.

_____
(*name of company*)

_____
(*representative of owner, name and title*)

STATE OF MAINE
CUMBERLAND, ss.

Date: _____

Personally appeared the above-named _____(*name and title*), and acknowledged the foregoing instrument to be his free act and deed in his said capacity.

Before me,

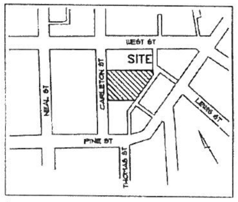
_____
Notary Public/Attorney at Law

Print name: _____

Exhibit A: Subdivision Plat as recorded

Exhibit B: Approved Grading and Drainage Plan *(name of the plan showing the Stormwater System in detail)*

Exhibit C: Approved Stormwater Maintenance and Inspection Agreement



LOCATION PLAN

SCALE: 1"=250'±

SNOW CLEARANCE NOTES

1. SNOW IS TO BE STORED WITHIN THE SNOW STORAGE AREAS.
2. SNOW MAY BE PHYSICALLY REMOVED AND TRANSPORTED OFFSITE IF NECCESSARY.
3. SNOW TRANSPORTED OFFSITE SHALL BE BROUGHT TO A MAINE DEP APPROVED "SNOW DUMP" OR MEET THE EXEMPTION REQUIREMENTS SPECIFIED WITHIN CHAPTER 573 WHEN THE ABOVE REQUIREMENTS CANNOT BE MET DUE TO AN ABUNDANCE OF SNOW.
4. THE SNOW CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO VEGETATION, LANDSCAPING, CURBING, LIGHTING, FENCING ETC. RESULTING FROM THEIR ACTIVITIES.
5. THE SNOW CONTRACTOR SHALL USE SALT OR CHLORIDE SUBSTITUTE TO DEICE THE PARKING LOT.
6. THE OWNER IS RESPONSIBLE FOR SNOW REMOVAL BEING UNDERTAKEN IN A TIMELY FASHION.

PARKING REQUIREMENTS 37 UNITS

REQUIRED:	
FIRST 3 UNITS:	0
REMAINING 34 UNITS:	34
SHARED CAR BONUS:	-8 ①
TOTAL:	26
EXPECTED AFFORDIBLE HOUSING NEEDS:	
70% OF OCCUPANTS NEED SPACES:	26
SHARED CAR BONUS:	-8 ①
TOTAL:	18
PROVIDED:	
9'x18' STANDARD SPACES:	21
8'x18' COMPACT SPACES:	3
8'x18' HANDICAP ACCESSIBLE SPACES:	7
TOTAL:	31

① AVESTA IS COMMITTED TO PROVIDING ONE SHARE CAR FOR USE BY THE RESIDENTS OF THIS PROJECT.

ZONE INFORMATION

ZONE: R-6, RESIDENTIAL
PERMITTED USE: MULTI-FAMILY DWELLING

SPACE STANDARDS	REQUIRED	PROVIDED
MINIMUM LOT SIZE	2,000 SQ. FT.	25,248 SQ. FT.
MINIMUM AREA PER DWELLING UNIT	725 SQ. FT.	685 SQ. FT. ①
MINIMUM STREET FRONTAGE	20 FEET	141.43 FEET
MINIMUM FRONT YARD	5 FEET	5 FEET
MINIMUM REAR YARD	10 FEET	65 FEET
MINIMUM SIDE YARD	10 FEET	105 FEET
MAXIMUM LOT COVERAGE	60%	28%
MINIMUM LOT WIDTH	20 FEET	141 FEET
MAXIMUM BUILDING HEIGHT	45 FEET	41 FEET
OPEN SPACE RATIO	20%	25%
OFF STREET PARKING	SEE PARKING REQUIREMENTS	
EXISTING IMPERVIOUS	--	19,248 SQ. FT.
PROPOSED IMPERVIOUS	--	19,210 SQ. FT.

① DENSITY BONUS OF 25% FOR AFFORDABLE UNITS, SECTION 14-488. TOTAL UNITS ALLOWED: 42, UNITS PROVIDED: 37

GENERAL NOTES

1. OWNER: AVESTA HOUSING DEVELOPMENT CORP., 307 CUMBERLAND AVENUE, PORTLAND MAINE 04101. DEEDS RECORDED IN CUMBERLAND COUNTY REGISTRY OF DEEDS BK. 32163, PG. 143, DATE MARCH 31, 2015.
2. ENGINEER: PINKHAM & GREER CIVIL ENGINEERS, 28 VANNAH AVENUE, PORTLAND, MAINE, 04103.
3. ARCHITECT: ARCHETYPE ARCHITECTS, 48 UNION WHARF, PORTLAND, MAINE 04101.
4. TOPOGRAPHIC AND BOUNDARY INFORMATION PROVIDED BY OWEN HASKELL, INC. 390 US ROUTE ONE, FALMOUTH, MAINE. REFERENCE IS MADE TO "TOPOGRAPHIC SURVEY AT CARLETON STREET MADE FOR AVESTA HOUSING, 307 CUMBERLAND AVENUE, PORTLAND, MAINE" DATED 4/1/15.
5. UNDERLYING SOILS MAPPING TAKEN FROM SOIL CONSERVATION STUDY OF CUMBERLAND COUNTY AND CLASSIFIED AS HINCKLEY (HLB), GENERALLY SANDY LOAM, 3-8% SLOPES, HYDROLOGICAL GROUP "A". THE SURFACE OF THE SITE IS CURRENT URBAN LAND.
6. ZONE: R-6, RESIDENTIAL, PROPOSED USE: MULTIFAMILY DWELLING
7. TAX MAP REFERENCE: MAP 55 / BLOCK A / LOT 4.
8. TOTAL PARCEL = 0.58 acres
9. UNITS TO BE SERVICED BY PUBLIC WATER, SEWER, AND GAS FROM CARLETON STREET. THESE SERVICES, INCLUDING HYDRANTS, ARE AS SHOWN ON SHEET C13, GRADING AND UTILITIES PLAN.
10. POWER, TELEPHONE AND CABLE SERVICES ARE TO BE UNDERGROUND FROM THE COMMON PASSAGE WAY. THESE SERVICES ARE SHOWN ON SHEET C13, GRADING AND UTILITIES PLAN.
11. CALL DIG-SAFE PRIOR TO COMMENCING WORK, 1-800-DIG-SAFE.
12. ALL WORK WITHIN THE PUBLIC RIGHT OF WAY SHALL MEET CITY OF PORTLAND TECHNICAL MANUAL STANDARDS.
13. PROPOSED PARKING SPACES: 32 SPACES.
14. THE SUBJECT PARCEL SHOWN AS 17 CARLETON STREET IS SUBJECT TO A CITY OF PORTLAND LEVEL III SITE PLAN AND SUBDIVISION PERMIT.
15. DETAILS OF STREET TREES ARE INCLUDED ON THE LANDSCAPE PLAN AS PART OF THE APPROVAL FOR 17 CARLETON STREET SITE PLAN.
16. FLOODPLAIN: THIS PROPERTY IS IN ZONE C OF THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL 230051 0013 B, EFFECTIVE DATE JULY 17, 1986. IT IS NOT IN A SPECIAL FLOOD HAZARD ZONE.
17. SNOW CLEARANCE REQUIREMENTS ARE AS NOTED ON THIS SHEET UNDER SNOW CLEARANCE NOTES.
18. NEW PROPERTY PINS TO BE SET AT THE EXPENSE OF THE DEVELOPER AT THE END OF CONSTRUCTION.
19. ALL CONSTRUCTION AND SITE ALTERATIONS SHALL BE DONE IN ACCORDANCE WITH THE "MAINE EROSION AND SEDIMENT CONTROL BMPS" PUBLISHED BY THE BUREAU OF LAND AND WATER QUALITY, MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, LATEST EDITION, MARCH 2003.
20. THIS APPROVAL IS DEPENDENT UPON, AND LIMITED TO, THE PROPOSALS AND PLANS CONTAINED IN THE APPLICATION AND SUPPORTING DOCUMENTS SUBMITTED AND AFFIRMED BY THE APPLICANT AND ANY VARIATION FROM THE PLANS, PROPOSALS AND SUPPORTING DOCUMENTS IS SUBJECT TO REVIEW AND APPROVAL BY THE PLANNING BOARD, EXCEPT FOR DE MINIMIS CHANGES WHICH THE DIRECTOR OF PLANNING AND ZONING MAY APPROVE.

SURVEY PLAN REFERENCES

1. PLAN OF LAND IN PORTLAND, MAINE FOR BUTLER-PAYSON CO. DATED NOVEMBER 29, 1976 REVISED THROUGH 3-13-79 BY OWEN HASKELL, INC.
2. PLAN MADE FOR JB BROWN ESTATE DATED FEB 1891 RECORDED IN PLAN BOOK 8 PAGE 73.
3. ALTA/ACSM LAND TITLE SURVEY AT #17 PINE ST., WEST ST. & CARLETON ST., PORTLAND, CUMBERLAND COUNTY, MAINE MADE FOR HALLKEEN MANAGEMENT DATED NOV. 2, 2004 BY OWEN HASKELL, INC.
4. ALTA/ACSM LAND TITLE SURVEY AT #17 PINE ST., WEST ST. & CARLETON ST., PORTLAND, CUMBERLAND COUNTY, MAINE UPDATED FOR BUTLER PAYSON COMPANY DATED MAY 26, 2010, REV. 1 07-09-11, BY OWEN HASKELL, INC.
5. ALTA/ACSM LAND TITLE SURVEY AT #17 PINE ST., WEST ST. & CARLETON ST., PORTLAND, CUMBERLAND COUNTY, MAINE UPDATED FOR AVESTA HOUSING DATED OCTOBER 11, 2011 REVISED OCTOBER 20, 2011 BY OWEN HASKELL, INC.

WAIVERS

LEGEND

EXISTING

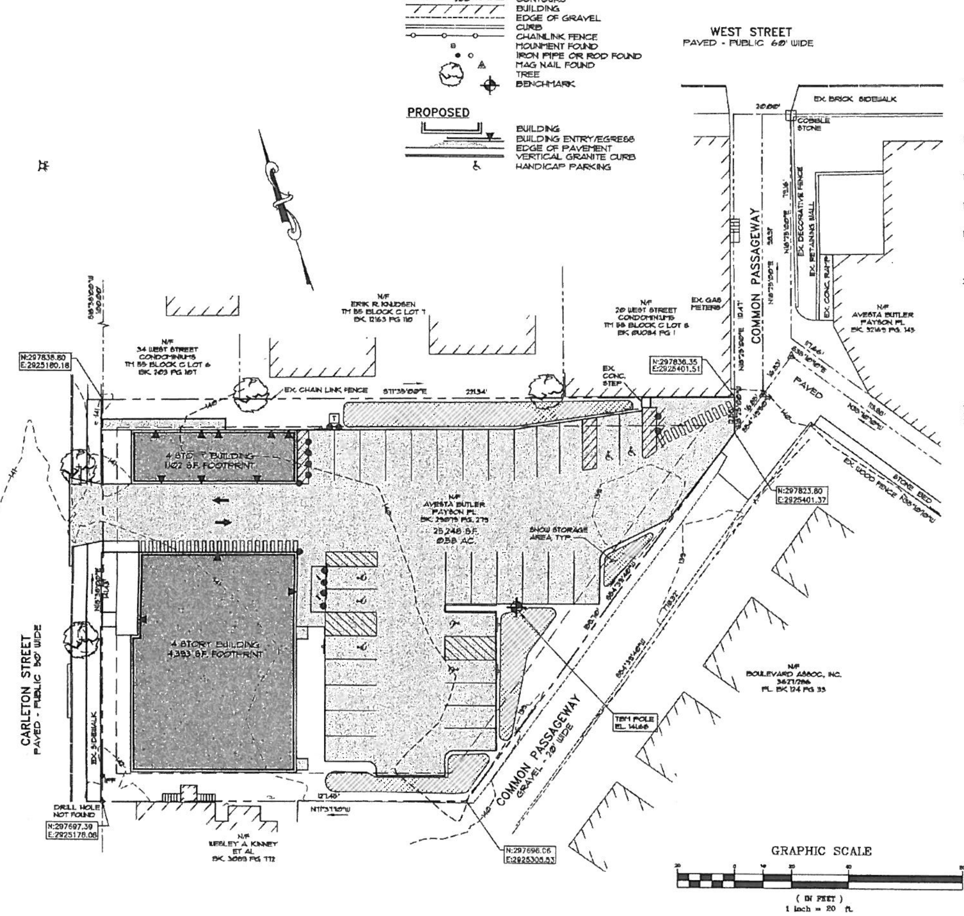
PROPERTY LINE
BUILDING SETBACK
ABUTTERS PROPERTY
EDGE OF PAVEMENT
CONTOURS
BUILDING
EDGE OF GRAVEL
CURB
CHAINLINK FENCE
MONUMENT FOUND
IRON PIPE OR ROD FOUND
MAG NAIL FOUND
TREE
BENCHMARK

PROPOSED

BUILDING
BUILDING ENTRY/EGRESS
EDGE OF PAVEMENT
VERTICAL GRANITE CURB
HANDICAP PARKING

CITY OF PORTLAND SITE PLAN AND SUBDIVISION NOTES

1. LANDSCAPING SHALL MEET THE "ARBORICULTURAL SPECIFICATIONS AND STANDARDS OF PRACTICE AND LANDSCAPE GUIDELINES" OF THE CITY OF PORTLAND TECHNICAL AND DESIGN STANDARDS AND GUIDELINES.
2. THE ENTIRE SITE SHALL BE DEVELOPED AND/OR MAINTANED AS DEPICTED ON THE SITE PLAN. APPROVAL OF THE PLANNING AUTHORITY OR PLANNING BOARD SHALL BE REQUIRED FOR ANY ALTERATION TO OR DEVIATION FROM THE APPROVED SITE PLAN, INCLUDING, WITHOUT LIMITATION: TOPOGRAPHY, DRAINAGE, LANDSCAPING, RETENTION OF WOODED OR LAWN AREAS, ACCESS, SIZE, LOCATION, AND SURFACING OF PARKING AREAS AND LOCATION AND SIZE OF BUILDINGS.
3. ALL POWERLINE UTILITIES SHALL BE UNDERGROUND.
4. SIDEWALKS AND CURBING SHALL BE DESIGNED AND BUILT WITH TIPDOWN RAMPS AT ALL STREET CORNERS, CROSSWALKS AND DRIVEWAYS IN CONFORMANCE WITH THE CITY OF PORTLAND TECHNICAL AND DESIGN STANDARDS AND GUIDELINES.
5. ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MAINE EROSION AND SEDIMENT CONTROL BMPS PUBLISHED BY THE BUREAU OF LAND AND QUALITY, MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, MARCH 2003.
6. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY SITE EXCAVATION OR REGRADING.
7. ALL DISTURBED AREAS ON THE SITE NOT COVERED BY BUILDINGS OR PAVED AREAS SHALL BE STABILIZED WITH LOAM AND SEED OR OTHER METHODS AS REQUIRED BY BEST MANAGEMENT PRACTICES (SEE ABOVE).
8. PRIOR TO CONSTRUCTION, A PRECONSTRUCTION MEETING SHALL BE HELD AT THE PROJECT SITE WITH THE CONTRACTOR, DEVELOPMENT REVIEW COORDINATOR, PUBLIC WORK'S REPRESENTATIVE AND OWNER TO REVIEW THE CONSTRUCTION SCHEDULE AND CRITICAL ASPECTS OF THE SITE WORK. AT THAT TIME, THE SITE/BUILDING CONTRACTOR SHALL PROVIDE THREE (3) COPIES OF A DETAILED CONSTRUCTION SCHEDULE TO THE ATTENDING CITY REPRESENTATIVE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE A MUTUALLY AGREEABLE TIME FOR THE PRECONSTRUCTION MEETING.
9. EXISTING VEGETATION SHALL BE CONSERVED IN AREAS SHOWN ON THIS SITE. FENCING OR OTHER PROTECTIVE BARRIERS SHALL BE ERECTED OUTSIDE THE DRIP-LINE OF INDIVIDUAL GROUPINGS OF TREES DESIGNATED FOR PRESERVATION PRIOR TO THE ONSET OF CONSTRUCTION. REGRADING SHALL NOT TAKE PLACE WITHIN THE DRIP-LINE OF TREES DESIGNATED FOR PRESERVATION. NO STORAGE OR CONSTRUCTION MATERIALS SHALL BE PERMITTED WITHIN THE DRIP-LINE OF TREES TO BE PRESERVED.
10. SUBDIVISION AT THE TIME OF APPROVAL IS DEFINED AS "SUBDIVISION SHALL MEAN THE DIVISION OF A LOT, TRACT OR PARCEL OF LAND INTO THREE (3) OR MORE LOTS, INCLUDING LOTS OF FORTY (40) ACRES OR MORE, WITHIN ANY FIVE-YEAR PERIOD WHETHER ACCOMPLISHED BY SALE, LEASE, DEVELOPMENT, BUILDINGS OR OTHERWISE AND AS FURTHER DEFINED IN 30-A MRSA, SECTION 4401. THE TERM SUBDIVISION SHALL ALSO INCLUDE THE DIVISION OF A NEW STRUCTURE OR STRUCTURES ON A TRACT OR PARCEL OF LAND INTO THREE (3) OR MORE DWELLING UNITS WITHIN A FIVE-YEAR PERIOD AND THE DIVISION OF AN EXISTING STRUCTURE OR STRUCTURES PREVIOUSLY USED FOR COMMERCIAL OR INDUSTRIAL USE INTO THREE (3) OR MORE DWELLING UNITS WITHIN A FIVE-YEAR PERIOD. THE AREA INCLUDED IN THE EXPANSION OF AN EXISTING STRUCTURE IS DEEMED TO BE A NEW STRUCTURE FOR THE PURPOSE OF THIS PARAGRAPH. A DWELLING UNIT SHALL INCLUDE ANY PART OF A STRUCTURE WHICH, THROUGH SALE OR LEASE, IS INTENDED FOR HUMAN HABITATION, INCLUDING SINGLE-FAMILY AND MULTIFAMILY HOUSING CONDOMINIUMS, TIME-SHARE UNITS AND APARTMENTS."



SUBDIVISION PLAT, APPROVED BY THE CITY OF PORTLAND PLANNING BOARD	
	DATE

SUBDIVISION CONDITIONS OF APPROVAL

1. THAT THE APPLICANT AND ALL ASSIGNS SHALL COMPLY WITH THE CONDITIONS OF CHAPTER 32 STORMWATER INCLUDING ARTICLE III, POST-CONSTRUCTION STORM WATER MANAGEMENT, WHICH SPECIFIES THE ANNUAL INSPECTIONS AND REPORTING REQUIREMENTS. THE DEVELOPER/CONTRACTOR/ SUBCONTRACTOR MUST COMPLY WITH CONDITIONS OF THE CONSTRUCTION STORMWATER MANAGEMENT PLAN AND SEDIMENT & EROSION CONTROL PLAN BASED ON CITY STANDARDS AND STATE GUIDELINES. A MAINTENANCE AGREEMENT FOR THE STORMWATER DRAINAGE SYSTEM AS DESCRIBED IN ATTACHMENT __ OF THIS REPORT, SHALL BE APPROVED BY CORPORATION COUNSEL AND DEPARTMENT OF PUBLIC SERVICES, AND SUBMITTED AND SIGNED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY WITH A COPY TO THE DEPARTMENT OF PUBLIC SERVICES.

PINKHAM & GREER CIVIL ENGINEERS
28 VANNAH AVE, PORTLAND, ME 04103
TEL: 207.781.5242 FAX: 207.781.4245

STATE OF MAINE · THOMAS S. GREER · No. 4206 · LICENSED · PROFESSIONAL ENGINEER

7/21/15

REV.	DATE	DESCRIPTION
3	7/29/15	REV'D PER STAFF REVIEW
2	6/30/15	REV'D PER STAFF REVIEW AND COMMENTS
1	5/7/15	ISSUED FOR SUBMISSION & SITE PLAN APPROVAL

AVESTA HOUSING DEVELOPMENT CORP.
307 CUMBERLAND AVENUE
PORTLAND, ME. 04101

SCALE: AS SHOWN · DRN BY: RJS/JDC
DATE: APRIL 10, 2015 · DESG BY: TSG
PROJECT: 15108 · CHK BY: TSG

17 CARLETON STREET
CARLETON STREET, PORTLAND, MAINE

SUBDIVISION RECORDING PLAT

C1.0

MAP/LOT 55/A4

LEGEND

EXISTING

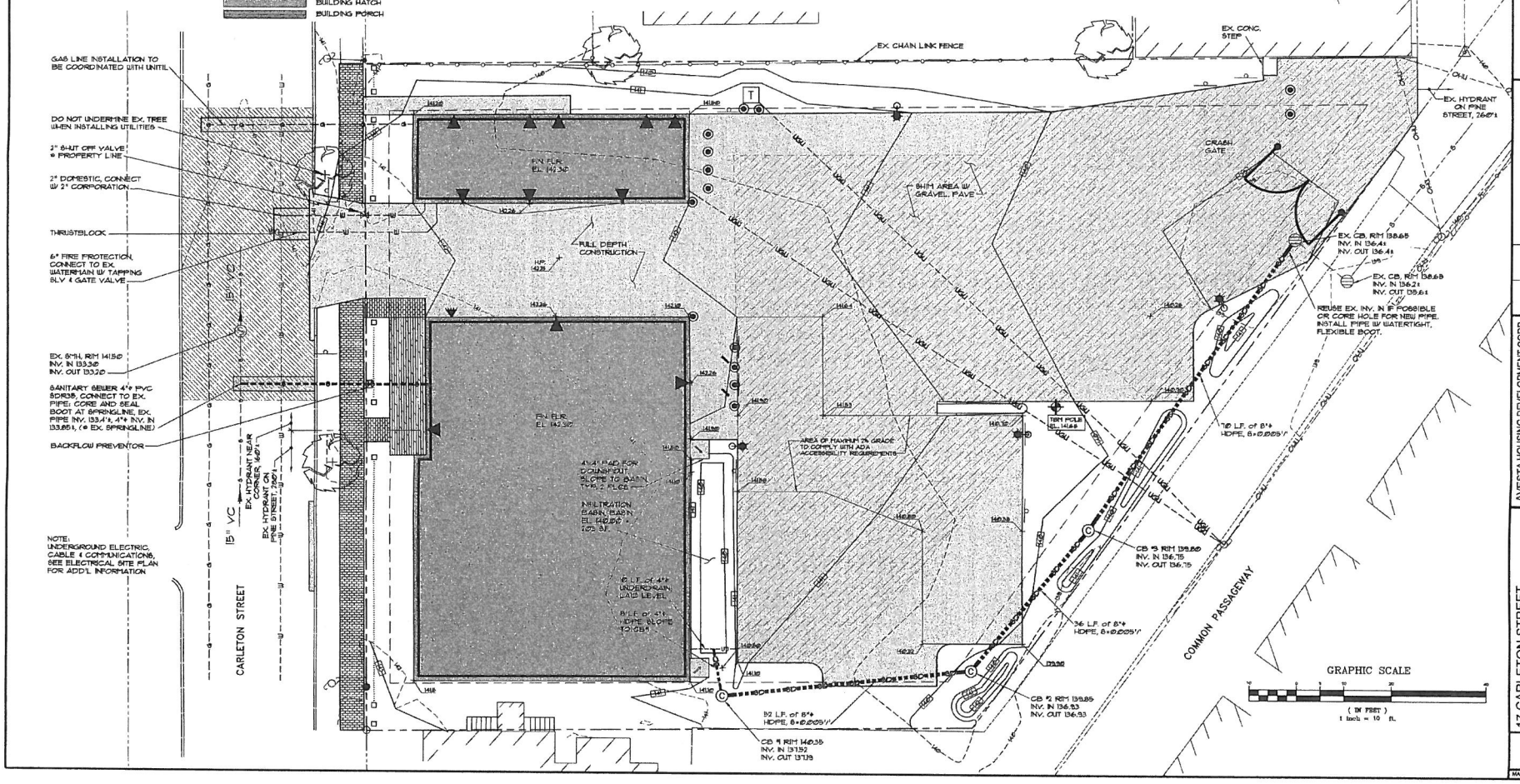
- PROPERTY LINE
- BUILDING SETBACK
- ABUTTERS PROPERTY
- EDGE OF PAVEMENT
- CONTOURS
- BUILDING
- EDGE OF GRAVEL
- CURB
- GAS LINE
- SANITARY SEWER
- STORMDRAIN
- OVERHEAD UTILITY
- UNDERGROUND COMMUNICATION CABLE
- WATER LINE
- CATCH BASIN
- DRAIN MANHOLE
- TELEPHONE MANHOLE
- SEWER MANHOLE
- UTILITY POLE
- UTILITY POLE W/ GUY WIRE
- SIGN
- CHAINLINK FENCE
- MONUMENT FOUND
- IRON PIPE OR ROD FOUND
- MAG NAIL FOUND
- HYDRANT
- GATE VALVE
- GAS VALVE
- LIGHT POLE
- TREE
- BENCHMARK

PROPOSED

- EDGE OF PAVEMENT
- VERTICAL GRANITE CURB
- CONTOURS
- BUILDING
- BUILDING ENTRY/EGRESS
- GAS LINE
- SANITARY SEWER
- STORMDRAIN
- OVERHEAD UTILITY
- UNDERGROUND UTILITY
- WATER LINE
- UNDERDRAIN
- FOUNDATION DRAIN
- SPOT GRADE
- TOP OF CURB/BOTTOM OF CURB SPOT GRADE
- FIELD INLET
- CATCH BASIN
- WATER SHUT OFF
- THRUST BLOCK
- LIGHT POLE
- WALL MOUNTED LIGHT
- UTILITY POLE
- TRANSFORMER
- BOLLARD
- SIGN
- HANDICAP PARKING
- PAINTED CROSSWALK
- FULL DEPTH BITUMINOUS PVMT
- SHIM GRAVEL & PAVE
- BRICK PAVERS
- BUILDING HATCH
- BUILDING PORCH

FIRE DEPARTMENT SITE REQUIREMENTS

1. FIRE ACCESS TO THE BACK OF THE BUILDING WILL BE OFF OF CARLETON STREET. THE OPENING UNDER THE BUILDING MUST BE 20' WIDE BY 13'9" HIGH TO PROVIDE THIS ACCESS.
2. FIRE HYDRANTS SHALL NOT BE BLOCKED OR ENCLOSED BY FENCING. A 3' FOOT CLEARANCE MUST BE KEPT AT ALL TIMES AROUND THE FIRE HYDRANT.
3. IF GATES ARE LOCKED, A PORTLAND FIRE DEPARTMENT KNOX PADLOCK MUST BE PURCHASED BY THE APPLICANT TO ALLOW ACCESS FOR THE FIRE DEPARTMENT.
4. THE CONSTRUCTION COMPANY' EMERGENCY CONTACT INFORMATION SHALL BE POSTED ON THE PROPERTY IN CASE OF AN AFTER HOURS EMERGENCY.
5. ALL CONSTRUCTION SHALL COMPLY WITH 2009 NFPA 1 CHAPTER 16 SAFEGUARDS DURING BUILDING CONSTRUCTION, ALTERATION AND DEMOLITION OPERATIONS.
6. ANY CUTTING AND WELDING DONE WILL REQUIRE A HOT WORK PERMIT FROM FIRE DEPARTMENT.



PINKHAM & GREER CIVIL ENGINEERS
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28 AMORY AVE., PORTLAND, ME 04102
TEL 207.772.2891 FAX 207.772.3627

STATE OF MAINE — THOMAS S. GREER — NO. 7828 — LICENSED PROFESSIONAL ENGINEER

7/21/15

REV	DATE	DESCRIPTION
4	7/21/15	REVD PER STAFF REVIEW
3	7/2/15	REVD INFILTRATION SYSTEM
2	6/29/15	REVD PER STAFF REVIEW AND COMMENTS
1	5/7/15	ISSUED FOR SUBDIVISION & SITE PLAN APPROVAL

AVESTA HOUSING DEVELOPMENT CORP.
307 CUMBERLAND AVENUE
PORTLAND, ME 04101

SCALE: AS SHOWN
DATE: APRIL 10, 2015
PROJECT: 13108
DRN BY: RJS/JDC
DES'D BY: TSG
CHK BY: TSG

17 CARLETON STREET
CARLETON STREET, PORTLAND, MAINE

GRADING & UTILITIES PLAN

C1.3

MAPLOT 550A4

17 Carleton Street
PORTLAND, MAINE
July 31, 2015

INSPECTION AND MAINTENANCE OF STORMWATER MANAGEMENT FACILITIES

The owner is Avesta Housing Development Corp., 307 Cumberland Avenue, Portland, Maine 04101. The owner will be responsible for the inspection and maintenance of all stormwater management facilities, the establishment of any contract services required to implement the program, and the keeping of records and maintenance log book as described herein. At a minimum, the appropriate and relevant activities for each of the stormwater management facilities should be performed on the prescribed schedule. Periodic inspection and maintenance of these site features and devices is necessary to prevent erosion and remove pollutants from stormwater runoff.

POST CONSTRUCTION MONITORING:

32-38. Post-construction stormwater management plan compliance.

Any person owning, operating, or otherwise having control over a BMP required by a post Construction stormwater management plan shall maintain the BMPs in accordance with the approved plan and shall demonstrate compliance with that plan as follows:

(a) Inspections. The owner or operator of a BMP shall hire a qualified post-construction stormwater inspector to at least annually, inspect the BMPs, including but not limited to any parking areas, catch basins, drainage swales, detention basins and ponds, pipes and related structures, in accordance with all municipal and state inspection, cleaning and maintenance requirements of the approved post-construction stormwater management plan.

(b) Maintenance and repair. If the BMP requires maintenance, repair or replacement to function as intended by the approved post-construction stormwater management plan, the owner or operator of the BMP shall take corrective action(s) to address the deficiency or deficiencies as soon as possible after the deficiency is discovered and shall provide a record of the deficiency and corrective action(s) to the department of public services (“DPS”) in the annual report.

(c) Annual report. The owner or operator of a BMP or a qualified post-construction stormwater inspector hired by that person, shall, on or by June 30 of each year, provide a completed and signed certification to DPS in a form provided by DPS, certifying that the person has inspected the BMP(s) and that they are adequately maintained and functioning as intended by the approved post-construction stormwater management plan, or that they require maintenance or repair, including the record of the deficiency and corrective action(s) taken.

(d) Filing fee. Any persons required to file and annual certification under this

section shall include with the annual certification a filing fee established by DPS to pay the administrative and technical costs of review of the annual certification.

(e) Right of entry. In order to determine compliance with this article and with the post-construction stormwater management plan, DPS may enter upon property at reasonable hours with the consent of the owner, occupant or agent to inspect the BMPs.

(Ord. No. 35-09/10, 8-17-09)

CATCH BASINS, FIELD INLETS AND DRAIN MANHOLES:

Catch Basins and field inlets are precast concrete structures with sumps and cast iron grates used to collect stormwater and trap heavy sediments. Drain Manholes are similar structures constructed with a channel instead of a sump and a solid cast iron cover instead of a grate. Drain Manholes exist at changes in direction and/or size of storm drain pipe. Catch Basins, field inlets and drain manholes provide access to the closed storm drain system for inspection and maintenance.

Throughout the winter / spring sanding period, inspect catch basins and field inlets monthly and after every significant rainfall event or period of heavy snowmelt. Clean catch basin and field inlet sumps when sediment level is within 3 inches of the outlet pipe invert. Record dates of inspections, observations and maintenance measures implemented (if any) on the forms provided and initial the entry.

Confined space entry safety procedures should be practiced when entering these structures.

DRAIN PIPES:

Drain pipes connect catch basins and field inlets. Inspect drain pipes when inspecting other stormwater maintenance facilities. At least annually make a visual inspection of the pipe. During the daylight you should be able to see light through most pipes as they have been laid to a straight line and grade. In some cases (e.g. pipe runs to a catch basin, or is blocked) you will need a light to inspect pipes.

Clean pipes as necessary. Record inspections on the forms provided noting condition of pipe and any maintenance procedures implemented.

SWALES, DITCHES AND PAVED SURFACES:

Swales, ditches and paved surfaces are easily inspected during a site walk or even a ride-by. Since visual inspection is easy, their condition should be assessed during and/or after significant rainfall events such as thundershowers and periods of heavy or extended rainfall and during periods of significant snowmelt. Any damage or unusual condition such as sedimentation of a ditch, erosion, damaged pavement or dying vegetation should be

recorded, dated and initialed by the inspector when observed. Even if there is no damage, the inspector should make record of these inspections at least twice annually.

Paved surfaces should be visually inspected monthly during the winter. The inspector should pay particular attention to the build up of ice and sand along the edge of the road and remove accumulations that block the free flow of surface runoff to the catch basins. Paved areas should be swept at least once annually. The date and initials of the inspector should be recorded on the forms provided as well as a notation of any cleanup effort that was made.

INFILTRATION BASINS:

Infiltration basins are impoundments designed to temporarily store runoff and release it at a controlled rate. The infiltration basin for 17 Carleton Street is designed to infiltrate stormwater and attenuate peak flow from the project. This basin infiltrates stormwater runoff. The basin is designed to capture and treat rain that falls on the roof of the building the from storms with frequencies of 1" and 2, 10 and 25 year events.

The basin should be inspected semi annually for erosion, destabilization of side slopes, embankment settling and other signs of structural failure, and loss of storage volume due to sediment accumulation. Corrective action should be taken immediately upon identification of problems.

The basin should be maintained to preserve their integrity as impoundment structures; including, but not necessarily limited to, vegetative maintenance (mowing, control of woody vegetation), rodent control, erosion control and repair.

Inspection and maintenance of the basin is critical to the long-term performance of the infiltration basins. In addition to the inspections and maintenance measures described above the depth of water in the infiltration basin should be monitored closely to verify the performance characteristics of the system. This is done by measuring how quickly the basin de-waters following storms and how quickly sediments build up. Sediment buildup is monitored visually. Observations and volume of sediment removed should be recorded in the inspection/maintenance log. The rate at which the basin de-waters is determined by periodically measuring and recording the water level following significant rainfall events and the time of the measurements.

The depth of water in the infiltration basin should be recorded at least twice per day following rainfalls of 2 inches or more in 24 hours throughout the construction period of the project and for one year following completion of the project. Once the performance characteristics of the infiltration basins have been verified, the monitoring schedule can be reduced. Under the reduced schedule water levels should be observed and recorded in the same manner twice per year following significant rainfall events in the spring and fall.

When the permeability of the basin is below 3 inch per hour sediment deposits should be removed from the basin. If permeability is still less than 3 inch/hour the stone is probably plugged with fines or has become compacted. In this case the basin should be excavated

and the stone and topsoil replaced.

Inspections should be documented on forms similar to those provided. The date and initials of the inspector should be recorded as well as a description of conditions and any repair effort. Following significant rainfall events the water depth and times of the measurements should also be recorded.

17 CARLETON STREET
PORTLAND, MAINE

INSPECTION / MAINTENANCE LOG

CATCH BASINS, FIELD INLETS, DRAIN MANHOLES

I: INSPECTED - C: CLEANED - R: REPAIRED

DATE	INITIALS	ACTION	COMMENT
7/31/15	ABC	I, C	EXAMPLE: Remove sand deposits and debris as necessary.

17 CARLETON STREET
PORTLAND, MAINE

INSPECTION / MAINTENANCE LOG

DRAIN PIPES

I: INSPECTED - C: CLEANED - R: REPAIRED

DATE	INITIALS	ACTION	COMMENT
7/31/15	DEF	I, C	EXAMPLE: Cleared debris from ends of pipes. Called ACME to clean debris from field inlets.

17 CARLETON STREET PORTLAND, MAINE			
INSPECTION / MAINTENANCE LOG			
SWALES, DITCHES, PAVED SURFACES			
I: INSPECTED - C: CLEANED - R: REPAIRED			
DATE	**INITIALS**	**ACTION**	**COMMENT**
7/31/15	GHI	I, C	EXAMPLE: Removed sand along the edge of the road. Heavy rain over the weekend.

17 CARLETON STREET PORTLAND, MAINE			
INSPECTION / MAINTENANCE LOG			
INFILTRATION BASIN			
I: INSPECTED - C: CLEANED - R: REPAIRED			
DATE	**INITIALS**	**ACTION**	**COMMENT**
7/31/15	GHI	I, C	EXAMPLE: Units cleaned by ACME, 2 truckloads to Pike.

STORMWATER MANAGEMENT SYSTEM MAINTENANCE PROGRAM SUMMARY CHECKLIST					
		Frequency			
Item	**Commentary**	**Month**	**Semi-Annual**	**Annual**	**Long-Term**
Open Swale, Ditches & Inlet Structures	nspect for debris accumulation, erosion and excessive vegetation. Mow monthly, remove debris, repair and revegetate any area of erosion	**X Mow**		**X**	
Pavement	Review for damage and buildup of debris and sand.	**X**	**X Sweep**		
Catchbasin and Drain Manholes	I Inspect grates to assure optimum water flows into the structures. Inspect sump and casco traps for blockage and sediment accumulation. Clean out sumps.	**X Inspect**		**X Sediment removal**	
Pipelines	Inspect for sediment build-up in pipe. Flush and remove as required.			**X**	
Infiltration System	Mow twice per year. Inspect for erosion.		**X**		

HOUSEKEEPNG REPORT

17 CARLETON STREET
PORTLAND, MAINE
July 31, 2015

Housekeeping:

This project is located in an residential zone. Protection of the groundwater and surface water quality is ensured by having good housekeeping practices and maintenance of the stormwater systems. Spill prevention must be incorporated into the plan. The facility should follow the following steps:

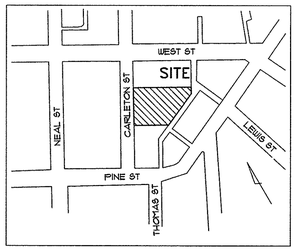
1. Identify any products that if spilled will create contamination of the groundwater.
2. Maintain a list of the materials and keep the MSDS sheets available to all employees.
3. If petroleum products are stored on site, keep absorbent pads available for use in clean up.
4. Post the names and contract information for the employee responsible for environmental matters and the names and contact information of companies to be called in the event of a spill.
5. As part of employee training, inform employees of the procedures for response to environmental matters.
6. No refueling of equipment and vehicles should occur on site.

The maintenance of the landscaping and parking lots should include the sweeping of the parking lots and removal of the materials that may cause dust.

During construction follow the erosion control measures outlined on the plans.

During construction, develop a waste handling program that identified potential contaminates that could be introduced to the environment. Follow hazardous waste rules if any items used are considered a hazardous waste. It is critical to the site that uncontrolled releases be prevented.

This site will not require dewatering of trenches. During construction, monitor stormwater runoff from the equipment and ground areas to minimize contamination of groundwater.



LOCATION PLAN

SCALE: 1"=250'±

SNOW CLEARANCE NOTES

1. SNOW IS TO BE STORED WITHIN THE SNOW STORAGE AREAS.
2. SNOW MAY BE PHYSICALLY REMOVED AND TRANSPORTED OFFSITE IF NECCESSARY.
3. SNOW TRANSPORTED OFFSITE SHALL BE BROUGHT TO A MAINE DEP APPROVED "SNOW DUMP" OR MEET THE EXEMPTION REQUIREMENTS SPECIFIED WITHIN CHAPTER 573 WHEN THE ABOVE REQUIREMENTS CANNOT BE MET DUE TO AN ABUNDANCE OF SNOW.
4. THE SNOW CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO VEGETATION, LANDSCAPING, CURBING, LIGHTING, FENCING ETC. RESULTING FROM THEIR ACTIVITIES.
5. THE SNOW CONTRACTOR SHALL USE SALT OR CHLORIDE SUBSTITUTE TO DEICE THE PARKING LOT.
6. THE OWNER IS RESPONSIBLE FOR SNOW REMOVAL BEING UNDERTAKEN IN A TIMELY FASHION.

PARKING REQUIREMENTS 37 UNITS

REQUIRED:

FIRST 3 UNITS:	0
REMAINING 34 UNITS:	34
SHARED CAR BONUS:	-8 ①
TOTAL:	26

EXPECTED AFFORDIBLE HOUSING NEEDS:

70% OF OCCUPANTS NEED SPACES:	26
SHARED CAR BONUS:	-8 ①
TOTAL:	18

PROVIDED:

9'x18' STANDARD SPACES:	21
8'x18' COMPACT SPACES:	3
8'x18' HANDICAP ACCESSIBLE SPACES:	7
TOTAL:	31

① AVESTA IS COMMITTED TO PROVIDING ONE SHARE CAR FOR USE BY THE RESIDENTS OF THIS PROJECT.

ZONE INFORMATION

ZONE: R-6, RESIDENTIAL
PERMITTED USE: MULTI-FAMILY DWELLING

SPACE STANDARDS	REQUIRED	PROVIDED
MINIMUM LOT SIZE	2,000 SQ. FT.	25,248 SQ. FT.
MINIMUM AREA PER DWELLING UNIT	725 SQ. FT.	685 SQ. FT.①
MINIMUM STREET FRONTAGE	20 FEET	141.43 FEET
MINIMUM FRONT YARD	5 FEET	5 FEET
MINIMUM REAR YARD	10 FEET	65 FEET
MINIMUM SIDE YARD	10 FEET	10.5 FEET
MAXIMUM LOT COVERAGE	60%	28%
MINIMUM LOT WIDTH	20 FEET	141 FEET
MAXIMUM BUILDING HEIGHT	45 FEET	41 FEET
OPEN SPACE RATIO	20%	25%
OFF STREET PARKING	SEE PARKING REQUIREMENTS	
EXISTING IMPERVIOUS	--	19,245 SQ. FT.
PROPOSED IMPERVIOUS	--	19,210 SQ. FT.

① DENSITY BONUS OF 25% FOR AFFORDABLE UNITS, SECTION 14-488.
TOTAL UNITS ALLOWED: 42, UNITS PROVIDED: 37

GENERAL NOTES

1. OWNER: AVESTA HOUSING DEVELOPMENT CORP., 307 CUMBERLAND AVENUE, PORTLAND MAINE 04101. DEEDS RECORDED IN CUMBERLAND COUNTY REGISTRY OF DEEDS BK. 32169, PG. 143, DATE MARCH 31, 2015.
2. ENGINEER: PINKHAM & GREER CIVIL ENGINEERS, 28 VANNAH AVENUE, PORTLAND, MAINE, 04103.
3. ARCHITECT: ARCHETYPE ARCHITECTS, 48 UNION WHARF, PORTLAND, MAINE 04101.
4. TOPOGRAPHIC AND BOUNDARY INFORMATION PROVIDED BY OWEN HASKELL, INC. 390 US ROUTE ONE, FALMOUTH, MAINE. REFERENCE IS MADE TO "TOPOGRAPHIC SURVEY AT CARLETON STREET MADE FOR AVESTA HOUSING, 307 CUMBERLAND AVENUE, PORTLAND, MAINE" DATED 4/7/15.
5. UNDERLYING SOILS MAPPING TAKEN FROM SOIL CONSERVATION STUDY OF CUMBERLAND COUNTY AND CLASSIFIED AS HINCKLEY (HLB.) GENERALLY SANDY LOAM, 3-8% SLOPES, HYDROLOGICAL GROUP "A". THE SURFACE OF THE SITE IS CURRENT URBAN LAND.
6. ZONE: R-6, RESIDENTIAL, PROPOSED USE: MULTIFAMILY DWELLING
7. TAX MAP REFERENCE: MAP 55 / BLOCK A / LOT 4.
8. TOTAL PARCEL = 0.58 acres
9. UNITS TO BE SERVICED BY PUBLIC WATER, SEWER, AND GAS FROM CARLETON STREET. THESE SERVICES, INCLUDING HYDRANTS, ARE AS SHOWN ON SHEET C1.3, GRADING AND UTILITIES PLAN.
10. POWER, TELEPHONE AND CABLE SERVICES ARE TO BE UNDERGROUND FROM THE COMMON PASSAGE WAY. THESE SERVICES ARE SHOWN ON SHEET C1.3, GRADING AND UTILITIES PLAN.
11. CALL DIG-SAFE PRIOR TO COMMENCING WORK, 1-800-DIG-SAFE.
12. ALL WORK WITHIN THE PUBLIC RIGHT OF WAY SHALL MEET CITY OF PORTLAND TECHNICAL MANUAL STANDARDS.
13. PROPOSED PARKING SPACES: 32 SPACES.
14. THE SUBJECT PARCEL SHOWN AS 17 CARLETON STREET IS SUBJECT TO A CITY OF PORTLAND LEVEL III SITE PLAN AND SUBDIVISION PERMIT.
15. DETAILS OF STREET TREES ARE INCLUDED ON THE LANDSCAPE PLAN AS PART OF THE APPROVAL FOR 17 CARLETON STREET SITE PLAN.
16. FLOODPLAIN: THIS PROPERTY IS IN ZONE C OF THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL 230051 0013 B, EFFECTIVE DATE JULY 17, 1986. IT IS NOT IN A SPECIAL FLOOD HAZARD ZONE.
17. SNOW CLEARANCE REQUIREMENTS ARE AS NOTED ON THIS SHEET UNDER SNOW CLEARANCE NOTES.
18. NEW PROPERTY PINS TO BE SET AT THE EXPENSE OF THE DEVELOPER AT THE END OF CONSTRUCTION.
19. ALL CONSTRUCTION AND SITE ALTERATIONS SHALL BE DONE IN ACCORDANCE WITH THE "MAINE EROSION AND SEDIMENT CONTROL BMPS" PUBLISHED BY THE BUREAU OF LAND AND WATER QUALITY, MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, LATEST EDITION, MARCH 2003.
20. THIS APPROVAL IS DEPENDENT UPON, AND LIMITED TO, THE PROPOSALS AND PLANS CONTAINED IN THE APPLICATION AND SUPPORTING DOCUMENTS SUBMITTED AND AFFIRMED BY THE APPLICANT AND ANY VARIATION FROM THE PLANS, PROPOSALS AND SUPPORTING DOCUMENTS IS SUBJECT TO REVIEW AND APPROVAL BY THE PLANNING BOARD, EXCEPT FOR DE MINIMIS CHANGES WHICH THE DIRECTOR OF PLANNING AND ZONING MAY APPROVE.

Plan 1

SURVEY PLAN REFERENCES

1. PLAN OF LAND IN PORTLAND, MAINE FOR BUTLER-PAYSON CO. DATED NOVEMBER 29, 1976 REVISED THROUGH 3-13-79 BY OWEN HASKELL, INC.
2. PLAN MADE FOR JB BROWN ESTATE DATED FEB 1897 RECORDED IN PLAN BOOK 8 PAGE 79.
3. ALTA/ACSM LAND TITLE SURVEY AT #77 PINE ST., WEST ST. & CARLETON ST., PORTLAND, CUMBERLAND COUNTY, MAINE MADE FOR HALLKEEN MANAGEMENT DATED NOV. 2, 2004 BY OWEN HASKELL, INC.
4. ALTA/ACSM LAND TITLE SURVEY AT #77 PINE ST., WEST ST. & CARLETON ST., PORTLAND, CUMBERLAND COUNTY, MAINE UPDATED FOR BUTLER PAYSON COMPANY DATED MAY 26, 2010, REV. 1 07-09-11, BY OWEN HASKELL, INC.
5. ALTA/ACSM LAND TITLE SURVEY AT #77 PINE ST., WEST ST. & CARLETON ST., PORTLAND, CUMBERLAND COUNTY, MAINE UPDATED FOR AVESTA HOUSING DATED OCTOBER 11, 2011 REVISED OCTOBER 20, 2011 BY OWEN HASKELL, INC.

CITY OF PORTLAND SITE PLAN AND SUBDIVISION NOTES

1. LANDSCAPING SHALL MEET THE "ARBORICULTURAL SPECIFICATIONS AND STANDARDS OF PRACTICE AND LANDSCAPE GUIDELINES" OF THE CITY OF PORTLAND TECHNICAL AND DESIGN STANDARDS AND GUIDELINES.
2. THE ENTIRE SITE SHALL BE DEVELOPED AND/OR MAINTAINED AS DEPICTED ON THE SITE PLAN. APPROVAL OF THE PLANNING AUTHORITY OR PLANNING BOARD SHALL BE REQUIRED FOR ANY ALTERATION TO OR DEVIATION FROM THE APPROVED SITE PLAN, INCLUDING, WITHOUT LIMITATION: TOPOGRAPHY, DRAINAGE, LANDSCAPING, RETENTION OF WOODED OR LAWN AREAS, ACCESS, SIZE, LOCATION, AND SURFACING OF PARKING AREAS AND LOCATION AND SIZE OF BUILDINGS.
3. ALL POWERLINE UTILITIES SHALL BE UNDERGROUND.
4. SIDEWALKS AND CURBING SHALL BE DESIGNED AND BUILT WITH TIPDOWN RAMPS AT ALL STREET CORNERS, CROSSWALKS AND DRIVEWAYS IN CONFORMANCE WITH THE CITY OF PORTLAND TECHNICAL AND DESIGN STANDARDS AND GUIDELINES.
5. ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MAINE EROSION AND SEDIMENT CONTROL BMPS PUBLISHED BY THE BUREAU OF LAND AND QUALITY, MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, MARCH 2003.
6. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY SITE EXCAVATION OR REGRADING.
7. ALL DISTURBED AREAS ON THE SITE NOT COVERED BY BUILDINGS OR PAVED AREAS SHALL BE STABILIZED WITH LOAM AND SEED OR OTHER METHODS AS REQUIRED BY BEST MANAGEMENT PRACTICES (SEE ABOVE).
8. PRIOR TO CONSTRUCTION, A PRECONSTRUCTION MEETING SHALL BE HELD AT THE PROJECT SITE WITH THE CONTRACTOR, DEVELOPMENT REVIEW COORDINATOR, PUBLIC WORK'S REPRESENTATIVE AND OWNER TO REVIEW THE CONSTRUCTION SCHEDULE AND CRITICAL ASPECTS OF THE SITE WORK. AT THAT TIME, THE SITE/BUILDING CONTRACTOR SHALL PROVIDE THREE (3) COPIES OF A DETAILED CONSTRUCTION SCHEDULE TO THE ATTENDING CITY REPRESENTATIVE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE A MUTUALLY AGREEABLE TIME FOR THE PRECONSTRUCTION MEETING.
9. EXISTING VEGETATION SHALL BE CONSERVED IN AREAS SHOWN ON THIS SITE. FENCING OR OTHER PROTECTIVE BARRIERS SHALL BE ERECTED OUTSIDE THE DRIP-LINE OF INDIVIDUAL, GROUPINGS OF TREES DESIGNATED FOR PRESERVATION PRIOR TO THE ONSET OF CONSTRUCTION. REGRADING SHALL NOT TAKE PLACE WITHIN THE DRIP-LINE OF TREES DESIGNATED FOR PRESERVATION. NO STORAGE OR CONSTRUCTION MATERIALS SHALL BE PERMITTED WITHIN THE DRIP-LINE OF TREES TO BE PRESERVED.
10. SUBDIVISION AT THE TIME OF APPROVAL IS DEFINED AS "SUBDIVISION SHALL MEAN THE DIVISION OF A LOT, TRACT OR PARCEL OF LAND INTO THREE (3) OR MORE LOTS, INCLUDING LOTS OF FORTY (40) ACRES OR MORE, WITHIN ANY FIVE-YEAR PERIOD WHETHER ACCOMPLISHED BY SALE, LEASE, DEVELOPMENT, BUILDINGS OR OTHERWISE AND AS FURTHER DEFINED IN 30-A M.R.S.A. SECTION 4401. THE TERM SUBDIVISION SHALL ALSO INCLUDE THE DIVISION OF A NEW STRUCTURE OR STRUCTURES ON A TRACT OR PARCEL OF LAND INTO THREE (3) OR MORE DWELLING UNITS WITHIN A FIVE-YEAR PERIOD AND THE DIVISION OF AN EXISTING STRUCTURE OR STRUCTURES PREVIOUSLY USED FOR COMMERCIAL OR INDUSTRIAL USE INTO THREE (3) OR MORE DWELLING UNITS WITHIN A FIVE-YEAR PERIOD. THE AREA INCLUDED IN THE EXPANSION OF AN EXISTING STRUCTURE IS DEEMED TO BE A NEW STRUCTURE FOR THE PURPOSE OF THIS PARAGRAPH. A DWELLING UNIT SHALL INCLUDE ANY PART OF A STRUCTURE WHICH, THROUGH SALE OR LEASE, IS INTENDED FOR HUMAN HABITATION, INCLUDING SINGLE-FAMILY AND MULTIFAMILY HOUSING CONDOMINIUMS, TIME-SHARE UNITS AND APARTMENTS."

WAIVERS

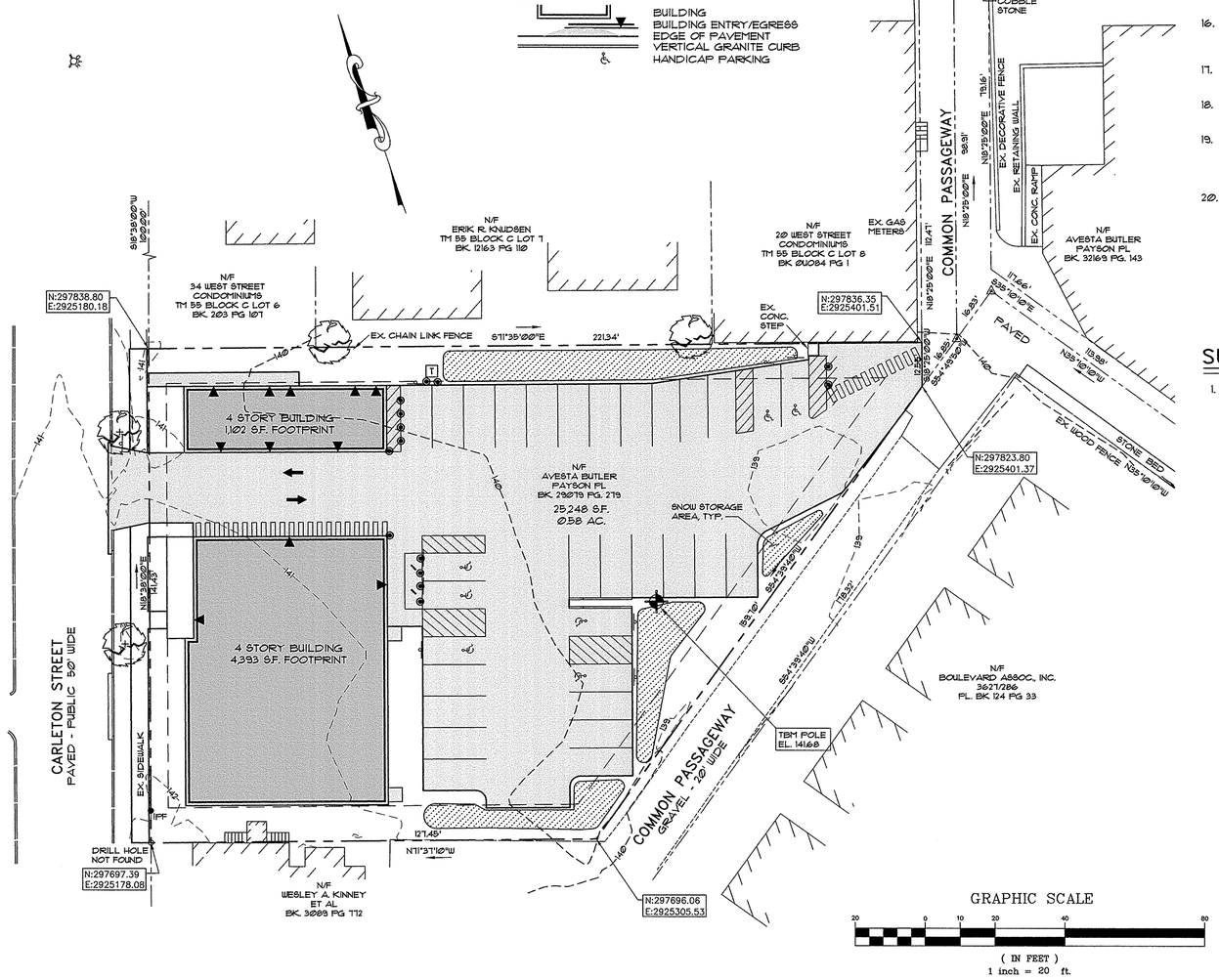
LEGEND

EXISTING

- PROPERTY LINE
- BUILDING SETBACK
- ABUTTERS PROPERTY
- EDGE OF PAVEMENT
- 200 CONTOURS
- BUILDING
- EDGE OF GRAVEL
- CURB
- CHAINLINK FENCE
- MONUMENT FOUND
- IRON PIPE OR ROD FOUND
- MAG NAIL FOUND
- TREE
- BENCHMARK

PROPOSED

- BUILDING
- BUILDING ENTRY/EGRESS
- EDGE OF PAVEMENT
- VERTICAL GRANITE CURB
- HANDICAP PARKING



SUBDIVISION CONDITIONS OF APPROVAL

1. THAT THE APPLICANT AND ALL ASSIGNS SHALL COMPLY WITH THE CONDITIONS OF CHAPTER 32 STORMWATER INCLUDING ARTICLE III, POST-CONSTRUCTION STORM WATER MANAGEMENT, WHICH SPECIFIES THE ANNUAL INSPECTIONS AND REPORTING REQUIREMENTS. THE DEVELOPER/CONTRACTOR/ SUBCONTRACTOR MUST COMPLY WITH CONDITIONS OF THE CONSTRUCTION STORMWATER MANAGEMENT PLAN AND SEDIMENT & EROSION CONTROL PLAN BASED ON CITY STANDARDS AND STATE GUIDELINES. A MAINTENANCE AGREEMENT FOR THE STORMWATER DRAINAGE SYSTEM AS DESCRIBED IN ATTACHMENT ___ OF THIS REPORT, SHALL BE APPROVED BY CORPORATION COUNSEL AND DEPARTMENT OF PUBLIC SERVICES, AND SUBMITTED AND SIGNED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY WITH A COPY TO THE DEPARTMENT OF PUBLIC SERVICES.

SUBDIVISION PLAT, APPROVED BY THE CITY OF PORTLAND PLANNING BOARD

_____ DATE

PINKHAM & GREER CIVIL ENGINEERS
28 VANNAH AVE, PORTLAND, ME. 04103
TEL: 207.781.5242 FAX: 207.781.4245

STATE OF MAINE THOMAS S. GREER No. 4268 LICENSED PROFESSIONAL ENGINEER 7/21/15

REV.	DATE	DESCRIPTION
3	7/28/15	REV'D PER STAFF REVIEW
2	6/30/15	REV'D PER STAFF REVIEW AND COMMENTS
1	5/7/15	ISSUED FOR SUBDIVISION & SITE PLAN APPROVAL

AVESTA HOUSING DEVELOPMENT CORP.
307 CUMBERLAND AVENUE
PORTLAND, ME. 04101

SCALE: AS SHOWN
DATE: APRIL 10, 2015
PROJECT: 15108
DRN BY: RJS/JDC
DESG BY: TSG
CHK BY: TSG

17 CARLETON STREET
CARLETON STREET, PORTLAND, MAINE

SUBDIVISION RECORDING PLAT

C1.0

MAP/LOT 55/A/4

CITY OF PORTLAND
SITE PLAN AND SUBDIVISION NOTES

1. LANDSCAPING SHALL MEET THE "ARBORICULTURAL SPECIFICATIONS AND STANDARDS OF PRACTICE AND LANDSCAPE GUIDELINES" OF THE CITY OF PORTLAND TECHNICAL AND DESIGN STANDARDS AND GUIDELINES.

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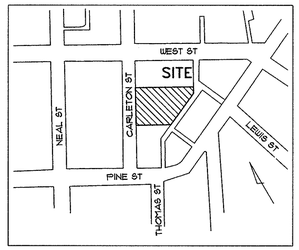

LOCATION PLAN

SCALE: 1"=250'±

PROJECT DRAWINGS

C1.0	SUBDIVISION RECORDING PLAT
C1.1	SITE PLAN
C1.2	EXISTING CONDITIONS AND DEMOLITION PLAN
C1.3	GRADING AND UTILITIES PLAN
C1.4	EROSION CONTROL AND LANDSCAPE PLAN
C2.1	DETAILS
C2.2	DETAILS
C2.3	DETAILS
C2.4	DETAILS
A0.1	BUILDING RENDERINGS
A1.2	BUILDING FLOOR PLANS
A2.1	BUILDING ELEVATIONS
1	ALTA/ACSM LAND TITLE SURVEY

ZONE INFORMATION

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① DENSITY BONUS OF 25% FOR AFFORDABLE UNITS, SECTION 14-488.
TOTAL UNITS ALLOWED: 42, UNITS PROVIDED: 37

GENERAL NOTES

Plan 2

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2. ENGINEER: PINKHAM & GREER CIVIL ENGINEERS, 28 VANNAH AVENUE, PORTLAND, MAINE, 04103.

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11. CALL DIG-SAFE PRIOR TO COMMENCING WORK, 1-800-DIG-SAFE.

12. ALL WORK WITHIN THE PUBLIC RIGHT OF WAY SHALL MEET CITY OF PORTLAND TECHNICAL MANUAL STANDARDS.

13. PROPOSED PARKING SPACES: 32 SPACES.

14. THE SUBJECT PARCEL SHOWN AS 17 CARLETON STREET IS SUBJECT TO A CITY OF PORTLAND LEVEL III SITE PLAN AND SUBDIVISION PERMIT.

15. DETAILS OF STREET TREES ARE INCLUDED ON THE LANDSCAPE PLAN AS PART OF THE APPROVAL FOR 17 CARLETON STREET SITE PLAN.

16. FLOODPLAIN: THIS PROPERTY IS IN ZONE C OF THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL 230051 0013 B, EFFECTIVE DATE JULY 17, 1986. IT IS NOT IN A SPECIAL FLOOD HAZARD ZONE.

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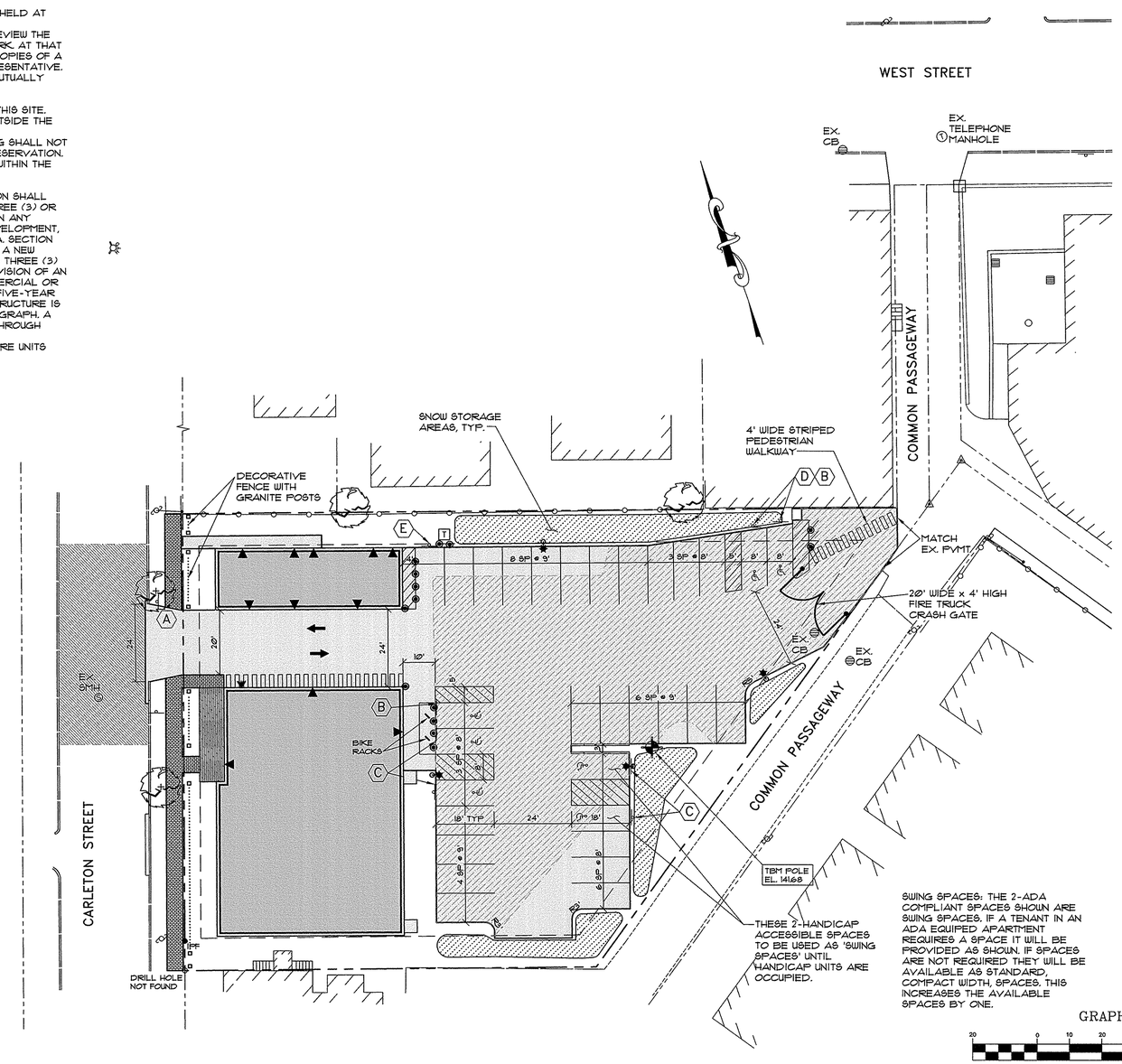
LEGEND

EXISTING

- PROPERTY LINE
- BUILDING SETBACK
- ABUTTERS PROPERTY
- EDGE OF PAVEMENT
- 200 CONTOURS
- BUILDING
- EDGE OF GRAVEL
- CURB
- G GAS LINE
- S SANITARY SEWER
- SD STORMDRAIN
- OHU OVERHEAD UTILITY
- UCC UNDERGROUND COMMUNICATION CABLE
- W WATER LINE
- CATCH BASIN
- DRAIN MANHOLE
- TELEPHONE MANHOLE
- SEWER MANHOLE
- UTILITY POLE
- UTILITY POLE W/ GUY WIRE
- SIGN
- CHAINLINK FENCE
- MOUNMENT FOUND
- IRON PIPE OR ROD FOUND
- MAG NAIL FOUND
- HYDRANT
- GATE VALVE
- GAS VALVE
- LIGHT POLE
- TREE
- BENCHMARK

PROPOSED

- EDGE OF PAVEMENT
- VERTICAL GRANITE CURB
- BUILDING
- BUILDING ENTRY/EGRESS
- CATCH BASIN
- DRAIN MANHOLE
- SANITARY MANHOLE
- WATER SHUT OFF
- LIGHT POLE
- WALL MOUNTED LIGHT
- TRANSFORMER
- BOLLARD
- SIGN
- HANDICAP PARKING
- PAINTED CROSSWALK
- BITUMINOUS PAVEMENT
- SHIM GRAVEL & PAVE
- BRICK PAVERS
- BUILDING HATCH
- BUILDING PORCH
- SNOW STORAGE AREAS



SWING SPACES: THE 2-ADA COMPLIANT SPACES SHOWN ARE SWING SPACES. IF A TENANT IN AN ADA EQUIPED APARTMENT REQUIRES A SPACE IT WILL BE PROVIDED AS SHOWN. IF SPACES ARE NOT REQUIRED THEY WILL BE AVAILABLE AS STANDARD, COMPACT WIDTH, SPACES. THIS INCREASES THE AVAILABLE SPACES BY ONE.

