TO: Mayor and Council
FROM: Paul Weller
DEPARTMENT: Public Works
DATE: June 19, 2017
SUBJECT: Broadway Improvements Update

DESCRIPTION:
Broadway Improvements Update

RECOMMENDATION:

S. Broadway Improvements
- Proceed with design and construction of electrical system in the 3300 and 3400 blocks
- Install banners on street light poles in the 3400 block
- Proceed with powder coating of street furniture, in the bronze color, in the 3400 block

Public Involvement
- Communicate project updates through the use of web postings, e-mail and UPS mailing where necessary
- Prepare an on-line survey to assist in the selection of project design elements (banners and pedestrian lighting initially)

Mid-Block Pedestrian Crossing
- Proceed with the construction of the original mid-block design.
- Install Rectangular Rapid Flashing Beacons with associated signage and pavement markings
- Construct raised median per ETAC recommendation
- Use a red methyl methacrylate (MMA) based pavement marking for the crosswalk

PREVIOUS COUNCIL ACTION:

S. Broadway Improvements
- Council has made a total of $533,000 available to fund streetscape improvements, mainly to the 3400 block of S Broadway

Public Involvement
- Council has asked that Staff to work with the businesses on S Broadway to get their input to the design of the improvements.
Mid-Block Crossing

- Council has asked that Staff prepare recommendations for proceeding with the construction of the Mid-Block Crossing

SUMMARY:

S Broadway Improvements

- Public Works staff solicited 3 fee proposals from electrical design firms having extensive experience for the improvements to the existing electrical system.
- ME Engineers of Golden, Colorado had the lowest cost proposal and is now under contract. They are currently examining the existing system and preparing plans for the upgrades to include new pedestrian lights and outlets for holiday/special occasion lighting.
- Samples of the pedestrian light fixtures are included with this presentation for your review. Steve Peterson, our lighting designer from ME Engineers has the following guidance for the review of the samples "...this selection is not intended to pick the actual luminaire but rather it’s like picking a burger, hot dog or Brat".
- Final construction plans will be ready for bid in mid-July with the goal of having the new system ready for the 2017 holiday lighting.
- Xcel Energy has approved the installation of banners on the existing street light poles (no replacement required). Suggested samples of the banners prepared by City staff are included with this presentation for your review.
- Street furniture can be powder coated to match the existing color or in a bronze color. The bronze color will set the 3400 block apart from the rest of the area.

Public Involvement

Brad Power, Community Development Director has provided a memo dated May 22nd outlining the plan to the approach to involve the businesses on S Broadway in the design of the improvements:

“This approach is intended to respect the time of the owners by shifting to an opt-in participation effort that offers more opportunities for the parties in the area to receive updates and offer input than solely through a scheduled meeting”.
- Periodic updates by mail or e-mail
- On-Line survey to judge preferences for design elements (initially banners, color of street furniture and pedestrian light fixtures)
- Open house in the Civic Center to review the final plans and discuss construction schedules and impacts.

Mid-Block Crossing

Paul Weller, Engineering Manager has provided a memo dated May 31st that discusses several alternatives for proceeding with the construction of the Mid-Block crossing and recommends the preferred alternative.

"The RRFB has shown to be the most effective beacon for improving driver awareness of pedestrians and reducing the probability of vehicle/pedestrian accidents in un-signalized crossings."
- Construction of the original design of the crossing with the addition of the RRFB with the appropriate signage and pavement marking will meet the minimum standards of the Model Traffic Code.
• The extension of the bulb-out on the approach side of the crosswalk will not result in the loss of parking as measured by the MUTCD standard parking stall length of 24’.
• A raised median will be included on the north side of the island to provide a sense of safety to pedestrians waiting for a safe gap to cross as recommended by ETAC. The raised median will be approximately 12” above the adjacent curb. The median will be covered with colored/patterned concrete to match the existing and will not contain landscape plantings. The raised median will not adversely effect the visibility of waiting pedestrians.
• Staff has researched an alternative material for the cross walk marking. A red methyl methacrylate (MMA) based road marking system will enhance the look of the crosswalk and conform to the requirements of the Model Traffic Code for visibility. A cost proposal provided by KSI of Castle Rock, Colorado for the enhanced crosswalk and associated markings is about $6,000 more than the traditional preformed tape markings.

