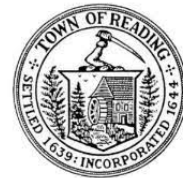




Town of Reading Virtual Public Listening Session

Tuesday, January 24, 2023
7:00pm



Project Team

Town of Reading

- Andrew MacNichol, *Town Planner*
- Alex Rozycki, *Senior Civil Engineer*
- Charles Tirone, *Conservation Administrator*

Horsley Witten

- Jennifer Relstab, PE, *Project Manager, Senior Water Resources Engineer*

Mystic River Watershed Assoc.

- Catherine Pedemonti, *Project Manager*

Welcome

Agenda :

- Introduction and Project Background
- Overview of Constructed Stormwater Wetlands
- Summary of the Project Design
- Questions and Comments

Reading MVP History

Municipal Vulnerability Preparedness (MVP) Program - Community Resilience Building

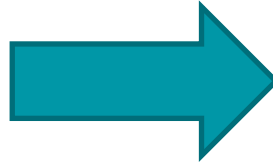
MVP Final Report and Designation: June 2020

Identified Hazards:

1. Changing Precipitation Patterns;
2. Extreme Temperatures;
3. Snow and Blizzards;
4. Wind Related Hazards

Review of current strengths/assets and weaknesses in local Environment, Infrastructure and Societal

High and Moderate Priorities established



Designation allows for **Action Grant** applications!



Maillet, Sommes, Morgan Constructed Wetland project awarded **\$2.1 million** in Action Grant funding (FY23-24)



RESILIENT
MYSTIC
COLLABORATIVE

21 communities. One watershed.

We partner on climate challenges no
single municipality can solve alone



FUNDING

Through Resilient Mystic Collaborative



MVP
Municipal Vulnerability
Preparedness



Mystic River
WATERSHED ASSOCIATION



Alewife Stormwater Wetland, the original inspiration

Resilient Mystic Collaborative Upper Mystic Working Group

Overall goal: Manage precipitation-based flooding

1. Modeling to better understand flooding
2. Identify tools to manage regional flooding
3. Zoom in on constructed wetlands as tool to manage regional flooding
4. Identify potential sites. 425 sites narrowed to 6.
5. Design and permit top 3 sites



Community Engagement to date

Lunch and Learn (Spring 2021)

Public Meeting (Spring 2021)

Site Walk (Fall 2022)

Public Forum (2023)

Additional Site walks
(TBD)



COMMUNITY
ENGAGEMENT TO
DATE



MVP
Municipal Vulnerability
Preparedness

Mystic River
WATERSHED ASSOCIATION

Constructed Stormwater Wetlands

- Engineered nature-based systems that utilize shallow pools and native wetland vegetation to treat stormwater runoff.
- Benefits:
 - Supports wildlife and habitat
 - Enhances open spaces and provides color throughout the seasons
 - Provides opportunities for passive and active recreation and place-making
 - Improves water quality and provides flood mitigation benefits

