

1. 2-22-17 Agenda

Documents:

[2-22-17 AGENDA.PDF](#)

2. HP MEMO - Deering Oaks - Public Infrastructure Alterations

Documents:

[HP MEMO - DEERING OAKS - PUBLIC INFRASTRUCTURE ALTERATIONS.PDF](#)

3. HP MEMO - Deering Oaks - Bayside Trail Extension

Documents:

[HP MEMO - DEERING OAKS - BAYSIDE TRAIL EXTENSION.PDF](#)

4. HP MEMO - 97 INDIA ST

Documents:

[HP MEMO - 97 INDIA ST.PDF](#)

5. Guidelines For Installation Of Heat Pumps, Compressors, And Associated Equipment-
DRAFT

Documents:

[GUIDELINES FOR INSTALLATION OF HEAT PUMPS, COMPRESSORS, AND
ASSOCIATED EQUIPMENT- DRAFT.PDF](#)

6. Consent Item - 6 City Center

Documents:

[CONSENT ITEM - 6 CITY CENTER.PDF](#)

CITY OF PORTLAND, MAINE
HISTORIC PRESERVATION BOARD

Scott Benson, Chair
Bruce Wood, Vice Chair
Glenn Harmon
Robert O'Brien
Penny Pollard
Julia Sheridan
John Turk

HISTORIC PRESERVATION BOARD AGENDA

February 22, 5:00 p.m.

Room 209, City Hall, 389 Congress Street

Public comment is taken at all meetings

- 1. ROLL CALL AND DECLARATION OF QUORUM**
- 2. COMMUNICATIONS AND REPORTS**
- 3. REPORT OF DECISIONS OF February 1, 2017:**

- i. Request to Amend Previously-Approved Plans; 164 MIDDLE STREET; NDA Middle, LLC., Applicant. *The Board voted 6-0 (Turk absent) to approve amended plans subject to conditions.*
- ii. Certificate of Appropriateness for Exterior Alterations and Signage; 11 BROWN STREET; Phelps Craig R.E. Holdings, LLC., Applicant. *The Board voted 6-0 to approve the application subject to conditions.*
- iii. Certificate of Appropriateness for Marquee Reconstruction; STATE THEATRE, 609 CONGRESS ST/142 HIGH ST.; Crostone Portland LLC., Applicant. *The Board voted 6-0 to approve the application subject to conditions.*
- iv. Certificate of Appropriateness for Site Alterations; PORTLAND MUSEUM OF ART, 7 CONGRESS SQUARE; Portland Museum of Art, Applicant. *The Board voted 6-0 to approve the application subject to conditions.*

4. WORKSHOP

- i. Preliminary Review of Proposed Parking Lot and Site Improvements; DEERING OAKS HISTORIC LANDSCAPE DISTRICT; City of Portland Department of Works, Applicant.
- ii. Preliminary Review of Proposed Bayside Pathway Extension; DEERING OAKS HISTORIC LANDSCAPE DISTRICT; City of Portland Parks Division, Applicant.

Break for Dinner; Meeting Resumes at 6:45

PUBLIC HEARING, continued

- i. Certificate of Appropriateness for Dormer Additions; 97 INDIA STREET; Scott Knoll, Applicant.
- ii. Review and Approval of proposed *Design Guidelines for the Installation of Heat Pumps, Compressors and Associated Equipment in Historic Districts*

5. CONSENT AGENDA

**HISTORIC PRESERVATION BOARD
CITY OF PORTLAND, MAINE**

**WORKSHOP
STATE STREET AND VICINITY OF DEERING OAKS**

TO: Chair Benson and Members of the Historic Preservation Board

FROM: Deborah Andrews, Historic Preservation Program Manager

DATE: February 8, 2017

RE: February 15, 2017 Workshop – Preliminary Review of Proposed
Public Infrastructure Alterations associated with Stormwater Improvement
Project

Address: Deering Oaks and State Street intersections

Applicant: Department of Public Works
represented by Project Engineers Brad Roland and Justin Pellerin

Consultant: Gorrill Palmer Civil Engineering

Introduction

Justin Pellerin and Brad Roland of the Department of Public Works have requested a workshop to review plans for public infrastructure improvements in the vicinity of State Street and Deering Oaks that are related to the implementation of its Combined Sewer Overflow Long Term Control Plan. Since the City's CSO Plan was approved by the State in 1993, numerous specific stormwater improvement initiatives have been undertaken, with more to follow.

Currently, plans are under development for the installation of an 84" storm drain under State Street, which will outfall into Back Cove. Although much of the area impacted by the installation is proposed to be restored to its current condition, a number of site alterations are proposed in conjunction with the project. These include improvements to the existing gravel parking lot off State Street in the vicinity of the Deering Oaks Castle, creation of a bio-retention pond near the intersection of Deering Oaks' Tennis Court Road and State Street, introduction and/or extension of brick sidewalks and reconfiguration of a number of State Street intersections. Although the intersection modifications are not prompted by the CSO project, Public Works is taking advantage of the opportunity to introduce traffic calming measures and ADA-compliant crosswalks.

Mr. Pellerin has provided a written description of the project, highlighting those aspects that are subject to Historic Preservation Board review. Also enclosed is an aerial view for orientation purposes, together with site plans for specific areas where alterations are proposed.

General site plans comparing existing and proposed conditions have not been provided. Note that existing roadway alignments are shown in faint dashed lines on the enclosed plans.

In reviewing the proposed site alterations, Board members are encouraged to familiarize themselves with the 1993 Deering Oaks Master Plan, as it addresses the topic of access and circulation, and makes a variety of recommendations that are relevant to this project. It also describes the major characteristics of this designed landscape that should be respected in any project affected the Park. A copy of the Plan is enclosed and specifics pages are noted for reference purposes.

Note: The second application on the Board's agenda (the proposed extension of the Bayside Trail) calls for infrastructure improvements in the same general vicinity. Board members will note that several basic elements are repeated on both sets of plans and that the depiction of these elements is not entirely consistent. This reflects the fact that the projects are moving along separate tracks, overseen by different staff and with different consultants. It is understood that the plans and design solutions will need to be coordinated as they move forward to final design development. The Board's input on these elements will no doubt impact the final proposals as well. The Board's role is to address the general direction of the plans, recognizing that coordination will follow.

Proposed Scope of Work

As noted in Mr. Pellerin's report, the following infrastructure changes fall within the Historic Preservation Board's purview:

- Rehabilitation of the existing gravel parking lot near the Castle. (See Sheet 38.) Project calls for repaving with a combination of asphalt for circulation areas and permeable pavers for parking stalls. Two islands are shown within the lot, but it is not clear whether they are to have trees or other landscaping. As part of the project, the northern entrance to the parking lot (closest to Forest Ave) will be closed and the esplanade and brick sidewalk along the street edge continued. The sidewalk will also be extended toward the Castle. The southern entrance to the parking lot will be narrowed and better defined. Overhead power lines will be buried.
- Reconfiguration of State Street/Tennis Court Road intersection. (See Sheet 25.) The project calls for significantly narrowing Tennis Court Road where it meets State. (See dashed lines for current road edges.) As well, crosswalked will be defined, ADA tip-downs will be introduced and the sidewalk will be extended on either side of the Tennis Court Road at the intersection.

- Narrowing of State Street extension and creation of crosswalk across State to provide improved pedestrian and bicycle access from Forest Ave. On the Deering Oaks side of the crosswalk, a circular “node” is proposed where several sidewalks merge.
- In the land area created by narrowing Tennis Court Road and State Street extension, introduction of a bio-retention pond with rain garden. Although no details have been provided, presumably the rain garden will be similar to those installed on Deering Street.
- Areas adjacent to Back Cove Trail and the far eastern edge of Deering Oaks near High Street that will be disturbed by the project will be restored to their current condition.
- At the intersection of State and Park Avenue, crosswalk and ADA improvements are proposed. It does not appear that roadway width will be modified.
- Moving south on State Street in the Parkside neighborhood, three intersections are to be modified. At Grant Street and Sherman Street, the roadways will be narrowed considerably, reducing the widths of the crosswalks, creating ADA tip-downs and widening the sidewalks at the intersections. At the Cumberland Avenue intersection, the existing geometry remains essentially unchanged; the only modifications are the tip-downs and defined cross-walks.

Staff Questions and Comments

As with all public infrastructure improvement projects proposed for historic neighborhoods, care should be taken to ensure that the improvements are generally compatible with the established character of the historic streetscape or area. This is especially the case in historic landscape districts, where the existing landscape character and contributing site features are the product of a specific design intent. In reviewing the proposed alterations, Board members are encouraged to review the Standards for Review of Streetscape and Pedestrian Improvements excerpted from the *Historic Resources Design Manual* (ATTACHMENT 4) as well as relevant portions of the *Deering Oaks Master Plan*, which was commissioned in 1993 to provide guidance for future improvements in the Park (ATTACHMENT 5).

Deering Oaks was intended by its designer William Goodwin to be a natural, scenic oasis in the heart of the city where “a major goal was to preserve the natural beauty which already existed rather than to superimpose a formal design on the landscape.” To that end, all elements introduced within the existing landscape—roads, paths, bridges, etc.-- were designed to reinforce the natural setting. With this design intent in mind, it is important that the traffic-calming measures and other interventions proposed in conjunction with this stormwater control project not appear as unduly “engineered” or imposed upon an otherwise naturalistic

landscape. While recognizing the importance of improving traffic safety and enhancing pedestrian access to Deering Oaks, it might be necessary to modify some of the proposed alignments, find an alternative to the circular “nodes” introduced where several sidewalks merge, and/or ease the rather abrupt transitions where roadways are necked-down at intersections. These types of adjustments might achieve greater compatibility with the character of Deering Oaks.

Another element of the proposed plan that might warrant reconsideration is the introduction of a bio-retention pond and rain garden near the Castle intersection. In discussing this element with Mr. Roland and Mr. Pellerin, staff understands that this feature is elective, rather than necessary, and that a simple grassed swale would suffice to collect rainwater. In staff’s view, this is not an appropriate location to introduce an engineered rain garden such as was proposed for Deering Street.

As with the modified intersection near the Deering Oaks Castle, to retain State Street’s historic streetscape character, the proposed changes to the State/Grant and State/Sherman Street intersections should not appear unduly forced. (This section of State Street is also located within a historic district, in this case the Deering Street Historic District.) Staff suggests that the transitions in roadway width be made more gradual and that the widened sidewalk areas at the intersections be less exaggerated.

In addition to these general observations and concerns, staff suggests that the Board ask for clarification on a number of specific details. For example, is lighting proposed within the parking lot? Will there be additional signage? What is the rationale for using two paving solutions within the parking lot?

Applicable Review Standards

In addition to the following general review standards, the Historic Resources Design Manual includes Standards for Streetscape and Pedestrian Improvements. See ATTACHMENT 4 for applicable standards.

Standards for Review of Alterations

- (2) *The distinguishing original qualities or character of a structure, object or site and its environment shall not be destroyed. The removal or alteration of any historic material or distinctive architectural features should be avoided when possible.*
- (9) *Contemporary design for alterations and additions to existing properties shall not be discouraged when such alterations and additions do not destroy significant cultural, historical, architectural or archeological materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the size, scale, color, material and character of the property, neighborhood or environment.*

- (10) *Wherever possible, new additions or alterations to structures and objects shall be undertaken in such a manner that, if such additions or alterations were to be removed in the future, the essential form and integrity of the historic property would be unimpaired.*

Attachments

1. Written project description
2. Aerial view of project context
3. Site plans
4. Standards for Streetscape and Pedestrian Improvements, from Historic Resources Design Manual
5. Deering Oaks Master Plan



Project Memo

Historic Preservation Review

Portland Public Works

To: Deb Andrews

From: Justin Pellerin, P.E. Project Engineer

Date: February 8, 2017

Re: State Street Storm-Drain Outfall Project, Deering Oakes Parking Lot Rehabilitation.

Project Need / Description

The City of Portland has been implementing a multi-year Combined Sewer Overflow (CSO) Long Term Control Plan (LTCP) since the original LTCP prepared by CH2M Hill was submitted and approved by the State in 1993. We are now implementing what is termed the "Tier III" action plan. A number of specific abatement projects are completed and some are currently under construction or design, with more programmed to be completed over the coming years.

The referenced project is being undertaken to comply with the requirements laid out in our Tier III action plan. The plan identified the a sewer separation project of State Street, State Street Extension and parts of Forest Avenue and High Street extension as projects that would be required to mitigate CSO activity at CSO 17 and 18 which outfall into Back Cove just to the south of the Back Cove Trail parking area.

The City of Portland has hired the firm of Gorrill Palmer to produce design plans and construction documents for construction to be started late this spring. As such we are looking to bid the project in March of 2017. Per our tier III action plan this project is to be completed as soon as possible.

The project involves the installation of an 84" storm drain outfall into Back Cove. The storm drain will run across the back cove trail and park and turn onto Preble street extension towards the 295 overpass. Once the storm drain is complete across this area, the surfaces will be put back together as they currently exist. As part of the project, the storm drain will run across the existing Deering Oaks gravel parking lot near the castle building. In conjunction with the parks and recreation department's desires to improve the parking area, our design consultant has designed a new parking area which will feature pervious paver green infrastructure parking stalls to treat the stormwater runoff generated by the parking area, along with pavement and permanent striped parking lines. The project is also proposing to install a brick sidewalk along the state street extension frontage along the parking lot to connect the sidewalk near castle building to the sidewalk at the corner of Forest Avenue and State Street extension. As part of the rehabilitation of the parking lot the entrance closest to Forest Avenue will be closed to allow vehicles turning the corner on to State Street to see

vehicles turning into the lot. The existing driveway to be closed will become green space. The project will also take over-head power lines that currently run above the parking lot and put them under ground and out of site to the public. The project is also looking at implementing traffic calming measures and pedestrian improvements where the Deering Oaks road merges with State Street extension. The plan proposes to narrow the roadway, add sidewalks and build a green infrastructure rain garden to treat stormwater flows coming from the park. There is also a portion of work which will run a smaller storm drain along High Street Extension on the very edge of the Deering Oaks Park before tying into our trunk storm drain line in the Deering Oaks Parking lot. As such, I wanted to contact the Historic Preservation Commission to inquire into any authorization that may be required for the work in the Deering oaks gravel parking lot area, the back cove park/trail area, work done near the Deering Oaks Road and Castle building and work done on the edge of the park near High Street Extension.

We will soon file permits for Maine Department of Environmental Protection (MDEP) Permit by Rule and Army Corp of Engineer (ACOE) permits for the discharge of the storm drain into Back Cove. Please let us know if you would like a copy of these permit applications.

Project Requirements

The project has the following major components:

1. Installation of nearly 7,400 LF of new storm-drain on State Street, State Street Extension, Park Avenue, High Street Extension, Forest Avenue and Marginal Way.
2. Construction of 84" storm drain outfall into back cove near the back cove parking lot adjacent to the twin existing CSO pipes.
3. Installing an 84" storm drain across the back cove park and trail towards Preble Street Extension
4. Reconfiguration of the Deering Oaks Gravel Parking Lot near the castle building
5. Traffic Calming, pedestrian improvements and rain garden at the Deering oaks road and State Street Extension
6. Pedestrian Improvements along State Street

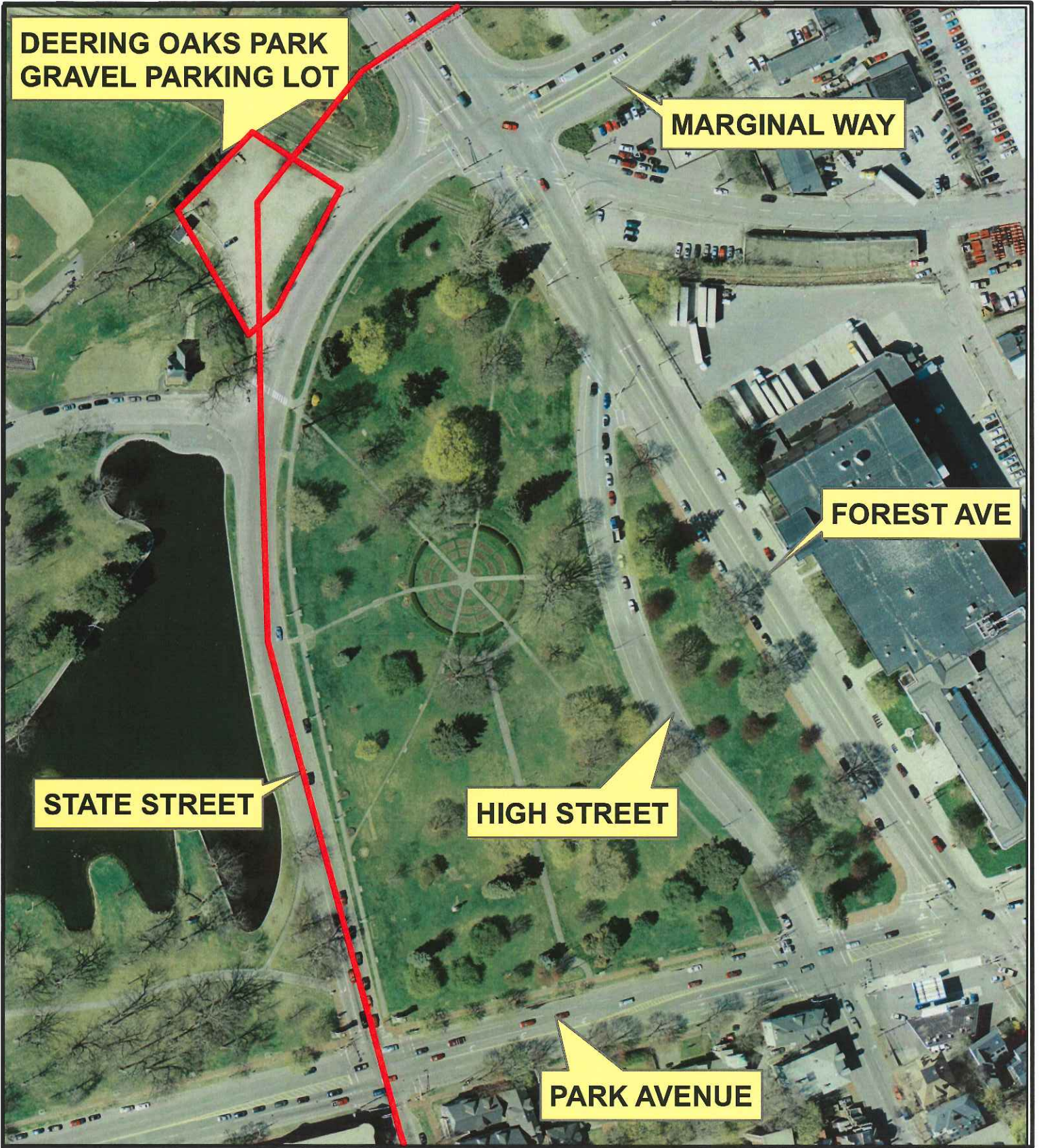
Historical Preservation Review

Items which I believe the Historical Preservation Board would require discussion or further information on are listed below.

1. Reconfiguration of the Deering Oaks Gravel Parking Lot near the castle building
2. Construction of 84" storm drain outfall into back cove near the back cove park and trail.
3. Installing an 84" storm drain across the back cove park and trail towards Preble Street Extension. Restoration will match existing.
4. Traffic Calming, pedestrian improvements and rain garden at the Deering oaks road and State Street Extension
5. Pedestrian Improvements along State Street

Attached you will find plans of each area that we think the Historical Preservation review will be concerned with, listed above.

If you would like more information on the entire scope of the project or require information on anything else, please let me know.



DEERING OAKS PARK
GRAVEL PARKING LOT

MARGINAL WAY

FOREST AVE

STATE STREET

HIGH STREET

PARK AVENUE



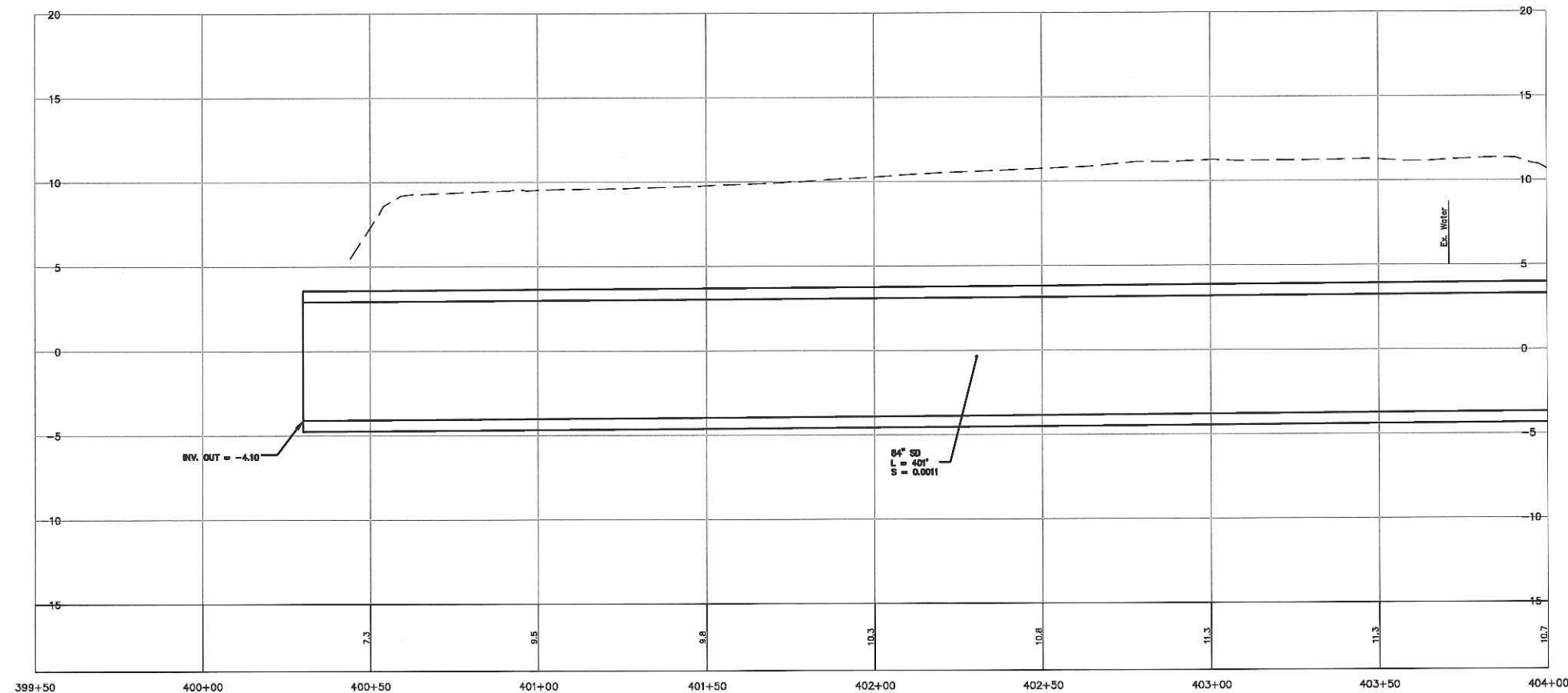
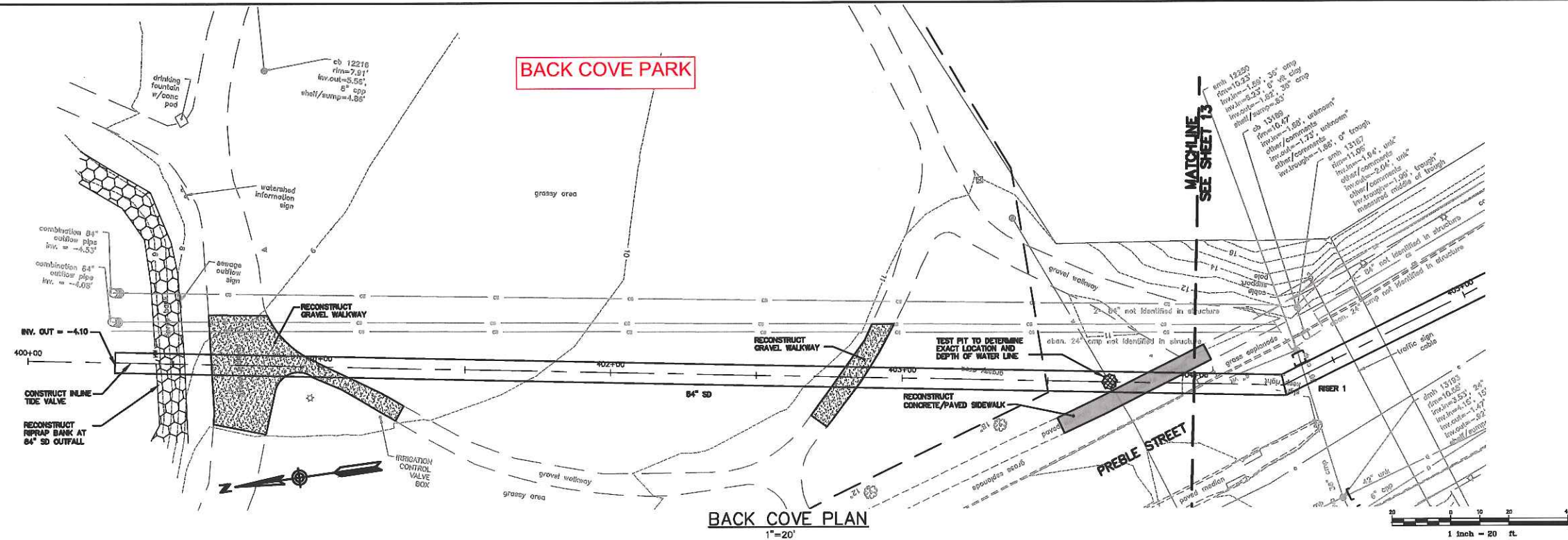
AERIAL LOCATION MAP
DEERING OAKS PARK
AND STATE STREET
SEWER SEPARATION
PROJECT
PORTLAND, MAINE



2

FIGURE

0 62.5 125 250 Feet



BACK COVE PROFILE
1"=20' HORIZONTAL
1"=4' VERTICAL

60% SUBMISSION



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SHEET #	12 OF 49
VAULT PLAN NUMBER	

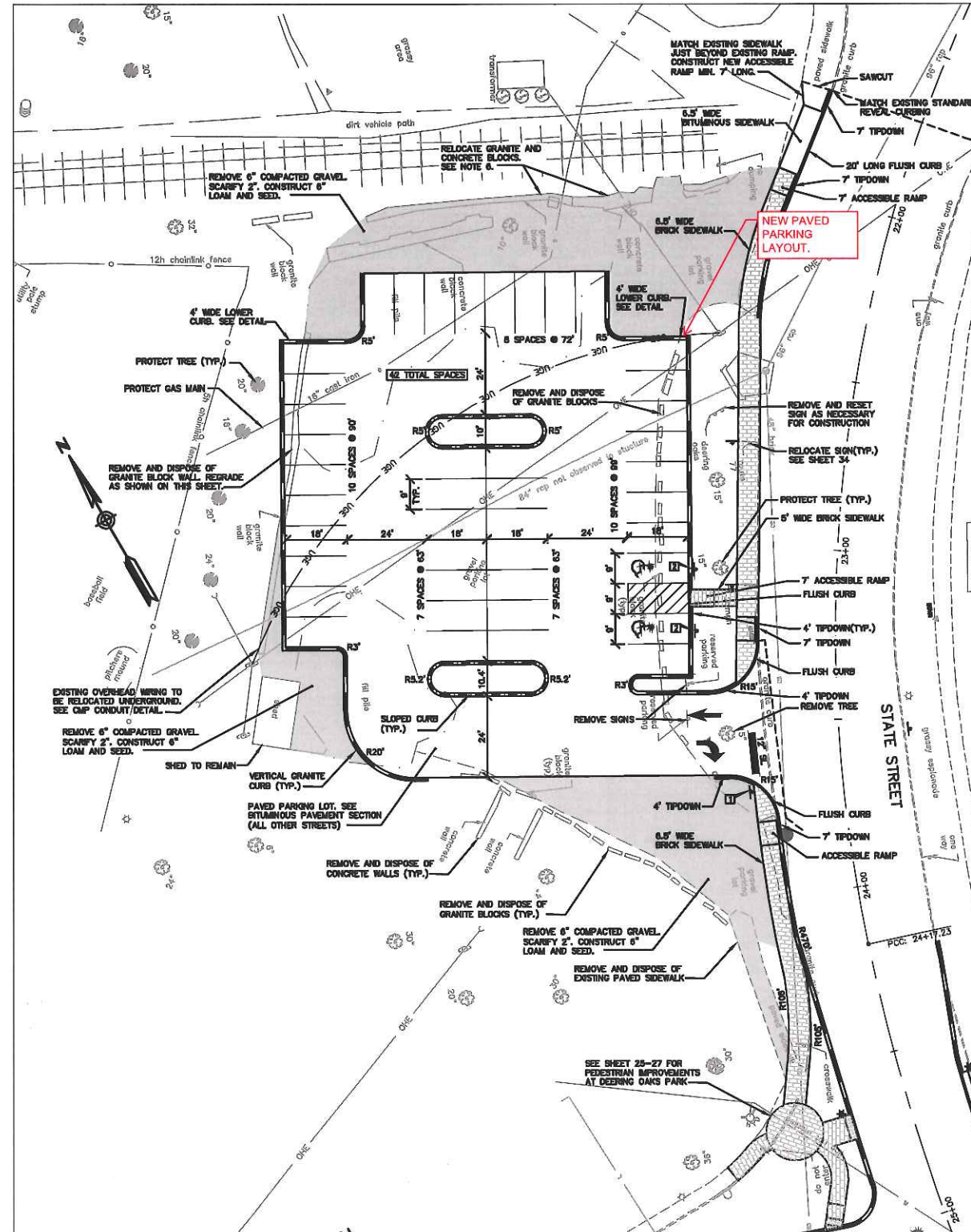
CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING SECTION

STATE STREET & MARGINAL WAY
SEWER SEPARATION
BACK COVE
PLAN AND PROFILE

REFERENCES:

LDD PROJECT NAME: N/A
DRAWING NAME: 2835.14-PBASE_ALT
FIELD BOOK USED: N/A

DEERING OAKS PARKING LOT

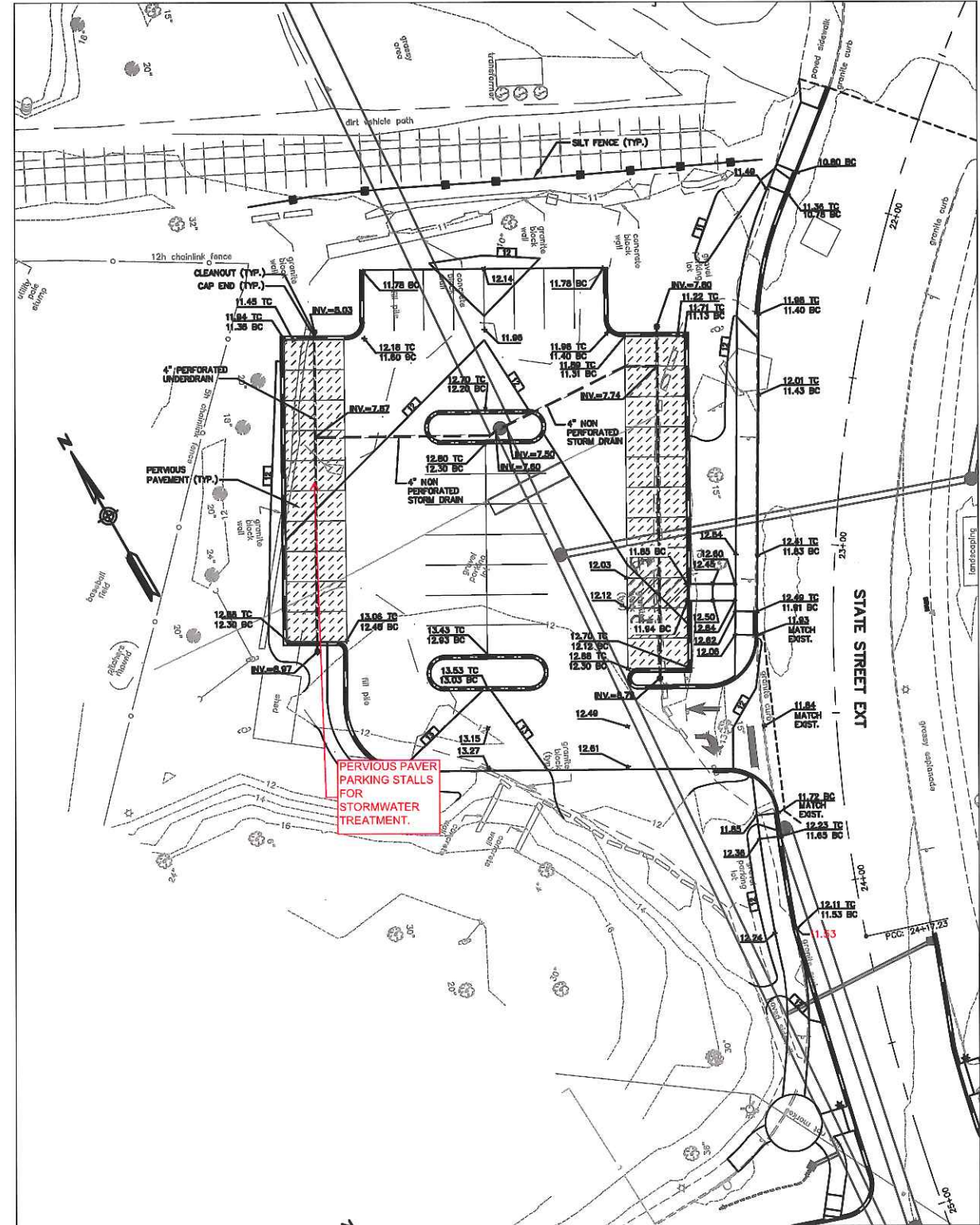


NOTES:

1. ACCESSIBLE RAMP SHALL MEET ADA STANDARDS:
MAXIMUM LONGITUDINAL SLOPE = 6.3%
MAXIMUM CROSS SLOPE = 2.0%
2. NEW SIDEWALKS SHALL MEET ADA STANDARDS:
MAXIMUM LONGITUDINAL SLOPE = 8%
MAXIMUM CROSS SLOPE = 2%
3. ANY CURBING REMOVED WITHIN THE RIGHT-OF-WAY IS THE PROPERTY OF THE CITY OF PORTLAND AND SHALL BE DELIVERED TO THE PUBLIC WORKS FACILITY ON OUTER CONGRESS STREET.
4. ALL DISTURBED AREAS THAT ARE NOT COVERED BY BRICK OR PAVEMENT SHALL RECEIVE 4\"/>

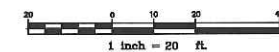
PARKING LOT LAYOUT PLAN

1\"/>



PARKING LOT GRADING & DRAINAGE PLAN

1\"/>



60% SUBMISSION



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LDI PROJECT NAME:
N/A
DRAWING NAME:
2023.14-PRASE-ALT
FIELD BOOK USED:
N/A

REFERENCES:

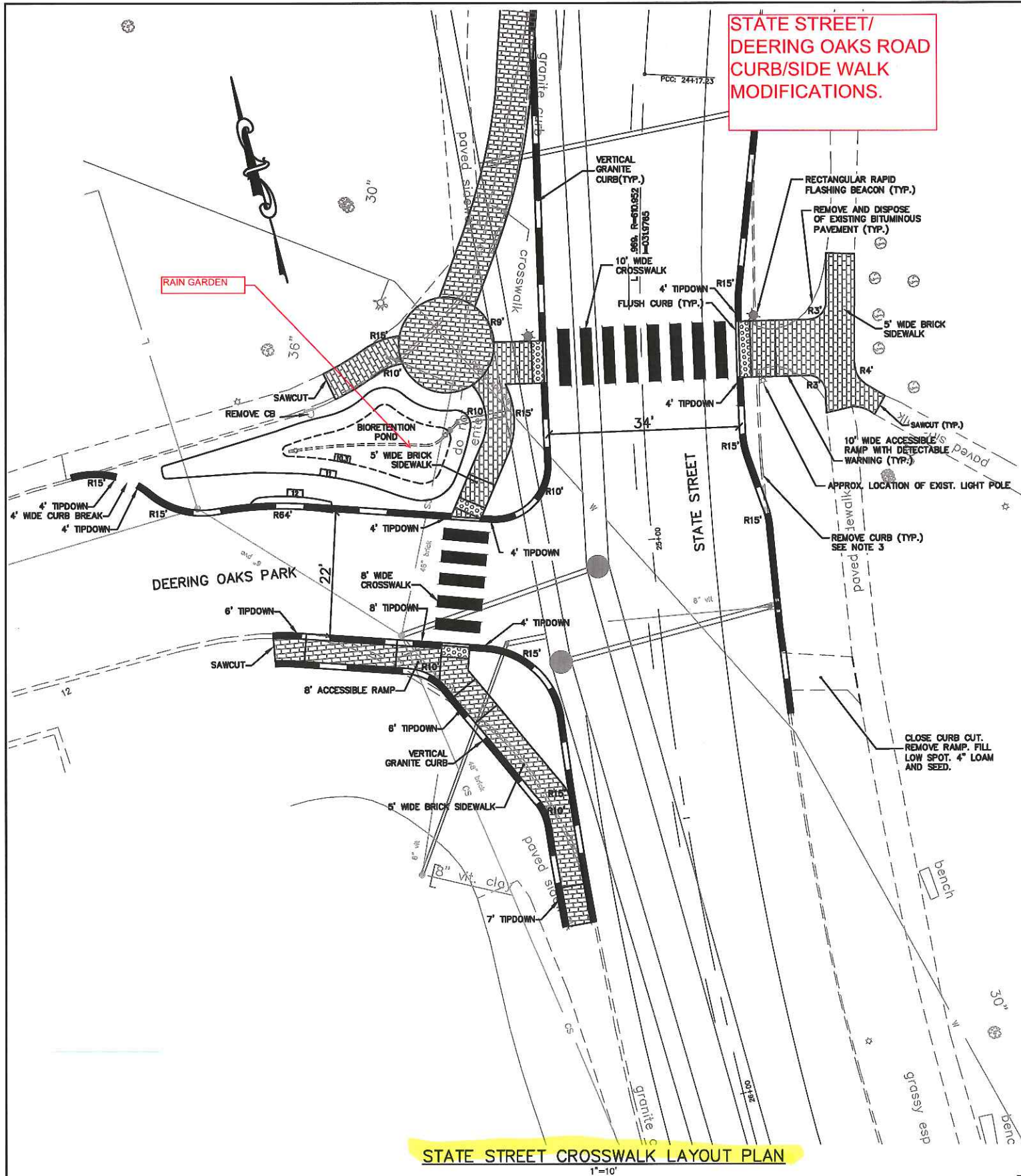
DESIGNED BY:	QC
DRAWN BY:	LAN
CHECKED BY:	NSH
SCALE:	AS NOTED
DATE:	MAY 2016

STATE STREET & MARGINAL WAY
SEWER SEPARATION
DEERING OAKS PARKING LOT
SITE, GRADING & DRAINAGE PLAN

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING SECTION



SHEET #
38 OF 45
VAULT PLAN NUMBER

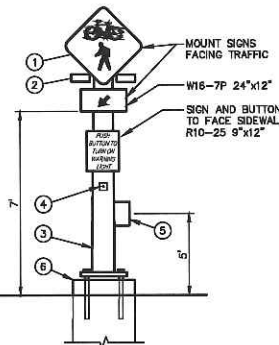


STATE STREET/
DEERING OAKS ROAD
CURB/SIDE WALK
MODIFICATIONS.

- NOTES:
1. ACCESSIBLE RAMP SHALL MEET ADA STANDARDS:
MAXIMUM LONGITUDINAL SLOPE = 8.3%
MAXIMUM CROSS SLOPE = 2.0%
 2. NEW SIDEWALKS WITH THE EXCEPTION OF THE TRANSITION SECTIONS ADJACENT TO THE POND, SHALL MEET ADA STANDARDS:
MAXIMUM LONGITUDINAL SLOPE = 5%
MAXIMUM CROSS SLOPE = 2%
 3. ANY CURBING REMOVED WITHIN THE RIGHT-OF-WAY IS THE PROPERTY OF THE CITY OF PORTLAND AND SHALL BE DELIVERED TO THE PUBLIC WORKS FACILITY ON OUTER CONGRESS STREET.
 4. ALL DISTURBED AREAS THAT ARE NOT COVERED BY BRICK OR PAVEMENT SHALL RECEIVE 4" LOAM AND SEED.
 5. COMMON BORROW SHALL MEET MDOT SPECIFICATION 703.18.
 6. RESET RIMS OF ALL STRUCTURES TO REMAIN WITHIN NEW RAMP/SIDEWALK AREAS.
 7. ALL WORK TO CONFORM TO MAINE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGES AND STANDARD DETAILS.
 8. ALL PROPOSED WORK SHALL BE IN CONFORMANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", "STANDARD HIGHWAY SIGNS", U.S.D.O.T., F.H.W.A., LATEST EDITION.

- CONSTRUCTION NOTES:
1. 30"x30" SIGN W11-15
 2. 12" YELLOW RECTANGULAR RAPID FLASHING BEACONS (BLACK HOUSING) SET TO HIGH VISIBILITY STROBE PATTERN - MOUNTED FACING TRAFFIC
 3. MAINTENANCE PEDESTAL POLE
 4. PEDESTRIAN PUSH BUTTON (NON AUDIBLE)
 5. POLE MOUNTED NETWORK CONTROLLER
 6. 10" CONCRETE FOUNDATION PER MAINTENANCE STANDARDS

- GENERAL NOTES:
7. ALL LIGHTS AND PEDESTRIAN PUSH BUTTONS SHALL BE 120V TECHNOLOGIES OR EQUAL
 8. POLE SHALL BE PAINTED MATT BLACK
 9. LIGHTS SHALL FLASH FOR 30 SECONDS (AS NOTED)
 10. SIGNS W11-15 AND W18-7P SHALL BE FLUORESCENT YELLOW-GREEN BACKGROUND COLOR
 11. SEE PROVISION 643.



