



DRAFT Environmental Assessment  
**ECOS Environmental Center**

Forest Park, Springfield, MA

DR 1994 MA

September 26, 2014



**FEMA**

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Cover photo: Rusty Clark, July 26, 2010

**ENVIRONMENTAL ASSESSMENT  
ECOS ENVIRONMENTAL CENTER**

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## Acronyms and Abbreviations

ACM	Asbestos Containing Material
ADA	Americans with Disabilities Act
APCD	Air Pollution Control Division
BMP	Best Management Practice
CEQ	Council on Environmental Quality
CAA	Clean Air Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
C.F.R.	Code of Federal Regulations
CMS	Centers for Medicare and Medicaid Reimbursement
CWA	Federal Water Pollution Control Act (Clean Water Act)
DEP	Massachusetts Department of Environmental Protection
DMH	Massachusetts Department of Mental Health
DPS	Massachusetts Department of Public Safety
EA	Environmental Assessment
EIS	Environmental Impact Statement
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
GIS	Geographic Information System
JCAHO	Joint Committee on Accreditation of Health Care Organizations
LEED	Leadership in Energy and Environmental Design
MHC	Massachusetts Historic Commission
MSA	Magnuson-Stevens Fishery Conservation and Management Act
NEPA	National Environmental Policy Act
NESHAPS	National Emission Standards for Hazardous Air Pollution
NFIP	National Flood Insurance Program
NHESP	Massachusetts Natural Heritage & Endangered Species Program
NHPA	National Historic Preservation Act
NPDES	National Pollutant Discharge Elimination System
NPL	National Priority List
NRCS	Natural Resources Conservation Service
PA	Public Assistance
RCRA	Resource Conservation and Recovery Act
SCC	Springfield Conservation Commission
SHPO	State Historic Preservation Officer
USACE	U.S. Army Corps of Engineers
USEPA	U. S. Environmental Protection Agency
USGBC	U.S. Green Building Council
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service

# 1 INTRODUCTION

As a result of damages sustained on June 1, 2011, the President declared a major disaster for the Commonwealth of Massachusetts under the Robert T. Stafford Disaster Relief and Emergency Assistance Act. This major disaster declaration, referenced as FEMA-1994-DR-MA, authorizes the Federal Emergency Management Agency (FEMA) to provide Public Assistance (PA) grant funding to local governments, state agencies and eligible private non-profit organizations in Massachusetts. The City of Springfield, Massachusetts has applied through the Massachusetts Emergency Management Agency (MEMA) to FEMA for funding assistance under the PA program.

In accordance with 44 Code of Federal Regulations (CFR) for FEMA, Subpart B, Agency Implementing Procedures, Part 10.9, this Environmental Assessment (EA) is being prepared pursuant to Section 102 of the National Environmental Policy Act (NEPA) of 1969, as implemented by the regulations promulgated by the President's Council on Environmental Quality (CEQ); 40 CFR Parts 1500-1508. The purpose of an environmental assessment (EA) is to determine whether the potential impacts of a federally proposed action could have significant environmental impacts. If the EA concludes that the impacts of the proposal could be significant, then the agency is required by the National Environmental Policy Act (NEPA) to prepare an Environmental Impact Statement (EIS). If, however, the agency concludes on the basis of the EA that the impacts would not be significant, then the agency may issue a Finding of No Significant Impact (FONSI) and proceed with the action.

## 1.1 DISASTER BACKGROUND AND OVERVIEW

The City of Springfield, Massachusetts (the City) is located in western Massachusetts, in Hampden County, near the Massachusetts/Connecticut border. Springfield is the third largest city in Massachusetts with an estimated population of 153,000 per the 2010 Census.

On June 1, 2011, tornadoes struck portions of Western Massachusetts, including the City of Springfield, causing extensive and widespread property damage. The former Zanetti School at 59 Howard St., in the City's South End sustained significant damage from the tornado, rendering it unusable for its intended purpose. The building was used at the time of the event as a storage warehouse and no longer functioned as a school. After the tornado, the City assessed the extent of the damage and secured the building.

The City determined that the public welfare would not be best served by restoring the damaged facility or by restoring the function of the damaged facility at another location. In accordance with FEMA PA Alternate Projects policy, the City has applied to FEMA to redirect eligible funds toward two alternative projects to better serve the population of that area. For the two Alternate Projects, the City proposes to; 1) refurbish the police facility located at 50 East Street, and 2) renovations and expansion to the Clifford A. Phaneuf Environmental Center, commonly referred to as the "ECOS" center as the facility is associated with the Environmental Center of Our Schools or ECOS program located in Forest Park. The police facility is not subject to review in this EA as that project is categorically excluded from the requirements of an EA. The review for that project has already been completed and will not be referenced in this document hereafter. This EA focuses on the project to expand and enhance the Clifford A. Phaneuf Environmental Center, which was historically referred to as the Porter Lake Skate House and will be referred to in this EA as the ECOS Center.

The ECOS Center structure is a wood-framed building that abuts Porter Lake. It is the former skate house at the lake, and has been home for the ECOS program since 1970. The programs are experienced by thousands of science students, teachers and parents annually. This area of Forest Park is home to many species of birds and wildlife. This program provides hands on experience for students of natural history including the study of organisms: plants or animals. The facility is currently in need of repairs and enhancement. The renovations to the existing facility plus the expansion by approximately one-hundred and fifty percent (150%) from approximately forty-nine hundred square feet (4,900 SF) to approximately seventy-four hundred square feet (7,400 SF), will be examined by identifying the impacts the project will have on the local resources.

## 1.2 PURPOSE AND NEED

The purpose of the *Proposed Alternative* is enhancing the welfare of the community by providing additional curriculum to the educational system of the City for grades Kindergarten through eighth (8<sup>th</sup>) grade.

The need is to have enough space and functionality of a facility to fulfill this purpose.

## 2 ALTERNATIVES CONSIDERED

### 2.1 NO ACTION ALTERNATIVE

Under the *No Action Alternative* the ECOS Center would remain in its existing condition in need of repair and renovation. If this alternative is selected, there would be no change in this facility.

### 2.2 PROPOSED ALTERNATIVE

Under the *Proposed Alternative* there are two proposed additions to the building, and the main focus is providing an updated educational center and enhancing usage of the building during after-school hours, weekends and summer.

The building is a two story wood frame with a slab on grade foundation and a log façade. The building's footprint currently is approximately 2,900 square feet (SF) with a second floor of approximately 2,000 SF. The ground floor footprint will increase by about 2,100 SF, with the western addition extending two stories over an area of about 1,000 SF and a ground-level porch of about 650 SF. The eastern kitchen addition will be a single level only and comprise an area of about 500 SF. Hence, the total enclosed area (both levels) will be about 7,400 SF. (See Appendices A, B, and C)

The renovation will include upgrades of mechanical, electrical and plumbing (MEP) systems, including possible installation of a hydro-geothermal heat pump system to heat and cool the building. Geothermal systems or ground source heat pump systems are an energy efficiency strategy that can contribute to Leadership in Energy and Environmental Design (LEED) points. These systems employ subsurface soil and/or groundwater as a heat source to provide seasonal heating or cooling needs.

A hydro-geothermal pond loop system uses a similar concept, but uses the water in the pond as the heat source or heat sink to respond to heating and cooling needs. Although near-surface water temperatures fluctuate with the seasons, water at the pond bottom has a more limited temperature fluctuation. Geothermal or hydro-geothermal systems utilizing geothermal water-source heat pumps can achieve about 25 percent energy savings over conventional new HVAC systems.

### 2.3 OTHER ALTERNATIVES CONSIDERED AND ELIMINATED

The alternative of repairing the former Zanetti School to pre-disaster condition for continued use as a storage facility was also considered, but it was eliminated because the City determined that the public welfare would not be best served by either restoring the damaged facility or by restoring the function of the damaged facility. In lieu of repairing the school, the City determined to utilize FEMA's Alternate Project Policy to renovate the ECOS Center.



### 3 AFFECTED ENVIRONMENTS AND POTENTIAL IMPACTS CONSIDERED

The *No Action Alternative* consists of the continued use of the facility as it presently exists.

The *Proposed Alternative* will have direct effect on the existing building.

**Table 3.1** summarizes the effects described and analyzed in this section. Levels of potential impacts are defined as follows:

- \* 1 - Negligible: The resource area would not be affected. Changes would be non-detectable or if detected, effects would be slight and local. Impacts would be well below regulatory limits.
- \* 2 - Minor: Changes to the resource would be measurable, but the changes would be small and localized. Impacts would be within or below regulatory limits. Mitigation measures may be necessary to reduce potential effects.
- \* 3 - Moderate: Changes to the resource would be measurable and have localized and potentially regional scale impacts. Impacts would be within or below regulatory limits, but historical conditions would be altered on a short-term basis. Mitigation measures may be necessary to reduce potential effects.
- \* 4 - Major: Changes would be readily measurable and would have substantial consequences on a local and potentially regional level. Impacts would exceed regulatory limits. Mitigation measures to offset the effects would be required to reduce impacts, although long-term changes to the resource would be possible.

<b>Table 3-1. PROJECT ALTERNATIVES: SUMMARY OF POTENTIAL EFFECT, COORDINATION AND MITIGATION APPLIED</b>							
<b>Affected Environment/ Resource Area</b>	<b>Alternatives</b>	<b>IMPACT</b>			<b>Agency Coordination/ Permits</b>	<b>Mitigation/BMPs</b>	<b>Comments</b>
<b>Geology</b>	<b>No Action</b>	<b>1</b>					No Impacts Identified.
	<b>Proposed Alternative</b>	<b>1</b>					No Impacts Identified.
<b>Soils</b>	<b>No Action</b>	<b>1</b>					No Impacts Identified.
	<b>Proposed Alternative</b>	<b>1</b>					No Impacts Identified.
<b>Air Quality</b>	<b>No Action</b>	<b>1</b>					No Impacts Identified.
	<b>Proposed Alternative</b>		<b>2</b>			All asbestos abatement and disposal procedures shall be performed in compliance EPA’s NESHAP regulations, MADEP asbestos regulations, and City of Springfield environmental and building codes.	No Permanent Impact.

**Table 3-1.  
PROJECT ALTERNATIVES: SUMMARY OF POTENTIAL EFFECT,  
COORDINATION AND MITIGATION APPLIED**

Affected Environment/ Resource Area	Alternatives	IMPACT				Agency Coordination/ Permits	Mitigation/BMPs	Comments
							Water, hygroscopic materials, or non-toxic chemical stabilizers will be used as treatment to reduce fugitive dust emissions during demolition as required under Clean Air Act.	
Climate Change	No Action	1						No Impacts Identified.
	Proposed Alternative	1						No Impacts Identified.
Water Quality	No Action	1						No Impacts Identified.
	Proposed Alternative	1					During renovation of the building Best Management Practices to control the release of sediment shall be used.	Porter Lake is a TMDL site, but Proposed Alternative SOW does not trigger a permit. No impact identified.
Floodplains	No Action	1						No Impacts Identified.
	Proposed Alternative	1						Project is not located within a floodplain No impacts identified.
Wetlands	No Action	1						No Impacts Identified.
	Proposed Alternative	1						No impacts identified.
Threatened and Endangered Species	No Action	1						No Impacts Identified.
	Proposed Alternative	1						No federally listed threatened or endangered species in or near project area.
Ecosystems, Fish and Wildlife	No Action	1						No Impacts Identified.
	Proposed Alternative	1						No impacts identified.
Historic Properties	No Action	1						No impacts identified.

**Table 3-1.  
PROJECT ALTERNATIVES: SUMMARY OF POTENTIAL EFFECT,  
COORDINATION AND MITIGATION APPLIED**

Affected Environment/ Resource Area	Alternatives	IMPACT				Agency Coordination/ Permits	Mitigation/BMPs	Comments
	<b>Proposed Alternative</b>	1					<p>An archaeological monitor shall be present on site during construction activities to identify if any cultural resources are uncovered during construction.</p> <p>If human remains are discovered during the course of project implementation, the City shall immediately stop construction activities in the vicinity of the discovery and take all reasonable measures to avoid or minimize harm until FEMA concludes consultation with the City, the State Historic Preservation Office, and applicable Tribal Historic Preservation Officer.</p>	
<b>EO 12898 Environmental Justice</b>	<b>No Action</b>	1						No Impacts Identified.
	<b>Proposed Alternative</b>	1						No disproportionate impacts to minority or low income populations.
<b>Hazardous and Solid Waste</b>	<b>No Action</b>	1						No Impacts Identified.
	<b>Proposed Alternative</b>	2					<p>Hazardous materials and special wastes will be segregated and disposed of in accordance with all applicable local, state, and federal laws, regulations, and requirements</p> <p>The City shall manage and dispose of excavated soils and waste materials in accordance with applicable local, state, and federal regulations. If hazardous/contaminated</p>	

**Table 3-1.  
PROJECT ALTERNATIVES: SUMMARY OF POTENTIAL EFFECT,  
COORDINATION AND MITIGATION APPLIED**

Affected Environment/ Resource Area	Alternatives	IMPACT				Agency Coordination/ Permits	Mitigation/BMPs	Comments
							materials are discovered during construction, the work shall cease until the City can implement appropriate procedures and secure additional permits if needed.	
Noise	No Action	1						No Impacts Identified.
	Proposed Alternative		2				Construction will take place only during normal business hours and all equipment will meet local, state, and federal noise regulations. Idling time shall be limited onsite.	There may be a temporary increase in noise during construction, otherwise noise levels will remain as under current uses.
Traffic Impacts	No Action	1						No Impacts Identified.
	Proposed Alternative		1					No Impacts Identified.
Public Services and Utilities	No Action	1						No Impacts Identified.
	Proposed Alternative		1				Construction vehicles and equipment will be stored on site during the project. All construction activities will be performed using qualified personnel and in accordance with the standards specified in Occupational Safety and Health Administration (OSHA) regulations. Appropriate signage will be posted onsite and in the vicinity.	No Impacts Identified.
Public Health and Safety	No Action	1						No impacts identified.
	Proposed Alternative		2					No impacts identified.
Cumulative Impacts	No Action	1						No impacts identified.
	Proposed Alternative		1					De minimis Impact

## ***Location***

The site is located in Forest Park, in Springfield, Massachusetts. It is one of the largest municipal parks in the United States, lying on 735 acres. The ECOS program is based in Forest Park in Springfield, Massachusetts, at Latitude: N42.07446 Longitude: W-72.56839. It hosts an educational program run by the City of Springfield. Since 1970, ECOS takes all Springfield public school students in grades 4 through 7 on a two-day environmental learning outing in Forest Park.

Porter Lake was created approximately 100 years ago by damming Pecousic Brook at Porter Lake Dam Road with a masonry structure spillway which was constructed in a semi-circular shape. The lake is 31 acres in area, including Porter and Lower Porter Lake (more commonly referred to as Fountain Lake). The lake has a drainage basin of 5,160 acres (approximately 8 square miles) with areas of the watershed in the communities of Springfield, East Longmeadow, and Longmeadow.

## ***Topography***

Springfield's greatest topographical feature is the Connecticut River. The City sits near confluence of two major tributary rivers: the western Westfield River, which flows into the Connecticut across from Springfield's South End Bridge; and the eastern Chicopee River, which flows into the Connecticut less than 0.5 miles north of Springfield. The City's second most prominent topographic feature is the city's 735 acre Forest Park.

The portion of Forest Park where the subject site is located is in the ruggedly contoured valley of Pecousic Brook which occupies more than half of the south side of the Forest Park. This features many walking trails. Factors related to geology, soils, vegetation and wildlife are considered during project development to determine if one or more actions could adversely affect one or multiple resources or upset the balance among them.

## **IN THE FOLLOWING SECTION:**

The *No Action Alternative* (the continued use of the facility as it presently exists) is not evaluated. Since there is no added adverse effect to the affected environment and the consequences are only addressed in Table 3-1 in this EA.

The *Proposed Alternative* will have direct effect on the existing building and is discussed further.

### **3.1 GEOLOGY**

The building location sits on the Portland Formation (Jp), which is reddish-brown to pale arkose (also known as New Haven Traprock and Brownstone) and siltstone, and gray sandstone, gray siltstone and black shale interpreted as lakebeds. There are no unique or protected geologic resources or geologic hazards in the project vicinity.

The *Proposed Alternative* will have direct effect on the existing building.

#### **3.1.1 *Potential Impacts***

No impact to the geology or the Proposed Alternative.

### 3.1.2 *Need for Mitigation*

None identified.

## 3.2 SOILS

Terrace escarpments consist of long, narrow, rocky areas that rise abruptly from the mean tide line to the coastal plain terraces or plateaus. This land type consists of steep faces that separate the terraces from the lower lying land. The faces are composed of soft coastal sandstone, hard shale, or hard, weather-resistant, fine-grained sandstone.

The ***Proposed Alternative*** will have direct effect on the existing building.

### 3.2.1 *Potential Impacts*

No impact to the soils or the Proposed Alternative.

### 3.2.2 *Need for Mitigation*

None identified.

## 3.3 AIR QUALITY

The ***Proposed Alternative*** will have direct effect on the existing building.

