BELMONT COMMUNITY PATH
FEASIBILITY STUDY

Public Meeting #4 – Eastern End

November 16, 2016

PARE CORPORATION
Engineers | Scientists | Planners

K3LA

AGENDA

1. Introduction	Russell Leino
2. Purpose and Level of Design	Amy Archer
3. Public Engagement Goals	Kathleen Fasser
4. Where We Left Off	Amy Archer
5. Alternatives Analysis	Amy/Kathleen/Tim Thomson
6. Preliminary Matrix	Amy Archer
7. Public Engagement	Open Discussion
8. Next Steps	Amy Archer

PURPOSE

To recommend a preferred alternative for a non-motorized, multi-use path through Belmont that will serve the Town's residents as well as "fill the gap" along the Mass Central Rail Trail (MCRT) between Waltham and Cambridge using the alignments from the CPAC as a base.

LEVEL OF ANALYSIS/DESIGN

- Feasibility study intended to advance to conceptual design and planning cost estimate
  - Define path options – alignments and typical sections
  - Quantify impacts to property and resources
  - Quantify costs based on path definition
  - Weight and rank pros and cons of alternatives

PUBLIC ENGAGEMENT GOALS

Describe and outline public engagement efforts that will inform the Study

ENGAGEMENT GOAL

Level of Engagement: Collaborate (See page 6, Stakeholder Roles and Responsibilities)

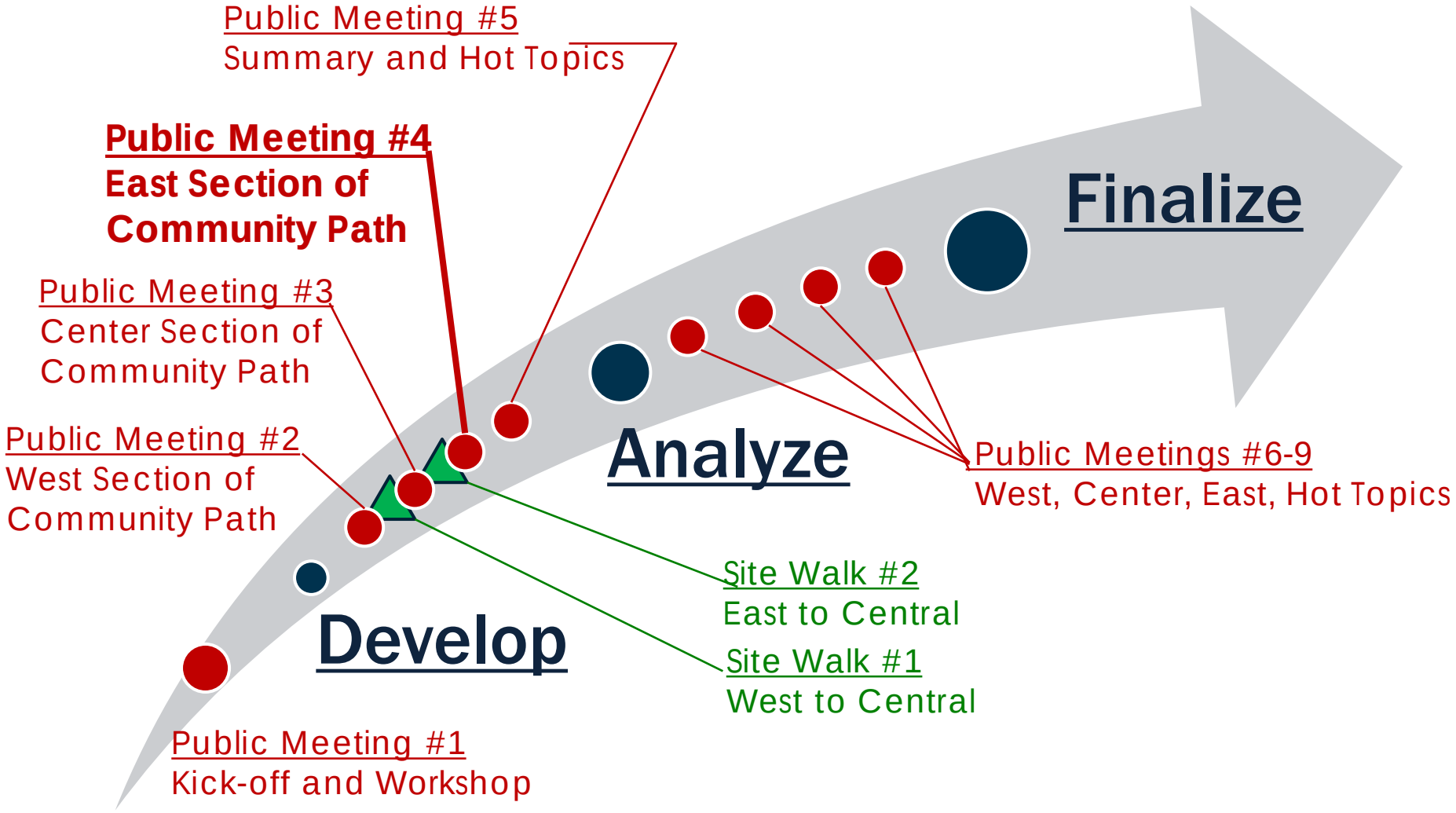
	Inform	Consult	Collaborate	Partner
Engagement Goal:	*To provide stakeholders with factual, balanced, and timely information to help them understand the project.*	*To obtain stakeholder feedback on project analysis, alternatives, or decisions.*	*To work directly with the public throughout the process to ensure that perspectives are consistently understood, considered, and reflected in project decisions.*	*To partner with stakeholders in each aspect of decision making in order to develop and implement collaborative project solutions.*

PUBLIC ENGAGEMENT GOALS

ROLES & RESPONSIBILITIES

engage in the process in a manner that promotes respectful civil discourse and enhances mutual understanding of all stakeholder viewpoints.