RECTANGULAR RAPID FLASHING
BEACON ASSEMBLY DETAIL
(SOLAR POWERED, RADIO ACTIVATED)
NOT TO SCALE

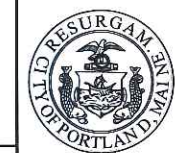
LDD PROJECT NAME:
N/A
DRAWING NAME:
2835.21-INT-DET.dwg
FIELD BOOK USED:
N/A

REFERENCES:

DESIGNED BY:	OC
DRAWN BY:	LAN
CHECKED BY:	MOH
SCALE:	AS NOTED
DATE:	MAY 2016

STATE STREET & MARGINAL WAY
SEWER SEPARATION
STATE STREET
CROSSWALK DETAIL

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING SECTION

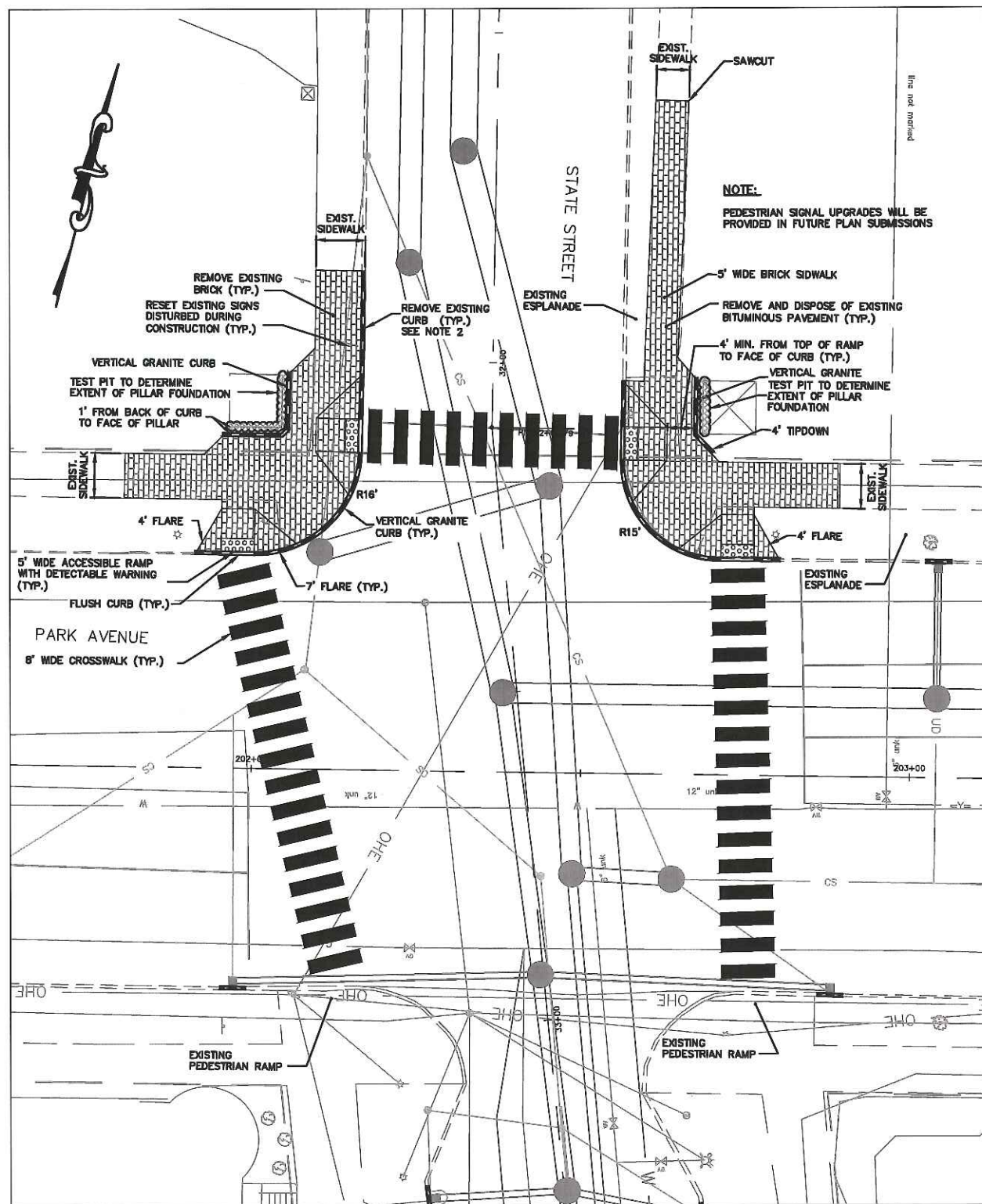


SHEET #
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VAULT PLAN NUMBER

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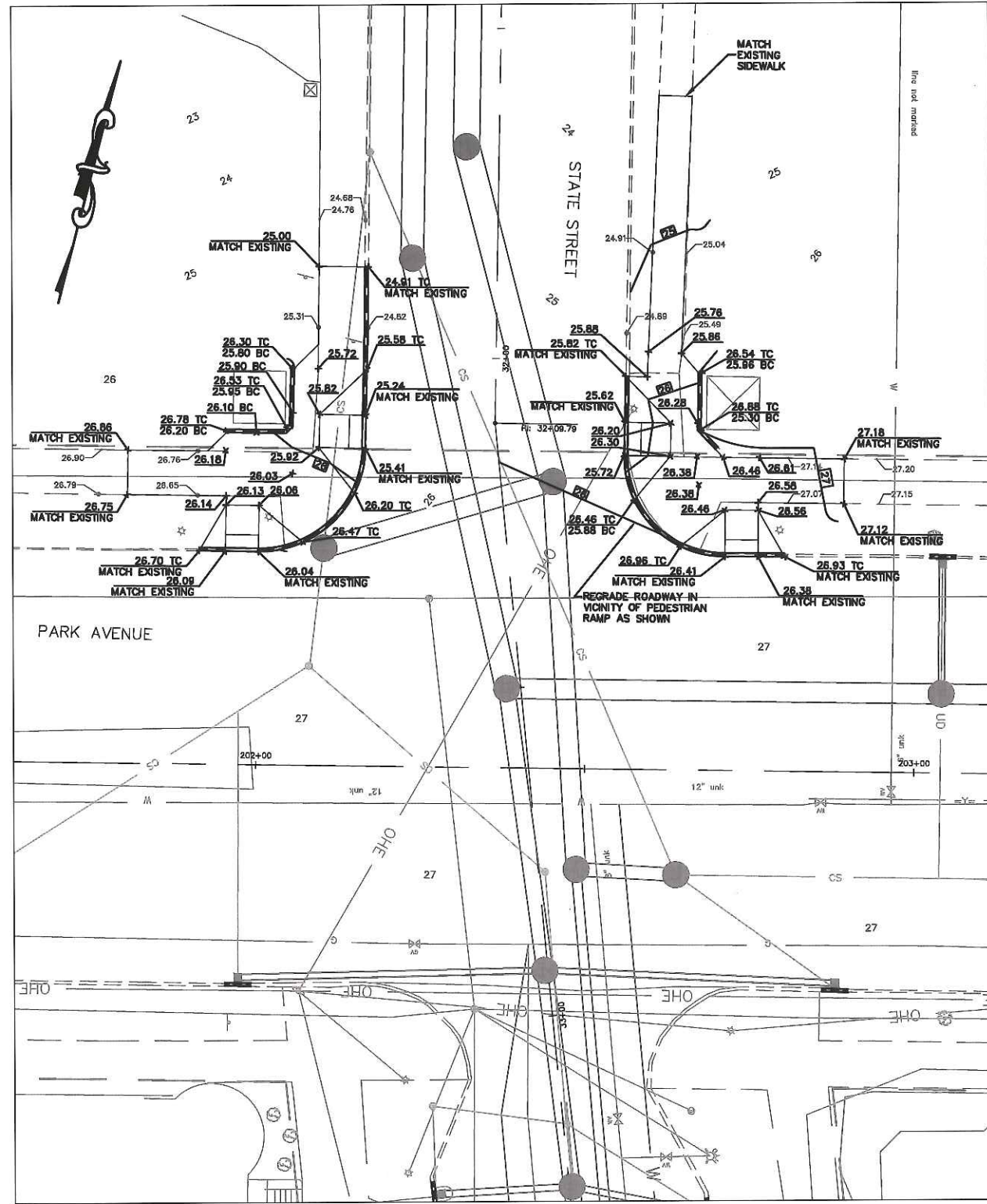


STATE STREET/PARK AVENUE CROSSWALK LAYOUT PLAN

1"=10'

NOTES:

1. ACCESSIBLE RAMP SHALL MEET ADA STANDARDS:
MAXIMUM LONGITUDINAL SLOPE = 8.3%
MAXIMUM CROSS SLOPE = 2.0%
2. ANY CURBING REMOVED WITHIN THE RIGHT-OF-WAY IS THE PROPERTY OF THE CITY OF PORTLAND AND SHALL BE DELIVERED TO THE PUBLIC WORKS FACILITY ON OUTER CONGRESS STREET.
3. ALL DISTURBED AREAS THAT ARE NOT COVERED BY BRICK OR PAVEMENT SHALL RECEIVE 4" LOAM AND SEED.
4. COMMON BORROW SHALL MEET MDOT SPECIFICATION 703.18.



STATE STREET/PARK AVENUE CROSSWALK GRADING PLAN

1"=10'



60% SUBMISSION



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LDD PROJECT NAME:
N/A
DRAWING NAME:
2835.21-INT-DET.dwg
FIELD BOOK USED:
N/A

REFERENCES:

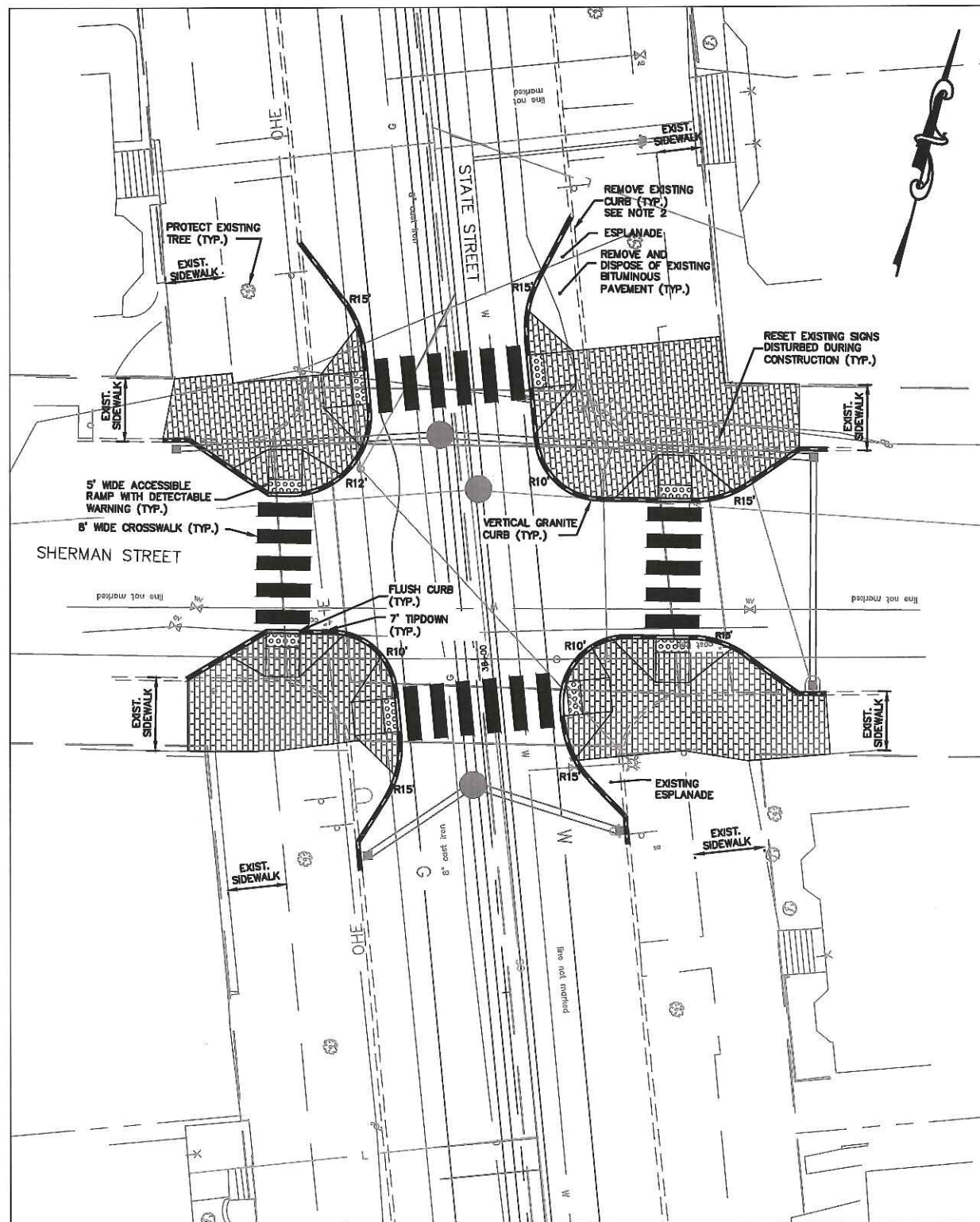
DESIGNED BY:	CC	DRAWN BY:	LAN	CHECKED BY:	WON	SCALE:	AS NOTED	DATE:	MAY 2016
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STATE STREET & MARGINAL WAY
SEWER SEPARATION
STATE STREET
CROSSWALK DETAIL

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING SECTION



SHEET #
30 OF 49
VAULT PLAN NUMBER

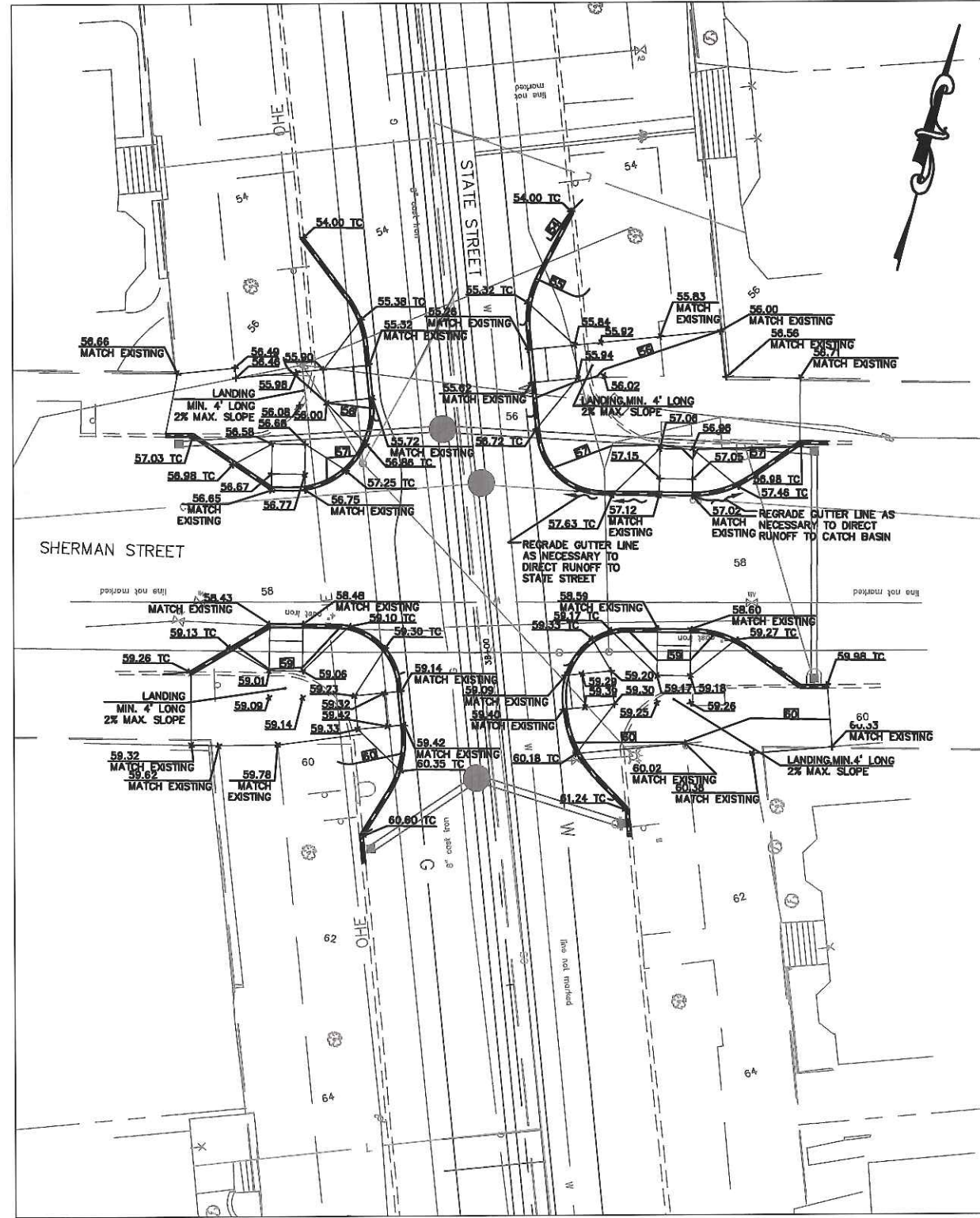


STATE STREET/SHERMAN STREET CROSSWALK LAYOUT PLAN

1"=10'

NOTES:

1. ACCESSIBLE RAMP SHALL MEET ADA STANDARDS:
MAXIMUM LONGITUDINAL SLOPE = 8.3%
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3. ALL DISTURBED AREAS THAT ARE NOT COVERED BY BRICK OR PAVEMENT SHALL RECEIVE 4" LOAM AND SEED.
4. COMMON BORROW SHALL MEET MDOT SPECIFICATION 703.18.
5. RESET RIMS OF ALL STRUCTURES TO REMAIN WITHIN NEW RAMP/SIDEWALK AREAS.



STATE STREET/SHERMAN STREET CROSSWALK GRADING PLAN

1"=10'



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LDD PROJECT NAME:

N/A

DRAWING NAME:

2835.21-INT-OCT.dwg

FIELD BOOK USED:

N/A

REFERENCES:

DESIGNED BY:	OC
DRAWN BY:	LAN
CHECKED BY:	WCH
SCALE:	AS NOTED
DATE:	MAY 2016

STATE STREET & MARGINAL WAY
SEWER SEPARATION

STATE STREET
CROSSWALK DETAIL

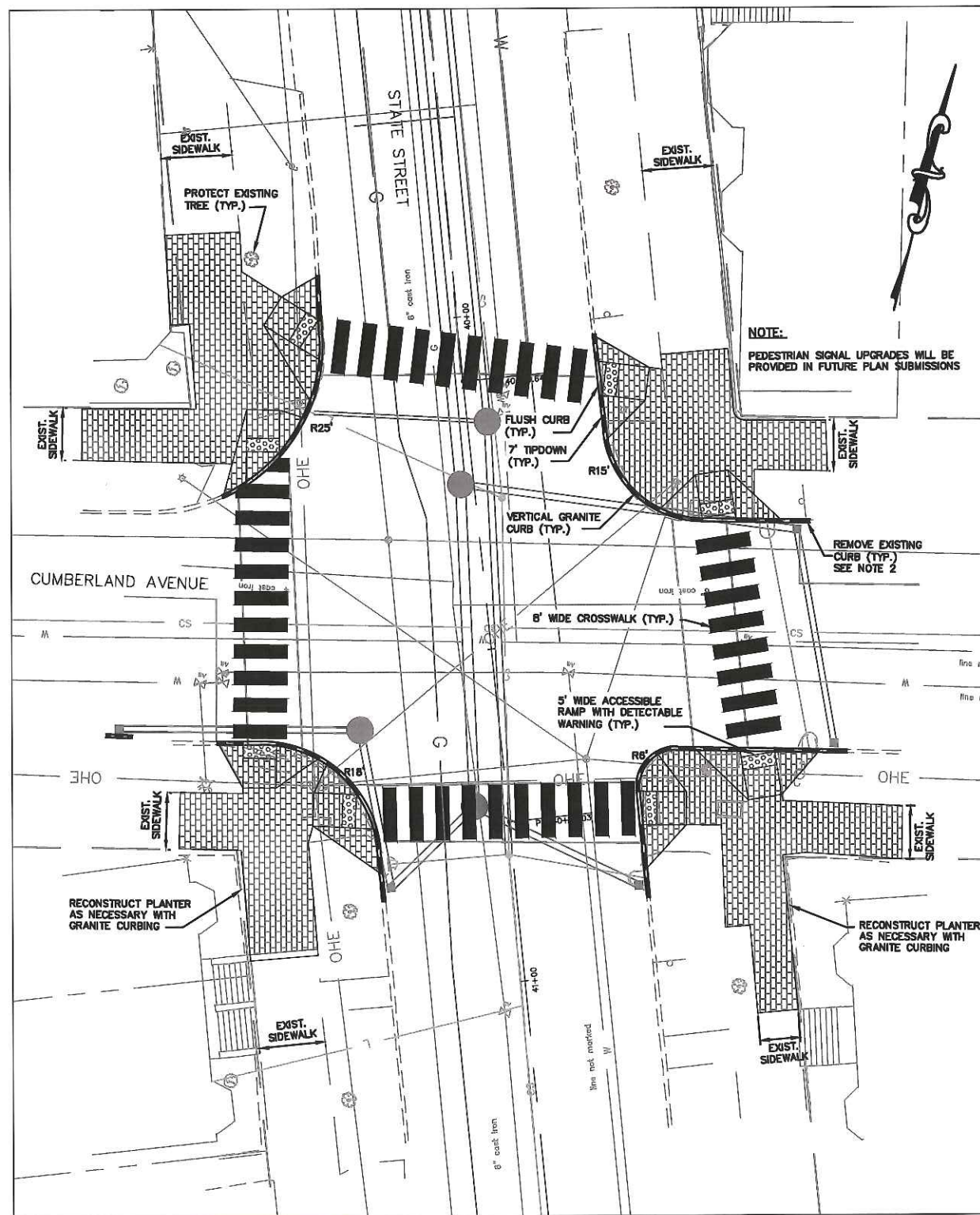
CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING SECTION



SHEET #

32 OF 49

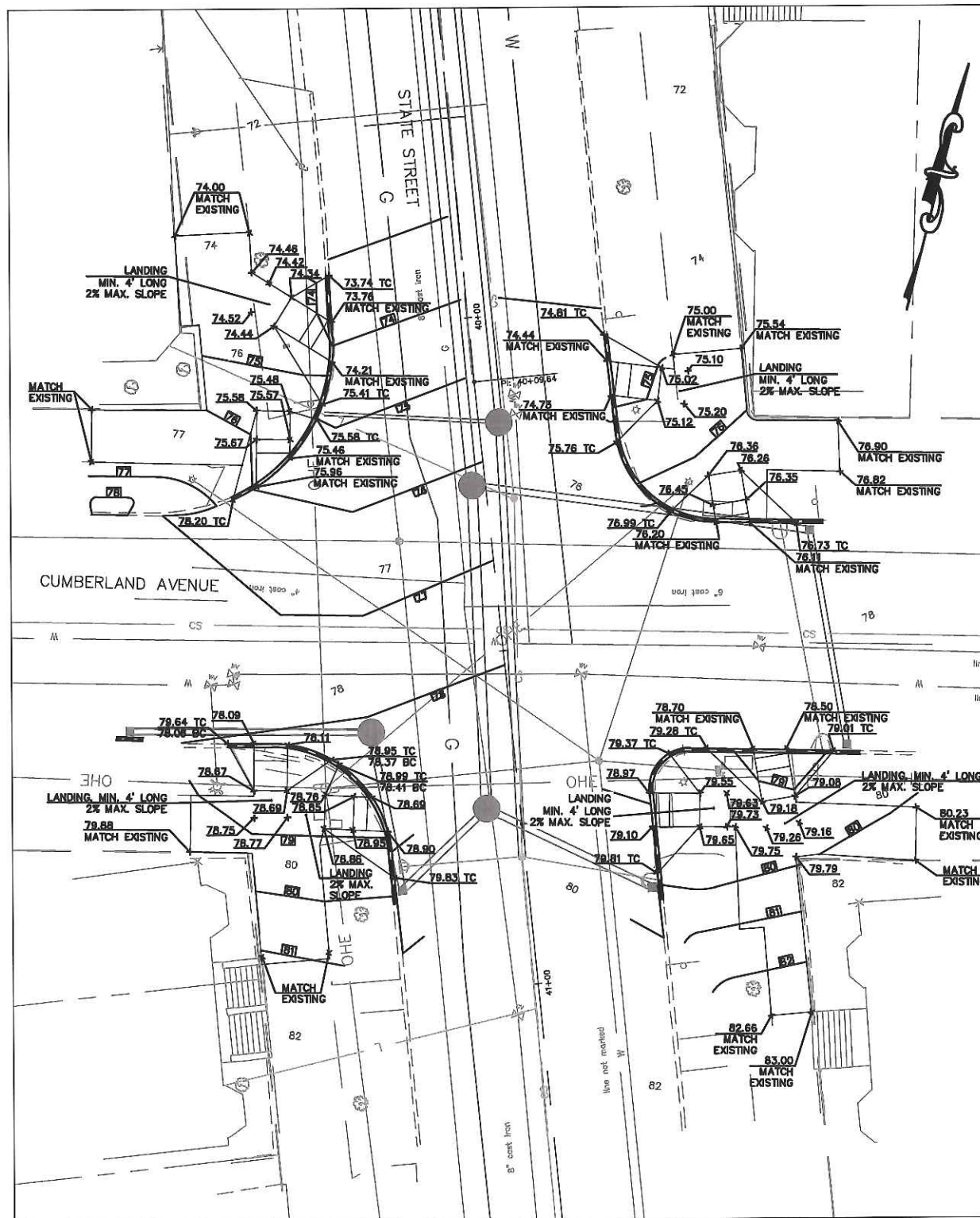
Vault Plan Number



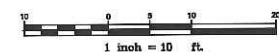
STATE STREET/CUMBERLAND AVENUE CROSSWALK LAYOUT PLAN

NOTES:

1. ACCESSIBLE RAMP SHALL MEET ADA STANDARDS:
MAXIMUM LONGITUDINAL SLOPE = 8.3%
MAXIMUM CROSS SLOPE = 2.0%
2. ANY CURBING REMOVED WITHIN THE RIGHT-OF-WAY IS THE PROPERTY OF THE CITY OF PORTLAND AND SHALL BE DELIVERED TO THE PUBLIC WORKS FACILITY ON OUTER CONGRESS STREET.
3. ALL DISTURBED AREAS THAT ARE NOT COVERED BY BRICK OR PAVEMENT SHALL RECEIVE 4" LOAM AND SEED.
4. COMMON BORROW SHALL MEET MDOT SPECIFICATION 703.18.
5. RESET RIMS OF ALL STRUCTURES TO REMAIN WITHIN NEW RAMP/SIDEWALK AREAS.



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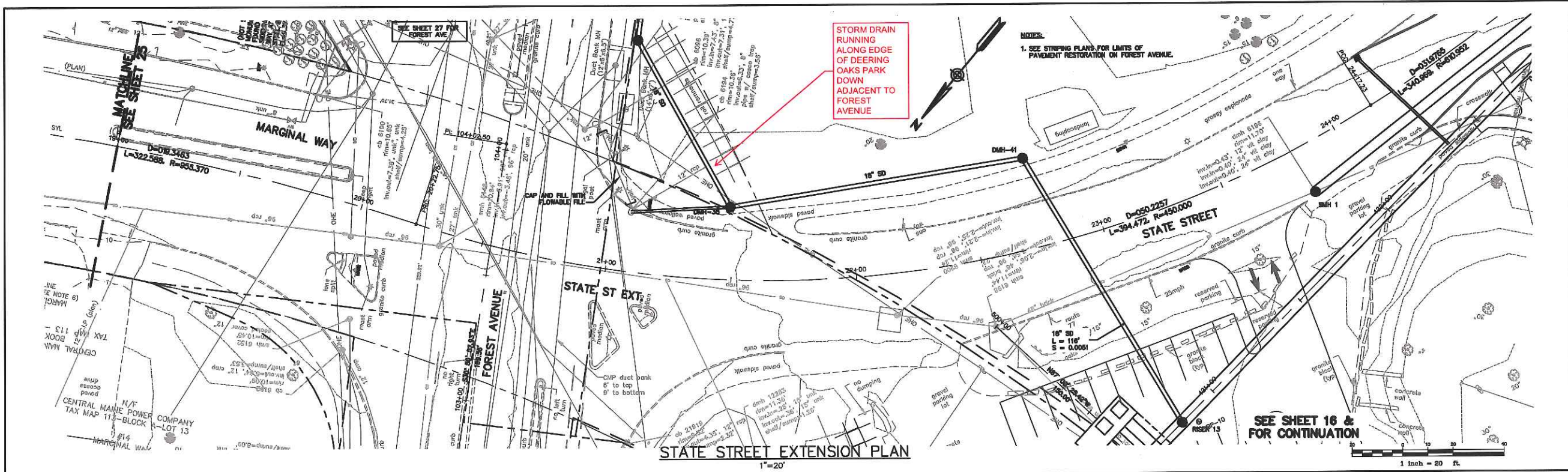
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CITY OF PORTLAND, MAINE
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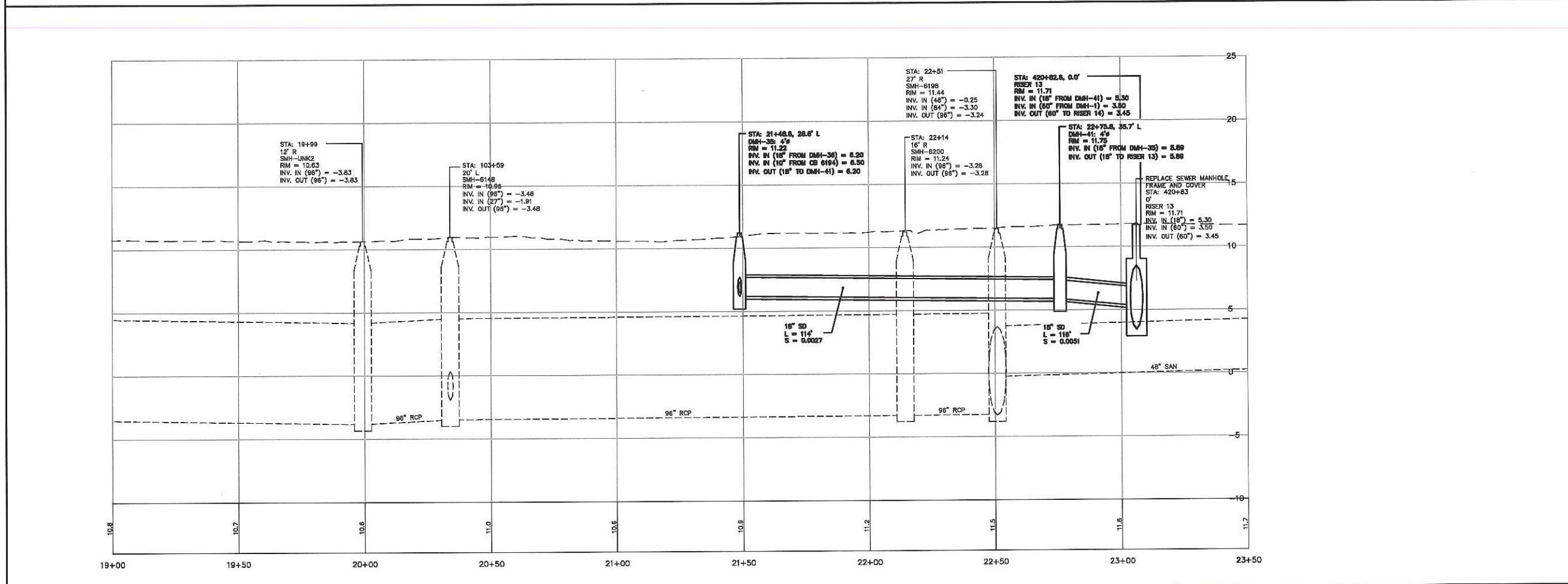
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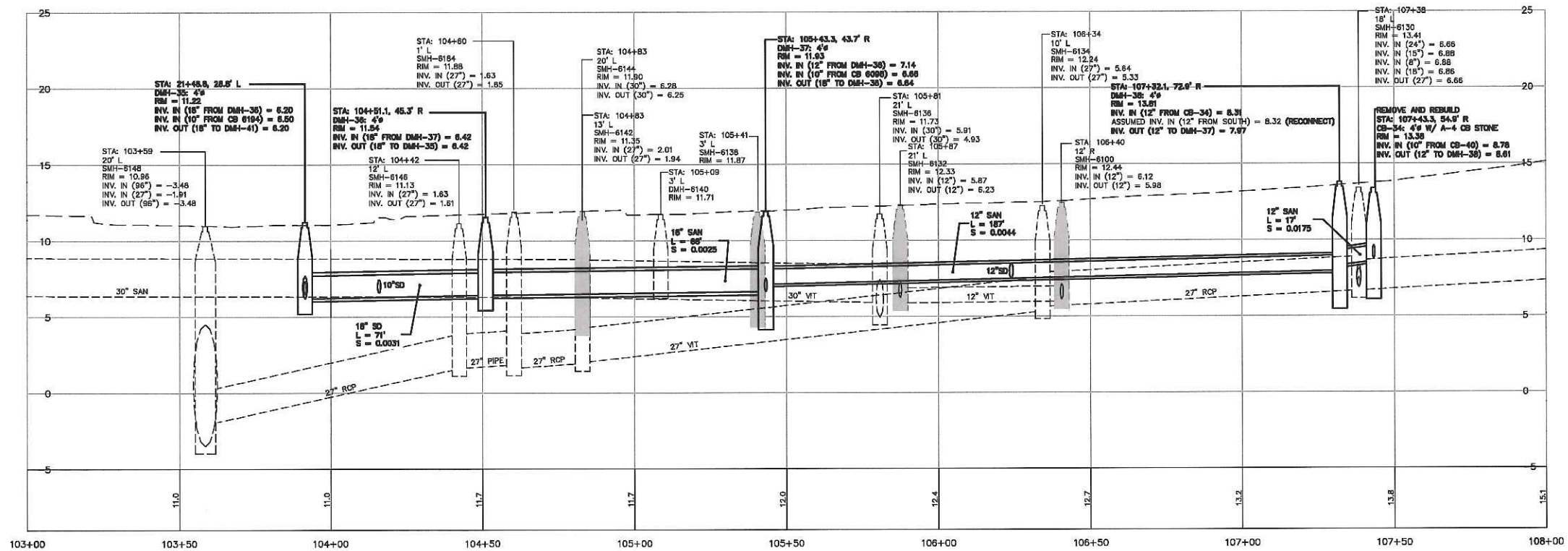
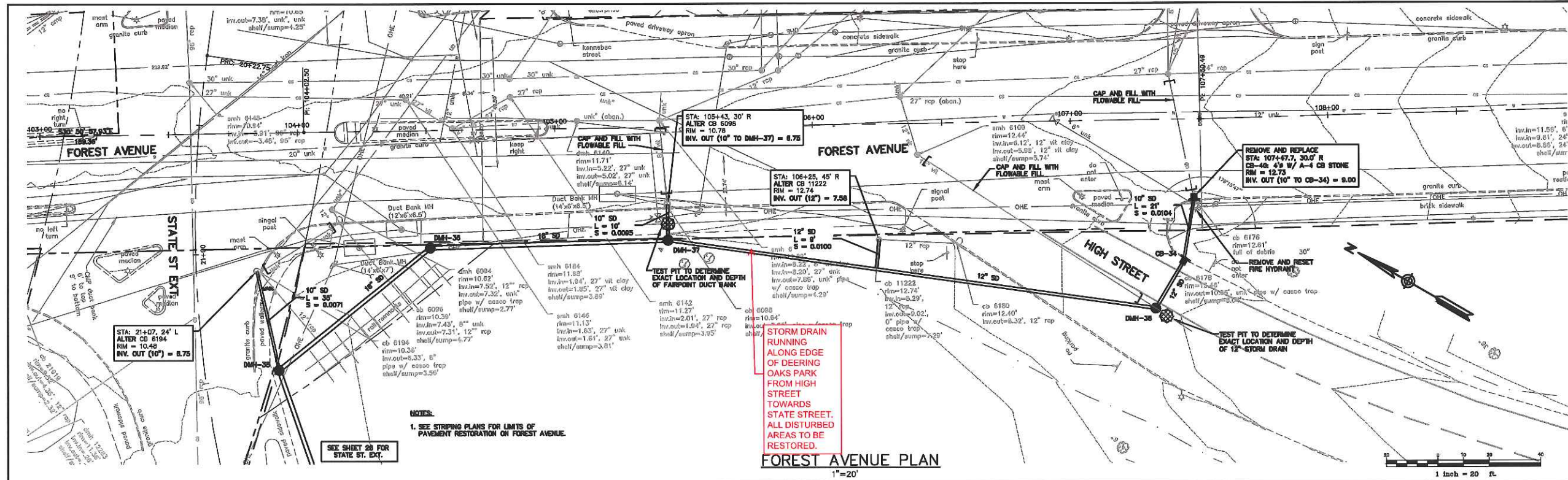
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CITY OF PORTLAND, MAINE PUBLIC SERVICES DEPARTMENT ENGINEERING SECTION	
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FIELD BOOK USED:
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LAN

CHECKED BY:
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SCALE:
AS NOTED

DATE:
MAY 2016

STATE STREET & MARGINAL WAY
SEWER SEPARATION
FOREST AVENUE
PLAN AND PROFILE

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING SECTION



SHEET #
27 OF 49

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STANDARDS: STREETSCAPE AND PEDESTRIAN IMPROVEMENTS

8

1. General

Retain the distinctive historic features of the streetscape, including walkways, alleys, lighting, signage, planters, landscaping, curbing, and paving that give the district its distinguishing character. Where streetscape or pedestrian improvements are proposed which were not historically a part of the site, such improvements shall be compatible with the existing historic character.

2. Pedestrian Amenities

- a. While pedestrian amenities must be compatible with the City's historic character, variations shall be permitted in order to respect the vitality and the variety of the City's different thoroughfares and neighborhoods.
- b. Different types of public spaces should respond to the following general performance criteria:
 - Historic commercial streets shall be treated simply with maximum open sidewalk space, limited obstructions on the ground, and pedestrian preference for street crossing.
 - Historic, non-commercial pedestrian streets and walks shall have a similar scale, more intimate design using textures and smaller elements that stimulate interest along the path.
 - Waterfronts were not typically pedestrian spaces in historic Portland but should be opened up to the public wherever possible due to their historic interest and value as a public amenity.

- Parking areas must be carefully designed and landscaped due to their large size and visual impact upon visitors and residents.

- Parks should play a special role in historic interpretation and provide day-time cultural activity for the District as well as relief from paved areas.

3. Streetscape

a. Paving and Planting

- a. The existing streetscape should be enriched, especially around historic buildings and heavily used pedestrian areas. Historically appropriate improvements should create some consistency while avoiding complete uniformity.
- b. Historic paving features should be retained wherever possible and incorporated into the streetscape improvements. For example, where brick sidewalks existed historically, brick shall continue as the material of choice.
- c. Subtle variations in paving patterns and materials shall be used to enrich sidewalks and plazas, such as highlighting patterns in street lights, trees, furniture, street crossings, and entryways.
- d. Planting shade trees and shrubs shall be encouraged where they would enhance the historic character and create more inviting spaces. Removal of healthy trees over 3" caliper shall be discouraged, except where they threaten existing structures or personal safety.

b. Street Furniture

- a. Placement of street furniture which is appropriate to the context, attractive, and durable shall be encouraged. Placement of furniture should be based upon careful study of how people tend to use a street.

c. Lights, Signs, and Traffic Signals

- a. Public signs shall utilize compatible graphics, colors, proportions, dimensions, and fabrication methods in order to create greater consistency and improve their compatibility with their historic setting.
- b. Street lights shall be designed to harmonize with their surroundings, and traffic signal poles and mounts shall be as unobtrusive as possible, both physically and visually.

Deering Oaks

Portland, Maine

Master Plan

Prepared for:

The City of Portland
Maine

May 1994

Consultants:

The Halvorson Company, Inc.
Landscape Architects and Master Planning Consultants

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Historical Summary

I. EARLY YEARS (1630s - 1879)

Colonial Town

Present-day Portland, which was originally part of the town of Falmouth, was one of Maine's early communities as it offered both a protected harbor and fertile land for farming. After initial settlement in the 1630s, the population grew steadily despite Indian attacks. By 1675 there were forty farms scattered around the peninsula. War with the Indians decimated the area for a few years but in 1678 peace was made, at least temporarily.

Among those returning to rebuild their homes was the Anthony Brackett family whose farm was located near what is now Deering Oaks. The Bracketts had been captured by the Indians but escaped to safety. A few years later, in 1689, Brackett's orchard was the scene of one of the fiercest battles of the French and Indian wars. In an intense six-hour battle, Major Benjamin Church defeated the 700 Indians but the following spring the community at Falmouth Neck was once again annihilated.

The 1690 Plan of Falmouth Neck shows a small settlement concentrated along the Casco River near the present old port. There are a few outlying farmsteads but Brackett's farm at the edge of Back Cove is the most remote. The layout or extent of the property is not indicated, although it was probably a small subsistence farm carved from the woods like most in Maine during this era. The area just south of the farmstead (now Deering Oaks) was heavily wooded and laced with inlets.

Once the Indian threat was eliminated, Portland grew rapidly because of its good harbor and abundant natural resources. Lumber was an important basis of the new prosperity, particularly supplying masts to the British Royal Navy. The American Revolution temporarily ended the town's prosperity as Portland actively sided with the colonists. In 1775 Portland was once again destroyed, this time at the hands of the British, who bombarded and burned the town. Nathaniel Deering, who opened the first store on Fore Street and helped construct Long Wharf after the disaster, was one of many who rebuilt the downtown area.

Growth of Portland

In 1786 the town of Portland separated from the rest of Falmouth and grew rapidly in the years that followed. Shipbuilding, lumbering, fishing and trade were its primary industries. By 1820, when Maine became a state, the population of the new town had reached 8,581. Along with the growing population was a dramatically changing physical form. Plans from the 1820s and 30s show the port area well developed and streets extending out towards what is now Western Promenade.

In 1832 the state capitol was moved to Augusta and Portland was incorporated as a city. By this time the population had grown to over 13,000 and Portland was a flourishing commercial center with the largest fleet on the eastern seaboard. Commercial activity centered near the old port while the western part of the peninsula was becoming a fashionable residential district.

The coming of the railroad in the 1840s further solidified Portland's role as a center of trade. The Portland and Rochester Line came in along the western edge of Back Cove, crossing the inlet near Green Street (Deering's bridge) before heading east towards a depot built on filled land at the south edge of Back Cove. In the 1850s gradual filling expanded the land further into Back Cove. By this time the New County Road running along the southern edge of Deering Oaks had been renamed Portland Street.

Early Parks and Civic Improvements

With Maine's statehood in 1820 came a new era of civic pride and a desire for public improvements. Mount Joy Hill on the eastern edge of the peninsula overlooking Casco Bay had long been popular as a common ground where citizens could go for scenic enjoyment. Portions of the area were acquired by Portland in 1828 "for the ornament of the town as well as for the health and pleasure of its citizens" (NR nomination). By 1837, the city recognized the need to preserve the dramatic scenic qualities of the site and constructed a pleasure drive which became known as Eastern Promenade. Similar improvements were made at Bramhall's Hill on the western end of the Portland peninsula, later known as Western Promenade. These two areas are early examples of preserved scenic landscapes. It is all the more remarkable that they were acquired by the city several decades before the creation of Central Park in New York and before Niagara Falls or Yosemite Valley became public reservations.

The third major public landscape in Portland was Evergreen Cemetery, established in 1854. Like Mount Hope Cemetery in Bangor, Evergreen was based on rural and romantic landscape ideals established at Mount Auburn Cemetery near Boston and was an important model for the design of public parks in the years that followed.

The fire of 1866 which wiped out much of the downtown area was the impetus for Portland's fourth major open space. Lincoln Park was created partly as a fire break and partly as a "promenade park, the object being less to display beautiful scenery but primarily afford an opportunity for fresh air and ample uninterrupted promenade." (Gardens of Municipal Intercourse) The design of the 2.49-acre park by City Engineer Charles Goodell was far more elaborate than Portland's earlier parks, with curving tree-lined paths, a central fountain and ornate granite and iron perimeter fence.

Deering's Oaks

Anthony Brackett was the first known settler of the Deering Oaks area. His family farmed the area immediately north of the Oaks during the late seventeenth century. Even at that time, the area south of the inlet was known for its mature trees. By the 1820s the Deering family owned the former Brackett farm and had built a bridge across the inlet, known as Deering's bridge. At that time the Deering's Oaks area was roughly circumscribed by Green Street (with bridge) and Back Cove at the east; the inlet and the farm at the north; a street which corresponds with the present Deering Avenue at the west; and Cumberland Street at the south. Other features in the vicinity included the alms house and powder magazine to the west and a ropewalk near Deering's bridge. By 1831 the New County Road (present Park Avenue) had been built, further defining the southern boundary of the area.

An 1843 plan of James Deering's farm, the first detailed depiction of the area, shows roads, farm buildings, orchards, gardens and fields located north of the inlet (which by this time was known as the Mill Pond). The stone bridge was also a dam to harness the tidal power of the inlet for the adjacent mill. The Mill Pond itself consisted of two arms, a longer northern arm (which extended through the site to connect with a small stream which drained the area to the west) and a shorter southern arm. There were extensive tidal flats along the edges of the pond and between the two arms was a densely forested area -- the site of the famous oaks.

