

Quinobequin Road and Trail Improvements Phase 1: Concept Design

Public Meeting 2 - Concept Alternatives







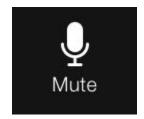
Thursday, October 8, 2020, 6:30 p.m.–8:00 p.m. Virtual Meeting



Quinobequin Road and Trail Improvements Phase 1: Concept Design

Meeting Logistics – ZOOM Platform









Quinobequin Road and Trail Improvements Phase 1: Concept Design

Public Meeting 2 - Concept Alternatives







Thursday, October 8, 2020, 6:30 p.m.–8:00 p.m. Virtual Meeting



Governor

Charles D. Baker

Lieutenant Governor

Karyn E. Polito

Energy and Environmental Secretary

Katie Theoharides

Department of Conservation and Recreation Commissioner

Jim Montgomery





DCR Mission Statement

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



Meeting Purpose

- Introduce Project Goals
- Provide Project Summary
- Introduce Project Team
- Introduce 3 Alternatives
 - 21st-Century Parkway
 - Charles River Greenway
 - Share the Road
- Present Alternatives Matrix
- Discuss Alternatives
- Present Project Schedule and Next Steps



Project Goals

- Improve safety for drivers, cyclists, and walkers
- Create an accessible recreational path along the river
- Improve the ecosystem function of the Charles River Reservation
- Preserve the scenic character of the roadway and parkland, while accommodating both safety and access



Project Team

DCR

CONSULTANT TEAM

Principal-in-Charge

Tracie Lenhardt, PE, ENV SP

Project Manager

Pete Sorensen, PE, ENV SP

QA/QC

Susan Kremer, PE, ENV SP

Deputy Project Manager

Margot Schoenfelder, PE, AICP

Structural Engineer

Shanta Keller, PE, ENV SP

Traffic

Val Lenhardt, PE, IMSA III Dave Greenberg, PE, IMSA III

Public Outreach

Geoffrey Morrison-Logan

Cultural Resources

Nicole Benjamin-Ma

Environmental

Dan Cannata

Stormwater

Eric Monkiewicz, PE, LEED AP, ENV SP

Landscape Architecture/ Trail Signage

IBI Placemaking (formerly CRJA Landscape Architects) Rick Williams, RLA Jeff Bittenbender, RLA Survey

Craig Robertson

Construction

Jack Lydon, PE

Geotechnical Engineer

Lahlaf Geotechnical Consulting, Inc. (LGCI)

Lighting

Thompson Engineering Company, Inc.



Project Locus





Assessment Criteria

Archeological Resource Preservation

Historic Parkway Character Impacts

Natural Resource Preservation

Habitat Preservation & Restoration/Tree Removal

Stormwater Management/Water Quality

Floodplain Impacts

Traffic Calming

Safety

Accessibility

Cyclist Accommodations

Pedestrian Accommodations

Cost

Point System

- 4 Best
- 3 Better
- Bad
- Worst



Assessment Criteria Definitions

- **Archeological Resource Preservation** The Charles River shoreline is highly sensitive for the presence of archaeological resources. The project team has utilized the City of Newton's archaeological survey as a reference. Specific archaeological areas within the project limits are not currently known. Alternatives shall minimize excavations for construction activities between the roadway and the rivers edge.
- **Historic Parkway Character impacts** Quinobequin Road is listed on the National Register of Historic Places. Alternatives shall minimize changes to the character of the parkway and its setting.
- **Natural Resource Preservation** The Project will ultimately require work within wetland resource areas subject to protection under the Massachusetts Wetland Protection Act (WPA) and the Federal Clean Water Act (CWA).
 - The wooded areas along Quinobequin road contain many vegetated wetlands and small tributary streams associated with the Charles River. Areas subject to Regulation under the WPA in the vicinity of Quinobequin Road consist of:
 - Bordering Vegetated Wetland (BVW)
 - Bank (Associated with the Charles River and adjacent streams)
 - Land Under Waterbodies and Waterways (LUWW)
 - Bordering Land Subject to Flooding (BLSF) (100-Year Floodplain)
 - 200-foot Riverfront Area (associated with the Charles River)
 - Impacts to vegetated wetland resource areas would require replication at a ratio of 1:1.



Assessment Criteria Definitions

- Habitat Preservation & Restoration/Tree Removal The areas along the Charles River contain areas of primarily undisturbed wooded areas surrounding the existing footpaths. The wooded areas provide home for many wildlife species that are native to the watershed. Any proposed tree clearing would occur within the Riverfront Area and require replanting or restoration to maintain wildlife habitat and comply with state regulations related to the Riverfront Area.
- **Stormwater Management/ Water Quality** Improve existing roadway drainage and address erosion. Comply with Massachusetts Stormwater Standards to the greatest extent practicable
- **Floodplain Impacts** A significant portion of the project is within the 100-year flood plain. All fill placed within the flood plain requires compensatory flood storage providing a net zero impact.
- **Traffic Calming** Ability to integrate potential traffic calming measures such as narrow lanes, signage, enforcement Raised cross walks, raised tables at intersections, etc.
- **Safety** Provide separation between vehicles Pedestrian and Cyclists, lighting, Traffic calming, improved site distance for all users

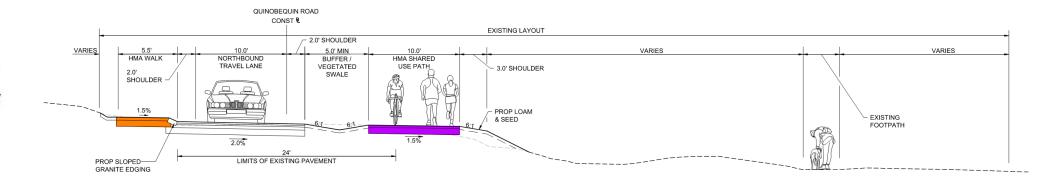
Assessment Criteria Definitions

- **Accessibility** Provide compliant sidewalks, walking paths, ramps, crosswalks. Overlooks, etc, meeting the applicable accessibility guidelines
- 2010 ADA Standards for Accessible Design
- 521 CMR Architectural Access Board Regulations
- U.S. Forest Service Trail Accessibility Guidelines (FSTAG)
- **Cyclist Accommodations** meets that meet current safety standards and design guidelines.
- Pedestrian Accommodations Provides a safe accessible pedestrian experience with enhanced view corridors, ability to experience natural features.
- Cost Order of magnitude cost to determine budgeting and funding purposes.

