



DATE: February 22, 2022

TO: Mayor and City Council

FROM: Director of Public Works

SUBJECT Adopt a Resolution Approving Plans and Specifications and Calling for Bids for the FY22 Pavement Improvement Project, Project No. 05239

RECOMMENDATION

That the Council adopts a resolution (Attachment II) approving the plans and specifications and calling for bids for the FY22 Pavement Improvement Project (PIP), Project No. 05239.

SUMMARY

The FY22 PIP calls for the pavement rehabilitation of sixty-four street sections and preventive maintenance of thirty-one street sections for a total of ninety-five street sections (Attachments III and IV). The proposed improvements will repair failed pavement sections and improve street surfaces.

The project budget of \$11,900,000 is funded via the Gas Tax, Measure B, Measure BB, Vehicle Registration Fees, Street System Improvements, and anticipated Road Repair and Accountability Act (RRAA) (SB1) funds. This project is categorically exempt from environmental review under Section 15301(c) of the California Environmental Quality Act Guidelines for the operation, repair, maintenance, or minor alteration of existing facilities.

Council Infrastructure Committee

At the October 27, 2021¹ Council Infrastructure Committee (CIC) meeting, staff presented the FY22 PIP including street selection criteria, treatment types, and budget allocations and the CIC recommended the tentative list of streets be presented to Council for approval

BACKGROUND

On May 4, 2021², staff recommended Council approve a project list for the SB1 FY22 PIP Funding. A resolution was required to submit an application to the California Transportation Commission (CTC) to receive \$2,900,000 in funding for pavement improvement.

¹ <https://hayward.legistar.com/LegislationDetail.aspx?ID=4677681&GUID=269B1B10-A818-456B-A7FC-26BD649B71EA&Options=&Search=>

² <https://hayward.legistar.com/LegislationDetail.aspx?ID=4544075&GUID=F617FA6F-C198-474E-B133-26C761043039&Options=&Search=>

On June 1, 2021³, staff recommended Council adopt a resolution authorizing the City Manager to execute Amendment No. 3 to the Professional Services Agreement (PSA) with Pavement Engineering, Inc., (PEI) for engineering services associated with the FY22 PIP. The scope of work for PEI was limited to engineering review, pavement evaluation, measurement of field quantities, curb ramp design, and construction support.

At the October 27, 2021⁴ CIC meeting, staff presented the FY22 PIP including street selection criteria, treatment types, and budget allocations and the CIC approved the tentative list of streets.

The PIP involves one of four types of treatments:

Pavement Rehabilitation:

- 1) Standard overlay of the existing street pavement with new Hot Mix Asphalt (HMA) surfacing.
- 2) Cold-In-Place Recycling (CIR), which involves removing the top layer of asphalt, mixing the removed aggregates with a recycling agent and other additives on-site, replacing this pavement material onto the same roadway, then applying a HMA overlay.
- 3) Full Depth Reclamation (FDR), which consists of pulverizing and mixing distressed asphalt and underlying pavement materials with or without the addition of stabilizing agents; using the resulting material as a base for the renewed pavement structure and adding a new HMA cap.

Preventive Maintenance:

- 4) Varying combinations of: crack sealing, 6" spot repair and micro-surfacing.

Street selection for the PIP is based on staff's analysis using several criteria described below:

- **Technology** – The Pavement Management Program (PMP)⁵ evaluates current and predicts future roadway conditions. It provides logical and efficient methods of identifying street rehabilitation needs. It also determines the most cost-effective allocation of funds to the street segments needing preventive maintenance, rehabilitation or reconstruction. Staff utilized the PMP to compile an initial list of allocation parameters.
- **Social Equity** – Whether a particular area of the City has received its fair share of improvements in the past.

³ <https://hayward.legistar.com/LegislationDetail.aspx?ID=4548864&GUID=6506EE24-A2C3-455B-92E1-8A42B60887B1&Options=&Search=>

⁴ <https://hayward.legistar.com/LegislationDetail.aspx?ID=4677681&GUID=269B1B10-A818-456B-A7FC-26BD649B71EA&Options=&Search=>

⁵ The PMP is a Metropolitan Transportation Commission (MTC) recommended software program.

- **Geographic Location** – Selecting streets in close vicinity to help lower construction bids was considered.
- **Internal Reports** - Reports from the City’s Maintenance Services staff on streets needing repair were considered.
- **Council Members Input** – Council member requests for selecting streets were considered.
- **Public Input** - Public requests for selecting streets were considered.
- **Funding Availability** – Available funding and potential for obtaining outside grant funding was evaluated.

The Pavement Condition Index (PCI) is an overall rating of road conditions. The PCI of each arterial and collector street segment is evaluated by an independent third-party every other year, and each residential street segment is evaluated every five years.

<u>PCI Rating</u>	<u>Description</u>
100	This rating is given to newly constructed or rehabilitated roadways.
86 - 99	Highly functional roadway. No action required.
71 - 85	Roadway can be maintained ("preventive maintenance") with crack sealing, slurry seals, micro-surfacing, and some minor, localized pothole repairs. As the roadway pavement ages, preventive maintenance may not be effective after a few maintenance cycles.
41 - 70	Extensive "dig-outs," grinding, fabric, or asphalt overlays may be required to maintain (or "rehabilitate") roadway.
0 - 40	Roadway requires complete reconstruction using full depth reconstruction, cold in place recycling, or hot in-place recycling methods. If a street deteriorates beyond certain points, it becomes progressively more expensive to bring that street back to the desired standard.

