

Route 16/Quinobequin Road Trail Connection Alternatives



THE LAWRENCE & LILLIAN
SOLOMON FOUNDATION



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& ASSOCIATES

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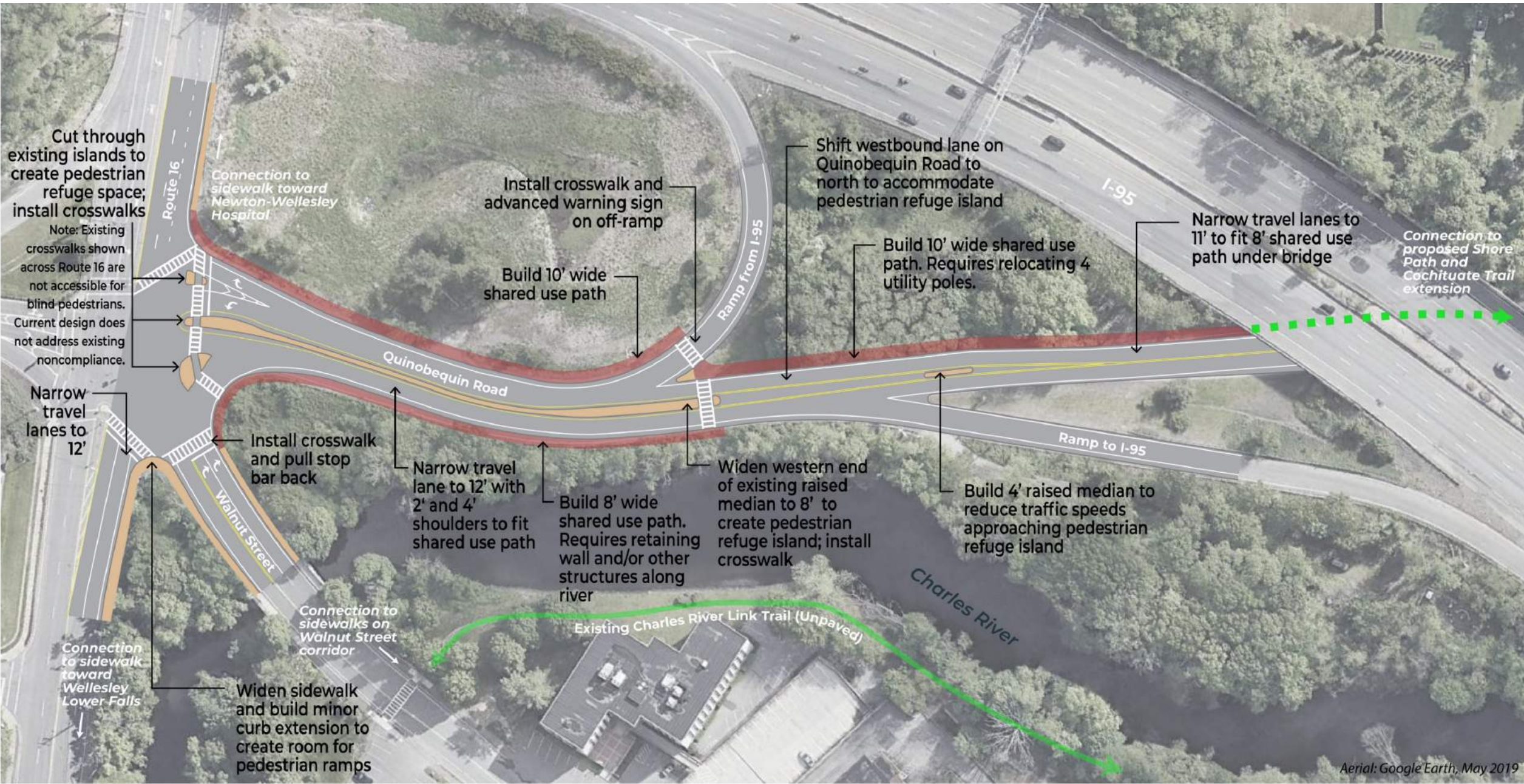
Alternative A: Quinobequin At-Grade Crossing



