

134-A-1

2014-034

Stevens Avenue

Evergreen Cemetery Expansion

City of Portland

on spreadsheet



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1. APPLICATION FORM



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 Alteration site plan.

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 square feet, or creation of other impervious surface areas between 1,000 and 7,500 square feet.
- 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;

The Land Use Code (including Article V), the Technical Manual, and the Design Manual are available on the City's web site at <http://www.portlandmaine.gov/planning/default.asp> or copies may be purchased at the Planning Division Office.

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

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

PROJECT NAME: Evergreen Cemetery Expansion

PROPOSED DEVELOPMENT ADDRESS:

Evergreen Cemetery, 672 Stevens Avenue

PROJECT DESCRIPTION:

A new road, grave space layout, and landscaping are proposed for an approximately five acre portion of Evergreen Cemetery located adjacent to the Stevens Avenue entrance to the cemetery. The project will also include a new columbarium structure and the revegetation of existing gravel pathways in the cemetery.

CHART/BLOCK/LOT: 134 A001

CONTACT INFORMATION:

	Applicant's Contact for electronic plans Name: Woodard & Curran, c/o Lauren Swett, PE e-mail: lswett@woodardcurran.com work #: 207-774-2112
Applicant – must be owner, Lessee or Buyer Name: Joe Dumais, Parks and Cemeteries Division Manager 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 # 207-874-8793 Home# Cell # Fax# e-mail: jdumais@portlandmaine.gov
Owner – (if different from Applicant) Name: 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 (Same as Applicant) Name: Address: City/State : Zip Code:	Billing Information Work # Cell # Fax# e-mail:

Engineer Name: Woodard & Curran, c/o Lauren Swett, PE Address: 41 Hutchins Drive City/State : Portland/ME Zip Code: 04102	Engineer Contact Information Work # 207-774-2112 Cell # _____ Fax# _____ e-mail: lswett@woodardcurran.com
Surveyor Name: Owen Haskell, Inc., c/o John Swan Address: 390 US Route One City/State : Falmouth/ME Zip Code: 04105	Surveyor Contact Information Work # 207-774-0424 Cell # _____ Fax# _____ e-mail: jswan@owenhaskell.com

APPLICATION FEES:

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

Level I Site Alteration Site Plan <small>Fee Waived for City Project</small> Application Fee (\$200.00) The City invoices separately for the following: <ul style="list-style-type: none"> • Notices (\$.75 each) • Legal Ad (% of total Ad) • Planning Review (\$40.00 hour) • Legal Review (\$75.00 hour) Third party review is assessed separately.	Fees Paid (office use) <hr style="width: 50px; margin: 0 auto;"/>
Performance Guarantee: A performance guarantee is required to cover all public and private site improvements.	Required
Inspection Fee: An inspection fee of 2% of the performance guarantee is due prior to the release of permits	2% of the performance guarantee

Application Check List

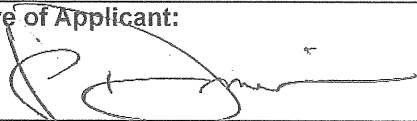
Refer to the application checklist for a detailed list of submittal requirements.

All site plans and written application materials must be uploaded to a website for review. At the time of application, instructions for uploading the plans will be provided to the applicant. One paper set of the plans, written materials and application fee must be submitted to the Planning Division Office to start the review process.

Portland's development review process and requirements are outlined in the Land Use Code (Chapter 14), which includes the Subdivision Ordinance (Section 14-491) and the Site Plan Ordinance (Section 14-521).

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 Site Plan review only, a Performance Guarantee, Inspection Fee, Building Permit Application and associated fees will be required prior to construction.

Signature of Applicant: 	Date: 3/27/14
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Please refer to Article V, Site Plan of the City of Portland Land Use Code for detailed information concerning the City's site plan review process, thresholds and standards. Should you have any questions regarding the submittal requirements or any other aspect of the site plan review process, please contact the Planning Division.

PROJECT DATA

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

Total Site Area	10,611,216	sq. ft.
Proposed Total Disturbed Area of the Site	36,690	sq. ft.
IMPERVIOUS SURFACE AREA		
• Proposed Total Paved Area		sq. ft.
• Existing Total Impervious Area	14,730	sq. ft.
• Proposed Total Impervious Area	15,120	sq. ft.
• Proposed Impervious Net Change	390	sq. ft.
PARKING SPACES		
• Existing Number of Parking Spaces		
• Proposed Number of Parking Spaces		
TOTAL Number of Parking Spaces	N/A	

General Submittal Requirements – Level I Site Alteration

Applicant Checklist	Planner Checklist	Number of Paper Copies	Submittal Requirement
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Completed application form.
<input type="checkbox"/> N/A	<input type="checkbox"/>	1	Application fees.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Written description of project.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Evidence of right, title and interest.
<input type="checkbox"/> N/A	<input type="checkbox"/>	1	Copies of required state and/or federal permits.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Written assessment of proposed project's compliance with applicable zoning requirements.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Written description of existing and proposed easements or other burdens.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Written requests for waivers from individual site plan and/or technical standards.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Evidence of financial and technical capacity.

Site Plans and Boundary Survey Requirements – Level I Site Alteration

Applicant Checklist	Planner Checklist	Number of Copies	Submittal Requirement
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Boundary Survey meeting the requirements of Section 13 of the City of Portland Technical Manual.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Site Plan Including the following:
<input checked="" type="checkbox"/>	<input type="checkbox"/>		▪ Existing structures with distance from property line (including location of proposed piers, docks or wharves if in Shoreland Zone)
<input checked="" type="checkbox"/>	<input type="checkbox"/>		▪ Location and dimension of existing and proposed paved areas.
<input checked="" type="checkbox"/>	<input type="checkbox"/>		▪ Location and details of proposed infrastructure improvements (e.g. - curb and sidewalk improvements, utility connections, roadway improvements).
<input checked="" type="checkbox"/>	<input type="checkbox"/>		▪ Identification of and proposed protection measures for any significant natural features on the site (including wetlands, ponds, watercourses, floodplains, significant wildlife habitats and fisheries or other important natural features listed in Section 14-526 (b)1. of the Land Use Code.
<input type="checkbox"/> N/A	<input type="checkbox"/>		▪ Details of proposed pier rehabilitation (Shoreland areas only).
<input checked="" type="checkbox"/>	<input type="checkbox"/>		▪ Existing utilities.
<input checked="" type="checkbox"/>	<input type="checkbox"/>		▪ Existing and proposed grading and contours.
<input checked="" type="checkbox"/>	<input type="checkbox"/>		▪ Proposed stormwater management and erosion controls.
<input checked="" type="checkbox"/>	<input type="checkbox"/>		▪ Total area and limits of proposed land disturbance.
<input checked="" type="checkbox"/>	<input type="checkbox"/>		▪ Existing vegetation to be preserved and proposed site landscaping.
<input checked="" type="checkbox"/>	<input type="checkbox"/>		▪ Existing and proposed easements or public or private rights of way.

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

2. PROJECT DESCRIPTION

2.1 PROJECT SITE & BACKGROUND

The project site is in the historic, city-owned, Evergreen Cemetery, which was established in 1855 and is located at 672 Stevens Avenue in Portland, Maine. A location map (Figure 1) is included in Appendix A for your reference. There is an increasing demand for burial spaces; and the developed portion of the 244-acre Cemetery is nearing capacity. The need for new burial space has led to the re-development and expansion of the Cemetery in the area just off of Stevens Avenue, adjacent to the Main Road Entrance.

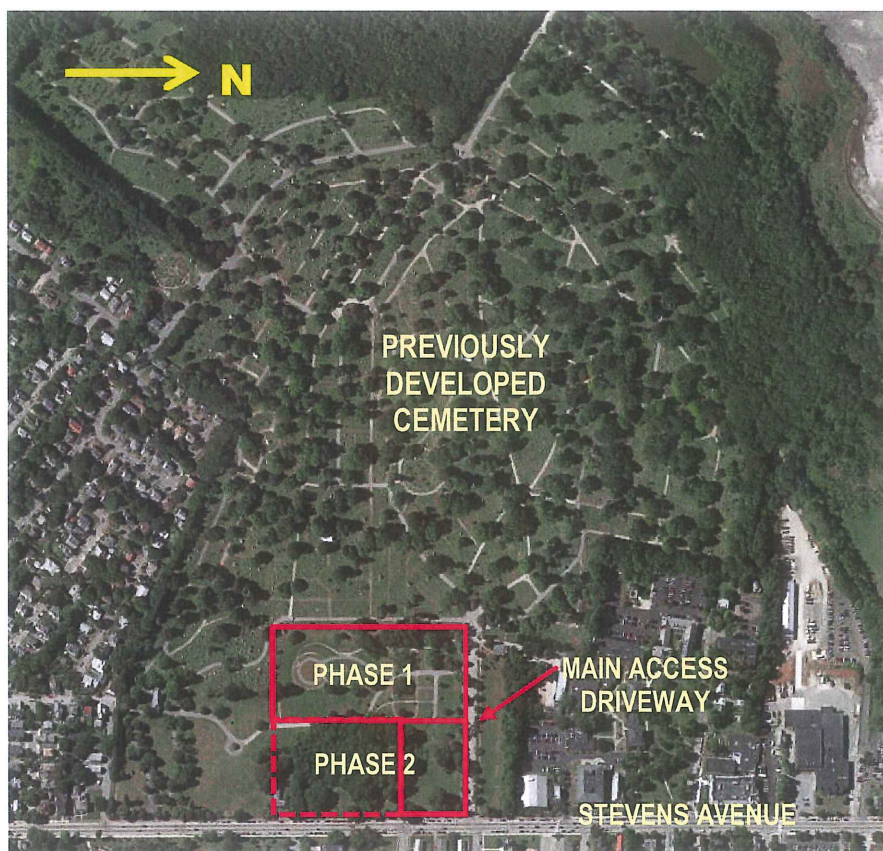


Figure 2-1 Cemetery Redevelopment Locations

In 2005, plans for Phase 1 and Phase 2 expansions were developed for this area of the Cemetery. These areas are identified in the figure above. The two phases were designed and approved by the City of Portland, and Phase 1 was constructed in 2006. The plans for Phase 2 were kept for future construction when the Phase 1 area became full. As part of the Phase 1 construction, stormwater infrastructure was installed through the Phase 2 area for use with future expansion. The 2005 Phase 1 and Phase 2 plan was developed by Sebago Technics, and a copy of the plan is included in Appendix B.

As the Phase 1 area approaches capacity, the City of Portland Public Services Department has reviewed the previously developed plan for Phase 2, and has determined that modifications to the design are needed to provide better functionality. The original layout presented challenges associated with narrow circular roads, limitations for snow storage, and challenging burial site layout. The originally proposed Phase 2 design also called for complete removal of the existing trees within the area, and a design with less impact on the existing trees, which serve to buffer the Cemetery from Stevens Avenue, was preferred. The City

also has a need for more interment options which can be addressed by constructing a columbarium structure with niches for urn placement. The original design of both Phases 1 and 2 did not include space for this type of construction.

2.1.1 Design Development

The design team of Woodard & Curran (civil engineers) and Carol R. Johnson Associates, Inc. (CRJA) (landscape architects) held several design development meetings throughout 2013. These meetings provided opportunities for outreach and involvement with stakeholder groups, throughout the design process. These meetings included City of Portland Public Services, Evergreen Cemetery staff, City of Portland Historic Preservation staff, and members of the Friends of Evergreen Cemetery Group.

Starting with the original Phase 2 design, a plan for expansion has been developed to provide a functional new Cemetery space that will be in line with the historic nature of the existing Cemetery and the 1994 Master Plan developed for the Cemetery. The original Phase 2 area (identified in Figure 2-1 with dashed lines) has been reduced to a smaller area (identified in the figure with solid lines). The design preserves some existing vegetation and provides new landscaping along Stevens Avenue.

2.2 PROPOSED PROJECT

Plans, including engineering and landscaping improvements are included in Appendix C. The project includes an updated road layout for both the Phase 1 and Phase 2 areas of the Cemetery, providing for improved traffic movement and parking options during funeral services. Existing road widths in the cemetery were reviewed, and were found to range from 12 to 18 feet in width in the area surrounding the proposed work. The proposed new road widths are 12 feet and 18 feet to match the surrounding existing conditions.

The road has also been designed to provide for a more functional grave space layout. The proposed grave layout (Figure 2) is included in Appendix D. The reconfiguration of the road within the Phase 1 area leaves space for approximately 320 grave spaces. The Phase 2 area will have approximately 540 grave spaces.

The road was also laid out to maintain existing catch basins. A combination of one-way and two way roads are proposed for the project and the roads will not be curbed. Vehicle turning was evaluated at proposed intersections. Vehicles will be able to enter and exit the cul-de-sac area without issue. Figure 2-2 shown on the next page shows turning movements into and out of the cul-de-sac area.

New landscaping features, including trees throughout the proposed expansion and trees at the Stevens Avenue entrance have been proposed to supplement the existing trees. The addition of trees at Stevens Avenue will create a buffer to replace vegetation that will be removed. A mix of evergreens, flowering trees, and fruit trees will be planted.

The project will also include the construction of a columbarium within the existing Phase 1 area of the Cemetery. Three curved granite walls containing niches for urn placement will be installed within the Phase 1 roadway cul-de-sac. A total of 300 niches will be provided. This roadway will be reconstructed as part of this project, and will be widened to allow for improved parking in the area. Under the current configuration, individuals in funeral processions would not be able to exit the site without all individuals in the procession exiting prior. A second roadway will be constructed off of the cul-de-sac, creating separate routes for entering and exiting the cul-de-sac, improving circulation and access. To counter the added impervious area of the new paved roadways, existing gravel access pathways within the Phase 1 area will be loamed and seeded, resulting in a net decrease in impervious area of over 200 square feet.

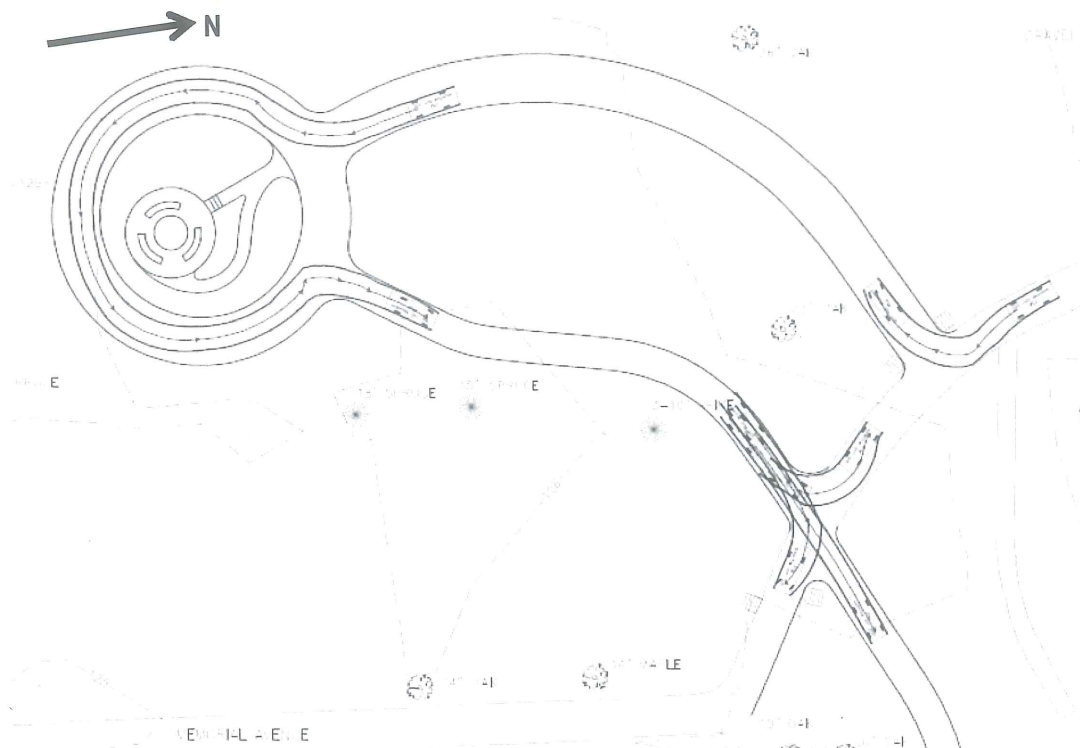


Figure 2-2 Vehicle Turning Check

The columbarium and the proposed landscaped features have been developed by Landscape Architect Carol R. Johnson Associates, Inc. (CRJA). Memos from CRJA describing the design elements of the columbarium and proposed landscaping features are included in Appendix E.

The proposed project will also include the construction of curb ramps and cross walks on Stevens Avenue. New curb ramps will be constructed, providing an ADA accessible pathway to cross the Cemetery driveway. Existing curb ramps crossing Stevens Avenue to the north and south of the Cemetery driveway will be reconstructed to be compliant with ADA standards.

The proposed Cemetery expansion has been designed to be consistent with the context of the existing Cemetery. The layout of the grave spaces and the widths of the proposed roadways will match those in the existing, historic areas of the Cemetery.

2.3 LEVEL I SITE ALTERATION APPLICATION

A pre-application meeting was held with the City of Portland Planning Division on November 20, 2013, and subsequent information on the size and impact areas of the proposed project was provided to the Planning Division in a memo on December 6, 2013. Due to the size of the proposed land disturbance (less than one acre, including stripping, grading, grubbing, filling, and excavation), the project qualifies for review under a Level I Site Alteration.

The following Report is presented in conformance with the requirements of a Level I Site Alteration Application. Appendices are included with the Report in support of various sections. Civil and landscaping plan sheets showing the proposed design of the project have been attached for your reference.

While the City of Portland Code of Ordinances does not require that a neighborhood meeting be held for projects being reviewed as Level 1 Site Alterations, due to the public nature of the project, and the interest of local neighborhood and friends groups, a public meeting will be held. The meeting is currently scheduled for April 15, 2014, with notices also sent to neighbors and other interested parties. Any project

alterations that occur as a result of the public meeting will be provided to the Planning Division under separate cover.

3. EVIDENCE OF RIGHT, TITLE, AND INTEREST

The project site is located entirely on public land owned by the City of Portland. The Cemetery property consists of multiple parcels, and the project parcel is located at chart, block, lot 134 A001. Copies of the City of Portland Tax Maps showing the parcel location are attached in Appendix F.

4. ADDITIONAL PROJECT APPROVALS

4.1 ADDITIONAL LOCAL APPROVALS

In accordance with Article IX of the Land Use Code, an Application for a Certificate of Appropriateness is being submitted to the Historic Preservation Program for the proposed construction and site alterations to Evergreen Cemetery, a designated historic property.

4.2 STATE AND FEDERAL APPROVALS

A wetland assessment was completed within the project area in 2013. While the preliminary assessment in February 2013 indicated the potential for wetlands, a follow up assessment in May 2013 confirmed that there are no wetlands in the project area. The proposed project will not impact any natural resources therefore no Natural Resources Protection Act (NRPA) permits from the Maine Department of Environmental Protection (MaineDEP) or Programmatic General Permits from the Army Corps of Engineers will be required.

This application will adequately address Stormwater Management requirements in compliance with the City's Standards; however, the project does not require approval from MaineDEP under State Stormwater Management Law because it will not create more than one acre of impervious area onsite.

5. EVIDENCE OF FINANCIAL AND TECHNICAL CAPACITY

5.1 FINANCIAL CAPACITY

The Evergreen Cemetery Expansion project is currently included in the City of Portland's 2014 Capital Improvement Plan and appropriate funds have been allocated for this project in the City's annual budget.

5.2 TECHNICAL CAPACITY

On behalf of the City of Portland, Woodard & Curran is preparing this site plan application for the Evergreen Cemetery Expansion project. Woodard & Curran has extensive experience with these types of projects and resumes can be made available upon request. Woodard & Curran is an over 800 person Portland based firm that has provided engineering services to the public sector for more than 30 years, including permitting, civil/site engineering, stormwater, and construction management services.

