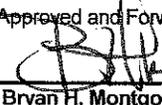




Agenda Date: 04/14/2015
Agenda Item: 3.7

STAFF REPORT

Date: Tuesday, April 14, 2015
To: Bryan H. Montgomery, City Manager
From: Kevin Rohani, P.E. Public Works Director/ City Engineer
SUBJECT: Agreement with Pavement Engineering, Inc. (PEI) for Design Services Associated with CIP Project Number 167 – FY 2015/16 Street Repair and Resurfacing Project

Approved and Forwarded to City Council

Bryan H. Montgomery, City Manager

Background and Analysis

The City's Five-Year Capital Improvement Program (CIP) includes a project for the improvement and rehabilitation of the local streets in the City of Oakley. The City uses this annual project to perform rehabilitative and preventative maintenance on the public street network through various means such as: dig-outs, crack sealing, slurry sealing, cape sealing, and pavement overlays.

The City of Oakley uses a Pavement Management System (PMS) to evaluate the condition of streets and to prioritize projects to repair and resurface the streets. The PMS program is based on the inspection of streets and evaluation of traffic flows and volumes. Each annual street repair and resurfacing project is done strategically to ensure the funds allocated are utilized to not only repair and resurface the streets that are in poor condition, but also to rehabilitate streets that are in fair to good condition to prolong their life and performance.

One of the major issues that we are faced with in Oakley is the existence of Sierra-Crete in the roadway base. Sierra-Crete was a product of DuPont Corporation that was used as roadway base material in the then unincorporated Oakley streets, as well as other communities in East Contra Costa County between 1989 and 1996. This material has not performed as expected and has resulted in numerous base failures under City streets over the past several years. As a part of the annual street repair and resurfacing projects, base repairs are performed and Sierra-Crete is removed from under the City streets.

The City's most recent street repair and resurfacing project, located in the Heather Park neighborhood, contained similar failures and Sierra Crete. The design recommendation was to repair the failed areas and place a Thin Maintenance Overlay (TMO) over the entire street. The TMO provided a minor structural benefit and the final product looks like a newly paved street. The TMO has been in place for a year and is performing exceptionally well. This project had both Sierra Crete and non-Sierra Crete streets. They all have had similar failures due to their age and varying pavement condition. Using a TMO for the entire project afforded an economy

of scale by using only one treatment method, and provided a superior treatment to a slurry seal.

For the past two (2) years, the consulting firm Pavement Engineering, Inc. (PEI) has been hired by the City of Oakley to design the annual street repair and resurfacing project. This firm specializes in pavement design and works for a large number of municipalities across California. They have performed effectively and efficiently on the City of Oakley projects. Staff requested a proposal from Pavement Engineering, Inc. to prepare plans, specifications, bid documents, and engineer's estimates. They have proposed to do it for a cost not to exceed \$45,477.50.

This type of project is considered to be a "fair weather" project and has to be constructed during the warmer months. The proposed schedule would be to design it over the next few months and have it ready for construction in late summer of 2015.

Fiscal Impact

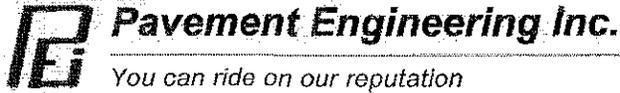
Currently there is \$304,000 in unassigned appropriations in the Gas Tax Fund that is available to fund the design phase of the project. The proposed FY 2015/16 budget currently includes an additional \$1,000,000 for the construction phase (\$800,000 in Gas Tax funds and \$200,000 in Measure J funds). Approval of the resolution will authorize the City Manager to execute an agreement with PEI for a cost not to exceed \$45,477.50, and assign \$45,477.50 of available Gas Tax funds to CIP 151, the FY 2014/15 Street Repair and Resurfacing CIP.

Recommendation

Staff recommends that the City Council adopt the resolution approving the agreement with PEI for design services, as described, for a cost not to exceed \$45,477.50 and authorizing the City Manager to enter into the agreement. The Resolution also includes the assignment of \$45,477.50 of funds currently available in Gas Tax funds to pay for the work.

Attachments

- 1) Pavement Engineering Inc. Proposal
- 2) Resolution



April 6, 2015

MP15-133B

Mr. Jason Kabalin
City of Oakley
3231 Main Street
Oakley, CA 94561

Subject: Proposal to Provide Engineering Design Services for the FY 2015-2016 Pavement Maintenance Project (see attached street lists)

Dear Jason:

We appreciate the confidence you have in our services and look forward to working with you and the City of Oakley on its FY 2015-2016 Pavement Maintenance Project. This proposal outlines our services and fees.

