



DATE: May 22, 2018

TO: Mayor and City Council

FROM: Interim Director of Public Works

SUBJECT: FY 2019 Pavement Rehabilitation and Preventative Maintenance Project – Authorization for City Manager to Execute a Professional Service Agreement with Pavement Engineering, Inc., for Pavement Evaluation

RECOMMENDATION

That Council adopts the attached resolution authorizing the City Manager to execute a professional services agreement with Pavement Engineering, Inc., for engineering services associated with the FY 2019 Pavement Rehabilitation and Preventative Maintenance Project in an amount not-to-exceed \$219,920.

SUMMARY

Pavement Engineering, Inc., (PEI) will provide engineering services to evaluate pavement conditions, measure field quantities, design curb ramps, and provide construction support for the FY 2019 Pavement Rehabilitation and Preventative Maintenance Project.

The project budget is \$8,364,000, and the not-to-exceed amount for PEI is \$219,920. The funding will come from Gas Tax, Measure B/BB, Vehicle Registration Fees, and anticipated Road Repair and Accountability Act (SB1) funds.

BACKGROUND

On April 25, 2018, the Council Infrastructure Committee (CIC) reviewed and commented on the FY 2019 Pavement Rehabilitation and Preventative Maintenance project.

The project includes 26 street sections for rehabilitation treatment and 16 street sections for preventative maintenance treatment. These 42 street sections have been identified as high priority locations for treatment.

DISCUSSION

On February 21, 2018, staff issued a Request for Proposal (RFP) to various firms specializing in pavement engineering. Initially, three consultants expressed interest in submitting proposals; however, only one consultant, Pavement Engineering, Inc., submitted a proposal.

This firm has extensive experience with City pavement management and rehabilitation projects including the following:

- FY 2017 & FY 2018 Pavement Rehabilitation Project;
- FY 2017 & FY 2018 Pavement Preventive Maintenance & Resurfacing Project;
- FY 2016 Pavement Preventative Maintenance & Resurfacing Project;
- FY 2016 Pavement Rehabilitation Project; and the
- Community Development Block Grant for Hayward Promise Neighborhood Street Improvement Project.

The proposal submitted by Pavement Engineering, Inc., was thorough in scope and schedule and the cost proposal has been deemed appropriate. The scope of work for PEI consists of the following five tasks:

Task 1 - Street Investigation / Engineering Review:

PEI will visually evaluate the pavement condition of each of the proposed project streets. The review will confirm the appropriate pavement treatment for each street, pavement rehabilitation, and preventive maintenance and resurfacing, among other options. This task will allow PEI to recommend refinement of the project budget and identify any specific problem areas.

During the review, PEI will estimate the amount of crack sealing and dig-out repairs that will be needed. After the visual review, a preliminary cost estimate for each street will be developed based on the identified treatment and amount of crack sealing and dig-outs. This cost will be used to refine the project budget.

Task 2 – Pavement Evaluation on Pavement Rehabilitation:

PEI will perform a pavement evaluation on each street segment to determine the most cost-effective rehabilitation treatments for each street based on structural requirements, reflective cracking requirements, longevity, and economy.

The evaluation work will consist of deflection testing, each street segment or lane in each direction, on a maximum of 100-foot intervals with a minimum of 10 tests per lane. Each street will have the existing pavement section (Asphalt Concrete and Aggregate Base) measured in 500-foot intervals in alternating lanes with a minimum of 2 locations per segment. Native soil samples will be collected at 1,000-foot intervals, or a minimum of one per street segment to determine the load-bearing capacity (R-value).

Task 3 – Measurement of Field Quantities:

PEI will walk along each of the project streets identified in the project streets list to measure and record all pertinent field quantities, such as: location of crack sealing and dig-outs and other pavement repairs.

Construction of handicap ramps, PCC valley gutter, traffic detector loop, utilities adjustment, tree root pruning, striping and markings will be identified during field reviews. PEI will take note of required tasks when determining the repairs to be included in the bid quantities.

Task 4 – Curb Ramp Design:

PEI will assist the City with curb ramp designs related to this project. This task involves designing ADA ramps in the field to provide limits of removal and quantities of work.

Task 5 – Construction Support / Mark Pavement Repairs:

After the project bid and before construction begins, PEI will mark all the pavement repairs in the field. PEI will annotate any changed quantities, and provide a revised quantity summary to the City at the completion of the field work.

ECONOMIC IMPACT

The project is fully funded by the City's Capital Improvement Program.

FISCAL IMPACT

The not-to-exceed amount for PEI is as follows:

Task 1 – Street Investigation / Engineering Review	\$18,920
Task 2 – Pavement Evaluation on Pavement Rehabilitation	\$102,730
Task 3 – Measurement of Field Quantities	\$42,520
Task 4 – Curb Ramp Design	\$25,990
Task 5 – Construction Support / Mark Pavement Repairs	\$29,760

Total: \$219,920

The estimated project funding sources are as follows:

210 – Gas Tax	\$700,000
212 – Measure BB – Local Transportation	\$1,900,000
215 – Measure B – Local Transportation	\$2,350,000
218 – Vehicle Registration Fee	\$750,000
211 – SB1 (awarded amount to be announced in June 2018)	\$2,674,000

Total: \$8,374,000

The scope of work in the RFP includes costs for evaluating 42 high priority streets which are the street sections identified in the FY 2019 Pavement Rehabilitation and Preventative Maintenance Project and 24 lower priority streets. PEI will initially evaluate the higher priority streets and, if cost savings are found, will evaluate lower priority streets to be added to the project.

STRATEGIC INITIATIVES

This agenda item is a routine operational item and does not relate to one of the Council's Strategic Initiatives.

SUSTAINABILITY FEATURES

The action taken for this agenda report will not result in a new physical development, purchase or service, or a new policy or legislation. Any physical work will be approved in a separate Council action. Sustainability features for individual CIP projects are listed in each staff report.

PUBLIC CONTACT

There has been no public contact related to this project to date.

NEXT STEPS

If Council approves this request, the City Manager will execute an agreement with PEI for \$219,920 for engineering services.

Prepared by: Kathy Garcia, Deputy Director of Public Works

Recommended by: Alex Ameri, Interim Director of Public Works

Approved by:



Kelly McAdoo, City Manager