Woodard & Curran is supported in this project by Carol R. Johnson Associates, Inc. (CRJA) for landscape architecture. CRJA was selected through a Request for Qualifications process for their extensive experience with development in historic cemeteries.

6. ASSESSMENT OF ZONING

The project is located within the City of Portland Recreation and Open Space Zone (R-OS), and will be designed to comply with the standards and intent of Divisions 8.5 of the Land Use regulations. The proposed activities will not result in any changes to the site's existing use.

6.1 RECREATION AND OPEN SPACE ZONE (LAND USE CODE DIVISION 8.5)

The project consists of expanding an existing Cemetery. In accordance with Division 8.5 of the Land Use Code, cemeteries are a permitted use within the R-OS zone.

6.1.1 Space and Bulk Requirements (Land Use Code Section 14-157)

A columbarium will be erected as part of the proposed project; no accessory structures are proposed as part of the project. The proposed structure consists of three curved walls containing niches which will hold cremation urns. A new grave layout has also been proposed for the Cemetery expansion area. The columbarium and the Cemetery grave layout are shown on the attached landscaping plans, and will comply with the following requirements of Land Use Code Section 14-157 as follows:

- *Minimum front yard:* A front setback of 25 feet will be maintained.
- *Minimum rear yard:* A rear setback of 25 feet will be maintained.
- *Minimum side yard:* A side setback of 12 feet will be maintained.
- *Minimum lot size:* The lot size is 243.6 acres, which is greater than the minimum of two acres.
- *Maximum building height:* No buildings are proposed. The proposed columbarium walls will be less than 35 feet in height.
- *Maximum coverage of lot:* Buildings, structures, and other impervious site improvements such as paved sidewalks, drives, and parking lots, shall not exceed 25% of the lot area; there will be a net decrease in impervious area on site site.
- *Maximum floor area ratio:* The proposed Columbarium structure will not have a floor area; this requirement is not applicable.

6.1.2 Development Standards for ROS Zone (Land Use Code Section 14-158)

The proposed project shall comply with the development standards outlined in Section 14-158 of the Land Use Code as follows:

- Vegetated areas not left in their natural state will be suitably landscaped. A landscaping plan for the area has been provided as part of the plan set;
- The City Arborist has identified specific significant trees to preserve as part of the proposed project. Natural features will be preserved to the greatest possible extent;
- Landscaping along Stevens Avenue has been proposed to provide screening, replacing the existing trees that are being removed;
- Significant scenic views presently enjoyed by nearby residents, passersby, and users of the site shall not be obstructed by the proposed columbarium. The proposed landscaping along Stevens Avenue will consist of a diverse selection of evergreen and flowering trees, providing an improved view;
- No new storage is proposed as part of the project;

-
- No active recreational areas are proposed as part of the project. The existing features that allow for recreational uses within the Cemetery (i.e. surfaces for walking, biking, etc.) will be maintained; and
 - In accordance with Section 14-332.1 of the Land Use Code, off-street parking shall be provided in R-OS Zones to adequately serve projected employee and visitor needs. The internal roadway system will be improved to provide for more convenient parking during funeral services. Existing off-street parking along the driveway and other internal Cemetery roads will not be impacted by the project.

6.1.3 Shoreland and Flood Plain Management Regulations (Land Use Code Section 14-159)

The proposed project is not located in a flood hazard zone, as demonstrated by the FEMA Flood Insurance Rate Map provided in Appendix G for your reference. The project area is not located within the Shoreland Zone. The requirements of Division 26 are therefore not applicable.

7. CONFORMANCE WITH SITE PLAN STANDARDS

Section 14-524 of the City of Portland's Land Use Code outlines the site plan standards that must be met by Level I Site Alteration projects. These standards are defined in Section 14-526 of the Code. Level I Site Alteration plans shall only be subject to the following site plan standards, as applicable:

7.1 TRANSPORTATION STANDARDS

In general, there are no proposed changes to off-site transportation systems. Construction access to the site will be managed to minimize impact to local streets and parking.

7.1.1 Impact on Surrounding Street Systems

No alterations to off-site circulation are proposed as part of this project. Handicap-accessible curb ramps will be installed at the end of the main Cemetery access drive, and at the intersection of Walton Street and Stevens Avenue, providing for improved pedestrian access. No additional impacts to surrounding street systems are anticipated as a result of this project.

7.1.2 Access and Circulation

The proposed site access and circulation is considered safe and reasonable for the site. No new points of access or egress are proposed as part of this project. The existing internal road system within the Phase 1/Phase 2 area is being widened, and new roadways added to provide improved circulation, especially at the time of heaviest use during funeral services.

7.1.3 Parking

In accordance with Section 14-332.1 of the Land Use Code, off-street parking shall be provided in R-OS Zones to adequately serve projected employee and visitor needs. The expansion of the Cemetery is not anticipated to result in increased demand for employee or visitor parking. The existing access road in the Phase 1 area will be widened, to allow for improved parking and circulation, primarily during funeral services. Other existing roadways that allow for parking within the Cemetery will not be impacted by this project.

7.2 ENVIRONMENTAL QUALITY STANDARDS

7.2.1 Preservation of Significant Natural Features

Significant natural features shall be preserved and protected. The City Arborist has designated specific significant trees to maintain as part of the project. Trees for protection are identified on the plans. Additional information is provided in Section 8 of this Report.

7.2.2 Landscaping and Landscape Preservation

Disturbance and removal of existing trees and other vegetation shall be limited to the maximum extent practicable, as necessary to accomplish the proposed Cemetery expansion. The City Arborist has designated specific significant trees to maintain as part of the project, as noted on the plan set. The extent of the proposed tree removal is significantly less than was proposed and approved with the original 2005 Phase 1 plans.

Landscaped screening along Stevens Avenue will be provided by proposed evergreen, fruit and flowering trees. A landscaping plan is included in the plan set to show proposed plantings.

7.2.3 Water Quality, Stormwater Management, and Erosion Control

The proposed project will not alter existing stormwater drainage patterns; existing topography will remain largely unchanged, and existing storm drain infrastructure will remain unaltered, with the exception of the addition of underdrain within the Phase 2 area, as shown on the plan set. This underdrain was originally proposed as part of the 2005 Phase 2 plans, and similar underdrain was installed within the Phase 1 area. The underdrain provides for proper drainage within the burial areas.

There will be a net decrease in impervious area. The project will comply with the standards of Section 5 of the City of Portland Technical Manual, as discussed in Section 10 of this Report.

Groundwater contamination is not anticipated to occur as a result of this project.

7.3 PUBLIC INFRASTRUCTURE AND COMMUNITY SAFETY STANDARDS

7.3.1 Consistency with City Master Plans

The proposed project has been designed to be consistent with the Evergreen Cemetery Master Plan developed in 1994. The Master Plan identified that the Cemetery serves a dual purpose as a place for burial and as a space for low-impact recreational activities. The proposed Cemetery Expansion has been designed to provide additional space for interment, while also maintaining the recreational nature of the area. The Plan also notes the importance of design review in the implementation of development at the Evergreen Cemetery. The City and Woodard & Curran have held multiple design development meetings with project stakeholders to ensure that an appropriate design has been proposed. The Master Plan also notes the importance of administration, management, and maintenance at the Cemetery, and Cemetery and Public Services Staff have been fully engaged to ensure that the proposed expansion will provide a functional burial space that can be maintained using existing resources.

It is noted, that while this project is developing the burial area with landscaping, a columbarium, and a new grave space layout, the project does not specify individual plot treatments. The grave space layout has been designed to provide flexibility in creating family burial plots, a feature identified by the Master Plan, and seen prominently in the historic areas of the Cemetery. The actual use of the spaces for family burial plots will depend on the current market for burial options. The addition of a columbarium provides a new option that was not previously available at the Cemetery.

The Master Plan identified the proposed project site as the largest undeveloped area of the Cemetery with potential for burial space expansion, but also noted that the land immediately adjacent to Stevens Avenue should be reserved to create a stronger visual presence of the Cemetery. The Plan's Vegetation Recommendations and Guidelines for Landscape Character specifically identify the need for screening along property boundaries, including the Stevens Avenue edge. The Master Plan also recommends a stronger definition of the Cemetery's main entrance located at Stevens Avenue. A landscaping buffer, including evergreens and flowering fruit trees will serve to screen Stevens Avenue, while bolstering the entrance and the presence of the Cemetery.

The Master Plan also specifically notes the need to increase the quantity and diversity of tree species at the Cemetery, using deciduous shade, flowering, and evergreen trees. The proposed trees shown on the landscaping plan have been reviewed with the Cemetery staff, and with the City's Arborist, and have been found to be appropriate for the site.

The Master Plan identifies the importance of essential design elements and special relationships throughout the Cemetery, through the use of historically responsive design. The Plan specifically notes the use of focal areas, like circles within the Cemetery layout. Cemetery staff has noted that circles provide challenges to maintenance, grave space layout, and traffic. The existing circle driveway within the Phase 1 area will be modified to allow for improved traffic circulation. The grave layout in this area

has also been updated, and the space in the middle of the circle will be utilized for the construction of a columbarium plaza and walls. This columbarium will become a focal point of this portion of the Cemetery, and in addition to three curved granite walls, the layout will incorporate landscaping elements that follow the Master Plan's guidance. In addition to flowering trees, the center space will be planted with flowering groundcover. The Master Plan notes the importance of special plantings at focal areas, and specifically notes that the presence of flowers, particularly in beds in circles, should be reestablished in the Cemetery.

The proposed expansion will address other specific concerns raised in the Master Plan.

- Dispersed parking throughout the Cemetery will be maintained.
- Visitor vehicular circulation will be limited to paved roads. Existing narrow gravel pathways that are intended primarily for maintenance vehicles and walking are often used by visitors in vehicles. A majority of these gravel paths within the Phase 1 area will be revegetated, helping to prevent undesired vehicle traffic.
- Drainage will be managed through the stormwater system installed as part of Phase 1, and with underdrains installed as part of this project.
- Elderly and handicapped accessibility has been considered through the design of the columbarium. A universally accessible pathway will lead up to the columbarium walls. In addition, sidewalk improvements on Stevens Avenue include the construction of new handicap accessible ramps in areas where no ramps or non ADA-compliant ramps currently exist.

7.4 SITE DESIGN STANDARDS

7.4.1 Historic Resources

In accordance with Article IX of the Land Use Code, an application for a Certificate of Appropriateness is being submitted to the Historic Preservation Program for the proposed construction and site alterations to the designated historic property, the Evergreen Cemetery.

The proposed expansion is in an area that has not previously been a part of the active burial area of the Cemetery. No known archaeological resources are located within the site.

7.4.2 Exterior Lighting

No exterior lighting is proposed as part of this project.

7.4.3 Signage and Wayfinding

Proposed signage indicating direction of travel on internal roadways will be consistent with existing signage within the Cemetery. Sign permits will be submitted under separate cover.

7.4.4 Zoning Related Design Standards

Narrative regarding how the proposed project will comply with zoning related design standards has been provided in Section 6 of this Report.

8. REQUEST FOR WAIVERS

8.1 BOUNDARY SURVEY

Woodard & Curran is requesting a waiver from the City of Portland Boundary Survey requirements of Section 14-527 of the Land Use Code and Section 13 of the City Technical Manual. The project area is the same area that was previously approved for Phase 2 improvements in 2005. As noted, the proposed project is located entirely on public land owned by the City of Portland (parcel located at chart, block, lot 134 A001) and is well within the appropriate setbacks, as demonstrated by the plan set.

9. SIGNIFICANT NATURAL FEATURES

A wetland delineation and assessment study was completed for the project area by FB Environmental; the study is documented by two memorandums dated February 7, 2013, and May 9, 2013, which describe the site in detail and have been included in Appendix F for your reference. A preliminary assessment was conducted on January 18, 2013, and a follow-up visit was conducted on May 2, 2013. FB Environmental determined that there are no wetlands or significant natural features located on the project site.

10. STORMWATER MANAGEMENT

The proposed project must comply with the water quality, stormwater management, and erosion control standards identified by the City of Portland in the Land Use chapter of the Code of Ordinance. While the City's Technical Manual does not identify Level I Site Alteration projects on the list of projects requiring compliance with manual's Section 5 on stormwater management, Section 14-524 of the Code of Ordinance requires that the stormwater standards must be met for this level of permit submission.

10.1 EXISTING CONDITIONS

The site is located in the existing Evergreen Cemetery. The Cemetery consists of open space, roadways, walkways, landscaped areas, and undeveloped woodlands. The existing site runoff flows over the surface of vegetated areas and either infiltrates into the ground or discharges to the nearby storm drain system.

10.2 PROPOSED DEVELOPMENT

The proposed project consists of an expansion of the existing Evergreen Cemetery, as described in Section 0. The proposed project will not alter existing stormwater drainage patterns; existing topography will remain largely unchanged, and existing storm drain infrastructure will remain unaltered, with the exception of the addition of underdrain, as shown on the plan set. Site runoff will continue to flow as it does in the existing condition.

As previously discussed at the November 20, 2013 pre-application meeting and identified in the December 6, 2013 memo to the City Planning Division, the area of tree clearing and new impervious area will be less than one acre. As the project design has progressed since that meeting, the total disturbed area has increased by about 260 square feet to 36,950 square feet, but the amount of impervious area has decreased. Existing gravel walkways on the site will be revegetated as part of the project, resulting in a net decrease in impervious area of approximately 390 square feet. Figures showing impact and impervious areas are included in Appendix G. It is our understanding that as there is a decrease in impervious area, the project will not be required to include any specific stormwater management features.

10.3 STORMWATER STANDARDS

The project will comply with the stormwater standards as outlined in Section 5 of the City of Portland's Technical Manual and the MaineDEPs Chapter 500 Stormwater Management Rules.

10.3.1 Basic Standard

Erosion and sedimentation control measures will be utilized during construction to ensure that the work will not result in the contamination of any natural resources. Details for all proposed erosion and sedimentation control measures, in addition to a narrative describing the plan for all temporary and permanent erosion control techniques to be utilized on this project, are included in the plan set submitted with this application. All erosion and sedimentation control measures will be utilized in accordance with MaineDEP Erosion Control Best Management Practices.

10.3.2 General Standard

The proposed project will result in a decrease in impervious area, and as such, is not required to include any specific stormwater management features for stormwater quality control. The Cemetery is a relatively low-pollutant area, and the proposed project will not result in any reduction in stormwater quality.

10.3.3 Flooding Standard

The proposed project will result in a decrease in impervious area, and as such, is not required to include any specific stormwater management features for stormwater quantity control. It is not anticipated that the

proposed project will result in significant increases in stormwater runoff. The previously approved Phase 2 project included a much larger area of clearing, which would have resulted in a greater increase in runoff. The stormwater conveyance system installed as part of Phase 1 was designed to handle the previous Phase 2 design, and should adequately manage the proposed project area.

10.3.4 Urban Impaired Stream Standard

The project is not located within the watershed of an urban impaired stream, and is therefore not required to provide compensation or mitigation in accordance with the Urban Impaired Stream Standard.

11. SOLID WASTE

11.1 MUNICIPAL SOLID WASTE MANAGEMENT

The proposed project will not result in any changes to solid waste management at the Cemetery.

11.2 CONSTRUCTION AND DEMOLITION DEBRIS

As with any construction project, the proposed construction will generate construction waste and demolition debris (CDD). The construction contractor(s) will be responsible for hauling the CDD, or contracting with a waste management service to haul the CDD, from the project site. The contractor(s) will be fully responsible for handling, managing, and disposing of all waste generated by construction in accordance with Maine Solid Waste Management Regulations – 06-096 CMR 400-409. The contractor(s) will be bound by contract to dispose of all materials in full accordance with all applicable local state and federal regulations. The contractor will measure the actual waste volumes at the time of construction.

12. UTILITIES

No new utilities are proposed as part of this project, and existing utilities that are located on the project site will be protected.

Existing internal waterlines will be replaced and relocated to accommodate watering the proposed landscaping. No new water services will be required.

13. CONSTRUCTION MANAGEMENT PLAN

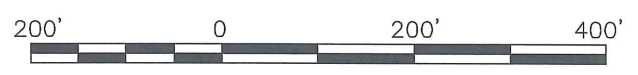
The Evergreen Cemetery site will be managed during construction to minimize impacts to the surrounding area and natural resources. Security fencing will surround the construction area at all times and will be moved to accommodate the construction activities for the project. Traffic controls will consist of temporary signage to manage pedestrian traffic. The contractor will be required to provide a construction management plan for the project, subject to the review and approval of the City and Engineer. The construction management plan will specifically identify how the Contractor will maintain safe access to the surrounding active Cemetery during construction.

Temporary erosion and sedimentation control measures will be established prior to the start of construction and removed after construction has been completed and the site has been stabilized. Erosion and sedimentation control measures will include temporary construction access, temporary inlet protection devices, and sedimentation barriers. The locations of these erosion and sedimentation control measures will be specified on the construction plans.

14. FIRE DEPARTMENT REVIEW

The project will include the construction of a Columbarium; however, no fire protection systems or hydrants will be required. We anticipate that review by the Fire Department will not be required for this project.

APPENDIX A: LOCATION MAP



BAR SCALE
1" = 200'

CHECK GRAPHIC SCALE BEFORE USING



1520 Highland Avenue
Cheshire, Connecticut 06410
888.265.8969 | www.woodardcurran.com

COMMITMENT & INTEGRITY DRIVE RESULTS

PROJECT LOCATION MAP

DESIGNED BY: N/A	CHECKED BY: DLC
DRAWN BY: LJS	EVERGREEN LOCATION MAP.DWG

CITY OF PORTLAND

EVERGREEN CEMETERY
PHASE 2 EXPANSION

JOB NO: 222854.006
DATE: JANUARY 2013
SCALE: 1"=200'

FIG. 1

APPENDIX B: 2005 PHASE 1/PHASE 2 PLAN

APPENDIX C: PLANS

(Bound Separately)

APPENDIX D: GRAVE LAYOUT

APPENDIX E: COLUMBARIUM & LANDSCAPING DESIGN MEMOS

MEMORANDUM

TO: Denise Cameron
FROM: Jeanne Lukenda, Horace Aikman
DATE: January 12, 2014
RE: Evergreen Cemetery, Columbarium Narrative

The expansion of burial capacity at Evergreen Cemetery will include new grave plots for casketed remains and new columbarium walls for cremated remains. The addition of columbarium walls to Evergreen Cemetery serves the increasing demand for cremation in Maine. A relatively recent burial practice, cremation is increasing in popularity in the United State and in Maine in particular. Over 50% of burials in Maine are with cremated remains.

In order to serve this relatively new burial need, Evergreen Cemetery will build new columbarium walls. When Evergreen Cemetery was being built up during the late 19th and early 20th centuries, cremation of bodies was not common. As a result, there are no historic precedents for columbarium walls within the existing inventory of historic stone monuments and structures within the historic cemetery.

Columbarium walls within Evergreen Cemetery represent a contemporary design solution to a new burial practices. The new columbarium walls of Evergreen Cemetery will provide approximately 300 new niches. The columbarium walls will be placed in the rear center of the existing cul-de-sac island and aligned to face towards the approach road. The walls will be approximately 6 feet tall. Setting on top of a low rise in the island of the cul-de-sac, the overall height of the new columbarium monument will be approximately 8 feet, smaller in height than the large cemetery monuments and structures in this area of the cemetery, including the Wilde Memorial Chapel, the Baxter Monument and the Chisholm Mausoleum.

The exposed, exterior surfaces of the columbarium walls will be smooth, sand-blasted gray New England granite, similar in color and texture to the majority of the historic granite monuments in the Cemetery.