The 200-acre Deering homestead was described in Nathaniel Deering's obituary. "Its broad, park-like appearance, its multitude of gigantic oaks, well kept and elegant buildings and grounds are said to compare favorably with any similar establishment in the United States in the immediate vicinity of a city. It is remarkable for its spreading oaks of monstrous size. The white oak is of very slow growth and some of these of from twelve to fifteen feet in circumference must have been at least two centuries (old). The margin of each of the original roads through the estate is ornamented with elms of 75 years growth, while the fruit trees of all kinds are almost without number." (date unknown, Maine Historical Society, Deering/Noyes Collection, File 951)

By the mid-nineteenth century, Deering's Oaks was the largest undeveloped open space near Portland and a dramatic remnant of Maine's primeval landscape. At a time of growing urbanization, when wilderness and natural scenery were nostalgically romanticized, this large tract of forest so close to the city was a popular destination for outings. Although still privately owned, it was known to all Portland residents and functioned almost as a public reservation. Henry Wadsworth Longfellow, in his poem "My Lost Youth", was one of many to sing its praises when he wrote of "the breezy dome of

Deering's woods". In the 1850s the city, recognizing the importance and potential of the area, proposed to buy the property but the offer was refused.

II. GOODWIN'S DESIGN (1879 - 1893)

Public Ownership

Although the city's earlier offer to purchase Deering's Oaks had been refused, in 1879 the heirs of James Deering (Nathaniel and Henry) donated their interest in the Oaks to the city of Portland to be used as a park forever on the condition that taxes on their other property would not be increased for ten years. The remaining interest in the Oaks was acquired from the heirs of Mary Preble for \$9,000. The total acreage of the new park was 44.62 acres. (Annual Report 1905, NR Nomination)

The land acquired by the city was bounded on the south by Portland Street (now Park Avenue); on the west by Grove Street (Deering Street); on the north by the Mill Pond embankment with the Mill Pond and the town of Deering beyond and on the east by industrial land including the Casco Tannery with Green Street (Forest Avenue) beyond. Recommendations were made immediately that the industrial land be acquired to fill out the park and remove intrusive uses but this took many years to accomplish.

Several factors influenced Portland's interest in the Oaks. One was the growth of the city, which by the 1870s, occupied most of the peninsula with little open space remaining. Another factor was the Oaks themselves, long recognized as a local landmark and a place of recreation and inspiration, a vestige Maine's natural scenery. External influences were important as well. In 1858 New York's Central Park established a precedent for naturalistic urban parks. In 1870 Frederick Law Olmsted, one of the creators of Central Park, visited Boston and spoke eloquently about "Public Parks and the Enlargement of Towns", later moving to Boston to design the park system there. Olmsted envisioned idealized natural scenery which could provide a healthful setting where urban residents could go easily to escape the pressures of daily life. Olmsted's partner for several projects was Calvert Vaux, an English-trained architect who visited Portland in 1878 at the request of the mayor to advise on the city's parks.

Vaux, who shared many of Olmsted's ideas, undoubtedly influenced the thinking of City Engineer William Goodwin. After attending Saco Academy and Bowdoin College, Goodwin worked as a surveyor and engineer for the railroads before joining the U. S. Lighthouse Service. From 1872 to 1892 he served as Portland's City Engineer with responsibility for maintaining and improving the city's streets and public grounds. Shortly after Vaux visited Portland, Goodwin was charged with making improvements to Eastern and

Western Promenades and drawing up a plan for Deering Oaks. At the time the profession of landscape architecture was not well-established, so engineers or architects were often called upon to design parks, particularly those like Deering Oaks which had specific technical problems.

Design Concepts

Goodwin's 1879 plan for Deering Oaks followed the naturalistic approach favored by Olmsted, Vaux and many other nineteenth century park designers. A major goal was to preserve the natural beauty which already existed rather than to superimpose a formal design on the landscape. The oaks themselves were the most important feature of the design. Goodwin recommended that "No tree should be cut even in trimming, without a deep sense of responsibility and earnest conviction of necessity" (Auditor's Report 1880). Other important features included a circulation system designed to accommodate both pedestrians and carriages, and a four-acre pond created from the tidal flats.

An early public concern regarding the donation of Deering Oaks was that substantial public outlay would be needed for improvements. Goodwin argued otherwise and urged caution, recognizing that implementation of his design would have to be phased over many years. He also stressed the importance of an overall plan to provide continuity and urged that the plan be approved by the city council to prevent undue influence by special interest groups. His arguments regarding the proposal for a parade ground at the corner of Grove and Portland Streets are reminiscent of those used by other nineteenth century park designers who sought to preserve the integrity of a design. Goodwin felt that there wasn't enough room for a parade ground and insisted that it was better to have trees and shrubs which would be enjoyed every day than a parade ground which would be used only a few days of the year and would otherwise be a wasteland.

Goodwin also made a distinction between the natural scenery of the Oaks and a park. "The name 'The Oaks,' or 'Deering's Oaks,' for this public breathing place, seems to have become well established. It is scarcely ever termed the 'Park,' and is a name so much fitter and better than the latter that special care should be taken to retain it. The place can probably never become a park with expensive park-like structures and accessories, but will always be 'the Oaks' whatever may be done in or about it." (Report of City Civil Engineer, 1881).

Goodwin's ideas regarding reservations (although he did not use the term) as opposed to parks reflected the thinking of progressive park designers of his time. The concept of preserving remote areas of natural beauty was well established by the 1860s but creating reservations closer to urban centers was not common until the 1890s. Waverly Oaks, a similar site near Boston, was publicly acquired in 1893.

Drainage and Hydrology

Along with preservation of the trees, drainage and sanitation were among the first issues to be addressed in Goodwin's plan. Soon after the land was acquired by the city, a trunk sewer was constructed from Grove Street, along Portland Street to the foot of State Street and then through the Oaks to a point just beyond the bridge on Green Street, allowing the sewage to flow through a closed, underground drain into Back Cove rather than through the open Mill Pond to the north.

As the sewer ran northeast from State Street through the Oaks, it also served as a dam, retaining the water to the west and transforming the tidal flats into a pond. By 1880 the pond was beginning to fill and the area was already in use even though construction was not complete. Each night 300,000 gallons of water from the Sebago Reservoir ran into the pond through a pipe at the head of the Mellen Street Cove (Auditor's Report 1880). Goodwin hoped that springs at the head of the pond, together with rainfall would keep the water sweet during the summer months. If not, the water could be drawn off at any time through the sewer by opening the tide gate. He only hinted at the difficulty of transforming a tidal area into a freshwater zone. "The pond . . . will be much improved when the flags, root and all, which infest it, shall have been removed." (Report of City Civil Engineer 1884).

The pond edges were derived from the natural shape of the land as it appeared on maps going all the way back to 1690. The western and southern edges were a series of small coves and embayments with the longest at the north, dividing the park area almost in two and a second major embayment at the head of Mellen Street. The northeastern edge was more rectilinear with a small peninsula (again an echo of earlier forms) jutting out into the pond while the eastern edge was largely straight, created by the man-made dam.

At the northeastern corner of the pond "A bank wall of ledge stone laid in cement with granite coping has been built around the cove . . . being 102 feet long." Goodwin thought this would be useful as a boat landing in summer and a gathering place for skaters in winter but urged against extending it, arguing that it was expensive and "does not compare in symmetry of appearance with green sward coming down to the water's edge, fringed at salient points with willows and other waterside trees and shrubs." (Report of City Civil Engineer 1884) A curved pipe rail was set around the cove at the foot of the pond.

From the beginning the westerly ravine was a problem. Even though there was a spring, there was insufficient water flow to create the effect that Goodwin intended. His plan shows a fountain, visible from the major entrance at Portland and Grove Streets and then a series of dammed pools

stepping down to the main pond. Edge treatment in this area was to be more naturalistic with steep slopes and heavy plantings. Photographs from the late 1880s show some natural forest understory along the slopes of the gully but other areas bare and eroded, particularly at the water's edge. This is not surprising given the dense shade and intense use. In his 1884 report Goodwin stressed the importance of making improvements to this area, "Details of the improvements of this gully are shown on the Oaks plan which at no great expense would form striking features of the landscape." (Report of City Civil Engineer 1884) He also suggested that the water supply be fed in at the head of the ravine rather than at Mellen Street.

Circulation

Goodwin's circulation system was designed to provide "driveways and foot paths enough for convenience of ingress and egress in four directions." (Auditor's Report 1880) Like other park designers, he carefully separated pedestrian circulation from carriage traffic and created winding routes which provided passages of scenery through the area as well as connecting more formally with the city street system. He had entrances at the four corners of the park although he felt that the southwestern corner would become the main entrance. An 1887 photo reveals the rough, undeveloped character of the area, and illustrates Goodwin's vision in designing a grand entrance for the city which later grew up around the Oaks.

Marginal Way, which followed the alignment of the railroad embankment, was designed to serve as the northern edge of the park and to connect Deering Oaks with Portland's other parks. Goodwin wrote "The circuit of our public grounds, beginning with either Promenade and thence passing through our shaded streets and the Oaks to the other Promenade, affords a variety and natural beauty of scenery to be found in but few cities of the country." (Auditors Report 1881) Once again he showed unusually sophisticated thinking in attempting to create not a single park but a park system linked by parkways as Olmsted and others were doing in Boston and other large cities. Although other sections of Marginal Way were built, the portion north of Deering Oaks, with its central fountain and tree-lined drives was never constructed.

By 1881 the dam embankment north of State Street had been raised three feet and graded to a width of twenty feet, making a carriage road along the eastern edge of the pond. Goodwin's efforts to preserve trees were even reflected in the alignment of the road, which divided in several places to accommodate existing trees. He wrote, "The motive here is a rural drive such as is found among our suburban woods. There is not enough of upland at that place for a broad drive, and the trees which must have been destroyed to make room for such a roadway are surely of much greater value than a strip of rolled gravel

or macadam however broad and smooth." (Report of City Civil Engineer 1881).

The same year two temporary foot bridges were constructed across the ravine and several additional drives were built through the woods on the northern side of the pond. The earliest photos show very simple wooden bridges but by 1887 a three-arched wooden bridge was built over the northernmost gully near the pond with vertical slatting and a diagonal railing.

Vegetation

In the nineteenth century, the white oaks which comprised the Deering Oaks were magnificent trees, some as much as 12 to 15 feet in circumference and 200 years old. Goodwin recognized that "The crowning glory of the oaks will always be the "breezy dome" of the old woods, to which the elms and beeches and birches, the maples and evergreens and shrubbery can never be much more than an ornamental fringing." (Auditors Report 1880) His plan shows the oaks as a dark, densely planted mass occupying most of the western portion of the site, intersected at several points by pond embayments.

Along the southern and northern edges of the park, trees and shrubs of diverse species were to be massed in groups according to the picturesque style. This created a more open park-like landscape, a transition from the formal city edge to the wilderness-like oaks. It was also a more diverse planting, with primarily deciduous trees and shrubs but some evergreens scattered for effect.

Goodwin proposed two areas of open lawn. The major one was located on the peninsula immediately north of the pond near the bandstand, while the other was at the western edge of the park, along Grove Street. The final type of planting that Goodwin proposed was rows of evenly spaced trees along the perimeter of the park and at the edges of the major carriage roads. In 1880, sixteen trees were planted. The following year the number grew to fifty trees planted, including elm, ash, bass, maple, hemlock and birch, most of which were along the embankment drive north of State Street. Diverse species were deliberately selected to see which types were best suited to the locality.

Goodwin's initial plan was conceptual and did not show planting details. Other than the rows of trees, the only formal planting appears to be near the fountain at the southwest entrance. However, despite his efforts to stress preservation of natural scenery and to differentiate between the Oaks and formal parks such as Lincoln Park, by 1887 three beds of coleus had been planted near the bandstand.

Structures

In keeping with the idea that Deering Oaks should not be a formal park but should remain a natural area where citizens could go for tranquility and relief from the city, Goodwin recommended only a few structures. The largest was the bandstand located north of the pond near the central lawn area. This was built in 1883 and appears in photographs a few years later as an octagonal wooden structure with a shingled roof and decorative railings. It was set at the edge of the woods with a few simple wooden benches scattered around. From the first year, evening concerts were popular.

Another structure shown on Goodwin's plan was the duck house located on an island in the pond. This small building, designed to resemble a miniature house, was built in 1887 to provide a home for water fowl, a popular attraction of the area. Benches (called seats) were put in early on, most were simple wooden structures located near the pond.

Of the three fountains that Goodwin proposed (at the intersection with Marginal Way, at the head of the ravine and in the pond) only the latter was apparently built. Constructed in 1887, it was a major focal point of the pond. It was initially a multi-tiered cast iron basin and was much photographed, often in conjunction with the duck house.

Design and Management Evolution

When Deering Oaks was acquired by the city in 1879, responsibility for cemeteries and public grounds fell to a committee which was appointed annually. In 1885 Portland was authorized by the state legislature to appoint a Board of Commissioners to assume this responsibility. The trend from committee to commissioners reflected the higher priority of open space and the need for stronger management and a more consistent vision. The condition of the city's parks and cemeteries was seen as the "thermometer that registers the degree of refinement and culture of the individuals that compose the community." (Annual Report 1885-6) Parks and cemeteries at that time consisted of Eastern and Western Promenades, Lincoln Park, Deering Oaks and Eastern, Western and Forest City Cemeteries (Evergreen Cemetery was administered separately).

Interest in Deering Oaks, the newest and largest of the city's parks, remained strong through the 1880s with Goodwin actively involved in overseeing improvements. In winter the ice was cleared so the pond could be used for skating. In summer, various amusements were provided including a gondola, swan boats, row boats and band concerts. By 1889, the appropriation for Deering Oaks was \$3,150, over half of the city's total parks budget.

One unresolved issue was the condition of the ravine where Goodwin had proposed two waterfalls with a pool above each dam and a fountain at the head, with a spring providing the requisite water. One of the dams was built in 1889 in the hopes of creating the desired effect. Goodwin realized, however, that there might still be a problem with water supply and suggested that the Sebago supply pipe discharging at the foot of Mellen street might need to be removed to this location so that "the water would reach the pond over these falls, adding a feature of liveliness to the quest for beauty of the landscape." (Report of City Engineer 1889).

Another problem that arose in 1889 was a railroad spur proposed along the northern edge of the Oaks where Marginal Way was supposed to have been. Over the opposition of park advocates and property owners, the railroad line was constructed. Some exchanges of land were made to allow the new line to become the northern boundary of the park. The filling which accompanied the construction of the railroad embankment prevented the escape of pollution into Back Cove. By 1891 the creek north of the Oaks was deemed "a huge cess-pool . . . a great receptacle for feculant waste" by the Deering Board of Heath. (Maine Historical Society, Deering Noyes Collection, File #951)

III. BAXTER/OLMSTED IMPROVEMENTS (1893 - 1905)

Baxter's Vision for Portland Parks

William Goodwin retired as City Engineer in 1892 after a twenty-year tenure. His influence on Portland's parks, especially Deering Oaks, was great and his vision was remarkable. Many of his ideas were shared by James Phinney Baxter, a wealthy and influential businessman who was elected mayor in 1893. Baxter had made his fortune as a young man and devoted most of his later life to enhancing the quality of life in Portland, donating a public library and founding other civic institutions.

One of Baxter's greatest achievements was the enlargement of Portland's park system. When he became mayor, Portland's parks consisted of Eastern and Western Promenades, Lincoln Park, Deering Oaks and several smaller squares. By the time he left office in 1905 there were nine parks with a total area of 106 acres. Deering Oaks comprised 51.02 acres or nearly half of this. In the decade that followed, the total grew to 181.97 acres as many of Baxter's plans were implemented.

Baxter envisioned the major parks linked by an arborway such as Olmsted had created in Boston. He recommended acquisition of privately-owned land at Eastern and Western Promenades to protect important views. He pointed to Lincoln Park, built after the great fire of 1866, as the "best exhibition of wise enterprise which Portland has ever made" (Mayor's Address 1895) and

Deering Oaks as "one of our chief prides" but still "capable of annual improvement" (Mayor's Address 1894). His primary goals for Deering Oaks were acquisition of the industrial land to the east and connection with the other parks.

Baxter's greatest interest, and ultimately his greatest accomplishment with regard to Portland's parks, was the construction of a boulevard around the cove. In 1895 he hired the firm of Olmsted, Olmsted and Eliot to prepare a plan for Back Cove including drainage and sanitary improvements as well as the boulevard. The obstacles were formidable as the land around the cove was privately owned and funds were not available for its purchase. Ultimately the project became a political issue which resulted in Baxter's losing the election in 1897.

In 1904 Baxter was once again voted into office. He promptly hired Olmsted Brothers to prepare a comprehensive plan for the Portland park system. Part of the mandate was to develop a scheme for connecting the major parks. Detailed plans were also drawn for the two promenades and for Back Cove with an overall plan showing the connections between the parks. Baxter himself wrote the 1905 report and was obviously the driving force behind the project. He even took Portland's park commissioners to Boston at his own expense to see how parks and parkways had been created there.

Baxter and the Olmsteds envisioned Deering Oaks as a gateway to the city from Union Station to the west. The boulevard connected with the park at its northwest corner and then headed north before turning east towards Back Cove. A broad swath of greensward extended west from the park where the city almshouse had been (site of present stadium). Trees were also proposed along Portland Street, another major route into the city from Union Station and the southern boundary of Deering Oaks.

Some of the plan was implemented immediately but other proposals, especially for Back Cove, were deemed an extravagance and put aside after Baxter lost the election of 1905. However, even that project gained momentum over the years and was eventually built. In 1921 Baxter was in the first car to travel the boulevard which was later named after him.

Deering Oaks Improvements

While Baxter saw Deering Oaks as largely complete, he felt that there was still room for improvements. Among the first of these to take place during his tenure was construction of the carriage road along the southern edge of the pond. This had been proposed in Goodwin's plan but had not been built. Initial survey work was done in 1894 with the 18-foot road built the following year.

A decade later, in 1904, the cove at the head of Mellen Street was filled in because the water in the area was shallow (presumably indicating that the water supply had been disconnected or relocated) and the banks steep and eroding. A curved retaining wall was built about thirty feet from the mouth of the cove and the area behind it filled, eliminating the need for a bridge. "The loop at the foot of the pond formerly spanned by the rustic bridge was filled in and made a part of the driveway at that point. This work was made necessary by the increase in travel for pleasure through this park. This roadway at this point has been badly congested, and by this improvement the driveway was widened about thirty feet, giving ample room for carriages and pedestrians" (Annual Report 1904).

In 1894 the park also got its first major structure with the addition of a waiting room north of the pond. It had not been in the original plan but as use of the area grew, it was soon deemed necessary, particularly in winter as a warming hut for skaters. Frederick Tompson of Portland was the architect. The Park Commissioners were very proud of the new building but also took care to indicate that many of the materials and much of the labor had been donated and thus the cost to the city had been minimal. Restroom facilities were added in a separate wing in 1908.

In 1898 a formal gateway was completed at the northern entrance on Grove Street where the connection with the boulevard system was proposed. The entrance has been described as a central vehicular drive "flanked by pedestrian walkways, delineated by paired, square, random ashlar blocks with a solid granite cap. A wing wall of the same design as the piers, approximately 3 feet high and 3 feet wide connected to the outside pier curves in a quarter circle terminating at a matching granite pier." (NR nomination)

Maintenance and general upkeep continued as well, with public expectations increasing as the city became more urban and sophisticated. The stone wall around the pond was extended by a few hundred feet a year; filling was constantly taking place to eliminate poorly drained areas; roads and paths were improved; trees, shrubs and flowers were planted; buildings and bridges required ongoing maintenance; and benches were added. The pond continued to be a problem with algae and invasive weeds periodically choking it. In 1904 the bottom was thoroughly cleaned but a few years later the problem returned.

Another feature added in the late nineteenth century was the deer park, a small paddock where urban children could be exposed to wildlife. It was mentioned in 1895 when two deer and two pair of pheasants added. In 1900, a new deer park was completed on the north side of the park and the site of the old one near the State Street entrance was regraded. In 1903 the area was mentioned in the city's annual report. "While there are a few changes in the makeup of the small zoological display in Deering's Oaks, it continues to be

an ever-increasing source of pleasure to the patrons of this park, who come there for recreation, and no part of the park is more thoroughly appreciated." (Annual Report 1903) Seven prairie dogs were donated in 1907. The deer park was apparently phased out a few years later when the area it had occupied was converted to a playground.

State Street Entrance

William Goodwin wrote in 1881 that he thought the southwest corner would be the primary entrance to the park but as the city evolved, he also recognized the importance of the State Street entrance. In 1886, when the Commissioners of Public Grounds were newly established and there was strong interest in civic improvements, Goodwin was asked to draw up plans for a formal State Street gateway. Nothing was built at that time but the idea persisted. In 1897 the Commissioners hired architect F. M. Blaisdell to design a monumental gate but the bids were too high so the design was not implemented. In 1902 the issue of a formal entrance came up again, largely the impetus of abutters who had been instrumental in getting a \$2,000 appropriation for the project.

John Charles Olmsted of Olmsted Brothers was called in March 1902 to advise on the landscape treatment of the area. He was outspoken in his criticism of the proposed project saying, "A Gateway is essentially a hole in a fence, and as they now have no fence, the very first thing to do is to determine whether they were going to have a fence, and if so, what kind of a fence, and then they could judge what kind of an architectural display would be appropriate for the gateway." As no one was interested in a fence he judged it "wholly irrational and in bad taste to put up an elaborate and expensive gateway with big brick posts." (Olmsted Collection, Library of Congress, File 1862, Notes by JCO March 21, 1902).

Olmsted suggested landscape improvements instead, including grading, macadamizing, seeding and planting. When this was deemed inexpedient in light of the source of the funding, he suggested a handsome shelter to the right of the entrance area. Initially there was some interest in the idea but ultimately it was rejected in favor of the gates. Once the columns were inevitable, Olmsted consented to make recommendations for the landscape treatment of the entrance. He suggested regrading to eliminate steep slopes, realigning roads and paths, and planting shrubbery on the slope to the left of the State Street entrance.

In 1903 the granite columns which Portland architect Frederick Thompson had designed for the State Street entrance were completed. The following year ornamental electric light fixtures by Winslow Bros., of Chicago were installed on top of the columns. The Park Commissioners wanted to make this entrance "the most attractive of any in the City" (Annual Report 1903). Landscape improvements continued in the years that followed.

In addition to his comments on the proposed gateway, Olmsted was critical of condition of the park. His detailed notes reveal the park through the eyes of a skilled designer with paths too narrow and too low, too few shrubs, pond too shallow and with unnatural wall around it. He lamented "they must still further artificialize the park as seems almost inevitable, to suit the public taste" (Olmsted Collection, Library of Congress, File 1862, Notes by JCO March 21, 1902).

IV. TWENTIETH CENTURY (1906 - 1993)

Evolving Landscape

As Olmsted had noted, by the early twentieth century Deering Oaks was no longer the rustic reservation that Goodwin had envisioned. Like the city around it, the park had evolved with the times, growing more formal in response to changing landscape ideals and the demands of intensive use. However it continued to fill an important need in the life of the city.

"Deering's Oaks, from its retirement, still continues to be a resort for family parties and people of quiet taste. Its beautiful and lofty oaks, rustic bridges and the refreshing view of the pond and fountain are appreciated more and more by the ever-increasing number of people who enjoy them" (Annual Report 1906).

Formal entrance gates were created first at Deering Avenue (1898), then at State Street (1903) and later at Forest Avenue. The quality of the roads also changed, with those originally designed for carriages gradually widened and straightened to accommodate automobiles with their higher speeds and wider tires. The volume increased as well with many more people travelling for pleasure by the 1920s. Initially roads had been gravelled with little grading of the roadbed. Gradually they were improved with compacted sub-base, curbs or cobbled gutters at the sides and catch basins where needed. Surfaces were oiled in the early twentieth century and later macadamized. Lights were added along the State Street extension in 1918, reflecting the importance of this roadway to the city's overall circulation system. Paths, initially of compacted earth, were crushed cinders for a time and later crushed stone.

The shape of the land evolved too, from a natural area with rough, irregular topography to a carefully shaped landscape with a more finished appearance. The low area on the Larrabee lot near the State Street entrance (which had originally been a marsh) required substantial filling in the early twentieth century. One of the largest projects took place between 1905 and about 1912 as large areas at the northwestern edge of the park were filled to create recreational land. During 1909 alone, more than two acres was brought up to grade using donated fill material.

Although the pond retained its basic shape derived from the natural configuration of the land, it too changed. The process of building a low retaining wall around the edges which was begun during Goodwin's tenure (and somewhat over his objections) continued through about 1910 at which point the heavily used northern and eastern edges were defined by walls, as was one of the small coves on the south side of the pond (see 1937 plan for extent of wall). The remainder of the southern edge and the ravine continued to have natural earthen edges although some of these had steep slopes which presented a problem, particularly in areas of heavy use. The cove near Mellen Street was partially filled in 1912 with additional grading in 1929.

Maintaining good quality water in the pond had been a problem from the beginning. By 1908 an unusually abundant growth of algae once again made the surface unsightly and impaired the boating. In 1911 the pond again had to be dredged and cleaned. In 1912 a four-inch water supply was installed at the head of the ravine to provide continuous supply of running water, a solution that Goodwin had suggested some years earlier. The Annual Report described the effect. "The water enters the ravine over an artificial rock bottom and flows into the high level pond and over the dam into the main pond" (Annual Report 1912). In 1911 the wooden bridge over the ravine had been replaced by an arched concrete bridge designed by W. O. Thompson, the Parks Department engineer. In subsequent years, gold fish were stocked in the small pond and the slopes of the ravine were planted with shrubs and vines. Planting here was difficult to maintain from the start and had to be done again in the 1930s.

Attitudes about horticulture were one of the biggest changes between Goodwin's ideas about Deering Oaks and those of the early twentieth century. The oaks themselves were the subject of considerable concern. They had declined seriously since the park was established (possibly weakened by an epidemic of brown-tailed moths) and a great many had to be removed. Between 1910 and 1915 over 500 new oaks were planted with more in the years that followed. These are largely what exists today. Between 1915 and 1917 over 300 weeping willows were set out around the pond, few (if any) of which remain.

While Goodwin had worked with a limited palette of trees, primarily native, and very few shrubs and flowers, by the early twentieth century there many new varieties available and the city nursery and greenhouse were producing large volumes of trees, shrubs and flowers for use in the city's parks and cemeteries. In 1917 alone, \$300 worth of "fancy evergreens" were purchased, 36 flower beds were planted with materials from the greenhouse, one bed of 300 shrubs was planted, as were bed of 24 rhododendrons and 18 kalmias on the westerly slope of the pond and 350 hardy blooming plants from the

greenhouse (Annual Report 1917). The turf had taken on a more finished appearance as well with the introduction of improved lawnmowers.

Recreational Facilities

By the turn of the century there was a growing interest in playgrounds and organized athletic activities in Portland as elsewhere. Open areas at Deering Oaks were already used for informal football games but there was also a desire for more structured recreational spaces. The large open area at the north side of the Oaks was recommended to meet city-wide demand for playgrounds and ballfields. In 1902 the city built a small playground at Deering Oaks with separate facilities for girls and boys. It was an immediate success. "The experiment of erecting and maintaining playgrounds in Deering's Oaks has been satisfactory from the start . . . one has but to watch the delight of the boys and girls who congregate there to be convinced that every dollar spent for playgrounds is well invested." (Annual Report 1902).

New play equipment was added annually as funds were available and there were frequent recommendations that the facilities be expanded to accommodate increased use. Suggested improvements for 1908 included swings, rings, bars, ladders and slides. The ballfields were also popular and well-maintained. Initially there was a police officer on duty to oversee the area but during the 1920s teachers were hired during the summer months to organize children's activities.

Playgrounds and athletic fields were imbued with social purpose as well meeting more practical needs. They were considered to promote "the stimulating sense of self-respect that results from the manly contests of skill and strength in which they may engage through these mediums of public beneficence, and they carry to their homes these new ideas, and a new spirit, which are bound, in the long run, to make their parents, as well as themselves, better citizens of this commonwealth" (Annual Report 1908).

As the popularity of the recreational facilities grew, the city began filling the low areas at the northwest corner of the park to create additional ballfields, a process which went on for several years using ashes and other fill materials donated for the purpose. In 1911 the playground was moved to its present location in the enclosure formerly used as a deer park and new play equipment was added. Other facilities were added or upgraded over the years as funds and fashion dictated. In 1927 concrete surface replaced clay at some of the tennis courts for greater durability. The following year a girl's hockey field was constructed on the filled land at the northwest corner of the park.

Sometime between 1915 and 1928 (probably in the early 1920s) a bowling green was built south of the ravine. This was the one athletic activity not located at

the northern edge of the park, possibly because it had a different constituency or user group.

By 1929 the recreational facilities at Deering Oaks included six tennis courts, a baseball and football field, a girls hockey field, a volley ball court, horseshoe pitching, a bowling green and a children's playground. It was one of 12 playgrounds city-wide supervised in good weather by teachers (Annual Report 1929). Other popular activities at the time were ice skating, boating and band concerts.

Note: no good photographs of the play areas have been found to date although they may exist in private collections or newspaper articles. See 1937 plan for layout of play areas at that time and plan of bowling green prepared by William Dougherty as well as other playground details.

Expansion/Rose Garden

As soon as Deering Oaks was acquired by the city in 1879, Goodwin and others recommended that the adjacent land to the southeast be purchased. A major parcel at the corner of Portland and State Streets (known as the Larrabee lot) was acquired in 1894 with subsequent purchases of smaller parcels over the years. Initial improvements, primarily filling, grading and some planting, were made as land was acquired but the area retained a generally unfinished look through the early 1920s. Around 1922 the Casco Tannery, the last major industrial parcel in the block, was acquired. Several smaller parcels along Forest Avenue remained in private hands until they were acquired in 1929, completing the land acquisition program begun fifty years earlier.

The new land did not have the dramatic features which characterized the rest of the park. It was primarily industrial land with dilapidated buildings, flat topography and little vegetation. There was also considerable pressure from the surrounding area. Forest Avenue and the eastern edge of Park Avenue needed to be widened to accommodate increasing automobile traffic as well as trolley lines. An automobile connection was needed between High Street and Forest Avenue. Thus the layout of the new area was dictated in large measure by pragmatic considerations. The design, developed in the 1920s when resources were plentiful and ornamental horticulture was popular, also reflected a very different aesthetic than the rest of Deering Oaks. It was formal and geometric with emphasis on horticultural display. It was also a labor intensive landscape with elaborate plantings and even an irrigation system.

The central feature was a circular rose garden with a series of concentric beds enclosed by a low hedge. Trees were placed primarily along paths and at evenly spaced intervals around the perimeter of the park. Most were deciduous but evergreens were located in lawn areas for contrast. In addition

to the main rose garden, there were also smaller flower beds and shrubs, including a Japanese barberry hedge along Park Avenue. The path system (of crushed stone) was primarily geometric but also responded to circulation needs. Benches were located under trees. A Spanish veterans monument was located near the State Street entrance. Park Department superintendent and engineer William J. Dougherty was responsible for the overall layout of the area with planting by the Parks Department staff.

Another important aspect of the new area was the opportunity to develop a proper connection between State Street and Forest Avenue which had long been a concern. The new road was a wide parkway in a graceful arch. It was intended partly for park purposes but also to meet traffic needs.

Post-War Era

By the late 1930s Deering Oaks was much as it is today with all the important features created and horticultural displays still a prominent characteristic. During the difficult war years, all parks suffered as national priorities shifted and labor shortages resulted in greatly reduced care with few new initiatives. After the war, inflation and high labor costs forced many economies, on top of already deferred maintenance. In the 1970s the northern portion of Deering Oaks was lost with the construction of Interstate 295.

In 1980 the city of Portland developed an Urban Park and Recreation Recovery Action Plan which identified \$4 million in improvements needed city-wide to upgrade parks and recreation facilities. Deering Oaks was recognized as one of the highest priorities. Recommended projects included: rehabilitation of pond wall, erosion control, reconstruction of walkways, installation of lighting, restoration of playground area (i.e., tennis courts and ballfield), road improvements, general landscaping. The following year city and UPARR funds totalling \$143, 000 were allocated for restoration of the pond wall.

In 1983 an additional \$333,000 in UPARR funds was requested for Deering Oaks. Work included conversion of eight tennis courts from clay to asphalt; installation of 20 lampposts throughout the park; erosion control at pond perimeter; rehabilitation of deteriorated stairway to playground and seeding of bank to prevent erosion; installation of new wood railing and curbing to define parking areas; curbing of tennis court road and parking areas to prevent erosion of banks along the road; treatment of dirt/gravel areas with oil-base compound to alleviate dust; continuation of asphalt sidewalk along tennis court road; installation of seven catch basins to eliminate flooding and ponding of water; and restoration of soil to ensure survivability of the oaks (UPARR). In 1989 the historical importance of the park was recognized when it was nominated to the National Register of Historic Places.

BIBLIOGRAPHY

Dibner, Martin, ed., *Portland*, Greater Portland Landmarks Inc., Portland, Maine, Second Edition, 1986.

Baxter, James P., *The Park System of Portland*, City of Portland, 1905.

Berg, Shary Page, *Maine Public Landscapes: 1719 - 1950, Draft Context Statement*, unpublished manuscript prepared for Maine Olmsted Alliance and Maine Historic Preservation Commission, 1992.

City of Portland, *Annual Reports*, various issues between 1880 and 1934.

City of Portland, *Urban Parks and Recreation Recovery Action Plan, Implementation Proposal Grant Application, Deering Oaks and Fort Allen*, City of Portland, May 1983.

Igleheart, Elizabeth, "Gardens of Municipal Intercourse", in *Maine Section Newsletter, American Society of Landscape Architects*, Vol. 2, No 3, 1989.

Igleheart, Elizabeth, "William A Goodwin: 1822 - 1896" in *A Biographical Dictionary of Architects in Maine*, Vol. VI, 1991, Maine Historic Preservation Commission.

Igleheart, Elizabeth, *Deering Oaks National Register Nomination*, Maine Historic Preservation Commission, 1989.

Library of Congress, Manuscript Department, Olmsted collection, especially file 1862, Deering Oaks.

Maine Historic Preservation Commission, post card collection, miscellaneous files and photographs.

Maine Historical Society, Deering/Noyes collection, primarily photograph albums and newspaper clippings.

Guiding Principles and Goals and Objectives

Guiding Principles and Goals & Objectives

Guiding Principles

The guiding principles of the master plan build on the original design concept and purposes as clarified by the historical research that has been done to date. They may be modified as the process continues and historical research is completed. The guiding principles also recognize the significance of changes in the landscape and use of Deering Oaks over time, and the contribution of maintenance and management toward the success of the park as a beautiful and significant landscape of great importance to the people of Portland.

The primary founding and enduring purpose of Deering Oaks is to provide a pastoral refuge from the stresses of urban life, a place that is *"necessary for the comfort and enjoyment of our citizens."* (1893 Address of Mayor Baxter). The primary mission of the master plan, therefore, should be to preserve and enhance the park in ways that will allow it to serve this central purpose in the best possible way, while accommodating multiple recreational uses.

The master plan's guiding principles define the tenets considered fundamental to preserving the unique character and enhancing the special experience of Deering Oaks, both in terms of physical park elements and in terms of the park's use and care.

A Regional Park

The significance of Deering Oaks extends beyond its immediate neighborhood. It is a resource for all of Portland and visitors to the city, and improvements to the park must respond to the needs of the larger public as well as those of the neighborhood.

Management and Maintenance

The quality of Deering Oaks depends to a great extent on an on-going commitment to management and maintenance. This includes a regular program of maintenance for the park's built and natural elements, important components that together characterize the landscape.

Essential Park Elements

There are particular park elements and spatial relationships that define the character of Deering Oaks, and should be understood and respected in all proposals for improvement:

- a. The park's vegetation, particularly its stand of mature oaks, a signature of the space since pre-park days.
- b. The pond, a central organizing and focal feature.
- c. The separation between the active park and the passive park areas. This is essential to preserve the integrity of the park to serve both active and passive recreational needs.
- d. The balance between open spaces and wooded areas.
- e. The relationship of the park itself to the surrounding city.
- f. The curvilinear circulation design, working with the topography and in contrast to the city street grid pattern.
- g. The formal and arboretum-like character of the rose garden area, providing an alternative experience to the main park section.

Goals and Objectives

The goals established for the master plan identify the major needs to be met by the plan's recommendations. The objectives spell out more specifically the means to achieve each goal. The guiding principles for the plan will be defined once historical research is completed. This ordering of needs gives focus to data gathering and analysis, and will provide a testing ground for master plan proposals. It will also assist the on-going process of long-range planning for Deering Oaks, and should be re-evaluated as proposals are implemented and circumstances change.

The following goals and objectives are statements of need and appropriate responses to that need, and not final recommendations.

1. Facilitate the Use and Enjoyment of Deering Oaks.

Deering Oaks is an important and beloved park for Portland citizens, as it has been throughout its history. The increasing demands for use in the park have begun to damage its ecological systems and erode its essential character. This degradation has and will lead to reduced enjoyment and use of the park. Examples of actions that could be taken to improve the park's capacity to support public use and enjoyment are:

- A. Maintain, through design and management, the separation of active and passive recreational uses.
- B. Provide parking within reasonable distance from various use areas that is visually unobtrusive within the park landscape. Make policy decisions concerning use of parking areas for non-park users.
- C. Increase the safety and enjoyment of park users by controlling the volume and velocity of automobile movement through the park, including the possible reduction of the number and size of roadways.
- D. Develop a coordinated sign system to provide people with orientation, information and regulations. ✓
- E. Consider the development of a visitor/interpretive center in the park to increase the public's understanding of park history, environment and recreational opportunities.
- F. Increase opportunities for sitting and picnicking.
- G. Make improvements to the path system, including upgrading of path condition, addition of paved pathways where needed, and provision for safer passage between park areas separated by roadways.

- H. Identify use conflicts and adopt strategies for their resolution.
- I. Evaluate the use of the park for large-scale festivals, in terms of their impact on the park environment as well as their service to the community.
- J. Ensure that the establishment of any future facilities respect the park's historic design intent and the site's carrying capacity.
- K. Adopt design and management schemes that control uses which are damaging to the park and disruptive to legitimate park use.
- L. Continue to improve the condition of the park's active recreational facilities, including facilities for winter use.
- M. Create links that strengthen the connection of Deering Oaks with the larger open space network.
- N. Integrate the park into a system of amenities within the surrounding neighborhood.

2. Rehabilitate and Preserve the Historic Design Intent of the Park

The intent of the historic design of Deering Oaks was to create a natural oasis in the city, a delightful contrast to the urban streets for the recreation of all of Portland's citizens and visitors. The historic design intent built upon the natural characteristics of the land, emphasizing and highlighting them. In order to preserve and better fulfill the special character of the park efforts must be made to rehabilitate and preserve the historic design intent of the park. Examples of actions that could be taken to accomplish this are:

- A. Strengthen the character of park entrances, and the experience of gateways and transitions from the city into the park. Evaluate the need for all vehicular entrances.
- B. Improve the character of the area surrounding the Castle in the Park.
- C. Minimize the visual intrusion of surrounding streets into the park environment.
- D. Minimize the division of the park by State Street. Reinforce, through design elements and vehicular control, the status of State Street as a parkway between Marginal Way and Park Avenue.

- E. Recommend design improvements to park elements such as lighting and site furnishings compatible with the park's history.
- F. Determine the feasibility of extending the water system into the ravine, researching history to determine the evolution and hydrological issues relative to the ravine.
- G. Rehabilitate park structures in ways that are consistent with their original design, replacing inappropriately designed structures with original or compatible designs.
- H. Strengthen the scenic beauty of the park's pond and other focal areas with additional tree and shrub plantings.
- I. Evaluate the historical evolution and need for dual bridges over the pond, and consider eliminating the smaller wooden bridge.

3. Restore and Maintain the Park's Horticultural Beauty and Ecological Health

In many important ways, the quality of "parkness" for the visitor to an urban park such as Deering Oaks is judged by the quality of its natural elements—its trees, turf and water. It is essential, therefore, that the park's natural environment be healthy and aesthetically pleasing. Examples of actions that could be taken to restore and maintain the horticultural beauty and ecological health of Deering Oaks are:

- A. Improve the condition of the park's trees with a systematic program of removal, replacement, pruning, aeration and fertilization.
- B. Develop a program of regular turf management.
- C. Enrich the park's growing environment with a program of soil improvement.
- D. Restore the park's understory plantings in selective places.
- E. Evaluate the water quality of the pond, and recommend improvement measures.

4. Strengthen Park Maintenance and Management Programs

Good maintenance and management, including the financial support necessary to achieve it, is critical to the health and functioning of Deering Oaks. Examples of actions that could be taken to strengthen park maintenance and management programs are:

- A. Evaluate current maintenance and management procedures, and recommend improvements.
- B. Improve coordination and cooperation between the several departments with maintenance and management responsibilities in the park.
- C. Clarify and enforce park regulations.
- D. Develop clear management guidelines and policies for special park events, including a system of fees dedicated to park maintenance.

5. Improve the Image and Safety of Deering Oaks

The use and enjoyment of Deering Oaks has been negatively affected because of real and/or perceived lack of safety. Examples of actions that could be taken to improve the image and safety of Deering Oaks are:

- A. Develop strategies and enforce regulations to reduce inappropriate or illegal use of the park.
- B. Maximize the use of the park ranger program with walking and horseback patrols, and expand their functions to include education, information and enforcement. Facilitate communication and cooperation between park rangers and police.
- C. Use a variety of means to educate the public about the history and recreational opportunities at Deering Oaks, to foster greater understanding about and comfort in the park.
- D. Evaluate the advisability of nighttime lighting of the park.
- E. Encourage the development of a citizens' park advocacy group.

Analysis and Recommendations

Analysis and Recommendations

1. Use

Active and Passive Park Use

A public survey was conducted in the fall of 1993 to solicit input from residents about their use and perceptions of Deering Oaks, and their visions for the future of the space. An analysis of survey responses can be found in the Appendix. The following summarizes that analysis and addresses a range of other issues concerning park use.

The public is very fond of, and concerned for, Deering Oaks. This was clear in the impressive number of questionnaires returned—701 questionnaires out of 4000, or an 18% return—and the extent of commentary written in the returned questionnaires. There is a need, and the solid grounds for, a Friends group to focus the public's commitment to Deering Oaks within a productive, effective structure in partnership with the city as it undertakes the rehabilitation of this important park.

By far, the greatest use and perceived asset of Deering Oaks is as a passive haven in the city. While many visitors take advantage of the active recreational facilities and organized events, the clear majority of use is passive. Therefore, it is essential that improvements to the park seek to strengthen its ability to serve passive recreational needs, while continuing to accommodate active recreation and special events in appropriate locations. Despite the high percentages of respondents indicating passive use of the park, there is very little provision in Deering Oaks for such use—very few picnic tables or park benches are provided.

The defined, active recreational areas see regular use throughout the warm months of the year. Skating on the pond is also a popular winter activity. Passive activities are concentrated predominantly near the pond—sitting and relaxing, sunbathing, feeding the ducks. Sunbathing occurs generally wherever the sun hits the ground, concentrated along the southern edge of the park closest to the adjacent residential neighborhood. The rose circle is also visited and appreciated by a significant number of people.

Access, Circulation and Parking

The opening of nearby Hadlock Field in the spring of 1994 prompted the need to examine the park circulation system in the initial master planning phase, in order to devise a plan that serves park users while protecting the park from being overburdened by non-park traffic and parking. A preliminary circulation study of Deering Oaks was performed by traffic engineer Gary

Hebert of Fay, Spofford & Thorndike in October, 1993 in an effort to assess issues and potential solutions relative to traffic and parking in the park. Recommendations were revised and further developed by the team in collaboration with the project committee and in response to public input. They are based on the following historical background and evaluation of access, circulation and parking in Deering Oaks.

Since the park was established in 1879, the circulation system of Deering Oaks has changed physically to some degree. However, it has changed dramatically in terms of its context and use. Originally, State Street was a two-way road, more curvilinear than at present and lined with trees to reinforce its function as a park road. The impressive pillars at the Park Avenue end of State Street, once serving as signatures of entrance into the park, have lost their significance with State Street now a one-way southward-moving street and the pillars only experienced as one is leaving the park.

Today, State Street is a major three-lane thoroughfare serving regional transportation needs. The high volume of traffic approaches 14,000 cars daily with little breaks in the traffic flow, impacting safe and restful park use. The road cuts the park in two, making it very difficult to physically move between the main section and the rose garden and visually causing these park areas to appear as separate parks. High Street, the second half of a one-way pair with State Street, also sees high volumes of traffic and cuts the Edwards lot off from the rose circle, making the Edwards lot appear as a large traffic island. The proximity of State Street to the pond causes traffic noise and views to intrude onto the serenity of that important passive and focal space in the park.

