

35-I-1

2014-096

356 State St.

Ravine Improvements

Deering Oaks

March 13, 2015

Shukria Wiar, Planner
Planning Division
Portland City Hall, 4th Floor
389 Congress Street
Portland, Maine 04101



Re: Deering Oaks Pond Bottom Replacement – Ravine Improvements
Request for Plan Revision for Project 2014-096 Level 1 Site Alteration Approval

Dear Shukria:

On behalf of the City of Portland, Woodard & Curran is submitting a request to the Planning Division for approval of a revision to the Deering Oaks Pond Bottom Replacement project. A Level I Site Alteration site plan was approved for the project by the Planning Authority, ID 2014-096, on July 3, 2014. Since that time, landscaping improvement work has been designed in the ravine area located on the western edge of Deering Oaks Pond. The extent of this work is shown on the enclosed plan, and is described in the following letter.

As a result of public comments on the Deering Oaks Pond Bottom Replacement project, the City of Portland's Transportation, Sustainability, & Energy (TSE) Committee requested that the design team pursue improvements to the ravine area of Deering Oaks Pond. The goal was to increase buffer vegetation along the ravine and help stabilize the inslopes of the ravine. In response to the TSE concerns, work proposed in this area will include new plantings, invasive species control and naturalization as shown in detail on the enclosed Schematic Planting Plan.

The work is considered landscape maintenance and has been designed to be consistent with the historical context of the area. The project landscape architect has worked closely with City staff, specifically Jeff Tarling, City Arborist, to ensure that the proposed plantings are appropriate for Deering Oaks Park. A memo from Regina Leonard, the project's landscape architect, describing the proposed work and the historical precedent that has been followed is also enclosed. Both of these documents have been submitted to Deb Andrews in the Historic Preservation Office on March 2, 1015.

The proposed improvements are primarily maintenance work for the ravine area, and there will be no changes to the conditions and standards as addressed in the previous Level I Site Alteration Application:

- Right, Title, & Interest: All work remains within the City of Portland-owned Deering Oaks Pond property.
- Additional Project Approvals: The Pond Bottom Replacement project received approval from the Historic Preservation Board on May 23, 2014. The proposed revisions have been reviewed by Historic Preservation staff, with no concerns identified, and no additional action is required with regards to the Historic Preservation Board Approval. As noted in the original project submission, permits are not required by the Maine Department of Environmental Protection or the U.S. Army Corps of Engineers for the proposed work. No other permit modifications are required for the proposed work.
- Financial & Technical Capacity: *Financial:* The new landscaping work will be completed as part of the Deering Oaks Pond Bottom Improvement Project, funded through an EPA State and Tribal Affairs grant and matching City of Portland funds. *Technical:* The landscaping work has been specified by Regina Leonard, a landscape architect with experience in the City of Portland, along with input and review from City of Portland Arborist, Jeff Tarling.



- Zoning: As with the previously submitted pond bottom improvements, the new landscaping work will be in compliance with the standards of the Recreation and Open Space Zone (Land Use Code Division 8.5).
- Site Plan Standards: The new landscaping improvements will be in compliance with all City of Portland Site Plan Standards. The proposed landscaping work will have no impact on transportation systems, public infrastructure, or public safety; the work will not have a detrimental impact on environmental quality; and the work will be consistent with the City's Deering Oaks Master Plan and the historic resources within Deering Oaks Park.
- Stormwater: The proposed new work will not result in any increase to impervious surface, and thus does not require compliance with the General or Flooding Standards for stormwater. The landscaping work will comply with the Basic Standards. The work will be completed as part of the overall Pond Bottom Improvement project, and erosion and sedimentation control systems will be utilized in compliance with the MaineDEP Erosion Control Best Management Practices, as noted in the original permit application submission.
- Solid Waste: The proposed new work will not result in any increased solid waste production.
- Utilities: The proposed new work will not impact existing utilities or require any new utilities.
- Construction Management Plan: The proposed new work will be completed as part of the Pond Bottom Improvement Project and will follow the construction management plan as outlined in the original permit application.
- Fire Department Review: The proposed new work will not require fire department review.

The work is anticipated to be started in 2015 as part of the previously approved Deering Oaks Pond Bottom Replacement project, with plantings installed in the spring of 2016. We anticipate that as part of this work, the project's landscape architect and City staff may provide field directive for additional plantings on the slopes west of the bridge, using similar plantings to those proposed. In this case, we will contact your office to keep you aware of the additions.