Each columbarium niches will measure 12-inches tall and wide and 16-inches deep. The walls will be double sided and measure approximately 3 feet wide. The interior, hidden-from-view niche boxes will be fabricated from aluminum. The doors to each niche will be powder-coated and protected against moisture. Niche covers will be fitted against individual niches and will be fabricated from flat panels of the same New England gray granite as the base, capstone and end wall panels. The granite base stones of each columbarium wall will be 6-inches high and the cap will be 4-inches thick. Granite, half-column will be placed at the ends of each wall, the sole embellishment to the simple, contemporary lines of the granite columbarium monument. The size, scale and materials of the new columbarium monuments will be in keeping with the historic character of the cemetery.

The columbarium plaza will be accessible by a central walkway with a low set of granite steps. Universal access is provided by an adjacent, accessible walkway with grades less than 5 percent. Walkways will be paved in non-slip concrete, broom finished and exposed aggregate to differentiate the different areas of the pavement.

MEMORANDUM

TO: Denise Cameron
FROM: Jeanne Lukenda, Horace Aikman
DATE: January 12, 2014
RE: Evergreen Cemetery, Columbarium Narrative

In keeping with the name of Evergreen Cemetery, a screen buffer of evergreen Spruce and Fir trees will be planted between the cemetery expansion area and Stevens Avenue. Evergreen trees have been selected for hardiness and drought resistance and will include Concolor Fir, Serbian Spruce, Norway Spruce and White Spruce. These trees branch to the ground and when grown to maturity will establish a dense back drop to a staggered row of white flowering crabapples. Crabapple varieties will include Donald Wyman, Snowdrift, Jackii and Harvest Gold. The evergreen screen will grow into a dense, even and full backdrop to the flower and fruit display of the flowering crabapples.

The evergreens will be planted in a meandering, staggered row of trees on a relatively close on center spacing, anticipating that the trees will provide near term, full screening effect. As the trees grow into one another, intermediate trees can be transplanted to other locations in the Cemetery. Flowering and evergreen trees will be grouped by species so that their aggregate effect will be visually cohesive and strong.

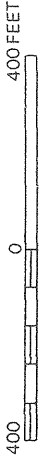
Within the cemetery expansion area, trees will be deciduous shade trees, trees that grow taller than 60 feet and provide extensive shade. These tree species will include Sugar Maples, White Ash, White Oak, Red Oak and American Linden. These trees will provide deep, lush green shade from late spring through the fall leaf drop. Each tree is native to New England and can be found within the existing limits of the cemetery. The trees directly behind the columbarium plaza will be Zelkovas, a lower growing shade tree adapted to Portland and providing a deep wine colored fall foliage and a vase shape.

APPENDIX F: TAX MAPS

APPENDIX G: FEMA FIRMETTE



APPROXIMATE SCALE



NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

CITY OF
PORTLAND,
MAINE
CUMBERLAND COUNTY

PANEL 7 OF 17
(SEE MAP INDEX FOR PANELS NOT PRINTED)

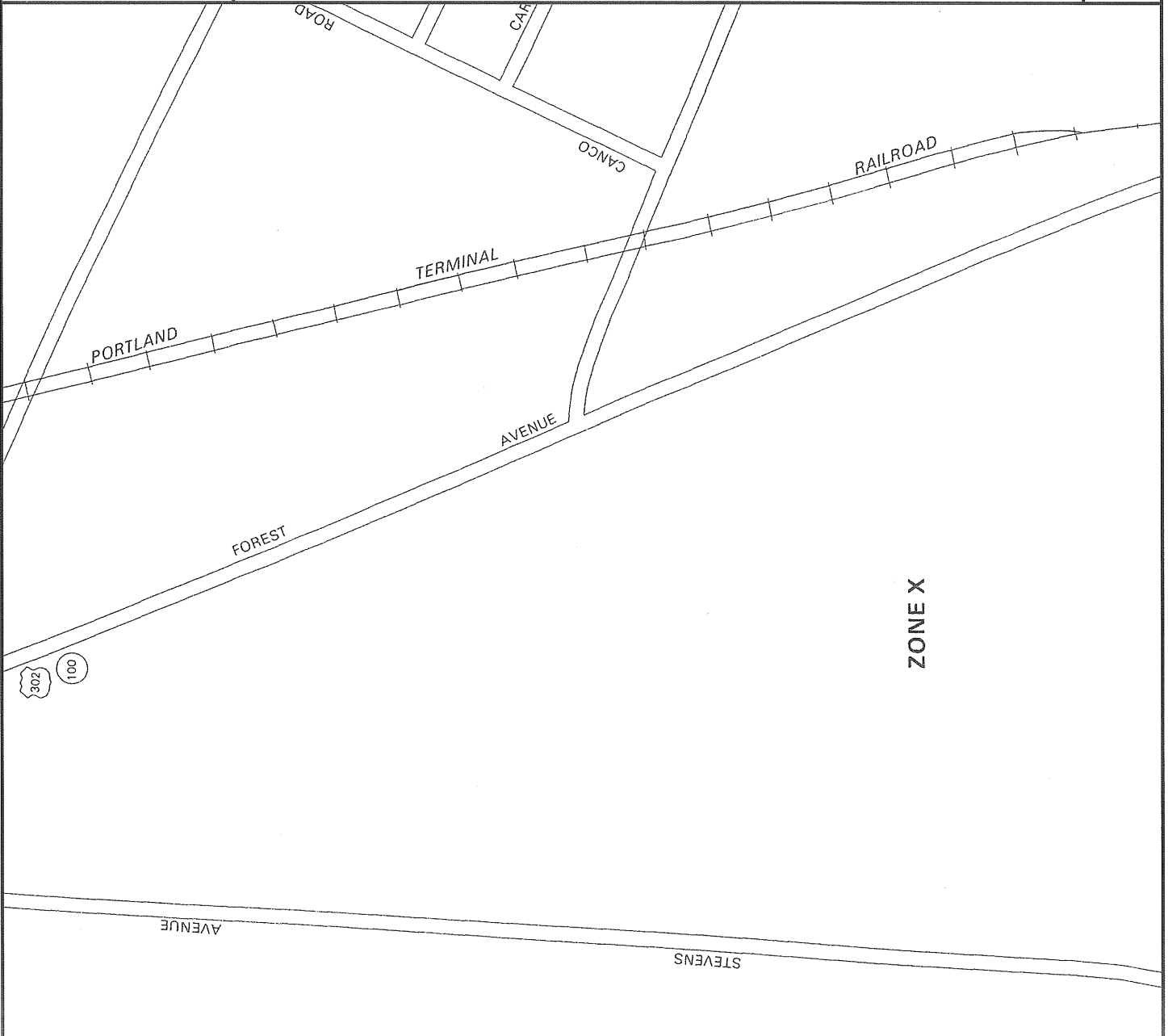
COMMUNITY-PANEL NUMBER
230051 0007 C

MAP REVISED:
DECEMBER 8, 1998



Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov



APPENDIX H: FB ENVIRONMENTAL WETLAND MEMORANDUMS

Results

Two small potential wetland areas were flagged within the project area (Attachment 1). Area 1 is a small area (~ 20' x 40') east of Memorial Avenue at the southern end of the forested area, and adjacent to the Barbara and Charles Gamble Memorial Bench. Trees within Area 1 include primarily deciduous trees, such as poplar, maple and oak, with occasional patches of mature pitch pine. The shrub layer within Area 1 is dominated by invasive/nuisance plant species including honeysuckle, bittersweet, black swallow-wort and burning bush. Dogwood, blackberry and fertile fronds of sensitive fern were also documented. Any future construction activities in this area should consider management of these plants, and proper disposal of plants and soils to limit the spread to other areas in the landscape. A shallow soil profile indicated a dark (2YR 2/2) surface horizon to 11", with a more reduced subsurface horizon to 14" (10YR 3/3 with depletions 10YR 5/3 of 5%). Adjacent soil cores indicated additional depletions at 20% of the matrix below 14"; yet, depth was limited by the cold temperatures.

Potential wetlands Area 2 covers approximately 50' x 50' of land a few hundred feet to the southeast of Area 1. This area is dominated by poplar, maple and white pine in addition to pitch pine and oak. Vegetation in the shrub layer was limited to saplings and some low-bush blueberry, while the herb layer could not be verified due to snow cover. Soils were saturated within the surface horizon, and included hydric soil indicators such as presence of prominent redox features. A small area of ice cover under the snow was evident within Area 2 indicating that there may be some standing water in this area. A spring visit will verify if all three wetland criteria will be met in this area. It is likely that soils and hydrology will be met, but vegetation will not due to the presence of upland species.

FBE will keep W&C informed regarding the timing of a follow-up field visit in the spring.

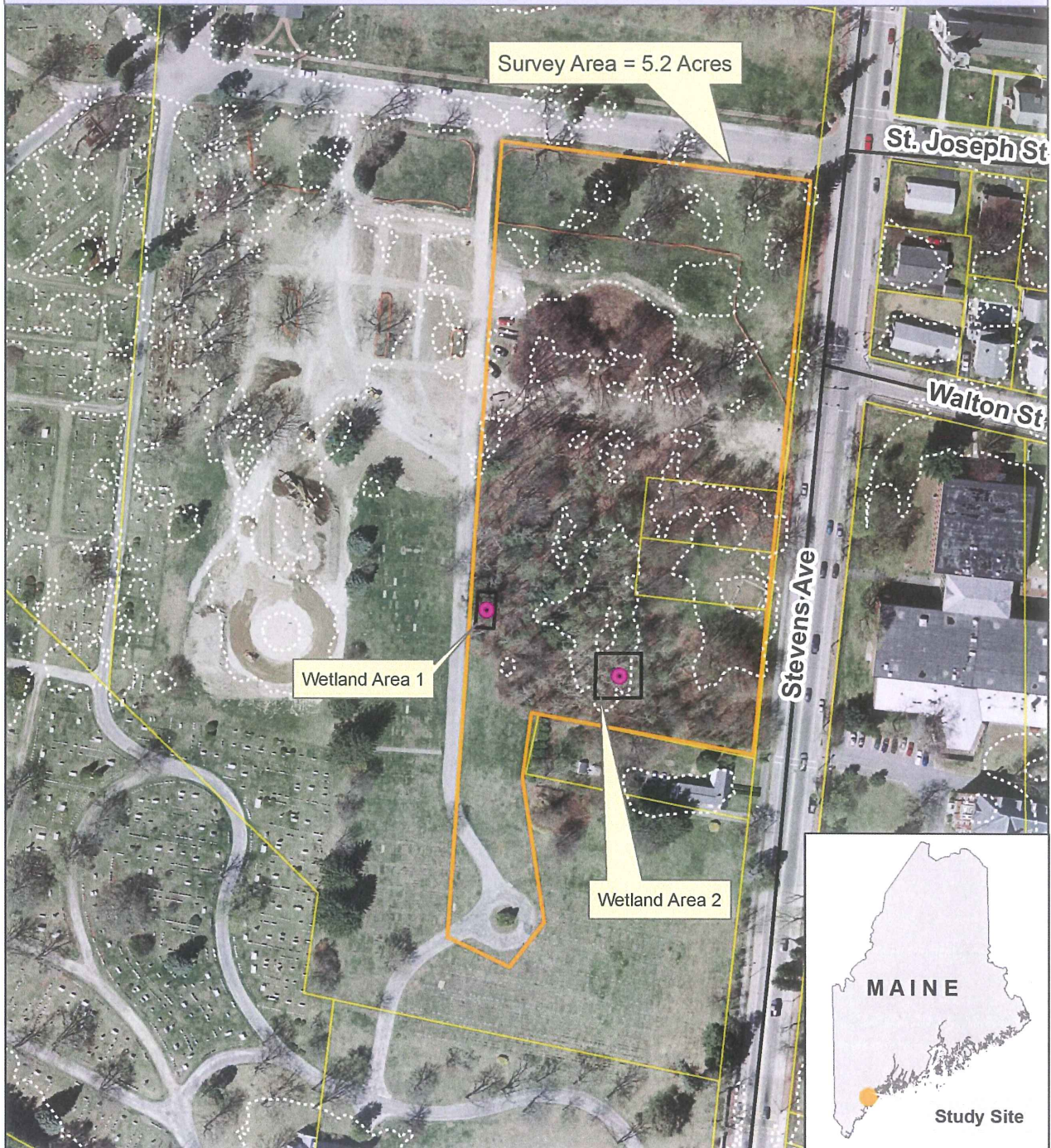
References

SCS (1974). USDA Soil Conservation Service. Soil Survey: Cumberland County, Maine. Retrieved online from:
http://soils.usda.gov/survey/online_surveys/maine/ME005/cumberland.pdf

USDA NRCS (2013). USDA Natural Resources Conservation Service. Soil Data Mart. Retrieved from:
<http://soildatamart.nrcs.usda.gov/>

Attachment A- Site Map

Site Map-Evergreen Cemetery Wetland Delineation Portland, Maine



Project Area	Contours	Portland Parcels
Roads	Streams	
Wetland Center	Approximate Wetland Area	

Note: There are no NWI wetlands in the vicinity of the project area.

Data Source: MEGIS, NWI, NRCS, USGS
 Coordinate System: NAD 1983 UTM Zone 19
 Created by FB Environmental, 2013

Attachment B- Soil Map

Soil Map - Evergreen Cemetery Wetland Delineation Portland, Maine

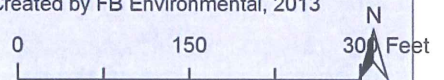


- Project Area
- Contours
- Portland Parcels
- Roads
- Streams
- WmB

Note: There are no NWI wetlands in the vicinity of the project area.



Data Source: MEGIS, NWI, NRCS, USGS
Coordinate System: NAD 1983 UTM Zone 19
Created by FB Environmental, 2013





FINAL MEMORANDUM

To: Lauren Sweat, Woodard & Curran
From: Jennifer Jespersen, FB Environmental
Subject: Wetland Survey- **Evergreen Cemetery**
Date: May 9, 2013

FB Environmental (FBE) was contracted by Woodard & Curran (W&C) to conduct a routine wetland delineation for approximately five acres of city owned property at Evergreen Cemetery in Portland, ME. FBE conducted a preliminary wetland assessment on January 18, 2013 at the request of W&C to assist with the design process, and flagged two potential wetland areas based on conditions at the time (*See memo dated February 7, 2013*). A formal delineation was scheduled for the spring after snowmelt.

On May 2, 2013, FBE wetland scientist Jennifer Jespersen conducted a formal delineation of the site, including the two small flagged areas identified during the January site visit. Survey methods followed standard practice for a routine wetland delineation using the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual* (US ACOE, 2011). This meant identifying wetlands based on three main criteria: Wetland Vegetation, Hydric Soils, and Wetland Hydrology. To meet the definition of a wetland, all three criteria need to be met.

Hydrologic conditions at the time of the field visits were documented in the field and interpreted in terms of the presence or absence of wetland hydrology. Neither wetland area met the criteria for wetland hydrology.

Soils were examined using a soil auger to ~ 18 inches (50cm) deep to document soil profiles. Determination of whether hydric soils were present was carried out according to the methods in the *Field Indicators of Hydric Soils in the United States* (USDA-NRCS, 2010b). In several locations, multiple soil pits were dug to characterize soil and vegetation changes within the potential wetlands. Soils did not meet the definition of hydric soils within either of the potential wetland areas.

Since two of the three wetland criteria were not met, a formal assessment of wetland vegetation was not conducted. However, several invasive/noxious species were documented in the area, including *Acer platinoides*, *Rosa multiflora*, *Lonicera tatarica* and *Celastrus orbiculatus*. Proper removal of these plants and soil containing seeds should be considered during construction.

APPENDIX I: IMPACT & IMPERVIOUS AREA FIGURES

City of Portland
Development Review Application
Planning Division Transmittal Form

Application Number: 2014-034 **Application Date:** 04/02/2014
CBL: 134 A001001 **Application Type:** Level I Site Alteration
Applicant: CITY OF PORTLAND PARKS AND CEMETERIES /Joe Dumais
Project Name: Evergreen Cemetery Expansion
Address: 0 EVERGREEN CEMETARY
Project Description: New road, grave space layout, and landscaping are proposed for an approximately five acre portion of Evergreen Cemetery located adjacent to the Stevens Avenue entrance to the cemetery. The project will also include a new columbarium structure and the revegetation of existing gravel pathways in the cemetery.
Zoning: R5

Other Required Reviews:

- | | | |
|---|---|--|
| <input type="checkbox"/> Traffic Movement | <input type="checkbox"/> 14-403 Streets | <input type="checkbox"/> Housing Replacement |
| <input type="checkbox"/> Storm Water | # Units _____ | <input type="checkbox"/> Historic Preservation |
| <input type="checkbox"/> Subdivision | <input type="checkbox"/> Flood Plain | <input type="checkbox"/> Other: |
| # Lots _____ | <input type="checkbox"/> Shoreland | |
| <input type="checkbox"/> Site Location | <input type="checkbox"/> Design Review | |
| # Unit _____ | | |

Distribution List:

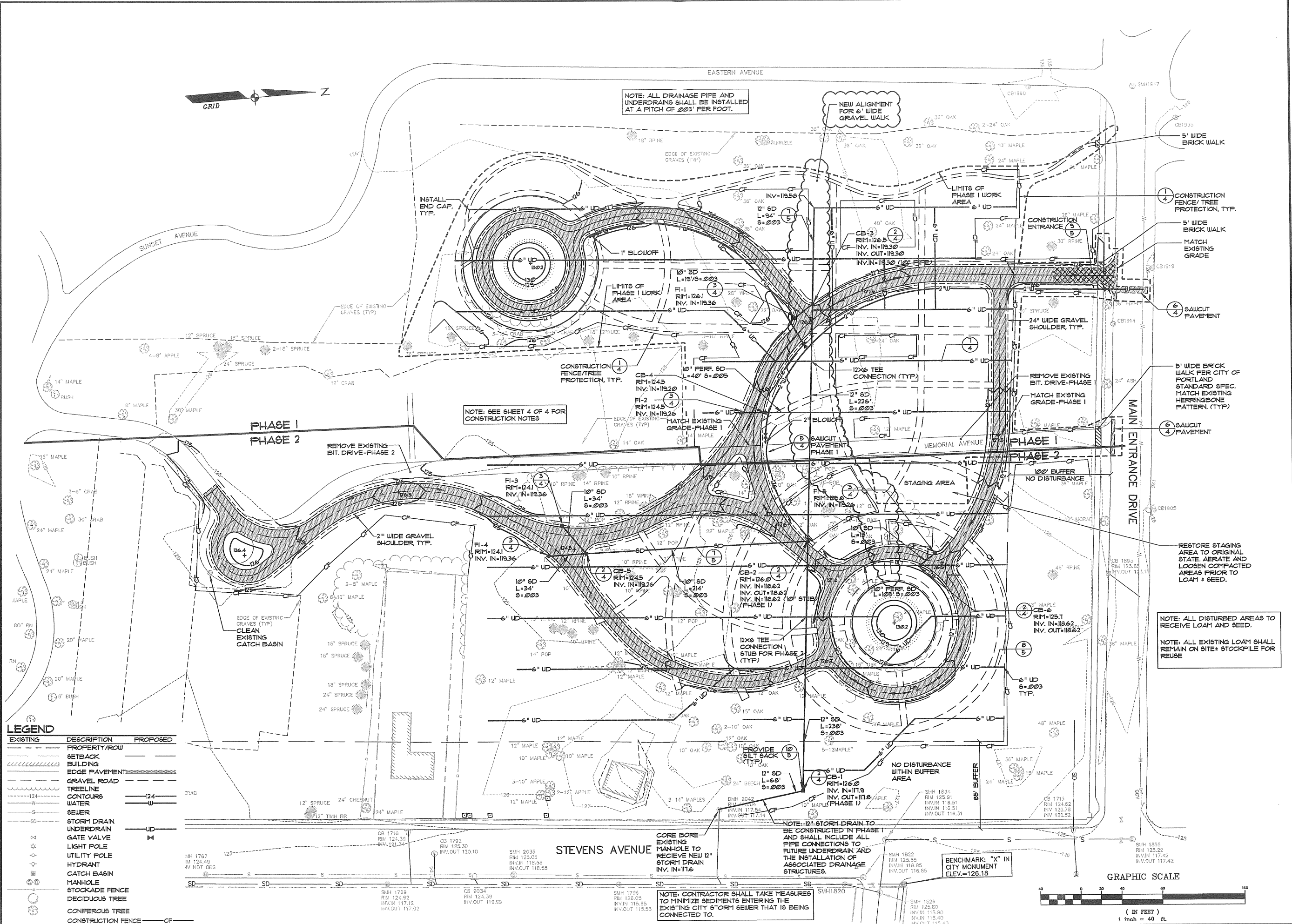
Planner	Barbara Barhydt	Parking	John Peverada
Zoning	Marge Schmuckal	Design Review	Alex Jaegerman
Traffic Engineer	Tom Errico	Corporation Counsel	Nennifer Thompson
Civil Engineer	David Senus	Sanitary Sewer	John Emerson
Fire Department	Chris Pirone	Inspections	Tammy Munson
City Arborist	Jeff Tarling	Historic Preservation	Deb Andrews
Engineering	David Margolis-Pineo	DRC Coordinator	Phil DiPierro
		Outside Agency	

Comments needed by 4/11/2014



NOTE: ALL DRAINAGE PIPE AND UNDERDRAINS SHALL BE INSTALLED AT A PITCH OF 0.03' PER FOOT.