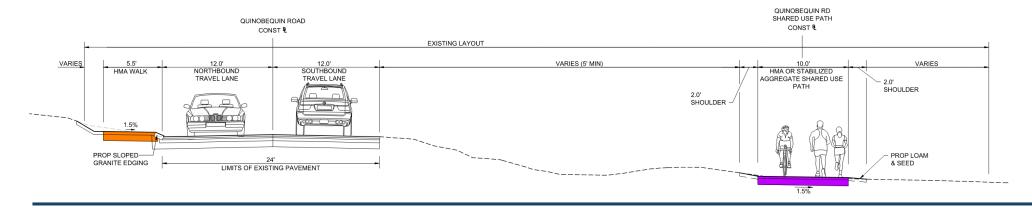


3 Alternatives: Typical Sections

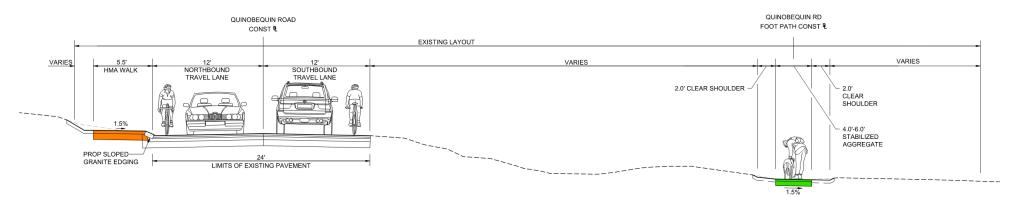
21st-Century Parkway



ALTERNATIVE 2 Charles River Greenway

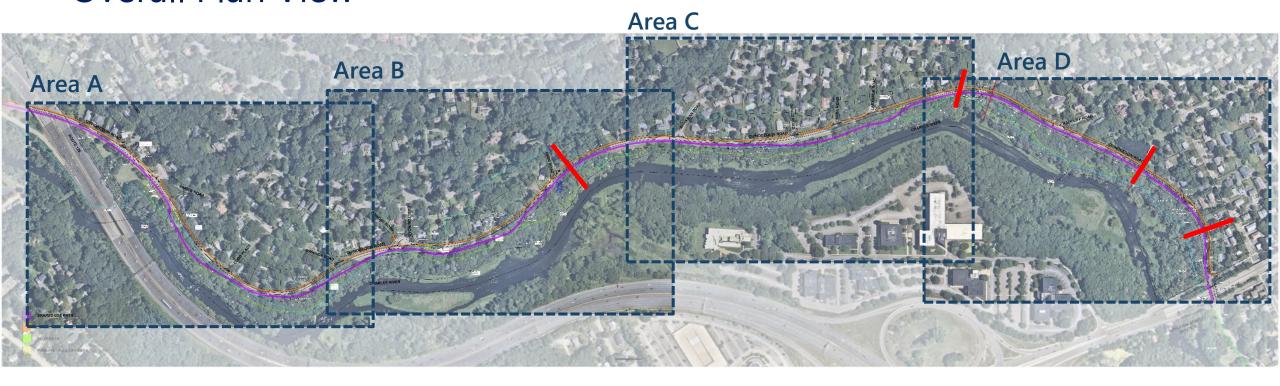


ALTERNATIVE 3 Share the Road





Overall Plan View



— Critical Section



Alternative 1 AREA A



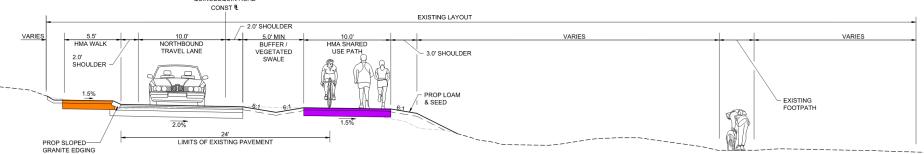
Sidewalk

Foot Path

Parking/Pull-Off Area

