

# Granite Railway Quarry Permit Compliance Project Off-Site Wetland Replication Options



**Public Meeting**  
**November 22, 2010, 7:00PM**  
**Ponkapoag Golf Course Meeting Room**



# Commonwealth of Massachusetts

Governor

**Deval L. Patrick**

Lieutenant Governor

**Timothy Murray**

Energy and Environmental Secretary

**Ian A. Bowles**

Department of Conservation and Recreation Commissioner

**Richard K. Sullivan, Jr.**



## **DCR Mission Statement**

*To protect, promote and enhance our  
common wealth of natural, cultural  
and recreational resources.*

## Purpose of Meeting

- Provide background on permit compliance
- Present options for wetlands replication and obtain public input
- Outline next steps in project
- Respond to questions



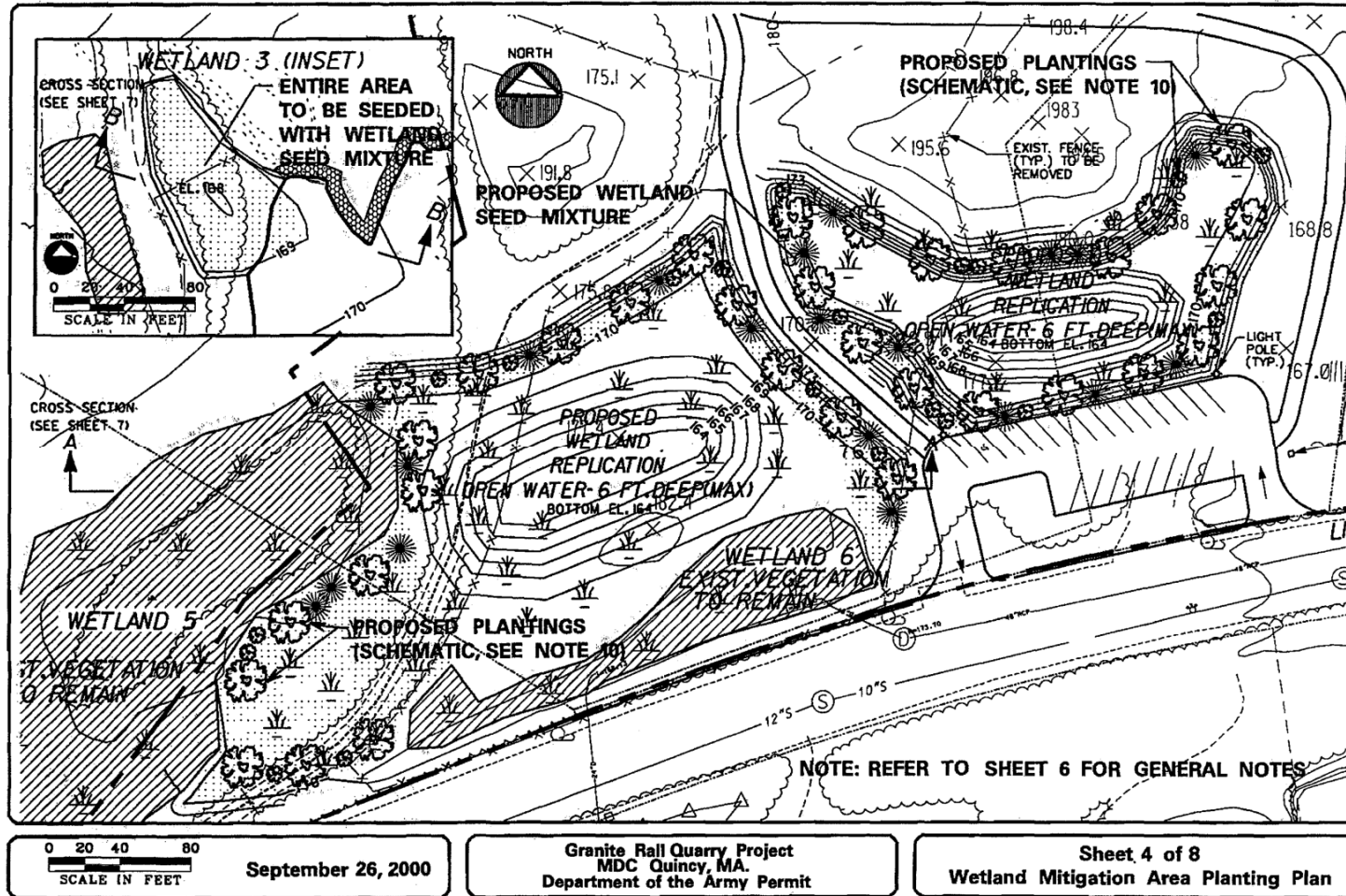
## Background of Granite Railway Quarry Fill Project

