City of Littleton Public Works & Utilities April 2017 Project Report

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General Capital

A. Bridge Improvements

Purpose: Annual fund for bridge repairs as necessary. State funded inspections occur every 2 years. Alfred Benesch & Company recently complete 2016 inspections and discussed findings in 2016. Based on the findings the City applied for grants and received funds for necessary work on the Rio Grande bridge. Grant is managed by CDOT

Public Impacts: None currently.

Schedule:

Design- July 2017 to April 2018 Bid- April 2018 Construction- May 2018 to Jan 2019

Budget: \$50,000 (2017).

Total Project Cost-\$508,000 (City to fund 100% and seek reimbursement from grant funds)

City portion- \$101,600 Grant portion- \$406,400

B. 2017 Street Rehabilitation

1. Windermere

Purpose: Street pavement is in poor condition from W. Littleton Blvd. to Belleview Ave.. Damaged concrete curb gutter sidewalk will be replaced. The asphalt pavement surface will be milled and a new riding surface will be installed.

Public Impacts: Delays will be encountered by the traveling public during construction. Access will be maintained to all residents.

Schedule: Design completion May 2017, Construction June-Aug 2017.

Budget: \$600,000 + 10% Contingency (34-302-7893 Street Rehabilitation)

2. Mineral- West bound, Broadway to Windermere

Purpose: Street pavement is in poor condition from Broadway to Windermere. Damaged concrete curb gutter sidewalk will be replaced. The asphalt pavement surface will be milled and a new riding surface will be installed.

Public Impacts: Delays will be encountered by the traveling public during construction. Access will be maintained to all residents.

Schedule: Design completion May 2017, Construction June-Aug 2017.

Budget: \$600,000 + 10% Contingency (34-302-7893 Street Rehabilitation)

3. Broadway- Caley to Arapahoe

Purpose: Street pavement is in poor condition on Broadway from Caley to Arapahoe. The project will consist of repairs to both concrete and asphalt pavement sections. The City will work with the City of Centennial to coordinate work and share cost for the work on Broadway where ownership is split.

Public Impacts: Delays will be encountered by the traveling public during construction. Access will be maintained to all businesses.

Schedule: Design completion May 2017, Construction June-Aug 2017.

Budget: \$400,000 + 10% Contingency (34-302-7893 Street Rehabilitation)

4. Surface Sealing

Purpose: The City has identified the Southpark Lane area as a good candidate for a pilot project for asphaltic surface sealing to preserve the roadways. It was determined that a slurry seal application is the most appropriate method for the condition of the Southbridge neighborhood roads. The City will work closely with the affected residents and business owners to communicate the project schedule and impacts.

Public Impacts: Drivers will encounter street closures and parking restrictions during construction.

Schedule: Bid- June 2017, Construction July-August

Budget: \$490,000 + 10% Contingency (34-302-7893 Street Rehabilitation)

5. Crack Seal

Purpose: Roadway cracks will be filled to maintain the roadway before the crack get larger and require more expensive repair methods. The City will work with the contractors to determine the areas that are the highest priority:

Public Impacts: Possible parking restrictions and temporary traffic delays during construction. The contractor is generally in and out of an area fairly quickly.

Schedule: Bid Spring 2017, Construction Fall 2017 when temperature and construction conditions are ideal.

Budget: 250,000 + 10% Contingency (34-302-7893 Street Rehabilitation)

C. 2016 Concrete Pavement Repairs

Purpose: Repair worn and deteriorated concrete panels in Broadway at the intersection with Arapahoe Rd. This work follows efforts completed in 2016 at the same intersection.

Public Impacts: Delays will be encountered by the traveling public during construction. Access will be maintained to all businesses.

Schedule: Bid June 2017, Construction July-August.

Budget: Budget \$200,000. Funds to be used in conjunction with Street Rehabilitation funds for the repairs on Broadway near the intersection with Arapahoe.

D. S Broadway & County Line Road Intersection

Purpose: Replace the outdated span wire traffic signal with a pole and mast arm installation. In addition, increase capacity by constructing a second southbound left turn lane.

Public Impacts:

• Construction: Lane closures during the widening of Broadway to accommodate the second left turn lane and installation of the new traffic signal equipment.