### 3.3.1 *Potential Impacts*

The Proposed Alternative will not impact the air quality at the project site, in the nearby area, or in the region.

### 3.3.2 *Need for Mitigation*

All asbestos abatement and disposal procedures shall be performed in compliance with the Environmental Protection Agency's (EPA's) National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations, the Massachusetts Department of Environmental Protection (MADEP) asbestos regulations, and City of Springfield environmental and building codes.

Water, hygroscopic materials, or non-toxic chemical stabilizers will be used as treatment to reduce fugitive dust emissions during demolition as required under Clean Air Act.

## 3.4 CLIMATE CHANGE

The CEQ has issued a draft NEPA guidance document encouraging federal agencies to include the consideration of the effects on greenhouse gas emissions and climate change in their evaluations of proposals subject to NEPA documentation (CEQ, 2010).

The ***Proposed Alternative*** will have direct effect on the existing building.

### 3.4.1 *Potential Impacts*

The use of the building and the activities within will not cause additional volume or intensity of emissions of greenhouse gases or be affected by climate change by the ***Proposed Alternative***.

#### 3.4.2 *Need for Mitigation*

There may be a temporary rise in the volume of greenhouse gas due to the running of construction equipment. This volume will be temporary and low. The use of building after construction will have no additional permanent effect on the volume or intensity of greenhouse gas emissions than the No Action Alternative.

### 3.5 WATER QUALITY

The main strategy employed by MassDEP to protect and maintain water quality is the implementation of the Watershed Management Approach. A phased holistic program for watershed-based assessment, Total Maximum Daily Load evaluation, permitting, and implementation has been adopted by MassDEP's Bureau of Resource Protection to address its Watershed Management goals. The Massachusetts Estuaries Project (MEP) determines which estuaries are being impacted by excessive nitrogen and identifies the sources of nitrogen pollution, so that communities have the scientific basis for common sense, cost-effective decisions on how to protect and restore their estuaries.

Porter Lake is listed by the MassDEP as a water resource requiring a Total Maximum Daily Load (TMDL) which is a calculation of the maximum amount of a pollutant that a waterbody can accept and still meet the state's Water Quality Standards for public health and healthy ecosystems.

A report "*Massachusetts Year 2012 Integrated List of Waters*" by the - Massachusetts Department of Environmental Protection, Bureau of Resource Protection describes Porter Lake, as 27.931 acres and Porter Lake West, as 5.036 acres both with (Non-Native Aquatic Plants), Aquatic Plants (Macrophytes), Excess Algal Growth.

The ***Proposed Alternative*** will have direct effect on the existing building.

#### 3.5.1 *Potential Impacts*

The Proposed Alternative is not the type of activity that triggers a permit. The renovation of building will have no permanent effect on the TMDL since it does not involve working within the lake.

#### 3.5.2 *Need for Mitigation*

During renovation of the building Best Management Practices to control the release of sediment shall be used.

### 3.6 FLOODPLAINS

A floodplain is an area of land adjacent to a stream or river that stretches from the banks of its channel to the base of the enclosing valley walls and experiences flooding during periods of high discharge. Executive Order 11988 directs federal agencies to assume leadership in avoiding direct or indirect support of development in the 100 year floodplain.

The ***Proposed Alternative*** will have direct effect on the existing building and is discussed further.

### 3.6.1 *Potential Impacts*

Per Flood Insurance Rate Map (FIRM) number 25013C 0404E, effective July 16, 2013, the site is located outside the floodplain and the activity does not affect floodplain values. (See Appendix A-3)

### 3.6.2 *Need for Mitigation*

None identified.

## 3.7 WETLANDS

A wetland is a land area that is saturated with water, either permanently or seasonally, such that it takes on the characteristics of a distinct ecosystem. Executive Order 11990 requires federal agencies to avoid adverse impacts to wetlands to the extent possible. Section 404 of the Clean Water Act (CWA) establishes a wetland permit program administered by the U.S. Army Corps of Engineers (USACE).

The ***Proposed Alternative*** will have direct effect on the existing building.

### 3.7.1 *Potential Impacts*

There will be no long term impacts to the wetlands.

### 3.7.2 *Need for Mitigation*

During renovation of the building Best Management Practices to control the release of sediment must be used.

## 3.8 THREATENED AND ENDANGERED SPECIES

The Natural Heritage & Endangered Species Program (NHESP), part of the Massachusetts Division of Fisheries and Wildlife, is one of the programs forming the Natural Heritage network. NHESP is responsible for the conservation and protection of hundreds of species that are not hunted, fished, trapped, or commercially harvested in the state. The Program's highest priority is protecting the vertebrate and invertebrate animals and native plants that are officially listed as Endangered, Threatened or of Special Concern in Massachusetts.

The site was plotted on the US FWS critical habitat mapper and did not fall within a designated habitat. NHESP maintains the BioMap2. The BioMap2 is a statewide plan for conserving the most important habitats and ecosystems in Massachusetts. It incorporates the latest concepts of ecological resilience in the context of a changing climate. This comprehensive, multi-scale conservation plan will protect not only current biodiversity, but also ensure healthy ecosystems for the future. The BioMap2 program maintains maps of Critical Natural Landscapes. The site was plotted on the BioMap2 and does not fall within a designated area. (See Appendix A-2)

The ***Proposed Alternative*** will have direct effect on the existing building.

### 3.8.1 *Potential Impacts*

There are no identified impacts to Endangered or Threatened Species or their habitats.



### 3.8.2 *Need for Mitigation*

None identified.

## 3.9 ECOSYSTEMS, FISH AND WILDLIFE

The biological make up of Forest Park includes a great diversity in plant and animal makeup and their supporting habitats and natural communities. The ponds are especially rich in plant and animal species including insects, frogs and snapping turtles.

The ***Proposed Alternative*** will have direct effect on the existing building.

### 3.9.1 *Potential Impacts*

Short-term phases of construction and long-term re-development will have no significant effect on wildlife habitat. The natural functions of the site will not be significantly altered as a result of the ***Proposed Alternative***.

### 3.9.2 *Need for Mitigation*

None identified.

## 3.10 HISTORIC AND CULTURAL RESOURCES

### 3.10.1 *Historic Resources*

In 1884, Springfield resident O.H. Greenleaf offered 65 acres for the establishment of a park to be named Forest Park. Shortly after, approximately 178 acres were donated by wealthy philanthropist Everett Hosmer Barney. The park was designed by renowned architect Frederick Law Olmstead. Initially, Barney made his fortune as a Civil War arms producer and later as a businessman, developing clamp-on ice skates and roller skates. In 1890 Barney built an elaborate, turreted 2 ½-story Victorian mansion on a hill at the west end of his estate, which is now Forest Park. The Barney Mansion featured a spectacular view of the Connecticut River and Metro Center Springfield. Greenleaf and Barney convinced several of their wealthy friends and neighbors to donate much of the remaining land that would become the 735-acre Forest Park. The bulk of this land was, at the time, in the town of Longmeadow, Massachusetts. Ultimately, Longmeadow ceded control of the park to the City of Springfield.

The Barney Mansion was used for park events until the early 1950s, by which time it was considered a fire hazard due to its lack of sprinklers. In the 1950s about fifty (50) acres of the park, including fifteen (15) acres of the former Barney estate, were taken to construct the Springfield/Longmeadow sections of Interstate 91, which severed the places' connections to the Connecticut River. Barney's house stood atop the hill at the northwest corner of the park, and the highway construction may have threatened its foundations, so assuming it was razed. The mausoleum of Barney's son and a carriage house still survive from the estate, along with many remnants of an extensive arboretum and water gardens planted by Barney around 1900. The developer of the Forest Park neighborhood continued this theme by planting many interesting specimen trees, especially around Magnolia Terrace. This historic neighborhood with many fine examples of Victorian houses abuts the park on the north, while a small enclave of Springfield's stately brick colonial homes and the town of Longmeadow, Massachusetts borders the park to the south.

The EOCS Center was built in 1936 by the Works Progress Administration (WPA) as the “Warming House”. The “Warming House” was built to replace the original skate house which was located near the same location to the southwest. Until 1970, the building served as the skate house for Porter Lake, a man-made lake located directly south of the structure. The building underwent a series of updates and changes around 1970, included installation of a concrete foundation. Currently the center exists as steel frame with wood stud walls and log cabin style siding. In 1971 the building began serving as the headquarters for the ECOS Center with Clifford A. Phaneuf serving as the first coordinator. In 2008 the Warming House became officially referred to as the Clifford A. Phaneuf Environmental Center.

### 3.10.2 Archaeological Resources

In 1986 an archaeological survey was conducted within Forest Park. Based on the report for this survey (MHC Report # 25-676): *Archaeological Study of Forest Park*, four (4) Native American sites were identified. These sites have been recorded as; 19-HD-292, 19-HD-293, 19-HD-294, and 19-HD-295. A map has been provided showing each sites location within Forest Park. On this map; 19-HD-292 is identified as “Unit A”, 19-HD-293 is identified as “Unit C”, 19-HD-294 is identified as “Unit H”, and 19-HD-295 is identified as “Unit I”. According to the site forms the following information has been obtained for each site;

#### 19-HD-292 – Beach Spring Site

- Site located 22-65 cm below surface
- Site roughly bounded by 30 x 20 m<sup>2</sup>
- Soil type: Fine Sandy Loam (undisturbed)
- Nearest water source: Unnamed Brook 200 ft. away
- 7 STPs yielded 166 artifacts, including; 2 quartz biface fragments, 1 quartz biface fragment, 1 quartz utilized flake, 1 rhyolite groundstone tool, and several antler fragments

#### 19-HD-293 – Washington Road Site

- Site classified as a workshop
- Site located 18-65 cm below surface
- Site consist of several small 3 x 5 m<sup>2</sup> areas
- Area disturbed from plowing
- Nearest water source: Unnamed Brook 700 ft. away
- 9 STPs yielded flake scatter and fire-cracked rock

#### 19-HD-294 – Pecousic Brook Site

- Site classified as a workshop
- Site located 4-80 cm below surface
- Soil type: Fine Sandy Loam
- Nearest water source: Pecousic Brook 150 ft. away
- 7 STPs yielded 78 argillaceous mudstone flakes and 1 quartz flake

#### 19-HD-295 – Trout Pond Site

- Site classified as a workshop

- Site located 1-85 cm below surface
- Area disturbed by fill and road construction
- Nearest water source: Trout Brook 150 ft. away
- 12 STPs yielded flake scatter and associated fire-cracked rock

A fifth archaeological site, 19-HD-83, has been identified within Forest Park but it seems as though it was recorded prior to the 1986 survey. Though the 1986 project area survey unit map indicates there was a survey unit (“B”) located where 19-HD-83 has been identified, the number issued to the site indicates the site was inventoried at an earlier date. As the inventoried numbers are sequential by county, it is reasonable to believe that sites 19-HD-292, 293, 294, and 295 were all discovered during the same survey in which distance warranted separate site numbers. If site 19-HD-83 was identified during the 1986 survey it would be numbered in the same sequence as the other sites found within Forest Park. Therefore, it can be concluded that even if there was testing performed at the area identified as “Unit B” the site 19-HD-83 was already known to exist at this location. According to the site form, the following information has been obtained for site 19-HD-83 (the site report was not accessible, a copy of the report is located at the Bronson Museum of Attleboro-MAS # M29-SE-33);

- King Phillip’s Stockade Site
- Located via Cultural Resource Management survey
- Site boundary: 100 x 250 m<sup>2</sup>
- Soil type: Windsor Loamy Sand
- 63 artifacts were identified, including; 1 chert edge tool fragment, 1 core, and thinning and shaping flakes

The site records indicate that even in disturbed areas sites can still remain intact if natural soils are reached. However, the location of the ECOS Center is has been heavily disturbed over the years and the likelihood for natural soils is very low. A majority of the recorded sites appear to be located in Windsor loamy sand and it can be inferred that if such soils are intact within the project area in level, well-drained locations, than those areas would contain archaeological sensitivity.

The ***Proposed Alternative*** will have direct effect on the existing building.

### *3.10.3 Potential Impacts*

To address the archaeological sensitivity, FEMA through consultation with MHC has conditioned this project with the requirement that an archaeological monitor be present on site during construction activities to identify if any cultural resources are uncovered during construction. If they are, then work will cease immediately and FEMA, MHC and MEMA will be contacted in order to properly address the steps needed to move forward.

### *3.10.4 Need for Mitigation*

FEMA has consulted with MHC to fulfill Section 106 of the NHPA responsibilities. The end result is a determination that the ECOS Center at Forest Park, or the former Porter Lake Skate House is not eligible for inclusion on the National Register and therefore this undertaking results in a determination of No Adverse Effect to historic resources. This determination was made with the condition, identified previously, that the City hire a qualified archaeological monitor to be present during construction. (See Appendix D)

If human remains are discovered during the course of project implementation, the City shall immediately stop construction activities in the vicinity of the discovery and take all reasonable measures to avoid or minimize harm until FEMA concludes consultation with the City, the State Historic Preservation Office, and applicable Tribal Historic Preservation Officer. These parties shall consult to determine the appropriate course of action and disposition of remains in accordance with applicable local, state, federal and tribal regulations.

### 3.11 EXECUTIVE ORDER (EO) 12898 ENVIRONMENTAL JUSTICE

EO 12898 requires that federal agencies identify and address disproportionately high and adverse human health or environmental effects on minority or low income populations posed by their activities, policies, or programs.

The *Proposed Alternative* will have direct effect on the existing building.

#### 3.11.1 *Potential Impacts*

The ECOS program is already in operation and the renovation of the facility will improve opportunities for the communities in the City any will have no disproportionate human health or environmental risks to minority or low income populations posed by their activities, policies, or programs.

#### 3.11.2 *Need for Mitigation*

None identified.

### 3.12 HAZARDOUS AND SOLID WASTE

Hazardous waste is unwanted materials that pose substantial or potential threats to public health or the environment. In the United States, the treatment, storage and disposal of hazardous waste is regulated under the Resource Conservation and Recovery Act (RCRA). RCRA was amended in 1984 by the Hazardous and Solid Waste Amendments (HWSA).

The *Proposed Alternative* will have direct effect on the existing building.

#### 3.12.1 *Potential Impacts*

Prior to selective demolition associated with expansion, the City shall follow all applicable local, state, and federal laws, regulations, and requirements for the abatement and disposal of lead, asbestos, and other routinely encountered hazardous substances. If there is an unusual material encountered or there is an extraordinary amount of lead, asbestos, or other routinely encountered material, the City will contact the Massachusetts Emergency Management Agency (MEMA) and FEMA. The City will also contact the relevant agency with authority for regulation of the material.

Hazardous substances may include, but are not limited to propane cylinders, paints and solvents, coolants containing chlorofluorocarbons (CFCs), used oil, other petroleum products, used oil filters, fuel filters, cleaning chemicals, laboratory reagents, pesticides, batteries, and unlabeled tanks and containers. Equipment that may include these materials are ice machines, refrigerators, generators, computers, televisions, mercury switches, fluorescent lights, fluorescent light ballasts, sandblast units, paint sprayers, etc.

### *3.12.2 Need for Mitigation*

Prior to selective demolition associated with expansion, hazardous materials and special wastes will be segregated and disposed of in accordance with all applicable local, state, and federal laws, regulations, and requirements. Construction and demolition debris will be segregated and disposed of in accordance with all applicable local, state, and federal laws, regulations, and requirements.

The City shall manage and dispose of excavated soils and waste materials in accordance with applicable local, state, and federal regulations. If hazardous/contaminated materials are discovered during construction, the work shall cease until the City can implement appropriate procedures and secure additional permits if needed.

## 3.13 NOISE

The ***Proposed Alternative*** will have direct effect on the existing building.

### *3.13.1 Potential Impacts*

There may be a temporary increase in noise during construction. No permanent increase in ambient noise will occur since use will remain about the same as under current uses.

### *3.13.2 Need for Mitigation*

Construction will take place only during normal business hours and all equipment will meet local, state, and federal noise regulations. Idling time shall be limited onsite.

## 3.14 TRAFFIC IMPACTS

The ***Proposed Alternative*** will have direct effect on the existing building.

### *3.14.1 Potential Impacts*

There will be a temporary increase in construction vehicles during the renovation. After the construction is completed traffic will remain about the same as under current uses.

### *3.14.2 Need for Mitigation*

None identified.

## 3.15 PUBLIC SERVICES AND UTILITIES

The ***Proposed Alternative*** will have direct effect on the existing building and is discussed further.

### *3.15.1 Potential Impacts*

None identified

### *3.15.2 Need for Mitigation*

None identified.

## 3.16 PUBLIC HEALTH AND SAFETY

The ***Proposed Alternative*** will have direct effect on the existing building.

*3.16.1 Potential Impacts*

None identified

*3.16.2 Need for Mitigation*

Construction vehicles and equipment will be stored on site during the project. All construction activities will be performed using qualified personnel and in accordance with the standards specified in Occupational Safety and Health Administration (OSHA) regulations. Appropriate signage will be posted onsite and in the vicinity.