Thank you for your consideration of this modification to our plan. Please don't hesitate to contact us if you have any questions or require further information about the proposed work.

Sincerely,

WOODARD & CURRAN

A handwritten signature in cursive script that reads "Lauren Swett".

Lauren Swett, P.E.
Project Engineer

Enclosures: Level I Site Plan Application
Schematic Planting Plan, dated February 26, 2015
Deering Oaks Ravine Plantings Memo, dated February 25, 2015

cc: Michael Farmer, Portland Department of Public Services

PN: 222804.46



Jeff Levine, AICP, Director
Planning & Urban Development Department

Electronic Signature and Fee Payment Confirmation

Notice: Your electronic signature is considered a legal signature per state law.

By digitally signing the attached document(s), you are signifying your understanding this is a legal document and your electronic signature is considered a **legal signature** per Maine state law. You are also signifying your intent on paying your fees by the opportunities below.

I, the undersigned, intend and acknowledge that no Site Plan or Historic Preservation Applications can be reviewed until payment of appropriate application fees are **paid in full** to the Inspections Office, City of Portland Maine by method noted below:

- Within 24-48 hours, once my complete application and corresponding paperwork has been electronically delivered, I intend to **call the Inspections Office** at 207-874-8703 and speak to an administrative representative and provide a credit/debit card over the phone.
- Within 24-48 hours, once my application and corresponding paperwork has been electronically delivered, I intend to **call the Inspections Office** at 207-874-8703 and speak to an administrative representative and provide a credit/debit card over the phone.
- I intend to deliver a payment method through the U.S. Postal Service mail once my application paperwork has been electronically delivered.

This is an application for a modification to an existing permit. The project agent is Woodard & Curran, and the applicant is the City of Portland Department of Public Services, and the fee was waived.

Lauren Swett
Applicant Signature:

3/13/15
Date:

Lauren Swett
I have provided digital copies and sent them on:

3/13/15
Date:

NOTE: All electronic paperwork must be delivered to buildinginspections@portlandmaine.gov or by physical means i.e. a thumb drive or CD to the Inspections Office, City Hall, 3rd Floor, Room 315.



Level I – Site Alteration Development Review Application Portland, Maine

Planning and Urban Development Department
Planning Division

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

Level I: Site Alteration Development includes:

- Alteration of a watercourse or wetland as defined in Section 14-47 of the City Code.
- Alteration of a site. The disturbance of land areas of less than one (1) acre that are stripped, graded, grubbed, filled or excavated. The Planning Authority shall exempt from review the loam and seeding of lawns and the cumulative placement of less than fifteen (15) cubic yards of fill on any lot provided such loaming or placement does not alter a drainage course, swale, wetland or redirect water onto adjoining property and does not violate any other provision of the Portland City Code or state or federal law. "Disturbed area" does not include routine maintenance, but does include re-development and new impervious areas.
- The construction of any temporary or permanent parking area, paving of existing unpaved surface parking areas between 1,000 and 7,500 sq. ft., or creation of other impervious surface areas between 1,000 and 7,500 sq. ft.
- The rehabilitation or reconstruction, but not new construction, of piers, docks, wharves, bridges, retaining walls, and other structures located within the shoreland zone.
- A site alteration in which vehicle access is proposed from more than one (1) street.

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

Land Use Code: <http://me-portland.civicplus.com/DocumentCenter/Home/View/1080>

Design Manual: <http://me-portland.civicplus.com/DocumentCenter/View/2355>

Technical Manual: <http://me-portland.civicplus.com/DocumentCenter/View/2356>

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

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

PROJECT NAME: Deering Oaks Pond Bottom & Water Quality Improvements

PROPOSED DEVELOPMENT ADDRESS:

Deering Oaks Park, bounded by Deering Avenue, Forest Avenue, Park Avenue, and Interstate 295

PROJECT DESCRIPTION:

Install a new pond bottom system in Deering Oaks Pond to allow for easier and more complete annual maintenance of the pond, helping to improve water quality in the pond. UPDATE: Install additional landscaping to the pond's ravine area.