Boardwalk / River Overlook







Alternative 1 AREA B



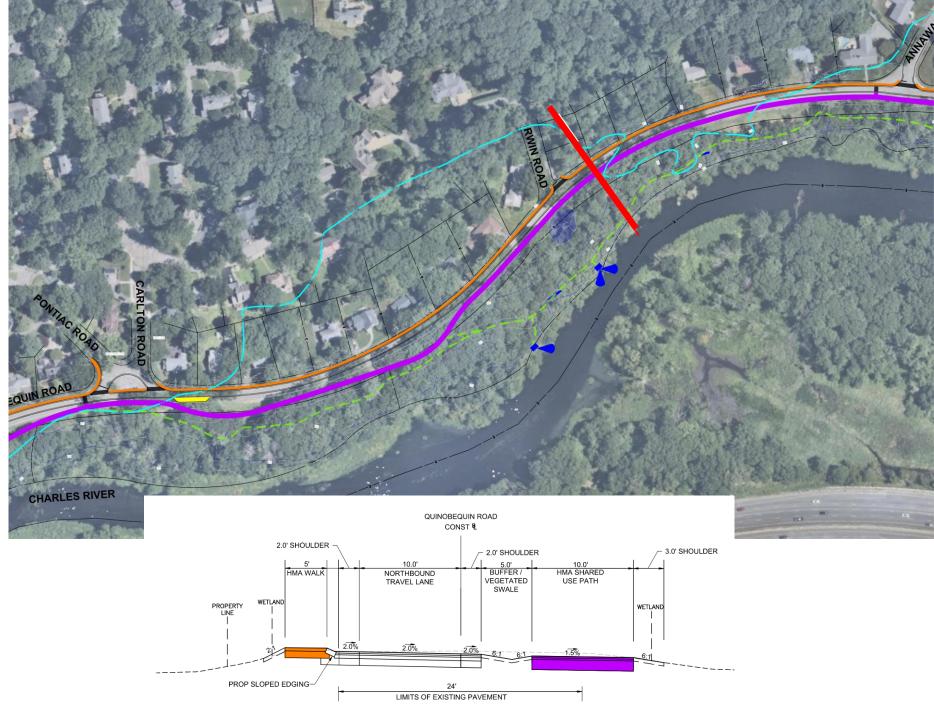
Shared Use Path

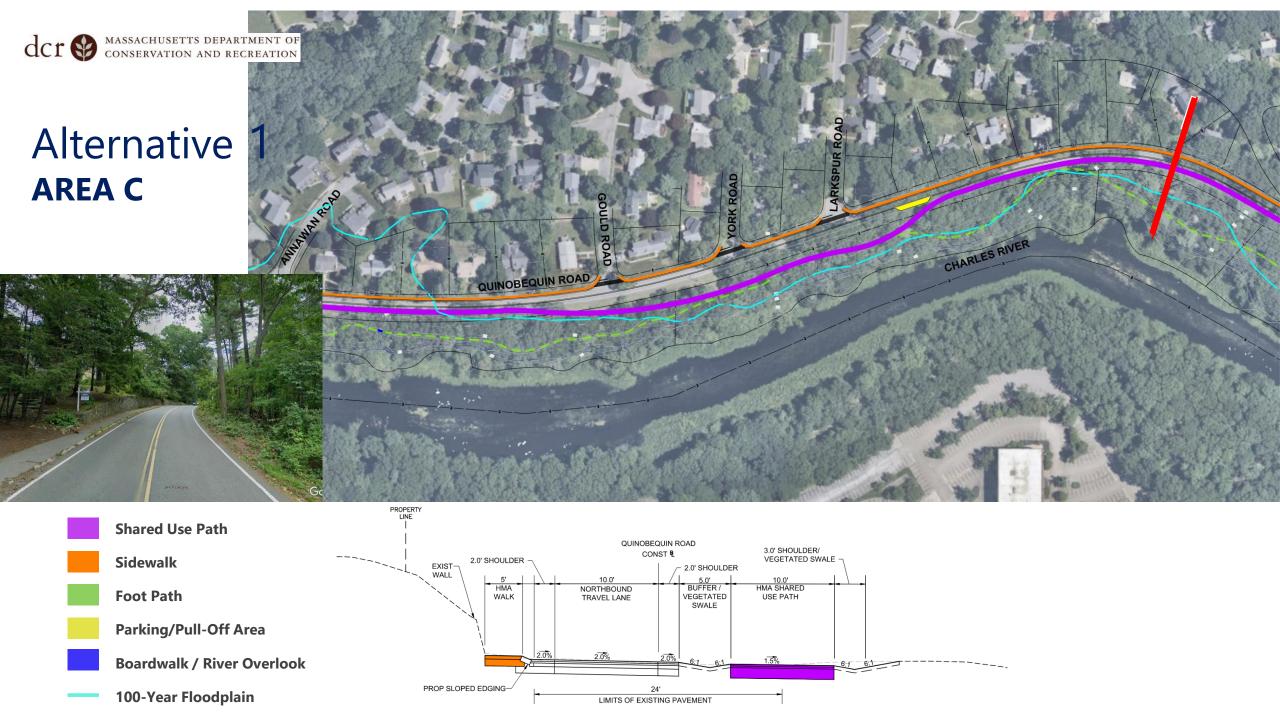
Sidewalk

Foot Path

Parking/Pull-Off Area

Boardwalk / River Overlook







Alternative 1 AREA D







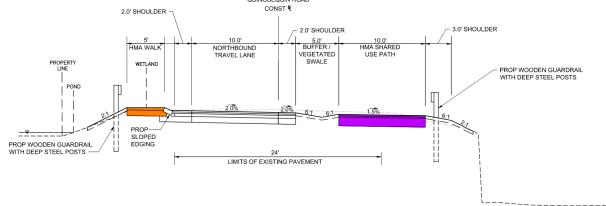














Alternative 1 AREA D



Shared Use Path

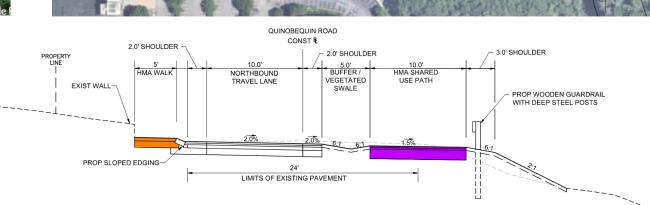
Parking/Pull-Off Area