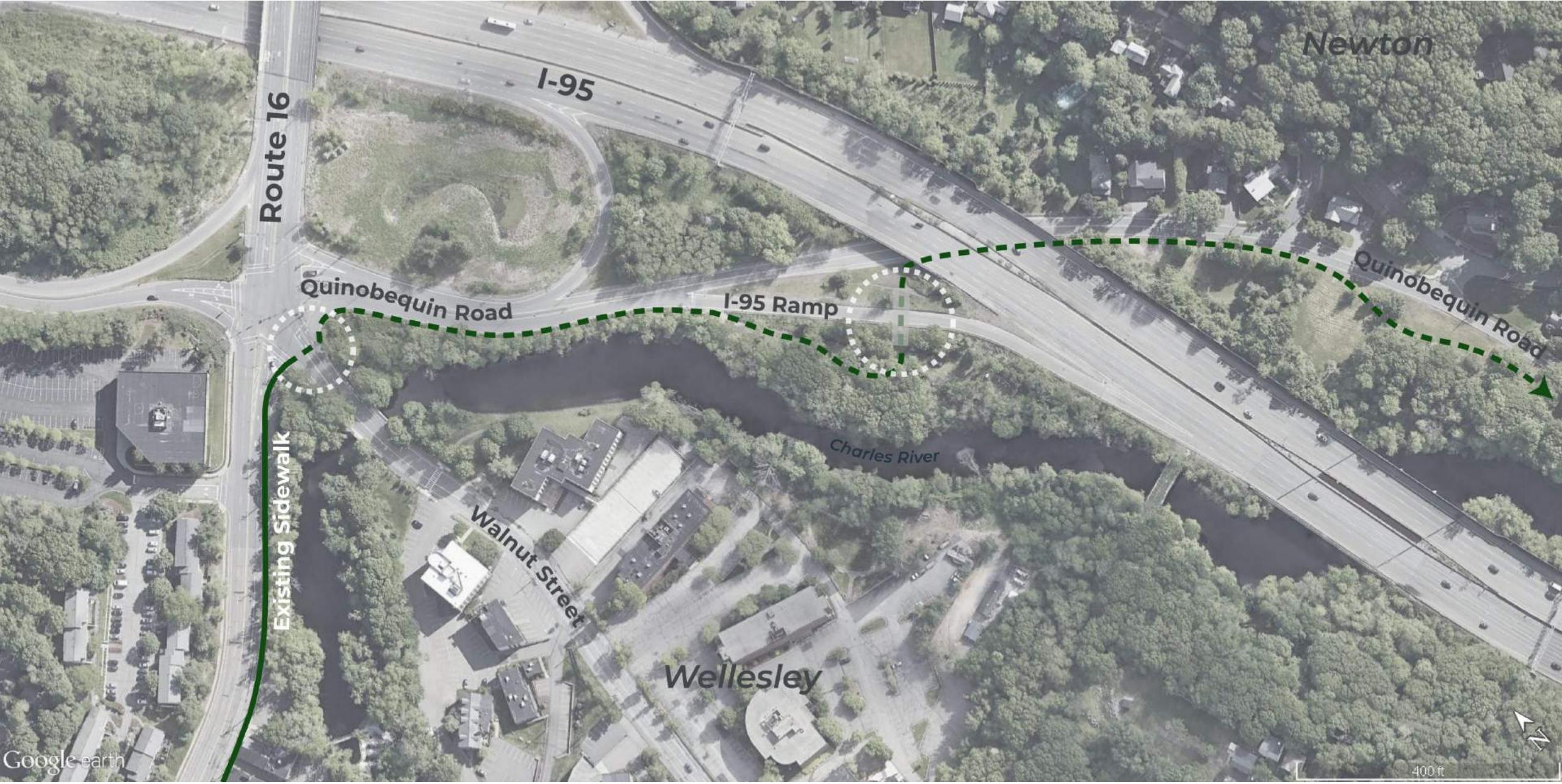
Alternative A: Quinobequin At-Grade Crossing



