

- **TO:** Mayor and Councilmembers
- **FROM:** Charles W. Ebeling, Director of Public Works
- **CONTACT:** James Campero, Deputy Public Works Director
- **SUBJECT:** Amendment No. 2 to Professional Design Services Agreement No. 2017-023 with Pavement Engineering Inc., for a Pavement Management Program

## **RECOMMENDATION:**

Authorize the City Manager to execute Amendment No. 2 to Professional Design Services Agreement No. 2017-023 with Pavement Engineering Inc. to increase the scope of the Pavement Management Program, increasing the contract authority by \$525,265, for a total contract not-to-exceed amount of \$720,490, and extending the agreement for one year to December 31, 2021.

## BACKGROUND:

In January of 2014 and February 2015, the City and Pavement Engineering Inc. (PEI) entered into an agreement for services to evaluate the condition of the City's streets and recommend treatments and strategies for pavement maintenance. Subsequent presentations were provided to City Council in March of 2016 and May 2017 on the status of the City's roadway network and the Pavement Management Program.

In May of 2017, the City and PEI entered into a new agreement for the design of the Fiscal Year 2017/18 Pavement Rehabilitation Project. In June of 2018, City Council approved an amendment to the PEI agreement to expand the scope of services and extend the agreement termination date. PEI has completed all tasks included in the original agreement and amendment.

## **DISCUSSION:**

City staff is ready to begin design for the 2019 Pavement Rehabilitation Project and is targeting to advertise for bids at the end of the year. City staff would also like to initiate design of the 2020 Pavement Rehabilitation Project concurrently or shortly after completing design of the 2019 pavement project in order to be able to bid the 2020 Pavement Rehabilitation Project next spring. The City requested a cost proposal from PEI for design services based on their history and experience working on the prior annual

pavement rehabilitation projects. The City assumed an average annual construction budget of approximately \$2.4 million for design scoping purposes, however the scope of work may be modified as design is further developed and depending on the available budget when the project is ready to advertise for bids.

In addition to the proposal for preparing bidding documents for the pavement rehabilitation projects, the City also requested a proposal from PEI to provide a new complete evaluation of the City's roadway network. A new evaluation is needed because the last full evaluation and inspection of the City's roadway network was done by PEI in 2015, nearly four (4) years ago. The evaluation will include inspecting and evaluating all City roadways, inputting the information into the City's roadway system database, performing an analysis and producing a report on the current and projected condition of the City's roadway network, and providing recommended treatments and strategies for pavement maintenance.

PEI's proposal for the design services identified above is reflected in the table below.

Scope of Work	
Evaluate, inspect, and update the City's roadway system, prepare a summary report, and develop an implementation plan.	\$ 130,000
Prepare bidding documents for the 2019 Pavement Rehabilitation Project.	\$ 185,000
Prepare bidding documents for the 2020 Pavement Rehabilitation Project.	\$ 160,000
Provide design engineering support services during construction for the Pavement Rehabilitation Projects.	\$ 50,265

## TOTAL \$525,265

PEI is a qualified engineering firm that is capable of completing the work in a timely manner. Staff recommends execution of Amendment No. 2 to the Professional Design Services Agreement No. 2017-023 with PEI for additional engineering design services in the amount of \$525,265, for a total contract not-to-exceed amount of \$720,490. (Attachment 1)

## FISCAL IMPACTS:

The adopted budget for FY 2019/20 and the requested carryover budget from FY 2018/19 for the Pavement Management Program are shown in the table below.