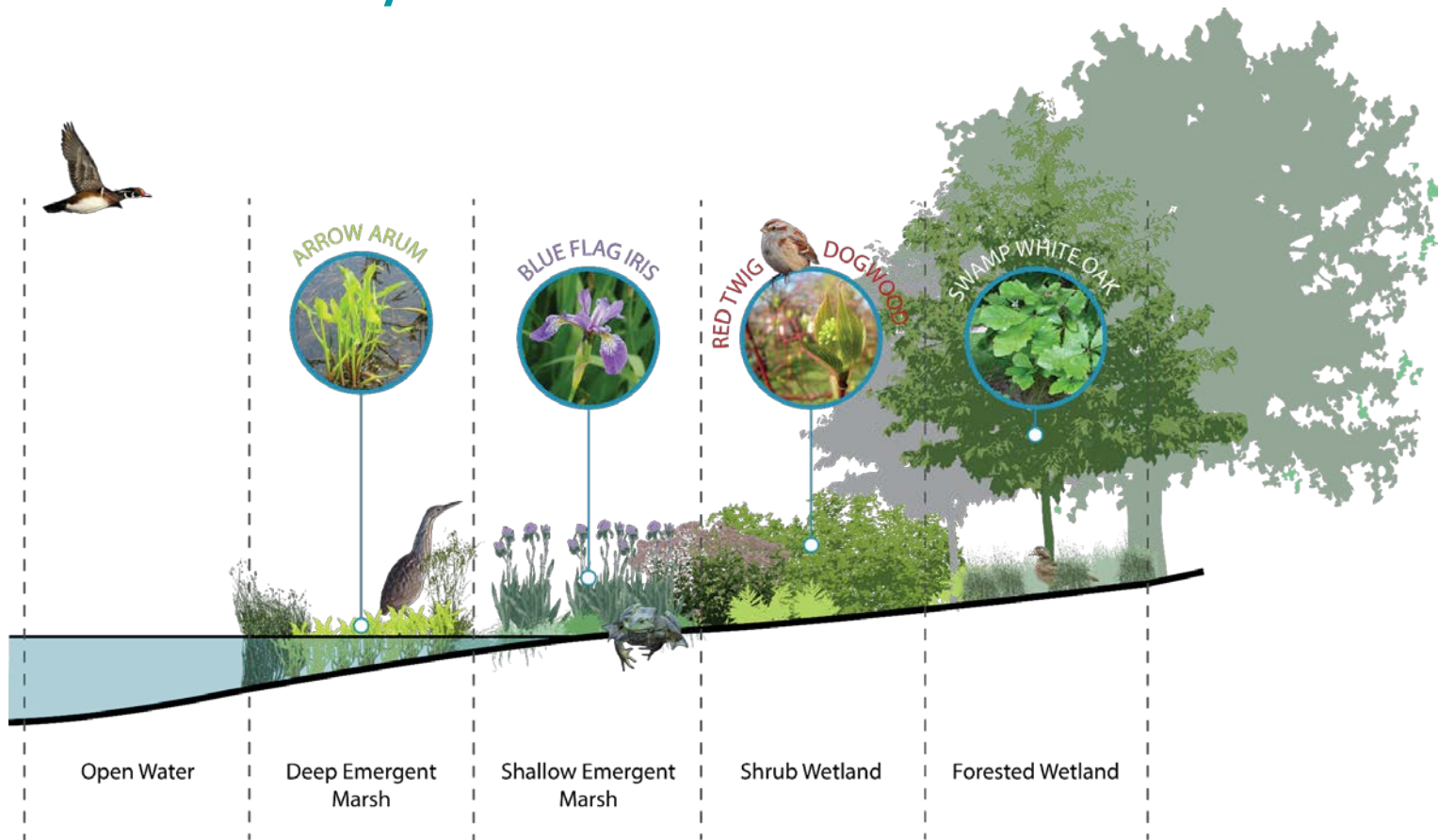
Common Questions

- Will the wetland be wet or dry?
- Will the area be flooded during large rain events?
- What about mosquitoes?