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

SITE PLAN, APPROVED BY THE CITY OF PORTLAND PLANNING BOARD

DATE

PINKHAM & GREER CIVIL ENGINEERS
28 VANNAH AVE. PORTLAND, ME. 04103
TEL: 207.781.5242 FAX: 207.781.4245

STATE OF MAINE THOMAS S. GREER No. 4285 LICENSED PROFESSIONAL ENGINEER

7/29/15

REV.	DATE	DESCRIPTION
3	7/29/15	REV'D PER STAFF REVIEW
2	6/30/15	REV'D PER STAFF REVIEW AND COMMENTS
1	5/7/15	ISSUED FOR SUBDIVISION & SITE PLAN APPROVAL

AVESTA HOUSING DEVELOPMENT CORP.
307 CUMBERLAND AVENUE
PORTLAND, ME. 04101

SCALE: AS SHOWN
DATE: APRIL 10, 2015
PROJECT: 15108
DRN BY: RJS/JDC
DESG BY: TSG
CHK BY: TSG

17 CARLETON STREET
CARLETON STREET, PORTLAND, MAINE

SITE PLAN

C1.1

MAP/LOT 55/A/4

Plan 3

LEGEND

EXISTING

- PROPERTY LINE
- BUILDING SETBACK
- ABUTTERS PROPERTY
- EDGE OF PAVEMENT
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- CURB
- G GAS LINE
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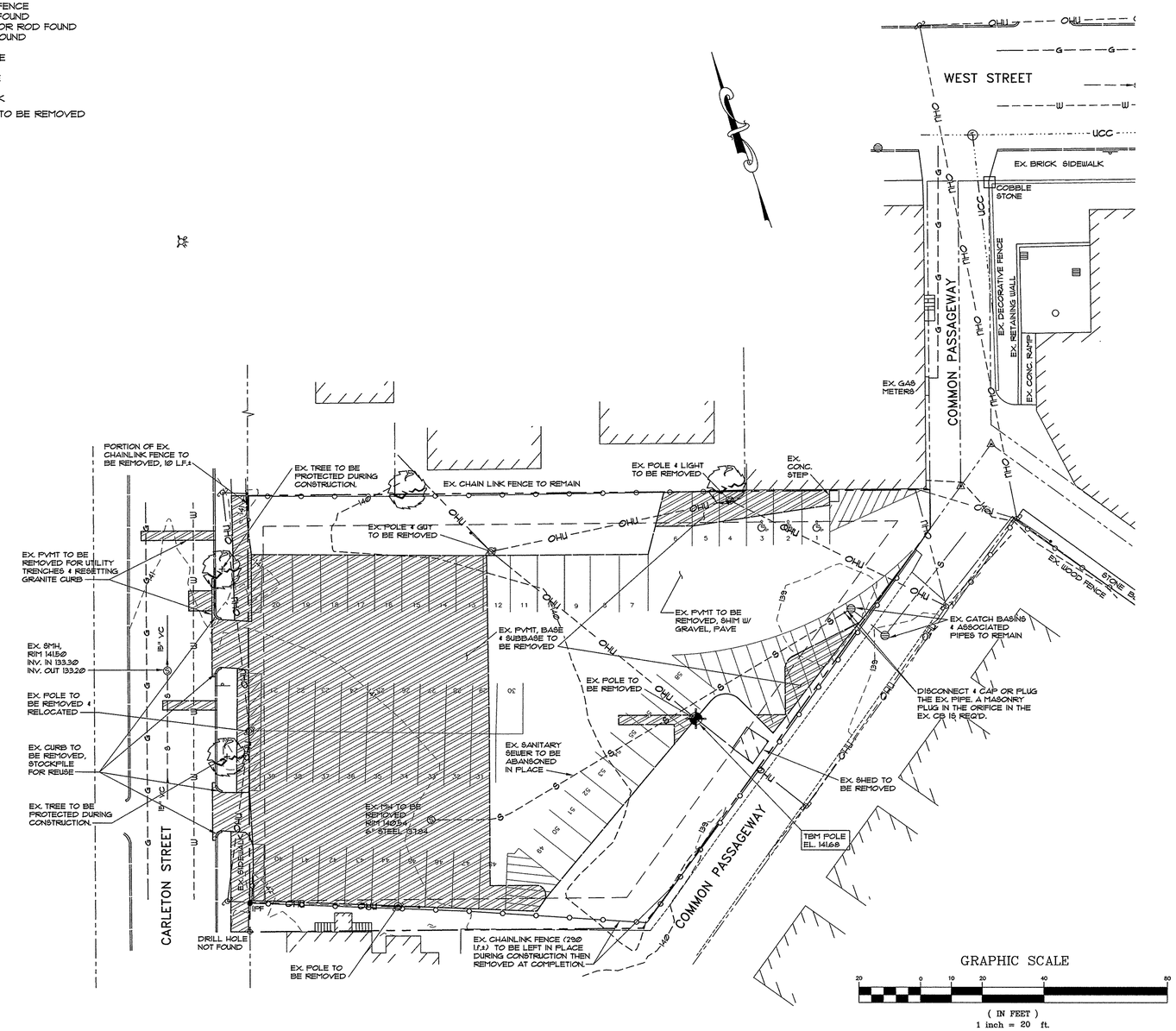
- UTILITY POLE
- UTILITY POLE W/ GUY WIRE
- SIGN
- CHAINLINK FENCE
- MOUNMENT FOUND
- IRON PIPE OR ROD FOUND
- MAG NAIL FOUND
- HYDRANT
- GATE VALVE
- GAS VALVE
- LIGHT POLE
- TREE
- BENCHMARK
- PAVEMENT TO BE REMOVED



DEMOLITION NOTES

1. ANY UNUSED SERVICE LINES ARE TO BE PROPERLY REMOVED TO THE MAIN. CAP EACH IN ACCORDANCE WITH THE APPROPRIATE UTILITY REQUIREMENTS.
2. NOTIFY THE CITY OF PORTLAND ARBORIST TO APPROVE TREE PROTECTION MEASURES OF THE EXISTING TREES.
3. COORDINATE WITH THE ELECTRICAL CONSULTANT PLANS TO MAINTAIN SERVICES TO ADJACENT BUILDINGS.

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STATE OF MAINE THOMAS S. GREER No. 4206 LICENSED PROFESSIONAL ENGINEER

7/21/15

REV.	DATE	DESCRIPTION
3	7/29/15	REV'D PER STAFF REVIEW
2	6/30/15	REV'D PER STAFF REVIEW AND COMMENTS
1	5/7/15	ISSUED FOR SUBDIVISION & SITE PLAN APPROVAL

AVESTA HOUSING DEVELOPMENT CORP.
307 CUMBERLAND AVENUE
PORTLAND, ME. 04101

SCALE: AS SHOWN
DATE: APRIL 10, 2015
PROJECT: 15108
DRN BY: RJS/JDC
DESG BY: TSG
CHK BY: TSG

17 CARLETON STREET
CARLETON STREET, PORTLAND, MAINE

EXISTING CONDITIONS AND DEMOLITION PLAN

C1.2

MAP/LOT 55/A/4

LEGEND

EXISTING

- PROPERTY LINE
- BUILDING SETBACK
- ABUTTERS PROPERTY
- EDGE OF PAVEMENT
- 200 CONTOURS
- BUILDING
- EDGE OF GRAVEL
- CURB
- G GAS LINE
- S SANITARY SEWER
- SD STORMDRAIN
- OHU OVERHEAD UTILITY
- UCC UNDERGROUND COMMUNICATION CABLE
- W WATER LINE
- CATCH BASIN
- DRAIN MANHOLE
- TELEPHONE MANHOLE
- SEWER MANHOLE
- UTILITY POLE
- UTILITY POLE W/ GUY WIRE
- SIGN
- CHAINLINK FENCE
- MOUNMENT FOUND
- IRON PIPE OR ROD FOUND
- MAG NAIL FOUND
- HYDRANT
- GATE VALVE
- GAS VALVE
- LIGHT POLE
- TREE
- BENCHMARK

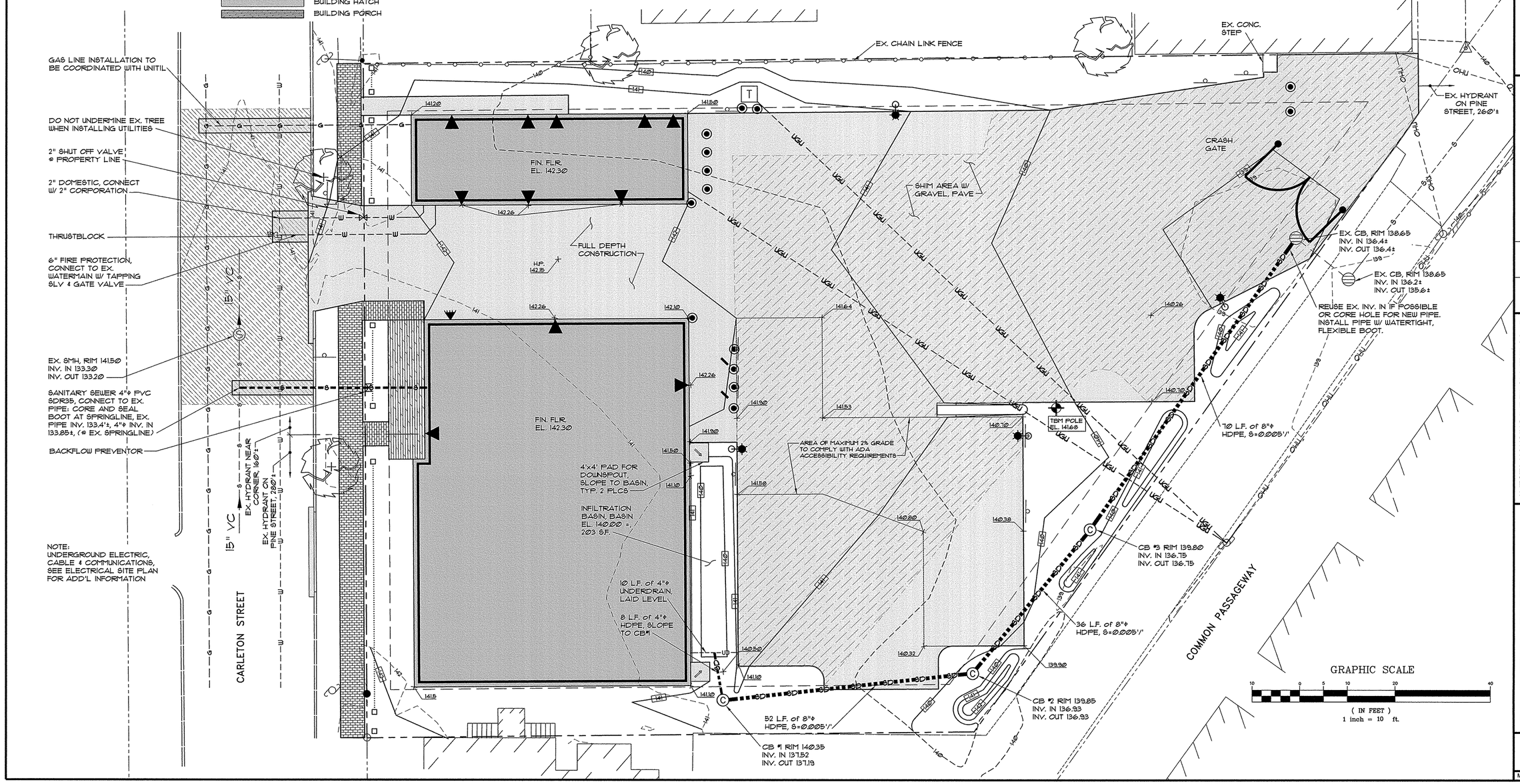
PROPOSED

- EDGE OF PAVEMENT
- VERTICAL GRANITE CURB
- 250 CONTOURS
- BUILDING
- BUILDING ENTRY/EGRESS
- G GAS LINE
- S SANITARY SEWER
- SD STORMDRAIN
- OHU OVERHEAD UTILITY
- UGU UNDERGROUND UTILITY
- W WATER LINE
- UD UNDERDRAIN
- FD FOUNDATION DRAIN
- × 29.15 SPOT GRADE
- TC 111.20 BC 110.70 TOP OF CURB/BOTTOM OF CURB SPOT GRADE
- FIELD INLET
- CATCH BASIN
- WATER SHUT OFF
- THRUST BLOCK
- LIGHT POLE
- WALL MOUNTED LIGHT
- UTILITY POLE
- TRANSFORMER
- BOLLARD
- SIGN
- HANDICAP PARKING
- PAINTED CROSSWALK
- FULL DEPTH BITUMINOUS PVMT
- SHIM GRAVEL & PAVE
- BRICK PAVERS
- BUILDING HATCH
- BUILDING PORCH

FIRE DEPARTMENT SITE REQUIREMENTS

1. FIRE ACCESS TO THE BACK OF THE BUILDING WILL BE OFF OF CARLETON STREET. THE OPENING UNDER THE BUILDING MUST BE 20' WIDE BY 13'9" HIGH TO PROVIDE THIS ACCESS.
2. FIRE HYDRANTS SHALL NOT BE BLOCKED OR ENCLOSED BY FENCING. A 3' FOOT CLEARANCE MUST BE KEPT AT ALL TIMES AROUND THE FIRE HYDRANT.
3. IF GATES ARE LOCKED, A PORTLAND FIRE DEPARTMENT KNOX PADLOCK MUST BE PURCHASED BY THE APPLICANT TO ALLOW ACCESS FOR THE FIRE DEPARTMENT.
4. THE CONSTRUCTION COMPANY' EMERGENCY CONTACT INFORMATION SHALL BE POSTED ON THE PROPERTY IN CASE OF AN AFTER HOURS EMERGENCY.
5. ALL CONSTRUCTION SHALL COMPLY WITH 2009 NFPA 1 CHAPTER 16 SAFEGUARDS DURING BUILDING CONSTRUCTION, ALTERATION AND DEMOLITION OPERATIONS.
6. ANY CUTTING AND WELDING DONE WILL REQUIRE A HOT WORK PERMIT FROM FIRE DEPARTMENT.

Plan 4



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STATE OF MAINE THOMAS S. GREER No. 4266 LICENSED PROFESSIONAL ENGINEER
7/28/15

REV.	DATE	DESCRIPTION
4	7/28/15	REV'D PER STAFF REVIEW
3	7/28/15	REV'D INFILTRATION SYSTEM
2	6/30/15	REV'D PER STAFF REVIEW AND COMMENTS
1	5/7/15	ISSUED FOR SUBDIVISION & SITE PLAN APPROVAL

AVESTA HOUSING DEVELOPMENT CORP.
307 CUMBERLAND AVENUE
PORTLAND, ME. 04101

SCALE: AS SHOWN
DATE: APRIL 10, 2015
PROJECT: 15108
DRN BY: RJS/JDC
DESG BY: TSG
CHK BY: TSG

17 CARLETON STREET
CARLETON STREET, PORTLAND, MAINE

GRADING & UTILITIES PLAN

C1.3

MAP/LOT 55/A/4

LANDSCAPE NOTES

GENERAL:

1. SAVE EXISTING TREES AS SHOWN. DO NOT CUT OR CLEAR ANY VEGETATION BEYOND THE IMPACT LIMIT LINE.
2. ALL PLANT MATERIALS INSTALLED ARE TO MEET THE SPECIFICATIONS OF THE "AMERICAN STANDARDS FOR NURSERY STOCK" BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
3. ALL PROPOSED PLANT LOCATIONS SHALL BE AS SHOWN ON PLANS. CONTRACTOR SHALL VERIFY LOCATION OF ALL UTILITIES PRIOR TO PLANTING AND WILL NOTIFY OWNER'S REPRESENTATIVE IN THE EVENT OF CONFLICTS.
4. PLANT LOCATIONS ARE TO BE SCALED FROM THELANDSCAPE PLAN UNLESS NOTED OTHERWISE.
5. NO PLANT MATERIAL SHALL BE INSTALLED UNTIL FINAL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
6. FINAL QUANTITY FOR EACH PLANT TYPE IS NOTED IN THE PLANT LIST. THIS NUMBER SHALL TAKE PRECEDENCE IN THE CASE OF ANY DISCREPANCY BETWEEN QUANTITIES SHOWN IN THE LIST AND ON THE PLAN.
7. ANY PROPOSED SUBSTITUTIONS MUST BE APPROVED BY THE OWNER OR THE OWNER'S REPRESENTATIVE.
8. ALL DISTURBED AREAS TO BE LOAMED AND SEEDED.

MAINTENANCE:

1. LAWNS: SHALL BE WATERED, FERTILIZED AND MOWN ON A REGULAR BASIS ACCORDING TO SEASON AND RAINFALL, TO PRODUCE A STRONG TURF OF 80% MIN. COVERAGE WITHIN THE FIRST YEAR, FREE FROM SIZABLE THIN OR BARE SPOTS. REGRADING AND RESEEDING WILL BE PERFORMED ON BARE SPOTS UNTIL COVERAGE IS COMPLETE.
2. TREES & SHRUBS: THE ESTABLISHMENT PERIOD SHALL BE TWO CALENDAR YEARS FROM THE DATE OF FINAL ACCEPTANCE. DURING THE ESTABLISHMENT PERIOD THE OWNER OR OWNER'S CONTRACTOR SHALL WATER, CULTIVATE AND PRUNE AS REQUIRED TO MAINTAIN A HEALTHY GROWING CONDITION.
3. AT THE END OF THE ESTABLISHMENT PERIOD AND UPON SUBSEQUENT ANNUAL INSPECTIONS, PLANTS WHICH HAVE DIED OR FAILED TO THRIVE SHALL BE REPLACED WITH EQUIVALENT SIZE AND SPECIES. AFTER THE CONTRACTOR'S GUARANTEE PERIOD HAS ENDED, IT IS THE OWNER'S RESPONSIBILITY TO MAINTAIN AND REPLACE PLANTINGS.
4. TREES, SHRUBS AND LAWNS WHICH ARE NOT IRRIGATED WITH AN AUTOMATIC SPRINKLER OR DRIP SYSTEM SHALL BE THOROUGHLY WATERED ON A REGULAR BASIS DURING PERIODS OF BELOW AVERAGE RAINFALL. SOIL SHOULD BE SAMPLED AT A DEPTH OF 12" AND IF DRY, WATER TO DEPTH OF 24".
5. MULCH IS TO BE MAINTAINED AT A DEPTH TO COMPLETELY COVER THE SOIL AND TO PRESERVE MOISTURE AND MINIMIZE WEEDS.
6. TREES, SHRUBS AND LAWNS SHALL BE FERTILIZED ANNUALLY AND TREATED WITH INSECTICIDES AND/OR FUNGICIDES AS REQUIRED FOR CONTINUED HEALTHY GROWTH.
7. SUCKERS, WEEDS, AND DEAD WOOD SHALL BE REMOVED ON A SEASONAL BASIS, AND SHRUBS SHALL BE PRUNED TWICE A YEAR ACCORDING TO THE REQUIREMENTS OF EACH SPECIES (I.E. SOME SPECIES SHOULD NOT BE PRUNED AT ALL). SHRUBS SHALL NOT BE PRUNED INTO INDIVIDUALS BUT ALLOWED TO GROW INTO A MASS.
8. WHERE TREES ARE LOCATED NEAR SIDEWALKS OR PARKING LOTS, THE CANOPY SHALL BE LIMBED UP TO PROMOTE SAFE CLEARANCE TO 8' ABOVE GRADE.
9. LAWN AREAS SHALL BE MOWN AS OFTEN AS NECESSARY TO KEEP LAWNS TO A 1/2 - 3" HEIGHT, AND AERATED ON A SEASONAL BASIS.
10. BEDS AND LAWN EDGES SHALL BE REGULARLY TRIMMED AND EDGED.
11. PERENNIAL AND ANNUAL BEDS SHALL BE DESIGNED, PLANTED AND MAINTAINED FOR SEASONAL COLOR AND INTEREST. ANNUALS MAY BE INCORPORATED TO A MAXIMUM LIMIT OF 25% OF THE BED AREA OF MAINTAINED BEDS FROM MAY 15 THROUGH NOVEMBER 15. PERENNIAL BEDS SHALL BE WATERED AS REQUIRED FOR HEALTHY PLANT GROWTH, AND WEEDED AND DEADHEADED ON A MONTHLY BASIS.

SUGGESTED SEQUENCE OF CONSTRUCTION TO CONTROL EROSION:

THIS SEQUENCE OF CONSTRUCTION IS A GENERAL GUIDE TO THE CONTRACTOR. ACTUAL CONSTRUCTION PRACTICES WILL DICTATE VARIATIONS IN THE ORDER OF MAJOR EVENTS.

1. INSTALL SILTATION PROTECTION ON BASINS. (PRIOR TO ANY STRIPPING OF TOPSOIL OR OTHER EARTHWORK)
2. CLEAR AND GRUB WORK AREAS. TEMPORARILY SEED AREAS NOT TO BE WORKED ON WITHIN 14 DAYS.
3. BEGIN EARTHWORK FOR PARKING AND BUILDING FOUNDATION. INSTALL AND PROTECT STORM DRAINAGE SYSTEM.
4. BEGIN BUILDING CONSTRUCTION.
5. ROUGH GRADE PARKING AREAS.
6. FINE GRADE ALL PARKING AND DRIVEWAY SIDE SLOPES AND ROUGH GRADE REMAINDER OF SITE.
7. RESEED OR TEMPORARILY SEED ANY AREA WHICH WILL BE LEFT UNDISTURBED FOR MORE THAN 14 DAYS.
8. COMPLETE FINE GRADING AND PAVING OF WALKS AND PARKING AREAS.
9. FINE GRADE, LOAM SEED AND FERTILIZE REMAINDER OF SITE.
10. REMOVE TEMPORARY SOIL EROSION MEASURES.

LEGEND

EXISTING

PROPERTY LINE
ABUTTERS PROPERTY
EDGE OF PAVEMENT
CONTOURS
BUILDING
EDGE OF GRAVEL
CURB
CATCH BASIN
DRAIN MANHOLE
TELEPHONE MANHOLE
SEWER MANHOLE
UTILITY POLE
UTILITY POLE W/ GUY WIRE
SIGN
CHAINLINK FENCE
MOUNMENT FOUND
IRON PIPE OR ROD FOUND
MAG NAIL FOUND
HYDRANT
GATE VALVE
GAS VALVE
TREE

PROPOSED

EDGE OF PAVEMENT
VERTICAL GRANITE CURB
CONTOURS
BUILDING
BUILDING ENTRY/EGRESS
FIELD INLET
CATCH BASIN
WATER SHUT OFF
LIGHT POLE
WALL MOUNTED LIGHT
UTILITY POLE
TRANSFORMER
BOLLARD
SIGN
HANDICAP PARKING
PAINTED CROSSWALK
BITUMINOUS PAVEMENT
BITUMINOUS OVERLAY
BRICK PAVERS
BUILDING HATCH
BUILDING PORCH

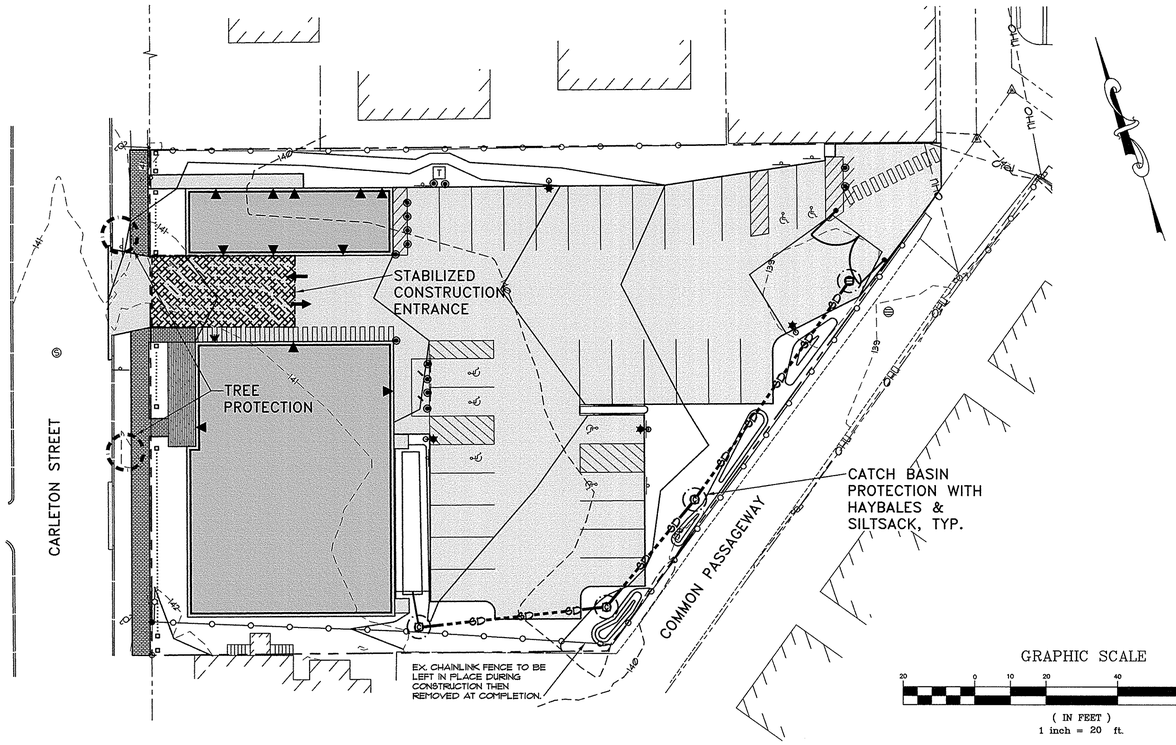
EROSION CONTROL

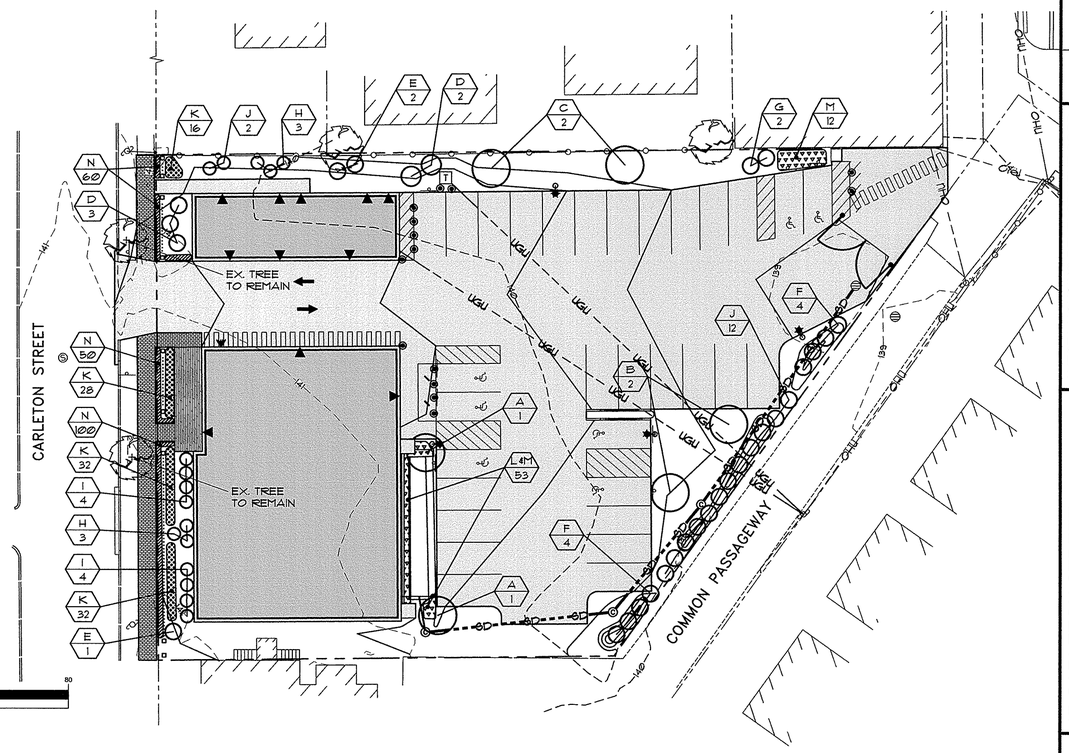
CATCH BASIN PROTECTION WITH HAYBALES AND SILTSACK
STABILIZED ENTRANCE
TREE PROTECTION

PLANT LIST

(A / 12) SYMBOL / QUANTITY

SYMBOL	COMMON NAME/BOTANICAL NAME	SIZE	QUANTITY	ROOT	NOTES
A	Pagoda Dogwood / C. Alternifolia	5'-6' tall	2	B&B	
B	Paperbark Maple / A. Griseum	7'-8' tall	2	B&B	Single Trunk
C	Hophornbeam / Ostrya Virginiana	2 1/2" Cal.	2	B&B	
D	Blackhaw Viburnum / V. Prunifolium	4'-5' tall	5	B&B	
E	Corneliancherry Dogwood / C. Mas	5'-6' tall	3	B&B	3 Trunks
F	Amur Privet / L. Amurense	4' tall	8	B&B	3 Canes min.
G	Common Lilac / S. Vulgaris	4'-5' tall	2	B&B	Purple Blossums
H	Blue billow Hydrangea / H. Serrata 'Blue billow'	#3	6	Cont.	
I	Viburnum / V. Plicatum Tomentosum 'summer Snowflake'	#5	8	Cont.	
J	Viburnum / V. Plicatum Tomentosum 'Shasta'	4'-5' tall	14	B&B	
K	Daylily Varieties / Hemerocallis	--	108	Cont.	select for bloom Early Summer to Fall
L	Lady Fern / Filix-Femina 'Lady fern'	--	28	Cont.	
M	Christmas Fern / Polystichum Acrostichoides	--	37	Cont.	
N	Japanese Spurge / Pachysandra Terminalis	--	210	Flats	





Plan 5

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STATE OF MAINE
THOMAS S. GREER
No. 4266
LICENSED
PROFESSIONAL ENGINEER

7/29/15

REV.	DATE	DESCRIPTION
3	7/29/15	REVD PER STAFF REVIEW
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AVESTA HOUSING DEVELOPMENT CORP.
307 CUMBERLAND AVENUE
PORTLAND, ME. 04101

SCALE: AS SHOWN
DATE: APRIL 10, 2016
PROJECT: 15108
DRN BY: RJS/JDC
DESG BY: TSG
CHK BY: TSG

17 CARLETON STREET
CARLETON STREET, PORTLAND, MAINE

EROSION CONTROL & LANDSCAPE PLAN

C1.4

MAP/LOT 55/A/4

LEGEND

EXISTING

- PROPERTY LINE
- BUILDING SETBACK
- ABUTTERS PROPERTY
- EDGE OF PAVEMENT
- CONTOURS
- BUILDING
- EDGE OF GRAVEL
- CURB
- GAS LINE
- SANITARY SEWER
- STORMDRAIN
- OVERHEAD UTILITY
- UNDERGROUND
- COMMUNICATION CABLE
- WATER LINE
- CATCH BASIN
- DRAIN MANHOLE
- TELEPHONE MANHOLE
- SEWER MANHOLE
- UTILITY POLE
- UTILITY POLE W/ GUY WIRE
- SIGN
- CHAINLINK FENCE
- MOUNMENT FOUND
- IRON PIPE OR ROD FOUND
- MAG NAIL FOUND
- HYDRANT
- GATE VALVE
- GAS VALVE
- LIGHT POLE
- TREE
- BENCHMARK

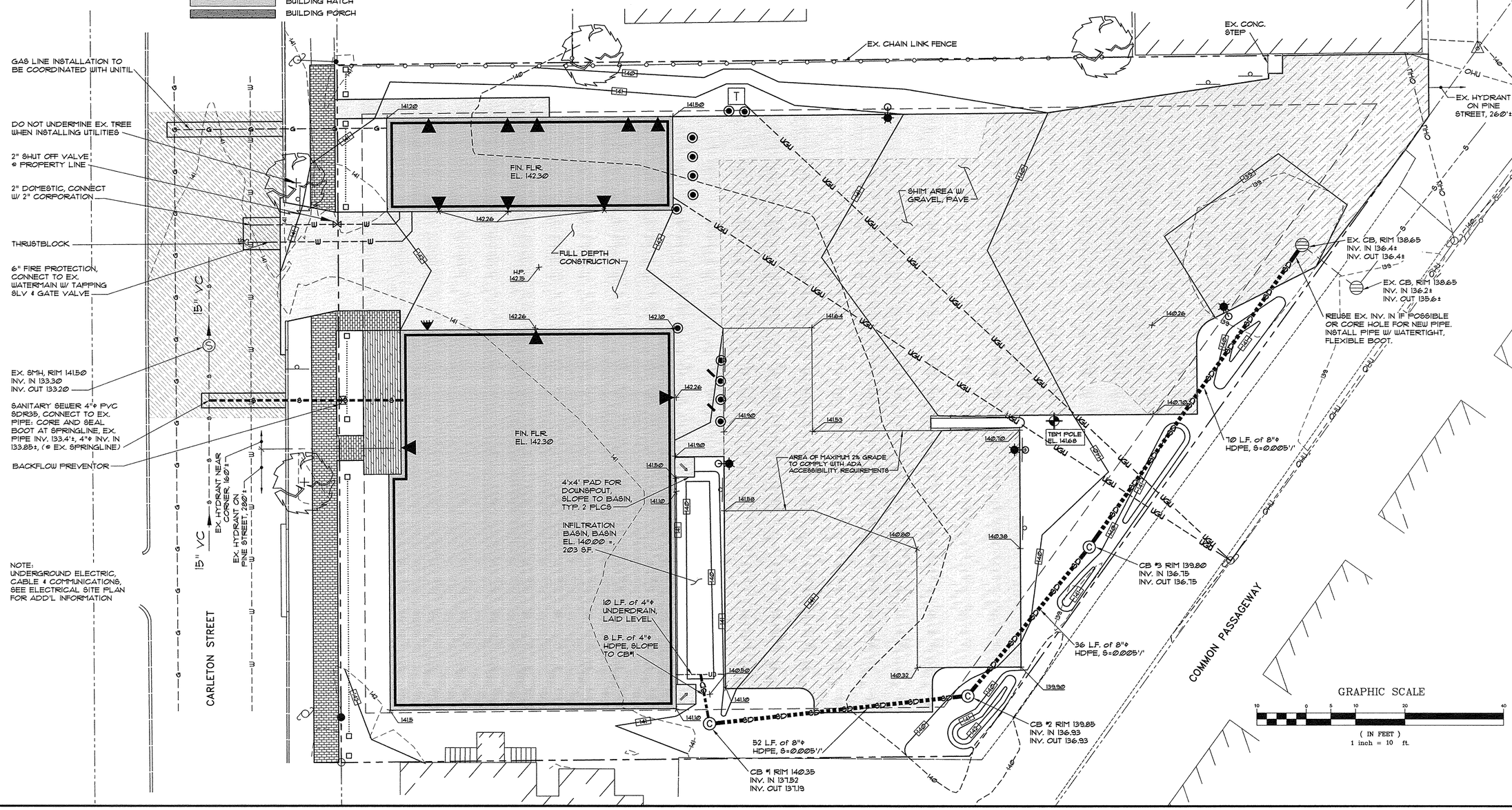
PROPOSED

- EDGE OF PAVEMENT
- VERTICAL GRANITE CURB
- CONTOURS
- BUILDING
- BUILDING ENTRY/EGRESS
- GAS LINE
- SANITARY SEWER
- STORMDRAIN
- OVERHEAD UTILITY
- UNDERGROUND UTILITY
- WATER LINE
- UNDERDRAIN
- FOUNDATION DRAIN
- SPOT GRADE
- TOP OF CURB/BOTTOM OF CURB SPOT GRADE
- FIELD INLET
- CATCH BASIN
- WATER SHUT OFF
- THRUST BLOCK
- LIGHT POLE
- WALL MOUNTED LIGHT
- UTILITY POLE
- TRANSFORMER
- BOLLARD
- SIGN
- HANDICAP PARKING
- PAINTED CROSSWALK
- FULL DEPTH BITUMINOUS PVMT
- SHIM GRAVEL & PAVE
- BRICK PAVERS
- BUILDING HATCH
- BUILDING PORCH

FIRE DEPARTMENT SITE REQUIREMENTS

1. ACCESS TO THE REAR OF THE BUILDING MUST BE MAINTAINED VIA WEST STREET AND PINE STREET YEAR ROUND.
2. STREETS MUST MAINTAIN A 20' WIDTH FOR FIRE DEPARTMENT ACCESS AT ALL TIMES.
3. FIRE HYDRANTS SHALL NOT BE BLOCKED OR ENCLOSED BY FENCING. A 3' FOOT CLEARANCE MUST BE KEPT AT ALL TIMES AROUND THE FIRE HYDRANT.
4. IF GATES ARE LOCKED, A PORTLAND FIRE DEPARTMENT KNOX PADLOCK MUST BE PURCHASED BY THE APPLICANT TO ALLOW ACCESS FOR THE FIRE DEPARTMENT.
5. THE CONSTRUCTION COMPANY' EMERGENCY CONTACT INFORMATION SHALL BE POSTED ON THE PROPERTY IN CASE OF AN AFTER HOURS EMERGENCY.
6. ALL CONSTRUCTION SHALL COMPLY WITH 2009 NFPA 1 CHAPTER 16 SAFEGUARDS DURING BUILDING CONSTRUCTION, ALTERATION AND DEMOLITION OPERATIONS.
7. ANY CUTTING AND WELDING DONE WILL REQUIRE A HOT WORK PERMIT FROM FIRE DEPARTMENT.

Plan 6



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STATE OF MAINE
THOMAS S. GREER
No. 4208
LICENSED
PROFESSIONAL ENGINEER

7/28/15

REV.	DATE	DESCRIPTION
3	7/28/15	REVD INFILTRATION SYSTEM
2	6/30/15	REVD PER STAFF REVIEW AND COMMENTS
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DRN BY: RJS/JDC
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17 CARLETON STREET
CARLETON STREET, PORTLAND, MAINE

GRADING & UTILITIES PLAN

C1.3

MAP/LOT 55/A/4

EROSION CONTROL NOTES

GENERAL:

THE DRAWINGS DEPICT THE REQUIRED SOIL EROSION CONTROL MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE CONSTRUCTION SITE IN SUCH A MANNER THAT:

1. SOIL EROSION IS KEPT TO A MINIMUM.
2. NO SEDIMENT LEAVES THE CONSTRUCTION SITE PROPER.
3. ALL POSSIBLE MEASURES ARE EMPLOYED TO PREVENT SEDIMENT FROM ENTERING DRAINAGE COURSES AND WETLANDS EVEN BEYOND THE DETAILS SHOWN ON THIS PLAN IF NECESSARY.

1. ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MAINE EROSION AND SEDIMENT CONTROL BMPS PUBLISHED BY THE BUREAU OF LAND AND WATER QUALITY, MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, MARCH 2003.

2. THE CONTRACTOR IS RESPONSIBLE FOR ALL FINES RESULTING FROM EROSION OR SEDIMENTATION FROM THE SITE TO SURROUNDING PROPERTIES, WATERBODIES, OR WETLAND AS A RESULT OF THIS PROJECT.

3. LOAM AND SEED ALL DISTURBED AREAS AS SOON AS POSSIBLE AFTER DISTURBANCE, BUT NO LONGER THAN 7 DAYS. LOAM AND SEED ANY DISTURBED AREA WITHIN 75' OF WETLANDS OR WATERBODIES WITHIN 48 HOURS OR PRIOR TO AND STORM EVENT. USE WINTER SEED RATES AND SPECIFICATIONS IF APPROPRIATE.

4. INSPECT SOIL EROSION MEASURES WEEKLY AND AFTER SIGNIFICANT STORM EVENTS. MAKE ALL NECESSARY REPAIRS TO FACILITIES AS SOON AS POSSIBLE, BUT NO LONGER THAN 2 DAYS. CLEAN AND RESET SILT FENCES AND STONE CHECK DAMS WHICH ACCUMULATE SEDIMENT AND DEBRIS.

5. PROTECT AND STABILIZE ALL AREAS NOT SCHEDULED FOR EROSION PREVENTION OR STABILIZATION BUT THAT SHOW SIGNS OF EROSION. NOTIFY OWNER OF ANY SIGNIFICANT EROSION PROBLEM.

6. APPLY MULCH TO BARE SOILS WITHIN 7 DAYS OF INITIAL DISTURBANCE OF SOILS, WITHIN 48 HOURS IF WITHIN 75' OF WETLAND OR WATERBODY, PRIOR TO ANY RAIN EVENT, OR PRIOR TO ANY WORK SHUTDOWN LASTING MORE THAN ONE DAY.

7. TEMPORARILY SEED WITHIN 7 DAYS ANY AREA WHICH WILL BE LEFT DISTURBED AND UNWORKED FOR MORE THAN 14 DAYS WITH THE TEMPORARY SEED MIX LISTED BELOW. IF AREA IS WITHIN 75' OF A WETLAND OR WATERBODY, SEED WITHIN 48 HOURS. PERMANENTLY SEED ANY AREA WHICH CAN BE LOAMED AS SOON AS POSSIBLE WITH THE PERMANENT SEED MIX LISTED BELOW. DO NOT USE PERMANENT SEED MIX AFTER SEPTEMBER 15.

8. MULCH ALL AREAS SEEDED SO THAT SOIL IS NOT VISIBLE THROUGH THE MULCH REGARDLESS OF THE APPLICATION RATE. DURING THE GROWING SEASON (APRIL 15 - SEPT. 30) USE EROSION CONTROL MESH (OR MULCH AND NETTING) ON:
   - THE BASE OF GRASSED WATERWAYS
   - SLOPES STEEPER THAN 15%
   - WITHIN 100 ft. OF STREAMS AND WETLANDS

   BETWEEN OCT. 1 AND APRIL 14 USE EROSION CONTROL MESH (OR MULCH AND NETTING) ON:
   - SIDE SLOPES OF GRASSED WATERWAYS
   - SLOPES STEEPER THAN 8%

9. INSTALL EROSION CONTROL MESH IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS. MESH TO BE EQUAL TO NORTH AMERICAN GREEN PRODUCT C125BN.

10. FOLLOW SILT FENCE MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS FOR INSTALLATION OF SILT FENCE. SECURE ENTIRE BOTTOM OF FENCE EITHER BY BURYING BOTTOM OF FENCE IN A TRENCH OR BERMING WITH SOIL OR CHIPPED GRUBBINGS. REFER TO SILT FENCE DETAILS.

11. PLACE AND GRADE LOAM IN A REASONABLY UNIFORM MANNER. WORK LIME AND FERTILIZER INTO THE SOIL TO A DEPTH OF 4 INCHES WITH A DISC, SPRING TOOTH HARROW OR OTHER SUITABLE EQUIPMENT. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM SEED BED IS PREPARED. REMOVE FROM SURFACE ALL STONES LARGER THAN 2" AND ALL OTHER UNSUITABLE MATERIAL. LIME AND FERTILIZER SHOULD BE MIXED INTO SOIL PRIOR TO ROLLING EXCEPT IF INCLUDED IN HYDROSEED MIXTURE. PERMANENT STABLILIZATION OF REVEGETATED AREAS IS CONSIDERED AS 90% CATCH.

12. ALL CULVERT OR PIPE OUTFALL PROTECTION MUST BE INSTALLED WITHIN 48 HOURS OF INSTALLING NEW PIPE OR CULVERT.

13. DITCHES AND CHANNELS DESIGNATED TO BE LINED WITH RIPRAP AND/OR EROSION CONTROL MESH MUST BE INSTALLED WITHIN 48 HOURS OF COMPLETING THE GRADING OF THAT SECTION OF DITCH OR CHANNEL.

14. ALL CATCH BASINS, NEW OR EXISTING, THAT MAY RECEIVE RUNOFF FROM DISTURBED AREAS MUST BE PROTECTED BY INSTALLING AND MAINTAINING SILT SACKS DURING CONSTRUCTION.

15. WATER FROM CONSTRUCTION TRENCH DEWATERING OR TEMPORARY STREAM DIVERSION WILL PASS FIRST THROUGH A FILTER BAG OR SECONDARY CONTAINMENT STRUCTURE (E.G. HAY BALE OR EROSION CONTROL MIX LINED POOL) PRIOR TO DISCHARGE. THE DISCHARGE SITE SHALL BE SELECTED TO AVOID FLOODING, ICING, AND SEDIMENT DISCHARGES TO A PROTECTED RESOURCE. IN NO CASE SHALL THE FILTER BAG OR CONTAINMENT STRUCTURE BE LOCATED WITHIN 100 FEET OF A PROTECTED NATURAL RESOURCE.

TOPSOIL:

1. SUITABLE TOPSOIL SALVAGED FROM SITE OR SCREENED, LOOSE AND FRIABLE SANDY LOAM OR LOAM AS DEFINED BY THE USDA SOIL CONSERVATION SERVICE CLASSIFICATION SYSTEM, FREE FROM ADMIXTURE OF SUBSOIL, REFUSE, LARGE STONES, CLODS, ROOTS, WEEDS, RHIZOMES OR OTHER UNDESIREABLE FOREIGN MATTER AS DETERMINED BY THE INSPECTING AUTHORITY. CONTRACTOR SHALL SUBMIT REPORTS OF LOAM TEST RESULTS PERFORMED BY AN INDEPENDENT TESTING LABORATORY FOR TOPSOIL FROM DIFFERENT SOURCES PRIOR TO PLACING. THE COST OF TESTING SHALL BE INCIDENTAL TO THE COST OF TOPSOIL. TOPSOIL SHALL MEET THE FOLLOWING SPECIFICATIONS:

2. MATERIAL

   SAND - 0.08 IN. TO 0.002 IN. DIAMETER (% BY VOLUME) . . . . . 45 - 75
   SILT - 0.002 IN. TO 0.00008 IN. DIAMETER (% BY VOLUME) . . . 20 - 40
   CLAY - LESS THAN 0.00008 IN. DIAMETER (% BY VOLUME) . . . . 5 - 15

   ORGANICS (SHALL MEET THE REQUIREMENTS OF MDOT
   STANDARD SPECIFICATION 717.09 PEAT HUMUS) (% BY VOLUME) . 10 - 20

   NUTRIENTS:
   CALCIUM (CA) (% SATURATION) . . . . . 60 - 80
   MAGNESIUM (MG) (% SATURATION) . . . . 10 - 25
   POTASSIUM (K) (% SATURATION) . . . . . 2.1 - 3.0
   PHOSPHORUS (P) (POUNDS/ACRE) . . . . . 10 - 40
   PH . . . . . 6.0 - 6.5

   PERMEABILITY (INCHES PER HOUR) . . . . . 3 - 10

   MAXIMUM STONE SIZE (INCHES) 3/4

SEEDING:

USE PERMANENT SEED MIXES AND RATES BETWEEN 5/15 AND 9/30.
USE TEMPORARY SEED MIXES FOR PERIODS LESS THAN 12 MONTHS. IF USING TEMPORARY SEED MIXES AND RATES BETWEEN 10/1 AND 5/14, RE-SEED WITH PERMANENT SEED MIX AFTER 5/15.

PERMANENT SEED:

MDOT 717.03(a) METHOD NUMBER 3

TEMPORARY SEED:

OATS	80.00 LBS/ACRE	4/01 - 5/14
ANNUAL RYEGRASS	40.00 LBS/ACRE	
SUDANGRASS	40.00 LBS/ACRE	5/15 - 8/14
ANNUAL RYEGRASS	80.00 LBS/ACRE	5/15 - 9/14
WINTER RYE	112.00 LBS/ACRE	9/15 - 9/30
WINTER RYE (W/ MULCH COVER)	112.00 LBS/ACRE	10/01 - 3/31

LIME AND FERTILIZER:

APPLY GROUND LIMESTONE (EQUIVALENT TO 50% CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF 3 TONS PER ACRE (138 POUNDS PER 1000 SQUARE FEET). APPLY FERTILIZER (10-20-20) AT A RATE OF 800 POUNDS PER ACRE (18.4 POUNDS PER 1000 SQUARE FEET).

MULCH:

STRAW OR HAY (ANCHORED)	70 - 90 LBS	PROTECTED AREAS
STRAW OR HAY (ANCHORED)	185 - 275 LBS	WINDY AREAS
SHREDDED OR CHOPPED	185 - 275 LBS	
JUTE MESH	AS REQUIRED	MODERATE TO HIGH VELOCITY AREAS &
EXCELSIOR MAT	AS REQUIRED	STEEP SLOPES

MULCH ANCHORING

PEG AND TWINE	LIQUID ASPHALT
MULCH NETTING	WOOD CELLULOSE FIBER
ASPHALT EMULSION	CHEMICAL TACK

STABILIZING SITE FOR THE WINTER:

1. STANDARD CONDITIONS REQUIRING THE TIMELY STABILIZATION OF DITCHES AND CHANNELS - THE CONTRACTOR WILL CONSTRUCT AND STABILIZE ALL STONE-LINED DITCHES AND CHANNELS ON THE SITE BY NOVEMBER 1. THE CONTRACTOR WILL CONSTRUCT AND STABILIZE ALL GRASS-LINED DITCHES AND CHANNELS ON THE SITE BY SEPTEMBER 15. IF THE CONTRACTOR FAILS TO STABILIZE A DITCH OR CHANNEL TO BE GRASS-LINED BY SEPTEMBER 15, THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE DITCH FOR LATE FALL AND WINTER:

a. INSTALL A SOD LINING IN THE DITCH - THE CONTRACTOR WILL LINE THE DITCH WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE CONTRACTOR PINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL, AND ANCHORING THE SOD WITH JUTE OR PLASTIC MESH TO PREVENT THE SOD STRIPS FROM SLOUGHING DURING FLOW CONDITIONS.

b. INSTALL A STONE LINING IN THE DITCH - THE CONTRACTOR WILL LINE THE DITCH WITH STONE RIPRAP BY NOVEMBER 1. THE CONTRACTOR WILL HIRE A REGISTERED PROFESSIONAL ENGINEER TO DETERMINE THE STONE SIZE AND LINING THICKNESS NEEDED TO WITHSTAND THE ANTICIPATED FLOW VELOCITIES AND FLOW DEPTHS WITHIN THE DITCH. IF NECESSARY, THE CONTRACTOR WILL REGRADE THE DITCH PRIOR TO PLACING THE STONE LINING SO TO PREVENT THE STONE LINING FROM REDUCING THE DITCH'S CROSS-SECTIONAL AREA.

2. STANDARD CONDITIONS REQUIRING THE TIMELY STABILIZATION OF DISTURBED SLOPES - THE CONTRACTOR WILL CONSTRUCT AND STABILIZE STONE-COVERED SLOPES BY NOVEMBER 1. THE CONTRACTOR WILL SEED AND MULCH ALL SLOPES TO BE VEGETATED BY SEPTEMBER 15. ANY AREA HAVING A GRADE GREATER THAN 15% (10H:1V) IS A SLOPE. IF THE CONTRACTOR FAILS TO STABILIZE ANY SLOPE TO BE VEGETATED BY SEPTEMBER 15, THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SLOPE FOR LATE FALL AND WINTER:

a. STABILIZE THE SOIL WITH TEMPORARY VEGETATION AND EROSION CONTROL MATS - BY OCTOBER 1 THE CONTRACTOR WILL SEED THE DISTURBED SLOPE WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1,000 SQUARE FEET AND APPLY EROSION CONTROL MATS OVER THE MULCHED SLOPE. THE CONTRACTOR WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR COVER AT LEAST 75% OF THE DISTURBED SLOPE BEFORE NOVEMBER 1, THEN THE CONTRACTOR WILL COVER THE SLOPE WITH A LAYER OF WOODWASTE COMPOST AS DESCRIBED IN ITEM C OF THIS CONDITION OR WITH STONE RIPRAP AS DESCRIBED IN ITEM D OF THIS CONDITION.

b. STABILIZE THE SLOPE WITH SOD - THE CONTRACTOR WILL STABILIZE THE DISTURBED SLOPE WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE CONTRACTOR PINNING THE SOD ONTO THE SLOPE WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL. THE CONTRACTOR WILL NOT USE LATE-SEASON SOD INSTALLATION TO STABILIZE SLOPES HAVING A GRADE GREATER THAN 33% (3H:1V).

c. STABILIZE THE SLOPE WITH WOODWASTE COMPOST - THE CONTRACTOR WILL PLACE A SIX-INCH LAYER OF WOODWASTE COMPOST ON THE SLOPE BY NOVEMBER 1. PRIOR TO PLACING THE WOODWASTE COMPOST, THE CONTRACTOR WILL REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED SLOPE. THE CONTRACTOR WILL NOT USE WOODWASTE COMPOST TO STABILIZE SLOPES HAVING GRADES GREATER THAN 50% (2H:1V) OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.

d. STABILIZE THE SLOPE WITH STONE RIPRAP - THE CONTRACTOR WILL PLACE A LAYER OF STONE RIPRAP ON THE SLOPE BY NOVEMBER 1. THE CONTRACTOR WILL HIRE A REGISTERED PROFESSIONAL ENGINEER TO DETERMINE THE STONE SIZE NEEDED FOR DRAINAGE AND SOIL SEPARATION.

3. STANDARD CONDITIONS REQUIRING THE TIMELY STABILIZATION OF DISTURBED SOILS - BY SEPTEMBER 15 THE CONTRACTOR WILL SEED AND MULCH ALL DISTURBED SOILS ON AREAS HAVING A SLOPE LESS THAN 15%. IF THE CONTRACTOR FAILS TO STABILIZE THESE SOILS BY THIS DATE, THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SOIL FOR LATE FALL AND WINTER:

a. STABILIZING THE SOIL WITH TEMPORARY VEGETATION - BY OCTOBER 1 THE CONTRACTOR WILL SEED THE DISTURBED SOIL WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1,000 SQUARE FEET, AND ANCHOR THE MULCH WITH PLASTIC NETTING. THE CONTRACTOR WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR COVER AT LEAST 75% OF THE DISTURBED SOIL BEFORE NOVEMBER 1, THEN THE CONTRACTOR WILL MULCH THE AREA FOR OVER-WINTER PROTECTION AS DESCRIBED IN ITEM C OF THIS STANDARD CONDITION.

b. STABILIZE THE SOIL WITH SOD - THE CONTRACTOR WILL STABILIZE THE DISTURBED SOIL WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE CONTRACTOR PINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL.

c. STABILIZE THE SOIL WITH MULCH - BY NOVEMBER 1 THE CONTRACTOR WILL MULCH THE DISTURBED SOIL BY SPREADING HAY OR STRAW AT A RATE OF AT LEAST 150 POUNDS PER 1,000 SQUARE FEET ON THE AREA SO THAT NO SOIL IS VISIBLE THROUGH THE MULCH. PRIOR TO APPLYING THE MULCH, THE CONTRACTOR WILL REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED AREA. IMMEDIATELY AFTER APPLYING THE MULCH, THE CONTRACTOR WILL ANCHOR THE MULCH WITH PLASTIC NETTING TO PREVENT WIND FROM MOVING THE MULCH OFF THE DISTURBED SOIL.

WINTER CONSTRUCTION:

THE WINTER CONSTRUCTION PERIOD IS FROM NOVEMBER 1 THROUGH APRIL 15. IF THE CONSTRUCTION SITE IS NOT STABILIZED WITH PAVEMENT, A ROAD GRAVEL BASE, 75% MATURE VEGETATION COVER OR RIP RAP BY NOVEMBER 15 THEN THE SITE NEEDS TO BE PROTECTED WITH OVER-WINTER STABILIZATION. AN AREA CONSIDERED OPEN IS ANY AREA NOT STABILIZED WITH PAVEMENT; VEGETATION, MULCHING, EROSION CONTROL MATS, RIP RAP OR GRAVEL BASE ON A ROAD. WINTER EXCAVATION AND EARTHWORK SHALL BE COMPLETED SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME. LIMIT THE EXPOSED AREA TO THOSE AREAS IN WHICH WORK IS EXPECTED TO BE UNDER TAKEN DURING THE PROCEEDING 15 DAYS AND THAT CAN BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT. ALL AREA SHALL BE CONSIDERED TO BE DENUDED UNTIL THE SUBBASE GRAVEL IS INSTALLED IN ROADWAY AREAS OR THE AREAS OF FUTURE LOAM AND SEED HAVE BEEN LOAMED, SEEDED AND MULCHED. HAY AND STRAW MULCH RATE SHALL BE A MINIMUM OF 150 LBS/1,000 SF. (3 TONS/ACRE) AND SHALL BE PROPERLY ANCHORED.
THE CONTRACTOR MUST INSTALL ANY ADDED MEASURES WHICH MAY BE NECESSARY TO CONTROL EROSION/SEDIMENTATION FROM THE SITE DEPENDENT UPON THE ACTUAL SITE AND WEATHER CONDITIONS.
CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED, IN ORDER TO MINIMIZE AREAS WITHOUT EROSION CONTROL PROTECTION.

1. SOIL STOCKPILES
   STOCKPILES OF SOIL OR SUBSOIL WILL BE MULCHED FOR OVER-WINTER PROTECTION WITH HAY OR STRAW AT TWICE THE NORMAL RATE OR AT 150 LBS/1,000 SF. (3 TONS/ACRE) OR WITH A FOUR INCH LAYER OF EROSION CONTROL MIX. THIS WILL BE DONE WITHIN 24 HOURS OF STOCKING AND WILL BE REESTABLISHED PRIOR TO ANY RAINFALL OR SNOWFALL. ANY SOIL STOCKPILE WILL NOT BE PLACED (EVEN COVERED WITH HAY OR STRAW) WITHIN 100 FEET FROM ANY NATURAL RESOURCES.

2. SEDIMENT BARRIERS
   DURING FROZEN CONDITIONS, SEDIMENT BARRIERS SHALL CONSIST OF EROSION CONTROL MIX SEDIMENT BARRIERS AS FROZEN SOIL PREVENTS THE PROPER INSTALLATION OF HAY BALES AND SEDIMENT SILT FENCES.

3. MULCHING
   ALL AREA SHALL BE CONSIDERED TO BE DENUDED UNTIL AREAS OF FUTURE LOAM AND SEED HAVE BEEN LOAMED, SEEDED AND MULCHED. HAY AND STRAW MULCH SHALL BE APPLIED AT A RATE OF 150 LBS/1,000 SF. OR 3 TONS/ACRE (TWICE THE NORMAL ACCEPTED RATE OF 75 LBS/1,000 SF. OR 1.5 TONS/ACRE) AND SHALL BE PROPERLY ANCHORED. MULCH SHALL NOT BE SPREAD ON TOP OF SNOW. THE SNOW WILL BE REMOVED DOWN TO A ONE INCH DEPTH OR LESS PRIOR TO APPLICATION.
   AFTER EACH DAY OF FINAL GRADING, THE AREA WILL BE PROPERLY STABILIZED WITH ANCHORED HAY OR STRAW OR EROSION CONTROL MATTING.
   AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN MULCHED WITH STRAW OR HAY AT A RATE OF 150 LBS/1,000 SF. (3 TONS/ACRE) AND ADEQUATELY ANCHORED SO THAT GROUND SURFACE IS NOT VISIBLE THOUGH THE MULCH.

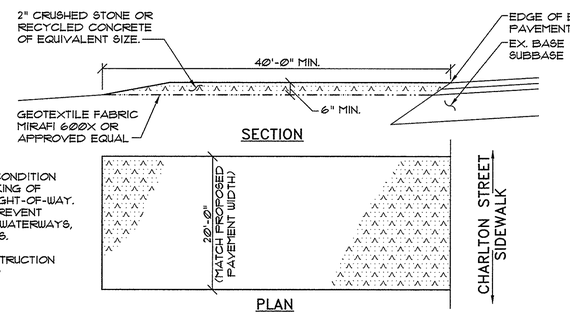
   BETWEEN THE DATES OF NOVEMBER 1 AND APRIL 15, ALL MULCH SHALL BE ANCHORED BY EITHER PEG LINE, MULCH NETTING, ASPHALT EMULSION CHEMICAL TACK, OR WOOD CELLULOSE FIBER. WHEN GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH THEN COVER IS SUFFICIENT.
   AFTER NOVEMBER 1, MULCH AND ANCHORING OF ALL BARE SOIL SHALL OCCUR AT THE END OF EACH FINAL GRADING WORK DAY.

4. MULCHING ON SLOPES AND DITCHES
   SLOPES SHALL NOT BE LEFT EXPOSED FOR ANY EXTENDED TIME OF WORK SUSPENSION UNLESS FULLY MULCHED AND ANCHORED WITH PEG AND NETTING OR WITH EROSION CONTROL BLANKETS.
   MULCHING SHALL BE APPLIED AT A RATE OF 230 LBS/1,000 SF. ON ALL SLOPES GREATER THAN 8%.
   MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH A SLOPE GREATER THAT 3% FOR SLOPES EXPOSED TO DIRECT WINDS AND FOR ALL OTHER SLOPES GREATER THAN 8%.
   EROSION CONTROL BLANKETS SHALL BE USED IN LIEU OF MULCH IN ALL DRAINAGE WAYS WITH SLOPE GREATER THAN 8%.
   EROSION CONTROL MIX CAN BE USED AS A SUBSTITUTE FOR EROSION CONTROL BLANKETS ON ALL SLOPES EXCEPT DITCHES.

5. SEEDING
   BETWEEN THE DATES OF OCTOBER 15 AND APRIL 1, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES FINISHED AREAS SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED.
   AFTER NOVEMBER 1 IF THE EXPOSED AREA HAS BEEN LOAMED AND FINAL GRADED WITH A UNIFORM SURFACE, THEN THE AREA MAY BE DORMANT SEEDED AT A RATE OF 3 TIMES HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED.
   DORMANT SEEDING MAY BE PLACED PRIOR TO THE PLACEMENT OF MULCH AND FABRIC NETTING ANCHORED WITH STAPLES.
   IF DORMANT SEEDING IS USED FOR THE SITE, ALL DISTURBED AREAS SHALL RECEIVE 4" OF LOAM AND BE SEEDED AT AN APPLICATION RATE OF 5 LBS/1000 SF. ALL AREAS SEEDED DURING THE WINTER WILL BE INSPECTED IN THE SPRING FOR ADEQUATE CATCH. ALL AREAS INSUFFICIENTLY VEGETATED (LESS THAN 75 % CATCH) SHALL BE REVEGETATED BY REPLACING LOAM, SEED AND MULCH.
   IF DORMANT SEEDING IS NOT USED FOR THE SITE, ALL AREAS DISTURBED IN THE WINTER SHALL BE VEGETATED IN THE SPRING.

6. TRENCH DEWATERING AND TEMPORARY STREAM DIVERSION
   WATER FROM CONSTRUCTION TRENCH DEWATERING OR TEMPORARY STREAM DIVERSION WILL PASS FIRST THROUGH A FILTER BAG OR SECONDARY CONTAINMENT STRUCTURE (E.G. HAY BALE OR EROSION CONTROL MIX LINED POOL) PRIOR TO DISCHARGE. THE DISCHARGE SITE SHALL BE SELECTED TO AVOID FLOODING, ICING, AND SEDIMENT DISCHARGES TO A PROTECTED RESOURCE. IN NO CASE SHALL THE FILTER BAG OR CONTAINMENT STRUCTURE BE LOCATED WITHIN 100 FEET OF A PROTECTED NATURAL RESOURCE.