CHART/BLOCK/LOT: 035 I001, 050 A001, & 049 B001

CONTACT INFORMATION:

Applicant – must be owner, Lessee or Buyer Name: Michael Farmer, Project Engineer Business Name, if applicable: City of Portland Department of Public Services Address: 55 Portland Street City/State : Portland/ME Zip Code: 04101	Applicant Contact Information Work # 207-874-8845 Home# Cell # Fax# e-mail: mfarmer@portlandmaine.gov
Owner – (if different from Applicant) Name: (Same as Applicant) Address: City/State : Zip Code:	Owner Contact Information Work # Home# Cell # Fax# e-mail:
Agent/ Representative Name: Woodard & Curran, c/o Lauren Swett, PE Address: 41 Hutchins Drive City/State : Portland/ME Zip Code: 04102	Agent/Representative Contact information Work # 207-774-2112 Cell # e-mail: lswett@woodardcurran.com
Billing Information Name: (Same as Applicant) Address: City/State : Zip Code:	Billing Information Work # Cell # Fax# e-mail:

APPLICATION SUBMISSION:

1. All site plans and written application materials must be submitted electronically on a CD or thumb drive with each plan submitted as separate files, with individual file which can be found on the **Electronic Plan and Document Submittal** page of the City's website at <http://me-portland.civicplus.com/764/Electronic-Plan-and-Documents-Submittal>
2. In addition, one (1) paper set of the plans (full size), one (1) paper set of plans (11 x 17), paper copy of written materials, and the application fee must be submitted to the Building Inspections Office to start the review process.

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

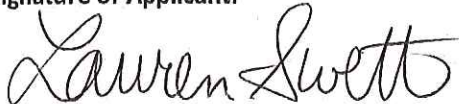
1. One (1) full size site plans that must be folded.
2. One (1) copy of all written materials or as follows, unless otherwise noted:
 - a. Application form that is completed and signed.
 - b. Cover letter stating the nature of the project.
 - c. All Written Submittals (Sec. 14-527 (c), including evidence of right, title and interest.
3. A stamped standard boundary survey prepared by a registered land surveyor at a scale not less than one inch to 50 feet.
4. Plans and maps based upon the boundary survey and containing the information found in the attached sample plan checklist.
5. One (1) set of plans reduced to 11 x 17.

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

APPLICANT SIGNATURE:

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

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

Signature of Applicant: 	Date: 3/13/15
----------------------------------------------------------------------------------------------------------------	------------------

PROJECT DATA

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

Total Area of Site	42.7 acres	sq. ft.
Proposed Total Disturbed Area of the Site	3.5 acres	sq. ft.
If the proposed disturbance is greater than one acre, then the applicant shall apply for a Maine Construction General Permit (MCGP) with DEP and a Stormwater Management Permit, Chapter 500, with the City of Portland		
Impervious Surface Area	N/A	
Impervious Area (Total Existing)		sq. ft.
Impervious Area (Total Proposed)		sq. ft.
Parking Spaces	N/A	
# of Parking Spaces (Total Existing)		sq. ft.
# of Parking Spaces (Total Proposed)		sq. ft.
# of Handicapped Spaces (Total Proposed)		sq. ft.

Level 1 Site Alteration			
Applicant Checklist	Planner Checklist	# of Copies	GENERAL WRITTEN SUBMISSIONS CHECKLIST
X		1	Completed Application form
N/A		1	Application fees
X		1	Written description of project
Provided with original submission		1	Evidence of right, title and interest
Provided with original submission		1	Evidence of state and/or federal approvals, if applicable
Provided with original submission		1	Written assessment of proposed project's compliance with applicable zoning requirements
Provided with original submission		1	Summary of existing and/or proposed easement, covenants, public or private rights-of-way, or other burdens on the site
Provided with original submission		1	Written requests for waivers from site plan or technical standards, if applicable.
Provided with original submission		1	Evidence of financial and technical capacity
Applicant Checklist	Planner Checklist	# of Copies	SITE PLAN SUBMISSIONS CHECKLIST
Provided with original submission		1	Boundary Survey meeting the requirements of Section 13 of the City of Portland's Technical Manual
Provided with original submission		1	Preliminary Site Plan including the following: (information provided may be preliminary in nature during preliminary plan phase)
Provided with original submission			Proposed grading and contours;
Provided with original submission			Existing structures with distances from property line;
Provided with original submission			Proposed site layout and dimensions for all proposed structures (including piers, docks or wharves in Shoreland Zone), paved areas, and pedestrian and vehicle access ways;
Provided with original submission			Preliminary design of proposed stormwater management system in accordance with Section 5 of the Technical Manual (note that Portland has a separate applicability section);
Provided with original submission			Preliminary infrastructure improvements;
X			Preliminary Landscape Plan in accordance with Section 4 of the Technical Manual;

