

**SUBMITTAL TO THE BOARD OF SUPERVISORS  
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**



**ITEM**  
3.14  
(ID # 5901)

**MEETING DATE:**

Tuesday, February 27, 2018

**FROM :** ECONOMIC DEVELOPMENT AGENCY (EDA):

**SUBJECT:** ECONOMIC DEVELOPMENT AGENCY (EDA): French Valley Airport-  
Rehabilitation of Runway 18-36, Taxiway A & Connector Taxiways-Design  
Services, District 3, [\$85,915] Federal Aviation Administration Airport  
Improvement Grant Funds 87%, Airport Budget Fund (22350) 13%.

**RECOMMENDED MOTION:** That the Board of Supervisors:

1. Approve and authorize the Chairman of the Board to execute the attached work order agreement between the County of Riverside and Mead & Hunt, Inc. for the Rehabilitation of the Runway 18-36, Taxiway A and Connector Taxiway Pavements – Design Services work order agreement at French Valley Airport; and
2. Delegate Change Order authority to the Assistant County Executive Officer/EDA or designee in accordance with Board Policy B-11.

**ACTION:** Policy

Robert Field, Assistant County Executive Officer/EDA 1/4/2018

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**MINUTES OF THE BOARD OF SUPERVISORS**

On motion of Supervisor Jeffries, seconded by Supervisor Ashley and duly carried by unanimous vote, IT WAS ORDERED that the above matter is approved as recommended.

**Ayes:** Jeffries, Tavaglione, Washington, Perez and Ashley  
**Nays:** None  
**Absent:** None  
**Date:** February 27, 2018  
**xc:** EDA

Kecia Harper-Ihem  
Clerk of the Board  
By:   
Deputy

**SUBMITTAL TO THE BOARD OF SUPERVISORS COUNTY OF RIVERSIDE,  
STATE OF CALIFORNIA**

<b>FINANCIAL DATA</b>	<b>Current Fiscal Year:</b>	<b>Next Fiscal Year:</b>	<b>Total Cost:</b>	<b>Ongoing Cost</b>
<b>COST</b>	\$85,915	\$0	\$85,915	\$0
<b>NET COUNTY COST</b>	\$0	\$0	\$0	\$0
<b>SOURCE OF FUNDS:</b> Federal Aviation Administration Airport Improvement Grant Funds 87%, Airport Budget Fund (22350) 10%			<b>Budget Adjustment:</b>	<b>No</b>
			<b>For Fiscal Year:</b>	<b>2017/2018</b>

**C.E.O. RECOMMENDATION:** Approve

**BACKGROUND:**

**Summary**

The purpose of this project is to design the rehabilitation of ageing pavement on the Airport's primary runway, Runway 18-36, the parallel Taxiway A, and the five connector taxiways. The pavements were visually inspected and detailed in the Airport Pavement Management System report, dated June 2013, and rated as Fair and Good. The runway consists of an area approximately 55,000 square yards of pavement, the connector taxiways consist of an area of approximately 6,500 square yards of pavement, and Taxiway A has an area of approximately 31,500 square yards of pavement. The project rehabilitation is anticipated to include preparation of the pavement surface by pressure washing, crack cleaning and filling of minor size cracks, saw cutting and repair of major size cracks, a slurry seal of the pavements and the application of new pavement markings.

The Rehabilitation of the Runway 18-36, Taxiway A and Connector Taxiway Pavements at French Valley Airport is consistent with the Airport's Capital Improvement Program and Master Plan. Mead & Hunt Inc. were selected by Request for Qualification (RFQ) as the County's Airports Project Consultant, per the Federal Aviation Administration's (FAA) five-year consultant selection criteria.

Staff proposes to have Mead & Hunt, Inc. provide design engineering services and recommend that the Board of Supervisors approve the necessary design work order agreement for the project. County Counsel has reviewed and approved the attached documents as to legal form.

**Impact on Residents and Businesses**

The rehabilitation of the Runway 18-36, Taxiway A and Connector Taxiway Pavements will improve the airport operations and enhance capacity and safety.

**Additional Fiscal Information**

**SUBMITTAL TO THE BOARD OF SUPERVISORS COUNTY OF RIVERSIDE,  
STATE OF CALIFORNIA**

There will be no impact on the County's general fund.

**Attachments**

- Work Order Agreement

RF:HM:TM:SG:VP:mm

  
Neha Dasika, Principal Management Analyst 2/20/2018

  
Gregory V. Priamos, Director County Counsel 2/14/2018

**WORK ORDER AGREEMENT**  
**FOR**  
**FRENCH VALLEY AIRPORT**  
**REHABILITATION OF THE RUNWAY 18-36, TAXIWAY A,**  
**AND CONNECTOR TAXIWAY PAVEMENTS**  
**ENGINEERING DESIGN SERVICES**  
**BY AND BETWEEN**  
**RIVERSIDE COUNTY ECONOMIC DEVELOPMENT AGENCY**  
**AND**  
**MEAD & HUNT, INC.**

This Agreement is made and entered into this 27<sup>th</sup> day of February, 2018, by and between the COUNTY OF RIVERSIDE by and through the Economic Development Agency (EDA), a public body corporate politic in the State of California (hereinafter "COUNTY"), and MEAD AND HUNT, INC., (hereinafter "CONSULTANT").

**RECITALS**

**WHEREAS**, the proposed services provided in this Agreement are necessary to design rehabilitation of runway and taxiway pavements critical to the airport's operation.

**WHEREAS**, the COUNTY has selected CONSULTANT to provide services based on Request for Proposal (RFP) for Airport Consulting Services that included runway and taxiway rehabilitation; and

**WHEREAS**, the COUNTY and the CONSULTANT have entered into a MASTER SERVICE AGREEMENT, dated 9th day of September, 2014, the terms of which apply to this Work Order Agreement; and

**WHEREAS**, CONSULTANT is uniquely qualified based on their prior knowledge by completing design and construction projects for French Valley Airport; and

**WHEREAS**, CONSULTANT has agreed to provide such services to COUNTY.

**NOW THEREFORE**, in consideration of the mutual covenants contained herein, the parties hereto agree as follows:

1. **DESCRIPTION OF SERVICES**: CONSULTANT shall provide services for the design engineering for the Rehabilitation of the Runway 18-36, Taxiway A, and Connector Taxiway Pavements project at French Valley Airport, as outlined and specified in Exhibit "A", which is attached hereto and by this reference incorporated herein.