- Are there impacts to existing habitats and wildlife?

What do they look like?



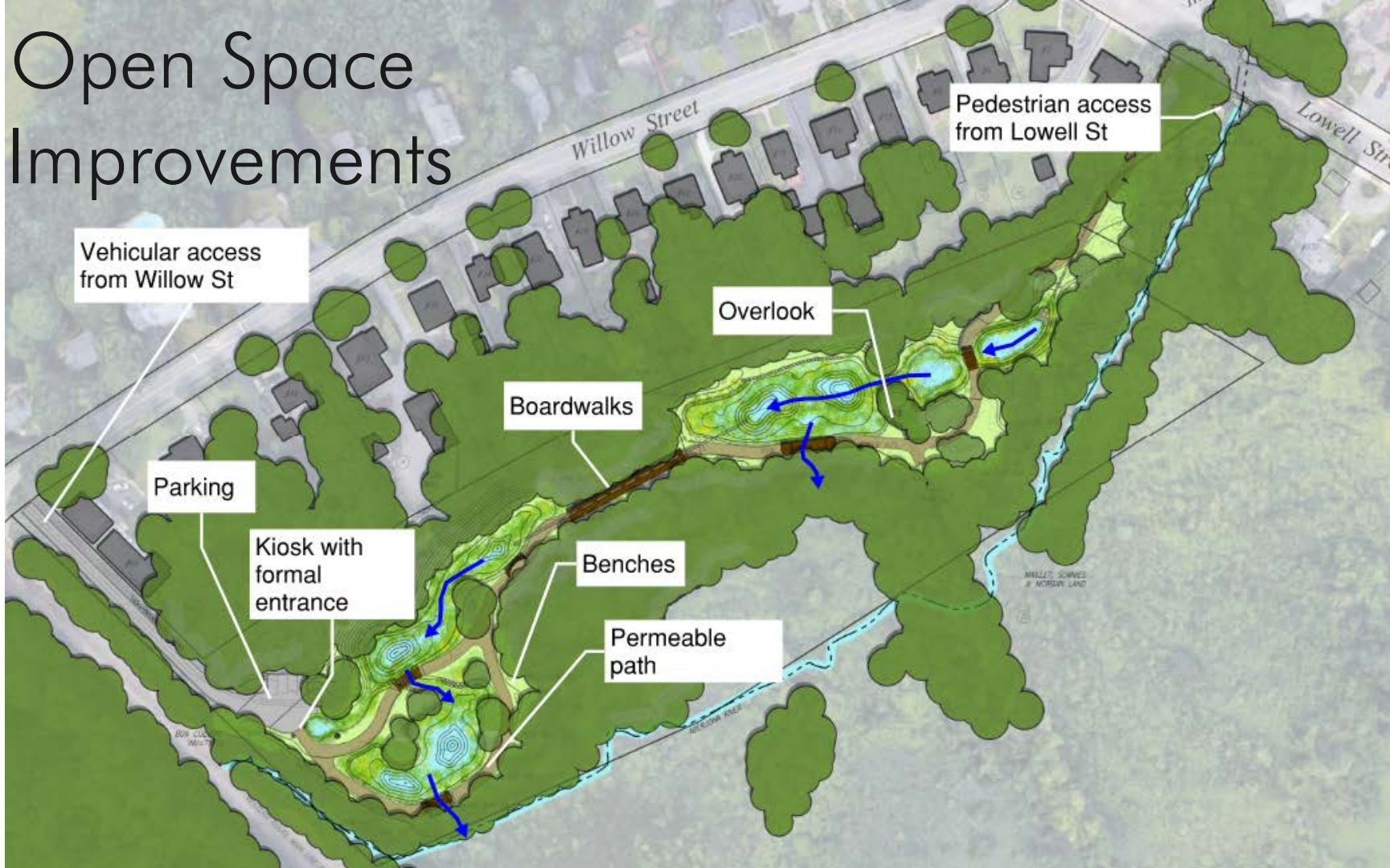
What do they look like?