Site Plan Standards for Review of Level I: Site Alteration

Level I: Site alteration plans shall only be subject to the following site plan standards, as applicable, as contained in section 14-526:

- (a) Transportation standards:
 1. Impact on surrounding street systems,
 2. Access and circulation, and
 4. Parking
- (b) Environmental quality standards
 1. Preservation of significant natural features,
 2. Landscaping and landscape preservation, and
 3. Water quality, stormwater management and erosion control.
- (c) Public infrastructure and community safety standards.
 1. Consistency with city master plans.
- (d) Site design standards
 5. Historic resources,
 6. Exterior lighting,
 8. Signage and wayfinding, and
 9. Zoning related design standards.

Except as provided in article III, or to conditions imposed under section 14-526(e) only, or to those submission requirements set forth in section 14-527 as relate solely thereto.



PORTLAND FIRE DEPARTMENT SITE REVIEW FIRE DEPARTMENT CHECKLIST



A separate drawing[s] shall be provided to the Portland Fire Department for all site plan reviews.

1. Name, address, telephone number of applicant.
 2. Name address, telephone number of architect
 3. Proposed uses of any structures [NFPA and IBC classification]
 4. Square footage of all structures [total and per story]
 5. Elevation of all structures
 6. Proposed fire protection of all structures
- **As of September 16, 2010 all new construction of one and two family homes are required to be sprinkled in compliance with NFPA 13D. This is required by City Code. (NFPA 101 2009 ed.)**

7. Hydrant locations

MEMORANDUM



REGINA S. LEONARD
landscape architecture & design

DATE: 2/25/15

RE: DEERING OAKS RAVINE PLANTINGS

TO: DEB ANDREWS

CC: WOODARD & CURRAN (FORWARDED TO COMMITTEE MEMBERS).

HISTORICAL PRECEDENT (from 1994 Deering Oaks Master Plan, by Halvorsen Company)

The western ravine – also referenced by Goodwin as “the gully” - has always challenged Goodwin’s original intentions for the area. He had proposed for the ravine a fountain at its western edge with a stepped series of cascading pools emptying into Deering Oaks pond. One pool, located at the head of the ravine, was constructed in 1889 however water supply was deemed inadequate to create the full intended effect for the cascading series of pools proposed in the original plan. In 1914 a water supply line was installed at the head of the ravine, as suggested by Goodwin many years prior. The Annual Report of 1912 reported that water flowed into an upper level pond and over a dam into the main pond.

Maintaining plantings along ravine side slopes proved to be challenging. The City planted these areas several times between 1912 and the 1930s. While Goodwin worked with a fairly narrow palette of native trees and shrubs, plantings proposed during this era included ornamental and exotic species popular at the time. A 1935 planting plan by William Dougherty showed an elaborate ornamental scheme for the upper pond and ravine. By the time of the 1994 Master Plan, this area was largely in disrepair. The Plan called for a feasibility study for re constructing the upper pond in the ravine. The popular Ravine Pool was subsequently added in 2000. The 1994 Master Plan called for restoring the natural beauty and ecological health of Deering Oaks, including the enhancement of understory plantings around pond perimeters to enhance the landscape composition, limit visitor access to the edge to decrease erosion and to reduce maintenance. Recommendations included increasing shrub and groundcover plantings to embellish the landscape and create cross-supporting plant communities.

For the ravine, Goodwin originally envisioned a naturalistic edge with steep slopes and heavy plantings. The natural edges of the ravine were retained until recently, when sloped granite curbing was added to reinforce the banks. The 1994 Master Plan stipulated that this style of reinforcement be discontinued in favor of a stacked curb edge and recommended that this treatment be continued to the concrete bridge across the ravine. The Plan called for reserving the naturalistic treatment to the ravine area above the bridge. While this area has since been planted, bank edges were formalized to reduce erosion. The Master Plan did not make specific provisions for the lower ravine area, where plantings are now being proposed.

PROPOSED TREATMENT

We believe that the overall goals and approach for this planting project are consistent with Goodwin’s vision of the ravine as a naturalized landscape. While the 1935 planting plan for the

ravine provided an opportunity to mimic former plantings, we felt that the plant palette was not in keeping with Goodwin's preferred native plant palette. As well, the primary goal for improving this area – as directed by the TSE – is to enhance the buffer to reduce runoff and erosion. To achieve these benefits, the plantings need to thrive and be appropriate for stabilization. Past planting efforts likely failed, in part, because plant selection was based on a desired ornamental effect rather than in response to natural function or soil conditions. We've selected shrubs that do well in heavy clay soils and tend to colonize in natural settings. It is not the intent that these plantings should receive intensive management, but left to naturalize. For this reason, we limited plantings east of the old bridge abutment, where the pond widens and the landscape becomes more formal.