Alternative A: Quinobequin At-Grade Crossing



Alternative B: I-95 Ramp Underpass

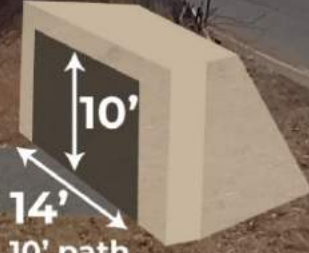


Alternative B: I-95 Ramp Underpass



Quinobequin Road

Ramp to I-95



Path may need to be lowered to allow required vertical clearance under ramp

10' path
2' clearance on either side



Alternative C: I-95 Underpass Along Charles River



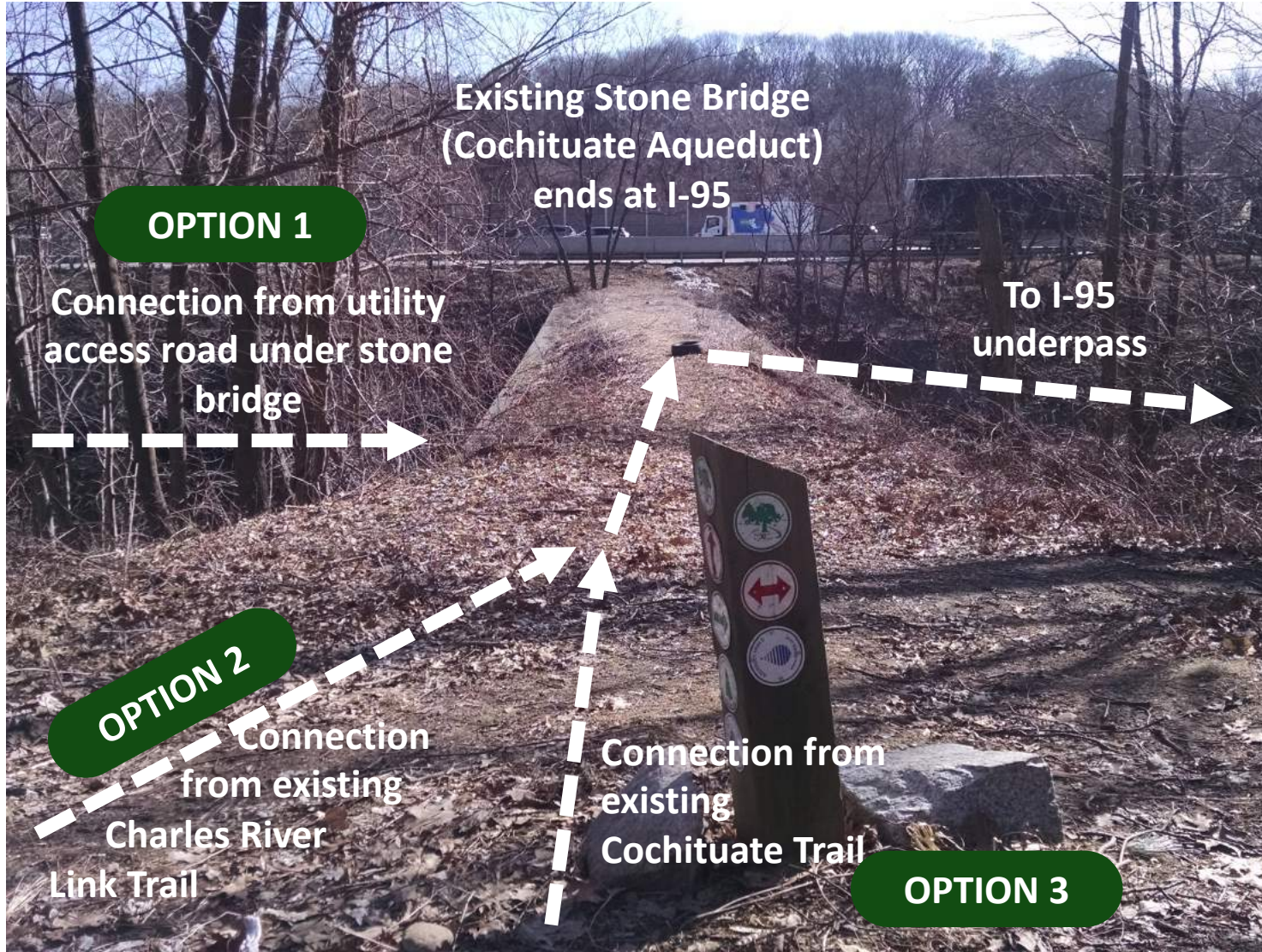
Alternative C: I-95 Underpass Along Charles River