**3.17 CUMULATIVE EFFECTS**

Cumulative effects are those that result from the incremental effect of the Proposed Alternative when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other action (40 C.F.R. 1508.7).

The ***Proposed Alternative*** will have direct effect on the existing building and is discussed further.

*3.17.1 Potential Impacts*

Most of the changed conditions at the site are from the damming of the Pecousic Brook which created the Porter Lake. The current building was built as a skating cabin for the lake. Over time the lake has become naturalized and now supports many animal, fish and amphibian species. The Proposed Alternative will serve the community in substantially the same capacity that it is already serving so no additional cumulative effects are anticipated.

*3.17.2 Need for Mitigation*

None identified.

## **4 PUBLIC INVOLVEMENT**

### **4.1 PUBLIC MEETINGS**

As the lead Federal agency for the NEPA compliance process for the proposed ECOS Center renovations in Springfield, Massachusetts, FEMA's goal is to expedite the preparation and review of NEPA documentation and to be responsive to the community and the purpose and need of the Proposed Action, while meeting the intent of NEPA and complying with all relevant provisions thereof.

The concept and design development process of the ECOS project has been made public for years. Multiple meetings were held, including agency and board/commission meetings, programmatic meetings with stakeholders, and public community workshops dedicated to discussing the improvements to the ECOS Center.

The City of Springfield will notify the public of the availability of the Draft EA and a Draft Finding of No Significant Impact (FONSI) through publication of a notice in the local newspaper, as required. A public comment period will commence on the initial date of the public notice.

After the public review and comment period is completed and substantive comments have been addressed, the Regional Environmental Officer will sign the FONSI of the selected alternative and proceed with the action. The EA and FONSI will then be archived on FEMA's website.

### **4.2 FEMA PUBLICATION OF DRAFT ENVIRONMENTAL ASSESSMENT NOTICE AND REQUEST FOR COMMENT**

Please see Appendix E for a copy of this notice.

## **5 LIST OF PREPARERS**

This document was prepared by:

Anita Uhlan & Marcus Tate  
FEMA Region I, Mitigation Division  
Environmental & Historic Preservation Office (EHP)  
99 High St., 6<sup>th</sup> Floor  
Boston, MA 02110

This document was edited by:

Lydia A. Kachadoorian, RPA  
Acting Regional Environmental Officer (Acting REO)  
FEMA Region I, Mitigation Division  
Environmental & Historic Preservation Office (EHP)  
99 High St., 6<sup>th</sup> Floor  
Boston, MA 02110



## 6 REFERENCES

- CEQ, 2010. Memorandum for Heads of Federal Departments and Agencies. Subject: Draft NEPA guidance on consideration of the effects of climate change and greenhouse gas emissions. Authored by: Nancy H. Sutley, Chair, Council on Environmental Quality, February 18, 2010.
- EO 11988. Executive Order No. 11988. Floodplain Management, May 24, 1977. 42 C.F.R. 26951.
- EO 11990. Executive Order No. 11990. Protection of Wetlands, May 24, 1977. 42 C.F.R. 2691.
- EO 12898. Executive Order No. 12898. Environmental Justice for Low Income and Minority Populations. 1994. 59 C.F.R. 7629.
- FEMA, 2010. Federal Emergency Management Agency Flood Insurance Maps, available online at: [https://msc.fema.gov/webapp/wcs/stores/servlet/info?storeId=10001&catalogId=10001&langId=-1&content=firnetteHelp\\_A&title=FIRMettes](https://msc.fema.gov/webapp/wcs/stores/servlet/info?storeId=10001&catalogId=10001&langId=-1&content=firnetteHelp_A&title=FIRMettes)

## **7 APPENDICES**

### Appendix A Maps and Figures

Figure A-1 Site Location Map

Figure A-2 BioMap2

Figure A-3 Floodplain Insurance Rate Map

Figure A-4 Wetlands Map

### Appendix B Site Photographs

### Appendix C Plans and Drawings

### Appendix D State Historic Preservation Officer letter of concurrence

### Appendix E Public involvement information

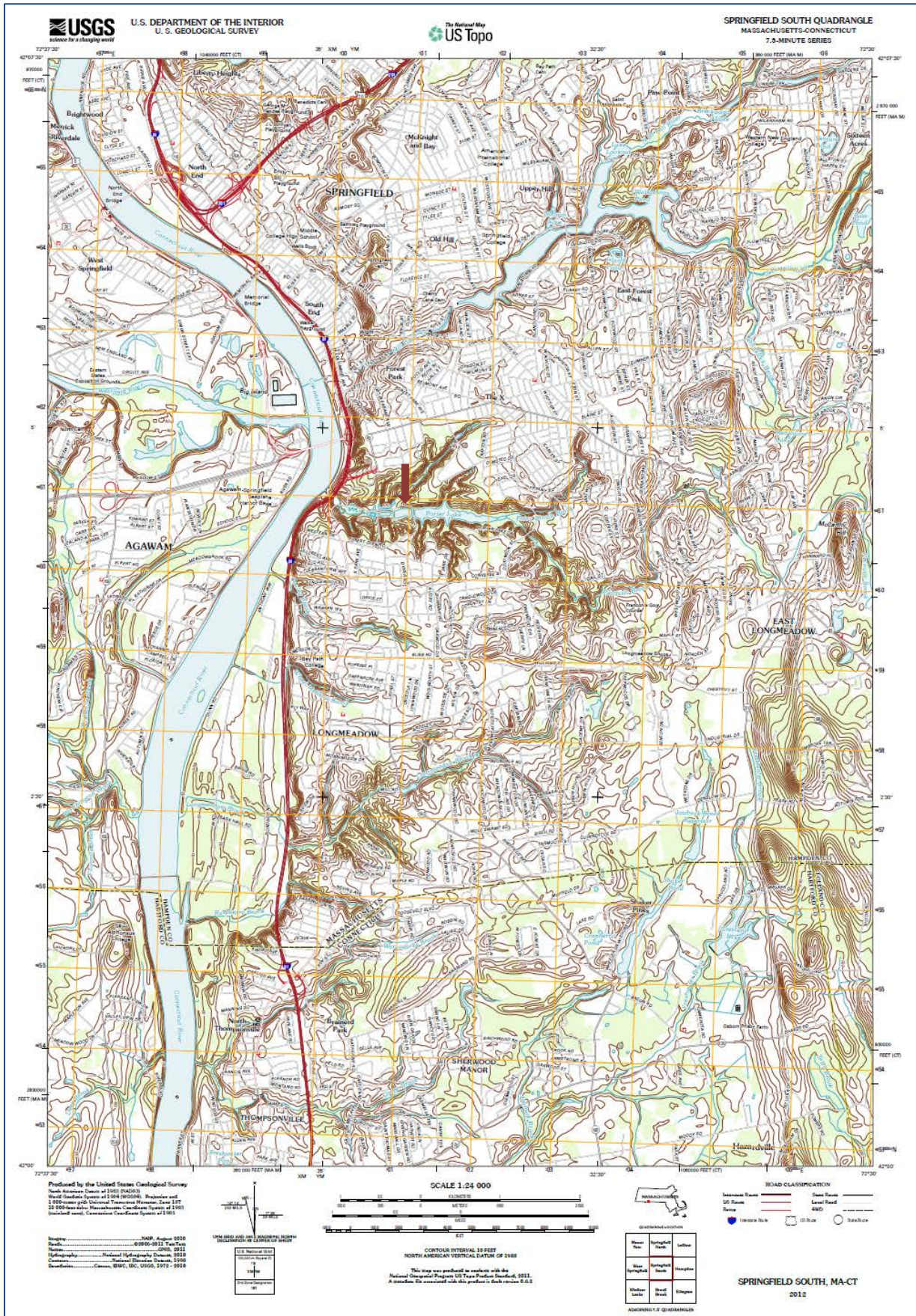
# **APPENDIX A**

## **MAPS AND FIGURES**

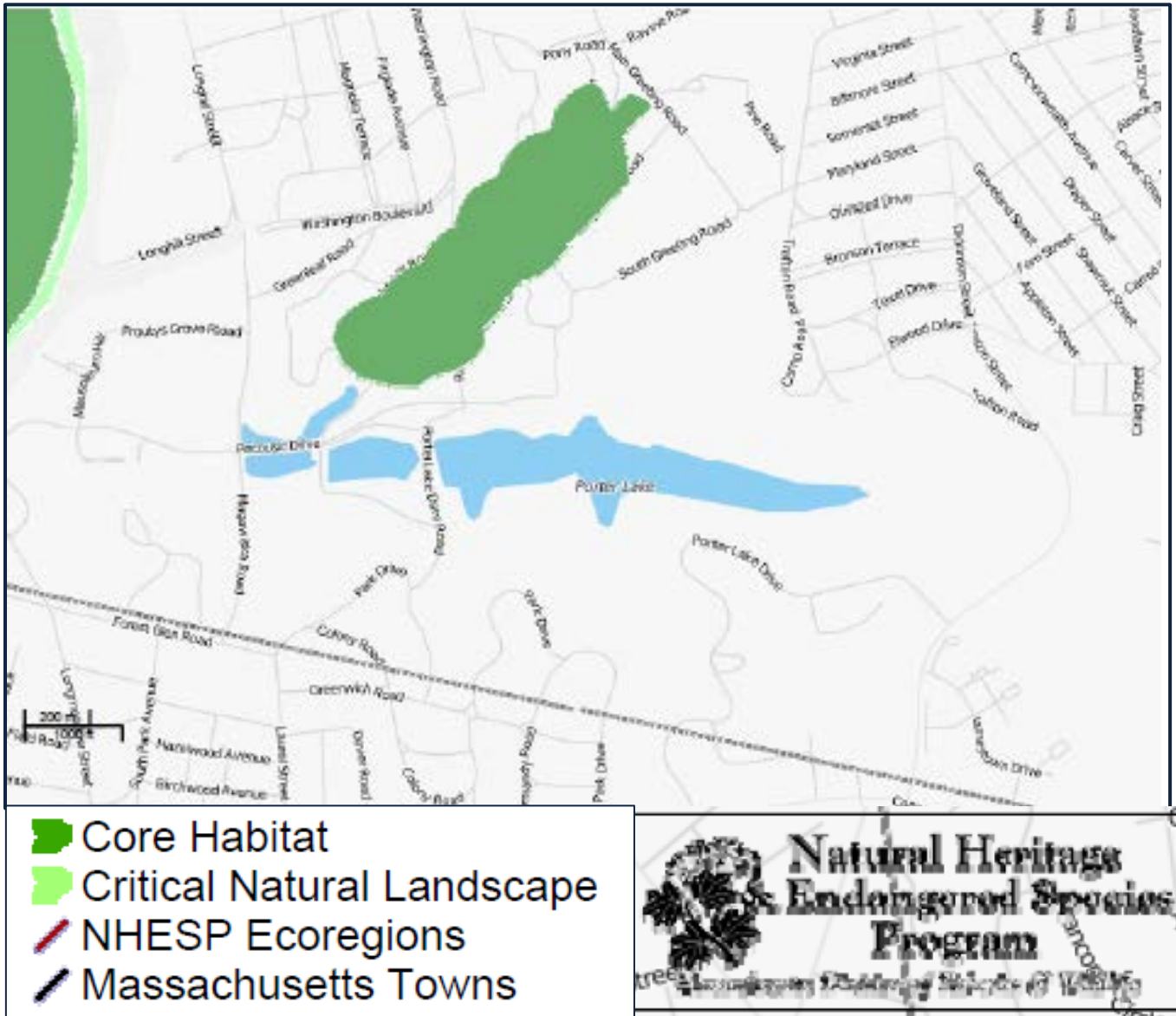
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- Figure A-1 Site Location Map
- Figure A-2 BioMap2
- Figure A-3 Floodplain Insurance Rate Map
- Figure A-4 Wetlands Map

# A-1 Site Location Map



# A-2 BioMap2



# A-3 Floodplain Insurance Rate Map



# A-4 Wetlands Map

ECOS Forest Park

Jul 25, 2013



U.S. Fish and Wildlife Service  
National Wetlands Inventory



## Wetlands

- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands names should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

User Remarks:

# **APPENDIX B**

## **PHOTOGRAPHS**

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Photo Key: ECOS Center Renovation

Applicant: City of Springfield	Project Name: ECOS Center Renovation and Expansion
County: Hampden	Disaster and PW Number DR-1994-MA PW# 290
Project Location and Lat / Long: Forest Park, Springfield MA N42.07446 W-72.56839	



Picture #1: ECOS Center looking northeast across Porter Lake from Porter Lake Dam Road



Picture #2: ECOS Center looking east from walkway off Porter Lake Dam Road

Applicant: City of Springfield	Project Name: ECOS Center Renovation and Expansion
County: Hampden	Disaster and PW Number DR-1994-MA PW# 290
Project Location and Lat / Long: Forest Park, Springfield MA N42.07446 W-72.56839	



Picture #3: West side looking east from Porter Lake Dam Road



Picture #4: Close-up of west side looking northeast

Applicant: City of Springfield	Project Name: ECOS Center Renovation and Expansion
County: Hampden	Disaster and PW Number DR-1994-MA PW# 290
Project Location and Lat / Long: Forest Park, Springfield MA N42.07446 W-72.56839	



Picture #5 South side looking east/northeast



Picture #6: North side looking west/southwest

Applicant: City of Springfield	Project Name: ECOS Center Renovation and Expansion
County: Hampden	Disaster and PW Number DR-1994-MA PW# 290
Project Location and Lat / Long: Forest Park, Springfield MA N42.07446 W-72.56839	



Picture #7: East side looking north from walking trail



Picture #8: East side looking northwest from walking trail

Applicant: City of Springfield	Project Name: ECOS Center Renovation and Expansion
County: Hampden	Disaster and PW Number DR-1994-MA PW# 290
Project Location and Lat / Long: Forest Park, Springfield MA N42.07446 W-72.56839	



Picture #9 Close-up of architecture on south side

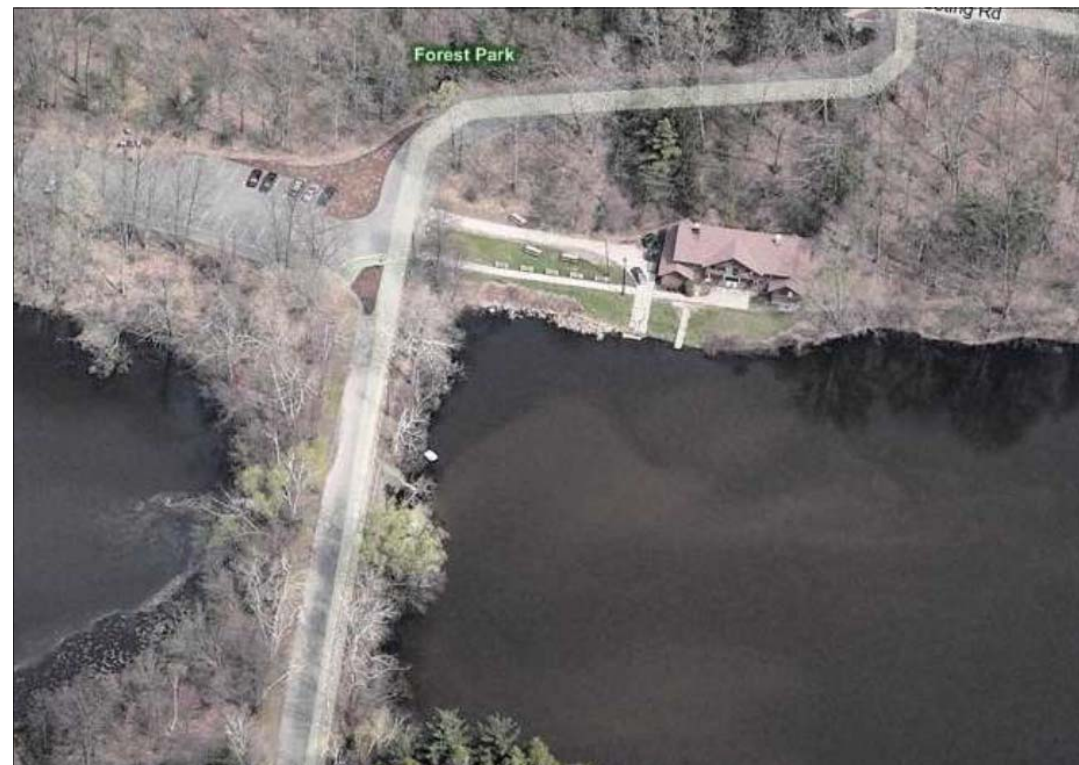


Picture #10: Close-up of architecture

Applicant: City of Springfield	Project Name: ECOS Center Renovation and Expansion
County: Hampden	Disaster and PW Number DR-1994-MA PW# 290
Project Location and Lat / Long: Forest Park, Springfield MA N42.07446 W-72.56839	



Picture #11 Parking area looking west from Porter Lake Dam Road



Picture #12: Aerial from Bing.com

**APPENDIX C**

**PLANS AND DRAWINGS**

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# Clifford A. Phaneuf Environmental Center

Forest Park 100 Park Drive Springfield, MA 01106

## CLIENT

The Springfield Department of  
Capital Asset Construction and  
The Springfield Department of  
Parks, Buildings & Recreation  
Management



