Binney/Galileo/Broadway

Streetscape & Intersection Redesign Project

Cambridge Committee on Public Planting Presentation | March 2017
PROJECT PURPOSE
• CRA
  – Leading, managing, funding

• Key staff from DPW, TPT, CDD, Fire and Police
  – Advising, collaborating, approving

• Alta Planning + Design
  – Prime Consultant
  – Bicycle and Pedestrian Facility Design
  – Landscape Architecture

• HDR Engineering, Inc.
  – Civil Engineering

• McMahon and Associates
  – Traffic Engineering
Important Notes:

• This is a design project only
• Construction will be done by others – at least 4+ entities
• Each section is tied to a special permit for a related development
• Each developer must bring our 25% drawings to 100% drawings by a certain milestone
• Construction of each section is set to a different milestone in their special permit
• The entire corridor will not be constructed all at once
• Largest section may not be under construction until likely 2019-2022 by BP, depending on market conditions
SCOPE MAP

Project Scope Area

Add / Alt #1

CRA and City property for possible integration of bicycle and pedestrian facilities (Grand Junction Path, sidewalk, Binney/ Galileo cycle track)
• Cambridge Vision Zero Pledge (safety of all users)
• Enhance connectivity of existing bike facilities
• Facilitate bus travel & enhance waiting areas
• Improve pedestrian and bicycle facilities at intersections
• Integrated streetscapes and proposed pedestrian/bike facilities
• **Preserve street trees at curb edges**
• Accommodate new development
• Manage traffic access and cut-through traffic
• Integrate designs with railroad crossing at Broadway
• Reflect environmental sustainability goals
• Accommodate universal design principles
Review of Work Completed

Work Completed:
- Property survey completed
- Traffic analysis existing conditions baseline
- Draft alternatives started
- Draft evaluation criteria created

Coordination Meetings:
- EZ Ride/ MBTA
- All adjacent property owners
- Bicycle / Ped / Transit Committees
- Multiple interdepartmental City meetings
- New Binney Street Park (CDD/Stoss)
- KSA
- ECPT (2/22)

Website:
- www.cambridgeredevelopment.org
- FAQ on website to come...
BICYCLE NETWORK PLAN

Connecting two existing protected facilities
6TH STREET WALKWAY BIKE PATH
FLOATING BUS STOP
SHARED BUS STOP

This is not preferred
PROTECTED INTERSECTIONS
PROTECTED INTERSECTIONS
THINKING THROUGH THE MEDIAN

• Benefits
  - Retain existing median trees & traditional boulevard feel
  - Eliminates illegal turns and provides refuge island for pedestrians at crossings

• Tradeoffs
  - Not enough space for additional uses other than a cycle track (curb side parking/drop off/loading, floating bus stops, etc.)
  - Fire Department requires 16-18’ curb to curb when a median is present, forcing the use of a large unnecessary paved shoulder that serves no purpose and may end up being used as illegal parking
  - Median landscaping has challenges, and will continue to deteriorate. Curb side landscaping is better maintained.
Idea!: Create Islands

• Benefits
  - Still enforces illegal turns
  - Allows more than enough room for replacement of vegetation/trees on outside
  - Allows space for additional uses other than cycle track in key locations
  - Reduces roadway width enough to eliminate need for crosswalk refuge island in most places
  - Complies with Fire Department requirements without the use of a large paved shoulder
  - Traffic Calming (especially for trucks)
CURRENT MEDIAN TREES (~30)

At 5th Street

At Fulkerson

On Galileo Way

On Broadway
SECTION VIEWS (F)
GALILEO GALILEI WAY - EXISTING SECTION (F)
GALILEO GALILEI WAY - MEDIAN SCHEME (F)

<table>
<thead>
<tr>
<th>8'</th>
<th>8'</th>
<th>7'</th>
<th>3'</th>
<th>6'</th>
<th>11'</th>
<th>10'</th>
<th>11'</th>
<th>6'</th>
<th>3'</th>
<th>7'</th>
<th>9'</th>
<th>6'</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sidewalk</td>
<td>Tree Zone</td>
<td>Cycle Track</td>
<td>Buffer</td>
<td>Shoulder</td>
<td>Travel Lane</td>
<td>Median</td>
<td>Travel Lane</td>
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</tr>
</tbody>
</table>
GALILEO GALILEI WAY - ISLAND SCHEME (F)
BINNEY STREET - MEDIAN SCHEME (B)
BINNEY STREET - ISLAND SCHEME
(B)
BROADWAY - EXISTING SECTION (H)
BROADWAY – MEDIAN AND ISLAND SCHEMES (H)
### Streets
- Broadway
- Galileo
- Binney

### Intersections
- Galileo/Broadway
- Binney/Fulkerson
- 6th Street Walkway
- Vassar/Galileo/Main
WHAT IS THE GREEN SPACE?

Overall…there will be plenty of room for a net gain of trees if the median were taken away.

It could be…

- 2nd row of trees (bike through the forest)
- Rain Gardens (stormwater)
- Groundcover
- Grass
- Street furniture/seating
- Parking

Location

- Curb edge (enjoyed by the cyclist)
- Additive to existing planting area (enjoyed by the pedestrian)
- A little of both
- Tradeoffs to each of these:
  - Stormwater
  - Parking
  - Shade
  - Future transit
  - Cyclist comfort/safety
  - Ped/bike separation
  - Geometry of cycle track at crossings
NEXT STEPS

- Additional coordination with property owners/implementers
- Keep working on alternatives
- Eventually, take one alternative to 25% design drawings, and run future traffic analysis on that design

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