Fund Type	Account	Adopted Budget FY19/20	Prior FY Carryover	Total Available Budget
General	101-5-5800-413	\$ 710,000	\$ 311,144	\$ 1,021,144
Gas Tax	201-5-5800-413	\$ 670,500	\$ 295,914	\$ 966,414
RMRA	203-5-5800-413	\$ 528,000	\$ 7,000	\$ 535,000
Measure A	205-5-5800-413	\$ 420,000	\$ 37,762	\$ 457,762

LSTP	306-5-5800-400	\$ 116,500	\$ 0	\$ 116,500
Total		\$ 2,445,000	\$ 651,820	\$ 3,096,820

The contract amendment is for a term extension through December 31, 2021 and increase the contract authority by \$525,265, for a total contract not-to-exceed amount of \$720,490. There is sufficient budget to cover the costs of these design services. Design services are typically funded out of the General Fund. Staff recommends that this amendment to PEI's agreement in the amount of \$525,265 be funded out of the \$1,021,144 available in the General Fund. Approximately \$2.5 million will then available for the FY 2018/19 Pavement Rehabilitation Project.

## ALTERNATIVES:

Council could elect not to award the design services contract to PEI and direct staff to request other proposals from qualified firms. However, doing so would impact the timing of the next paving projects and delay the much needed evaluation of the City's roadway network.

## **Reviewed By:**

#### Legal Review By:

Approved By:

Kristine Schmidt

Deputy City Manager

**ATTACHMENTS:** 

Michael Jenkins City Attorney

Michelle Greene

City Manager

1. Amendment No. 2 to Professional Design Services Agreement No. 2017-023 with Pavement Engineering Inc., for a Pavement Management Program

# Attachment 1

Amendment No. 2 to Professional Design Services Agreement No. 2017-023 with Pavement Engineering Inc., for a Pavement Management Program

## AMENDMENT NO. 2 TO A PROFESSIONAL DESIGN SERVICES AGREEMENT BETWEEN THE CITY OF GOLETA AND PAVEMENT ENGINEERING INC.

This **Amendment No. 2** to a PROFESSIONAL DESIGN SERVICES AGREEMENT by and between the **CITY OF GOLETA**, a municipal corporation ("City") and **PAVEMENT ENGINEERING INC.**, ("Consultant") dated May 2, 2017 ("Agreement," Agreement No. 2017-023) is made this 17<sup>th</sup> day of September, 2019.

## RECITALS

**WHEREAS,** the CITY has a need for professional pavement maintenance design and management services for the City's Pavement Maintenance Program; and

**WHEREAS,** the Agreement was entered into on May 2, 2017 with a maximum compensation of \$195,225 and a termination date of June 30, 2018; and

**WHEREAS,** the Agreement was amended on June 19, 2018 to expand the scope of services and extend the termination date to June 30, 2020; and

**WHEREAS,** the Agreement between City and Consultant currently provides in Section 3 Subsection (a) for the total compensation amount not to exceed \$195,225; and

WHEREAS, the parties desire to amend the Agreement so as to provide for additional compensation in the amount of \$525,265 for additional tasks including for development of the Pavement Management Program, Five Year Maintenance Plan and Design of Two Years of Maintenance Projects for a total not to exceed amount of \$720,490; and

**WHEREAS,** the Agreement between City and Consultant currently provides in Section 6 for the termination of the Agreement on June 30, 2020; and

WHEREAS, the parties desire to amend the Agreement so as to extend the termination of the Agreement to December 31, 2021; and

**WHEREAS**, the Agreement between City and Consultant currently provides in Exhibit A-1 entitled "Scope of Work" the complete and particular description of services as set forth for Consultant; and

WHEREAS, the parties desire to amend Exhibit A-1 of the Agreement by adding additional services for development of the Pavement Management Program, Five Year Maintenance Plan and Design of Two Years of Maintenance Projects as more completely and particularly set forth in the Scope of Work, attached as Exhibit "A-2"; and

**WHEREAS**, the Agreement between City and Consultant currently provides in Section 3 Subsection (a) a Schedule of Fees, marked Exhibit B entitled "Compensation" the hourly rates for Consultant; and

**WHEREAS**, the parties desire to amend Exhibit B-1 of the Agreement to identify changes as shown in Exhibit B-2; and

**WHEREAS**, the parties desire to amend Exhibit C-1 of the Agreement to identify fee changes as shown in Exhibit C-2; and

**WHEREAS**, the Agreement did not provide for the Agreement or any amendments to be executed in counterparts by facsimile or electronic mail; and

**WHEREAS,** the parties desire to amend the Agreement to allow for execution of the Agreement and amendments by facsimile and electronic mail in order to expedite the finalization of the agreements; and

WHEREAS, the City Council approved this Amendment No. 2, on this 17<sup>th</sup> day of September, 2019.

