



Community Meeting October 8, 2009

Presented by:

CITY OF BOSTON

Boston Transportation Department

Tetra Tech Rizzo

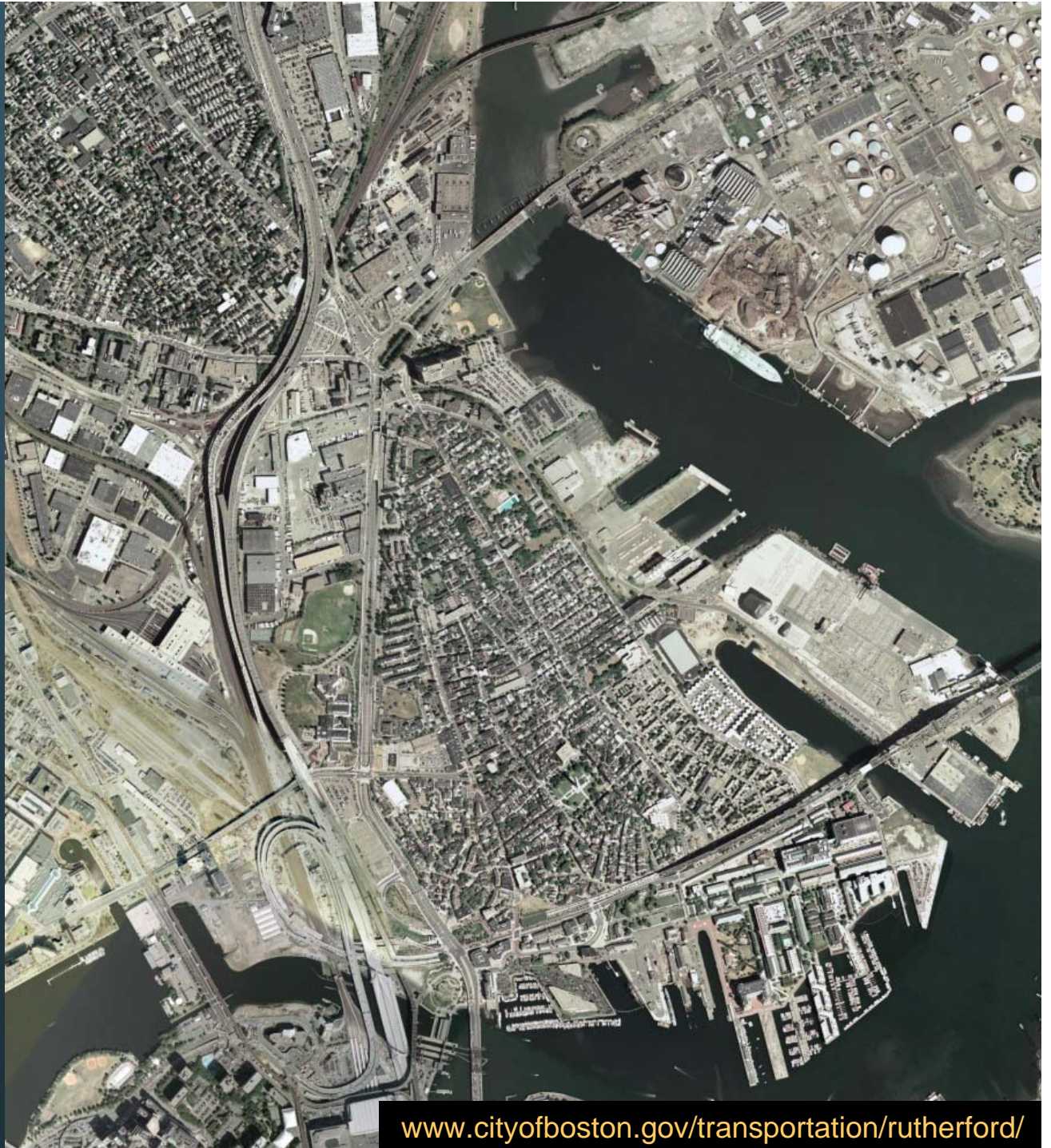
The Cecil Group

Brown Richardson & Rowe

Jacobs Engineering Group



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www.cityofboston.gov/transportation/rutherford/

Meeting Agenda

- Sullivan Square Refined Alternatives
 - At Grade
 - Underpass
- Comparison of Alternatives
- Community Discussion



Project Development Process

- Transportation Study
- Preliminary Design ← Current Step
- 25% Design
- Final Design (100%) and Bid Drawings
- Phased Construction
- Long Term Maintenance



Scope and Work Products

STEP 1: Existing Conditions / Project Goals

- Inventory Transportation, Development and Open Space Projects
- Identify Design Objectives

STEP 2: Alternatives Evaluation

- Develop and Evaluate Conceptual Alternatives
- Identify Potential Development and Open Space Parcels
- Select Preferred Conceptual Design

STEP 3: Preliminary Design

- Develop Preliminary Roadway & Parcel Design
- Parking and Access Guidelines Relative to Parcel Use
- Develop Cost Estimates and Phasing Strategies



Project Schedule

	Fall 2008	Spring 2009	Summer/ Fall 2009
Establish Design Principles & Identify Conceptual Alternatives			
Analyze, Review & Select Conceptual Design			
Review of Preliminary Design			



Project Funding

- \$600,000 in City of Boston funding for design to leverage federal dollars
- Initial earmarks for design and early phase construction (\$13 million)
- Accepted as Major Infrastructure Project in State's long range plan (potential \$100 million)
- Potential for public/private partnerships with developers



Project Goals

- Improve pedestrian connections between community and Sullivan Square Station
- Create public/open space
- Provide opportunities for appropriate development
- Decrease congestion by distributing traffic
- Provide bicycle connections
- Increase on-street parking
- Protect Main Street from cut-through traffic



Sullivan Square Layout Options

	Separated Main and Maffa	Combined Main and Maffa
At Grade Road	Option 1	Option 2
Underpass	Option 3	Option 4



Sullivan Square Surface Option (Option 1)

Layout and Circulation



Sullivan Square Underpass Option (Option 3)

Layout and Circulation



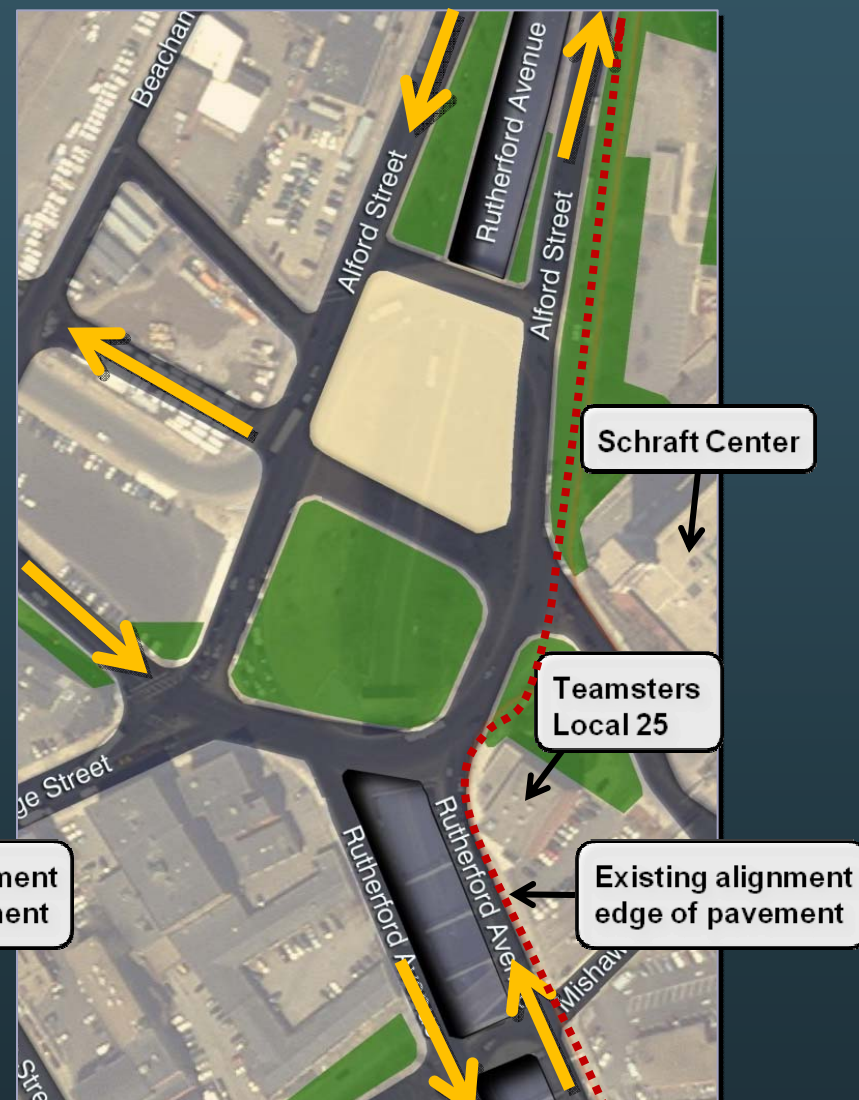
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11 Sullivan Square: Layout and Circulation



Surface Option



Underpass Option



Sullivan Square Surface Option

Rendered Site Plan



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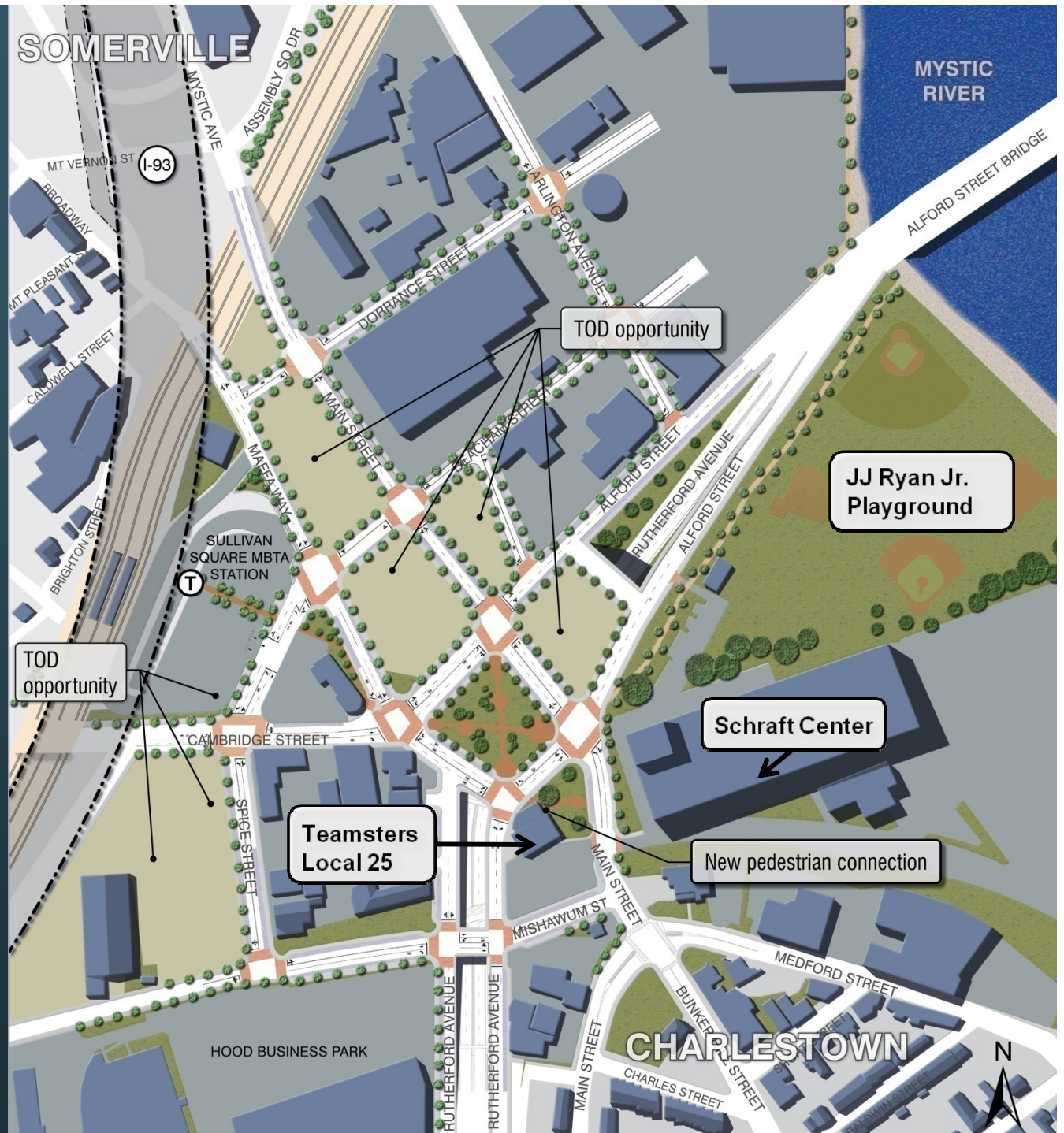