ANALYSIS:
See Above

FINANCIAL IMPLICATIONS:

PHASE 1 ESTIMATED COSTS

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
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<tbody>
<tr>
<td>Electrical Infrastructure</td>
<td>$143,000</td>
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<tr>
<td>Pedestrian Lighting</td>
<td>$260,000</td>
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<tr>
<td>Banners on Street Lights</td>
<td>$55,000</td>
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<tr>
<td>Street Furniture (refurbish)</td>
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<tr>
<td>Wayfinding Signs</td>
<td>$20,000</td>
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<tr>
<td>Public Art</td>
<td>$50,000</td>
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Total Estimated Phase 1 Cost $533,000

Approval of banner placement on existing Xcel street light poles saves approximately $35,000 from the project estimate.

MID-BLOCK CROSSWALK ESTIMATED COST

Crosswalk with Rapid Flashing Rectangular Beacon $110,000

Installation of the methyl methacrylate (red carpet) crosswalk markings will increase the cost of the mid-block construction by approximately $6,000.
3400 S. Broadway Streetscape Improvements
Update
PHASE 1–4

COST ESTIMATE

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<thead>
<tr>
<th>PHASE 1</th>
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<td>Electrical Infrastructure (new outlets at trees)</td>
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<tr>
<td>Pedestrian Lighting</td>
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<tr>
<td>Banners &amp; Street Lighting</td>
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<tr>
<td>Street Furniture (refurbish only)</td>
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<td>Wayfinding Signs</td>
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<tr>
<th>PHASE 2</th>
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<td>Irrigation Infrastructure (3300 &amp; 3400 Blocks)</td>
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<td>Street Trees &amp; Shrubs (3400 only)</td>
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<td>Intersections (S. Broadway &amp; Englewood Parkway)</td>
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<td>Intersections (S. Broadway &amp; Hampden)</td>
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<td>Replace Street Furniture (3400 only)</td>
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<tr>
<td>Sidewalks &amp; Tree grates (3300 &amp; 3400 Blocks)</td>
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Total Cost Estimate $1,381,000

Maintenance 10 years $100,000

PHASE 1
- Electrical Infrastructure
- Pedestrian Lighting
- Banners & Street Lighting
- Street Furniture (refurbish only)
- Wayfinding Signs
- Public Art

PHASE 2
- Irrigation Infrastructure
- Street Trees & Shrubs

PHASE 3
- Intersection Improvements

PHASE 4
- Replace Street Furniture
- Sidewalks
- Tree Grates

$533,000
$226,000
$299,000
$321,000
MID-BLOCK CROSSING

- Original Design w/ Rectangular Rapid Flashing Beacons
- Raised Median per ETAC Recommendation
- “Red Carpet” Crosswalk
PUBLIC INVOLVEMENT

• Community Updates
• On-line Surveys
• Community Based Goals Workshop
PEDESTRIAN LIGHTING

Legend
- Pedestrian Light Phase I
- Pedestrian Light Phase II
- Buried conduit w/ distance
- Between poles (approximate)
- Electric Panel w/ Meter
- Potential Burc. Pit Location

Electric Panel
and Meter

Pedestrian Light Inventory
3300-3400 Block of S. Broadway

Scale: 1 inch = 200 feet
Date: June 13, 2017
Prepared: JG 16
LIGHTING STYLE COMPARISON

Englewood
Parker

Santa Fe Arts District
Golden
Littleton
Arvada

S Broadway, Antique Row
HESS AMERICA
RECOMMENDED
PHILIPS LUMEC

UrbanScape LED pendant

UrbanScape LED post-top
TYPICAL DISTURBED AREA DETAIL

- Curb and gutter
- Replace concrete
- Colored concrete banding
- Tree with outlet or pedestrian light with 18" diameter base
- Existing concrete sidewalk
- Building

File Information
- Department of Public Works
- Drawn by: EML
- Island File Name: ISLAND
- Date: 06/04/13
- Author Version: 2011
- Scale: 1" = 20'
- Units: English
- Issued by: EML
XCEL STREET LIGHTS FOR BANNERS
BANNERS AND NEW STREET LIGHTS
HISTORIC BANNER STYLE 1

ALIVE

FRIENDLY

HISTORIC
HISTORIC BANNER STYLE 2

ALIVE

FRIENDLY

HISTORIC

CITY OF Englewood
CURRENT

- Rusted
- Weathered
- Dim lighting

AFTER

- Refurbish 7 trash receptacles/3 benches
- Updated pedestrian lighting
- Updated electrical infrastructure
WAY-FINDING
PUBLIC ART

• Cultural Arts Commission
  ➢ Free Standing
  ➢ Murals
  ➢ Lighting
  ➢ Specialty Sidewalk Paving
## PHASE 1 IMPROVEMENTS SCHEDULE

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<th>Duration (weeks)</th>
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<th>May-17</th>
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