## AMENDED TERMS

**Now therefore** City and Consultant agree as follows that the Agreement be, and hereby is, amended as follows:

1. Section 3. <u>COMPENSATION AND PAYMENT</u> of the Agreement is amended to add an additional authorized amount of \$525,265 and to read in its entirety:

(a) Maximum and Rate. The total compensation payable to CONSULTANT by CITY for the services under this AGREEMENT SHALL NOT EXCEED the sum of \$720,490, (herein "not-to-exceed amount"), and shall be earned as the work progresses on the following basis:

Hourly at the hourly rates and with reimbursement to CONSULTANT for those expenses set forth in CONSULTANT's Schedule of Fees marked Exhibit "C," attached and incorporated herein. The rates and expenses set forth in that exhibit shall be binding upon CONSULTANT until December 31, 2021, after which any change in said rates and expenses must be approved in writing by CITY's Project Manager as described in Section 5 (CITY is to be given 60 days notice of any rate increase request), provided the not to exceed amount is the total compensation due CONSULTANT for all work described under this AGREEMENT

(b) <u>Payment</u>. CONSULTANT shall provide CITY with written verification of the actual compensation earned, which written verification shall be in a form satisfactory to CITY's Project Manager, as described in Section 5. Invoices shall be made no more

City of Goleta Amendment No. 2 to Agreement No. 2017-023 Page 2 of 12 frequently than on a monthly basis, and describe the work performed (including a list of hours worked by personnel classification). All payments shall be made within 30 days after CITY's approval of the invoice.

2. Section 6. <u>TERM, PROGRESS AND COMPLETION</u> of the Agreement is amended to extend the term for an additional two and a half years to read in its entirety.

The term of this Agreement is from the date first written above to December 31, 2021, unless the term of this Agreement is extended or the Agreement is terminated as provided for herein.

CONSULTANT shall not commence work on the services to be performed until (i) CONSULTANT furnishes proof of insurance as required by Section 10 below, and (ii) CITY gives written authorization to proceed with the work provided by CITY's Project Manager. All services shall be completed within the term of this Agreement following the notice to proceed.

**3.** This Agreement is amended to deleted and replace in its entirety:

Exhibit A-1 "Scope of Work" with Exhibit A-2 "Scope of Work" attached hereto and incorporated herein.

4. This Agreement is amended to delete and replace in its entirety:

**Exhibit B-1 "Deliverables**" with **Exhibit B-2 "Deliverables**" attached hereto and incorporated herein.

5. This Agreement is amended to delete and replace in its entirety:

**Exhibit C-1 "Schedule of Fees**" with **Exhibit C-2 "Compensation"** attached hereto and incorporated herein.

## 6. Section 31. COUNTERPARTS AND ELECTRONIC/FACSIMILE SIGNATURES

of the Agreement is added to include counterparts and electronic/facsimile signatures as follows:

This Agreement may be executed in several counterparts, which may be facsimile or electronic copies. Each counterpart is fully effective as an original, and together constitutes one and the same instrument.

**7.** Except as otherwise specifically provided herein, all other provisions of the Agreement shall remain in full force and effect.

In concurrence and witness whereof, this Amendment No. 2 has been executed by the parties effective on the date and year first above written.