Sullivan Square Underpass Option

Rendered Site Plan



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Sullivan Square Surface Option

Urban Design Elements



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Sullivan Square Underpass Option

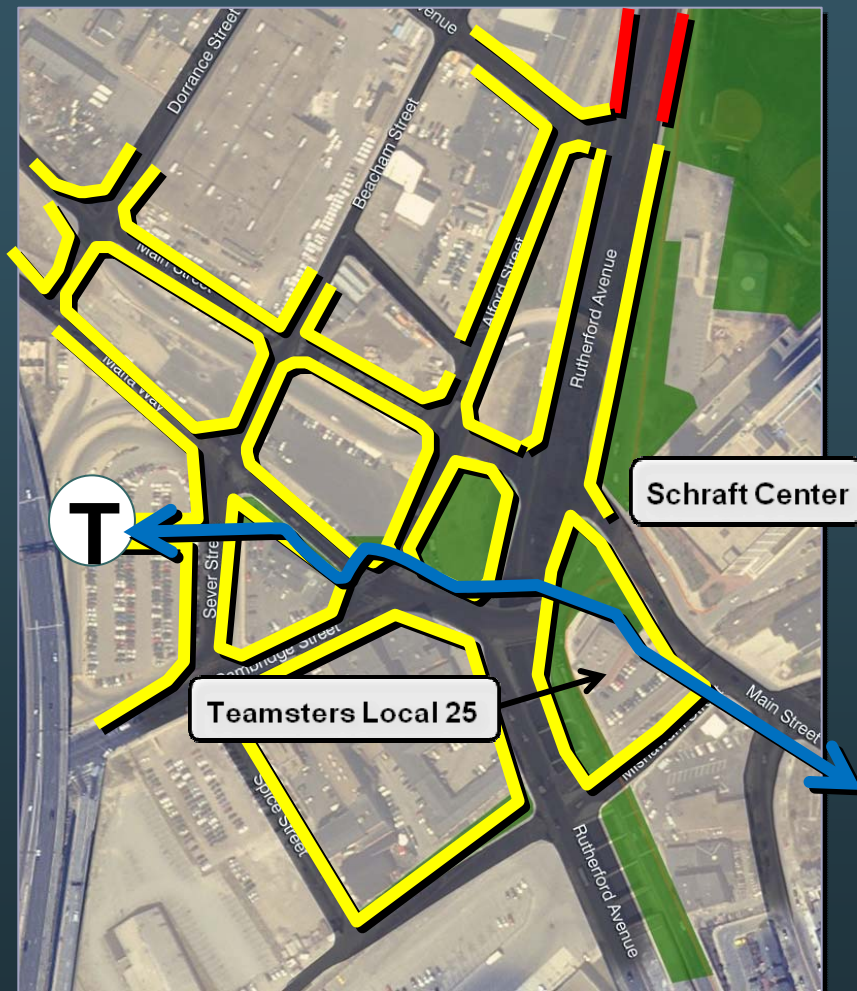
Urban Design Elements



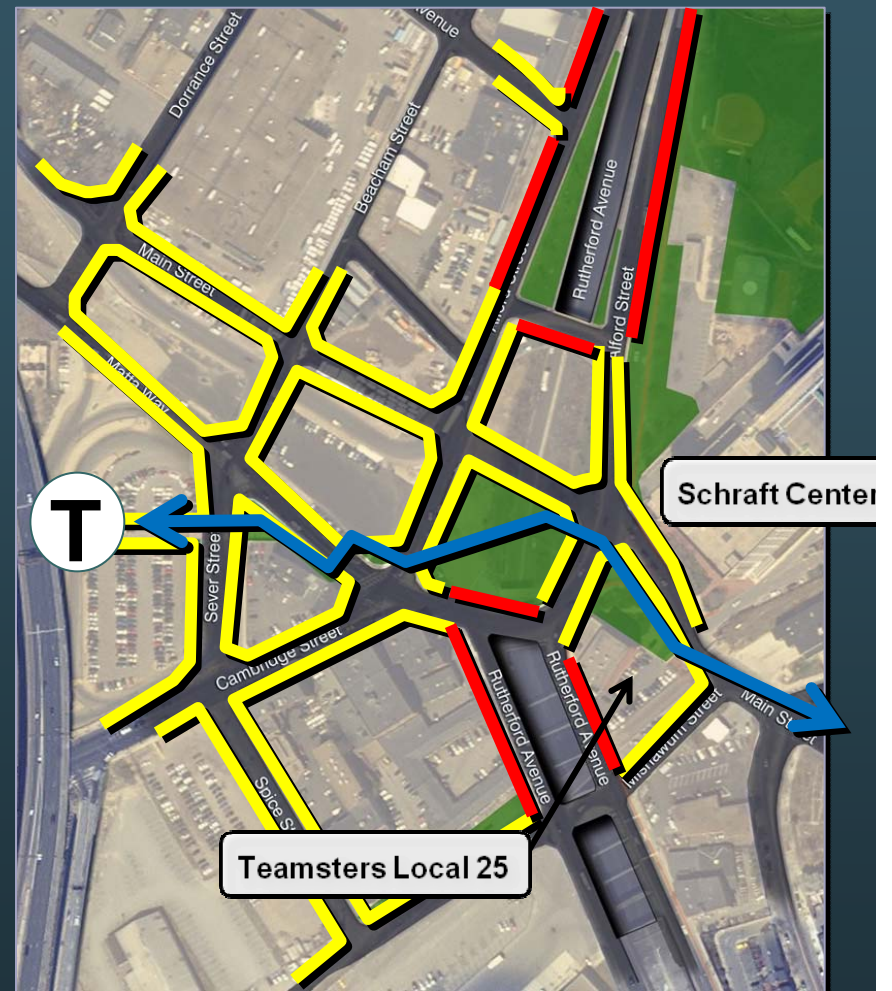
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Sullivan Square: Urban Design Elements



Surface Option



Underpass Option



Intersection Character

4-way
intersection,
4 lanes

Newbury at
Exeter St,
Boston



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Intersection Character

Boat Section,
9 lanes

Huntington Ave
at Mass Ave



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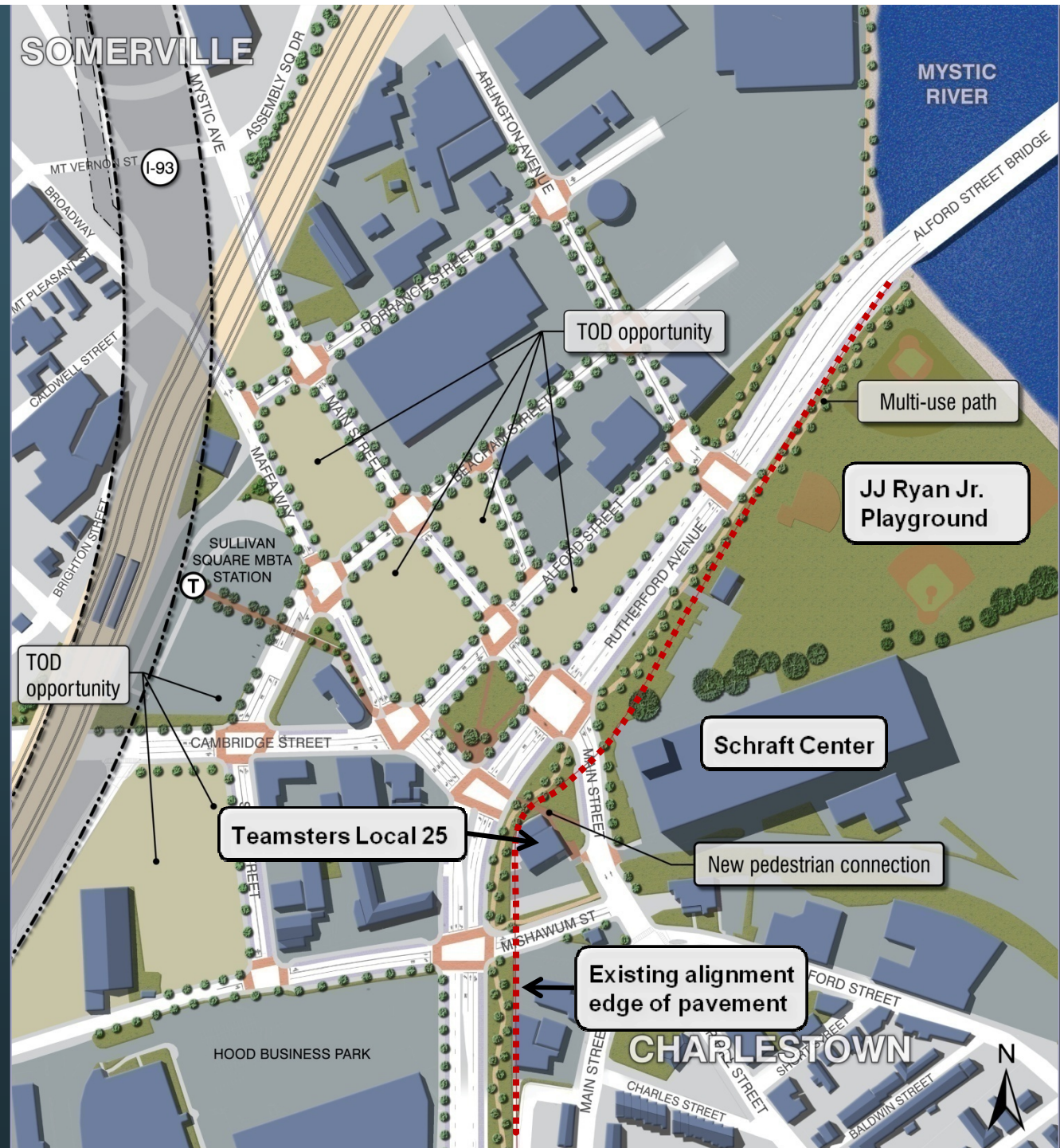