1.1 CONSULTANT represents and maintains that it is skilled in the professional calling necessary to perform all services, duties, and obligations required by this Agreement to fully and adequately complete the project. CONSULTANT shall perform the services and duties in conformance to and consistent with the standards generally recognized as being employed by professionals in the same discipline in the State of California. CONSULTANT further represents and warrants to the COUNTY that it has all licenses, permits, qualifications, and approvals of whatever nature are legally required to practice its profession. CONSULTANT further represents that it shall keep all such licenses and approvals in effect during the term of this Agreement.

2. **PERIOD OF PERFORMANCE**: CONSULTANT shall commence performance upon date of execution of this Agreement and complete performance within twelve (12) months. CONSULTANT will diligently and responsibly pursue the performance of the services required of it by this Agreement through project completion unless the work is altered by written amendment(s) pursuant to the MASTER SERVICES AGREEMENT between COUNTY and CONSULTANT, dated September 9, 2014, currently in place. In the event the services described in this fully executed work order are not completed during the term of the MASTER SERVICES

AGREEMENT, though the work order was executed by the parties while the MASTER SERVICES AGREEMENT was in effect, CONSULTANT shall continue to be obligated to perform the services and the COUNTY shall be obligated to pay for such services as provided in this work order.

3. **COMPENSATION:** The COUNTY shall pay the CONSULTANT for services performed and expenses incurred in accordance with Exhibit A, Scope of Services.

3.1 CONSULTANT shall be paid a LUMP SUM amount not-to-exceed Eighty-five Thousand Nine Hundred Fifteen Dollars (\$85,915.00) for Engineering Design and Bidding Services described in Exhibit "A", Description of Tasks in Phases I, II, III & IV. CONSULTANT shall submit invoices monthly to the COUNTY for progress payments based on the performance of the total work completed to date.

4. **CONFLICT OF INTEREST:** CONSULTANT shall have no interest, and shall not acquire any interest, direct or indirect, which will conflict in any manner or degree with the performance of services required under this Agreement.

5. **DESIGNATED REPRESENTATIVES:** The following individuals are designated as representatives of the AGENCY and CONSULTANT respectively to act as liaison between the parties:

**AGENCY**

Tim Miller  
Aviation Director  
Economic Development Agency for the  
County of Riverside  
3403 10<sup>th</sup> St., Suite 400  
Riverside, CA 92501  
Phone: (951) 955-4838  
Fax: (951) 955-6686  
Email: TLMiller@rivco.org

**CONSULTANT**

Robert A. Casagrande  
Department Manager  
Mead and Hunt, Inc.  
1360 19<sup>th</sup> Hole Drive, Suite 200  
Windsor, CA 95492  
Phone: 707-526-5010  
Fax: 608-273-6391  
Email: bob.casagrande@meadhunt.com

Any change in designated representatives shall be promptly reported to the other party in order to ensure proper coordination.

6. **NOTICES:** All correspondence and notices required or contemplated by this Agreement shall be delivered to the respective parties at the addresses set forth below and are deemed submitted one (1) day after their deposit in the United States Mail, postage prepaid:

**AGENCY**


Tim. Miller  
Aviation Director  
Riverside County, EDA  
3403 10<sup>th</sup> Street, Suite 400  
Riverside, CA 92501

**CONSULTANT**


Jon J. Faucher  
Vice President  
Mead & Hunt, Inc.  
1360 19<sup>th</sup> Hole Drive, Suite 200  
Windsor, CA 95492

IN WITNESS WHEREOF, the parties hereto have caused their duly representatives to execute this Agreement.

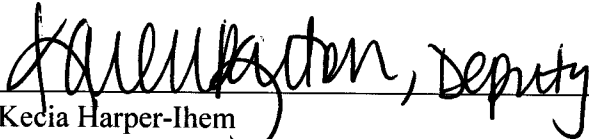
**COUNTY OF RIVERSIDE**

  
\_\_\_\_\_  
Chuck Washington, Chairman  
Board of Supervisors

**MEAD AND HUNT, INC.**

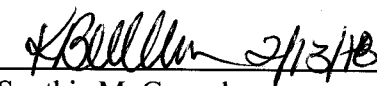
  
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Jon J. Faucher  
Vice President

**ATTEST:**

  
\_\_\_\_\_  
Kecia Harper-Ihem  
Clerk of the Board

**APPROVED AS TO FORM:**

Gregory P. Priamos  
County Counsel

  
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Synthia M. Gunzel  
Deputy County Counsel

## EXHIBIT A

### DESIGN ENGINEERING SCOPE OF SERVICES

for

### FRENCH VALLEY AIRPORT, RIVERSIDE COUNTY

### Rehabilitation of Runway 18-36, Taxiway A and Connector Taxiway Pavements

August 15, 2017

#### PROJECT DESCRIPTION

The Engineering Design Services to be provided by Mead & Hunt, Inc. (Consultant) are described herein and detail airport improvements for pavement rehabilitation at the French Valley Airport (Airport) in the City of Marietta, Riverside County (County), California.

The proposed project is to design the rehabilitation of ageing pavement on the Airport's primary runway, Runway 18-36, the parallel Taxiway A, and the five connector taxiways (Project). The pavements were visually inspected and detailed in the Airport Pavement Management System report, dated June 2013, and rated as "Fair" and "Good." The runway consists of an area of approximately 55,000 square yards. The connector taxiways consist of an area of approximately 6,500 square yards of pavement; Taxiway A has an area of approximately 31,500 square yards. The project rehabilitation is anticipated to include preparation of the pavement surface by pressure washing, crack cleaning and filling of minor size cracks, saw cutting and repair of major size cracks, a slurry seal of the pavements, and the application of new pavement markings. The estimated cost of construction for this work is estimated at \$863,000.

#### CONSULTANT EXPERTISE

The Consultant's "Project Team" includes Civil Engineers, registered in the State of California to practice their professions, and are experienced in the evaluation and design of airport improvement projects in accordance with FAA standards.