100-Year Floodplain

Boardwalk / River Overlook

Sidewalk

Foot Path



RADCLIFF ROAD



Alternative 2 AREA A

Shared Use Path

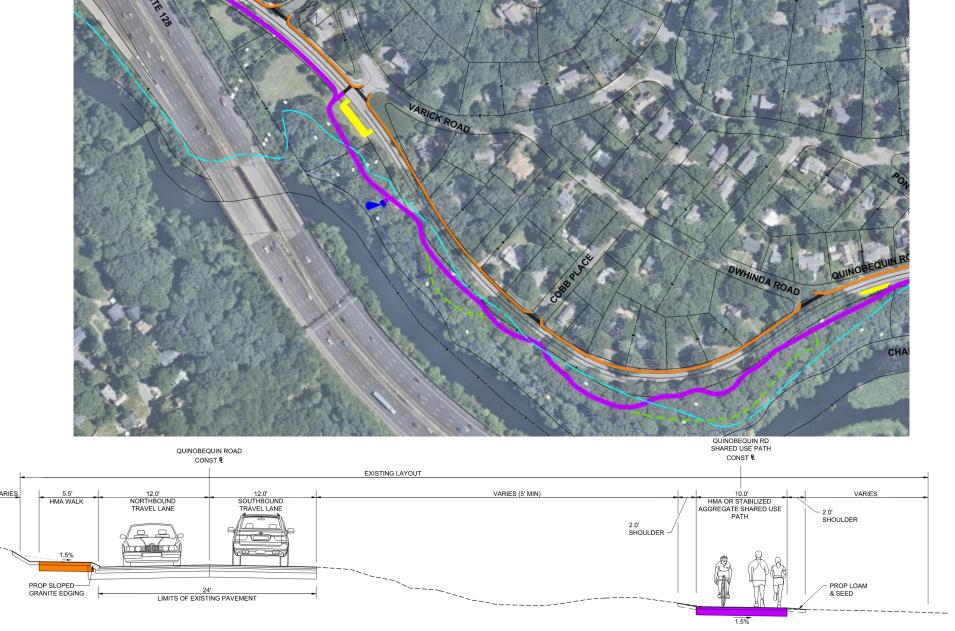
Parking/Pull-Off Area

100-Year Floodplain

Boardwalk / River Overlook

Sidewalk

Foot Path

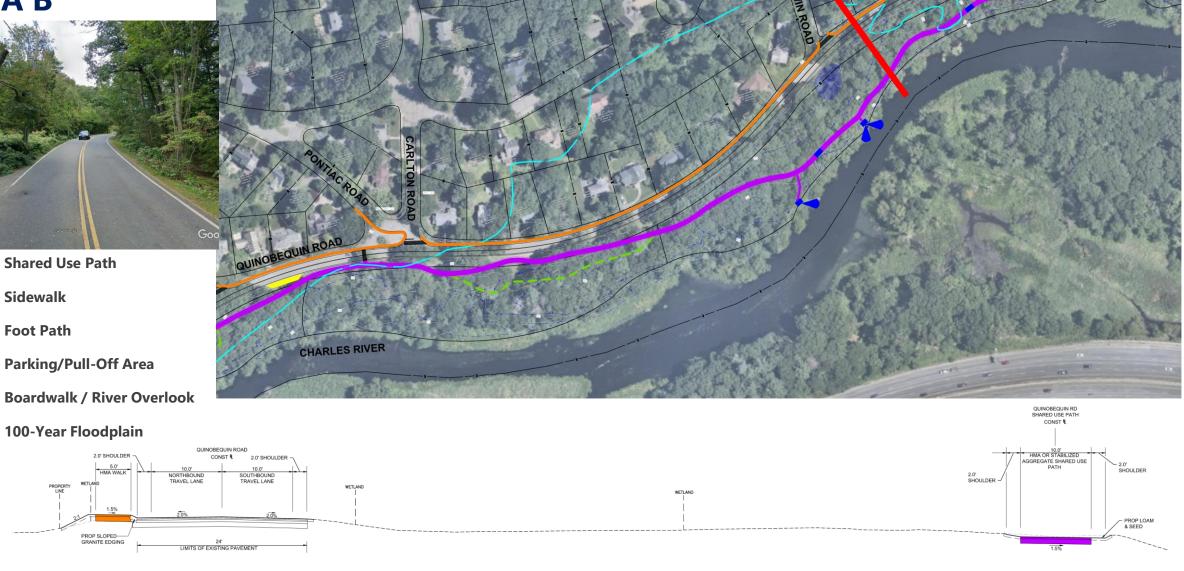




Alternative 2 **AREA B**



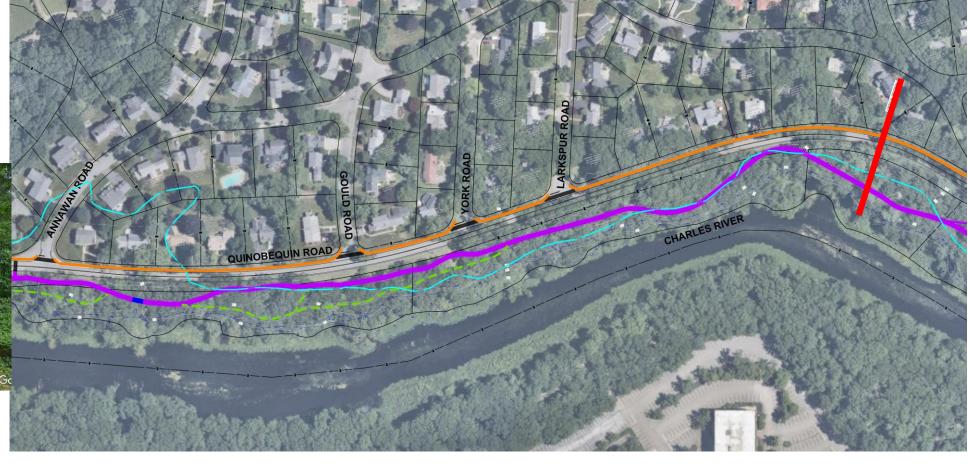
Boardwalk / River Overlook