Sullivan Square Surface Option

Open Space Opportunities



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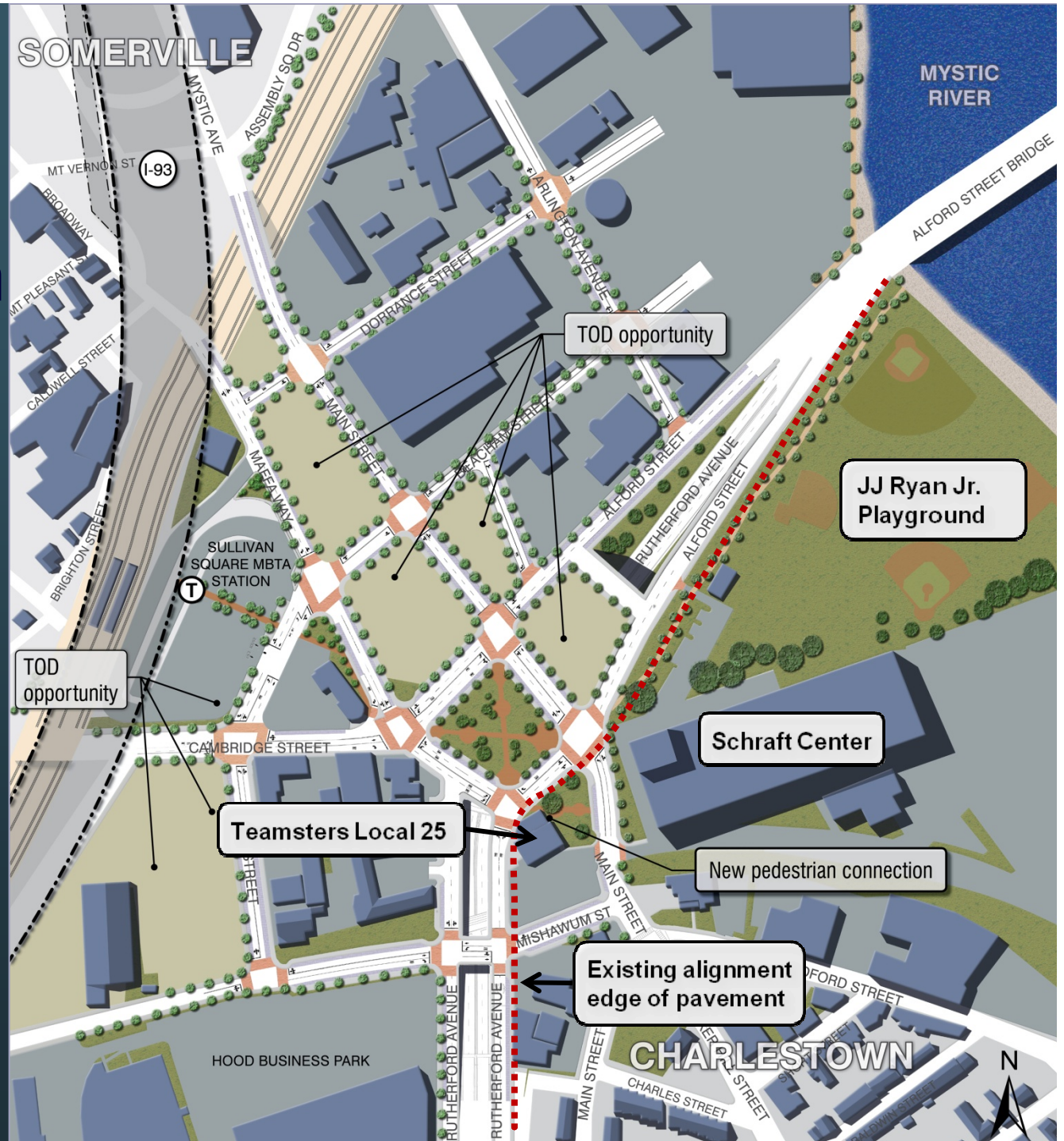


Sullivan Square Underpass Option

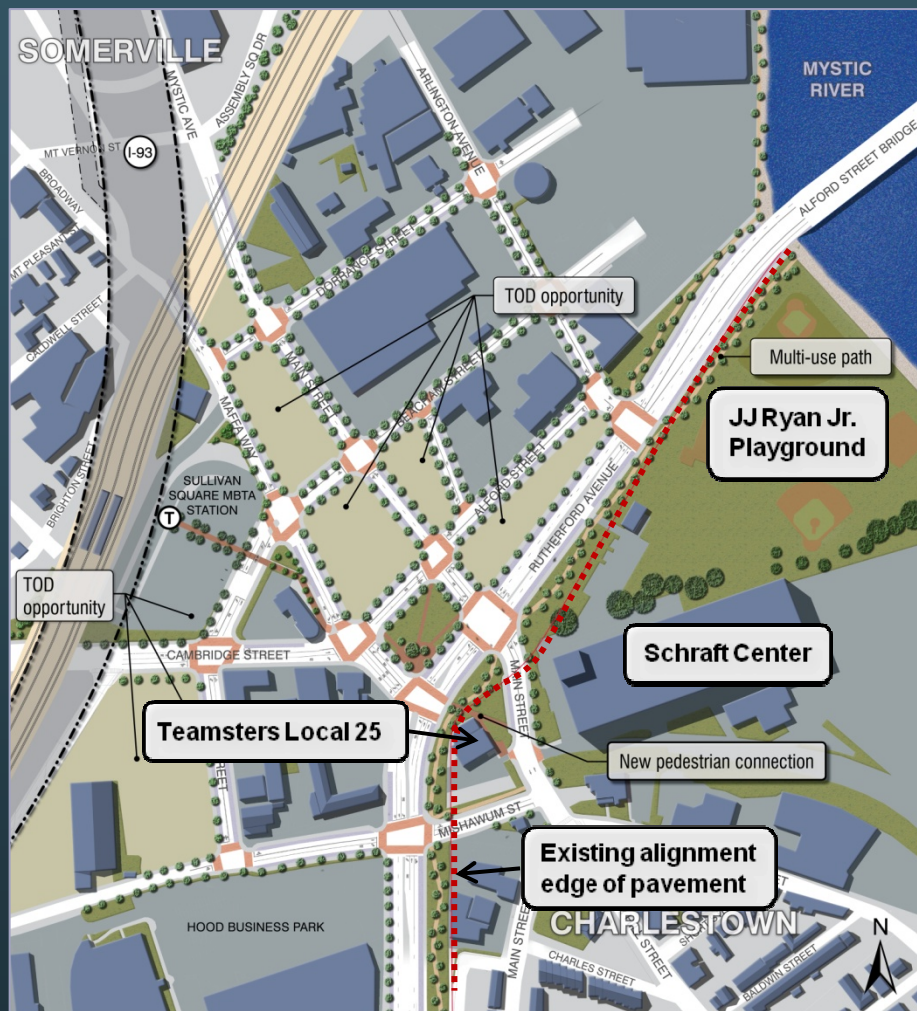
Open Space Opportunities



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21 Sullivan Square: Open Space Opportunities



Surface Option

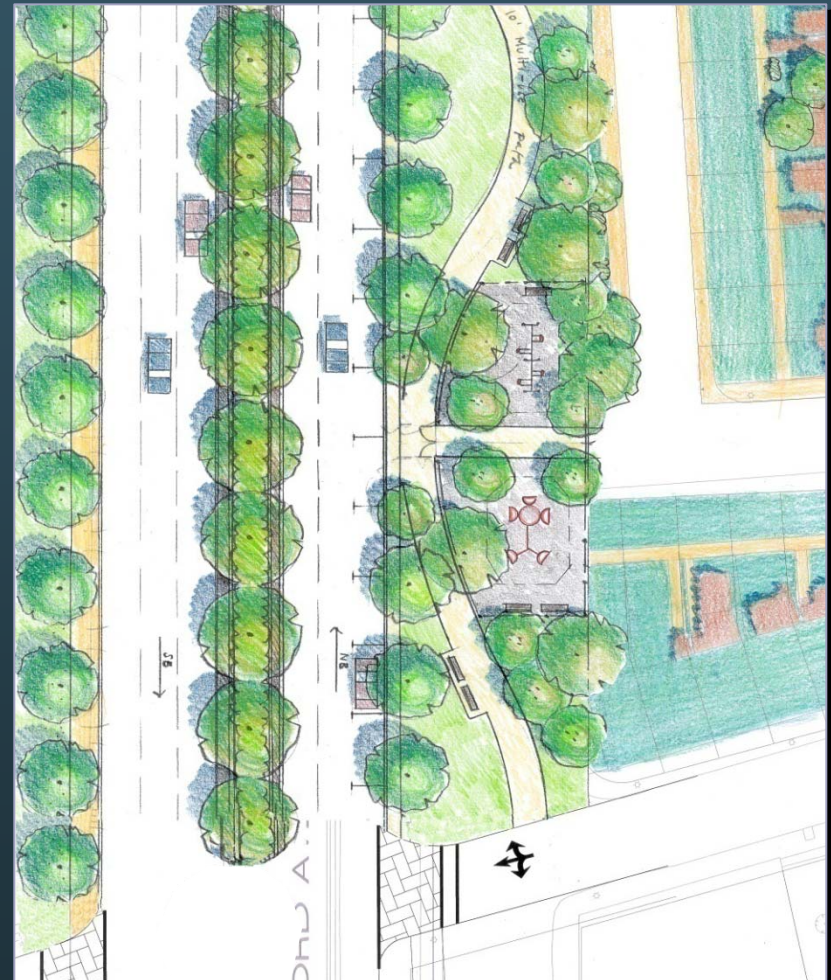
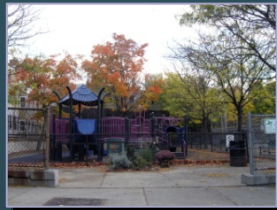


Underpass Option



Open Space Opportunities

Tot lots, community gardens,
public art, seating areas,
multiuse path



Open Space Opportunities

Pedestrian and bicycle paths



(Example: Southwest Corridor)



Open Space Opportunities

Bicycle connections to other streets



(Example: Portland, Oregon)