NEW ALIGNMENT FOR 6' WIDE GRAVEL WALK



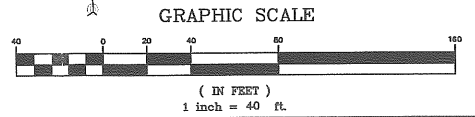
NOTE: SEE SHEET 4 OF 4 FOR CONSTRUCTION NOTES

RESTORE STAGING AREA TO ORIGINAL STATE. AERATE AND LOOSEN COMPACTED AREAS PRIOR TO LOAM & SEED.

NOTE: ALL DISTURBED AREAS TO RECEIVE LOAM AND SEED.

NOTE: ALL EXISTING LOAM SHALL REMAIN ON SITE. STOCKPILE FOR REUSE

EXISTING	DESCRIPTION	PROPOSED
---	PROPERTY/ROW	---
---	SETBACK	---
---	BUILDING	---
---	EDGE PAVEMENT	---
---	GRAVEL ROAD	---
---	TREELINE	---
---	CONTOURS	---
---	WATER	---
---	SEWER	---
---	STORM DRAIN	---
---	UNDERDRAIN	---
---	GATE VALVE	---
---	LIGHT POLE	---
---	UTILITY POLE	---
---	HYDRANT	---
---	CATCH BASIN	---
---	MANHOLE	---
---	STOCKADE FENCE	---
---	DECIDUOUS TREE	---
---	CONIFEROUS TREE	---
---	CONSTRUCTION FENCE	---



REV.	BY:	DATE:	STATUS:
C	CD	3/24/06	REVISED LOCATION OF 6' WIDE GRAVEL WALK
B	CD	8/22/05	ISSUED FOR CONSTRUCTION BID
A	CD	8/16/05	ISSUED FOR REVIEW

THIS PLAN SHALL NOT BE USED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS, INC.

Sebago Technics
 Engineering Expertise You Can Build On
 One Chubb Street
 Westbrook, ME 04090-1339
 Tel: (207) 558-0277

PROJECT NO. FIELD BOOK DESIGN CHKD DRAWN
 03383 ELECT SAG JHW MJP/CD

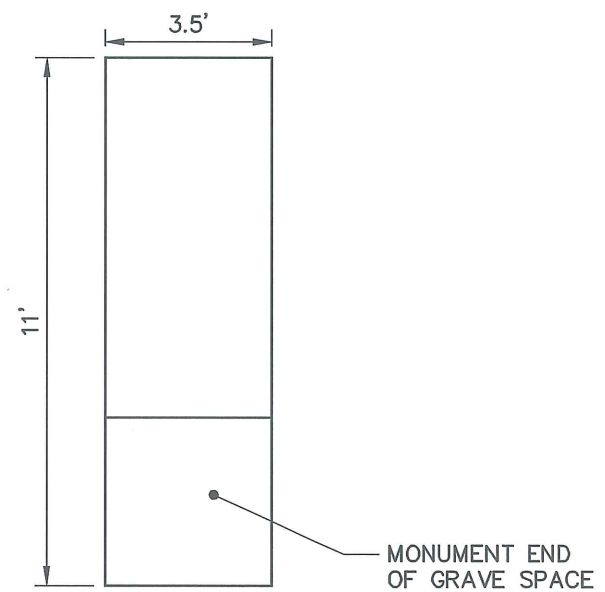
GRADING AND UTILITIES PLAN
 OF:
EVERGREEN CEMETERY: PHASE 1 LOT DEVELOPMENT
 STEVENS AVENUE
 PORTLAND, MAINE 04103
 FOR:
CITY OF PORTLAND
 17 ARBOR STREET
 PORTLAND, MAINE 04103

DATE	SCALE
12-9-04	1"=40'

SHEET 3 OF 5



TYPICAL GRAVE SPACE
N.T.S.



41 Hutchins Drive
Portland, Maine 04102
800.426.4262 | www.woodardcurran.com

WOODARD & CURRAN

COMMITMENT & INTEGRITY DRIVE RESULTS

GRAVE SPACE LAYOUT

DESIGNED BY: LJS
CHECKED BY: DLC
DRAWN BY: BCM
222804.55_C10X.dwg

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING SECTION

EVERGREEN CEMETERY
PHASE II

JOB NO: 222804.55
DATE: MARCH 2014
SCALE: 1"=60'

FIG. 2

60' 0 60' 120'

BAR SCALE
1" = 60'
CHECK GRAPHIC SCALE BEFORE USING





J6NW

J6NE

J7NW

J6SW

J6SE

I6NW

I6NE

I7NW

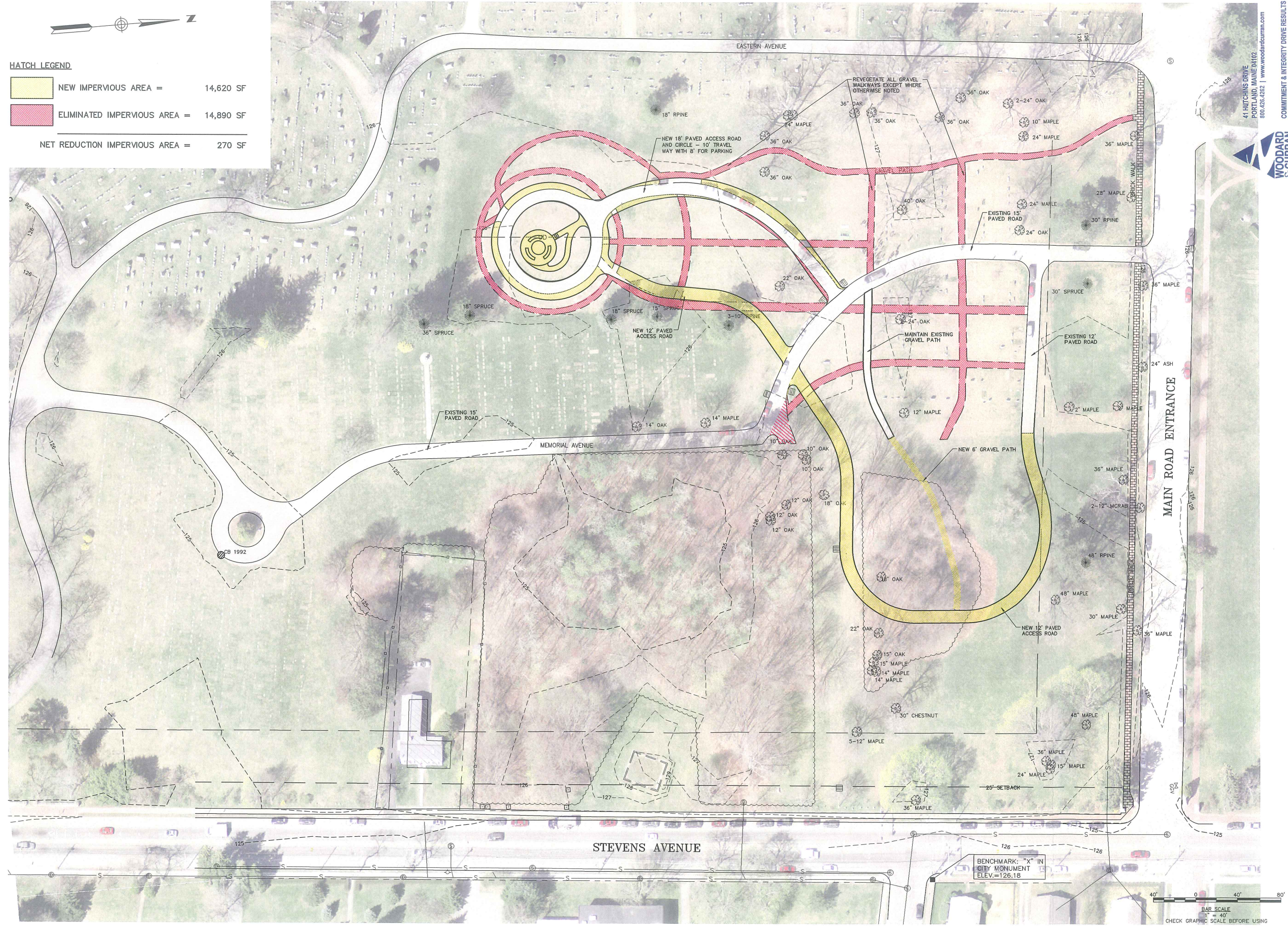
April 1 2012 fy 2013

Tax Map Index; <http://www.portlandassessors.com/taxmaps.htm>



Index Number - J6SE

1 inch = 50 feet

\\PORTLAND\Projects\222804 - Portland-Cem Eng Services\WP_55 Evergreen Cemetery\Drawings\Design drawings\222804.55 CIOX Evergreen Layout 2.dwg, Mar 26, 2014 - 10:35am



HATCH LEGEND

	NEW IMPERVIOUS AREA =	14,620 SF
	ELIMINATED IMPERVIOUS AREA =	14,890 SF
NET REDUCTION IMPERVIOUS AREA =		270 SF



41 HUTCHINS DRIVE
PORTLAND, MAINE 04102
800.426.4262 | www.woodardcurran.com



COMMITMENT & INTEGRITY DRIVE RESULTS

LDD PROJECT NAME: N/A
DRAWING NAME: 222804-55 CIOX EVERGREEN LAYOUT 2.DWG
FIELD BOOK USED: N/A

REFERENCES:
10-089P.dwg

DESIGNED BY:	LJS
DRAWN BY:	LJS
CHECKED BY:	DLC
SCALE:	1"=40'
DATE:	DEC. 2013



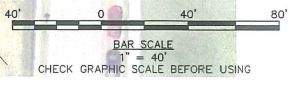
EVERGREEN CEMETERY
PHASE II
NEW IMPERVIOUS AREAS

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING SECTION



SHEET #
1 OF 1
PLAN NUMBER
FIG. 4

BENCHMARK: "X" IN CITY MONUMENT
ELEV.=126.18



CITY OF PORTLAND PUBLIC SERVICES DEPARTMENT



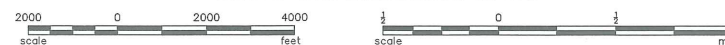
EVERGREEN CEMETERY EXPANSION

PERMIT REVIEW SET – NOT FOR CONSTRUCTION

APRIL 2014



SITE LOCATION MAP



INDEX OF PLANS

--	COVER
G-001	1 GENERAL NOTES, LEGEND, ABBREVIATIONS & OVERALL PLAN
C-100	2 EXISTING CONDITIONS & DEMOLITION PLAN
C-101	3 PROPOSED CONDITIONS PLAN
C-102	4 SIDEWALK REPLACEMENT PLAN
C-103	5 CIVIL DETAILS - 1
C-104	6 CIVIL DETAILS - 2
L-100	7 LANDSCAPING PLAN & DETAILS
L-101	8 COLUMBARIUM PLAN & DETAILS



GENERAL NOTES:

- SITE AND TOPOGRAPHIC DATA PROVIDED BY:
 - TOPOGRAPHIC SURVEY AT WILDE CHAPEL EVERGREEN CEMETERY, PORTLAND, MAINE BY OWEN HASKELL, INC. DATED 9/15/1998
 - EXISTING CONDITIONS SURVEY AT EVERGREEN CEMETERY, PORTLAND, MAINE BY OWEN HASKELL, INC. DATED 3/9/2013
 - GRADING & UTILITIES PLAN FOR EVERGREEN CEMETERY: PHASE I, BY SEBAGO TECHNICS, DATED 12/9/2004, REVISED 3/24/2006
- VERTICAL DATUM IS REFERENCED TO CITY DATUM WITH ONE FOOT CONTOUR INTERVALS. CITY DATUM IS +0.02 FT NGVD 1929. HORIZONTAL DATUM IS REFERENCED TO STATE PLANE NAD 1983 (FEET), MAINE WEST ZONE.
- THE UTILITY LOCATIONS SHOWN IN PLAN ARE APPROXIMATE AND REQUIRE FIELD VERIFICATION BY THE CONTRACTOR. CONTACT THE CITY IMMEDIATELY UPON DISCOVERING ANY CONFLICTS WITH EXISTING AND PROPOSED UTILITY LOCATIONS. NOT ALL EXISTING UTILITIES ARE SHOWN ON PLANS.
- CLEAN AND/OR FLUSH ALL MANHOLES, CATCH BASINS, AND ASSOCIATED PIPING AFTER THE WORK HAS BEEN COMPLETED.
- COORDINATE CONSTRUCTION ACTIVITY WITH UTILITY COMPANIES, EMERGENCY SERVICES AND CITY. CONTACTS ARE LISTED IN SPECIFICATIONS. NOTIFY UTILITY COMPANIES WITHIN 48 HOURS OF WORK ACTIVITY ADJACENT TO THOSE UTILITIES.
- CONTRACTOR SHALL NOTIFY ALL UTILITIES PRIOR TO COMMENCING WORK, ALLOWING SUFFICIENT TIME TO LOCATE AND MARK THE LOCATION OF BURIED UTILITIES. CONTRACTOR SHALL CONTACT "DIG SAFE", TELEPHONE 888-344-7233, PRIOR TO EXCAVATION.
- RESTORE ALL AREAS DISTURBED BY CONTRACTOR'S OPERATIONS TO ORIGINAL FINISH (GRAVEL, PAVEMENT, GRASS, ETC.). RESTORATION OF PAVED SURFACES, GRAVEL SURFACES, DRIVEWAYS, AND LAWNS DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE PERFORMED AT NO ADDITIONAL COST TO OWNER. ANY CURB DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE REPLACED IN KIND AND SHALL CONFORM TO CITY OF PORTLAND AND MAINE DOT SPECIFICATIONS AT NO ADDITIONAL COST TO OWNER.
- PROPERLY PROTECT AND DO NOT DISTURB PROPERTY IRONS AND MONUMENTS. IF DISTURBED, THE PROPERTY MONUMENT SHALL BE RESET AT THE CONTRACTOR'S EXPENSE BY A LICENSED LAND SURVEYOR ACCEPTABLE TO THE CITY.
- EXISTING FACILITIES (I.E. TREES, POLES, LIGHT POSTS, CATCH BASINS, ETC.) SHALL BE REMOVED AND PROTECTED DURING CONSTRUCTION EXCEPT AS OTHERWISE NOTED. CITY RETAINS RIGHT TO KEEP ANY AND ALL REMOVED FACILITIES. CONTRACTOR SHALL DISPOSE OF ANY REMOVED FACILITY AT THE REQUEST OF CITY AT CONTRACTOR'S EXPENSE.
- ALL TREES NOT NOTED TO BE REMOVED SHALL BE PROTECTED BY CONTRACTOR DURING CONSTRUCTION.
- ALL WORK WITHIN THE RIGHT OF WAY OF CITY STREETS SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY TRAFFIC ENGINEER. THE CONTRACTOR SHALL SUBMIT A PROPOSED TRAFFIC CONTROL PLAN TO THE TRAFFIC ENGINEER AT LEAST 7 DAYS BEFORE BEGINNING CONSTRUCTION IN ANY STREET. THE PROPOSED TRAFFIC CONTROL PLAN SHALL BE SUBJECT TO APPROVAL BY THE TRAFFIC ENGINEER, WHO MAY ATTACH SPECIAL CONDITIONS TO, OR REQUIRE MODIFICATIONS OF, THE TRAFFIC CONTROL PLAN. WORK SHALL NOT BEGIN UNTIL THE PLAN IS APPROVED BY THE TRAFFIC ENGINEER.
- DO NOT PARK, IMPEDE ACCESS TO, OR STORE EQUIPMENT ON ADJACENT CITY OR PRIVATELY OWNED LOTS, UNLESS PERMISSION HAS BEEN GRANTED IN WRITING BY CITY AND/OR LAND OWNER.
- COORDINATE DISRUPTION OF PRIVATE UTILITY SERVICES WITH LANDOWNERS AT LEAST TWO DAYS (48 HOURS) PRIOR TO DISRUPTION. ALL UTILITY COORDINATION IS RESPONSIBILITY OF CONTRACTOR.
- RESTRICT ACCESS TO SITE THROUGH THE USE OF APPROPRIATE SIGNAGE, BARRIERS, FENCES, ETC. SITE SHALL BE LEFT WITH APPROPRIATE SAFETY MEASURES IN PLACE DURING NON-WORKING HOURS. NO TRENCH SHALL BE LEFT OPEN DURING NON-WORKING HOURS. SITE SAFETY IS THE RESPONSIBILITY OF CONTRACTOR, DURING BOTH WORKING AND NON-WORKING HOURS.
- CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY CONSTRUCTION PERMITS. PERMIT APPLICATIONS SHALL BE SUBMITTED WITH ADEQUATE TIME SO AS NOT TO DELAY CONSTRUCTION.
- THE CONTRACTOR SHALL OBTAIN A CITY STREET OPENING PERMIT BEFORE BEGINNING CONSTRUCTION. THE FEE FOR THIS PERMIT WILL BE WAIVED BY THE CITY. THE CONTRACTOR WILL ALSO BE REQUIRED TO HAVE A CURRENT EXCAVATOR'S LICENSE IN THE CITY. THE EXCAVATOR'S LICENSE FEE WILL NOT BE WAIVED BY THE CITY.
- ALL WORK ASSOCIATED WITH THE PROJECT SHALL BE COMPLETED IN ACCORDANCE WITH ARTICLES VI, VII, AND IX OF CHAPTER 25-STREETS, SIDEWALKS, AND OTHER PUBLIC PLACES OF THE CITY OF PORTLAND CODE OF ORDINANCES.
- THE CITY OF PORTLAND ENGINEERING DIVISION REQUIRES THAT UPON COMPLETION OF CONSTRUCTION, A COMPLETE SET OF "RECORD" DRAWINGS THAT REFLECT ANY AND ALL MODIFICATIONS TO THE ROAD CONSTRUCTION, SANITARY SEWER SYSTEM, STORM SEWER SYSTEM AND ANY OTHER UTILITY INSTALLATIONS OR ALTERATIONS WITHIN THE PROJECT LIMITS BE SUBMITTED TO THE DIVISION. THESE DRAWINGS SHALL BE SUBMITTED IN BOTH DIGITAL AUTOCAD AND HARD COPY FORMAT AS DEFINED IN THE SPECIFICATIONS PRIOR TO PAYMENT OF FINAL RETAINAGE.
- ALL WATER SERVICES ARE APPROXIMATE AS SHOWN. CONTRACTOR SHALL FIELD VERIFY LOCATION OF EXISTING WATER SERVICES AND RELOCATE AS REQUIRED TO COMPLETE WORK. CONTRACTOR SHALL COORDINATE WORK WITH THE CITY OF PORTLAND, PORTLAND WATER DISTRICT, AND PROPERTY OWNERS.
- WORK IS IN CLOSE PROXIMITY TO EXISTING UTILITIES. PROTECTION OF EXISTING UTILITIES DURING CONSTRUCTION SHALL BE THE CONTRACTOR'S RESPONSIBILITIES.
- CONTACT CITY OF PORTLAND ARBORIST AND CEMETERY SUPERINTENDENT PRIOR TO CUTTING ROOTS, TRIMMING BRANCHES, OR DISTURBING TREES THAT HAVE NOT BEEN NOTED FOR REMOVAL ON THE PLANS.
- PROVIDE 6-INCHES OF LOAM AND SEED IN ALL LAWN AREAS DISTURBED BY CONTRACTOR'S OPERATIONS.
- IF CONTRACTOR PROPOSES TO TEMPORARILY STOCKPILE ANY SURPLUS SOIL AND ROCK IN THE CITY OF PORTLAND, THE CONTRACTOR SHALL OBTAIN APPROVAL FOR EACH STOCKPILE LOCATION FROM THE ENGINEER. IF CONTRACTOR PROPOSES TO PERMANENTLY STOCKPILE ANY SURPLUS SOIL AND ROCK ON PROPERTY IN THE CITY OF PORTLAND, THE CONTRACTOR MUST OBTAIN ANY SITE PLAN PERMITS REQUIRED FROM THE CITY PLANNING AUTHORITY OR ANY FILL PERMITS REQUIRED FROM MDEP OR U.S. ARMY CORPS OF ENGINEERS. BOTH TEMPORARY AND PERMANENT STOCKPILE LOCATIONS SHALL MEET THE APPLICABLE SETBACK REQUIREMENTS IN THE CITY LAND USE CODE AND SHALL RECEIVE PROPER STABILIZATION AND EROSION & SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH APPROVED SOIL EROSION & WATER POLLUTION CONTROL PLAN.
- PROJECT IS SUBJECT TO THE CONDITIONS SET FORTH IN PERMITS ISSUED BY THE CITY OF PORTLAND, SPECIFICALLY RELATED TO LIMITS OF IMPACT, EROSION CONTROL MEASURES, RESTORATION ACTIVITIES, AND TIMEFRAME RESTRICTIONS. CONTRACTOR SHALL READ PERMIT DOCUMENTS FULLY AND CARRY OUT WORK IN ACCORDANCE WITH PERMIT DOCUMENTS. COPIES OF PERMIT DOCUMENTS ARE APPENDED TO THE PROJECT SPECIFICATIONS.
- CEMETERY IS ACTIVE. CONTRACTOR SHALL MAINTAIN VEHICULAR AND PEDESTRIAN ACCESS PATHS DURING CONSTRUCTION AND SHALL COORDINATE ALL ACTIVITIES WITH CEMETERY SUPERINTENDENT.

