



STAFF REPORT

To: Honorable Mayor and Members of Town Council

From: Aaron Monks, Project Manager

Title: Award of Contracts for the 2016 Pavement Maintenance Program

Notification and Outreach Efforts

Staff has developed specific public coordination outreach to ensure that residences and businesses will understand construction impacts and how this may affect access to individual businesses and residences. Public outreach will occur in numerous forms such as; 1) Roadwork Road Shows, 2) Town newsletters, 3) HOA mediums such as newsletters, 4) Town social media, 5) Door notification, 6) Press releases, 7) Town's web site and others. Residents and businesses will be notified of actual dates that work is to be completed adjacent to their properties, and traffic control plans will be developed and managed to ensure worker and public safety.

Town staff will host multiple Roadwork Road shows the last part of March. These Roadwork Road shows are for public outreach, and will consist of detailed maps of the 2016 maintenance work to let concerned residents know which streets will receive treatments and how it may affect them. Possible locations are the Miller Activity Center, the Recreation Center, Sapphire Point Fire Station, DC Oaks High School, and the Cobblestone Ranch Community Center. These are tentative locations; actual locations will be communicated on the Roadwork Road Show mailer. Staff plans to coordinate with neighborhood Home Owners Association's (HOA) to attend their meetings. Staff will present detailed maps of the 2016 maintenance. Possible HOA's are Sapphire Pointe, Diamond Ridge, Cobblestone Ranch, Castle Oaks, Founders Village, and Plum Creek. Furthermore, press releases will be published before the start of PMP construction season to notify the public of work locations and dates.

History of Past Town Council, Boards & Commissions, or Other Discussions

The Public Works Commission at their October 3, 2011 meeting voted unanimously to recommend to Town Council to adopt the proposed Five Year Pavement Maintenance Program, and the Overall Condition Index goal to be set at 75 for primary streets and 70 for residential streets.

In an effort to minimize impacts of roadway maintenance to residents, and to reduce costs of work by concentrating in one area of Town. Town Council approved the Town's rotating five year PMP regionalized area plan for residential streets at the November 1, 2011 Town Council meeting. The Town's five year regional plan divides the town into five regionalized areas. Primary streets can be included in any year of the five year program. The PMP program will then annually rotate around these five areas

excluding primary streets and downtown Castle Rock such that every fifth year repairs to an area's residential street system will occur.

Discussion

The Town's goal for the PMP is to preserve and extend the life of the Town's streets by making annual improvements to selected street segments. These goals are met when proper street maintenance is administered to these segments.

Staff determines which streets require maintenance by evaluating the street's condition rating in addition to a subjective analysis. A pavement management program, Cartegraph's Pavement View and Pavement View Plus, establishes these condition ratings. This program establishes a condition rating for the streets and rates them from poor to excellent condition. Different types of street maintenance treatments, such as asphalt rejuvenating agent, slurry seals, mill & overlays, and reconstructions are identified based on the condition of the roadway.

Slurry seal is a form of maintenance to keep a newer street in good condition and to extend its design life. This type of seal is thin in nature and meant to keep water out of minor cracks, and improve skid resistance. Staff evaluates the condition of streets to attempt to keep a good street in serviceable condition with a treatment that extends the service life at minimum cost. This year the Town will complete approximately 56 lane miles of slurry, and rejuvenating agent, which is 9% of the Town's streets. A lane mile is a lane width by a mile long.

Another category of street maintenance is an asphalt mill and overlay. This maintenance treatment removes and replaces a layer of asphalt without compromising the original pavement section. This work is more costly than a slurry seal and normally will be done to a street that has more than one distress. The distresses include minor alligator or fatigue cracking, joint reflection cracking, longitudinal / transverse cracking, thermal cracking, potholes, raveling and rutting. This year the Town will complete approximately 9 lane miles of mill & overlay, which is approximately 1.5% of the Town's streets.

Concrete restoration is also performed on concrete pavement streets. Concrete pavement streets that are determined to have adequate remaining design life receive concrete panel replacement, diamond grinding, and resealing of the joints. Panel replacement focuses on removing and replacing damaged panels restoring the structural integrity of the concrete pavement. Diamond grinding is performed after the panel replacement. Diamond grinding improves the smoothness of the pavement, which reduces the tire thumping noise, and improves safety by providing a skid resistant surface. This year the Town will complete approximately 4.5 lanes miles of concrete restoration, which is approximately 0.7% of the Town's streets.

A Street that is in very poor condition and is beyond application of surface treatments requires reconstruction, which is the most costly form of street rehabilitation. Reconstruction involves removing the pavement section in its entirety, moisture conditioning the subgrade and installing a new pavement section. The pavement section will vary in depth from 4 inches to 11 inches depending on the classification of

the street. This year the Town will perform approximately 3.5 lane miles of reconstruction, which is approximately 0.6% of the Town's streets.

Staff also evaluates the condition of the Town's concrete curb, gutter, and public sidewalks. These contracts will remove and replace any damaged concrete infrastructure that is a hazard to pedestrians or to the traveling public.

The invitation to bid for construction of the various projects was advertised in December 2015. Bids were opened for each of the projects on January 26 and 27, 2016.

A list showing the various PMP projects and the bid results are attached (**Attachment B**). The CIP included in the PMP contracts consists of budgeted amounts within the Transportation Fund for Sunset Drive Reconstruction, Downtown Crosswalk Rehabilitation, and Wilcox Bridge over Sellers Gulch Deck Repair.

All low bids were checked for accuracy, references were checked, and all documents were reviewed for contract compliance. Staff believes that each of the recommended bidders is qualified to perform the work associated with the respective maintenance contract. A summary of the individual contracts with low bid amount plus contingency and the contractors are shown on the following table:

2016 PMP RECOMMENDED AWARD

PROJECT	BID AMOUNT PLUS CONTINGENCY	CONTRACTOR
2016 Asphalt Patching, Overlay, and Reconstruction Project, and CIP	\$2,101,220 + \$59,033 Contingency	Schmidt Construction Company, Castle Rock, CO
2016 Mikelson Boulevard Reconstruction Project	\$1,338,021 + \$14,444 Contingency	Chavez Construction, Inc., Littleton, CO
2016 Slurry Seal Project	\$1,611,962 + \$78,449 Contingency	Foothills Paving & Maintenance, Inc., Golden, CO
2016 Concrete Restoration Project	\$845,019 + \$42,253 Contingency	PLM Asphalt and Concrete Inc., Aurora, CO
2016 Curb, Gutter, Sidewalk and Miscellaneous Concrete Project, and CIP	\$941,238 + \$50,389 Contingency	PLM Asphalt and Concrete Inc., Aurora, CO
TOTAL:	\$7,082,028	

It is anticipated that concrete repairs, the reconstructions, and the CIP portions of the PMP projects will begin in mid-April. The asphalt overlay and sealing portions will occur in the summer months. All PMP and associated CIP projects are expected to be

complete by September. The Plum Creek Parkway maintenance is anticipated to start in May, and be completed by the end of July in conjunction with the Plum Creek Parkway Intersection Improvement project.