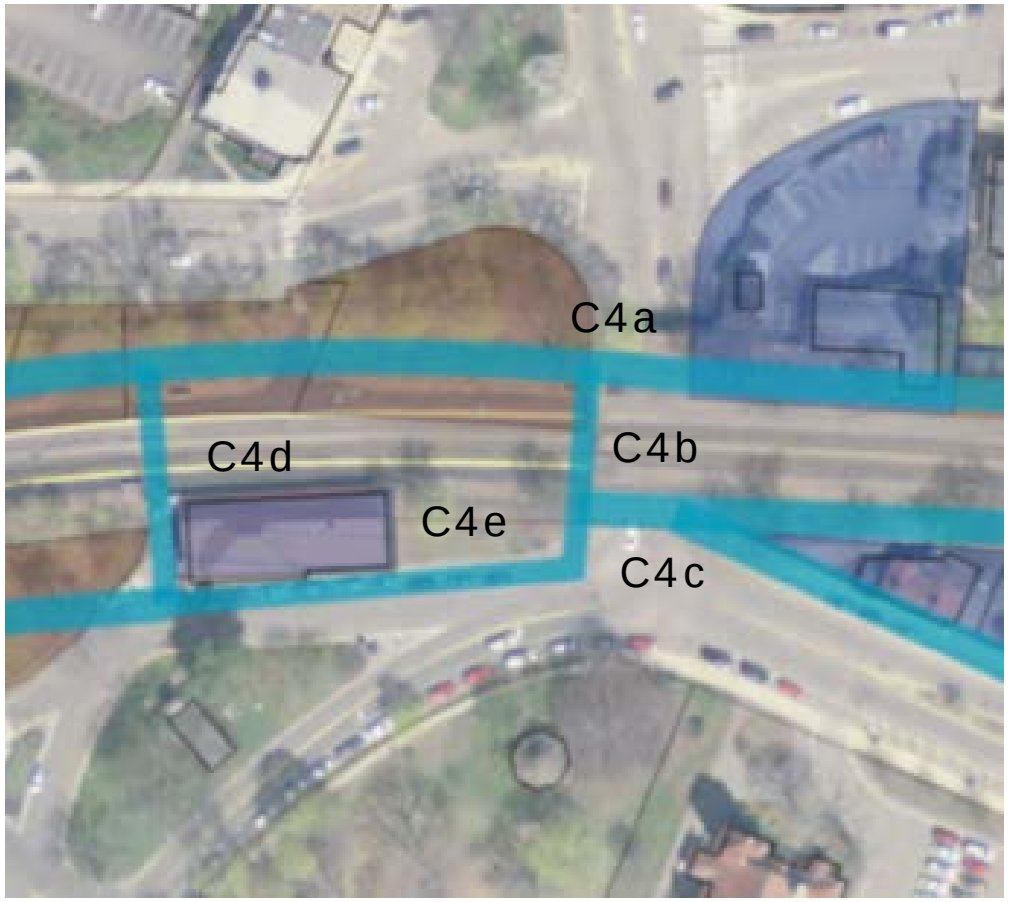
PUBLIC ENGAGEMENT PROCESS



CPAC ALIGNMENTS

WHERE WE LEFT OFF – CENTRAL AREA

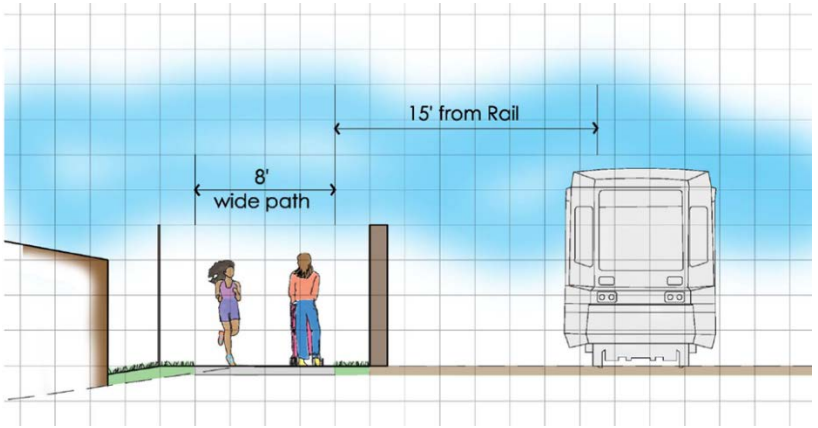
- Developed array of alternatives to traverse downtown on either side of tracks or combination thereof.



EASTERN END ALIGNMENTS

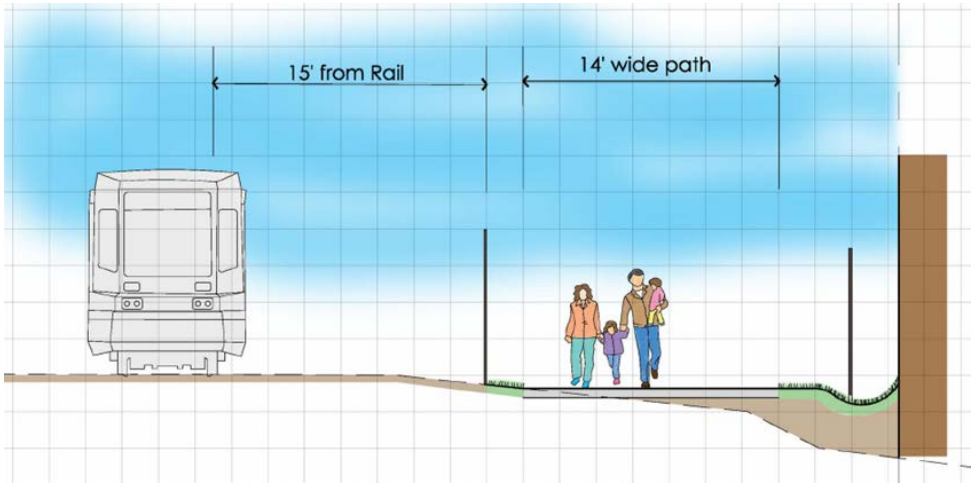
DOWNTOWN TO ALEXANDER AVENUE (E1)

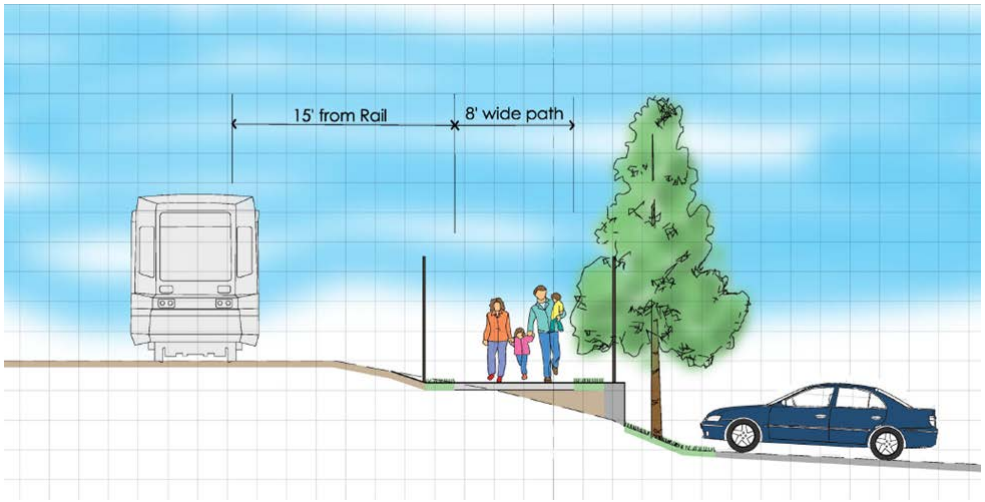
- E1a: CPAC Alignment
  - Continue on north side of rail
  - Pinch behind Coldwell Banker building
    - 25’ length
    - Minimum 15’ offset and minimum 8’ path



DOWNTOWN TO ALEXANDER AVENUE (E1)