Schedule:

- Design Completed July 2016
- CDOT approval of bids received in October of 2016.
- Construction Started in March of 2017 and is ongoing; completing by Summer 2017. (KECI)

Budget: \$680,000 (Grant funds) 90-10 Split (Federal-City). City pays 100% and is then reimbursed 90%.

E. Federal Boulevard & Berry Avenue Pedestrian Signal

Purpose: Provide a controlled signalized crossing across Federal Boulevard at Berry Avenue.

Public Impacts: Minor road closures.

Schedule:

- Design Completion Spring 2017. Recently received approval letter from Denver Water.
- CDOT FIR Meeting November 15, 2016
- Construction 2017

Budget: \$117,000. 90-10 Split (Federal-City). City pays 100% and is then reimbursed 90%.

F. Curb, Gutter & Sidewalk Repair

Purpose: As part of an annual program City staff evaluates the condition of existing concrete curb, gutter and sidewalk throughout the City and develops a list of areas with the highest need of repair or replacement. This work is packaged and competitively bid. The following are the dates and locations of the 2017 efforts.

Public Impacts: Drivers and/or pedestrians may encounter temporary lane or sidewalk restrictions during construction. Parking in the immediate vicinity may be restricted during construction.

Locations & Schedules: The following areas are scheduled for concrete repairs & replacements:

Bemis Library Parking Lot	5700 to 5800 block S. Greenwood St.
5800 block S. Lowell Way sidewalk	5700 to 5800 block S. Hickory St.
600 block E. Mineral Ave trail	5700 block S. Hickory Way,
5800 block S. Prince St crosswalk	5700 to 5800 block S. Huron St.
5700 to 5800 block S. Cherokee St.	10 to 300 block W. Fair Ave.
5700 to 5800 block S. Delaware St.	5900 to 6100 block S. Fairfield St.
5700 block S. Elati Way,	5900 block S. Greenwood Cir.
5700 to 5800 block S. Elati St.	6300 to 6500 block S. Acoma St.
5800 block S. Fox Way,	7900 to 8100 block S. Pennsylvania St.
5700 to 5800 block S. Fox St.	

Budget: \$300,000 (34-302-7894). Engineers Estimate \$459,638. Low Bid \$349,615. Additional funds from Street Rehabilitation.

G. Future/Potential Capital Projects

1. Mineral Avenue Corridor Assessment Study

Purpose: Study the traffic conditions along Mineral Avenue between Platte Canyon Road and Polo Ridge Drive. Identify safety concerns with the segment of roadway and develop an implementation strategy to address issues. For more information refer to the Mineral Avenue Corridor Assessment Study webpage at: http://www.littletongov.org/city-services/city-departments/public-works/transportation-management/mineral-ave-corridor-assessment

Public Impacts:

- Community Meetings: Completed in January, May and July of 2016.
- Construction: Lane closures for immediate Mineral Avenue work including paint, sign installation, delineator installation and signal work. Additional work and impacts to be determined.

Schedule:

- Design Completion To be determined
- Construction Immediate installations began October of 2016 and was completed in November of 2016, phase 1 of 3. Future construction work to be determined.
- Continuing to work with CDOT on phase 2 work, but no design or construction dates yet.

Budget: Cost of immediate installations \$20,100. Remainder of construction costs to be determined.

2. Windermere Street Traffic Calming

Purpose: Installation of traffic circles at Southridge Way South and W Davies Avenue in order to reduce vehicle speeds travelling along Windermere Street. The project is on hold pending public meetings, coordination of efforts, and City funding.

Public Impacts: TBD

Schedule: TBD

Budget: TBD (2017 Street Rehabilitation)

3. Arapahoe County Pedestrian/Bike Master Plan

Purpose: Work with Arapahoe County and other stake holders to develop a bicycle and pedestrian master plan for areas to include the City of Littleton.

Public Impacts: None for the planning effort. Community involvement is part of the master planning process.

Schedule:

- July, 2016 Developed: project goals, team roles, scope and schedule.
- Sept 2016 Design workshop.
- April 2017 Public Open Houses.
- May 2017 Plan adoption

Budget: TBD

4. Santa Fe Corridor – Traffic Signal Timing

Purpose: City staff are working with CDOT and DRCOG (Denver Regional Council of Governments) to assess potential improvements to the traffic signal timing on Sante Fe. The team is actively testing different scenarios.

Public Impacts: None at this time.

Schedule: Study completed. Implementation of timing improvements in May 2017.

