

AGENDA ITEM #: _____

DATE: March 1, 2021

CAR #: 2021-7189



CITY COUNCIL ACTION REPORT

SUBJECT: FY2021 Spring Pavement Management Projects

STAFF PRESENTER(S): Hugh Bigalk, City Traffic Engineer
Brian Harvel, Pavement Management Coordinator

OTHER PRESENTER(S): None

Summary: Request City Council approve expenditures up to \$1,600,000 for FY2021 Spring pavement management projects.

Recommendation: Approve expenditures in the amount of \$1,600,000 to complete pavement management projects in various locations throughout the City.

Fiscal Impact: The FY2021 pavement management budget includes \$3,316,600 in HURF and General Funds in the Engineering operating budgets. Identified in Table 1 below are the FY2021 Spring pavement management projects.

Table 1: FY2021 Spring Pavement Management Projects

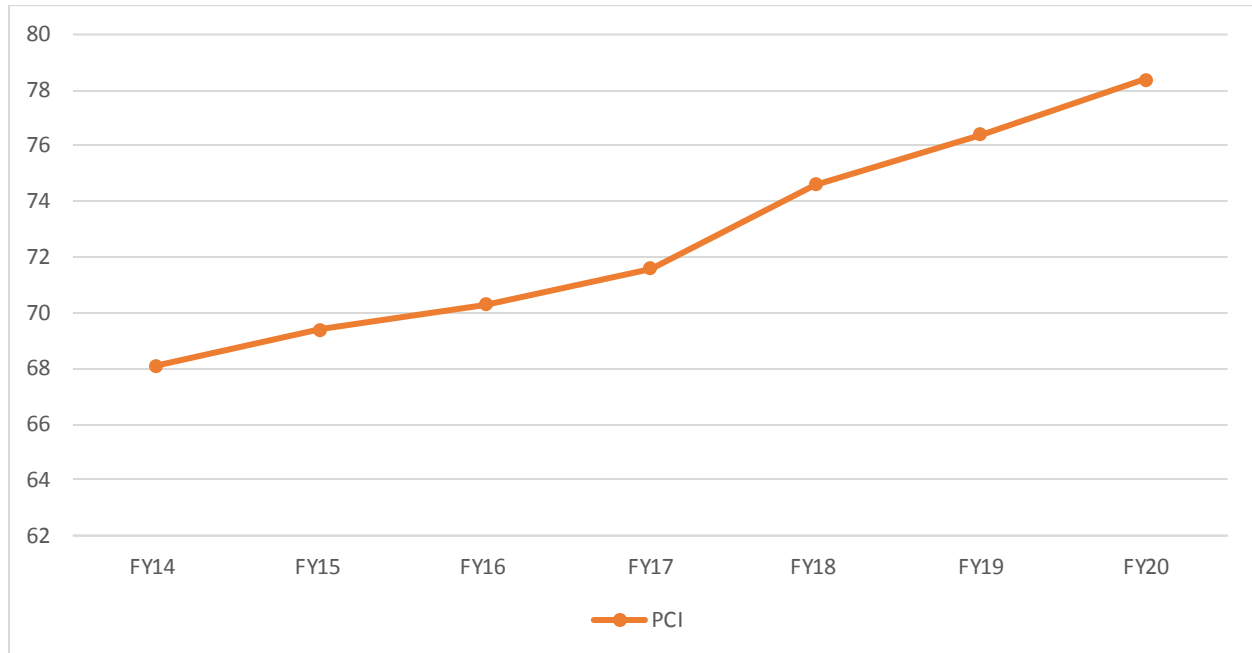
Item	TOTAL
Asphalt Micro Surfacing	\$1,000,000
Asphalt Slurry Seal Application	\$600,000
Total	\$1,600,000

Background and Previous Actions

On March 17, 2014 and August 25, 2014, the city's pavement management consultant, APT, presented an update on their pavement management project; at that time, treatment strategies and funding recommendations were discussed. During those presentations, the City's Pavement Condition Index (PCI) of 68.1 was presented to Council. Figure 1 below identifies the average network PCI of the roadway network during the past seven fiscal years. The city's PCI has increased by over ten points to 78.4 during this time, as a result of increased commitment to the

pavement management program. This demonstrates a significant increase in the overall health of the city's roadway network.