SYMBOLS

DESCRIPTION	EXISTING
SANITARY SEWER MANHOLE	⊙
STORM DRAIN MANHOLE	⊙
CATCH BASIN W/ HEADSTONE	⊕
CATCH BASIN, FIELD INLET	⊕
UTILITY POLE W/GUY	⊙
UTILITY POLE	⊙
WATER GATE	⊙
WATER VALVE	⊙
WATER SHUT OFF	⊙
HYDRANT	⊙
SIGN	⊙
MAILBOX	⊙
CONIFEROUS TREE	⊙
DECIDUOUS TREE	⊙
IRON PIN (FOUND)	⊙
MONUMENTS (FOUND)	⊙
PROTECT TREE	⊙
CATCH BASIN PROTECTION	⊙

LINE TYPES

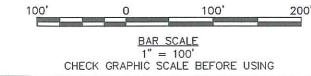
DESCRIPTION	EXISTING	PROPOSED
CONTOUR (1' INTERVAL)	-122-----	-----122
CONTOUR (INDEX)	-120-----	-----120
SANITARY SEWER	-----S	-----S
STORM DRAIN	-----SD	-----SD
UNDERDRAIN	-----UD	-----UD
WATER MAIN	-----W	-----W
UNDERGROUND ELECTRIC	-----E	-----E
GAS LINE	-----G	-----G
OVERHEAD ELECTRIC	-----OE	-----OE
PROPERTY LINE	-----	-----
RIGHT OF WAY	-----	-----
EASEMENT	-----	-----
EDGE OF VEGETATION	-----	-----
FENCE	-----	-----
CENTERLINE	-----	-----
RETAINING WALL	-----	-----
STONEWALL	-----	-----
CURB	-----	-----
EDGE OF PAVEMENT	-----	-----
EDGE OF GRAVEL	-----	-----
SILT FENCE	-----	-----
LIMIT OF WORK	-----	-----LW

ABBREVIATIONS

&	AND
A.G.	ABOVE GROUND
BIT	BITUMINOUS
B/W	BETWEEN
CB	CATCH BASIN
CI	CAST IRON
CMP	CENTRAL MAINE POWER
CONC	CORRUGATED METAL PIPE CONCRETE
DI	DUCTILE IRON
DIA.	DIAMETER
DMH	DRAIN MANHOLE
DTL	DETAIL
E	UNDERGROUND ELECTRICAL
EL.	ELEVATION
E.O.P.	EDGE OF PAVEMENT
EXIST.	EXISTING
FF	FINISH FLOOR
FT	FOOT/FEET
G	GAS MAIN
GS	GAS SERVICE
GALV.	GALVANIZED
GRAN.	GRANITE
HDPE	HIGH DENSITY POLYETHYLENE
HYD	HYDRANT
INV.	INVERT
LF	LINEAR FEET
MAX.	MAXIMUM
MDOT	MAINE DEPARTMENT OF TRANSPORTATION
MIN.	MINIMUM
MON	MONUMENT
NET&T	NEW ENGLAND TELEPHONE & TELEGRAPH (FAIRPOINT COMMUNICATIONS)
N.I.C.	NOT IN CONTRACT
NR	NUMBER
NO	NO REFUSAL
N.T.S.	NOT TO SCALE
OE	OVERHEAD ELECTRIC
OH	OVERHEAD
±	PLUS OR MINUS
LLS	LICENSED LAND SURVEYOR
PROP.	PROPOSED
PT.	POINT
PVC	POLYVINYL CHLORIDE
R.O.W.	RIGHT-OF-WAY
RCP	REINFORCED CONCRETE PIPE
REINF.	REINFORCED
REQ'D	REQUIRED
RRP	RIBBED PLASTIC PIPE
S	SLOPE (FT./FT.)
SD	SEWER
SDH	STORM DRAIN
SCH	SEWER MANHOLE
STA.	SCHEDULE STATION
TYP.	TYPICAL
UP	UTILITY POLE
VC	VITRIFIED CLAY
WT.	VITRIFIED CLAY
W	WEST
W	WATER
W/W	WATER MAIN
WS	WATER SERVICE
WV	WATER VALVE



OVERALL SITE PLAN
SCALE: 1"=100'



41 HUTCHINS DRIVE
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WOODARD & CURRAN
COMMITMENT & INTEGRITY DRIVE RESULTS

LDD PROJECT NAME:
N/A

DRAWING NAME:
222804.55 C10X.DWG

FIELD BOOK USED:
N/A

REFERENCES:

DESIGNED BY:	US	DRAWN BY:	ECM	CHECKED BY:	DLC	SCALE:	DATE:
						1"=100'	APRIL 2014



EVERGREEN CEMETERY
PHASE II

GENERAL NOTES, LEGEND,
ABBREVIATIONS & OVERALL PLAN

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING SECTION



SHEET #
1 OF 8

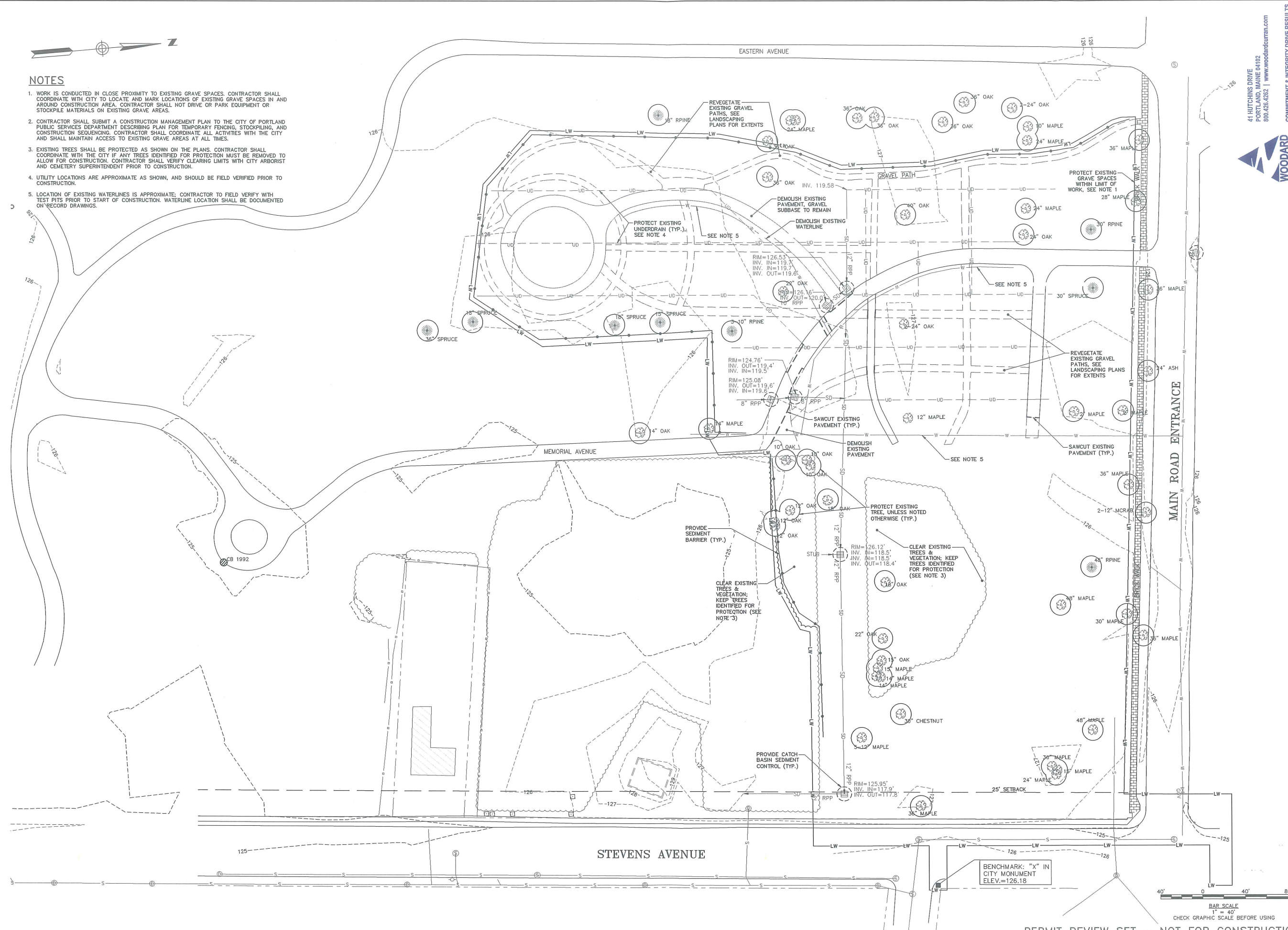
PLAN NUMBER
G-001

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NOTES

1. WORK IS CONDUCTED IN CLOSE PROXIMITY TO EXISTING GRAVE SPACES. CONTRACTOR SHALL COORDINATE WITH CITY TO LOCATE AND MARK LOCATIONS OF EXISTING GRAVE SPACES IN AND AROUND CONSTRUCTION AREA. CONTRACTOR SHALL NOT DRIVE OR PARK EQUIPMENT OR STOCKPILE MATERIALS ON EXISTING GRAVE AREAS.
2. CONTRACTOR SHALL SUBMIT A CONSTRUCTION MANAGEMENT PLAN TO THE CITY OF PORTLAND PUBLIC SERVICES DEPARTMENT DESCRIBING PLAN FOR TEMPORARY FENCING, STOCKPILING, AND CONSTRUCTION SEQUENCING. CONTRACTOR SHALL COORDINATE ALL ACTIVITIES WITH THE CITY AND SHALL MAINTAIN ACCESS TO EXISTING GRAVE AREAS AT ALL TIMES.
3. EXISTING TREES SHALL BE PROTECTED AS SHOWN ON THE PLANS. CONTRACTOR SHALL COORDINATE WITH THE CITY IF ANY TREES IDENTIFIED FOR PROTECTION MUST BE REMOVED TO ALLOW FOR CONSTRUCTION. CONTRACTOR SHALL VERIFY CLEARING LIMITS WITH CITY ARBORIST AND CEMETERY SUPERINTENDENT PRIOR TO CONSTRUCTION.
4. UTILITY LOCATIONS ARE APPROXIMATE AS SHOWN, AND SHOULD BE FIELD VERIFIED PRIOR TO CONSTRUCTION.
5. LOCATION OF EXISTING WATERLINES IS APPROXIMATE; CONTRACTOR TO FIELD VERIFY WITH TEST FITS PRIOR TO START OF CONSTRUCTION. WATERLINE LOCATION SHALL BE DOCUMENTED ON RECORD DRAWINGS.

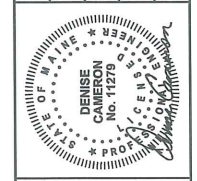


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REFERENCES:

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DRAWN BY:	ECU
CHECKED BY:	DJC
SCALE:	1"=40'
DATE:	APRIL 2014



EVERGREEN CEMETERY
 PHASE II
 EXISTING CONDITIONS &
 DEMOLITION PLAN

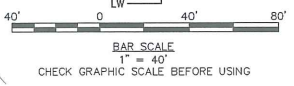
CITY OF PORTLAND, MAINE
 PUBLIC SERVICES DEPARTMENT
 ENGINEERING SECTION



SHEET #
 2 OF 8
 PLAN NUMBER
 C-100

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PERMIT REVIEW SET - NOT FOR CONSTRUCTION



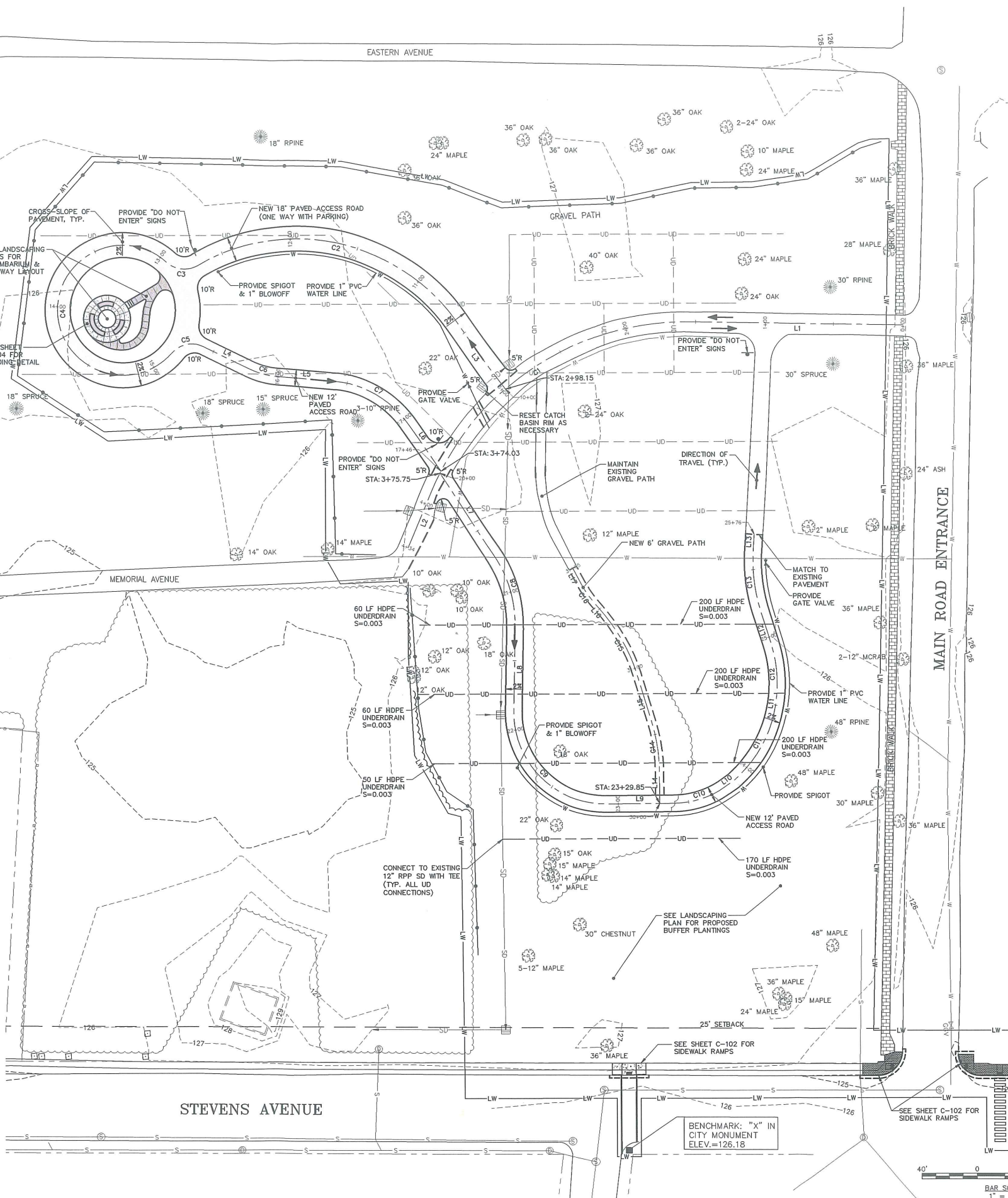
BENCHMARK: "X" IN CITY MONUMENT
 ELEV.=126.16



CENTERLINE ALIGNMENT LINE DATA					
Line #	Length	Direction	Start Point	End Point	End Sta.
L1	152.474	S5° 56' 54.07"W	N-309118.83 E-2918478.89	N-308967.17 E-2918463.09	0+00.00
L2	41.719	S62° 45' 34.26"E	N-308768.63 E-2918607.56	N-308749.53 E-2918607.56	3+92.31
L3	61.520	S59° 20' 18.03"W	N-308829.50 E-2918446.85	N-308798.13 E-2918468.59	10+00.00
L4	36.314	N30° 51' 29.73"E	N-308815.19 E-2918449.36	N-308846.36 E-2918483.55	15+41.55
L5	42.700	N10° 09' 39.05"E	N-308866.21 E-2918476.02	N-308708.24 E-2918483.55	15+99.18
L6	41.059	N60° 47' 11.34"E	N-308757.69 E-2918518.78	N-308777.73 E-2918554.62	17+04.61
L7	69.323	N61° 30' 04.66"E	N-308776.81 E-2918556.07	N-308809.89 E-2918617.00	20+00.00
L8	59.986	S83° 50' 09.47"E	N-308820.73 E-2918671.94	N-308814.29 E-2918731.58	21+26.19
L9	47.399	N4° 29' 33.24"E	N-308874.74 E-2918804.46	N-308921.99 E-2918808.18	22+91.77
L10	7.974	N29° 51' 21.02"W	N-308960.02 E-2918799.82	N-308966.94 E-2918795.65	23+78.74
L11	0.286	N75° 36' 33.30"W	N-309001.58 E-2918743.81	N-309001.66 E-2918743.54	24+50.55
L12	23.377	S77° 31' 07.20"W	N-309002.38 E-2918699.86	N-308997.33 E-2918677.03	24+94.64
L13	11.149	N81° 14' 31.81"W	N-308995.83 E-2918630.99	N-308997.53 E-2918619.97	25+64.36
L14	24.113	N85° 30' 26.76"W	N-308912.70 E-2918807.45	N-308914.59 E-2918783.41	30+00.00
L15	37.589	S78° 12' 30.44"W	N-308912.43 E-2918749.49	N-308904.74 E-2918712.69	30+58.22
L16	10.538	S55° 17' 02.46"W	N-308885.91 E-2918668.87	N-308879.91 E-2918660.21	31+43.82
L17	13.807	S67° 13' 03.05"W	N-308871.91 E-2918645.63	N-308866.57 E-2918632.90	31+71.02

CENTERLINE ALIGNMENT CURVE DATA					
Curve	Length	Radius	Tangent	Delta	PC Sta.
C1	239.84	200.00	136.71	68°42'28"	1+52.47
C2	208.41	141.00	128.50	84°41'13"	10+61.52
C3	24.16	19.00	14.03	72°52'13"	12+69.93
C4	222.66	47.00	45.84	271°26'16"	12+94.09
C5	24.80	19.00	14.52	74°46'29"	15+16.75
C6	21.31	59.00	10.77	20°41'51"	15+77.86
C7	62.73	71.00	33.58	50°37'32"	16+41.88
C8	56.87	94.00	29.33	34°39'46"	20+69.32
C9	105.60	66.00	67.95	91°40'17"	21+86.18
C10	39.57	66.00	20.40	34°20'54"	23+39.17
C11	63.55	94.00	33.05	38°44'19"	23+86.71
C12	44.09	94.00	22.46	26°52'20"	24+50.55
C13	46.34	125.00	23.44	21°14'21"	25+18.02
C14	34.11	120.00	17.17	16°17'03"	30+24.11
C15	48.01	120.00	24.33	22°55'28"	30+95.81
C16	16.66	80.00	8.36	11°56'01"	31+54.36

NOTE: SEE SHEET L-100 FOR GRAVE LAYOUT PLAN.