- E1b: CPAC Alignment
  - Continue east from downtown on south side of rail
  - 15’ offset and recommended path width past post office
  - Minimum offset and minimum path past commercial properties to avoid parking impacts



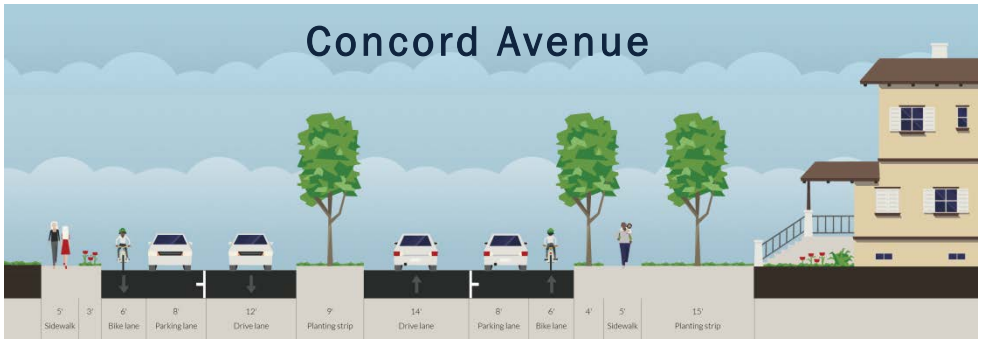


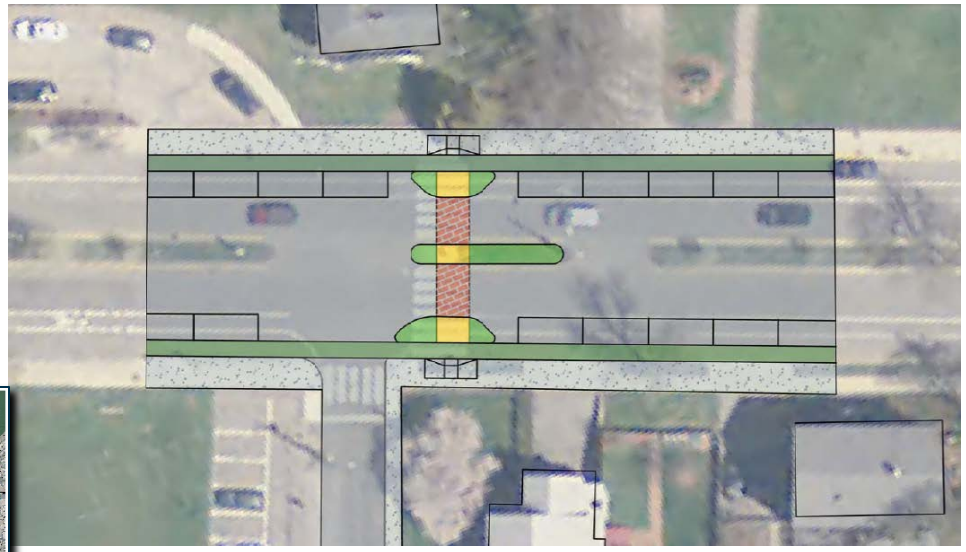
BELMONT CENTER CONNECTIONS (C4)

- C4b: Concord Avenue Underpass
  - Descend or ascend to/from street through park
- C4c: Cross Concord Avenue
  - Signalized street crossing

DOWNTOWN TO ALEXANDER AVENUE (E1)

- E1c: CPAC Alignment
  - Continue east from downtown along Concord Avenue
  - Reverse location of parking and bike lanes
  - Minimal cost – complex crossings





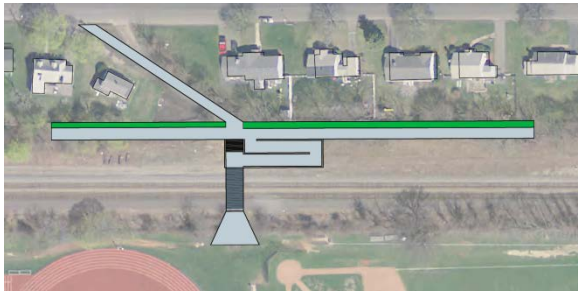
ALEXANDER AVENUE UNDERPASS (E2)

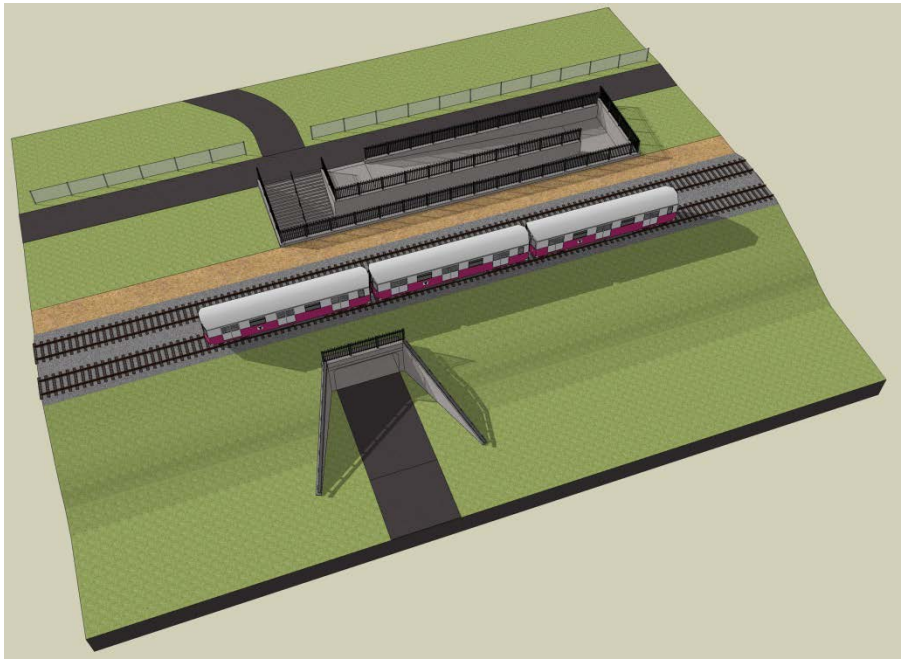
- E2a: Path Depresses to Underpass
  - Only works with path on north side of rail
  - Requires walls along property line and MBTA maintenance drive aisle
  - Provides ample space for path enjoyment

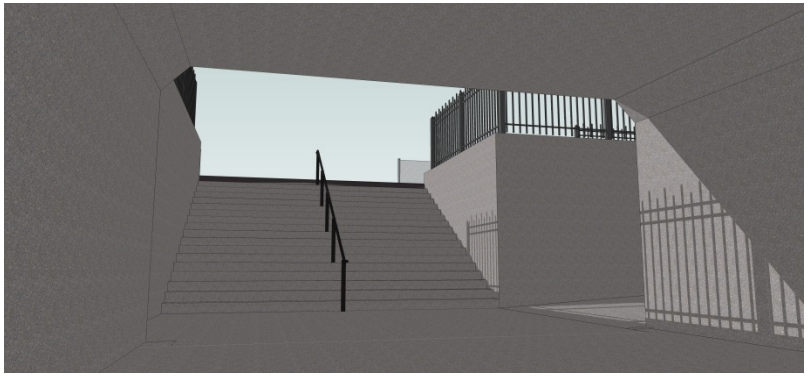
ALEXANDER AVENUE UNDERPASS (E2)