**CITY OF GOLETA** 

## CONSULTANT

Michelle Greene, City Manager

ATTEST:

Joseph L. Ririe, P.E., Principal

Deborah Lopez, City Clerk

William Long, Chief financial Officer

## **APPROVED AS TO FORM**

Winnie Cai, Assistant City Attorney

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# Exhibit A-2 Goleta Pavement Maintenance Program Scope of Work

#### TASK 1 Develop Pavement Maintenance Program Document

CONSULTANT will develop a pavement maintenance strategy that will manage the City's pavements in a serviceable and safe condition. Depending on the estimated annual budgets, CONSULTANT will develop a plan to improve the City's PCI. This effort will include working with City staff to determine (forecast) the best maintenance and rehabilitation strategy for the next five years. CONSULTANT will do this by performing a budget analysis using several scenarios that will help the City evaluate budget strategies and impacts and will use StreetSaver<sup>®</sup> GIS mapping to visually illustrate these impacts.

CONSULTANT will work with City staff to identify and prioritize annual asphalt concrete preventative maintenance and rehabilitation treatments on a street by street or neighborhood by neighborhood basis and make recommendations based on a critical-point approach that incorporates pavements from all parts of the deterioration curve, not just the best nor just the worst. This approach optimizes every budget dollar by seeking to apply the right treatment at the right time: not too soon and not too late.

CONSULTANT's analysis will demonstrate what the City can expect in overall pavement condition based on current and proposed future funding levels. If shortfalls exist, CONSULTANT will recommend preventative maintenance strategies to improve and maintain the City's street system within budgetary constraints. CONSULTANT has the knowledge and experience to assist the City evaluate appropriate options and explore treatments and value engineering techniques to accomplish the objectives.

#### TASK 2 Perform Annual Updates of the City's StreetSaver<sup>®</sup> Program

CONSULTANT is proposing to re-rate all of the City's arterial streets and ½ of the collector and residential streets on an annual basis. This work will keep the City's PCI current.

#### Phase 1: Kick-off Meeting

CONSULTANT will schedule a kick-off meeting with City staff to discuss project goals and expectations. Some items of discussion may include:

- The scope of work, schedule and budget;
- Existing pavement data, GIS files and drawings;
- Streets, roadways and alleyways review, neighborhood areas, boundaries, private streets and function classifications;
- Current and past pavement maintenance history and budgets;
- Quality control approach;

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- Safety, field work access and public notifications;
- The format of deliverables.

Throughout the project, CONSULTANT will meet with City staff as required to coordinate and review specific project progress, schedules, budgets and other items of business to ensure the work performed meets performance goals. The objective is to deliver a quality project on time and on budget.

#### Phase 2: Visual Evaluation of Pavement Condition

CONSULTANT will visually inspect all the City's arterial streets (~26 CL miles) and 1/2 of the City's collectors and local roads (~30 CL miles) as well as any newly constructed residential and mixed-used streets. The assessment will conform to ASTM Standard D6433 standards.

CONSULTANT's inspectors are certified for quality and consistency and attend annual training to keep abreast of changes and hone skills. That training demonstrates an accuracy rate for CONSULTANT's inspectors of  $\pm$  5 PCI points. Industry standards accept  $\pm$  10 PCI points. They will manually survey all streets and roads according to the following MTC's eight distress categories:

- Alligator cracking;
- Block cracking;
- Distortions;
- Longitudinal and transverse cracking;
- Patching and utility cuts;
- Rutting and depressions;
- Weathering;
- Raveling.

CONSULTANT will assign a Pavement Condition Index (PCI) for each street segment per StreetSaver<sup>®</sup> criteria and supported by CONSULTANT's quality assurance standards, which are designed to ensure accuracy and consistency.

During the field review, CONSULTANT will use a vehicle-mounted digital measuring device to measure the length of each street segment and a hand-held wheel to measure the width. Precise measurements are key to accurate cost projections, which are calculated based on pavement area.