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COMMITMENT & INTEGRITY DRIVE RESULTS

LDD PROJECT NAME: N/A
DRAWING NAME: 222804-55 C10X.DWG
FIELD BOOK USED: N/A

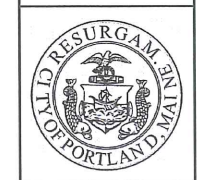
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DRAWN BY:	BCA
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DATE:	APRIL 2014



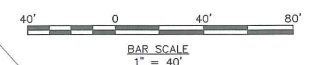
EVERGREEN CEMETERY
PHASE II
PROPOSED CONDITIONS PLAN

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING SECTION

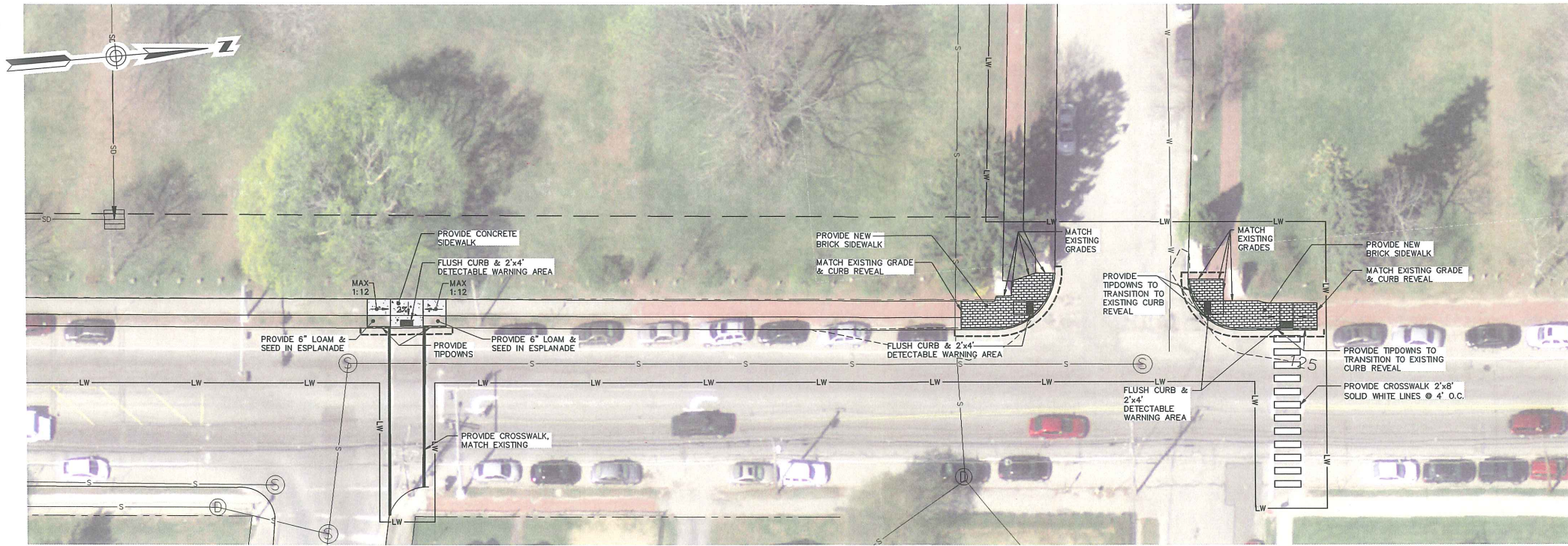


SHEET # 3 OF 8
PLAN NUMBER C-101

PERMIT REVIEW SET - NOT FOR CONSTRUCTION

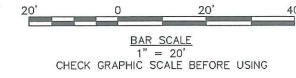


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SIDEWALK REPLACEMENT PLAN

SCALE: 1"=20'



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COMMITMENT & INTEGRITY DRIVE RESULTS

LDD PROJECT NAME: N/A
DRAWING NAME: 222804-55 C10X.DWG
FIELD BOOK USED: N/A

REFERENCES:
10-0899.dwg

DESIGNED BY:	LJS
DRAWN BY:	BCM
CHECKED BY:	DLC
SCALE:	1"=20'
DATE:	APRIL 2014

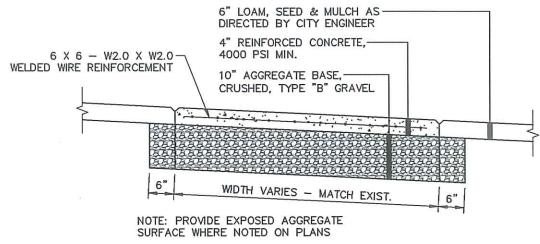


EVERGREEN CEMETERY
PHASE II
SIDEWALK REPLACEMENT PLAN

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING SECTION

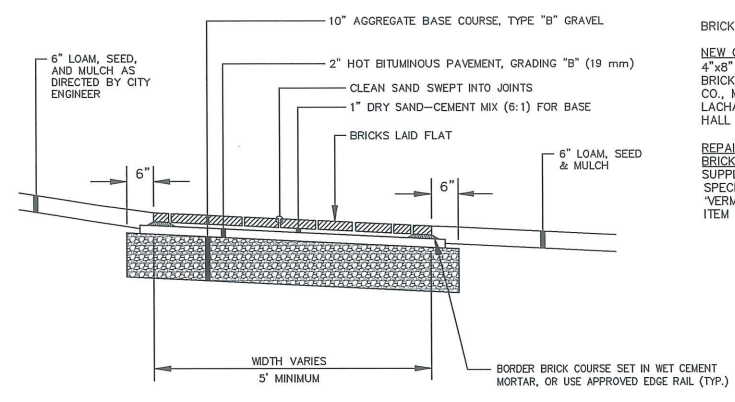


SHEET # 4 OF 8
PLAN NUMBER C-102



REINFORCED CONCRETE SIDEWALK

N.T.S.

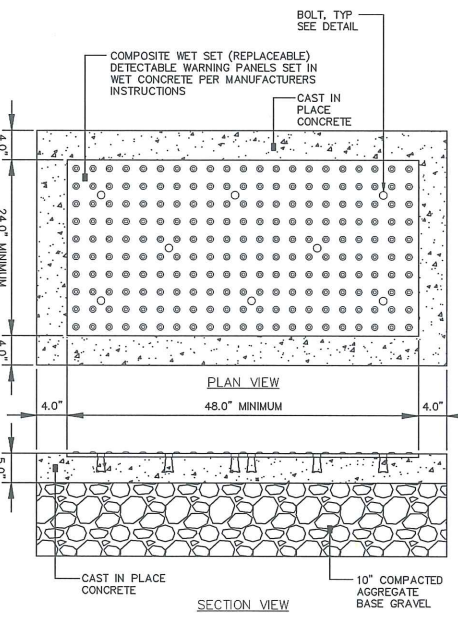


BRICK SIDEWALK WITH BITUMINOUS BASE

N.T.S.

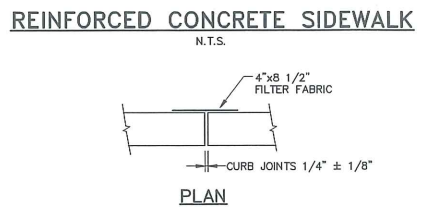
BRICKS TO BE USED:
NEW CONSTRUCTION:
4"x8" PINE HALL PATHWAY PAVER BRICK; MFG. BY PINE HALL BRICK CO., MADISON, NORTH CAROLINA. LACHANCE ITEM # 193623. PINE HALL PATHWAY PAVER BRICK.
REPAIR /MAINTENANCE TO EXISTING BRICK SIDEWALKS: VERMONT PAVER; SUPPLIED BY GAGNE AND SONS. SPECIFICATION NUMBER: 'VERMONT BACKER BRICK'; ITEM NUMBER # VBBB

- NOTES:**
- COMPOSITE WET SET (REPLACEABLE) DETECTABLE WARNING PANELS SHALL BE AS MANUFACTURED BY ADA SOLUTIONS, INC. (WWW.ADATILE.COM), OR APPROVED EQUAL.
 - CAST IN PLACE CONCRETE SHALL MEET SPECIFICATIONS FOR MAINE D.O.T. CLASS A STRUCTURAL CONCRETE, MINIMUM COMPRESSIVE STRENGTH 4,000 PSI. THE CONCRETE SHALL BE SEALED PRIOR TO SETTING PANELS. THE EXPOSED CONCRETE BORDER SHALL RECEIVE A GROOVED EDGE BETWEEN THE PANEL AND CONCRETE, ALONG WITH A UNIFORM BROOM FINISH PERPENDICULAR TO THE FLOW OF PEDESTRIAN TRAFFIC.
 - TRUNCATED DOMES SHALL BE ALIGNED IN ROWS, PARALLEL AND PERPENDICULAR TO THE PREDOMINANT DIRECTION OF TRAVEL. TRUNCATED DOME BRICKS AND GRANITE PAVERS ARE NOT ALLOWED.
 - COLOR FOR ALL DETECTABLE WARNING PANELS SHALL BE AS REQUIRED BY CITY OF PORTLAND PUBLIC SERVICES. FOLLOW MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION.
 - SIZE: THE DETECTABLE WARNING PANEL(S) SHALL EXTEND 24 INCHES MINIMUM IN THE DIRECTION OF TRAVEL AND THE FULL WIDTH OF THE CURB RAMP, LANDING, OR BLENDED TRANSITION TO THE STREET.
 - ORIENTATION: THE DETECTABLE WARNING PANEL SHALL BE LOCATED SO THAT THE EDGE NEAREST THE CURB LINE IS 6 INCHES MINIMUM AND 8 INCHES MAXIMUM FROM THE CURB LINE. THE PANEL SHALL BE ORIENTED TO THE DIRECTION OF TRAVEL AS IDENTIFIED BY THE POINT OF EGRESS.

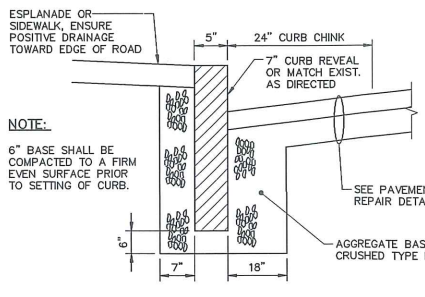


SIDEWALK RAMP DETECTABLE WARNING PANEL

N.T.S.



PLAN



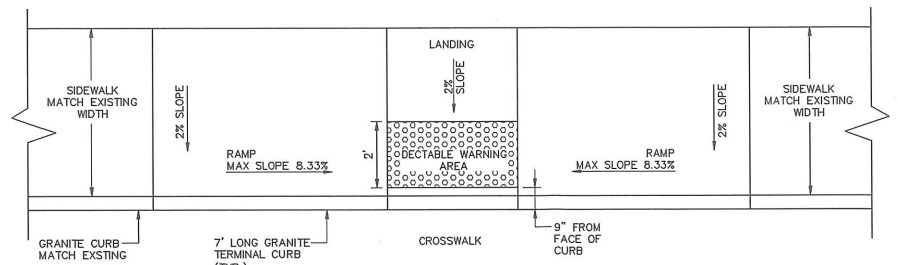
SECTION

TYPICAL NEW AND RESET CURB INSTALLATION

N.T.S.

NOTE: AGGREGATE TYPES PER MDOT SECTION 304.02

CURB TYPE 1 ON CURVES			
TYPE	RADIUS OF CURVE	LENGTH	STONE IS CUT OR CAST
1	0' TO 60' INCL.	4' MIN.	ARC TO FIT CURVE
	OVER 60' TO 180'	4' TO 6'	STRAIGHT PIECES

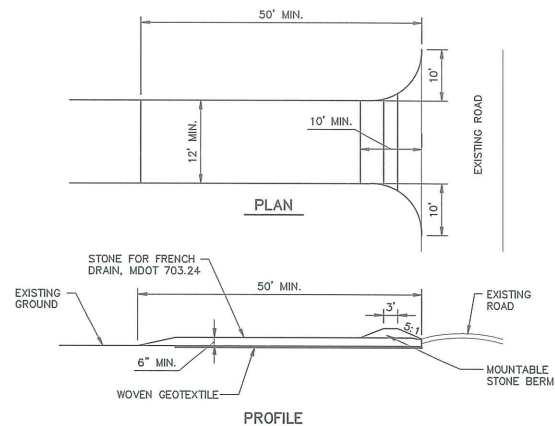


PARALLEL SIDEWALK RAMP LAYOUT

N.T.S.

- NOTES:**
- ALL RAMPS SHALL COMPLY WITH ADA STANDARDS.
 - GRANITE CURB ADJACENT TO LANDING SHALL BE FLUSH WITH STREET.

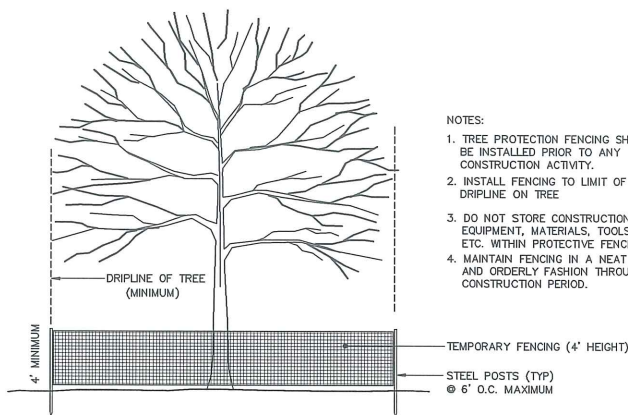
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NOTES:

- CONSTRUCTION ENTRANCES MAY BE RELOCATED AS CONSTRUCTION PROGRESSES.
- WHEEL WASH PITS MAY ALSO BE USED, IF APPROVED.
- MAINTENANCE:** INSPECT FOR EFFECTIVE REMOVAL OF SOIL FROM VEHICLES PRIOR TO LEAVING THE SITE. SWEEP ANY SOIL FROM ADJACENT ROADWAYS.
- REMOVAL:** AT LEAST ONE CONSTRUCTION ENTRANCE SHALL BE MAINTAINED UNTIL ALL AREAS OF THE SITE ARE STABILIZED.

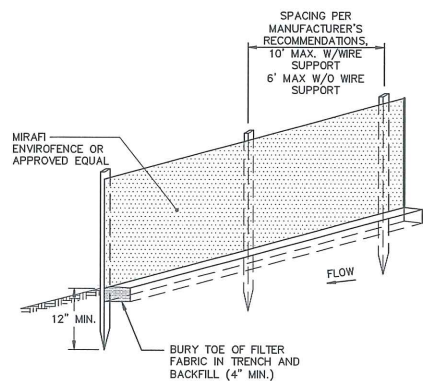
STABILIZED CONSTRUCTION ENTRANCE DETAIL
N.T.S.



NOTES:

- TREE PROTECTION FENCING SHALL BE INSTALLED PRIOR TO ANY CONSTRUCTION ACTIVITY.
- INSTALL FENCING TO LIMIT OF DRIPLINE ON TREE
- DO NOT STORE CONSTRUCTION EQUIPMENT, MATERIALS, TOOLS, ETC. WITHIN PROTECTIVE FENCING.
- MAINTAIN FENCING IN A NEAT AND ORDERLY FASHION THROUGHOUT CONSTRUCTION PERIOD.

TREE PROTECTION - SECTION
N.T.S.



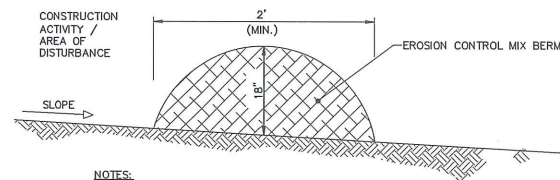
NOTES:

- INSTALL FABRIC ON UPHILL SIDE OF SUPPORT POSTS
- INSTALL SILT FENCE ACROSS SLOPES
- SILT FENCE SHALL NOT BE USED IN DRAINAGE WAYS

MAINTENANCE: INSPECT FOR TEARS IN THE FABRIC OR DAMAGE TO SUPPORTS. REPAIR AS NECESSARY. REMOVE ACCUMULATED SEDIMENT WHEN IT REACHES A DEPTH OF SIX-INCHES OR LESS.

REMOVAL: WHEN UPSLOPE AREAS ARE STABILIZED, THE STRUCTURE AND ANY ACCUMULATED SEDIMENT WILL BE REMOVED.

SEDIMENT BARRIER - SILTATION FENCE DETAIL
N.T.S.



NOTES:

Erosion Control Mix Berms

Erosion control mix can be manufactured on or off the project site. It must consist primarily of organic material and may include: shredded bark, stump grindings, composted bark, or acceptable manufactured products. Wood and bark chips, ground construction debris or reprocessed wood products will not be acceptable as the organic component of the mix.

Composition

Erosion control mix shall contain a well-graded mixture of particle sizes and may contain rocks less than 4" in diameter. Erosion control mix must be free of refuse, physical contaminants, and material toxic to plant growth. The mix composition shall meet the following standards:

- The organic matter content shall be between 80 and 100% dry weight basis.
- Particle size by weight shall be 100% passing a 6" screen and a minimum of 70%, maximum of 85% passing a 0.75" screen.
- The organic portion needs to be fibrous and elongated.
- Large portions of silts, clays or fine sands are not acceptable in the mix.
- Soluble salts content shall be < 4.0 mmhos/cm.
- The pH should fall between 5.0 and 8.0.

SEDIMENT BARRIER - EROSION CONTROL MIX BERM
N.T.S.

EROSION AND SEDIMENT CONTROL NOTES		
Temporary Erosion Control		
Measure	Dates For Use	Timing, Activity, and Location
Sedimentation Barrier	ALL	Before soil disturbance, install downhill of areas to be disturbed and around material stockpiles.
Up-slope Diversion	ALL	Before soil disturbance, install uphill of areas to be disturbed and around material stockpiles.
Catch Basin Protection	ALL	Before soil or pavement disturbance, install ACF Environmental, Inc. High Flow Siltsock, Siltsover Inlet Filter, or equal, installed per manufacturer's requirements.
Dust Control	ALL	During dry weather, apply water and calcium chloride to control dust.
Temporary Seeding	April 15 to Oct. 1	Soil stockpiles that are not covered and disturbed areas that will not be disturbed again within 14 days. If grass growth provides less than 95% soil coverage by Nov. 1, apply mulch and anchor with erosion control blanket.