19 Dec. 2011

## List of Drawings

### ARCHITECTURAL

D1.1- D1.3	Demolition Plans
A1.1- A1.5	Building Plans
A2.0- A2.1	Exterior Elevation
A3.0- A3.2	Interior Elevations
A4.0	Sections
A5.0- A5.2	Details
A6.0- A6.1	Acoustical Plans

### LANDSCAPE

EX-1	Existing Conditions Survey Plan
C-1 - C-7	Plans
C-8 - C-10	Details
L-1	Landscape Plan

### MECHANICAL, ELECTRICAL, PLUMBING

E0.1, E1.1, E21.1, E3.1,	
ES.1	Electrical
M0.1, M1.1, M1.2, M2.1,	
M3.1, M4.1 & ME.1	Mechanical
P0.1 - P0.2, P1.1	Plumbing

### STRUCTURAL

S1 - S3	Structural Plans
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### FIRE PROTECTION

FP1.0-FP4.0	Site Plan, Sections, Details Plans
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## ARCHITECT

JABLONSKI | DEVRIESE  
ARCHITECTS

29 Elliot Street  
Springfield, MA 01105  
p. 413 747 5285  
f. 413 747 0297

## LANDSCAPE DESIGN

GZA GeoEnvironmental, Inc  
Engineers and Scientists

1350 Main Street, Suite 1400  
Springfield, MA 01103  
p. 413 727 2100  
f. 413 732 1249

## MECH, ELEC, PLUMB

Gaskell Associates  
Consulting Engineers

120 Maple Street, Suite 304  
Springfield, MA 01103  
p. 413 519 7542  
f. 413 736 1294

## STRUCTURAL ENG

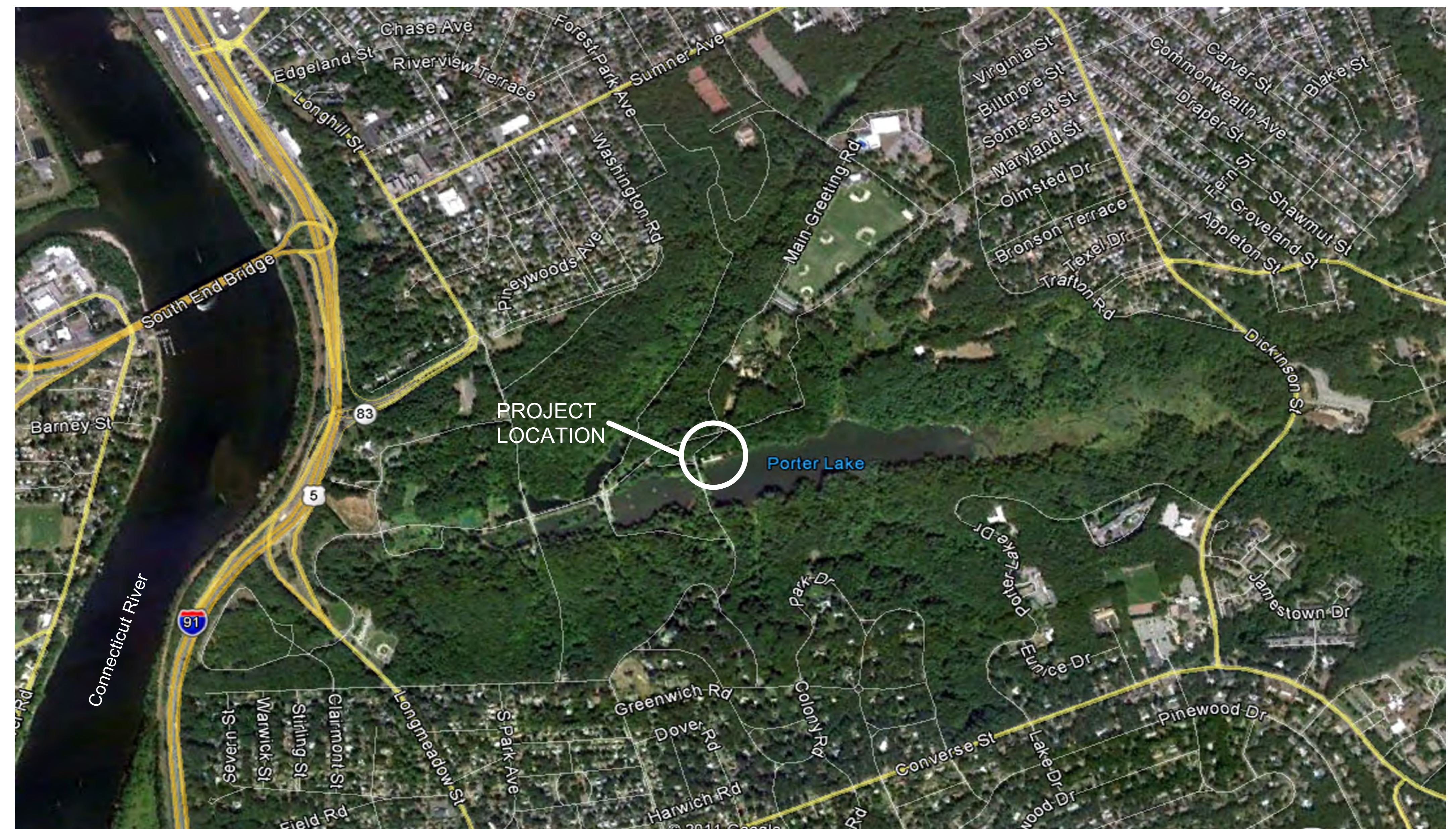
Ryan S. Hellwig, PE

28 Aldrich Street  
Northampton, MA 01083  
p. 413 584 4594

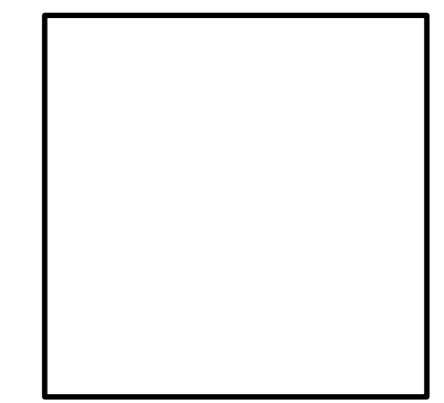
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Rybak Engineering Inc

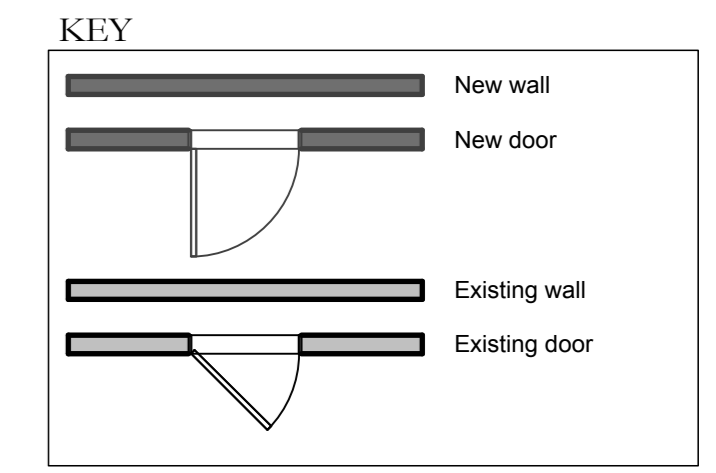
132 Forest Ave  
Warren, MA 01083  
p. 413 436 5500  
f. 413 436 5563



LOCUS MAP



Consultants



Clifford A. Phaneuf  
Environmental Center

Forest Park

100 Park Drive  
Springfield, MA 01106

First Floor Plan

Revisions:

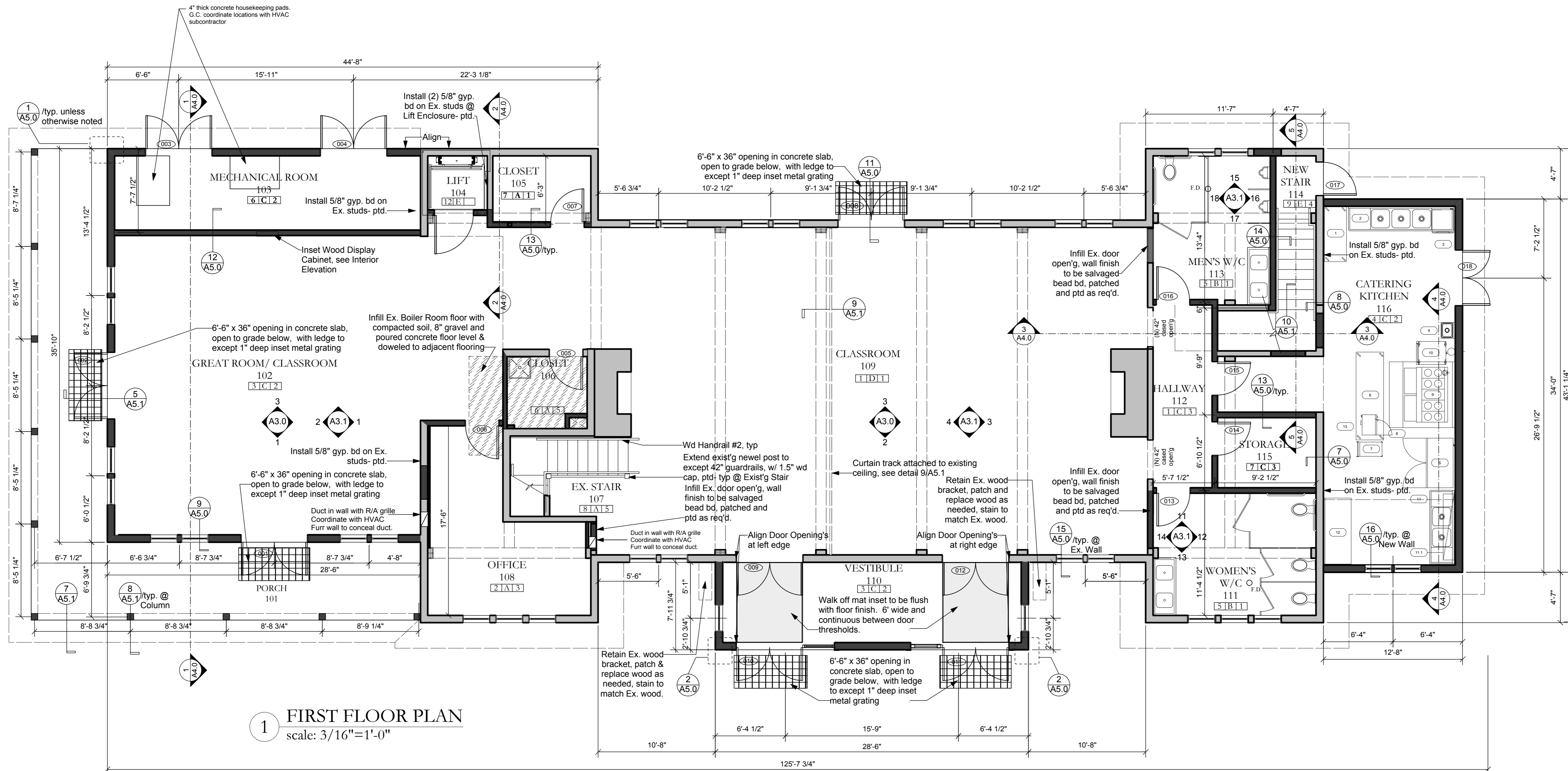
- Revision 1
- Revision 2
- Revision 3
- Revision 4
- Revision 5

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File Name: plsh\_plan\_12.08.11  
Drawn By: SS, LP  
Reviewed By: LP  
Scale: 1/8" = 1'-0"

Drawing No.

A1.1

FEMA SET 7/8/13



1 FIRST FLOOR PLAN  
scale: 3/16"=1'-0"

ROOM FINISH SCHEDULE

The finish in each room is indicated by a three digit code. The code is indicated in a block under the room title.

- The first digit, a number, indicates the finish for the floor surfaces.
- The second digit, a letter, represents the finish treatment of the wall surfaces.
- The third digit, a number, indicates the ceiling finish.

FLOOR SCHEDULE

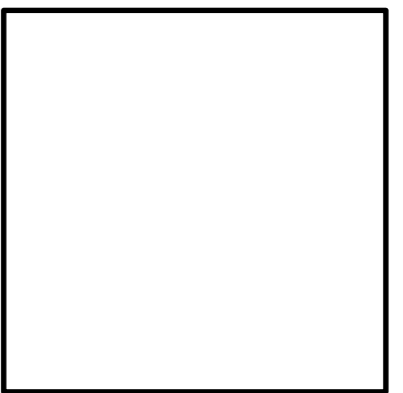
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2. PATCH & SEAL EX. CONCRETE, ADD FLOORSORE CERT. LINOLEUM SHEET FLOOR'S
3. NEW SEALED CONCRETE, NEW FLOORSORE CERT. TILE (T-1)
4. NEW SEALED CONCRETE, NEW FLOORSORE CERT. TILE (T-3)
5. PATCH & SEAL EX. CONCRETE ADD FLOORSORE CERT. TILE (T-2)
6. NEW SEALED CONCRETE
7. PATCH & SEAL EX. CONCRETE
8. REFINISH & PAINT EX. W/D TREADS & RISERS
9. NEW FLOORSORE CERTIFIED LINOLEUM TREADS & RISERS, VINYL NOSING
10. REMOVE EX. FLOOR'G TO SUBFLOOR, CLEAN AND LEVEL TO ACCEPT FLOORSORE CERT. SHEET LINOLEUM
11. REMOVE EX. FLOOR'G TO SUBFLOOR, CLEAN AND LEVEL TO ACCEPT FLOORSORE CERT. TILE (T-2)
12. FLOORSORE CERT. LINOLEUM SHEET
13. NEW SUBFLOOR

WALL SCHEDULE

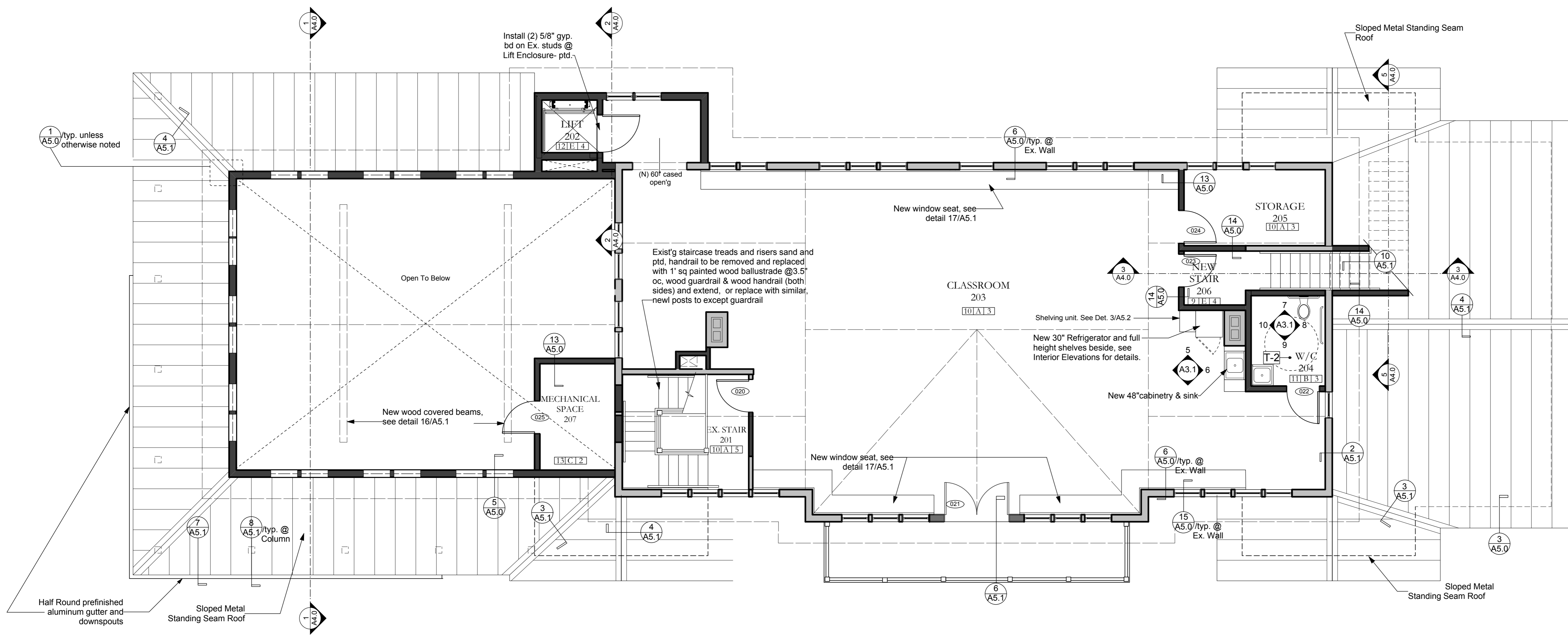
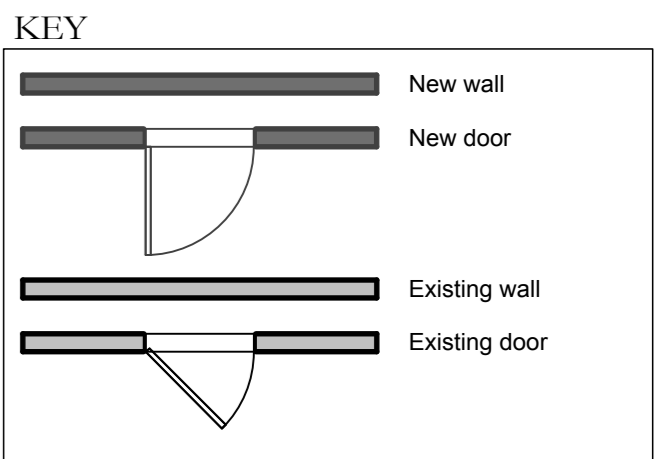
- A. REMOVE EX. BEAD BOARD WALLS, REPLACE W/ PTD. (ZERO VOC) GYP. BD.
- B. REMOVE EX. BEAD BOARD, REPLACE W/ GYP. BD., TILE TO HT. 4'-8" AFF. WALL ABOVE PTD. (ZERO VOC) GYP. BD.
- C. NEW PTD. (ZERO VOC) GYP. BD.
- D. REMOVE EX. BEAD BOARD WALLS, REPLACE W/ PTD. (ZERO VOC) GYP. BD., EAST & WEST WALLS TO HAVE SALVAGED (LOW VOC) PTD. BEAD BOARD.
- E. NEW PTD. (ZERO VOC) GYP. BD. - 2 LAYERS