CONSULTANT will sample locations on random test sites of  $\pm$  2,500 sf and will annotate the sample location on our rating sheet using footage from the beginning of each road segment. Recording locations of inspected sample areas provides the necessary information to relocate the measured area for verification. This method produces reliable, reproducible data for current and future use. As part of this work, CONSULTANT will perform a Quality Control review. Typically, the review compares the latest PCIs of newly rated street segments to prior PCIs from

City of Goleta Amendment No. 2 to Agreement No. 2017-023 Page 6 of 12 the last PMS update. Since there will be no previous PCI data, the Project Manager will review a random 10% of the street segments.

To ensure safety during the visual evaluation, CONSULTANT will provide its inspectors with reflective safety vests and will provide traffic control using a flashing beacon and a vehicle-mounted magnetic sign warning of frequent stops.

#### Phase 3: Data Input

CONSULTANT will input all of the data collected during the visual evaluations in the City's StreetSaver<sup>®</sup> database using MTC's Mobile Rater. This speeds project completion and increases accuracy.

To make sure any analysis is consistent with the use of recommended maintenance and rehabilitation strategies, CONSULTANT will review the City's current street segmentation and how the roads are being used. The goal is to develop the most accurate database possible, one that will manifest in better, more precise recommendations and projections.

In addition, CONSULTANT can review the functional classifications of streets in its system to determine if they comply with Caltrans specifications and are therefore eligible for future federal funding. We can compare each road section contained in the updated PMS database with the California Road System (CRS) maps found on the Caltrans website to verify functional classification accuracy.

As part of this Task, CONSULTANT will also review both the StreetSaver<sup>®</sup> Decision Tree and PCI breakpoint table with the City to verify treatments and associated unit prices to ensure costs being used by the program are current and reflect the construction costs the City is seeing. Revised information will be updated in StreetSaver<sup>®</sup>.

#### Phase 4: Update Maintenance History and GIS Linkage

CONSULTANT will work with City staff and, in particular, the City's GIS department to make sure there are no missing streets. If CONSULTANT finds missing streets, they will visually evaluate them and add them to the system.

CONSULTANT will update the maintenance and rehabilitation history for all of the street segments throughout the City since the last data backup. Adding this information to the work history files for each of the streets will help ensure that the most accurate PCI is represented by the program.

CONSULTANT will also work with the City's GIS department to see that they have all the information needed to develop the City's PCI maps and will make sure that all the data is linked to the GIS module contained within StreetSaver<sup>®</sup> so City staff can take advantage of this feature.

#### Phase 5: Prepare Snapshot Report

Once the visual evaluations are finished and the StreetSaver<sup>®</sup> database is completely updated, CONSULTANT will run reports that forecast the PCI based on proposed treatments. This effort will provide feedback for the treatment decisions necessary to achieve the City's goals.

City of Goleta Amendment No. 2 to Agreement No. 2017-023 Page 7 of 12 As part of this phase, CONSULTANT will prepare a "database snapshot" report containing the following information that will serve as an annual summary:

- Summary of work performed;
- Three basic budget scenarios for improving or maintaining the PCI during the next 10 years;
- Network summary statistics broken down into functional class: arterial, collector, residential/local, and other required classifications;
- Summary of conditions, recommended treatments and estimated unit costs by functional class;
- Network condition summary based on budget scenarios;
- A sorted desktop reference, listing roads by PCI from best to worst or alphabetically by name.

Because StreetSaver always reports the current PCI based on the system's deterioration curve, it cannot look back at previous years; however, past information helps to evaluate trends and measure progress. This report will serve as a printed reference that can be compared to previous or future annual updates..

#### Proposed Schedule for Task 2

CONSULTANT anticipates that this task will take from 6 to 8 weeks. The schedule may vary depending inclement weather. Annual ratings will be scheduled so that the timing will be the same from year to year.

#### TASK 3 Prepare and Present Bi-Annual City Council Presentations

CONSULTANT will prepare and present a bi-annual report to the City Council. The focus of the presentation will be to update the council on the City's pavement program, plan and projects. This task will include working with City staff during the development of the presentation to make sure that the all of the necessary items are covered. CONSULTANT will prepare a PowerPoint presentation for each of the bi-annual meetings.