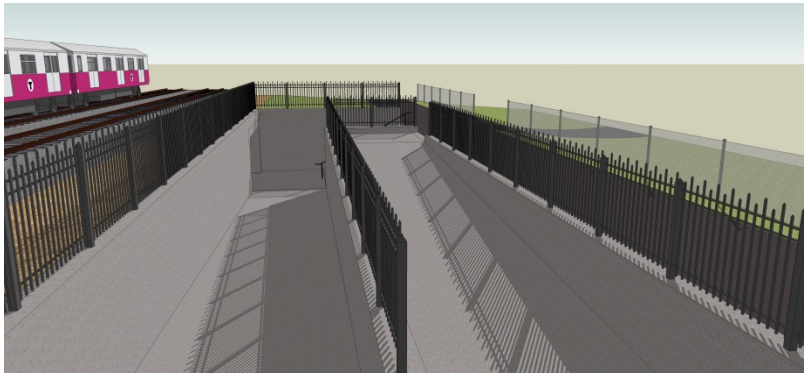
ALEXANDER AVENUE UNDERPASS (E2)

- E2b: Switchback
  - Works with any path location
  - Path running on north side of rail could bypass underpass
  - Less walls required than E2a

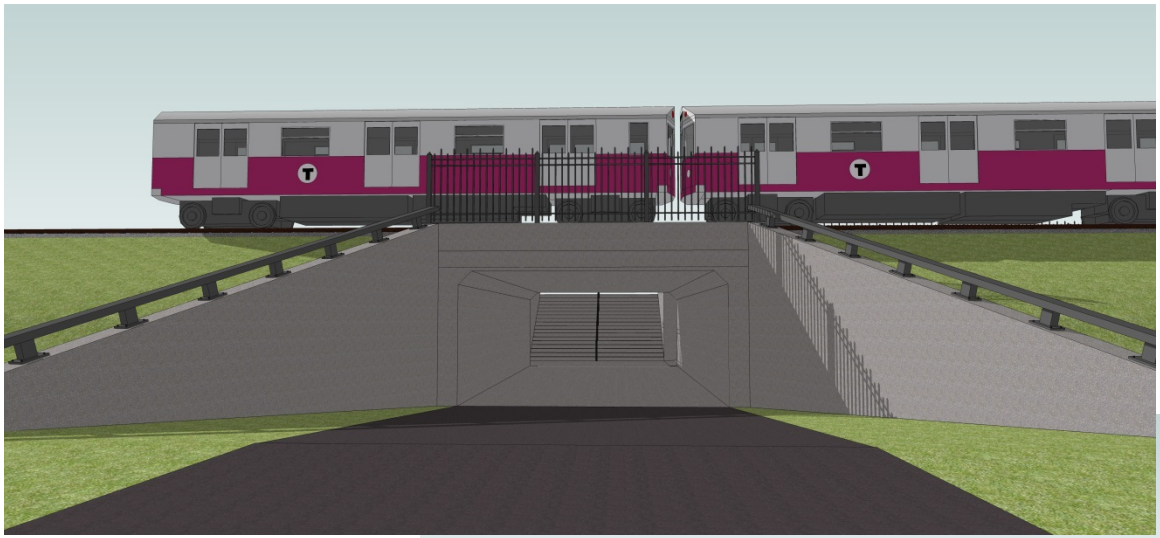


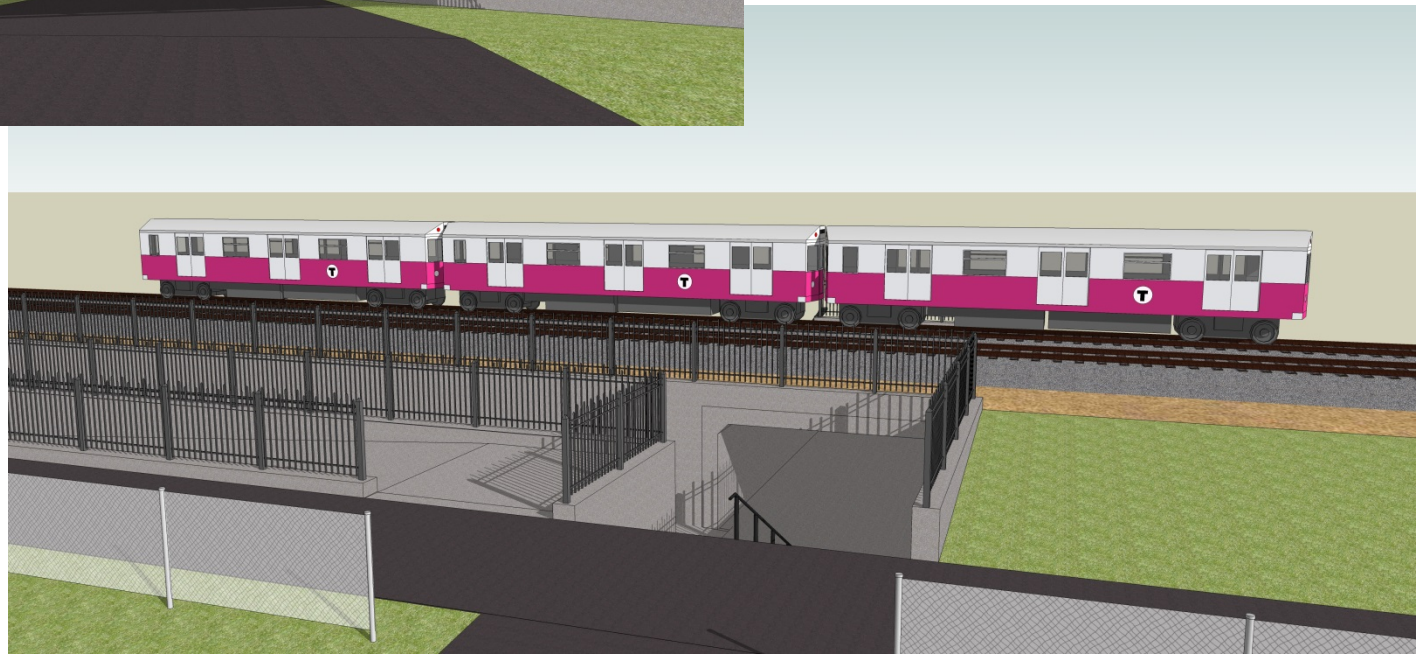






ALEXANDER AVENUE UNDERPASS (E2)





ALEXANDER AVENUE UNDERPASS (E2)

