

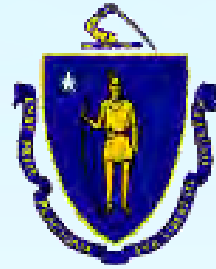
# Walden Pond Accessibility Improvements



**DCR Public Meeting**

November 19, 2019

Harvey Wheeler Community Center, Concord



# Commonwealth of Massachusetts

Governor

**Charles D. Baker**

Lieutenant Governor

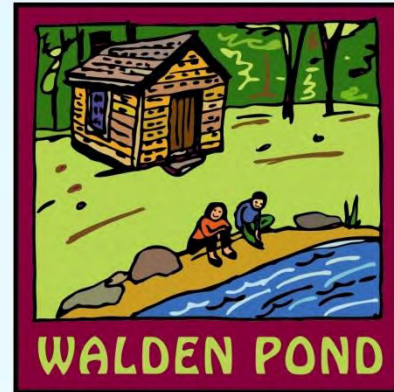
**Karyn E. Polito**

Energy and Environmental Affairs Secretary

**Kathleen A. Theoharides**

Department of Conservation and Recreation Acting Commissioner

**Jim Montgomery**



## DCR Mission Statement

*To protect, promote and enhance our  
common wealth of natural, cultural  
and recreational resources  
for the well-being of all.*

**MARYANN THOMPSON  
ARCHITECTS**

**Maryann Thompson Architects:**  
Architecture, Prime Consultant Bathhouse



**Crosby, Schlessinger, & Smallridge:**  
Landscape Architects, Prime Consultant Universal Access



**BSC Group:**  
Engineering & Permitting

*Peter S. Jensen & Associates, LLC*

**Peter Jensen and Associates:**  
Trailbuilding Consultant

**Consultant Team**



# Purpose

Present and obtain public input on:

- Thoreau House Site Trail Accessibility Improvement Project
- Main Beach Accessibility Improvement Project, including the proposed Boardwalk and Bathhouse
- Proposed project schedules

# Agenda

- Overview of Project process and history
- Presentation of the Thoreau House Site Trail Accessibility Project
- Design progress on the Main Beach Accessibility Improvement Project
- Open comment period

**Tonight's Meeting**

- 2013 DCR Resource Management Plan (RMP) / Visitor Services Master Plan were prepared to initiate visitor center planning, and make priority management recommendations for the Reservation.
- Recommendations included improving universal accessibility at Walden Pond, including the Main Beach and the Thoreau House Site.
- The Walden Pond Main Beach, including the existing bathhouse, does not comply with state and federal accessibility codes. Prior to the Visitor Center project, DCR made the commitment to bring the Main Beach and bathhouse up to these standards.
- January 30, 2019 public meeting reviewed bathhouse and boardwalk concept.
- May 2019 building study evaluated two options:
  - renovating of existing bathhouse; and
  - constructing a new bathhouse at the plaza level

## **Accessibility Improvements Background**





*Thoreau House Site, existing condition*

## Thoreau House Site Trail Accessibility Improvements



Improve visitor accessibility for all to the Thoreau House Site, a historically significant location of interest to visitors

- Incorporate Universal Access Design principles
- Meet U.S. Forest Service Trail Accessibility Guidelines
- Maintain the rustic trail experience
- Incorporate elements of interest present in the landscape

Minimize impacts to cultural and natural resources in Walden Pond State Reservation, a National Historic Landmark

- Use best management practices to improve water quality
- Use best management practices to protect and restore habitat
- Protect archaeological resources



**Project Goals**  
**Thoreau House Site Trail Accessibility Improvements**



- The project will improve access for all to the Thoreau House Site, from the Visitor Center crosswalk.
- Three alternatives were assessed. The Woods Path Trail alignment was selected, primarily due to reduced disturbance to natural and cultural resources.
- The trail will restore the surface of the existing Woods Path trail, and in some places reduce the overall width.
- The trail will be built to U.S. Forest Service Trail Accessibility Guidelines, with 90% of the trail being 5% longitudinal slope or less.
- Restored areas will be hand-raked to loosen compaction, reseeded with native understory species and stabilized with on-site woodland duff.
- The restored trail will end at a level landing near the House Site and will provide interpretive signage.