7 Entire Corridor Relationship

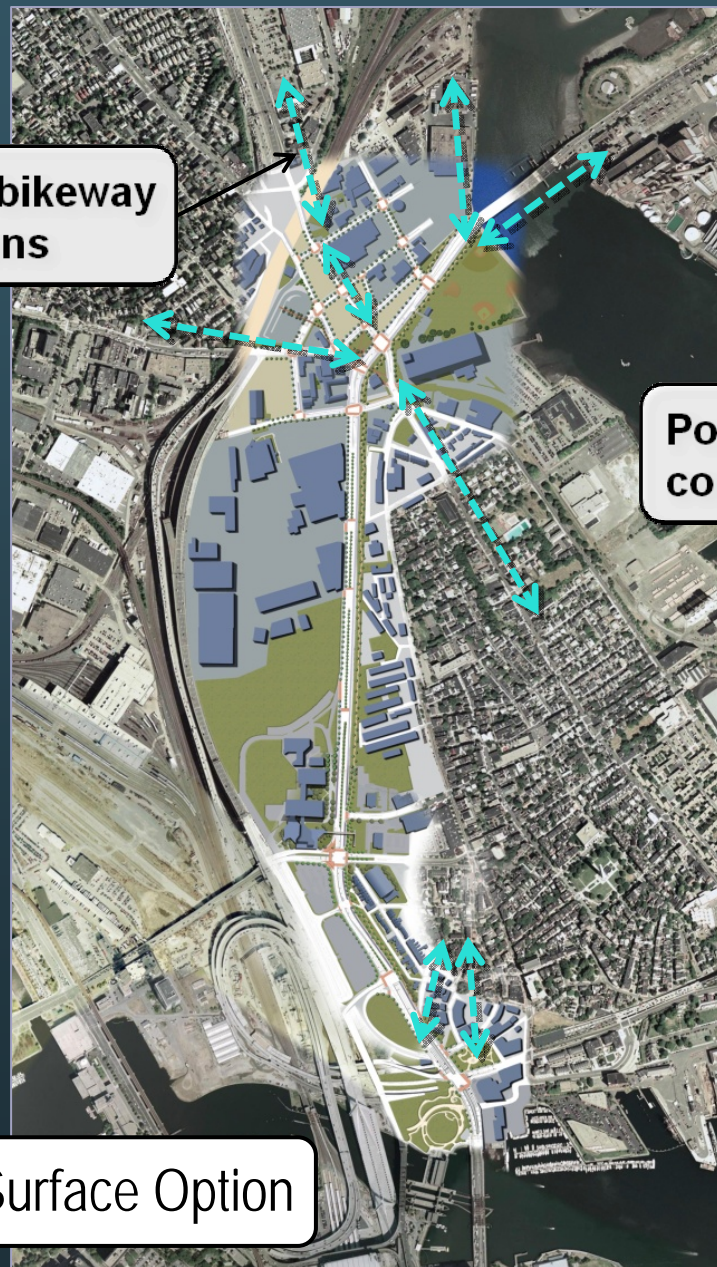


8 Entire Corridor Relationship



9 Entire Corridor Relationship

Potential bikeway connections



Surface Option

Potential bikeway connections



Underpass Option



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2030 Traffic Projections

- 2008 Traffic Counts
- Increase by 5% to account for regional growth and redevelopment in the Rutherford Avenue corridor
- Add in traffic from proposed Assembly Square Project in Somerville (including IKEA)
- Re-assign traffic based on likely travel paths through new roadway network



Existing Traffic Volumes / Operations

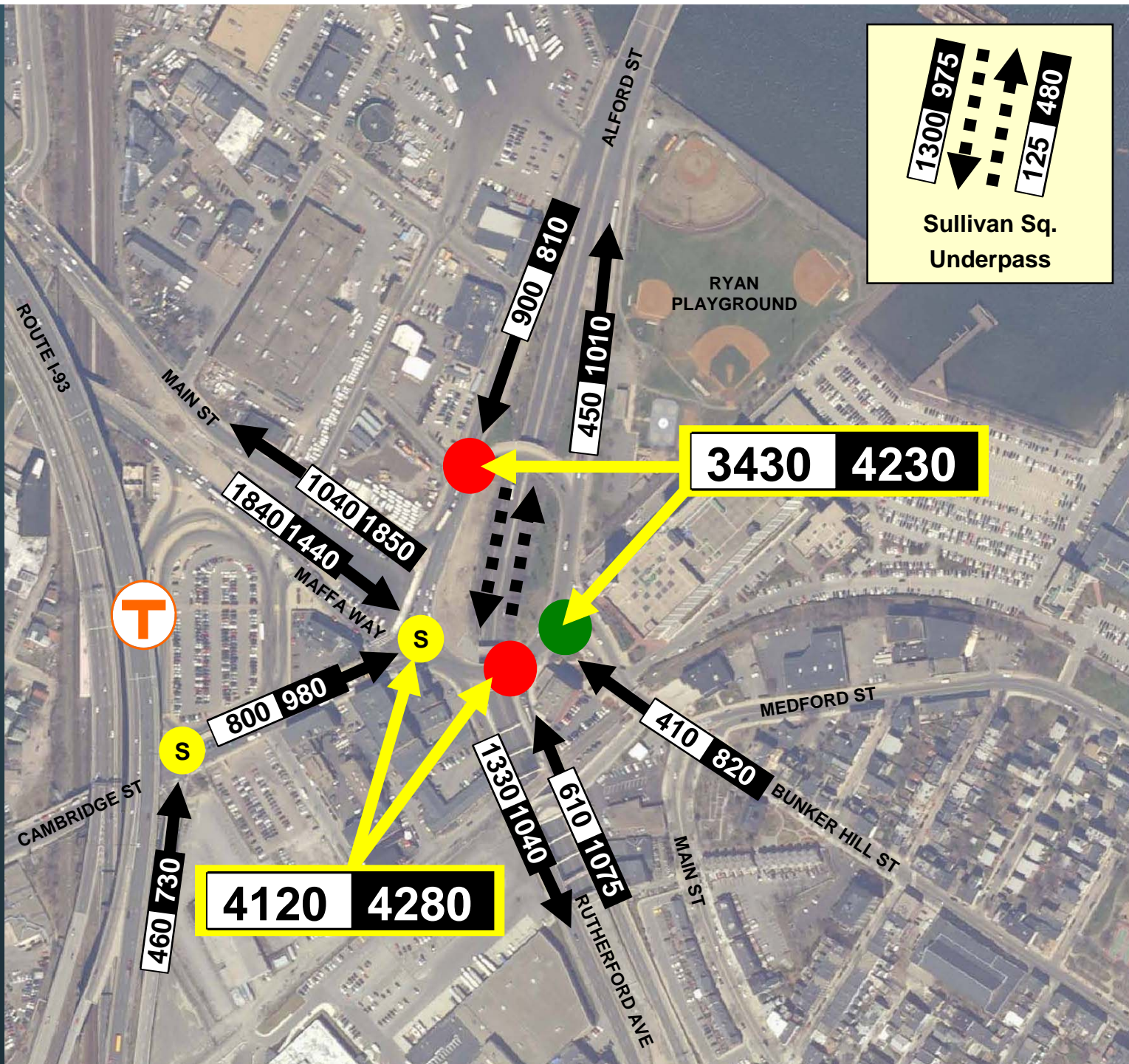
LEGEND

- LOS A-D
- LOS E
- LOS F
- S Signal

AM PM



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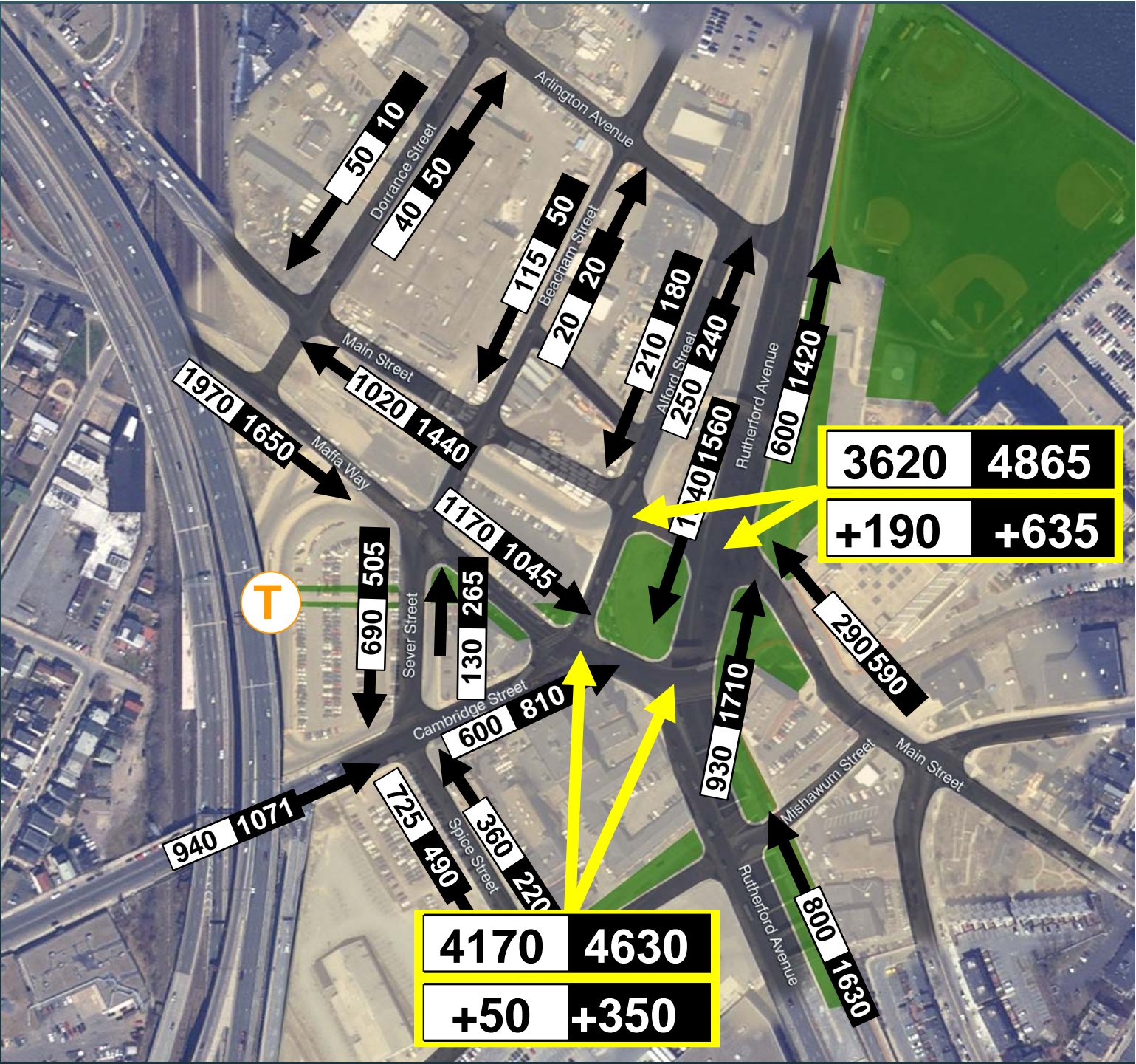
Sullivan Square Surface Option