The northern road, known as Tennis Court Road, was originally designed to be the primary circulation route into and through the park. This was reinforced by major entrance gates at Deering Avenue (still existing) and at Forest Avenue (removed when the Forest Avenue entrance road was eliminated). This road, more curved and narrow than at present, followed the topography and the top of the ridge separating the ballfields and playground from the rest of the park.

Today Tennis Court Road has ten parking nodes along its length, added in the late twentieth century, which are heavily used during the summer, but also used all day long through twelve months of the year. Solicitation has become a common activity at these parking areas as well as along the road that parallels Deering Avenue, driving a significant number of people from this park area. The privilege of using the park circulation system is also abused by short-cut driving along Tennis Court Road, primarily from State Street to Deering Avenue, although to some degree this allows people to enjoy the park from their car and survey it prior to use. A traffic count was conducted

over six days in October, 1993 by the city. It showed that upwards of 1000 cars travel this road throughout most of the twenty-four hours of a day.

The middle road, today known as the Interior Park Road, was aligned in relation to a major geographical feature, the ravine at the head of the pond. It is now closed during normal park hours with the use of gates at both ends of the road, and open when needed for overflow parking, snow emergency parking or during the Saturday Farmer's Market. The gate design, a trial closing of the road, makes the road closing appear temporary. A permanent design solution is needed.

The southern road, termed Bowling Green Road, was not established and connected to a lower Deering Avenue entrance until 1895. The current entrance was developed in 1932. Today, that entrance has an open, poorly defined character inside the park. Bowling Green Road has cars parked along its length during most hours of the day, and like Tennis Court Road these are visually intrusive. The traffic count of October, 1993 also found an average of 1000 cars traveling on this road daily. Uncontrolled parking here allows cars to park beyond the paved surface and damage turf areas, creating ruts and large areas of bare earth and causing severe stress to the trees adjacent to the road.

Over the last 10 years an inappropriate park use that has become entrenched along Bowling Green Road is overnight parking by the adjacent residential neighborhood. Cars line the road, not only throughout the night but throughout the day as well. It also appears that residents park in Deering Oaks rather than on streets in the neighborhood.

A survey was conducted over a week's duration in January, 1994 by city staff to determine the average number of cars parked overnight along Bowling Green Road, and the average number of available parking spaces in the neighborhood. It was found that there was an average of 39 cars in the park as opposed to an average of 123 spaces available on Grant and Sherman Streets and Park Avenue. Some people also park their cars in Deering Oaks as a less expensive work-day alternative to a parking garage. It is reasonable for nearby residents to have places to park their cars, but the interior of the park should not be viewed as a legitimate place to satisfy that need. The plan's recommendations succeed in integrating the parking needs of the neighborhood with those of park users, without sacrificing an entire park area for use as a parking lot.

Deering Oaks has been used as a place for parking during winter snow emergencies, and up to 500 cars can be parked in the park. The need for snow emergency parking in the vicinity of the park is a legitimate concern, which is being addressed by the city in response to master plan recommendations that seek to provide reasonable access for park users while controlling

inappropriate, damaging or intrusive use of the circulation system by non-park users.

Historically, pathways were designed to allow clear separation between modes of travel, for the safety and enjoyment of all park users. The original park plan shows no paths in the woods, while the 1937 park plan shows paths within the main oak grove. Today, the park paths are for the most part aligned parallel to the roads, and some end without reason. There is no developed path outside of the park along Deering Avenue, and a compacted dirt way indicates the need for one. Walking along the eastern edge of the pond at State Street is a very uncomfortable experience, with insufficient separation between the pond and the road. There is an underpass providing access from one side of Deering Avenue to the other, but it appears uninviting and unsafe.

The cumulative visual effect of the changes in alignment and use of the park circulation system over the years is of lack of caring and of domination by the automobile, with little space to find rest and contrast from the city beyond. Functionally, the circulation system is both a convenience for park users and yet an imposition on safe and comfortable use by the pedestrian. The volume and speed of traffic has made many park areas dangerous to the pedestrian. This is particularly true at the entry drive in front of the Castle building where people must cross the busy road to reach the pond from the building, and on State Street, which must be crossed to visit the rose circle from the main park section.

The following principles and goals were developed for the access, circulation and parking system in Deering Oaks in order to define the purposes and appropriate uses of the system, from both historical and current perspectives:

Access, Circulation and Parking Principles and Goals

Principles

1. The curvilinear circulation design in Deering Oaks was designed to work with the topography and promote easy, relaxing and safe movement through the park by park users. This design is intended to support the experience of the park as a refuge and contrast to the city street grid.
2. The circulation system is intended to provide easy access to every area of the park, either by vehicle or by foot.
3. Ways provided for different modes of travel should be separated for safe and enjoyable movement through the park.

4. The park's circulation system should be primarily used for park-related activities.
5. Use of the park for the purposes of active recreation, passive recreation and special events should all be considered in determining the best scheme for access, circulation and parking.

Goals

1. Access

- 1A. Reasonable access for park users convenient to facilities
- 1B. Safe and comfortable pedestrian and bicycle access for park users
- 1C. Protection of horticultural areas—limiting vehicle access to paved ways only during regular park use (including maintenance vehicles); zoning of park to limit use of natural areas for high-impact events; and compaction mitigation and restoration measures for any vehicle driving on turf areas during special events
- 1D. Provision for handicapped, emergency and maintenance vehicle access

2. Circulation

- 2A. Safe and comfortable pedestrian and bicycle circulation throughout park areas
- 2B. Safe pedestrian movement between various park areas—minimizing pedestrian/vehicular conflicts
- 2C. Development of pedestrian linkages to greater open space network
- 2D. Along any vehicular circulation route into or through the park, maintenance of ease of movement along roadway (Olmsted's principle—no right-angle or acute turns that call for calculation)
- 2E. Clear indications of routes—hierarchy of ways, indicated by scale and surfacing

3. Parking

- 3A. Parking for park-related activities only during day. Overnight parking permitted at perimeter lot

3B. Alternative, perimeter provision for non-park related parking that has become an established use in the park

3C. Reasonable parking for use of central park areas, particularly playground and tennis courts

3D. Provision for handicapped parking

Special Event and Vendor Use

A number of organized events take place in Deering Oaks. In 1993, there were permits granted to 17 events which ranged from one day to one week, and which had attendance ranging from 10 people for the filming of a commercial to 150,000 people attending the Deering Oaks Family Festival. In addition, a Farmers Market is held along the Interior Park Road on Saturdays from May until November, and Christmas tree vendors sell trees at seven locations throughout the park from Thanksgiving to Christmas.

Deering Oaks Family Festival

Of all the organized activities in Deering Oaks, the Family Festival has aroused the greatest controversy. Proponents point to the large number of people that come and enjoy the event, and are able to have a positive experience in Deering Oaks at the same time. Opponents argue that the scale and longevity of the event cause unjustified damage to the park's natural environment. Some take issue with the character of the Festival, particularly the carnival aspect of it.

In cooperation with the city, the Chamber of Commerce has taken measures in its placement of festival tents, booths and rides to minimize the impact of the event on the park's physical environment. Food booths are located only on the Interior Park Road, large carnival rides are placed on Deering Avenue which is closed for the duration of the Festival, and there are no tents placed within the major tree groves of the park. However, the impact of so large an event is severely felt on the park, as much from the numbers of people moving across the site as from the structures placed within it.

Philosophically, there needs to be a distinction in evaluating the use of Deering Oaks for public and private events. The Family Festival is a publicly sponsored event and a public service. It is also an event which animates the park, invites use by many who would otherwise not use Deering Oaks, and represents an important part of the Maine recreational culture which enjoys outdoor activities during the relatively short warm months of the year. Deering Oaks, as Portland's major park, is an appropriate place in which to host such large public gatherings.

However, an event of such large proportions, occurring over so extended a time, does considerable damage to the park's environment. The clay soils of Deering Oaks are heavy and more prone to compaction than sandy soils. Tree roots in heavy clay soils are usually in the top zone of the soil, from 0"-9" inches in depth, and easily susceptible to damage.

From a horticultural point of view, turf should be tough enough to withstand the type of use represented by the Festival and to provide adequate protection for trees, if it is in a healthy condition and given regular maintenance, particularly adequate repair after such an event including aeration, overseeding, fertilizing of turf and trees, and tree fertilizing and pruning. The funds received from the Festival are inadequate to pay for the necessary mitigation of the damage to the park.

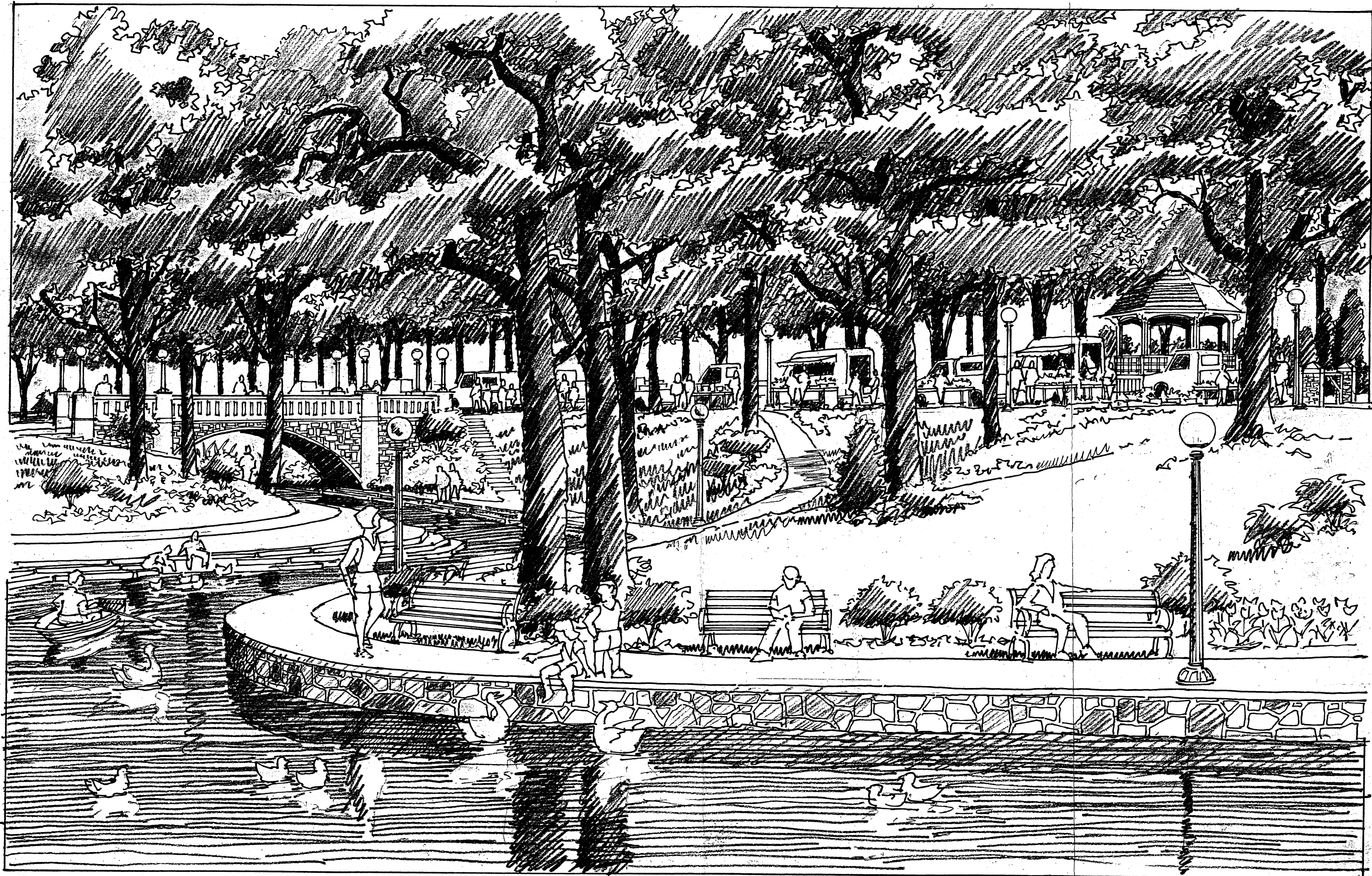
The city, however, bears the major responsibility for the deteriorated condition of the park, and needs to take its fair share of the responsibility for horticultural restoration and maintenance. This responsibility includes policies that have allowed events such as the Family Festival to occur without adequate guidelines to control use, require follow-up mitigation measures and direct funds to park maintenance. The city must enforce guidelines that speak for the ecological voice of the park as well as the recreational voice. Adequate funding that is dedicated for park maintenance is necessary if the Festival is to continue.

There also needs to be a decision about the type of festival that Portland wants, whether it be focused on food, arts and crafts and children's performances, or include carnival rides which introduce a very different atmosphere.

Farmers Market and Christmas Tree Sales

There are two regularly scheduled park uses by private enterprises, the Farmers Market and Christmas tree sales. Philosophically, use of a public space for private gain has less legitimacy than use for a public event. Such use should be accommodated only at the pleasure of the city, if it enhances the park experience by the public and does not negatively impact either the park environment or public use.

Farmers Markets have become very popular nationally in recent years. In Deering Oaks, the Saturday market attracts park use and offers the positive experience of connecting the city dweller with the food producer. However, in recent years the scale of the operation in Deering Oaks has grown too large for the space provided along the Interior Park Road. At the height of the season, there can be 20 trucks along the road, 10 on either side. Trucks are parking off the paved surface onto the turf areas, damaging the turf and nearby trees through soil compaction. There is no fee for this use of the park, beyond a fee



FARMER'S MARKET & BANDSTAND

to the clerk's office for a vendor's license. Some Saturdays see a great amount of traffic congestion of the park roads by visitors to the market. The determining factor for the presence of this use in Deering Oaks should be the protection of turf areas, and the possible limiting of vendors if necessary.

With the exception of Christmas tree sales at the "castle" building, tree vendors set up large operations on turf areas in the park, including trailers and the storage of significant numbers of trees. Of all activities in Deering Oaks, this one occurs over the longest time frame and takes place at a time when the turf is in a dormant state and unable to repair itself. The damage done to the park environment is inadequately addressed by the nominal fees of \$25 per week, a \$50 security deposit and a \$50 processing fee. This is not an appropriate use of unpaved park areas.

Use Recommendations and Guidelines

A. *Support for Passive Recreational Use:*

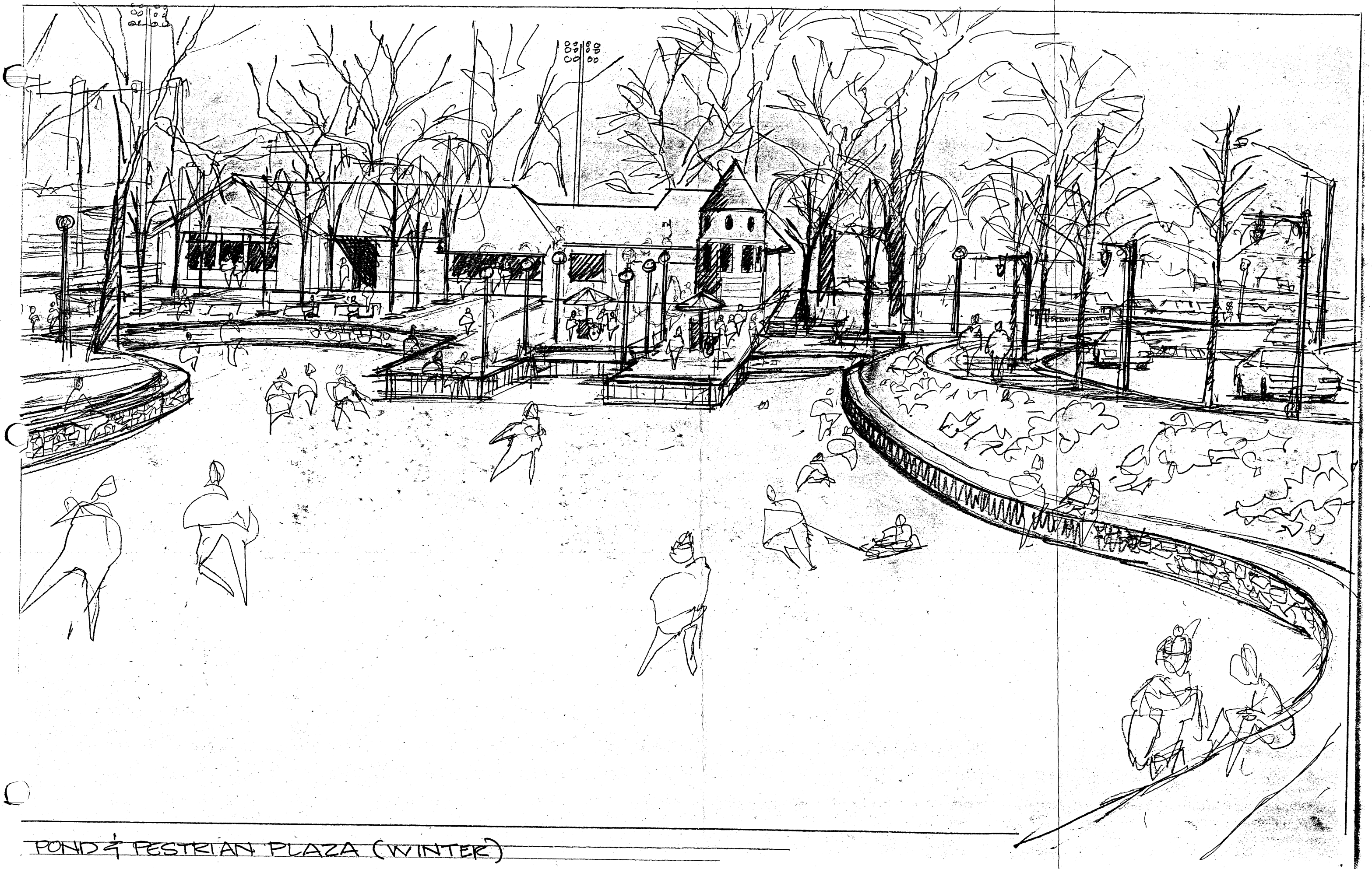
1. Add more benches in selected locations.
2. Add several picnic tables in selected locations.

B. *Support for Active Recreational Use:*

1. Refurbish tennis courts that need repair.
2. Reconstruct the existing basketball court, and convert one tennis court to a basketball court.
3. Remove all horseshoe pits, relocating ten pits north of the tennis courts.
4. Develop two volleyball courts at the current site of the horseshoe pits.

It would be appropriate to have lights for nighttime use of the athletic courts as long as the poles were of a modest height, no taller than twenty-five feet.

5. Encourage currently popular uses of the bowling green, i.e. croquet, bocce. Consider providing equipment for a fee. Leave the bowling green open to be available for unstructured uses.
6. Improve the condition of the pond ice for winter skating. Remove the cobra-head light fixtures around the pond, and replace with pedestrian-scale lights to provide a adequate but not intensive level of light for nighttime use.



POND & PEDESTRIAN PLAZA (WINTER)

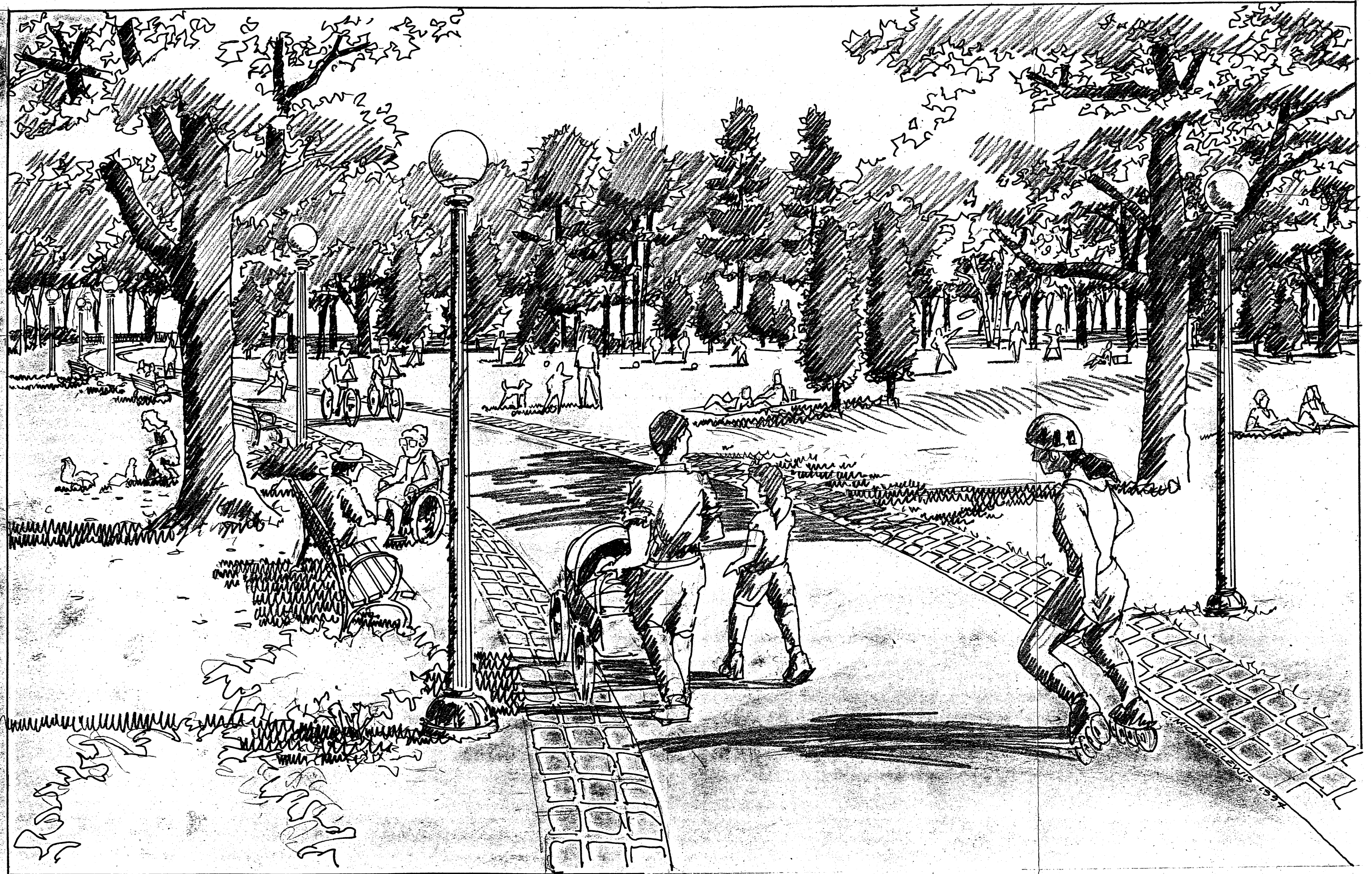
7. Increase park programming by the city to encourage use. Work with park rangers in developing and overseeing programs.

C. Visitor Information and Education:

1. Develop a visitor information center and possible ranger station in the Castle building. Such a place can serve as a gateway and information center for the city as well as the park.
2. Station park rangers in the park for regulatory functions as well as to offer information and interpretation about the history and current conditions of the park.
3. Design and implement a comprehensive signage system including identification, regulatory, informational and interpretive signs for use throughout the park. Coordinate the design within a system for all of Portland's historical open spaces. Signs should include:
 - entrance signs at the entrance to the parking lot on State Street and at the Deering Avenue vehicular entrance;
 - a site map exhibit and information bulletin board at the parking lot to orient the visitor and impart information about park activities;
 - signs in association with the Castle building;
 - regulatory signs at selected locations throughout the park;
 - one or two interpretive signs to tell the story of the park's history, particularly one by the ravine at the pond.

D. Access, Circulation and Parking Changes to Support Use:

The following recommendations for changes to the circulation system are the result of a great deal of work and collaboration between the consultants, the Project Committee, the City Planning, Parks and Public Works and Recreation staff and the public through the vehicles of public forums and questionnaires. Recommendations are listed as discreet elements, but it is essential to recognize that they are parts of a unified whole, without any of which the overall plan for circulation will not work. They seek to enhance the safety and character of the park, while providing reasonable access to park areas and convenient parking. The City Council has agreed to a one-year experiment of the circulation proposals before final implementation.



BOWLING GREEN PEDESTRIAN WAY

1. Close to visitor vehicular traffic Bowling Green Road and the connector between Bowling Green Road and the Interior Park Road. Narrow these roads for use by pedestrians, bicyclists, roller bladers, service and emergency vehicles, etc.
2. Narrow Tennis Court Road and change it to one-way from Deering Avenue east to provide reasonable access while limiting cut-through driving and reducing vehicular/pedestrian conflicts.

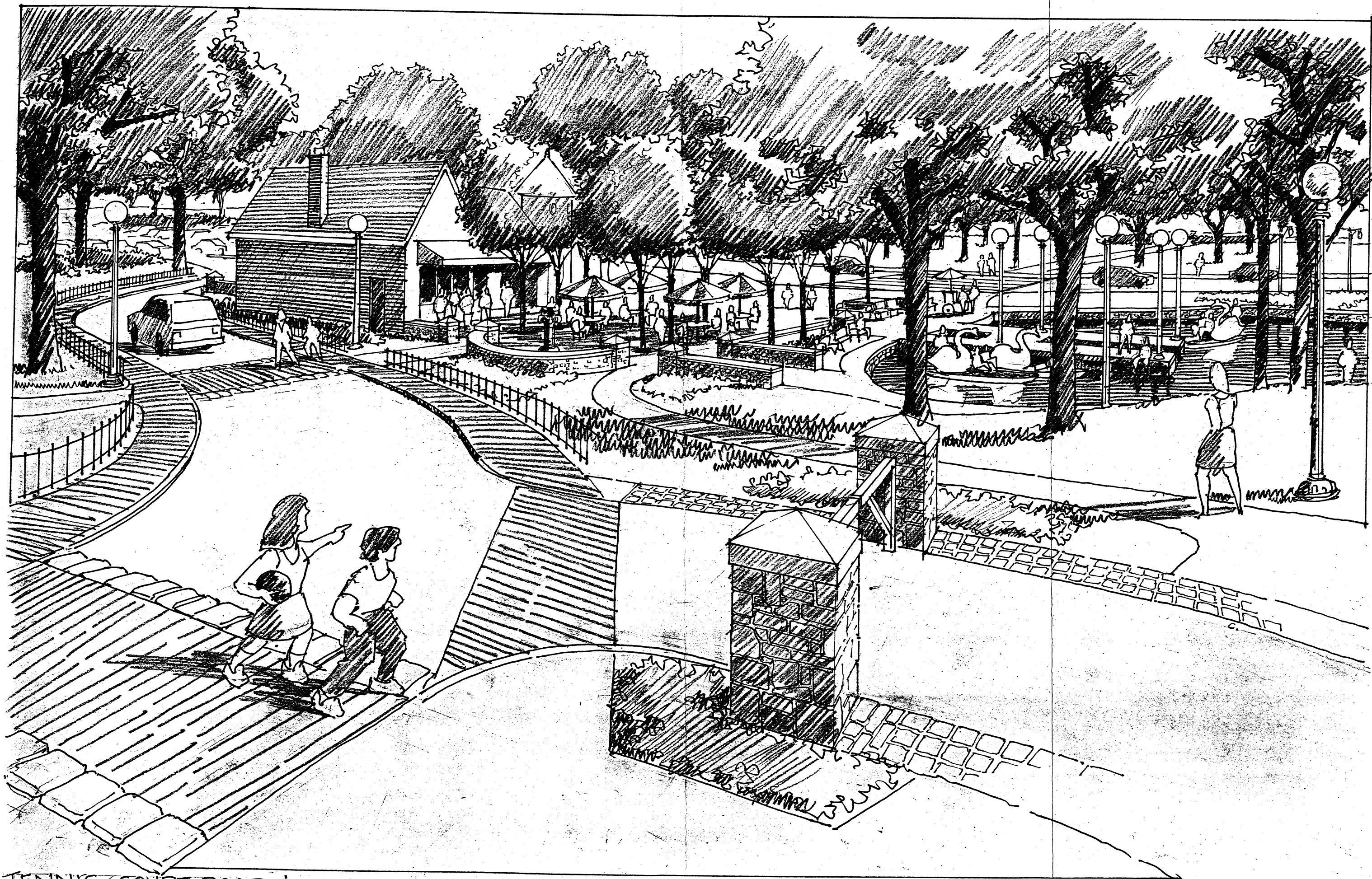
Permitting limited vehicular access allows people to view the park casually, increase eyes on the park, and make the park accessible to all. Reducing the width of this road to twelve feet will prevent parallel parking along the road and facilitate pedestrian crossing. One-way, single lane traffic will also be easier for children to see and anticipate. Short-cut driving through the park will be dramatically reduced, because the great majority of cut-through driving travels from east to west along this corridor.

3. Eliminate the vehicular entrance at the Castle building, and convert it to a pedestrian entrance. Develop a pedestrian plaza to serve customers, connect the Castle and the pond, and make the area safer with elimination of traffic. Develop a new vehicular entrance off State Street to the proposed parking lot. Realign Tennis Court Road to pass behind Castle building to connect to new entrance road and parking lot.

This is a very important aspect of the circulation proposals. It will have a major, positive effect on the character and use of the area in front of the Castle, changing this dangerous environment where fast-moving cars conflict with pedestrians to a safe and inviting gathering space. Pedestrian plazas are proposed for both the front and rear of the building, to invite customers from the parking lot as well as from the park interior and rose circle area. Low stone walls are proposed around both plazas to retain, define and increase safety adjacent to roads.

The proposal to develop a road behind the Castle is critical to the success of the circulation proposals. It allows motorists to access the parking lot from Tennis Court Road. Wide, well-defined crosswalks will be placed along the road as well as speed humps and a stop sign, to slow traffic and maximize the safety of crossing the road in order to move between the ballfield and the Castle. A fence along the ballfield side of the road will direct pedestrians to crosswalks. The creation of one-way eastward-moving traffic along Tennis Court Road will significantly reduce both traffic volumes and speed.

4. Develop perimeter parking for the park: a 50-car parking lot at the site of the maintenance yard; parallel parking along Park Avenue and Deering Avenue. Make this parking available for overnight use by the neighborhood.



TENNIS COURT ROAD & PEDESTRIAN PLAZA (SUMMER)

The parking lot will satisfy the major demand for normal park use, as well as be available for neighborhood overnight parking. A proposed management plan for the lot will include a policy for overnight parking for the neighborhood and daytime parking for park users. Stickers will be issued for overnight neighborhood resident parkers, and signs will be posted for three-hour limits for park users during the day.

Creating a parking lane along Park Avenue will necessitate widening the road up to the edge of the sidewalk, but not cutting into the park. Parallel parking along Deering Avenue is proposed to be developed by taking one travel lane from the road. A crosswalk should be developed at the northern Deering Avenue park entrance to encourage student and other crossing of the road to occur at that location, and minimize moving out between parked cars to cross to the King Middle School side of the road.

5. Maintain two small parking nodes along Tennis Court Road (maximum six cars each) for short-term drop-off and handicap parking.

It is important that there be reasonable provision inside the park for the elderly and handicapped park visitor, as well as for those who need to drop off passengers or equipment, such as sports coaches.

6. Continue to gate the Interior Park Road, to be opened periodically for special events and for snow emergency parking. Develop alternative sites in the vicinity for additional snow emergency parking.
7. Narrow State Street to two lanes, widening to three lanes at the intersection with Park Avenue, in order to connect the rose circle with the main park section, add more green space to the park, make walking along State Street safer and more pleasant, and lessen intrusion by the vehicle into the park environment.
8. Close State Street on Sundays.
9. Maintain High Street as a two-lane road, converting the third break-down lane to green space for the rose circle area of the park.

All roadways within the park, those accessible to vehicles and those to be narrowed, are proposed to have the original cobble drainage swales restored. Swales would be two feet wide on either side of the bituminous.

10. Improve the open space connections within this larger neighborhood.

Deering Oaks sits in a neighborhood with an enormous amount of recreational resources. To the west lie Fitzpatrick Stadium, the Portland Ice

Arena, the Expo Building and Hadlock Field. The park also forms the potential link between these complexes and Baxter Boulevard to the northeast.

There have been attempts historically to strengthen the open-space linkages throughout the city. Now, as more facilities are developed, the Portland Trails plan is being put forward, and an environment exists that is favorable to alternative modes of transportation, every effort should be made to maximize the open spaces of the city as a system and to create circulation links between them.

E. Use of the Park for Special Events And Vendors:

1. Implement proposed management guidelines for special events and particularly for the Family Festival to allow a limited number and duration of events while protecting the physical environment and mitigating the negative impacts of such use. See Appendices 4 and 5 for guidelines.
2. Develop a winter festival that encourages year-round use of the park and focuses on the pond as a recreational amenity.
3. Restrict vendor use of the park (i.e.. Christmas tree vendors, Farmers Market vendors) to hard surface areas only.

2. Landscape Character and Historic Design Intent

The analysis of landscape character builds on the original intent of the park's design and the guiding principles for the master plan in evaluating the current conditions of the park.

As stated in the master plan's guiding principles, the "primary founding and enduring purpose of Deering Oaks is to provide a pastoral refuge from the stresses of urban life, a place that is 'necessary for the comfort and enjoyment of our citizens' " (1893 Address of Mayor Baxter). The park was designed in the naturalistic style popular in the nineteenth century, responding to the site's landforms and features, and was intended to provide a contrast to the geometric urban grid by using a curvilinear design for the circulation system, an irregular pond edge of bays and headlands, and edge planting to screen the city from the park. A formal element of the park's design—the alignment of Marginal Way punctuated by a circle and fountain marking the entrance into the park from the north—was never constructed.

A number of park elements and spatial relationships have been identified in the guiding principles as character-defining elements of Deering Oaks:

- Vegetation, particularly the mature oaks but also other understory and entrance plantings that have been lost over time;

- The pond, a central organizing and focal feature;

- The separation between the active and passive park areas;

- The relationship of open spaces and wooded areas;

- The relationship of the park itself to the surrounding city;

- The curvilinear circulation design;

- The formal and arboretum-like character of the rose garden area, as contrast to the main park section.

Park Edges and Entrances

Originally, the main entrances into the park were at Deering Avenue (the northern entrance with the stone gates) and Forest Avenue (through gates that no longer exist, and across what is now the rose circle lot). These connected to the main thoroughfare through the park, the northern road now termed Tennis Court Road.

Deering Avenue was once a major trolley line. A boulevard was intended to connect Deering Oaks from Deering Avenue to the Western Promenade. This was not implemented, and a changing context over time has made the main Deering Avenue entrance less important than it was originally. Today, the monumental gateway into the park is confusing and appears overbuilt. The parkland inside of this entrance lacks a sense of arrival and clear destination.

The companion northeast entrance into the park from Forest Avenue was eliminated when Forest Avenue was re-aligned from its original right-angle turn into Deering Oaks to the current intersection with Marginal Way and State Street. At present, entrance into Deering Oaks from the northeast is experienced as a maze of busy roads, traffic signals and signs. The Parks and Public Works maintenance yard is inappropriately located at the park entrance and greets the park visitor with a cluttered and intrusive materials storage area. The area in front of the Castle building, perceived as the secondary park entrance from the northeast, is dominated by asphalt and fast-moving traffic that cuts the building off from the pond and creates an unfriendly pedestrian environment.

None of the park entrances is marked by ornamental treatment to announce entry into a special place. Historic documentation shows that this was done in the early years of the park. The Deering Avenue gates are the best example of formal announcement of entry into the park, but here too there is little supportive planting to match the scale of the gates. The entry into the park at the Castle is marked by a series of signs referring to the Castle in the Park, including an unattractive highway-type fluorescent sign.

The dominating presence of the automobile in Deering Oaks is exacerbated by the lack of separation from the surrounding streets. Where there were once estates and farmland, there are now multi-family dwellings and busy thoroughfares, including the very-intrusive Interstate 295 to the north. Because of the elevation of the road above the park, an evergreen planting along the park's northern edge is insufficient to screen the highway. Lack of any formal edge created by plantings or fencing has permitted views and noise of the surrounding city to invade the park. This has had a very detrimental effect on the ability of Deering Oaks to function as an oasis and relief from the stresses of urban life.

Visual Zones

There are a number of distinct visual zones in Deering Oaks:

Rose Garden: visually rich micro-environment, with impressive display of roses. Area has an arboretum character, reflective of the pastoral English parkland landscape of trees over lawn. Space is separated and isolated from rest of park.

Pond: The primary focal element of the park. An inviting space, animated by the central fountain. The presence of two focal elements in the pond—the fountain and the duckhouse—is visually competitive, and lessens the impact of each.

The pond edges follow the pre-park landform. The layout of headlands and bays gives the illusion of greater size of the pond. The proximity of the pond to the road, however, undermines its integrity as a pastoral destination point.

Goodwin proposed natural, soft edges as appropriate to the naturalistic park design. However, the retaining wall built around the easterly side of the pond was continued over time along the north and south sides of the pond, in response to increased use and erosion. Today, the pond edge consists of a combination of formal walled edging, stacked granite block edging, slope curbing, small boulders, and lawn. The mix of edge treatments needs to look as if it has been deliberately done. The concrete ramp at the south pond edge, constructed to access the pond by maintenance vehicles, is overbuilt and out of character with the landscape.

The upper pond, the ravine, has been lost, and now appears as a dry ditch with remains of a concrete dam that once allowed water to pond in the ravine. A planting plan for this area dated 1935 shows an elaborate ornamental scheme for the area and indicates the ornamental importance of this park area. At present, the area appears abandoned and its function confusing.

Two bridges cross the pond at its westerly edge, a small wooden bridge and a larger concrete bridge. The presence of two bridges appears visually conflicting, and without water in this area both bridges seem to lack a purpose.

Oak Grove. The grove of oaks in Deering Oaks is a majestic legacy of the site's history, some of which are 200 years old. They are the dominant visual element in the park, located primarily in the central section but also westward along the Deering Avenue edge and northward to the embankment above the ballfields. This beautifully extends the grandeur and maturity of the landscape to have a positive impact on the open, flat landscape of active recreation to the north.

Active Recreation Area. The northern segment of the park is a large, flat, exposed area devoted to active recreation—ballfields, courts and a playground—and separated from the rest of the park by a grade change. The northern edge is exposed to the railroad tracks and Interstate 295. A

major asset of the park, visually and functionally, is the separation of active and passive use areas.

Edge Zones. The park area along Deering Avenue is separated from the street by a grade change along part of its length. The edge along Park Avenue is very permeable, and exposed to the street. There is a concentration of ornamental trees here, which provides an element of horticultural surprise and diversity to the predominant oak tree population in the park. The eastern park edge is indistinct, with edges along the pond at State Street, along the rose garden at High Street, and along the Edwards lot at Forest Avenue. In general, this park edge is dominated by busy roads, with the northeastern space dominated by the clutter of the maintenance yard.

Bowling Green. The bowling green, once a well-used space for lawn bowling, now appears as an artificial-looking pad of grass undefined by plantings and with no apparent purpose.

Landscape Details

The loss of character in Deering Oaks has occurred incrementally, through the confused or inappropriate visual signals conveyed by site details.

Lights. Site lighting is of several types: highway-type lighting along the pond and on State and High Streets, and Colonial-type fixtures within the park. Neither is appropriate for Deering Oaks, with its period of significance in the last quarter of the nineteenth century and the early twentieth century. In particular, the cobra-head fixtures are very intrusive in the landscape and reinforce a highway rather than a parkway character for State and High Streets.

Signage. Signage is inconsistent throughout the park, and for the most part regulatory in nature. The only identification signage is for Castle in the Park, giving the first-time visitor the sense that this is the name of the park. Lack of signage creates confusion and a feeling of unwelcome at park entrances.

Site Furniture. There are very few benches in Deering Oaks, and the ones that exist are out of character with the period of significance of the park, which is turn-of-the-century. The existing wooden and concrete benches were introduced into the park in the 1930s. Trash receptacles are currently of two styles. It is not necessary that they be of an historic design, but a simple, practical receptacle of one style would be preferable. The wooden bollards controlling parking along Tennis Court Road are out of character with the park, and more in keeping with the landscapes of state or national parklands. The gates

controlling circulation on the Interior Park Road are also out of character. They were installed as a temporary trial closing of the road and need to be of a permanent, improved design reflective of and contributing to the park's character.

Path Surfacing and Alignment. All of the park's paths are surfaced with bituminous concrete, which makes them appear more as extensions of the roadway network and less as pedestrian ways. Originally laid out to conform with the topography and diverge from the road alignments, there are some park areas that have only the roadway as the defined traveling way, or have a path alignment that parallels the road. The well-traveled pedestrian route connecting the northern Deering Avenue entrance to the entrance opposite Mellen Street is in a straight alignment, not the gracious alignment originally designed into the circulation system.

Proposed changes in path alignments need to restore the original intent of the circulation system to reflect topographic variations and separate the pedestrian from the automobile as much as possible. At the same time, they cannot be so indirect that they are not followed, and worn paths or desire lines are created instead.

Architectural Elements

There are few buildings in Deering Oaks. The major one, the Castle building, has been expanded from its original size to over twice that size. The new development is not in keeping with the original structure. A major visual problem with the building is the signage covering the facade, which masks the building and is an intrusion into the park landscape.

The original park bandstand was a circular wooden gazebo-like structure, set back against the oak grove in the center area of the park. The current bandstand is an intrusive structure, very out of character with the park landscape, and situated close to the road and pond.

A small structure in the park, one which is inappropriate in design for Deering Oaks, is the temporary storage locker near the softball field.

Sculpture and Monumentation

There are two pieces of sculpture in Deering Oaks. There is a Spanish War Veterans monument in the rose circle area, and a granite shaft in the Edwards lot with a bronze memorial plaque in honor of the site's namesake, World War I Major General Clarence R. Edwards. There are also nine memorial trees or groves in the main park section with plaques identifying the individual or group to whom the tree is dedicated. At one time there was a

small-scale model of city hall mounted on top of a column from the old city hall, which was removed from the park at some point in its history.

Deering Oaks began as a reservation with a simple naturalistic design. As tastes changed, the landscape became more embellished. However, formal spaces appropriate for sculpture were never built into the park's structure. The rose circle is an area that would be appropriate for temporary installations of sculpture, if they were carefully reviewed for design, scale and location within that park area. The only place that could accommodate a permanent installation of sculpture would be at the proposed pedestrian plaza in front of the Castle building, where a sculptural piece at the western edge of the plaza could serve as a focal element that also helps to define and separate the area from nearby park traffic.