#### DESIGN SERVICE PHASES

The following details the scope of services to be provided by Consultant.

##### Phase I Contract Administration and Coordination

This phase involves those activities required for defining the scope of project, negotiating contract and subcontracts, and general coordination and administration, including (but not limited to) the following activities:

##### 1.0 PROJECT SCOPING

##### 1.1 Preliminary Meetings with the County

Consultant will confer with the County to ascertain project requirements, finances, schedules, and other pertinent matters and shall meet with Federal Aviation Administration (FAA) if needed and other concerned agencies and parties on matters affecting the project and shall arrive at a



mutual understanding of such matters with the County. The Consultant and County shall discuss what type of environmental documentation (Environmental Assessment or Categorical Exclusion) will be needed and/or what has been prepared for the project and included in the work scope. The County shall provide the Consultant with any environmental documents available. Meetings with the County shall also determine the need for topographical surveying and pavement/geotechnical testing. It is anticipated that there will be a maximum of 1 meeting with the County and/or the FAA, with some meetings occurring at the project location.

1.2 Prepare Project Scope of Work and Proposal

This includes preparing the scope of work and fee proposal and negotiating the contract scope and fee with the County. This also includes coordination with subconsultants for scopes and fees.

2.0 PREPARE CONTRACT AND SUBCONTRACTS

This includes preparing the Consultant-County contract and preparing any necessary subconsultant contracts required to complete the work described in this scope.

3.0 PROJECT COORDINATION (coordination with Design Team, County, FAA etc.)

Consultant will coordinate with the subconsultants, County, FAA, and other applicable agencies to complete the work elements of the Project. Weekly progress meetings will be held with the design team and/or County along with milestone meetings with the FAA.

4.0 GENERAL CONTRACT ADMINISTRATION

Provide general administration during the design and bidding process, as applicable. A Project Manager (PM) will be assigned to this Project to ensure continuity through all phases of work, as described in this scope. The Project Manager will be responsible for work performed by the Project Team. The Project Manager shall:

- a. Define tasks, schedules, and costs.
- b. Monitor work progress and resolve problems.
- c. Maintain up-to-date schedules.
- d. Coordinate with the County to receive their input; address their concerns; keep them informed regarding Project status; obtain their concurrence on Project scope, cost, and schedule; and obtain their input and approval of concepts and Final Design.
- e. Focus the efforts of the Consultant and Subconsultants to expedite the design of a high-quality, cost-effective Project that meets the needs of the County.
- f. Maintain quality control on all work of the Consultant and subconsultants. Implement and monitor a program of Quality Control (QC) and Quality Assurance (QA).
- g. Prepare invoices to submit to the County in accordance with the County's standard invoice requirements.

5.0 GRANT APPLICATION AND ADMINISTRATION

This element of work includes the preparation of the FAA Grant Application before design has been completed and revisions to the FAA Grant Application after bids are accepted. Preparation of the FAA Grant Application will include the following:

- a. Federal form SF-424 with correct current information
- b. Federal form 5100 with current information, costs and calculations, and requested funding.
- c. Calculate the Project's FAA National Priority Rating (or research available pavement PCN and PCI ratings if required)
- d. Draft the program narrative (scope of work), discussing the purpose and need of the work and the method of accomplishment
- e. Generate a draft project schedule
- f. Prepare a Project cost estimate summary for Project elements involved
- g. Calculate FAA, State, and local funding amounts
- h. Prepare a current Exhibit A Property Map from available resources
- i. Prepare a Project Sketch, indicating the proposed Project area to be submitted with application
- j. Prepare updated, draft, Sponsor Certifications (that pertain to this project; usually 4 certifications) for County Signatures.
- k. Prepare updated, draft, Grant Assurances for County Signatures.
- l. Prepare updated, draft, Title VI Assurances for County Signatures.
- m. Assist County with information submittal to FAA.
- n. Communicate with FAA on behalf of the County if so requested.

The Consultant will prepare an electronic "application package" as a pdf. and submit to the County for approval and signatures. County will send signed application package to the FAA for grant processing.

#### PHASE I DELIVERABLES

- 1) Draft Scope of Services – One (1) electronic file
- 2) Final Scope of Services – Two (2) original hard copies
- 3) Executed Contract – Two (2) originals hard copies
- 4) Grant Application – One (1) electronic file to County

#### Phase II Preliminary Design (60%)

##### 6.0 TOPOGRAPHICAL SURVEYING - NIC<sup>1</sup>

##### 7.0 GEOTECHNICAL INVESTIGATION

###### 7.1 Coordination for Geotechnical Work

This task includes data collection, review of as-built plans, and compiling available existing geotechnical information in order to gather information on existing soil conditions and past geotechnical or pavement test results. Coordination will be done with the geotechnical sub-consultant to schedule work and establish any work constraint parameters.

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<sup>1</sup> NIC – Not in Contract

## 7.2 Establish Project Testing Requirements

The Consultant will determine the type and frequency of geotechnical testing required for the project. The testing shall consider such items as pavement type, design methodology, type of wheel loading, and weight of design aircraft (e.g. greater than or less than 60,000 lbs.). The Consultant will use this information to perform the following tasks:

- a. Determine soil boring locations and frequency of testing.
- b. Develop a project sketch showing location and coordinates of borings.
- c. Determine soil sampling locations and types of soils testing required.