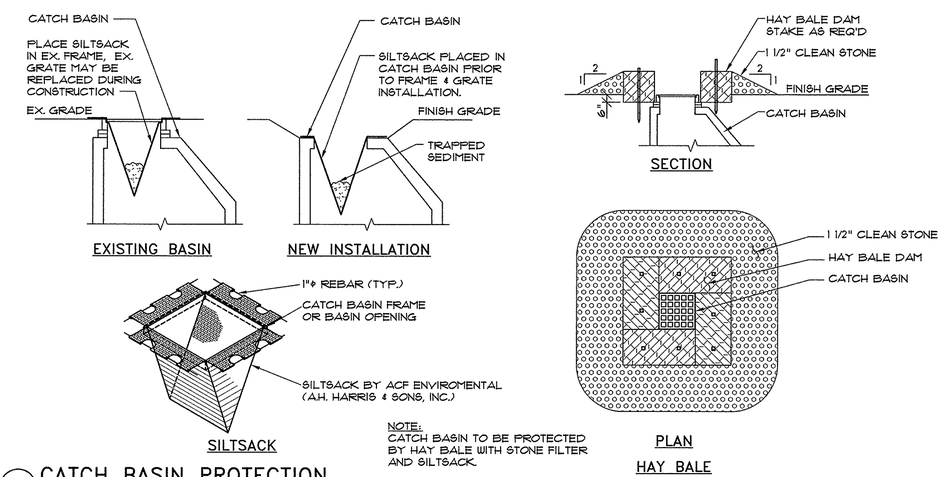
7. INSPECTION AND MONITORING
   MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION SEASON. AFTER EACH RAINFALL, SNOW STORM OR PERIOD OF THAWING AND RUNOFF, THE SITE CONTRACTOR SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES AND PERFORM REPAIRS AS NEEDED TO INSURE THEIR CONTINUOUS FUNCTION. FOLLOWING THE TEMPORARY AND/OR FINAL SEEDING AND MULCHING, THE CONTRACTOR SHALL, IN THE SPRING, INSPECT AND REPAIR ANY DAMAGED AND/OR UNESTABLISHED SPOTS. ESTABLISHED VEGETATIVE COVER MEANS A MINIMUM OF 85 TO 90% OF AREAS VEGETATED WITH VIGOROUS GROWTH.



NOTES:
1. MAINTAIN ENTRANCE IN A CONDITION THAT WILL PREVENT TRACKING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. IF WASHING IS REQUIRED PREVENT SEDIMENT FROM ENTERING WATERWAYS, DITCHES OR STORM DRAINS.
2. REMOVE STABILIZED CONSTRUCTION ENTRANCE TO FINISH ROAD CONSTRUCTION & PAVING.

1 STABILIZED CONSTRUCTION ENTRANCE DETAIL

NOT TO SCALE



NOTE:
CATCH BASIN TO BE PROTECTED BY HAY BALE WITH STONE FILTER AND SILTSACK.

2 CATCH BASIN PROTECTION

NOT TO SCALE

Plan 7

PINKHAM & GREER
CIVIL ENGINEERS
28 VANNAH AVE., PORTLAND, ME. 04103
TEL: 207.781.5242 FAX: 207.781.4245

STATE OF MAINE
THOMAS S. GREER
No. 6205
LICENSED
PROFESSIONAL ENGINEER
7/29/15

REV.	DATE	DESCRIPTION
3	7/29/15	REV'D PER STAFF REVIEW
2	6/30/15	REV'D PER STAFF REVIEW AND COMMENTS
1	5/7/15	ISSUED FOR SUBDIVISION & SITE PLAN APPROVAL

AVESTA HOUSING DEVELOPMENT CORP.
307 CUMBERLAND AVENUE
PORTLAND, ME. 04101

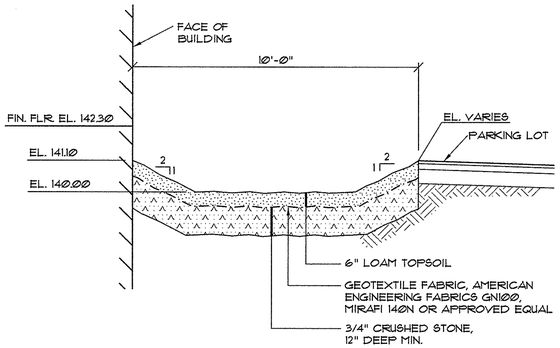
SCALE: AS SHOWN
DATE: APRIL 23, 2015
PROJECT: 15108
DRN BY: RJS/JDC
DESG BY: TSG
CHK BY: TSG

17 CARLETON STREET
CARLETON STREET, PORTLAND, MAINE

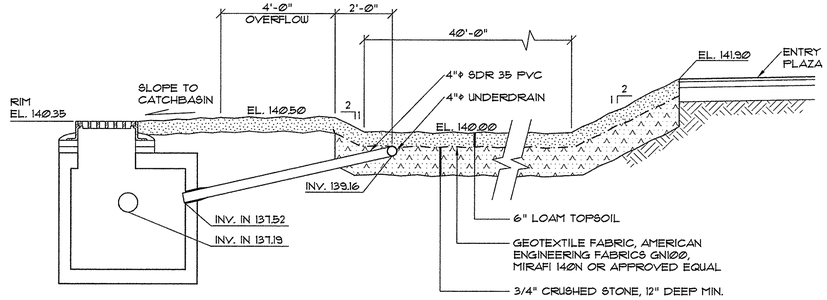
DETAILS

C2.1

MAP/LOT 55/A/4



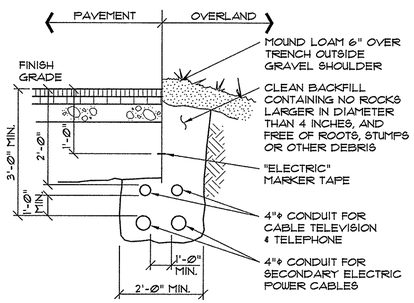
INFILTRATION BASIN CROSS-SECTION



INFILTRATION BASIN LONGITUDINAL SECTION

4 INFILTARTION BASIN SECTIONS

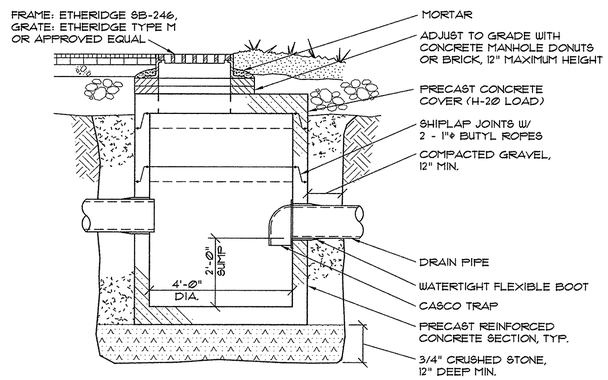
NOT TO SCALE



NOTES:
1. INSTALLATION SHALL NOT ALLOW INTER-TWINING OF CABLES.
2. DIRECT BURY CABLES EXCEPT UNDER PAVED AREAS. PROVIDE SCH. 40 PVC CONDUIT UNDER PAVED AREAS, EXTEND CONDUIT 5'-0" BEYOND EDGE OF PAVEMENT.

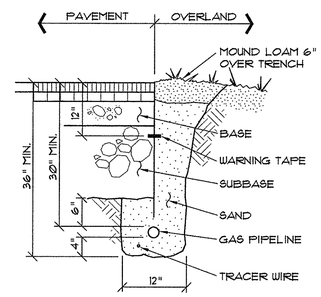
7 CABLE TRENCH SECTION

NOT TO SCALE



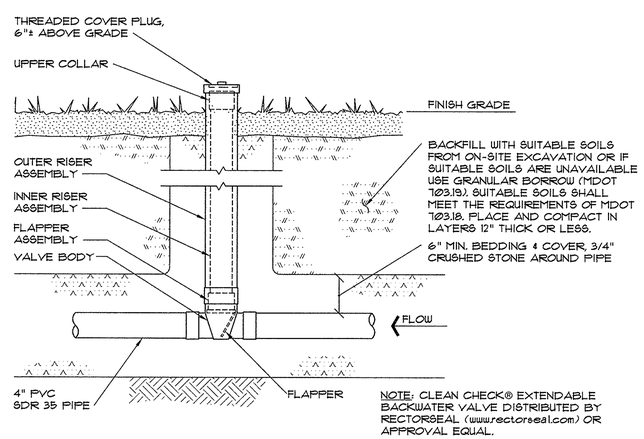
6 TYPICAL CATCH BASIN SECTION

NOT TO SCALE



5 GAS PIPING TRENCH SECTION

NOT TO SCALE



NOTE: CLEAN CHECK® EXTENDABLE BACKWATER VALVE DISTRIBUTED BY RECTORSEAL (www.rectorseal.com) OR APPROVAL EQUAL.

8 TYPICAL BACKFLOW PREVENTOR DETAIL

NOT TO SCALE

UNDERGROUND UTILITIES WARNING TAPE

IDENTIFICATION TAPE TO BE INSTALLED ABOVE ALL NEW UNDERGROUND UTILITIES AND ABOVE ANY EXISTING UTILITIES THAT MAY BE EXPOSED BY THIS CONSTRUCTION.

DETECTABLE UNDERGROUND MARKING TAPE TO BE PERMANENT, BRIGHT-COLORED, CONTINUOUS-PRINTED PLASTICIZED ALUMINUM TAPE, INTENDED FOR DIRECT-BURIAL SERVICE NOT LESS THAN 3" WIDE x 5 MILS THICK. PROVIDE TAPE WITH BLACK PRINTING IDENTIFYING THE UTILITY. DETECTABLE WARNING TAPE REQUIRED OVER ALL WATER, SEWER, DRAINAGE, OR GAS UTILITIES. TAPE TO BE TERRA TAPE BY REEF INDUSTRIES, INC., www.reefindustries.com, OR EQUAL.

APWA UNIFORM COLOR CODE:

WHITE	PROPOSED EXCAVATION
PINK	TEMPORARY SURVEY MARKINGS
RED	ELECTRIC POWER LINES, CABLES, CONDUIT AND LIGHTING CABLES
YELLOW	GAS, OIL, STEAM, PETROLEUM OR GASEOUS MATERIALS
ORANGE	COMMUNICATION, ALARM OR SIGNAL LINES, CABLES OR CONDUIT
BLUE	POTABLE WATER
PURPLE	RECLAIMED WATER, IRRIGATION AND SLURRY LINES
GREEN	SEWERS AND DRAIN LINES

1 UNDERGROUND UTILITIES WARNING TAPE

Plan 8

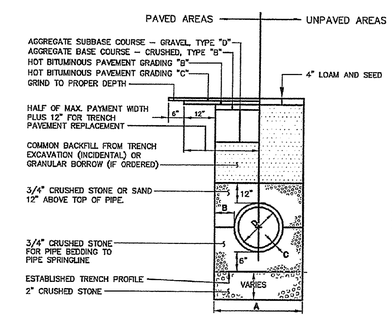
GENERAL NOTES FOR MANHOLES AND CATCH BASINS

1. ALL CONCRETE SHALL HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 4000 lbs. PER SQ. INCH AT THE END OF 28 DAYS, UNLESS OTHERWISE NOTED.
2. MANHOLES MAY BE CONSTRUCTED OF PRECAST REINFORCED CONCRETE, OR CAST IN PLACE.
3. PRECAST REINFORCED CONE BARREL MANUFACTURED PER ASTM SPEC. C-478.
4. ALL STORM AND SEWER MANHOLE COVERS SHALL BE SOLID AND SHALL HAVE ONE 7/8" DIAMETER DRILLED PICK HOLE LOCATED 8" FROM THE CENTER OF THE COVER.
5. ALL SANITARY MANHOLE COVERS SHALL HAVE "SEWER" CAST INTO THE COVER. ALL STORMWATER/DRAIN MANHOLE COVERS SHALL HAVE "DRAIN" CAST INTO THE COVER.
6. ALL MANHOLE RISERS SHALL BE ETHERIDGE 24" OR APPROVED EQUAL.
7. SEWER BRICK SHALL CONFORM TO ASTM SPEC. DESIGNATE ON C-32-63, GRADE MA AND SA.
8. ALL SANITARY MANHOLES SHALL HAVE A WATERPROOFING COATING APPLIED TO THE EXTERIOR SURFACE.
9. CATCH BASIN FRAMES FOR TYPE A4 CATCH BASIN CURB INLETS SHALL BE ETHERIDGE DR5A OR APPROVED EQUAL.
10. CASTINGS SHALL CONFORM TO ASTM DESIGNATION A48-CLASS 35.
11. EXISTING MANHOLES, CATCH BASINS, FRAMES, AND COVERS SHALL BE SALVAGED BY THE CONTRACTOR, AND SHALL REMAIN THE PROPERTY OF THE CITY OF PORTLAND.
12. ALL CATCH BASIN OUTLETS SHALL BE INSTALLED WITH A CASCO TRAP. SEE FIGURE II-09.

2 GENERAL NOTES FOR MANHOLES AND CATCH BASINS (11-4)

NOTES:
DEPTH OF BITUMINOUS PAVEMENT AND AGGREGATE COURSES SHALL BE DETERMINED BY STREET CLASSIFICATION.

ANY ALTERNATE TRENCHING OR PAYMENT METHODS SHALL BE APPROVED IN ADVANCE BY THE CITY OF PORTLAND, DEPARTMENT OF PUBLIC SERVICES..



NOTES:
1. ALTERNATIVE CONSTRUCTION METHODS OR PAYMENT METHODS SHALL BE APPROVED IN ADVANCE BY THE CITY.
2. IN PAVED AREAS, DEPTHS OF GRAVEL AND HOT MIX ASPHALT PAVEMENT SHALL MATCH THE GREATER OF EXISTING CONDITIONS OR THE REQUIREMENTS FOR THE CORRESPONDING STREET CLASSIFICATION.
3. DIMENSION B SHALL BE SUFFICIENT TO ALLOW CRUSHED STONE BEDDING TO BE PLACED AND COMPACTED UNDER THE HAUNCHES OF THE PIPE; BUT IN ALL CASES DIMENSION B SHALL BE AT LEAST 8".
4. DIMENSION A IS THE MAXIMUM WIDTH ALLOWED FOR CALCULATING PAY QUANTITIES UNDER GRANULAR BORROW, CRUSHED STONE, STRUCTURAL EARTH EXCAVATION, AND STRUCTURAL ROCK EXCAVATION. DIMENSION A SHALL BE BASED ON PIPE DIAMETER D, AS SET FORTH IN THE FOLLOWING TABLE.

PIPE DIAMETER, D (INCHES)	MAX. TRENCH WIDTH, A (FEET)
4	4.0
6	4.0
8	4.0
10	4.0
12	5.0
15	5.0
18	5.0
21	5.0
24	6.0
27	6.0
30	6.0
36	6.0
42	7.0
48	7.0

3 TYPICAL PIPE TRENCH INSTALLATION (11-12)

PINKHAM & GREER
CIVIL ENGINEERS
28 VAUGHAN AVE, PORTLAND, ME. 04103
TEL: 207.781.5242 FAX: 207.781.4245

STATE OF MAINE
THOMAS S. GREER
No. 12626
LICENSED
PROFESSIONAL ENGINEER
7/28/15

REV.	DATE	DESCRIPTION
3	7/28/15	REV'D INFILTRATION SYSTEM, ADDED DETAIL 8
2	6/30/15	REV'D PER STAFF REVIEW AND COMMENTS
1	5/7/15	ISSUED FOR SUBDIVISION & SITE PLAN APPROVAL

AVESTA HOUSING DEVELOPMENT CORP.
307 CUMBERLAND AVENUE
PORTLAND, ME. 04101

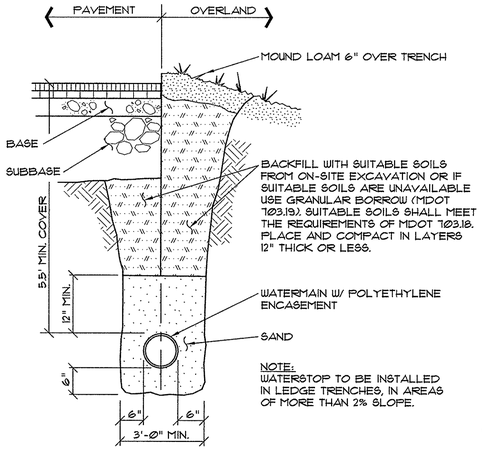
SCALE: AS SHOWN
DATE: APRIL 23, 2015
PROJECT: 15108
DRN BY: RJS/JDC
DESG BY: TSG
CHK BY:

17 CARLETON STREET
CARLETON STREET, PORTLAND, MAINE

DETAILS

C2.2

MAP/LOT 55/A/4

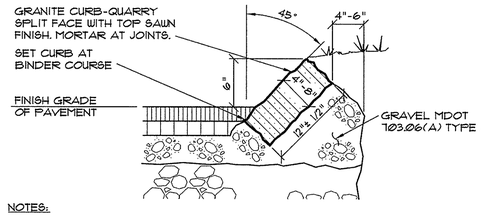


POLYETHYLENE ENCASEMENT GENERAL SPECIFICATIONS

1. TUBE TYPE POLYETHYLENE ENCASEMENT SHALL BE INSTALLED ON ALL DUCTILE IRON PIPE AND FITTINGS IN ACCORDANCE WITH AWWA STANDARD C105 - LATEST REVISION, METHOD A.
2. POLYETHYLENE ENCASEMENT SHALL BE EITHER LINEAR LOW-DENSITY POLYETHYLENE (LLDPE) FILM WITH A MINIMUM THICKNESS OF 8-MIL OR HIGH-DENSITY, CROSS-LAMINATED POLYETHYLENE (HDCLPE) FILM WITH A MINIMUM THICKNESS OF 4-MIL.
3. CIRCUMFERENTIAL WRAPS OF TAPE OR PLASTIC TIE STRAPS SHALL BE PLACED AT 2-FT. INTERVALS ALONG THE BARREL OF THE PIPE.
4. THE POLYETHYLENE ENCASEMENT SHALL PREVENT CONTACT BETWEEN THE PIPE AND THE SURROUNDING BACKFILL AND BEDDING MATERIAL BUT IS NOT INTENDED TO BE A COMPLETELY AIRTIGHT OR WATERTIGHT ENCLOSURE. ALL LUMPS OF CLAY, MUD, CINDERS, AND SO FORTH, ON THE PIPE SURFACE SHALL BE REMOVED PRIOR TO INSTALLATION OF THE POLYETHYLENE ENCASEMENT. DURING INSTALLATION, CARE SHALL BE EXERCISED TO PREVENT SOIL OR EMBANKMENT MATERIAL FROM BECOMING TRAPPED BETWEEN THE PIPE AND THE POLYETHYLENE.
5. THE POLYETHYLENE FILM SHALL BE FITTED TO THE CONTOUR OF THE PIPE TO EFFECT A SNUG, BUT NOT TIGHT, ENCASEMENT WITH MINIMUM SPACE BETWEEN THE POLYETHYLENE AND THE PIPE. SUFFICIENT SLACK SHALL BE PROVIDED IN CONTOURING TO PREVENT STRETCHING THE POLYETHYLENE WHERE IT BRIDGES IRREGULAR SURFACES, SUCH AS BELL-SPIGOT INTERFACES, BOLTED JOINTS, OR FITTINGS, AND TO PREVENT DAMAGE TO THE POLYETHYLENE DUE TO BACKFILLING OPERATIONS. OVERLAPS AND ENDS SHALL BE SECURED WITH ADHESIVE TAPE, STRING, PLASTIC TIE STRAPS, OR ANY OTHER MATERIAL CAPABLE OF HOLDING THE POLYETHYLENE ENCASEMENT IN PLACE UNTIL BACKFILLING OPERATIONS ARE COMPLETE.
6. THREE LAYERS OF POLYETHYLENE ADHESIVE TAPE SHALL BE WRAPPED AROUND ANY POLYWRAPPED PIPE WHERE A TAPPING MACHINE WILL BE PLACED. ALL COPPER SERVICES CONNECTED TO A PIPE WRAPPED IN POLYETHYLENE ENCASEMENT SHALL BE WRAPPED WITHIN THREE FEET OF THE PIPE.

8 TYPICAL WATER MAIN SECTION ON-SITE

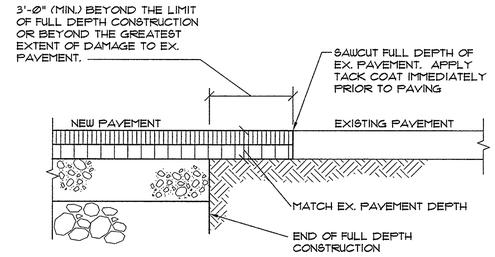
NOT TO SCALE



NOTES:
1. MINIMUM LENGTH OF THE CURB SECTIONS SHALL BE 3'-0".
2. FOR ALL CURBS WITH RADIUS LESS THAN 15' INSTALL STONES CUT TO THE RADIUS REQUIRED (NOT STRAIGHT SECTIONS).

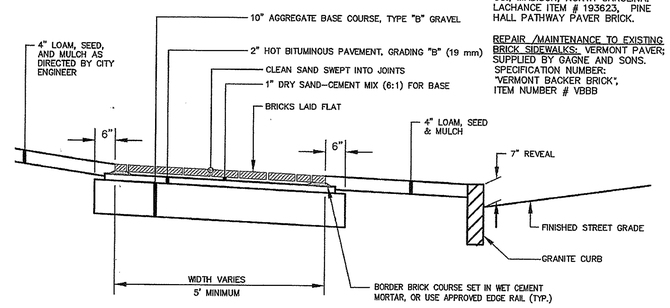
4 SLOPED GRANITE CURB SECTION ON-SITE

NOT TO SCALE



1 PAVEMENT CUTTING & MATCHING SECTION

NOT TO SCALE



BRICKS TO BE USED:

NEW CONSTRUCTION:
4"x8" PINE HALL PATHWAY PAVER BRICK; MFG. BY PINE HALL BRICK CO., MADISON, NORTH CAROLINA. LACHANCE ITEM # 193623, PINE HALL PATHWAY PAVER BRICK.

REPAIR /MAINTENANCE TO EXISTING BRICK SIDEWALKS: VERMONT PAVER; SUPPLIED BY GAGNE AND SONS. SPECIFICATION NUMBER: "VERMONT BACKER BRICK", ITEM NUMBER # VBBB

5 BRICK SIDEWALK WITH BITUMINOUS BASE (I-10)

NOT TO SCALE

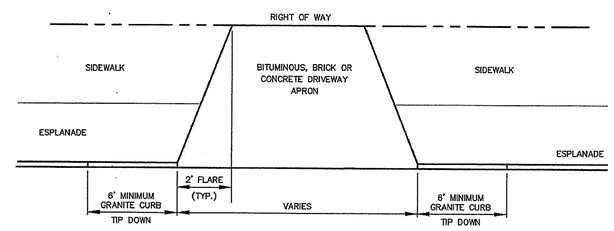
CONSTRUCTION	USE
1 1/4" HMA MDOT 9.5mm 2 1/4" HMA MDOT 19.0mm 4" COMPACTED AGGREGATE BASE, MDOT 703.06(a) TYPE A 15" COMPACTED AGGREGATE SUBBASE, MDOT 703.06(b) TYPE D COMPACTED SUBGRADE	BITUMINOUS FULL DEPTH CONSTRUCTION
1 1/4" HMA MDOT 9.5mm 2 1/4" HMA MDOT 19.0mm COMPACTED AGGREGATE BASE, MDOT 703.06(a) TYPE A COMPACTED EXISTING BASE & SUBBASE	BITUMINOUS SHIM & PAVEMENT
4" TOPSOIL, NO STONES OVER 3/4" DIA. GRANULAR MATERIAL IN FILL AREAS COMPACTED SUBGRADE	GRASS ALL DISTURBED AREAS
3" BARKMULCH PREPARED SUBGRADE	PLANT BED BARKMULCH

NOTES:
1. HMA = HOT MIX ASPHALT.
MDOT = MAINE DEPARTMENT OF TRANSPORTATION.
2. ALL COURSE THICKNESS AFTER FINAL COMPACTION.

2 SURFACE FINISHES ON-SITE

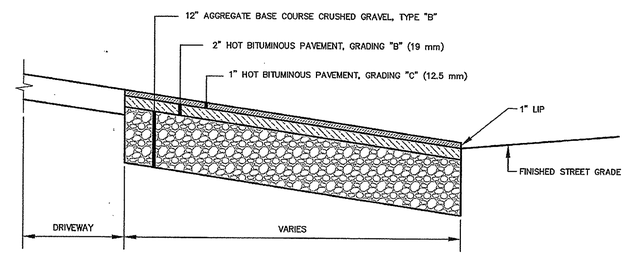
NOT TO SCALE

NOTE:
MATCH GRADE OF EXISTING DRIVEWAY AT R. O. W. LINE, EXCEPT WHEN DIRECTED OTHERWISE BY CITY ENGINEER.



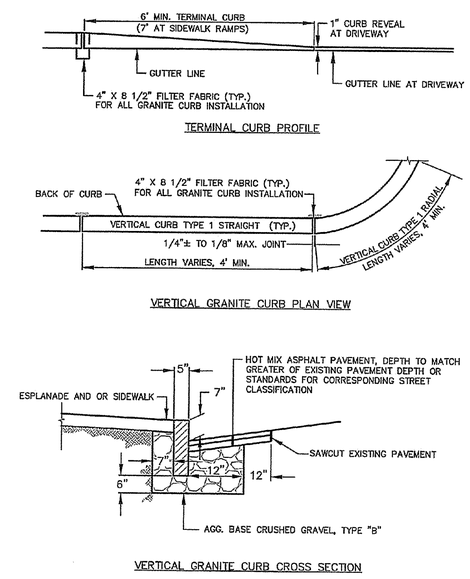
6 DRIVEWAY APRON LAYOUT (I-9)

NOT TO SCALE



7 BITUMINOUS DRIVEWAY APRON (I-13)

NOT TO SCALE



3 VERTICAL GRANITE CURB INSTALLATION IN EXISTING STREET (I-17)

NOT TO SCALE

Plan 9

PINKHAM & GREER
CIVIL ENGINEERS
28 WARREN AVE. PORTLAND, ME. 04103
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STATE OF MAINE
THOMAS S. GREER
No. 4206
LICENSED
PROFESSIONAL ENGINEER
7/29/15

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AVESTA HOUSING DEVELOPMENT CORP.
307 CUMBERLAND AVENUE
PORTLAND, ME. 04101

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PROJECT: 15108
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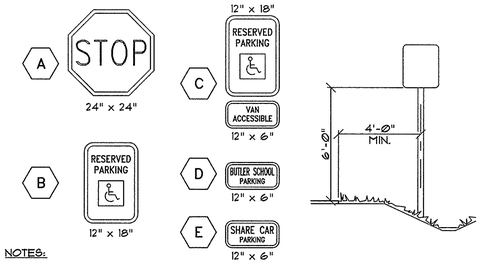
DESG BY: TSG
CHK BY: TSG

17 CARLETON STREET
CARLETON STREET, PORTLAND, MAINE

DETAILS

C2.3

MAP/LOT 55/A/4

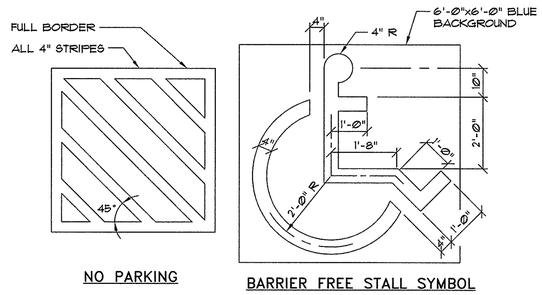


NOTES:

1. SIGNS SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH MAINE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, HIGHWAYS AND BRIDGES REVISION OF DECEMBER 2002, SECTION 645.
2. ALL PERMANENT SIGNS ON THIS PROJECT ARE CLASSIFIED UNDER SECTION 645.03(b) TYPE I REGULATORY WARNING AND ROUTE MARKER ASSEMBLY SIGNS.
3. SIGN MATERIAL SHALL BE AS SPECIFIED IN SECTION 719 OF THE MDOT STANDARD SPECIFICATIONS.
4. POSTS SHALL BE METAL CHANNELS AS SPECIFIED IN SECTION 720.08. ALTERNATE POSTS MAY BE 4"x6" WOOD AS SPECIFIED IN SECTION 720.12, AS APPROVED BY ENGINEER.
5. POSTS IN THE PUBLIC RIGHT-OF-WAY TO BE ON BREAKAWAY POSTS AS SPECIFIED IN SECTION 720 OF THE MDOT STANDARD SPECIFICATIONS.

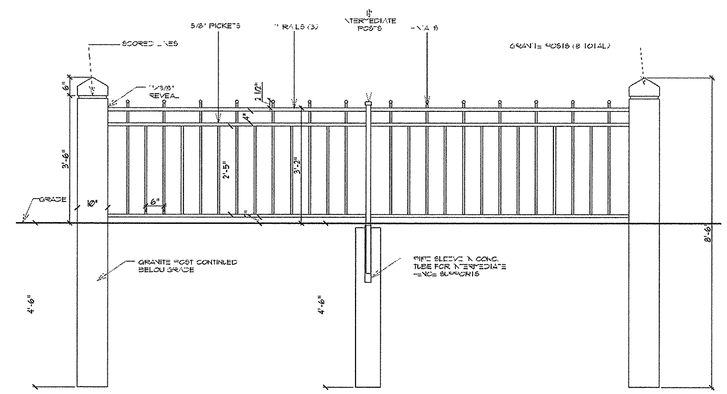
7 ROAD SIGN LEGEND

NOT TO SCALE



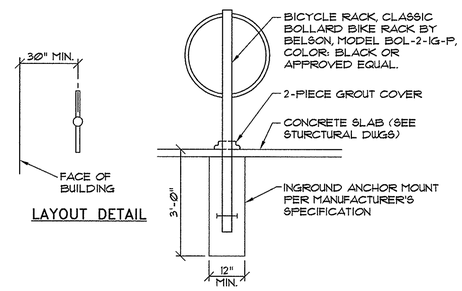
8 STRIPING DETAILS

NOT TO SCALE



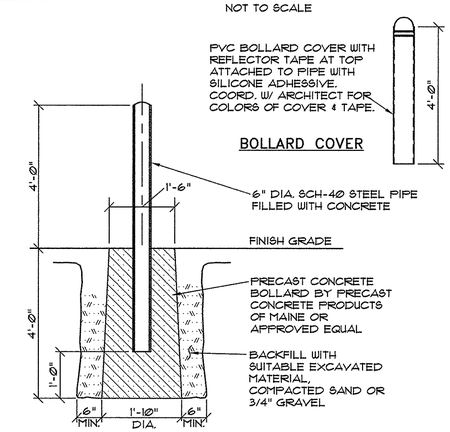
1 DECORATIVE FENCE SECTION

NOT TO SCALE



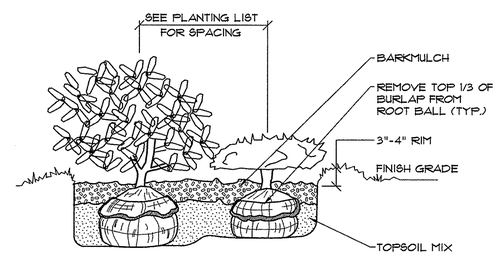
4 BIKE RACK DETAIL

NOT TO SCALE



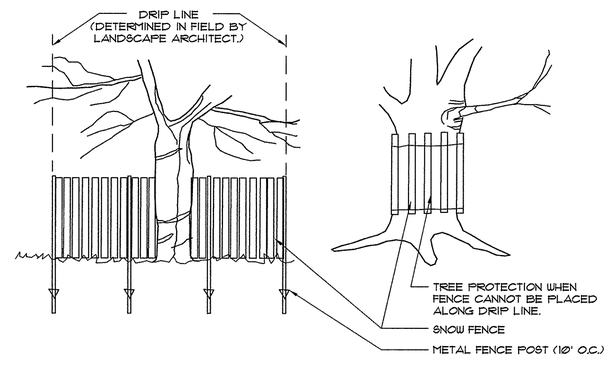
2 STEEL BOLLARD DETAIL

NOT TO SCALE



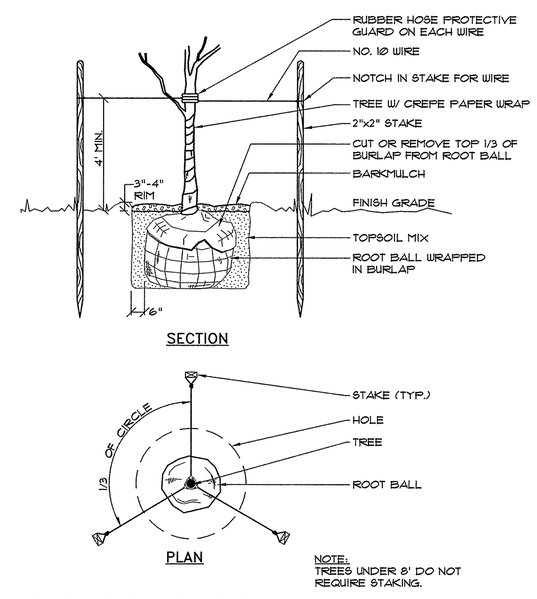
5 SHRUB PLANTING DETAIL

NOT TO SCALE



6 TREE PROTECTION FENCE

NOT TO SCALE



3 TREE PLANTING DETAIL

NOT TO SCALE

Plan 10

PINKHAM & GREER
CIVIL ENGINEERS
28 VANNAH AVE, PORTLAND, ME. 04103
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STATE OF MAINE
THOMAS S. GREER
No. 6268
LICENSED
PROFESSIONAL ENGINEER
7/29/15

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3	7/29/15	REV'D PER STAFF REVIEW
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PORTLAND, ME. 04101

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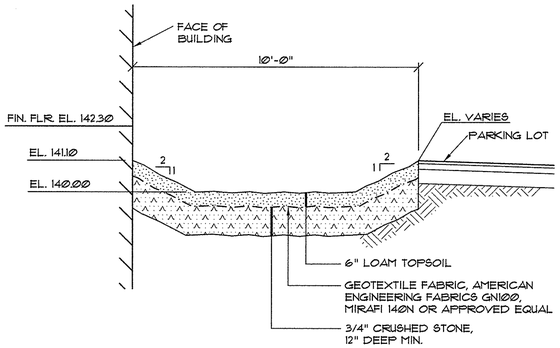
PROJECT: 15108
DRN BY: RJS/JDC
DESG BY: TSG
CHK BY: TSG

17 CARLETON STREET
CARLETON STREET, PORTLAND, MAINE

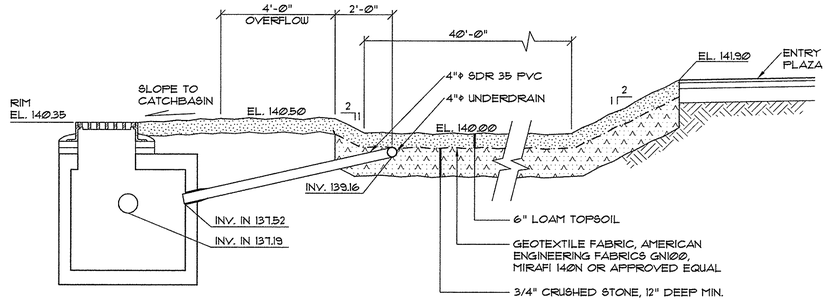
DETAILS

C2.4

MAP/LOT 55/A/4



INFILTRATION BASIN CROSS-SECTION



INFILTRATION BASIN LONGITUDINAL SECTION

4 INFILTARTION BASIN SECTIONS

NOT TO SCALE

UNDERGROUND UTILITIES WARNING TAPE

IDENTIFICATION TAPE TO BE INSTALLED ABOVE ALL NEW UNDERGROUND UTILITIES AND ABOVE ANY EXISTING UTILITIES THAT MAY BE EXPOSED BY THIS CONSTRUCTION.

DETECTABLE UNDERGROUND MARKING TAPE TO BE PERMANENT, BRIGHT-COLORED, CONTINUOUS-PRINTED PLASTICIZED ALUMINUM TAPE, INTENDED FOR DIRECT-BURIAL SERVICE NOT LESS THAN 3" WIDE x 5 MILS THICK. PROVIDE TAPE WITH BLACK PRINTING IDENTIFYING THE UTILITY. DETECTABLE WARNING TAPE REQUIRED OVER ALL WATER, SEWER, DRAINAGE, OR GAS UTILITIES. TAPE TO BE TERRA TAPE BY REEF INDUSTRIES, INC., www.reefindustries.com, OR EQUAL.

APWA UNIFORM COLOR CODE:

WHITE	PROPOSED EXCAVATION
PINK	TEMPORARY SURVEY MARKINGS
RED	ELECTRIC POWER LINES, CABLES, CONDUIT AND LIGHTING CABLES
YELLOW	GAS, OIL, STEAM, PETROLEUM OR GASEOUS MATERIALS
ORANGE	COMMUNICATION, ALARM OR SIGNAL LINES, CABLES OR CONDUIT
BLUE	POTABLE WATER
PURPLE	RECLAIMED WATER, IRRIGATION AND SLURRY LINES
GREEN	SEWERS AND DRAIN LINES

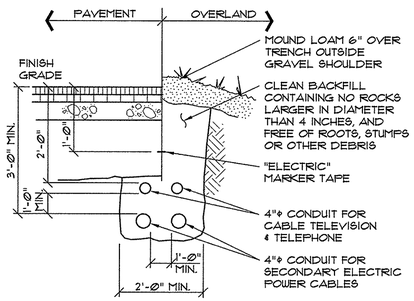
1 UNDERGROUND UTILITIES WARNING TAPE

Plan 11

GENERAL NOTES FOR MANHOLES AND CATCH BASINS

1. ALL CONCRETE SHALL HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 4000 lbs. PER SQ. INCH AT THE END OF 28 DAYS, UNLESS OTHERWISE NOTED.
2. MANHOLES MAY BE CONSTRUCTED OF PRECAST REINFORCED CONCRETE, OR CAST IN PLACE.
3. PRECAST REINFORCED CONE BARREL MANUFACTURED PER ASTM SPEC. C-478.
4. ALL STORM AND SEWER MANHOLE COVERS SHALL BE SOLID AND SHALL HAVE ONE 7/8" DIAMETER DRILLED PICK HOLE LOCATED 8" FROM THE CENTER OF THE COVER.
5. ALL SANITARY MANHOLE COVERS SHALL HAVE "SEWER" CAST INTO THE COVER. ALL STORMWATER/DRAIN MANHOLE COVERS SHALL HAVE "DRAIN" CAST INTO THE COVER.
6. ALL MANHOLE RISERS SHALL BE ETHERIDGE 24" OR APPROVED EQUAL.
7. SEWER BRICK SHALL CONFORM TO ASTM SPEC. DESIGNATE ON C-32-63, GRADE MA AND SA.
8. ALL SANITARY MANHOLES SHALL HAVE A WATERPROOFING COATING APPLIED TO THE EXTERIOR SURFACE.
9. CATCH BASIN FRAMES FOR TYPE A4 CATCH BASIN CURB INLETS SHALL BE ETHERIDGE DR5A OR APPROVED EQUAL.
10. CASTINGS SHALL CONFORM TO ASTM DESIGNATION A48-CLASS 35.
11. EXISTING MANHOLES, CATCH BASINS, FRAMES, AND COVERS SHALL BE SALVAGED BY THE CONTRACTOR, AND SHALL REMAIN THE PROPERTY OF THE CITY OF PORTLAND.
12. ALL CATCH BASIN OUTLETS SHALL BE INSTALLED WITH A CASCO TRAP. SEE FIGURE II-09.

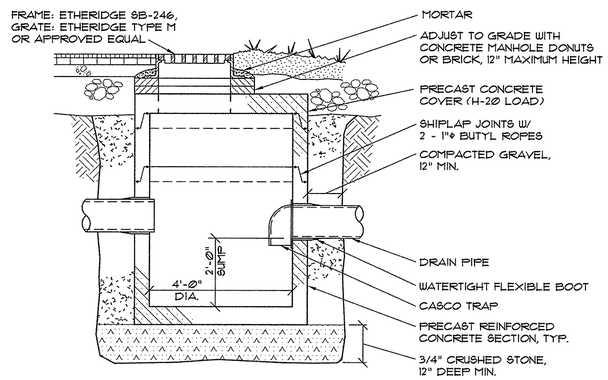
2 GENERAL NOTES FOR MANHOLES AND CATCH BASINS (11-4)



NOTES:
1. INSTALLATION SHALL NOT ALLOW INTER-TWINING OF CABLES.
2. DIRECT BURY CABLES EXCEPT UNDER PAVED AREAS. PROVIDE SCH. 40 PVC CONDUIT UNDER PAVED AREAS, EXTEND CONDUIT 5'-0" BEYOND EDGE OF PAVEMENT.

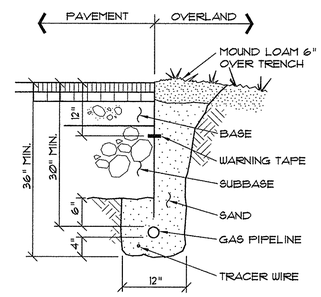
7 CABLE TRENCH SECTION

NOT TO SCALE



6 TYPICAL CATCH BASIN SECTION

NOT TO SCALE

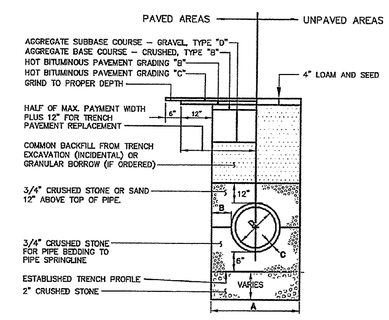


5 GAS PIPING TRENCH SECTION

NOT TO SCALE

NOTES:
DEPTH OF BITUMINOUS PAVEMENT AND AGGREGATE COURSES SHALL BE DETERMINED BY STREET CLASSIFICATION.

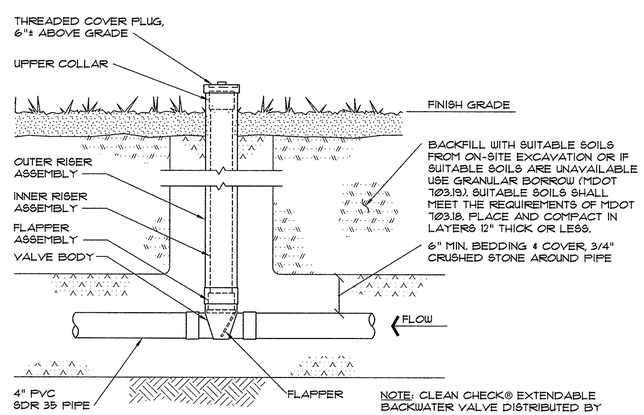
ANY ALTERNATE TRENCHING OR PAYMENT METHODS SHALL BE APPROVED IN ADVANCE BY THE CITY OF PORTLAND, DEPARTMENT OF PUBLIC SERVICES..



NOTES:
1. ALTERNATIVE CONSTRUCTION METHODS OR PAYMENT METHODS SHALL BE APPROVED IN ADVANCE BY THE CITY.
2. IN PAVED AREAS, DEPTHS OF GRAVEL AND HOT MIX ASPHALT PAVEMENT SHALL MATCH THE GREATER OF EXISTING CONDITIONS OR THE REQUIREMENTS FOR THE CORRESPONDING STREET CLASSIFICATION.
3. DIMENSION B SHALL BE SUFFICIENT TO ALLOW CRUSHED STONE BEDDING TO BE PLACED AND COMPACTED UNDER THE HAUNCHES OF THE PIPE; BUT IN ALL CASES DIMENSION B SHALL BE AT LEAST 8".
4. DIMENSION A IS THE MAXIMUM WIDTH ALLOWED FOR CALCULATING PAY QUANTITIES UNDER GRANULAR BORROW, CRUSHED STONE, STRUCTURAL EARTH EXCAVATION, AND STRUCTURAL ROCK EXCAVATION. DIMENSION A SHALL BE BASED ON PIPE DIAMETER D, AS SET FORTH IN THE FOLLOWING TABLE.

PIPE DIAMETER, D (INCHES)	MAX. TRENCH WIDTH, A (FEET)
4	4.0
6	4.0
8	4.0
10	4.0
12	5.0
15	5.0
18	5.0
21	5.0
24	6.0
27	6.0
30	6.0
36	6.0
42	7.0
48	7.0

3 TYPICAL PIPE TRENCH INSTALLATION (11-12)



NOTE: CLEAN CHECK® EXTENDABLE BACKWATER VALVE DISTRIBUTED BY RECTORSEAL (www.rectorseal.com) OR APPROVAL EQUAL.

8 TYPICAL BACKFLOW PREVENTOR DETAIL

NOT TO SCALE

PINKHAM & GREER
CIVIL ENGINEERS
28 VAUGHAN AVE., PORTLAND, ME. 04103
TEL: 207.781.5242 FAX: 207.781.4245

STATE OF MAINE
THOMAS S. GREER
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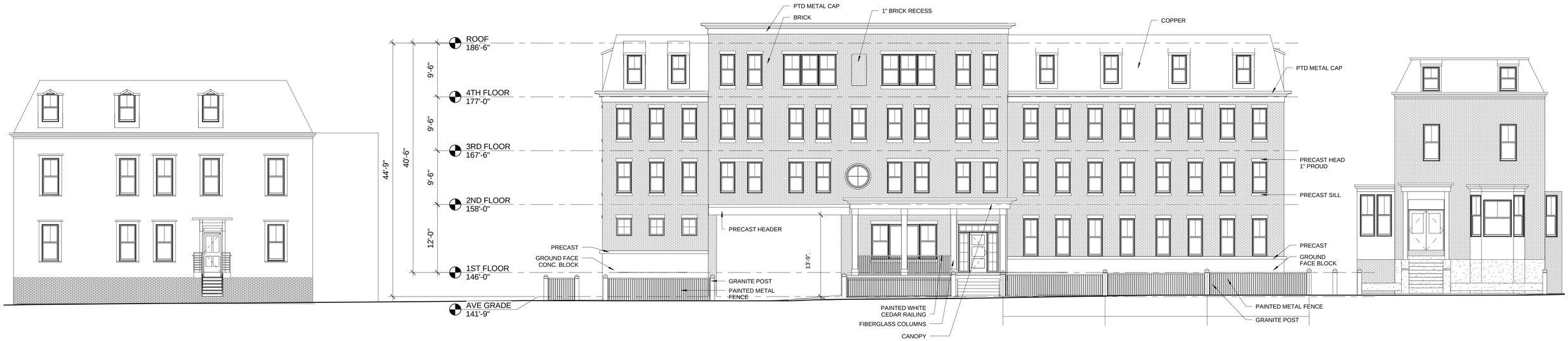
17 CARLETON STREET
CARLETON STREET, PORTLAND, MAINE

DETAILS

C2.2

MAP/LOT 55/A/4

Plan 12

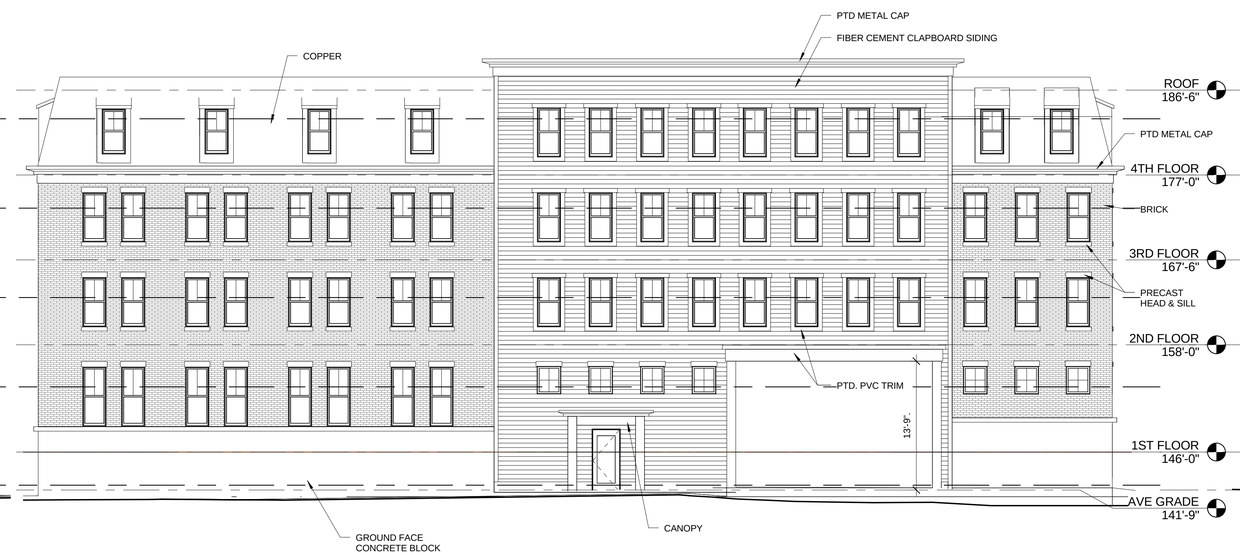


1 WEST ELEVATION
1/8" = 1'-0"

GENERAL NOTES:
1. AVERAGE GRADE BY DEFINITION: 4 CORNER AVERAGE GRADE - NW 141.2' + NE 142.0' + SE 141.1' + SW 141.5' = 565.8' / 4 = 141'-5" (AVERAGE GRADE)

2. BUILDING HEIGHT: THE VERTICAL MEASUREMENT FROM AVERAGE GRADE TO HIGHEST POINT OF THE ROOF BEAMS = 44' - 9"

3 NORTH ELEVATION
1/8" = 1'-0"



2 EAST ELEVATION
1/8" = 1'-0"

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

CARLETON STREET

Carleton Street, Portland, Maine

JULY 27, 2015

A2.1

ARCHETYPE architects
48 Union Wharf Portland, Maine 04101

ARCHETYPE
architects

ARCHETYPE
architects

Memorandum
Planning and Urban Development Department
Planning Division

To: Stuart O'Brien, Chair, and Members of the Portland Planning Board
From: Shukria Wiar, Planner
Date: July 10, 2015
Re: 17 Carleton Street, Avesta Housing Development
Project #: 2015-078 **CBL:** 055 A004001
Meeting Date: July 14, 2015

I. INTRODUCTION

Avesta Housing Development has submitted a Level III application for site plan and subdivision review for their property at 17 Carleton Street. The property is situated on Carleton Street and backs up to an alley passageway to West Street. The proposal is to construct a new building with thirty-seven (37) affordable housing units with a surface parking lot with thirty-one (31) spaces. The new building will be four stories along Carleton Street with the surface parking lot at the rear of the property.

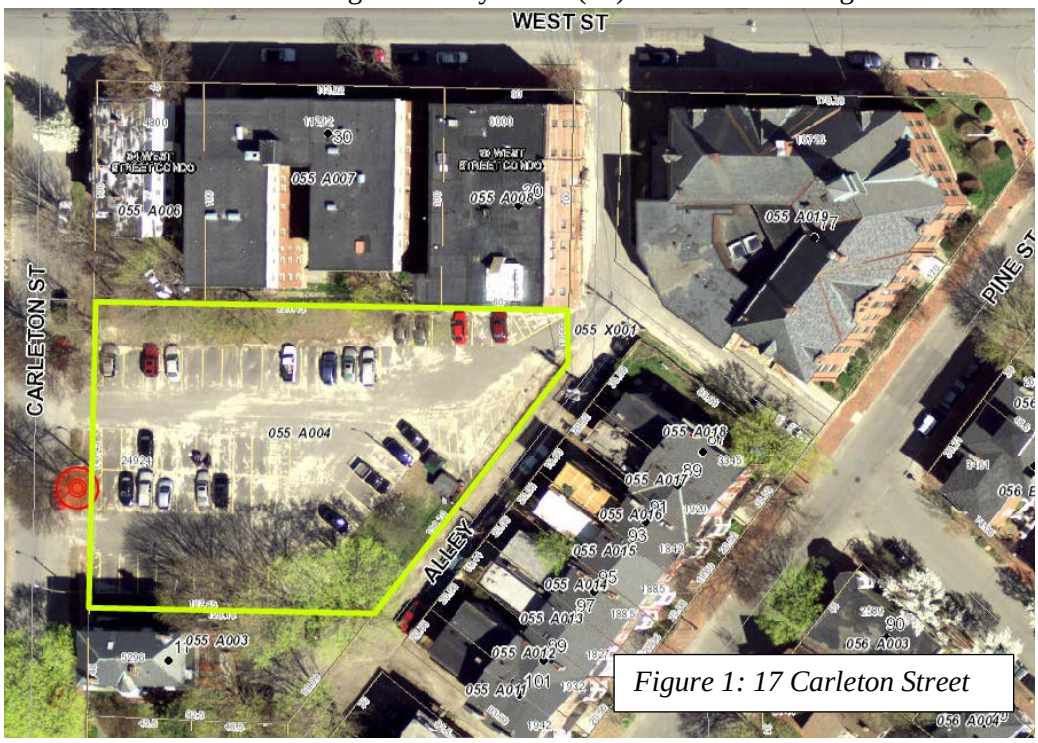


Figure 1: 17 Carleton Street

The site is currently a surface parking lot that consists of 25, 247 square feet. The property is located in the Residential R-6 zone and is in the West End Historic District. The project is being reviewed by the Historic Preservation Board for the design of the building and compatibility with the neighborhood. This proposal is being reviewed as a final plan and subject to the Site Plan and Subdivision Ordinance of the Land Use Code.

Applicant Name	Avesta Housing Development Corporation
Consultants	
Agent Representative	Thomas Greer of Pinkham and Greer
Engineer	Thomas Greer of Pinkham and Greer
Surveyor	Owen Haskell, Inc.
Architect	David Lloyd, Archetype Architects

II. PROJECT REVIEW

Review	*Applicable Standards*
Site Plan	14-526
Subdivision	14-491

REQUESTS FOR WAIVERS (staff evaluation within review under standards)

Waiver Request	**Applicable Standard**
Street tree Requirement – Sec. 14-526 2.b.iii. a The street tree requirement is one tree per unit for a total of 32 trees.	*Sec. 14-526 2.b.iii* (b) Waiver. Where the applicant can demonstrate that site constraints prevent the planting of required street trees in the City right of way, the Reviewing Authority may permit the planting of street trees in the front yard, within ten feet of the property line. Existing preserved healthy trees that are six (6) inches or more in caliper and are on the site within ten (10) feet of the property line may be counted towards this requirement. If planting street trees is neither feasible in the City right of way nor within the site, the applicant shall contribute to the City of Portland Tree Fund an amount proportionate to the cost of required street trees.

III. PROJECT DATA

Existing Zoning	R-6	
Tax Map	CBL: 055 A004001	
Existing Use	Surface Parking Lot	
Proposed Use	Rental Housing	
Parcel Size	25, 247 SF	
Number of Affordable Units	37 units	
	Existing	***Proposed***
Residential Data	None	37 dwelling units
Building Footprint	Zero	5,495 SF
Building Floor Area	Zero	26,375 SF
Building Height	Zero	43 feet
Impervious Surface Area	19,245	19,210
Parking Spaces	58	3, of which 7 are handicapped
Bicycle Parking Spaces	0	20
Estimated Cost of Project	$6.5 Million	
Uses in Vicinity	The site is surrounding by Multifamily buildings that are either owner-occupied or being rented.	

IV. EXISTING CONDITIONS/ BACKGROUND

a. Background

77 Pine Street and 17 Carleton Street- Butler School and the Parking Lot

The parcel at 17 Carleton Street was originally part of the Butler School property; it was the playground for the School. The Planning Report, dated 01.31.1975 (Attachment 3), to the Board of Appeals gives background of the Butler School and the site at 17 Carleton Street:

Late in 1973, the City advertised for the disposition of the Butler School. Later, the Butler School Playground

> *was included in the disposition description for both properties to be disposed of as a package. After numerous meetings, Council voted to sell both properties to Community Development Services, Inc. (CDS) for reuse as rehabilitated housing and associated parking, with the understanding that CDS would have to obtain a permit from the Board of Appeals.*

The first site plan that City staff found on record for the property was submitted on January 20, 1975 to the Department of Public Services to convert this parcel from a playground to a parking lot. In the same year, on February 12, the Board of Appeals granted an appeal to the premises at 17 Carleton Street as an off-street parking lot for 64 passenger cars subject to two conditions. It appears very likely that this appeal has expired since a similar proposal was submitted again for thirty-four (34) parking spaces (at 13-23 Carleton Street) and 15 parking spaces (rear 13-23 Carleton Street) for a total of forty-nine (49) spaces. On November 10, 1976, the Board of Appeals granted appeals to the owner/ developer for both the Space and Bulk and for the lot size per dwelling unit requirement and the required off-street parking variances. The Zoning Ordinance at that time required one off-street parking space per unit, totaling thirty-nine parking spaces for the development. The appeal granted that no required off-street parking had to be provided on the property and the density standard could be reduced. At this same meeting, the Board granted conditional uses for the property at 17 Carleton Street (stated as 13-23 Carleton Street and rear 13-23 Carleton Street) to be converted for a total of forty-nine (49) space parking lot (34 spaces for 13-23 Carleton Street and 15 for rear 13-23 Carleton Street). The previously referenced 1975 Planning Report stated the following regarding parking in the surrounding neighborhood:

> *Parking is a problem on the peninsula. For the residential areas in the City, parking is most acute in the West End. While the uncontrolled proliferation of parking lots in residential areas can have a blighting effect, off-street parking is a necessity and can be an asset if done well.*

The Butler School and the property at 17 Carleton Street were both developed in 1976 and 1977 for thirty-nine (39) residential units.

Jennifer Thompson, Associate Corporation Counsel reviewed the deed from when the City sold the Butler School and surrounding parcels. The deed contained covenants and specifically required the development of the former playground into a parking lot. There are also restrictions on the use of the property which states the use expired after a period of fifteen (15) years. Below are the excerpts from the deed; see Attachment 18 for the full description of the deed.

By the acceptance of this deed, Grantee covenants and agrees that:

1. It shall within one year from the date of this deed rehabilitate the building to accommodate twelve to thirteen dwelling units and incidental school uses, all work to be performed in compliance with the provisions of the Municipal Code and in accordance with architectural plans approved by the Planning Board and the City Council before work is undertaken. In performing said work, the present architectural features of the building and its relationship with adjoin properties shall be preserved.

…

3. In developing the playground area for parking purposes, all work shall be performed in compliance with the provisions of the Municipal Code and subject to the approval of the Planning Board. All significant trees within said area shall be retained and maintained.

….

6. Grantee shall not during said periods of 15 years, without Council approval, mortgage or otherwise encumber said premises, or any part thereof, except that necessary for the initial rehabilitation work, which mortgage or encumbrance shall remain the obligations of Grantee, its successors and assigns.

7. Grantee shall not develop the premises herein conveyed for any purposed other than set forth above without the prior written approval of the City Council within a period of 15 years form the date of this deed.

Below are Ms. Thompson's comments:

So, given that there does not appear to me to be any surviving limitation in the deeds to the properties on the ability to sell or develop them separately, it appears that if there is any requirement that the "playground/parking lot" lot provide parking to the Butler School or any other property, that requirement will need to be found in an approval by some City administrative body.

After a somewhat summary review, it appears to me that the review and approval of the Butler School lot and the parking lot in connection with this sale were done separately. Namely, there was a:

1. Space and bulk/change of use variance granted with respect to the Butler School that, according to the agenda, allowed its use to be changed from a school to an apartment house with 39 units despite the fact that it didn't meet the lot coverage requirements. The agenda also indicates that the requirement that 39 parking spaces be provided was also waived. I have not seen a written decision reflecting that approval - and so cannot determine whether the waiver of the parking was conditioned on those parking spaces being provided elsewhere or was simply waived without condition. If there was no condition on that approval, then obviously the Butler School will continue to be a lawful use under that approval despite the lack of parking. If there was a condition that required the Butler School to provide off-street parking, its failure to provide the parking would likely render it a nonconforming use. However, in the absence of some covenant or condition that is binding on the Carleton Street lot and prevents the proposed development of that lot, I'm not sure that the legality of the Butler Street's use under its prior change of use variance is a matter that can or should be resolved by the Planning Board in connection with its review of a different property.

2. Conditional Use Approval was granted with respect to the Carleton Street (playground/parking lot lot) that allowed that lot to be used as a parking lot. Again, I have not seen a written decision on that approval and so cannot determine whether the approval was conditioned on the lot providing spots to certain properties. Even if this approval was so conditioned, however, I think that condition would only continue to apply to the parking lot use. If the use of the lot is changed, such that the conditional use approval is no longer necessary, it seems to me that that approval would no longer have any effect.

On July 8, 2015, the Planning Division and Corporation Counsel received a letter from Avesta Housing's attorney, Maurice Selinger of Curtis Thaxter. In the letter it is stated the following, refer to Attachment 20 for the full letter:

In sum, I see nothing in these materials saying affirmatively that the Carleton Street lot must be available to tenants at the old Butler School for parking. The public record is clear that the existing approvals for the former Butler School do not require off street parking on the Carlton Street lot or anywhere else.

If you are in possession of official City records that suggest otherwise, I would appreciate the opportunity to review them.

Ms. Thompson is on vacation for the week of July 6, 2015 and will review the letter upon her return.

20 West Street - 20 West Street Condos

The property at 20 West Street was granted two appeals to convert the building from a warehouse to residential dwelling units in 1980. The Board of Appeals granted on August 11, 1980, to convert the space to ten (10) dwelling units with the requirement that there are ten off-street parking spaces within 300 feet of the site. The second appeal was granted in October 30, 1980 to convert the rest of the building to an additional nine dwelling units with the requirement that there are nine off-street parking spaces within 300 feet for a total of nineteen (19) dwelling units and off-street parking spaces. After researching the microfiche for this specific site, there were three lease agreements submitted at the time. There was an agreement between the owner at the time and Pine Street Garage, at 72 Pine Street, for ten parking spaces. This garage has since been converted to condominiums. The second lease was with State Street

Management Company for then spaces. The third was a lease with Butler Payson for seven spaces with a provision for additional twelve spaces for a total of nineteen (19) spaces. It has been determined the State Street Management Company managed Butler School and the parking lot at 17 Carleton Street.

Even though parking was leased at these locations, it was not the responsibility of the lessor to continue to provide these spaces. The Board of Appeals' requirement was that these spaces be located within 300 feet of the site and not tied to a specific property.

Figure 2: Proposed Site Along with the Three Properties

30 West Street -
There was a building permit, dated September 3, 1924 for 30 West Street that converted the building from hotel to apartments. Considering this building permit was issued in 1924, it is highly unlikely there would have been any parking requirements for this change of use. . This residential building pre-dated the development of the parking lot at Carleton Street.

A detailed chronological history of the City's Board decisions and findings found on microfiche is included in the chart below. Planning Staff did not find any decisions, whether administrative or issued by a City Board, requiring the parking lot at 17 Carleton Street to provide parking to the Butler School or any other property.

	Chronology of the Properties at 77 Pine St **17 Carleton Street, and 20 West Stree**
January 17, 1975	Application for Certificate of Occupancy for the Use of Premises was submitted to the Inspection Division to allow the use of the pro the property is listed as playground. The application includes the question: "Proposed use to be accessory to a building or other use other use?" and the applicant answers *Apartments*. Owner is Community Development Services, Inc. (CDS) Attachment 1
January 20, 1975	Department of Public Works (now Public Services) received a site plan for 17 Carleton Street property to convert the playground to Attachment 2
January 31, 1975	Planning Report from the Portland Planning Department to the Board of Appeals. Attachment 3
February 12, 1975	Based on the Finding of Facts, the Board of Appeals granted the appeal to CDS, Inc. to use the premises at 13-23 Carleton Street (17 Installation of light screening on fence (2) Planning Staff will work with Mr. Kinney and other abutters and the developer to provide This may have expired since the project was granted appeal again on November 10, 1976, see below. Currently appeals granted Attachment 4
October 22, 1976	Applications for Certificate of Occupancy for the Use of Premises was submitted to the Inspection Division to allow the use of the pr the property is listed vacant. Owner is Butler School Associates Attachment 5
November 10, 1976	Based on the Findings of Fact, the Board of Appeals Board granted Space and Bulk Variances (Density) to 214-220 State Street and 7

	214-220 State Street, cor. 32-36 Deering St. - Masada Trust The Board granted the change of use of this building from school use to an apartment house with 17 dwelling units. **71-83 Pine St. cor. 4-16 West St. -Public School Assoc.** The Board granted the change of use of this building at the above named location from school use to an apartment house with 39 dwelling units. 6
	At the same meeting, conditional use was granted to 13-23 Carleton Street and rear 13-23 Carleton Street, see below: **13-23 Carleton St. - Butler School Associates** The Board granted permission to permit off street parking for 34 passenger cars at the above named location. **rear 13-23 Carleton St. - Butler School Associates** The Board granted permission to permit off street parking for 15 passenger cars at the above named location. Attachment 7
November 12, 1976	Planning Department Site Plan Review sheet that list the parking lot conversion as a 'Major Development' that was 'Approved Condi On November 9, 1976, the Portland Planning Board approved a site plan for this proposal. The plan was revised from the c provision of landscaping which had been submitted in the interim and which has been revised according to recommendati should be withheld until the property has been conveyed to the applicant by the City. Attachment 8
	Public Works Department Site Plan Review sheet that the parking lot conversion as 'Approved' and the reason stated was the follow Corrections in review are due to the reception of a revised plan. Attachment 9
June 13, 1977	The subdivision for Butler-Payson Co was recorded in the Cumberland County of Registry of Deeds and included both the Butler Sch Attachment 10
August 11, 1980	A variance for dwelling unit conversion appeal was granted to 20 West Street (owner: Larry Adlerstein) by the Board of Appeals to a meeting the requirement of Section 602.14 (has to be within 300 feet of the property). Attachment 11
October 30, 1980	A variance for dwelling unit conversion appeal was granted to 20 West Street (owner: Larry Adlerstein) by the Board of Appeals to a meeting the requirement of Section 602.14 (has to be within 300 feet of the property). With the two above variances, 20 West Street had a total of 19 dwelling units with a required 19 parking spaces. There were three parking leases found on microfiche for 20 West street: Pine Street garage at 72 Pine Street for 10 parking spaces (lease agreement for 7 parking spaces plus 12 addition spaces at 17 Carleton Street property. According to an abutter, State Street M Attachment 12

According to the applicant, currently the parking spaces are leased out on a monthly basis to area residents; ten of the spaces are for the tenants of Butler School. Below are photographs of the current site.