OPTION 1



At the end of the utility access road, the trail would parallel the I-95 highway embankment toward the Cochituate Aqueduct stone bridge.

Alternative C: I-95 Underpass Along Charles River



ALL OPTIONS



Trail would continue under the I-95 bridge that passes over the Charles River.

Alternative C: Stone Bridge to I-95 Underpass



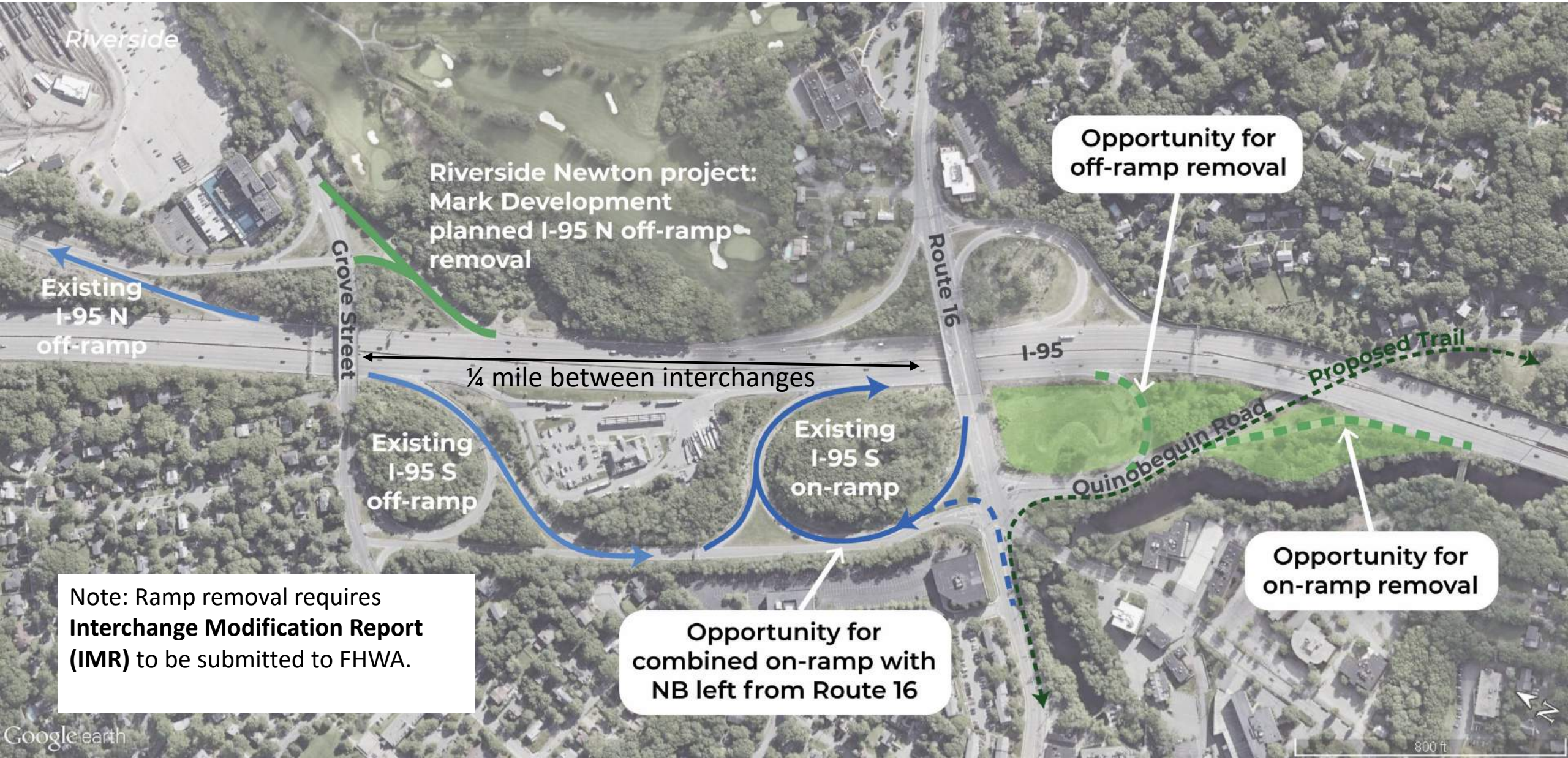
Bringing trail under I-95 bridge would require a cantilevered boardwalk.
Challenges: vertical clearance, permitting, lighting, comfort