## 7.3 Field Work and Laboratory Testing (Subconsultant )

- a. Four (4) borings within the limits of the runway pavement as shown. The borings shall be to a depth of at least 10 feet below the surface.
- b. Perform two in-place CBR tests and two laboratory CBR tests.
- c. Prepare boring graphic logs including:
  - Location
  - Date performed
  - Type of exploration
  - Surface elevation
  - Depth of materials with particular detail on the pavement and base course layers.
  - Sample identification numbers
  - Classification
  - Water table
  - Standard penetration test (SPT) - Compaction tests of in situ material at 6" below pavement section, then 12" below pavement section, then 18" below pavement section.
- d. Soil Testing Requirements
  - i. Standard Test Method for Particle-Size Analysis of Soils (ASTM D 422). Provide a minimum of four (4) tests.
  - ii. Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils (ASTM D 4318). Provide a minimum of four (4) tests.
  - iii. Moisture-Density Relations of Soils. Use ASTM Method D 698, Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort. Provide a minimum of four (4) tests.
- e. Provide Unified Soil Classification per ASTM D 2487.
- f. Provide recommendations for preparation of subgrade and for subgrade stabilization techniques by mechanical means (with or without stabilization fabrics).
- g. Provide an analysis and recommendation for use of existing aggregate base and asphalt concrete blend for use and recycled base for pavement section.
- h. Provide an analysis for susceptibility for soil shrinkage and/or expansion and swelling

## 7.4 Analyze Data

After receiving the testing report from the geotechnical firm, the Consultant will analyze the data and any existing previous geotechnical data, consisting of the following tasks:

- a. Review geotechnical recommendations.

- b. Determine appropriate data for pavement design.
  - c. Input data for computer modeling with topographical survey data.
  - d. Prepare pavement data and soil information for incorporation onto plan sheets.
  - e. Evaluate existing pavement sections for potential recycling and reuse.
  - f. Evaluate shrink, swell, and consolidation potential.
- 8.0 PREPARE PLAN SHEETS FOR PRELIMINARY SUBMITTAL  
Consultant will complete a project layout sheet that will depict the proposed improvements.
- 9.0 PREPARE FAA PAVEMENT DESIGN REPORT AND FAA FORM 5100. - NIC
- 10.0 PREPARE PRELIMINARY SURFACE DRAINAGE ANALYSIS - NIC
- 11.0 PREPARE PRELIMINARY COST ESTIMATE
- 11.1 Calculate Estimated Preliminary Quantities  
The Consultant will calculate necessary quantities for the various work items. Quantities will be consistent with the specifications and acceptable quantity calculation practices.
- 11.2 Prepare Preliminary Cost Estimate  
The Consultant will provide a preliminary cost estimate based on record cost data and similar work. Cost estimate shall be included in the Preliminary Design Report.
- 12.0 PREPARE PRELIMINARY DESIGN REPORT (PDR)  
To document the results of a preliminary design, a PDR will be prepared. The report will include the summary of the project scope, geometrics, pavement design, electrical design, drainage design, pavement marking, environmental issues, construction phasing plans, and a project schedule. The report will also contain details on alternative design concepts that were investigated as part of the preliminary design effort and recommendations on which alternatives to pursue. An analysis of the impacts of construction on airport operations will be included, as well as an Engineer's cost estimate. This report will also discuss funding, budget, strategies for bidding the project and potential use of bid alternates. The information will be presented in letter report format for review by the County.
- 13.0 PREPARE FAA FORM 7460  
Consultant will complete a notice of proposed construction or alteration as per FAA guidelines and will send the form to the County to be submitted to the FAA.
- 14.0 PREPARE ENVIRONMENTAL DOCUMENTATION (Categorical Exclusion)  
The Consultant has performed a Categorical Exclusion (CAT EX) Document for the site development project. The FAA has reviewed and approved the CAT EX in March 2017 for this project.
- 15.0 PHASE II PROJECT MEETINGS  
The Consultant will arrange and lead meetings during Phase II, as described in the subtasks below. The Consultant will produce drawings and handouts, as needed, to conduct each meeting and will prepare minutes to document the discussions.

15.1 Present Preliminary Design and Cost Recommendations to Airport

The Consultant will prepare for and conduct a meeting by phone to present the findings of the preliminary engineering phase and cost recommendations for the project.

15.2 Coordination Meetings (with FAA, local agencies, subconsultants, etc)

The Consultant will conduct a coordination meeting by phone, with the FAA, the County, and other airport stake holders as needed.

**PHASE II DELIVERABLES**

Prior to the completion of Phase II, the Consultant will deliver the following information to the County:

- 1) Preliminary Design Report – Three (3) hard copies and one electronic file
- 2) Plans in support of preliminary design – Three (3) hard copies and one electronic file
- 3) Geotechnical Report – Three (3) hard copies
- 4) FAA Form 7460 –Electronic file
- 5) CAT EX – Three (3) hard copies

**Phase III Final Design (95% and Final)**

**16.0 PREPARE PLANS**

Plan sheets will be prepared depicting the proposed improvements as indicated under Project Description. The following is a general list of drawings that will be used as a guideline. Actual number and title of drawings may be modified during the design phase, as required.

**General:**

- G-001 Cover Sheet, Sheet Index and Symbols
- G-002 Legend and Abbreviations
- G-021 Project Layout Plan
- G-081 Construction Safety and Phasing Plan

**Civil:**

**General**

- C-001 Civil Legend
- C-021 Erosion Control Plans
- C-031 Erosion Control Details

**Site**

- C-201 Surface Preparation Plan
- C-301 Typical Sections
- C-311 Paving Details

**Marking**

- C-651 Marking Plans
- C-671 Marking Details

## 17.0 PREPARE SPECIFICATIONS

The Consultant will assemble the specifications and bid documents for County to use in obtaining competitive bids for the work. All documents shall meet current FAA Standards for Airport Improvement Program (AIP) funded projects.

### 17.1 Prepare Bidding and Contract Documents

The Consultant will prepare bidding and contract documents including, but not limited to, Invitation for Bids (Notice to Bidders), Instruction to Bidders, Proposal (Bid Form), FAA Required Certification forms, DBE Requirements, Sample Construction Contract/Agreement, Bid Bond, Performance Bond, and Payment Bond. All documents shall be based on the current County standards, modified to include all FAA required provisions and bid forms.

### 17.2 Required Federal Provisions

Federal laws and regulations require that specific contract provisions be included in federally funded contracts, as established within the grant assurances. Consultant will include the Required Federal Provisions in the bid documents. These requirements cover items such as:

- Affirmative Action Plan
- Buy American Preferences
- Civil Rights
- Disadvantaged Business Enterprises
- Federal Fair Labor Standards Act (Minimum Wage)
- Lobbying and Influencing Federal Employees
- Occupational Safety and Health Act
- Davis Bacon Requirements
- Equal Employment Opportunity
- Nonsegregated Facilities
- Drug-free Workplace
- Texting and Driving

### 17.3 FAA General Provisions (Advisory Circular 150-5370-10G)

FAA requires these provisions be included and complied with for all projects funded with federal grant monies through the Airport Improvement Program (AIP), as established within the grant assurances. The Consultant will include the FAA General Provisions and provide any project specific information. These provisions cannot be modified other than where noted in the document.