C:\Use n St.

Figure 3: View of Site from Carleton Street

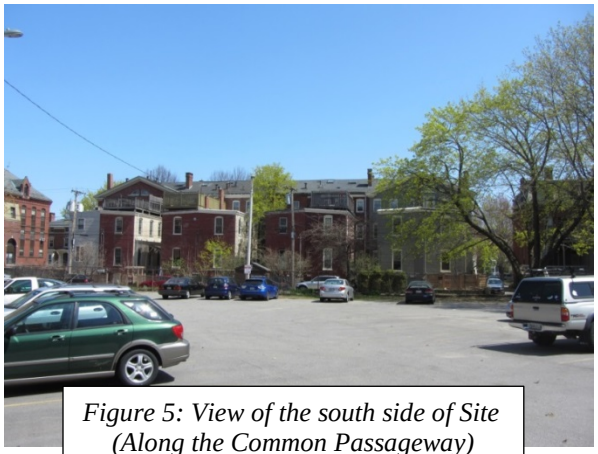


Figure 4: View of the north side of Site (Rear of 20 and 30 West St)

Figure 5: View of the south side of Site (Along the Common Passageway)

Figure 6: View of Site from Carleton St. This curb cut will be closed

To summarize, replacement of the existing parking lot with a new housing proposal has raised questions and concerns from the surrounding neighborhood. Though Planning staff is sensitive to their concern for the loss of neighborhood off-street parking, nothing found in the course of extensive research into prior documentation and approvals and documentation has demonstrated that there is a requirement to keep this as a parking lot in perpetuity, or that the applicant does not have the right to proceed with this application. We will continue to review any additional documentation that may come forward, and evaluate it for any impact it might have on this implication. Corporation Counsel has not indicated there is cause for the application not to proceed as presented.

b. Proposed Development

The proposed plan is for the construction of a thirty-seven (37)-unit apartment building at 17 Carleton Street in the West End. The subject property is located on the east side of Carleton Street, between Pine and West Streets. The property is currently fully developed surface parking lot that extends deep into the interior of the triangular block bounded by Carleton, West and Pine Streets. The site has three curb cuts, two on Carleton Street and one on the shared passageway at the rear of the site. As part of the proposal, one of the curb cuts on Carleton Street will be closed and the one at the rear of the site will remain open.

Figure 7: Front View Rendering

The front façade of the building is set back approximately 10 feet from the sidewalk. At the sidewalk line a low retaining wall with fence extends the full width of the property, with openings for vehicular and pedestrian entries. The fencing is metal and the base and posts are concrete.

The ground floor of the building features a 24' wide open passageway that provides vehicular access to the parking lot

behind the building. The main entrance to the apartment complex is located behind a projecting first floor canopy and porch. The porch extends in width beyond the entrance itself. There are two large, mature deciduous trees in the esplanade in front of the property. These trees are proposed to be retained.

Figure 8: West Elevation Rendering

Behind the proposed building is the surface parking lot. The applicant is proposing a total of thirty-one (31) parking spaces of which seven are dedicated handicapped spaces. Two handicapped spaces are required for Butler School under the Maine Housing Authority. The applicant is providing these two required parking spaces as well as eleven (11) other spaces for Butler School housing development for a total of thirteen (13) spaces. The applicant is proposing to provide a ride share car, which the Zoning Ordinance allows, and which reduces the required parking spaces by eight spaces.

V. PUBLIC COMMENT

A notice was sent out on May 14, 2015 to the area property owners indicating that the Planning Office had received this application. A notice of this Workshop was sent to 357 property owners within 500 feet and interested citizens, and appeared in the July 6th and July 7th, 2015 editions of the *Portland Press-Herald*.

A Neighborhood Meeting is required for this project and was held at Reiche School on June 11, 2015; the notes are in Attachment W. The Neighborhood meeting was attended by about 40 people. A total of nine people called the Planning Division office either to inquire or express concerns about the project of which five to six called a number of times recurrently to discuss the project in detail. Twelve (12) written comments have been received at the time this report was prepared and all the letters raise objections to the project. The main concerns to date are the loss of much needed parking space at this location and the design of the building. There were also some questions raised about the stormwater capacity and sewer capacity at this location since some of the abutters have had sewer backup their basements during a heavy rainfall.

There have also been four Freedom of Information requests. The specific questions raised pertain to whether this parking lot was approved for the specific use of the Butler School, when the School was converted to dwelling units in the late 1970s, and for 20 West Street when it was converted to dwelling units in 1980. The Planning staff reviewed files in the Planning Division, Inspections and Zoning Divisions, and Department of Public Services; the documents that pertained to the requestors' questions (conversion dates, parking requirements, etc.) were organized by address and given to the four requestors.

VI. RIGHT, TITLE AND INTEREST AND FINANCIAL/TECHNICAL CAPACITY

a. The owner of the property is Avesta Butler Payson LP. The applicant has provided a copy of quitclaim deeds, recorded at the Cumberland County Registry of Deeds (Please see Attachment D for the Book and Page) which demonstrates their right, title and interest in the property.

b. The estimated cost of the development is listed as approximately $6.5 Million on the application. The

applicant has submitted a letter from Gorham Savings Bank, dated April 28, 2014, as demonstration of their financial and technical capacity to complete the proposed development.

VII. ZONING ASSESSMENT

This project is for a new, four (4) story building with 37 residential dwelling units, located in the R-6 zone. There is also a Historic Overlay zone. On June 18th, the architect e-mailed me information regarding the average grade and the height of the building. The project height is at 43', which is under the maximum 45' building height. The project is meeting all other dimensional requirements.

At the time of HVAC permitting this office will require unit information on dBA emissions. Separate permits are required for any new signage. Since the site in in the historic district, all signs will need to be reviewed by the Historic Preservation staff.

VIII. DEVELOPMENT REVIEW

A. SITE PLAN SUBMISSION REQUIREMENTS (Section 14-527) and SUBDIVISION PLAT AND RECORDING PLAT REQUIREMENTS (Section 14-496)

The applicant has submitted a recording plat. The final plat will need to be revised to reflect any waivers and conditions of approval that relate to the subdivision plan. Any waivers granted must be recorded at the Registry of Deeds within 90 days of a Planning Board decision.

B. SUBDIVISION (Section 14-497)

The proposed development has been reviewed by staff for conformance with the relevant review standards of Portland's Subdivision Ordinance and applicable regulations. Staff comments are listed below.

1. *Will Not Result in Undue Water and Air Pollution (Section 14-497 (a) 1), and Will Not Result in Undue Soil Erosion (Section 14-497 (a) 4)*
   The project will not result in undue water or air pollution, as it is not in a flood plain and is for residential use. The proposal will not cause unreasonable soil erosion as the site is already paved.

2. *Sufficient Water Available (Section 14-497 (a) 2 and 3)*
   The applicant has not provided a 'Capacity to Serve' letter from Portland Water District; this would need to be provided by the public hearing to have a complete application.

3. *Will Not Cause Unreasonable Traffic Congestion (Section 14-497 (a) 5)*
   Carleton Street is a one-way street from Pine Street to West Street. The street on the south is Pine Street and the street to the north is West Street. All speed limits in the immediate area are posted 25 mph or not posted and assumed to be 25 mph.

   The applicant has submitted a Parking and Traffic Study. Tom Errico, Consultant Traffic Engineer with TY Lin, has reviewed the study and states:

   > *I have reviewed the traffic study and find the methods and conclusions to be acceptable. The project is estimated to generate 8 new AM peak hour trips and 10 new PM peak hours trips. Capacity analyses were conducted at the Carleton Street intersections with West Street and Pine Street and results indicate both intersections will operate at excellent levels of service. A review of crash data indicated there are no High Crash Locations in the vicinity of the project. Accordingly, the project is not anticipated to have a significant impact on traffic mobility and safety.*

4. *Will Provide for Adequate Sanitary Sewer and Stormwater Disposal (Section 14-497 (a) 6), and Will Not Cause an Unreasonable Burden on Municipal Solid Waste and Sewage (Section 14-497 (a) 7)*
As part of the revised plans, the applicant is proposing to separate the roof drain from the stormwater and sanitary sewer by draining all the roof water to a rain garden. David Margolis-Pineo, Deputy Engineer with the Department of Public Services, had reviewed the submitted plans. A wastewater application to confirm capacity has been submitted to the Department of Public Services. The wastewater application indicates that this new project will be putting approximately 3,000 gallons per day of sanitary waste into the sewer. There is a problem on the Western Peninsula of basements flooding when there is a heavy rain storm. Below is Mr. Margolis-Pineo's comment about the current situation in the neighborhood:

> *All streets in the West End of Portland, West, Pine, and Carlton Streets included, were designed with one sewer pipe to convey both stormwater and sanitary wastes. In recent years, more rain events have exceeded the capacity of the sewer resulting in residential sewer backups into basements. It has been estimated that the 37 Avesta units proposed on Carlton Street will add approximately 3,000 gallons per day (gpd) of sanitary waste with no increase in stormwater runoff. To offset this estimated wastewater addition, the applicant is requested to calculate and propose means to retain/remove 3,000 gallons of stormwater for a one inch storm event.*

The Department of Public Services will make a determination on the wastewater capacity letter when the applicant has addressed the above comment.

The floor plan shows a trash room that will be utilized by the tenants. The details of how it will be used is not outlined in the application. The applicant should address this.

5. *Scenic Beauty, Natural, Historic, Habitat and other Resources (Section 14-497 (a) 8*
The proposed building is located within the West End Historic District and was considered by the Historic Preservation Board in May 2015. For subdivisions within historic districts the Historic Preservation Board must apply the standards of Section 14-651of Article IX which sets out criteria for review of new construction.

The Historic Preservation Board reviewed the proposed project at a Workshop on May 13, 2015 and the current renderings reflect the changes made to address the Historic Preservation Board's concerns. The building design contributes to the character of the area.

The City's Technical Standards regarding the provision of street trees applies to this subdivision which requires one street tree per unit, therefore thirty-seven (37) street trees are being proposed. The landscaping plan shows two existing trees that will remain on Carleton Street and two paperbark maples that are being proposed along the common passageway at the rear of the site. Jeff Tarling, the City Arborist, has reviewed the tree selection types and states the following about the selection:

> *Tree selection types also need to be larger tree variety vs Hawthorn and Paperbark Maple which are very small trees. European Hornbeam or some of the upright Oak varieties like 'Regal Prince' which can grow in tight space but offer more height for screening. See: http://www.jfschmidt.com/pdfs/regalprinceoak.pdf*
>
> *The north edge space for example, could use 4 of the upright trees vs the two Hawthorns as shown.*

The plan is not showing any new trees being proposed on Carleton Street. Given the limited space on the site and along the sidewalk, three more street trees should be planted as part of the project: one tree on Carleton Street and two along the common passageway side of the site. As the remaining thirty-two (32) trees cannot be located on the site, the applicant will need to request a waiver of the street trees and make

a financial contribution to the City's Residential Tree Program for the provision of 32 trees to be planted in the vicinity of the proposed project.

6. *Easements*
According to the applicant, the only easement on this site is one that requires that Avesta Housing provide two ADA spaces for the use by the Butler School Project.

7. *Comprehensive Plan (Section 14-497 (a) 9)*
The staff has identified the following goals and policies which are relevant to the proposed housing development and finds the proposal in conformance with the Comprehensive Plan:

Portland Housing Goal: 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.
Policies

- Ensure 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, including but not limited to the following:
  - ii. Housing units for decreasing household size, such as young professionals, empty nesters, single-parent households, and senior citizens.
  - viii. Housing with a range of services and medical support for the elderly and special needs population, including assisted living, congregate care, group homes and nursing homes;
- Encourage higher density housing for both rental and home ownership opportunities, particularly located near services, such as schools, businesses, institutions, employers, and public transportation.
- 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.
- Identify vacant land and redevelopment opportunities throughout the City to facilitate the construction of new housing.

Portland Housing Goal: Maintain and enhance the livability of Portland's neighborhoods as the City grows and evolves through careful land use regulations, design and public participation that respects neighborhood integrity.
Policies

- Encourage innovative new housing development, which is designed to be compatible with the scale, character, and traditional development patterns of each individual residential neighborhood.
- Encourage new housing development in proximity to neighborhood assets such as open space, schools, community services and public transportation.
- Ensure the integrity and economic value of Portland's neighborhoods.

Volume 2 Implementation - Housing Initiatives:

3. New Senior Citizen Housing: A variety of housing opportunities are needed to assist Portland's senior citizens, including subsidized apartments.

   (b) Update zoning to encourage neighborhood livability with higher density multi-family and innovative mixed use projects that are along major public transportation routes, near service areas, in redevelopment (underutilized) or infill area, locations near downtown and in business zones.

8. *Financial Capability (Section 14-497 (a) 10)*

The estimated cost of the development is listed as approximately $6.5 Million on the application. The applicant has submitted a letter from Gorham Savings Bank, dated April 28, 2014, as demonstration of their financial and technical capacity to complete the proposed development.

C. SITE PLAN STANDARDS (Section 14-526)

The proposed development has been reviewed by staff for conformance with the relevant review standards of Portland's site plan ordinance and applicable regulations. Staff comments are listed below.

1. Transportation Standards

a. *Impact on Surrounding Street Systems and Access and Circulation*

The proposed project is located on a site that has access off of Carleton Street via one curb cut and has access via a common passageway from the rear of the property. There are two access points for this common passageway from the site; the passageway connects to West and Pine Streets.

The applicant has submitted a traffic study and Mr. Errico has reviewed it. Please refer to Paragraph VIII B (3) for his analysis.

b. *Public Transit Access*

The public transit requirements do not apply to this project but there is a bus route, Route #8, which serves West Street. West Street is approximately 125 feet from the site.

c. *Parking*

It is understood that the applicant is using the site at present for parking for tenants from other properties and are on a monthly rental. The neighborhood is worried that when this project gets developed, the cars currently parking at this lot (58 spaces of which are 10 are being used by the Butler Street apartments) will be displaced. These cars will be placed on the surrounding on-streets, where parking is so scarce.

Section 14-332.1 (k) – For residential development on the peninsula and in the R-6 and R-6A Zones, including new construction, the parking requirement is one space per dwelling unit, the first three units are exempt from providing parking. This same section also states that:

> The planning board may establish a parking requirement that is less than the normally required number of spaces upon a finding of unique conditions that result in a lesser parking demand, such as housing for persons who cannot drive, housing that participates in a travel demand management program, availability of transit, or housing which includes permanent restrictions on automobile usage, and which is permanently restricted from utilizing resident on-street parking stickers.

The applicant is proposing to provide a ride share car, per Zoning Ordinance (Section 14-332.1 (k) 2), which allows the parking spaces to be reduced by eight spaces. The applicant will have to determine where the parking space will be provided for the car.

Section 14-332.2 (b) - *Incentives for affordable housing- parking reductions,* the Planning Board may establish a parking requirement for affordable units that are less than the one parking per unit requirement, regardless of the size of the structure.

The following is the breakdown of the parking that is required by zoning:

Proposed Development has 37 Units	34 spaces are required per R6 zoning

Development is proposing u-car share	8 spaces are reduced per Zoning Ordinance for car share
Total of Spaces required	26 Parking Spaces

The applicant is proposing a total of thirty-one (31) parking spaces of which seven spaces are handicapped at the rear of the site, behind the proposed building. Two handicapped spaces are required for Butler School under the Maine Housing Authority. The applicant is providing these two required parking spaces as well as eleven (11) other spaces for Butler School housing development for a total of thirteen (13) spaces. As part of the proposal, one of the curb cuts on Carleton Street will be closed and the one at the rear of the site will remain open.

According to the applicant's cover letter, Attachment A, it states:

> *Historically, AVESTA's parking demand for their projects is 70% of total number of units, or 26 spaces. The ride share care will further reduce this number to 18. We would like this to be the required number.*

The applicant has submitted Supplemental Parking Information Parking Occupancy Evaluation (Attachment T). Mr. Errico has reviewed the information this information and offers the following:

> *The applicant has provided updated parking demand analysis information that indicates the proposed site will require 0.37 parking spaces per residential unit, but is suggesting a parking supply – for 17 Carleton Street only – of 0.48 parking spaces per unit or 18 parking spaces. I would note that the parking rates developed by the applicant are based on cars observed to be parked. According to their data, at many sites the number vehicles parked did not closely correlate to tenant automobile ownership. If automobile ownership was used, the average parking demand rate would be 0.59 parking spaces per residential units. I need to continue to review this and historical parking information, before I render a conclusion on the parking demand analysis.*

Mr. Ericco also adds that any "*Changes to the on-street parking schedule for Carleton Street will be required in conjunction with changes to existing driveway conditions. This will require City Council action and the applicant shall provide supporting documentation at the time of the request*".

d. *Bicycle Parking*

Currently there is not bicycle parking at the surface parking lot. The applicant is proposing a total of twenty (20) spaces on site, four of these will be exterior and sixteen (16) will be in the Bike Room, which is within the building.

2. Environmental Quality Standards

a. *Preservation of Significant Natural Features*

There are no known significant natural features on the site.

b. *Landscaping and Landscape Preservation*

The applicant is proposing to have landscaping along the front of the building as well as along the back of the property. The applicant is proposing to save two street trees on Carleton Street, in front of the building. The street tree requirement would be one tree per unit, or thirty-seven street trees, in or near the ROW (refer to Section VIII B5, above). Due to the site constraints, the applicant cannot plant the required amount. Therefore the applicant will need to contribute to the City's Tree Fund for the balance of required trees.

Jeff Tarling, City Arborist, has reviewed the landscaping plan and feels additional screening is needed along north edge, see below:

> *The north edge space for example, could use 4 of the upright trees vs the two Hawthorns as shown.*

c. *Water Quality, Storm Water Management and Erosion Control*
The site is fully developed as a parking lot. The site currently drains to two catch basins on site which connect to the drainage system in Pine Street. With the proposed development, the amount of impervious surface on the site will be reduced. The developed conditions will match the existing conditions with flow going to the existing onsite catch basin. A series of field inlets, underdrains and catch basins will collect the runoff and convey it to the catch basin at the rear of the site. The drainage from the parking area will flow to Pine Street via the existing storm drain, as it currently does.

David Senus, Consultant Engineer with Woodard and Curren, had recommended in his preliminary comments that the roof drain be should be discharged to the ground or preferably to landscaping or a rain garden area instead of a connection into the storm drain system, which ultimately connects to the City's combined sewer system. The applicant has revised the plans to show that the roof drain will be discharged to a rain garden. Mr. Senus also offers the following comments:

> *The addition of an underdrained soil filter to manage runoff from the proposed rooftop area will help to reduce the volume and slow the rate of inflow into the City's combined sewer system; an enhancement over the existing site condition where runoff from the existing parking area directly enters the City's combined sewer system. The City has received comments and complaints from neighbors with concerns regarding the capacity of the combined sewer system, specifically related to sewer backups into nearby basements. We request that the Applicant calculate the reduction in stormwater discharge rate and the volume reduction potential (estimated infiltration) for the soil filter system for a typical 1", 24-hr storm event and provide a comparison to the anticipated sanitary sewer flowrates generated by the project.*

Please refer to Attachment 15 for Mr. Senus' full review.

3. Public Infrastructure and Community Safety Standards
4.

a. *Public Safety and Fire Prevention*
The Crime Prevention through Environmental Design (CPTED) standards in the site plan ordinance address the principles of natural surveillance, access control and territorial reinforcement so that the design of developments enhance the security of public and private spaces and reduce the potential for crime. Overhead lighting poles are being proposed at the parking lot that will provide a well lite area. The applicant is also providing a well illuminated passageway from Carleton Street to the parking lot.

Captain Keith Gautreau of the Fire Department has reviewed the proposed plans. Capt. Gautreau's main concern is that the proposed building has access on a minimum of two sides and the access to the rear of the building be maintained year round. There are two accesses to the building, one from Carlton Street and one from the common passageway. According to the applicant, the common passageway to West Street is maintained by Avesta Housing and cars do not park at this location. Capt. Gautreau may want signage at this location. The Fire Department's full comments for the project are in Attachment 17; City staff and the applicant are working together to resolve any issues.

b. *Availability and Adequate Capacity of Public Utilities*

The project will be served by the existing utility services located in Carleton Street. The electrical and communication utilities are located in the common passageway. The Applicant has received a capacity letter from the Portland Water District and has contacted the City Department of Public Services requesting ability to serve sewer demand, and awaits response. Confirmation of ability to serve sewer from DPS should be forwarded to the Planning Authority upon receipt.

5. Site Design Standards

a. *Snow and Ice Loading*

The application and site plan was unclear about onsite snow loading areas on the site. The applicant will have to address this standard requirement.

b. *Exterior Lighting*

The site is located in the West End Historic District; therefore the Historic Preservation Board will review the proposed fixtures. The revised photometric plans have been reviewed by Planning Staff the lighting trespass at the north edge of the property is now meeting the required trespass standard of .01 foot candle at property line.

c. *Noise and Vibration*

All heating, ventilation and air conditioning equipment (HVAC), air handling units (AHU), emergency generators, and similar equipment will have to be shown on the plans and meet state and federal emissions requirements. Mechanical equipment should be located to the interior of the site, away from abutting residential properties and be screened from view from any public street and from adjacent sites by structure walls, evergreen landscaping, fencing, masonry walls or a combination thereof. This information will have to be submitted for review.

d. *Signage and Wayfinding*

The site is located in a historic district; therefore all commercial signs will need to be reviewed by the Historic Preservation staff. Separate permits are required for any new commercial signage.

e. *Zoning Related Design Standards*

Since the property is located in the West End Historic District, the Historic Preservation Board will review the design of the building. The Board has had one workshop on the item and a second one is scheduled for July 15, 2015.

IX. NEXT STEPS

1. Address staff comments;
2. Address additional comments of the Planning Board;
3. Prepare final plan submission for review by the Planning Authority and Planning Board; and
4. Hold final Planning Board Hearing.

ATTACHMENTS

PLANNING BOARD ATTACHMENTS

1. Application for Certificate of Occupancy for the Use of Premises
2. Site plan for 17 Carleton Street Property
3. Planning Report from the Portland Planning Department to the Board of Appeals
4. Board of Appeals Finding of Facts for Carleton Street Site
5. Application for Certificate of Occupancy for the Use of Premises
6. Marge Schmuckal Determination Letter
    a. Board of Appeals Space and Bulk Variance Appeal for 214-220 State Street
    b. Board of Appeals Space and Bulk Variance Appeal for 71-83 Pine Street

7. Board of Appeal Conditional Use for the Carleton Street Property
8. Planning Department Site Plan Review sheet
9. Public Works Department Site Plan Review sheet
10. Subdivision for Butler-Payson Co. recorded in 1977
11. 20 West Street- Board of Appeals Board granted Space and Bulk Variance
12. 20 West Street- Board of Appeals Board granted Space and Bulk Variance
13. Traffic Engineering Review (Tom Errico, T Y Lin), comments dated 06.04.2015 and 07.02.2015
14. Department of Public Services Review, David Margolis-Pineo, dated 06.05.2015
15. Civic Engineer Review, David Senus, dated 05.28.2015 and 07.09.2015
16. City Arborist Review, Jeff Tarling, dated 06.02.2015
17. Fire Department, Capt. Keith Gautreau, dated 05.07.2015
18. Jennifer Thompson Email dated 07.01.2015
19. Butler School Associates Deed
20. Maurice Selinger of Curtis Thaxter Letter dated 07.08. 2015

PUBLIC COMMENTS

PC1. Anne Adams at 30 West Street
PC2. Clair Oppenheim
PC3. Deborah Boyajiin and Bill Nelligan at 27 West Street
PC4. Derek Jaskulski at 50 Carleton Street
PC5. Elliot Rappaport at 20 West Street
PC6. Jen DeRosa
    1. Comments dated 06.02.2015
    2. Comments dated 06.08.2015
    3. Photographs
PC7. Jenson Steel at 30 West Street #6
PC8. Liz Kellogg
PC9. Mason Sears at 106 Pine Street
PC10. Resident at 30 West Street Apt. #2
PC11. Resident at 30 West Street
PC12. FOAA request - Penrose
PC13. FOAA request - Mary Doughty
PC14. FOAA request - George Silverman
PC15. FOAA request - Larry Reinhartsen
PC16. Kathy DiMatteo at 20 West Street
PC17. Julie DiMatteo at 20 West Street
PC18. Joshua Roy at 20 West Street

APPLICANT'S SUBMITTAL

A. Cover Letter (Tom Greer, Pinkham &Greer Civil Engineers) dated 05.07.2015
B. Site Plan Application, Checklist & Authorization Letter
C. Project Information and Photos
D. Deed and Passageway Agreement
E. USGS Location Map
F. Financial Capacity
G. Technical Ability
H. Tax Map
I. Portland Water District Ability to Serve Letter Request
J. Flood Map
K. Soils Map
L. Wastewater Ability to Serve Letter Application

M. Unitil Ability to Serve Letter
N. Construction Plan
O. Electrical Site Plan & Photometric
P. Traffic and Parking Study
Q. Drew Wing's Email dated 06.17.2015and 06.30.2015
R. Cover Letter Addressing (Tom Greer, Pinkham &Greer Civil Engineers) dated 06.30.2015
S. Updated Project Data Sheet
T. Supplemental Parking Information Parking Occupancy Evaluation
U. Lighting Catalogue Cuts
V. Portland Water District Ability to Serve Letter
W. Neighborhood Meeting and Minutes

PLANS

Plan1	C1.0 – Subdivision Recording Plat
Plan2	C1.1 – Site Plan
Plan3	C1.2 – Existing Conditions and Demolition Plan
Plan4	C1.3 – Grading and Utilities Plan
Plan5	C1.4 – Erosion Control and Landscape Plan
Plan6	C2.1 – Detail
Plan7	C2.2 – Detail
Plan8	C2.3 – Detail
Plan9	C2.3 – Detail
Plan10	C2.4Butler Payson Survey
Plan11	Photometric Plan
Plan12	Carleton Street - Front View Rendering
Plan13	Carleton Street - West Elevation Render
Plan14	Carleton Street - BACK VIEW
Plan15	Carleton Street - Model in Street NW
Plan16	Carleton Street - Model in Street SW
Plan17	Carleton Street - A2.1 - BUILDING ELEVATIONS
Plan18	Carleton Street - Floor Plans

Att. 1

APPLICATION FOR CERTIFICATE OF OCCUPANCY FOR USE OF PREMISES

13-23 Carleton St

Portland, Maine January 17, 1975

Lot 55-A- 4 & 5, Pine St

Zone R-6

INSPECTOR OF BUILDINGS, Portland, Maine

The undersigned hereby applies for a certificate of occupancy to the use of the above named premises for parking

forth on the attached site plan (made by CDS address is PO Box 7130, Portland, Me) to show compliance with the Ordinance according to the intended use and the zone in which the is located; and in accordance with the following pertinent mation:-

(name, address and phone number) CDS, PO Box 7130, Portland, Me. 04112

(name, address and phone number)

posed use to be accessory to a building or other use on this lot?

yes , If so, what is use of building or other use apartments

If street parking is sought, what is proposed maximum number of vehicles to be parked - passenger cars? 64 , commercial vehicles 0 .

Have you secured on the site plan the written approval of existing and proposed entrances to and exits from the premises for vehicles over sidewalks by the Traffic Engineer (Dept. of Public Works? no And, if access to the premises is available from more than one street, have you secured similar approval by the Planning Board? no

Have you shown on the site plan the true location of all trees on the street along the frontage of the premises (both streets if a corner lot)? yes

Do you propose to remove or disturb any tree on a public street? no Have you secured on the site plan the written approval of the Director of Parks and Recreation? n/a

Signature of Owner

By
(duly authorized thereto)

****

THIS IS NOT A CERTIFICATE OF OCCUPANCY

COMMENCING the above proposes use of the premises would be IN VIOLATION of the Zoning Ordinance unless a Certificate of Occupancy is first procured from the Department of Building Inspection.

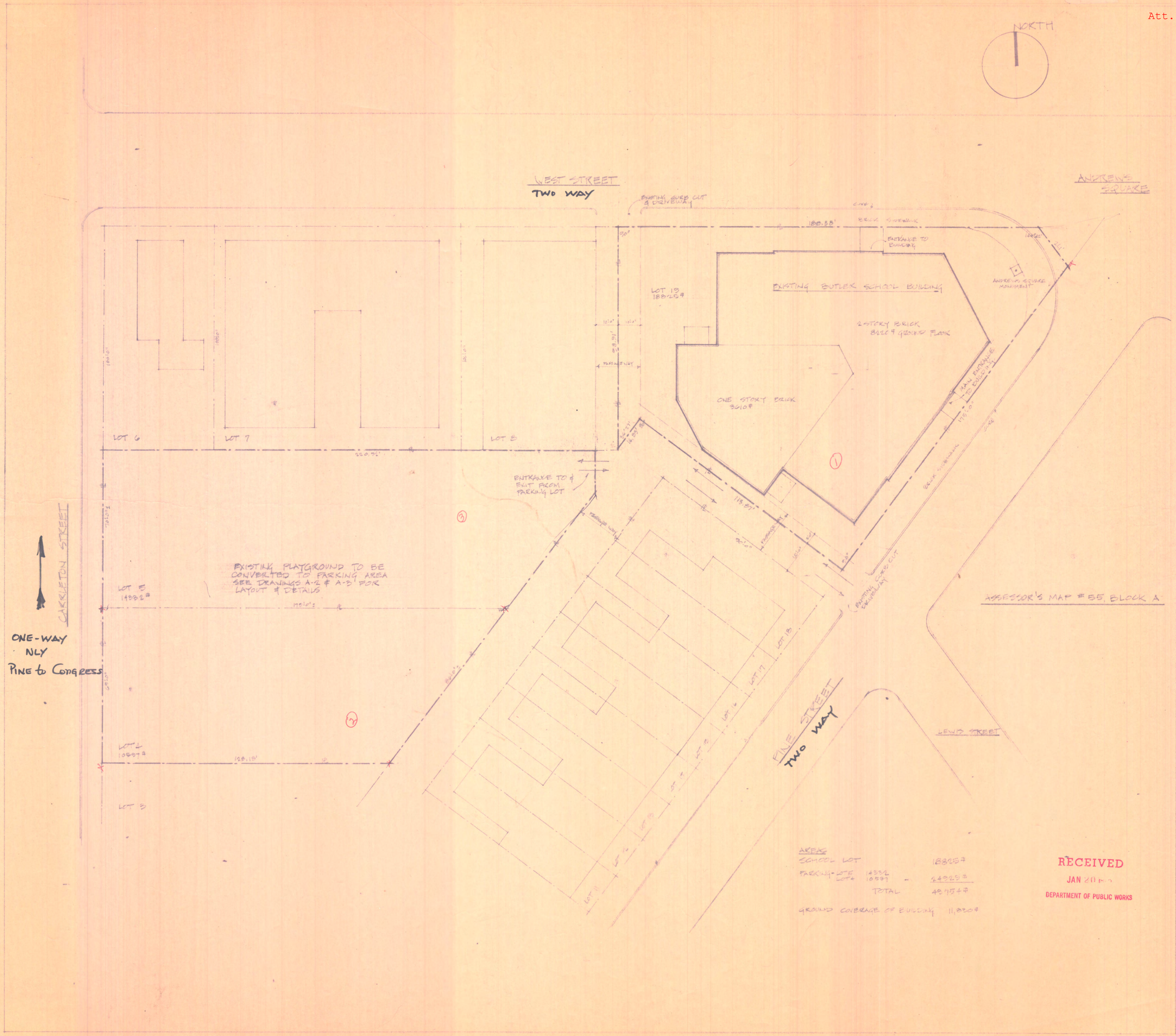
However, improvement of the premises according to the site plan and the above application may now proceed without further authorization, but subject to the conditions indicated below - notice of readiness for final inspection to be given to this department when the premises have been placed in compliance with the requirements:-

(Date) Inspector of Buildings

2-11-75 Not satisfied

Appeal sustained conditionally 2-12-75

Att. 2



RECEIVED
JAN 20 19
DEPARTMENT OF PUBLIC WORKS

CDS INC
343 fore street
portland maine

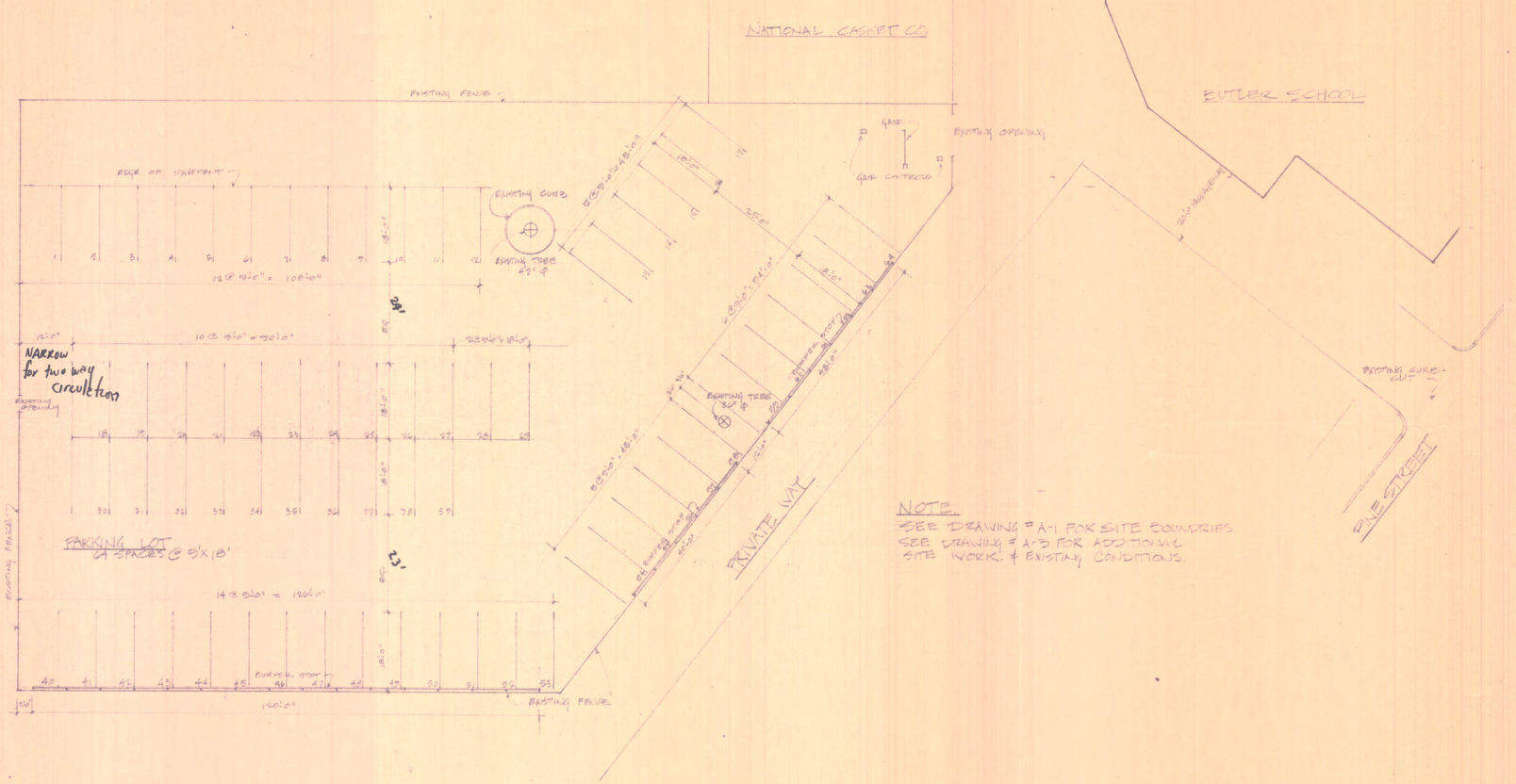
BUTLER SCHOOL
77 PINE STREET
PORTLAND MAINE

SITE PLAN

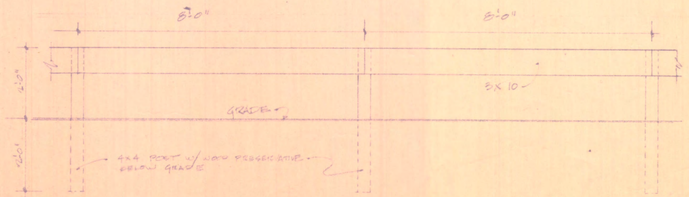
scale 1" = 20'-0"
date JAN 1983
drawn by

drawing no
A-1

job no



NOTE
SEE DRAWING # A-1 FOR SITE BOUNDRIES
SEE DRAWING # A-3 FOR ADDITIONAL SITE WORK & EXISTING CONDITIONS.



TYPICAL BUMPER STOP
1/4" = 1'-0"

RECEIVED
JAN 20 1975
DEPARTMENT OF PUBLIC WORKS

CDS INC
343 fore street
portland maine

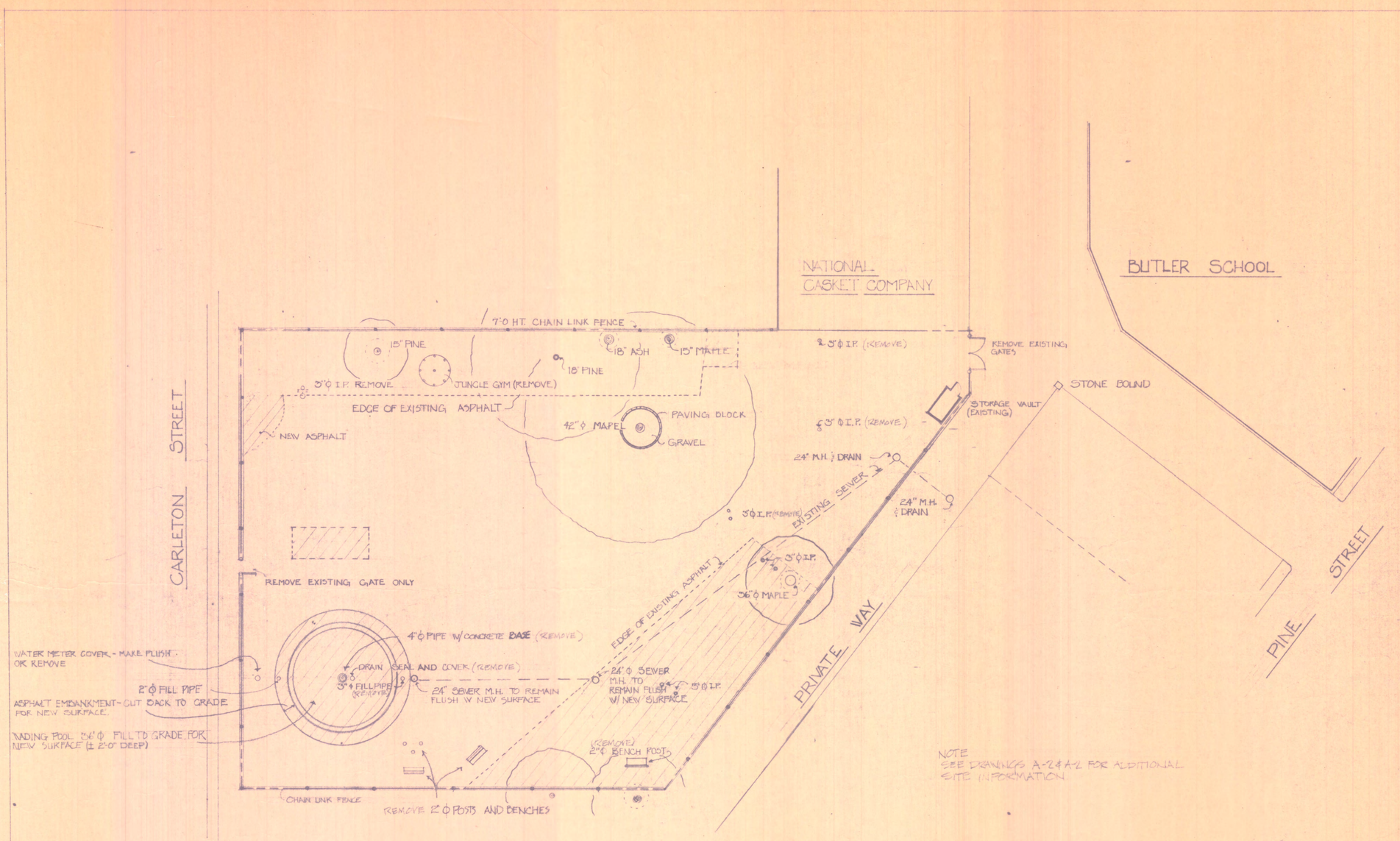
BUTLER SCHOOL
77 PINE STREET
PORTLAND MAINE

PARKING LOT LAYOUT

scale 1/8" = 1'-0"
date 18 JAN 75
drawn by

drawing no
A-2

job no



NOTE
SEE DRAWINGS A-2 & A-2 FOR ADDITIONAL SITE INFORMATION

NOTES

1. ALL EXISTING TREES TO REMAIN
2. ALL PIPES ECT FROM BENCHES PLAYGROUND EQUIPMENT ECT WITHIN PARKING AREA TO BE CUT OFF AT OR BELOW GRADE AND REMOVED
3. CONTRACTOR TO VARIFY ALL CONDITIONS ON SITE AND REPORT ANY DISCREPANCIES TO OWNER
4. ALTERNATE A. PATCH OUT SHADED AREAS ONLY, GRADE LIEVEL NEW ASPHALT SURFACE
   B. GRADE LEVEL & NEW ASPHALT AREA AS NOTED

Grade Pavement to utilize existing SD & CB as much possible
depress MH slightly existing

RECEIVED
JAN 20 1975
DEPARTMENT OF PUBLIC WORKS

CDS INC
343 fore street
portland maine

BUTLER SCHOOL
77 PINE STREET
PORTLAND, MAINE

PARKING SITE PLAN

Scale 1/16"=1'-0"
Date 13 JAN 75
Drawn by CJK

DRAWING No. A-3

JOB No.

Att. 3

CITY OF PORTLAND, MAINE
MEMORANDUM

TO: Chairman and Members of the Board of Appeals

DATE: 1/31/75

FROM: Portland Planning Department

SUBJECT: Planning Report - Board of Appeals Agenda - 2/12/75

1. Butler School Play Yard - Parking Lot. Community Development Services, Inc.

Facts: Parking lot for 64 cars with gate control
Existing zone - R-6
LDP proposed zone - R-6
Site area - 24,929 square feet (0.57 acres)
No conflict with City projects
No LDP land use conflicts

Background: Late in 1973, the City advertised for the disposition of the Butler School. Later, the Butler School Playyard was included in the disposition description for both properties to be disposed of as a package. After numerous meetings, Council voted to sell both properties to Community Development Services, Inc. (CDS) for use as rehabilitated housing and associated parking, with the understanding that CDS would have to obtain a permit from the Board of Appeals.

Staff Review: Access to the 64 space lot is proposed over an existing alleyway from Pine Street and behind the Butler School (see opinion below). The developer intends to utilize the existing pavement as much as possible with new paving only where necessary. As required by the City, all trees are being preserved and the site plan has set aside tree areas. A twenty-foot buffer strip along the north side of the lot (where many of the trees are located) is being preserved.

Parking stalls are designed at 9' x 18' and bay widths are as narrow as 59 feet. Normally a 60 foot bay width is required; however, discussions with the developer revealed that this was necessary so as to (1) utilize existing pavement and (2) preserve the 20 foot buffer strip. Since intentions are for each space to be assigned to one person and since there will be a gate to prohibit the casual parker, the reduced bay widths should be adequate.

The gate opening is shown as 10 feet wide. This appears somewhat narrow particularly for two-way traffic; however, design of the gate control system may dictate the narrow opening. The accessway inside the gate expands to 22 feet.

While there is a 20-foot buffer on the northerly side of the lot, none is proposed for the southerly lot line. During the disposition process, a Mr. Wesley Kinney of Cumberland Center, owner of the abutting property, contacted the Planning staff regarding a means of buffering that could be installed along the property line. CDS has been advised to contact Mr. Kinney to resolve the problem and Mr. Kinney has been notified.

No lighting is shown on the plans. While the lot probably could use additional illumination, the installation of lights could result in a nuisance to abutting residential properties. Since potential vandalism should be reduced by the controlled nature of the lot, the absence of lighting may not be a problem.

Opinion: Access to the lot via the private alleyways creates some problems. While the alleys pass behind the Butler School, their ownership is uncertain. They are only 20 feet wide and are presently used for parking. While the parking area will not be open to the general public, it will generate the traffic of 64 cars over this alley. It is the staff's opinion that while the use of the alley for access is not wholly unacceptable, there may be some flow and safety consequences because of the narrow width.

The alternative to the use of the alley would be access from Carleton Street. This might create security problems for CDS with their control gate so easily accessible. Secondly, it would generate additional traffic on Carleton Street, which is predominantly residential. And third, the one-way nature of Carleton Street would make access to the lot somewhat inconvenient. Therefore, while both access schemes are workable, neither is perfect.

Parking is a problem on the peninsula. For residential areas in the City, parking is most acute in the West End. While the uncontrolled proliferation of parking lots in residential areas can have a blighting effect, off-street parking is a necessity and can be an asset if done well. This proposal incorporates the retention of the existing mature tree cover; these trees will tend to soften many of the detrimental effects of a parking lot. Access via the alleyway, while not wholly desirable, will tend to lessen the visibility of the parking area by the neighborhood as a whole.

cc: A. Allan Soule, Assistant Director, Building & Inspection Services
Charles Lane, Assistant Corporation Counsel

Att. 4

CITY OF PORTLAND, MAINE
IN THE BOARD OF APPEALS

CONDITIONAL USE APPEAL

Findings of Fact

The applicant is CDS, Inc. (David Schurman, President) and he is interested in the property located at 13-23 Carleton Street as holder of an option. The owner of the property is City of Portland and his address is 389 Congress Street, Portland, ME. The property is located in a R-6 Zone. The present use of the property is playground.

The applicant respectfully petitions the Board of Appeals for a conditional use permit to permit a certificate of occupancy for use of the premises at the above-named location as an off-street parking lot for 64 passenger cars.

Further Findings of Fact

CDS, Inc. is the holder of an option which must be exercised by March 31, 1975.

Appearances

The names and addresses of those appearing in support of the application are: David Schurman, President CDS, P.O. Box 7130, Portland, ME, Charleton Smith, Esquire, 148 Pine Street, Portland, ME.

and the names and addresses of those appearing in opposition to the application are: Dorothy LeButt, 144 Pine Street, Portland, ME, Wesley Kinney, Cumberland Center, ME, Scott Dexter, (minor address unknown), Philip Jenkins, Tate Street, Portland, ME, David Osborn, (minor address unknown).

Exhibits

The documentary evidence presented to the Board, including, but not by way of limitation, plans, specification, photographs, etc. consisted of the following: A report from the Planning Department and several letters both in support and in opposition to the proposed use.

REASONS FOR DECISIONS

The proposed building or use (will/~~will not~~) be in harmony with the general purpose, goals, objectives and standards of the Land Development Plan, the Zoning Ordinance and the Site Plan Ordinance, as evidenced by: The conditions placed upon the development of the parking lot by the Planning Board

The proposed building or use (~~will~~/will not) have a substantial adverse effect, including monetary, upon adjacent property, the character of the neighborhood, the traffic conditions, utility facilities and other matters affecting the public health, safety and general welfare, because of the following: the present use of the property and its suitability as a parking lot in the particular neighborhood and also the conditions imposed upon the use permit by the Board of Appeals

The proposed building or use (will/~~will not~~) be constructed, arranged and operated so as to interfere with the development and use of neighboring property in accordance with the applicable zoning regulations as demonstrated by: it will aid in the development of adjacent property because the development of the Butler School will retain the character of the neighborhood.

The proposed building or use (will/~~will not~~) be served adequately by essential public facilities and services such as highways, streets, police and fire protection, drainage structures, refuse disposal, water and sewers, and schools, as evidenced by: the applicant will preserve a 24 foot strip for storage of snow during snow removal operations. There are existing sewers on the property which adequately serve it.

and the persons or agencies responsible for the establishment of the proposed use (will/~~will not~~) provide adequately for such services as shown by: Approval of the proposed plans by the Building Inspector

The proposed building or use (~~will~~/will not) result in the destruction, loss or damage of any natural, scenic or historic feature of major importance, because of the following: because of the retention of existing trees.

The proposed building or use (will/~~will not~~) comply with all standards imposed on it by the regulations applicable to the zone in which the use will be located and any additional standards relating to the specific conditional use as demonstrated by the following: Reports of the Building Inspector and Planning Staff

The proposed building or use at the particular location requested (is/~~is not~~) necessary or desirable to provide a service or a facility which is in the interest of the public convenience or which (will/~~will not~~) contribute to the general welfare of the neighborhood or community, as demonstrated by: Current parking need

The public goals described above (can/~~can not~~) be met by the location of the proposed building or use at some site or in some area which may be more appropriate than the proposed site, because of the following: Lack of parking in the area.

All steps possible (~~have~~/have ~~not~~) been taken to minimize any adverse effects of the proposed buildings or use on the immediate vicinity through building design, site design, landscaping and screening as evidenced by: Report of the Planning Staff and approval by the Building Inspection Department

SPECIFIC RELIEF GRANTED

After a public hearing on February 12, 1975, the Board of Appeals find that all of the conditions required by the Ordinance (do/~~do not~~) exist with respect to this property and that a conditional use should _____ be granted in this case.

It is therefore determined that a conditional use _____ be granted *

this case by:

James O'Malley

Walter R. Nelson

Jacqueline Cole

Thomas J. Murphy

Joel D. Snow

* Subject to the following conditions: (a) Installation of light screening on fence (b) Planning Staff will work with Mr. Kinney and other abutters and the developer to provide fencing as needed as well as additional lighting if such is found necessary.

Att. 5

APPLICATION FOR CERTIFICATE OF OCCUPANCY FOR USE OF PREMISES

Portland, Maine Oct. 22, 1976

Location: 13-23 Carlton St. - Rear Zone B-6

To the INSPECTOR OF BUILDINGS, Portland, Maine

The undersigned hereby applies for a certificate of occupancy to allow the use of the above named premises for parking lot as set forth on the attached site plan (made by Schurman whose address is 24 Exchange St.) to show ance with the Zoning Ordinance according to the intended use an s in which the property is located; and in accordance with the following pertinent information:-

Owner (name, address and phone number) Butler School Assoc. -24 Exchange St. 774-0440

Lessee (name, address and phone number)

Is proposed use to be accessory to a building or other use on this lot? . If so, what is use of building or other use

If off-street parking is sought, what is proposed maximum number of vehicles to be parked - passenger cars? 15, commercial vehicles

Have you secured on the site plan the written approval of existing and proposed entrances to and exits from the premises for vehicles over public sidewalks by the Traffic Engineer (Dept. of Public Works? And, if access to the premises is available from more than one street, have you secured similar approval by the Planning Board?

Have you shown on the site plan the true location of all trees on the public street along the frontage of the premises (both streets if a corner lot)?

Do you propose to remove or disturb any tree on a public street? If so, have you secured on the site plan the written approval of the Director of Parks and Recreation?

Signature of Owner BUTLER SCHOOL ASSOCIATES

By Dion I Schurman - Architect
(duly authorized thereto)

****

THIS IS NOT A CERTIFICATE OF OCCUPANCY

To:

COMMENCING the above proposes use of the premises would be IN VIOLATION of the Zoning Ordinance unless a Certificate of Occupancy is first pro cured from the Department of Building Inspection.

However, improvement of the premises according to the site plan and the above application may now proceed without further authorization, but subject to the conditions indicated below - notice of readiness for final inspection to be given to this department when the premises have been placed in compliance with the requirements:-

(Date) Inspector of Buildings

APPLICATION FOR CERTIFICATE OF OCCUPANCY FOR USE OF PREMISES

Portland, Maine Oct. 22, 1976

Location 13 -23 Carlton St. Zone R-6

To the INSPECTOR OF BUILDINGS, Portland, Maine

The undersigned hereby applies for a certificate of occupancy to allow the use of the above named premises for parking lot as set forth on the attached site plan (made by David Schurman whose address is 24 Exchange St.) to show compliance with the Zoning Ordinance according to the intended use and the zone in which the property is located: and in accordance with the following pertinent information:-

Owner (name, address and phone number) Butler School Assoc. 24 Exchange St. 774-0440

Lessee (name, address and phone number)

Is proposed use to be accessory to a building or other use on this lot? _____. If so, what is use of building or other use

If off-street parking is sought, what is proposed maximum number of vehicles to be parked - passenger cars? 34, commercial vehicles

Have you secured on the site plan the written approval of existing and proposed entrances to and exits from the premises for vehicles over public sidewalks by the Traffic Engineer (Dept. of Public Works? _____ And, if access to the premises is available from more than one street, have you secured similar approval by the Planning Board?

Have you shown on the site plan the true location of all trees on the public street along the frontage of the premises (both streets if a corner lot)?

Do you propose to remove or disturb any tree on a public street? _____ If so, have you secured on the site plan the written approval of the Director of Parks and Recreation?

Signature of Owner BUTLER SCHOOL ASSOCIATES

By [signature] Architect
(duly authorized thereto)

****

THIS IS NOT A CERTIFICATE OF OCCUPANCY

Note:

COMMENCING the above proposes use of the premises would be IN VIOLATION of the Zoning Ordinance unless a Certificate of Occupancy is first procured from the Department of Building Inspection.

However, improvement of the premises according to the site plan and the above application may now proceed without further authorization, but subject to the conditions indicated below - notice of readiness for final inspection to be given to this department when the premises have been placed in compliance with the requirements:-

(Date) _____ _____
Inspector of Buildings

Att. 6

Strengthening a Remarkable City. Building a Community for Life • www.portlandmaine.gov

Penny St. Louis Littell- Director of Planning and Urban Development
Marge Schmuckal, Zoning Administrator

October 15, 2009

Cory R. Fellows
The Wishcamper Companies, Inc.
Three Canal Plaza
Portland, ME 04101

RE: 77 Pine Street (71-83 Pine Street) – 055-A019 – (the "Property") – R-6 Zone with a Historic Overlay

Dear Mr. Fellows,

I am in receipt of your request to determine the parking requirement applicable to the Property.

The Property is located within an R-6 Zone with a Historic Overlay. The Property was developed in 1976 and 1977 for thirty-nine (39) dwelling units. On November 10, 1976 the owner/developer was granted a Space & Bulk Variance appeal for both the lot size per dwelling unit and required off-street parking. The Land Use Ordinance at that time required one off-street parking space for each dwelling unit or 39 parking spaces. The appeal granted allowed no off-street parking to be provided on the Property.

I have enclosed copies of the appeal actions for the Property.

If you have any other questions regarding this matter, please do not hesitate to contact me at 874-8695.

Very truly yours,

Marge Schmuckal
Zoning Administrator

CC: file

Enclosures

Att. 6A

CITY OF PORTLAND, MAINE
BOARD OF APPEALS

SPACE AND BULK VARIANCE APPEAL

I. Findings of Fact

A. Applicant Masada Trust (c/o Alan Levenson)

B. Property Location 214-220 State St. Corner of 32-36 Deering St.

C. Applicant's Interest in Property:

(x) Owner
( ) Tenant
( ) Other

D. Property Owner Masada Trust (c/o Alan Levenson)

E. Owner's Address 187 Middle St.

F. Zone (Circle One):

R-1 R-2 R-3 R-5 (R-6)

R-P B-1 B-2 B-3 A-B

I-P I-1 I-2 I-2b I-3 I-3b

RPZ

G. Site Plan Approval Required no

H. Present Use of Property vacant

I. Section(s) to Which Variance Related 602.7B.8 & 602..4B.1

J. Reasons Why Permit Cannot be Issued area of lotis only 9,240 sq. ft instead of the min. of 21,000 sq. ft. Only 4 parking space for off street parking instead of 17 minimum required.

K. Requested Variance Would Permit apt. house with 17 dwelling units.

L. Notice Sent to _____ Adjacent Property Owners

II. Appearances

A. Those Advocating Variance

Kermit Lipez - rep. Myerson, Allen

David Schurman

John Allen

B. Those Opposing Variance

Dorothy LeBert - for information

(for information) Wm. Gawronski - 39 Deering

(Attachments, As Necessary)

III. Exhibits (Any documents, photos, plans, further findings of fact, etc. presented to the Board as part of its records)

map, overlay, blueprints

IV. Reasons for Decisions - Undue Hardship (The following checklist relates with the Board of Appeals hardship definitions for space and bulk variances as contained in Section 602.24C 3.b.(1) (a) through (e).

A. The parcel is exceptional due to physical characteristics or topographic features which amount to more than a mere inconvenience [Section 602.24C 3.b.(1) (a)]

(✓) Yes/Agreement with statement

( ) No/Disagreement with statement

Reasons existing building

B. If yes, the unique physical conditions: (Check One) [Sec. 602.24C 3.b.(1) (b)]

(✓) existed at the time of the enactment of the provision from which a variance is sought; or

( ) were caused by natural forces; or

( ) were the result of governmental action

C. Pertinent ordinance provision deprives owner of substantial use or enjoyment of property in the manner commonly enjoyed by owners of property subject to the same provisions [Sec. 602.24C 3.b.(1) (c)]

( ) Yes/Agreement with statement — other property owners have similar parking conditions.

(✓) No/Disagreement with statement

Reasons _____

D. As evidenced by affirmative answers to either IV. A. or IV. C. above, the variance will not create a special privilege for the applicant. [Sec. 602.24C 3.b.(1) (d)]

(✓) Yes/Agreement with statement

( ) No/Disagreement with statement

Reasons _____

E. The variance will not adversely affect neighborhood property in the same zone and will not be detrimental to the general public health and safety [Sec. 602.24C 3. b.(1) (e)]

(✓) Yes/Agreement with statement

( ) No/Disagreement with statement

Reasons Will improve the building

V. Specific Relief Granted

After a public hearing held on Nov. 10, 1976, the Board of Appeals finds that: (Check One)

(✓) Approval - All of the conditions required by Sec. 602.24C 3.b.(1) exist with respect to this property, as evidenced by affirmative responses to all statements set forth in IV. A. through IV. E. above, and that a space and bulk variance be granted in this case.

Conditions of Approval (If Any) _____

( ) Disapproval - All conditions required by Sec. 602.24C 3.b.(1) do not exist with respect to this property, as evidenced by one or more negative responses to statements set forth in IV. A. through IV. E. above, and that a space and bulk variance should not be granted in this case.

VI. Signatures of Board

Chairman

Att. 6B

CITY OF PORTLAND, MAINE
BOARD OF APPEALS

SPACE AND BULK VARIANCE APPEAL

I. Findings of Fact

A. Applicant Public School Assoc.

B. Property Location 71-83 Pine Street, corner of 4-16 West Street

C. Applicant's Interest in Property:

(X) Owner
( ) Tenant
( ) Other

D. Property Owner Public School Assoc.

E. Owner's Address Box 4563 - Portland, Me. 04112

F. Zone (Circle One):

R-1 R-2 R-3 R-5 R-6

R-P B-1 B-2 B-3 A-B

I-P I-1 I-2 I-2b I-3 I-3b

RPZ

G. Site Plan Approval Required no

H. Present Use of Property vacant - school

I. Section(s) to Which Variance Related 602.7B.8 & 602.14B.1

J. Reasons Why Permit Cannot be Issued area of lot is 20,318 sq.ft. instead of 39,000 sq. ft. required. No off street parking will be provided instead of 39 parking spaces required.

K. Requested Variance Would Permit apartment house with 39 dwelling units

L. Notice Sent to _____ Adjacent Property Owners

II. Appearances

A. Those Advocating Variance

see State St.

B. Those Opposing Variance

(Attachments, As Necessary)

III. Exhibits (Any documents, photos, plans, further findings of fact, etc. presented to the Board as part of its records)

photo, overlay, blueprint

IV. Reasons for Decisions - Undue Hardship (The following checklist relates with the Board of Appeals hardship definitions for space and bulk variances as contained in Section 602.24C 3.b.(1) (a) through (e).

A. The parcel is exceptional due to physical characteristics or topographic features which amount to more than a mere inconvenience [Section 602.24C 3.b.(1) (a)]

(✓) Yes/Agreement with statement

( ) No/Disagreement with statement

Reasons

B. If yes, the unique physical conditions: (Check One) [Sec. 602.24C 3.b.(1) (b)]

(✓) existed at the time of the enactment of the provision from which a variance is sought; or

( ) were caused by natural forces; or

( ) were the result of governmental action

C. Pertinent ordinance provision deprives owner of substantial use or enjoyment of property in the manner commonly enjoyed by owners of property subject to the same provisions [Sec. 602.24C 3.b.(1) (c)]

(✓) Yes/Agreement with statement

( ) No/Disagreement with statement

Reasons_____

D. As evidenced by affirmative answers to either IV. A. or IV. C. above, the variance will not create a special privilege for the applicant. [Sec. 602.24C 3.b.(1) (d)]

(✓) Yes/Agreement with statement

( ) No/Disagreement with statement

Reasons_____

E. The variance will not adversely affect neighborhood property in the same zone and will not be detrimental to the general public health and safety [Sec. 602.24C 3. b.(1) (e)]

(✓) Yes/Agreement with statement

( ) No/Disagreement with statement

Reasons_____

V. Specific Relief Granted

After a public hearing held on Nov. 10, 1976, the Board of Appeals finds that: (Check One)

(✓) Approval - All of the conditions required by Sec. 602.24C 3.b.(1) exist with respect to this property, as evidenced by affirmative responses to all statements set forth in IV. A. through IV. E. above, and that a space and bulk variance be granted in this case.

Conditions of Approval (If Any)_____

( ) Disapproval - All conditions required by Sec. 602.24C 3.b.(1) do not exist with respect to this property, as evidenced by one or more negative responses to statements set forth in IV. A. through IV. E. above, and that a space and bulk variance should not be granted in this case.

VI. Signatures of Board

W Carl Estelam Chairman

Jacqueline Cohen

Thomas Murphy

James O'Malley

Gail D. Snow

Att. 7

CITY OF PORTLAND, MAINE
IN THE BOARD OF APPEALS

CONDITIONAL USE APPEAL

Findings of Fact

The applicant is Butler School Associates and he is interested in the property located at 13-23 Carleton St. as parking lot. The owner of the property is _____ and his address is _____. The property is located in a R-6 Zone. The present use of the property is vacant.

The applicant respectfully petitions the Board of Appeals for a conditional use permit to permit off street parking for 34 passenger cars which is not issuable under the Zoning Ordinance because the proposed use is not allowable in the R-6 Residential Zone in which this property is located unless authorized by the Board of Appeals. (Sec. 602.8.d)

Further Findings of Fact

See State St

Appearances

The names and addresses of those appearing in support of the application are:

See State St

and the names and addresses of those appearing in opposition to the application are:

Exhibits

The documentary evidence presented to the Board, including, but not by way of limitation, plans, specification, photographs, etc. consisted of the following:

See State St

_____

_____

_____

REASONS FOR DECISIONS

The proposed building or use (will/~~will not~~) be in harmony with the general purpose, goals, objectives and standards of the Land Development Plan, the Zoning Ordinance and the Site Plan Ordinance, as evidenced by: _____

_____

_____

The proposed building or use (~~will~~/will not) have a substantial adverse effect, including monetary, upon adjacent property, the character of the neighborhood, the traffic conditions, utility facilities and other matters affecting the public health, safety and general welfare, because of the following: _____

_____

_____

_____

The proposed building or use (~~will~~/will not) be constructed, arranged and operated so as to interfere with the development and use of neighboring property in accordance with the applicable zoning regulations as demonstrated by: _____

_____

_____

_____

The proposed building or use (will/~~will not~~) be served adequately by essential public facilities and services such as highways, streets, police and fire protection, drainage structures, refuse disposal, water and sewers, and schools, as evidenced by: _____

_____

_____;

and the persons or agencies responsible for the establishment of the proposed use (will/~~will not~~) provide adequately for such services as shown by: _____

_____

_____

_____

The proposed building or use (~~will~~/will not) result in the destruction, loss or damage of any natural, scenic or historic feature of major importance, because of the following: _____

_____

_____

The proposed building or use (will/~~will not~~) comply with all standards imposed on it by the regulations applicable to the zone in which the use will be located and any additional standards relating to the specific conditional use as demonstrated by the following: _____

_____

_____

The proposed building or use at the particular location requested (is/~~is not~~) necessary or desirable to provide a service or a facility which is in the interest of the public convenience or which (will/~~will not~~) contribute to the general welfare of the neighborhood or community, as demonstrated by: _____

_____

_____

_____

The public goals described above (~~can~~/can not) be met by the location of the proposed building or use at some site or in some area which may be more appropriate than the proposed site, because of the following: _____

_____

_____

_____

All steps possible (have/~~have not~~) been taken to minimize any adverse effects of the proposed buildings or use on the immediate vicinity through building design, site design, landscaping and screening as evidenced by: _____

_____

_____

_____

SPECIFIC RELIEF GRANTED

After a public hearing on Nov. 10, 1976, the Board of Appeals find that all of the conditions required by the Ordinance (do/do not) exist with respect to this property and that a conditional use should _____ be granted in this case.

Condition — screen against headlights on south side of Carleton.