2030
Traffic
Volumes

LEGEND

AM

PM



Sullivan Square Underpass Option

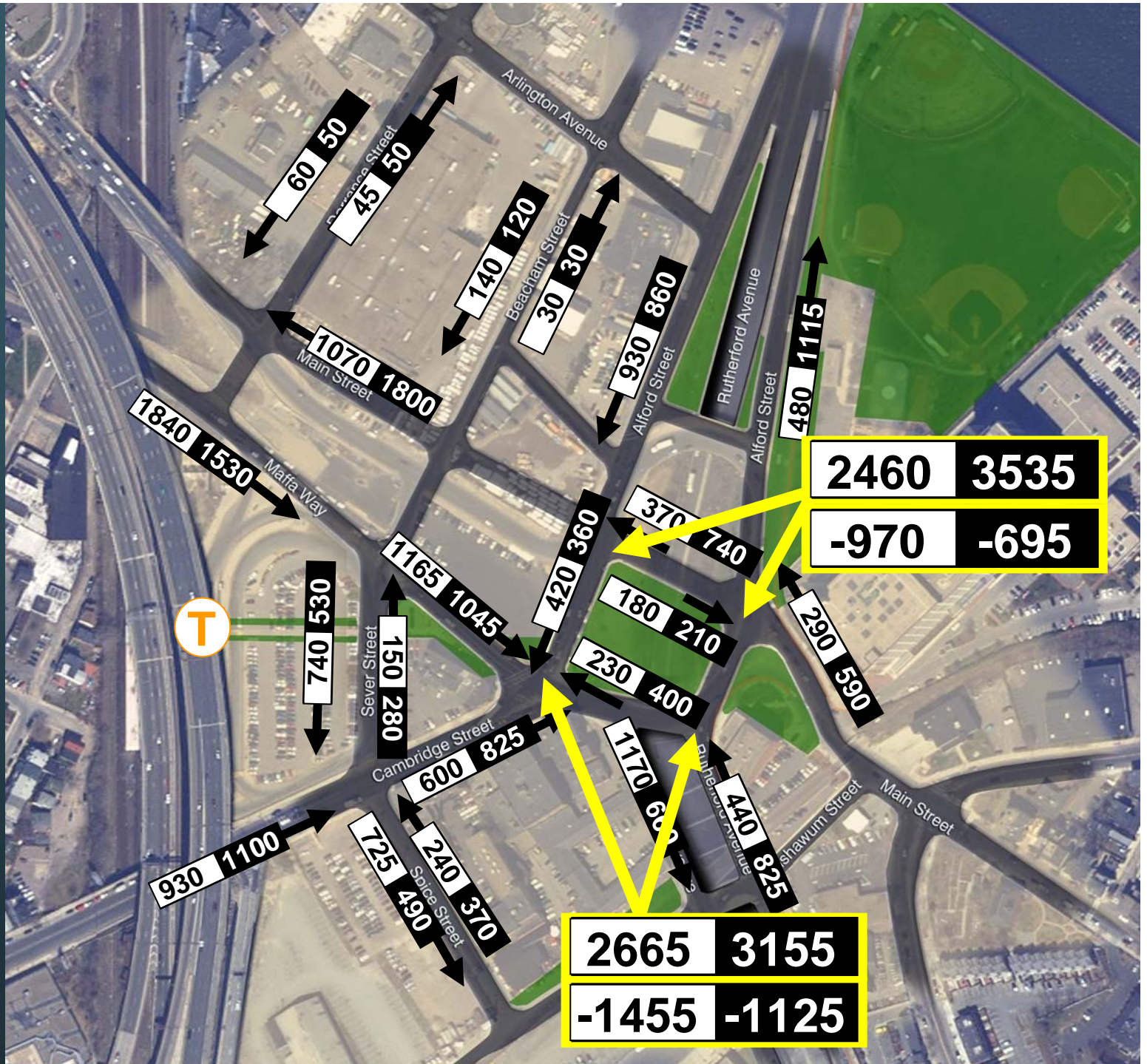
2030
Traffic
Volumes

LEGEND

AM PM



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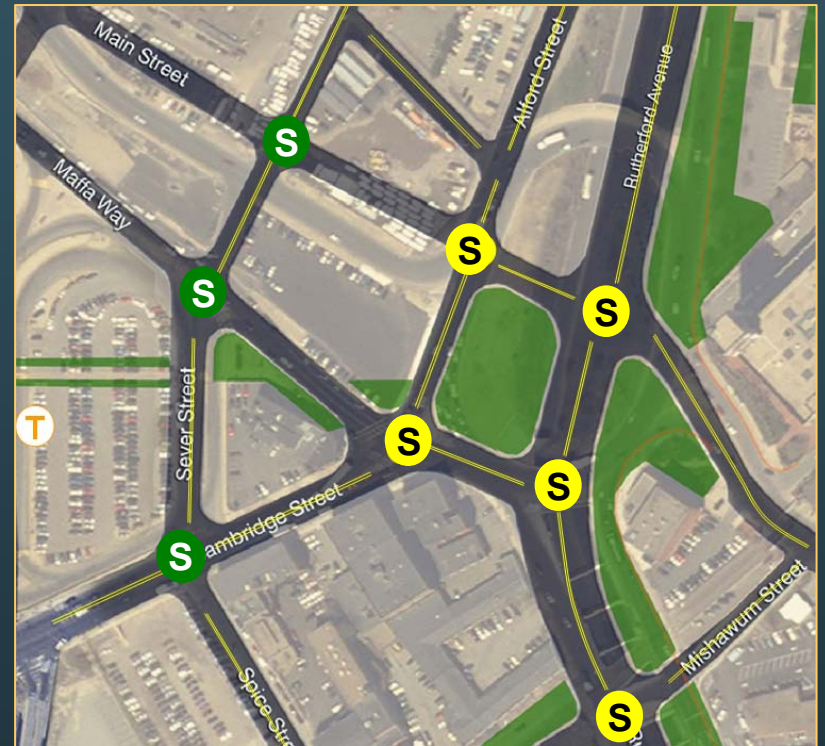
Sullivan Square: 2030 PM Peak Hour Traffic Operations

LEGEND

- LOS A-D
- LOS E
- LOS F
- S Signal



Surface Option



Underpass Option



Sullivan Square Surface Option Cost Summary

Construction Period -
Approx: 4 ½ years



Sullivan Square Area	At-Grade Option
Project Elements	Estimated Cost
<u>Construction Items</u>	
Roadway Pavement	\$9,090,000
Sidewalks	\$4,060,000
Curbing	\$1,140,000
Demolition (bridges, structures)	\$3,480,000
Embankment	\$4,770,000
Decking	\$0
Drainage	\$5,770,000
Structures (walls)	\$1,420,000
Traffic Signals	\$3,300,000
Landscaping (Parks, Multi-Use Path, Lighting)	\$7,060,000
Utility Relocations	\$6,550,000
Construction Staging	\$4,650,000
Maintenance of Traffic / Police	\$5,130,000
<i>Subtotal</i>	\$56,420,000
Contingency (25%)	\$14,110,000
<i>TOTAL CONSTRUCTION COST</i>	\$70,530,000
say	\$71,000,000

Sullivan Square Underpass Option Cost Summary

Construction Period -
Approx: 5 years



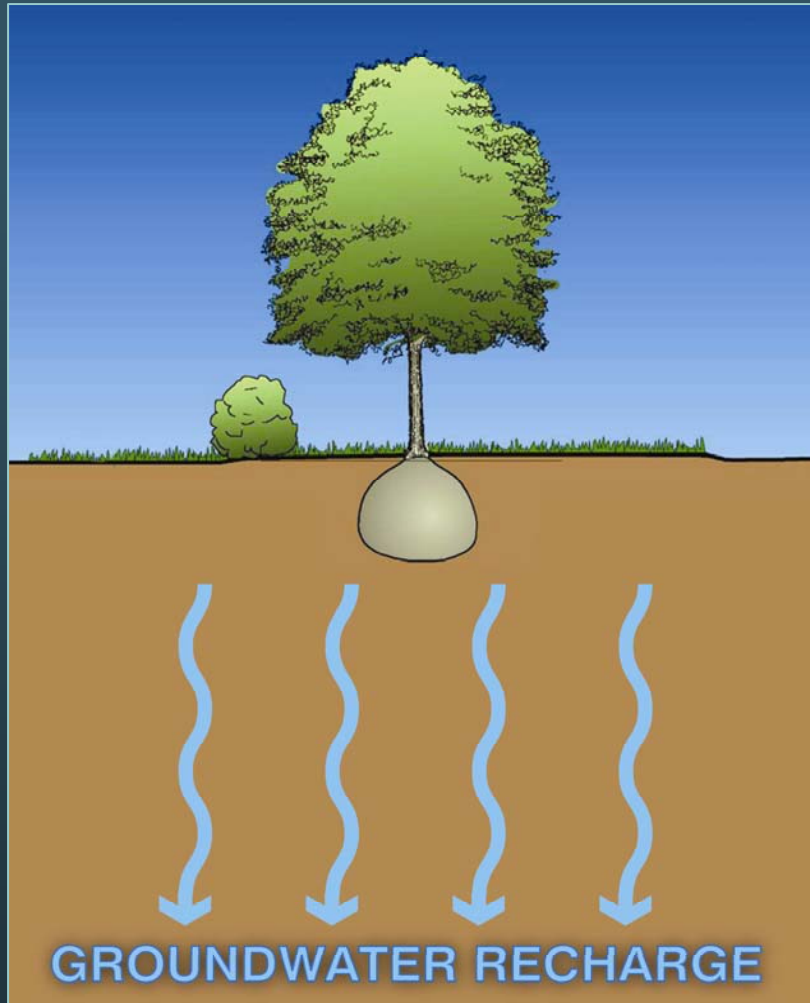
Sullivan Square Area	Underpass Option
Project Elements	Estimated Cost
<u>Construction Items</u>	
Roadway Pavement	\$7,470,000
Sidewalks	\$4,200,000
Curbing	\$970,000
Demolition (bridges, structures)	\$2,450,000
Embankment	\$0
Decking	\$17,000,000
Drainage	\$6,030,000
Structures (walls)	\$2,170,000
Traffic Signals	\$2,700,000
Landscaping (Parks, Multi-Use Path, Lighting)	\$5,640,000
Utility Relocations	\$6,750,000
Construction Staging	\$4,980,000
Maintenance of Traffic / Police	\$6,040,000
<i>Subtotal</i>	\$66,400,000
Contingency (25%)	\$16,600,000
<i>TOTAL CONSTRUCTION COST</i>	\$83,000,000
say	\$83,000,000