#### TASK 4 Develop PS&E for the Annual Pavement Maintenance Projects

The City anticipates total construction budgets of \$2.7M, for FY 2018-19 and \$2.2M, for FY 2019-20, Annual Pavement Maintenance Projects. They have a goal to have the FY 2018-19 project in construction during the fall of 2019.

Consultant proposes the following scope of work and phases to assist with the City's pavement maintenance project:

#### Phase 1: Street Investigation / Engineering Review

CONSULTANT will visually evaluate candidate streets to develop this year's pavement maintenance project. During our review, we will visually confirm the next appropriate treatment for each street. After our review, we will develop a preliminary budget for each street and meet with City staff to discuss our findings and develop a final project list.

#### Phase 2: Measure Field Quantities

CONSULTANT will physically walk each of the final project streets identified in Phase 1 to measure and record all pertinent field quantities. Physically measuring the quantities provides confidence that the bid quantities are correct. Taking time to physically measure each bid item in the field also ensures smoother contract administration and reduces the potential for change orders.

CONSULTANT will measure and record 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 CONSULTANT identifies any concrete repairs or tree root damage during our field reviews, CONSULTANT will note it and bring it to City's attention to determine if these repairs should be added to the contract.

#### Phase 3: Perform Deflection Testing and Coring for Pavement Design

CONSULTANT will perform deflection testing, coring and analysis on the project streets that are candidates for rehabilitation. This type of analysis eliminates guesswork and ensures that we identify an optimum rehabilitation approach. In addition, CONSULTANT has found that adequate cores and deflection data are invaluable during both the design and construction phases of the project. CONSULTANT's experience suggests this additional data helps produce designs that can last longer than average, resulting in additional savings to the City.

The deflection analysis will be performed in general accordance with California Test Method 356 (CTM 356). CONSULTANT will perform deflection tests at 100-foot maximum intervals in each lane (minimum ten tests per lane) and coring at 500-foot maximum intervals over the street segment (minimum two cores per street segment). To assist with the analysis, CONSULTANT's core samples will determine the full structural section (AC & AB). We also will collect a sample of the native soil to determine the R-value.

CONSULTANT will arrange for traffic control using vehicle mounted warning lights and flagging as needed. The City of Goleta will provide traffic index information.

Rehabilitation options for investigation will include pulverization and resurfacing, milling and filling, conventional asphalt concrete overlay and ARHM overlays. CONSULTANT will include deflection testing and coring data for each street in the project development binders; however, no formal deflection testing report will be prepared. Going straight from the raw analysis and data to design saves considerable design funds. CONSULTANT will compile pavement

evaluation information into binders and submit them to the City during reviews and at the completion of the project.

#### Phase 4: ADA Ramps Design

CONSULTANT will review and design ramps associated with the streets that have treatments that trigger ramp upgrades. CONSULTANT work will include field measuring to determine the estimated construction quantities and preparing estimates for inclusion in the project's bid schedule. If the ramps are complicated by existing utility boxes, poles or other obstructions, CONSULTANT will provide a more detailed design that will be included in the project plans. For the FY 2018-19 project, CONSULTANT has assumed 25 ramps that will require quantities only and 4 ramps that will require detailed design.

CONSULTANT will compile all field quantities (Phase 2) 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 (Phase 3), CONSULTANT will meet with City staff to determine the most cost-effective rehabilitation approach for each of the project streets. This meeting will be considered the 65% submittal.

CONSULTANT will draft technical specifications and details for typical sections, transitions, conforms, digouts and prepare additional pavement work. CONSULTANT 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 necessary. Where it facilitates the design, CONSULTANT will use aerial photographs to develop base sheets. This information will be submitted to the City at the 90% design review.