The proposed plan for lower ravine includes native understory trees, shrubs to stabilize steep banks and herbaceous plants to enhance visual interest and diversity of species in the wetland areas. The reinforced edges of sloped granite will be retained and seeded-in native plants, including grasses and several species of aster, will be nurtured in the spaces between the blocks. The wetland soils just east of the foot bridge will be enhanced with flowering herbaceous plants, such as Blue Flag Iris White Beard Tongue and Wild Bergamot. Colonizing and wettolerant native shrubs, including Winterberry, Summersweet and Elderberry are proposed in groupings along the stabilized bank edge, with Summerweet and Witherod Viburnum proposed in swaths along the northern upland, where the slope is very steep. Hophornbeam trees and Witchhazel plantings supplement the understory in this area.

The proposed plan also recommends that mowing schedule and cutting height be adjusted in the remaining lawn areas between the lower paths and the top of bank in order to achieve a better diversity of grasses and forb species. This will also help to reduce erosive impacts from intensive mowing of the steep slopes. It is recommended that these areas be kept between 5-8 inches tall which creates conditions more favorable for warm season grasses and associated flowering species. For all plantings, the City will need to regularly monitor for invasive species so that plants can be detected and addressed early to avoid higher levels of infestation and the issues associated with them.

There are limited improvements proposed beyond plantings. The plan also calls for improving access to the wetland at the former pedestrian bridge location via stepped reclaim curbing bordered by boulders. These stones will be hand selected for rounded edges and will have similar qualities to those in the Ravine Pool Area. At the request of staff, a portion of the reinforced granite edge will be removed and utilized in this area. The stepped feature will allow visitors to explore plantings along the ravine edge while reducing unwanted impacts to planted areas..

We hope we have adequately described the proposed scope of work as well as the historical precedents for this work. If you have any question, please do not hesitate to contact us.

Sincerely,



Regina S. Leonard
Maine-Licensed Landscape Architect

KEY - SYMBOLS

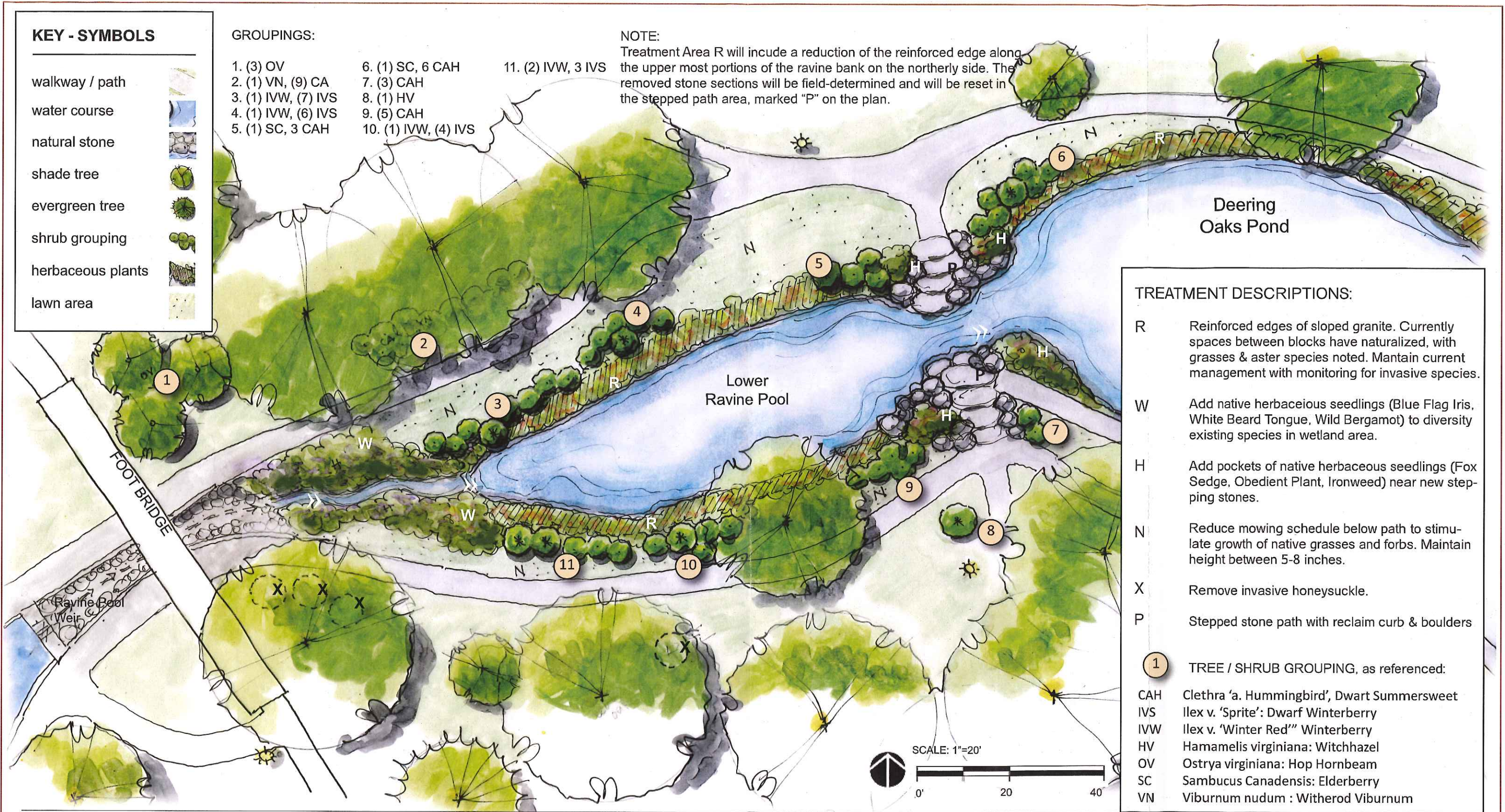
- walkway / path
- water course
- natural stone
- shade tree
- evergreen tree
- shrub grouping
- herbaceous plants
- lawn area