It is therefore determined that a conditional use _____ be granted in this case by:

_____

_____

_____

_____

_____

CITY OF PORTLAND, MAINE
IN THE BOARD OF APPEALS

CONDITIONAL USE APPEAL

Findings of Fact

The applicant is Butler School Associates and he is interested in the property located at Rear 13-23 Carleton St. as _____. The owner of the property is Butler School Associates and his address is 24 Exchange St. _____. The property is located in a R-6 Zone. The present use of the property is vacant _____.

The applicant respectfully petitions the Board of Appeals for a conditional use permit to permit off street parking for 15 cars _____

Further Findings of Fact

_____

Appearances

The names and addresses of those appearing in support of the application are: See State St _____

_____

_____;

and the names and addresses of those appearing in opposition to the application are:

See State St _____

_____

_____

Exhibits

The documentary evidence presented to the Board, including, but not by way of limitation, plans, specification, photographs, etc. consisted of the following:

See State St _____

_____

REASONS FOR DECISIONS

The proposed building or use (will/~~will not~~) be in harmony with the general purpose, goals, objectives and standards of the Land Development Plan, the Zoning Ordinance and the Site Plan Ordinance, as evidenced by: _____

The proposed building or use (~~will~~/will not) have a substantial adverse effect, including monetary, upon adjacent property, the character of the neighborhood, the traffic conditions, utility facilities and other matters affecting the public health, safety and general welfare, because of the following: _____

The proposed building or use (~~will~~/will not) be constructed, arranged and operated so as to interfere with the development and use of neighboring property in accordance with the applicable zoning regulations as demonstrated by: _____

The proposed building or use (will/~~will not~~) be served adequately by essential public facilities and services such as highways, streets, police and fire protection, drainage structures, refuse disposal, water and sewers, and schools, as evidenced by: _____

_____;

and the persons or agencies responsible for the establishment of the proposed use (will/~~will not~~) provide adequately for such services as shown by: _____

The proposed building or use (~~will~~/will not) result in the destruction, loss or damage of any natural, scenic or historic feature of major importance, because of the following: _____

The proposed building or use (will/will not) comply with all standards imposed on it by the regulations applicable to the zone in which the use will be located and any additional standards relating to the specific conditional use as demonstrated by the following: lights directed away from adjacent buildings, plantings supervised by city arborist.

The proposed building or use at the particular location requested (is/~~is not~~) necessary or desirable to provide a service or a facility which is in the interest of the public convenience or which (will/~~will not~~) contribute to the general welfare of the neighborhood or community, as demonstrated by: _____

The public goals described above (~~can~~/can not) be met by the location of the proposed building or use at some site or in some area which may be more appropriate than the proposed site, because of the following: _____

All steps possible (have/~~have not~~) been taken to minimize any adverse effects of the proposed buildings or use on the immediate vicinity through building design, site design, landscaping and screening as evidenced by: _____

SPECIFIC RELIEF GRANTED

After a public hearing on Nov. 10, 1976, the Board of Appeals find that all of the conditions required by the Ordinance (do/do not) exist with respect to this property and that a conditional use should _____ be granted in this case.

It is therefore determined that a conditional use _____ be granted in this case by:

Carl Carlson

Jacqueline Cohen

Thomas J. Murphy

James O'Malley

Gail D. Snow

Att. 8

CITY OF PORTLAND, MAINE
SITE PLAN REVIEW
Processing Form

76

Date _____

Applicant _____

Mailing Address _____

Address of Proposed Site _____

Present Use of Site _____

Site Identifier(s) from Assessors Maps _____

Area of Site _____ Ground Floor Coverage _____

Zoning of Proposed Site _____

Conservation Review (DEP) Required: ( ) Yes ( ) No

Proposed Number of Floors _____

Board of Appeals Action Required: ( ) Yes ( ) No

Total Floor Area _____

Planning Board Action Required: ( ) Yes ( ) No

Other Comments: _____

Date Staff Review Due: _____

PLANNING DEPARTMENT REVIEW 10/26/76
(Date Received)

X Major Development — Requires Planning Board Approval: Review Initiated

Minor Development — Staff Review Below

	LOADING AREA	PARKING	CIRCULATION PATTERN	ACCESS	PEDESTRIAN WALKWAYS	SCREENING	LANDSCAPING	SPACE & BULK OF STRUCTURES	LIGHTING	CONFLICT WITH CITY PROJECTS	FINANCIAL CAPACITY	CHANGE IN SITE PLAN	
APPROVED	NA		X	X	X	X			X	X			
APPROVED CONDITIONALLY		X					X						CONDITIONS SPECIFIED BELOW
DISAPPROVED													REASONS SPECIFIED BELOW

REASONS: On November 9, 1976, the Portland Planning Board approved a site plan for this proposal. The ~~xxx plan was revised from the original to show~~ 31 parking spaces with nine foot widths. The Board's approval also ~~involved the provision of landscaping which had been submitted in the~~ interim and which has been revised according to recommendations of the City Arborist. ~~This approval xx is conditional upon both these revisions.~~ The Building Permit should be ~~withheld x until xxxxxxxx~~ the property has been conveyed to the applicant by the City.

(Attach Separate Sheet if Necessary)

11/12/76

SIGNATURE OF REVIEWING STAFF/DATE

PLANNING DEPARTMENT COPY

Att. 9

CITY OF PORTLAND, MAINE
SITE PLAN REVIEW
Processing Form

Date

Mailing Address

Address of Proposed Site

Proposed Use of Site

Site Identifier(s) from Assessors Maps

Ground Floor Coverage

Zoning of Proposed Site

Review (DEP) Required: ( ) Yes ( ) No

Proposed Number of Floors

Appeals Action Required: ( ) Yes ( ) No

Total Floor Area

Board Action Required: ( ) Yes ( ) No

Other Comments:

Date Dept. Review Due

RECEIVED

OCT 26 1976

DEPARTMENT OF PUBLIC WORKS

PUBLIC WORKS DEPARTMENT REVIEW

(Date Received)

	TRAFFIC CIRCULATION	ACCESS	CURB CUTS	ROAD WIDTH	PARKING	SIGNALIZATION	TURNING MOVEMENTS	LIGHTING	CONFLICT WITH CITY CONSTRUCTION PROJECT	DRAINAGE	SOIL TYPES	SEWERS	CURBING	SIDEWALKS	OTHER	
APPROVED	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
APPROVED CONDITIONALLY								JR								CONDITIONS SPECIFIED BELOW
DISAPPROVED		JR	JR													REASONS SPECIFIED BELOW

REASONS: Corrections in review are due to the reception of a revised plan.

(Attach Separate Sheet if Necessary)

John P. Rogue 11-3-76

SIGNATURE OF REVIEWING STAFF/DATE

PUBLIC WORKS DEPARTMENT COPY

Description of Playground Lot to be Mortgaged

A certain lot or parcel of land situated on the Easterly side of Carleton Street in the City of Portland, County of Cumberland, and State of Maine bounded and described as follows:

Beginning at an iron pipe on the Easterly sideline of said Carleton Street at the Southwesterly Corner of land of Irving McCalmon, said iron pipe also being 100.00 feet distant as measured along said Easterly sideline of said Carleton Street on a bearing of S18°-38'-00"W from the intersection of the Southerly sideline of West Street and said Easterly sideline of Carleton Street;

Thence from said point of beginning S 71°-35'-00"E along said Irving McCalmon land, Lund Development Company land, and National Casket Company Incorporated land 221.34 feet to a Common Passageway and an iron pipe;

Thence S18°-25'-00"W along said Common Passageway 12.55 feet to an iron pipe;

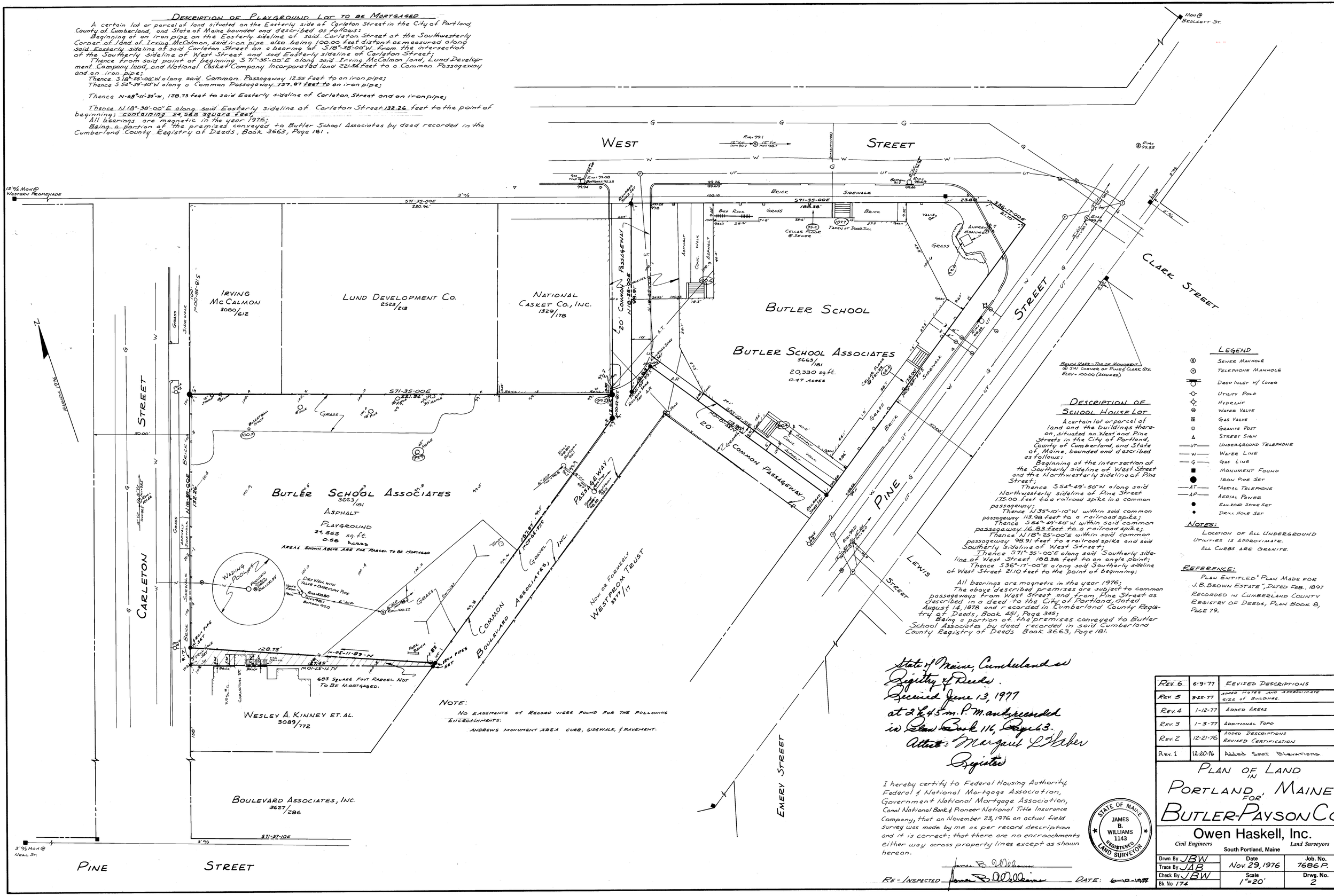
Thence S 54°-39'-40"W along a Common Passageway 137.87 feet to an iron pipe;

Thence N-68°-11'-30"-W, 128.73 feet to said Easterly sideline of Carleton Street and an iron pipe;

Thence N18°-38'-00"E along said Easterly sideline of Carleton Street 132.26 feet to the point of beginning; containing 24,565 square feet;

All bearings are magnetic in the year 1976;

Being a portion of the premises conveyed to Butler School Associates by deed recorded in the Cumberland County Registry of Deeds, Book 3663, Page 181.



Description of School House Lot

A certain lot or parcel of land and the buildings thereon, situated on West and Pine Streets in the City of Portland, County of Cumberland, and State of Maine, bounded and described as follows:

Beginning at the intersection of the Southerly sideline of West Street and the Northwesterly sideline of Pine Street;

Thence S54°-49'-50"W along said Northwesterly sideline of Pine Street 175.00 feet to a railroad spike in a common passageway;

Thence N35°-10'-10"W within said common passageway 113.98 feet to a railroad spike;

Thence S54°-49'-50"W within said common passageway 16.83 feet to a railroad spike;

Thence N18°-25'-00"E within said common passageway 98.91 feet to a railroad spike and said Southerly sideline of West Street;

Thence S71°-35'-00"E along said Southerly sideline of West Street 188.38 feet to an angle point;

Thence S36°-17'-00"E along said Southerly sideline of West Street 21.10 feet to the point of beginning;

All bearings are magnetic in the year 1976;

The above described premises are subject to common passageways from West Street and from Pine Street as described in a deed to the City of Portland, dated August 14, 1878 and recorded in Cumberland County Registry of Deeds, Book 451, Page 345;

Being a portion of the premises conveyed to Butler School Associates by deed recorded in said Cumberland County Registry of Deeds Book 3663, Page 181.

Legend

- Sewer Manhole
- Telephone Manhole
- Drop Inlet w/ Cover
- Utility Pole
- Hydrant
- Water Valve
- Gas Valve
- Granite Post
- Street Sign
- UT — Underground Telephone
- W — Water Line
- G — Gas Line
- Monument Found
- Iron Pipe Set
- AT — Aerial Telephone
- AP — Aerial Power
- Railroad Spike Set
- Drill Hole Set

Notes:

Location of All Underground Utilities is Approximate.

All Curbs are Granite.

Reference:

Plan Entitled "Plan Made for J.B. Brown Estate", Dated Feb., 1897 Recorded in Cumberland County Registry of Deeds, Plan Book 8, Page 79.

State of Maine, Cumberland ss
Registry of Deeds.
Received June 13, 1977
at 2 h 45 m. P.M. and recorded
in Plan Book 116, Page 13.
Attest: Margaret L. Baker
Register

I hereby certify to Federal Housing Authority, Federal & National Mortgage Association, Government National Mortgage Association, Canal National Bank & Pioneer National Title Insurance Company, that on November 23, 1976 on actual field survey was made by me as per record description and it is correct; that there are no encroachments either way across property lines except as shown hereon.

James B. Williams

RE-INSPECTED James B. Williams DATE: 6-10-1977

STATE OF MAINE — JAMES B. WILLIAMS 1143 — REGISTERED LAND SURVEYOR

Rev. 6	6-9-77	Revised Descriptions
Rev. 5	3-22-77	Added notes and approximate size of building.
Rev. 4	1-12-77	Added Areas
Rev. 3	1-3-77	Additional Topo
Rev. 2	12-21-76	Added Descriptions Revised Certification
Rev. 1	12-20-76	Added Spot Elevations

Plan of Land in Portland, Maine for Butler-Payson Co

Owen Haskell, Inc.
Civil Engineers — Land Surveyors
South Portland, Maine

Drwn By JBW	Date Nov. 29, 1976	Job. No. 7686 P.
Trace By JAB		
Check By JBW	Scale 1" = 20'	Drwg. No. 2
Bk No 174		

Att. 11

CITY OF PORTLAND, MAINE
IN THE BOARD OF APPEALS

VARIANCE FOR DWELLING UNIT CONVERSIONS

Findings of Fact

The applicant is Larry Adlerstein and he is interested in the property located at 20 West St. as 10 apts. & pottery suppli

The owner of the property is Larry Adlerstein and his address is 20-22 West St. The property is located in a r-6 Zone.

The present use of the property is 1 apt. & pottery supplies.

The applicant respectfully petitions the Board of Appeals for a variance from the provision of Section 602.24 C of the Ordinance to permit 10 apts and pottery supplies

Further Findings of Fact

Appearances

The names and addresses of those appearing in support of the application are: Larry Adlerstein, Owner; Jim Cartonia, 20 West St; Tom Mitchell, 20 West St.;

and the names and addresses of those appearing in opposition to the application are:

Exhibits

The documentary evidence presented to the Board, including, but not by way of limitation, plans, specification, photographs, etc. consisted of the following:

Location Map, Survey, Photo, Photo of Dwelling

REASONS FOR DECISIONS

The subject property consists of a structure which by reason of its size or the size of the lot on which it is located (could/~~could not~~) legally accommodate more dwelling units than are permitted in the residential zone where it is located as evidenced by: _____

By reasons of its age, condition or marketability, the structure (~~can~~/can not) be economically used or maintained if used for no more than the number of dwelling units permitted in the residential zone where it is located for the following reasons: _____

The existing uses in the immediate vicinity of the subject property (~~are~~/are not) of such a nature and condition as to justify rezoning a reasonable area in the vicinity of the subject property to a classification which would permit the economic use and maintenance of the subject property, because: _____

Adequate provision (has/~~has not~~) been made for on-site or off-site parking spaces in a number sufficient to meet the requirements of Section 602.14, which requires 10 parking spaces.

If the proposed variance should be granted, it (will/~~will not~~) comply with all other provisions of this ordinance and all other codes or ordinances of the City or meet the requirements for a variance of those provisions.

The conversion of the subject property so as to accommodate more dwelling units than are permitted in the zone in which it is located (~~would~~/would not) significantly interfere with the use and enjoyment of other land in the vicinity as evidenced by: _____

The foregoing conditions (~~have~~/have not) been deliberately created by, or with the consent or acquiescence of, the owner, his predecessors and title, or any user of the property in order to bring the subject property within the standards of this section, as shown by: _____

There (~~is~~/is not) any alternative available to the owner, other than a variance to permit an increase in the number of dwelling units, which would suffice to permit the economic use and maintenance of the subject property because of the following: _____

SPECIFIC RELIEF GRANTED

After a public hearing held on Sept. 11, 1980, the Board of Appeals find that all of the conditions required by the Ordinance (do/~~do not~~) exist with respect to this property and that a variance for dwelling unit conversion should _____ be granted in this case.

It is therefore determined that a variance from the provisions of the Zoning Ordinance should _____ be granted in this case.

Maxwell L. Lipsitz

Gail D. Zayac

Earl E. Erickson

Richard E. Friedrich

Ernest E. Hoffman

Thomas J. Murphy

PINE ST. GARAGE
72 Pine Street
Portland, Maine 04102
772-2464

August 28, 1980

To Whom It May Concern:

Effective today I lease 10 Parking Spaces to Larry Adlerstein for use by tenants of 20 West Street.

My garage is within 300 feet of that building.

Signed Bart McDonough

Owner

Att. 12

CITY OF PORTLAND, MAINE
IN THE BOARD OF APPEALS

VARIANCE FOR DWELLING UNIT CONVERSIONS

Findings of Fact

The applicant is Larry Adlerstein and he is interested in the property located at 20-22 West St. as 19 apartment bldg. The owner of the property is Larry Adlerstein and his address is 20 West St. The property is located in a R-6 Zone. The present use of the property is 10 apts. & pottery supplies.

The applicant respectfully petitions the Board of Appeals for a variance from the provision of Section 602.24 C of the Ordinance to permit change of use from 10 apts. & pottery supplies to 19 apts which is not issuable under the Zoning Ordinance because the lot on which this bldg is located is only about 6000 sq. ft. rather than the 19,000 sq. ft. min. (1000 sq.ft. per family) req. by Sec.602.7.B.8 of Ordinance applying to R-6 Resid. Zone

9 off street parking spaces will be provided within 300 ft. as required by Sec.602.14.C

Further Findings of Fact

Appearances.

The names and addresses of those appearing in support of the application are: Larry Adlerstein, Tom Mitchell;

and the names and addresses of those appearing in opposition to the application are:

Exhibits

The documentary evidence presented to the Board, including, but not by way of limitation, plans, specification, photographs, etc. consisted of the following:

Sanborn map, overlay, photos, financial statement, plans

REASONS FOR DECISIONS

The subject property consists of a structure which by reason of its size or the size of the lot on which it is located (could/~~could not~~) legally accommodate more dwelling units than are permitted in the residential zone where it is located as evidenced by: _____

By reasons of its age, condition or marketability, the structure (can/can not) be economically used or maintained if used for no more than the number of dwelling units permitted in the residential zone where it is located for the following reasons: _____

The existing uses in the immediate vicinity of the subject property (~~are~~/are not) of such a nature and condition as to justify rezoning a reasonable area in the vicinity of the subject property to a classification which would permit the economic use and maintenance of the subject property, because: _____

Adequate provision (has/~~has not~~) been made for on-site or off-site parking spaces in a number sufficient to meet the requirements of Section 602.14, which requires 9 parking spaces.

If the proposed variance should be granted, it (will/~~will not~~) comply with all other provisions of this ordinance and all other codes or ordinances of the City or meet the requirements for a variance of those provisions.

The conversion of the subject property so as to accommodate more dwelling units than are permitted in the zone in which it is located (~~would~~/would not) significantly interfere with the use and enjoyment of other land in the vicinity as evidenced by: _____

The foregoing conditions (~~have~~/have not) been deliberately created by, or with the consent or acquiescence of, the owner, his predecessors and title, or any user of the property in order to bring the subject property within the standards of this section, as shown by: _____

There (~~is~~/is not) any alternative available to the owner, other than a variance to permit an increase in the number of dwelling units, which would suffice to permit the economic use and maintenance of the subject property because of the following: I objects to alternatives available

SPECIFIC RELIEF GRANTED

After a public hearing held on Oct. 30, 1980, the Board of Appeals find that all of the conditions required by the Ordinance (do/do not) exist with respect to this property and that a variance for dwelling unit conversion should _____ be granted in this case.

It is therefore determined that a variance from the provisions of the Zoning Ordinance should _____ be granted in this case.

Merrill Schlitzes

Gail D. Zayac

Carl Eskelsen

Ira E. Nichols

Thomas J. Murphy

State Street Management Company

P.O. Box 4654
Portland
Maine
04112

April 27, 2981

Mr. Larry Adlerstein
20 West Street
Portland, Maine 04102

Dear Mr. Adlerstein:

This is to inform you that, per the terms of the Parking Lease, ten (10) spaces are available for your use effective today.

Sincerely,

Jacqueline Price

Jacqueline Price
Financial Manager

JP/bl

Jan Keppel
Financial Manager

L E A S E

Lease Agreement made this day of April, 1981 by and between BUTLER/PAYSON COMPANY, a Maine limited partnership with a place of business in Portland, Maine (hereinafter "Lessor") and LARRY ADLERSTEIN of Portland, Maine (hereinafter "Lessee").

FOR AND IN CONSIDERATION of the covenants and agreements hereinafter set forth, Lessor does hereby lease and demise unto Lessee, subject to certain terms and conditions, a portion of the premises situated at 77 Pine Street in Portland, Maine, more particularly described as follows:

> Seven (7) spaces for the parking of vehicles located in the parking lot at the rear of the premises known as 77 Pine Street, Portland, Maine, which parking lot borders on Carlton Street in said Portland.

TO HAVE AND TO HOLD the above-described premises (hereinafter "the premises") unto the exclusive possession of Lessee for a term of twelve (12) months from the 1st day of May, 1981, through the 30th day of April, 1982.

The Lessee paying and yielding therefore the sum of Two Thousand One Hundred Dollars ($2,100), payable in twelve (12) consecutive equal monthly installments of One Hundred Twenty-Five Dollars ($125) (175.00) in advance on or before the 1st day of each and every month of the term.

The parties further agree as follows:

VIII. ADDITIONAL PARKING SPACES

Lessor agrees that as additional parking spaces in the said parking lot become available it shall offer to lease the said additional spaces, up to an additional twelve (12) in number, to the Lessee on the same terms and conditions ~~which~~ as provided herein. ~~it could otherwise obtain from any other lessee.~~

IX. GENERAL

This Agreement of Lease shall inure to and be binding upon the respective heirs, personal representatives, successors and assigns of the parties.

IN WITNESS WHEREOF, the Lessee has hereunto set his hand and seal and the Lessor has caused its name and seal to be affixed by _____, its _____, duly authorized, all on the day and year first above written.

SIGNED, SEALED and DELIVERED
In Presence Of:

_____

_____

LESSEE:

_____
Larry Adlerstein

LESSOR:

BUTLER/PAYSON COMPANY

By _____, its

Att. 13

From: Tom Errico <thomas.errico@tylin.com>
To: Shukria Wiar <SHUKRIAW@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: 6/4/2015 3:04 PM
Subject: 17 Carleton Street - Preliminary Traffic Comments

Hi Shukria - I have reviewed the application materials and offer the following preliminary comments.

* The applicant should provide dimensions of driveway width, parking aisles, etc. for review and comment.

* It is my understanding that a traffic study is being prepared and I will review traffic specific issues upon receipt of the study.

* The following outlines my comments as it relates to the review of parking conditions for the project:

o The applicant should specifically note details of vehicles parking in the existing lot. It should be noted whether any of the vehicles are using the lot as part of a site plan approval requirement.

o Given parking concerns in the neighborhood and limited parking opportunities, the applicant should conduct an updated parking generation survey at existing similar sites on the Portland Peninsula. The survey is intended to confirm parking demand requirements. The scope and details of the survey shall be coordinated with City staff.

* A brief paragraph has been provided in respect to a construction management plan. It isn't noted, but the plan will likely require the closure of the abutting sidewalk and a temporary sidewalk detour will be required. Other specific details can be reviewed at the Pre-Construction meeting.

Please contact me if you have any questions.

Best regards,

Thomas A. Errico, PE
Senior Associate
Traffic Engineering Director
[T.Y. Lin International]T.Y. Lin International
12 Northbrook Drive
Falmouth, ME 04105
207.781.4721 (main)
207.347.4354 (direct)
207.400.0719 (mobile)
207.781.4753 (fax)
thomas.errico@tylin.com<mailto:thomas.errico@tylin.com>
Visit us online at www.tylin.com<http://www.tylin.com>
Twitter | Facebook | LinkedIn | YouTube

"One Vision, One Company"

Please consider the environment before printing.

Att. 13

From: Tom Errico <thomas.errico@tylin.com>
To: Shukria Wiar <SHUKRIAW@portlandmaine.gov>
CC: David Margolis-Pineo <DMP@portlandmaine.gov>, Katherine Earley <KAS@portlandmaine.gov>, Jeff Tarling <JST@portlandmaine.gov>, "JeremiahBartlett" <JBartlett@portlandmaine.gov>
Date: 7/2/2015 9:49 AM
Subject: 17 Carleton Street - Traffic Comments

Hi Shukria - I have reviewed the application materials and offer the following status update from my June 4th comments.

* The applicant should provide dimensions of driveway width, parking aisles, etc. for review and comment.
Status: The revised plans include dimensions and I find details to be acceptable. I would note that the compact parking spaces do not meet City standards, but because they are slightly longer, I support a waiver.

* It is my understanding that a traffic study is being prepared and I will review traffic specific issues upon receipt of the study.
Status: I have reviewed the traffic study and find the methods and conclusions to be acceptable. The project is estimated to generate 8 new AM peak hour trips and 10 new PM peak hours trips. Capacity analyses were conducted at the Carleton Street intersections with West Street and Pine Street and results indicate both intersections will operate at excellent levels of service. A review of crash data indicated there are no High Crash Locations in the vicinity of the project. Accordingly, the project is not anticipated to have a significant impact on traffic mobility and safety.

* The following outlines my comments as it relates to the review of parking conditions for the project:

o The applicant should specifically note details of vehicles parking in the existing lot. It should be noted whether any of the vehicles are using the lot as part of a site plan approval requirement.

o Given parking concerns in the neighborhood and limited parking opportunities, the applicant should conduct an updated parking generation survey at existing similar sites on the Portland Peninsula. The survey is intended to confirm parking demand requirements. The scope and details of the survey shall be coordinated with City staff.
Status: The applicant has provided updated parking demand analysis information that indicates the proposed site will require 0.37 parking spaces per residential unit, but is suggesting a parking supply - for 17 Carleton Street only - of 0.48 parking spaces per unit or 18 parking spaces. I would note that the parking rates developed by the applicant are based on cars observed to be parked. According to their data, at many sites the number vehicles parked did not closely correlate to tenant automobile ownership. If automobile ownership was used, the average parking demand rate would be 0.59 parking spaces per residential units. I need to continue to review this and historical parking information, before I render a conclusion on the parking demand analysis.

* A brief paragraph has been provided in respect to a construction management plan. It isn't noted, but the plan will likely require the closure of the abutting sidewalk and a temporary sidewalk detour will be required. Other specific details can be reviewed at the Pre-Construction meeting.
Status: The applicant has added a note to the Plan and I have no further comment.

* Changes to the on-street parking schedule for Carleton Street will be required in conjunction with changes to existing driveway conditions. This will require City Council action and the applicant shall provide supporting documentation at the time of the request.

* The applicant should provide information on the proposed location of the Car-Share vehicle for review and approval.

Please contact me if you have any questions.

Best regards,

Thomas A. Errico, PE
Senior Associate
Traffic Engineering Director
[T.Y. Lin International]T.Y. Lin International
12 Northbrook Drive
Falmouth, ME 04105
207.781.4721 (main)
207.347.4354 (direct)
207.400.0719 (mobile)
207.781.4753 (fax)
thomas.errico@tylin.com<mailto:thomas.errico@tylin.com>
Visit us online at www.tylin.com<http://www.tylin.com>
Twitter | Facebook | LinkedIn | YouTube

"One Vision, One Company"

Att. 14

From: David Margolis-Pineo
To: Shukria Wiar
CC: DEVELOPMENT REVIEW GROUP
Date: 7/8/2015 11:44 AM

Also placed in Urban Insight

July 8, 2015

Memo To: Shukria Wiar
Barbara Barhydt
From: David Margolis-Pineo
Re: Review Comments for 17 Carlton St. – Avesta Housing

The Department of Public Services has the following preliminary comments.

1. Survey comments will be forwarded under a separate cover.
2. Please add note that all work within the Public Right of Way shall meet City of Portland Technical Manual standards.
3. All streets in the West End of Portland, West, Pine, and Carlton Streets included, were designed with one sewer pipe to convey both stormwater and sanitary wastes. In recent years, more rain events have exceeded the capacity of the sewer resulting in residential sewer backups into basements. It has been estimated that the 37 Avesta units proposed on Carlton Street will add approximately 3,000 gallons per day (gpd) of sanitary waste with no increase in stormwater runoff. To offset this estimated wastewater addition, the applicant is requested to calculate and propose means to retain/remove 3,000 gallons of stormwater for a one inch storm event.

We have no further comments at this time.

COMMITMENT & INTEGRITY
DRIVE RESULTS

41 Hutchins Drive
Portland, Maine 04102
www.woodardcurran.com

T 800.426.4262
T 207.774.2112
F 207.774.6635

Att. 15

MEMORANDUM

TO: Shukria Wiar, Planner
FROM: David Senus, P.E.
DATE: May 28, 2015
RE: 17 Carleton Street, Preliminary Level III Site Plan Application

---

Woodard & Curran has reviewed the Preliminary Level III Site Plan Application for the proposed development located at 17 Carleton Street in Portland, Maine. The project involves the construction of 37 affordable housing units with 31 parking spaces and associated site improvements.

Documents Reviewed by Woodard & Curran

- Preliminary Level III Site Plan Application and attachments, dated May 7, 2015, prepared by Pinkham & Greer, on behalf of Avesta Housing.
- Engineering Plans, Sheets C1.0, C1.1, C1.2, C1.3, C1.4, C2.1, C2.2, C2.3, & C2.4, dated April 10, 2015, prepared by Pinkham & Greer, on behalf of Avesta Housing.
- ALTA/ACSM Land Title Survey, dated May 26, 2010, prepared by Owen Haskell, Inc., on behalf of Butler Payson Company.

Comments

1) In accordance with Section 5 of the City of Portland Technical Manual, a Level III development project is required to submit a stormwater management plan pursuant to the regulations of MaineDEP Chapter 500 Stormwater Management Rules, including conformance with the Basic, General, and Flooding Standards. We offer the following comments:
   a) Basic Standards: Plans, notes, and details have been provided to address erosion and sediment control requirements, inspection and maintenance requirements during-construction, and good housekeeping practices in general accordance with Appendix A, B, & C of MaineDEP Chapter 500.
   b) General Standards: The project will result in a net decrease in impervious area. As such, the project is not required to include stormwater management features for stormwater quality control. We encourage the Applicant to review the City's Stormwater Service Charge Credit Manual (available online) to evaluate whether they may want to incorporate stormwater quality treatment measures that qualify for a future Stormwater Service Charge credit.
   c) Flooding Standard: The project will result in a net decrease in impervious area. As such, the project is not required to include stormwater management features to control the rate of stormwater runoff from the site.
2) The Applicant has requested confirmation of capacity to serve the proposed development from the Portland Water District and the City of Portland; copies of the approval letters should be forwarded to the City upon receipt.
3) The Existing Conditions and Demolition Plan (Sheet C1.2) should identify disconnecting and capping / plugging the existing sewer service at the downstream catch basin to eliminate continued inflow into the sewer system. A masonry plug repair should be noted on the existing catch basin.
4) The Grading & Utilities Plan (Sheet C1.3) should specify the highpoint with spot grades in the area of the driveway entrance between the 142 contours to ensure proper drainage away from the building in this area.
5) The Grading & Utilities Plan (Sheet C1.3) should identify pipe invert elevations for the proposed storm drain system at new and existing catch basins / manhole connections.
6) The Applicant should consider utilizing beehive grates for proposed field inlets in landscaped areas.
7) The Grading & Utilities Plan (Sheet C1.3) should include a backflow preventer on the new sewer service prior to the connection with the combined sewer system.
8) The limits and type of pavement repair noted in Carleton Street on Sheet C1.3 are inconsistent with what is shown and noted on the Demolition Plan (Sheet C1.2).

9) The Grading & Utilities Plan (Sheet C1.3) includes a line and several spot grades in the parking lot area; we are unclear what this line and the associated spot grades represent.
10) The Applicant should consider alternatives to the direct piped connection of the roof drain into the storm drain system, which ultimately connects to the City's combined sewer system. Discharge to the ground or preferably to landscaping or a rain garden area is recommended.

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DRIVE RESULTS

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Portland, Maine 04102
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F 207.774.6635

MEMORANDUM

TO: Shukria Wiar, Planner
FROM: David Senus, P.E.
DATE: July 9, 2015
RE: 17 Carleton Street, Final Level III Site Plan Application

---

Woodard & Curran has reviewed the response to comments submittal for the Final Level III Site Plan Application for the proposed development located at 17 Carleton Street in Portland, Maine. The project involves the construction of 37 affordable housing units with 31 parking spaces and associated site improvements.

Documents Reviewed by Woodard & Curran

- Response to Comments Letter and Final Site Plan attachments, dated June 30, 2015, prepared by Pinkham & Greer, on behalf of Avesta Housing.
- Engineering Plans, Sheets C1.0, C1.1, C1.2, C1.3, C1.4, C2.1, C2.2, C2.3, & C2.4, REV dated June 30, 2015, prepared by Pinkham & Greer, on behalf of Avesta Housing.

Comments

1) Sheet C1.3 – The backflow preventer proposed on the sanitary sewer service should be located on the project property (outside of the Right-of-Way) and a detail should be included or a type/model should be identified.
2) The Applicant has provided a letter confirming capacity to serve the proposed development from the Portland Water District; we anticipate that the Applicant is awaiting a letter from the City of Portland confirming capacity to serve sanitary sewer flows.
3) The addition of an underdrained soil filter to manage runoff from the proposed rooftop area will help to reduce the volume and slow the rate of inflow into the City's combined sewer system; an enhancement over the existing site condition where runoff from the existing parking area directly enters the City's combined sewer system. The City has received comments and complaints from neighbors with concerns regarding the capacity of the combined sewer system, specifically related to sewer backups into nearby basements. We request that the Applicant calculate the reduction in stormwater discharge rate and the volume reduction potential (estimated infiltration) for the soil filter system for a typical 1", 24-hr storm event and provide a comparison to the anticipated sanitary sewer flowrates generated by the project.

9) The Grading & Utilities Plan (Sheet C1.3) includes a line and several spot grades in the parking lot area; we are unclear what this line and the associated spot grades represent.
10) The Applicant should consider alternatives to the direct piped connection of the roof drain into the storm drain system, which ultimately connects to the City's combined sewer system. Discharge to the ground or preferably to landscaping or a rain garden area is recommended.

Att. 16

From: Jeff Tarling
To: Shukria Wiar
CC: Barbara Barhydt ; David Margolis-Pineo
Date: 6/4/2015 4:03 PM
Subject: 17 Carleton Street

Hi Shukria -

I have reviewed the proposed Landscape plan and feel additional screening is needed along the north edge. Tree selection types also need to be larger tree variety vs Hawthorn and Paperbark Maple which are very small trees. European Hornbeam or some of the upright Oak varieties like 'Regal Prince' which can grow in tight space but offer more height for screening. See:

http://www.jfschmidt.com/pdfs/regalprinceoak.pdf

The north edge space for example, could use 4 of the upright trees vs the two Hawthorns as shown.

With some of suggested improvements or conditions the project could be acceptable.

Thanks,

Jeff Tarling
City Arborist

MEMORANDUM

To: FILE

From: Shukria Wiar

Subject: Application ID: 2015-078

Date: 7/8/2015

Comments Submitted by: Keith Gautreau/Fire on 5/27/2015

Must have access to a minimum two sides of the proposed structure. Access to the rear of the building must be maintained via West Street and Pine Street year round.

Comments Submitted by: Keith Gautreau/Fire on 5/27/2015

Premises Identification
The main entrance of the building must be the address for the property. This should be consistent with 911, tax assessor, Inspections Division and future mailing address.
Street addresses shall be marked on the structure and shall be as approved by the City E-911 Addressing Officer.
If the building entry faces a different street, both the street name and number should be large enough to read from the street.
Address numbers must be a minimum of 4 inches high.

Comments Submitted by: Keith Gautreau/Fire on 5/27/2015

Construction Management Plan
Streets must maintain a 20' width for Fire Department access at all times.
Fire Hydrants shall not be blocked or enclosed by fencing. A 3' foot clearance must be kept at all times around the fire hydrant.
If gates are locked, a Portland Fire Department Knox padlock must be purchased by the applicant to allow access for the Fire Department.
The Construction Company' emergency contact information shall be posted on the property in case of an after hours emergency.
All construction shall comply with 2009 NFPA 1 Chapter 16 Safeguards During Building Construction, Alteration, and Demolition Operations.
Any cutting and welding done will require a Hot Work Permit from Fire Department.

Comments Submitted by: Keith Gautreau/Fire on 5/27/2015

1.Hydrants

1.) 2009 NFPA 1 18.3 Water Supplies and Fire Hydrants
2.) Fire Department Connections shall not be located where large diameter hose may block egress.

2. Fire Vehicle Access

1.) Largest Fire Department Vehicle must be able to navigate through the parking lot to access building.
2.) Fire Department Access shall have an unobstructed vertical clearance of not less than 13 ft 6 in.

From: Jennifer Thompson
To: Barbara Barhydt; Shukria Wiar
Date: 7/1/2015 3:59 PM
Subject: 17 Carleton Street
Attachments: Butler School Associates Deed bk 3663 pg 181.pdf

Hi Shukria -

Following our meeting yesterday, I pulled the deed from back when the City sold the Butler School and surrounding parcels. You will see that the deed did contain covenants and specifically required the development of the former playground into a parking lot. However, you'll also see that the restrictions on the use of the property (including, I think, the requirement that the "playground lot" be used for parking) expired after a period of 15 years. Presumably, that is why there is no mention of that former covenant in the more recent deeds.

So, given that there does not appear to me to be any surviving limitation in the deeds to the properties on the ability to sell or develop them separately, it appears that if there is any requirement that the "playground/parking lot" lot provide parking to the Butler School or any other property, that requirement will need to be found in an approval by some City administrative body.

After a somewhat summary review, it appears to me that the review and approval of the Butler School lot and the parking lot in connection with this sale were done separately. Namely, there was a:

1. space and bulk/change of use variance granted with respect to the Butler School that, according to the agenda, allowed its use to be changed from a school to an apartment house with 39 units despite the fact that it didn't meet the lot coverage requirements. The agenda also indicates that the requirement that 39 parking spaces be provided was also waived. I have not seen a written decision reflecting that approval - and so cannot determine whether the waiver of the parking was conditioned on those parking spaces being provided elsewhere or was simply waived without condition. If there was no condition on that approval, then obviously the Butler School will continue to be a lawful use under that approval despite the lack of parking. If there was a condition that required the Butler School to provide off-street parking, its failure to provide the parking would likely render it a nonconforming use. However, in the absence of some covenant or condition that is binding on the Carleton Street lot and prevents the proposed development of that lot, I'm not sure that the legality of the Butler Street's use under its prior change of use variance is a matter that can or should be resolved by the Planning Board in connection with its review of a different property.

2 Conditional Use Approval was granted with respect to the Carleton Street (playground/parking lot lot) that allowed that lot to be used as a parking lot. Again, I have not seen a written decision on that approval and so cannot determine whether the approval was conditioned on the lot providing spots to certain properties. Even if this approval was so conditioned, however, I think that condition would only continue to apply to the parking lot use. If the use of the lot is changed, such that the conditional use approval is no longer necessary, it seems to me that that approval would no longer have any effect.

I realize that these questions have been the subject of much discussion and that a number of historical documents are being reviewed. I have not yet had an opportunity to review the entire packet so this email should be considered preliminary and may change as we receive more information. For now, however, this appears to me to be the status of things.

I plan to attend the workshop on the 14th and will be happy to talk further with you or the Board then.

Best,
Jen

KNOW ALL MEN BY THESE PRESENTS, That the CITY OF PORTLAND, a body politic and corporate located in the County of Cumberland and State of Maine, in consideration of One Dollar ($1.00) and other good and valuable considerations, paid by Butler School Associates, located in said Portland in the County of Cumberland and State of Maine, the receipt whereof it does hereby acknowledge, does hereby give, grant, bargain, sell and convey, unto the said Butler School Associates, a duly organized and existing Maine Limited Partnership, its successors and assigns forever, certain real estate located in said Portland, bounded and described as follows:

> Beginning at the north-westerly corner of Pine and West Streets in the said City of Portland, thence running south-westerly on the northerly side line of Pine Street a distance of 175 feet to a passageway now 15 feet wide, thence north-westerly at right angles with said line of Pine Street on north-easterly side of said passageway a distance of 113.87 feet to the easterly line of a passageway 20 feet wide, thence south-westerly at right angles with last described line a distance of 16.83 feet to the centre of last named passageway, thence north on included angle of 36 degrees 27 minutes on said centre line a distance of 98.91 feet to the southerly line of West Street, thence south-easterly at right angles on the said line of West Street a distance of 188.38 feet to angle in said line of West Street, thence with an included angle of 144 degrees 42 minutes a distance of 21.1 feet to the point of beginning, containing by calculation an area of 188.25 square feet. A strip of the aforesaid land 5 feet wide and adjoining said first named passageway and extending from said Pine Street to said last named passageway is to be forever kept open as a passageway in connection with said first named passageway widening the same to 20 feet: said lot shall always have the use of said last named passageway to Pine Street and said lot is subject to all sewer and sidewalk assessments upon the same and to the common use of all said passageways by all the land adjoining the same including all the land of said John and Philip or either of them within the tract bounded by West, Pine and Carleton Streets.
>
> Also one other certain lot or parcel of land in said Portland, bounded and described as follows: Beginning on the easterly side line of Carleton Street at the most northerly corner of land conveyed by Jessie D. Wright to Harrison C. Josslyn by deed dated August 18, 1926 recorded in Cumberland County Registry of Deeds in Book 1243, Page 375; thence northerly on Carleton Street sixty-nine (69) feet to a stake; thence southeasterly and parallel with the northerly line of a certain lot of land conveyed to the said Harrison C. Josslyn about one hundred and seventy-nine (179) feet to a common passageway; thence south-westerly on said passageway about eighty-six (86) feet to said Josslyn land and thence westerly on said Josslyn land to the first bound on Carleton Street.

Also one other certain lot or parcel of land in said Portland bounded as follows: Beginning on the easterly side of Carleton Street at the northerly corner of the lot or parcel of land herein before described, said point being about one hundred seventy (170) feet southerly of West Street; thence northerly by Carleton Street to land now or formerly of one Black at a point one hundred (100) feet southerly of West Street; thence by said Black land and other land formerly belonging to the Trustees under the Will of John B. Brown, keeping the distance of one hundred (100) feet southerly of West Street and two hundred twenty-five (225) feet more or less to a proposed way as delineated on Plan 55 of Assessors Plans of Portland; thence by the westerly side of said passageway to the lot of land herein before in this deed described; thence by the northerly line of said land one hundred seventy-nine (179) feet more or less to the point begun at.

The first parcel being the same premises conveyed to the Grantor by deed of J. B. Brown and P. H. Brown, dated August 14, 1878, recorded in the Cumberland County Registry of Deeds in Book 451, Page 345. The second and third parcels being the same premises conveyed to the Grantor by deed of Eleanor W. Vanamee, et al, dated March 30, 1945, recorded in said Registry in Book 1773, Page 334.

By acceptance of this deed, Grantee covenants and agrees that:

1. It shall within one year from the date of this deed rehabilitate the building to accomodate twelve to thirteen dwelling units and incidental school uses, all work to be performed in compliance with the provisions of the Municipal Code and in accordance with architectural plans approved by the Planning Board and the City Council before work is undertaken. In performing said work, the present architectural features of the building and its relationship with adjoining properties shall be preserved.

2. Andrews Square Monument now located on the premises shall be refurbished and upgraded to the satisfaction of the Planning Board.

3. In developing the playground area for parking purposes, all work shall be performed in compliance with the provisions of the Municipal Code and subject to the approval of the Planning Board. All significant trees within said area shall be retained and maintained.

4. In the event of failure of the Grantee to complete or substantially complete the work required above within said period, the Grantee shall be required at the election of the Grantor to reconvey to the Grantor all of the premises herein conveyed at the said purchase price of $20,000.00

5. In the event Grantee shall within a period of 15 years desire to dispose of said premises, or any part thereof, it shall notify the City

in writing of its desire to so dispose of said premises, or any part thereof, and the City shall have the right within a period of sixty (60) days after receipt of said notice, to elect to purchase said premises, or any part thereof. If Grantee and the City shall be then unable to agree upon a mutually satisfactory purchase price, said price shall be determined by a board of three arbitrators, after which the City shall have a period of thirty (30) days to determine whether it will exercise its election to purchase.

6. Grantee shall not during said period of 15 years, without Council approval, mortgage or otherwise encumber said premises, or any part thereof, except that necessary for the initial rehabilitation work, which mortgage or encumbrance shall remain the obligation of Grantee, its successors and assigns.

7. Grantee shall not develop the premises herein conveyed for any purposes other than set forth above without the prior written approval of the City Council within a period of 15 years from the date of this deed.

TO HAVE AND TO HOLD the same, together with all the privileges and appurtenances thereunto belonging, to the said Butler School Associates, its successors and assigns forever.

AND the said Grantor Corporation does covenant with the said Butler School Associates, its successors and assigns, that it will warrant and forever defend the premises to it the said Grantee, its successors and assigns forever, against the lawful claims and demands of all persons claiming by, through, or under it.

IN WITNESS WHEREOF, the said City of Portland has caused this instrument to be sealed with its corporate seal and signed in its corporate name by JOHN G. DE PALMA, its Director of Finance, thereunto duly authorized, this 1st day of April in the year one thousand nine hundred and seventy-five.

SIGNED, SEALED AND DELIVERED
IN PRESENCE OF
Grace R. Meadly

CITY OF PORTLAND
By John G. De Palma
Director of Finance

STATE OF MAINE
CUMBERLAND, ss.

April 1, 1975.

Personally appeared the above named John G. De Palma, Director of Finance of said Grantor Corporation as aforesaid, and acknowledged

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the foregoing instrument to be his free act and deed in his said capacity, and the free act and deed of said corporation.

Before me,

Patricia E. Horton

~~Justice of the Peace~~
Notary Public

APR 1 1975

REGISTRY OF DEEDS, CUMBERLAND COUNTY, MAINE
Received at 3 H 37 M PM, and recorded in
BOOK 3663 PAGE 181. Margaret L. Helen Acting Register

Att. 20

CURTIS THAXTER
ATTORNEYS AT LAW

ONE CANAL PLAZA, SUITE 1000, P.O. BOX 7320, PORTLAND, ME 04112-7320
TEL: 207.774.9000 • FAX 207.775.0612 • www.curtisthaxter.com

Maurice A. Selinger, III
mselinger@curtisthaxter.com

VIA ELECTRONIC MAIL

July 8, 2015

Shukria Wiar, Planner
Planning Division, City of Portland
389 Congress Street
Portland, ME 04101

Danielle West-Chuhta, Esq.
City of Portland Corporation Counsel
389 Congress Street
Portland, ME 04101

RE: 17 Carleton Street

Dear Shukria and Danielle:

Avesta Housing Development Corporation provided me with materials obtained under a freedom of information act request with respect to the above property and adjacent property located at West and Pine Streets known as the former Butler School. The materials relate to the approvals process in the mid 1970s when Butler School was converted to apartments and the former school playground was approved for use as a parking lot.

By letter dated October 15, 2009, the City's then-Zoning Administrator, Marge Schmuckal, responding to the request of an interested party as to the parking requirements applicable to the former Butler School property, stated that "[t]he appeal granted allowed no off-street parking to be provided on the Property." The appeal Ms. Schmuckal was referring to was granted on November 10, 1976 to Public School Associates and allowed the former school to be used as a 39 unit apartment building with no off street parking.

I reviewed the entire 76 pages of materials furnished by the City to Avesta, and I have not found anything inconsistent with the statements in Ms. Schmuckal's letter, nor did I find anything stating that parking for the former Butler School property was to be provided on the Carleton Street lot or anywhere else. Note that on both the appeal agenda from November 10, 1976 (pages 8 and 9 of the PDF) and the memorandum summarizing the action of the board of appeals dated November 23, 1976 (page 10 of the PDF), the school property and the Carleton Street lot are shown as being in different ownership, and there is no condition requiring a parking agreement or lease of spaces by the owner of the school lot from the owner of the Carleton Street lot.

While an earlier set of approvals in favor of CDS, Inc. might seem to tie the parking lot and the school lot together, in fact none of those materials anywhere require that parking spaces

in the Carleton Lot are to be reserved for or made available to tenants at the Butler school property. Moreover, these 1975 approvals are superseded by the 1976 approvals.

In sum, I see nothing in these materials saying affirmatively that the Carleton Street lot must be available to tenants at the old Butler School for parking. The public record is clear that the existing approvals for the former Butler School do not require off street parking on the Carleton Street lot or anywhere else.

If you are in possession of official City records that suggest otherwise, I would appreciate the opportunity to review them.

Very truly yours,

Maurice A. Selinger, III

cc: Seth Parker
Drew Wing

O:\MAS\99475 Avesta\Carleton Street\Land use\Ltr to City re Carelton Street.docx

17 Carleton Street
Portland, Maine

Site Plan / Subdivision Application

Submitted to
City of Portland

May 7, 2015

Prepared by
PINKHAM & GREER
CIVIL ENGINEERS
28 VANNAH AVE. PORTLAND, ME. 04103
Tel: 207.781.5242 Fax: 207.781.4245

PINKHAM & GREER
CIVIL ENGINEERS
28 VANNAH AVE. PORTLAND, ME. 04103
Tel: 207.781.5242 Fax: 207.781.4245

File: 15108

Att. A

May 7, 2015

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

RE: 17 CARLETON STREET, AVESTA HOUSING

Dear Barbara,

On behalf of AVESTA Housing, we are pleased to submit the attached information for a 37 unit affordable housing project to be located at 17 Carleton Street. This site, previously the playground for Butler School, is currently a parking lot, making this project a great infill project. Attached are photos showing the existing conditions around the site.

Working with Archetype, the building has been designed to fit into the historic neighborhood. The Historic Preservation Committee is currently reviewing the project as well.

The site design allows for access from Carleton Street to the site via a passageway under the building. This provides a diminished view of the parking. Overall the amount of impervious cover is reduced, making it an environmentally friendly project. A second connection to the Common Passageway is located at the back of the site.

The view from Carleton Street is critical in the design process. The existing street trees provide a canopy for the sidewalk and the edge of the street. These trees will be maintained with only minor trimming on the building side.

The existing brick sidewalk is in need of repair. This project will install a new sidewalk the full length of the project. The impact on the street trees will be addressed with input from Tony Muench, RLA. Currently the roots have been exposed in the sidewalk. The use of crushed stone for the sidewalk will help provide air for the roof systems.

The project consolidates the two curb cuts on Carleton Street to one. This helps enhance the aesthetic appeal of the project.

The landscaping and site design utilize historic plants and fencing. The plant selection by Tony Muench uses low maintenance materials, typical of historic landscapes. The front fence uses a mix of metal fencing and granite posts. The only thing missing would be hitching posts for horses to complete the historic nature of the site.

Parking for this building's occupants is accomplished in the rear of the building. There are 31 spaces for the 37 units. To assist the residents, AVESTA will be providing a ride share car. This reduces the need for parking by 8 spaces.

Historically, AVESTA's parking demand for these projects is 70% of total number of units, or 26 spaces. The ride share car will further reduce this number to 18. We would like this to be the required number.

Of the 31 spaces 7 of them will be marked as ADA spaces. Two will be dedicated to the Butler residence.

The public utilities will be underground. The sewer, water, and gas service will be from Carleton Street. The electrical and communication services will be from the common passage way in the rear of the building.

As this site is currently fully developed as a parking lot, the stormwater management and erosion control are less of an issue. The site currently drains to two catch basins on site which connect to the drainage system in Pine Street. Erosion control will consist of protecting these basins and ensuring soil isn't tracked on to Carleton Street.

As the site reduces the amount of impervious surface on the site, peak flow control or stormwater treatment is not a concern. The developed conditions will match the existing conditions with flow going to the existing on site catch basin. To ensure drainage around the parking a series of field inlets, underdrains and catch basins collect the runoff and convey it to the catch basin at the back of the site. All drainage will continue to flow to Pine Street via the existing storm drain.

This project will fully develop the site. No future expansions of the building or parking are planned at this time.

PINKHAM & GREER
CIVIL ENGINEERS

Attached are drawings of the site and building as well as short narratives on specific items.

Thank you very much for consideration of our project.

Sincerely,

PINKHAM & GREER

Thomas S. Greer, P.E.

Enclosures

cc: Drew Wing, David Lloyd, File

TSG/rjs

Att. B

PROJECT NAME: 17 Carleton Street

PROPOSED DEVELOPMENT ADDRESS:

17 Carleton Street

PROJECT DESCRIPTION:

The construction of a 37 unit affordable residential building with 31 parking spaces.

CHART/BLOCK/LOT: 55/A/4

PRELIMINARY PLAN 5/7/15 (date)
FINAL PLAN _____ (date)

CONTACT INFORMATION:

Applicant – must be owner, Lessee or Buyer Name: Drew Wing Business Name, if applicable: Avesta Housing Development Corp. Address: 307 Cumberland Ave City/State : Portland, ME Zip Code: 04101	**Applicant Contact Information** Work # 207.245.3340 Home# Cell # Fax# e-mail: DWing@avestahousing.org
Owner – (if different from Applicant) Name: Same as Above Address: City/State : Zip Code:	**Owner Contact Information** Work # Home# Cell # Fax# e-mail:
Agent/ Representative Thomas S. Greer Name: Pinkham & Greer, Civil Engineers Address: 28 Vannah Avenue City/State : Portland, ME Zip Code: 04103	**Agent/Representative Contact information** Work # 207.781.5242 Cell # e-mail: tgreer@pinkhamandgreer.com
Billing Information Drew Wing Name: Avesta Housing Development Corp. Address: 307 Cumberland Ave City/State : Portland, ME Zip Code: 04101	**Billing Information** Work # 207.245.3340 Cell # Fax# e-mail: DWing@avestahousing.org

Engineer Pinkham & Greer, Civil Engineers Name: Thomas S. Greer Address: 28 Vannah Avenue City/State : Portland, ME Zip Code: 04103	**Engineer Contact Information** Work # 207.781.5242 Cell # Fax# 207.781.4245 e-mail: tgreer@pinkhamandgreer.com
Surveyor Name: Owen Haskell, Inc. Address: 390 US Route One #10 City/State : Falmouth, ME Zip Code: 04105	**Surveyor Contact Information** Work # 207.774.0424 Cell # Fax# 207.774.0511 e-mail:
Architect Archetype Architects Name: David Lloyd Address: 48 Union Wharf City/State : Portland, ME Zip Code: 04101	**Architect Contact Information** Work # 207.772.6022 Cell # Fax# 207.772.4056 e-mail: lloyd@archetypepa.com
Attorney Name: Address: City/State : Zip Code:	**Attorney Contact Information** Work # Cell # Fax# e-mail:

APPLICATION FEES:

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

Level III Development (check applicable reviews)

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

Plan Amendments (check applicable reviews)

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

The City invoices separately for the following:

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

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

Other Reviews (check applicable reviews)

___ Traffic Movement ($1,000)
___ Stormwater Quality ($250)
X Subdivisions ($500 + $25/lot)
# of Lots ___ x $25/lot = _____
___ Site Location ($3,000, except for residential projects which shall be $200/lot)
# of Lots ___ x $200/lot = _____
___ Other _____
___ Change of Use
___ Flood Plain
___ Shoreland
___ Design Review
___ Housing Replacement
___ Historic Preservation

Updated: April 23, 2014

APPLICATION SUBMISSION:

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

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

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

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

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

APPLICANT SIGNATURE:

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

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

Signature of Applicant:	Date:
Thomas Gray HUGHT	5/7/15

PROJECT DATA

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

Total Area of Site	sq. ft. 25,247
Proposed Total Disturbed Area of the Site	sq. ft. 25,247
If the proposed disturbance is greater than one acre, then the applicant shall apply for a Maine Construction General Permit (MCGP) with DEP and a Stormwater Management Permit, Chapter 500, with the City of Portland.	
Impervious Surface Area	
Impervious Area (Total Existing)	sq. ft.
Impervious Area (Total Proposed)	sq. ft.
Building Ground Floor Area and Total Floor Area	
Building Footprint (Total Existing)	sq. ft.
Building Footprint (Total Proposed)	sq. ft.
Building Floor Area (Total Existing)	sq. ft.
Building Floor Area (Total Proposed)	sq. ft.
Zoning	
Existing	R-6
Proposed, if applicable	
Land Use	
Existing	Parking Lot
Proposed	37 Residential Units w/ parking
Residential, If applicable	
# of Residential Units (Total Existing)	0
# of Residential Units (Total Proposed)	0
# of Lots (Total Proposed)	0
# of Affordable Housing Units (Total Proposed)	37
Proposed Bedroom Mix	
# of Efficiency Units (Total Proposed)	
# of One-Bedroom Units (Total Proposed)	
# of Two-Bedroom Units (Total Proposed)	
# of Three-Bedroom Units (Total Proposed)	
Parking Spaces	
# of Parking Spaces (Total Existing)	58
# of Parking Spaces (Total Proposed)	31
# of Handicapped Spaces (Total Proposed)	7
Bicycle Parking Spaces	
# of Bicycle Spaces (Total Existing)	0
# of Bicycle Spaces (Total Proposed)	Exterior (4), Bike Room (16)
Estimated Cost of Project	

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

FINAL PLAN - Level III Site Plan			
Applicant Checklist	Planner Checklist	# of Copies	**GENERAL WRITTEN SUBMISSIONS CHECKLIST (* If applicant chooses to submit a Preliminary Plan, then the * items were submitted for that phase and only updates are required)**
		1	* Completed Application form
		1	* Application fees
		1	* Written description of project
		1	* Evidence of right, title and interest
		1	* Evidence of state and/or federal permits
		1	* Written assessment of proposed project's specific compliance with applicable Zoning requirements
		1	* Summary of existing and/or proposed easements, covenants, public or private rights-of-way, or other burdens on the site
		1	* Evidence of financial and technical capacity
		1	Construction Management Plan
		1	A traffic study and other applicable transportation plans in accordance with Section 1 of the technical Manual, where applicable.
		1	Written summary of significant natural features located on the site (Section 14-526 (b) (a))
		1	Stormwater management plan and stormwater calculations
		1	Written summary of project's consistency with related city master plans
		1	Evidence of utility capacity to serve
		1	Written summary of solid waste generation and proposed management of solid waste
		1	A code summary referencing NFPA 1 and all Fire Department technical standards
		1	Where applicable, an assessment of the development's consistency with any applicable design standards contained in Section 14-526 and in City of Portland Design Manual
		1	Manufacturer's verification that all proposed HVAC and manufacturing equipment meets applicable state and federal emissions requirements.

Applicant Checklist	Planner Checklist	# of Copies	**SITE PLAN SUBMISSIONS CHECKLIST** **(* If applicant chooses to submit a Preliminary Plan, then the * items were submitted for that phase and only updates are required)**
x		1	* Boundary Survey meeting the requirements of Section 13 of the City of Portland's Technical Manual
		1	**Final Site Plans including the following:**
x			Existing and proposed structures, as applicable, and distance from property line (including location of proposed piers, docks or wharves if in Shoreland Zone);
x			Existing and proposed structures on parcels abutting site;
n/a			All streets and intersections adjacent to the site and any proposed geometric modifications to those streets or intersections;
x			Location, dimensions and materials of all existing and proposed driveways, vehicle and pedestrian access ways, and bicycle access ways, with corresponding curb lines;
x			Engineered construction specifications and cross-sectional drawings for all proposed driveways, paved areas, sidewalks;
			Location and dimensions of all proposed loading areas including turning templates for applicable design delivery vehicles;
n/a			Existing and proposed public transit infrastructure with applicable dimensions and engineering specifications;
x			Location of existing and proposed vehicle and bicycle parking spaces with applicable dimensional and engineering information;
x			Location of all snow storage areas and/or a snow removal plan;
			A traffic control plan as detailed in Section 1 of the Technical Manual;
n/a			Proposed buffers and preservation measures for significant natural features, where applicable, as defined in Section 14-526(b)(1);
n/a			Location and proposed alteration to any watercourse;
n/a			A delineation of wetlands boundaries prepared by a qualified professional as detailed in Section 8 of the Technical Manual;
n/a			Proposed buffers and preservation measures for wetlands;
x			Existing soil conditions and location of test pits and test borings;
x			Existing vegetation to be preserved, proposed site landscaping, screening and proposed street trees, as applicable;
x			A stormwater management and drainage plan, in accordance with Section 5 of the Technical Manual;
x			Grading plan;
n/a			Ground water protection measures;
x			Existing and proposed sewer mains and connections;

- Continued on next page -

		Location of all existing and proposed fire hydrants and a life safety plan in accordance with Section 3 of the Technical Manual;
x		Location, sizing, and directional flows of all existing and proposed utilities within the project site and on all abutting streets;
		Location and dimensions of off-premises public or publicly accessible infrastructure immediately adjacent to the site;
x		Location and size of all on site solid waste receptacles, including on site storage containers for recyclable materials for any commercial or industrial property;
x		Plans showing the location, ground floor area, floor plans and grade elevations for all buildings;
		A shadow analysis as described in Section 11 of the Technical Manual, if applicable;
		A note on the plan identifying the Historic Preservation designation and a copy of the Application for Certificate of Appropriateness, if applicable, as specified in Section Article IX, the Historic Preservation Ordinance;
		Location and dimensions of all existing and proposed HVAC and mechanical equipment and all proposed screening, where applicable;
x		An exterior lighting plan in accordance with Section 12 of the Technical Manual;
n/a		A signage plan showing the location, dimensions, height and setback of all existing and proposed signs;
x		Location, dimensions and ownership of easements, public or private rights of way, both existing and proposed.

Avesta Housing Development Corporation
307 Cumberland Avenue
Portland, ME 04101

(207) 245-3340

April 14, 2015

To Whom It May Concern

This letter is to inform you that Thomas S. Greer and his associates of Pinkham & Greer Civil Engineers in Portland are hereby authorized to represent me throughout the approval process of the 17 Carleton Street Housing in Portland, Maine.

This includes representing me with the City of Portland and any other State or local agencies who may become involved in the process.

Should you have any questions or concerns, please feel free to contact me.

Sincerely,

Drew Wing
Development Officer
Avesta Housing Development Corporation

Att. C

17 Carleton Street
File: 15108

Zoning Assessment

This project is in the R-6 Zone. As a residential property, it is a permitted use. The density allowed is one unit per 725 sq. ft of lot plus a 25% density bonus for affordable units. This would be 34 units plus 8 for the bonus; total allowable 42, 37 are proposed.

The building is approximately 43 feet in height, below the 45 feet allowed. Setbacks become 10 feet on each side due to the height. Side setbacks are approximately 10 feet or slightly greater. This project fits the R-6 Zone.

ZONE INFORMATION		
ZONE: R-6, RESIDENTIAL PERMITTED USE: MULTI-FAMILY DWELLING		
SPACE STANDARDS	REQUIRED	PROVIDED
MINIMUM LOT SIZE	2,000 SQ. FT.	25,248 SQ. FT.
MINIMUM AREA PER DWELLING UNIT	725 SQ. FT.	685 SQ. FT. *
MINIMUM STREET FRONTAGE	20 FEET	141.43 FEET
MINIMUM FRONT YARD	5 FEET	5 FEET
MINIMUM REAR YARD	10 FEET	65 FEET
MINIMUM SIDE YARD	10 FEET	10.5 FEET
MAXIMUM LOT COVERAGE	60%	28%
MINIMUM LOT WIDTH	20 FEET	141 FEET
MAXIMUM BUILDING HEIGHT	45 FEET	41 FEET
OPEN SPACE RATIO	20%	25%
OFF STREET PARKING	SEE PARKING REQUIREMENTS	
* DENISTY BONUS OF 25% FOR AFFORDABLE UNITS, SECTION 14-488. TOTAL ALLOWED: 42, PROVIDED: 37		

Easements

This site is to provide two ADA spaces for use by the Butler School Project.

Waivers

This site has a reduction in impervious surface. If required, we request a waiver for the stormwater technical standards. Existing impervious is 19,245 sq. ft. The proposed impervious is 19,210 sq. ft.