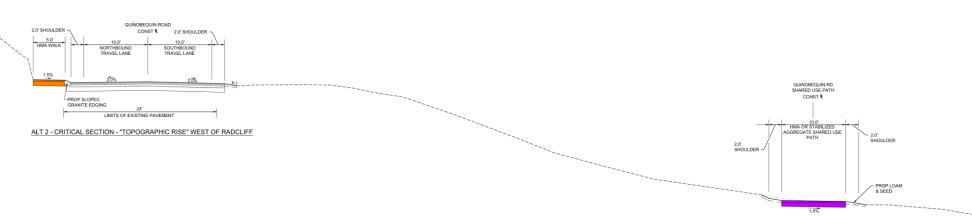


Alternative 2
AREA C





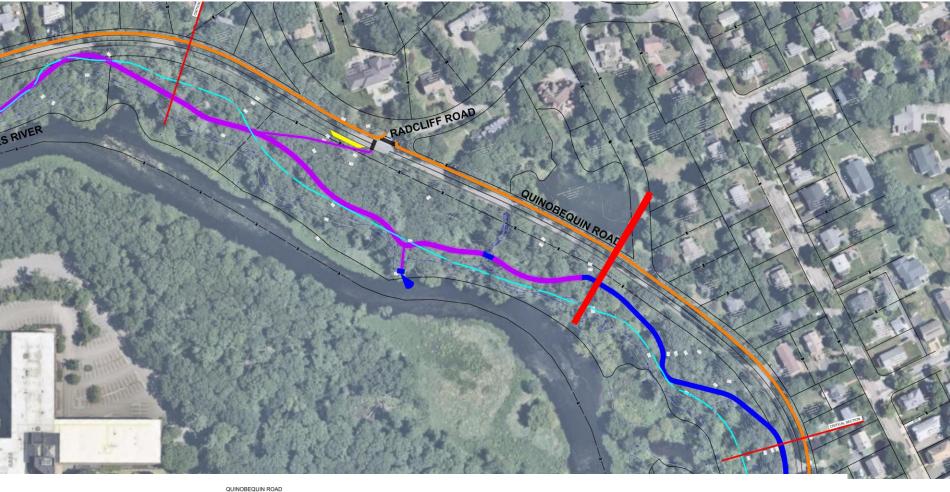






Alternative 2 AREA D





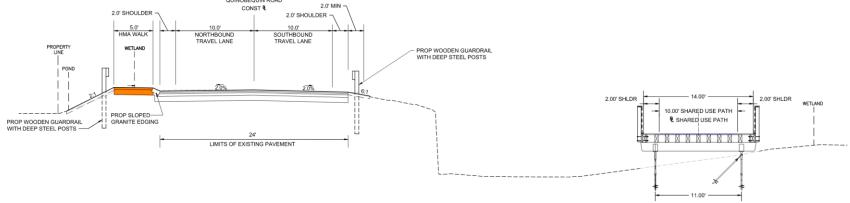






Parking/Pull-Off Area

Boardwalk / River Overlook





Alternative 2 AREA D



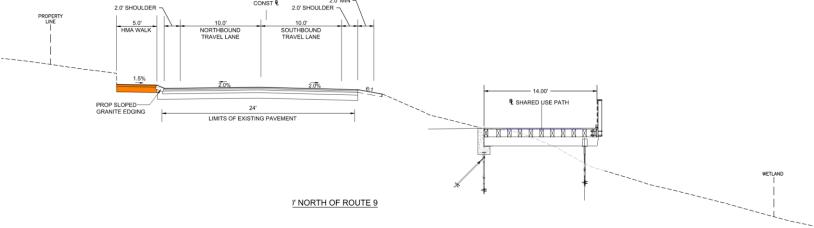




Foot Path

Parking/Pull-Off Area

Boardwalk / River Overlook



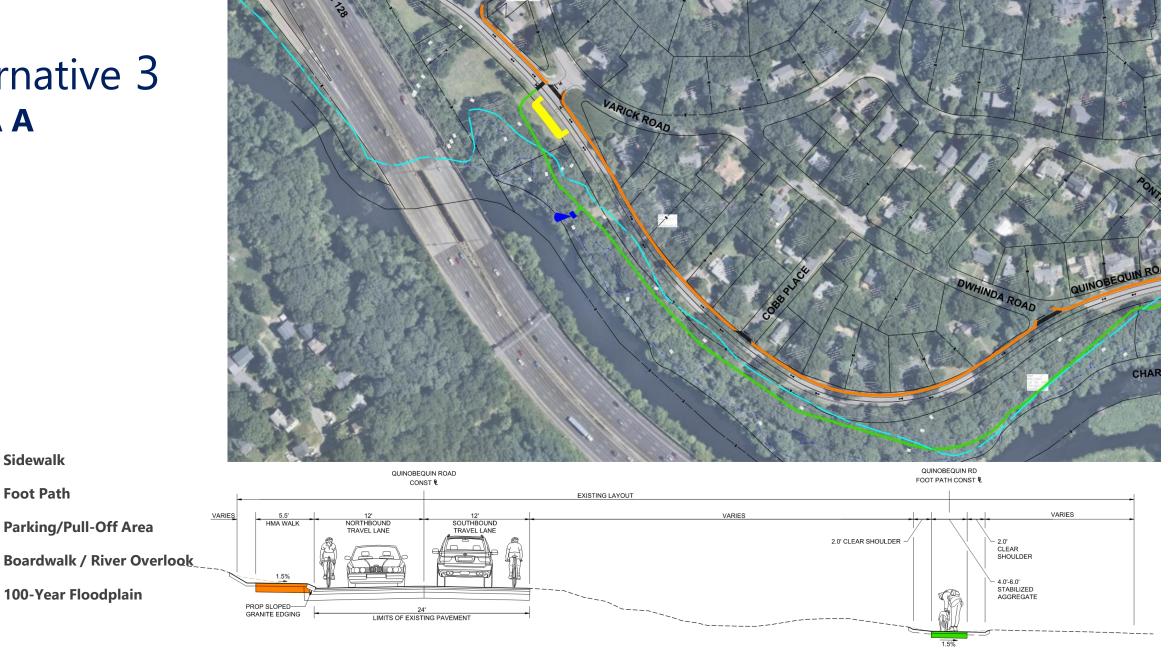