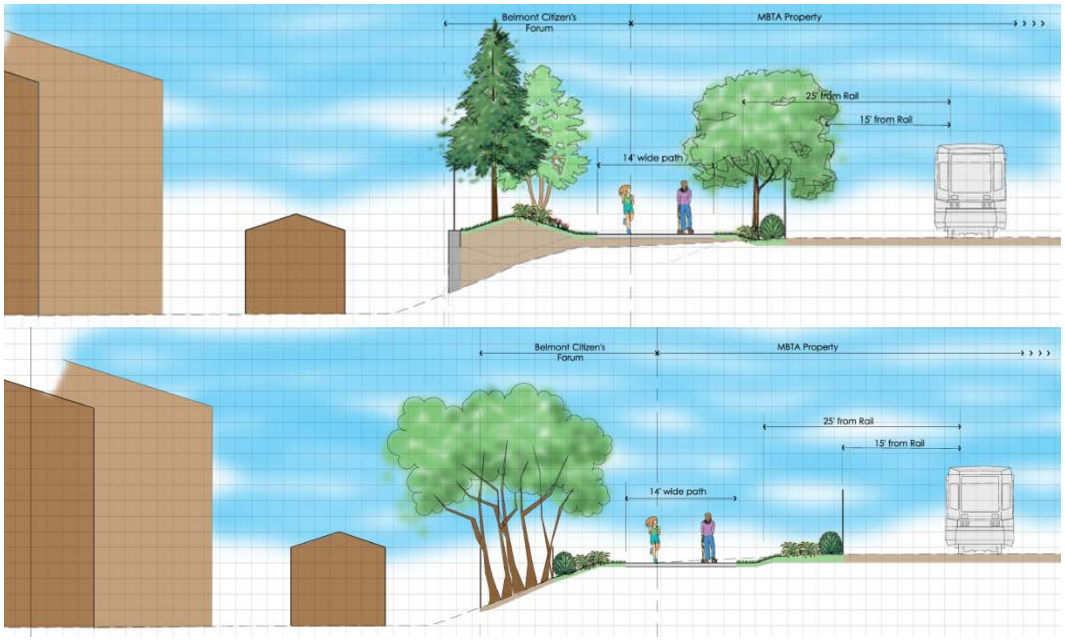
- E2c: Alexander Avenue Uses Underpass
  - Works with path on High School or Concord Avenue
  - Approach to underpass from both campus and Alexander Avenue would mimic existing Yerxa Road underpass in Cambridge
  - Minimal wall construction

ALEXANDER AVENUE UNDERPASS (E2)

- E2: All Underpass Options
  - Connection to Concord Avenue recreational uses is important
    - Includes pool, library, music school and more
  - Must coordinate with redevelopment of high school campus

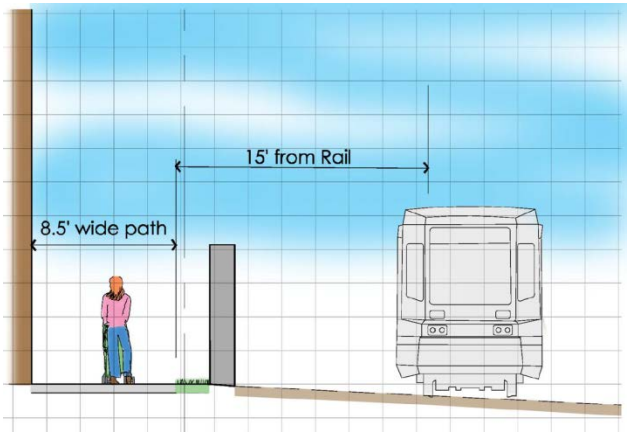
ALEXANDER AVE TO BRIGHTON ST (E3)

- E3a: CPAC Alignment
  - Continue east on combination of MBTA and Belmont Citizen's Forum (BCF) property.
  - Many options for edge treatments – 2 shown



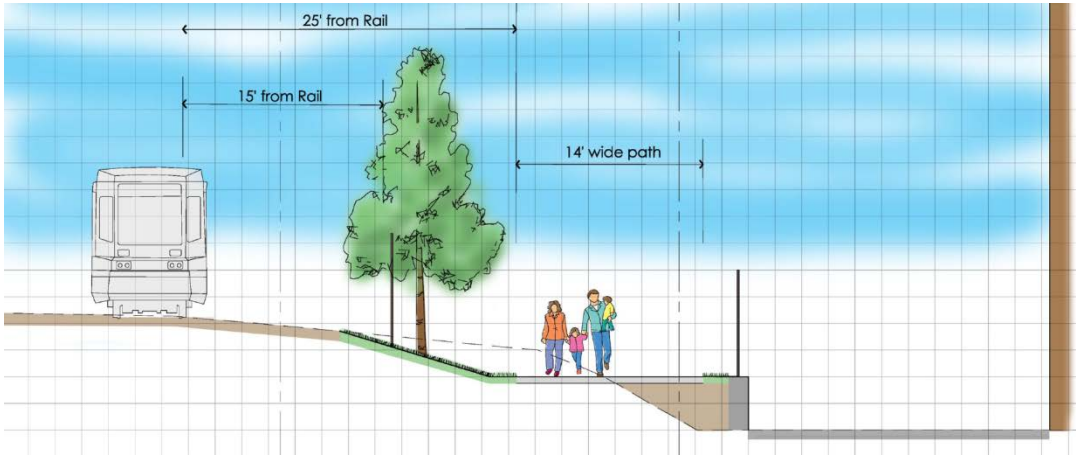
ALEXANDER AVE TO BRIGHTON ST (E3)

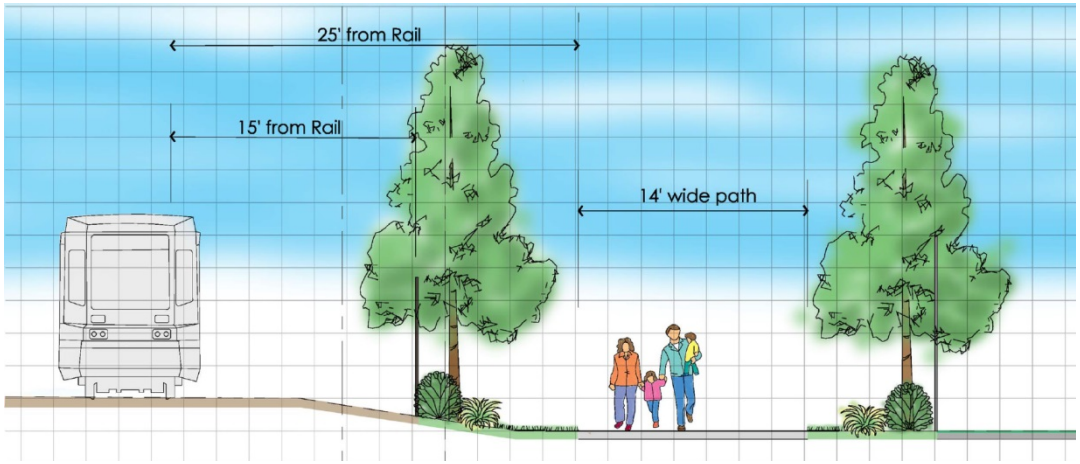
- E3a: CPAC Alignment
  - Along north side of rail
  - Path meanders within MBTA/BCF property
  - Pinches at French and Mahoney property (F&M)
    - Minimum offset and minimum path against building
    - Utilizes 10’ easement on F&M