Example (right):
Paul Dudley White Bike Path
under the BU Bridge



Alternative D: Route 16/Quinobequin Reconstruction

Option 1: Remove I-95 S on- and off-ramps from Quinobequin Road



Note: Ramp removal requires **Interchange Modification Report (IMR)** to be submitted to FHWA.

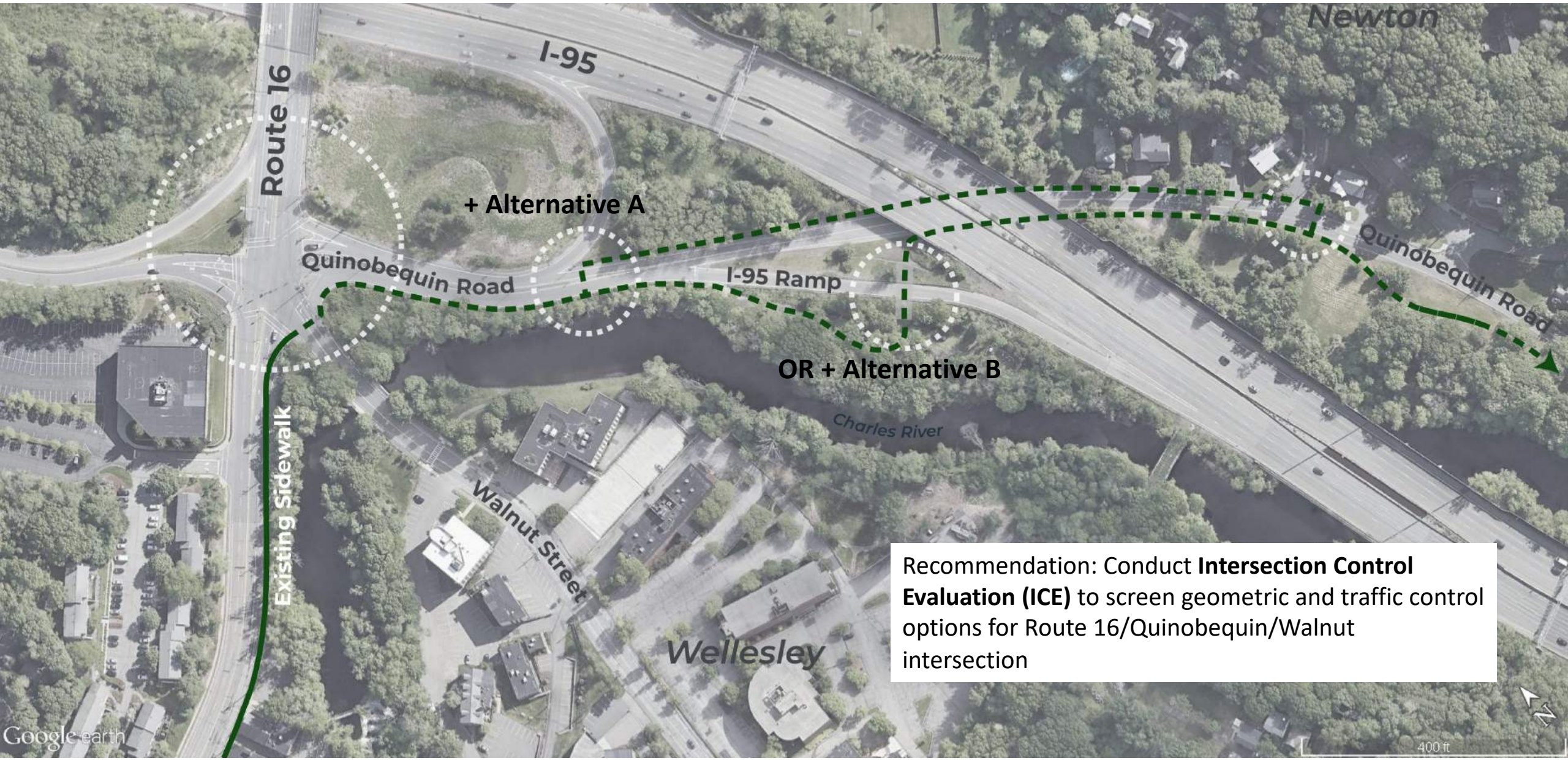
Opportunity for combined on-ramp with NB left from Route 16