Alternative 3 **AREA A**

Sidewalk

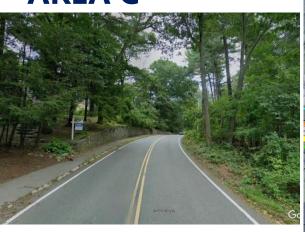
Foot Path

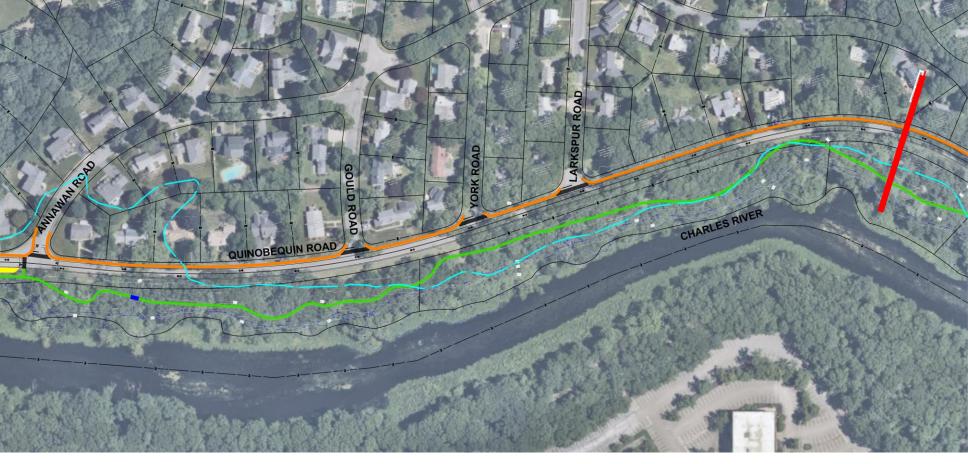
Parking/Pull-Off Area

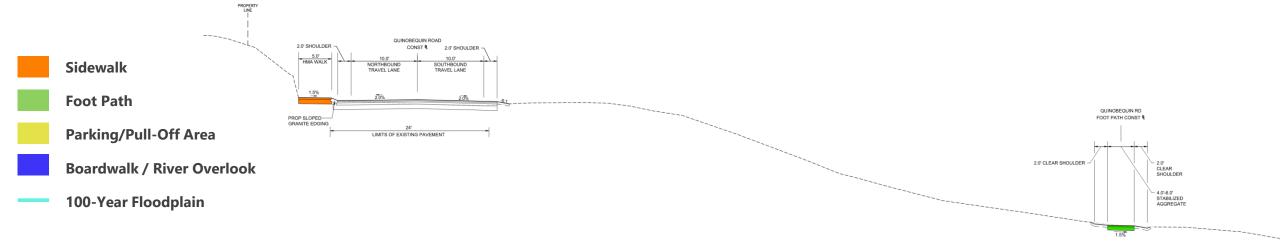














AREA D



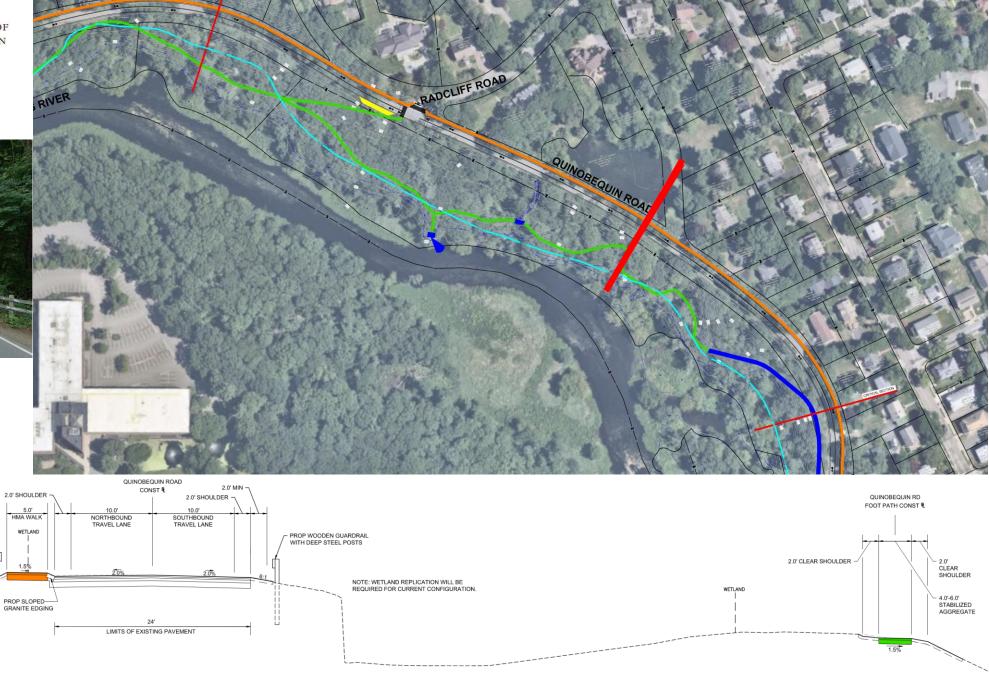
Sidewalk

Foot Path

Parking/Pull-Off Area

Boardwalk / River Overlook

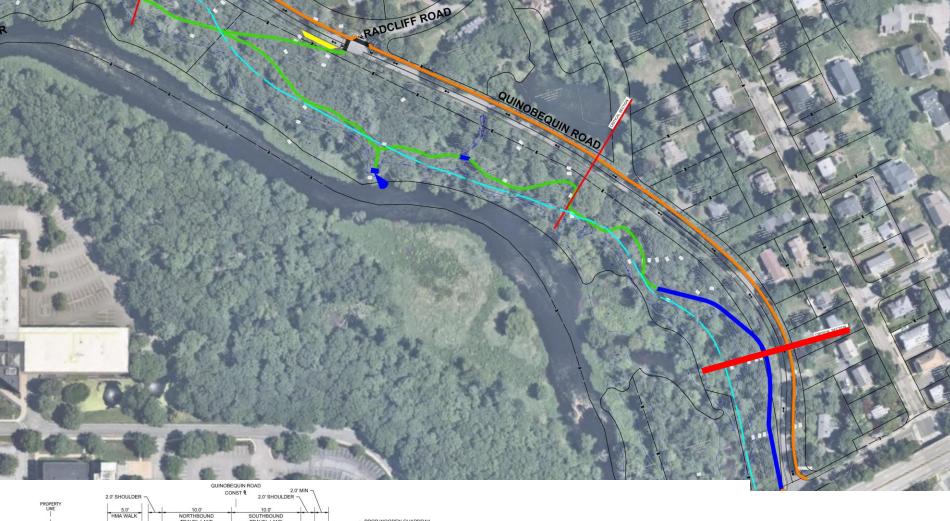
PROP WOODEN GUARDRAIL WITH DEEP STEEL POSTS —