## **Process**

# **Thoreau House Site Trail Accessibility Improvements**





# Site Plan

## Thoreau House Site Trail Accessibility Improvements



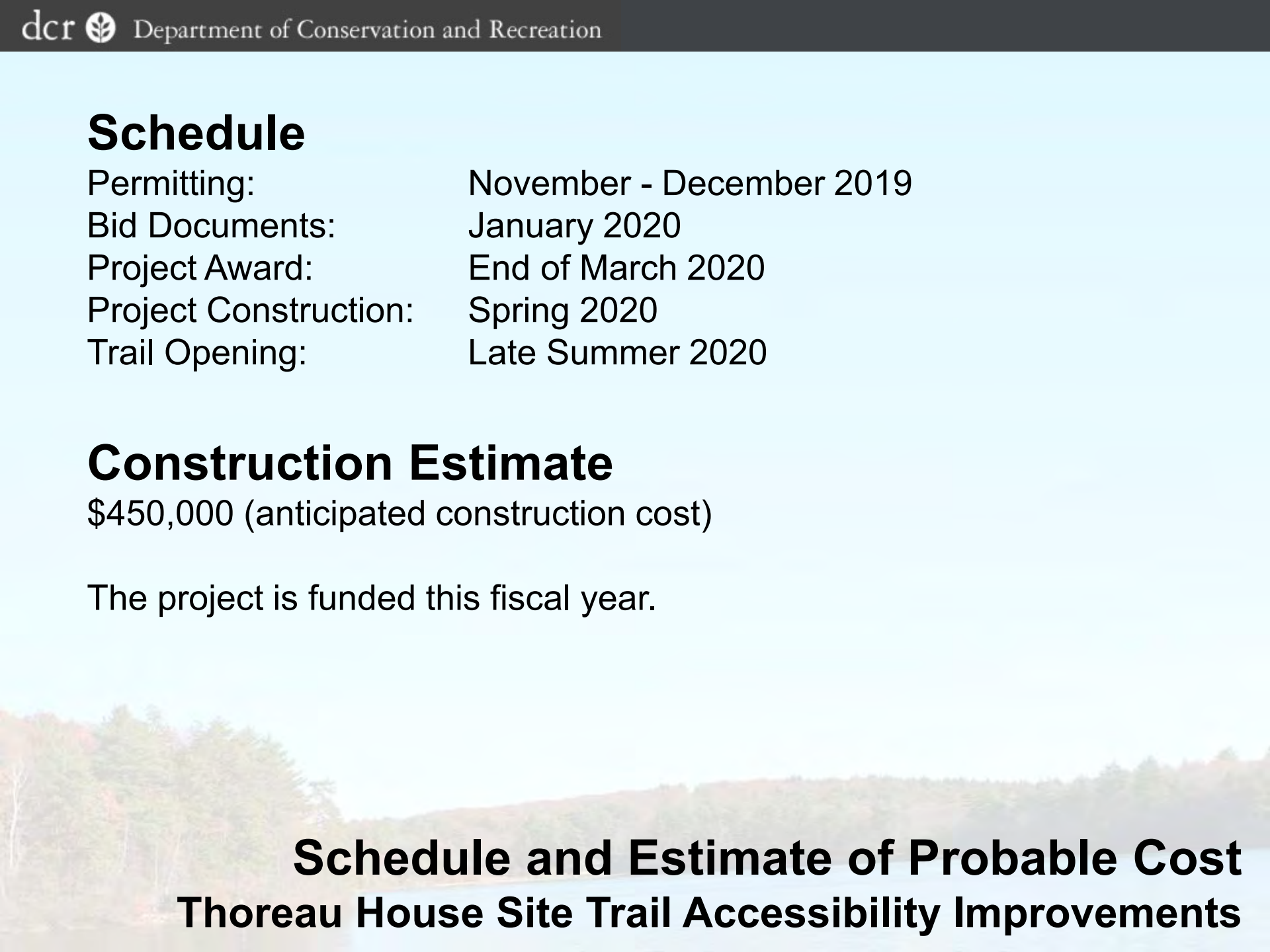
## **Schedule**

Permitting:	November - December 2019
Bid Documents:	January 2020
Project Award:	End of March 2020
Project Construction:	Spring 2020
Trail Opening:	Late Summer 2020

## **Construction Estimate**

\$450,000 (anticipated construction cost)

The project is funded this fiscal year.