Project Design Priorities

- Create open space improvements and site amenities that harmonize with the existing environment
- Provide accessible pathways for pedestrians
- Restore native plant and tree species
- Implement nature-based heat mitigation strategies
- Provide management and treatment of stormwater

Open Space Improvements



Stormwater Improvements





Tree in Field

Existing Boardwalk

Sewer Manhole by Rock



Tree in Field

Existing Boardwalk

Sewer Manhole by Rock



SYMBOLS	
—	UTILITY POLE
—	DRAIN PIPE
—	GAS LINE
—	OVERHEAD WIRE
—	SAFETY WIRE
—	WATER LINE
—	WETLAND BOUNDARY
—	WETLAND 100 BUFFER
—	WETLAND 500 BUFFER
—	RIVER CENTERLINE
—	EDGE OF WATER (AUGUST 16, 2022)
—	ALLOA
—	BORING
—	WETLAND FLAG
—	ROCK
—	BRN
—	BRNCH



Existing Boardwalk

Sewer Manhole by Rock

Tree in Field

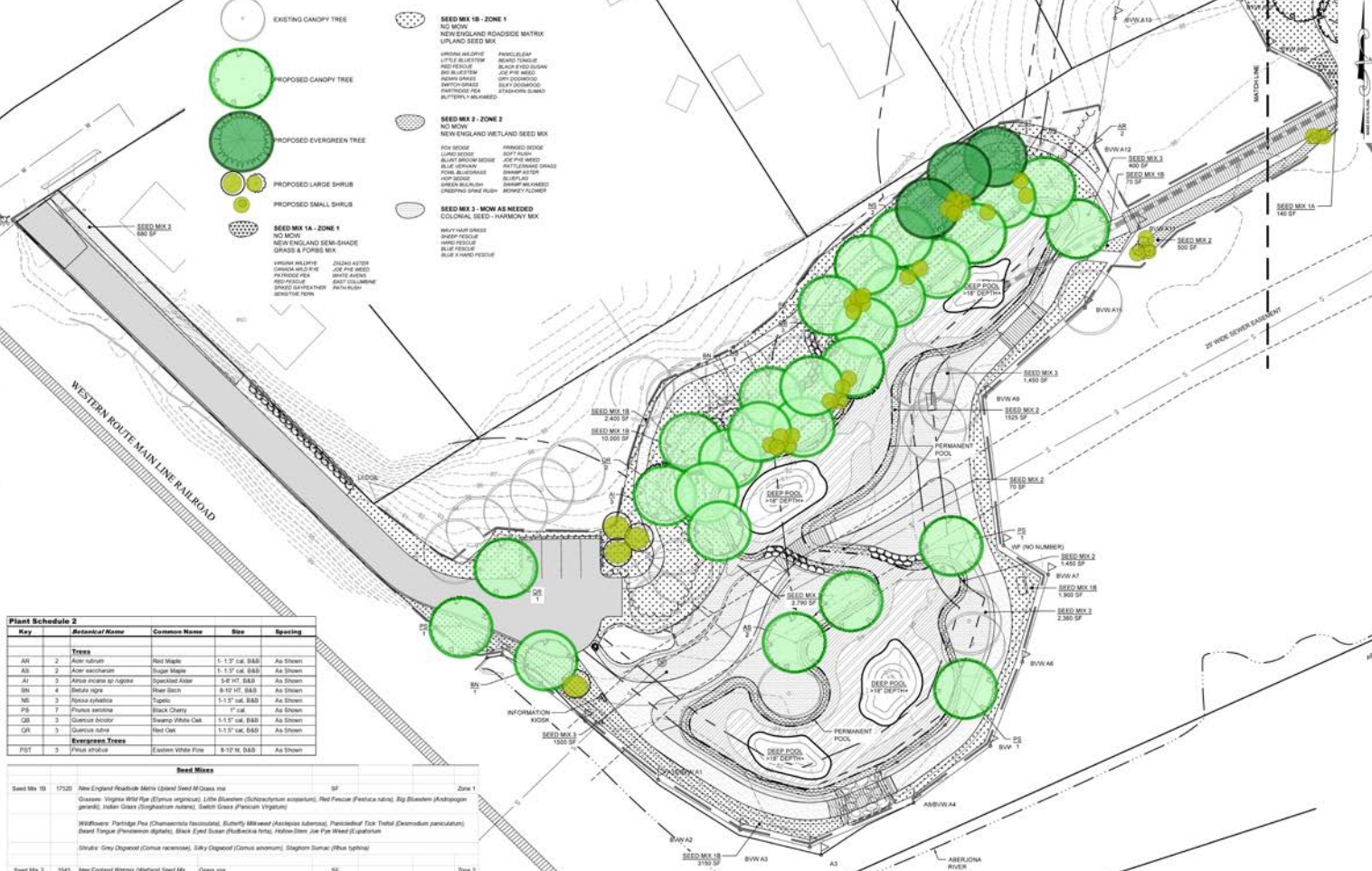


Trees and Plants

- Removing 56 total trees (greater than 6-inch DBH), including several invasives

Qty	Type	Size	Approx. Height	Notes
31	Deciduous Shade Tree	1-1.5" cal.	N/A	61 total replacement trees
7	Deciduous Shade Tree	8-10' ht.	8-10 feet tall	
16	Deciduous Shade Tree	5-8' ht.	5-8 feet tall	
7	Evergreen	8-10' ht.	8-10 feet tall	
31	Shrub	#3 cont.	1-3 feet tall	90 total replacement shrubs
59	Shrub	#5 cont.	2-4 feet tall	
23,735	Perennial / Grass	Plug	N/A	

last modified: 05/27/21 by eb K:\Projects\2021\21008 Upper Mystic River Watershed Drawings_Reading\21008_READING_LA.dwg



Plant Schedule 2

Key	#/Latin Name	Common Name	Size	Spacing
Trees				
AR	2 Acer rubrum	Red Maple	1-1 1/2' cal. BAB	As Shown
AS	2 Acer saccharum	Sugar Maple	1-1 1/2' cal. BAB	As Shown
AI	3 Acer incense var. rugosum	Roundleafed Maple	1-2' cal. BAB	As Shown
IN	4 Salix nigra	Slack Birch	8-10' cal. BAB	As Shown
MS	3 Rhus typhina	Turkey	1-1 1/2' cal. BAB	As Shown
PI	7 Prunus americana	Black Cherry	1" cal.	As Shown
OB	3 Quercus bicolor	Swamp White Oak	1-1 1/2' cal. BAB	As Shown
OR	3 Quercus rubra	Red Oak	1-1 1/2' cal. BAB	As Shown
Evergreen Trees				
PIST	3 Pinus strobus	Eastern White Pine	8-10' W. BAB	As Shown