Landscape Character and Historic Design Intent Recommendations and Guidelines

A. Park Edges and Entrances:

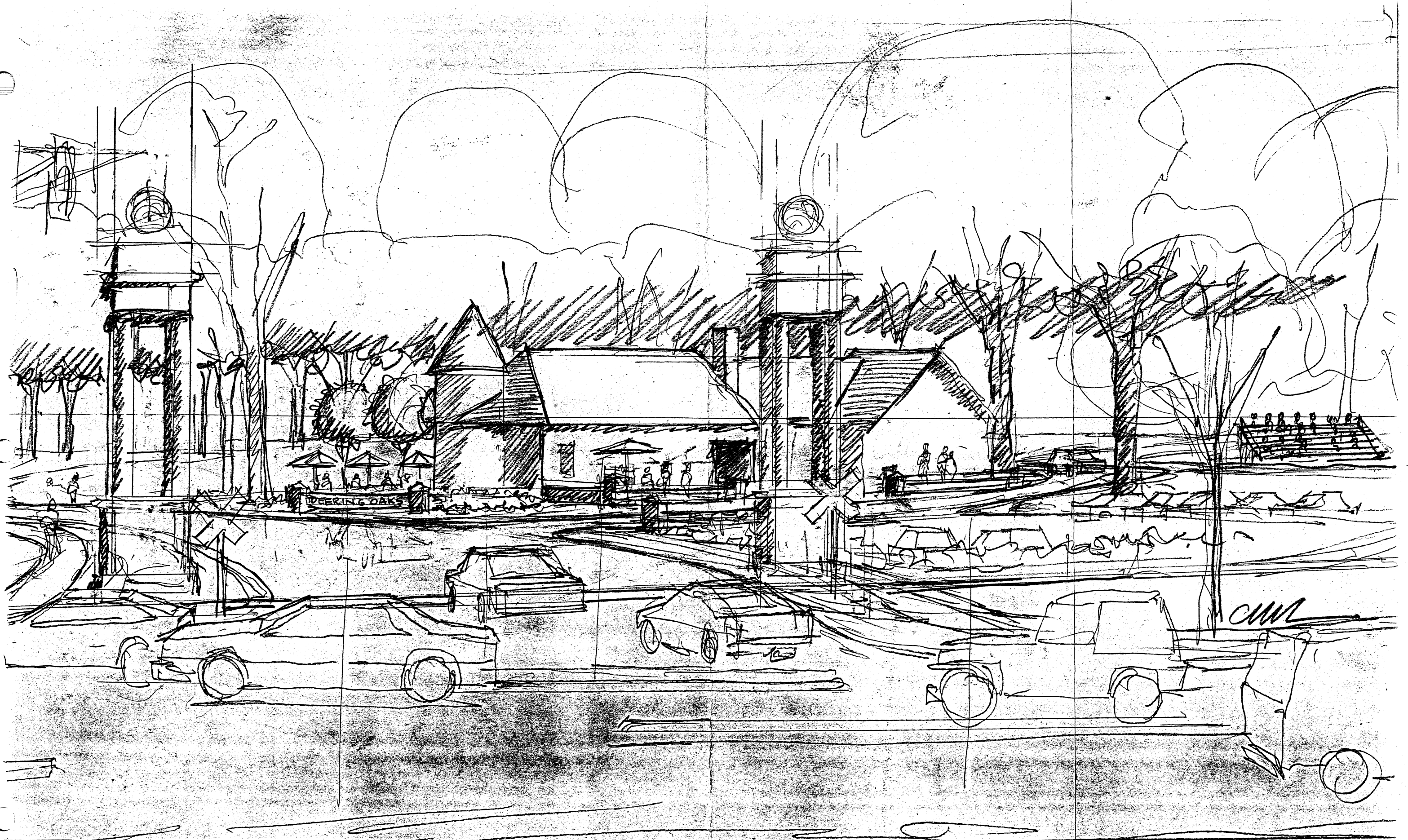
1. Embellish all park entrances with plantings of trees, shrubs and groundcovers to announce the park and welcome the visitor.

A combination of plant materials used in composition will strengthen the park's entrances and mark more clearly the passage from the city into the park. Underplanting trees with shrubs and groundcovers will also create a community of plants which will be easier to maintain and better able to withstand the rigors of life in a urban environment by lessening the possibility of compaction and helping to retain soil moisture.

2. Introduce plantings of trees, shrubs and groundcovers along the park perimeter with breaks to allow periodic views in, and with variable heights of vegetation to allow views over, in order to enhance the park landscape and to screen the city from the park.

A ratio of 2/3 closed, or planted edge to 1/3 open, or unplanted edge should be developed in implementing edge planting of the park that will achieve the goals of better separating the park from the city while offering views into the park from without and ensuring the safety of park visitors.

3. Investigate the potential to screen Interstate 295 from the park with planting along the highway right-of-way.
4. Establish entrance gates on State Street south of the railroad tracks, at the perceived entrance into the park.



ENTRANCE @ FOREST AVENUE & STATE STREET

Entrance gates on the north end of State Street will be a dramatic announcement of entry into this special place, such as the existing gates were when there was two-way circulation on this road. They will also serve to announce entry into the city itself from I-295, in a place where there is currently a maze of busy roads and a yard of stored maintenance materials.

4. Design small-scale entrance gateways for narrowed park entrances.

Pedestrian entrances at the east and west ends of Bowling Green Road and at the Castle need some architectural definition to give them character and to prevent vehicular access. Design for these entrance gateways should reflect the character of nearby vehicular gateways. The Deering Avenue park edge has a more rustic and woodsy character, expressed by the Deering Avenue entrance gates and the proximity of the major oak grove. The State Street edge is more urban and formal architecturally, expressed by the State Street gates and the proximity of the rose circle area.

B. Landscape Details:

1. Introduce a family of details for the park that are coordinated and reflect and reinforce the period of significance of the park, which is turn-of-the-century. (Illustrations of proposed details follow.)

- **Lights:** Replace the existing Colonial-style pedestrian lights with lights of a design consistent with the period of significance of the park, and similar in design to the lights that were historically on the concrete bridge. Restore the lights on the concrete bridge. Replace the cobra-head fixtures on State and High Streets with lights of a design consistent with the period of significance of the park. Use pedestrian-type rather than roadway-type lights by the pond.

- **Signs:** Design a coordinated sign system for the historic open spaces of the city, and apply the design to a system for Deering Oaks.

- **Benches:** Replace the wooden and concrete park benches with wooden and metal benches of a design consistent with the period of significance of the park. Phase in the new benches, placing them in the high visibility areas of the pond and pedestrian plaza first, the Bowling Green road next, and the playground last.

- **Access Control Gates:** Replace existing gates with gates that are similar in design to the Deering Avenue entrance gates, stone pillars with double metal swing gates.

- **Trash Receptacles:** Use one design for the park trash receptacles, the simple barrel design used in the city. Make the park barrels distinctive by

painting them dark green and adding a logo coordinated with the sign design.

2. Restore the original lights on the State Street gates.

3. Establish a hierarchy of path surfacing relative to distinct areas of visual character; level and type of use; and relationship to other areas:

- brick paving at the pedestrian plazas by the Castle building, to extend from the rear plaza to the parking lot and the path north of Tennis Court Road, and from the main plaza east down State Street, and west along the Interior Park Road, along the north pond edge, and over the bridge to the park entrance opposite Mellen Street. These are high-use areas in need of hard surfacing, and will appear and serve as extensions of and connections to the plaza areas.
- brick paving in the rose circle area, to reflect the more formal character of that park zone.
- brick paving on the sidewalk north of Tennis Court Road, to accommodate with a hard surface the high level of use and times of the year when the ground is wet. A high visibility pathway.
- brick paving on the Deering Avenue sidewalk to tie in with the city brick sidewalk on Park Avenue.
- bituminous concrete paving on all closed and narrowed roads, to accommodate a range of alternative uses (bicycling, roller skating, etc.)
- bituminous concrete paving on the ramp to Quinn Field, the steep path to the playground from Tennis Court Road, and the path by the baseball field bleachers, a practical hard-surface solution to steep grades in areas that do not warrant special brick treatment.
- bituminous concrete paving on the path/maintenance access way from Tennis Court Road to the playground, a hard-surface treatment in response to the slope as well as the use of the road for maintenance vehicles. Development of a hammerhead turn-around area at the playground for maintenance vehicles.
- stone dust paving for the access path along the athletic facilities, beyond the limit of vehicle access west toward Quinn Field, where there is no need for a hard-surface pathway.
- stone dust paving along the paths south of the pond to reflect a more rustic character.

- stone dust paving on proposed new paths within the passive park area: to connect to the proposed relocated bandstand, and to pass through the oak grove connecting the Deering Avenue entrance to the brick path that crosses the bridge, where there is currently a desire line indicating the need for a defined path.

The handling of drainage on stone dust paths is a critical factor. Drainage should not be concentrated, but rather designed as sheet drainage with crowns on the paths.

C. Visual Zones:

1. Preserve the distinctiveness of the various visual zones throughout the park, in particular: the arboretum character of the rose circle with its award-winning display of roses; the majestic stand of red and white oaks; the separation of active and passive recreational areas; and the bowling green. Improve the visual definition of the bowling green with edge tree plantings.

D. Pond Landscape Treatment:

1. Increase planting around pond edge with trees, shrubs and groundcovers to enhance pond edge composition, control public use of the edge to minimize erosion, and reduce maintenance.
2. Conduct feasibility study to determine potential and costs of recreating the upper pond in the ravine. Plant along the ravine as a first phase treatment of the area.
3. Eliminate the wooden bridge at the pond, maintaining the one original concrete bridge. Restore the original lights on the concrete bridge.
4. Reset, on a foundation, the granite curb edge around the pond, in order for the edge to have a consistent level. Discontinue the sloped curb edge, using only the stacked curb detail for areas not bounded by the mortared wall. Continue the edge up to the concrete bridge, reserving the ravine area for more naturalistic treatment.
5. Convert the paddle boats to be like the original swan boats.

D. Inappropriate Park Structures:

1. Scale down the ramp at the pond, redesigning the structure with cobble drainage swales on either side.

2. Remove the inappropriately designed bandstand and construct a replacement in the location of the original bandstand, in a design and of a scale sympathetic with the original (to be determined during design development). Consider the use of temporary staging in front of the bandstand to accommodate concerts needing more space than the building can provide.
3. Redesign the storage locker near Quinn Field more sympathetic to the character of the park.

E. Sculpture and Memorials:

1. Remove the memorial tree plaques in the park, and place those names on a plaque to be placed in the proposed visitor center. Honor all who contribute to memorial park trees in this manner.
2. Do not accept any donated sculpture or other permanent art pieces for the park. Temporary installations may be installed after review and approval by the Public Arts Committee and the Friends of the Parks Commission.
3. Design and install wire arches at the entrances to the rose circle as structures to support climbing roses, in order to make the rose display more visible from the surrounding roads.

3. Horticulture and Ecology

An evaluation of the condition of the horticulture at Deering Oaks was made by Paul Rogers, consulting horticulturist to The Halvorson Company. This evaluation was based on interviews with city maintenance and management staff, review of budget material and other pertinent documentation, and one site visit in October, 1993. As part of his site visit, Mr. Rogers met with members of the project committee in order to report and demonstrate his findings.

Further input was provided by a group of consulting arborists who were in Portland for an urban forestry conference and were invited to the park by Mr. Jeffrey Tarling, the City of Portland Arborist.

An evaluation of the hydrology and water quality of the pond at Deering Oaks was made by Stephen Kelley, Senior Environmental Geologist at Haley & Aldrich, Geotechnical Engineers and Environmental Consultants. This evaluation was based on review of available historical material, interviews with city maintenance, management and planning staff, review of the results of chemical testing of the pond water by city staff, and one site visit in October, 1993.

Evaluation of the horticulture follows, after which is an evaluation of the park's hydrology and water quality.

Horticulture: Historical Perspective

Many references can be found in the historic documentation for Deering Oaks to on-going, proactive maintenance and capital improvements. For example, in 1902 the report of the Parks Commission cited much work done on the park's shrub and flower beds. In 1904 it was noted that the park was thoroughly cleaned, borders of walks cut, dead trees removed, lawn repaired, shrubs and trees pruned, and walks and drives repaired. Between 1910 and 1921 1000 oak trees were planted or replaced. Much of the filling that was done in the early twentieth century in the northwest and at State Street was done with donated materials and labor. In 1910 a cottage with a greenhouse was constructed on Park Avenue for a park superintendent. In 1917 \$300 worth of "fancy" evergreens were planted, 36 flower beds were planted with plants grown in the greenhouse, 168 weeping willows were planted around the pond, manure and leaf mold were spread under the oak trees, all trees and shrubs were pruned, and one bed was cited to have been planted with 300 shrubs.

This is an impressive legacy of care for the park, both by the city and by the public. It is a legacy that must be reinstituted to ensure the health and future of Deering Oaks.

Trees

There are approximately 1000 trees in Deering Oaks. The predominant species in the park is oak, white and red oak, some specimens being the 200 year-old survivors of the pre-park life of the site. Seventeenth century plans of the site show that the location of the major oak stand in the central park area has been constant for at least three centuries, a remarkable legacy for an urban park. There have been additions of other species over the years, most particularly in the southern quadrant of the main park section and in the rose circle area, developed after that property was purchased in 1906.

Ornamental species found along the Park Avenue edge were planted in the early twentieth century, an expression of the popular taste of the time for exotic or non-native species. Examples of species are catalpa and horse chestnut. There is also greater variety and ornamental character to the tree population of the rose circle area, which has been planted to display individual specimens. An appropriate species mix for Deering Oaks would be 2/3 oaks, 1/3 other species.

There are evergreens in the park, including Austrian pines, red pines, arborvitae and spruce. The evergreens are primarily located in the southern and southwestern park areas.

Deering Oaks is typical of urban woodland conditions, which are subject to the stresses of pollution, intensive park use, competition, and lack of an understory plant layer which helps to retain soil moisture, regulate soil temperature, and control compaction. In order to ensure the future of a signature oak stand for Deering Oaks, a program of replacement tree planting and maintenance is essential. New trees have been planted in recent years, but overall, the tree population is even-aged and nearing the end of its life cycle. Oaks need sunlight to grow, and without selective tree thinning to open up more light replacement oak tree plantings would have difficulty surviving amidst the mature oak stand of the park. At present, the density of trees is too high. There is a need for a thinning and planting plan to replace old dying trees and plant the next generation. Private donations have been given to the city for tree planting in Deering Oaks, and they should be encouraged in the future. The planting plan should create clear open spaces and canopied spaces in order to restore, where appropriate, the historic intent of tree masses and open lawns.

The city crew does all cabling and other maintenance work on the trees. Remedial pruning is done in the winter, and planting in the summer. For the first time, the city has developed a plan of tree location, type and size, which will provide a good basis for an upgraded maintenance and tree replacement

program that includes a regime for tree pruning and replacement as well as for turf and soil improvements that are essential for healthy tree growth.

Tree roots are normally located in the top 16" of the soil, with most being in the top 9". Soil tests in Deering Oaks have indicated that the soil profile consists primarily of heavy clay soils with less than 1" of organic matter at the surface. In this clay soil condition, all plant roots are surface roots. The positive characteristic of clay soils are that they have a good ability to hold nutrients, however they do limit the infiltration of water down through the soil horizons. They also have an unfortunate tendency to pack together, being easy to compact and therefore needing regular aeration to counteract this tendency.

It was estimated that 10% of the park's trees, or 100 trees, are in poor condition and should be removed immediately, and that 40%-50% need immediate care. This magnitude of tree removal will change the character of the park temporarily, but is necessary to address the severity of the problem and allow for an intensive replanting program.

There is a significant presence throughout the main park section of browning and die-out at the tops of trees. Many tree trunks are also hollow, rotted out from the middle with thin, highly unstable outer rings of trunk wood supporting massive tree canopies.

Many trees have also lost their central leader. Their remaining side branches have formed crotches, which are structurally extremely weak. A tree with a crotch angle of 0-19 degrees has a 100% probability of splitting. Many trees have already lost one side, with all their growth on the remaining side. This unbalanced mass distribution is another very unstable condition and needs attention.

There is ample evidence of girdled tree roots, a situation in which roots are wrapped around the tree base and are strangling one another. This condition is often due to compacted soils which prevent normal root growth. A healthy tree is buttressed at the bottom, with its trunk flaring out as it meets the ground. The trees in the rose circle, where there is less usage and soil compaction, are substantially healthier and show this buttressed condition. In the main park section, many trees can be found with little or no buttressing at the base or a flat trunk on one side, indicating girdling roots caused by soil compaction. A progression of dying limbs up the tree is a further symptom of this problem, which is leading to the irreversible decline of significant numbers of the park's trees.

The two-needle pines in the park have diplodia, a disease that has spread throughout New England over the last 10-15 years. Holes drilled by sapsuckers can be seen in the trunks of infected trees. This indicates the

presence of insects which are feeding on the infected, weakened wood and are in turn being eaten by the birds. There are infected trees throughout the park.

Grass

There is no regular grass maintenance at Deering Oaks other than mowing and trimming. There is insufficient money and crew to perform regular and necessary liming, fertilizing, aerating, topdressing or overseeding of turf areas. Remedial work is done only in response to certain specific uses, in particular the Family Festival, and insufficient funds received from use-intensive activities such as the festival mean that insufficient repair work is done. With the present budget, the city could not keep up with the mowing requirements if these maintenance techniques were instituted to improve the turf.

The quality of the turf in the park varies according to the location within the park: the sports fields, especially the baseball field, receive specialized care and have relatively little use and consequently are in the best condition; the turf in the rose garden area benefits from its isolation and relatively small use and thus is in relatively good condition; the remainder of the park and especially in the areas of high use, heavily tree-covered areas, and road edges is badly worn, in some cases barren, and in some eroded.

Because of the severe soil compaction present in the park, in some places, fescue—a type of hardy grass—is the only grass growing. Many places exhibit poor grass growth and the presence of weeds. In some places, such as under the major stand of pines along the Deering Avenue park edge, the grass is mildewed because of intense shade. Soil tests under these evergreens showed that there were less microorganisms than there should be: a result of the nutrients being taken by the grass. This is a case in which a mulch layer around all the evergreens in the stand would be more beneficial than attempting to maintain grass. Round Up is used to a limited extent around tree bases to control grass growth.

Soil Compaction

A soil probe was used to determine the amount of soil compaction in the park. A probe should be able to be pushed down through one foot of soil. Tests throughout the park showed such a severe level of compaction that in places the probe could not penetrate the soil surface at all, and in no case could it be penetrate further than three inches. This means that no oxygen and little moisture is getting into the soil, both of which are essential for plant survival. A cubic foot of good quality soil typically consists of 45% mineral matter, 5% organic matter, 25% water, and 25% air. When the air content of soil is below 18%, plant roots suffer. When it is below 9%, they die. The carbon dioxide given off by plant roots in the normal process of respiration

becomes toxic if compacted soil causes it to build up in high concentrations. This is most likely occurring in Deering Oaks.

One of the major causes of soil compaction and stress to the trees adjacent to park roads is uncontrolled parking, particularly along the southern park road, commonly referred to as Bowling Green Road. That road is used for regular overnight parking with a capacity of 100 cars, and the lack of curbing has allowed cars to move beyond the paved surface and onto turf areas. Those areas are now barren, compacted and eroded, an invitation for continued parking and further degradation of the physical environment. Testing of trees along the pond side of that road by visiting arborist Alex Shigo indicated that the trees are suffering severely from the stress of soil compaction by cars that each weigh thousands of pounds each. A clear indication of the source of the stress was the fact that the sides of the trees facing the pond were in much better condition than the sides facing the road. If this situation is not alleviated, all the trees along the side of the road will be lost. There are bituminous curbs along the Tennis Court Road, and although they are scarcely high enough to do a good job of vehicular control, the trees near this curbing are in better condition than those where there are no curbs.

There are a number of concentrated, long-term uses that have a particularly heavy impact on the park's environment. The Deering Oaks Family Festival takes place during one week in July, and draws upwards of 150,000 people. There has been an attempt in recent years to minimize damage through the location of festival structures. Nevertheless, the combination of tents, carnival rides and attendees causes tremendous soil compaction throughout the park. The fees paid by the Chamber of Commerce, sponsor of the event, are insufficient to address the real damage. In addition, they are not dedicated for park maintenance, but rather go to the Recreation Division general fund.

Christmas tree sales occur at seven locations throughout the park from Thanksgiving to Christmas. Only one location, at the Castle building, is on a hard surface. Vendors set up trailers and large numbers of trees. The turf at this time of year is in a dormant state, and not able to repair itself from such heavy usage over so extended a time period. This is clearly a significant damaging use of the park.

The Farmers Market occurs on Saturdays from May to November, and vendors park their trucks along the Interior Park Road. At the height of the season, 20 trucks can be present, 10 on each side of the road. They park off the paved surface, compact the soil, damage the turf and stress the trees. If it is determined that this is an appropriate use for the park, it must be accommodated on paved areas only.

Athletic Fields

Deering Oaks has almost 11 acres of athletic fields. The outfield of Quinn Field is also used for football, lacrosse and field hockey. Because this intense level of use causes severe decline in the condition of the turf, it is replaced every spring. It also has an irrigation system. It appears that the ballfield crew is well equipped to maintain these facilities.

Leaves and Mulching

In the fall, leaves are blown into piles, collected with a vac unit, and removed. The result of this leaf pick-up is that, over the long term, the natural source of organic material in the soil is lost to the park. The value of this material was recognized in the early twentieth century when there are records of humus being applied throughout the park as a way to improve the soil quality.

Next to soil compaction, damage by weed wackers and other maintenance equipment poses the greatest danger to the health of the park's trees, particularly the small trees trying to get established. The city is beginning to use wood chips as mulch around the base of trees. The use of mulch helps to retain soil moisture and nutrients and reduce the danger of soil compaction near the trees. It also regulates the proximity of maintenance vehicles and equipment to tree trunks. Trees should be mulched at least 4'-5' beyond the tree trunk. Groves of trees in the park should be mulched together as a community of plants.

The city is planning to recycle its leaves this year at Portland's landfill. It is experimenting to find the proper mix of leaves and wood chips for mulch.

Wooded and Open Areas

An important determinant of visual character, one that also affects park use and should be considered in a vegetation management plan, is the relationship between areas of tree cover and open areas. The 1879 plan of Goodwin clearly shows wooded areas, partially wooded areas and open areas. The 1870 plan of Portland shows wooded and open areas in the parkland that closely align with Goodwin's proposal, and that in most respects correspond with the current condition. There have been modest changes over time, but an area that has changed most markedly is the land to the northwest of the pond, where the bandstand is currently located, and behind it, the eastern third of the central park section. This was open space in Goodwin's plan, at the edge of which he located the bandstand, with the oak grove behind it and looking out over the pond. Today this is a wooded area, most likely the result of planting that was recorded over time. The lack of understanding about the importance of open spaces as contrast to the woods, and as opportunities for a

different type of use, has caused a blurring of the edges between open and closed park areas.

Hydrology: Historical Perspective

Until the late 1800s the pond was part of a tidal estuary that was continuous with Back Cove. Since that time the estuary has been filled, and the pond is no longer tidal or connected to Back Cove. The edge of the pond was defined by a combination of dry-laid stone and mortar, and stone walls beginning in 1882. The fountain was added in 1885 and the duckhouse in 1887.

The edge of the pond in Deering Oaks has been significantly modified in two areas, at the Castle building and along the pond's southwestern edge. In the early years of the park, a tributary channel of the pond extended from behind the building under the current entry road and connecting to the main pond across the road. A small bridge brought the visitor into the park from the Forest Avenue entrance. Another inlet and bridge existed at the southern pond edge, which was later filled in and the bridge removed. The southwestern edge of the pond was also modified with another bay filled in. The western edge of the pond, where there once was a dam and an upper pond, is now a dry inlet with remains of the concrete dam structure along the edges of the ravine. It appears that the dam did not have a spillway, but rather, held back water to create an upper pool. An original wooden bridge here was replaced by a concrete and granite bridge in 1911. The bridge was reconstructed in the early 1970s. Another smaller bridge was constructed just east of the main bridge about 20 years ago.

According to park records, water quality has been a problem from the beginning, due to lack of water flow and depth of the pond. There are many references to algae and grasses being cleaned from the pond. The pond bottom was dredged and lined with gravel in the early 1970s.

Water Sources and Water Quality

The pond, which is approximately four feet deep, is filled with municipal water. It also receives inflow from stormwater through catchbasins in the park. Overland sheetflow also reaches the pond during and after large storms.

Outflow from the pond is controlled by an outlet structure on the eastern pond edge. It is closed except when the pond is drained in the fall.

Chemical water tests indicated that the pond is highly eutrophic. Eutrophication is the process that a water body undergoes as it moves towards unhealthy conditions, resulting in excessive plant or algae growth and unpleasant odors. Plant growth is caused by the excessive addition of inorganic nutrients, organic matter or silt which causes increased biological

production and decreased water volume. The shallow depth of the pond allows sunlight to reach the bottom and promote weed growth. It is also relatively stagnant, with minimal flow-through except in times of high runoff. A water body is considered to be highly eutrophic if phosphorous concentrations are above 50 parts-per-billion (ppb). Samples collected in the pond ranged from 54 ppb at the ramp at the southern edge to over 200 ppb at the footbridge.

The high phosphorous levels reflect the numerous nutrient sources in the area such as bird droppings, incoming sediment, and surface runoff. Because there is no regular outflow these nutrients and contaminants accumulate until the pond is drained in the fall. Even then, some nutrients and contaminants are likely absorbed by the soils, are present in the vegetation, or remain on the floor of the pond to affect the water quality when the pond is filled again.

The water quality of the pond would be improved by eliminating or reducing the potential sources of contamination. It would also be improved by introducing mechanical aeration and water circulation measures. However, nutrients and contaminants will still accumulate and eventually result in similar conditions unless a system is introduced to allow water to flow through and drain from the pond continuously or be mechanically treated. At present the only major recharge is metered water from the Portland Water District. Recharging the pond from this source could cost the city a significant amount of money. The use of stormwater for recharge is problematic because of the potential accumulation of toxic concentrations of contaminants as well as the undependable nature of summer rainfall. The development of wells for recharge appears to be viable as a reliable, inexpensive source of water, assuming that the potentially brackish water is not a problem.

Other actions that should be considered are controlling the waterfowl population and dredging to deepen the pond. Deepening the pond will cause the water temperature to lower somewhat and reduce the sunlight sustaining bottom vegetation, making conditions that support weed growth less desirable. A greater volume of water would also increase the amount of nutrients and contaminants that the pond could accept without significantly affecting water quality. Saltwater intrusion is likely with the use of well water and the deepening of the pond. However, the current uses of the pond should not be greatly impacted by it.

The Ravine

The ravine in the western edge of the pond was evaluated for the potential to create a viable water body. It appears that an inflow stream and waterfall can be created only by mechanical recycling or pumping. A small spring in the upper reaches of the ravine appears to reach the old dam location only

occasionally. If wells and a flow-through system were introduced, the water could be pumped to and discharged in the ravine to flow naturally towards the pond. Based on the configuration of the ravine, a substantial amount of water would be necessary to create a steady flow across the bottom of the ravine. However, the current created by this water flow would provide the added benefits of supplying additional oxygen to the water, discouraging the settling of contaminants and thereby improving water quality.

Horticulture and Ecology Recommendations and Guidelines

A. Vegetation Maintenance and Improvements:

1. Develop and implement a vegetation management plan with the following goals and components:
 - selectively thin the current tree population and interplant the next generation of trees, giving highest priority to the oak groves.
 - maintain a mix of red and white oak in the oak groves of the park.
 - maintain a ratio of 2/3 native species, including oaks and evergreens, and 1/3 introduced species such as catalpa, horse chestnut, tree lilac, yellowwood, crabapple.
 - concentrate the exotic species in the area south of Bowling Green Road and in the rose circle area, using some flowering or other ornamental species at park entrances.
 - develop a clearer division of wooded and open spaces, using the historic Goodwin plan as a guide (see master plan map for delineation of areas).
 - conduct a tree-by-tree condition assessment to serve as a baseline and to form the basis for a removal and replanting program.
 - set up a computerized record-keeping system that can allow record-keeping of vegetation condition on an individual plant basis, facilitate planning, and allow tracking of operations in order to learn what works best in terms of maintenance and management and make adjustments over time.
2. Institute a regular program of fertilization and pruning for the site's trees to improve tree condition:
 - fertilize and prune trees on a cycle of 20% a year to start, 33% a year once program is established. Fertilize with organic fertilizer, and add lime first in order to not lose the benefits of the fertilizer.
 - anticipate increased growth and maintenance needs in response to fertilization, to be supported by increased budget support for maintenance.

3. Implement a regular, higher intensity program of turf maintenance and soil improvements to improve turf condition, relieve damage due to compaction and add nutrients to the soil:

- apply ground limestone at the rate of fifty pounds per one thousand square feet.
- apply 12-8-20 fertilizer in the fall at the rate of ten pounds per one thousand square feet.
- aerate the ground in the fall, using four passes with an aerator, minimum 3" deep penetration.
- overseed with a fescue grass mix at the rate of three pounds per one thousand square feet.

These recommendations are based on current research which shows fall to be the ideal time to fertilize turf. Feeding at this time makes grass more cold resistant; reduces disease and winter injury; keeps the grass growing later in the fall, thus shortening its dormant season; provides a residue of nutrients for spring green-up of the grass; and suppresses weed growth by promoting grass health.

4. Introduce shrub and groundcover plantings in particular areas (identified under Landscape Character and Historic Design Intent) to embellish the landscape, reduce maintenance, and establish communities of plants to cross-support one another.

5. Institute a regular program of fertilization and pruning of existing and new shrub and groundcover plantings:

- fertilize and prune shrubs on a cycle of 20% a year to start, 33% a year once program is established. Fertilize with organic fertilizer, and add lime first in order to not lose the benefits of the fertilizer.
- anticipate increased maintenance needs in response to new plantings, to be supported by increased budget support for maintenance.
- commit to the increased maintenance necessary to culture new groundcover plantings and establish ground coverage for two to three years: weeding, watering, mulching.

6. Develop staff training sessions in preparation for high-intensity maintenance and implementation of vegetation management plan.

7. Compost and re-use leaves as mulch on site, concentrating particularly on new shrub and groundcover plantings to help them become established. Mulch to a five foot radius around the trees, mulching some groves of trees together and eliminating grass as an understory. Mulch plants in the fall no deeper than 3" coverage. Maintain mulch in a loose consistency, cultivating any mulch that has compacted around plants.

8. Discontinue the use of herbicides in the park. Substitute Integrated Pest Management (IPM) which utilizes alternatives to chemicals for pest control and establishes a monitoring system for early detection.

B. Pond Water Quality:

1. Conduct further study to determine the best method of increasing flow-through of water in the pond and thereby improving water quality.
2. Investigate the possibility of trapping and removing a certain number of ducks to maintain an appropriate population. Seal the openings in the duckhouse to discourage the duck population. Sell cracked corn for the public to use for duck feed instead of bread which becomes suspended in the water.

4. Maintenance and Management

Management, Personnel and Budget

The city has instituted umbrella management, a cooperative arrangement under which various crews and equipment from the Department of Parks and Public Works are available to one another, thereby increasing efficiency. What this means for Deering Oaks is that there are roving crews to maintain the park, rather than dedicated caretakers.

The following divisions and crews have jurisdiction in Deering Oaks:

- Parks: mowing, trimming, litter pick-up
- Recreation
- Ballfield
- Forestry
- Horticultural: flower beds
- DPW: roads and sidewalks
- Wastewater and Sewer
- Traffic: lights and signs
- Buildings and Trades: maintenance of the "castle"
- Engineering: plans for upgrade of roads, etc.
- Parks Division, 3-person crew: benches, fences, gates, and bleachers
- Cross between 3-person crew and Buildings and Trades: fountain

The presence of this many crews and divisions presents coordination challenges, if not coordination problems for maintenance of the park. In addition, there are no plans or schedules for regular maintenance tasks such as tree pruning or grass aeration.

The Recreation Division at one time was part of Parks Division. The two are now separated under the Department of Health and Human Services and the Department of Parks and Public Works, respectively. It is critical that there be good coordination and agreement on common goals for the park between these two divisions. While Parks maintains and repairs Deering Oaks, Recreation issues permits and receives money from users such as the Chamber of Commerce, which goes into the general revenue rather than being dedicated for maintenance and repair of Deering Oaks. There is no set-aside funding for maintenance or for planting, while at the same time the intensive use that the park gets demands that equally intensive maintenance be provided to counteract the impact.

The lack of a detailed maintenance and management plan, the challenges of maintenance coordination, and the lack of adequate funding for capital improvements and maintenance, are among the largest and most serious issues the park must face.

Maintenance of Structures

The structures in Deering Oaks were evaluated by visual assessment, and a summary of their physical condition follows. Park structures need to be repaired as well as regularly maintained in order to forestall accelerated deterioration.

Entrance Gates, Pillars. In good condition, with some minor repointing necessary in places.

Castle Building. Recent work has been done to the structure. Roof work is needed. The building's interior should be assessed in terms of retrofitting to satisfy proposed use for a visitor center and ranger station, as well as possible sports equipment storage, etc.

Paths. Bituminous concrete in good condition. No formal edging of paths, which are crumbling in places.

Roads. Bituminous concrete in good condition, with some cracked pavement in places. Roads have been over-paved over time, with the loss of the original cobble drainageways and adequate curb height.

Stairs, Dams at Ravine. Stairs in poor condition, remains of dams along ravine.

Walls at Pond. Overall good condition, with significant mortar loss in places, particularly on the northern shore where some sedimentation has occurred. Freezing of water for winter skating will cause degradation of stonework.

Lights. Most of lenses in park lights broken.

Drainage Structures. Appear to be operating well, although a number are filled with debris.

Park Concession

Deering Oaks is fortunate to have a food concession at the Castle building. It is a function that was considered by early park planners to be very important for a public space, a gregarious place where people could gather, have refreshments, and casually see and meet one another. It also provides a place for orientation and information.

The concessionaires at the Castle operate year-round, providing refreshments during the temperate months of the year, selling Christmas trees in late fall,

and renting skates, serving hot chocolate and working with the city to maintain the ice on the pond during the winter.

It is in the city's and the park's best interests that the agreements between the city and the concessionaires allow for the stability of the concessionaires and the ability for them to deliver a quality product for park visitors. The agreements should be reviewed in order to ensure an equitable partnership that defines relative responsibilities for maintenance costs and capital expenditures for the physical plant and the services provided.

It is also very important that the city have control over certain design, management and use issues, i.e.: the character of signage and boats; the multiple uses of the building for the concession, a warming house in the winter, and future year-round visitor center; and the warehousing of seasonal equipment.

Public/Private Partnership

It is essential that Deering Oaks have private friends as well as public servants. Friends who are organized and dedicated to the future health, well-being and appropriate use of this special place in Portland. Friends groups for parks across the country have, in partnership with cities, accomplished a tremendous amount on behalf of their parks, most notably in garnering private donations to support the on-going efforts of park maintenance and capital improvements and to augment the limited funding of city budgets.

A Friends group for Deering Oaks should also serve the important role of watchdog for the park, advocating for policies, practices and budgets that help to improve the quality of the park's physical environment and make it an inviting place for the visitor.

A Friends group will be critical for Deering Oaks as master plan recommendations are considered for implementation, and the competing interests of city departments and needs are weighed for priorities and funding.

Maintenance and Management Recommendations and Guidelines

A. *Park Management:*

1. Improve coordination and cooperation between the several departments with maintenance and management responsibilities in the park, particularly between the Recreation and Parks Divisions.
2. Implement mechanisms that can improve communication and accountability, such as written work schedules and job sheets.
3. Establish a budget with dedicated line items in order to plan, manage effectively, quantify the budget need and effectively advocate for increased funding.
4. Develop job descriptions for park staff.
5. Implement management guidelines and policies for special park events including the Family Festival (see Appendices 4 and 5). Incorporate a system of fees dedicated to park maintenance.

B. *Private Advocacy and Support:*

1. Encourage the establishment of the Friends of Deering Oaks group to spearhead fund-raising efforts and serve as a public watchdog and advocate for the park.

C. *Maintenance of and Improvements to Structures:*

1. Make necessary repairs to park structures and infrastructure.
2. Retrofit Castle building to accommodate proposed additional uses.

D. *Park Regulations:*

1. Post and enforce park regulations.

E. *Park Concession:*

1. Review the agreement between the city and the vendors of the Castle. Make any necessary changes that ensure vendor stability and the ability to deliver a quality product, while giving the city the necessary control over design and management issues (i.e. design of signage; type of boats used in pond; use of Castle building space for other park-related functions).

5. Image and Safety

The most frequently expressed concerns of respondents to the survey of public use focused on safety and security, the image of Deering Oaks as an unsafe place. The greatest percentage of respondents, 39%, cited a variety of illegal or nuisance park uses as posing safety issues: drinking; sexual solicitation; violence; drug dealing; gang activity. Concern for safety after dark was also mentioned frequently, as was concern about the danger posed by the volume and speed of traffic through the park.

Most urban parks share the problem of public concern for safety and security. The problem is both real and perceived at Deering Oaks as well as in other similar urban parks. Perceptions change slowly, once they are ingrained. High visibility efforts must be made to address the issues of greatest public concern, allay fears, and encourage those who do not use the park to visit it.

Recommended changes to the circulation system will improve the real and perceived park environment for the park user. These changes must be accompanied by adequate support for police patrolling of the park.

The concept of park security through rangers that have the official posture of police yet use policing techniques tailored to parks originated with Frederick Law Olmsted. Along with maintenance, park safety was one of his central themes in ensuring the continued success of his parks. Deering Oaks had park rangers at one time, and because of budget constraints does not have the program any longer. However, it has proven of immense benefit as a friendly and authoritative presence in other urban parks across the country, one which cuts down significantly on inappropriate park use. Its reinstatement in this park would be a tremendous support to deter problem uses, enforce regulations, and provide assistance and information to the public, thereby also improving the park's accessibility and image.

Image and Safety Recommendations and Guidelines

A. Park Surveillance:

1. Augment the effectiveness of police patrolling with the use of park rangers to reinforce regulations and appropriate use.
2. Facilitate police patrolling of closed park roads with installation of remote control swing gates.
3. Maintain park lights all night long to facilitate police surveillance.

B. Public Education and Park Use:

1. Educate the public about the values of the park's landscape, history and physical environment in order to reduce inappropriate use and abuse of the park.

C. Citizen Advocacy

1. Encourage the development of a citizen advocacy group to collaborate with the city in promoting the positive image and use of the park, in addition to such a group's role as advocate and fund-raiser for the park.

Phased Plan for Implementation

Phased Plan for Implementation

High Priority Projects are those which are most critical for satisfying the needs of the park and supporting the plan's goals, in terms of park use, character and functioning. High priority projects are proposed to be implemented within the next five years.

Moderate Priority Projects are projects that, although not an immediate need, are desirable to be implemented in the near term. They are significant for the long-term success and impact of the master plan and incrementally achieve the plan's goals. Some projects are continuations of work begun in high priority projects, such as the implementation of circulation recommendations. Moderate priority projects are proposed to be implemented within the next five to ten years.

Long-Range Priority Projects can only be implemented over the long term, can be done as funds become available, or are low priority relative to other park needs. Most long-term priority projects are proposed to be implemented after ten years. In some cases, however, particularly the edge planting projects, it is desirable that they be initiated in the short-term—sooner than ten years—but completed over the long term. Although they are extremely important for the character and use of the park, they appear in this category because of their scale.

Projects have been broken down in terms of construction projects although some projects are closely related and would most likely be done in tandem, such as the narrowing of Tennis Court Road, the development of an access road behind the Castle, and construction of the parking lot at the site of the current maintenance yard. Some projects are large and can be further subdivided, such as installation of park lighting in phases or the construction of new entry gates at State Street at a later date after narrowing of the road.

The master plan is intended to provide a blueprint for phased rehabilitation of Deering Oaks and to stimulate further public and private investment in the park. It is essential that the process of investment in the park be long-term and on-going. The plan as well as implementation of the first projects recommended therein will set the direction and provide the inspiration for that investment.

HIGH PRIORITY PROJECTS

MODERATE PRIORITY PROJECTS

LONG-TERM PRIORITY PROJECTS

- Tennis Court Road: narrowing of road and installation of granite curbs; closing of park entrance in front of Castle; developing of access road and associated sidewalk behind Castle - Parking lot: development of 50-car parking lot at site of current maintenance yard - Bowling Green Road: narrowing of road to pedestrian scale; redesign of southern park entrances at Deering Avenue and State Street to pedestrian scale - Park Avenue/Deering Avenue Parking: development of parallel parking along Park and Deering Avenues - Pathways: Brick--Deering Avenue: construction of brick pathway along Deering Avenue park edge - Pedestrian Plazas at Castle: development of front and rear pedestrian plazas at building - Planting at the Playground - Castle Renovation: making necessary repairs to structure; development of a visitor center/ranger station at the Castle - Site Improvements: Removal of existing horseshoe pits and relocation of new pits behind the tennis courts to clear space for development of volleyball courts - Site Improvements: Volleyball Courts: construction of two courts - Site Improvements: Tennis Court Restoration - Site Improvements: Basketball Court Reconstruction	- State Street: narrowing of State Street; planting along pond edge; development of brick pathway; installation of new lights of historic pathway character - Interior Park Road: redesign of access control gates; narrowing of access road between Tennis Court Road and Interior Park Road; installation of granite curbs - Site Improvements: Picnic Tables: two additional tables in oak grove	High Street: narrowing of High Street; installation of new lights of historic pathway character
- Park Lighting: installation of new lights of appropriate historic character - Signage System: design and installation of coordinated signage system of appropriate historic character - Site Improvements: Benches of appropriate historic character at the pond, Bowling Green Road, and playground (can be phased according to visibility and function of areas)	- Pond: removal of wooden bridge; repairs to mortared wall; resetting of stacked curbing; continuation of stacked curbing to the concrete bridge - Structures: Deering Avenue Gates/Wall Restoration: repairs to gates and walls at Deering Avenue entrance - Structures: Pond Access Drive: redesign of ramp at south pond edge - Structures: Landsand: removal of existing bandstand and construction of new one in original location and reflective of original design - Pathways: Brick S. of Interior Road: development of brick pathways from pedestrian plaza west along Interior Park Road, along north pond edge, over bridge and to park entrance opposite Mellen Street - Pathways: Stone Dust-surfacing of paths south of pond, through middle park section, and between playground and Quinn Field with stone dust - Planting: Entrances--Bowling Green Road: special entrance planting at the two narrowed park entrances accessing Bowling Green Road - Planting: Entrances--Deering Avenue: special entrance planting at proposed main park vehicular entrance - Site Improvements: Trash Receptacles: placement of receptacles of coordinated design in selected park areas	- Structures: Concrete Bridge Restoration: repairs to bridge; restoration of lights on bridge - Structures: State Street Gates Restoration: repairs to gates; restoration of lights on top of gates - Path-ways: Brick--Rose Circle: resurfacing of paths in rose circle with brick - Planting: Edges--Rose Garden/Edwards Lot: planting of edges to embellish landscape and better separate park from city - Planting: Edges--Park Avenue/Deering Avenue: planting of edges to embellish landscape and better separate park from city - Planting: Edges--L-295: planting to screen L-295 to greatest extent possible - Planting: Pond Edges: planting to embellish pond landscape, control erosion and facilitate maintenance - Planting: Ravine: restoration planting in upper pond area with reference to 1935 planting plan - Site Improvements: Rose Arbors: installation of wire arches at rose circle entrances as structures for climbing roses
- Feasibility Study of Pond Water Quality - Vegetation Management Plan	Feasibility Study: Upper Pond in Ravine: study to determine feasibility, costs and methods of reinstating water in ravine	
Pathways: Brick--Park Avenue: reconstruction of brick pathways along Park Avenue		Etuminous Concrete Pathway: improvements to pathway to active recreational area

**HISTORIC PRESERVATION BOARD
CITY OF PORTLAND, MAINE**

**WORKSHOP
DEERING OAKS, VICINITY OF FOREST, STATE and HIGH STS.**

TO: Chair Benson and Members of the Historic Preservation Board

FROM: Deborah Andrews, Historic Preservation Program Manager

DATE: February 8, 2017

RE: February 15, 2017 Workshop – Preliminary Review of Proposed
Bayside Trail Extension

Address: Deering Oaks and vicinity for State, Forest and High Streets

Applicant: City of Portland
Bruce Hyman, Transportation Program Manager

Consultant: Ransom Consulting Inc.

Introduction

Bruce Hyman, Transportation Program Manager in the Planning Department, has requested a workshop to present preliminary plans for the extension of the City's trail network. Specifically, the subject plan calls for extending the trail from its current termination point in the Bayside neighborhood to the Portland Transportation Center (PTC) at Thompson's Point. Under the plan, the trail extension will pass through Deering Oaks. As such, it requires review and approval by the Historic Preservation Board.

The City has received funding from the Maine DOT to study potential alignments for the trail. Specific criteria apply in reviewing the merits of identified alignment options. Mr. Hyman will be presenting the preferred option identified as a result of the preliminary planning exercise. As the project is still in the very early planning stages, he is seeking input from the Board about the alignment itself, but also about the treatment of proposed crossings within the Park.

As Board members will note, this project requires coordination with the Storm Drain Project currently under development by the Department of Public Works. Particular attention will need to be paid to the alignment of the trail across the portion of Deering Oaks between High and State, the location of the crosswalk across State and the alignment of sidewalk connections on the Castle side of State Street. To that end, reviewing the two projects in conjunction with each other is advantageous. Staff working on the two projects are well aware that the projects will need to be coordinated before finalizing designs.

Mr. Hyman has provided a memo describing the planning process to date, identifying the criteria that led to the proposed alignment. He will review the rationale for the alignment at

Wednesday's workshop and identify specific details where Board input is sought. Enclosed with the staff report are 2009 and 2014 letters from the Friends of Deering Oaks regarding this trail extension project.