Significant Natural Features

This site is currently a parking lot. There are no significant natural features or cultural features on site, consistent with the City's Master Plan.

17 Carleton Street
File: 15108

Master Plan Compliance

This project provides the affordable housing noted in the City's Master Plan. The zoning and land use are consistent with the neighborhood.

Traffic

This 37 unit affordable apartment will generate less traffic than a standard apartment building. Standard apartments generate 6.63 trips per day during the week with 0.56 peak am hour trips and .067 peak pm hour trips. Total trips are listed below:

Total Daily Trips	6.63x37	245
Peak AM Trips	0.56x37	21
Peak PM Trips	0.67x37	25

AVESTA experience is 70% of the units will have cars. Assuming this is a 30% reduction in trips as well the expected trips are shown below:

Total Daily Trips	171
Peak AM Trips	15
Peak PM Trips	18

This amount of trips is very small considering the urban location of the project. The use of bikes and access to the bus service in the area are expected to further reduce the trips for this project.

Trip generation rates are from the ITE Manual Trip Generation.

Neighborhood Meeting

Neighborhood meeting is yet to be held.

Google earth

feet 800

meters 200

17 CARLETON STREET
FILE: 15108

PHOTO 1

PHOTO 2

17 CARLETON STREET
FILE: 15108

PHOTO 3

PHOTO 4

17 CARLETON STREET
FILE: 15108

PHOTO 5

PHOTO 6

17 CARLETON STREET
FILE: 15108

PHOTO 7

PHOTO 8

17 CARLETON STREET
FILE: 15108

PHOTO 9

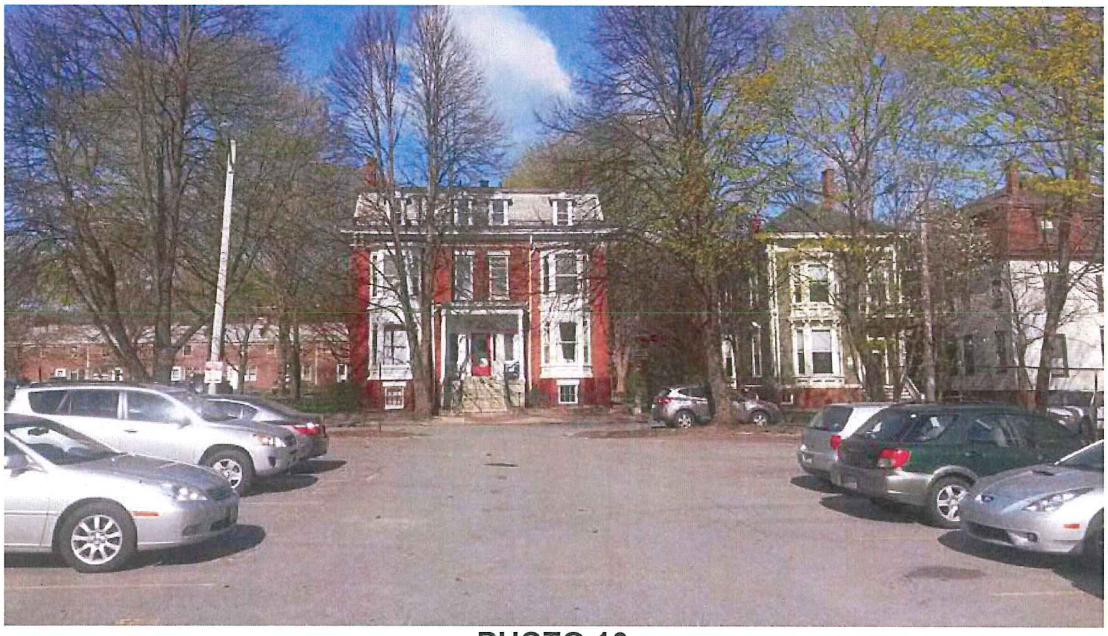


PHOTO 10

17 CARLETON STREET
FILE: 15108

PHOTO 11

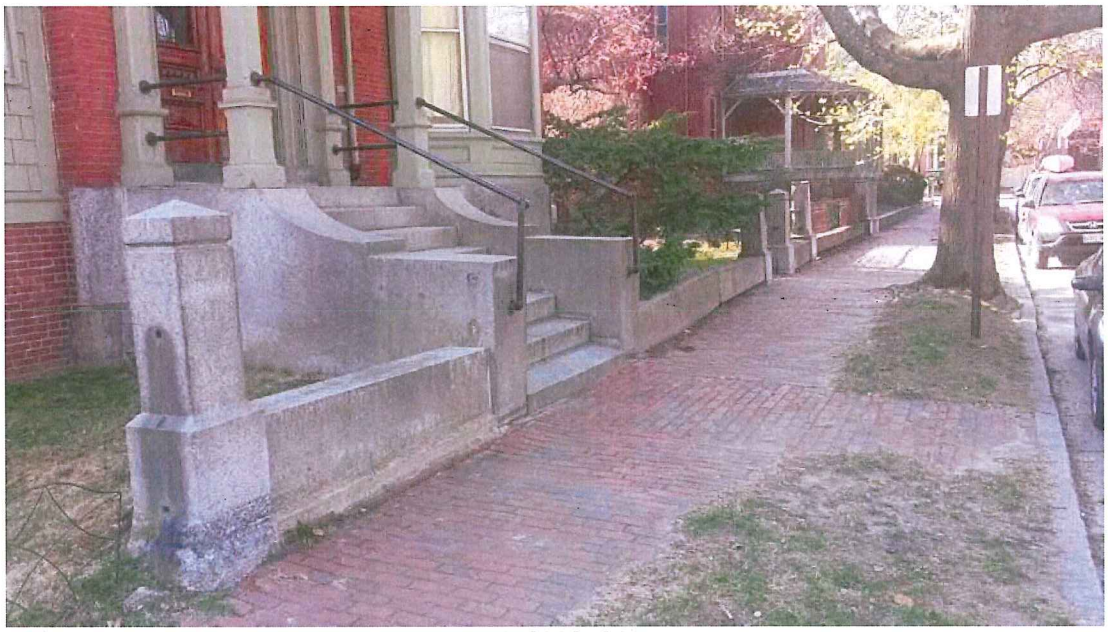


PHOTO 12

Att. D

Doc#: 13352 Bk:32169 Pg: 143

SHORT FORM QUITCLAIM DEED WITH COVENANT

KNOW ALL PERSONS BY THESE PRESENTS, THAT AVESTA HOUSING DEVELOPMENT CORPORATION, a Maine nonprofit corporation, doing business in Portland, Maine, FOR CONSIDERATION PAID, grants to AVESTA BUTLER PAYSON LP, a Maine limited partnership whose mailing address is 307 Cumberland Avenue, Portland, ME 04101, WITH QUITCLAIM COVENANT, the land located on West, Pine, Deering and State Streets in the City of Portland, County of Cumberland and State of Maine, more particularly described on Exhibit A attached hereto.

Being the same premises conveyed to Avesta Housing Development Corporation, by deed of Butler/Payson Company Limited Partnership dated October 21, 2011 and recorded in the Cumberland County Registry of Deeds in Book 29079, Page 282.

IN WITNESS WHEREOF, Avesta Housing Development Corporation has caused this instrument to be executed by Eric Boucher, its Chief Financial Officer thereunto duly authorized, this 30th day of March, 2015.

MAINE REAL ESTATE TAX PAID

WITNESS:

AVESTA HOUSING DEVELOPMENT CORPORATION

By: _____
Eric Boucher, its Chief Financial Officer

STATE OF MAINE
COUNTY OF CUMBERLAND, SS. March 30, 2015

Personally appeared the above-named Eric Boucher, Chief Financial Officer of Avesta Housing Development Corporation, as aforesaid, and acknowledged the foregoing instrument to be his free act and deed in his said capacity and the free act and deed of said Avesta Housing Development Corporation.

Before me,

_____
~~Notary Public~~/Attorney-at-Law
Print name: Amy N. Devin
My commission expires: N/A

EXHIBIT A

Parcel 1 - 77 Pine Street, "School Lot":

A certain lot or parcel of land and the buildings thereon, situated on West and Pine Streets in the City of Portland, County of Cumberland and State of Maine, bounded and described as follows:

Beginning at the intersection of the southerly sideline of West Street and the northwesterly sideline of Pine Street;

Thence S 54°49'50" W along said northwesterly sideline of Pine Street 175.00 feet to a railroad spike in a common passageway;

Thence N 35°10'10" W within said common passageway 113.98 feet to a railroad spike;

Thence S 54°49'50" W within said common passageway 16.83 feet to a railroad spike;

Thence N 18°25'00" E within said common passageway 98.91 feet to a railroad spike and said southerly sideline of West Street;

Thence S 71°35'00" E along said southerly sideline of West Street 188.38 feet to an angle point;

Thence S 36°17'00" E along said southerly sideline of West Street 21.10 feet to the point of beginning.

All bearings are magnetic in the year 1976.

Together with the right in common to use common passageways from West Street and from Pine Street as described in a deed to the City of Portland dated August 14, 1878 and recorded in the Cumberland County Registry of Deeds in Book 451, Page 345, including, without limitation, the right to pass and to repass to and from said premises from and to Pine Street and West Street.

Parcel 2 - 218 State Street:

A certain lot or parcel of land and the buildings thereon, situated at Deering and State Streets in the City of Portland, County of Cumberland, and State of Maine, bounded and described as follows:

Beginning at the intersection of the southerly sideline of Deering Street and the westerly sideline of State Street at an iron pipe;

Thence S 01°50'00" W along the westerly sideline of State Street 97.82 feet to an iron pipe and land now or formerly of LF Associates LLC described in a deed recorded in the Cumberland County Registry of Deeds in Book 25869, Page 326;

Thence N 85°47'00" W along said land now or formerly of LF Associates LLC 100.00 feet to a point marking the southwesterly corner of the within described premises and the southeasterly corner of land now or formerly of LCB38, LLC described in a deed recorded in said Registry of Deeds in Book 28686, Page 115;

Thence N 01°50'00" E along land now or formerly of said LCB38, LLC 100.00 feet to said southerly sideline of Deering Street and a drill hole;

Thence S 84°32'00" E along said southerly sideline of Deering Street 100.12 feet to the point of beginning.

All bearings are magnetic in the year 1976.

O:\MAS\99475 Avesta\Butler Payson Apartments\Transfer Docs\Quitclaim Deed.docx

Received
Recorded Register of Deeds
Mar 31,2015 10:24:12A
Cumberland County
Nancy A. Lane

QUITCLAIM DEED WITH COVENANT

KNOW ALL PEOPLE BY THESE PRESENTS, that Butler/Payson Company Limited Partnership, a Maine limited partnership, having an office c/o Keen Development Corporation, 6 Bennett St, Cambridge, Massachusetts 02138, for consideration paid by Avesta Housing Development Corporation, a Maine non-profit corporation, having an office at 307 Cumberland Avenue, Portland, Maine, the receipt and sufficiency of which is hereby acknowledged, does grant, bargain, sell, convey, set over and transfer unto said Avesta Housing Development Corporation, its successors and assigns forever, three parcels of land and the buildings thereon, situated in the City of Portland, County of Cumberland, State of Maine, bounded and described as follows:

Parcel 1:

A certain lot or parcel of land and the buildings thereon, situated on West and Pine Streets in the City of Portland, County of Cumberland and State of Maine, bounded and described as follows:

Beginning at the intersection of the Southerly sideline of West Street and the Northwesterly sideline of Pine Street;

Thence S 54°49'50" W along said Northwesterly sideline of Pine Street 175.00 feet to a railroad spike in a common passageway;

Thence N 35°10'10" W within said common passageway 113.98 feet to a railroad spike;

Thence S 54°49'50" W within said common passageway 16.83 feet to a railroad spike;

Thence N 18°25'00" E within said common passageway 98.91 feet to a railroad spike and said Southerly sideline of West Street;

Thence S 71°35'00" E along said Southerly sideline of West Street 188.38 feet to an angle point;

Thence S 36°17'00" E along said Southerly sideline of West Street 21.10 feet to the point of beginning;

All bearings are magnetic in the year 1976.

The above-described premises are subject to common passageways from West Street and from Pine Street as described in a deed to the City of Portland dated August 14, 1878 and recorded in the Cumberland County Registry of Deeds in Book 451, Page 345.

Together with the right in common to use said common passageways including, without limitation, the right to pass and to repass to and from said premises from and to Pine Street and West Street.

Parcel 2:

A certain lot or parcel of land situated on the Easterly side of Carleton Street in the City of Portland, County of Cumberland, and State of Maine bounded and described as follows:

MAINE REAL ESTATE TAX PAID

Beginning at an iron pipe on the Easterly sideline of said Carleton Street at the Southwesterly corner of land now or formerly of Irving McCalmon, said iron pipe also being 100.00 feet distant as measured along said Easterly sideline of said Carleton Street on a bearing of S 18°38'00" W from the intersection of the Southerly sideline of West Street and said Easterly sideline of Carleton Street;

Thence from said point of beginning S 71°35'00" E along said Irving McCalmon land, land now or formerly of Lund Development Company, and land now or formerly of National Casket Company Incorporated 221.34 feet to a common passageway and an iron pipe;

Thence S 18°25'00" W along said common passageway 12.55 feet to an iron pipe;

Thence S 54°39'40" W along a common passageway 159.70 feet to land now or formerly of Wesley A. Kinney et al and an iron pipe;

Thence N 71°37' 10" W along said Wesley A. Kinney et al land 127.45 feet to said Easterly sideline of Carleton Street and a drill hole;

Thence N 18°38'00" E along said Easterly sideline of Carleton Street 141.43 feet to the point of beginning;

All bearings are magnetic in the year 1976.

Together with the right in common to use the common passageways referred to in Parcel 1 above, including, without limitation, the right to pass and repass to and from said premises from and to Pine Street and West Street.

Parcel 3:

A certain lot or parcel of land and the buildings thereon, situated at Deering and State Streets in the City of Portland, County of Cumberland, and State of Maine, bounded and described as follows:

Beginning at the intersection of the Southerly sideline of Deering Street and the Westerly sideline of State Street at an iron pipe;

Thence S 01°50'00" W along the Westerly sideline of State Street 97.82 feet to an iron pipe and land now or formerly of Masada Trust;

Thence N 85°47'00" W along said land now or formerly of Masada Trust 100.00 feet to land formerly of Eben Steele;

Thence N 01°50'00" E along land now or formerly of Donald F. Files 100.00 feet to said Southerly sideline of Deering Street and a drill hole;

Thence S 84°32'00" E along said Southerly sideline of Deering Street 100.12 feet to the point of beginning;

All bearings are magnetic in the year 1976.

The above premises being the premises conveyed to Butler/Payson Company Limited Partnership by deeds recorded in Cumberland County Registry of Deeds at Book 3979, Page 343 and Book 4034, Page 137. See also confirmatory deed recorded in Cumberland County Registry of Deeds at Book 4005, Page 279.

To have and to hold the same together with all the privileges and appurtenances thereunto belonging to the said Butler/Payson Company Limited Partnership, its successors and assigns forever.

And said Butler/Payson Company Limited Partnership does covenant with the said grantee, its successors and assigns, that it will warrant and forever defend the premises to the said grantee, its successors and assigns forever, against the lawful claims and demands of all persons claiming by, through or under it.

[signature page follows]

IN WITNESS WHEREOF, this Deed has been duly signed and sealed by the Butler/Payson Company Limited Partnership as of this 31st day of October, 2011.

Butler Payson Company Limited Partnership

By: KAM LLC, its General Partner

By: the Estate of Robert H. Kuehn, Jr., its Manager

By: _____
Daniel A. Taylor, as Executor and not individually

COMMONWEALTH OF MASSACHUSETTS
Suffolk, SS.

October 21, 2011

Personally appeared the above-named Daniel A. Taylor, Executor of the Estate of Robert H. Kuehn, Jr., Manager of KAM LLC, General Partner of Butler/Payson Company Limited Partnership as aforesaid, and acknowledged the foregoing instrument to be his free act and deed in his said capacity and the free act and deed of said limited liability company and limited partnership.

Before me, _____
Notary Public/Attorney-at-Law

LINDA A. MESSICK
Notary Public
Commonwealth of Massachusetts
My Commission Expires
February 20, 2015

SEAL

Received
Recorded Register of Deeds
Oct 31,2011 01:21:11P
Cumberland County
Pamela E. Lovley

AGREEMENT

THIS AGREEMENT made this ____ day of _____, 2015 by and between AVESTA BUTLER PAYSON LP, a Maine limited partnership with a place of business and mailing address of 307 Cumberland Avenue, Portland, Maine 04101 ("BP") and AVESTA HOUSING DEVELOPMENT CORPORATION, a Maine nonprofit corporation with a place of business and mailing address of 307 Cumberland Avenue, Portland, Maine 04101 ("Avesta")

W I T N E S S E T H:

WHEREAS, BP owns a certain lot or parcel of land at 77 Pine Street in Portland, Cumberland County, Maine, more particularly described in a deed to BP (the "BP Deed") recorded in the Cumberland County Registry of Deeds in Book 32169, Page 143 (the "BP Land"); and

WHEREAS, Avesta holds title to adjoining land located on Carleton Street in said Portland, described as Parcel 2 in a deed recorded in the Cumberland County Registry of Deeds in Book 29079, Page 279 (the "Avesta Land"); and

WHEREAS, the BP Land is benefited by appurtenant easements for vehicular and pedestrian access over certain "common passageways" as described in the BP Deed (the "Common Passageways"); and

WHEREAS, Avesta plans to develop the Avesta Land as affordable rental housing and has requested that BP enter into this Agreement to provide assurances that the Common Passageways will not be obstructed;

NOW THEREFORE, for valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and in consideration of the mutual promises and covenants set forth herein, the parties agree as follows:

1. Non-Obstruction of Common Passageways. BP shall take reasonable commercial measures to keep the Common Passageways free of obstruction at all times, and to that end, in the event there occurs any such obstruction, BP shall take reasonable commercial enforcement measures to enforce its rights as an easement holder with respect to the Common Passageways and to cause any such obstruction to be removed.

2. No Objection to Use. BP agrees it shall not object to the use of, or attempt to prevent the use of, the Common Passageways by City of Portland Public safety vehicles accessing the Avesta Land for any legitimate public purpose.

3. General. This Agreement shall be biding upon and shall inure to the benefit of the parties and their respective successors and assigns. This Agreement may not be modified except in a written instrument executed by both parties and recorded in the Cumberland County Registry of Deeds. If any provision of this Cross Agreement is determined to be invalid or

unenforceable under any law or regulation, the validity or enforceability of any other provision of this Cross Agreement shall not be affected, and in lieu of such invalid or unenforceable provision there shall be added automatically, as part of this Cross Agreement, a provision as similar in terms as may be valid and enforceable, if possible.

IN WITNESS WHEREOF, the parties have caused this instrument to be signed and sealed as of the day and year first written above.

WITNESS:

AVESTA HOUSING DEVELOPMENT CORPORATION

_____

By:_____
Dana Totman, President

AVESTA BUTLER PAYSON LP

BY: Pinecone Housing Corporation, its General Partner

_____

By:_____
Dana Totman, President

STATE OF MAINE
County of Cumberland, ss.

_____, 2015

Then personally appeared the above-named Dana Totman, President of Avesta Housing Development Corporation, as aforesaid, and acknowledged the foregoing to be his free act and deed in his said capacity and the free act and deed of said corporation.

Before me,

_____
Notary Public/Attorney-at-Law
Print Name:_____
My Commission Expires: _____

STATE OF MAINE
County of Cumberland, ss. _____, 2015

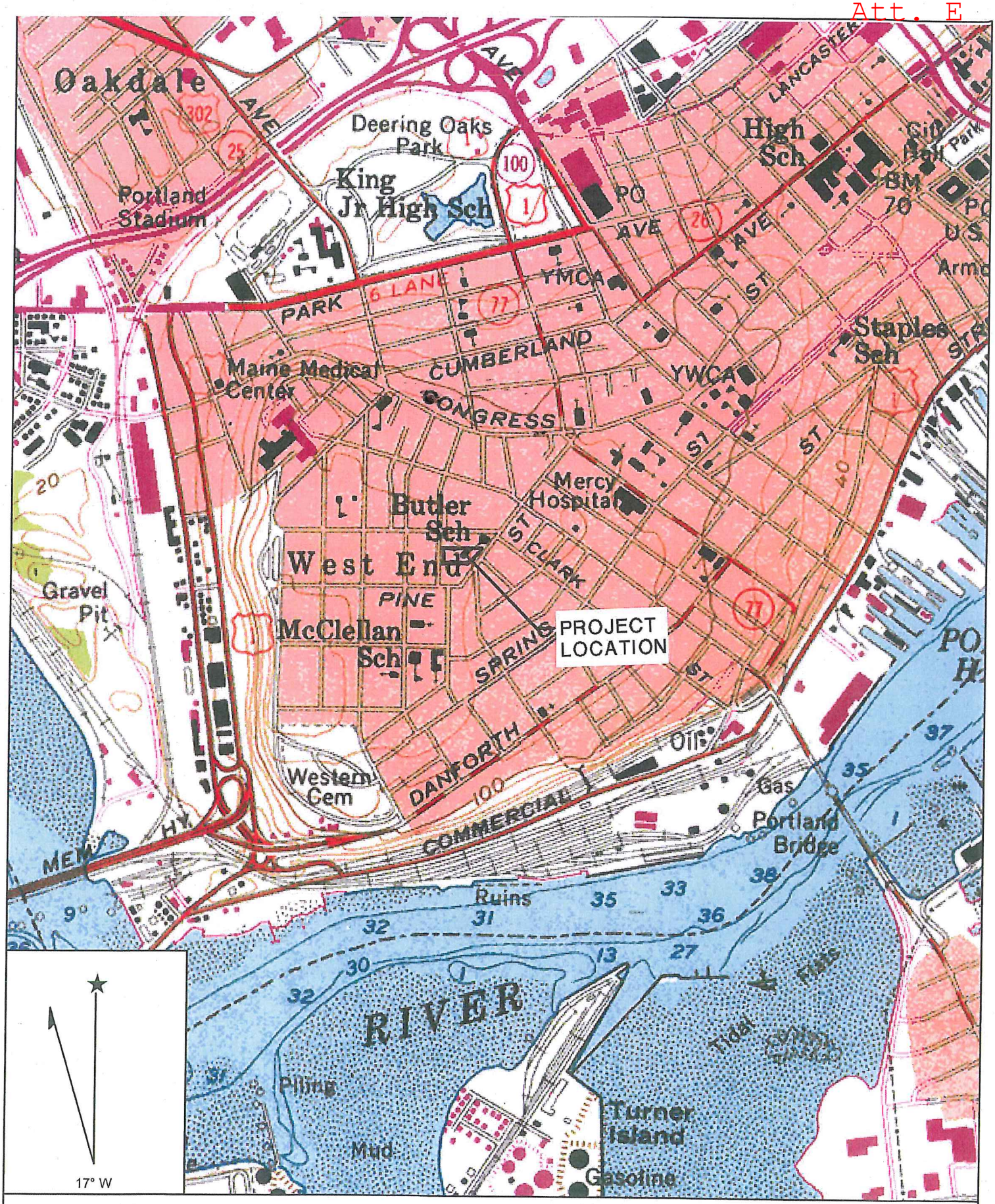
Then personally appeared the above-named Dana Totman, President of Pinecone Housing Corporation, General Partner of Avesta Butler Payson LP, and acknowledged the foregoing to be his free act and deed in his said capacity and the free act and deed of said limited partnership and corporation.

Before me,

_____
Notary Public/Attorney-at-Law
Print Name:_____
My Commission Expires: _____

O:\MAS\99475 Avesta\Carleton Street\Title\Agreement re passageways.docx

Att. E



Name: PORTLAND WEST
Date: 4/14/2015
Scale: 1 inch equals 1000 feet

Location: 043° 38' 56.86" N 070° 16' 10.32" W
Caption: 15108-CARLETON STREET

Copyright (C) 2002, Maptech, Inc.

Att. F

Gorham
SAVINGS BANK

Avesta Housing
307 Cumberland Avenue
Portland, ME 04101

City of Portland
389 Congress Street
Portland, ME 04101

April 28, 2015

RE: City of Portland – 17 Carleton Street

Gentlemen:

One behalf of Gorham Savings Bank, I am pleased to provide this letter in support of Avesta Housing for the above referenced project. Based on our experience with Avesta Housing for similar affordable housing development projects and a review of the financial elements of the proposed for the 17 Carleton Street low income housing project, we believe that the applicant has the ability to finance projected costs and develop a project of similar type and scale from a fiscal perspective.

Gorham Savings Bank has helped Avesta Housing complete successful affordable housing projects including Avesta Munjoy Commons in Portland, Avesta Cousens in Kennebunk, Avesta Cascade Brook in Saco, and Avesta Stonecrest in Standish. The Bank has successfully sponsored Maine Housing and Federal Home Loan Bank application for equity grants for Avesta Housing and the Bank has the capability to provide construction and tax increment credit financing. Avesta Housing has demonstrated the ability to secure development capital through low income housing tax credit program and other public and private sector sources and could, we believe, secure approximately $6.5 million needed to complete this project.

While this letter of support is not a commitment to lend, Gorham Savings Bank would welcome the opportunity to be a resource to Avesta Housing for financing and sponsoring any equity awards necessary in connection with this project. Our experience is that Avesta Housing is, in many ways, the premier affordable housing development organization in Maine with a solid record of supporting healthy and inclusive neighborhoods and helping to build strong and sustainable communities.

Sincerely,

Matthew W. Early
Senior Vice President

Att. G

PINKHAM & GREER
CIVIL ENGINEERS

Pinkham & Greer Civil Engineers provides civil engineering services to private and public sector clients. The principals in the firm, Thomas S. Greer PE and Stephen E. Stearns PE have experience with a wide variety of projects. We provided direct attention to each project and client.

Our experience includes projects for school districts, architects, private developers, commercial, and industrial clients. We work as part of a multi disciplinary team at the direction of our client.

Most projects involve some type of permitting. We are very experienced in packaging applications for Towns, the Department of Environmental Protection, and the Army Corp of Engineers. We utilize our network of consultants to meet all the technical requirements of the standards. This includes surveyors, wetland scientists, architects, and Geophysical consultants.

We work to make our clients successful and thereby making our firms successful. Our repeat client list is testimony to our efforts.

THOMAS S. GREER, P.E.
Principal

Mr. Greer has over 38 years of experience in consulting engineering. This includes construction inspection, civil engineering design, and project management, as well as company management as a Principal of Pinkham & Greer; each experience building on the previous to form a well-rounded background in civil engineering and business management.

Mr. Greer's principal responsibilities within the company include management of civil engineering projects such as site designs and permit applications, and the financial management of the firm. Civil engineering projects include subdivision and land planning, stormwater management plans, site designs for commercial and institutional clients, and utility design for sewer and water projects.

The responsibility of corporate management adds to Mr. Greer's direct, hands-on experience when addressing each client's individual business concerns; developing solutions sensitive to the issues important to the client, such as financing, in addition to the technical engineering issues.

Mr. Greer has chaired the American Society of Civil Engineering subcommittee reviewing the stormwater management manual prepared by the Maine Department of Environmental Protection and was a member of the Technical Advisory Committee in developing the DEP Stormwater Management Program. He has also assisted the DEP with training programs for Non Point Source Stormwater through the Non Point Source Technical Advisory Committee.

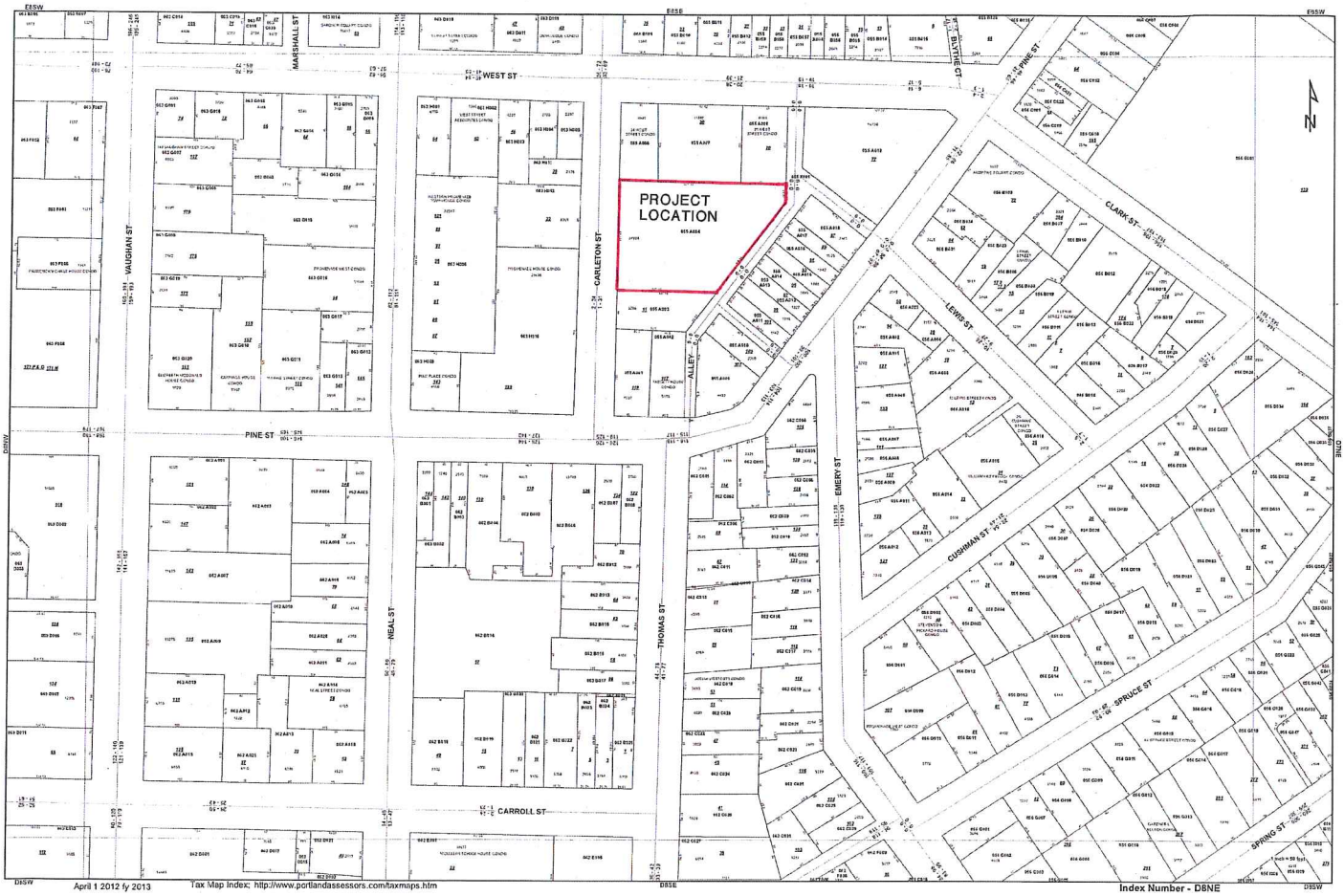
EDUCATION

University of Maine, Orono, Maine
Bachelor of Science, Civil Engineering, 1976

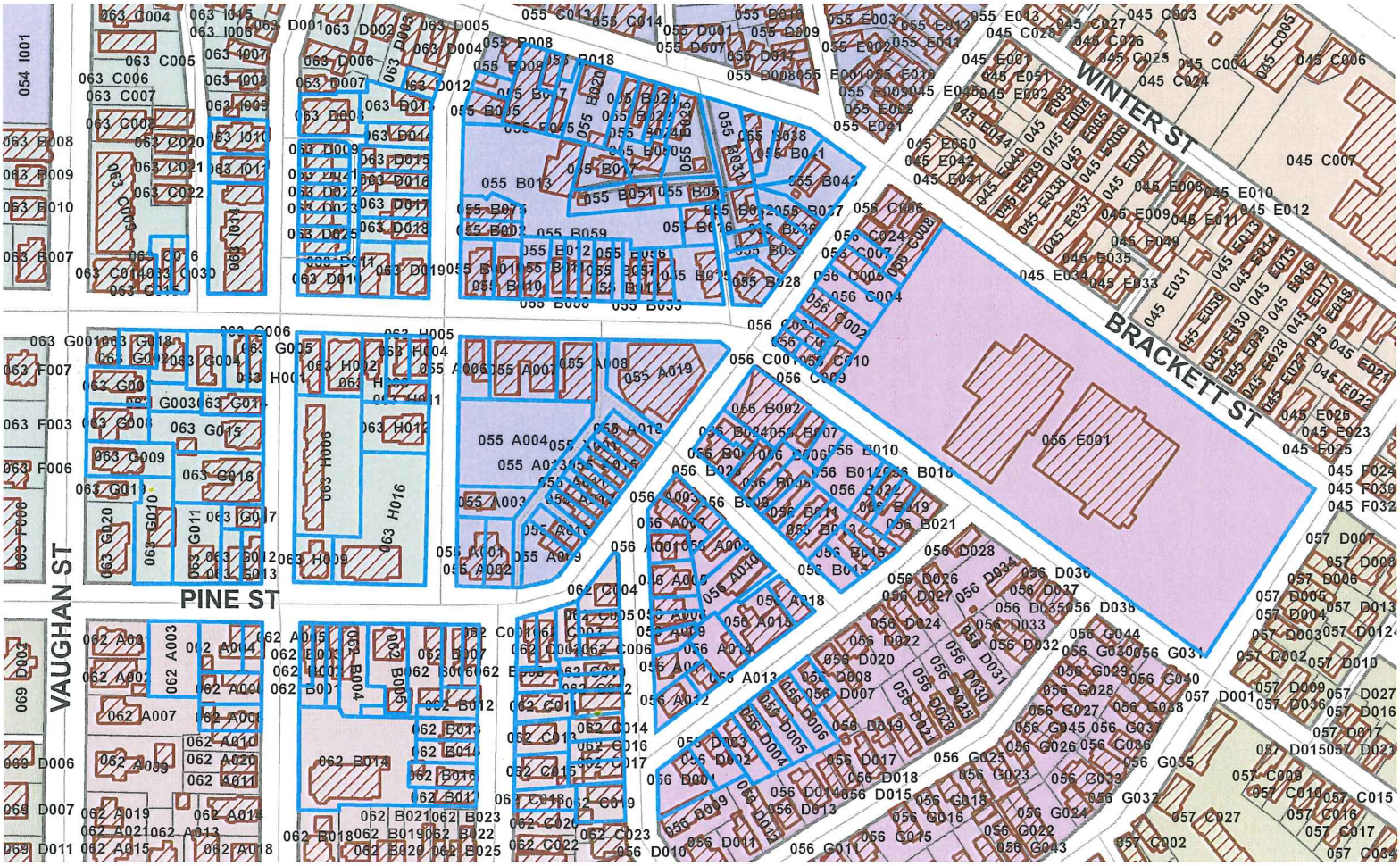
REGISTRATION AND LICENSES

Professional Engineer licensed in Maine, Massachusetts, Connecticut, and New Hampshire

Att. H



April 1 2012 fy 2013 Tax Map Index: http://www.portlandassessors.com/taxmaps.htm Index Number - DBNE


WINTER ST
BRACKETT ST
PINE ST
VAUGHAN ST

Att. I

PINKHAM & GREER
CIVIL ENGINEERS
28 VANNAH AVE. PORTLAND, ME. 04103
Tel: 207.781.5242 Fax: 207.781.4245

File: 15108

April 14, 2015

Ms. Glissen Havu
Portland Water District
PO Box 3553
Portland, ME 04104-3553

RE: 17 CARLETON STREET, PORTLAND

Dear Glissen,

We are in the process of designing a 33-37 unit building at 17 Carleton Street. Attached is a sketch plan showing one possible design. May we get copies of anything you may have about existing service in Carleton Street?

We are requesting an Ability to Serve letter to comply with the City's Planning requirements. We expect flows to be in the 3,000 gallons per day range. The building will also have a full sprinkler system for fire protection.

If you could provide a letter, we would be appreciative.

Sincerely,

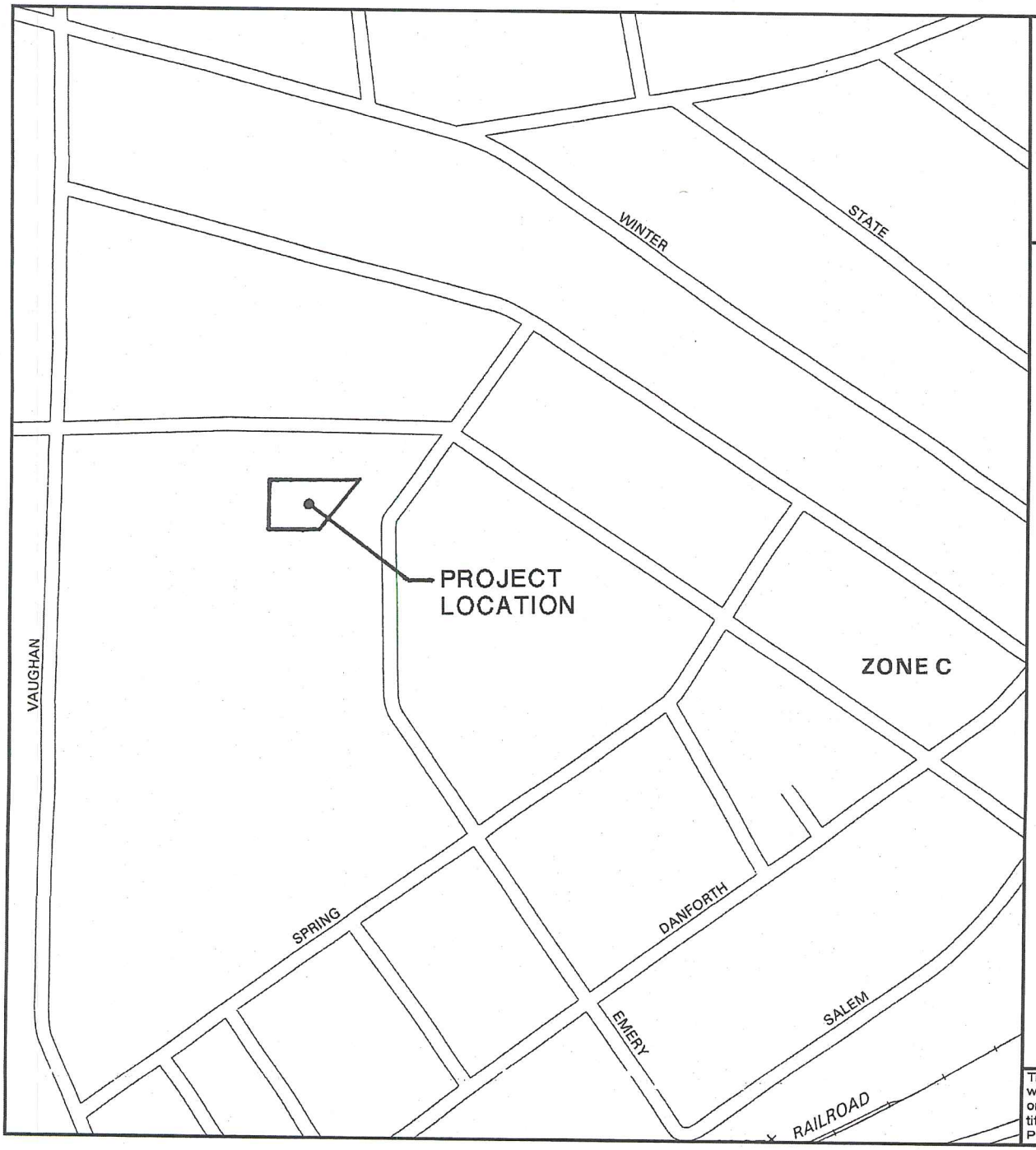
PINKHAM & GREER,
CIVIL ENGINEERS

Thomas S. Greer, P.E.

cc: (1) File

enclosures

TSG/rjs



APPROXIMATE SCALE

400 0 400 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

CITY OF
PORTLAND, MAINE
CUMBERLAND COUNTY

PANEL 13 OF 17
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
230051 0013 B

EFFECTIVE DATE:
JULY 17, 1986

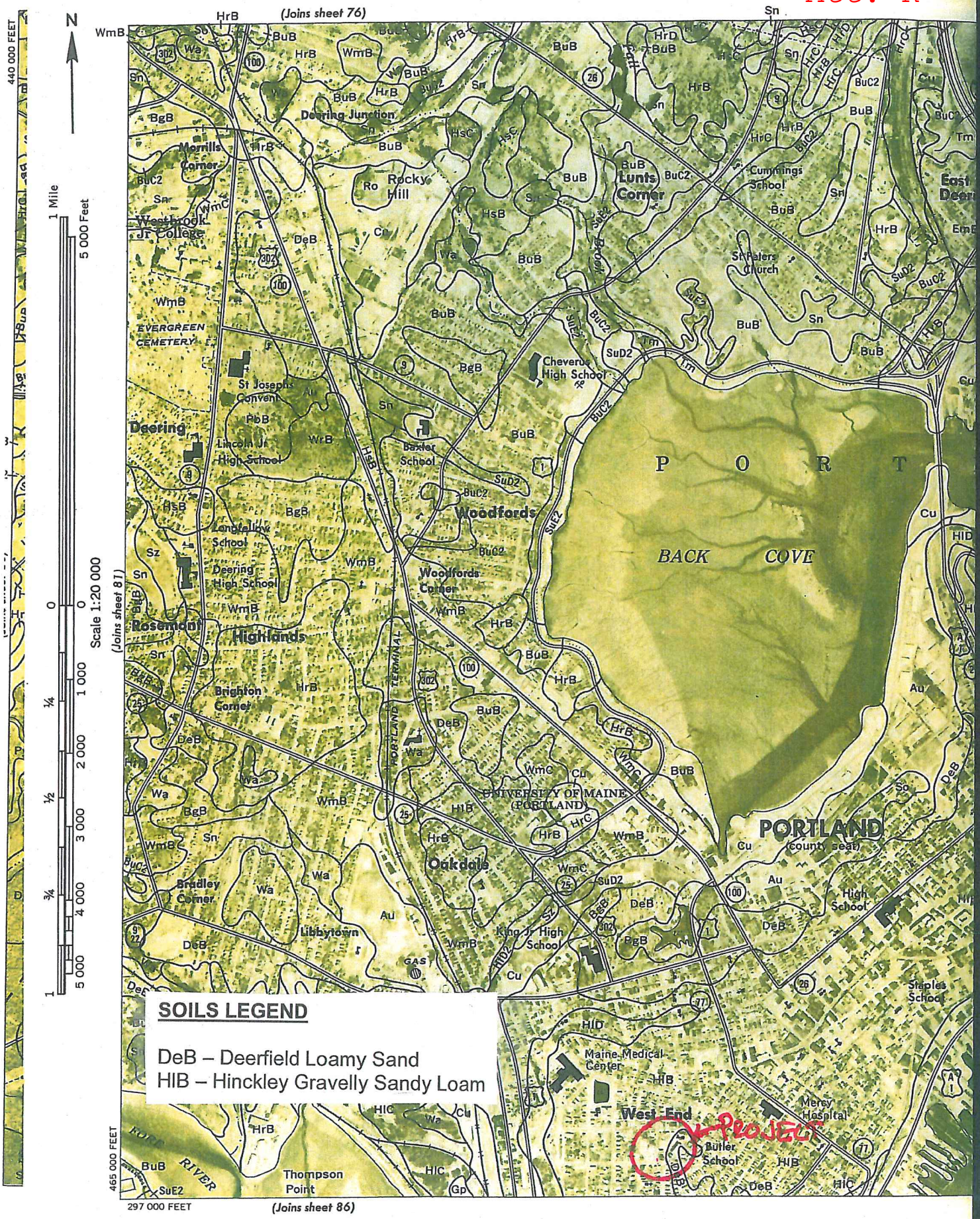
Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

Att. J

CUMBERLAND COUNTY,

Att. K



SOILS LEGEND

DeB – Deerfield Loamy Sand
HIB – Hinckley Gravelly Sandy Loam

Att. L

CITY OF PORTLAND WASTEWATER CAPACITY APPLICATION

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

Date: Aoril 14, 2015

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

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

Site Address: 17 Carleton Street

Chart Block Lot Number: 55 / A / 4

Proposed Use: Apartment Building & Parking Lot

Previous Use: Parking Lot

Existing Sanitary Flows: 0 GPD

Existing Process Flows: 0 GPD

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

Site Category		
	Commercial *(see part 4 below)*	
	Industrial *(complete part 5 below)*	
	Governmental	
	Residential	X
	Other *(specify)*	

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

2. Please, Submit Contact Information.

City Planner's Name: Helen Donaldson Phone: 207.874.8723

Owner/Developer Name: Avesta Butler Payson PI (Drew Wing)

Owner/Developer Address: 307 Cumberland Avenue, Portland, ME 04101

Phone: 207.245.3340 Fax: E-mail: dwing@avestahousing.org

Engineering Consultant Name: Pinkham & Greer Civil Engineers (Thomas S. Greer, P.E.)

Engineering Consultant Address: 28 Vannah Avenue, Portland, ME 04103

Phone: 207.781.5242 Fax: 207.781.4245 E-mail: tgreer@pinkhamandgreer.com

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

3. Please, Submit Domestic Wastewater Design Flow Calculations.

Estimated Domestic Wastewater Flow Generated: 3,000 GPD

Peaking Factor/ Peak Times: Typical Residential am & pm peaks

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

Based on EPA Standards water use per person 60 gpd / criteria.

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

4. Please, Submit External Grease Interceptor Calculations.

Total Drainage Fixture Unit (DFU) Values: Not Required

Size of External Grease Interceptor: _____

Retention Time: _____

Peaking Factor/ Peak Times: _____

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

5. Please, Submit Industrial Process Wastewater Flow Calculations

Estimated Industrial Process Wastewater Flows Generated: 0 GPD

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

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

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

Peaking Factor/Peak Process Times: _____

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

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

Notes, Comments or Calculation

This is a standard residential building with a mix of 1 and 2 bedroom apartments. The total number of units will be between 33 and 37.

Att. M

Unitil
natural gas

April 16, 2015

Thomas Greer
Pinkham & Greer Civil Engineers
28 Vannah Avenue
Portland, ME 04103

Re: 17 Carleton Street, Portland, ME

Dear Mr. Greer:

Thank you for your interest in using natural gas for the above referenced project.

Unitil has natural gas in the vicinity of this project to provide additional gas service. The evaluation to complete the design, costs and determining what the customer contribution may be, if any, can be completed once Unitil receives the completed design and load information. Unitil welcomes the opportunity for further discussions regarding this project.

If you have any further questions or require additional information, please contact me directly at (207) 541-2536 or at Harmon@unitil.com.

Sincerely,

Bridget L. Harmon
Business Development Representative
Unitil Corporation
(o) 207-541-2536 (f) 207-541-2586

Att. N

17 Carleton Street

File: 15108

Construction Management Plan

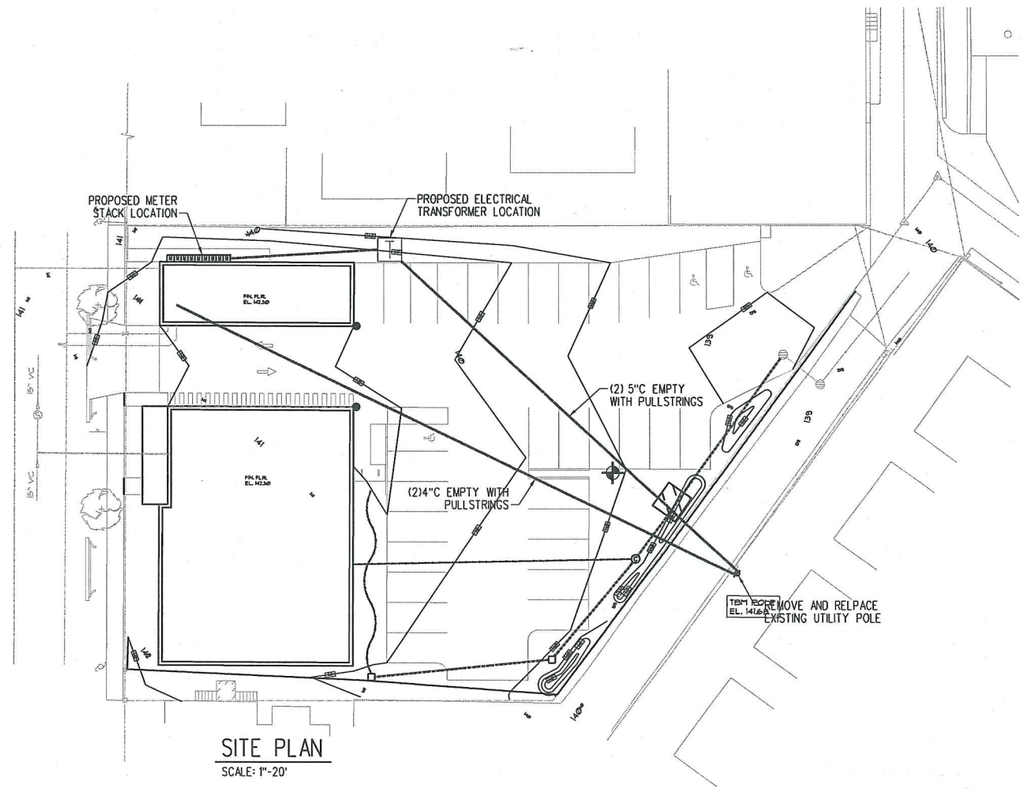
This site is unique in that it has a significant area behind the building to stage the construction. We expect the contractor trailers, dumpsters, and construction parking to utilize this space. Some temporary short term parking will occur on Carleton Street. The current residents using the site will have to find parking elsewhere. Once constructed some of the new spaces may become available for lease.

The one way traffic on Carleton Street should be available throughout the project. Signs at each end of the street will be placed noting the sidewalk will be out of service while it is being reconstructed.

Most construction material deliveries will be made from Carleton Street. The use of the common passage way will be used as the need arises.

The existing chainlink fence around the site will be used to control access to the site. Additional temporary fencing will be used along Carleton Street. Limited access to the construction will be enforced.

Att. O



SITE PLAN
SCALE: 1"=20'

PROGRESS PRINT
NOT FOR CONSTRUCTION

Prepared For:
AVESTA BUTLER PAYSON PL.
307 CUMBERLAND AVE
PORTLAND, ME. 04101

Consulting Engineer:
BENNETT ENGINEERING
MECHANICAL • ELECTRICAL
(207)865-9425

Architect:
ARCHETYPE architects
48 Union Wharf Portland, Maine 04101
(207) 772-6022 Fax (207) 772-4056

Project:
CARLETON STREET SENIOR HOUSING
17 CARLETON St.
PORTLAND, MAINE

Revisions:

Scale: As Noted

Date:

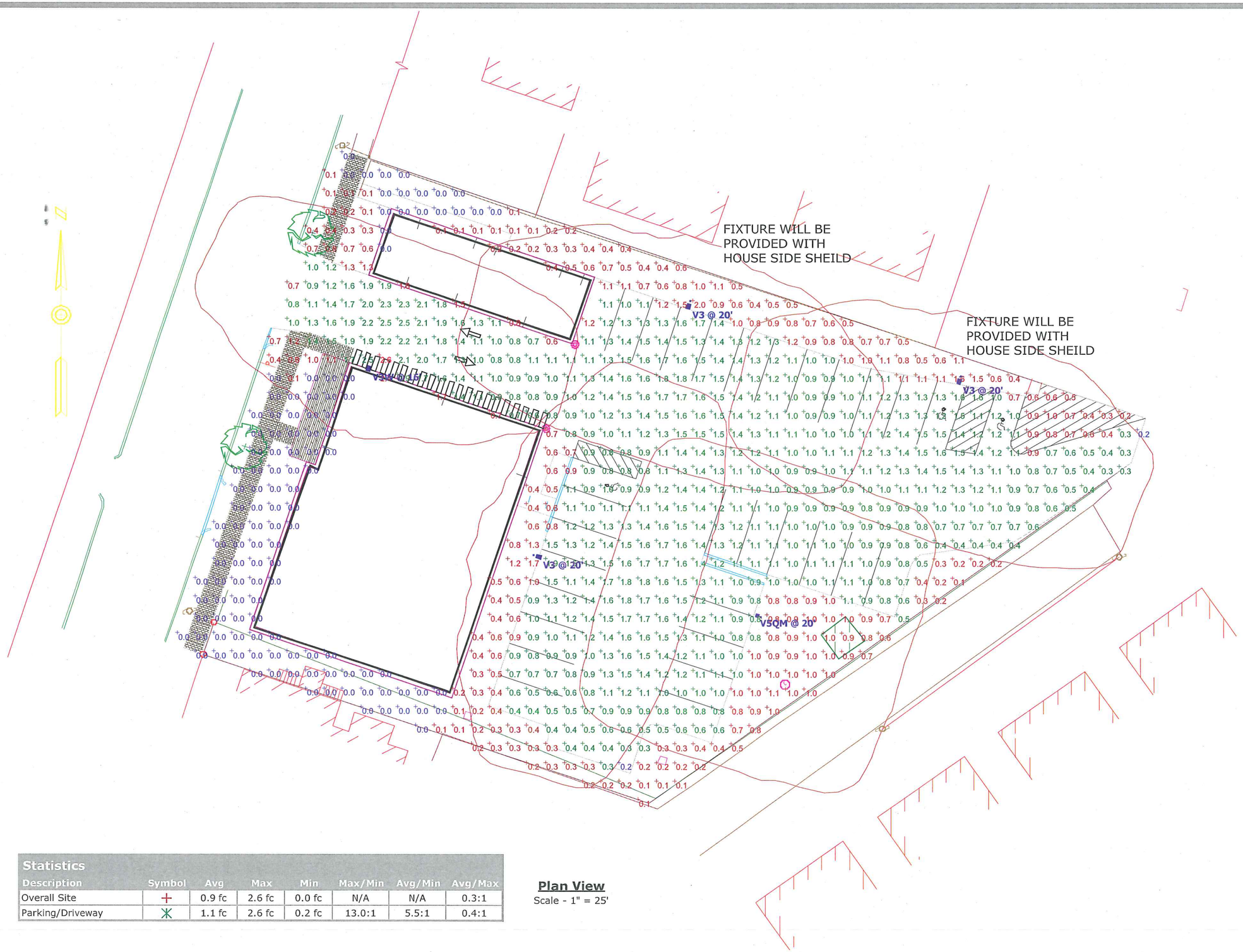
Luminaire Schedule

Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens Per Lamp	Light Loss Factor	Wattage
	V3	3	BEACON PRODUCTS	22NB-50-T3-5K		22 NICHIA LEDS	1	VP-S-22NB-50-T3.ies	4710	1	50
	V5QM	1	BEACON PRODUCTS	22NB-500-T5SM		22 NICHIA LEDS	1	VP-S-22NB-50-T5QM.ies	4923	1	50
	V3W	1	BEACON PRODUCTS	22NB-50-T3-5K		22 NICHIA LEDS	1	VP-S-22NB-50-T3.ies	4710	1	50

VISUAL

Carleton St Senior Housing
17 Carleton St.
Portland, ME

Designer
SAJ
Date
5/5/2015
Scale
Not to Scale
Drawing No.
E0
Summary



Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min	Avg/Max
Overall Site	+	0.9 fc	2.6 fc	0.0 fc	N/A	N/A	0.3:1
Parking/Driveway	✳	1.1 fc	2.6 fc	0.2 fc	13.0:1	5.5:1	0.4:1

Plan View
Scale - 1" = 25'

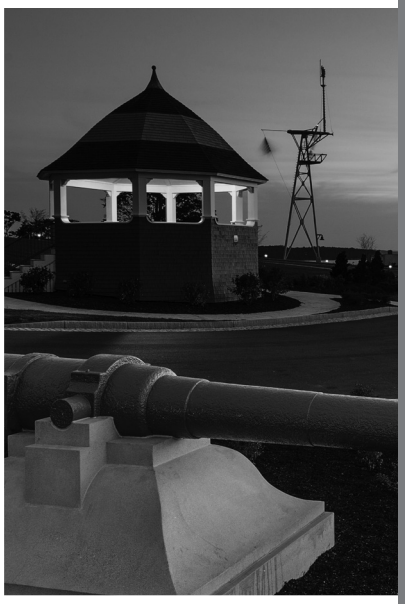
VISUAL

Carleton St Senior Housing
17 Carleton St.
Portland, ME

Designer
SAJ
Date
5/5/2015
Scale
Not to Scale
Drawing No.
E0
Summary

Att. P

Relationships.
Responsiveness.
Results.



Traffic Impact and Parking Study Carleton Street Housing Project Portland, Maine

PREPARED FOR:
Avesta Housing

June 2015

SUBMITTED BY:
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P.O. Box 1237
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Traffic Impact and Parking Study
Carleton Street Housing Project
Portland, Maine

I. Introduction

The purpose of this Study is to assess the traffic impact of the proposed senior housing development on the one-way Carleton Street in Portland, Maine and to estimate the parking demand forecast to be required for the project. This project will consist of 37 affordable housing units. The site is currently accessed by two driveways on the one-way Carleton Street. When it is completed it will be accessed by one driveway on Carleton Street.

The attached Figure 1 shows the approximate location of the site.

II. Existing Traffic Volumes

Gorrill Palmer (GP) completed morning and afternoon turning movement counts at the intersections of West Street with Carleton Street and Pine Street with Carleton Street. The turning movement counts were collected on Monday April 27, 2015 from 3:30-6:00 PM and Tuesday April 28, 2015 from 7:00-9:00 AM. The results of the counts are shown on the attached Figure 2.

III. Proposed uses in the Vicinity of the Proposed Development

Approved projects that are not yet opened as well as projects for which applications have been filed are required to be included in the predevelopment volumes. Based on conversations with Mr. Tom Errico, City of Portland Traffic Peer Reviewer, there are no significant projects in the immediate area that need to be included in the background traffic.

IV. Pre-Development Traffic Volumes

The traffic volumes shown in Figure 2 were counted in April 2015, and have been seasonally adjusted to approximate the 30th highest hour of the year using the weekly group mean factors published by the MaineDOT. This seasonal adjustment increases the volumes to those that may be experienced during the peak summer months. The seasonal adjustment resulted in an increase of eight percent for the morning and twelve percent for the afternoon.

In addition to seasonally adjusting the traffic volumes, they are also increased by a yearly growth to approximate the build out year of the project. The proposed project is anticipated to be occupied in 2016. MaineDOT traffic counts in the area show an average growth rate of approximately 2.3%.

Traffic volumes shown in Figure 3 reflect both the seasonal and annual adjustments to yield the 2016 Predevelopment Design Hour Volumes (DHV).

V. Trip Generation

A total of 37 affordable housing units are proposed.

The Institute of Transportation Engineers' publication *Trip Generation Manual, 9th Edition*, Land Use Code (LUC) 252 – Adult Senior Housing-Attached was utilized to forecast trip generation. The following summarizes the forecast trip generation for the proposed development:

- AM Peak Hour of Adjacent Street Traffic = 8 Trip Ends (3 In / 5 Out)
- PM Peak Hour of Adjacent Street Traffic = 10 Trip Ends (5 In / 5 Out)

A trip end is defined as a trip into or out of the site; thus a round trip is equal to two trip ends. The detailed trip generation calculations are attached.

This level of trip generation does not meet the threshold for filing a Traffic Movement Permit with the MaineDOT since it will generate less than 99 trip ends during the peak hours.

VI. Trip Composition and Assignment

We have assumed that all the trips to and from the site are primary trips made for the sole purpose of going to and from the site. The trip assignment has been based on the traffic counts completed at the study area intersections. The trip assignment is shown on the attached Figure 4.

VII. Post-Development Traffic Volumes

The pre-development traffic volumes shown in Figure 3 have been combined with the traffic forecast for the expansion shown on Figure 4 to yield the Post-development DHV shown on the attached Figure 5.

VIII. Capacity Analysis

GP completed capacity analyses for both the Carleton Street / West Street and the Carleton Street / Pine Street unsignalized intersections. The analysis was completed with Synchro/SimTraffic analysis software. Levels of service rankings are similar to the academic ranking system where an 'A' is very good with little control delay and an 'F' represents very poor conditions. At an unsignalized intersection, if the level of service falls below a 'D', an evaluation should be made to determine if mitigation is warranted.

The following table summarized the relationship between control delay and level of service:

Level of Service Criteria for Unsignalized Intersections

Level of Service	**Control Delay per Vehicle (sec)**
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 results of the capacity analysis are summarized as follows. The detailed analysis is attached.

Level of Service Summary

Approach	**Level of Service**			
	AM Pre	**AM Post**	**PM Pre**	**PM Post**
Carleton / West				
West - WB	A	A	A	A
West - EB	A	A	A	A
Carleton - NB	A	A	A	A
Carleton / Pine				
Pine - WB	A	A	A	A
Pine - EB	A	A	A	A

IX. Sight Line Evaluation

Both the City and Maine Department of Transportation have guidelines for sight distances. The City's sight distance criteria is the same as the MaineDOT. The basic sight line standards are as follows:

Standards for Sight Distance

Posted Speed (mph)	MaineDOT Sight Distance	City of Portland Sight Distance
25	200	200
30	250	250
35	305	305
40	360	360
45	425	425

The MaineDOT and the City measure sight distance using the same methodology. GP has evaluated the available sight lines at the intersection in accordance with MaineDOT / City standards.

The evaluation method is as follows:

Driveway observation point: 10 feet off edge of shoulder
Height of eye at driveway: 3 ½ feet above ground
Height of approaching vehicle: 4 ¼ feet above ground

All speed limits in the immediate area are posted 25 mph or not posted and assumed to be 25 mph. The following table summarizes the measured sight distances.

Sight Distance Summary

Approach	Sight Distance			
	Looking Left (ft)	Looking Right (ft)	MaineDOT Required (ft)	Portland Required (ft)
Exiting driveway onto Carleton*	75	N/A	200	200
Exiting driveway onto West	100	250	200	200
Exiting driveway onto Pine	250	+250	200	200

*Carleton Street is one-way

As summarized in the table, most of the sight distances meet or exceed the requirements. The sight distances exiting the site onto Carleton Street looking left and exiting onto West Street looking left are less than the required due to on-street parked cars. This is common on a downtown street. It is our opinion, that the required sight distance could be achieved by restricting parked vehicles adjacent to the driveways as a driver looks left exiting both Carleton Street and onto West Street. We understand that parking is a sensitive issue and the decision to restrict on-street parking to obtain the required sight distance is the jurisdiction of the City. GP also recommends that all plantings that have the potential to block sight distances not exceed 2 feet in height and be maintained at or below that height. In addition, signage

should be located such that it does not interfere with sight lines. We also recommend that during construction, if heavy equipment is entering and exiting into the site, that appropriate measures, such as signage and flag persons, be utilized in accordance with the Manual on Uniform Traffic Control Devices.

X. Crash Summary Data

GP obtained the crash data from MaineDOT for the period of 2012-2014, the most recent period available at the time this study was prepared (attached).

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

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

2. A minimum of eight crashes over the same three-year period.

Based on the crash data provided by MaineDOT, there are no high crash locations within the immediate vicinity.

XI. Parking Demand

Our office reviewed parking data from other projects we have on file in our office in estimating an appropriate parking ratio for this project. That data is summarized as follows:

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

  In addition, we referenced the parking supply for Franklin Towers and Oak Street Lofts. Franklin Towers has 200 units, and based upon aerial data, a parking supply of 58 spaces. Oak Street Lofts has 37 units, and 16 parking spaces, although it should be noted that half of these spaces (eight) are for motorcycles. For the purposes of this letter, it is assumed that peak demand at both of these facilities are at 100 percent occupancy.

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

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

***Assumes 100% occupancy at Oak Street.**

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

This information indicates that within the Portland Peninsula, parking demand at similar facilities is an average of 0.48 spaces per apartment with a high of 0.67. Applying these rates to the proposed 37 units, yields an average forecast parking demand of 18 parking spaces and a high of 25 spaces, both of which are well below the proposed 31 spaces (includes 7 handicap spaces). In addition, the facility is planning to be set up with ride share, which will further reduce parking demand by approximately 7 parking spaces, lowering the demand to 11 to 18 parking spaces.

XII. Conclusions / Recommendations

The following is a summary of the Conclusions / Recommendations:

1. The proposed expansion project is forecast to generate 8 trip ends and 10 trip ends during the AM and PM peak hours respectively. This level of trip generation does not require a MaineDOT traffic movement permit.

2. The capacity analysis shows the existing unsignalized intersections are forecast to operate at acceptable levels of service with the proposed project having minimal negative impact.

3. Most sight distances at the immediate access to the site meet or exceed the sight distance requirements. However; two of the sight distances are less than required due to on-street parking.

4. The MaineDOT crash data indicates there are no high crash locations in the immediate area.

5. Parking demand for the site is forecast at approximately 11 to 18 parking spaces, well below the proposed 31 parking spaces.