DESCRIPTION OF SERVICES

The City of Oakley would like Pavement Engineering Inc. (PEI) to assist them with its FY 2015-2016 pavement maintenance projects. As part of this work, PEI's design focus will include maintaining the existing pavement to a serviceable and safe condition. Working off the attached street list we will compile measured field quantities, prepare contract documents and estimates and provide bid and construction support services. The scope of work and our approach will be similar to previous projects performed with the City of Oakley.

SCOPE OF WORK

Task 1 - Measure Field Quantities

PEI will compile information previously collected measurements and pertinent field quantities from each of the project. Physically measuring the quantities provides confidence that the bid quantities are correct and ensures smoother contract administration and reduces the potential for change orders.

We will compile and summarize physical elements, including the location of existing striping, pavement markers and paint markings; location of underground utility covers; limits of paving transitions, digouts, and other pavement repairs; and the total area of pavement to be resurfaced.

If we identify any concrete repairs or tree root damage during our field reviews, we will note it and bring it to your attention to determine if the repairs should be added to the contract.

Mr. Jason Kabalin
April 6, 2015
MP15-133B
Page 2

Task 2 - Prepare and Incorporate Contract Documents and Estimates

PEI will compile all field quantities (Task 1) into individual engineer's estimates by street segment and will provide a summary spreadsheet of the entire project. Using these quantities, along with the pavement evaluation data (Task 3 -optional), PEI will meet with City staff to determine the most cost-effective maintenance approach for each of the project streets. This meeting will be considered the 65% submittal.

We will draft technical specifications and details for typical sections, transitions, conforms, digouts, and additional pavement work will be prepared. PEI will submit any portion of the maintenance work that requires further clarification in the form of drafted plan views, details, elevations, or cross sections, as is necessary. Where it facilitates the design, PEI will use aerial photographs to develop base sheets. This information will be submitted to the City at the 90% design review. Our work will include designing the required accessible ramps within the project limit.

After reviewing the 90% submittal, we will meet with City staff to resolve any outstanding issues and will adjust the contract documents accordingly. A final 100% submittal will follow.

This work does not include the design of ADA curb ramps. This service can be performed for additional fees.

Task 3 – Perform deflection testing and coring for pavement design

PEI will perform deflection testing, coring and analysis on the project streets. This type of analysis will eliminate the guesswork and ensure that an optimum maintenance approach is identified. In addition, PEI has found that adequate cores and deflection data is invaluable during both the design and construction phases of the project. Our experience suggests that gathering this additional data helps produce designs that can last longer than average approaches, resulting in additional savings to the City. The data collected would be helpful in evaluating these "Sierra-Crete" streets.

The deflection analysis will be performed in general accordance with California Test method 356 (CTM 356). Deflection tests will be performed at 100-foot maximum intervals in one lane (minimum 5 tests per segment). Coring will be performed at 500-foot maximum intervals over the street segment (minimum two cores per street segment).

Traffic control will be provided using a vehicle mounted warning lights. Flagging will be provided as needed. The City of Oakley will provide traffic index information.



Mr. Jason Kabalin
April 6, 2015
MP15-133B
Page 3

PROPOSED WORK SCHEDULE

PEI understands that time is of the essence. We are committed to completing the final contract documents quickly, so the City can enter into a construction contract by July of this year.

PROPOSAL FEE & FEE BREAKDOWN

We estimate the construction cost for the listed project streets will be between \$550,000 to \$800,000. Our not to exceed fee to perform the outlined work will be \$45,477.50. Pavement Engineering Inc.'s fee for the work is based on our experience with similar projects performed for the City and throughout the State.

The estimated fees for the total project include all field work, design work and contract document development up to completion of the project for the project streets. Construction inspection and testing services are not included.

Our work will be invoiced on a time and material basis. All fees and costs associated with this project are subject to final negotiation with the City of Oakley. Any change in scope may result in additional fees. The attached proposal conditions apply.

Please call me at (805) 781-2265 with any questions you may have about this proposal. It's always great working with you, Jason. We will always endeavor to meet your expectations going forward.

Very truly yours,
PAVEMENT ENGINEERING INC.