Cost Summary Comparison

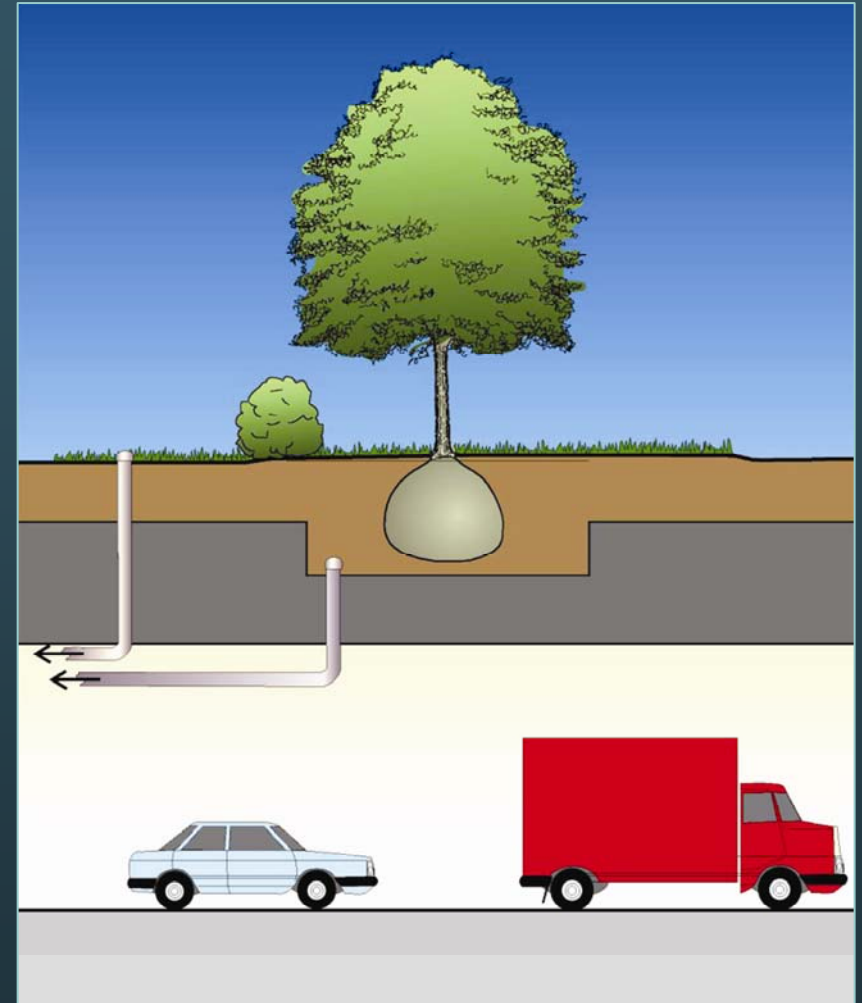
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Curbing	\$1,140,000	\$970,000
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Embankment	\$4,770,000	\$0
Decking	\$0	\$17,000,000
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say	\$71,000,000	\$83,000,000



Cross Section Implications



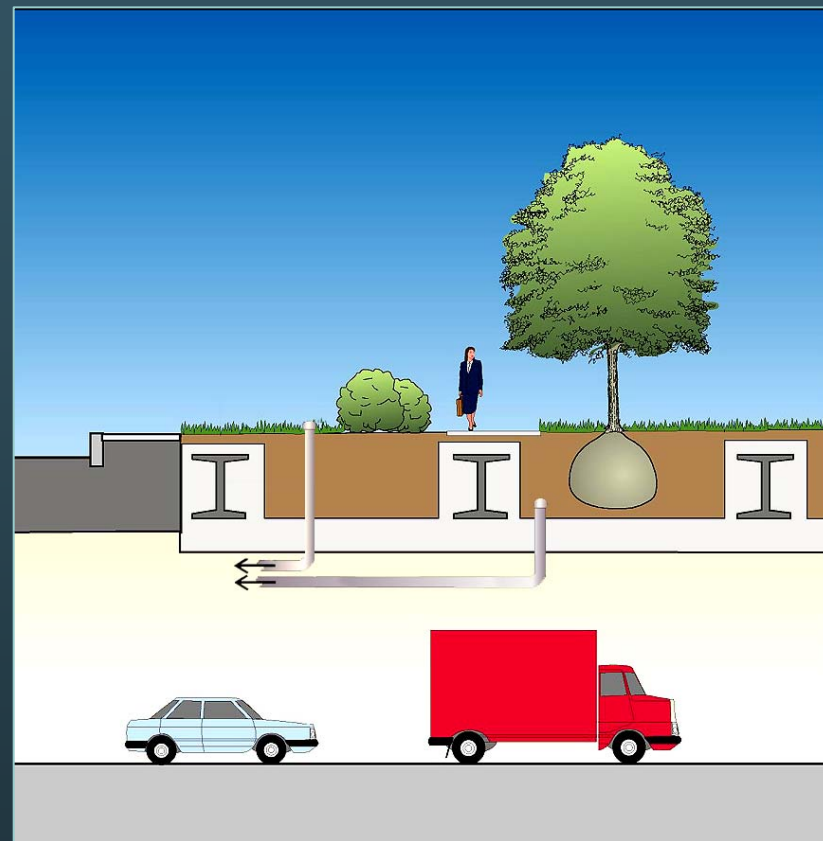
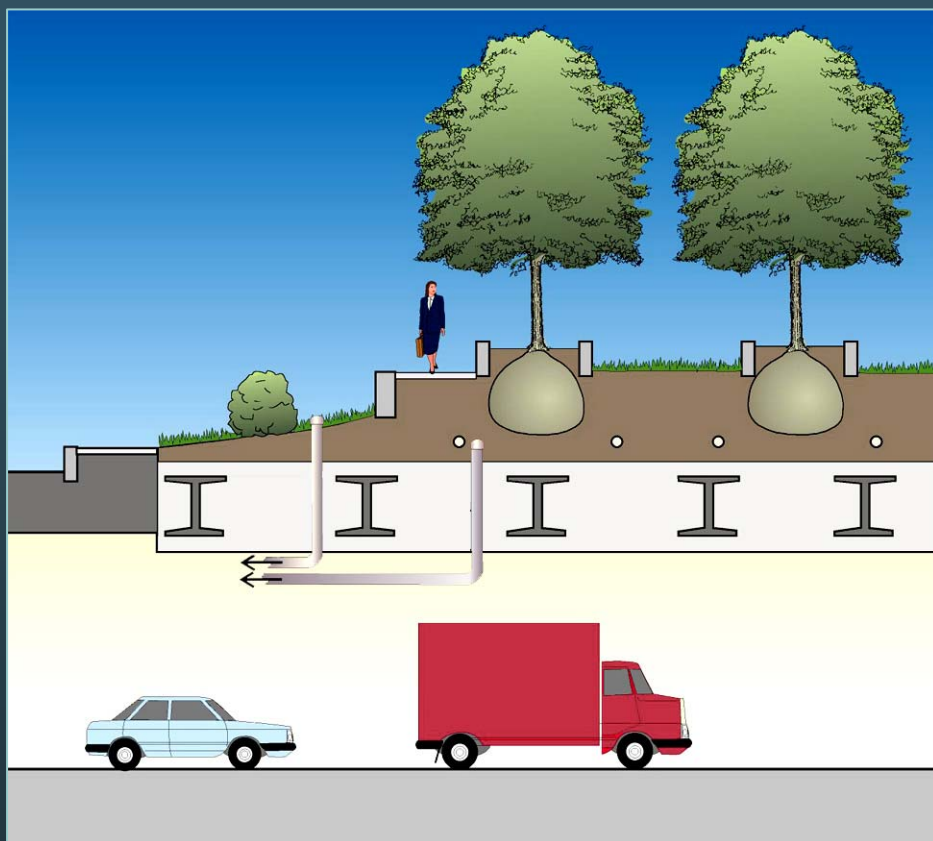
Planting at grade



Planting on a deck



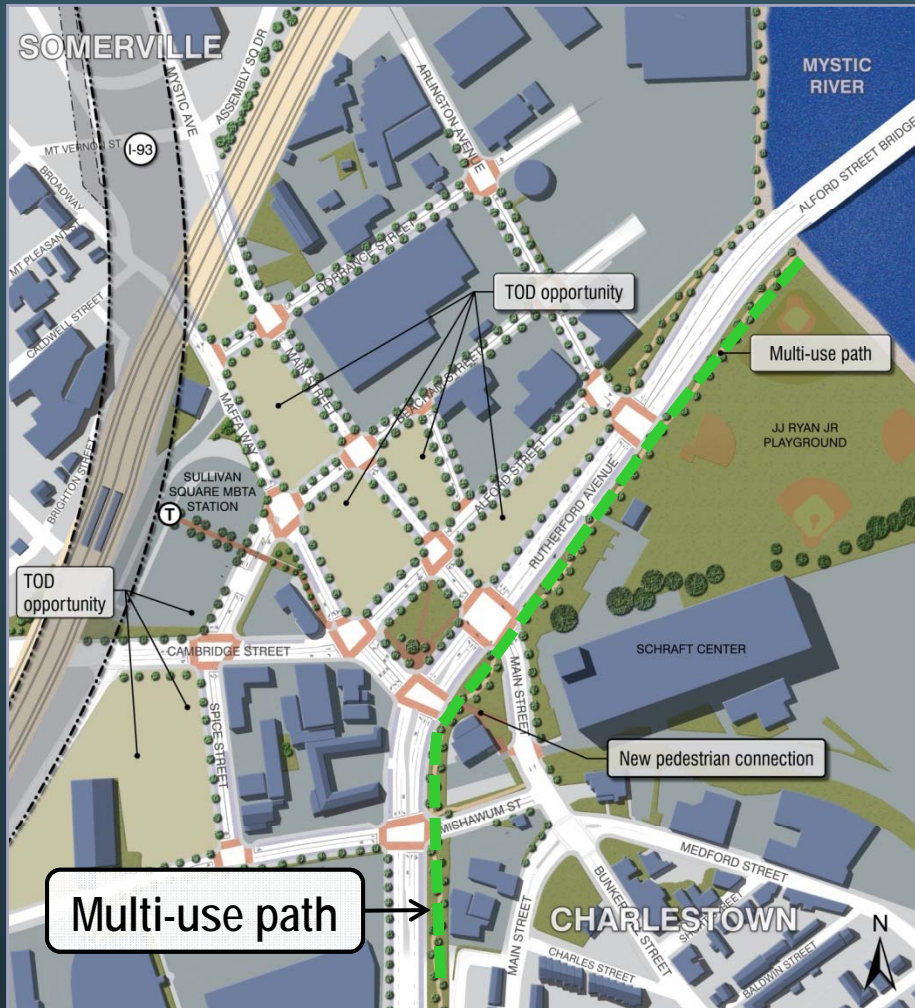
35 Cross Section Implications



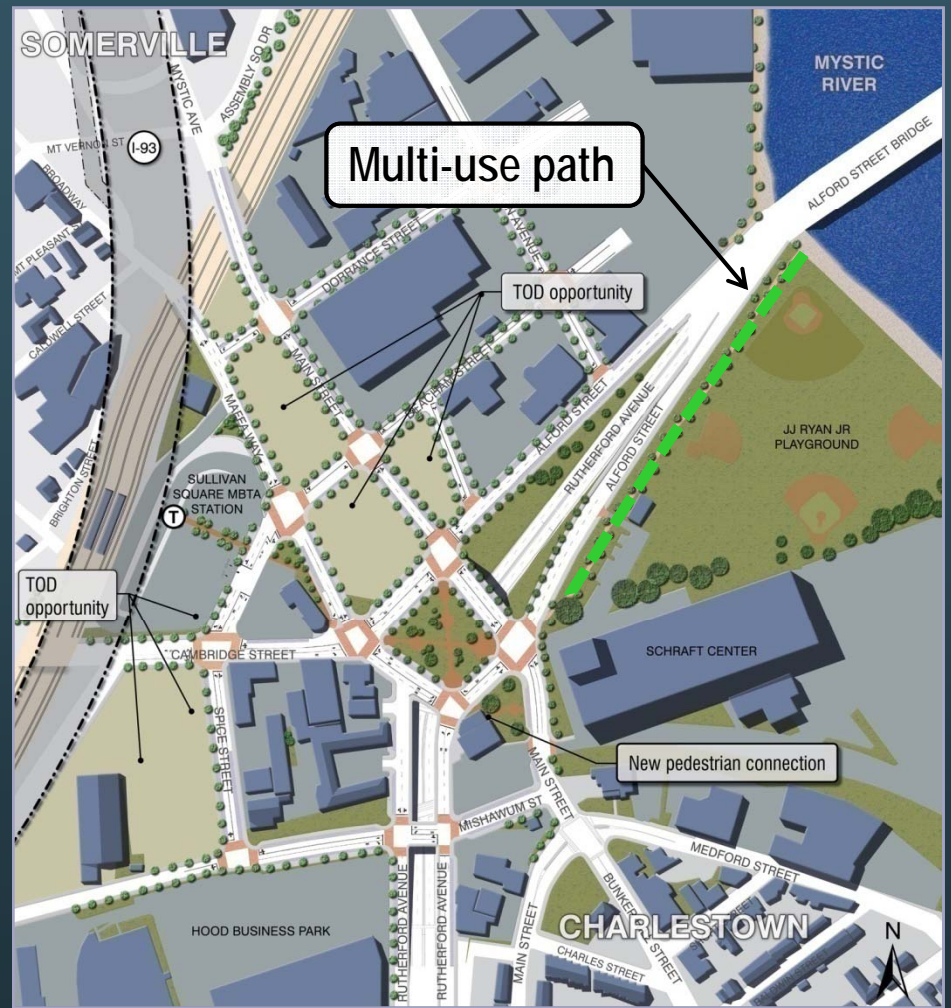
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Structural concept alternatives