Budget: N/A

5. Traffic Signal Program

Purpose: Conduct capital projects related to traffic signals. In addition, the city is continuously evaluating signal timing and coordination, often working with adjacent municipalities or the Denver Regional Council of Governments (DRCOG), in order to update and improve the operations throughout the city.

Public Impacts: On occasion, the city will close a lane of traffic or place a signal in flash in order to safely work on a traffic signal.

Schedule: As needed throughout the year.

Budget: \$400,000

General Fund Operations

A. Traffic Signal Maintenance

Purpose: The city maintains 60 traffic signals which require routine inspection, maintenance and equipment upgrades, as needed. A signal maintenance contractor is retained to assist with preventative maintenance and equipment testing, as well as to provide on-call services.

Public Impacts:

• Maintenance: On occasion, the city will close a lane of traffic or place a signal in flash in order to safely work on a traffic signal.

Schedule:

• Maintenance – As needed.

Budget: \$75,000 (2017)

B. Roadway Painting Maintenance

Purpose: The city maintains approximately 160 miles of roadways with lane striping, crosswalks, stop bars, arrows and more. The city attempts to repaint as much of the system as possible every year, as needed.

Public Impacts:

• Maintenance: On occasion, the city will close a lane of traffic in order to safely apply the paint.

Schedule: Starting late April 2017. Another effort at end of summer.

Budget: \$45,000 (2017)

C. Sign Maintenance

Purpose: The city maintains approximately 14,000 signs within the roadway right-of-ways both on traffic signal poles and mast arms, as well as on posts along the side of the roadway. The city replaces or removes old signs as determined necessary.

Public Impacts: Maintenance: On occasion, the city will close a lane of traffic in order to safely address signs along the roadway.

Schedule:

- Maintenance As needed.
- Reflectivity Checked annually and deficient signs replaced as needed and when schedule allows.
- Street Name Sign Replacement Program Neighborhood signs replaced when schedule allows.

Budget: \$40,000 (2017)

D. Milling and Paving

Purpose: In order to maintain City streets the City staff has an ongoing program of asphalt improvements. The following are the locations of the 2017 efforts.

Public Impacts: Drivers will encounter temporary lane restrictions during construction. Local residents may be asked to not park on the streets during the days of milling and paving operations.

Locations for 2017:

S. Sundown Cir. -W. Ridge Road to S. Elati St.

W. Caley Dr. - W. Longview Ave. to W. Caley Ave.

S. Delaware St. - S. Caley Dr. to Dead end

S. Acoma St. - W. Caley Ave. to W. Euclid Ave.

E. Philips Ct. - E. Phillips Ave. to Dead end

W. Costilla Ct. - 7300 Block

S. Highland Dr. - W. Houston Waring Cir. To W. Costilla Ave W. Peakview Ave. - S. Gallup St. to S. Elati St.

W. Costilla St. - W. Houston Waring Cir to W. Ridgeview Dr.

W. Ridgeview Dr. - W. Houston Waring Cir. to Dead End

W. Quinn St. - S. Prince St. to S. Curtice St.

W. Bradbury Ave. - S. Prince St. to S. Curtice St.

W. Rowland Ave. - S. Prince St. to S. Costilla St.

W. Caley Cir. - W. Caley Ave. To W. Caley Ave.

S. Longview St. - W. Arbor Ave. to W. Caley Ave.

Budget: \$300,000 (01-302-7170)

Sewer

A. 2017 Sanitary Sewer Rehabilitation

Purpose: Sewers in the older parts of the city have reached the end of their design life and are experiencing maintenance problems. In various locations, pipes will be lined with plastic or fiberglass lining without excavation and heavy construction impacts.

Public Impacts: Residents connected to the sewer being rehabilitated will not be able to discharge wastewater for about the 8 hours it takes to install the liner. Streets where work occurs may be closed for about 1 day for the work.

Schedule: Project being prepared for bid.

Budget: \$180,000 (41-311-7585)

B. 2017 Sanitary Sewer Replacement

Purpose: Older sewers which are substandard will be replaced by excavation and upgraded. Modern plastic pipe will be used in several locations.

Public Impacts:

Streets where work occurs will be dug up and closed to all but local access during construction Residents may not be able to use their sewer during each day work is underway.

Schedule:

Design – TBD. Plans have not been developed for 2017. Limited staffing may limit ability to prepare and execute a project this year.