**Schedule and Estimate of Probable Cost  
Thoreau House Site Trail Accessibility Improvements**





## Main Beach Universal Accessibility Improvements





1924

Since the 1900s, the east bank of Walden Pond has been used for water-based recreation, predominantly for swimming.

1922 map of Walden Pond show recreational infrastructure including two bath houses, a boathouse, and two toilets.



1933

## Historical Context – Walden Pond Main Beach Main Beach Universal Accessibility Improvements



1946

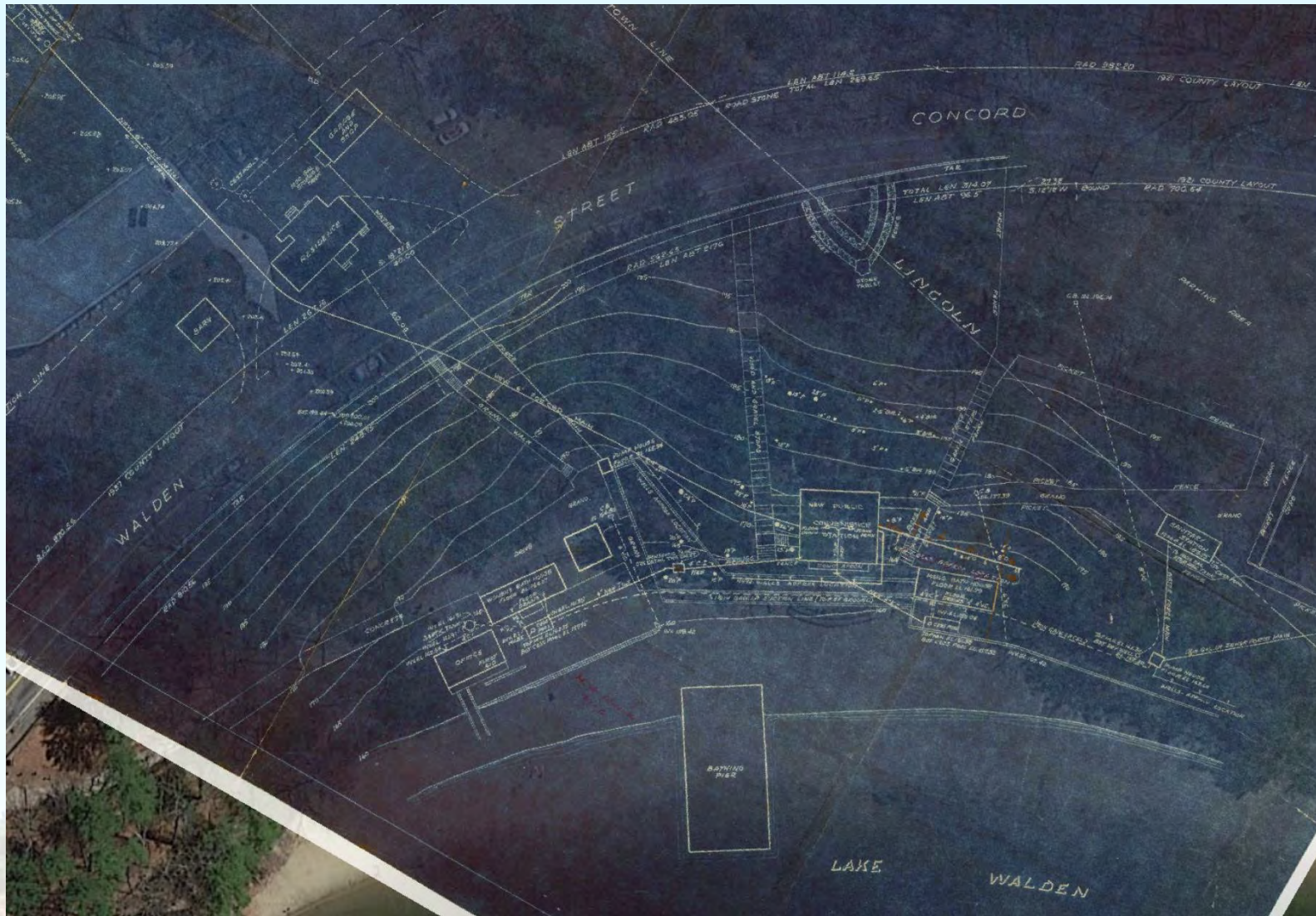


1970s