ALEXANDER AVE TO BRIGHTON ST (E3)

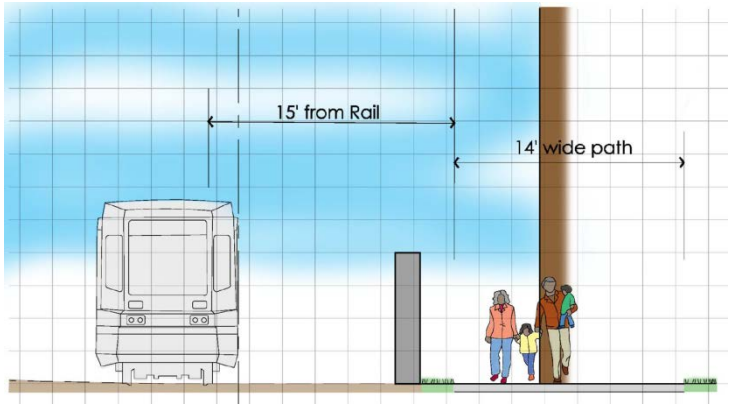
- E3b: CPAC Alignment
  - Along south side of rail
  - Path runs behind existing high school building
    - Minimum offset to rail
    - Retained to maintain drive aisle
  - Offset increases to recommended along tennis courts





ALEXANDER AVE TO BRIGHTON ST (E3)

- E3b: CPAC Alignment
  - Along south side of rail
  - Pinches at Crate Escape property
    - Minimum offset and recommended path width
    - Requires impact to building

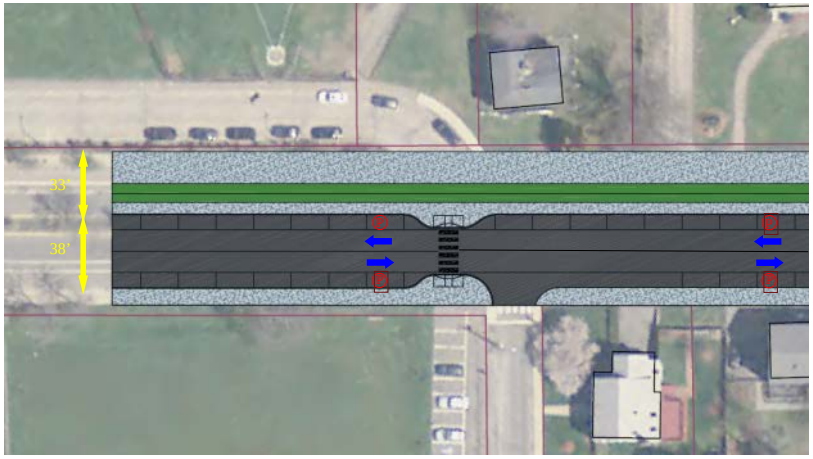


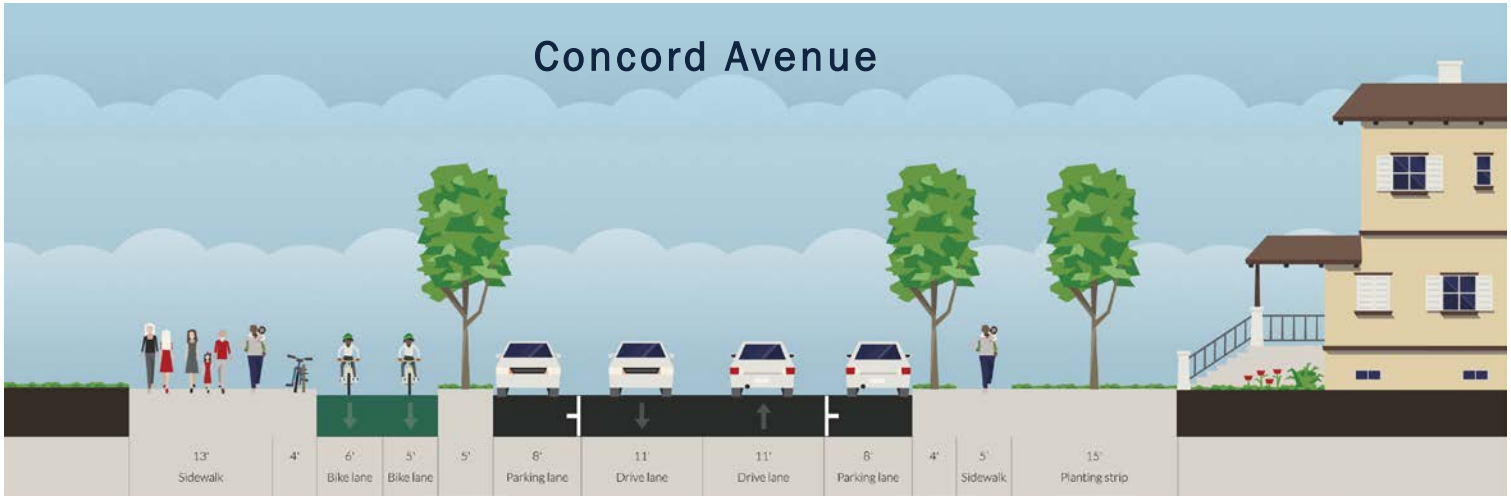
ALEXANDER AVE TO BRIGHTON ST (E3)

- E3c: Alternative – Traverse High School
  - Campus approved for reconstruction
  - Inclusion must be coordinated through MSBA
  - Array of options – replicate existing uses

ALEXANDER AVE TO BRIGHTON ST (E3)

- E3d: CPAC Alignment
  - Consolidate vehicular space
  - Utilize north side of existing median for path
  - Bumpouts reduce crossing length to 22’





ALEXANDER AVE TO BRIGHTON ST (E3)

- E3d: Linear Park
  - Could connect to downtown
  - Would require access management at west end

ALEXANDER AVE TO BRIGHTON ST (E3)