As part of the 2018 Capital Improvement Program (CIP) agenda item at the November 26, 2017⁶ CIP meeting, Council reviewed and agreed to the following budget allocations for annual pavement improvement projects:

⁶ <https://hayward.legistar.com/LegislationDetail.aspx?ID=3162145&GUID=271A23E5-9011-4B2B-9B73-99C315A0FDD1&Options=&Search=>

- Minimum 20% for preventive maintenance (streets with PCI of 70-85).
- Minimum 15% for streets located in Industrial Hayward as recommended by the Economic Development Strategic Plan in 2014.
- Minimum 10% for deteriorated streets (streets with PCI of 0-30).

DISCUSSION

Based on staff’s analysis using the criteria described above, the project parameters are as follows:

Project Budget Allocation	Goal	Current Performance	Difference
Preventive Maintenance Treatment	20% minimum	20%	0%
Streets Located in Industrial Hayward	15% minimum	25%	10%
Streets with PCI Less than 30	10% minimum	35%	25%

The project budget allocation is skewed towards streets in very poor condition (PCI less than 30) due to various reasons:

- Including streets in very poor condition with high number of resident requests in order to improve and increase equity in distribution of City services (Carroll Ave, Amador St, Elmhurst St, Southgate St, Flagg St, Laurel Ave, and West Winton Ave).
- The establishment of the Old Highlands (OHHA) Assessment District requires the inclusion of streets from the area (Grandview Ave, Campus View Way, and New Dobbel Ave).

This selection requires both judgement and experience. PEI has confirmed the selection of streets sections, the approximate level of treatment for each, and provided engineering support services.

Addition of Bicycle Lanes

7.0 miles of bike lane striping will be installed at the following locations, including Campus Drive to improve bike safety and implement traffic calming:

- Amador St, Elmhurst St to Jackson St (0.6 miles)
- Calaroga Ave, Tennyson Rd to Peterman Ave (1.5 miles)
- Cathy Wy, Hesperian Blvd to Calaroga Ave (0.3 miles)
- West Winton Ave, from Clawiter Rd to End (3.1 miles)
- Campus Drive, Hayward Blvd to 2nd St (1.5 miles)

ECONOMIC IMPACT

This project adds to the City’s economic vitality by increasing property values and providing safer roads for vehicles, bicyclists, and pedestrians through safer roads, more bike lanes, and better road markings.

FISCAL IMPACT

This project is funded through the Adopted FY22 CIP Program with the following estimated funding sources:

• 210 - Gas Tax	\$2,082,000
• 211 – RRAA (SB1)	\$2,900,000
• 212 - Measure BB – Local Transportation	\$1,900,000
• 215 - Measure B – Local Transportation	\$3,793,000
• 218 – Vehicle Registration Fee	\$825,000
• 450 – Street System Improvements	<u>\$400,000</u>
<i>Total:</i>	\$11,900,000

The project will be subject to the requirements of the citywide Community Workforce Agreement.

STRATEGIC ROADMAP

This agenda item supports the Strategic Priority of Improve Infrastructure. Specifically, this item relates to the implementation of the following project(s):

- Project 5, Part 5a: Maintain Pavement Condition Index (PCI) at 70.
- Project 5, Part 5c: Construct various OHHA Pavement Improvements

SUSTAINABILITY FEATURES

The project requires the contractor to recycle all construction and demolition debris generated from the project.

This project is consistent with City’s Complete Streets Policy and improves travel for all users including:

- Improved pavement for motorists
- Additional bike lanes and sharrows for bicyclists
- More visible pavement markings for pedestrians, including near school zones
- New or upgraded curb ramps to meet the recently revised Caltrans standards for pedestrians

The project satisfies the following General Plan policies:

- PFS-7.10 Recycled Products or Processes for Capital Projects
- HQL-2.5 Safe Routes to School
- HQL-2.6 Education on Sharing the Road
- M-1.7 Eliminate Gaps (in pedestrian networks)
- M-3.1 Serving All Users

- M-5.1 Pedestrian Needs
- M-5.6 Safe Pedestrian Crossings
- M-6.2 Encourage Bicycle Use

PUBLIC CONTACT

Immediately after the construction contract is awarded, a preliminary notice explaining the project will be posted and distributed to all residents and businesses along the affected streets. After the construction work has been scheduled, signs on barricades will be posted seventy-two hours prior to commencement of work indicating the date and time of work for each street. Residents will be advised to park their vehicles on side streets outside of the work area during the period when the streets are being treated.

NEXT STEPS

March 2022	Bid Opening
April 2022	Award of Contract
May 2022	Start of Construction
October 2022	End of Construction

Prepared by: Yama Farouqi, Associate Civil Engineer
Kathy Garcia, Deputy Director of Public Works

Recommended by: Alex Ameri, Director of Public Works

Approved by:



Kelly McAdoo, City Manager