Proposed Scope of Work

Following consideration of several trail alignment options, the Bayside to PTC Pathway Project committee is recommending that the trail extension run along the Union Branch rail corridor at the northerly edge of Deering Oaks next to I-295. The rail line has been inactive for many years and is owned by MDOT. As Mr. Hyman will explain on Wednesday, this alignment was ultimately preferred because of the limited number of traffic/crossing conflicts it entails, particularly in the area of the Portland Expo and Hadlock Field. One of the options considered was to run the trail through Deering Oaks, which had been favored by the Friends of Deering Oaks to encourage use and enjoyment of the Oaks—see 2009 and 2014 letters from FoDO. However, this alignment requires that trail users cross the intersection of Park Avenue and Deering Avenue as well as the entrance drives to Hadlock Field and the Portland Expo.. But for the necessary crossing at Forest Avenue and State Street (which would be required under any alignment), the Union Branch rail alignment offers a more straightforward, safe solution.

The project calls for the introduction of two new pathways within the portion of Deering Oaks flanked by High and State Streets—see ATTACHMENT 3. (This area, which includes the Rose Garden, is often not recognized as part of the Oaks as it is surrounded by significant roadways.) One of the pathways is located in the general vicinity of an original park entrance road off Forest Avenue. (See enclosed postcard views and plan of the early road.) The other proposed pathway runs more or less parallel to Forest Avenue. Two State Street crossings correspond to these paths. The position of the crossing next the Castle will need to be coordinated with the Storm Drain project, as the Storm Drain project will be implemented first. The other crossing will lead to a new landscaped traffic island that will separate Forest Avenue and State Street extension. From this point another crossing across State Street Extension will lead to the Union Branch crossing.

Staff Comments

Mr. Hyman is looking for Board input on the preferred trail alignment and, in particular, the location and configuration of the connections across this eastern section of Deering Oaks. Questions for consideration include:

- Is the proposed use compatible with the landscape character of Deering Oaks? (See Standard #1.) Does the trail's configuration require "minimal alteration of the character-defining features of the... site and its environment or ...use a property for its originally intended purpose"?

- Does the introduction of the proposed paths in the eastern section of Deering Oaks negatively impact the Oaks? As located and delineated, are the paths generally compatible with the landscape character of Deering Oaks?
- Should the pathway closest to the rose garden follow the alignment of the abandoned historic entrance road off Forest Avenue as depicted in early views or is it acceptable for the alignment to deviate slightly as shown? Note that although the original entrance road was straight, consistent with the formal nature of the entrance, Deering Oaks' circulation system is generally curvilinear.
- What paving material should be used for the paths and sidewalk connections? Note that the Deering Oaks Master Plan addresses the question of alignments and calls for a hierarchy of paving materials to reflect intended uses. (See pgs. 42 and 45 of the Plan.)
- Is the treatment of the proposed traffic island separating Forest Ave and State Street generally compatible with the adjacent park and appropriate for its gateway location?
- How should the circulation "hubs" or "nodes" where several paths or sidewalks converge be designed? Note that the node in the traffic island is shown as depicted in Public Works' site plans. The two other nodes near are designed otherwise.

Applicable Review Standards

In addition to the following general review standards, the Historic Resources Design Manual includes Standards for Streetscape and Pedestrian Improvements. (Standards are included with staff report for Storm Drain Project.)

Standards for Review of Alterations

- (1) *Every reasonable effort shall be made to provide a compatible use for the property which requires minimal alteration to the character-defining features of the structure, object or site and its environment or to use a property for its originally intended purpose.*
- (2) *The distinguishing original qualities or character of a structure, object or site and its environment shall not be destroyed. The removal or alteration of any historic material or distinctive architectural features should be avoided when possible.*
- (9) *Contemporary design for alterations and additions to existing properties shall not be discouraged when such alterations and additions do not destroy significant cultural, historical, architectural or archeological materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the size, scale, color, material and character of the property, neighborhood or environment.*

- (10) *Wherever possible, new additions or alterations to structures and objects shall be undertaken in such a manner that, if such additions or alterations were to be removed in the future, the essential form and integrity of the historic property would be unimpaired.*

Attachments

- A. Memo from Bruce Hyman, Transportation Program Manager
 - 1. Pathway alignment alternatives
 - 2. Postcard of historic Forest Avenue entrance
 - 3. Site Plan
- B. Letters from Friends of Deering Oaks

Portland, Maine



Yes. Life's good here.

Jeff Levine, AICP
Director, Planning & Urban Development Department

MEMORANDUM

TO: Deb Andrews, Historic Preservation Program Manager
FROM: Bruce Hyman, Transportation Program Manager
DATE: February 9, 2017
RE: HP Workshop: Bayside to Portland Transportation Center Pathway

The Transportation Division is locally administering a MaineDOT-funded project to select a preferred alignment and create a final design for an extension of a bicycle and pedestrian/shared use pathway from the future terminus of the Bayside Trail at Forest Avenue to the Portland Transportation Center (PTC)/Thompson's Point. There is currently no funding identified for construction of the pathway.

The preliminary preferred alignment proposes to enter Deering Oaks Park at a future pedestrian-bike crossing of Forest Avenue opposite a newly aligned Kennebec Street intersection with Forest Avenue, then proceed to and across State Street and then utilize the MaineDOT-owned Union Branch rail corridor between the Park and I-295. This crossing and entrance into Deering Oaks Park is generally the location of an older park entrance that no longer exists and its re-establishment has been a long-standing goal of the Friends of Deering Oaks.

Staff are seeking the Historic Preservation Board's input in a workshop setting on the proposed preliminary alignment of the pathway to and within Deering Oaks Park and its connections.

Background

The Bayside to PTC pathway project is part of a larger vision for a separated (from the roadway) bicycle and pedestrian way around the Portland peninsula for transportation and recreation purposes. Segments of this vision that have been completed include the Eastern Promenade Trail, the Bayside Trail from the Eastern Prom Trail to Elm Street, the Fore River Parkway Trail and short sections of the West Commercial Street Trail. Plans are in the works to extend the Bayside Trail to Forest Avenue in the next several years and construct much of the remaining gap of the West Commercial Street Trail in 2018.

Selection of a Preferred Pathway Route

The project is nearing completion of the initial planning stage for the selection of the preferred route for the pathway. **Attachment 1** illustrates the range of alignments that are being considered to connect the Bayside Trail to the PTC. Segment 1 is the portion within the project area from Forest Avenue to St. John Street and includes Deering Oaks Park.

Ten criteria are being used and are as follows:

1. Provide a direct route from the existing terminus of the Bayside Trail to the Portland Transportation Center that can be navigated by the target users with comfort and ease.
2. Provide access to key hubs of activity, and connectivity to the broader street, sidewalk and pathway network.
3. Provide safe, convenient and intuitive pathway crossings of City streets for both pedestrians and cyclists.
4. Create a pleasant, safe environment and a unique experience for a wide range of users.
5. Achieve broad stakeholder support.
6. Minimize impacts to private property and disruptions to existing uses of public property.
7. Minimize impacts to motor vehicle traffic and operations.
8. Complement the goals of other City projects, departments and policies.
9. Facilitate phased construction.
10. Cost-effectiveness.

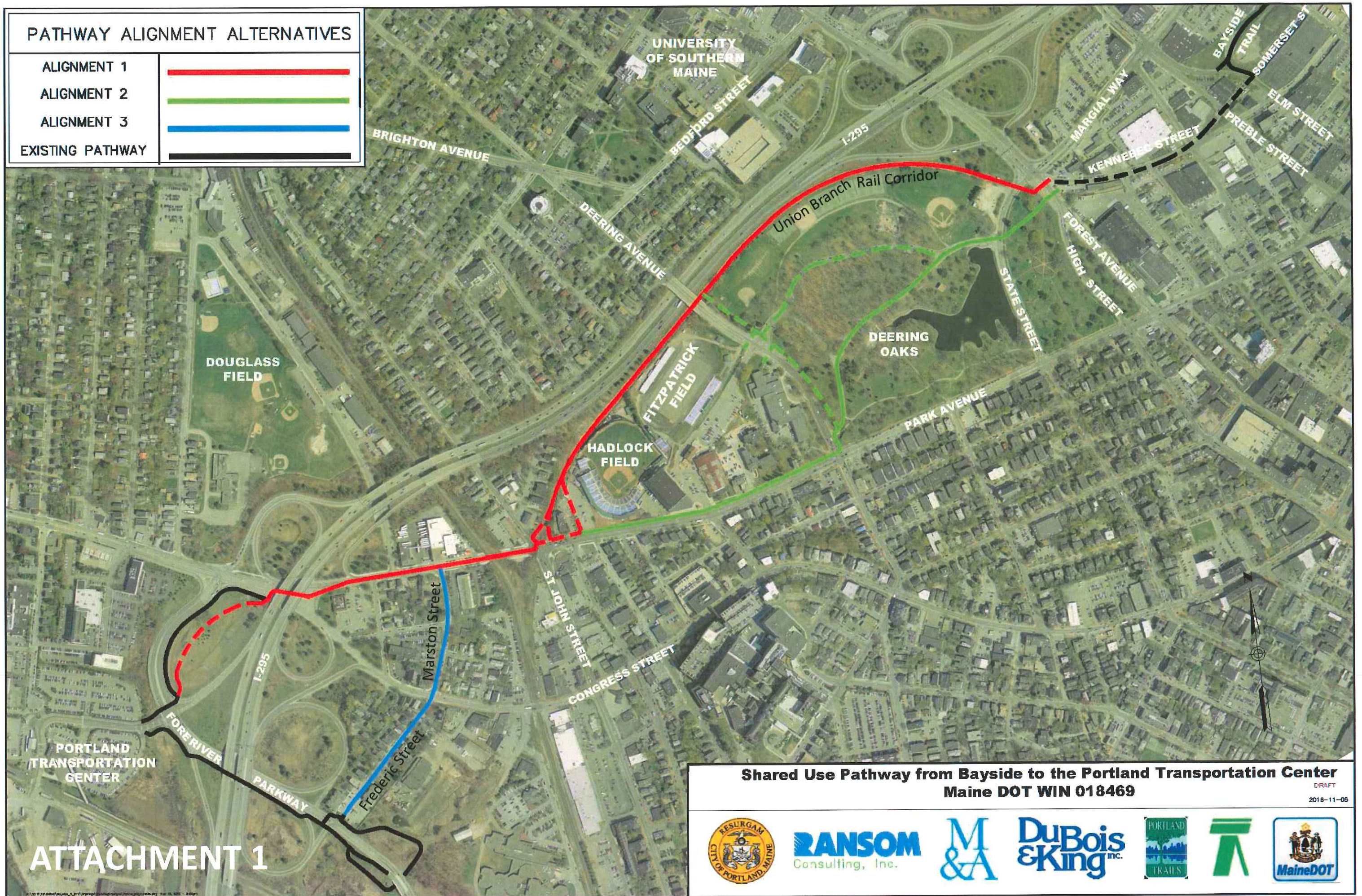
Based on these criteria, Alignment 1 (shown in red) was selected as best meeting the project objectives. It consists primarily of the Union Branch rail corridor from Forest Avenue to St. John Street, generally running along the northerly edge of Deering Oaks next to I-295. This rail line has been inactive for a number of years and is owned by the MaineDOT. The crossing of Forest Avenue and into Deering Oaks Park is proposed to be created with the realignment and reconfiguration of Kennebec Street and to include the extension of the Bayside Trail. This new entrance into Deering Oaks is in the vicinity of one of the earlier vehicular entrances into the Park (see Attachment 2).

Proposed Pathway Configuration within the Park

Attachment 3 shows: a conceptual configuration of this Forest Avenue crossing; the location of a pathway into the Park and connections to two crossings of State Street; and, a connection to the Union Branch rail corridor across State Street. Preliminarily, the pathway is proposed to be placed adjacent to the rails which would remain in place. An approximate footprint of the old entrance and road is shown in blue dashed lines. The Deering Oaks Master Plan emphasizes the use of curvilinear pathways within the park. Along the pathway where it is adjacent to the Park, multiple new connections into the park are envisioned, for instance, at the horse shoe pits and volley ball courts.

PATHWAY ALIGNMENT ALTERNATIVES

ALIGNMENT 1	
ALIGNMENT 2	
ALIGNMENT 3	
EXISTING PATHWAY	



Shared Use Pathway from Bayside to the Portland Transportation Center
Maine DOT WIN 018469

DRAFT

2016-11-08



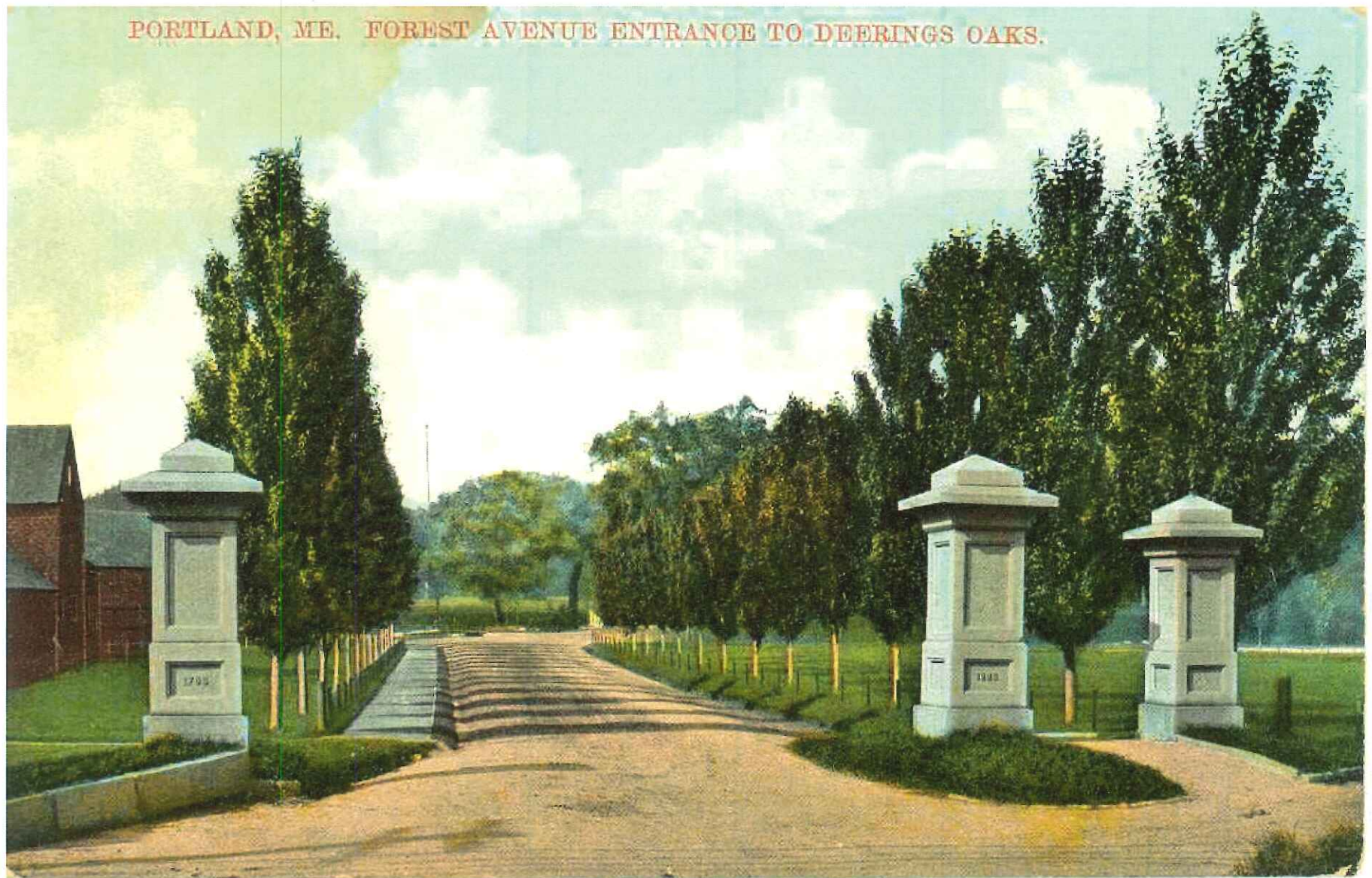
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INC.

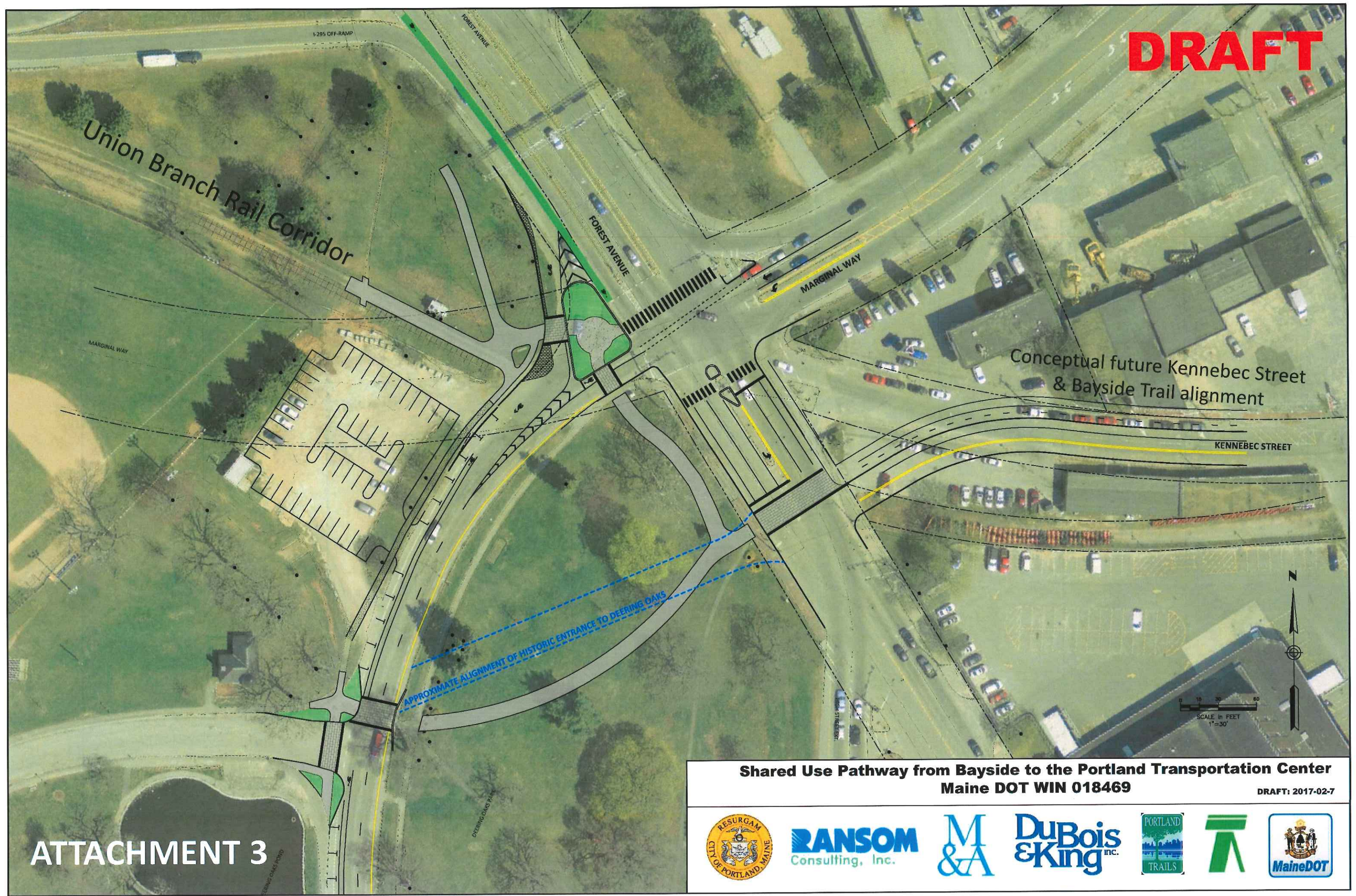


ATTACHMENT 1



ATTACHMENT 2 (Shown as “Approximate Alignment of Historic Entrance” on Attachment 3.)

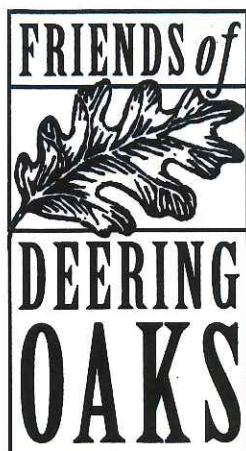
DRAFT



ATTACHMENT 3

Shared Use Pathway from Bayside to the Portland Transportation Center
Maine DOT WIN 018469
DRAFT: 2017-02-7





MISSION STATEMENT

The Friends of Deering Oaks is a non-profit citizen organization committed to preserving, protecting and enhancing the physical condition of Portland's historic Deering Oaks Park and promoting its use by residents and visitors. The 1994 Deering Oaks Master Plan will guide the activities of the Friends of Deering Oaks.

Friends of Deering Oaks
P.O. Box 10416
Portland, Maine 04104
(207) 774-0437

November 14, 2014

Mr. Rick Knowland
Senior Planner
City of Portland
389 Congress Street
Portland, ME 04101

Re: Somerset Street Extension

Dear Rick:

Thanks for meeting with me this week to provide an overview of the proposed route options for the Somerset Street extension and particularly the Phase II connection to Deering Oaks.

This connection is the perfect opportunity to further Mayor Baxter's Plan for the Portland Park System, developed in 1905 by Olmsted Brothers Landscape Architects (copy enclosed). The Plan envisioned connections between Back Cove and the principal peninsula parks: Eastern Prom, Deering Oaks, and the Western Prom (including the Western Cemetery).

In Deering Oaks, one can see the location of the original Forest Avenue entrance (images enclosed), which was almost directly across from where the rail line exited Kennebec Street. We believe this is the ideal location for the extended Bayside Trail's pedestrian crossing of Forest Avenue. This alignment would require less intrusion onto private property and may require some minor adjustment of High Street's exit from Deering Oaks and moving the traffic light slightly. It would allow reestablishing the historic park entrance, as a pedestrian pathway into the park rather than a roadway -- just as Bowling Green Road was converted to a pathway in the 1990s. And we believe it would be a much more appealing crossover than any of the options shown crossing the massive intersection of Forest, Marginal and State, even if design attempts are made to calm that intimidating area.

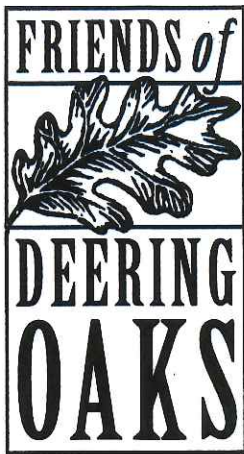
As I mentioned and as the Baxter Plan envisioned, we see people entering beautiful Deering Oaks as part of the trail experience (either on foot or bicycle), traversing through the heart of the park via several optional routes and exiting at the Park Street/Deering Avenue intersection, continuing along an enhanced Park Avenue and Valley Street (both improved by an allee of trees and other streetscape improvements) and up onto the Western Prom via the pathway that was built about five years ago. See image of an historic postcard I bought recently showing what Park Avenue looked like around 1915 and what it could look like today.

An additional point to be considered is the potential for restoring State and High to two-way traffic, which will greatly improve safety in crossing State Street to the Castle.

Please see FoDO's 2009 comment letter in response to the prior Libbytown visioning process. Please share this alternative at the meeting, to spark reaction and further discussion.

Very truly yours,

Anne B. Pringle
President



MISSION STATEMENT

The Friends of Deering Oaks is a non-profit citizen organization committed to preserving, protecting and enhancing the physical condition of Portland's historic Deering Oaks Park and promoting its use by residents and visitors. The 1994 Deering Oaks Master Plan will guide the activities of the Friends of Deering Oaks.

Friends of Deering Oaks
P.O. Box 10416
Portland, Maine 04104
(207) 774-0437

April 15, 2009

Ms. Nan Cumming, Executive Director
Portland Trails
305 Commercial Street
Portland, ME 04101

Dear Nan:

I am writing on behalf of the Friends of Deering Oaks to convey our thoughts on trail connections to Deering Oaks.

Trails will be coming to Deering Oaks from two directions, from Bayside and from the west. We believe that both approaches should bring people into the park itself, not deliver them to a trail at the edge, especially along the rail corridor at the north end of the park, abutting noisy I-295. Deering Oaks is one of Portland's premier open spaces and should be enjoyed by those using the trail system, not bypassed by a trail at a perimeter.

At the meeting the other night, mention was made of the desire for off-road trail experiences, which we can appreciate and which are certainly available in many other areas of the city. We do not believe that desire should override the choices as to where the trail enters and traverses Deering Oaks, as the park should be a focal element of the trail system.

We believe that the entrance from Bayside should come in at the point where the historic Forest Avenue entrance was located. This entrance should be restored as a pedestrian-only entrance to the park. This will require a significant investment in infrastructure to make a safe crossing and to reestablish the historic entrance. With financial resources limited, we believe that any available funds would be better spent on this link rather than creating an expensive trail at the I-295 perimeter.

From the west, we believe that the trail should enter at the Deering and Park Avenue intersection, and that the trail should come along a redesigned Park Avenue corridor, with investment in trees and other pedestrian amenities. This will put in place the original Olmsted vision, a connection to the Western Prom by improved Park, Valley, and Gilman Streets. People would traverse the park via Farmers' Market Road, exiting the newly-established Bayside pedestrian entrance.

We hope that Portland Trails will take these views into consideration as it advances the various trail route alternatives.

Very truly yours,

Anne B. Pringle
President

KENNEBEC ST.

FOREST AVE

PORTLAND TERMINAL CO. LOCATION
TRACK

ROADWAY TO BE ABANDONED

CASCO TANNING COMPANY

NEW ENTRANCE ROADWAY

WALK

WALK

WALK

ROADWAY

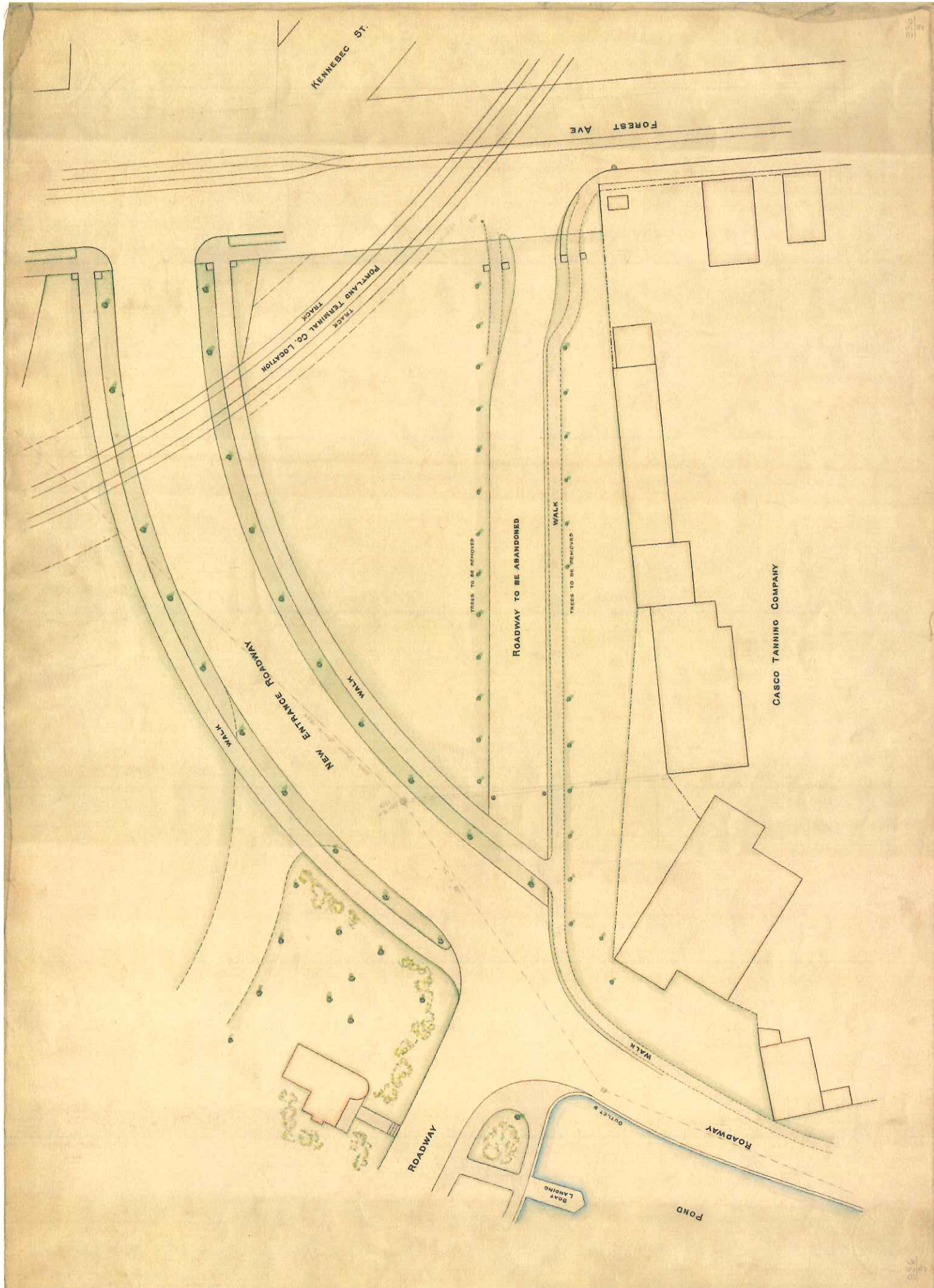
POND

BOAT
LANDING

ROADWAY

TREES TO BE REMOVED

TREES TO BE REMOVED







Portland, Maine, Forest Avenue Entrance to Deering Oaks.

**HISTORIC PRESERVATION BOARD
CITY OF PORTLAND, MAINE**

**PUBLIC HEARING
97 INDIA STREET**

TO: Chair Benson and Members of the Historic Preservation Board
FROM: Rob Wiener, Preservation Compliance Coordinator
DATE: February 10, 2016
RE: February 15, 2017 **Public Hearing** – Rooftop dormer additions

Address: 97 India Street
Applicant: Engine House, LLC
Architect: James Gauthier, Canal5 Studio

Introduction

On behalf of Scott Knoll of Engine House, LLC, owner of 97 India Street, James Gauthier of Canal5 Studio requested a public hearing on a Certificate of Appropriateness for two dormer additions on the roof of this former firehouse. A distinctive presence on upper India Street with a tower on the front, southeast corner, the Engine House has Landmark status in the India Street Historic District. It was completely renovated in the 1980s and houses three floors of offices. Each side of the finished third floor currently features several skylights. To provide more light and headroom, Mr. Gauthier proposes a shed dormer on each side for the middle portion of the space. In addition to the dormers, the applicants propose to remove the rear chimney on the inland side of the main roof, which has leakage problems.

Mr. Gauthier has provided a description of the proposed dormers, accompanied by a package of plans, elevations, and renderings. Given the thorough presentation and contained extent of the project staff has elected to make this agenda item a public hearing. As always, if the Board prefers to consider this meeting a workshop because members would like to see more consideration given to possible plan revisions, the review could be extended to another meeting.

Subject Property

The India Street Station was designed by architect George Harding, and built the year after the

Great Fire of 1866. Three firehouses were among the many buildings destroyed in that conflagration. The architectural survey in the Historic Resources Inventory describes it as a mixture of styles with a distinctive half-hipped roof. The hose tower features a mansard roof with prominent triangular vents. Front windows feature bracketed granite sills and arched, granite lintels with keystones, while on the sides headers are square and sills are less prominent and un-bracketed. Decorative wood brackets are closely spaced under the wide cornice, the cornice returns, and under the rakes at the gables. A two-story, flat-roofed rear addition is visible at the end of the driveway on the right side of the building, with a large arched masonry opening that is infilled with panels of wood and glass. At the front entrance, the original large opening is filled in with a paneled, v-shaped recess, with an entrance on the left side.

Pertinent to the review of the proposed dormers, the northwest, or left side plane of the roof is considerably more visible than the other side because an open parking lot exists on the left of the property. On the southeast (or right) side the tower and the tight spacing of the neighboring largely limit visibility of the roof. Three skylights exist on the northwest roof while two are on the southeast side.

Proposed Alterations

Project architect James Gauthier has provided a description of the proposed dormers, noting an intention to make them “contemporary and recessive.” All of the existing skylights would be eliminated by the dormers, except for the one near the southwest corner, on the left side of the roof closest to India Street.

The chimney proposed for removal is the rear one, which is shorter than the chimney close to the front. It probably was shortened at some point in the past, since the placement and design of the chimneys was likely to have been consistent and symmetrical.

Staff Comments

As dormers are a common way to increase utility and attractiveness of finished top floor spaces, the Board has reviewed numerous proposals over the years. Most recently, the Carroll Block at 136 Commercial Street joined a number of other historic buildings on that street in being expanded with a new dormer – reviewed by the Board in early 2016.

Like many similar proposals, Mr. Gauthier’s design downplays the proposed dormer, with simple details and finishes that he anticipates will blend well with the existing asphalt-shingled roof. Nonetheless, perhaps the threshold question is whether the Board is comfortable adding dormers to a landmark with enduring architectural character. (Since the left side roof is so much more visible than the right, this is likely to be the area of greatest concern.) Are there any possible design changes that might reduce the visual impact of the dormers? Staff suggests Board members may want to discuss:

- Could the height of the dormers be reduced at all? In the building section (Sheet 9,) Mr. Gauthier has drawn a continuous 8’ ceiling extending from the existing ceiling into the dormer. It appears the window headers, which appear to be drawn at approximately 7’ above the floor (or slightly more,) could be lowered by several inches, and still be at a level that would allow a person standing on the 3rd floor to see out. Perhaps the height of the face walls could be reduced, either resulting in steeper roof pitches, or a

slight lowering of the intersections of the dormer roof with the main roof.

- Could the outer faces of the dormers be moved back further from the plane of the lower walls? Moving the faces back (and upslope) more would render them less prominent on the roof, especially if combined with a height reduction. Despite the existing, fairly wide overhang at the main roof eaves, increasing the amount of roof below the dormers would reinforce their secondary nature. Even if it is structurally necessary to maintain some bearing on the lower walls, it may be possible to move the dormer face in by several inches or more.
- If Board members are hesitant to approve the dormer on the more visible slope of the roof, would they find a single dormer on the southeast slope acceptable?

In regards to the proposed removal of the rear chimney on the northwest slope, it must be noted that the existing chimney in question is certainly visible from India Street. From the air (or Google Earth) one can see that three corners of the roof have symmetrically placed chimneys, while the fourth (front right) corner is dominated by the tower. But only from India Street can one see that the two northwest (left side) chimneys are symmetrically located, and as noted above, different heights. The Board must judge whether the chimney in question is a character defining feature that would be missed if removed, with or without the proposed dormer.

Applicable Review Standards

The following ordinance review standards apply in the review of the proposed project:

- (1) *Every reasonable effort shall be made to provide a compatible use for the property which requires minimal alteration to the character-defining features of the structure, object or site and its environment or to use a property for its originally intended purpose.*
- (2) *The distinguishing original qualities or character of a structure, object or site and its environment shall not be destroyed. The removal or alteration of any historic material or distinctive architectural features should be avoided when possible.*
- (9) *Contemporary design for alterations and additions to existing properties shall not be discouraged when such alterations and additions do not destroy significant cultural, historical, architectural or archeological materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the size, scale, color, material and character of the property, neighborhood or environment.*
- (10) *Wherever possible, new additions or alterations to structures and objects shall be undertaken in such a manner that, if such additions or alterations were to be removed in the future, the essential form and integrity of the historic property would be unimpaired.*

Motion for Consideration

On the basis of plans and specifications submitted by the applicant for the February 15, 2017 public hearing and information included in the accompanying staff report, the Board finds that the proposed exterior alterations to 97 India Street **meet (fail to meet)** the historic preservation ordinance review standards for review of new construction (subject to the following conditions.....)

Attachments:

1. Architect's project description
2. Plans, elevations, renderings, and section supplied by architect



Date: 06 February 2017

HISTORIC PRESERVATION
APPLICATION FOR CERTIFICATE OF APPROPRIATENESS

Pursuant to review under the City of Portland's Historic Preservation Ordinance (Chapter 14, Article IX of the Portland City Code), application is hereby made for a Certificate of Appropriateness for the following work on the specified historic property:

PROJECT ADDRESS:

97 India St

CHART/BLOCK/LOT: 020 A005001

(for staff use only)

PROJECT DESCRIPTION: Describe below each major component of your project. Describe how the proposed work will impact existing architectural features and/or building materials. If more space is needed, continue on a separate page. Attach drawings, photographs and/or specifications as necessary to fully illustrate your project—see following page for suggested attachments.

Build continuous shed dormer on both north and south roof in order to provide increased space and headroom in existing third floor finished office space. Dormers are to be approximately twenty-one feet long each with continuous single-sash venting windows across the front. Dormer face walls would bear upon the inner edge of the existing exterior masonry bearing walls. The existing roof overhangs and trim would remain in place undisturbed. Four existing roof windows would be removed. The roof pitch will be approximately 5 in 12.

The dormer on the north elevation would be visible from India Street as there is a parking lot on that side of the building. The view of the south dormer from India Street would be very narrow due to the close proximity of the neighboring building.

The design intent is to make the dormers contemporary and recessive, with minimal and simple detailing, in contrast with the heavy brackets and cornice at the existing roof edge. Siding would be flat-seamed metal panels, and trim would be wrapped with matching metal. Siding, trim, and windows would be of matching color, a gray tone intended to not stand out strongly from existing roofing material.

The windows would be aluminum clad wood Low-E insulated glass awning units with a Visible Light Transmittance of 72. Asphalt roofing shingles similar to existing.

We would like to discuss the possibility of removing the existing easternmost chimney on the north roof, as it has been the source of troublesome leaks.

SUPPORTING DOCUMENTATION FOR:

PROPOSED DORMER ADDITIONS
AT 97 INDIA STREET

SUMBITTED TO:

HISTORIC PRESERVATION BOARD
CITY OF PORTLAND

BY:

CANAL 5 STUDIO
JAMES P. GAUTHIER, AIA

ON BEHALF OF:

SCOTT KNOLL, OWNER
ENGINE HOUSE, LLC.