Figure 1: Seven Year Average Network Pavement Condition Index



The results of the FY2021 Fall/Winter pavement management projects are illustrated in Table 2 below, with anticipated savings of \$173,200.

Table 2: FY2021 Fall/Winter Pavement Management Projects

Item	Budgeted	Status	Estimated or Final Cost	Savings
Roadway Preparation and ADA Ramps Repairs/Replacements	\$150,000	In Progress	\$150,000	\$0
Crack Seal	\$250,000	In Progress	\$250,000	\$0
Pavement Data Inventory	\$200,000	In Progress	\$140,000	\$60,000
Rainbow Valley Road Surface Preparation	\$118,300	Completed	\$118,000	\$300
High Volume FAST with Scrub Seal	\$782,600	Completed	\$670,000	\$112,600
Low Volume Cape Seal	\$434,300	Completed	\$434,000	\$300
FY2021 Fall/Winter Project Savings				\$173,200

Staff Analysis

Proposed FY2021 Spring pavement management projects total 90.24 lane-miles of pavement treatment projects that include both preservation and rehabilitation projects (Exhibit 1).

A description of each preservation type is provided below, followed by a list of roadways or neighborhoods recommended for the designated pavement treatment:

1. **Micro Surfacing** – A product that is commonly used on arterial and collector roads, and is effective at correcting or inhibiting raveling and oxidation of the pavement surface, improving surface friction, sealing the pavement surface, and filling minor surface irregularities and wheel ruts up to 1.25 inches deep. Micro-surfacing typically lasts 5 - 7 years.
 - Bullard Ave from Estrella Pkwy to Lower Buckeye Pkwy
 - Bullard Ave from Van Buren Rd to McDowell Rd
 - Canyon Trails Blvd from Lower Buckeye Rd to Yuma Rd
 - Westar Dr from Estrella Pkwy to San Miguel Rd
 - Golf Club Dr from San Miguel Rd to Westar Dr
 - Harrison St from 173rd Ave to Citrus Rd
 - N 173rd Ave from Yuma Rd to Van Buren St
 - San Gabriel Dr from Elliot Rd to Elliot Rd
 - Calistoga Dr from Estrella Pkwy to 182nd Dr
 - Elliot Rd from 187th Ave alignment to Rainbow Valley Rd
 - Lilac St from 173rd Ave to Cotton Ln
2. **Slurry Seal** – A mixture of crushed, well graded aggregate (fine sand and mineral filler) and an asphalt emulsion that is spread over the entire pavement with a spreader box attached to the back of a truck. Slurry seals are commonly used in neighborhoods and are effective in sealing low-severity surface cracks, waterproofing the pavement surface, and improving skid resistance at speeds below 30 MPH. Slurry seal typically lasts 5 to 7 years.
 - Palm Valley North (Phase 9)
 - The Cove at Palm Valley North
 - Curtis Commons
 - Vanderbilt Farms
 - Aldea
 - Legacy Ranch
 - Legacy
 - Sierra Point
 - Desert Breeze @ Canyon Trails
 - Summit
 - Arcadia
 - Avalon Del Lago
 - Trailridge Crossing

- Avalon Terrace
- Privada
- Eagle Point
- Parkside
- Lakeview
- The Highlands
- Trailridge
- Desert Breeze @ EMR

Existing City contracts with the following companies will be used for pavement treatments.

Viasun Corporation

Southwest Slurry Seal Inc.

Attachments

Exhibit 1: FY2021 Spring Pavement Management Program