### 17.4 Prepare Special Provisions for Airport Construction

The Consultant will prepare Special Provisions to address, or expand on, conditions specific to construction on airports that require additional clarification. They will include (as applicable), but are not limited to the following items:

- General Safety Requirements, Airfield Safety and Traffic Control
- Record Drawings
- Time Limitations
- Liquidated Damages
- Barricades and Runway Closure Markers
- Radio Communication

- Access and Security
- Work Hour Limitations
- SWPPP Requirements and guidance for Contractor

**17.5 Prepare Technical Specifications**

The Consultant will prepare Technical Specifications using FAA Standard Specifications and FAA Specification format. For work not covered by FAA Standards, County or Caltrans Standard Specifications shall be used. Technical Specifications anticipated for this project include, but not limited to, the following:

- A-105, Mobilization
- P-101, Surface Preparation
- P-609, Bituminous Asphalt Seal Coat
- P-620, Runway and Taxiway Marking
- P-626, Emulsified Asphalt Slurry Seal Surface Treatment

**18.0 PREPARE FINAL SURFACE DRAINAGE ANALYSIS AND FINAL STORM SEWER DESIGN - NIC**

**19.0 PREPARE LIGHTING LAYOUT AND CIRCUIT CALCULATIONS - NIC**

**20.0 UPDATE AIRPORT SIGNING AND MARKING PLAN - NIC**

**21.0 EROSION CONTROL PLAN**

The Consultant will develop an Erosion Control Plan for the project that is in general conformance with BAT (Best Available Technology) management practices. The plan will detail types of erosion control measures recommended for the site in addition to other information needed for the NPDES permitting application. The Contractor shall prepare the SWPPP. This information shall include, but not limited to:

- a. Project Location
- b. Size of Disturbance of Project
- c. Amount of Impervious Surface
- d. Hydrologic Classification of Site
- e. Receiving Waters
- f. Site Drainage Overview

**22.0 PREPARE SPONSOR CERTIFICATIONS, JUSTIFICATIONS FOR MODIFICATIONS TO FAA STANDARD SPECIFICATIONS, AND MODIFICATION OF AIRPORT CONSTRUCTION STANDARDS (if required).**

**22.1 Sponsor Certifications**

The Consultant will complete the required Sponsor Certifications verifying the plans and specifications were developed in accordance with Federal guidelines, and the Equipment/Construction certification.

**22.2 Justifications for Modification of Standards**

If any minor additions or modifications are required to be made to FAA Standards (General Provisions and/or Technical Specifications) for project clarification,, justifications for the change must be provided to the FAA. Consultant will prepare justifications as needed.

22.3 Modification of Airport Standards

If necessary, the Consultant will prepare a Request for Modification of Airport Standards, if found to be necessary for the project. The form will be submitted to the County for acceptance and signature. Signed copies will be uploaded to the FAA online portal.

Any justifications / modifications documents will be included in the final Engineer's Design Report.

23.0 PREPARE 95% SUBMITTAL

Based on County's written review comments on the 60% submittal, prepare 95% engineering and design of all improvements. This work shall include:

- a. Prepare and submit 95% plans.
- b. Prepare and submit 95% specifications and bid documents.
- c. Prepare and submit 95% cost estimate.
- d. Perform internal QA/QC for all documents included in the 95% submittal.
- e. Conduct 95% review meeting with the County to go over submitted data and discuss schedule for upcoming submittals.

24.0 PREPARE AND SUBMIT FINAL PLANS AND SPECIFICATIONS

A final set of plans, specifications, and contract documents will be prepared that will incorporate revisions, modifications, and corrections determined during the FAA and County's review of the ninety-five percent (95%) submittal.

25.0 PREPARE AND SUBMIT FINAL COST ESTIMATE

25.1 Calculate Estimated Final Quantities.

Update estimated quantities from the Preliminary Design to reflect County comments included to produce Final Plans.

25.2 Prepare Final Cost Estimate.

Using the final quantities calculated following the completion of the plans and specifications, the Consultant will prepare the final construction cost estimate. The estimate will be based on information obtained from previous projects, contractors, material suppliers, and other databases available.

26.0 PREPARE AND SUBMIT ENGINEER'S DESIGN REPORT

Prepare the Engineer's Design Report in conformance with FAA requirements. The report will include a summary and explanation of the project design including (as applicable) geometrics, pavement and electrical design, drainage design, pavement marking, environmental issues, phasing plans, and a project schedule. The report will also contain any alternative design concepts that were investigated and evaluated. A construction operation plan will be included, as well as a final Engineer's cost estimate. This report will also include details for bidding the project and recommended bid alternates. The report shall include (as applicable), but not be limited to, the following:

- a. Project Scope
- b. Design Standards
- c. Topographic Survey Summary
- d. Geotechnical Investigation Summary (report included as an Appendix)



- e. Design Geometrics (reference Federal Advisory Circular 150/5300-13A)
- f. Pavement Design Analysis (reference Federal Advisory Circular 150/5320-6E)
- g. Drainage Considerations
- h. Electrical Considerations
- i. Utility Considerations
- j. Pavement Marking Considerations
- k. Airport Operational Safety (reference Federal Advisory Circular 150/5370-2F)
- l. Construction Estimate
- m. Project Schedule and Construction Phasing
- n. Construction Inspection and Testing
- o. Deviations From FAA Standards
- p. Sponsor / Engineer's Certification for Project Plans and Specifications
- q. Sponsor Certification for Equipment/Construction Contract

#### 27.0 PREPARE A CONSTRUCTION SAFETY AND PHASING PLAN

Prepare Construction Safety and Phasing Plan (CSPP) in conformance with FAA Standards and AC 150/5370-2F, *Operations on Airports During Construction*. The CSPP will be uploaded to the FAA online portal for review and approval, after approval by County. The final CSPP will be included in the Bid Document package and will include the following information:

- a. Overview & Purpose
- b. Construction Safety Responsibility of Each Party
- c. Construction Phasing, including (but not limited to):
  - Phasing and time limitations
  - Areas and operations affected by construction
  - Wildlife management
  - Hazardous materials management
  - Inspection requirements
  - Marking and signs for access routes
  - Protection of runway and taxiway critical areas
  - Safety plan compliance document
- d. Construction Safety and Phasing Plan Sheet(s)

#### 28.0 PHASE III PROJECT MEETINGS

The Consultant will arrange and lead the phone meetings as described below. The Consultant will produce drawings and handouts, as needed, to conduct each meeting and shall issue minutes to document the discussion. The following meetings shall be included in Phase III:

- a. 95% Submittal review phone meeting (1)
- b. Final Submittal review phone meeting (1)
- c. Coordination meetings with County and FAA (If required)

#### PHASE III DELIVERABLES

During the Phase III design effort, the Consultant will deliver the following information to the County:

- 1) 95% Plans, Specifications, and Contract Documents – Three (3) hard copies and one electronic file

- 2) 95% Engineer's Design Report – Three (3) hard copies and one electronic file
- 3) Final Plans, Specifications and Contract Documents – Three (3) hard copies and one electronic file
- 4) Final Engineer's Design Report – Three (3) hard copies and one electronic file
- 5) Construction Safety and Phasing Plan – Will be included in the final set of bid documents as an Appendix.

## **Phase IV Bid Administration**

### **29.0 PREPARE ADVERTISEMENT FOR BIDS**

Required advertisement dates and bidding dates will be established. Consultant will prepare the Advertisement in conformance with FAA and local standards and submit a copy of the advertisement to the County. The County shall arrange for the legal advertising in conformance with local standards and shall pay for the associated cost of advertising.

### **30.0 BID DOCUMENTS DISTRIBUTION**

Consultant shall prepare and upload Contract Documents to Quest Construction Data Network (QuestCDN.com). Contractors interested in bidding on the project can register and pay a fee (approximately \$20) to download the Contract Documents. Bidders will be responsible for submitting their bids to the District similar to previous projects.

### **31.0 RESPOND TO BIDDERS QUESTIONS**

During the bidding process, the Consultant will be available to clarify bidding issues with contractors and suppliers, and for consultation with the various entities associated with the project. This item also includes contacting bidders to generate interest in the project.

### **32.0 PREPARE AND DISTRIBUTE ADDENDA**

Consultant will issue up to one (1) bid addendum as appropriate to interpret, clarify, or change the bidding documents as required by the County or the FAA. Addenda will be made available to the plan holders electronically via QuestCDN. Any addenda that are generated as a sole result of the County's error or omission, or FAA request, will be considered as extra services, and the Consultant will be reimbursed for this effort as an amendment to this contract.

### **33.0 PRE-BID CONFERENCE**

Consultant will arrange for and conduct Pre-Bid Conference. The Project Manager and Project Engineer will attend and conduct the Pre-Bid Conference with potential contractors and the County to review the project and answer questions. The conference will be conducted at the Airport and will include a site inspection. Meeting minutes will be prepared and distributed.

### **34.0 BID OPENING – NIC**

Consultant will not attend the bid opening.

### **35.0 BID REVIEW AND BID TABULATION**

Consultant will advise County as to the acceptability of any subcontractors, suppliers, and other persons and organizations proposed by the bidders and as to the acceptability of substitute materials and equipment proposed by bidders. The Consultant will prepare a spreadsheet that includes all bid items for the purpose of evaluating the lowest bidder. The Consultant will input the as-bid unit prices

into the spreadsheet and verify mathematical computations of the bids. The Consultant will then provide recommendations to the County as to the name of the Apparent Low Bidder.

#### 36.0 PREPARE RECOMMENDATION FOR AWARD

The Consultant will prepare a Recommendation of Award for the County to accept or reject the bids as submitted. If rejection is recommended, the Consultant will supply an explanation for their recommendation and possible alternative actions that the County can pursue to complete the project. Once the Contract Award is made, the Consultant will distribute the bid tabulations at request of the County.

#### PHASE IV DELIVERABLES

- 1) Bid Documents – upload to Quest site.
- 2) Bid Tabulation –One electronic file.
- 3) Recommendation for Award –One electronic file.

#### SCHEDULE OF COMPLETION

The Consultant will start work described under Phase I – Contract Administration and Coordination upon Notice to Proceed from the County. The Consultant will complete work called for under Phase II – Preliminary Design (60%) within forty-five (45) working days from the date the County issues the Notice to Proceed with the work. Consultant will complete work described in Phase III – Final Design (95%) within thirty (30) working days of receipt of the County's review comments on the preliminary submittal. Consultant will complete the final Engineer's Design Report and final contract documents for use in bidding within fifteen (15) working days of the receipt of County and FAA review comments on the 95% submittal.

#### COMPENSATION FOR SERVICES

Payment for all work outlined in this Scope of Services, Phase I, II, III, and IV shall be a lump sum fee of Eighty-Five Thousand Nine Hundred Fifteen Dollars (\$85,915.00). This fee shall include labor, materials, expenses, and incidentals necessary to complete the work as described herein. An Engineering Services Cost Estimate is included as *Exhibit B* to this Scope of Services

Aviation Services Design Engineering Cost Estimate

PROJECT NUMBER: 3171300-121874.01  
 DATE: 9/1/17  
 REV. NO: 0

AIRPORT: French Valley Airport  
 LOCATION: Marietta, California  
 AP PROJECT NO. 3-06-0338-029-2017  
 PROJECT DESCRIPTION: Runway 18-36, Taxiway A and Connector Taxiway Pavement Rehabilitation

Topographic Surveying (for Design) NIC	\$	10,000.00
Geotechnical Investigation (for Design)	\$	-
Cultural and Biological Field Investigations	\$	-
Expenses	\$	-