- Quarry dewatered in 1999 to assist State Police investigation
- In 2000, MassDEP orders filling and capping of quarry through Administrative Consent Order (ACO)
- Quarry filled in 2000 using Central Artery Tunnel Project fill, per MDC and MassHighway agreement
- Various permits issued for filling, including U.S. Army Corps 404 Permit





# Proposed Wetland Replication Plans (2000)



Original plan - Full mitigation on-site

## April 2008 Site Photo



## Granite Railway Quarry Permit Compliance Project

- DCR selected AECOM to develop plans to:
  - complete landfill closure process
  - replicate/restore wetlands
- Project kickoff in April 2010
- Funded by “tipping fee” funds from MassHighway
- DCR received \$825,000 in summer 2009 from MassHighway
- Money deposited into Blue Hills Trust Fund for use for permit compliance activities and, subject to available funds, recreational improvements



## Off-Site Replication Area – Selection Criteria

### Regulatory Criteria

- In or near same watershed as Granite Railway Quarry
- In-kind mitigation preferred
- Hydrological capacity of land for wetland resources
- Minimize land alteration impacts. Favor sites with:
  - Limited wetland resource area, endangered species habitat, if any
  - Limited vegetation removal, if any



### DCR Criteria

- Enhance an existing DCR recreation resource
- Permitting
- Access for machinery for construction



# Identified Mitigation Options



## Irrigation Reservoir at Ponkapoag Golf Course Option

- Plan calls for a pond with a watershed of approximately 77,000 square feet
- Part of DCR's Ponkapoag Golf Course Improvements Project
- Design is complete



## Irrigation Reservoir at Ponkapoag Golf Course Option

### Advantages

- Provides enhancement to an existing recreational resource
- Reduces need for water withdrawal from Ponkapoag Brook
- Permitting mostly complete
- Provides in-kind replication

### Disadvantages

- Vegetation removal and replacement required





## Old Route 128 West Option

### Advantages

- Opportunity to restore natural hydrology
- Reduces impervious surface

### Disadvantages

- Provides minimal recreational enhancement
- Not “in-kind” mitigation
- Involves permitting hurdles (Priority Habitat)





## Old Route 128 East Option

### Advantages

- Opportunity to restore natural hydrology
- Reduces impervious surface

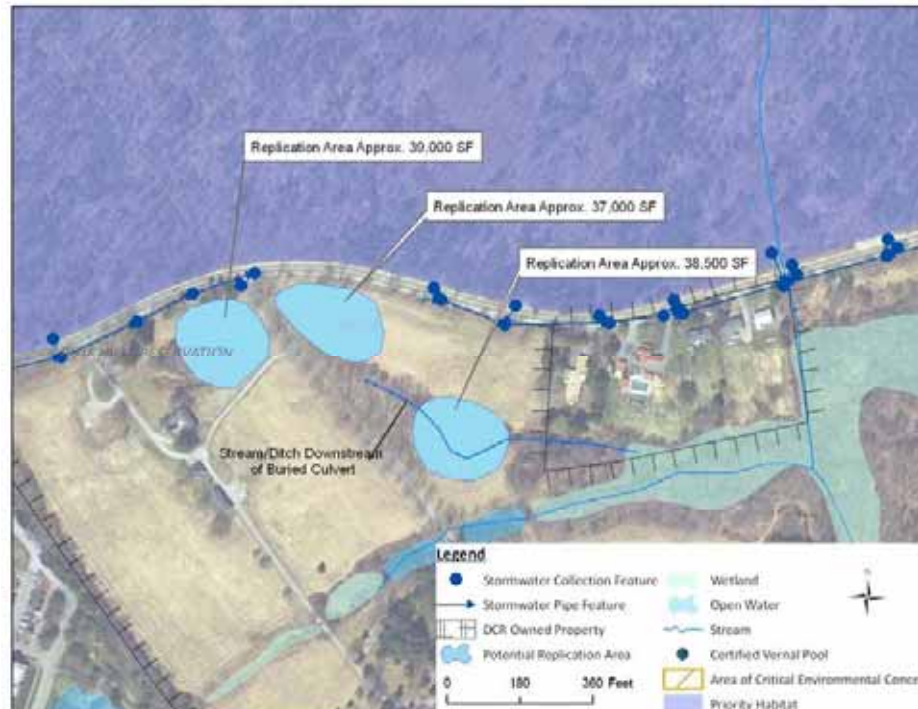
### Disadvantages

- Provides minimal recreational enhancement
- Not “in-kind” mitigation
- Possible engineering and access complications