CEILING SCHEDULE

1. PATCH & PTD. (ZERO VOC) EX. BEAD BOARD W/ PTD. (ZERO VOC) GYP. BD.
2. NEW PTD. (ZERO VOC) GYP. BD.
3. REMOVE EX. CEIL'G REPLACE W/ NEW PTD. (ZERO VOC) GYP. BD.
4. NEW PTD. (ZERO VOC) GYP. BD. - 2 LAYERS
5. REMOVE EX. CEIL'G REPLACE W/ NEW PTD. (ZERO VOC) GYP. BD. - 2 LAYER



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1 SECOND FLOOR PLAN  
scale: 3/16"=1'-0"

Clifford A. Phaneuf  
Environmental Center

Forest Park

100 Park Drive  
Springfield, MA 01106

Second Floor Plan

Revisions:

- Revision 1
- Revision 2
- Revision 3
- Revision 4
- Revision 5

Date: 12/19/11  
File Name: plsh\_plan\_12.08.11  
Drawn By: SS, LP  
Reviewed By: SJ  
Scale: 1/8" = 1'-0"

Drawing No.

A-1.2

ROOM FINISH SCHEDULE

The finish in each room is indicated by a three digit code. The code is indicated in a block under the room title.  
- The first digit, a number, indicates the finish for the floor surfaces.  
- The second digit, a letter, represents the finish treatment of the wall surfaces.  
- The third digit, a number, indicates the ceiling finish.

FLOOR SCHEDULE

1. PATCH & SEAL EX. CONCRETE ADD FLOORSORE CERT. TILE (T-1)
2. PATCH & SEAL EX. CONCRETE. ADD FLOORSORE CERT. LINOLEUM SHEET FLOORG
3. NEW SEALED CONCRETE. NEW FLOORSORE CERT. TILE (T-1)
4. NEW SEALED CONCRETE. NEW FLOORSORE CERT. TILE (T-3)
5. PATCH & SEAL EX. CONCRETE ADD FLOORSORE CERT. TILE (T-2)
6. NEW SEALED CONCRETE
7. PATCH & SEAL EX. CONCRETE
8. REFINISH & PAINT EX. W/O TREADS & RISERS
9. NEW FLOORSORE CERTIFIED LINOLEUM TREADS & RISERS. VINYL NOSING
10. REMOVE EX. FLOORG TO SUBFLOOR. CLEAN AND LEVEL TO ACCEPT FLOORSORE CERT. SHEET LINOLEUM
11. REMOVE EX. FLOORG TO SUBFLOOR. CLEAN AND LEVEL TO ACCEPT FLOORSORE CERT. TILE (T-2)
12. FLOORSORE CERT. LINOLEUM SHEET
13. NEW SUBFLOOR

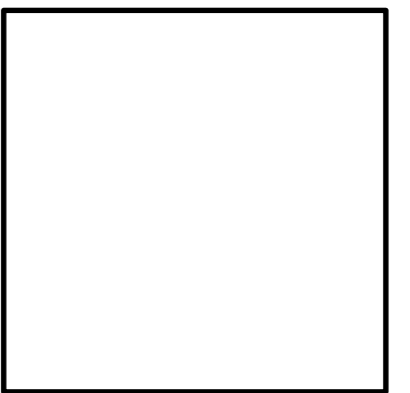
WALL SCHEDULE

- A. REMOVE EX. BEAD BOARD WALLS. REPLACE W/ PTD. (ZERO VOC) GYP. BD.
- B. REMOVE EX. BEAD BOARD. REPLACE W/ GYP. BD. TILE TO HT. 4'-8" AFF. WALL ABOVE PTD. (ZERO VOC) GYP. BD.
- C. NEW PTD. (ZERO VOC) GYP. BD.
- D. REMOVE EX. BEAD BOARD WALLS. REPLACE W/ PTD. (ZERO VOC) GYP. BD. EAST & WEST WALLS TO HAVE SALVAGED (LOW VOC) PTD. BEAD BOARD
- E. NEW PTD. (ZERO VOC) GYP. BD. - 2 LAYERS

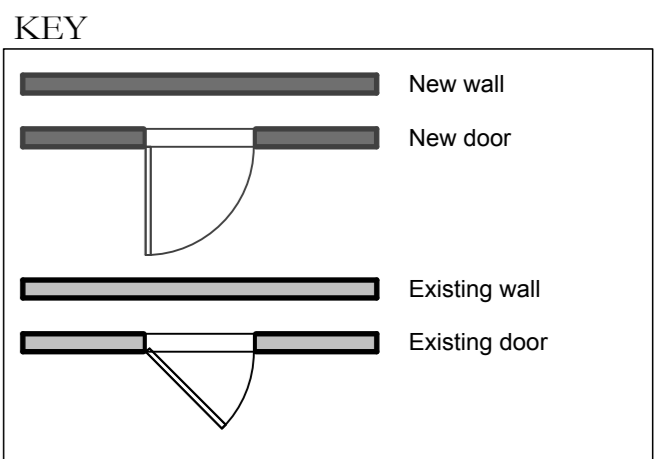
CEILING SCHEDULE

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2. NEW PTD. (ZERO VOC) GYP. BD.
3. REMOVE EX. CEIL'G REPLACE W/ NEW PTD. (ZERO VOC) GYP. BD.
4. NEW PTD. (ZERO VOC) GYP. BD. - 2 LAYERS
5. REMOVE EX. CEIL'G REPLACE W/ NEW PTD. (ZERO VOC) GYP. BD. - 2 LAYER

FEMA SET 7/8/13



Consultants



Clifford A. Phaneuf  
Environmental Center

Forest Park

100 Park Drive  
Springfield, MA 01106

Roof Plan

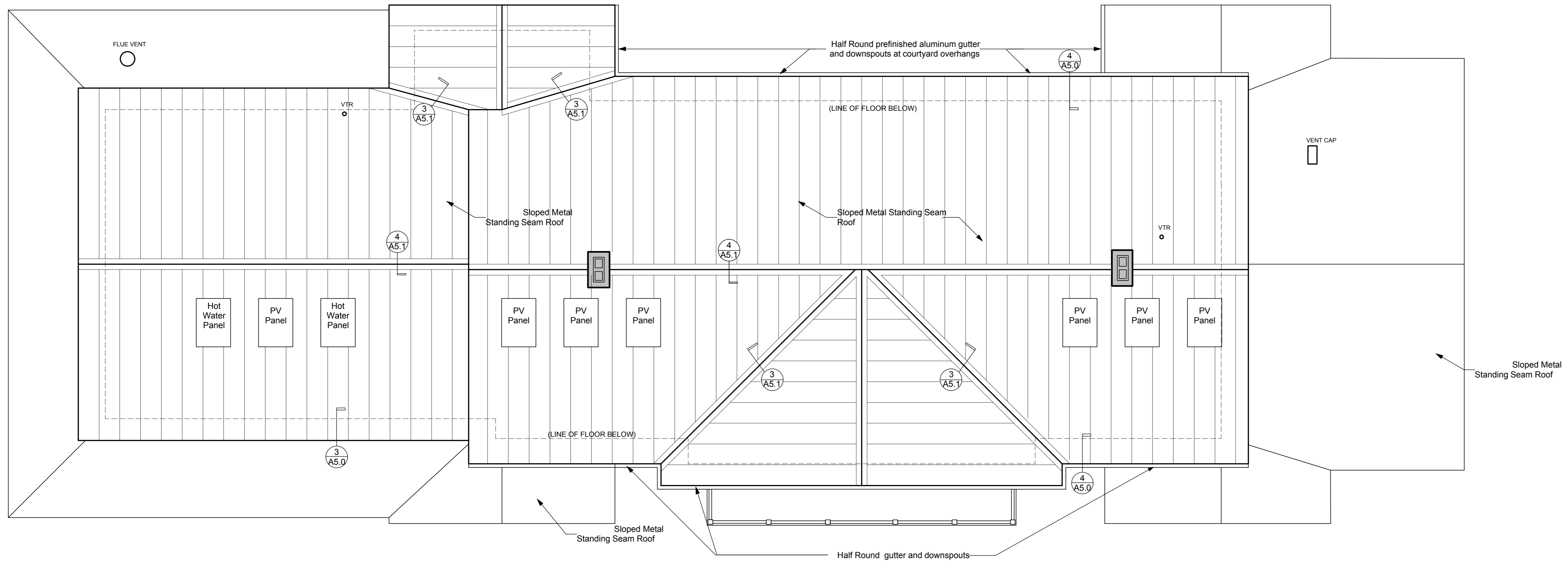
Revisions:

- Revision 1
- Revision 2
- Revision 3
- Revision 4
- Revision 5

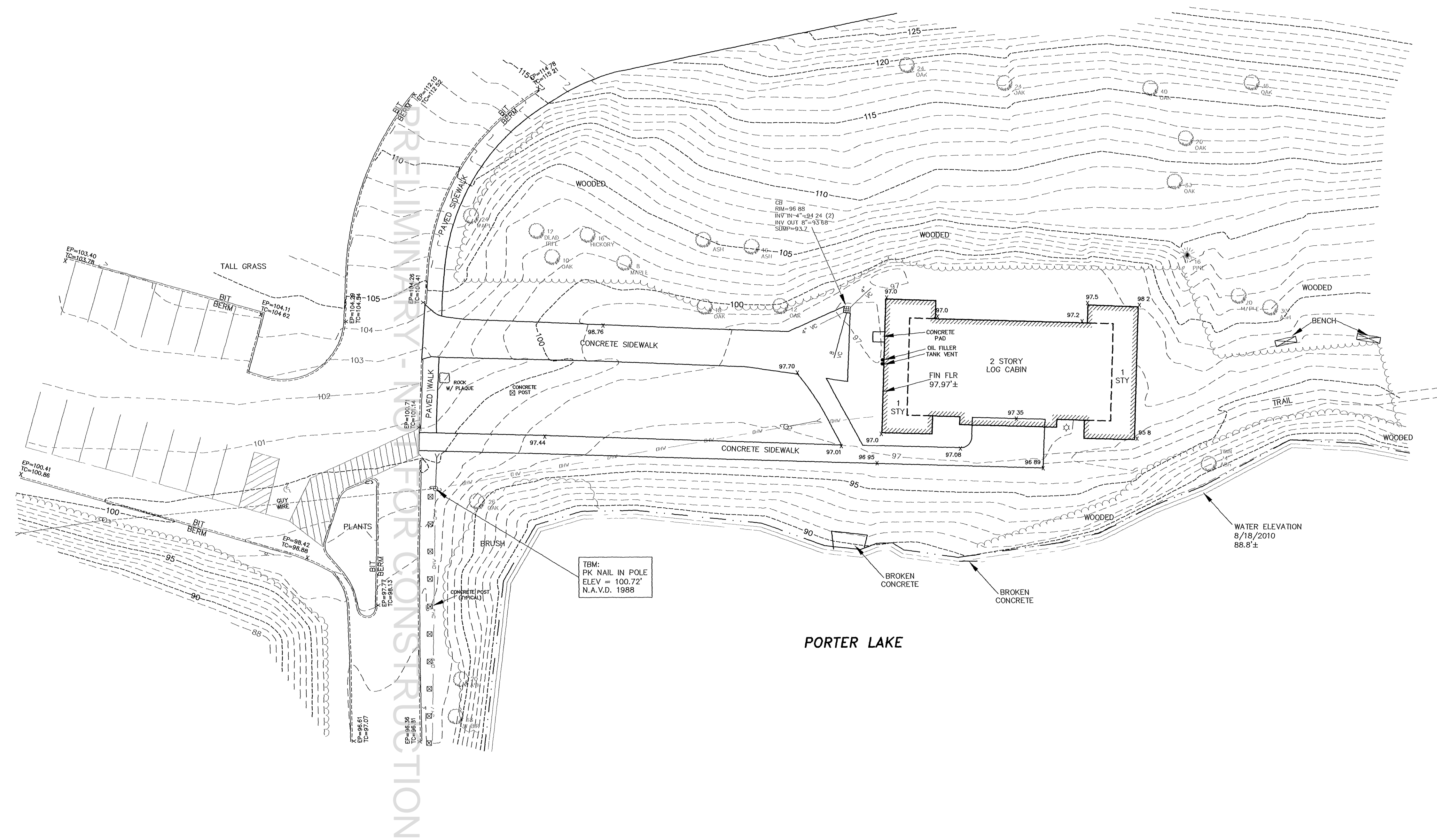
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Drawn By: SS, LP  
Reviewed By: SJ  
Scale: 1/8" = 1'-0"

Drawing No.

**A-1.3**



1 ROOF PLAN  
scale: 3/16"=1'-0"



PRELIMINARY - NOT FOR CONSTRUCTION

TM: PK NAIL IN POLE  
ELEV = 100.72'  
N.A.V.D. 1988

WATER ELEVATION  
8/18/2010  
88.8'±

EX-1

- NOTES:
- UNDERGROUND UTILITY LOCATIONS SHOWN HEREON ARE BASED UPON SURFACE FEATURES AS LOCATED BY SURVEY AND AVAILABLE RECORD DATA, AND ARE APPROXIMATE. ACTUAL LOCATIONS SHOULD BE VERIFIED WITH THE APPROPRIATE UTILITY COMPANY AND/OR MUNICIPAL DEPARTMENT PRIOR TO FINAL DESIGN AND/OR CONSTRUCTION.
  - ELEVATIONS ARE BASED ON THE 1988 N.A.V.D. SYSTEM.

LEGEND			
BOUND FOUND	□	LIGHT POLE	☆
IRON PIPE FOUND	○	HYDRANT	⌘
IRON ROD FOUND	●	WATER GATE	⊙
IRON PIPE SET	●	GAS GATE	⊙
CATCH BASIN	⊞	CHAIN LINK FENCE	— · — · —
DRAINAGE MANHOLE	⊙	EDGE OF WOODS	~~~~~
SANITARY MANHOLE	⊙	SPOT GRADE	x 99.4
UTILITY POLE	⊙	CONTOUR	---100---
GUY ANCHOR	⊙		
SIGN	⊙		

THIS SURVEY AND PLAN WERE PREPARED IN ACCORDANCE WITH THE PROCEDURAL AND TECHNICAL STANDARDS FOR THE PRACTICE OF LAND SURVEYING IN THE COMMONWEALTH OF MASSACHUSETTS.