1.0 Project Scoping	\$	3,105.00
2.0 Prepare Contract and Sub-Contracts	\$	686.00
3.0 Project Coordination	\$	2,750.00
4.0 General Contract Administration	\$	595.00
5.0 Grant Application and Administration Expenses	\$	1,664.00
<b>TOTAL PROJECT ADMINISTRATION AND COORDINATION</b>	<b>\$</b>	<b>12,800.00</b>

6.0 Topographic Surveying - NIC	\$	-
7.0 Geotechnical Investigation	\$	3,515.00
8.0 Prepare Plan Sheets for Preliminary Submittal	\$	2,644.00
9.0 Prepare FAA Pavement Design Report and FAA Form 5100 - NIC	\$	-
10.0 Prepare Preliminary Surface Drainage Analysis - NIC	\$	-
11.0 Prepare Preliminary Cost Estimate	\$	2,708.00
12.0 Prepare Preliminary Design Report	\$	2,631.50
13.0 Prepare FAA Form 7460	\$	631.50
14.0 Prepare Environmental Documentation	\$	8,535.50
15.0 Phase II Project Meetings Expenses	\$	728.00
	\$	175.00
<b>TOTAL PHASE II FINAL DESIGN (NIC &amp; PHASE II)</b>	<b>\$</b>	<b>30,999.50</b>

16.0 Prepare Plans	\$	15,775.00
17.0 Prepare Specifications	\$	6,070.00
18.0 Prepare Final Surface Drainage Analysis and Final Storm Sewer Design - NIC	\$	-
19.0 Prepare Lighting Layout and Circuit Calculations - NIC	\$	-
20.0 Update Airport Signing and Marking Plan - NIC	\$	-
21.0 Erosion Control Plan	\$	643.00
22.0 Prepare Sponsor Certifications	\$	318.00
23.0 Prepare 95% Submittal	\$	783.50
24.0 Prepare and Submit Final Plans and Specifications	\$	2,954.00
25.0 Prepare and Submit Final Cost Estimate	\$	1,569.50
26.0 Prepare and Submit Engineers Design Report (EDR)	\$	1,481.50
27.0 Prepare Construction Safety and Phasing Plan	\$	2,156.50
28.0 Phase III Project Meetings Expenses	\$	1,000.00
	\$	1,168.63
<b>TOTAL PHASE III FINAL DESIGN (NIC &amp; PHASE III)</b>	<b>\$</b>	<b>38,999.53</b>

29.0 Prepare Advertisement for Bids	\$	756.00
30.0 Bid Documents Distribution	\$	1,252.00
31.0 Respond to Bidders Questions	\$	1,700.50
32.0 Prepare and Distribute Addendums	\$	2,671.00
33.0 Pre-Bid Conference	\$	1,402.00
34.0 Bid Opening - NIC	\$	-
35.0 Bid Review and Bid Tabulation	\$	1,234.50
36.0 Prepare Recommendation for Award Expenses	\$	496.00
	\$	918.63
<b>TOTAL BIDDING AND AWARD</b>	<b>\$</b>	<b>12,160.63</b>
<b>TOTAL PROJECT FEES</b>	<b>\$</b>	<b>64,960.66</b>

EXHIBIT B

Item No.	Senior Associate	Senior Project Engineer	Project Engineer	Engineer III	Engineer II	Senior Engineering Technician	Technician III	Administrative Assistant	Clerical	Total Hours	Cost Summary
<b>PHASE I CONTRACT ADMINISTRATION AND COORDINATION</b>											
1.0 Project Scoping											
1.1 Preliminary meetings with the Sponsor	1	3	0	3	0	0	0	3	3	13	\$ 1,909.00
1.2 Prepare project scope of work and proposal	0	3	0	4	0	0	0	4	0	8	\$ 1,200.00
Estimated Total Man-hours	1	6	0	7	0	0	0	7	3	21	
Summary Costs	\$271.00	\$1,320.00	\$0.00	\$592.00	\$0.00	\$0.00	\$0.00	\$686.00	\$240.00		\$ 3,109.00
2.0 Prepare Contract and Sub-Contracts											
Estimated Total Man-hours	0	2	0	1	0	0	0	1	0	4	\$ 688.00
Summary Costs	\$0.00	\$440.00	\$0.00	\$148.00	\$0.00	\$0.00	\$0.00	\$98.00	\$0.00		\$ 686.00
3.0 Project Coordination											
Estimated Total Man-hours	0	2	10	0	0	0	0	5	0	17	\$ 2,750.00
Summary Costs	\$0.00	\$440.00	\$1,820.00	\$0.00	\$0.00	\$0.00	\$0.00	\$490.00	\$0.00		\$ 2,760.00
4.0 General Contract Administration											
Estimated Total Man-hours	1	1	0	0	0	0	0	1	0	3	\$ 589.00
Summary Costs	\$271.00	\$220.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$98.00	\$0.00		\$ 589.00
5.0 Grant Application and Administration											
Estimated Total Man-hours	0	1	4	0	0	0	3	3	1	12	\$ 1,664.00
Summary Costs	\$0.00	\$220.00	\$728.00	\$0.00	\$0.00	\$0.00	\$342.00	\$294.00	\$60.00		\$ 1,664.00
<b>Expenses</b>											
Subconsultant	0	0	0	0	0	0	0	0	0	0 Days	\$ 75.00
Auto Rental	0	1	0	0	0	0	0	0	0	1 Days	\$ 75.00
Mileage	0	175	0	0	0	0	0	0	0	175 Miles	\$ 0.535
Lodging	0	2	0	0	0	0	0	0	0	2 Days	\$ 150.00
Airline Costs	0	1	0	0	0	0	0	0	0	1 Trips	\$ 800.00
Meals	0	3	0	0	0	0	0	0	0	3	\$ 50.00
Tips	0	0	0	0	0	0	0	0	0	0 Days	\$ 250.00
Miscellaneous	0	0	0	0	0	0	0	0	0	0 Days	\$ 200.00
Other	0	0	0	0	0	0	0	0	0	0	\$ 50.00
Other	0	0	0	0	0	0	0	0	0	0	\$ 100.00
Other	0	0	0	0	0	0	0	0	0	0	\$ 50.00
Total Expenses											\$ 1,218.63
<b>PHASE I CONTRACT ADMINISTRATION AND COORDINATION TOTAL</b>											\$ 10,019.82