## Historical Context – Walden Pond Main Beach

### Main Beach Universal Accessibility Improvements





## Historical Context – Walden Pond Main Beach Main Beach Universal Accessibility Improvements

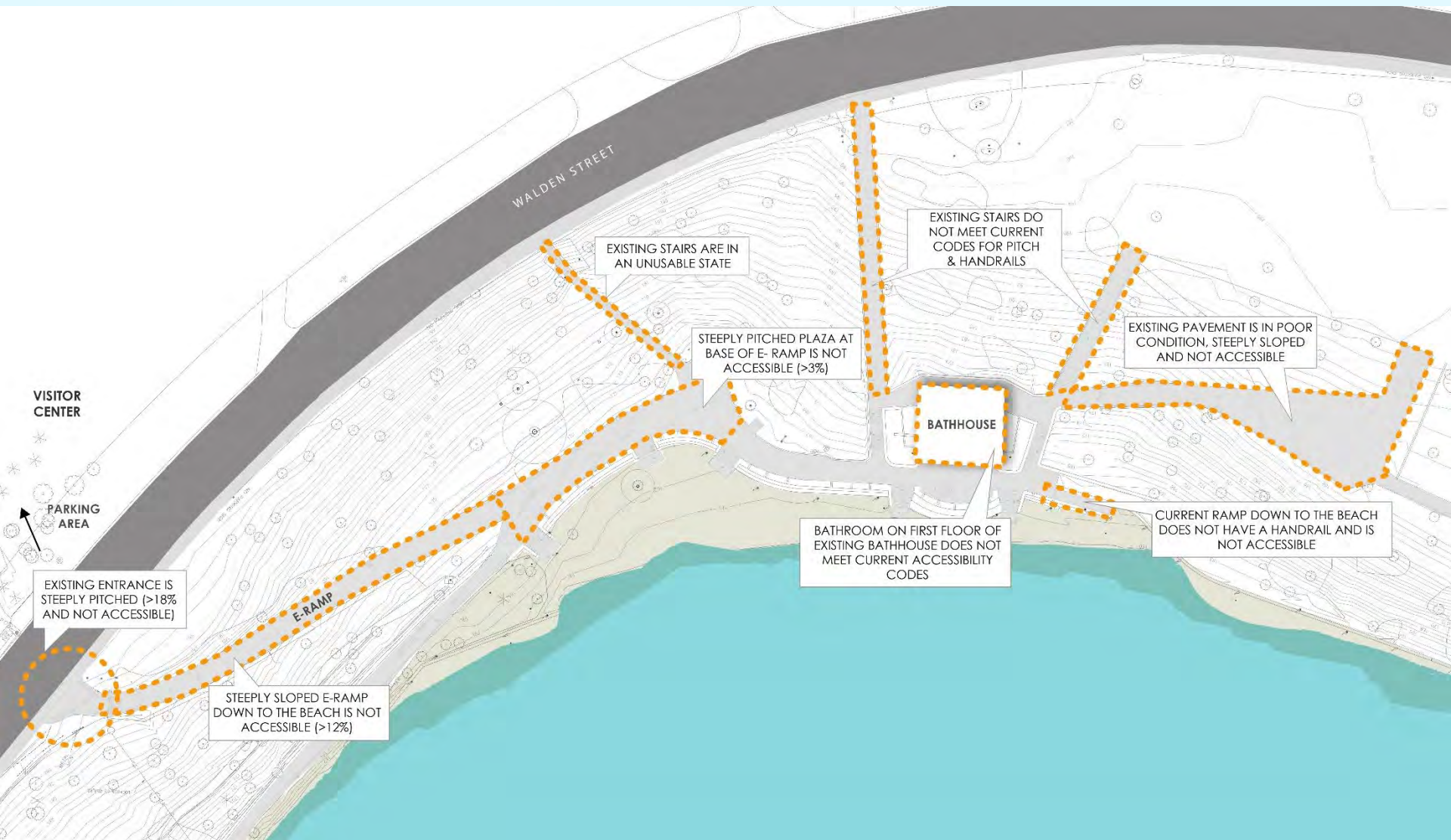
- Provide universally accessible arrival sequence and pathway to the beach and bathhouse that can be maintained year round.
- Incorporate Universal Design principles that will provide convenience to all visitors.
- Minimize the length of accessible routes to the greatest extent possible.
- Minimize the visibility of the new pathway from the pond and trails around Walden Pond.
- Minimize land alteration in Walden Pond State Reservation, a National Historic Landmark.