■ 1 ■ Sullivan Square: Rendered Site Plan



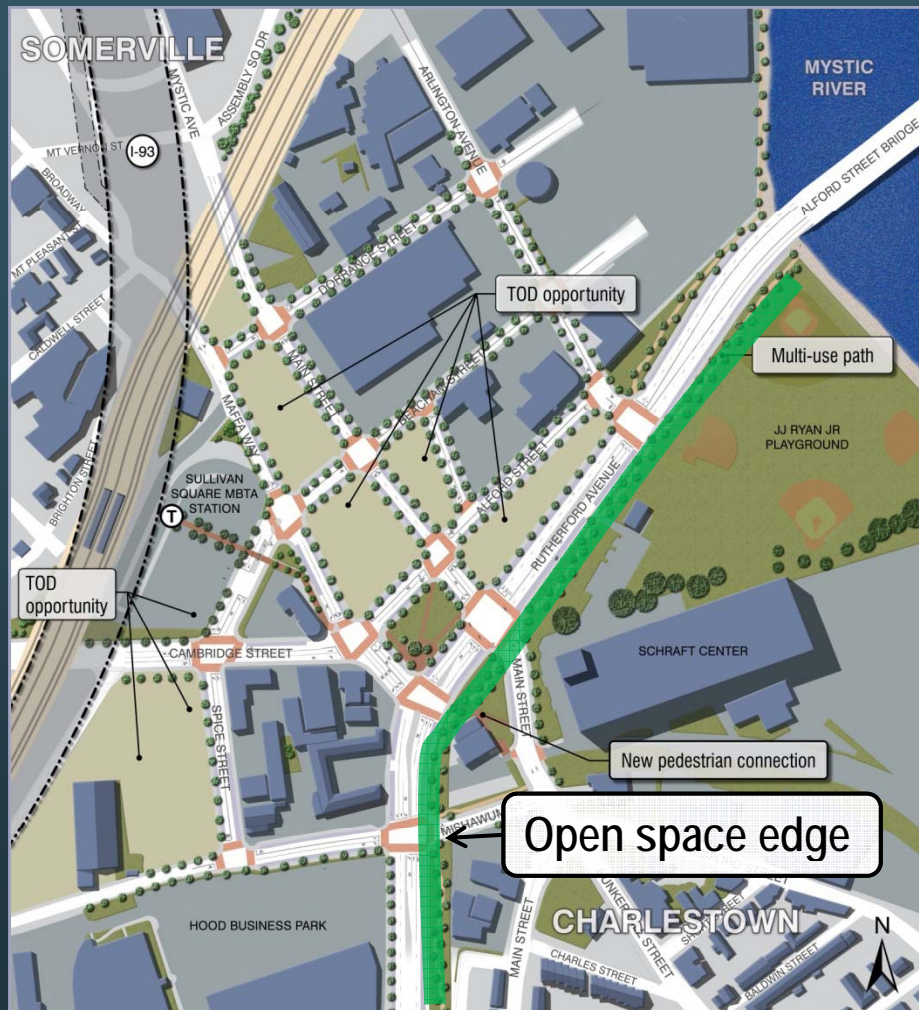
Surface Option



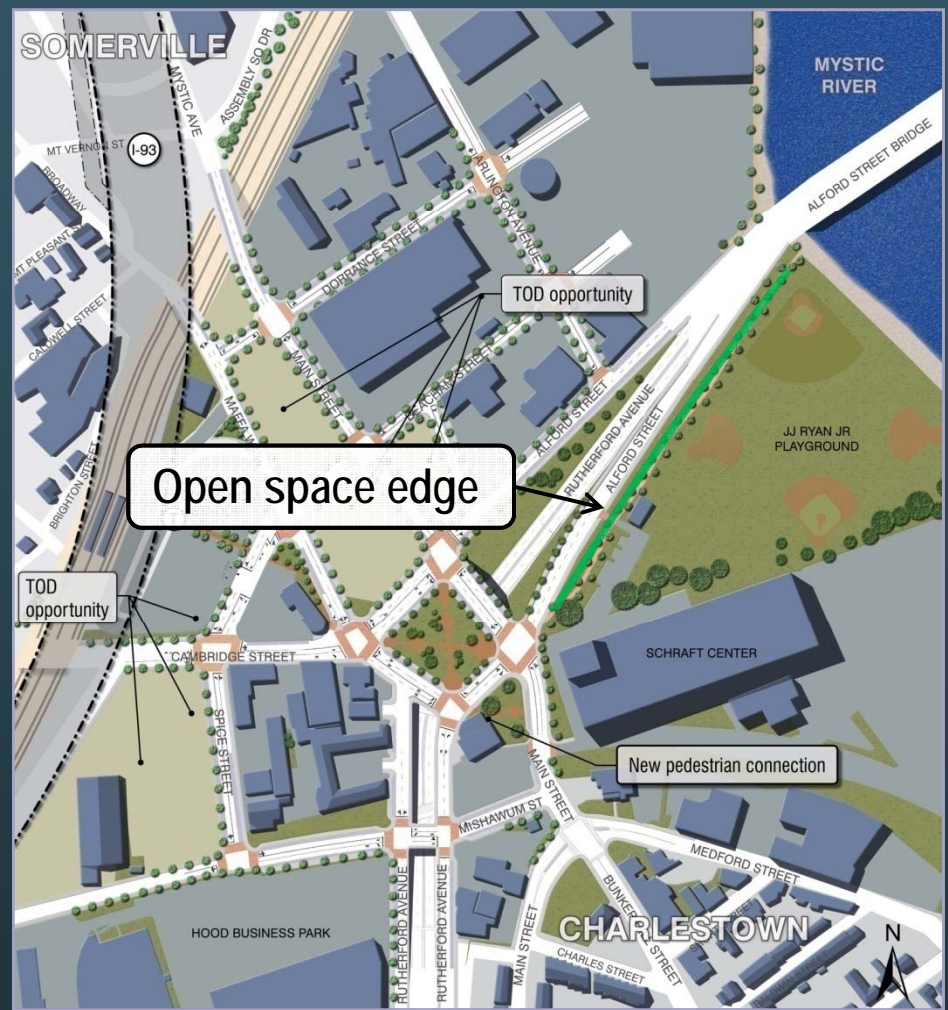
Underpass Option



Sullivan Square: Rendered Site Plan



Surface Option



Underpass Option



3 Sullivan Square: Rendered Site Plan



Surface Option



Underpass Option



4 Sullivan Square: Rendered Site Plan



Surface Option



Underpass Option



Sullivan Square: Rendered Site Plan



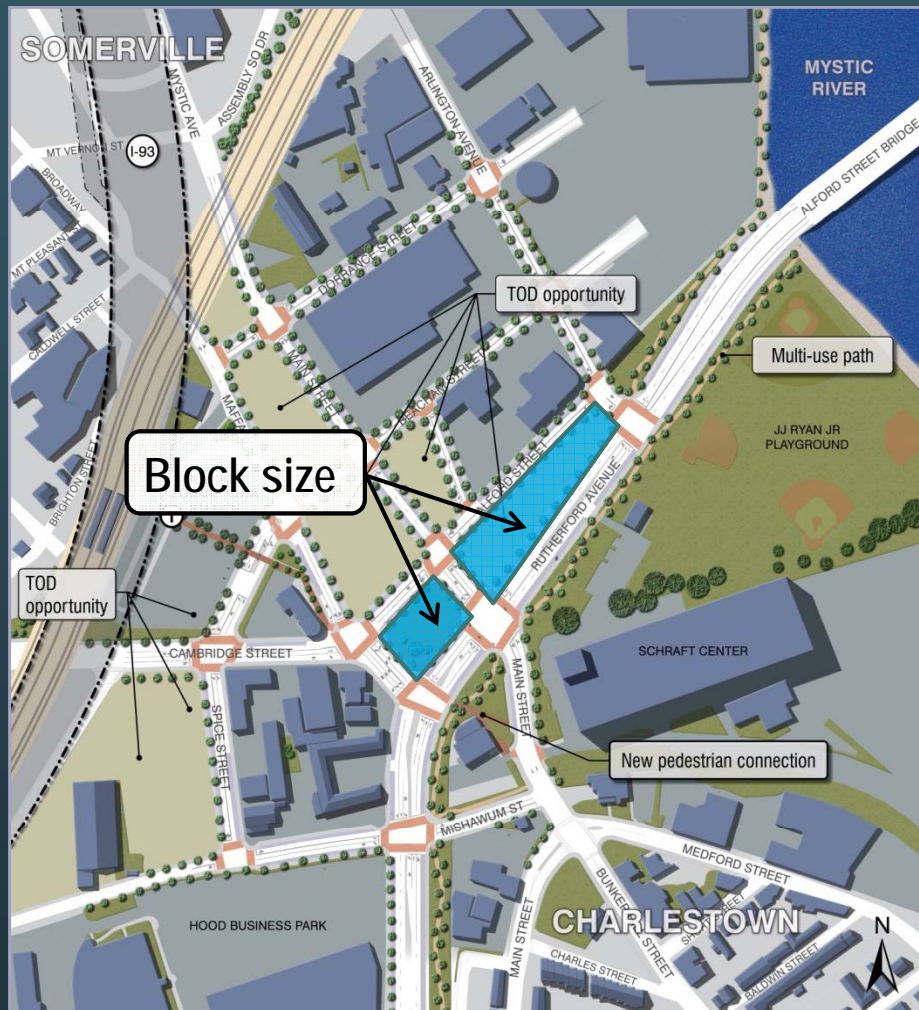
Surface Option



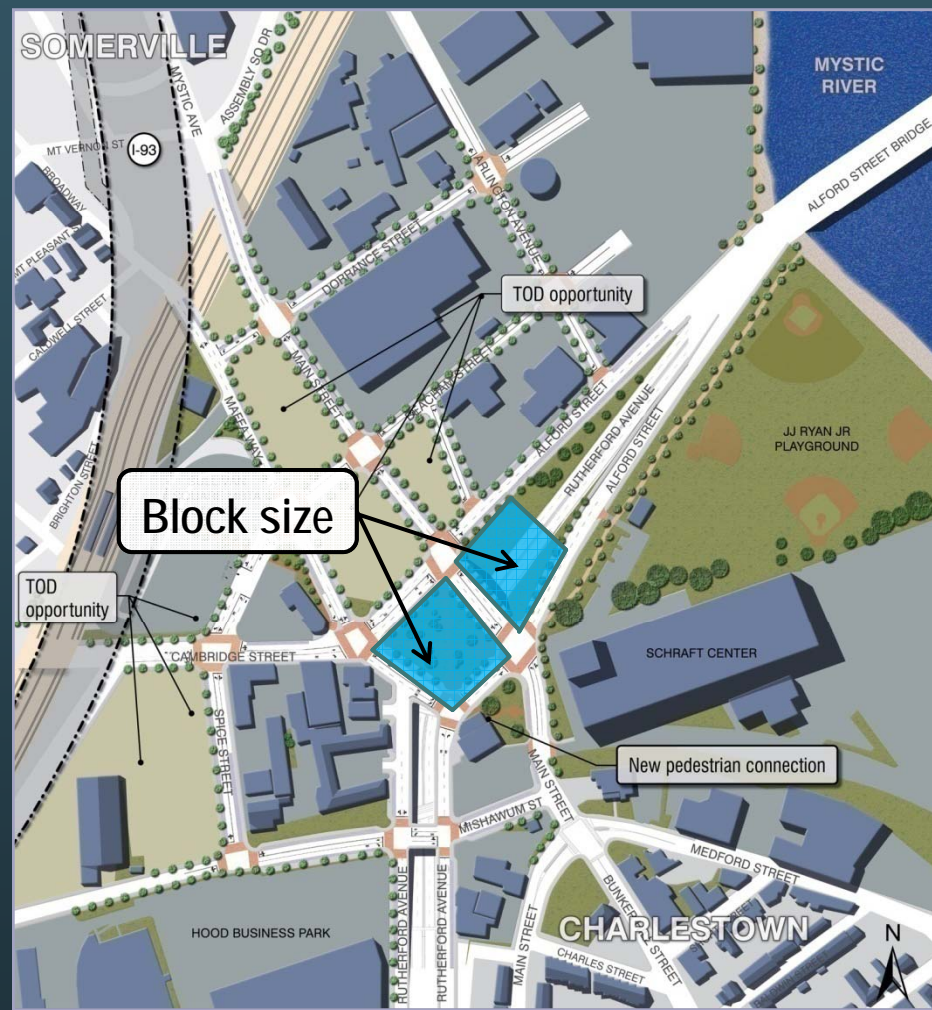
Underpass Option



Sullivan Square: Rendered Site Plan



Surface Option



Underpass Option



Project Goals

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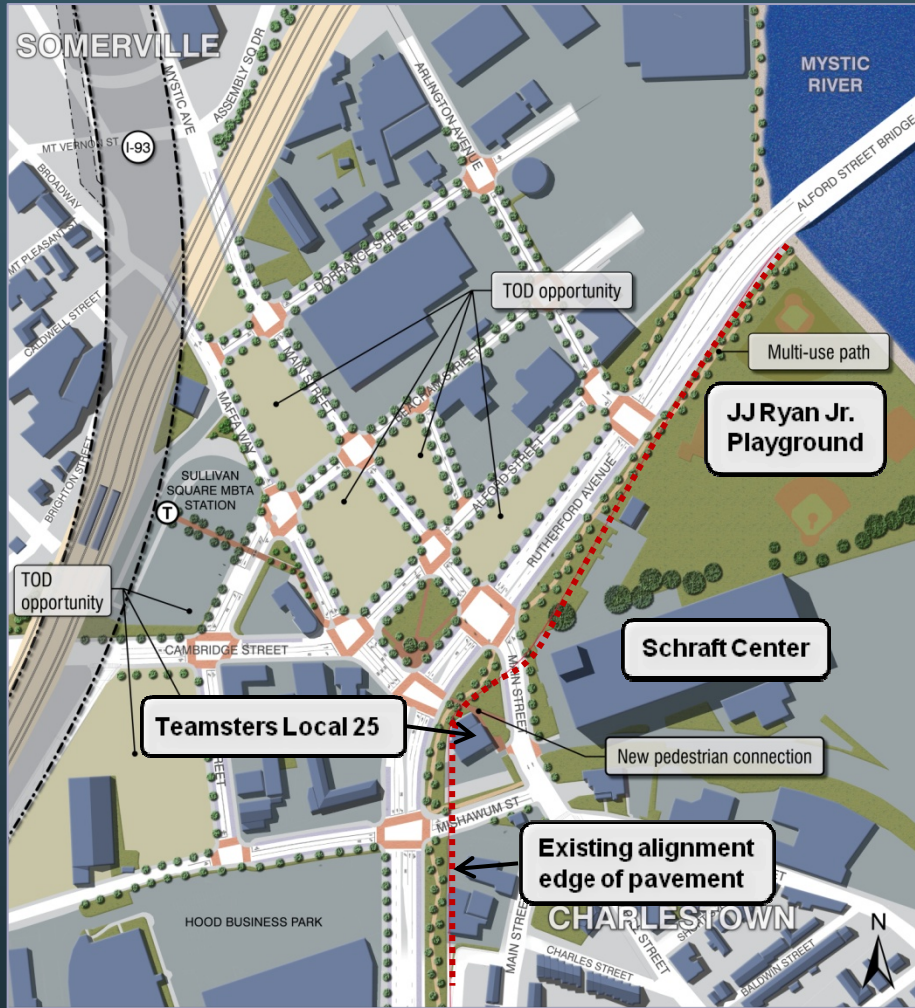


Option Comparison Based on Response to Goals

GOALS	SURFACE OPTION	UNDERPASS OPTION
Pedestrian Connections	<ul style="list-style-type: none"> • Good pedestrian connections • Enhanced access to Ryan playground 	<ul style="list-style-type: none"> • Some constrained pedestrian connections • Improved Ryan playground access depends on air rights development
Open Space	<ul style="list-style-type: none"> • Continuous and wide open space corridor for community use 	<ul style="list-style-type: none"> • Underpass does not allow for a wide and continuous open space corridor