EROSION AND SEDIMENTATION CONTROL NOTES

TEMPORARY EROSION CONTROL MEASURES MAY INCLUDE THE USE OF STABILIZED CONSTRUCTION ENTRANCES, HYDRAULIC MULCH, HAY AND STRAW MULCH, EROSION CONTROL BLANKET, TURF REINFORCED MATTING, RIPRAP AND TEMPORARY SEEDING. TEMPORARY SEDIMENT CONTROL MEASURES INCLUDE THE USE OF SILT FENCE, EROSION CONTROL MIX BERMS, PLUNGE POOLS, CHECK DAMS, SEDIMENT TRAPS, CATCH-BASIN SEDIMENT COLLECTION BAGS AND GEOTEXTILE FILTER BAGS. PERMANENT MEASURES INCLUDE THE USE OF RIPRAP AT EXPOSED STORMDRAIN AND CULVERT INLETS AND OUTLETS, ARMORED SWALES AND SLOPES AND PERMANENT VEGETATION.

GENERAL

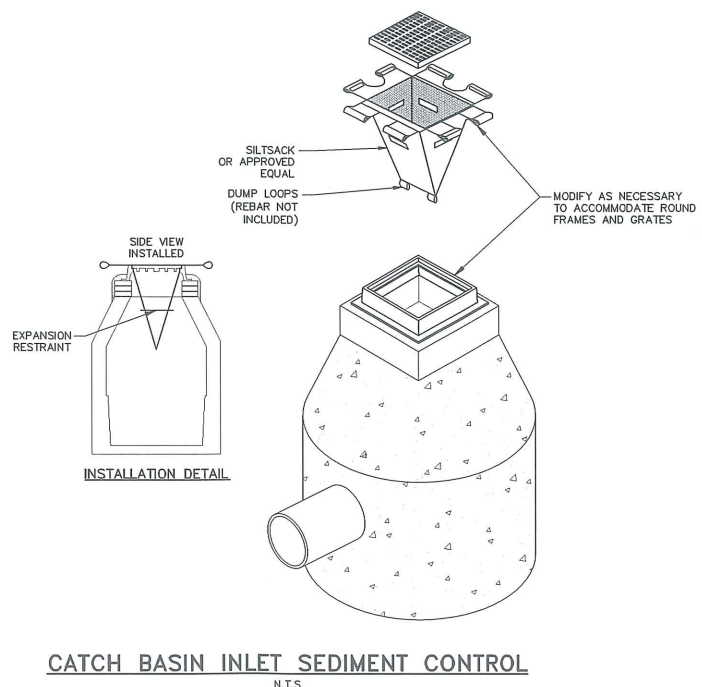
- THE PROJECT SHALL CONFORM WITH THE STANDARDS OF THE MAINE CONSTRUCTION GENERAL PERMIT, IF APPLICABLE.
- ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MAINE EROSION AND SEDIMENT CONTROL BMP HANDBOOK PUBLISHED BY THE MAINE DEP UNLESS OTHERWISE NOTED IN THESE PLANS. [HTTP://MAINE.GOV/DEP/BLW/DOCSTAND/ESCBMPS/](http://maine.gov/dep/blw/docstand/escbmps/)
- ANY ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES DEEMED NECESSARY BY THE OWNER'S REPRESENTATIVE, DEPARTMENT OF ENVIRONMENTAL PROTECTION, AND/OR MUNICIPAL OFFICIALS SHALL BE INSTALLED BY THE CONTRACTOR.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL FINES RESULTING FROM EROSION OR SEDIMENTATION FROM THE SITE TO SURROUNDING PROPERTIES, WATER BODIES, OR WETLANDS AS A RESULT OF THIS PROJECT.
- THE CONTRACTOR SHALL MINIMIZE DISTURBANCE TO THE SITE WHENEVER POSSIBLE WHILE ALLOWING PROPER SITE DEVELOPMENT.
- CONSTRUCTION STAGING SHALL BE CONDUCTED IN A WAY TO MINIMIZE THE POTENTIAL FOR STORMWATER RUN-ON TO DISTURBED AREAS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR/REPLACEMENT/MAINTENANCE OF ALL EROSION CONTROL MEASURES UNTIL ALL DISTURBED AREAS ARE STABILIZED TO THE SATISFACTION OF THE ABOVE PERSONNEL. DESCRIPTIONS OF PERMANENT STABILIZATION FOR VARIOUS COVER TYPES FOLLOWS:
 - FOR SEEDED AREAS, PERMANENT STABILIZATION MEANS THAT 90% OF THE DISTURBED AREA IS COVERED WITH REASONABLY THICK UNIFORM STAND OF PERMANENT GRASS SPECIES, FREE FROM SIZABLE THIN OR BARE SPOTS.
 - FOR SODDED AREAS, PERMANENT STABILIZATION MEANS THAT COMPLETE BINDING OF THE SOD ROOTS INTO THE UNDERLYING SOIL WITH NO SLUMPING OF THE SOD OR DIE OFF.
 - FOR MULCHED AREAS, PERMANENT STABILIZATION MEANS TOTAL COVERAGE OF THE EXPOSED AREA WITH AN APPROVED MULCH MATERIAL.
 - FOR AREAS STABILIZED WITH RIPRAP, PERMANENT STABILIZATION MEANS THAT SLOPES STABILIZED WITH RIPRAP HAVE AN APPROPRIATE BACKING OF A WELL-GRADED GRAVEL OR APPROVED GEOTEXTILE. STONE MUST BE SIZED APPROPRIATELY AND IN ACCORDANCE WITH SECTION E-6 OF THE MAINE EROSION AND SEDIMENT CONTROL BMP MANUAL.
 - FOR PAVED AREAS, PERMANENT STABILIZATION MEANS THE PLACEMENT OF THE ASPHALT BINDER COURSE.
 - FOR OPEN CHANNELS, LEVEL SPREADERS, ENGINEERED BUFFERS OR OTHER DESIGNED STORMWATER CONVEYANCE STRUCTURE, PERMANENT STABILIZATION MEANS THE CHANNELIZED AREA(S) IS STABILIZED WITH MATURE VEGETATION AT LEAST THREE INCHES IN HEIGHT, WITH APPROVED RIPRAP, OR WITH OTHER NON-EROSIVE LINING CAPABLE OF WITHSTANDING THE ANTICIPATED FLOW VELOCITIES AND FLOW DEPTHS WITHOUT RELIANCE ON CHECK DAMS TO SLOW FLOW. THERE SHALL BE NO EVIDENCE OF SLUMPING, UNDERCUTTING OR DOWNCUTTING OF THE DESIGNED CHANNEL.
- PROTECT ALL SEEDED AREAS WITH MULCH OR EROSION CONTROL BLANKET IN AREAS OF SHEET OR CONCENTRATED FLOWS. MULCH ALL AREAS SO THAT SOIL IS NOT VISIBLE THROUGH THE MULCH REGARDLESS OF THE APPLICATION RATE. SCHEDULE SEEDING OR SODDING TO AVOID FAILURE DUE TO SUMMER DROUGHT AND FALL FROST. NEWLY SEEDDED AREAS SHOULD BE PROTECTED FROM VEHICLE TRAFFIC, PEDESTRIAN TRAFFIC AND CONCENTRATED RUNOFF UNTIL THE VEGETATION IS WELL ESTABLISHED. AREAS MUST BE REWORKED AND RESTABILIZED IF GERMINATION IS SPARSE OR SURFACE EROSION IS EVIDENT.
- THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL TEMPORARY EROSION CONTROL MEASURE UPON STABILIZATION OF PROJECT AREA & COST SHALL BE INCIDENTAL TO CONTRACT.

GOOD HOUSEKEEPING AND POLLUTION PREVENTION

- SPILL PREVENTION CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM BEING DISCHARGED FROM MATERIALS ON SITE, INCLUDING STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER RUNOFF AND APPROPRIATE SPILL PREVENTION, CONTAINMENT AND RESPONSE PLANNING AND IMPLEMENTATION.
- DURING CONSTRUCTION, PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUND OR SURFACE WATERS MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO INFILTRATION AREAS. AN "INFILTRATION AREA" IS ANY ARE OF THE SITE THAT BY DESIGN, OR AS A RESULTS OF SOIL AND TOPOGRAPHY, ACCUMULATES RUNOFF THAT INFILTRATES IN THE SOIL. DIKES, BERMS, SUMPS AND OTHER FORMS OF TEMPORARY SECONDARY CONTAINMENT THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS.
- LOCATE ALL MATERIAL STOCKPILES WITH CONSIDERATION FOR STORMWATER DRAINAGE PATTERNS AND INFRASTRUCTURE.
- TAKE ALL REASONABLE MEASURES TO MINIMIZE DUST RESULTING FROM THE PROJECT. OIL MAY NOT BE USED FOR DUST CONTROL.
- LOCATE ALL LITTER, CONSTRUCTION DEBRIS AND CONSTRUCTION CHEMICALS WITH CONSIDERATION FOR STORMWATER DRAINAGE PATTERNS AND INFRASTRUCTURE.
- TRENCH OR FOUNDATION DE-WATERING MUST BE SPREAD THROUGH SUFFICIENT NATURAL BUFFERS THAT HAVE CAPACITY TO INFILTRATE THE PUMPED WATER OR SHOULD BE PUMPED TO DESIGNED CONSTRUCTION DEWATERING DEVICES AS DESCRIBED IN THE MAINE EROSION AND SEDIMENT CONTROL BMP HANDBOOK.
- SEDIMENTS AND SOIL MATERIALS SHOULD BE SWEEP FROM PAVED SURFACES AT THE END OF EACH WORKDAY OR PRIOR TO RAIN EVENTS, WHENEVER POSSIBLE.

INSPECTION AND MAINTENANCE

- A PERSON WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROLS, INCLUDING THE STANDARDS IN THE MAINE CONSTRUCTION GENERAL PERMIT, THE MAINE EROSION AND SEDIMENT CONTROL BMP HANDBOOK OR ANY MUNICIPAL REQUIREMENTS MUST CONDUCT THE INSPECTION. THIS PERSON MUST BE IDENTIFIED IN THE INSPECTION LOG. IF ADDITIONAL BMPs OR MODIFICATIONS TO BMPs ARE NECESSARY, THE MODIFICATIONS MUST BE IMPLEMENTED WITH 7 CALENDAR DAYS OR PRIOR TO ANY PRECIPITATION EVENT. ALL MEASURES MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION UNTIL AREAS ARE PERMANENTLY STABILIZED.
- AN INSPECTION AND MAINTENANCE LOG MUST BE KEPT BY THE CONTRACTOR, SUMMARIZING THE SCOPE OF THE INSPECTION, DATE, AND MAJOR OBSERVATIONS RELATING TO THE OPERATION OF EROSION AND SEDIMENT CONTROL BMPs, MATERIAL STORAGE AREAS, AND VEHICLE ACCESS POINTS TO THE CONSTRUCTION AREA. THE INSPECTION LOG SHOULD BE DELIVERED TO THE PROPERTY OWNER OR RESPONSIBLE CONTRACTING ENTITY UPON COMPLETION OF THE PROJECT.



CATCH BASIN INLET SEDIMENT CONTROL
N.T.S.

41 HUTCHINS DRIVE
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WOODARD & CURRAN
COMMITMENT & INTEGRITY DRIVE RESULTS

LDD PROJECT NAME: N/A
DRAWING NAME: 222804.55 C10X.DWG
FIELD BOOK USED: N/A

REFERENCES:
10-086P.dwg

DESIGNED BY: LUS
DRAWN BY: BCM
CHECKED BY: DUC
SCALE: AS NOTED
DATE: APRIL 2014



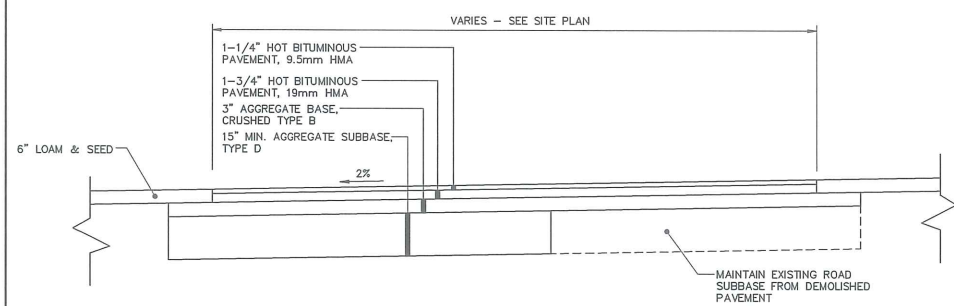
EVERGREEN CEMETERY
PHASE II
CIVIL DETAILS - 1

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING SECTION

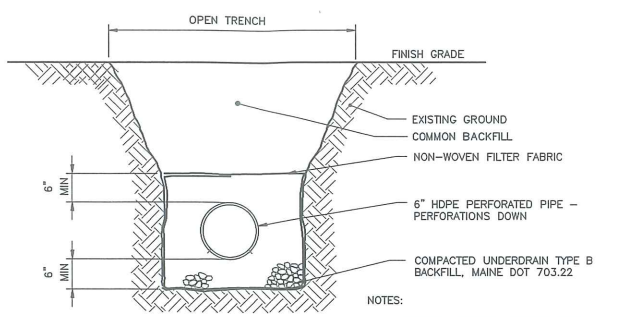


SHEET # 5 OF 8
PLAN NUMBER C-103

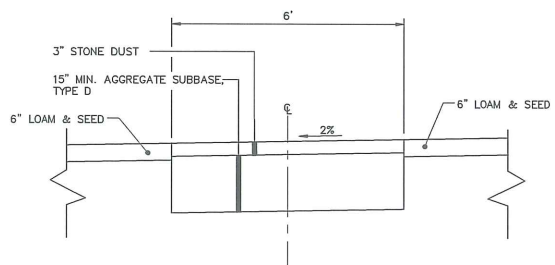
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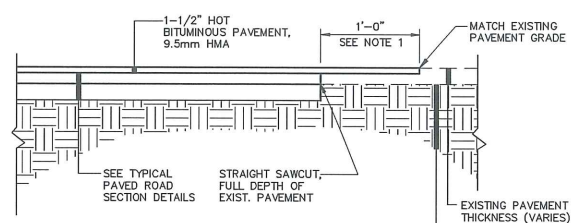
TYPICAL PAVED ROAD SECTION
N.T.S.
NOTE: AGGREGATE TYPES PER MDOT SECTION 304.02



UNDERDRAIN TRENCH DETAIL
N.T.S.

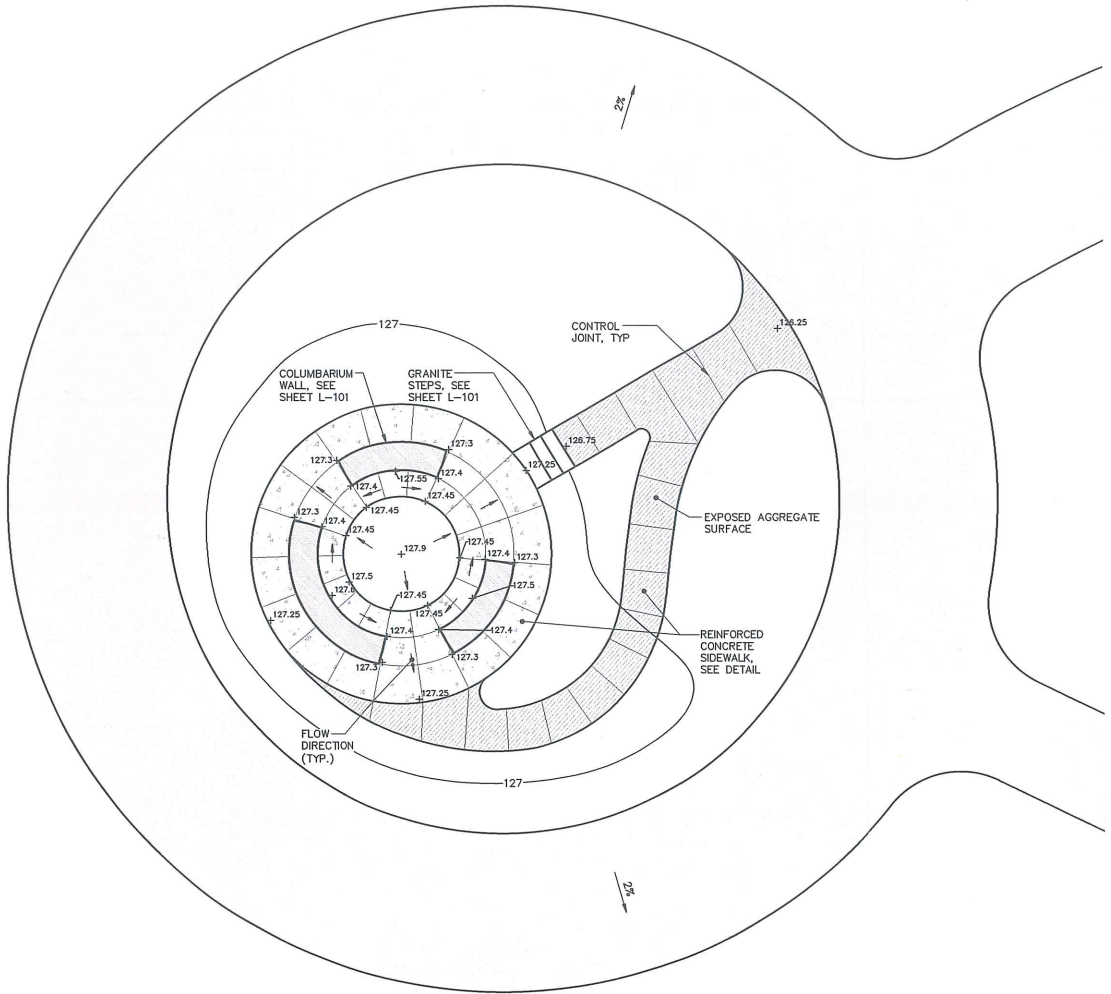


TYPICAL GRAVEL PATH SECTION
N.T.S.
NOTE: AGGREGATE TYPES PER MDOT SECTION 304.02



- NOTES:
1. GRIND EXISTING PAVEMENT, TO 1-1/2" DEPTH.
 2. PROVIDE BITUMINOUS TACK COAT ON VERTICAL AND HORIZONTAL SURFACES PRIOR TO PAVING.
 3. DETAIL APPLICABLE TO PAVEMENT BUTT JOINTS AT ROADWAY WORK LIMITS. REFER TO PIPE INSTALLATION DTL. OR PAVED ROAD SECTION DTLs. FOR TRENCH REPAIR REQUIREMENTS.

PAVEMENT BUTT JOINT DETAIL
N.T.S.