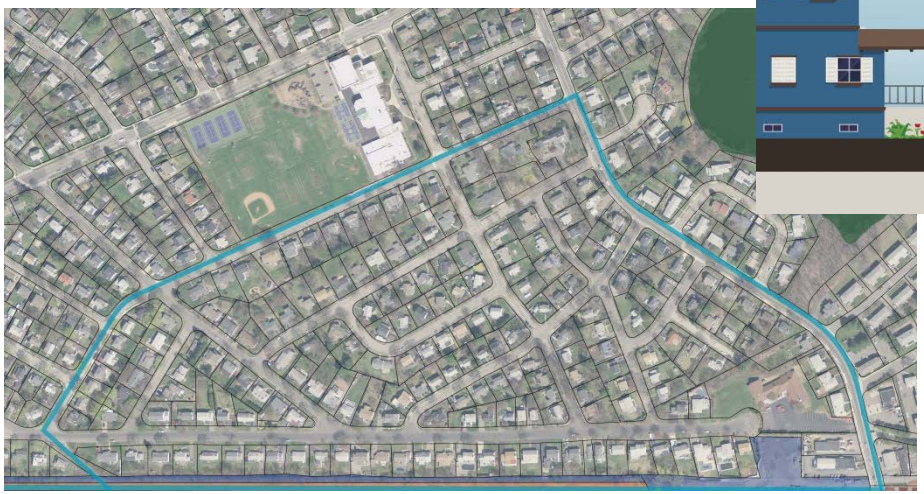
- E3d: Linear Park

ALEXANDER AVE TO BRIGHTON ST (E3)

- E3d: Linear Park
  - Continue up Underwood Street
  - Along street or through park

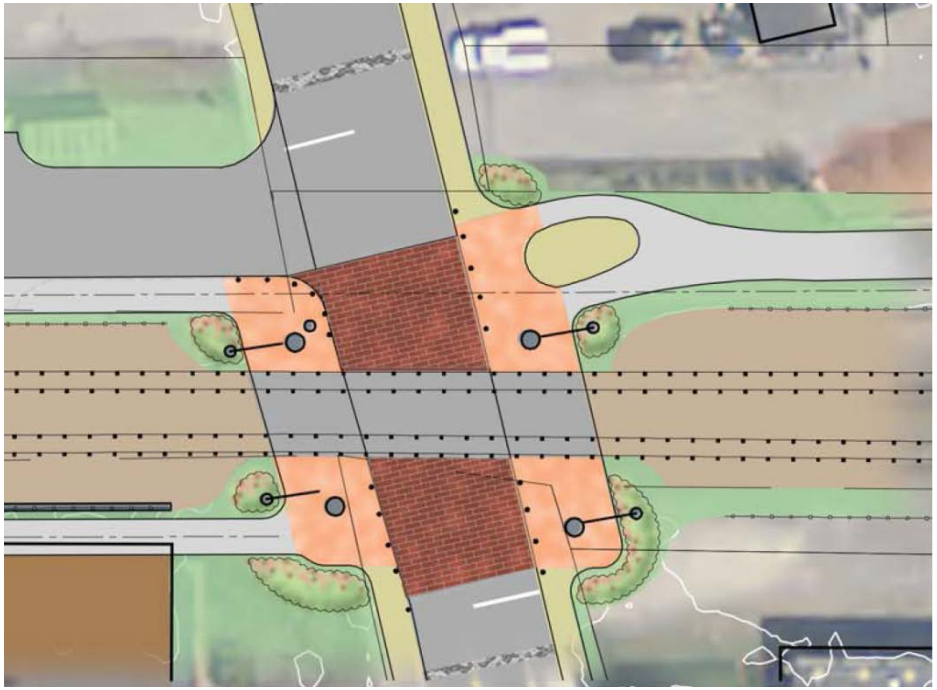
ALEXANDER AVE TO BRIGHTON ST (E3)

- E3e: Alternative – Traverse Winn Brook Neighborhood
  - Makes connection to Winn Brook Elementary School
  - Avoids pinch point at F&M property



BRIGHTON STREET (E4)

- E4a: Cross Brighton Street At Grade
  - Use highly visible pave treatment
  - Adjust stop bar locations
  - Widen sidewalks

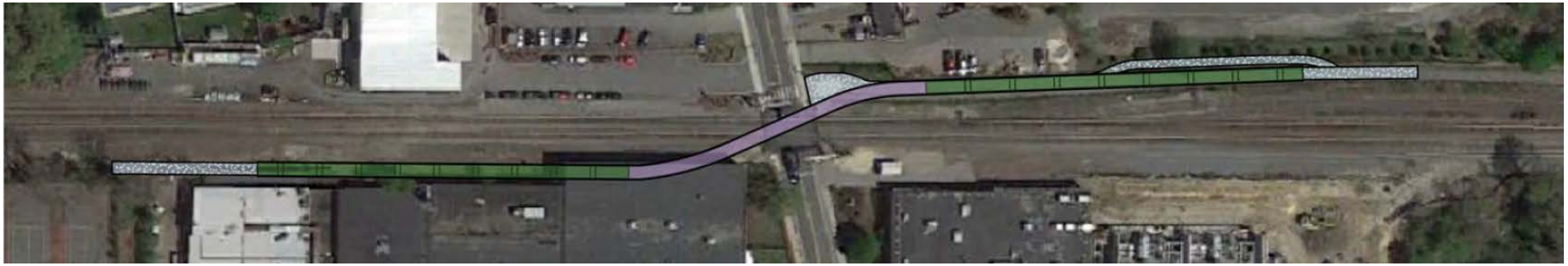


BRIGHTON STREET (E4)

- E4b: Cross over Brighton from North Side of Rail
  - Must ascend to full height west of F&M building
  - Less than 15’ offset to rail for short pinch
  - Existing cutoff must pass under structure to maintain connection to neighborhoods
  - Remount rail signal on structure
  - Total fully elevated length = 700’

BRIGHTON STREET (E4)

- E4c: Cross over Brighton and Rail from South Side of Rail
  - Has impact to Crate Escape building
  - Maintains 15’ offset to rail
  - Existing cutoff must pass under structure to maintain connection to neighborhoods
  - Path structure passes over signal
  - Total fully elevated length = 275’



WORKSHOP STATIONS

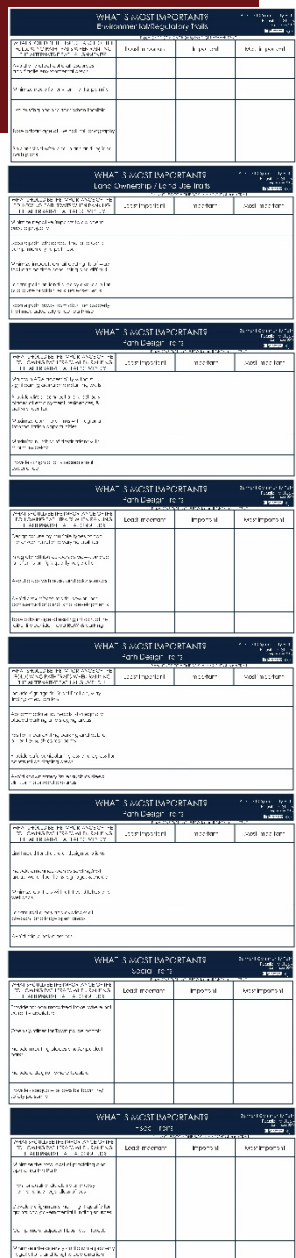
- **What is Most Important?**
  - **Guide development of potential evaluation criteria**
  - **Provide input on what you think is most important for the path**