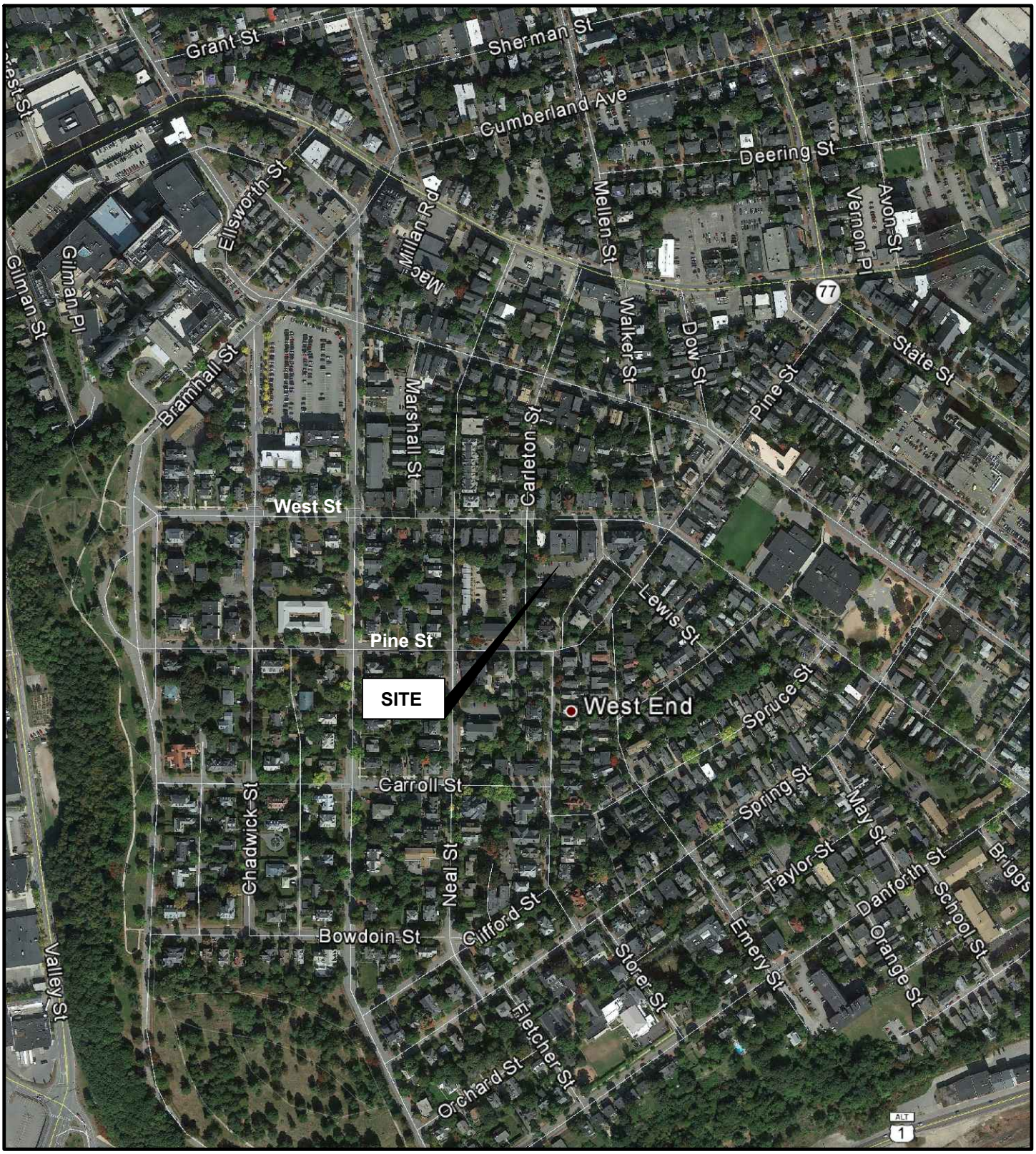
6. In our opinion, the proposed project will have minimal negative impact on the surrounding roadway network and the surrounding roadway network has the capacity to accommodate the proposed project.

Attachments

Site Location Map
Turning Movement Diagram
Trip Generation Calculation
Capacity Analysis
Crash History

Location Map

Figure No. 1



CARLETON STREET HOUSING PROJECT
PORTLAND, MAINE

Design:	ET	Scale:	NONE
Draft:	LAN	Date:	MAY 2015
Checked:	RED	File Name:	3008-TRAFF.dwg

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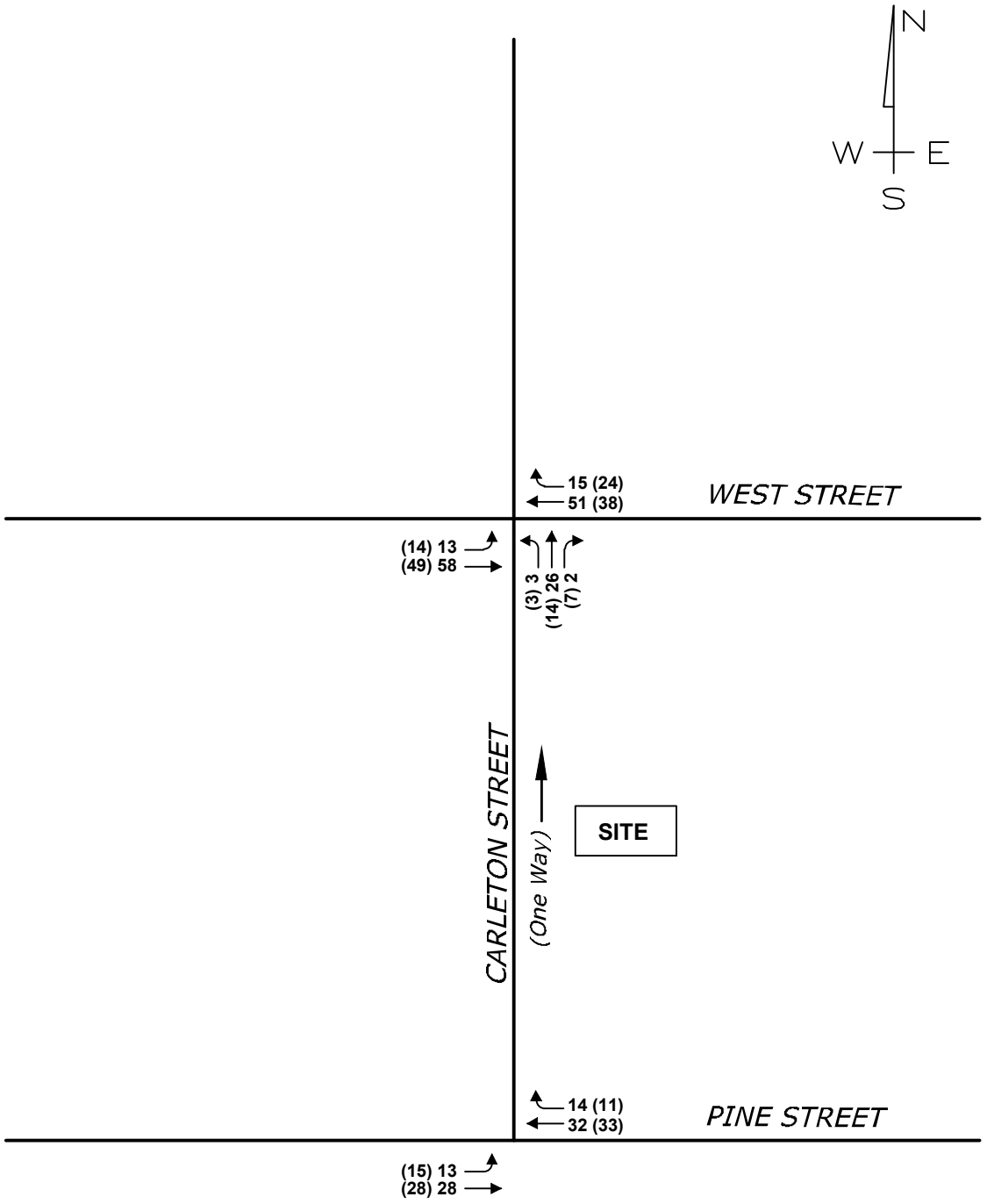
Raw Data

Figure No. 2



XX = AM PEAK HOUR
(XX) = PM PEAK HOUR

NOTE: AM COUNTS COLLECTED 4/28/2015
AND PM COUNTS COLLECTED 4/27/2015

PEAK HOUR
7:15-8:15 AM
4:30-5:30 PM

CARLETON STREET HOUSING PROJECT
PORTLAND, MAINE

Design:	ET	Scale:	NONE
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Checked:	RED	File Name:	3008-TRAFF.dwg

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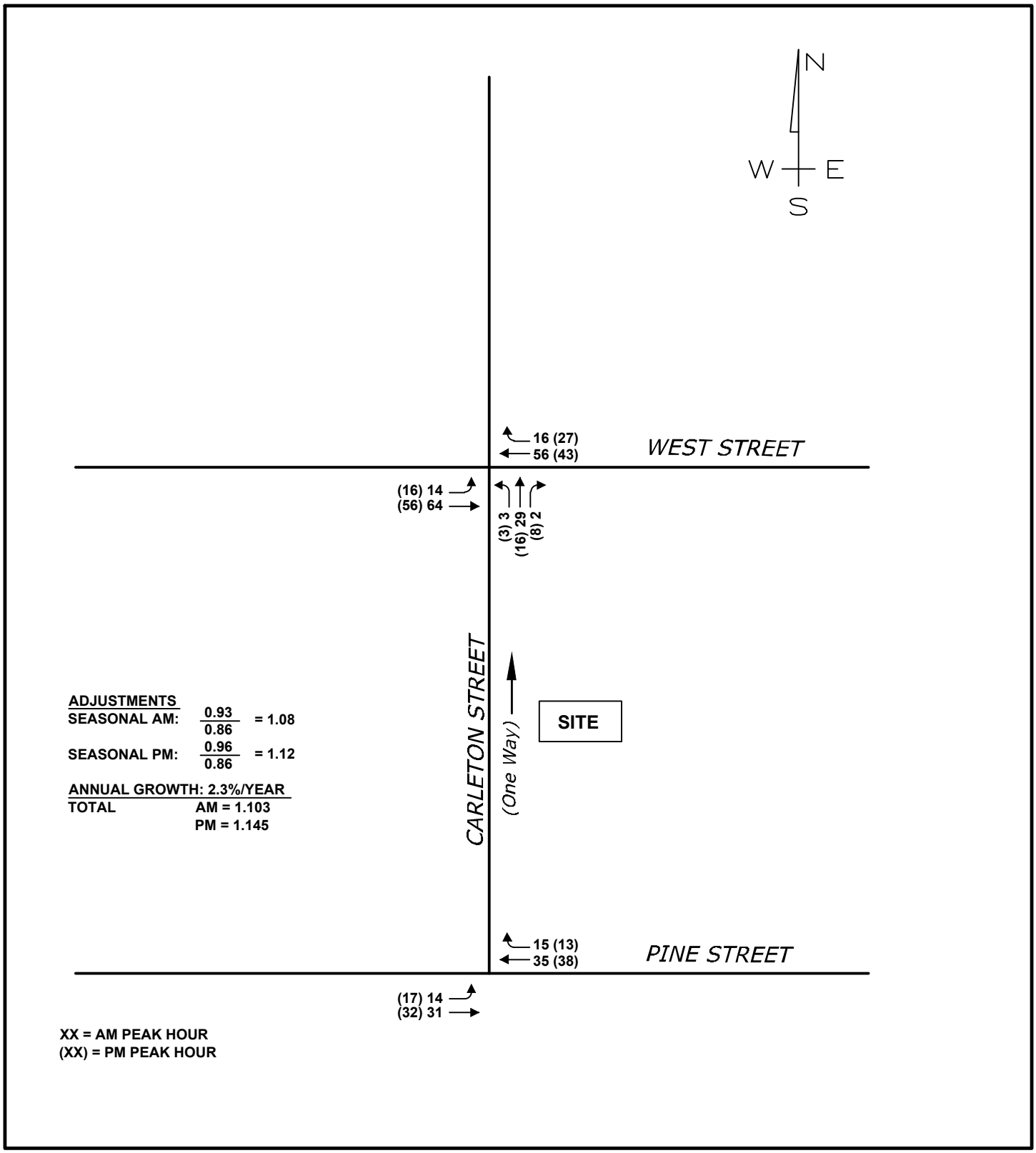
2016 Predevelopment Traffic Volumes

Figure No. 3



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Checked:	RED	File Name:	3008-TRAFF.dwg

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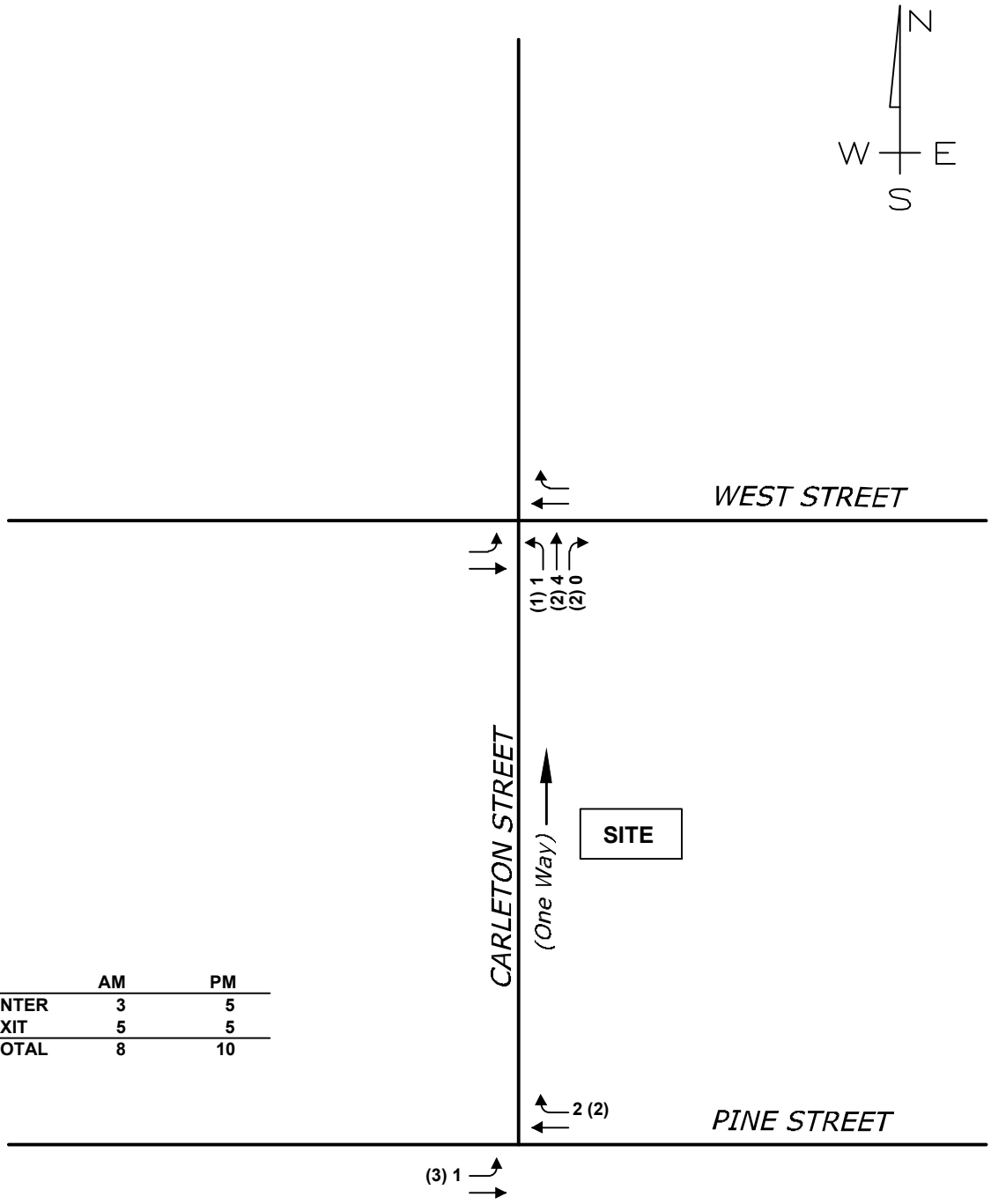
Trip Distribution and Assignment

Figure No. 4



	AM	PM
ENTER	3	5
EXIT	5	5
TOTAL	8	10

XX = AM PEAK HOUR
(XX) = PM PEAK HOUR

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PORTLAND, MAINE

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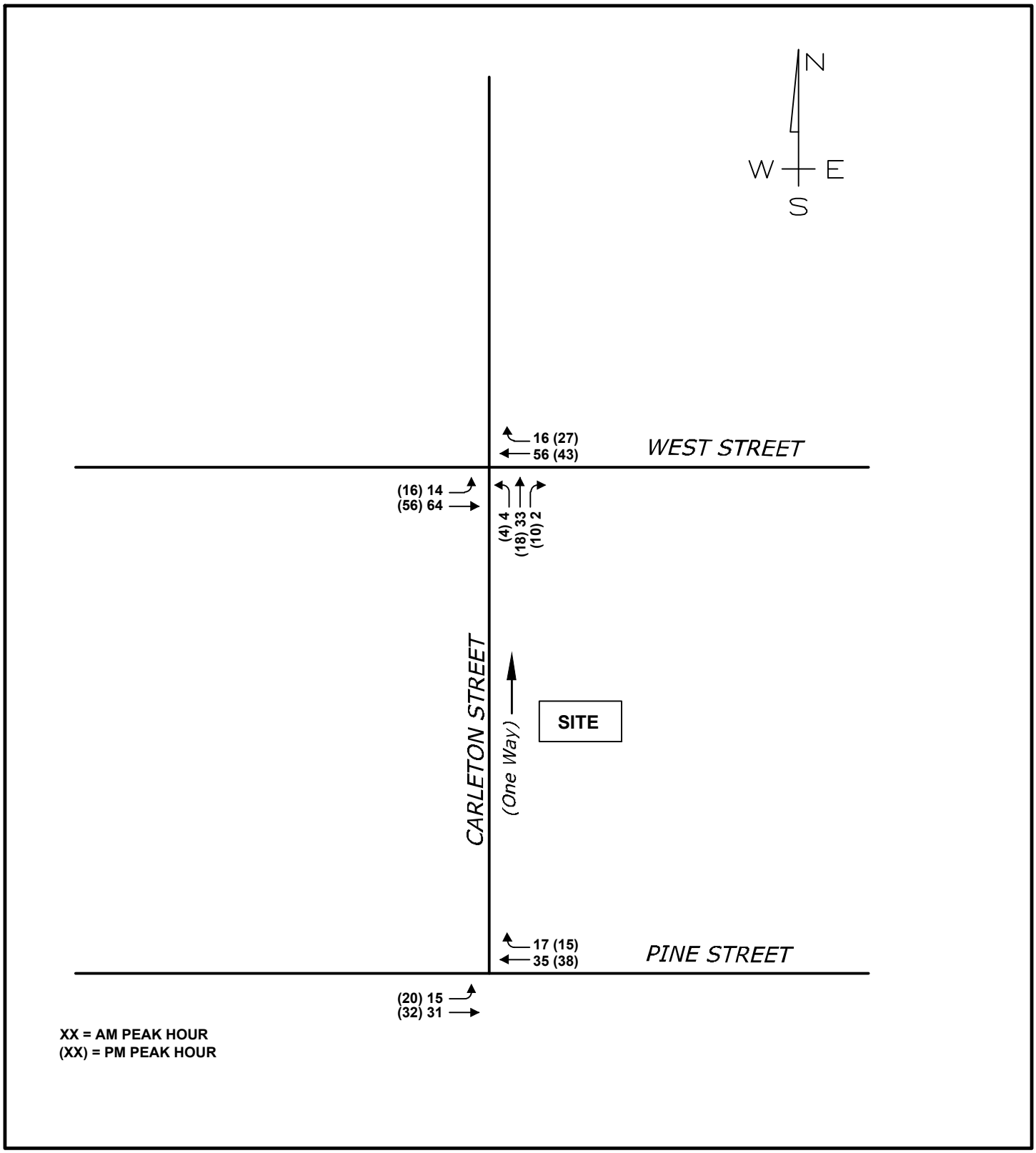
2016 Postdevelopment DHV

Figure No. 5



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CONSULTING ENGINEERS, INC.
P.O. Box 1237
GRAY, MAINE 04039
(207) 657-6910
FAX (207) 657-6912

JOB 3008
SHEET NO. ____ OF ____
CALCULATED BY ET DATE 5/19/15
CHECKED BY ____ DATE ____
SCALE ____

Trip Generation

Source: ITE Trip Generation Manual, 9th Edition
LUC 252 - Senior Adult Housing - Attached

Assumptions:
- ~~34~~ 37 affordable units

AM Peak Hour Adjacent Street Traffic

Avg rate : (0.20) × (~~34~~ 37) = ~~6.8~~ 7.4 trip ends

Equation : 0.20(~~34~~ 37) - 0.13 = ~~6.67~~ 7.37 trip ends

$\frac{\cancel{6.8}\ 7.4 + \cancel{6.67}\ 7.37}{2} = \cancel{6.73}\ 7.33$ trip ends

34% entering : ~~7 in~~ ~~2~~ 3 in
66% exiting : 5 ~~4~~ out

PM Peak Hour Adjacent Street Traffic

Avg rate = (0.25) × (~~34~~ 37) = ~~8.5~~ 9.25 trip ends

Equation = 0.24 (~~34~~ 37) + 1.64 = ~~9.8~~ 10.52 trip ends

$\frac{\cancel{8.5}\ 9.25 + \cancel{9.8}\ 10.52}{2} = \cancel{9.15}\ 9.89$ trip ends

54% entering : 5 in
46% exiting : 5 ~~4~~ out

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	6:57	6:57	6:57	6:57	6:57	6:57
End Time	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	63	63	63	63	63	63
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	222	290	244	241	227	243
Vehs Exited	221	292	244	240	227	245
Starting Vehs	0	2	0	1	0	0
Ending Vehs	1	0	0	2	0	0
Travel Distance (mi)	19	25	21	20	19	21
Travel Time (hr)	0.9	1.2	1.0	1.0	0.9	1.0
Total Delay (hr)	0.1	0.1	0.1	0.1	0.1	0.1
Total Stops	40	41	43	34	29	37
Fuel Used (gal)	0.7	0.9	0.7	0.7	0.7	0.8

Interval #0 Information Seeding

Start Time	6:57
End Time	7:00
Total Time (min)	3

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	222	290	244	241	227	243
Vehs Exited	221	292	244	240	227	245
Starting Vehs	0	2	0	1	0	0
Ending Vehs	1	0	0	2	0	0
Travel Distance (mi)	19	25	21	20	19	21
Travel Time (hr)	0.9	1.2	1.0	1.0	0.9	1.0
Total Delay (hr)	0.1	0.1	0.1	0.1	0.1	0.1
Total Stops	40	41	43	34	29	37
Fuel Used (gal)	0.7	0.9	0.7	0.7	0.7	0.8

5: Carleton Street & West Street Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.1	0.1	0.0	0.1
Total Del/Veh (s)	0.4	0.1	5.0	1.2

6: Pine Street & Carleton Street Performance by approach

Approach	EB	WB	All
Denied Del/Veh (s)	0.1	0.1	0.1
Total Del/Veh (s)	0.5	0.1	0.2

Total Network Performance

Denied Del/Veh (s)	0.1
Total Del/Veh (s)	1.2

Intersection: 5: Carleton Street & West Street

Movement	EB	NB
Directions Served	LT	LTR
Maximum Queue (ft)	23	36
Average Queue (ft)	1	22
95th Queue (ft)	9	45
Link Distance (ft)	143	394
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Pine Street & Carleton Street

Movement	EB
Directions Served	LT
Maximum Queue (ft)	12
Average Queue (ft)	0
95th Queue (ft)	6
Link Distance (ft)	161
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 0

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	6:57	6:57	6:57	6:57	6:57	6:57
End Time	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	63	63	63	63	63	63
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	227	266	252	233	226	241
Vehs Exited	227	267	253	234	227	242
Starting Vehs	1	1	1	1	2	0
Ending Vehs	1	0	0	0	1	0
Travel Distance (mi)	18	22	21	19	19	20
Travel Time (hr)	0.9	1.1	1.0	0.9	0.9	1.0
Total Delay (hr)	0.1	0.1	0.1	0.1	0.1	0.1
Total Stops	20	33	33	25	24	27
Fuel Used (gal)	0.7	0.8	0.8	0.7	0.6	0.7

Interval #0 Information Seeding

Start Time	6:57
End Time	7:00
Total Time (min)	3

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	227	266	252	233	226	241
Vehs Exited	227	267	253	234	227	242
Starting Vehs	1	1	1	1	2	0
Ending Vehs	1	0	0	0	1	0
Travel Distance (mi)	18	22	21	19	19	20
Travel Time (hr)	0.9	1.1	1.0	0.9	0.9	1.0
Total Delay (hr)	0.1	0.1	0.1	0.1	0.1	0.1
Total Stops	20	33	33	25	24	27
Fuel Used (gal)	0.7	0.8	0.8	0.7	0.6	0.7

5: Carleton Street & West Street Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.1	0.1	0.0	0.1
Total Del/Veh (s)	0.5	0.1	3.8	0.9

6: Pine Street & Carleton Street Performance by approach

Approach	EB	WB	All
Denied Del/Veh (s)	0.1	0.1	0.1
Total Del/Veh (s)	0.5	0.1	0.3

Total Network Performance

Denied Del/Veh (s)	0.1
Total Del/Veh (s)	0.9

Intersection: 5: Carleton Street & West Street

Movement	EB	NB
Directions Served	LT	LTR
Maximum Queue (ft)	22	39
Average Queue (ft)	2	19
95th Queue (ft)	13	44
Link Distance (ft)	143	394
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Pine Street & Carleton Street

Movement	EB
Directions Served	LT
Maximum Queue (ft)	24
Average Queue (ft)	1
95th Queue (ft)	10
Link Distance (ft)	161
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 0

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	6:57	6:57	6:57	6:57	6:57	6:57
End Time	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	63	63	63	63	63	63
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	231	293	244	265	227	251
Vehs Exited	230	295	244	264	227	253
Starting Vehs	0	2	0	1	0	0
Ending Vehs	1	0	0	2	0	0
Travel Distance (mi)	20	26	21	22	19	22
Travel Time (hr)	1.0	1.2	1.0	1.1	0.9	1.0
Total Delay (hr)	0.1	0.1	0.1	0.1	0.1	0.1
Total Stops	41	54	43	43	39	44
Fuel Used (gal)	0.7	0.9	0.7	0.8	0.7	0.8

Interval #0 Information Seeding

Start Time	6:57
End Time	7:00
Total Time (min)	3

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	231	293	244	265	227	251
Vehs Exited	230	295	244	264	227	253
Starting Vehs	0	2	0	1	0	0
Ending Vehs	1	0	0	2	0	0
Travel Distance (mi)	20	26	21	22	19	22
Travel Time (hr)	1.0	1.2	1.0	1.1	0.9	1.0
Total Delay (hr)	0.1	0.1	0.1	0.1	0.1	0.1
Total Stops	41	54	43	43	39	44
Fuel Used (gal)	0.7	0.9	0.7	0.8	0.7	0.8

5: Carleton Street & West Street Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.1	0.1	0.0	0.1
Total Del/Veh (s)	0.4	0.1	5.1	1.3

6: Pine Street & Carleton Street Performance by approach

Approach	EB	WB	All
Denied Del/Veh (s)	0.1	0.1	0.1
Total Del/Veh (s)	0.6	0.1	0.3

Total Network Performance

Denied Del/Veh (s)	0.1
Total Del/Veh (s)	1.4

Intersection: 5: Carleton Street & West Street

Movement	EB	NB
Directions Served	LT	LTR
Maximum Queue (ft)	23	40
Average Queue (ft)	1	24
95th Queue (ft)	9	46
Link Distance (ft)	143	394
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Pine Street & Carleton Street

Movement	EB
Directions Served	LT
Maximum Queue (ft)	18
Average Queue (ft)	1
95th Queue (ft)	9
Link Distance (ft)	161
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 0

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	6:57	6:57	6:57	6:57	6:57	6:57
End Time	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	63	63	63	63	63	63
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	229	271	260	241	238	247
Vehs Exited	229	272	261	242	239	248
Starting Vehs	1	1	1	1	2	0
Ending Vehs	1	0	0	0	1	0
Travel Distance (mi)	19	22	22	20	20	21
Travel Time (hr)	0.9	1.1	1.1	0.9	1.0	1.0
Total Delay (hr)	0.1	0.1	0.1	0.1	0.1	0.1
Total Stops	28	31	38	26	33	31
Fuel Used (gal)	0.7	0.8	0.8	0.7	0.7	0.8

Interval #0 Information Seeding

Start Time	6:57
End Time	7:00
Total Time (min)	3

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	229	271	260	241	238	247
Vehs Exited	229	272	261	242	239	248
Starting Vehs	1	1	1	1	2	0
Ending Vehs	1	0	0	0	1	0
Travel Distance (mi)	19	22	22	20	20	21
Travel Time (hr)	0.9	1.1	1.1	0.9	1.0	1.0
Total Delay (hr)	0.1	0.1	0.1	0.1	0.1	0.1
Total Stops	28	31	38	26	33	31
Fuel Used (gal)	0.7	0.8	0.8	0.7	0.7	0.8

5: Carleton Street & West Street Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.2	0.1	0.0	0.1
Total Del/Veh (s)	0.5	0.0	3.7	0.9

6: Pine Street & Carleton Street Performance by approach

Approach	EB	WB	All
Denied Del/Veh (s)	0.1	0.1	0.1
Total Del/Veh (s)	0.6	0.1	0.3

Total Network Performance

Denied Del/Veh (s)	0.1
Total Del/Veh (s)	0.9

Intersection: 5: Carleton Street & West Street

Movement	EB	NB
Directions Served	LT	LTR
Maximum Queue (ft)	22	39
Average Queue (ft)	2	22
95th Queue (ft)	14	45
Link Distance (ft)	143	394
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Pine Street & Carleton Street

Movement	EB
Directions Served	LT
Maximum Queue (ft)	19
Average Queue (ft)	1
95th Queue (ft)	11
Link Distance (ft)	161
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 0

Maine Department Of Transportation - Traffic Engineering, Crash Records Section

Crash Summary Report

Report Selections and Input Parameters

REPORT SELECTIONS

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

REPORT DESCRIPTION

Carleton St area

REPORT PARAMETERS

Year 2012, Start Month 1 through Year 2014 End Month: 12

Route: 0560782	Start Node: 12610	Start Offset: 0	☐ Exclude First Node
	End Node: 12612	End Offset: 0	☐ Exclude Last Node
Route: 0560735	Start Node: 12585	Start Offset: 0	☐ Exclude First Node
	End Node: 12586	End Offset: 0	☑ Exclude Last Node
Route: 0560579	Start Node: 12585	Start Offset: 0	☑ Exclude First Node
	End Node: 12609	End Offset: 0	☐ Exclude Last Node
Route: 0560112	Start Node: 12609	Start Offset: 0	☑ Exclude First Node
	End Node: 12610	End Offset: 0	☑ Exclude Last Node

Maine Department Of Transportation - Traffic Engineering, Crash Records Section

Crash Summary I

Nodes														
Node	Route - MP	Node Description	U/R	Total Crashes	Injury Crashes K	A	B	C	PD	Percent Injury	Annual M Ent-Veh	Crash Rate	Critical Rate	CRF
12610	0560782 - 0.24	0503022 POR,CARLETON,WEST ST.	2	0	0	0	0	0	0	0.0	0.945	0.00	0.54	0.00
												Statewide Crash Rate:	0.14	
12586	0560782 - 0.29	0502998 POR,WEST ST,UNN#16	2	0	0	0	0	0	0	0.0	0.730	0.00	0.56	0.00
												Statewide Crash Rate:	0.14	
12612	0560782 - 0.30	0503024 POR,WEST ST,W.STREET GARAGE DR	2	0	0	0	0	0	0	0.0	0.324	0.00	0.60	0.00
												Statewide Crash Rate:	0.14	
12585	0560735 - 0	0502997 POR, PINE ST, UNN#16	2	0	0	0	0	0	0	0.0	0.377	0.00	0.60	0.00
												Statewide Crash Rate:	0.14	
12589	0560579 - 0.31	0503001 POR,PINE,THOMAS ST.	2	0	0	0	0	0	0	0.0	0.400	0.00	0.60	0.00
												Statewide Crash Rate:	0.14	
12609	0560579 - 0.33	0503021 POR,CARLETON,PINE ST.	2	0	0	0	0	0	0	0.0	0.445	0.00	0.60	0.00
												Statewide Crash Rate:	0.14	
Study Years: 3.00		NODE TOTALS:		0	0	0	0	0	0	0.0	3.221	0.00	0.40	0.00

Crash Summary I

Sections

Start Node	End Node	Element	Offset Begin - End	Route - MP	Section Length	U/R	Total Crashes	Injury Crashes K	A	B	C	PD	Percent Injury	Annual HMVM	Crash Rate	Critical Rate	CRF
12586	12610	186953	0 - 0.05	0560782 - 0.24	0.05	2	1	0	0	0	0	0	0.0	0.00036	925.27	1383.57	0.00
0502998 POR,WEST ST,UNN#16				RD INV 05 60782											Statewide Crash Rate: 359.83		
12586	12612	186954	0 - 0.01	0560782 - 0.29	0.01	2	0	0	0	0	0	0	0.0	0.00006	0.00	1293.24	0.00
0502998 POR,WEST ST,UNN#16				RD INV 05 60782											Statewide Crash Rate: 359.83		
12585	12586	186950	0 - 0.08	0560735 - 0	0.08	2	0	0	0	0	0	0	0.0	0.00007	0.00	1378.69	0.00
0502997 POR, PINE ST, UNN#16				RD INV 05 60735											Statewide Crash Rate: 359.83		
12585	12589	186951	0 - 0.01	0560579 - 0.30	0.01	2	0	0	0	0	0	0	0.0	0.00002	0.00	-998.05	0.00
0502997 POR, PINE ST, UNN#16				RD INV 05 60579											Statewide Crash Rate: 359.83		
12589	12609	186960	0 - 0.02	0560579 - 0.31	0.02	2	0	0	0	0	0	0	0.0	0.00008	0.00	1399.02	0.00
0503001 POR,PINE,THOMAS ST.				RD INV 05 60579											Statewide Crash Rate: 359.83		
12609	12610	187005	0 - 0.08	0560112 - 0	0.08	2	0	0	0	0	0	0	0.0	0.00012	0.00	1549.32	0.00
0503021 POR,CARLETON,PINE ST.				RD INV 05 60112											Statewide Crash Rate: 359.83		
Study Years: 3.00				Section Totals:	0.25		1	0	0	0	0	0	0.0	0.00072	462.49	1179.45	0.39
				Grand Totals:	0.25		1	0	0	0	0	0	0.0	0.00072	462.49	1410.38	0.33

Crash Summary

Section Details

Start Node	End Node	Element	Offset Begin - End	Route - MP	Total Crashes	Injury Crashes K	A	B	C	PD	Crash Report	Crash Date	Crash Mile Point	Injury Degree
12586	12610	186953	0 - 0.05	0560782 - 0.24	1	0	0	0	0	0	2014-16793	06/22/2014	0.27	
12586	12612	186954	0 - 0.01	0560782 - 0.29	0	0	0	0	0	0				
12585	12586	186950	0 - 0.08	0560735 - 0	0	0	0	0	0	0				
12585	12589	186951	0 - 0.01	0560579 - 0.30	0	0	0	0	0	0				
12589	12609	186960	0 - 0.02	0560579 - 0.31	0	0	0	0	0	0				
12609	12610	187005	0 - 0.08	0560112 - 0	0	0	0	0	0	0				
				Totals:	1	0	0	0	0	0				

Maine Department Of Transportation - Traffic Engineering, Crash Records Section

Crash Summary II - Characteristics

Crashes by Day and Hour

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

Vehicle Counts by Type

Unit Type	Total	Unit Type	Total
1-Passenger Car	1	23-Bicyclist	0
2-(Sport) Utility Vehicle	0	24-Witness	0
3-Passenger Van	0	25-Other	1
4-Cargo Van (10K lbs or Less)	0	**Total**	**2**
5-Pickup	0		
6-Motor Home	0		
7-School Bus	0		
8-Transit Bus	0		
9-Motor Coach	0		
10-Other Bus	0		
11-Motorcycle	0		
12-Moped	0		
13-Low Speed Vehicle	0		
14-Autocycle	0		
15-Experimental	0		
16-Other Light Trucks (10,000 lbs or Less)	0		
17-Medium/Heavy Trucks (More than 10,000 lbs)	0		
18-ATV - (4 wheel)	0		
20-ATV - (2 wheel)	0		
21-Snowmobile	0		
22-Pedestrian	0		

Crash Summary II - Characteristics

Crashes by Driver Action at Time of Crash

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

Crashes by Apparent Physical Condition And Driver

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

Driver Age by Unit Type

Age	Driver	Bicycle	SnowMobile	Pedestrian	ATV	Total
09-Under	0	0	0	0	0	0
10-14	0	0	0	0	0	0
15-19	0	0	0	0	0	0
20-24	0	0	0	0	0	0
25-29	0	0	0	0	0	0
30-39	0	0	0	0	0	0
40-49	1	0	0	0	0	1
50-59	0	0	0	0	0	0
60-69	0	0	0	0	0	0
70-79	0	0	0	0	0	0
80-Over	0	0	0	0	0	0
Unknown	1	0	0	0	0	1
Total	2	0	0	0	0	2

Crash Summary II - Characteristics

Most Harmful Event

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

Traffic Control Devices

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

Injury Data

Severity Code	Injury Crashes	Number Of Injuries
K	0	0
A	0	0
B	0	0
C	0	0
PD	0	0
Total	**0**	**0**

Road Character

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

Light

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

Crash Summary II - Characteristics

Crashes by Year and Month

Month	2012	2013	2014	Total
JANUARY	0	0	0	0
FEBRUARY	0	0	0	0
MARCH	0	0	0	0
APRIL	0	0	0	0
MAY	0	0	0	0
JUNE	0	0	1	1
JULY	0	0	0	0
AUGUST	0	0	0	0
SEPTEMBER	0	0	0	0
OCTOBER	0	0	0	0
NOVEMBER	0	0	0	0
DECEMBER	0	0	0	0
Total	**0**	**0**	**1**	**1**

Report is limited to the last 10 years of data.

Maine Department Of Transportation - Traffic Engineering, Crash Records Section

Crash Summary II - Characteristics

Crashes by Crash Type and Type of Location

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

Crash Summary II - Characteristics

Crashes by Weather, Light Condition and Road Surface

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

Crash Summary II - Characteristics

Crashes by Weather, Light Condition and Road Surface

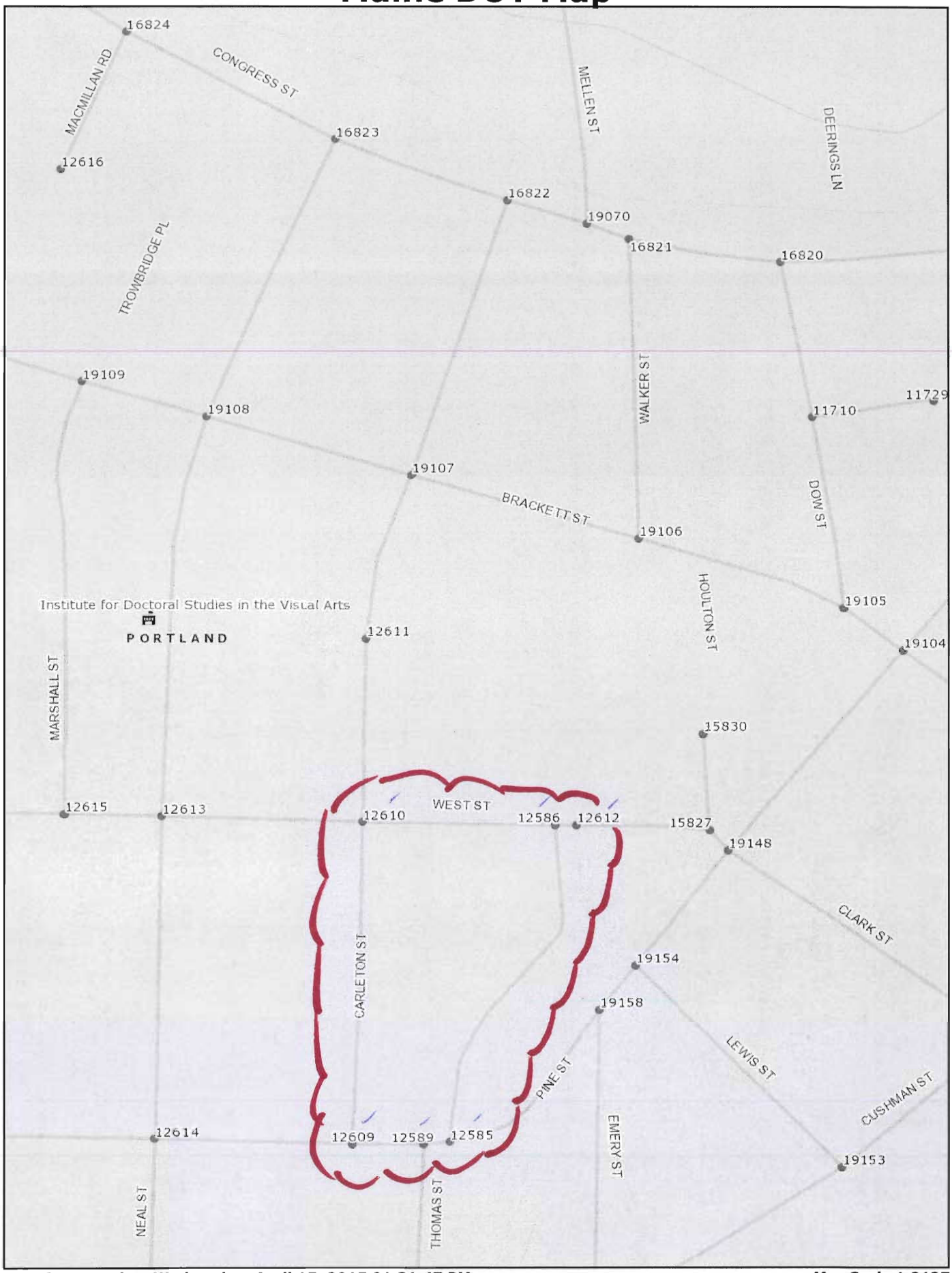
Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
Fog, Smog, Smoke												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0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

Crash Summary II - Characteristics

Crashes by Weather, Light Condition and Road Surface

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

Maine DOT Map



Map Generated on Wednesday, April 15, 2015 01:31:47 PM ***Map Scale 1:2127***

The Maine Department of Transportation provides this publication for information only. Reliance upon this information is at user risk. It is subject to revision and may be incomplete depending upon changing conditions. The Department assumes no liability if injuries or damages result from this information. This map is not intended to support emergency dispatch. Road names used on this map may not match official road names.

Att. Q

From: Drew Wing <DWing@avestahousing.org>
To: Shukria Wiar <SHUKRIAW@portlandmaine.gov>
CC: Seth Parker <SParker@avestahousing.org>
Date: 6/17/2015 8:57 AM
Subject: FW: Carleton Response
Attachments: Letter from Marge Schmuckal.pdf; TRAFFIC and PARKING STUDY_06-15-2015.pdf

Hi Shukria,

Please find responses to your questions below:

We are requesting more information on the proposed project. Please submit a Parking Demand Analysis for both the Butler School and the new proposed project at 17 Carleton Street. We would also like to see more information for the Butler School property, for example how many units are in the building, how many are handicapped, how many parking spaces are leased to the tenants. etc. Also, please provide documentation of any restrictions, easements, commitment, or burdens for the parking lot.

Response:

* The Butler School has 39 units, it is currently under renovation and upon completion will have 5 ADA units. There are 10 cars from the Butler School that are currently using the parking lot at 17 Carleton Street. Per the attached letter from Marge Schmuckal, dated October 15, 2009, you will see that there are no off street parking requirements for the Butler School. In refinancing the Butler School for the current renovations we agreed to provide 2 ADA parking spaces as required by Maine State Housing Authority. There are no other parking requirements for the Butler School.

* 17 Carleton Street has a total of 58 parking spaces. With the exception of the 10 spaces which we have allowed Butler residents to use at no cost, we rent the remaining spaces on a month to month basis. We have no documentation or knowledge of any long term parking agreements with users of 17 Carleton Street.

* There are no other restrictions, easements, commitments or burdens that encumber the lot. The development as we have proposed meets the zoning requirements of the R-6 zone. Per our calculations the density allows 42 units we are proposing 37. The proposed parking is supported by both the zoning ordinance and the traffic/parking analysis attached. We have proposed that 18 of the 31 spaces proposed would be required to serve 17 Carleton Street, the remaining 13 spaces would satisfy the required 2 ADA spaces for Butler School the balance of 11 spaces would serve Butler residents.

Thank you,

Drew Wing
Development Officer
Avesta Housing
307 Cumberland Ave
Portland, ME
207-245-3340
www.avestahousing.org<http://www.avestahousing.org/>

From: Drew Wing <DWing@avestahousing.org>
To: Tom Errico <thomas.errico@tylin.com>
CC: Shukria Wiar <SHUKRIAW@portlandmaine.gov>, Randy Dunton <RDunton@gorrillpalmer.com>
Date: 6/30/2015 9:44 AM
Subject: RE: 17 Carleton Street.
Attachments: Avesta Parking Lease.docx

Hi Tom-

Randy Dunton will be forwarding you the updated parking analysis this afternoon. You also inquired about data that we have regarding who is currently parking at the 17 Carleton Street Lot. As a matter of client confidentiality we cannot release specific names or addresses but I'm hoping the following will suffice for your purposes.

Parking Information:
10 – spaces occupied by residents of Butler School
43 – Spaces occupied by addresses on Pine Street within close proximity to site
2 – Spaces with addresses on Silver Street
3 – Spaces with addresses on Carleton Street within close proximity.

- 3 of the spaces appear to be used by small businesses, possibly for employee parking.

- There are several users who lease multiple parking spaces.

As previously represented there are no agreements in place which bind Avesta to meeting the parking requirements of other properties with the exception of 2 ADA spaces which we provide to Butler School. I have attached a sample lease which we use for leasing the parking spaces.

I hope this information is helpful and please let me know if you have any questions.

Thank You,
Drew Wing
Development Officer
Avesta Housing
307 Cumberland Ave
Portland, ME
207-245-3340
www.avestahousing.org<http://www.avestahousing.org/>

From: Tom Errico [mailto:thomas.errico@tylin.com]
Sent: Wednesday, June 24, 2015 3:50 PM
To: Shukria Wiar; Drew Wing
Subject: RE: 17 Carleton Street.

Hi Drew – I will be on vacation the week of July 6th, so I would like to get my preliminary finding to Shukria on July 2nd. I know this is tight, but I will do what I can to accelerate my review next week.
Thanks

Thomas A. Errico, PE
Senior Associate
Traffic Engineering Director
[T.Y. Lin International]T.Y. Lin International
12 Northbrook Drive
Falmouth, ME 04105
207.781.4721 (main)
207.347.4354 (direct)
207.400.0719 (mobile)
207.781.4753 (fax)
thomas.errico@tylin.com<mailto:thomas.errico@tylin.com>
Visit us online at www.tylin.com<http://www.tylin.com>
Twitter | Facebook | LinkedIn | YouTube

"One Vision, One Company"

Please consider the environment before printing.

From: Shukria Wiar [mailto:SHUKRIAW@portlandmaine.gov]

Sent: Wednesday, June 24, 2015 3:31 PM
To: Drew Wing
Cc: Tom Errico
Subject: Re: 17 Carleton Street.

Hello Drew:

The deadline for the revised plans and information is June 30th at noon so I can distribute them on Wednesday July 1st for staff review (we meet every Wednesday for Development Review). This will give them a week to review and give me comments. My report to the Planning Board needs to be done by Thursday July 9th.

Please do not hesitate to contact me if you have any questions.

Thank you.

Shukria

Shukria Wiar, Planner
Planning Division, City of Portland
389 Congress Street
Portland, ME 04101
Ph: 207-756-8083
Fax: 207-756-8258

>>> Drew Wing <DWing@avestahousing.org<mailto:DWing@avestahousing.org>> 6/24/2015 11:52 AM >>>
Hi Shukria,

I'm just checking in to see if there is anything you need and what the deadline would be for submitting information to your office for our July 14th meeting.

We will be coordinate with Tom on the updated parking analysis he requested. Tom, Randy will be reviewing the proposed scope with you prior to conducting the study. Can you please let me know your deadline for submitting the updated info to you.

Thank you,

Drew Wing
Development Officer
Avesta Housing
307 Cumberland Ave
Portland, ME
207-245-3340
www.avestahousing.org<http://www.avestahousing.org/>

--

PINKHAM & GREER
CIVIL ENGINEERS
28 VANNAH AVE. PORTLAND, ME. 04103
Tel: 207.781.5242 Fax: 207.781.4245

File: 15108

June 30, 2015

Att. R

Ms. Shukria Wiar, Planning Department
City of Portland
389 Congress Street, 4th Floor
Portland, ME 04101

RE: 17 CARLETON STREET, AVESTA HOUSING

Dear Shukria,

Below are our responses to Staff comments:

Comments Submitted by: Shukria Wiar / Planning on 6/5/2015

1. Plan C1.1- Label the areas around the parking; are these areas snow storage?

Snow Storage areas are labeled.

2. Show snow storage areas on the site plan.

Snow Storage is added to the plan.

3. The dimensions need to be shown on the parking lot.

Additional dimensions are provided.

4. It is a little hard to understand; will the existing curb cut at the rear of the lot be used as part of this proposal? If yes, will this be exit only? It may not meet the standards for a two-way.

The rear access towards Butler School will be used. Its width is consistent with the current access.

5. So the applicant have right to use this alleyway?

Yes. AVESTA Housing has rights to the common access. It will be used by the Butler School residents to access the two ADA parking spaces. It will continue to be open for emergency vehicles as well.

6. At the rear curb cut, there is a triangle shaped pavement; this is place to introduce a landscaped island.

This pavement will provide access for pedestrians to the door and ADA spaces.

7. The existing chain linked fence is being removed; will this be replaced with another fence? There have been a couple of abutters that would like it being replaced.

The existing fence on the north side will remain. The fencing on the east side will be replaced with landscaping.

8. A photometric plan has been submitted. The illumination levels/trespass is not meeting standards at the northern property line. This area is sensitive since it abuts residential buildings.

Attached is a revised Photometric Plan.

9. Submit catalogue cuts for all proposed lighting fixtures being proposed.

Attached are fixture cuts for the lights.

10. There seems to be proposed easements that benefit others. Please show all these easements on plan.

The survey plan shows all easements that we are aware of.

11. Submit the information of building footprint and floor area. What is the proposed bedroom mix?

Please see the revised project data sheet previously submitted.

12. What is the data on impervious area (existing and proposed)?

This data is on the project data sheet and on the plans.

13. What is the cost of the project?

The total budget is 6.5 million dollars.

14. How many units are in the Butler School building.

Butler School has 39 units.

Comments Submitted by: Keith Gautreau / Fire on 5/27/2015

Must have access to a minimum two sides of the proposed structure. Access to the rear of the building must be maintained via West Street and Pine Street year round.

The access in the rear will be maintained year round.

Construction Management Plan

Streets must maintain a 20' width for Fire Department access at all times.

Fire Hydrants shall not be blocked or enclosed by fencing. A 3' foot clearance must be kept at all times around the fire hydrant.

If gates are locked, a Portland Fire Department Knox padlock must be purchased by the applicant to allow access for the Fire Department.

The Construction Company' emergency contact information shall be posted on the property in case of an after hours emergency.

All construction shall comply with 2009 NFPA I Chapter 16 Safeguards During Building Construction, Alteration, and Demolition Operations.

Any cutting and welding done will require a Hot Work Permit from Fire Department.

These notes have been added to plan sheet C1.3.

Premises Identification

The main entrance of the building must be the address for the property. This should be consistent with 911, tax assessor, Inspections Division and future mailing address.

Street addresses shall be marked on the structure and shall be as approved by the City E-91 I Addressing Officer. If the building entry faces a different street, both the street name and number should be large enough to read from the street.

Address numbers must be a minimum of 4 inches high.

The building address and numbering will be consistent with the 911 standards.

Comments Submitted by: Keith Gautreau / Fire on 5I27I2015

1 .Hydrants
1.) 2009 NFPAI 18.3 Water Supplies and Fire Hydrants
2.) Fire Department Connections shall not be located where large diameter hose may block egress.
2. Fire Vehicle Access
1.) Largest Fire Department Vehicle must be able to navigate through the parking lot to access building.
2.) Fire Department Access shall have an unobstructed vertical clearance of not less than 13 ft 6 in.

Distances to hydrants are show on the plans.

Comments Submitted by: David Margolis-Pineo / Engineering DPS on 6/5/2015

1. *Survey comments will be forwarded under a separate cover.*

   Survey has been submitted. No additional comments have been received.

2. *Please add note that all work within the Public Right of Way shall meet City of Portland Technical Manual standards.*

   The note is on C1.1.

Comments Submitted by: Tom Errico / Traffic on 6/4/2015

1. *The applicant should provide dimensions of driveway width, parking aisles, etc. for review and comment.*

   Additional dimensions have been added.

2. *It is my understanding that a traffic study is being prepared and I will review traffic specific issues upon receipt of the study.*
3. *The following outlines my comments as it relates to the review of parking conditions for the project:*
   - *The applicant should specifically note details of vehicles parking in the existing lot. It should be noted whether any of the vehicles are using the lot as part of a site plan approval requirement.*
   - *Given parking concerns in the neighborhood and limited parking opportunities, the applicant should conduct an updated parking generation survey at existing similar sites on the Portland Peninsula. The survey is intended to confirm parking demand requirements. The scope and details of the survey shall be coordinated with City staff.*
4. *A brief paragraph has been provided in respect to a construction management plan. It isn't noted, but the plan will likely require the closure of the abutting sidewalk and a temporary sidewalk detour will be required. Other specific details can be reviewed at the Pre-Construction meeting.*

Planning and traffic will be submitted under a separate cover.

Comments Submitted by: Jeff Tarling / City Arborist on 6/5/2015

I have reviewed the proposed Landscape plan and feel additional screening is needed along the north edge. Tree selection types also need to be larger tree variety vs Hawthorn and Paperbark Maple which are very small trees. European Hornbeam or some of the upright Oak varieties like 'Regal Prince which can grow in tight space but offer more height for screening. See: http:!/www.jfschmidt.com/pdfs/regalPriflceOak. Pdf

The north edge space for example, could use 4 of the upright trees vs the two Hawthorns as shown. With some of suggested improvements or conditions the project could be acceptable.

The trees have been adjusted as a result of negotiations between Jeff and Tony Muench RLA.

Comments Submitted by: David Senus/Civil Engineering on 6/2/2015

1) In accordance with Section 5 of the City of Portland Technical Manual, a Level III development project is required to submit a stormwater management plan pursuant to the regulations of MaineDEP Chapter 500 Stormwater Management Rules, including conformance with the Basic, General, and Flooding Standards. We offer the following comments:

a) Basic Standards: Plans, notes, and details have been provided to address erosion and sediment control requirements, inspection and maintenance requirements during-construction, and good housekeeping practices in general accordance with Appendix A, B, & C of MaineDEP Chapter 500.

b) General Standards: The project will result in a net decrease in impervious area. As such, the project is not required to include stormwater management features for stormwater quality control. We encourage the Applicant to review the City's Stormwater Service Charge Credit Manual (available online) to evaluate whether they may want to incorporate stormwater quality treatment measures that qualify for a future Stormwater Service Charge credit.

c) Flooding Standard: The project will result in a net decrease in impervious area. As such, the project is not required to include stormwater management features to control the rate of stormwater runoff from the site.

No response required.

2) The Applicant has requested confirmation of capacity to serve the proposed development from the Portland Water District and the City of Portland; copies of the approval letters should be forwarded to the City upon receipt.

The capacity letter is attached.

3) The Existing Conditions and Demolition Plan (Sheet C1.2) should identify disconnecting and capping I plugging the existing sewer service at the downstream catch basin to eliminate continued inflow into the sewer system. A masonry plug repair should be noted on the existing catch basin.

Notes have been added to the plan.

PINKHAM & GREER
CIVIL ENGINEERS

4) *The Grading & Utilities Plan (Sheet C1.3) should specify the highpoint with spot grades in the area of the driveway entrance between the 142 contours to ensure proper drainage away from the building in this area.*

Spot grades have been added.

5) *The Grading & Utilities Plan (Sheet C1.3) should identify pipe invert elevations for the proposed storm drain system at new and existing catch basins I manhole connections.*

Inverts and rims have been added.

6) *The Applicant should consider utilizing beehive grates for proposed field inlets in landscaped areas.*

Grates are under consideration.

7) *The Grading & Utilities Plan (Sheet C1.3) should include a backflow preventer on the new sewer service prior to the connection with the combined sewer system.*

A backflow preventer has been noted on the plans.

8) *The limits and type of pavement repair noted in Carleton Street on Sheet C1.3 are inconsistent with what is shown and noted on the Demolition Plan (Sheet C1.2).*

We believe the two plans are consistent.

9) *The Grading & Utilities Plan (Sheet C1.3) includes a line and several spot grades in the parking lot area; we are unclear what this line and the associated spot grades represent.*

This area is to be ADA compliant. Maximum grades are provided with a note.

10) *The Applicant should consider alternatives to the direct piped connection of the roof drain into the storm drain system, which ultimately connects to the City's combined sewer system. Discharge to the ground or preferably to landscaping or a rain garden area is recommended.*

We have added a rain garden for the roof water. It will be discharged to the ground by a gutter and down spout system.

Sincerely,

PINKHAM & GREER

Thomas S. Greer, P.E.

Enclosures

cc: Drew Wing, David Lloyd, File

TSG/rjs

Att. S

PROJECT DATA

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

Total Area of Site	sq. ft. 25,247
Proposed Total Disturbed Area of the Site	sq. ft. 25,247
If the proposed disturbance is greater than one acre, then the applicant shall apply for a Maine Construction General Permit (MCGP) with DEP and a Stormwater Management Permit, Chapter 500, with the City of Portland.	
Impervious Surface Area	
Impervious Area (Total Existing)	19,245 sq. ft.
Impervious Area (Total Proposed)	19,210 sq. ft.
Building Ground Floor Area and Total Floor Area	
Building Footprint (Total Existing)	0 sq. ft.
Building Footprint (Total Proposed)	5,495 sq. ft.
Building Floor Area (Total Existing)	0 sq. ft.
Building Floor Area (Total Proposed)	26,375 sq. ft.
Zoning	
Existing	R-6
Proposed, if applicable	
Land Use	
Existing	Parking Lot
Proposed	37 Residential Units w/ parking
Residential, If applicable	
# of Residential Units (Total Existing)	0
# of Residential Units (Total Proposed)	0
# of Lots (Total Proposed)	0
# of Affordable Housing Units (Total Proposed)	37
Proposed Bedroom Mix	
# of Efficiency Units (Total Proposed)	9
# of One-Bedroom Units (Total Proposed)	26
# of Two-Bedroom Units (Total Proposed)	2
# of Three-Bedroom Units (Total Proposed)	
Parking Spaces	
# of Parking Spaces (Total Existing)	58
# of Parking Spaces (Total Proposed)	31
# of Handicapped Spaces (Total Proposed)	7
Bicycle Parking Spaces	
# of Bicycle Spaces (Total Existing)	0
# of Bicycle Spaces (Total Proposed)	Exterior (4), Bike Room (16)
Estimated Cost of Project	

Att. T

GORRILL PALMER

PO Box 1237, 15 Shaker Road
Gray, Maine 04039
207.657.6910

Supplemental Parking Information
Parking Occupancy Evaluation
Portland, Maine

Project: Carleton Street Apartments, Portland, Maine
Memo Date: June 29, 2015
Prepared By: Randy Dunton, Gorrill Palmer
Distribution: City of Portland, Thomas Errico, Avesta Housing

The purpose of this evaluation is to determine the parking demand rate of existing facilities in the Portland area that are similar to the proposed Carleton Street apartments. The data was collected on Thursday June 25, 2015 starting at 10:00 PM at facilities owned or managed by Avesta Housing. All the facilities are non-age restricted, similar to the proposed Carleton Street apartments. The date and time of the data collection was preapproved by the City. The following is a summary of the results of the data collection:

Parking Demand Rates – Avesta Housing Facilities

Location	# spaces / occupied	# units	# spaces / units	Management Data*
409 Cumberland Ave	12	57	0.21	29
Munjoy Commons	23	39	0.59	25
Pearl Place I & II	40	124	0.32	66
Oak Street Lofts	7	37	0.19	25
Average Rate	---	---	**0.33**	---
Avg Rate (w/o Oak Street Lofts)	---	---	**0.37**	---

*This data represents the number of residents that own vehicles.

Based on the data collected, the average parking rate is 0.33 spaces per unit with a peak rate of 0.59 spaces per unit. Based on these rates the average parking supply for Carleton Street Apartments, which is 37 units, should be 13 spaces minimum with a maximum demand of 22 spaces. The Oak Street Lofts parking area is a total of 8 spaces, one of which is handicapped. Since this parking lot was essentially full, there could have been vehicles parked on the street, which would be difficult to distinguish from other on street vehicles. For that reason, we also calculated the parking rate without using Oak Street Lofts which increased the average rate from 0.33 to 0.37. All the other parking lots were underutilized so it is expected there was no on-street parking occurring.

The following locations were also counted but are not owned or operated by Avesta Housing and contain a mixture of affordable and market rate units. The proposed units at 17 Carleton Street are all affordable and therefore will likely demonstrate a lower vehicle to unit ratio in contrast to projects with market rate and affordable units.

Parking Demand Rates – Non Avesta Housing Facilities

Location	# spaces / occupied	# units	# spaces / units	Low Income / Market Rate
53 Danforth	22	43	0.51	30 / 13
Walker Terrace	29	40	0.73	22 / 18
Average Rate	---	---	**0.62**	---

As can be seen from the summary table, the average and peak parking rates are 0.62 and 0.73 respectively. These rates are higher than the Avesta properties counted.

Conclusion:

In 2010, Gorrill Palmer performed a similar evaluation to the one contained herein, with a resultant average rate of 0.48 spaces per unit, which is greater than the current rate of 0.37 spaces per unit. This may be a reflection of the efforts that the City and developers such as Avesta have made to make it easier to negotiate using alternate forms of transit. Carleton Street Apartments is proposing to include 37 affordable housing units. Based on the average rate of 0.37 spaces per unit determined above, the number of spaces needed on-site would be 14 spaces. To provide some buffer, Avesta is requesting 18 parking spaces be approved. The number of parking spaces provided on-site is proposed at 31 spaces. Approving 18 parking spaces for the proposed Carleton Street apartments will allow 11 standard spaces to serve Butler School, if needed, and also provide 2 ADA spaces for Butler School.

Att. U

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Type:	
Project Name:	
Notes:	

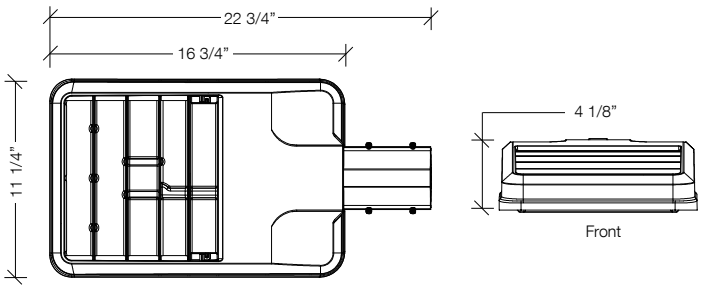
rev. 02.04.2015

VIPER - SMALL (LED)

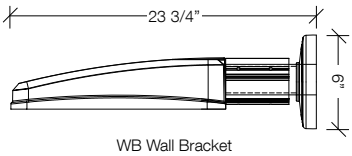
Small Viper Luminaire
Max Weight: 15.0 lbs
Max EPA: 0.67 sq ft

Sample	VP-S	30NB-90	5K	T5R	UNV	PCR-TL	SF2	GENIXX	BLC	RA	BBT
Ordering											
	A	B	C	D	E	F	G	H	I	J	K

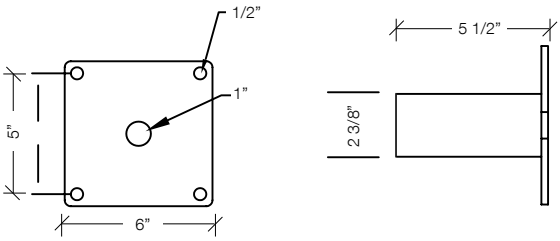
DETAILS

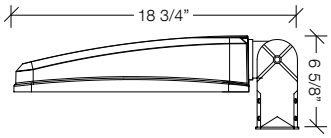


MOUNTING OPTIONS

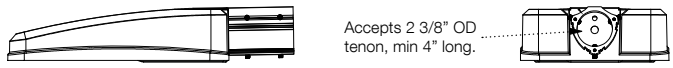


WB Wall Bracket





PK2 2-3/8" Adjustable Knuckle



Side View *Back View*

SF2 2-3/8" OD Slip Fitter

Side View *Back View*

RA Rectangular Arm

A. MODEL

VP-S	Viper - Small

B. ENGINE-WATTS

22NB-50	50 Watts - LED Array
22NB-70	70 Watts - LED Array
30NB-70	70 Watts - LED Array
30NB-90	90 Watts - LED Array

C. CCT - COLOR TEMP

5K	5000K (std.)
4K	4000K
3K	3000K

D. OPTICS[6]

T1	type I
T2	type II
T3	type III
T4	type IV
T5R	type V, rectangular
T5QM	type V, square medium
T5W	type V, round wide
FR	front row auto optic

E. VOLTAGE

UNV	120-277V
347V	347V
480V	480V

F. ELECTRICAL OPTIONS

PCR-TL	photocell, twist-lock
PCR-SC	photocell, shorting cap
2PF	dual power feed [1,2]

G. SENSOR OPTIONS

OCS	occupancy sensor (on/off)
MDD	motion dimming detector

H. CONTROL OPTIONS

GENI-XX	Energeni[5]

I. HOUSE SIDE SHIELD OPTIONS

HSS-90	house side shield 90°
HSS-180	house side shield 180°
BLC	backlight control[4]

J. MOUNTING OPTIONS

RA	rectangular arm
SF2	2 3/8" OD slip-fitter
PK2	2 3/8" adjustable knuckle
WB	wall bracket

K. COLOR

BBT	basic black textured
BMT	black matte textured
WHT	white textured
MBT	metallic bronze textured
BZT	bronze textured
DBT	dark bronze textured
GYS	gray smooth
DPS	dark platinum smooth
GNT	green textured
MST	metallic silver textured
MTT	metallic titanium textured
OWI	old world iron
RAL	_____

CERTIFICATIONS/LISTINGS

Certification Data: UL/cUL Wet Location Listed, LM79/LM80 Compliant, IDA Approved, 3G Vibration Rated, DesignLights Consortium® Qualified[3]

[1] not available with 64NB-135
[2] not available @ 347V or 480V input
[3] DesignLights Consortium Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details.
[4] T4 optic only
[5] When ordering Energeni, specify the routine setting code (example GENI-04). See Energeni brochure and instructions for setting table and options. Not available with sensor options.
[6] To rotate optics Left or right 90 degrees, specify L or R after the optical distribution example T4L.

rev. 02.04.2015

VIPER - SMALL (LED)

Small Viper Luminaire

Max Weight: 15.0 lbs

Max EPA: 0.67 sq ft

General: The Beacon Viper luminaire is available in two sizes with a wide choice of different LED Wattage configurations and optical distributions designed to replace HID lighting up to 1000W MH or HPS and with 5 different mounting options for application in a wide variety of new and existing installations. Luminaires are suitable for wet locations.