AREA D



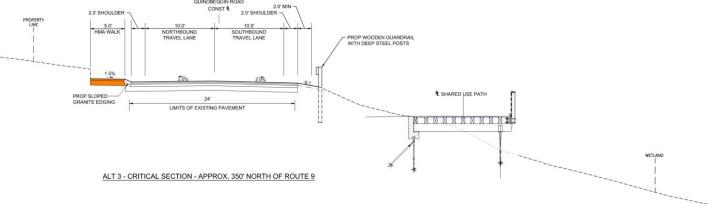




Foot Path

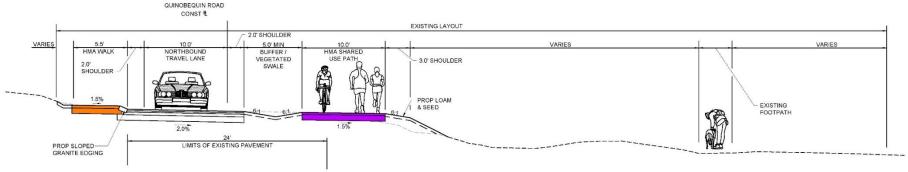
Parking/Pull-Off Area

Boardwalk / River Overlook

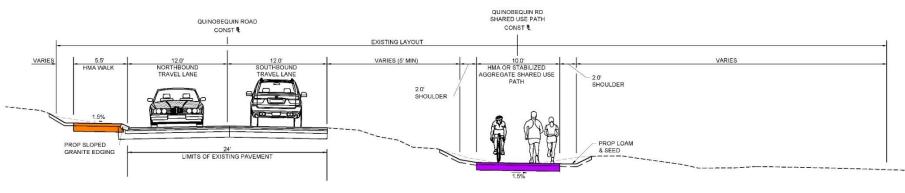




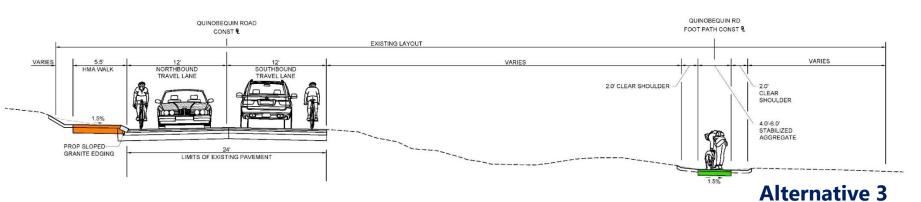
Kit of Parts - Paving Types



Alternative 1



Alternative 2















Kit of Parts **Boardwalk**



Wood at Installation



Weathered Wood



RADCLIFFROAD

Helical Pile Supports





Kit of Parts Parking / Crossings



Parallel Parking Pull-Off



Small Parking Area



RADCLIFF ROAD

Raised Crosswalk





Assessment Criteria Matrix

Point System

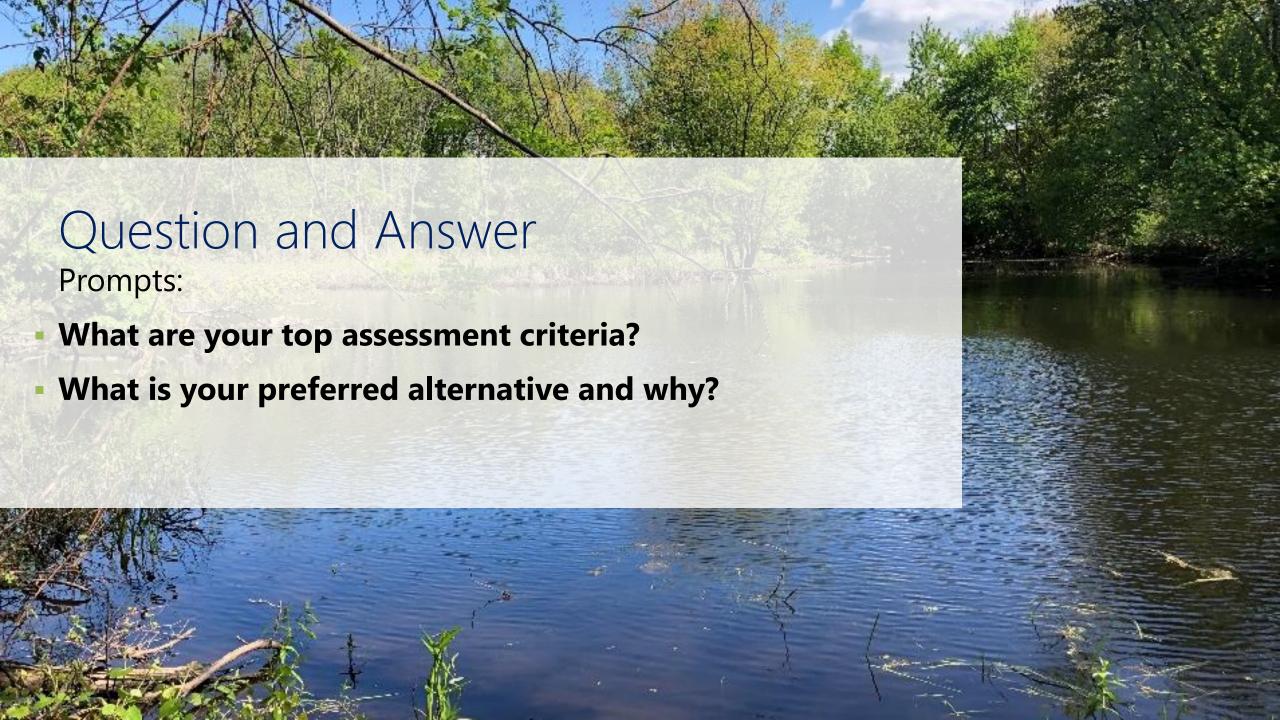
4 Best

3 Better

2 Bad

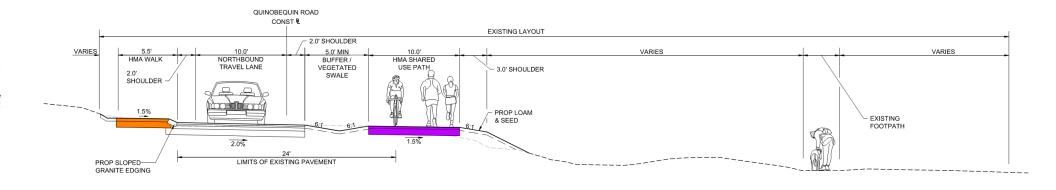
Worst

| OBJECTIVES | ALTERNATIVE 1 21st Century Parkway | ALTERNATIVE 2 Charles River Greenway | ALTERNATIVE 3 Share the Road |
|---|--------------------------------------|--------------------------------------|-------------------------------|
| TOTAL POINTS | 35 | 27 | 29 |
| Archeological Resource Preservation | 4 | 1 | 2 |
| Historic Parkway Character Impacts | 1 | 3 | 4 |
| Natural Resource Preservation | 2 | 1 | 3 |
| Habitat Preservation & Restoration/Tree Removal | 2 | 1 | 2 |
| Stormwater Management/Water Quality | 2 | 1 | 3 |
| Floodplain Impacts | 3 | 1 | 2 |