8/23/10 *Bruce A. Coombs*  
DATE REGISTERED LAND SURVEYOR

TOPOGRAPHICAL PLAN OF LAND IN  
**SPRINGFIELD, MASSACHUSETTS**  
SURVEYED FOR  
**THE CITY OF SPRINGFIELD**

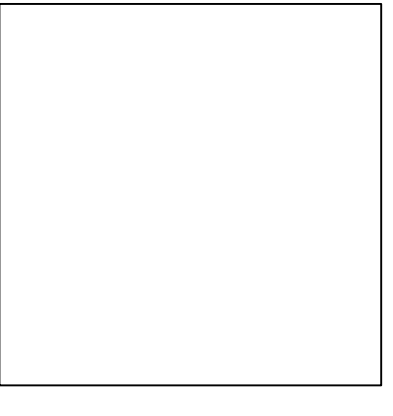
SCALE: 1" = 20'

DATE: AUGUST 23, 2010

**HERITAGE SURVEYS, INC.**  
REGISTERED PROFESSIONAL LAND SURVEYORS  
COLLEGE HIGHWAY & CLARK STREET  
POST OFFICE BOX 1  
SOUTHAMPTON, MASSACHUSETTS  
(413) 527-3600

*Bruce A. Coombs*

JOB # 6650-100805    DWG # 6650bec1    MAP # 6650-100823



Consultants  
**GZA GeoEnvironmental, Inc.**  
1350 Main Street, Suite 1400  
Springfield, MA 01103

**Clifford A. Phaneuf**  
Environmental Center  
Forest Park

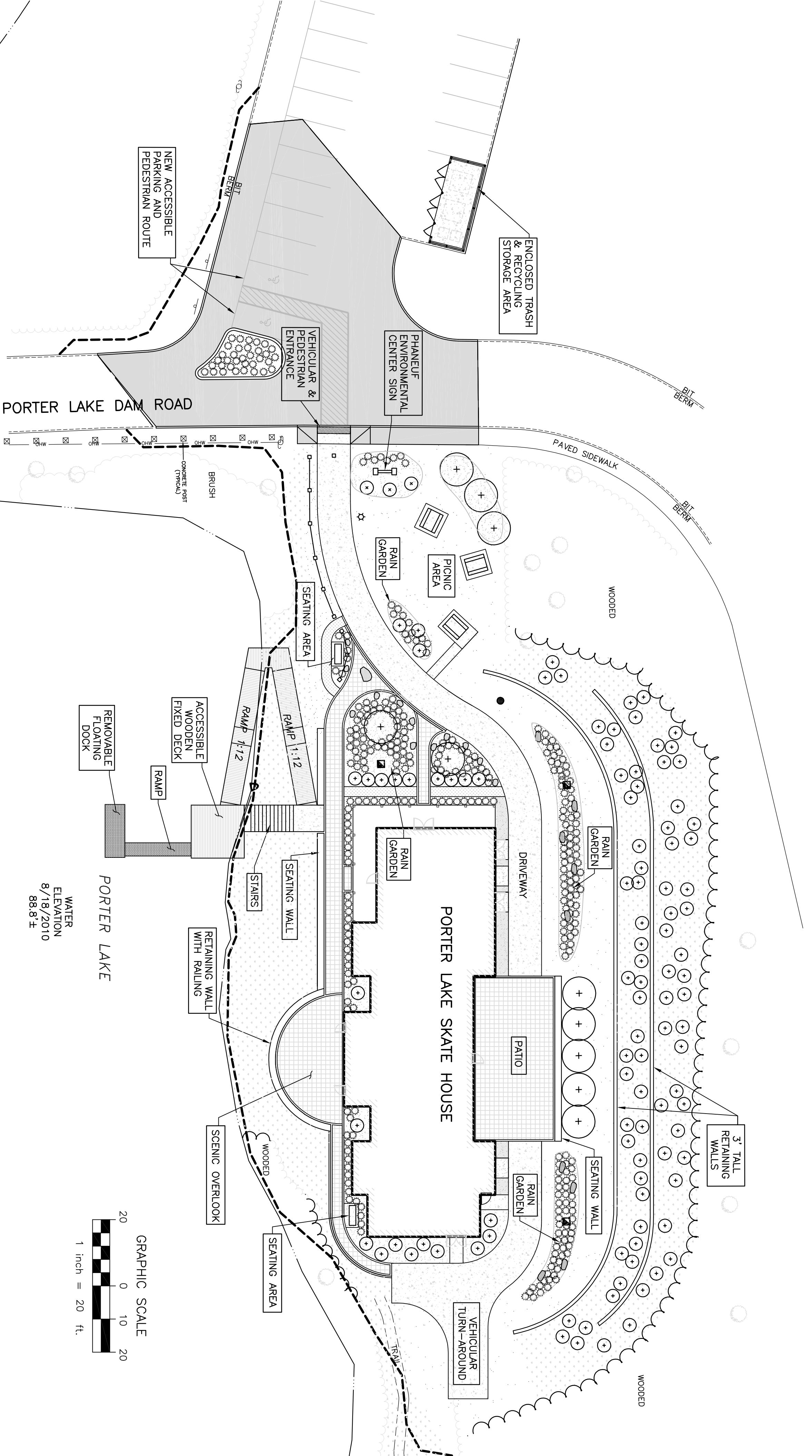
**100 Park Drive**  
Springfield, MA 01106

**OVERALL SITE IMPROVEMENTS PLAN**

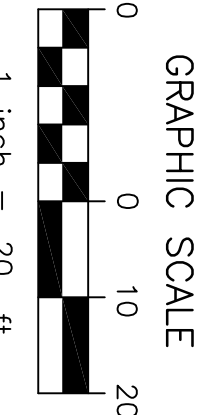
Revisions:

Revision 1	JANUARY 2012
Revision 2	GZA-BASE-PORTER-LAKE.DWG
Revision 3	ATR
Revision 4	TEJ
Revision 5	Scale 1"=20'

Date	JANUARY 2012
File Name	GZA-BASE-PORTER-LAKE.DWG
Drawn By	ATR
Reviewed By	TEJ
Scale	1"=20'
Drawing No.	C-1



**NOTE:**  
THIS OVERALL SITE PLAN IS INTENDED TO PROVIDE AN OVERVIEW OF THE PROJECT'S PRIMARY SITE ELEMENTS. THE INFORMATION IN THE OVERALL SITE PLAN SHALL NOT BE REFERENCED FOR PRICING PURPOSES OR FOR DETERMINATION OF PROJECT SCOPE.



**OVERALL PLAN**  
1"=20'

**LEGEND**

---	EXISTING EDGE OF WATER
---	EXISTING BITUMINOUS CURB
---	EXISTING 1 FT. CONTOUR
---	EXISTING 5 FT. CONTOUR
---	EXISTING TREE LINE
---	EXISTING STORM DRAIN LINE
---	EXISTING SANITARY SEWER
---	EXISTING GAS LINE
---	EXISTING WATER LINE
---	EXISTING BURIED TELEPHONE LINE
---	EXISTING BURIED MEDIA LINE
---	EXISTING BURIED ELECTRIC LINE
---	EXISTING CATCH BASIN
---	EXISTING DRAIN MANHOLE
---	EXISTING SANITARY MANHOLE
---	EXISTING ELECTRIC MANHOLE
---	EXISTING UTILITY POLE
---	EXISTING LIGHT POLE
---	EXISTING HYDRANT
---	EXISTING TREES/BUSHES
---	EXISTING TREE LINE
---	PROPOSED CHAIN LINK FENCE

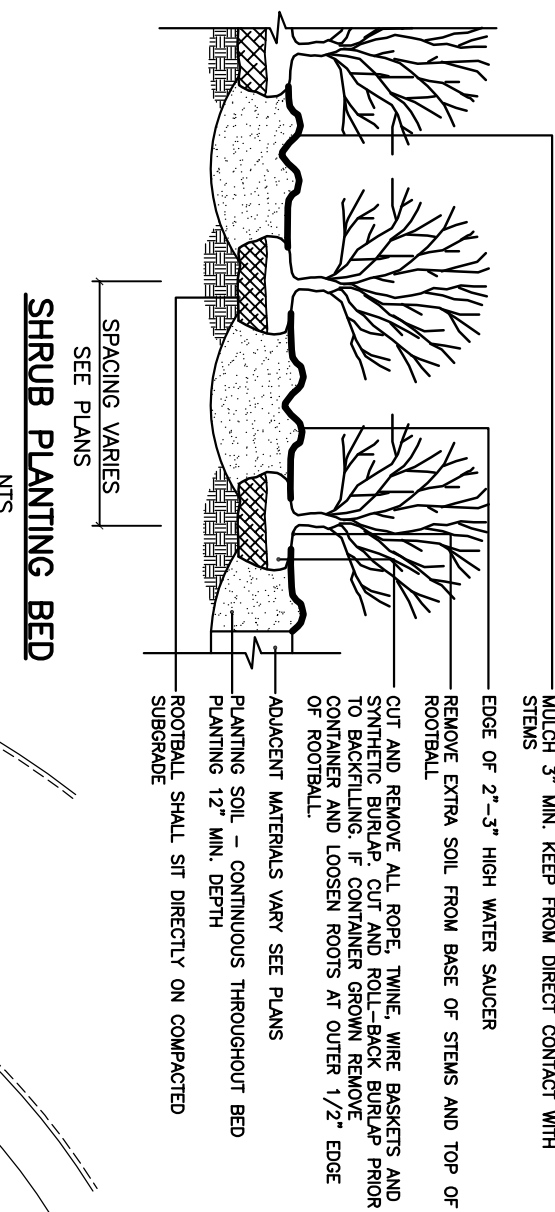
**LEGEND**

---	PROPOSED CONTOUR
---	PROPOSED SPOT GRADE
---	PROPOSED STORM DRAIN LINE
---	PROPOSED CATCH BASIN
---	PROPOSED LOW PRESSURE SANITARY LINE
---	PROPOSED SANITARY SEWER
---	PROPOSED SANITARY MANHOLE
---	PROPOSED WATER LINE
---	PROPOSED FRONT
---	PROPOSED PRECAST CONCRETE CURB
---	PROPOSED BITUMINOUS CURB
---	PROPOSED CONCRETE REINFORCED PAVEMENT
---	PROPOSED CONCRETE PAVEMENT
---	PROPOSED BITUMINOUS CONCRETE PAVEMENT
---	PROPOSED CONCRETE PAVEMENT
---	PROPOSED TIMBER GRABRALL
---	PROPOSED CHAIN LINK FENCE
---	PROPOSED WILDLIFE/GRASS AREA
---	PROPOSED MULCH BED

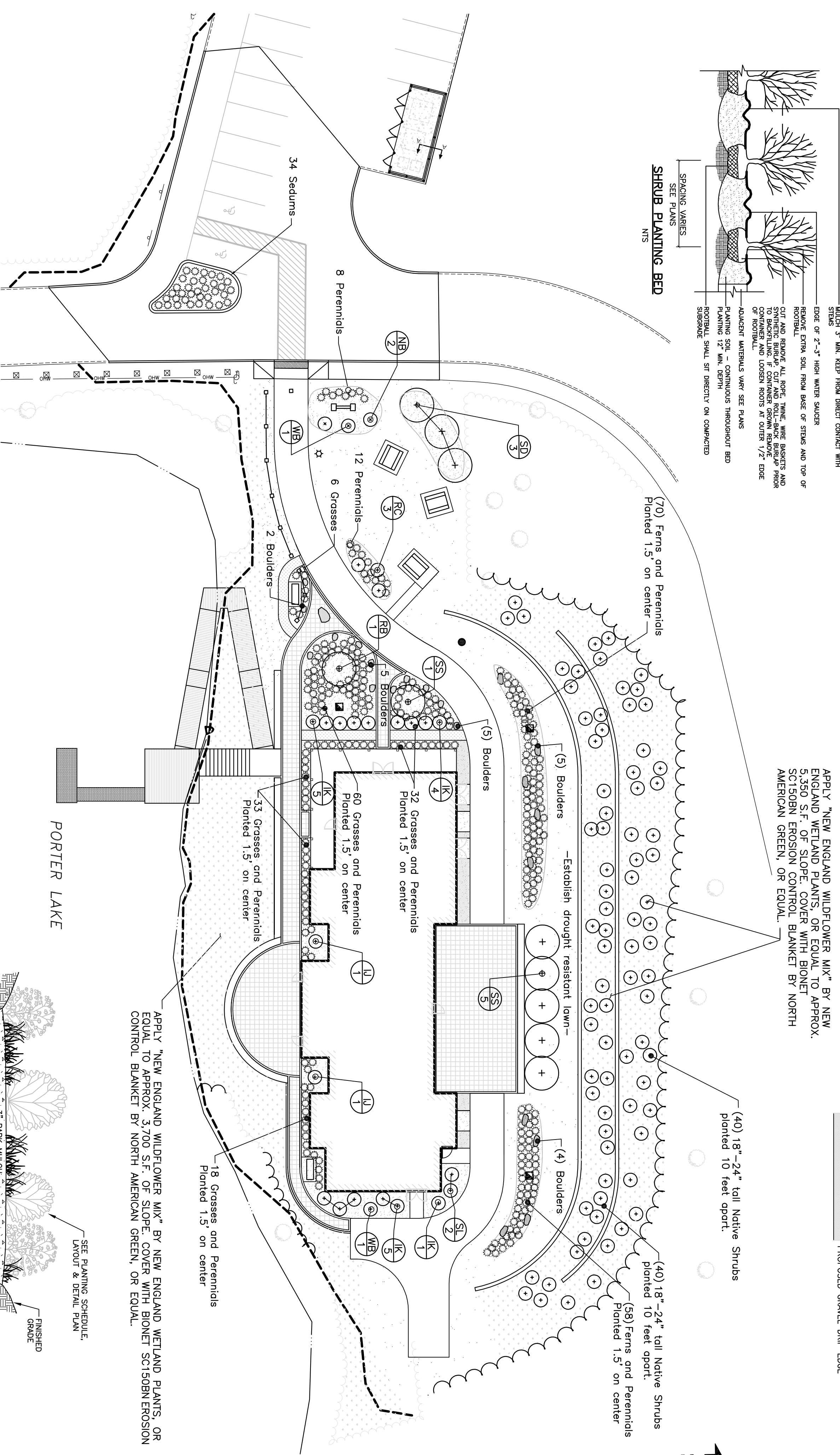
**SITE CONSTRUCTION NOTES:**

- PLANS DO NOT PURPORT TO SHOW ALL UTILITIES. CONTRACTOR CONTRACT DIG-SAFE (1-888-344-7233) AND LOCAL UTILITIES A MINIMUM OF 72 HOURS PRIOR TO BEGINNING EXCAVATION WORK AT THE SITE.
- THE ACCURACY AND COMPLETENESS OF ANY UNDERGROUND AND OVERHEAD UTILITIES AS SHOWN ON THE PLANS ARE NOT GUARANTEED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATION, SIZE, TYPE, ETC. OF ALL UTILITIES THAT MAY BE AFFECTED BY THE WORK OF THIS PROJECT.
- PRIOR TO COMMENCING ANY WORK, THE CONTRACTOR SHALL REVIEW SCHEDULING AND SITE SAFETY WITH THE OWNER. CONTRACTOR SHALL ENSURE THAT ALL OPERATIONS ARE CONDUCTED IN ACCORDANCE WITH THE CITY OF SPRINGFIELD PARKS DEPARTMENT, DEPARTMENT OF PUBLIC WORKS, AND POLICE DEPARTMENT. HOWEVER, THE PARK PERMITTED BY THE CITY OF SPRINGFIELD SHALL BE SUBJECT TO RANDOM ENTRY BY UNAUTHORIZED PERSONNEL. THE CONTRACTOR SHALL SUPPLY SUITABLE SIGNAGE INDICATING THAT THE PARK IS CLOSED AND SHALL PROTECT THE PUBLIC FROM THE HAZARDS ASSOCIATED WITH THEIR WORK AT ALL TIMES, INCLUDING THE INSTALLATION OF TEMPORARY BARRICADES OR FENCING AT ACCESS POINTS TO ACTIVE WORK AREAS.
- ALL WORK SHALL COMPLY WITH ENVIRONMENTAL PERMITS ISSUED FOR THE PROJECT. CONTRACTOR SHALL MAINTAIN A COPY OF THE WETLANDS ORDER OF CONDITIONS ON SITE AT ALL TIMES AND SHALL PROVIDE, ERECT, AND MAINTAIN REQUIRED SIGN DISPLAYING DEEP FILE NUMBER.
- CONTRACTOR SHALL COORDINATE ALL WORK WITH THE CITY OF SPRINGFIELD PARKS DEPARTMENT, DEPARTMENT OF PUBLIC WORKS, AND POLICE DEPARTMENT, AS NECESSARY.
- UNLESS OTHERWISE NOTED, ALL WORK AND MATERIALS SHALL COMPLY WITH APPLICABLE SECTIONS OF THE MASSACHUSETTS HIGHWAY DEPARTMENT'S "STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES," AS AMENDED.
- CONTRACTOR SHALL REMOVE NO TREES UNLESS SPECIFICALLY WITHIN THE WORK AREA OR IF SPECIFICALLY DIRECTED TO DO SO BY THE OWNER'S REPRESENTATIVE. LIMBS MAY BE PRUNED AS ABSOLUTELY NECESSARY FOR ACCESS, UPON APPROVAL OF THE OWNER'S REPRESENTATIVE. ROOT SYSTEMS SHALL BE PROTECTED AND LEFT UNDISTURBED TO THE MAXIMUM EXTENT PRACTICAL. WHERE ROOTS MUST BE CUT, ROOTS SHALL BE NEATLY AND CLEANLY PRUNED, SHALL BE KEPT CONTINUALLY MOIST, AND SHALL BE BACKFILLED AS SOON AS POSSIBLE.
- CONTRACTOR SHALL PERFORM ALL EXCAVATIONS IN STRICT CONFORMANCE WITH APPLICABLE STATE AND O.S.H.A. RULES, AS AMENDED.
- CONTRACTOR SHALL DEMOLISH, RAZE, REMOVE, AND DISPOSE OF ALL PAVEMENTS, ASPHALT, VEGETATION, STRUCTURES, AND OTHER OBSTRUCTIONS TO NEW WORK, EXCEPT OPERATING UTILITIES AND THOSE ITEMS FOR WHICH OTHER PROVISIONS HAVE BEEN MADE FOR REMOVAL AND/OR PROTECTION. ALL MATERIALS TO BE DISPOSED OF SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF AT AN OFF-SITE LOCATION.
- AT ALL AREAS OF PAVEMENT REMOVAL, THE PAVING EDGE TO REMAIN SHALL BE SAW CUT THROUGH THE ENTIRE PAVEMENT THICKNESS AND SHALL FORM A CLEAN EDGE. WHERE CEMENT CONCRETE SIDEWALKS ARE TO BE REMOVED, SAW CUT SHALL BE MADE AT THE NEAREST APPROPRIATE EXISTING JOINT.
- ALL NEW STORM DRAINS SHALL BE SDR 35 POLYVINYL CHLORIDE (PVC) OR HIGH DENSITY POLYETHYLENE (HDPE) SMOOTH-INTERIOR PIPE, UNLESS OTHERWISE INDICATED ON THESE PLANS. NOTE THAT ALL PERFORATED PIPE SHALL BE SDR35 PVC ONLY.
- UTILITY EXTENSIONS INCLUDING WATER AND ELECTRIC SERVICES WILL BE INSTALLED UNDERGROUND WITHIN THE WORK AREA. FINAL LOCATION OF THESE LINES TO BE DETERMINED BY OWNER, CONTRACTOR, AND APPROPRIATE UTILITY COMPANY.
- REPLACE DISTURBED SURFACES WITH MATERIALS AND THICKNESS TO MATCH EXISTING.
- ALL AREAS NOT OTHERWISE SURFACED SHALL RECEIVE MINIMUM 6" LOAM AND SHALL BE SEEDED, MULCHED, AND ESTABLISHED AS LAWN.
- ALL DISTURBED AREAS WITH SLOPES STEEPER THAN 3:1 SHALL RECEIVE A TEMPORARY EROSION CONTROL BLANKET TO BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS; NORTH AMERICAN GREEN MODEL NO. SC150 OR APPROVED EQUAL.