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

#### Proposed Schedule for Task 4

CONSULTANT understands that time is of the essence to prepare the PS&E for FY 2018-19. CONSULTANT is committed to completing the final contract documents quickly, so the City can enter into a construction contract during the late fall of 2019. CONSULTANT anticipates that Phase 1 will take approximately one (1) week and Phases 2 through 5 will take six (6) to eight (8) weeks once Phase 1 is completed. If CONSULTANT is authorized to begin immediately, this schedule will result in final documents during the first week of September 2019.

#### TASK 5 Provide Design Engineering Support during the City's Annual Pavement Maintenance Projects

CONSULTANT will provide construction support services for the FY 2018-19 and FY 2019-20 Pavement Maintenance Projects. Services include but are not limited to submittal review, meeting attendance, RFI responses or other requests that assist the City during construction. These services will be provided on an as-needed basis.

## Exhibit B-2 Goleta Pavement Maintenance Program Deliverables

- TASK 1 Develop Pavement Maintenance Program Document:
  - Pavement maintenance analysis report.

#### TASK 2 Perform Annual Updates of the City's StreetSaver<sup>®</sup> Program Phase 1: Kick-off Meeting: Deliverables

• Kick-off meeting notes and minutes.

## Phase 2: Visual Evaluation of Pavement Condition: Deliverables

• Updated PCI's in StreetSaver<sup>®</sup>.

## Phase 3: Data Input: Deliverables

- Updated database with maintenance and rehabilitation history;
- Reconciliation of any pending transactions;
- Functional classification comparison between Caltrans maps.

## Phase 4: Update Maintenance History and GIS Linkage: Deliverables

Updated GIS module.

## Phase 5: Prepare Snapshot Report: Deliverables

• Copies of draft report and a final report.

## TASK 3 Prepare and Present Bi-Annual City Council Presentations:

PowerPoint Presentation for each bi-annual meeting.

## TASK 4 Develop PS&E for the Annual Pavement Maintenance Projects:

#### Phase 1: Street Investigation / Engineering Review: Deliverables:

• Preliminary budget for each street.

#### Phase 2: Measure Field Quantities: Deliverables

• Record of all pertinent field quantities.

## Phase 3: Perform Deflection Testing and Coring for Pavement Design: Deliverables

- Analysis of project streets;
- Rehabilitation recommendations;
- Pavement evaluation binders.

## Phase 4: ADA Ramps Design: Deliverables

• ADA ramp PS&E's.

#### Phase 5: Prepare Plans, Technical Specifications and Estimates: Deliverables

- 65% design submittal package (PS&E's);
- 90% design submittal package (PS&E's);
- Written response to comments;
- Review meeting agenda and minutes.

## TASK 5 Provide Design Engineering Support during the Annual Pavement Project(s):

- Shop drawings and submittal comments;
- RFI responses;
- Meeting attendance, as needed;
- Change orders, as required.

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# Exhibit C-2 Goleta Pavement Maintenance Program Schedule of Fees

## **Engineering & Landscape Architect Services**

Senior Principal Engineer	\$245/hr
Principal Engineer/Landscape Architect	\$205/hr
Senior Associate Engineer/Landscape Architect	\$180/hr
Associate Engineer	\$165/hr
Assistant Engineer	\$160/hr

## **Technical Services**

Project & Construction Managers	\$160/hr
Senior Engineering Technician	\$145/hr
Engineering Technician	\$130/hr
Inspector*	
Clerical	\$80/hr
PMS Clerical	\$75/hr

## **Field Services**

PW Dynaflect Operator*	\$295/hr
PW Assistant Dynaflect Operator*	\$165/hr
PW Dynaflect Operator Travel*	\$170/hr
PW Assistant Dynaflect Operator Travel*	\$170/hr
PW Coring Technician*	\$240/hr
PW Assistant Coring Technician*	\$145/hr
PW Coring Technician Travel*	\$170/hr
PW Assistant Coring Technician Travel*	\$170/hr
PMS Data Technician	\$95/hr
* Two (2) hour minimum	

## **Basis of Charges**

## Miscellaneous Charges

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