| Traffic Calming | 4 | 3 | 2 |
| Safety | 4 | 4 | 1 |
| Accessibility | 4 | 4 | 2 |
| Cyclist Accommodations | 3 | 3 | 1 |
| Pedestrian Accommodations | 4 | 4 | 3 |
| Cost | 2 | 1 | 4 |

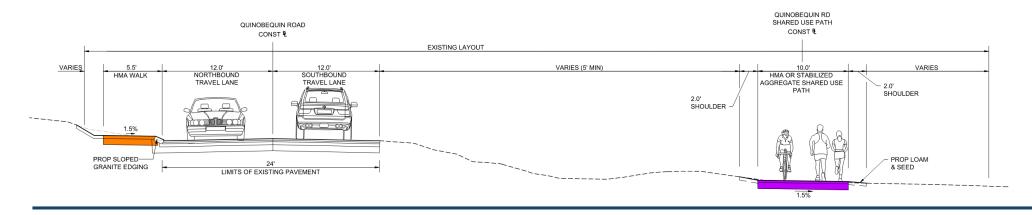


3 Alternatives: Typical Sections

21st-Century Parkway

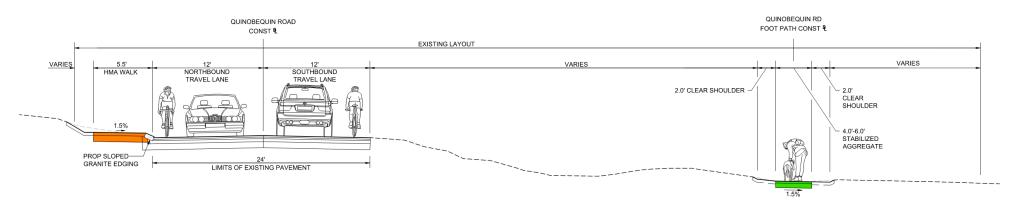


ALTERNATIVE 2
Charles River
Greenway



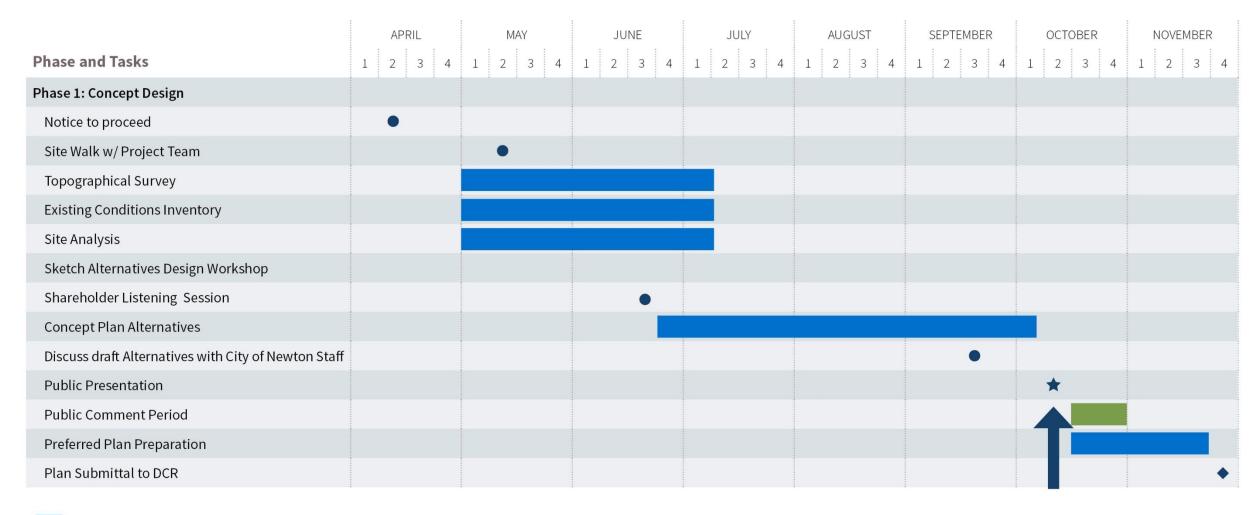
ALTERNATIVE 3

Share the Road





Project Schedule





Meeting/Presentation

★ Tonights Meeting

Deliverable



Additional Information

For more information:

www.mass.gov/dcr/past-public-meetings www.mass.gov/dcr-projects

If you have comments or suggestions on this project:

Submit online: www.mass.gov/dcr/public-comment

Email: jennifer.norwood@mass.gov

Deadline: Friday, October 23, 2020

Please note that the content of comments you submit to DCR, along with your name, town, and zip code, will be posted on DCR's website. Providing additional contact information when commenting, notably email address, is optional, and will only be used for outreach on future updates on the subject project or property.

Note: If you wish to subscribe to a DCR general information or project-related

listserv: contact DCR's Office of Community Relations at 617-626-4973 or

Mass.Parks@mass.gov.