## **Project Goals**

### **Main Beach Universal Accessibility Improvements**





## Existing Accessibility Issues

## Main Beach Universal Accessibility Improvements



The existing entrance is very steeply pitched and not accessible



The cross-slope on the existing plaza does not meet accessibility requirements



Existing stairs are unusable



The primary access path down to the beach is steeply sloped and not accessible



The existing pavement in other areas is in poor condition and not accessible

Existing ramp does not have a handrail



## Existing Accessibility Issues

### Main Beach Universal Accessibility Improvements



Bathhouse restrooms are on the second level and only accessible by stairs and a narrow walkway behind the building



Entrances to the restrooms have a step at the threshold of the doorway



Single accessible bathroom doesn't conform to current accessibility code in configuration or quantity



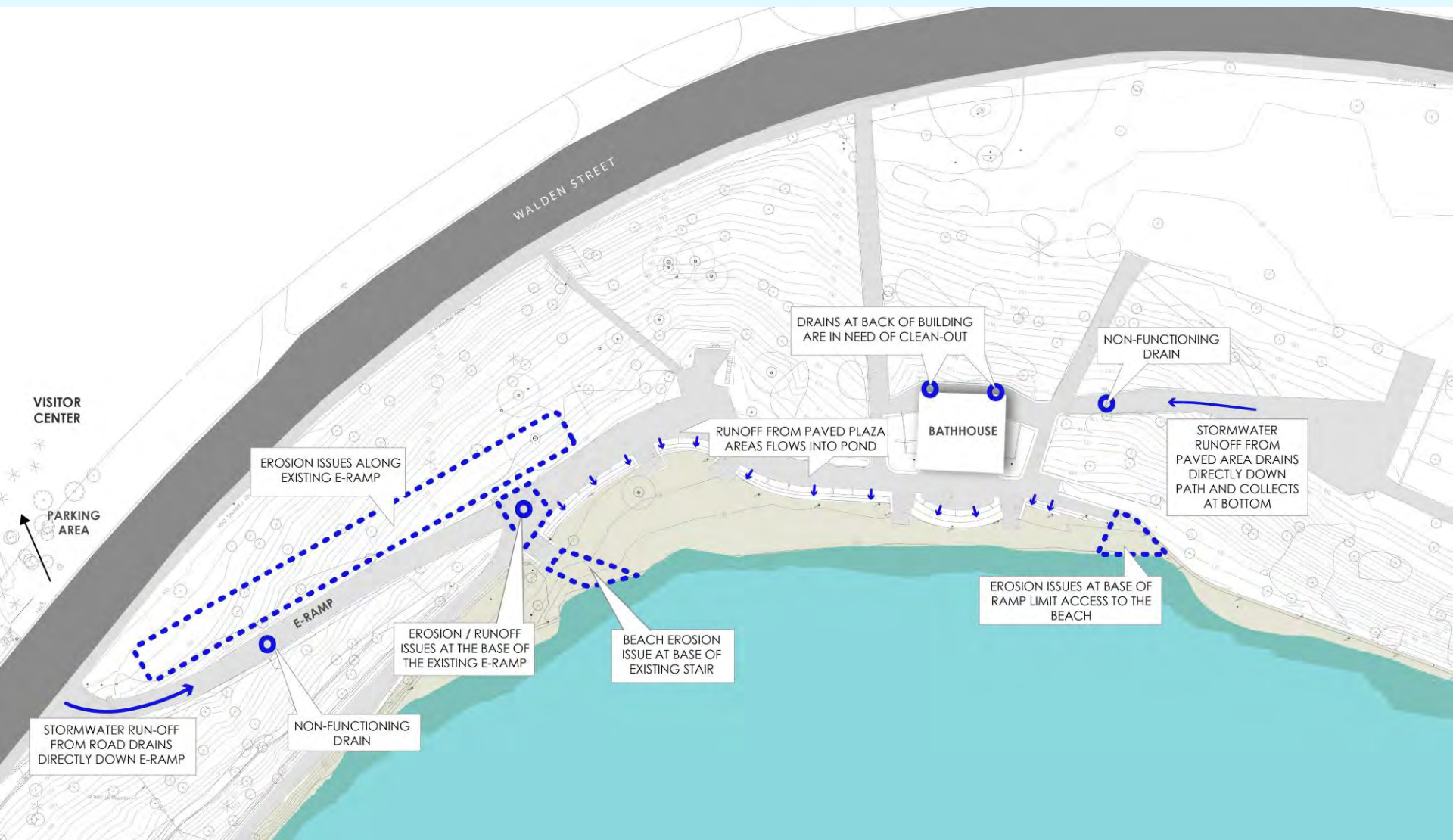
Main bathrooms do not contain any accessible toilet stalls