## Brookwood Farm Option

- Daylight possible stream/ditch that runs from wetland system north toward Hillside Street on Brookwood Farm property
- Create wetland resources on fringe of stream
- Create open water area near Hillside Street entrance



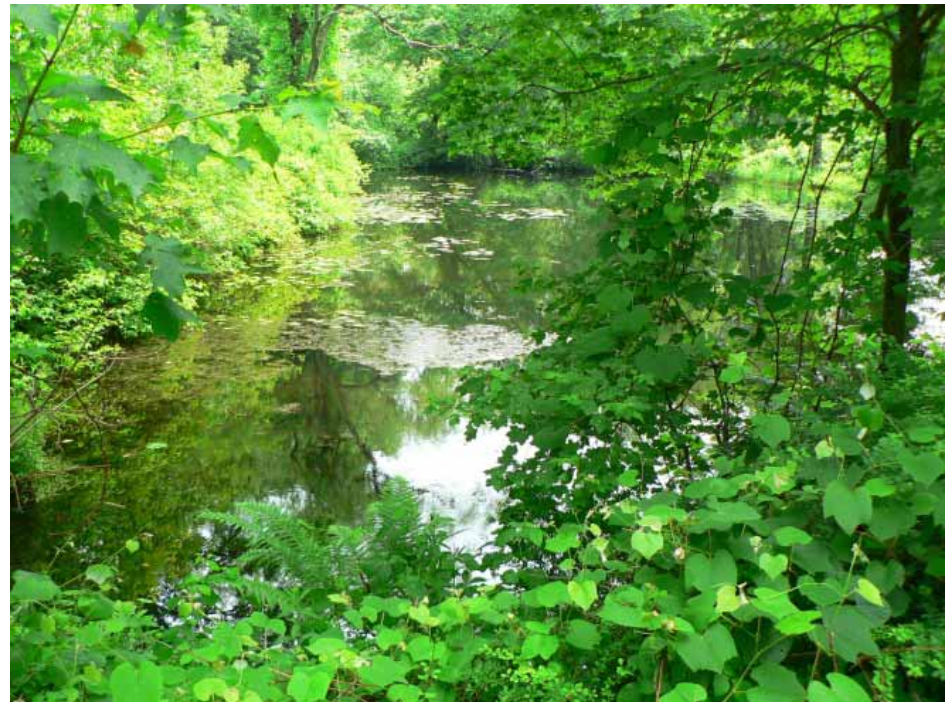
## Brookwood Farm Option

### Advantages

- Minimal vegetation removal required
- Opportunity to restore a portion of natural hydrology
- Provides “in-kind” mitigation

### Disadvantages

- Provides minimal recreational enhancement
- Subjective aesthetic impact to Brookwood Farm



# Alternatives Analysis

	Recreation	Ecological/Environmental	Constructability	Permitting
<b>Ponkapoag Golf Course</b>	Provides enhancement for maintenance of golf course	Reduces need to withdraw water from Ponkapoag Brook  Requires tree removal, although mitigated with planting	Hydrologic capacity has been shown to work  Easy site access	Permitting mostly complete  In-kind replication
<b>Old Route 128 West (Canton)</b>	No recreation benefit	Removes impervious surface and restores hydrological connections	Site access more difficult for heavy equipment	Additional permitting required due to rare species habitat  Not in-kind replication
<b>Old Route 128 East (Braintree)</b>	No recreation benefit	Removes impervious surface and restores hydrological connections	Site access more difficult for heavy equipment  Engineering complications possible	Not in-kind replication
<b>Brookwood Farm</b>	Use of pond could be perceived to be a recreational benefit  Subjective scenic impacts	No tree removal  No significant environmental/ecological benefit	Easy site access  Hydrologic capacity uncertain	Possible historic permitting issues  No wetland resource areas  In-kind replication

**Legend**

(-) Problematic	-1	
(+/-) Neutral	0	
(+) Good	+1	

## Next Steps

### Off-Site Replication

- Once a preferred alternative is developed and approved, design will occur during winter
- Contractor will need to be selected via bid process
- Work is anticipated to begin in spring/summer 2011

### On-Site Restoration

- Involves manual removal of Phragmites, biological control of Purple Loosestrife, and chemical treatment of Japanese Knotweed
- Work is expected to proceed in spring 2011

### Landfill Closure

- DCR/AECOM are preparing final landfill closure documents
- Expect to formally close landfill shortly and begin monitoring

# Discussion/Questions & Answers

## Additional Information

For more information:

- Web: [www.mass.gov/dcr](http://www.mass.gov/dcr)

If you have questions, concerns, or suggestions:

- Email: [dcr.updates@state.ma.us](mailto:dcr.updates@state.ma.us)
- Phone: 617-626-4974