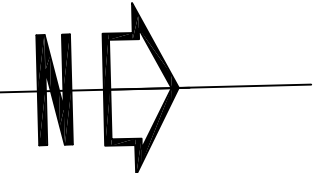
NOTE: SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.  
 1. SHRUBS SHALL BE SET PLANTED AND PLANTED SO THAT THE TOP OF THE PLANT IS AT THE FINISHED GRADE OF THE LANDSCAPE.  
 2. PERENNIALS SHALL BE PLANTED TWICE DURING THE FIRST 24 HOURS AFTER PLANTING.



APPLY "NEW ENGLAND WILDFLOWER MIX" BY NEW ENGLAND WILDFLOWER MIX TO APPROX. 1500 S.F. OF SLOPE CONTROL BLANKET BY NORTH AMERICAN GREEN, OR EQUAL.



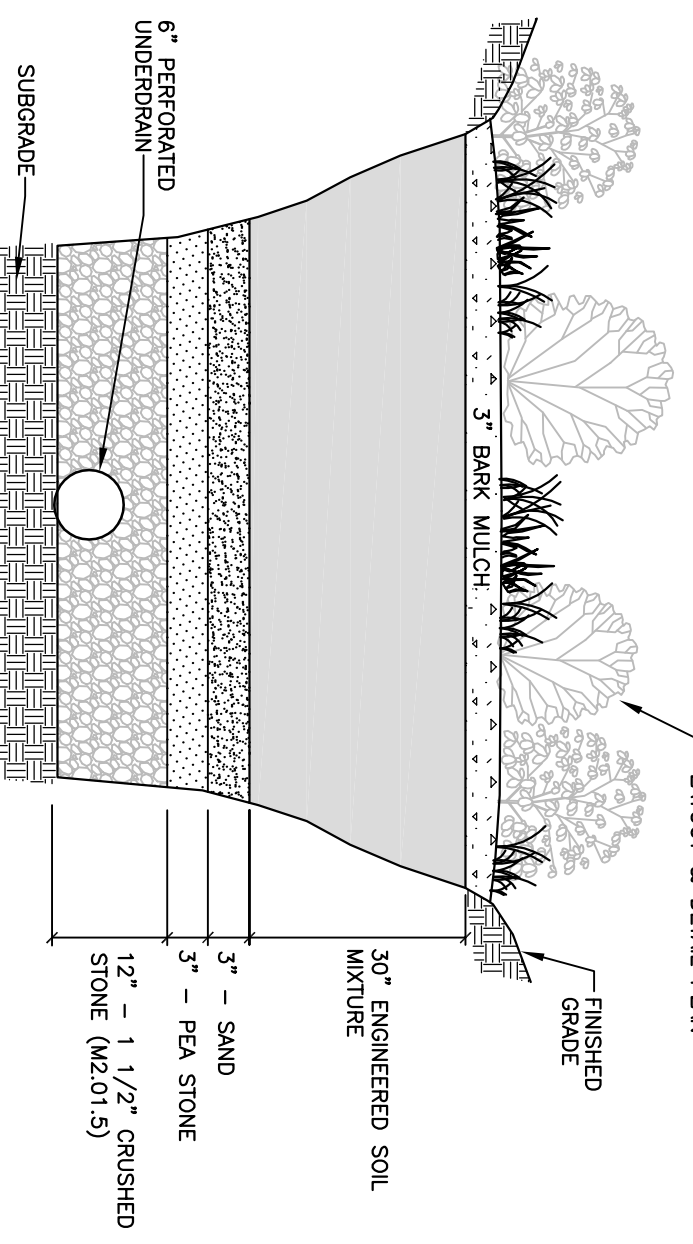
- PROPOSED BIT CONC. WALK/PAVEMENT
- PROPOSED CONCRETE PAVEMENT
- PROPOSED PAVERS
- PROPOSED COMPACTED GRAVEL PATH
- PROPOSED GRAVEL DRIVE EDGE



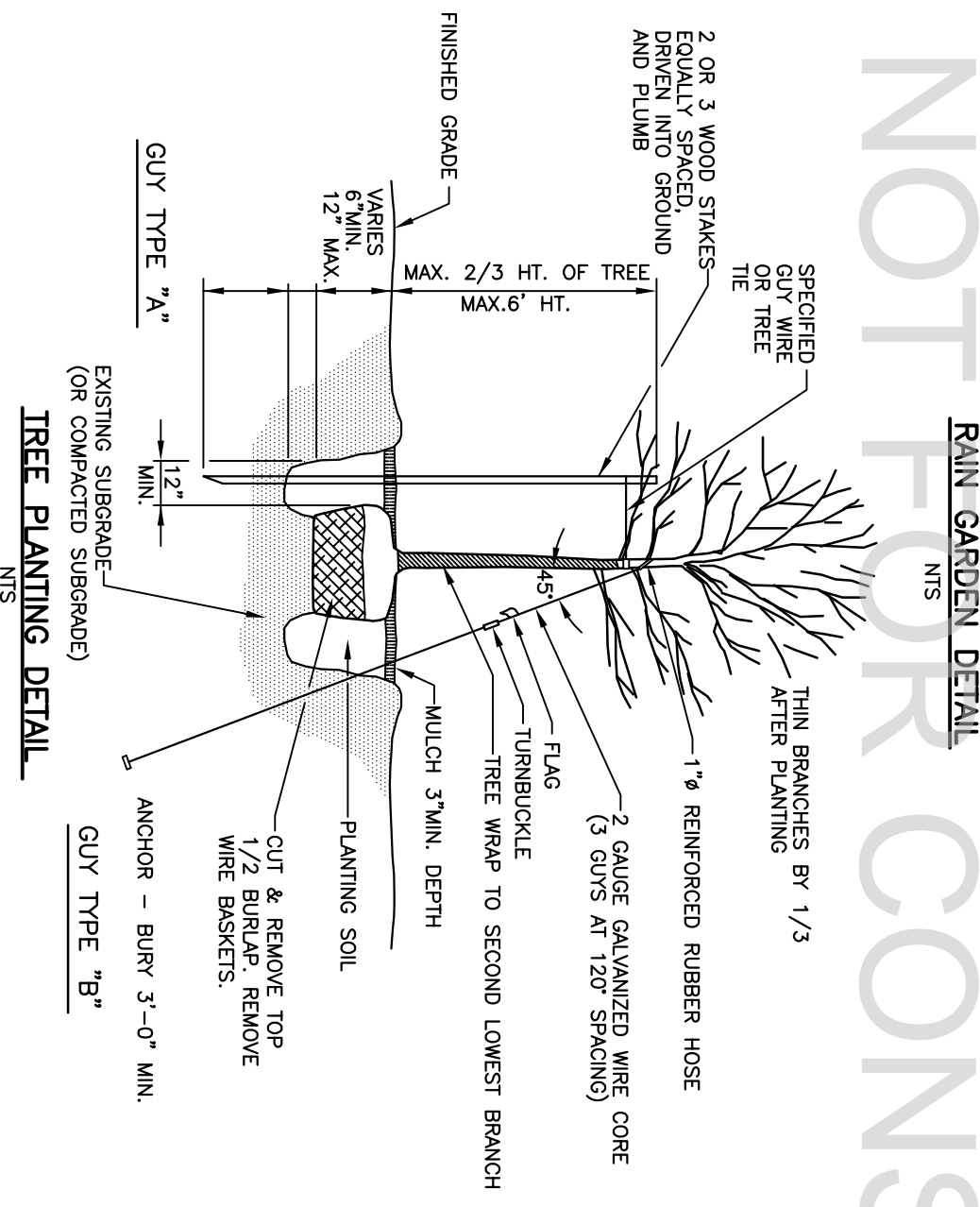
**LANDSCAPE PLAN**  
1"=20'

ABBREVI.	COMMON/BOTANICAL NAME	SIZE	QTY.	REMARKS
RB	River Birch / <i>Betula nigra</i>	4-5"	1	Container grown
IK	Inhberry / <i>Ilex glabra</i>	2"-2.5"	12	B & B
WB	Winterberry Holly / <i>Ilex verticillata</i>	18-24"	7	Container grown, male and female
RC	Red Chokeberry / <i>Aronia arbutifolia</i>	3 Gal.	12	Container grown
BC	Black Chokeberry / <i>Aronia melanocarpa</i>	3 Gal.	4	Container grown
ML	Mountain Laurel / <i>Kalmia latifolia</i>	18-24"	3	B & B
SS	Shadblow Serviceberry / <i>Amelanchier canadensis</i>	2"-2.5"	6	B & B, single
NB	Myrica Pensylvanica / <i>Northern Bayberry</i>	18-24"	8	B & B
SL	Sweetbells Leucochoe / <i>Leucochoe racemosa</i>	3 Gal.	2	Container grown
IJ	Japanese Holly / <i>Ilex japonica</i>	3 Gal.	2	Container grown
Ferns	Maidenhair Fern / <i>Adiantum pedatum</i>	1 Gal.	15	plant 18" apart o.c.
	Sensitive Fern / <i>Osmunda sensibylis</i>	1 Gal.	15	plant 18" apart o.c.
	Cinnamon Fern / <i>Osmunda cinnamomea</i>	1 Gal.	15	plant 18" apart o.c.
	Christmas Fern / <i>Polystichum acrostichoides</i>	1 Gal.	15	plant 18" apart o.c.
Perennials	In Variety: New England Aster, Cardinal Flower, Coneflower, Swamp Milk Weed, Black-eyed Susan, Smooth Penstemon	container	173	coord. choices w/landscape architect
Seed	New England Conservation Mix	1 lb. bag	4	1245 sq ft/lb
Grasses	In Variety: Feather Reed Grass, Sedge Grass, Northern Sea Oats	Container	60	coord. placement w/landscape arch.
	Fourtain Grass, Little Bluestem, Maiden			

**PORTER LAKE**



APPLY "NEW ENGLAND WILDFLOWER MIX" BY NEW ENGLAND WILDFLOWER MIX TO APPROX. 3,700 S.F. OF SLOPE CONTROL BLANKET BY NORTH AMERICAN GREEN, OR EQUAL.



**PLANTING NOTES:**

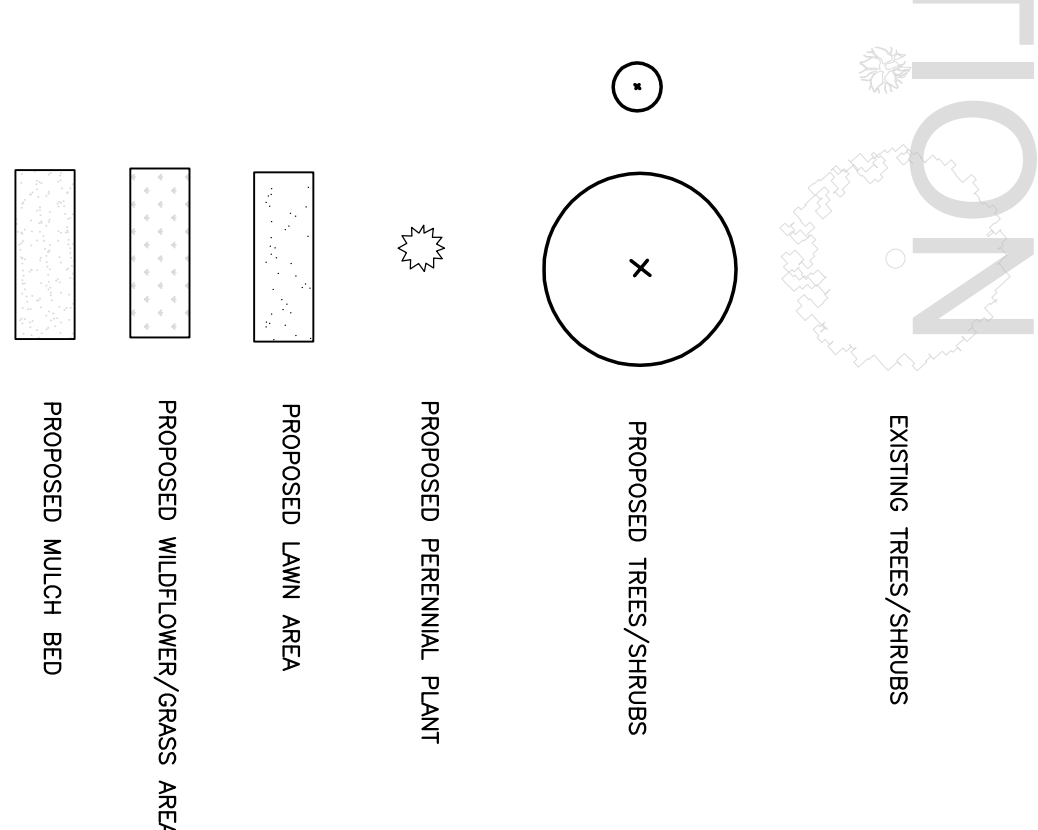
- LANDSCAPE CONTRACTOR SHALL REVIEW ALL SITE UTILITY PLANS AND COORDINATE WITH THE GENERAL CONTRACTOR TO AVOID HAZARDS AND CONFLICTS WITH EXISTING/NEW UNDERGROUND UTILITIES.
- ALL PLANTS ARE TO BE HEALTHY NURSERY STOCK MEETING REQUIREMENTS OF NURSERYMAN'S ASSOCIATION STANDARDS FOR TYPE, SIZE, AND CONDITION. ALL OTHERS WILL BE REJECTED.
- OWNER'S REPRESENTATIVE WILL INSPECT ALL PLANT BEDS PRIOR TO ANY PLANTING.
- ALL PLANT BEDS ARE TO RECEIVE A 3" SETTLED DEPTH OF AGED SHREDDED BARK MULCH, IMMEDIATELY AFTER INSTALLATION OF MULCH. THE CONTRACTOR SHALL THOROUGHLY WET ALL BEDS WITH THE EQUIVALENT OF 2" RAINFALL TO SETTLE MULCH TO 3" DEPTH.
- PLANT LIST IS INFORMATIONAL ONLY. IF THERE IS A DISCREPANCY BETWEEN QUANTITIES SHOWN ON THE PLANT LIST AND THOSE SHOWN ON THE PLANS, QUANTITIES SHOWN ON THE PLAN SHALL GOVERN.
- ALL TREE PITS AND PLANT BEDS SHALL RECEIVE PREPARED TOPSOIL AS DETAILED AND SPECIFIED.
- PLANT BEDS: 12" DEPTH WITH SURFACE 3" BELOW FINISHED GRADE TO ALLOW FOR MULCH.
- PLANTING MIX: (WELL BLENDED)
  - 5 PARTS ON-SITE TOPSOIL
  - 1 PART PEAT HUMUS
  - 1 PART WELL-ROTTED MANURE

**SITE LANDSCAPE WORK-LAWNS**

- ALL AREAS DISTURBED DUE TO CONSTRUCTION OPERATIONS AND NOT DESIGNATED FOR OTHER SURFACE TREATMENT ARE TO RECEIVE A 6" DEPTH OF TOPSOIL, TO BE FINE-GRADED AND SEEDED TO LAWN, PER SPECIFICATIONS.
- ALL LAWN AREAS ARE TO RECEIVE ADEQUATE IRRIGATION, AS SPECIFIED AND REQUIRED.
- NEW LAWNS SHALL BE HYDRO-SEEDING WHERE SHOWN, AND AS SPECIFIED. MECHANICAL SEEDING (BRILLON) OR APPROVED EQUIPMENT WILL BE ALLOWED IF APPROVED BY THE OWNER'S REPRESENTATIVE. THOSE LAWN AREAS SHALL BE HYDRO-MULCHED OR STRAW-MULCHED WITH A CHOPPER/BLOWER AND A TACKIFIER AFTER MECHANICAL SEEDING.