WHAT IS MOST IMPORTANT?
Environmental/Regulatory Traits

Belmont Community Path
Feasibility Study

Place ONE DOT in ONE BOX to the RIGHT of each TRAIT

WHAT SHOULD BE THE IMPORTANCE OF THE FOLLOWING PATH TRAITS WHEN RANKING THE ALTERNATIVE PATH ALIGNMENTS?	Least important	Important	Most important
Avoid or protect cultural resources and fragile environmental areas			●
Minimize need for environmental permits		●	
Use existing open spaces when feasible		●	
Take advantage of the natural topography	●		



SURVEY MATRIX OPTIONS RESULTS

- Environmental, Land Use, Design, Social, and Fiscal: ALL Important
- Least Important: Pocket parks and dog runs
- Most Important:
  - **Community connections**
  - **High quality recreation**

INITIAL COMPARISON

Alignment Stretch/Link	Access and Connectivity	Environmental Impacts	Property Impacts	Sense of Security/ Comfort	Relative Cost	Total
W#x, C#x, E#x	3	1	3	2	2	11

PURPOSE OF INITIAL COMPARISON

1. TO START THE CONVERSION

2. TO IDENTIFY IF ONE OR MORE CATEGORIES SHOULD BE WEIGHTED MORE OR LESS THAN ANOTHER

INITIAL COMPARISON

Alignment Stretch/Link	Access and Connectivity	Environmental Impacts	Property Impacts	Sense of Security/ Comfort	Relative Cost	Total
W#x, C#x, E#x	3	1	3	2	2	11

GENERALLY : 1= least feasible, 2=feasible 3=most feasible ∴ Highest Total = BEST

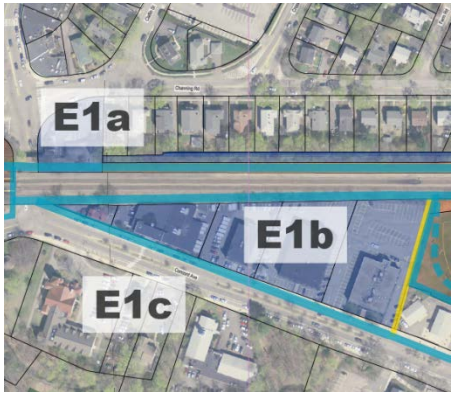
CATEGORIES:

- Access and Connectivity
- Environmental Impacts
- Property Impacts:
  EXAMPLE Private Residence=0; Private Other=1; Construction Easement=2; None =3
- Sense of Security/Comfort
  EXAMPLE Remoteness/Great Distance for Fire & Safety = 1; On-Road=2; Off-Road=3
- Relative Cost

INITIAL COMPARISON

1= least feasible, 3=most feasible Highest Total = BEST

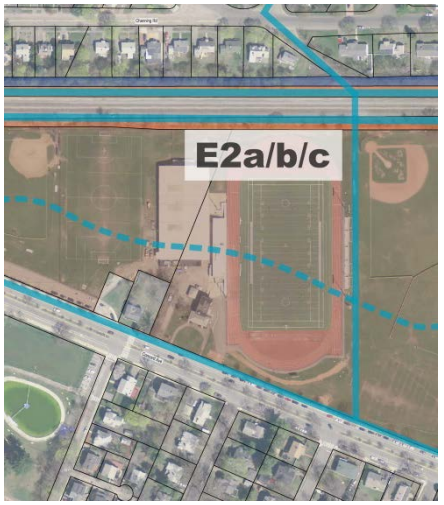
Eastern Area Stretch/Link	Access and Connectivity	Environmental Impacts	Property Impacts	Sense of Security/ Comfort	Relative Cost	Total
E1-a North Side Rail	1	2	2	3	3	11
E1-b South Side Rail	2	2	2	2	2	10
E1-c Concord Ave	2	3	3	0	3	11



INITIAL COMPARISON

1= least feasible, 3=most feasible Highest Total = BEST

Eastern Area Stretch/Link	Access and Connectivity	Environmental Impacts	Property Impacts	Sense of Security/ Comfort	Relative Cost	Total
E2-a Depressed Path – Open Underpass	3	2	3	3	1	12
E2-b Elevated Path – Switchback	2	2	3	1	2	10
E2-c Straight Underpass	3	3	3	2	3*	14



INITIAL COMPARISON

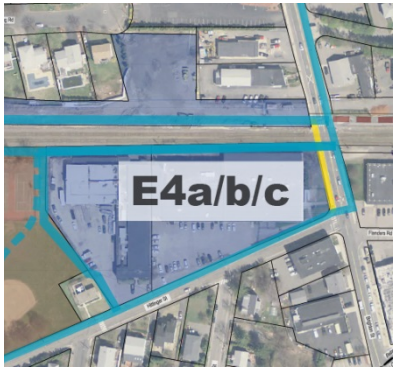
1= least feasible, 3=most feasible Highest Total = BEST

Eastern Area Stretch/Link	Access and Connectivity	Environmental Impacts	Property Impacts	Sense of Security/ Comfort	Relative Cost	Total
E3-a North Side Rail	1	2	2	2	2	9
E3-b South Side Rail	2	2	1	2	2*	9
E3-c High School Property	2	3	1	3	2*	11
E3-d Concord Avenue	3	3	3	2	1	12
E3-e Sherman Street	2	2	2	1	1	8

INITIAL COMPARISON

1= least feasible, 3=most feasible Highest Total = BEST

Eastern Area Stretch/Link	Access and Connectivity	Environmental Impacts	Property Impacts	Sense of Security/ Comfort	Relative Cost	Total
E4-a At-grade Crossing	2	3	2	1	3	11
E4-b North Side Overpass	1	2	2	2	1	8
E4-c South-to-North Overpass	2	2	1	3	2	10



INITIAL COMPARISON
WHAT RISES TO THE TOP?

Central Area Stretch/Link	Access and Connectivity	Environmental Impacts	Property Impacts	Sense of Security/ Comfort	Relative Cost	Total
E1-a North Side Rail	1	2	2	3	3	11
E1-c Concord Ave	2	3	3	0	3	11
E2-c Straight Underpass	3	3	3	2	3*	14
E3-d Concord Avenue	3	3	3	2	1	12
E4-a At-grade Crossing	2	3	2	1	3	11

DISCUSSION

- Interest in separated paths where space allows?

Shared

Designated Bike Lane

Separated ‘Quiet’ Path

Image by others

DISCUSSION

- Path access points?

DISCUSSION

- Access Point Amenities:
  - Parking
  - Restrooms
  - Overhead gateway / arch
  - Gateway bollards
  - Signature vertical feature
  - Signage
  - Seating, picnicking
  - Water fountain
  - Bicycle racks
  - Bicycle repair station
  - Mile marker

Images by others

WHAT'S NEXT?

- Consultant Team refine alternatives, continue coordination and further matrix elements and weighting

- Design presentations and discussion:
  - Meeting 5: Hot Topics/Matrix (from Meetings 2 - 4) – December 7

http://www.belmont-ma.gov/community-path-implementation-advisory-committee-cpiac/pages/community-path-feasibility-study

www.belmontmedia.org

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