## Existing Accessibility Issues

### Main Beach Universal Accessibility Improvements





## Existing Drainage / Water Quality Issues

### Main Beach Universal Accessibility Improvements



Run-off and sediment issues on E-ramp



Eroding soils add to run-off sediment from road along the E-ramp



Sediment filled catch basin on E-ramp



Drainage issues at E-ramp lead to erosion of beach at the base of the steps

Plaza run-off flows directly into the beach area and pond



Erosion of the beach at bottom of the existing access ramp

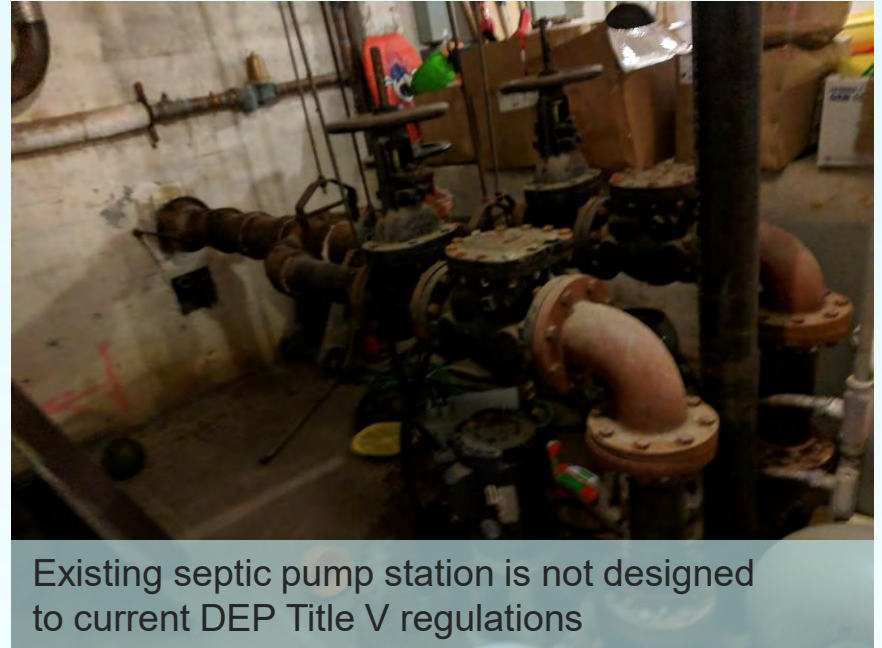
## Existing Drainage / Water Quality Issues