Bezel Optic System: Each Viper luminaire is supplied with an one piece optical cartridge system consisting of an LED engine, LED lamps, optics, gasket and stainless steel bezel. The cartridge is held together with internal brass standoffs soldered to the board so that it can be field replaced as a one piece optical system. Two-piece silicone and micro-cellular polyurethane foam gasket ensures a weather-proof seal around each individual LED.

The optical cartridge is secured to the die cast housing with fasteners. The optics are held in place without the use of adhesives. The cartridge assembly is available in various lighting distributions using TIR designed acrylic optical lenses over each LED.

Lifeshield™ Circuit: Thermal circuit shall protect the luminaire from excessive temperature by interfacing with the 0-10V dimmable drivers to reduce drive current as necessary. The factory-preset temperature limits shall be designed to ensure maximum hours of operation to assure L70 rated lumen maintenance. The device shall activate at a specific, factory-preset temperature, and progressively reduce power over a finite temperature range.

A luminaire equipped with the device may be reliably operated in any ambient temperature up to 55ºC (131ºF). The thermal circuit will allow higher maximum Wattages than would be permissible on an unregulated luminaire (if some variation in light output is permissible), without risk of premature LED failure or lumen depreciation. Operation shall be smooth and undetectable to the eye. Thermal circuit shall directly measure the temperature at the LED solder point. Thermal circuit shall consist of surface mounted components mounted on the LED engine (printed circuit board). For maximum simplicity and reliability, the device shall have no dedicated enclosure, circuit board, wiring harness, gaskets, or hardware. Device shall have no moving parts, and shall operate entirely at low voltage. The device shall be located in an area of the luminaire that is protected from the elements. Thermal circuit shall be designed to “fail on”, allowing the luminaire to revert to full power in the event of an interruption of its power supply, or faulty wiring connection to the drivers.

Device shall be able to co-exist with other 0-10V control devices (occupancy sensors, external dimmers, etc.). The device will effectively control the solder point temperature as needed; otherwise it will allow the other control device(s) to function unimpeded.

Printed Circuit Board (PCB): Aluminum thermal clad board with 0.062” thick aluminum base layer, thermally conductive dielectric layer, 0.0014” thick copper circuit layer circuit layer designed with copper pours to minimize thermal impedance across dielectric. Board will be mounted to the heat sink using minimum 12 #4-40 screws to ensure contact with thermal pad and heat sink. Use of thermal grease will not be allowed.

Housing and LED Thermal Management: The Viper’ monolithic housing design creates over 4.5 square feet (small Viper) or 7.7 square feet (large Viper) of heat-sinking surface area. Vertical fins, combined with flow-thru openings prevent sediment and moisture buildup on critical heat sinking surfaces without the need for grates, screens or other debris control tactics. The Viper housing, electrical compartment and fitter are made from die cast aluminum that is pre-treated and powder-coated to meet the most rugged industry standards. The finish is corrosion resistant to meet ASTMB-117, resists cracking or loss of adhesion per ASTM D522, resists surface impacts of up to 160 inch-pound. All external hardware is corrosion resistant. The housing serves as a heat-sink for the LED bezel with a separate compartment for the drivers.

Electrical Assembly: The fixture electrical compartment shall contain all LED driver components and shall be provided with a push-button terminal block for AC power connections. The housing is designed for an optional twist lock photo control receptacle.

Accessibility: Although the Viper luminaire is designed to operate for many years without maintenance, accessibility is a key component in its design. The Drivers are mounted on a removable door that is secured with keyslotted screws and hinges down for convenient access. The drivers are field replaceable using quick disconnects.

Drivers: Luminaires are equipped with an LED driver that accepts 100V through 277V, 50 Hz to 60 Hz (UNIV), or a driver that accepts 347V or 480V input. Power factor is .92 at full load. All electrical components are rated at 50,000 hours at full load and 25°C ambient conditions per MIL- 217F Notice 2. Dimming drivers are standard, with connections for external dimming equipment available upon request. Component-to-component wiring within the luminaire may carry no more than 80% of rated load and is listed by UL for use at 600VAC at 50°C or higher. Plug disconnects are listed by UL for use at 600 VAC, 13A or higher. 13A rating applies to primary (AC) side only.

Surge Protector: The on-board surge protector shall be a UL recognized component for the United States and Canada and have a surge current rating of 20,000 Amps using the industry standard 8/20 pSec wave. The LSP shall have a clamping voltage of 825V and surge rating of 540J. The case shall be a high-temperature, flame resistant plastic enclosure.

Fasteners: All fasteners shall be stainless steel. When tamper resistant fasteners are required, spanner HD (snake eye) style shall be provided (special tool required, consult factory).

Color Rendering Index (CRI): Luminaire shall have a minimum CRI of 67 at 5000K.

Operating Environment: Shall be able to operate normally in ambient temperatures from -40°C to 40°C

Finish: Finish shall be a Beacote V polyester powder-coat electro-statically applied and thermocured. Beacote V finish shall consist of a five stage iron phosphate chemical pretreatment regimen with a polymer primer sealer, oven dry off, and top coated with a thermoset super TGIC polyester powder coat finish. The finish shall meet the AAMA 605.2 performance specification which includes passing a 3000 hour salt spray test for corrosion resistance and resists cracking or loss of adhesion per ASTM D522 and resists surface impacts of up to 160 inch-pound.

Agency Certification: The luminaire shall bear a CSA label and be marked suitable for wet locations. The Beacon Viper is approved by the International Dark-Sky association as a dark sky friendly fixture.

Warranty: Beacon luminaires feature a 5 year limited warranty. Beacon LED luminaires with LED arrays feature a 5 year limited warranty covering the LED arrays. LED drivers are covered by a 5 year limited warranty. PIR sensors carry a 5 year limited warranty from the sensor manufacturer. See Warranty Information on www.beaconproducts.com complete details and exclusions.

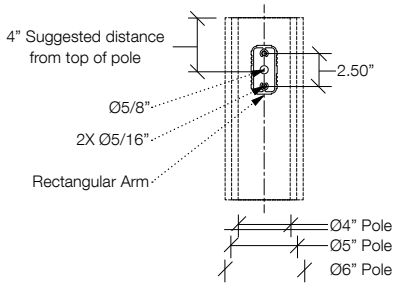
Power/Lumens & Distrubutions

Engine	Wattage	Delivered Lumens (varies by optic)	Delivered LPW	TM21 Calculated % Lumen Maint. at 100,000 hrs
22NB	50	4700-5020	93-103	96.19%
22NB	70	5780-6200	82-103	85.79%
30NB	70	6408-6850	91-103	95.02%
30NB	90	7700-8260	85-97	85.79%

TM21 is the framework for taking LM-80 data and making useful LED lifetime projections. Reported and Calculated Lifetimes shown are based on hours at the time of this printing. For current Reported and Calculated hours please contact factory or Beacon’s web-site.

CCT (COLOR TEMP) Lumen Output Multipliers	CRI (Color Rendering)
5000K = 1.0	min 67 CRI
4000K = .92	min 70 CRI
3000K = .75	min 80 CRI

DRILL PATTERN



Due to our continued efforts to improve our products, product specifications are subject to change without notice.

Att. V

Portland Water District

From Sebago Lake To Casco Bay

May 20, 2015

Pinkham & Greer
28 Vannah Avenue
Portland, ME 04103

Attn: Thomas S. Greer
Re: 17 Carleton Street - Portland
Ability to Serve with PWD Water

Dear Mr. Greer:

The Portland Water District has received your request for an Ability to Serve determination for the noted site submitted on April 14, 2015. Based on the information provided, we can confirm that the District will be able to serve the proposed project as further described in this letter.

Conditions of Service

The following conditions of service apply:

- New service(s) may be installed from the water main in Carleton Street. Due to the age of the water main (> 50-years), a second gate valve will be required at the property line on any services 4-inch diameter and larger.

- Water District approval of water infrastructure plans will be required for the project prior to construction. As your project progresses, we advise that you submit any preliminary design plans to MEANS for review of the water main and water service line configuration. We will work with you to ensure that the design meets our current standards.

Existing Site Service

According to District records, the project site does not currently have existing water service.

Water System Characteristics

According to District records, there is a 6-inch diameter cast iron water main on the easterly side of Carleton Street and a public fire hydrant located 150 feet from the site.

The current data from the nearest hydrant with flow test information is as follows:

Hydrant Location:	Carleton Street 20 feet southerly of West Street
Hydrant Number:	POD-HYD00028
Last Tested:	1/6/2015
Static Pressure:	50 psi

225 Douglass Street P.O. Box 3553 Portland, Maine 04104-3553
Phone: 207.774.5961 Fax: 207.761.8307 Web: www.pwd.org

Residual Pressure: Not Measured
Flow: Not Measured

Public Fire Protection

It is not anticipated that this project will include the installation of new public hydrants to be accepted into the District water system. It is your responsibility to contact the Portland Fire Department to ensure that this project is adequately served by existing and/or proposed hydrants.

Domestic Water Needs

The data noted above indicates there should be adequate pressure and volume of water to serve the domestic water needs of your proposed project.

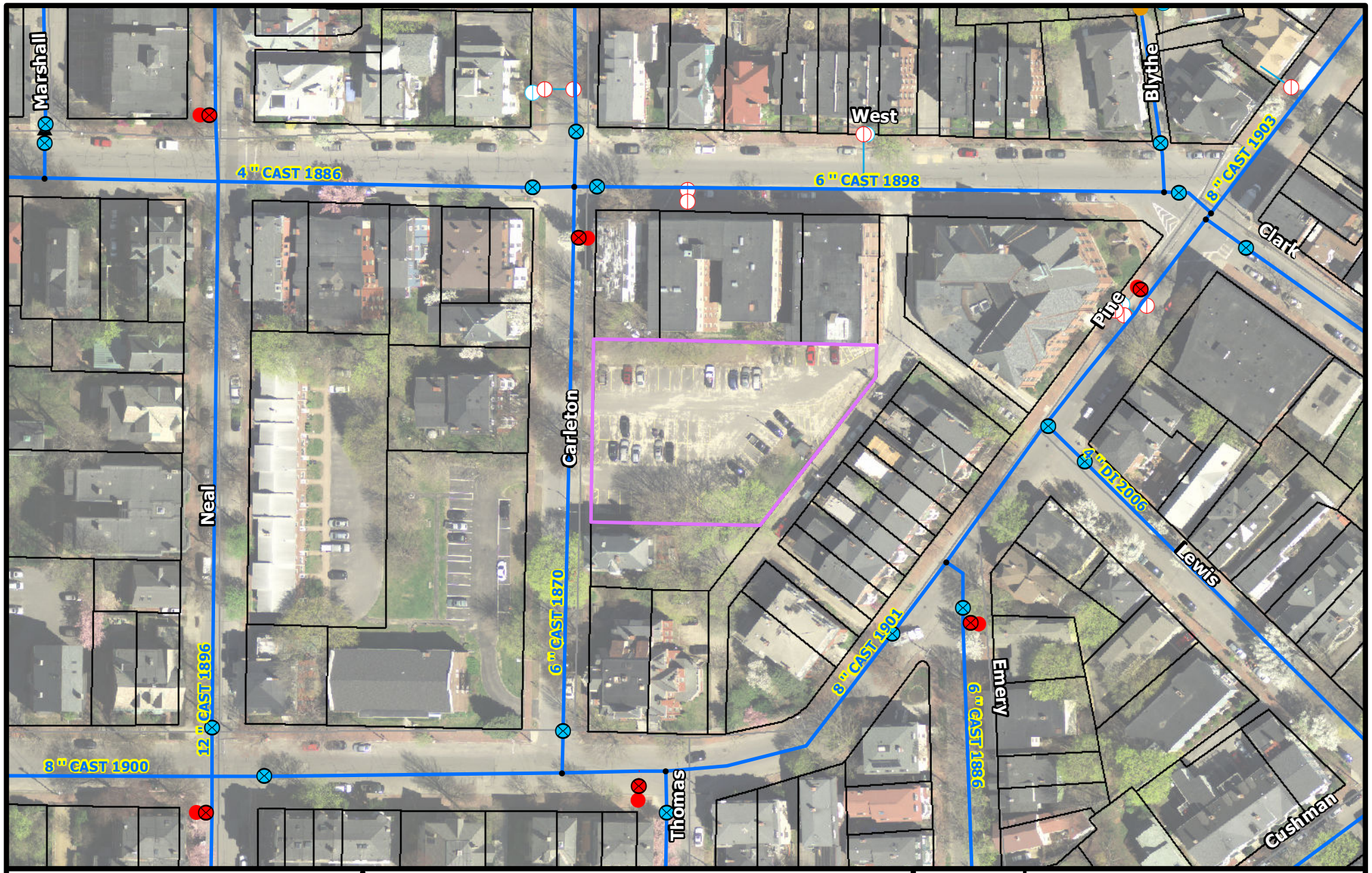
Private Fire Protection Water Needs

You have indicated that this project will require water service to provide private fire protection to the site. Please note that the District does not guarantee any quantity of water or pressure through a fire protection service. Please share these results with your sprinkler system designer so that they can design the fire protection system to best fit the noted conditions. If the data is out of date or insufficient for their needs, please contact the MEANS Division to request a hydrant flow test and we will work with you to get more complete data.

If the District can be of further assistance in this matter, please let us know.

Sincerely,
Portland Water District

Glissen Havu, E.I.
Design Engineer



17 Carleton Street

Portland

PORTLAND WATER DISTRICT
225 Douglass Street
Portland, ME 04104

Scale 0 25 50 100 150 200 Feet — 1 inch = 100 feet

N

Legend

- Air Valve
- Blow Off
- By Pass
- Distribution
- Transmission
- Connection
- Attribute Change
- Reducer
- Hydrant
- Hydrant Control
- Combined Service
- Domestic Service
- Fire Service
- Private Hydrants
- Meter Pits
- Manhole
- CSO
- Gravity
- Force

Disclaimer: This map is suitable for preliminary study and analysis and is based on PWD record information. PWD is not liable for any damages whatsoever resulting from inaccurate data or from errors made in the location and marking of its infrastructure.

Drawn By: BSJ

Scale: As Noted

Date: April 14, 2015

PINKHAM & GREER
CIVIL ENGINEERS
28 VANNAH AVE. PORTLAND, ME. 04103
Tel: 207.781.5242 Fax: 207.781.4245

Neighborhood Meeting

Att. W

May 27, 2015

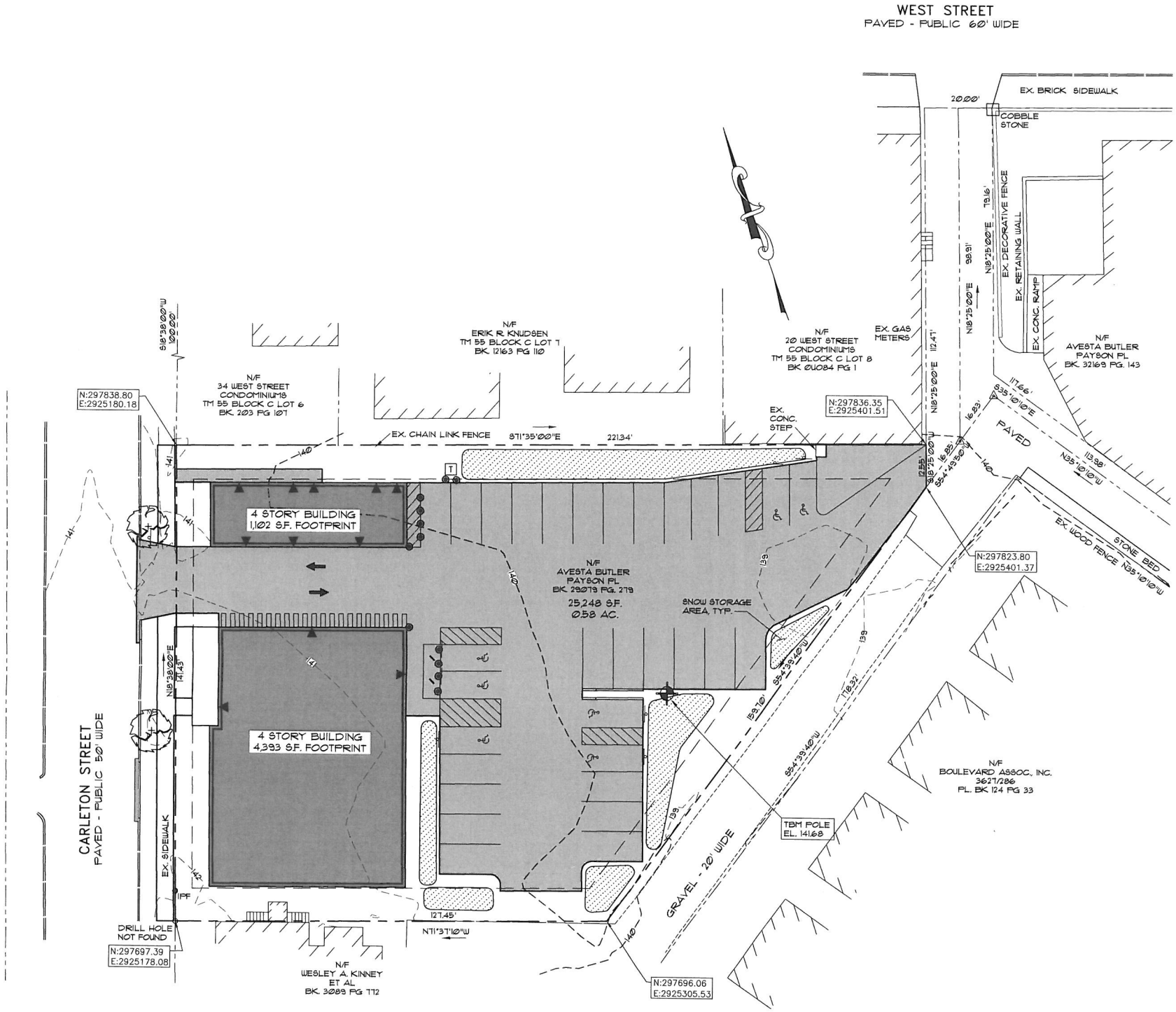
Dear Neighbor:

Please join us for a neighborhood meeting to discuss our plans for a 37 unit affordable housing residential building with 31 parking spaces located at 17 Carleton Street.

Meeting Location: Reiche Cafeteria
Meeting Date: June 11, 2015
Meeting Time: 6:00pm

The purpose of this meeting is to introduce the project to our neighbors as part of the City approval process.

If you have any questions, please call Thomas S. Greer, P.E., Pinkham & Greer, Civil Engineers at 207-781-5242 or email him at tgreer@pinkhamandgreer.com.


WEST STREET
PAVED - PUBLIC 60' WIDE
EX. BRICK SIDEWALK
COBBLE STONE
20.00'
EX. DECORATIVE FENCE
EX. RETAINING WALL
EX. CONC. RAMP
N/F
AVESTA BUTLER
PAYSON PL
BK. 32169 PG. 143
N/F
ERIK R KNUDSEN
TM 55 BLOCK C LOT 7
BK. 12163 PG 110
N/F
20 WEST STREET
CONDOMINIUMS
TM 55 BLOCK C LOT 8
BK 04084 PG 1
EX. GAS METERS
N/F
34 WEST STREET
CONDOMINIUMS
TM 55 BLOCK C LOT 6
BK. 203 PG 107
N:297838.80
E:2925180.18
N:297836.35
E:2925401.51
EX. CONC. STEP
EX. CHAIN LINK FENCE
S71°35'00"E
221.34'
N18°25'00"E
112.47'
N18°25'00"E
98.91'
N18°25'00"E
79.16'
S18°38'00"W
100.00'
4 STORY BUILDING
1,102 S.F. FOOTPRINT
N/F
AVESTA BUTLER
PAYSON PL
BK. 29079 PG. 279
25,248 S.F.
0.58 AC.
SNOW STORAGE AREA, TYP.
4 STORY BUILDING
4,393 S.F. FOOTPRINT
N18°38'00"E
141.43'
CARLETON STREET
PAVED - PUBLIC 50' WIDE
EX. SIDEWALK
IPF
DRILL HOLE NOT FOUND
N:297697.39
E:2925178.08
127.45'
N71°37'10"W
N/F
WESLEY A. KINNEY
ET AL
BK. 3088 PG 772
N:297696.06
E:2925305.53
GRAVEL - 20' WIDE
S54°39'40"W
159.70'
117.37'
TBM POLE
EL. 141.68
N:297823.80
E:2925401.37
PAVED
S35°10'10"E
117.26'
16.83'
S54°49'50"W
N35°10'10"W
113.38'
EX. WOOD FENCE
STONE BED
N35°10'10"W
N/F
BOULEVARD ASSOC. INC.
3627/286
PL. BK 124 PG 33

NEIGHBORHOOD MEETING ATTENDEE LIST
17 Carleton Street
June 11, 2015

Name & Address	Name & Address
Thomas S. Greer Pinkham & Greer Civil Engineers 28 Vannah Avenue Portland, ME 04103	Michael Courts & Ellen Manetti 56 West St. Portland, Me. 04102
PAUL STEVENS 21 THOMAS ST. PORTLAND 04102	Daniel Nuzzi Dana McEnny 97 Pine St Portland
LIZ KELLOGG 30 WEST ST #24 PTLD. PILGRIM APT.	Jay Kennedy 50 WEST ST # 3R PORTLAND, ME 04102
JOSHUA MURPHY 27 THOMAS ST PORTLAND ME 04102	Larry Reenhartsen 87 Pine St
Ken Hadden 25 West St Portland 04102	Claudine Grange 95 Pine St Portland, ME 04102
Tim Agnew 196 Pine St.	Rosanne Graef 30 Salem St. Portland 04102
DAVID and Claudia Bantz 100 NEAL STREET Portland, ME 04102	GRETCHEN LANGNER 87 PINE ST PORTLAND 04102
Thomas Watt 290 Baxter Blvd Portland	Sally Jorgeleit 51 Thomas St. 04102
DEREK JASKULSKI 50 CARLETON ST PORTLAND	Donna Wood 30 West St. 04102
John Hatche & Don Kennedy 126 Pine St Portland 04102	Mary Anne Kinney for Wesley Kinney 11 Carleton St / 39 Maple Ln Portland, ME / Knox, ME 04986

NEIGHBORHOOD MEETING ATTENDEE LIST
17 Carleton Street
June 11, 2015

Name & Address	Name & Address
Thomas S. Greer Pinkham & Greer Civil Engineers 28 Vannah Avenue Portland, ME 04103	Janet MISHOC 30 WEST Apt 4
Will Saunders 50 West St, Portland	Drew Wing - Avesta
ELLIOT RAPPAPORT 20 WEST ST. #6. 04102 20 WEST ASSOC. PRESIDENT	Darrell & Anne Jones 117 Pine St. #3
MICHAEL VALENTINE 217 VAUGHAN ST; UNIT 6 PORTLAND	TOM & NAN MILLER 122 NEAL ST. APT 1S
Mary C Doughty 28 Carleton St	TINA DINSMORE 17 LINWOOD STREET CAPE ELIZABETH 04107
IAN JACOB 59 STATE ST	TREVOR WATSON 33 WEST ST
george Silverman 15 West St	ANNE PRINGLE 44 NEAL ST. WESTERN PROM NA
[illegible] MUNGER 2[illegible] WEST	Kurt Knudsen
PETER L HALL 64 CARLETON ST	STEPHEN SHAW 59 West. St. #1 PORTLAND ME 04102
Michel P. Michaud 129 Pine St.	Phillip Incarnato / VAN AFES 58 WEST ST. 04102

NEIGHBORHOOD MEETING ATTENDEE LIST
17 Carleton Street
June 11, 2015

Name & Address	Name & Address
Thomas S. Greer Pinkham & Greer Civil Engineers 28 Vannah Avenue Portland, ME 04103	
Seth Parker 90 Spruce St. Portland, ME 04102	
Anne Rugh 105, 107 Pine St	
ROBERT LAMARCHE 91 NEAL ST.	

Carlton Street Neighborhood Meeting

June 11, 2015

Drew Wing explained who Avesta Housing was, and provided an overview of project.
Tom Greer reviewed site layout, drainage utilities
David Lloyd gave overview of design

Following are comments made after presentation:

1. Are tenants certified, is there a screening process, Answer, yes we requests references from past landlords, do credit checks, and background checks for criminal history, including sex offenders.

2. Tom Geer had a discussion about the sewer capacity and flooding during heavy rains. His response was that the city reviews our application and they have a city wide sewer/storm water separation projects.

3. Can the existing sewers meet the capacity for this building being added to the system, answer yes but some neighbors complained about system being overloaded and having sewers back up.

4. How many people will be in each unit? Answer possibly one or two in one bed units, possibly 2 or 3 in two bed units.

5. How do you know how much parking you need? 1. Answer- A parking analysis will be conducted across a number of properties on the peninsula including our existing properties. It is common for Avesta to request a reduction in the 1:1 parking ratio of .7 parking spaces per unit. We anticipate our actual usage will be less than this.

6. Several people expressed that there is a parking problem in the west end and that this project will exasperate it as the existing 58 cars parking there will no longer be able to park in the lot. Asked if there are parking lease agreements in place. Answer, Avesta leases parking spaces but is unaware of any long term leases or agreements which are tied to parking requirements.

7. Question asked if any of the nearby developments used parking in their lot to receive their approvals. Answer, not to our knowledge.

8. Why can't this be senior housing?

9. One comment that this is not a good fit for the neighborhood this is not a low income neighborhood.

10. Question on how rents are established and income levels required for people living there. Answer, income levels and the associated rents are established by Maine Housing.
11. Comment that this project is a cash cow for Avesta. Answer, Avesta is a nonprofit with a mission statement to provide affordable housing.

12. Comment that there are 58 air B&B in the west end, where are they going to park?

13. Does this project have restrictive covenants? Answer, yes 45 years for low income.

14. Comments from one gentleman asking about files on neighboring properties like the Butler School and 20 West Street, they can't be found at City Hall.

15. Where do people from 20 West Street Park? Answer, Avesta will share any and all files that it finds in relationship to this project.

16. Where are the people from Butler School going to park? Answer, we believe we have sufficient parking to meet the parking needs of the new development and potentially continue to allow a limited number of Butler cars to use the lot and we have done previously. There is no city parking requirements for the Butler School. We have committed to providing 2 ADA spaces in the lot for the Butler School.

17. Discussion about emergency vehicle access to the site: Tom Greer explained how access to building can be accomplished.

18. Comment of support for economic diversity and that parking in the west end is a city problem not Avesta's to solve.

19. Comments on building, someone does not like 4th floor with copper siding, does not like clapboard on east face of building.

20. Comment why does Avesta want to build here? Answer Avesta is interested in smart growth areas like this site.

21. Comment there is no need for this type of housing.

22. Do you screen potential tenants answer, yes and explained.

23. Comment that allowing units to have access to garden area in front of their unit will lead to a trashy site condition.

24. Where will construction workers park when it is under construction? Answer, not determined at this time.

25. Asked what rents will be. Answer, given in ranges, determined by income advised to look at MSHA web site to see how rents are determined.

26. Question where can I get a handicap parking sticker?

27. Question about water runoff. Answer, Tom Greer went over how water will be collected on site.

28. Questions and concerns about snow storage and removal and noise of trucks removing snow.

29. Have you been to see the site? Answer, yes.

30. What will Avesta pay in Taxes? Could not be answered at this time.

31. Comment that they believe design has improved greatly since last meeting at Historic Preservation but still has a long way to go. Answer, neighbor encouraged to be at next HP meeting to give their input.

Conclusion for architect of neighbors' comments. The building design is moving in the right direction. Neighbors need assurance that existing sewer and storm lines are sufficient for this project. Parking was the biggest concern expressed by the neighbors and their major concern seems to be the loss of the existing 58 parking spaces on site.

PC1

To the Portland Planning Board:

As a neighbor of the 17 Carleton St. parking lot, I wish to formally state my opposition to the plans by Avesta Housing for a 37 unit affordable income housing project as it now stands. Should this project reach fruition, over 50 cars that now have off-street parking in that lot will have to park on the surrounding streets. If one looks at the parking situation now, there are few empty spaces on the surrounding streets at end of day. How do 50 more cars find space? During snow emergencies and street cleaning nights, the problem will grow expedientially. The West End will become a less desirable place to live if it gains a reputation for difficult parking close to home. This will ultimately affect housing prices and the small businesses in the neighborhood.

Currently several parking spaces are leased by tenants of both the Pilgrim apartment building and the Butler School. Many of these people are elderly or handicapped. Where will they park? Avesta plans on offering just two spaces to Butler School tenants (who must be over 62 or handicapped) once their project is completed and Avesta OWNS the Butler School building. It would seem that they are intent in inconveniencing current tenants in order to carry out plans for future tenants. While Portland needs rental units at affordable rates, I do not think this particular project has been thought through as well as it might.

I would respectfully ask that the Planning Board give this issue serious consideration and ask Avesta to revise or scrap their current plans before they create a lasting negative impact on our neighborhood.

Sincerely,

Avesta needs to be held accountable for helping to uphold the very neighborhoods it plans to be apart of. This includes being responsible for providing parking for their tenants but also in not over running neighborhoods. There is also

already an Avesta building just blocks from the proposed new building. The history, uniqueness + charm ~~[illegible]~~ of the west end will quickly dissappear should many AVESTA properties be situated in the same block/neighborhood.

Best,

Anne Adams

30 WEST ST resident for over 17 years

already an Avesta building just blocks from the proposed new building. The history, uniqueness + charm ~~wm~~ ~~m~~ of the west end will quickly dissappear should many AVESTA properties be situated in the same block/neighborhood.

Best,

Anne Adams

30 WEST ST resident for over 17 years

PC2

From: Claire Oppenheim <c.oppenheim@me.com>
To: "shukriaw@portlandmaine.gov" <shukriaw@portlandmaine.gov>
Date: 5/22/2015 3:14 PM
Subject: Avesta Housing

Hi,
I live in the West End near where Avesta Housing is planning a 36 unit housing project. I would like to attend the planning board meetings but have to arrange my work schedule in advance in order to do so. Could you tell me when the next meeting is planned?
Thanks,
Claire Oppenheim

Sent from my iPad

PC3

From: Deborah Boyajian <boyajiand@mac.com>
To: <shukriaw@portlandmaine.gov>
Date: 5/26/2015 2:44 PM
Subject: Concerns & Suggestions regarding Avesta / Carleton Street Proposal

Hello Shukria,
Thank you for speaking with me this afternoon. Here is the letter I mentioned.
Sincerely,
Deborah

To Whom it May Concern,

My name is Deborah Boyajian. My husband, Bill Nelligan, and I purchased our first Maine home at 27 West Street in Portland's Historic West End district in 2005. Since that time, we have contributed extensively to the immediate neighborhood by making numerous improvements to the once dilapidated property we now call home. We have also forged a positive relationship with Portland's various departments, by working closely with the city and the Historic Board by making the appropriate improvements to our home. These improvements have not only added to the face of the John Calvin Stevens block of row homes, but our individual efforts have ultimately uplifted this end of West Street. We planted trees, we hired Krista Butterfield to install a gorgeous walkway, and we hired another local small business person—James McCain—to design and implement a lovely front garden (where a disheveled dumping ground once stood). We have worked with the city to re-align the uneven, treacherous front brick walkway, so passers by would not trip and hurt themselves—particularly in the winter. In addition to these visible external improvements, we have spent more than 100K renovating the inside of the property.

At this time in our lives—getting older, son off to New York City, and our beloved Golden Retriever, Beau, now gone—it is time to downsize. It has been time to downsize for several years. Unfortunately, our house is not selling because we do not have off street parking. Inevitably, there have been opportunistic buyers who have offered to buy our home for $100,000 (and even $200,000) less than its value because we do not have off street deeded parking. Sadly, the City of Portland has repeatedly denied our requests to install a small and unobtrusive parking spot alongside our front hedge area. These denials come despite the approval of said installation by the Historic Board; yes, we have indeed been approved by the Historic Board to install a non conforming curb cut and driveway, yet Mike Bobinsky has repeatedly refused to grant us the permit to do so. . We have presented documentation with photos of numerous non conforming and illegally installed driveways in the immediate neighborhood. We have also presented Mr. Bobinsky with the facts that his denial has created a hardship for us, yet he has been steadfast in his inflexibility. Ergo, we have lost numerous buyers: one family on Thomas Street, one family on Deering Street, another on Spring Street, another three on Neal Street, et al. Do you know the perspective that is taken when real property does not sell for years; the perspective is that something is wrong with the property being sold. This is what has happened to our 3600 square foot John Calvin Stevens Historic Row Home. The difficulties experienced with no off street parking, have increased incrementally each year: neighbors who have off street parking, but persist in taking up two, three, and even four spaces on an already overburdened street, frequent overnight guests who take up spaces, and diners from Aurora Provisions, Caiola's, Bonobo Pizza, and now the new building on the corner of Brackett and Pine. The residents are now outnumbered by the non residents.

Avesta Housing is a terrific organization--providing housing opportunities for the less advantaged. I am in complete support of what they do for immigrants (both refugees and asylum seekers) and elderly and low income people. The issue here is not one against the project per se, it is against the hardships that we personally, and collectively, will incur as a result of the proposed development on Carleton Street. If this project is to be given any consideration, it should be done so with the caveat that accommodations must be made to the abutters who will shoulder the greatest burden from the project. I cannot speak to what others in the neighborhood want, but I can tell you what would satisfy me. What I suggest is this: the Maine Medical Building in the rear of our property, used to belong to this block of row homes when JB Brown owned the properties as apartments. In 1978, J B Brown sold these John Calvin Stevens apartments as Row Homes. J B Brown then sold the rear property parking lot and building (which I am told was the garage for these row homes) to Maine Medical Center; a decision seemingly steeped in monetary gain rather than the foresight of what might eventually be a disastrous decision in a growing population. I ask you this; where were the civil engineers and planning board minds at that time?

Portland is currently confronted with another daunting decision; should they grant permission to the Avesta project, in a highly populated neighborhood where off street parking is very limited, and on street parking is a persistent problem? If you are giving this project serious consideration, I propose the following: 1) allow us to install a driveway 2) work closely with Maine Medical Center to allow the five Row Homes to lease for a minimum of twenty years (but preferably for 99 years) with the option to renew, two parking spaces each. Since these are individually owned row homes, the leases should be separate legal contracts, rather than group ones as in condo associations.
I have had several conversations with Mr. Cloutier, property manager for the rear Maine Medical Pkg. lot, pleading with him to allow us (at our expense) to install a gated fence into our back yard so we could park there. His rationale for denying our request (albeit politely and regretfully) was based on his presumption that all of the abutters would then make the same request. The fact is that there are 14 abutting properties. Of those 14, there are five who do not have off street parking. Those five are the John Calvin Stevens Row homes—which is pretty ironic, wouldn't you agree? 3) post "Resident Parking Only" signs from 5:00 pm until 8:00 am every day, so that residents have priority over business overflow. 4) paint white parking lines to help minimize irregular parking and to prevent oversized vehicles from taking up two parking spaces. 5) require Avesta to limit the parking they are proposing to 15 spaces for tenant occupancy—thus giving present lot renters the other 17 spaces inside their proposed building. I know two Butler school residents who are both elderly and disabled who deserve at the least, a modest accommodation of inside parking in the new proposed building; I think this suggestion aligns quite well with Avesta's purported mission to help the less advantaged.

I hope my letter has given you a sliver of the concern that my husband and I have regarding the Avesta project. Additionally, I hope that by personalizing and generalizing the serious and significant parking issues on West Street, you take a long look at the negative impact this project will have in the area.

Thank you,

Deborah Boyajian
Bill Nelligan
27 West Street

Portland, Maine 04102
(207) 831-6998

PC4

From: "Your Friend Derek" <derekj@usa.net>
To: <shukriaw@portlandmaine.gov>
Date: 6/19/2015 3:31 PM
Subject: 17 Carleton St proposal

Hi!

I've been interested in this project since I live a block away. So I attended the historical zone workshop which I thought was pretty balanced. Then I attended the neighborhood meeting hosted by Pinkham & Greer. What a hornet's nest!

97.5% of the comments revolved around parking or rather the loss of spaces for those using the lot now and the fact that there will be only 31 spaces for a 37 unit development. A guy from Avesta finally said that the shortage of parking in the West End is not their problem, it's the city's problem. No one liked that but he was right about that.

Anyway, be prepared to swamped with complaints about parking!!

But I would like to raise another issue. I believe that I saw that Avesta paid $13.5 million for the lot. I was surprised they paid so much. I wondered how that could be economically feasible, though I admit I know little about the low income housing tax credit market.

However, my concern was heightened by two things that were said at the Pinkham & Greer meeting. The architect (who seemed like a really decent guy) answered a question about why a portion of the shell on the back was a clapboard (I think) rather than brick. His answer was that his budget was so tight that to put a brick facade in that section would cause the project to go overbudget. I'm not a contractor, but it astonished me that something that minor would blow out the budget.

My suspicion was confirmed by a gent from Avesta. Almost as an aside, he mentioned that they need to put so many "efficiency" units into the building to make it economically feasible. In other words, the neighborhood and residents of the building have to accept an over-crowded rabbit warren because Avesta paid too much for the property.

Why should residents of the building and the whole neighborhood suffer because the execs at Avesta made a big mistake and paid way too much for the building? Let Avesta take the loss for their own mistake.

Please encourage Avesta to reduce the number of units in the building.

Thanks for taking the time to read this.

Derek Jaskulski
50 Carleton Street

PC5

Stuart O'Brien, Chair
Portland City Planning Board
389 Congress St, 4th Floor
Portland, ME 04101

June 8, 2015

Dear Mr. O'Brien:

On behalf of the 20 West Street Condominium Association, I am writing to express concern over the proposed development of a 37-unit apartment building at 17 Carleton Street.

There is general concern throughout the neighborhood about the loss of the 60 leased parking spaces currently on the site, but even more critical to our residents is the issue of wastewater. We have had several occurrences in the past of backflow through floor drains and toilets on our basement level, when storm runoff has overwhelmed the sewer system. Unit occupants in abutting properties have experienced some of the same issues.

Will an engineering study be done, prior to any approvals, to determine what the impact will be of wastewater from an additional 37 units on a sewage system that is already of a deficient capacity? If not, we would like to request that this step be taken, and that this issue be considered along with the other likely impacts of increasing density in this neighborhood.

Respectfully,

Elliot Rappaport
President
20 West Street Condominium Association

PC6.1

From: Jen DeRose <jennifer.derose@gmail.com>
To: <shukriaw@portlandmaine.gov>
Date: 6/2/2015 4:00 PM
Subject: 17 Carleton Street Proposal
Attachments: avesta_policecars.jpg; avesta_ambulance.jpg

Shukria Wiar

shukriaw@portlandmaine.gov

To whom it may concern:

This email is in regards to the proposed 17 Carleton Street project in the West End Historic District. As a resident and landlord at 93 Pine Street (which abuts the building proposal), as well as a former editor at Elle Decor, House Beautiful, and Interior Designs magazines, I would appreciate the planning divisions deep consideration on the following issues:

1. Parking

This project proposes 37 units--with only 31 parking spots. Besides not even providing enough parking for the proposed units, the project would also *displace the dozens of cars* that park there now. With the recent new 39-unit building West End Place at Pine and Brackett Streets, (and only 32 parking spots) there has already been a significant impact on parking in the area. As an example of how tight the parking situation is, tenants in our building recently inquired about the cost of renting one of the existing spots in the current lot at 17 Carleton, and were told it was already full.

2. Design

The buildings in the vicinity of the proposal are architectural treasures on a national level. I have edited national design magazines, and I'm sure you agree with me, this neighborhood is incredibly special. It's what attracts newcomers like me to the city. But a new building that does not live up to the existing architectural standards of the neighborhood has a detrimental effect. This can be evidenced with the addition of West End Place at Brackett and Pine Street. Not only does it not add to the beauty of the neighborhood, it actually takes away from it. The proposed building design could appear in Bayside, South Portland, or Kansas City--there is no consideration for it keeping in within the historic context of the neighborhood. It is not harmonious with the landmarked buildings around it. If you're going to build new in this neighborhood, then build a beautiful design that is as architecturally significant, and Leeas its neighbors.

3. Height & Scale

The proposed building is four stories. Many of the buildings around this area (including ours at 93 Pine Street) are only three stories and only have two exposures. With only windows at the front and back of our building (and not on the sides) we greatly benefit from the light the current open lot affords. With a new building at this location, the amount of light afforded to surrounding units will be dramatically decreased.

4. Noise

Adding a large busy building to what is a narrow, one-way road will undoubtedly bring noise and disturbances from sirens, delivery traffic, private trash removal, dumpsters, and traffic between the two Avesta properties. Please see the attached photo from Saturday, Memorial Day weekend, May 23, 2015. There were *6 emergency vehicles *extending for half the block for an incident that occurred at the Avesta Housing at 77 Pine Street. Carleton Street is such a narrow, quiet street, how will it host this amount of emergency vehicles? Should this proposal go through, this would be happening not only in the front of our building, but also to the rear.

I urge you to please carefully consider the implications of this building, and should this go forward, that it be with a revised design that addresses all of these points.

Thank you,
Jen DeRose

PC6.2

From: Jen DeRose <jennifer.derose@gmail.com>
To: <shukriaw@portlandmaine.gov>
Date: 6/8/2015 1:03 PM
Subject: Fwd: 17 Carleton Street Proposal
Attachments: avesta_policecars.jpg; avesta_ambulance.jpg; avesta_June4_2015.jpg

Shukria,

I wanted to follow up per my last email regarding the proposal for the Avesta housing at Carleton Street. On Thursday, June 4, 2015, there were another two police cars called to Avesta's Butler School. (please see attached photo.) That's at least* two times that emergency vehicles have been there within the last 12 days. *

Are there city records for how often emergency workers are called to Avesta's Butler School?

This building is directly across from where a woman was sexually assaulted and it seems to me that the city's emergency resources would be much better used in patroling the entire neighborhood and keeping the community safe rather than continually being called to the same building. Why would the city consider allowing Avesta to manage another property when there are clear issues with their existing buildings? And how can a narrow, one-way street like Carleton handle the continuous emergency vehicles that would be called there?

I hope that the planning commission takes the issue of safety into consideration when they review this proposal.

Thank you for your time.

Best,
Jen DeRose

---------- Forwarded message ----------
From: Jen DeRose <jennifer.derose@gmail.com>
Date: Tue, Jun 2, 2015 at 3:59 PM
Subject: 17 Carleton Street Proposal
To: shukriaw@portlandmaine.gov

Shukria Wiar

shukriaw@portlandmaine.gov

To whom it may concern:

This email is in regards to the proposed 17 Carleton Street project in the West End Historic District. As a resident and landlord at 93 Pine Street (which abuts the building proposal), as well as a former editor at Elle Decor, House Beautiful, and Interior Designs magazines, I would appreciate the planning divisions deep consideration on the following issues:

1. Parking

This project proposes 37 units--with only 31 parking spots. Besides not even providing enough parking for the proposed units, the project would also *displace the dozens of cars* that park there now. With the recent new 39-unit building West End Place at Pine and Brackett Streets, (and only 32 parking spots) there has already been a significant impact on parking in the area. As an example of how tight the parking situation is, tenants in

our building recently inquired about the cost of renting one of the existing spots in the current lot at 17 Carleton, and were told it was already full.

2. Design

The buildings in the vicinity of the proposal are architectural treasures on a national level. I have edited national design magazines, and I'm sure you agree with me, this neighborhood is incredibly special. It's what attracts newcomers like me to the city. But a new building that does not live up to the existing architectural standards of the neighborhood has a detrimental effect. This can be evidenced with the addition of West End Place at Brackett and Pine Street. Not only does it not add to the beauty of the neighborhood, it actually takes away from it. The proposed building design could appear in Bayside, South Portland, or Kansas City--there is no consideration for it keeping in within the historic context of the neighborhood. It is not harmonious with the landmarked buildings around it. If you're going to build new in this neighborhood, then build a beautiful design that is as architecturally significant, and Leeas its neighbors.

3. Height & Scale

The proposed building is four stories. Many of the buildings around this area (including ours at 93 Pine Street) are only three stories and only have two exposures. With only windows at the front and back of our building (and not on the sides) we greatly benefit from the light the current open lot affords. With a new building at this location, the amount of light afforded to surrounding units will be dramatically decreased.

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Adding a large busy building to what is a narrow, one-way road will undoubtedly bring noise and disturbances from sirens, delivery traffic, private trash removal, dumpsters, and traffic between the two Avesta properties. Please see the attached photo from Saturday, Memorial Day weekend, May 23, 2015. There were *6 emergency vehicles *extending for half the block for an incident that occurred at the Avesta Housing at 77 Pine Street. Carleton Street is such a narrow, quiet street, how will it host this amount of emergency vehicles? Should this proposal go through, this would be happening not only in the front of our building, but also to the rear.

I urge you to please carefully consider the implications of this building, and should this go forward, that it be with a revised design that addresses all of these points.

Thank you,
Jen DeRose

PORTLAND
PORTLAND
FIRE DEPT.
MEDICAL CRISIS UNIT
PFD
M6
EMERGENCY CALL
9·1·1

PC6.3

PORTLAND
PORTLAND
FIRE DEPT.
MEDICAL CRISIS UNIT
PFD
M6
9·1·1

BUTLER SCHOOL
PORTLAND
POLICE

PORTLAND POLICE
PORTLAND POLICE

PORTLAND POLICE
PORTLAND POLICE

PC7

To the Portland Planning Board:

As a neighbor of the 17 Carleton St. parking lot, I wish to formally state my opposition to the plans by Avesta Housing for a 37 unit affordable income housing project as it now stands. Should this project reach fruition, over 50 cars that now have off-street parking in that lot will have to park on the surrounding streets. If one looks at the parking situation now, there are few empty spaces on the surrounding streets at end of day. How do 50 more cars find space? During snow emergencies and street cleaning nights, the problem will grow expedientially. The West End will become a less desirable place to live if it gains a reputation for difficult parking close to home. This will ultimately affect housing prices and the small businesses in the neighborhood.

Currently several parking spaces are leased by tenants of both the Pilgrim apartment building and the Butler School. Many of these people are elderly or handicapped. Where will they park? Avesta plans on offering just two spaces to Butler School tenants (who must be over 62 or handicapped) once their project is completed and Avesta OWNS the Butler School building. It would seem that they are intent in inconveniencing current tenants in order to carry out plans for future tenants. While Portland needs rental units at affordable rates, I do not think this particular project has been thought through as well as it might.

I would respectfully ask that the Planning Board give this issue serious consideration and ask Avesta to revise or scrap their current plans before they create a lasting negative impact on our neighborhood.

Sincerely,

Jenson Steel
30 West St #6

PC8

To the Portland Planning Board:

As a neighbor of the 17 Carleton St. parking lot, I wish to formally state my opposition to the plans by Avesta Housing for a 37 unit affordable income housing project as it now stands. Should this project reach fruition, over 50 cars that now have off-street parking in that lot will have to park on the surrounding streets. If one looks at the parking situation now, there are few empty spaces on the surrounding streets at end of day. How do 50 more cars find space? During snow emergencies and street cleaning nights, the problem will grow expedientially. The West End will become a less desirable place to live if it gains a reputation for difficult parking close to home. This will ultimately affect housing prices and the small businesses in the neighborhood.

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I would respectfully ask that the Planning Board give this issue serious consideration and ask Avesta to revise or scrap their current plans before they create a lasting negative impact on our neighborhood.

Sincerely,

Liz Kellogg

LIZ KELLOGG

DEAR SHUKRIA,

MORNING DEAR,

I LIVE IN THE PILGRIM APARTMENT. TOP FLOOR IN THE BACK OVERLOOKING PARKING LOT.

IT IS MY SANCURARY IN SPITE OF, PARKING DELEMA, PARKING BANS ECT.

I AM LUCKY TO HAVE A LANDLORD WHO IS A GOOD PERSON.

I RECENTLY (MARCH 2015) TOOK A BETTER JOB IN YARMOUTH THAT HAS ME DRIVING, AGAIN. AFTER WALKING BLISSFULLY ON THE PENNINSULA FOR 18 MONTHS.

I WOULD TAKE A LOWER PAYING JOB TO GET BACK ON THE SIDEWALKS AGAIN IF THIS BUILDING GOES UP.

BUT, YOU KNOW, I LIKE BUYING NEW CLOTHES, NEW BED LINENS, BETTER FOOD, BETTER HAIR CUTS ECT.

WELL, GOOD LUCK TO US.

THANKS FOR READING,

LIZ KELLOGG

PC9

From: Mason Sears <hmsears@sfmarinausa.com>
To: <shukriaw@portlandmaine.gov>
Date: 6/4/2015 11:01 AM
Subject: 17 carlton St Project

Shukria

Unfortunately , I cannot make the public meeting for the 17 carlton St. project being held June 11th

I would like to ask how the project accommodates all the parking for the development ? As I understand it the development would directly add 5 cars to the on street parking demand, and displace an additioanl 56 current parking spaces to the street. As you are aware, parking is tight already in this neighborhood.

What alternative plan, or reduce scale of this project does the developer have..

In addition I am concerned that the Historical consistency of the neighbor hood will not be maintained. The appearance of the building in my mind does not fit with the surrounding buildings. Having watched the new apartments go up on the corner of pine ,and bracket st and the Low level of quality of the exterior that presents to the neighborhood, I fear that this will also be a low quality building that will not fare well in the years to come.

Will this project site continue to have access from the rear of the parking lot (butler school building) or will it have fencing around.

Thank you,

Mason Sears
106 pine st
Portland me

PC10

To the Portland Planning Board: including Chairman Stuart O'Brien

As a neighbor of the 17 Carleton St. parking lot, I wish to formally state my opposition to the plans by Avesta Housing for a 37 unit affordable income housing project as it now stands. Should this project reach fruition, over 50 cars that now have off-street parking in that lot will have to park on the surrounding streets. If one looks at the parking situation now, there are few empty spaces on the surrounding streets at end of day. How do 50 more cars find space? During snow emergencies and street cleaning nights, the problem will grow expedientially. The West End will become a less desirable place to live if it gains a reputation for difficult parking close to home. This will ultimately affect housing prices and the small businesses in the neighborhood.

Currently several parking spaces are leased by tenants of both the Pilgrim apartment building and the Butler School. Many of these people are elderly or handicapped. Where will they park? Avesta plans on offering just two spaces to Butler School tenants (who must be over 62 or handicapped) once their project is completed and Avesta OWNS the Butler School building. It would seem that they are intent in inconveniencing current tenants in order to carry out plans for future tenants. While Portland needs rental units at affordable rates, I do not think this particular project has been thought through as well as it might.

I would respectfully ask that the Planning Board give this issue serious consideration and ask Avesta to revise or scrap their current plans before they create a lasting negative impact on our neighborhood.

Sincerely, C. Zdanowicz

It is extremely disappointing that the city is moving ahead with the misguided project despite wide spread opposit + objection from all quarters of the west end + without regard to negative impacts incl. the elderly, infirm + handi cap

PC11

To the Portland Planning Board:

As a neighbor of the 17 Carleton St. parking lot, I wish to formally state my opposition to the plans by Avesta Housing for a 37 unit affordable income housing project as it now stands. Should this project reach fruition, over 50 cars that now have off-street parking in that lot will have to park on the surrounding streets. If one looks at the parking situation now, there are few empty spaces on the surrounding streets at end of day. How do 50 more cars find space? During snow emergencies and street cleaning nights, the problem will grow expedientially. The West End will become a less desirable place to live if it gains a reputation for difficult parking close to home. This will ultimately affect housing prices and the small businesses in the neighborhood.

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I would respectfully ask that the Planning Board give this issue serious consideration and ask Avesta to revise or scrap their current plans before they create a lasting negative impact on our neighborhood.

KEEP THE POOR PEOPLE OUT OF THIS SAFE NEIGHBORHOOD

Sincerely, RESIDENT
30 WEST ST, PORTLAND

LESS CRIME, LESS DRUGS, LESS LOITERING

PC12

Portland, Maine Yes. Life's good here.

Planning & Urban Development Department

June 29, 2015

Re: FOAA Request

Dear Mr. Penrose:

The following is the City of Portland's response pursuant to the State's Freedom of Access law (1 M.R.S.A. §§ 401-410) to your FOAA request dated June 19, 2015, seeking a copy of all files regarding the original Butler/Payson Site Plan Approval, which you estimate the time frame to be between 1970 and 1986.

To date, the Planning Office provided you with a thumb drive that contained all the documents stored on the Department's G:Drive and searched in the City Hall attic for files. There are no Planning Board files for the addresses that you have given. The planning staff recommended that you review the micro-fiche files stored in the Inspection Office. There may be documents from the Zoning Board of Appels that are on the micro-fiche, which may address your questions. If you would like the administrative staff to make copies of the relevant documents on the microfiche, we can compile that information. If you want copies of all the records, including all permits and inspections for this address, please let us know. I have asked staff in this department to search for any and all records responsive to your request and the staff will look once again in the attic. Given the scope of your request it is my estimate that it will take at least 3.5 hours of staff time to compile these records. See 1 M.R.S.A. § 408(4) and (5). At the statutorily established rate of $15 per hour, and the first hour free, the cost for compiling the relevant records will therefore be at least $37.50. If you want copies of all documents from microfiche and it is estimated that additional hour would be required. Additionally as only hard copies of these documents are available, copies will be provided at the cost of $0.50 per page.

The City hereby formally requests payment of the above amounts in advance. See 1 M.R.S.A. § 408. To the extent that the time required to compile the requested documents exceeds the 3.5 hour estimate, the City will notify you before the 3.5 hours has been exceeded with another estimate of the additional time that will be required and will similarly require an upfront payment for the additional work necessary to compile all of the documents requested. Overall, due to the nature of the documents, only selected city personnel can execute the work necessary to satisfy your request. As these employees have a number of daily responsibilities that must be completed prior to work on outside projects, it is estimated that satisfying your request will take approximately five days.

Please let me know how you wish to proceed. If you have any additional questions, do not hesitate to contact me.

Sincerely,

Barbara Barhydt
Development Review Services Manager

Cc: Jeff Levine, Director, Planning and Urban Development
Jennifer Thompson, Associate Corporation Counsel
Shukria Wiar, Planner
Jennifer Munson, Office Manager
Lannie Dobson, Administrative Assistant

PC13

Portland, Maine | Yes. Life's good here.

Planning & Urban Development Department

June 30, 2015

Re: FOAA Request

Dear Mary Doughty:

The following is the City of Portland's response pursuant to the State's Freedom of Access law (1 M.R.S.A. §§ 401-410) to your FOAA request dated June 23, 2015, seeking a copy of:

> Documents of Public Records regarding the site plan applications for 17 Carleton Street, Portland, ME pertinent to developments at 30 West Street, 20 West Street and 77 Pine Street.

I have asked staff in this department to search for any and all records responsive to your request. Given the scope of your request it is my estimate that it will take at least 1 hour of staff time to compile these records. See 1 M.R.S.A. § 408(4) and (5). At the statutorily established rate of $15 per hour, and the first hour free, there are no costs anticipated for compiling the records unless the staff time exceeds an hour (see below). Additionally as only hard copies of these documents are available, copies will be provided at the cost of $0.50 per page.

The City hereby formally requests payment of the above amounts in advance. See 1 M.R.S.A. § 408. To the extent that the time required to compile the requested documents exceeds the 1 hour estimate, the City will notify you before the 1 hours has been exceeded with another estimate of the additional time that will be required and will similarly require an upfront payment for the additional work necessary to compile all of the documents requested. Overall, due to the nature of the documents, only selected city personnel can execute the work necessary to satisfy your request. As these employees have a number of daily responsibilities that must be completed prior to work on outside projects, it is estimated that satisfying your request will take approximately five days.

Please let me know how you wish to proceed. If you have any additional questions, do not hesitate to contact me.

Sincerely,

Barbara Barhydt
Development Review Services Manager

Cc: Jeff Levine, Director, Planning and Urban Development
Jennifer Thompson, Associate Corporation Counsel
Shukria Wiar, Planner
Jennifer Munson, Office Manager
Lannie Dobson, Administrative Assistant

PC14

Portland, Maine | Yes. Life's good here.

Planning & Urban Development Department

June 30, 2015

Re: FOAA Request

Dear George Silverman:

The following is the City of Portland's response pursuant to the State's Freedom of Access law (1 M.R.S.A. §§ 401-410) to your FOAA request dated June 23, 2015, seeking a copy of planning files pertaining to 17 Carleton Street parking lot and Butler School project.

I have asked staff in this department to search for any and all records responsive to your request. Given the scope of your request it is my estimate that it will take at least 1 hours of staff time to compile these records. See 1 M.R.S.A. § 408(4) and (5). At the statutorily established rate of $15 per hour, and the first hour free, there are no costs anticipated for compiling the records unless the staff time exceeds an hour (see below). Additionally as only hard copies of these documents are available, copies will be provided at the cost of $0.50 per page.

The City hereby formally requests payment of the above amounts in advance. See 1 M.R.S.A. § 408. To the extent that the time required to compile the requested documents exceeds the 1 hour estimate, the City will notify you before the 1 hours has been exceeded with another estimate of the additional time that will be required and will similarly require an upfront payment for the additional work necessary to compile all of the documents requested. Overall, due to the nature of the documents, only selected city personnel can execute the work necessary to satisfy your request. As these employees have a number of daily responsibilities that must be completed prior to work on outside projects, it is estimated that satisfying your request will take approximately five days.

Please let me know how you wish to proceed. If you have any additional questions, do not hesitate to contact me.

Sincerely,

Barbara Barhydt
Development Review Services Manager

Cc: Jeff Levine, Director, Planning and Urban Development
Jennifer Thompson, Associate Corporation Counsel

Shukria Wiar, Planner
Jennifer Munson, Office Manager
Lannie Dobson, Administrative Assistant

PC15

Portland, Maine | Yes. Life's good here.

Planning & Urban Development Department

June 30, 2015

Re: FOAA Request

Dear Mr. Reinhartsen:

The following is the City of Portland's response pursuant to the State's Freedom of Access law (1 M.R.S.A. §§ 401-410) to your FOAA request dated June 23, 2015, seeking a copy of planning files pertaining to 17 Carleton Street parking lot and Butler School project.

I have asked staff in this department to search for any and all records responsive to your request. Given the scope of your request it is my estimate that it will take at least 1 hours of staff time to compile these records. See 1 M.R.S.A. § 408(4) and (5). At the statutorily established rate of $15 per hour, and the first hour free, there are no costs anticipated for compiling the records unless the staff time exceeds an hour (see below). Additionally as only hard copies of these documents are available, copies will be provided at the cost of $0.50 per page.

The City hereby formally requests payment of the above amounts in advance. See 1 M.R.S.A. § 408. To the extent that the time required to compile the requested documents exceeds the 1 hour estimate, the City will notify you before the 1 hours has been exceeded with another estimate of the additional time that will be required and will similarly require an upfront payment for the additional work necessary to compile all of the documents requested. Overall, due to the nature of the documents, only selected city personnel can execute the work necessary to satisfy your request. As these employees have a number of daily responsibilities that must be completed prior to work on outside projects, it is estimated that satisfying your request will take approximately five days.

Please let me know how you wish to proceed. If you have any additional questions, do not hesitate to contact me.

Sincerely,

Barbara Barhydt
Development Review Services Manager

Cc: Jeff Levine, Director, Planning and Urban Development
Jennifer Thompson, Associate Corporation Counsel

Shukria Wiar, Planner
Jennifer Munson, Office Manager
Lannie Dobson, Administrative Assistant

PC16

7/1/15

20 West Street

Portland, Maine 04102

Dear Portland City Planning Board:

I'd like to address the parking issue that will be created when Avesta builds their new building at 17 Carlton Street. I have currently been on Avesta's "waiting list" for a parking spot for 2 years. Each time I called I was bounced to a different person. Either they never returned my call or I was either 3rd on the list, 1st on the list or not even on the list. It appears to me that Avesta has not intended to lease out these spaces in anticipation of this new building. I find it hard to believe that planning board back then allowed 20 West Street to be made into condos knowing that there is no off street parking. It also seems strange that all the legal documentation for this and the Butler building projects are nowhere to be found.

Now we find out that the new building on the corner of Pine and Brackett were promised 10 spaces in order for that project to move forward.

I attended the Rieche School meeting with the Avesta representatives. It was stated by one of them that "there is not that much of a demand in the West End for off street parking. Just drive through that lot and you will see a lot of empty spaces." My comment is "yes" there are empty spaces because Avesta has not been leasing them out to make it appear that there is no demand. My question is how many other people were on their "list" or never made it to the list or "fell off their list". I understand that Avesta owns this lot and it is a free country (the last time I checked) and they should be able to do what they want with it; however, if prior commitments are not being fulfilled, I hope the planning board will take this into consideration. This neighborhood will also be losing parking that is currently "Joe Smoke Shop" which many people in this area are also depend on for parking.

Portland is not quite a little Boston. We do not have the mass transportation available as the big cities do. We need our cars to commute. Not everyone can walk or bike to work. Winters here are very hard on every one, the parking issue makes it even harder. Hopefully you understand our plight and will come up with a viable solution to a very real problem.

Thank you in advance for taking this issue into consideration.

Sincerely,

Kathy DiMatteo

207-712-1170 cell

To the Portland Planning Board:

As a neighbor of the 17 Carleton St. parking lot, I wish to formally state my opposition to the plans by Avesta Housing for a 37 unit affordable income housing project as it now stands. Should this project reach fruition, over 50 cars that now have off-street parking in that lot will have to park on the surrounding streets. If one looks at the parking situation now, there are few empty spaces on the surrounding streets at end of day. How do 50 more cars find space? During snow emergencies and street cleaning nights, the problem will grow expedientially. The West End will become a less desirable place to live if it gains a reputation for difficult parking close to home. This will ultimately affect housing prices and the small businesses in the neighborhood.

Currently several parking spaces are leased by tenants of both the Pilgrim apartment building and the Butler School. Many of these people are elderly or handicapped. Where will they park? Avesta plans on offering just two spaces to Butler School tenants (who must be over 62 or handicapped) once their project is completed and Avesta OWNS the Butler School building. It would seem that they are intent in inconveniencing current tenants in order to carry out plans for future tenants. While Portland needs rental units at affordable rates, I do not think this particular project has been thought through as well as it might.

I would respectfully ask that the Planning Board give this issue serious consideration and ask Avesta to revise or scrap their current plans before they create a lasting negative impact on our neighborhood.

Sincerely,

Kathy DiMaio
20 West St.
Portland, ME

PC17

To the Portland Planning Board:

As a neighbor of the 17 Carleton St. parking lot, I wish to formally state my opposition to the plans by Avesta Housing for a 37 unit affordable income housing project as it now stands. Should this project reach fruition, over 50 cars that now have off-street parking in that lot will have to park on the surrounding streets. If one looks at the parking situation now, there are few empty spaces on the surrounding streets at end of day. How do 50 more cars find space? During snow emergencies and street cleaning nights, the problem will grow expedientially. The West End will become a less desirable place to live if it gains a reputation for difficult parking close to home. This will ultimately affect housing prices and the small businesses in the neighborhood.

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I would respectfully ask that the Planning Board give this issue serious consideration and ask Avesta to revise or scrap their current plans before they create a lasting negative impact on our neighborhood.

Sincerely, Julie DiMatteo
20 West St 6/30/15

7/1/15

PC18

To the Portland Planning Board:

As a neighbor of the 17 Carleton St. parking lot, I wish to formally state my opposition to the plans by Avesta Housing for a 37 unit affordable income housing project as it now stands. Should this project reach fruition, over 50 cars that now have off-street parking in that lot will have to park on the surrounding streets. If one looks at the parking situation now, there are few empty spaces on the surrounding streets at end of day. How do 50 more cars find space? During snow emergencies and street cleaning nights, the problem will grow expedientially. The West End will become a less desirable place to live if it gains a reputation for difficult parking close to home. This will ultimately affect housing prices and the small businesses in the neighborhood.

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I would respectfully ask that the Planning Board give this issue serious consideration and ask Avesta to revise or scrap their current plans before they create a lasting negative impact on our neighborhood.

It is also our understanding that they agreed to lease 10 spaces to the new building at the corner of Bracket + Pine in order for that Building to be approved. What about those spaces.

Sincerely,

Joshua M. Roy
20 WEST St.