FEBRUARY 10, 2017



One Canal Plaza, Suite 888
Portland, Maine 04101

canal5studio.com

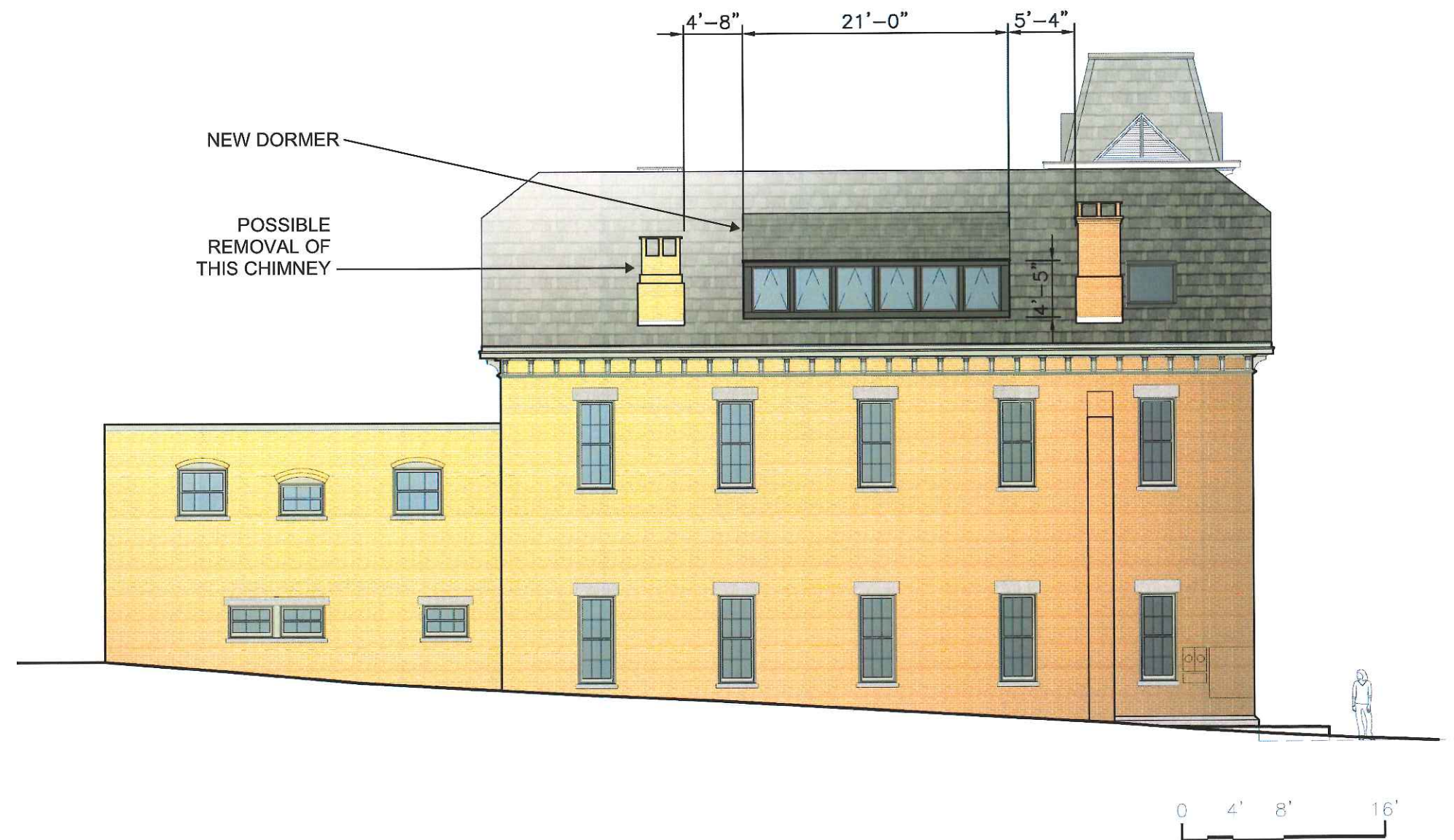


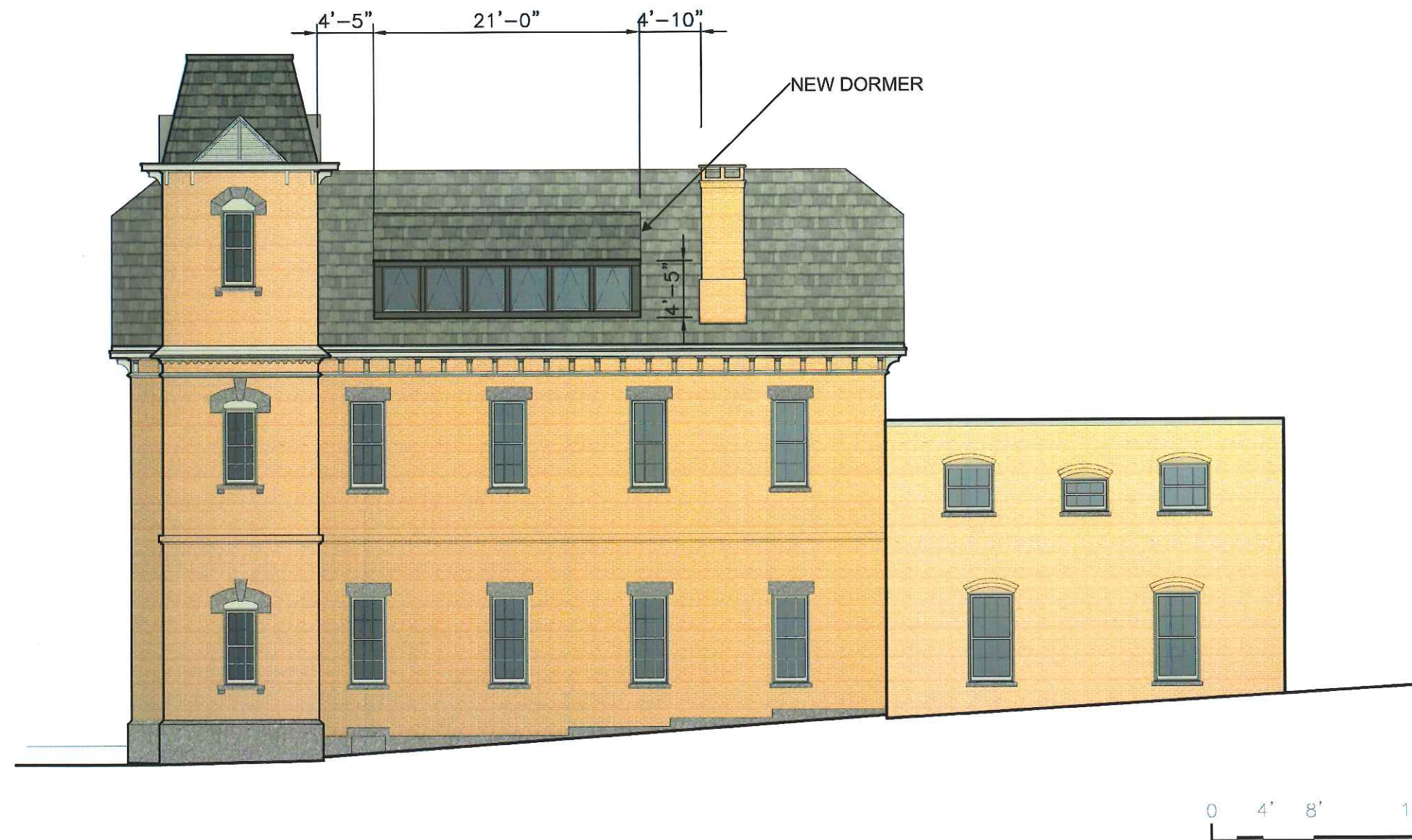
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2. EXTERIOR VIEW FROM SOUTHWEST
3. NORTH ELEVATION
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5. WEST ELEVATION
6. AXONOMETRIC CUT THROUGH 3RD FLOOR
7. INTERIOR VIEW
8. 3RD FLOOR PLAN
9. SECTION CUT THROUGH DORMERS
10. 3RD FLOOR EXISTING CONDITIONS/DEMO PLAN

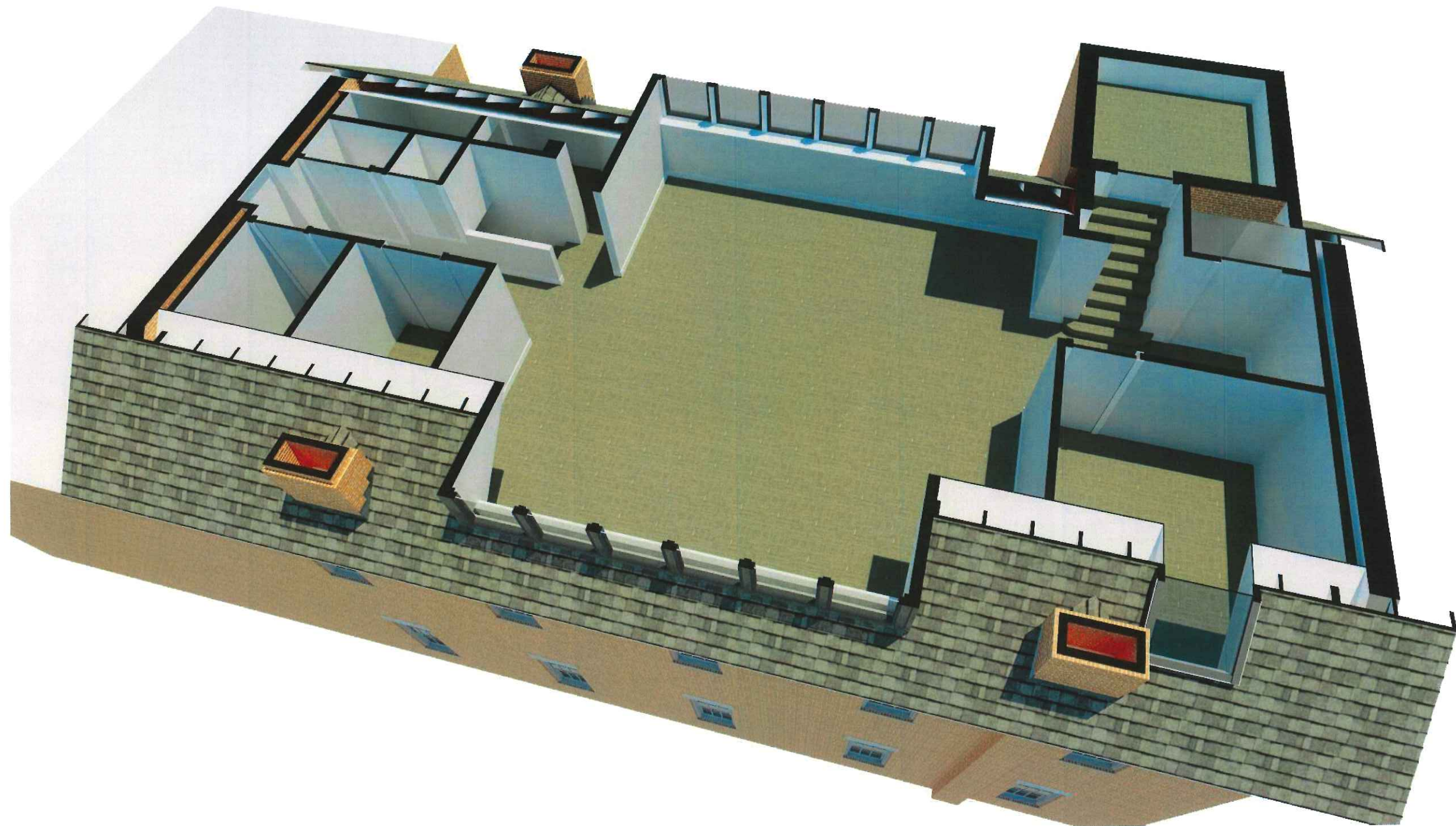




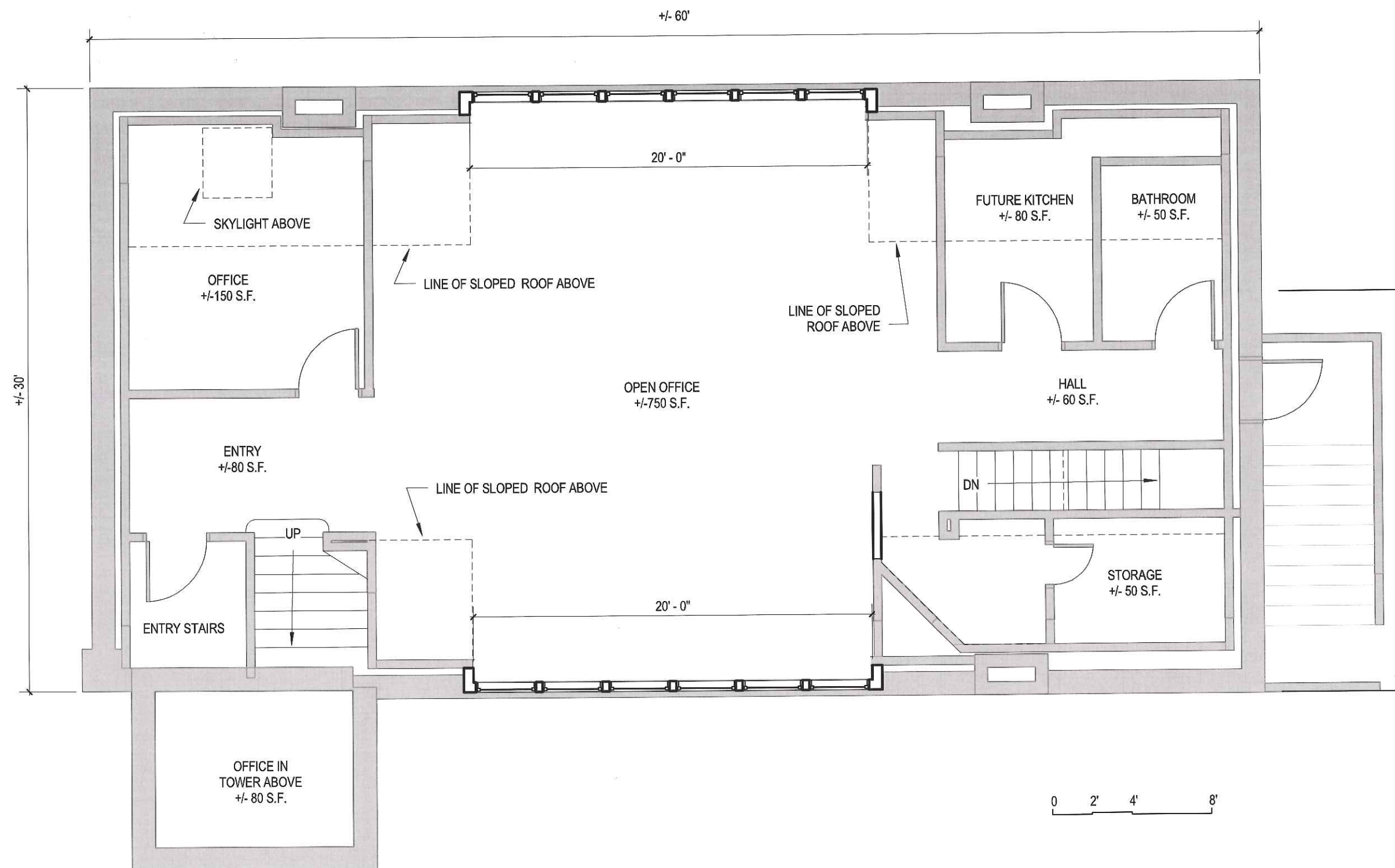


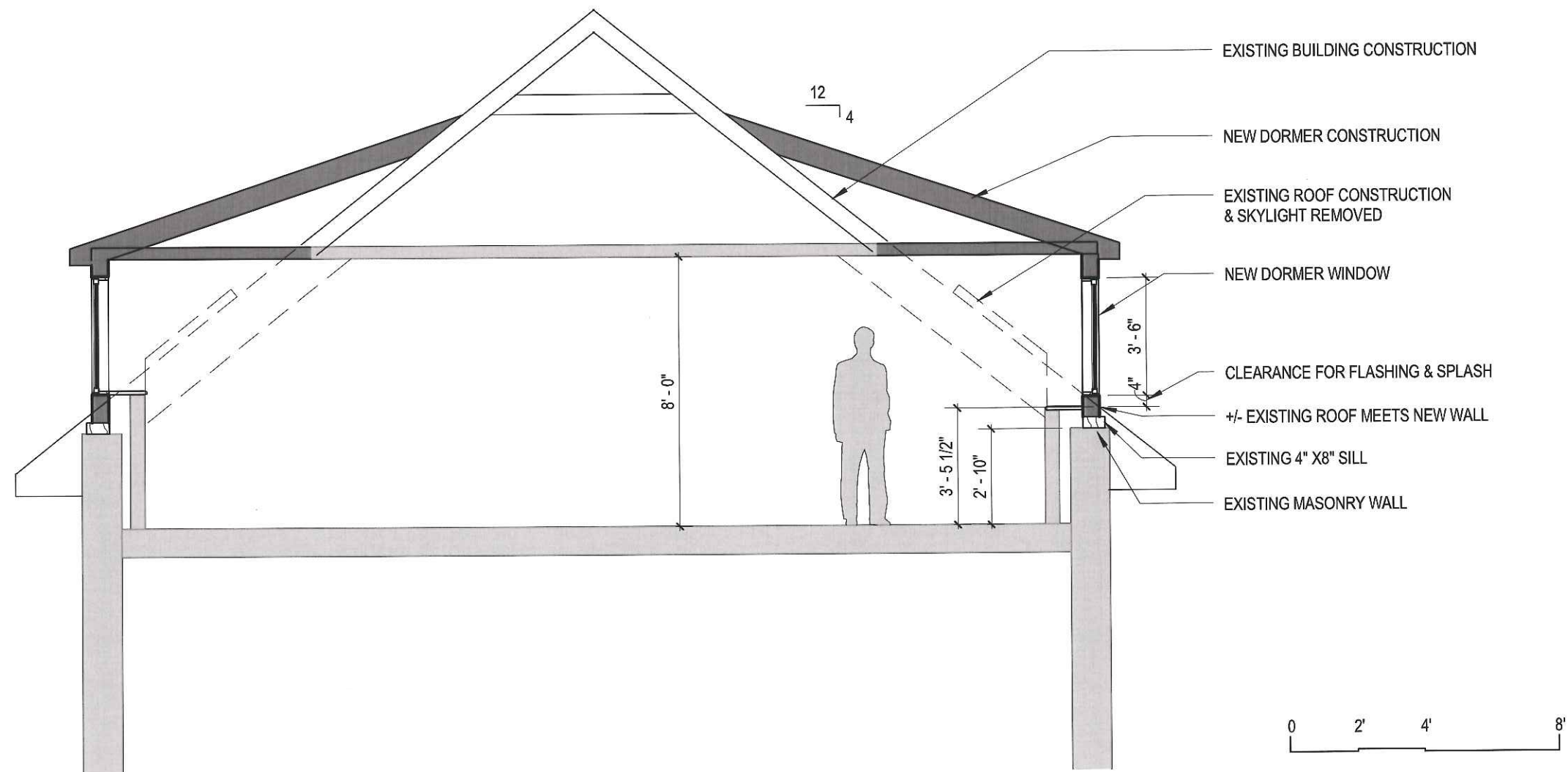


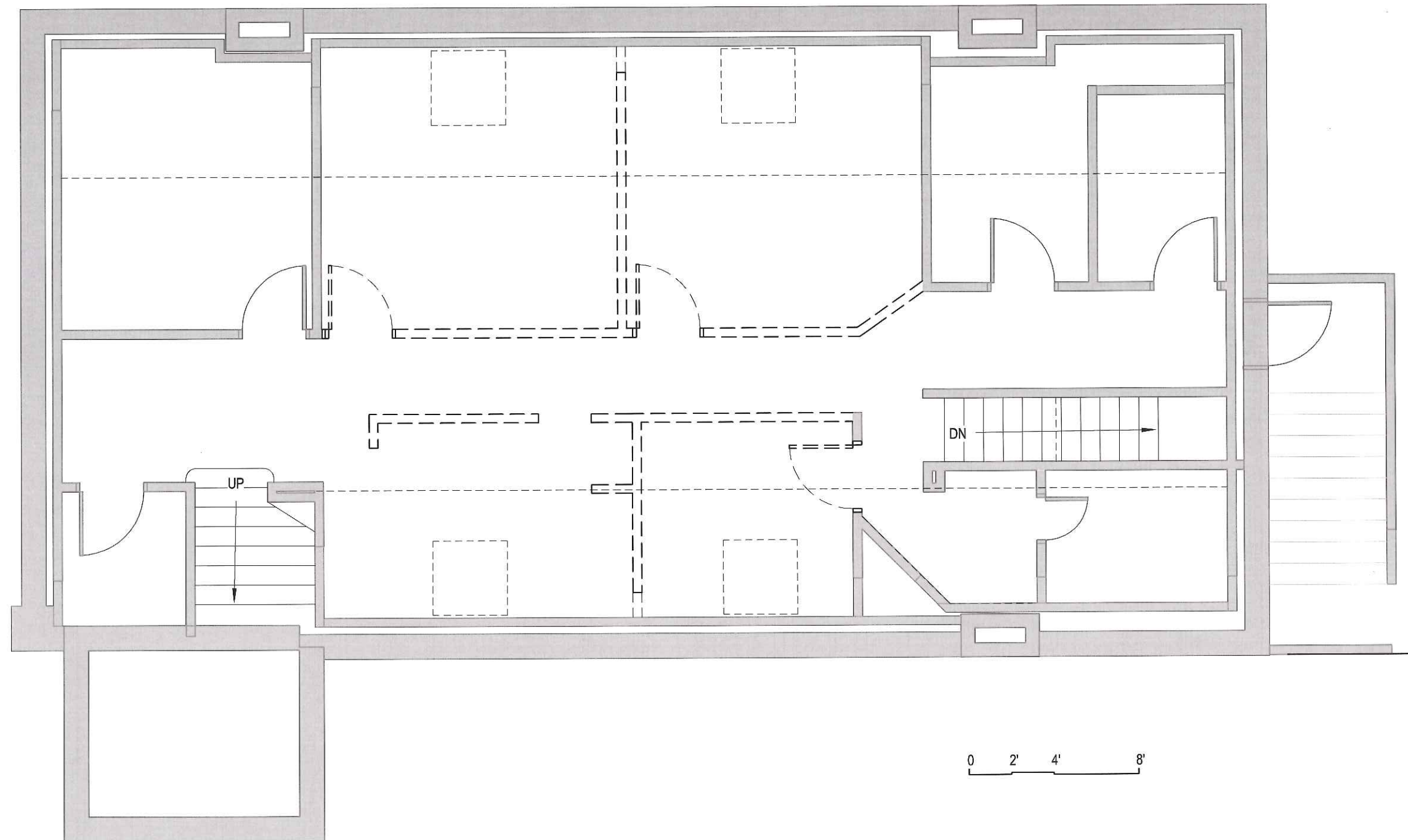












Guidelines for Installation of Heat Pumps, Compressors, and Associated Equipment in Portland's Historic Districts - DRAFT, 2-15-17

Rehabilitating historic buildings often requires installation of modern heating and cooling equipment. Recent technological advances and marketing have resulted in an explosion in the number of permit applications for heat pumps and other energy efficient heating and cooling options. In historic districts, installation of this type of equipment must meet the historic preservation ordinance review standards. Review Standard #1 requires that installations involve "...minimal alteration to the character-defining features of the structure, object or site and its environment...." For staff and members of the Historic Preservation Board charged with reviewing heating and cooling compressors and associated piping and wiring, this standard generally means locating the equipment so that it cannot be seen from a public vantage point, or otherwise mitigating the visual impact on the appearance of the property. In addition, installation cannot be allowed to compromise the physical integrity or weather-tightness of the building.

The following guidelines are intended to help designers, building owners, and contractors plan ahead in order to minimize the physical and visual impact of mechanical equipment on buildings. Because particular factors such as visibility, context, historical significance, and existing building conditions can vary widely from building to building, these guidelines are intended to be interpreted and applied in solutions tailored for specific contexts and properties.

General Considerations

- For designated landmarks and all buildings in historic districts, all HVAC equipment and associated screening proposals must be reviewed and approved by HP staff before permitting and installation.
- HVAC proposals will be reviewed by HP staff (or, at staff discretion, by the Historic Preservation Board,) on a case-by-case basis, taking into account individual characteristics and circumstances of the subject property. Some proposals for particularly sensitive properties may be denied if the equipment cannot be hidden from view from a public way.
- HVAC designs for existing and new buildings shall be focused on hiding equipment from view to the greatest extent possible.

Location

- In buildings with interior utility spaces large enough, compressor units shall be installed inside rather than on the exterior.

- Ground-mounted and wall-mounted compressor units shall be located on the rear (opposite the public face of the building,) to make them invisible or difficult to see at a distance.
- If there is no viable means of locating a ground-mounted or wall-mounted unit at the rear and it must be on the side of a building, it shall be located as far back from the public way as possible. The goal of the review will be to completely screen compressors with fencing, lattice, or plantings. Exposed line sets, conduit, wiring and piping will be strongly discouraged, unless otherwise determined by HP staff.
- Units shall be mounted as low as possible – on the ground is preferable to wall mounted units.
- Only under extraordinary circumstances and with appropriate screening will units be approved at the front of the property.
- Rooftop units shall be avoided except on flat roofs, and total height must be kept as low as possible. On flat roofs compressor units shall be located as far as possible from all edges of the roof. If part of a rooftop unit is visible from the street, screening may be required.

Piping, Line Sets, and Electrical Connections

- Piping shall be run inside the building if at all possible; or on a face of the property with no visibility.
- Exposed exterior wiring, line set covers, piping, and junction boxes shall be discreetly located, and must be colored or painted to match the siding or wall finish on which they are mounted.
- For painting equipment on brick masonry exterior walls, the applicant and HP staff shall choose the most appropriate of three matte-finish, brick red tints specified by staff.

Screening Options

- Vegetative screening for ground-mounted units shall be comprised of a sufficient number of shrubs with dense, year-round foliage to provide an effective screen. For some sites with an open landscape plan, screening with shrubs may not be appropriate.
- Fencing or lattice work must be designed to be compatible with the existing features of the property, and must be reviewed by HP staff as with any site or building alteration. The screen itself shall be recessive, and shall avoid calling attention to the unit that is being screened or having the appearance of an awkward appendage.

- Compressor units and piping may be required to be painted, in order to blend with screening or background materials such as siding, trim or roofing.
- For rooftop units a parapet or balustrade may provide an effective screen, though the introduction of a new parapet or balustrade where one did not already exist shall require a thorough review.

(End of document. Examples that follow are to inform the Board's discussion.)

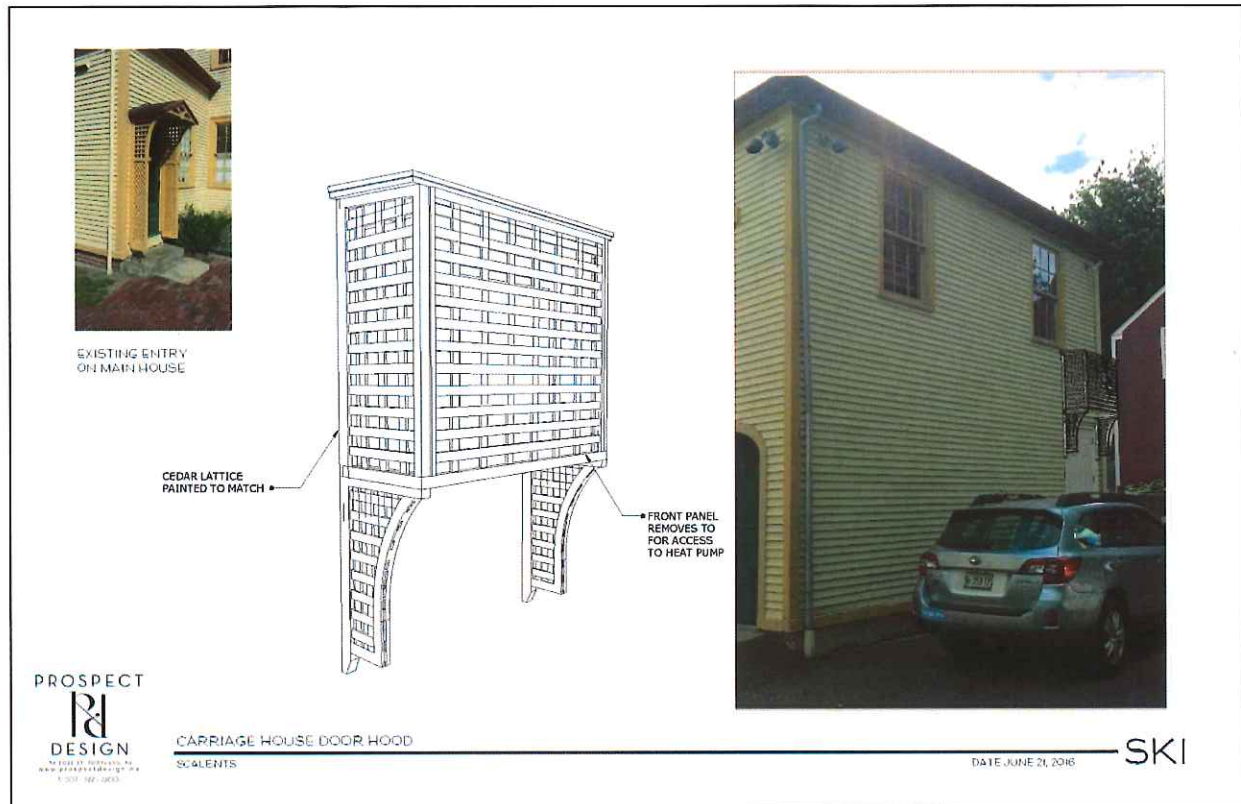
Examples of Approved and Unapproved Installations



73 Brackett Street

During a renovation converting the second floor of the carriage house for studio space, this heat pump compressor was installed in the adjacent parking lot. HP staff required that fence panels

matching the fence behind the unit be installed as a screen because the unit is clearly visible from Danforth Street. Because the condominium association may require that the heat pump be moved, the issue is not yet resolved, and HP staff has consulted on alternate locations and screening methods.



One proposed solution is depicted above: mounting the compressor above the back door of the carriage house, and screening it with a latticed enclosure that resembles a door hood.

211 Brackett Street (corner of Dow Street)



This heat pump was installed before HP staff could review the application. The owners do not own the parking area behind the house, and stated they had no choice but to install the compressor high enough on the wall to avoid interfering with neighbors' vehicles. The owners will be required to paint the compressor and line set covers to match the siding, and staff may seek a latticed enclosure for the compressor.



The installation included a line set cover on the front, facing Brackett Street. HP staff required that it be removed. Tubing now runs inside the house, but a tube for condensate now drains from a spout installed on the wall without review by HP staff.



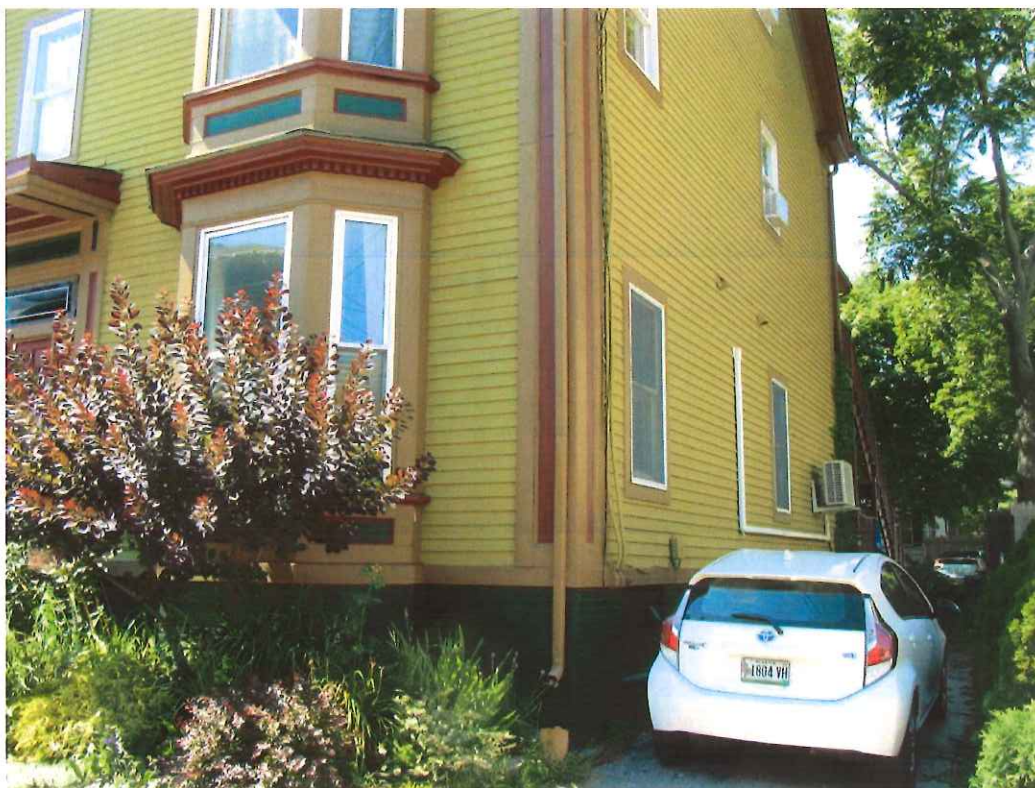
46 Cushman Street





Installed without HP review, this compressor needs to be moved to the rear of the roof, and may require a screen. The line set cover on the mansard needs to be painted black to match the roofing.

287 Spring Street



This heat pump was installed prior to an HP review, but the contractor agreed to construct a painted enclosure and painted the line set cover to match as well (not completed in photo.)



The enclosure could not sit on the ground because another condo owner had rights to the parking space.

22 Dow Street (not yet installed)



A heat pump compressor unit will be installed behind this proposed screen. The screen will be painted all one color to match the trim and be more recessive. Piping will enter the house and travel inside.

727 Congress Street



The original proposal for this heat pump was to mount the compressor on the masonry wall. The contractor agreed to mount it on the ground and provide robust plantings for a screen. The color of the unit does not stand out against the background of the building.

Michael Charek Architects

February 10, 2017

Deb Andrews
Historic Preservation Program Manager
Department of Planning & Urban Development
City of Portland
389 Congress Street
Portland, ME 04101

Ms. Andrews:

Subsequent to our project approval March 2016, we have made a number of minor adjustments in response to unforeseen conditions discovered during construction, and to the evolution of tenant requirements. This letter will summarize the changes we have made, in consultation with your office. I have attached revised versions of three of the drawings originally submitted, and three new drawings showing details of the proposed patio and deck, along with two sketches showing existing and proposed rooftop equipment layouts.

Revised drawings:

Sheet 9

Two recessed entries off Spring Street have been combined into one entry, giving access to both the ground level retail space and the first floor restaurant space. The one recessed entry has a masonry wall facing the street, due to fire separation requirements, and a storefront entry door leading to each tenant space.

Added a stair from the patio up to the sidewalk along Cross Street. This required an enlargement of the transitional area from sidewalk to stairs.

The existing doorway leading from the ground level space to the patio under the existing fire escape will be retained, but rebuilt level with the ground floor.

The proposed storefront entry door from the retail space onto the patio has been relocated so it is centered under the storefront opening above, and has a transom glass added in order to make use of the masonry opening for the existing entry doors into the former nightclub.

Sheet 10

- Added a stair from the patio up to the sidewalk along Cross Street. This required an enlargement of the transitional area from sidewalk to stairs.
- The existing doorway onto the deck from the interior stair will not be replaced.
- Dimensions of the deck have been slightly revised.
- Deck surface will be a tongue and groove PVC decking to drain water off the deck.

Sheet 11

- Windows along Cross Street and facing the patio and deck from the rear wing have been changed to clad Marvin window units.
- One window on the second floor facing the patio and deck has been removed.
- The proposed storefront entry door from the retail space onto the patio has been relocated so it is centered under the storefront opening above, and has a transom glass added in order to make use of the masonry opening for the existing entry doors into the former nightclub.
- Two recessed entries off Spring Street have been combined into one entry, giving access to both the ground level retail space and the first floor restaurant space. The one

recessed entry has a masonry wall facing the street, due to fire separation requirements, and a storefront entry door leading to each tenant space.

Sheets 12, 13 and 14

- Dimensions and details of the proposed patio and deck are shown on these three sheets.

Roof Plans, existing and proposed

- Show the existing rooftop equipment as it is now, and the new layout including a make-up air unit and exhaust fan for the restaurant kitchen.

I trust this information is sufficient for presentation to the Historic Preservation Committee next week. I plan to attend the meeting, and will bring samples of the decking material and the patio pavers for review.

Please let me know if you need anything else.

Thank you for your assistance.

Yours truly,

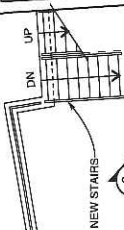


Michael R. Charek
Encl.



CROSS STREET

27'-4" ±



STORAGE

PATIO



NEW ENTRANCE

33'-9" ±

NEW WINDOWS

SPRING STREET



NEW ENTRANCE

RETAIL

VACANT

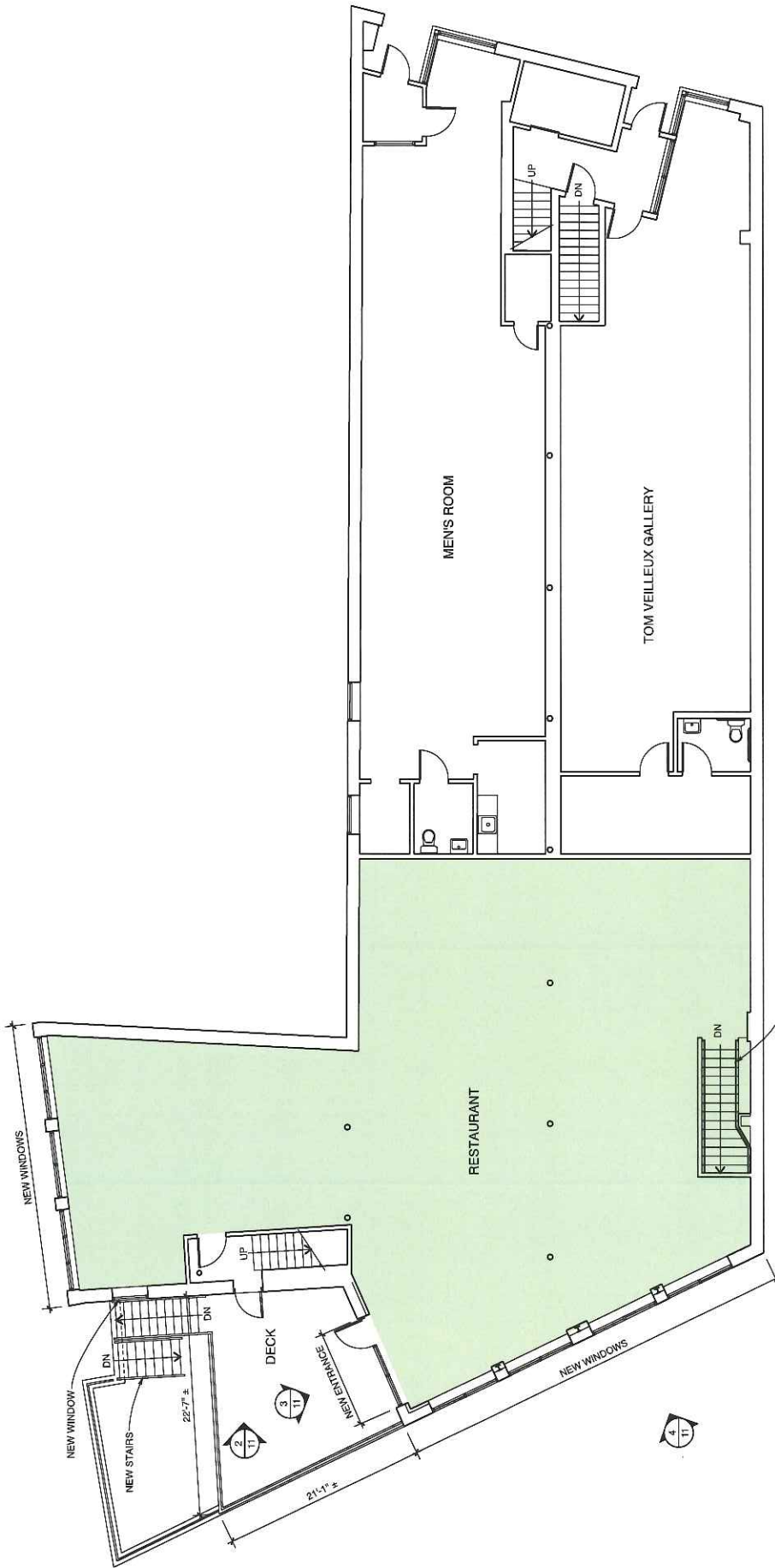
UP



2' 4' 8' 16'
GRAPHIC SCALE: 1/8" = 1'-0"

DRAWING REVISED FROM
SUBMISSION DATED 3/30/16

MICHAEL CHAREK ARCHITECTS PORTLAND, MAINE			
BUILDING RENOVATIONS 8 CITY CENTER PORTLAND, ME 04101			
GROUND FLOOR PLAN PROPOSED			
BY	CRD	SCALE	DATE
		1/8" = 1'-0"	2/10/17
JOB NO.	DWG.		
	9		

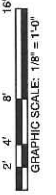


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SUBMISSION DATED 3/30/16

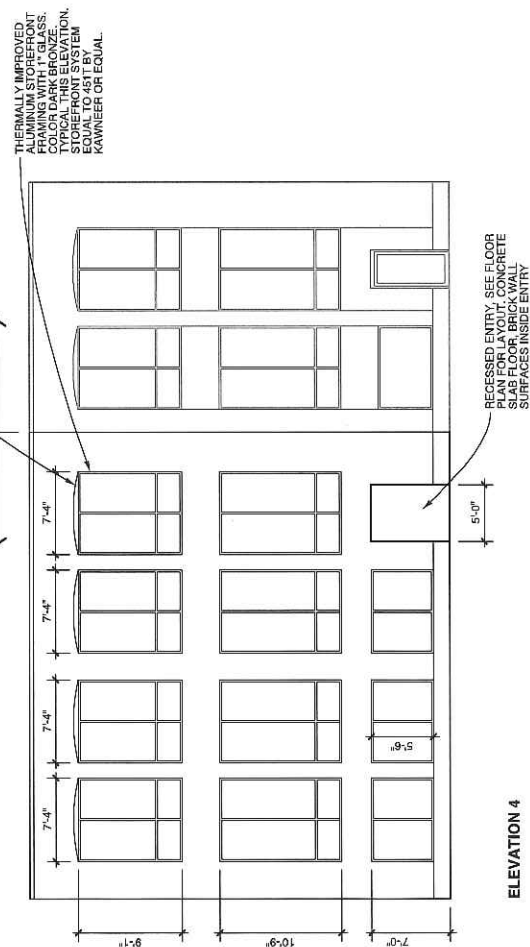
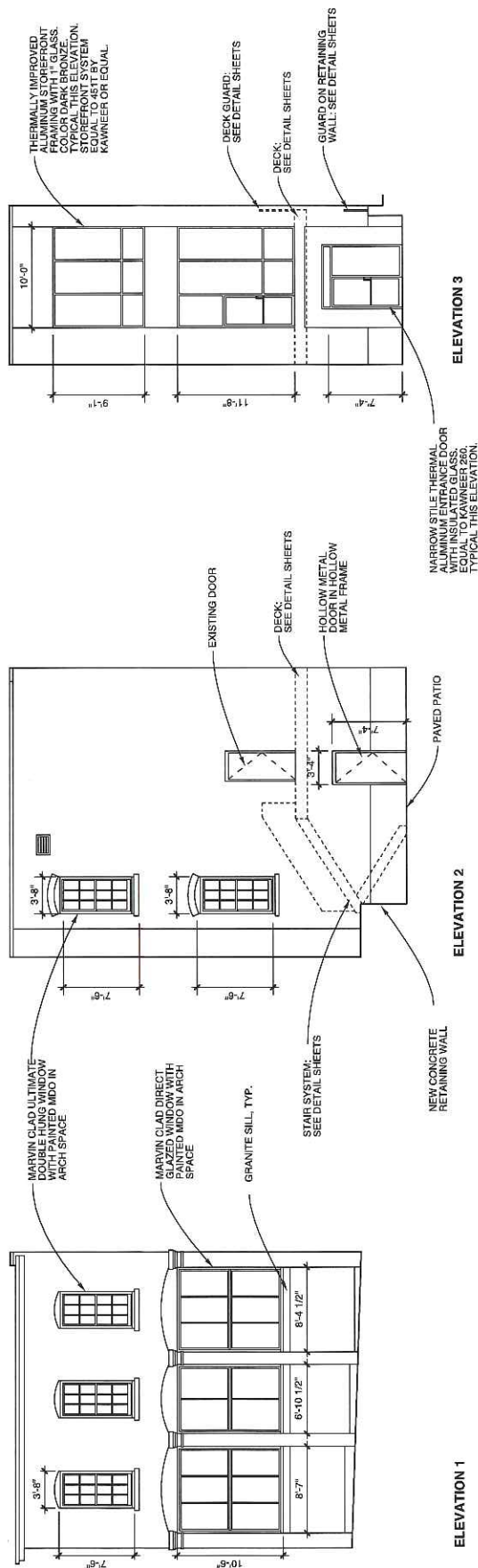
MICHAEL CHAREK ARCHITECTS
PORTLAND, MAINE

BUILDING RENOVATIONS
CITY CENTER
PORTLAND, ME 04101

FIRST FLOOR PLAN PROPOSED



BY	CKD	SCALE	1/8" = 1'-0"	DATE	2/16/17
JOB NO.			DWS.	10	

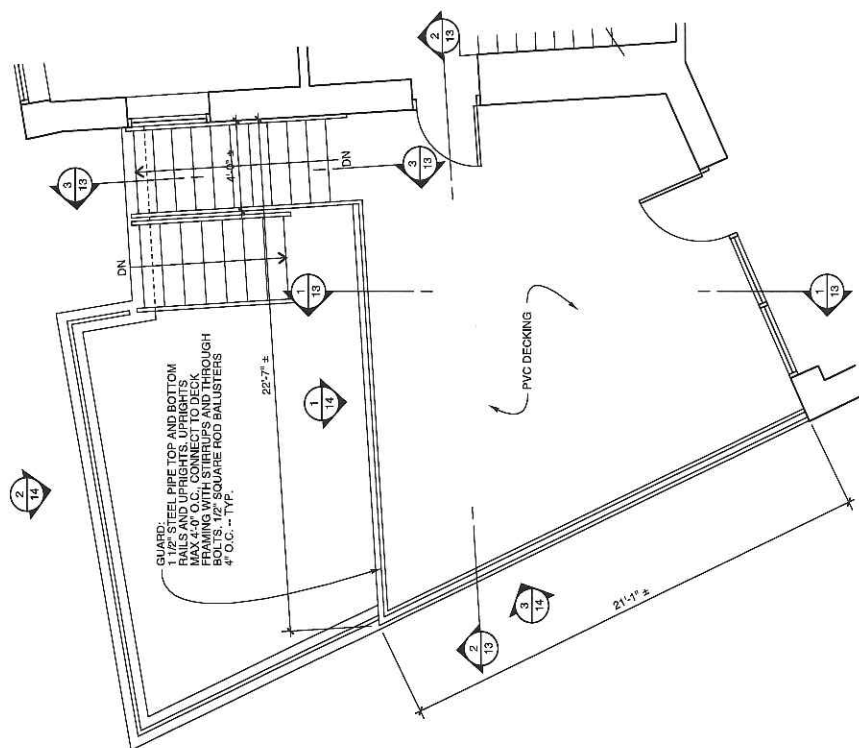


- NOTES:
1. DIMENSIONS SHOWN ARE APPROXIMATE. VERIFY ALL DIMENSIONS IN THE FIELD.
 2. LIGHTING OF DECK TO BE BY WALL MOUNTED LED FIXTURES WITH CUTOFF AND MOTION SENSOR.
 3. LIGHTING OF PATIO TO BE BY RECESSED LED FIXTURES UNDER THE DECK WITH MOTION SENSOR.
 4. LIGHTING OF RECESSED ENTRY TO BE BY RECESSED LED FIXTURES WITH TIMER
 5. TOOTH ALL WINDOW OPENINGS. MASONRY TO MATCH EXISTING BRICK AND MORTAR IN ALL PARTICULARS.