### Main Beach Universal Accessibility Improvements





Existing rest room areas are not inviting and have old inefficient fixtures



Existing septic pump station is not designed to current DEP Title V regulations

## Existing Drainage / Water Quality Issues Main Beach Universal Accessibility Improvements





## Proposed Site Plan Main Beach Universal Accessibility Improvements





# Site Removals

## Main Beach Universal Accessibility Improvements





# Landscape Restoration

## Main Beach Universal Accessibility Improvements



## Site Section/ Elevation Main Beach Universal Accessibility Improvements





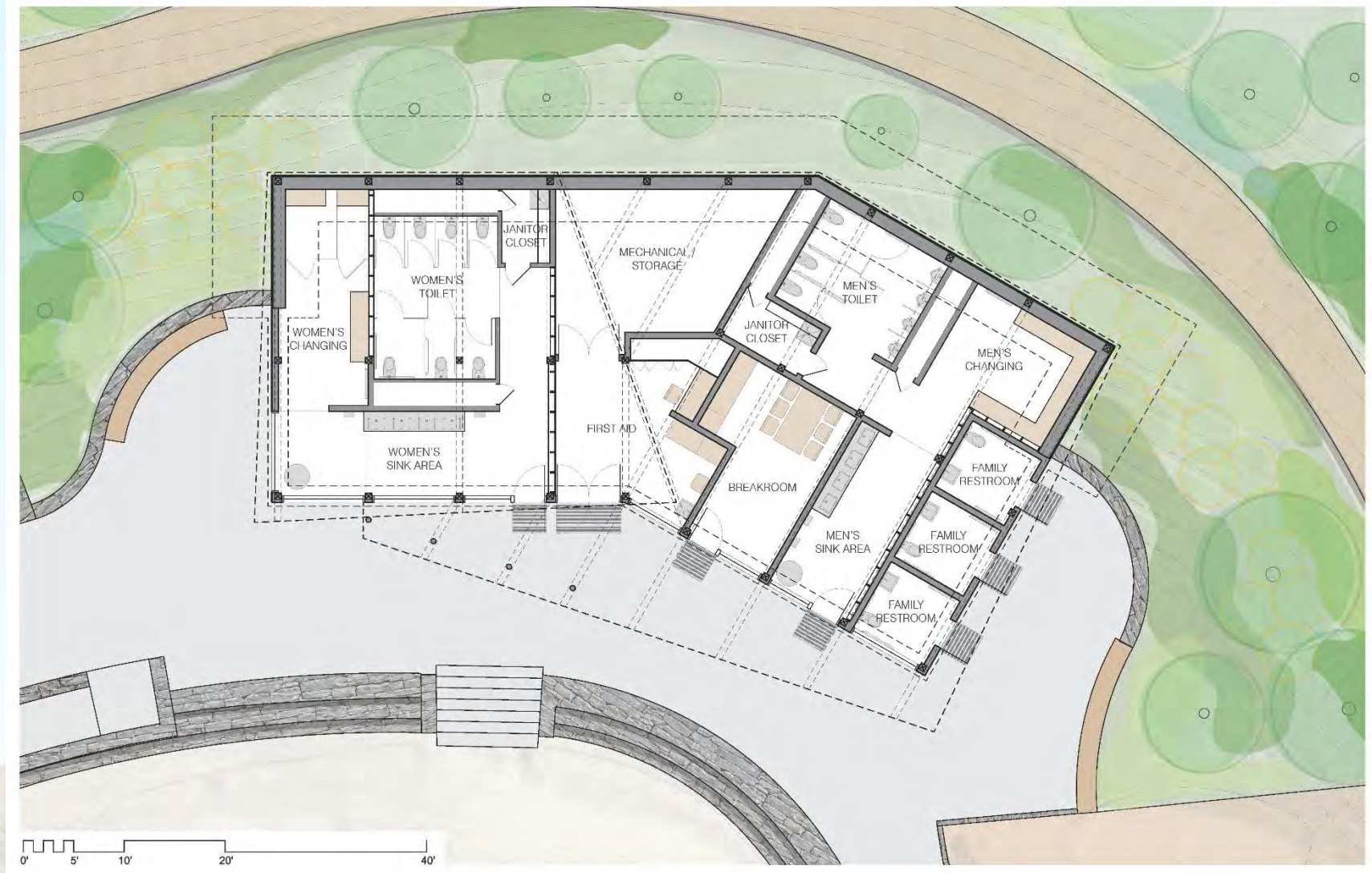
**Perspective: Arrival at Walden Street  
Main Beach Universal Accessibility Improvements**