Development Opportunities	<ul style="list-style-type: none"> • Good opportunities for appropriate development parcels • Easier to build and plant on terra-firma 	<ul style="list-style-type: none"> • Good opportunities for appropriate development parcels • Air rights more costly (deck premium)
Traffic Distribution	<ul style="list-style-type: none"> • Circulation disperses traffic • Effectively calming speed down 	<ul style="list-style-type: none"> • Circulation disperses traffic • Encourages regional through traffic
Main Street	<ul style="list-style-type: none"> • Alignment and signals timing to prevent cut-through traffic 	<ul style="list-style-type: none"> • Alignment and signals timing to prevent cut-through traffic
On-Street Parking	<ul style="list-style-type: none"> • Sullivan Square: 450 • Rutherford Ave corridor : 675 	<ul style="list-style-type: none"> • Sullivan Square: 330 • Rutherford Ave corridor : 400
Construction Cost/Time	<ul style="list-style-type: none"> • \$ 71m • approx. 4 ½ years to construct 	<ul style="list-style-type: none"> • \$ 83m • approx. 5 years to construct



Sullivan Square: Community Discussion



Surface Option



Underpass Option



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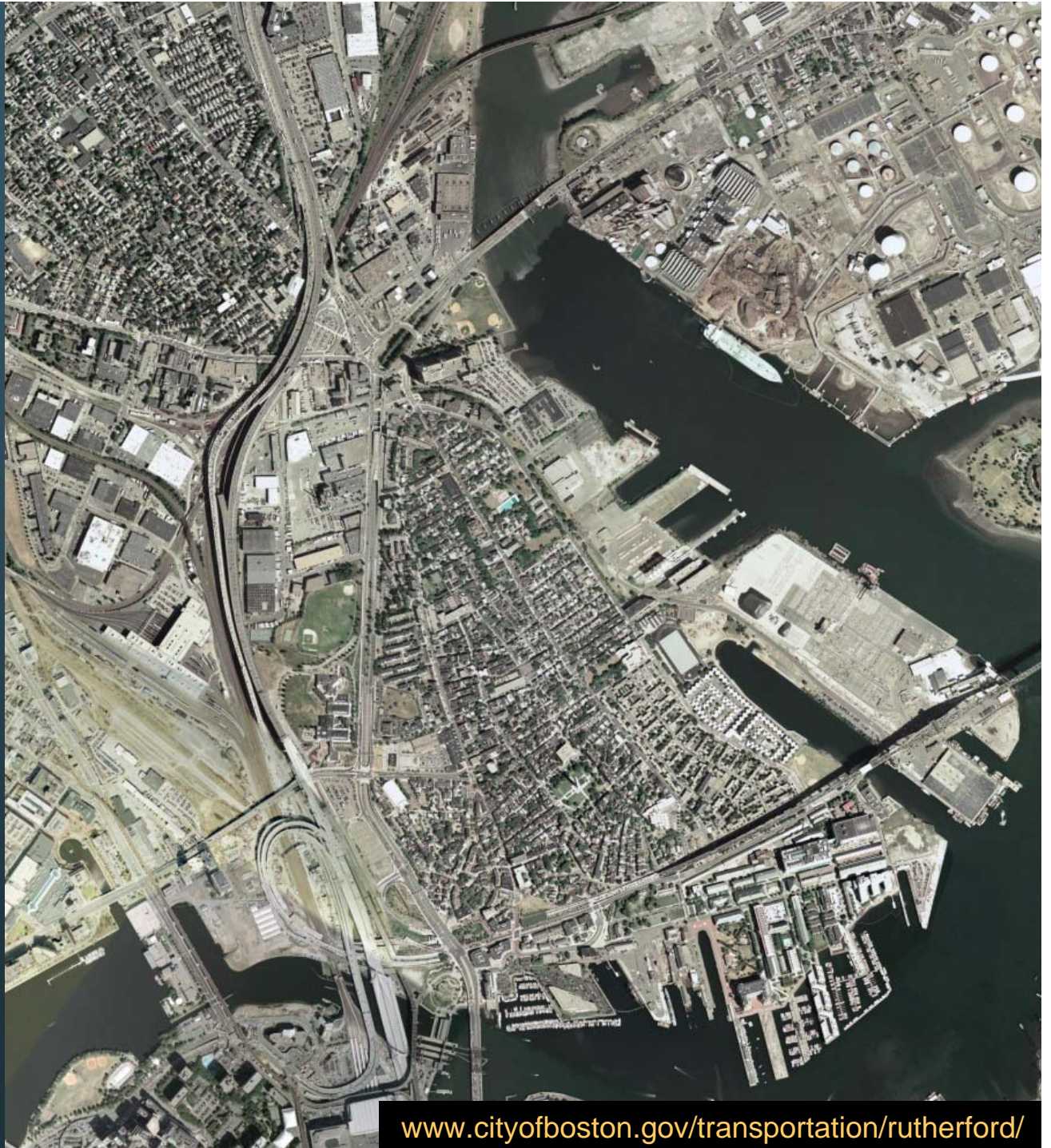
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