Seed Mixes

Seed Mix 1B	17520	New England Roadside Matrix Upland Seed Mix	SF	Zone 1
		Grasses: Virginia Wild Rye (Elymus virginicus), Little Bluestem (Schizanthus scoparium), Red Fescue (Festuca rubra), Big Bluestem (Andropogon gerardii), Indian Grass (Sorghastrum nutans), Soft-twig Grass (Panicum virgatum)		
		Wildflowers: Partridge Pea (Chamaecrista fasciculata), Bulbous Milkweed (Asclepias tuberosa), Parasitishof Tick Toad (Desmodium illinoense), Bristle Tongue (Penstemon digitalis), Black-eyed Susan (Rudbeckia hirta), Hollow-stem Joe-Pye Weed (Eupatorium sp.), and Struts (Grey Dogwood (Cornus nemoralis), Silky Dogwood (Cornus amomum), Slough Sycamore (Blue holly)		
Seed Mix 2	3545	New England Wetland (Medford Seed Mix)	SF	Zone 2
		For Sedge (Carex vaginata), Leaf Sedge (Carex lasiocarpa), Short-blown Sedge (Carex acutata), Blue Vervain (Verbena hastata), Field Sedges (Phragmites), Hay Sedge (Carex spinescens), Green Bulrush (Scirpus atrovirens), Cowling Spike Rush (Eleocharis acicularis), Fringed Sedge (Carex viridula), Soft Rush (Juncus effusus), Softleaf Joe-Pye Weed (Eupatorium maculatum), Rattlesnake Grass (Sporobolus canadensis), Swamp aster (Aster patens), Blueberry (Vaccinium corymbosum), Swamp Milkweed (Asclepias incarnata), Square-stemmed Milkweed Flower (Mimulus ringens)		
Seed Mix 3	8100	Hemlock Mix: Colonial Seed	SF	
		Waxy-leaf Grass, Swamp Fescue, Hard Fescue, Blue Fescue, Blue & Hard Fescue		

Revisions

NO.	DATE	BY	DESCRIPTION
1	05/27/21	eb	Initial Issue
2	05/27/21	eb	Revised
3	05/27/21	eb	Revised
4	05/27/21	eb	Revised
5	05/27/21	eb	Revised
6	05/27/21	eb	Revised
7	05/27/21	eb	Revised
8	05/27/21	eb	Revised
9	05/27/21	eb	Revised
10	05/27/21	eb	Revised
11	05/27/21	eb	Revised
12	05/27/21	eb	Revised
13	05/27/21	eb	Revised
14	05/27/21	eb	Revised
15	05/27/21	eb	Revised
16	05/27/21	eb	Revised
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18	05/27/21	eb	Revised
19	05/27/21	eb	Revised
20	05/27/21	eb	Revised

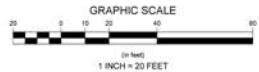
Horsley Witten Group, Inc.
 1000 North Main Street
 Suite 200
 Reading, MA 01060
 Phone: 978.333.9000
 Fax: 978.333.9100
 www.horsleywitten.com

**MYSTIC RIVER WATERSHED
 MAILLET CONSERVATION AREA
 READING, MASSACHUSETTS**

TREE PLANTING AND SEEDING PLAN

Town of Reading
 Planning & Zoning
 1000 North Main Street
 Reading, MA 01060
 Phone: 978.333.9000
 Fax: 978.333.9100

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Trees and Plants



Three-square
bulrush



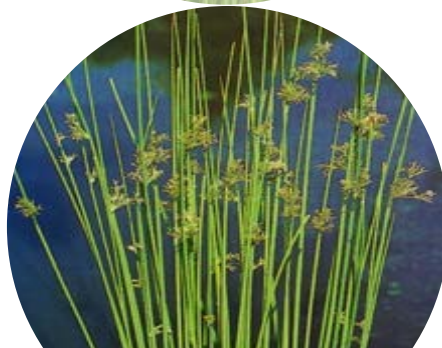
Cardinal Flower



White summer
sweet



Black cherry



Soft rush



Joe pye weed



Red maple



Spice bush

Design Questions

- What material is being used for the paths and boardwalks?
- Will the paths be accessible for users of all abilities and ages?
- How many parking spots will be available? What about overflow parking?
- Will there be access to the site during construction?
- What is the overall schedule for work?

Project Schedule





Questions and Comments

Project Information and Updates

For More Information and/or to Sign-Up for future Email Updates please
visit

readingma.gov/msm

Or contact staff:

Alex Rozycki, Senior Engineer – arzycki@ci.reading.ma.us

Chuck Tirone, Conservation Administrator – ctirone@ci.reading.ma.us

Andrew MacNichol Community Development – amacnichol@ci.reading.ma.us



Wetland Cross Section

(with typical plant species for each zone)