**Perspective: New Bathhouse  
Main Beach Universal Accessibility Improvements**





**Bathhouse Plan**  
**Main Beach Universal Accessibility Improvements**



## Site Section/ Elevation

### Main Beach Universal Accessibility Improvements





## Design Character

### Main Beach Universal Accessibility Improvements





**Perspective: New Bathhouse  
Main Beach Universal Accessibility Improvements**





**Perspective: Main Beach**  
**Main Beach Universal Accessibility Improvements**

- Improves accessibility from the main entrance to the Bathhouse, beach plaza and beach area and realizes DCR's commitment to making Walden Pond universally accessible to all visitors.
- Takes advantage of project opportunities to improve drainage and erosion issues site-wide and reduces the impact of park recreational use on Walden Pond.
- Limits tree removal as much as possible. The project seeks to reuse existing felled trees to the extent possible on site for building structure and finishes.
- Fully restores site disturbance to a level of planting variety and abundance over and above that which presently exists on the heavily used eastern bank.
- Ensures all species planted are specifically selected to be native to the upland Kettle Pond plant communities of Massachusetts.



## **Project Benefits**

### **Main Beach Universal Accessibility Improvements**



- Includes 150 new trees to help stabilize the slope, infill open canopy opportunity areas, and provide a great diversity of tree maturity for sustained canopy development over time.
- Includes over 1,500 understory shrub and perennial plantings to re-establish steep slopes and quickly out-compete potential invasive volunteers.
- Installs an additional 0.5 acres of vegetative restoration outside of project boundary in selected areas around Walden Pond.
- Removes over 2,500 square feet of impervious cover within the natural resource buffer zone.
- Bathhouse to feature natural materials, plenty of natural lighting and improved ventilation.
- Building energy use completely offset by existing Photovoltaic (PV) system behind Visitor Center through the use of energy efficient lighting and building systems.



## **Project Benefits**

### **Main Beach Universal Accessibility Improvements**

### Environmental/Historic

- Wetlands Protection Act (Concord)
- Massachusetts Historical Commission Review
- Massachusetts Endangered Species Act (Natural Heritage & Endangered Species Program)
- National Pollutant Discharge Elimination System (U.S. EPA)

### Construction

- Building Permit (State Building Inspector)
- Plumbing Permit (State Plumbing Inspector)
- Water Connection (Concord Water and Sewer)
- Electrical Permit (Concord)
- Fire Inspection (Concord Fire Department)
- Access Board review (Massachusetts Architectural Access Board)
- Emergency Access (Concord and Lincoln Fire Departments)



**Anticipated Permits**  
**Main Beach Universal Accessibility Improvements**



### **Phase I Construction (New Bathhouse, Associated Landscaping)**

Bathhouse Construction:	\$ 2,350,000
<u>Landscaping:</u>	<u>\$ 1,475,000</u>
<i>Total:</i>	\$ 3,825,000

### **Phase II (Boardwalk, Landscape Restoration)**

Construction:	\$ 4,383,000
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Grand total: \$8,208,000 (subject to change)

DCR is seeking money through the capital planning process, and exploring private contributions and grant opportunities.

**Preliminary Cost Estimates and Funding  
Main Beach Universal Accessibility Improvements**

- Public Comment Period  
(runs through December 11, 2019)
- Permitting
- Complete universal access and bathhouse design
- Identify project funding
- Design: 12 months (2019-2020)
- Construction two phases:
  - Bathhouse and related landscape: 12 months (2020-2021)
  - Universally accessible boardwalk and overlook: 12 months (2021-2022)

**Next Steps/ Schedule**  
**Main Beach Universal Accessibility Improvements**



# Q / A and Discussion



## For more information:

### DCR Website

- [www.mass.gov/dcr/past-public-meetings](http://www.mass.gov/dcr/past-public-meetings)

## If you have comments or suggestions on this project:

*Submit online:* [www.mass.gov/dcr/public-comment](http://www.mass.gov/dcr/public-comment)

*Write:* Department of Conservation and Recreation  
Office of Public Outreach  
251 Causeway Street, Suite 600  
Boston, MA 02114

*Deadline:* Wednesday, December 11, 2019

*Note: Public comments submitted to DCR may be posted on the DCR website in their entirety, and no information, including contact information, will be redacted.*

**If you wish to subscribe to a DCR general information or Walden Pond project-related listserv:** contact DCR's Office of Community Relations at 617-626-4973 or [Mass.Parks@state.ma.us](mailto:Mass.Parks@state.ma.us).



# Additional Information