GROUPINGS:

- | | | |
|---------------------|----------------------|--------------------|
| 1. (3) OV | 6. (1) SC, 6 CAH | 11. (2) IVW, 3 IVS |
| 2. (1) VN, (9) CA | 7. (3) CAH | |
| 3. (1) IVW, (7) IVS | 8. (1) HV | |
| 4. (1) IVW, (6) IVS | 9. (5) CAH | |
| 5. (1) SC, 3 CAH | 10. (1) IVW, (4) IVS | |

NOTE:

Treatment Area R will include a reduction of the reinforced edge along the upper most portions of the ravine bank on the northerly side. The removed stone sections will be field-determined and will be reset in the stepped path area, marked "P" on the plan.



TREATMENT DESCRIPTIONS:

- R** Reinforced edges of sloped granite. Currently spaces between blocks have naturalized, with grasses & aster species noted. Maintain current management with monitoring for invasive species.
- W** Add native herbaceous seedlings (Blue Flag Iris, White Beard Tongue, Wild Bergamot) to diversity existing species in wetland area.
- H** Add pockets of native herbaceous seedlings (Fox Sedge, Obedient Plant, Ironweed) near new stepping stones.
- N** Reduce mowing schedule below path to stimulate growth of native grasses and forbs. Maintain height between 5-8 inches.
- X** Remove invasive honeysuckle.
- P** Stepped stone path with reclaim curb & boulders

- 1** TREE / SHRUB GROUPING, as referenced:
- CAH Clethra 'a. Hummingbird', Dwarf Summersweet
 - IVS Ilex v. 'Sprite': Dwarf Winterberry
 - IVW Ilex v. 'Winter Red' Winterberry
 - HV Hamamelis virginiana: Witchhazel
 - OV Ostrya virginiana: Hop Hornbeam
 - SC Sambucus Canadensis: Elderberry
 - VN Viburnum nudum : Witherod Viburnum

**DEERING OAKS RAVINE
SCHEMATIC PLANTING PLAN
CITY OF PORTLAND, MAINE**

REGINA S. LEONARD
landscape architecture & design
29 Bridge St., Topsham, ME 04086
T(207)450-9700 F(207)482-0023

WOODARD & CURRAN
Project Leader:
Woodard & Curran
41 Hutchins Drive
Portland, ME 04102

DATE: FEBRUARY 25, 2015
 DEPT. OF PUBLIC SERVICES
55 PORTLAND STREET
PORTLAND, MAINE 04101