Joseph L. Ririe, P.E.
Principal

Attachments: Street List
Proposal Conditions

pc: C File, M File, MP Files



**CITY OF OAKLEY
2015 PAVEMENT MAINTENANCE PROJECT
STREET LISTS**

AREA A (135,210 SF)

<u>Street</u>	<u>From</u>	<u>To</u>
Carol Lane	Main Street	Fairhaven Way
East Summerfield Court	Fairhaven Way	End
Fairhaven Court	Fairhaven Way	End
Fairhaven Way	West Summerfield Court	Fairhaven Court
West Summerfield Court	Fairhaven Way	End

AREA B (403,539 SF)

<u>Street</u>	<u>From</u>	<u>To</u>
Bernard Road	Highway 4	Beginning Bridge
Century Way	Creekside Way	Oak View Lane
Creekside Court	Laurel Road	End
Creekside Way	Honey Lane	Creekside Court
Hacienda Drive	Oak View Lane	Creekside Way
Heritage Court	Heritage Way	End
Heritage Way	Century Way	Honey Lane
Honey Lane	Heritage Way	Creekside Way
Meadow Brook Court	Meadows Lane	End
Meadow Court	Meadows Lane	End
Meadow Creek Court	Meadows Lane	End
Meadows Lane	Bernard Road	Laurel Road
Mission Court	Century Way	End
Oak Glen Drive	Oak View Lane	White Oak Court
Oak Grove Court	Century Way	End
Oak Grove Drive	Century Way	Laurel Road
Oak View Lane	Century Way	Oak Glen Drive
Oak Villa Court	Creekside Way	End
Old Oak Court	Meadows Lane	End
White Oak Court	Hacienda Drive	Oak Glen Drive



PROPOSAL CONDITIONS

1. Proposal is valid for thirty days from the date of the proposal.
2. All work shall be performed utilizing common methods and practices of the civil engineering profession. Reports and construction documents will be signed by a registered civil engineer.
3. Fees for Lump Sum or Unit Price Proposals will be charged at the quoted price. The quoted prices include all laboratory testing costs. Fees for Engineering and Technical Services on a Time and Materials Basis will be charged at the applicable hourly rates of the current PEI Fee Schedule.
4. The proposal is based upon providing liability insurance with limits up to \$2,000,000.
5. One copy of an Engineering Report or Plans and Specifications will be provided to the Owner of a project. Additional copies are \$35 each.
6. Payment: Invoices will be submitted at the completion of the work for Engineering Reports. Inspection fees will be invoiced on a monthly basis. All invoices are due upon receipt. Interest of 1-1/2% per month (but not exceeding the maximum rate allowable by law) will be payable on any amounts not paid within 30 days, payment thereafter to be applied first to accrued interest and then to the principal unpaid amount. Attorneys' fees or other costs incurred in collecting any delinquent amount shall be paid by the client.



RESOLUTION NO. ___-15

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF OAKLEY
APPROVING AN AGREEMENT WITH PAVEMENT ENGINEERING INC., (PEI)
FOR DESIGN SERVICES ASSOCIATED WITH CAPITAL IMPROVEMENT
PROGRAM PROJECT NUMBER 167 – FY 2015/16 STREET REPAIR AND
RESURFACING PROJECT AND AUTHORIZING THE CITY MANAGER TO
EXECUTE THE AGREEMENT**

WHEREAS, as part of the Fiscal Year 2014/2015 Budget the City of Oakley approved a 5-Year Capital improvement Program (CIP); and

WHEREAS, Project Number 151 is the 2014/15 Street Repair and Resurfacing project, and Project 167 is the 2015/16 Street Repair and Resurfacing Project, which will include rehabilitative and preventative maintenance on the public street network through a series of dig-outs, crack sealing, and pavement overlay, and;

WHEREAS, staff identified numerous streets throughout the City of Oakley for the repair and resurfacing project; and

WHEREAS, Pavement Engineering Inc., has submitted a proposal to prepare design drawings, specifications, and cost estimates for CIP Project Number 167 for an amount not to exceed \$45,477.50.

NOW, THEREFORE, BE IT RESOLVED AND ORDERED, that the City Council of the City of Oakley hereby:

- 1) Approves the agreement with Pavement Engineering Inc., for the preparation of engineering design drawings, specifications, and cost estimates for CIP Project Number 167 for an amount not to exceed \$45,477.50, and authorizes the City Manager to execute said agreement;and
- 2) Assigns \$45,477.50 of currently available unassigned Fund Balance in the Gas Tax Fund, to CIP 151 so that funds are available for the design work to begin in Fiscal Year 2014/15.

PASSED AND ADOPTED by the City Council of the City of Oakley at a meeting held on the 14th of April, 2015 by the following vote:

AYES:
NOES:
ABSENT:
ABSTENTIONS:

APPROVED:

ATTEST:

Doug Hardcastle, Mayor

Libby Vreonis, City Clerk

Date