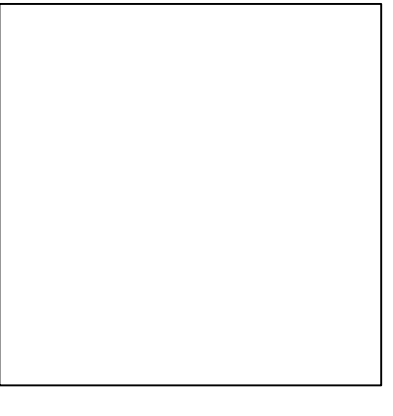
**RAIN GARDEN NOTES:**

- SOIL MIXTURE SHALL CONSIST OF THE FOLLOWING:
    - 40% SAND
    - 30-40% COMPOST
    - 20-30% TOPSOIL
  - SOIL MIX MUST BE UNIFORM, FREE OF STONES, STUMPS, ROOTS OR SIMILAR OBJECTS LARGER THAN 2 INCHES. CLAY CONTENT SHALL NOT EXCEED 5%.
  - SOIL PH SHALL BE BETWEEN 5.5-6.5.
  - USE SOILS WITH 1.5% TO 3% ORGANIC CONTENT AND MAXIMUM OF 500 ppm SOLUBLE SALTS.
  - SAND SHALL BE GRAVELLY SAND TO MEET ASTM D 422
- | SIEVE SIZE   | PERCENT PASSING |
|--------------|-----------------|
| 2-INCH       | 100             |
| 3/4-INCH     | 70-100          |
| 1/4-INCH     | 50-80           |
| U.S. No. 40  | 15-40           |
| U.S. No. 200 | 0-3             |
- TOPSOIL SHALL BE A SANDY LOAM, LOAMY SAND, OR LOAM TEXTURE.
  - COMPOST COMPONENT MUST BE PROCESSED FROM YARD WASTE IN ACCORDANCE WITH MA DEP GUIDELINES. COMPOST SHALL NOT CONTAIN BIOSOLIDS.
  - ON-SITE SOIL MIXING OR PLACEMENT IS NOT ALLOWED IF SOIL IS SATURATED OR SUBJECT TO WATER WITHIN 48 HOURS. COVER AND STORE SOIL TO PREVENT WETTING OR SATURATION.
  - DURING CONSTRUCTION, AVOID EXCESSIVELY COMPACTING SOILS IN AND AROUND RAIN GARDENS TO MINIMIZE SEDIMENT LOADING. DIRECT ONLY RUNOFF FROM EXISTING AREAS TO RAIN GARDENS. DO NOT ALLOW CONSTRUCTION EQUIPMENT ACCESS TO EDGES OF PROPOSED RAIN GARDEN. PLACE PLANTING SOILS IN 1-FOOT LIFTS AND COMPACT WITH MINIMAL PRESSURE UNTIL DESIRED GRADING/ELEVATION IS REACHED.
  - PLACE PLANTING SOILS IN 1-FOOT TO 2-FOOT LIFTS AND COMPACT THEM WITH MINIMAL PRESSURE UNTIL THE DESIRED ELEVATION IS REACHED.



**JABLONSKI | DEVRIESE**  
ARCHITECTS  
www.jablonski.com

member: American Institute of Architects  
 29 Elliot Street | Springfield, MA 01105  
 T 413.747.5285



Consultants  
**GZA GeoEnviron mental, Inc.**  
 1350 Main Street, Suite 1400  
 Springfield, MA 01103

Clifford A. Phaneuf  
 Environmental Center  
 Forest Park  
 100 Park Drive  
 Springfield, MA 01106

**LANDSCAPE PLAN**

Revisions:  
 Revision 1  
 Revision 2  
 Revision 3  
 Revision 4  
 Revision 5

Date: JANUARY 2012  
 File Name: GZA-BASE-PORTERLAKE.DWG  
 Drawn By: ATR  
 Reviewed By: TEJ  
 Scale: 1"=20'

Drawing No.

**L-1**

Total Sheets

DEPENDENT ON THE PROGRESS OF CONSTRUCTION - NOT FOR CONSTRUCTION

# **APPENDIX D**

## **SHPO Concurrence**

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June 4, 2014

**The Commonwealth of Massachusetts**  
William Francis Galvin, Secretary of the Commonwealth

Lydia Kachadoorian  
Deputy Regional Environmental Officer  
Federal Emergency Management Agency Region I  
99 High Street  
Boston, MA 02110

Attn: Marcus Tate

RE: Refurbishment and New Construction, Clifford A. Phaneuf Environmental Center (ECOS),  
Forest Park, Springfield, MA. MHC #RC.54747.

Dear Ms. Kachadoorian :

Thank you for submitting additional information regarding the proposed project referenced above, in response to the Massachusetts Historical Commission's (MHC) letter dated January 31, 2014. The additional information was received at this office on May 30, 2014. MHC staff have reviewed the information you submitted and have the following comments.

It is the opinion of MHC staff the Porter Lake Skate House no longer retains sufficient integrity to be eligible for inclusion in the National Register of Historic Places. Review of the current photographs you submitted and the line drawing of the structure as it was originally built in 1936 reveals that the configurations of windows and doors had been major contributing elements of the historical architectural design of the structure. Current photographs indicate that major changes to the door openings and windows have occurred through time, resulting in a loss of integrity of the original historic rhythm of fenestration and openings. In addition, the prominent historic balcony on the main facade was removed at some time in the past.

In the MHC's opinion, the proposed new construction and additions to the Skate House for the ECOS Center will have "no adverse effect" on the surrounding Forest Park, which may be eligible for listing in the National Register of Historic Places.

The MHC recommends that FEMA make a finding of "no adverse effect" (36 CFR 800.5(b)) for the proposed construction of the Clifford A. Phaneuf Environmental Center.

These comments are offered to assist in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (36 CFR 800). If you have any questions or require additional information, please feel free to contact Elizabeth Sherva or me at this office.

Sincerely,

A handwritten signature in blue ink that reads "Brona Simon".

Brona Simon  
State Historic Preservation Officer  
State Archaeologist  
Massachusetts Historical Commission  
xc: Springfield Historical Commission



FEMA

RECEIVED

JUN 12 2014

June 11, 2014

CONCURRENCE: *Brona Simon*  
6/13/14  
BRONA SIMON  
STATE HISTORIC  
PRESERVATION OFFICER  
MASSACHUSETTS  
HISTORICAL COMMISSION

MASS. HIST. COMM  
# 54747

Brona Simon  
State Historic Preservation Officer  
Massachusetts Historical Commission  
220 William T. Morrissey Blvd  
Boston, MA 02125

**Section 106 Consultation:** *No Adverse Effects, with Conditions*

**Undertaking:** *New Construction/Renovation of the Clifford A. Phaneuf Environmental Center, City of Springfield, MA*

**Subgrantee:** *City of Springfield*

**FEMA Grant Program:** *Public Assistance Grant Program (PA)*

Dear Ms. Simon:

This letter is an update the ongoing consultation on the FEMA Public Assistance Grant Program (PA) application for the Clifford A. Phaneuf Environmental Center aka Porter Lake Skate House (ECOS Center) project in Springfield, MA. In a letter FEMA sent to your office on January 31, 2014, FEMA made the determination that the undertaking resulted in an "Adverse Effect" based on the determination that the ECOS Center meets Criteria A and C of the Criteria of Eligibility for listing in the National Register of Historic Places. In a letter from MHC dated January 31, 2014, MHC concurred with FEMA's determination of eligibility but required additional information in order to understand the project and how the criteria of adverse effect applied to the project. After obtaining and reviewing the requested information, in a June 4, 2014 letter, MHC stated the opinion that the ECOS Center no longer retained sufficient historic integrity to be eligible for inclusion on the National Register of Historic Places. Therefore, MHC offers the opinion that this undertaking will result in "No Adverse Effects". (See Attachment 1)

Forest Park remains eligible for inclusion in the National Register of Historic Places and FEMA agrees with MHC's determination of "*No Adverse Effects*". To address the potential archaeological resources, FEMA recommends the applicant hire an archaeological monitor for during construction.

To address any archaeological sensitivity at this location, despite the potential for fill and disturbed soils, FEMA suggests that the applicant hire a qualified archaeological monitor during

Ms. Simon  
June 11, 2014

construction. This will require the applicant to hire an archaeological contractor to obtain a State Archaeologist's permit application (950 CMR 70) and perform the subsequent monitoring.

Based on these reasons, FEMA finds that the proposed undertaking would result in ***"No Adverse Effects, with Conditions"*** to the Clifford A. Phaneuf Environmental Center. Per 36 CFR 800.4(c)(2) and under the terms of the FEMA-SHPO-MEMA Programmatic Agreement for Massachusetts (2011) and **FEMA requests SHPO concurrence with this determination of effect within ten (10) calendar days from receipt of this transmittal.**

Should you have any questions, please do not hesitate to contact our project reviewer Marcus Tate at (617) 784-4712 or [Marcus.Tate@fema.dhs.gov](mailto:Marcus.Tate@fema.dhs.gov). I can be reached by phone at 857-205-2860 or email [Lydia.Kachadoorian@fema.dhs.gov](mailto:Lydia.Kachadoorian@fema.dhs.gov). Thank you for your prompt review.

Sincerely,

Marcus Tate  
Historic Preservation Specialist  
For: Lydia Kachadoorian, RPA  
Deputy Regional Environmental Officer  
FEMA Region 1, New England

ATTACHMENT:

Attachment 1: Previous consultations

# **APPENDIX E**

## **Public Involvement**

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# City of Springfield MA Public Meetings

---

The following captures all of the of discussions that have taken place at City and public meetings regarding the ECOS Center project subject to this EA. In an effort to streamline, only the ECOS Center topics have been pulled. The meetings contained multiple topics such as; Strategic Plan, High School course changes, counseling policies, personal reports, new business, and other topics and specific projects.

1. From the **Thursday April 2, 2009: “Minutes of Regular Session School Committee Meeting”** held by Springfield Public Schools.

These notes were collected by Patricia Walsh-Secretary of the School Committee

Under the section “Reports of Standing Committees” Section B-Building & Maintenance Committee:

- ECOS showed a model of the photovoltaic that they will be building. Mr. Collins indicated this project will save the city money. The cost of building the photovoltaic will be between \$30,000 and \$40,000 with a payback period of 8 years. There is a state grant for \$19,000.

2. From **the Monday March 22, 2010: “City Council Regular Meeting”** held by City Council members.

These notes were available on the City’s website

Under “Orders”:

- (18) Resolve. Acknowledging the renovation of Clifford A. Phaneuf Environmental Center (Ferrarra)-Read and after debate and passed by a majority voice vote with Councilor Twiggs absence and Councilor Wright abstaining.

3. From the **Thursday February 3, 2011: “Minutes of Regular Session School Committee Meeting”** held by Springfield Public Schools.

These notes were collected by Patricia Walsh-Secretary of the School Committee

Under: “Items Requiring a Vote of the School Committee”:

- Dr. Ingram explained that the item of voting for the second phase of the Clifford Phaneuf Building at ECOS would be tabled until further financial information could be obtained. Atty. Murphy indicated he had no problem voting on this item tonight because he did not wish to delay the project and urged the committee to take a vote. As explained, although the City

and the committee are very supportive of the project, we need to clarify the funding capacity.

4. From the **January 18, 2013: "Park Commission Meeting"**

The following is an article written by Peter Goonan of "The Republican" as posted on masslive.com

- The Park Commission this week gave its enthusiastic support for the final design plans for a \$2.5 million renovation-expansion of the Clifford A. Phaneuf Environmental Center at Forest Park, praising its design for year-round use by students and the public, and its state-of-the-art energy efficiency.

The commission voted 3-0 endorse the plans as presented by architect Stephen Jablonski of Jablonski Devriese Architects of Springfield. The wood-framed building that abuts Porter Lake is the former skate house at the lake, and has been home for the Environmental Center for Our Schools (ECOS) program since 1970, visited by thousands of science students, teachers and parents annually.

"Nothing could be more important than to be focused on the environment and nature," said Brian A. Santaniello, Park Commission chairman, regarding the project. "It's a fabulous job and a proud testament to Clifford Phaneuf."

Jablonski said he and others have been working on the plans for approximately four years, and the project is "shovel ready."

"It's literally ready to go out to bid," Jablonski said.

Commission members said they will urge that the project move forward as soon as possible.

The project is on the city's list of top priority capital projects for the coming year, but the full funding sources are not yet determined, officials said.

Mayor Domenic J. Sarno said he is committed to the project, and is reviewing options for funding. MassMutual Financial Group pledged \$150,000 to assist with the construction costs.

There are two proposed additions to the building, and the main focus is on providing an "updated educational plant," and provide for multiple uses of the building during after-school hours, weekends and summer, Jablonski said. The design features include a large kitchen, and there is the ability to rent the site for functions, he said.

"It could be a revenue generator, " said Patrick J. Sullivan, the city's director of parks, buildings, and recreation management.

There are various "green" technologies incorporated into the building design including a hydro-geothermal heating, ventilation, air conditioning system, state-of-the-art insulation, and passive solar-energy efficient windows, according to plans.

Under plans, there will also be improved access to the lake including a wheelchair-accessible dock and ramp, a plaza, pavers and planters, Jablonski said.

In 1988, the Park Commission voted to name the building after Phaneuf who had worked there for 17 years as coordinator of the Environmental Center for Our Schools program. Phaneuf had died in January of that year.

Santaniello said the city is indebted to Phaneuf, who he described as a "true pioneer in education."

In addition, Santaniello praised Burt D. Freedman, who has been a science teacher at the center, and taught there at its inception. Freedman has worked closely with the architect and city officials on the project plans for years and is urging the city to secure funding before the completed plans become stale.

Once funding is approved, construction might take six to eight months, Jablonski said.

Sullivan said the mayor continues to support the project "100 percent," but is still facing the financial pressures from damage caused by two disasters - the June 2011 tornado and October 2011 snowstorm, and continued negotiations for disaster aid to cover much of the expenses.

Park Commission members Jay Griffin and Gregory Drew joined in praising the ECOS program and the renovation project.

"The ECOS program is a tremendous program," Griffin said. "I have talked to kids who say 'we don't want to go out in the snow and weather and rain' and then say they had a great time. It's a great introduction to appreciate the outdoors and the four seasons."

## FEMA PUBLIC NOTICE

The Federal Emergency Management Agency (FEMA) proposes to assist the City of Springfield, Massachusetts, with the expansion and enhancement the Environmental Center for Our Schools (ECOS) Center located within Forest Park on Porter Lake. The project will include two additions to the building. The ground floor footprint will increase by about 2,100 SF, with the western addition extending two stories over an area of about 1,000 SF and a ground-level porch of about 650 SF. The eastern kitchen addition will be a single level only and comprise an area of about 500 SF. Hence, the total enclosed area (both levels) will be about 7,400 SF.

To meet the requirements of the National Environmental Policy Act (NEPA), FEMA has prepared a Draft Environmental Assessment (EA) to identify and evaluate human, historic, and environmental resources that might be affected by proposed construction, mitigation or other actions associated with the renovations of the ECOS Center. As part of its goal to ensure that good management decisions are made, FEMA invites the public to review and comment on the Draft EA and to provide FEMA with information it may not have considered in its review. If FEMA finds that the Proposed Alternative, as defined in the EA, will have no significant impact on the natural or human environment after the public comment period, a Finding of No Significant Impact (FONSI) will be issued by FEMA's Acting Regional Environmental Officer, Lydia Kachadoorian. However, if a change in the scope of work occurs FEMA must be notified to evaluate if the proposed change would alter the potential impacts on the environment.

Beginning on Friday October 3, 2014, the Draft EA and the Draft FONSI will be posted on the City's website at <http://www3.springfield-ma.gov/cos/> and FEMA's website at <http://www.fema.gov/resource-document-library>, and in person at the City of Springfield Office of Procurement located at Springfield City Hall, 36 Court Street Room 412, Springfield, MA 01103, Monday through Friday 8:15AM-4:30 PM. The comment period will last for 15 days, ending on October 18, 2014 at 5:00 pm.

Comments on the Draft EA can be submitted by mailing Lydia Kachadoorian, Acting Regional Environmental Officer at, FEMA Region 1, 99 High Street 6th Floor, Boston, Massachusetts 02110, by emailing [Lydia.Kachadoorian@fema.dhs.gov](mailto:Lydia.Kachadoorian@fema.dhs.gov), or by sending her a fax at 617-956-7574.