COLUMBARIUM GRADING DETAIL
SCALE: 1"=10'

44 HUTCHINS DRIVE
PORTLAND, MAINE 04102
800.426.4262 | www.woodardcurran.com

WOODARD & CURRAN
COMMITMENT & INTEGRITY DRIVE RESULTS

LDD PROJECT NAME: N/A
DRAWING NAME: 222804-55 C10X.DWG
FIELD BOOK USED: N/A

REFERENCES:
10-089P.dwg

DESIGNED BY:	U.S.
DRAWN BY:	BDU
CHECKED BY:	DLC
SCALE:	AS NOTED
DATE:	APRIL 2014



EVERGREEN CEMETERY
PHASE II
CIVIL DETAILS - 2

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING SECTION

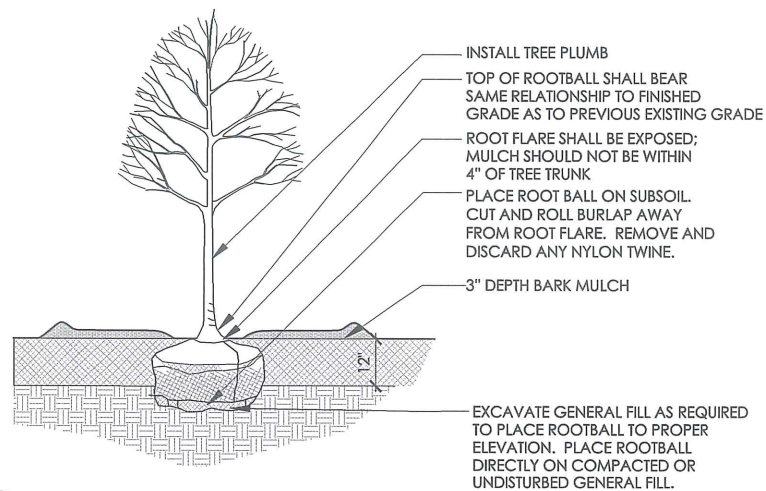


SHEET #
6 OF 8

PLAN NUMBER
C-104

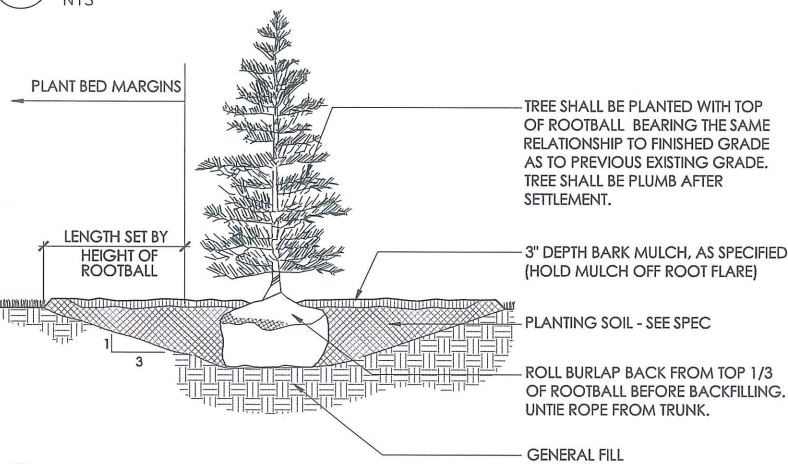
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PLANT LIST					
Deciduous Trees					
Qty.	KEY	Botanical Name	Common Name	Size	Comments
5	AR	<i>Acer rubrum</i>	Red Maple	2-3" cal. B&B	
1	AS	<i>Acer saccharum</i>	Sugar Maple	2-3" cal. B&B	
4	BA	<i>Betula alleghaniensis</i>	Yellow birch	2" cal. B&B	Single stem
5	QB	<i>Quercus bicolor</i>	Swamp White Oak	2-3" cal. B&B	
2	QR	<i>Quercus rubra</i>	Red Oak	2-3" cal. B&B	
5	ZS	<i>Zelkova serrata</i>	Japanese Zelkova	2-3" cal. B&B	
Small Flowering Trees					
Qty.	KEY	Botanical Name	Common Name	Size	Comments
8	MDW	<i>Malus 'Donald Wymon'</i>	Donald Wymon Crab-apple	2-2.25" cal. B&B	
5	MHG	<i>Malus 'Harvest Gold'</i>	Harvest Gold Crab-apple	2-2.25" cal. B&B	
5	MJ	<i>Malus 'Jackii'</i>	Jackii Crab-apple	2-2.25" cal. B&B	
5	MSN	<i>Malus 'Snowdrift'</i>	Snowdrift Crab-apple	2-2.25" cal. B&B	
Evergreen Trees					
Qty.	KEY	Botanical Name	Common Name	Size	Comments
4	AC	<i>Abies concolor</i>	White Fir	7-8 ft. tall	
4	PA	<i>Picea abies</i>	Norway Spruce	7-8 ft. tall	
11	PG	<i>Picea glauca</i>	White Spruce	7-8 ft. tall	
6	PO	<i>Picea omorika</i>	Serbian Spruce	7-8 ft. tall	
Apple Orchard Trees					
Qty.	KEY	Botanical Name	Common Name	Size	Comments
3	MDO	<i>Malus 'Duchess of Oldenburg'</i>	Duchess of Oldenburg	3/4" cal. B&B	
3	MF	<i>Malus 'Firestone'</i>	Firestone	3/4" cal. B&B	
3	MH	<i>Malus 'Honeycrisp'</i>	Honeycrisp	3/4" cal. B&B	
3	MS	<i>Malus 'Snow'</i>	Snow	3/4" cal. B&B	
Groundcover					
Qty.	KEY	Botanical Name	Common Name	Size	Comments
170	VM	<i>Vinca minor</i>	Periwinkle	#4 pot	Plant at 12" O.C.



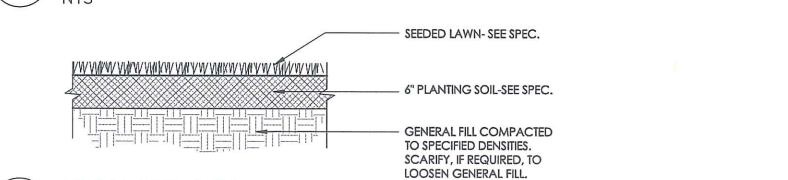
2 DECIDUOUS TREE PLANTING

NTS



3 EVERGREEN TREE PLANTING

NTS



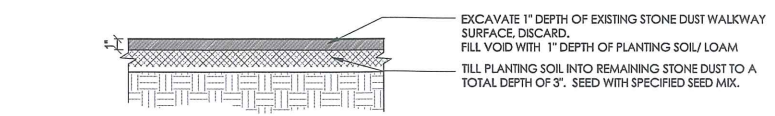
4 LOAM AND SEED

NTS



1 PLANTING PLAN

1" = 40'-0"



5 STONE DUST PATH RESTORATION

NTS

41 HUTCHINS DRIVE
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WOODARD & CURRAN
COMMITMENT & INTEGRITY DRIVE RESULTS

LDD PROJECT NAME: N/A
DRAWING NAME: XR-SITE_EVERGREEN.DWG
FIELD BOOK USED: N/A

REFERENCES:
10-088P.dwg

DESIGNED BY:	HA/US	DRAWN BY:	US	CHECKED BY:	HA/JL	SCALE:	AS NOTED	DATE:	JAN 17, 2014
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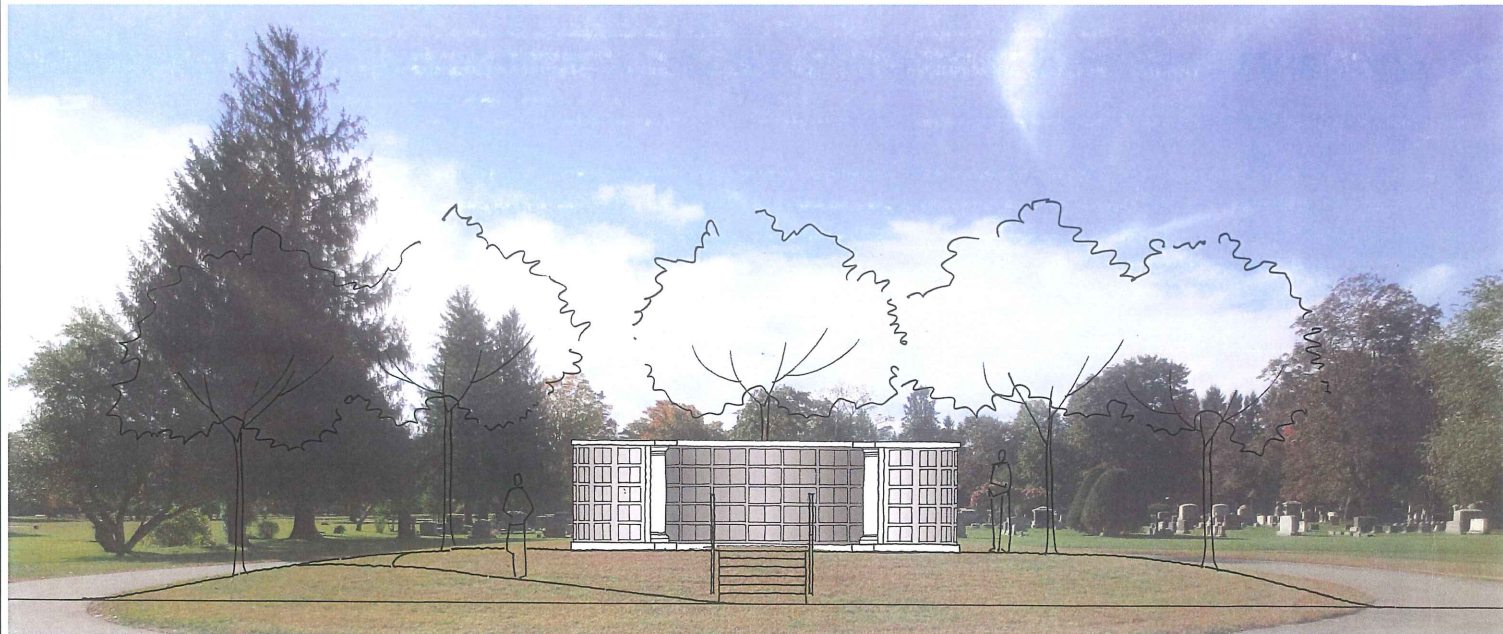
EVERGREEN CEMETERY
PHASE II
LANDSCAPE PLAN AND DETAILS

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING SECTION

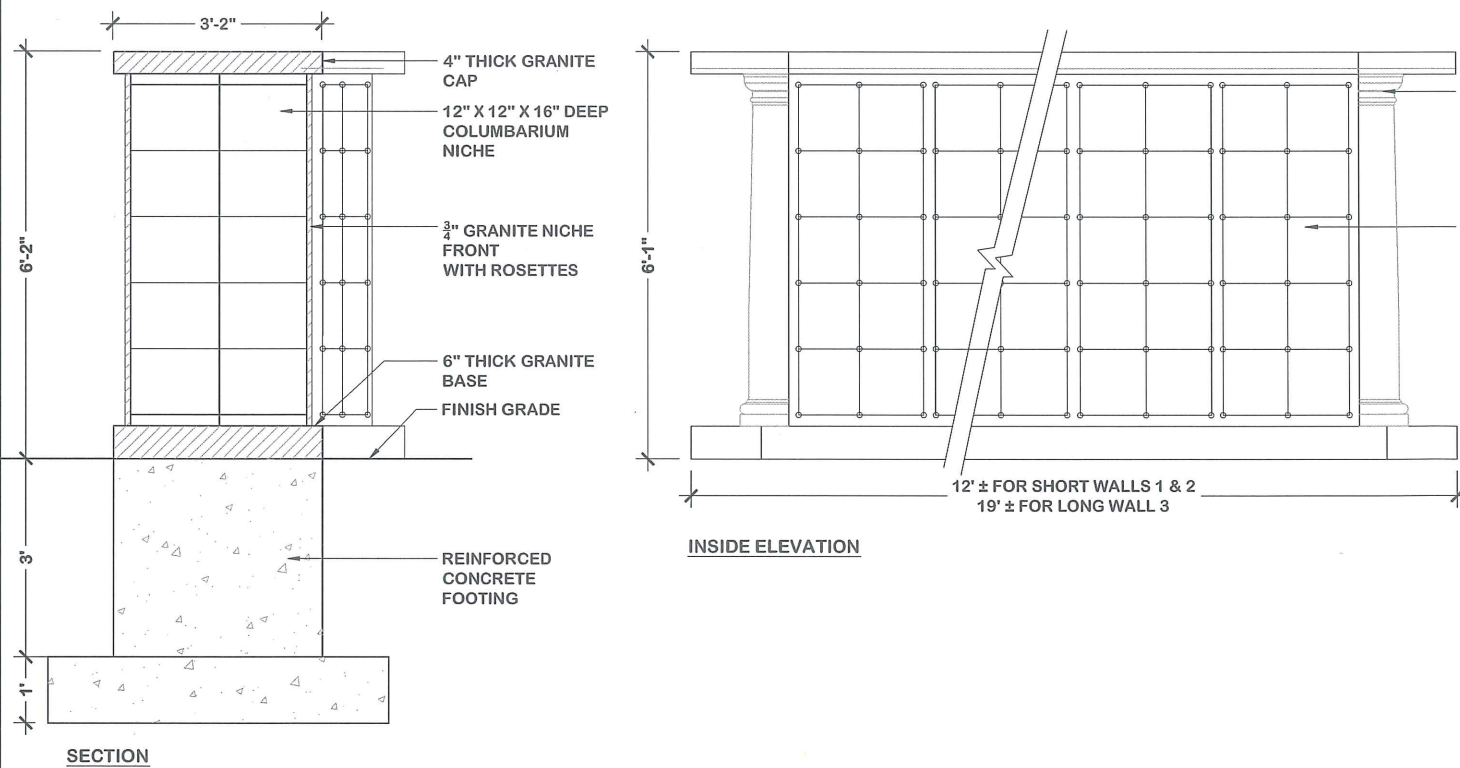


SHEET #
7 OF 8
PLAN NUMBER
L-100

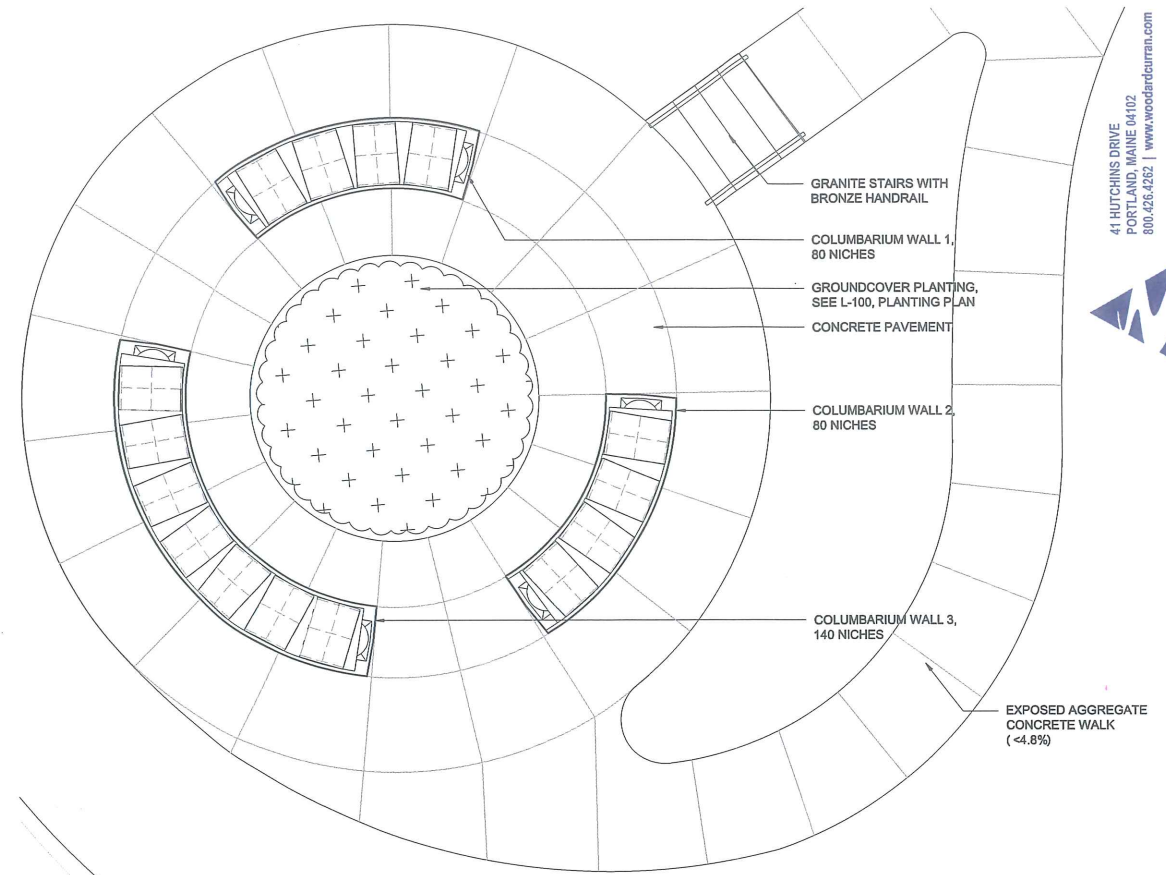
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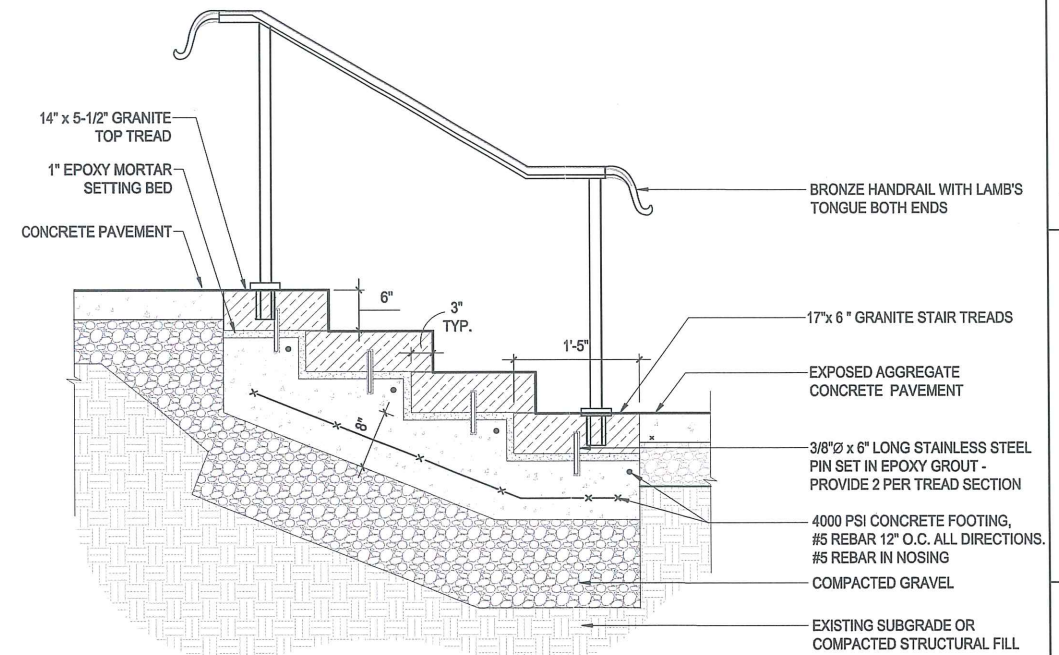
2 SKETCH ELEVATION OF COLUMBARIUM WALLS
NTS



3 SECTION AND ELEVATION OF COLUMBARIUM WALLS
3/4" = 1'-0"



1 COLUMBARIUM PLAN ENLARGEMENT
1/4" = 1'-0"



4 GRANITE STAIRS
NTS

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WOODARD & CURRAN

COMMITMENT & INTEGRITY DRIVE RESULTS

LDD PROJECT NAME:
N/A

DRAWING NAME:
XR-SITE_EVERGREEN.DWG

FIELD BOOK USED:
N/A

REFERENCES:
10-0809.dwg

DESIGNED BY:
HA/US

DRAWN BY:
US

CHECKED BY:
HA/JL

SCALE:
AS NOTED

DATE:
JAN 17, 2014



EVERGREEN CEMETERY
PHASE II

COLUMBARIUM PLAN AND
DETAILS

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING SECTION



SHEET #
8 OF 8

PLAN NUMBER
L-101

PERMIT REVIEW SET - NOT FOR CONSTRUCTION

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