Construction –TBD

Budget: \$86,00 (41-311-7585)

C. 2017 Sewer Line Cleaning and Video Inspection (CCTV)

Purpose: The City is improving the sewer line cleaning and inspection program. Approximately 1/3 of the sewer lines will be cleaned and inspected in 2017. The inspection data will be set up to assist in developing future CIP planning. These efforts are the implementation of the 2016 Tactical Action Plan developed to improve the use of available data and GIS. This approach will advance the City in its asset management efforts.

Public Impacts: Minor Traffic impacts around the cleaning and inspection trucks for limited periods of time. No residents or businesses will lose service during the work.

Schedule: TBD

Budget: \$1.9 million (41-311-7585)

Storm

A. Jackass Gulch

Purpose: The steep grade of the stream along W. Mineral Ave. is unstable and banks are eroding. The project will install drop structures to mitigate erosion

Public Impacts:

Backyards of homes along the gulch will see heavy construction. Trail users of Railroad Spur Park may encounter temporary closures

Schedule:

Project has been delayed by backlog in Corps of Engineers permit applications.

Design Completion – Summer 2017

Construction – Fall 2017 to winter 2018

Budget: \$450,000 (42-313-7890) Cost split between City and Urban Drainage. City paid \$250,000 in 2015

B. Lee Gulch at Broadway- Headwalls

Purpose: Emergency repairs to the existing culvert were completed in summer 2016. Additional work needs to be done to protect the culvert inlet and outlet. Headwalls will be designed and constructed as part of this next phase.

Public Impacts: Visible construction activity in possible in 2017. Minor sidewalk or traffic revisions expected.

Schedule: Design-TBD

Budget: TBD

C. Little's Creek Gallup and Peakview

Purpose: The intersection experiences frequent and severe flooding, both from Little's Creek overflowing its banks, along with inadequate street drainage. Project will install large culvert and storm sewers

Public Impacts: During about the 4 month construction period, the intersection will be closed to all traffic. Detours will be in place.

Schedule: Design -2017, Construction -2018

Budget: \$1,000,000 (42-313-7890) Cost split between City and Urban Drainage. City paid \$250,000 in 2015 and plans another \$250,000 in 2017.

D. Trailmark Culverts

Purpose: On West Trailmark Parkway, wingwalls on 2 culverts have partially collapsed, due to impacts of local expanding soils. Portions of the concrete structures will need to be replaced.

Public Impacts: Drivers may encounter temporary lane restrictions during construction.

Schedule: Design complete. Construction start pending funding.

Budget: TBD (42-313-7890)

E. High Line Canal Study- Urban Drainage

Purpose: A comprehensive study hydrologic and hydraulic of the High Line Canal is proposed for the entire length, from Douglas County to Aurora. The canal will be converted over time, from an irrigation conveyance facility to a storm water capture and treatment BMP. Study will look at mitigation of flood risk, storm water detention and treatment for both existing and new development, and providing water for healthy vegetation and trees.

Public Impacts: No impacts to public during study phase. Eventual impacts will be temporary recreation use during construction of storm water detention and treatment facilities.

Schedule: Study is anticipated to be done in 2017. Construction is dependent on future funding to be determined, and based on availability.

Budget:

Total study cost is \$400,000. Funding is proposed by multiple agencies, including Urban Drainage and Flood Control District, Denver Water, Arapahoe County, Aurora, Centennial, Denver, Douglas County, Greenwood Village, and Littleton. The share for each agency is based on length of canal within each jurisdiction. About 8.12% of canal is within Littleton, so its share would be \$16,241.

Projects Funded by Others

A. Floodplain Map Revisions

Purpose: Draft maps for Three Lakes Tributary and Little's Creek are being updated due to recent changes and improvements on the streams.

Public Impacts: Property Owners in or near the floodplain will receive notices of map changes. Owners who have flood

insurance may see an impact on their premiums.

Schedule: Comment period has been delayed. Starts fall 2016

Maps become effective - Winter 2018

Public open house meeting was scheduled for January 11.

Budget: Federal funding

B. CDBG Sidewalk Program

Purpose: The City obtains annual funding from the Community Development Block Grant program to improve sidewalks in the community.

Public Impacts: Temporary sidewalk closures during construction.

Schedule: Sept-Oct 2017.

Location: W Prentice sidewalk.

Budget: \$114,750 (funded by CDBG and Arapahoe County grant.)