Opportunity for off-ramp removal

Opportunity for on-ramp removal

Alternative D: Route 16/Quinobequin Reconstruction

Option 2: Reconstruct intersection without removing ramps



+ Alternative A

I-95 Ramp

OR + Alternative B

Recommendation: Conduct **Intersection Control Evaluation (ICE)** to screen geometric and traffic control options for Route 16/Quinobequin/Walnut intersection

Alternatives Matrix (Preliminary)



Alignment Option	Safety	Route Navigability	Quality of Experience	Cost	Ease of Permitting	Ease of Construction
Alternative A At-Grade Crossing	Moderate <ul style="list-style-type: none"> Exposure to conflicts with vehicles 	Moderate <ul style="list-style-type: none"> 90 degree turn for bikes Multiple crossings 	Moderate <ul style="list-style-type: none"> Requires seeking gap in traffic to cross 	Low	Moderate <ul style="list-style-type: none"> Potential environmental permitting needs along Charles River 	Easy
Alternative B Ramp Underpass	High <ul style="list-style-type: none"> Limited exposure to conflicts with vehicles 	Easy <ul style="list-style-type: none"> Continuous facility on same side of the road 	High <ul style="list-style-type: none"> If lighting provided for security Potential to open access to recreational land along the river 	Moderate	Moderate <ul style="list-style-type: none"> Potential environmental permitting needs along Charles River 	Difficult <ul style="list-style-type: none"> Potential challenge to maintain sufficient vertical clearance, drainage, and ADA-compliant grades
Alternative C I-95 Underpass	High <ul style="list-style-type: none"> Limited exposure to conflicts with vehicles 	Moderate <ul style="list-style-type: none"> Circuitous connection Unpaved trail connection in Options 2 and 3 deter biking 	High <ul style="list-style-type: none"> If lighting provided for security Potential to open access to recreational land along Charles River 	High	Difficult <ul style="list-style-type: none"> Potential environmental permitting challenges for construction over Charles River 	Difficult <ul style="list-style-type: none"> Potential challenge to maintain ADA-compliant grades and sufficient vertical clearance
Alternative D Intersection Reconstruction (Not including ramp removal)	More information needed <i>(High potential if ramps removed)</i>	Easy <ul style="list-style-type: none"> Potential to improve ped and bike connectivity throughout intersection area 	High <ul style="list-style-type: none"> Potential to create more comfortable connection from Route 16 	High	Difficult <ul style="list-style-type: none"> More complex permitting process 	More information needed