**DRAWING REVISED FROM
SUBMISSION DATED 3/30/16**

MICHAEL CHAREK ARCHITECTS PORTLAND, MAINE			
BUILDING RENOVATIONS 8 CITY CENTER PORTLAND, ME 04101			
ELEVATIONS			
BY	CHKD	SCALE	DATE
		1/8" = 1'-0"	2/10/16
JOB NO.		DWG.	11





FIRST FLOOR PLAN

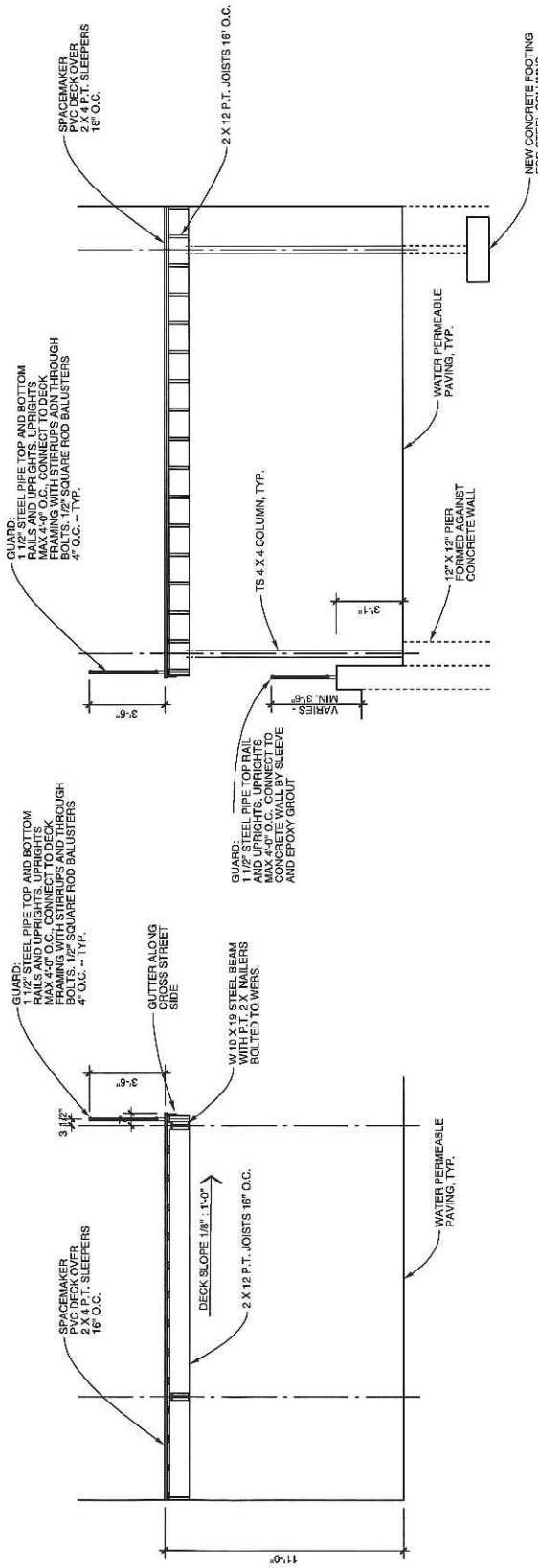


1' 2' 4' 8'

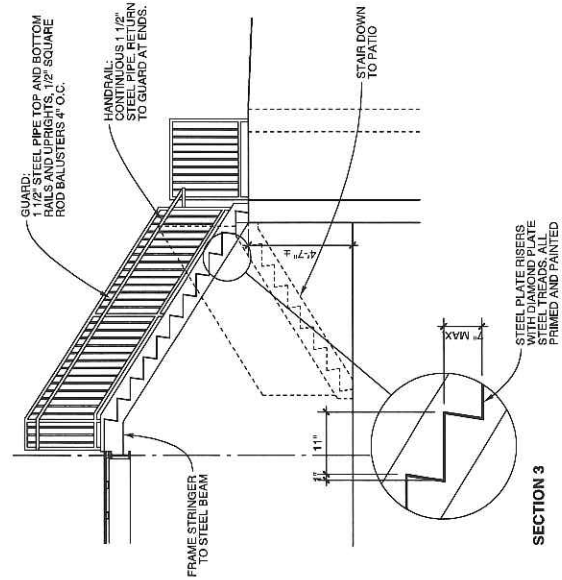
GRAPHIC SCALE: 1/4" = 1'-0"

BY	CKD	SCALE	DATE
		1/4" = 1'-0"	2/10/17

JOB NO. _____ DWG. _____



SECTION 2



MICHAEL CHAREK ARCHITECTS
PORTLAND, MAINE

BUILDING RENOVATIONS
CITY CENTER
PORTLAND, ME 04101

DECK DETAILS

BY	CKD	SCALE	1/4" = 1'-0"	DATE	2/10/17
JOB NO.		DWG.	13		

GUARD:
1 1/2" STEEL PIPE TOP AND BOTTOM
RAILS AND UPRIGHTS, UPRIGHTS
MAX 4'-0" O.C., CONNECT TO DECK
FRAMING WITH STIRRUPS AND THROUGH
BOLTS. 1/2" SQUARE ROD BALUSTERS
4" O.C. - TYP.

WOOD FRAME
DECK AND TRIM

GUARD:
1 1/2" STEEL PIPE TOP AND BOTTOM
RAILS AND UPRIGHTS, UPRIGHTS
MAX 5'-0" O.C., SLEEVE INTO TOP
OF RETAINING WALL 1/2" SQUARE
ROD BALUSTERS 4" O.C. - TYP.

ELEVATION 1

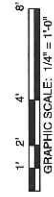
ELEVATION 2

GUARD:
1 1/2" STEEL PIPE TOP AND BOTTOM
RAILS AND UPRIGHTS, UPRIGHTS
MAX 4'-0" O.C., CONNECT TO DECK
FRAMING WITH STIRRUPS AND THROUGH
BOLTS. 1/2" SQUARE ROD BALUSTERS
4" O.C. - TYP.

WOOD FRAME
DECK AND TRIM

GUARD:
1 1/2" STEEL PIPE TOP AND BOTTOM
RAILS AND UPRIGHTS, UPRIGHTS
MAX 5'-0" O.C., SLEEVE INTO TOP
OF RETAINING WALL 1/2" SQUARE
ROD BALUSTERS 4" O.C. - TYP.

ELEVATION 3



MICHAEL CHAREK ARCHITECTS
PORTLAND, MAINE

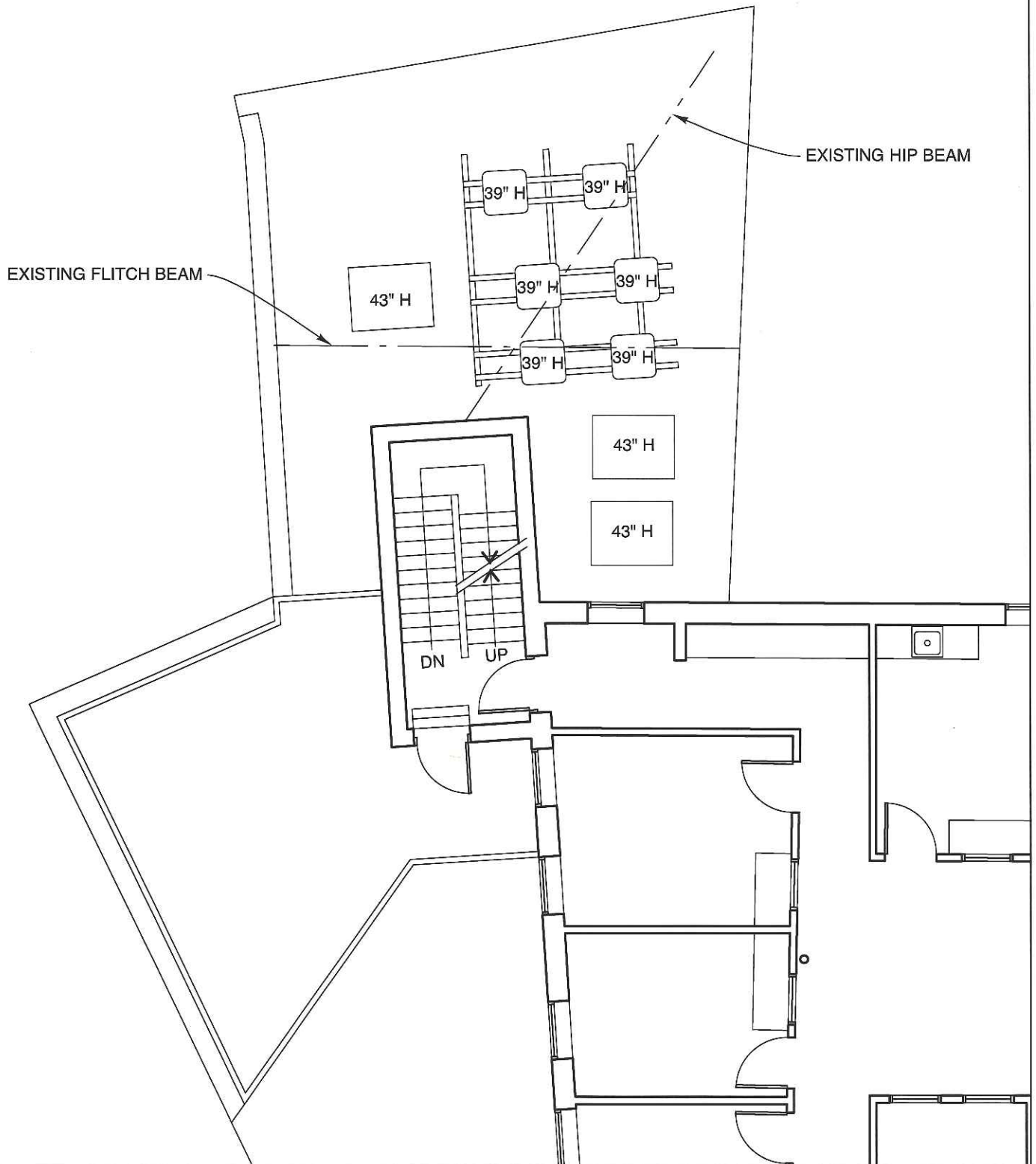
BUILDING RENOVATIONS
8 CITY CENTER
PORTLAND, ME 04101

DECK ELEVATIONS

BY	CKD	SCALE	1/8" = 1'-0"	DATE	2/10/17
JOB NO.		DWG.	14		

NOTES

1. BLACK OUTLINE, NO FILL IS EXISTING.
2. NUMBER IS HEIGHT ABOVE ROOF LEVEL TO TOP OF UNIT.



Title: 3rd Floor Partial Plan - Existing

Scale: 1/8" = 1'-0"

Date: 2/10/17

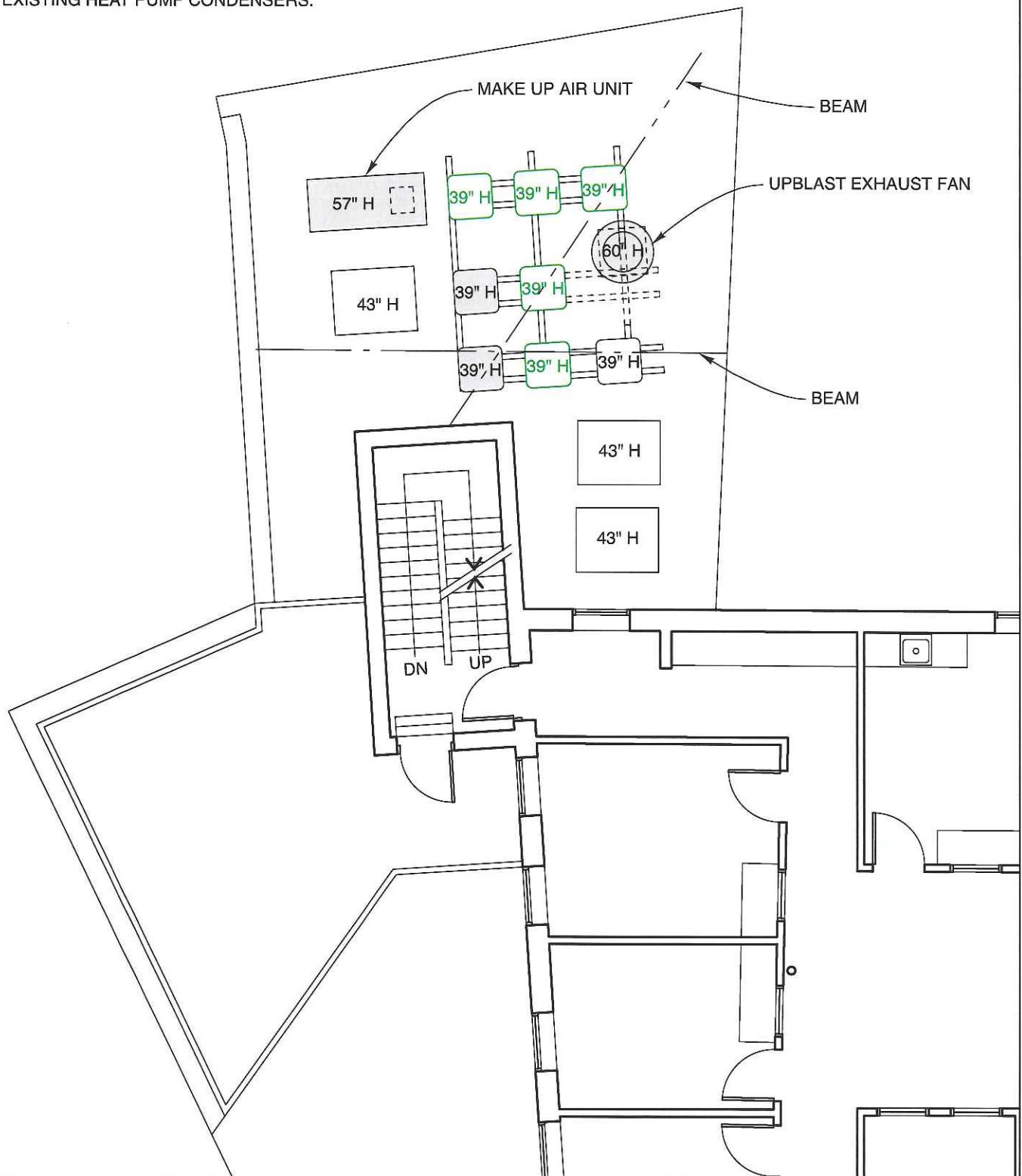
Project: 6 City Center Exterior Renovations - Kitchen Vents



Michael Charek Architects
25 Hartley Street
Portland, Maine 04103
(207) 761-0556

NOTES

1. BLACK OUTLINE, NO FILL IS EXISTING TO REMAIN
2. GREEN OUTLINE, NO FILL IS EXISTING UNIT RELOCATED
3. BLACK OUTLINE, GRAY FILL IS NEW UNIT
4. NUMBER IS HEIGHT OF UNIT.
5. PAINT MAKE-UP AIR UNIT AND EXHAUST FAN TO MATCH EXISTING HEAT PUMP CONDENSERS.

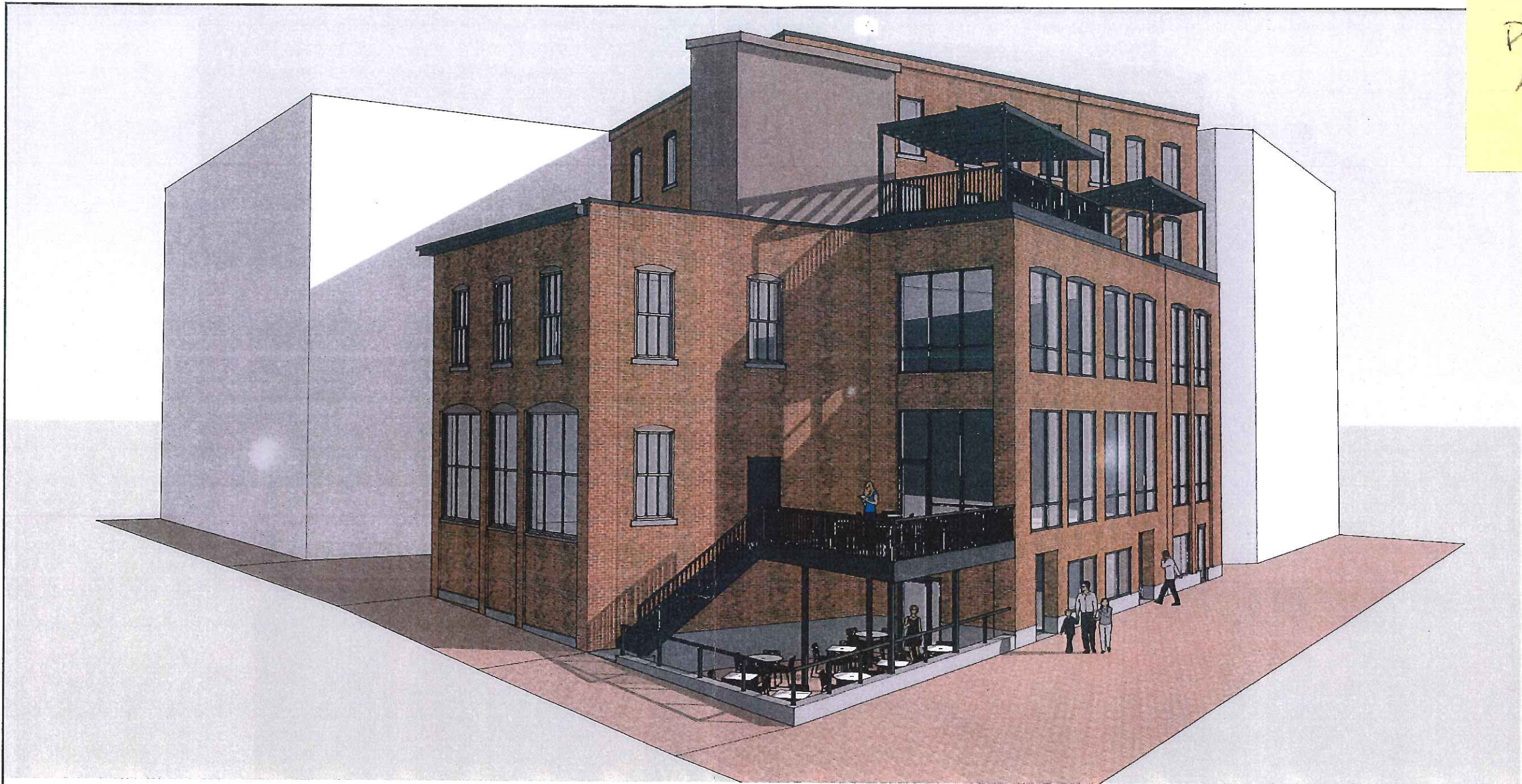


Title: 3rd Floor Partial Plan
 Scale: 1/8" = 1'-0"
 Date: 2/10/17
 Project: 6 City Center Exterior Renovations - Kitchen Vents



Michael Charek Architects
 25 Hartley Street
 Portland, Maine 04103
 (207) 761-0556

PLANS AS
APPROVED
4/6/16



MICHAEL CHAREK ARCHITECTS PORTLAND, MAINE			
BUILDING RENOVATIONS 6 CITY CENTER PORTLAND, ME 04101			
MODEL VIEW 1			
BY	CKD	SCALE	DATE
JOB NO.		NO SCALE	3/30/16
		DWG.	4 OF 11



MICHAEL CHAREK ARCHITECTS
PORTLAND, MAINE

BUILDING RENOVATIONS
6 CITY CENTER
PORTLAND, ME 04101

MODEL VIEW 2

BY	CKD	SCALE	NO SCALE	DATE	3/30/16
JOB NO.		DWG.		5 OF 11	



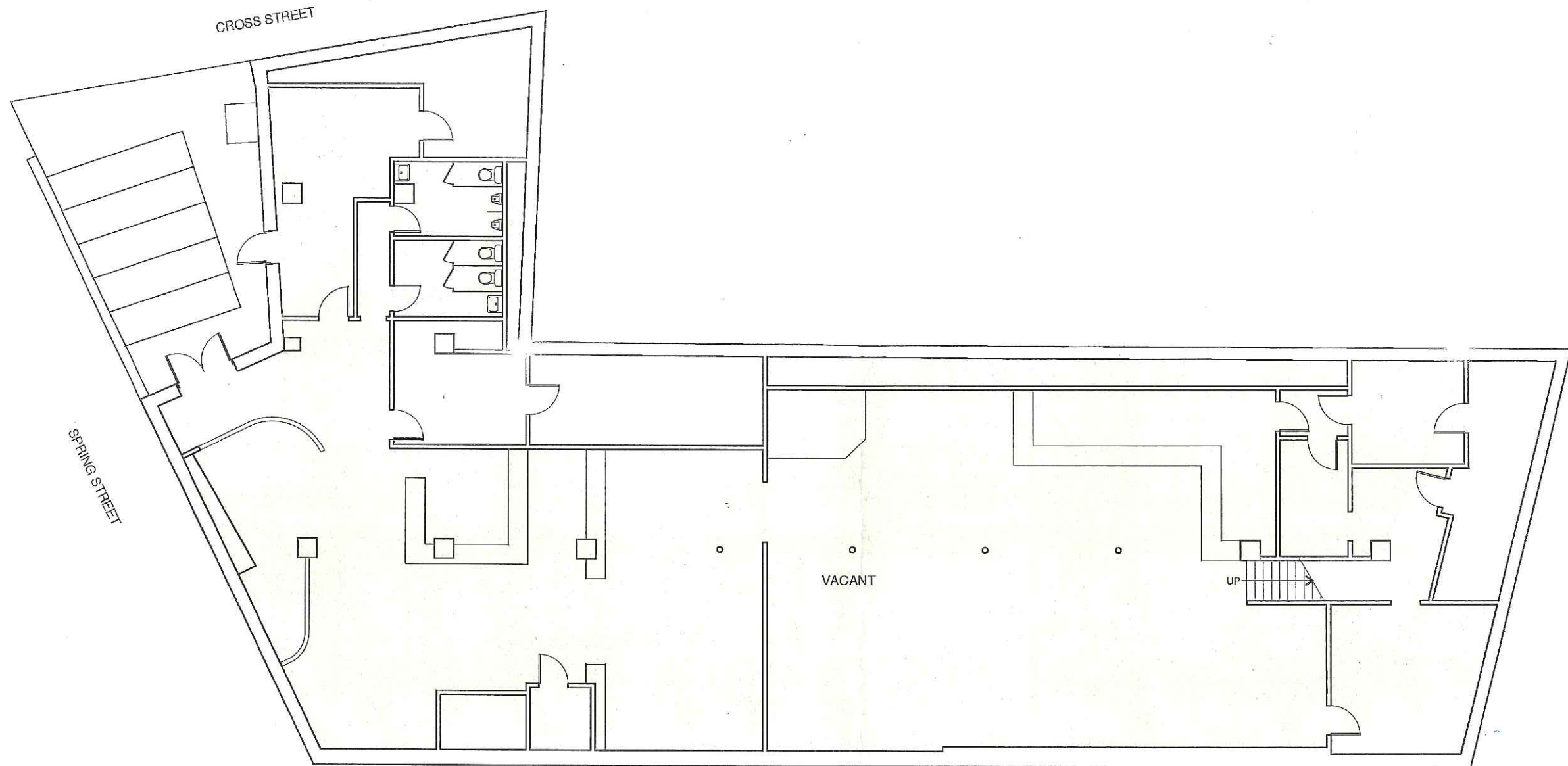
MICHAEL CHAREK ARCHITECTS
PORTLAND, MAINE

BUILDING RENOVATIONS
6 CITY CENTER
PORTLAND, ME 04101

MODEL VIEW 3

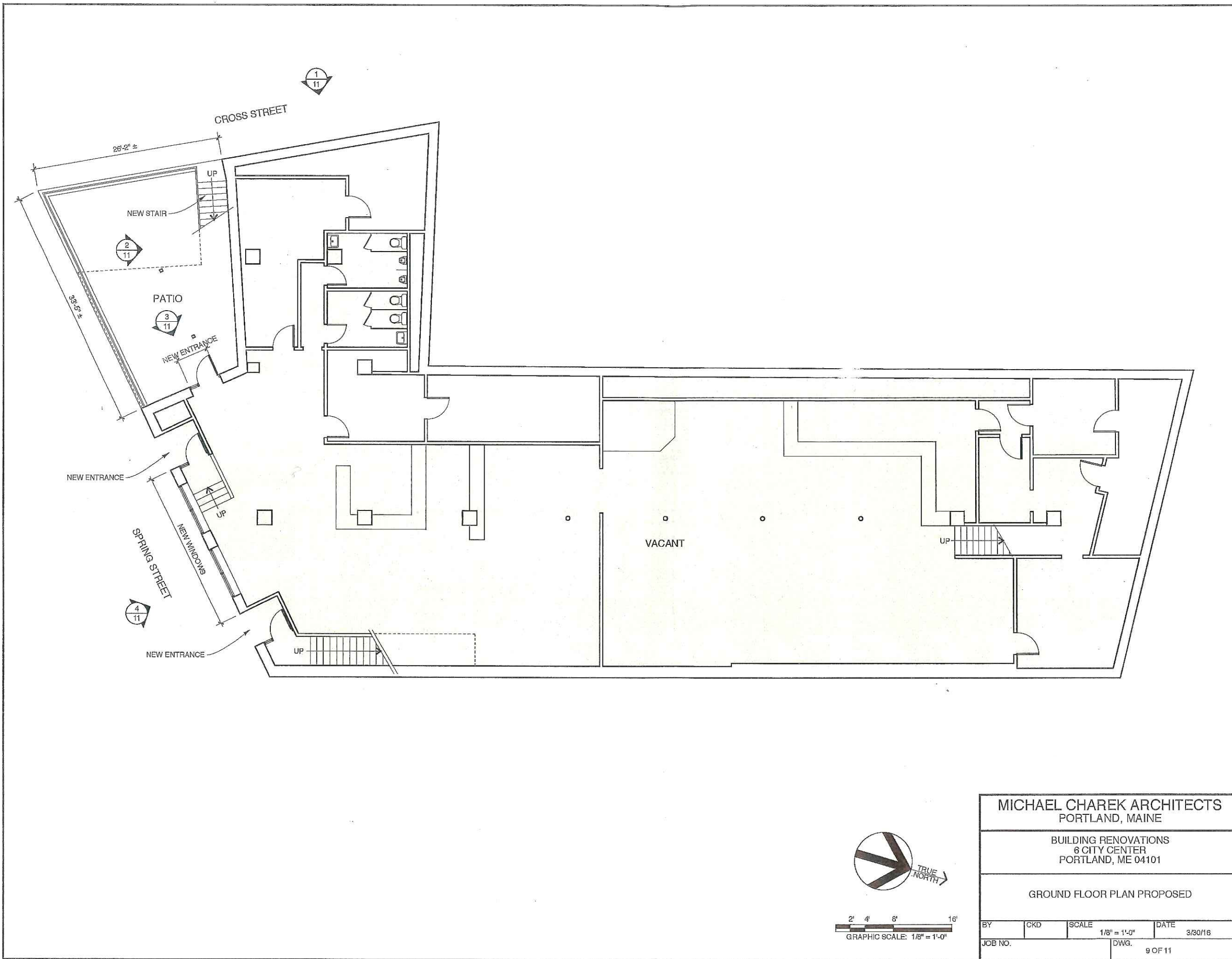
BY	CKD	SCALE	NO SCALE	DATE	3/30/16
JOB NO.	DWG.		6 OF 11		

Att. 4



2' 4' 8' 16'
GRAPHIC SCALE: 1/8" = 1'-0"

MICHAEL CHAREK ARCHITECTS PORTLAND, MAINE			
BUILDING RENOVATIONS 6 CITY CENTER PORTLAND, ME 04101			
GROUND FLOOR PLAN EXISTING			
BY	CKD	SCALE 1/8" = 1'-0"	DATE 3/30/16
JOB NO.		DWG.	7 OF 11

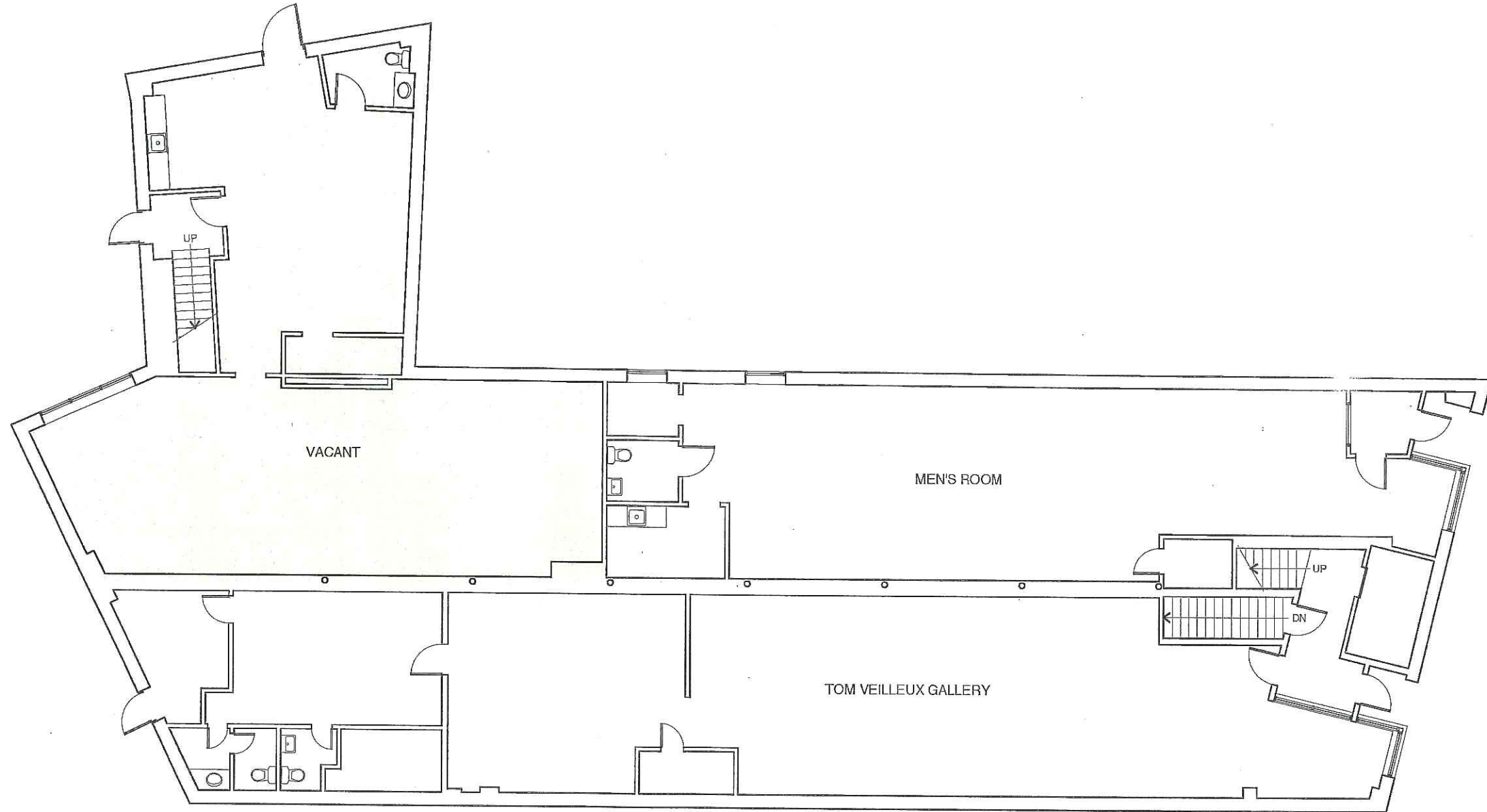


MICHAEL CHAREK ARCHITECTS
PORTLAND, MAINE

BUILDING RENOVATIONS
6 CITY CENTER
PORTLAND, ME 04101

GROUND FLOOR PLAN PROPOSED

BY	CKD	SCALE	DATE
JOB NO.	DWG.	1/8" = 1'-0"	3/30/16
		9 OF 11	



2' 4' 8' 16'
GRAPHIC SCALE: 1/8" = 1'-0"

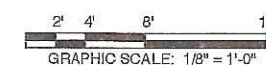
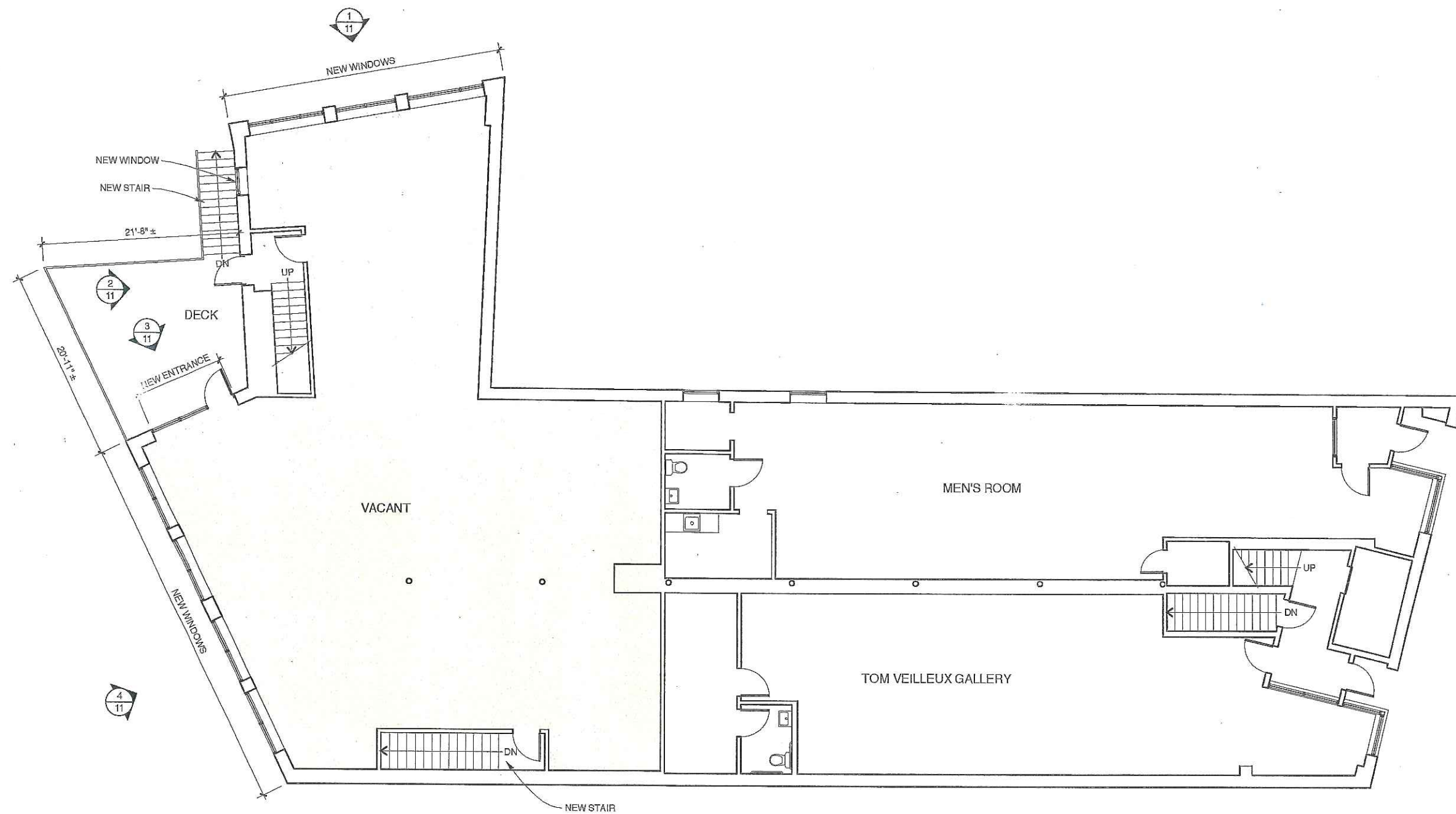
MICHAEL CHAREK ARCHITECTS
PORTLAND, MAINE

BUILDING RENOVATIONS
6 CITY CENTER
PORTLAND, ME 04101

FIRST FLOOR PLAN EXISTING

BY	CKD	SCALE	DATE
JOB NO.		1/8" = 1'-0"	3/30/16

DWG. 8 OF 11



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PORTLAND, MAINE

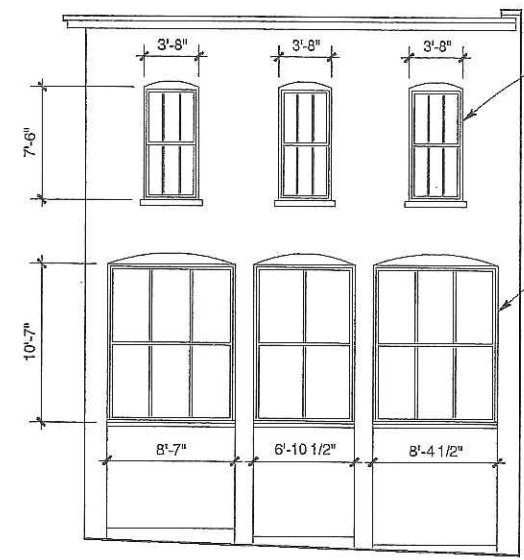
BUILDING RENOVATIONS
6 CITY CENTER
PORTLAND, ME 04101

FIRST FLOOR PLAN PROPOSED

BY	CKD	SCALE	DATE
		1/8" = 1'-0"	3/30/16

JOB NO.	DWG.
	10 OF 11

AH.5



ELEVATION 1

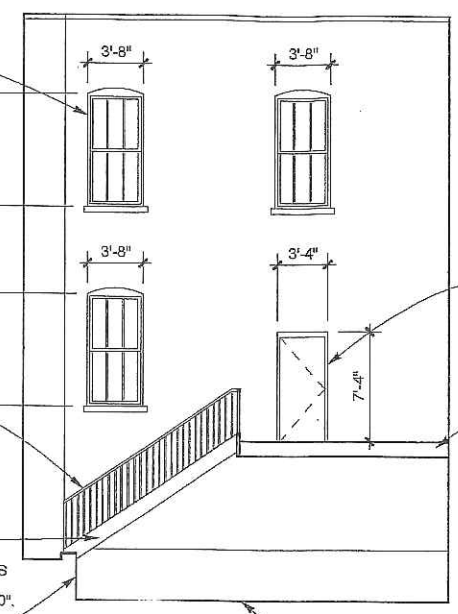
THERMALLY IMPROVED ALUMINUM DOUBLE HUNG WINDOW WITH ALUMINUM TRIM PAN. COLOR TO MATCH EXISTING PAINTED WOOD WINDOW FRAMES. TYPICAL THIS ELEVATION. WINDOW BY TRACO, EFCO, OR EQUAL

THERMALLY IMPROVED ALUMINUM FIXED SASH WINDOW WITH ALUMINUM TRIM PAN. COLOR TO MATCH EXISTING PAINTED WOOD WINDOW FRAMES. TYPICAL THIS ELEVATION. WINDOW BY TRACO, EFCO, OR EQUAL

GUARD: WELDED STEEL PIPE WITH 3/4" DIAM STEEL ROD BALUSTERS 4" O.C. ONE SIDE, HANDRAIL: 1-1/2" O.D. STEEL PIPE HANDRAIL BOTH SIDES. GUARD AND HANDRAIL POWDER COAT OR PAINTED FINISH

STAIR SYSTEM: GALVANIZED STEEL FRAMING GALVANIZED STEEL GRATE TREADS PAINT STRINGERS BLACK MAX 7" RISER, 11" TREAD. STAIR WIDTH 4'-0"

REBUILD CONCRETE RETAINING WALL



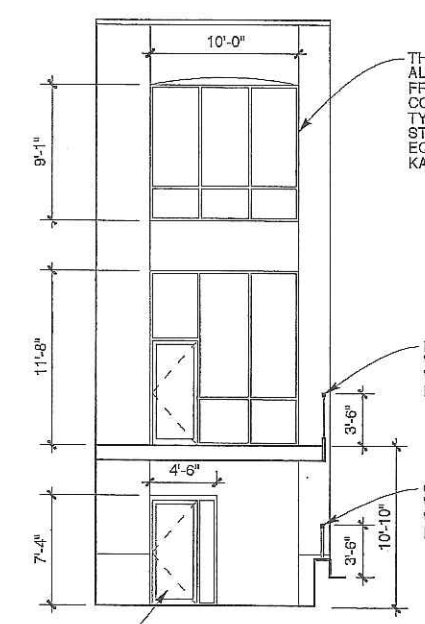
ELEVATION 2

HOLLOW METAL DOOR IN HOLLOW METAL FRAME

DECK: STEEL BEAMS AND COLUMNS P.T. WOOD JOISTS P.T. PLYWOOD DECK EPDM MEMBRANE ROOFING COMPOSITE DECKING ON P.T. WOOD SLEEPERS CEILING: VENTILATED ALUMINUM SOFFIT PITCH DECK AWAY FROM STOREFRONT SIDE ALUMINUM GUTTER AND LEADER SYSTEM TO CARRY STORM WATER TO PATIO LEVEL

BRICK PAVED PATIO

NARROW STILE THERMAL ALUMINUM ENTRANCE DOOR WITH INSULATED GLASS. EQUAL TO KAWNEER 260. TYPICAL THIS ELEVATION.

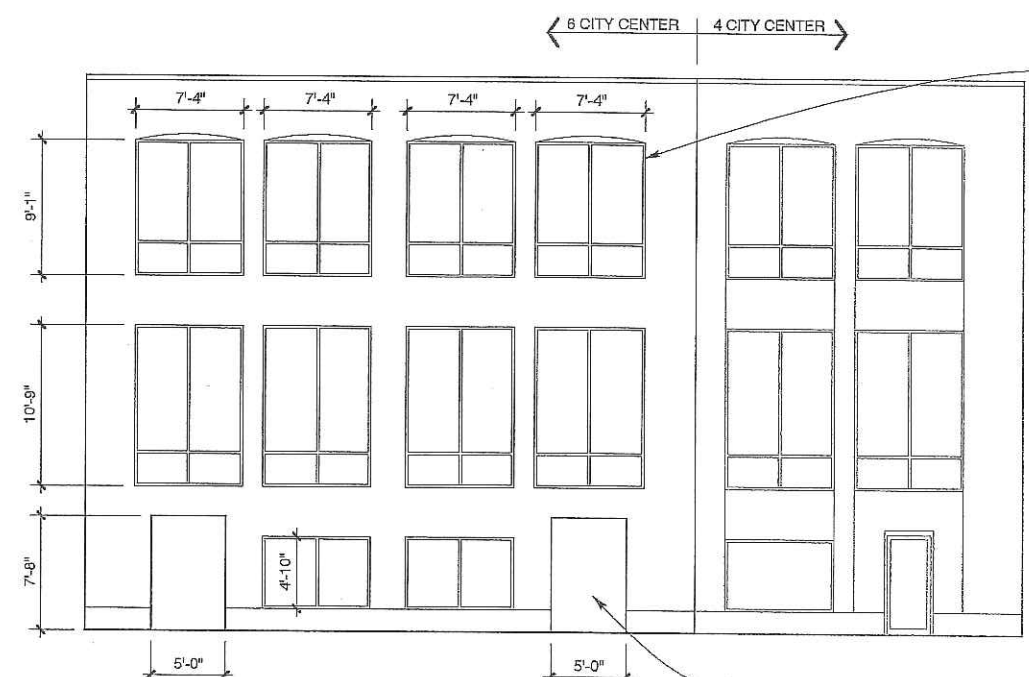


ELEVATION 3

THERMALLY IMPROVED ALUMINUM STOREFRONT FRAMING WITH 1" GLASS. COLOR DARK BRONZE. TYPICAL THIS ELEVATION. STOREFRONT SYSTEM EQUAL TO 451T BY KAWNEER OR EQUAL

DECK GUARD: WELDED STEEL PIPE WITH 3/4" DIAM STEEL ROD BALUSTERS 4" O.C.

GUARD ON RETAINING WALL: 1 1/2" STEEL PIPE, WITH POWDER COAT OR PAINTED FINISH



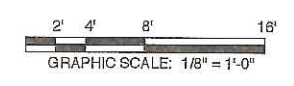
ELEVATION 4

THERMALLY IMPROVED ALUMINUM STOREFRONT FRAMING WITH 1" GLASS. COLOR DARK BRONZE. TYPICAL THIS ELEVATION. STOREFRONT SYSTEM EQUAL TO 451T BY KAWNEER OR EQUAL

RECESSED ENTRY. TYPICAL. SEE FLOOR PLAN FOR LAYOUT. CERAMIC TILE FLOOR, BRICK WALL SURFACES INSIDE ENTRY

NOTES:

1. DIMENSIONS SHOWN ARE APPROXIMATE. VERIFY ALL DIMENSIONS IN THE FIELD.
2. LIGHTING OF DECK TO BE BY WALL MOUNTED LED FIXTURES WITH CUTOFF AND MOTION SENSOR.
3. LIGHTING OF PATIO TO BE BY RECESSED LED FIXTURES UNDER THE DECK WITH MOTION SENSOR.
4. LIGHTING OF RECESSED ENTRIES TO BE BY RECESSED LED FIXTURES WITH TIMER
5. TOOTH ALL WINDOW OPENINGS, MASONRY TO MATCH EXISTING BRICK AND MORTAR IN ALL PARTICULARS.



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JOB NO.	DWG.		11 OF 11