**EXHIBIT B**

Item No.	Senior Associate	Senior Project Engineer	Project Engineer	Engineer III	Engineer II	Senior Engineering Technician	Technician III	Administrative Assistant	Clerical	Total Hours	Cost Summary
	\$271.00	\$220.00	\$182.00	\$148.00	\$137.00	\$165.00	\$114.00	\$98.00	\$80.00		
<b>16.0 Prepare Plans</b>											
<b>General</b>											
G-001	0	0.5	0	1	0	4	0	0	0	5.5	\$ 918.00
G-002	0	0.25	0	1	0	4	0	0	0	5.25	\$ 761.00
G-021	0	0.25	0	1	0	8	0	0	0	9.25	\$ 1,523.00
G-081	0	1	0	1	0	10	0	0	0	12	\$ 2,018.00
<b>Civil - General</b>											
C-001	0	0.25	0	1	0	1	2	0	0	4.25	\$ 586.00
C-021	0	0.5	0	1	0	4	0	0	0	5.5	\$ 918.00
C-031	0	0.5	0	1	0	2	2	0	0	5.5	\$ 816.00
<b>Civil - Site</b>											
C-201	0	1	0	1	0	6	0	0	0	8	\$ 1,358.00
C-301	0	0.5	0	1	0	4	0	0	0	5.5	\$ 918.00
C-311	0	0.5	0	1	0	2	4	0	0	7.5	\$ 1,044.00
<b>Civil - Marking</b>											
C-651	0	0.25	0	1	0	6	0	0	0	7.25	\$ 1,083.00
C-671	0	0.25	0	1	0	4	0	0	0	5.25	\$ 863.00
<b>Civil - X-Sections</b>											
C-901	0	0.25	0	1	0	0	6	0	0	7.25	\$ 887.00
<b>Electrical</b>											
E-201	0	0.5	0	1	0	4	0	0	0	5.5	\$ 918.00
E-601	0	0.5	0	1	0	2	0	0	0	3.5	\$ 588.00
<b>Estimated Total Man-hours Summary Costs</b>											
	\$0.00	\$1,540.00	\$0.00	\$2,220.00	\$0.00	\$9,735.00	\$0.00	\$0.00	\$0.00	101	\$ 15,775.00
<b>17.0 Prepare Specifications</b>											
17.1	0.5	1	2	1	0	0	0	2	0	6.5	\$ 1,063.50
17.2	0	1	2	1	0	0	0	2	0	6	\$ 928.00
17.3	0.5	1	2	1	0	0	0	2	0	6.5	\$ 1,063.50
17.4	0.5	1	2	4	0	0	0	2	0	9.5	\$ 1,507.50
17.5	0.5	1	2	4	0	0	0	2	0	9.5	\$ 1,507.50
<b>Estimated Total Man-hours Summary Costs</b>											
	2	5	10	11	0	0	0	10	0	38	\$ 6,070.00
<b>18.0 Prepare Final Surface Drainage Analysis and Final Storm Sewer Design - NIC</b>											
	\$542.00	\$1,100.00	\$1,820.00	\$1,628.00	\$0.00	\$0.00	\$0.00	\$980.00	\$0.00		\$ 6,070.00
<b>Estimated Total Man-hours Summary Costs</b>											
	6	0	6	0	0	6	0	0	0	6	\$ 807.00
<b>Estimated Total Man-hours Summary Costs</b>											
	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0	\$ 0.00

**EXHIBIT B**

Item No	Senior Associate	Senior Project Engineer	Project Engineer	Engineer III	Engineer II	Senior Engineering Technician	Technician III	Administrative Assistant	Clerical	Total Hours	Cost Summary
19.0											
	0	0	0	0	0	0	0	0	0	0	
	\$271.00	\$220.00	\$182.00	\$148.00	\$137.00	\$165.00	\$114.00	\$98.00	\$80.00		
	0	0	0	0	0	0	0	0	0	0	
	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
20.0											
	0	0	0	0	0	0	0	0	0	0	
	\$271.00	\$220.00	\$182.00	\$148.00	\$137.00	\$165.00	\$114.00	\$98.00	\$80.00		
	0	0	0	0	0	0	0	0	0	0	
	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
21.0											
	0	0	1	2	0	1	0	0	0	4	\$ 643.00
	\$0.00	\$0.00	\$182.00	\$296.00	\$0.00	\$165.00	\$0.00	\$0.00	\$0.00		\$ 643.00
	0	1	0	0	0	0	0	1	0	2	\$ 318.00
	\$0.00	\$220.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$98.00	\$0.00		\$ 318.00
	0.5	1	1	1	0	0	0	1	0	4.5	\$ 783.50
	\$135.50	\$220.00	\$182.00	\$148.00	\$0.00	\$0.00	\$0.00	\$98.00	\$0.00		\$ 783.50
24.0											
	1	2	2	2	2	3	3	4	1	20	\$ 2,954.00
	\$271.00	\$440.00	\$364.00	\$296.00	\$274.00	\$495.00	\$342.00	\$392.00	\$80.00		\$ 2,954.00
25.0											
	0	0	0	3	0	0	3	0	0	6	\$ 786.00
	\$0.00	\$0.00	\$0.00	\$420.00	\$0.00	\$0.00	\$126.00	\$0.00	\$0.00		\$ 786.00
	0.5	1	1	1	0	0	0	1	0	4.5	\$ 783.50
	\$135.50	\$220.00	\$182.00	\$148.00	\$0.00	\$0.00	\$0.00	\$98.00	\$0.00		\$ 783.50
26.0											
	0.5	2	2	0	0	5	0	4	0	13.5	\$ 2,156.50
	\$135.50	\$440.00	\$364.00	\$0.00	\$0.00	\$825.00	\$0.00	\$392.00	\$0.00		\$ 2,156.50
27.0											
	0	2	2	0	0	0	0	2	0	6	\$ 1,000.00
	\$0.00	\$440.00	\$364.00	\$0.00	\$0.00	\$0.00	\$0.00	\$196.00	\$0.00		\$ 1,000.00
Expenses											
	0	0	0	0	0	0	0	0	0	0	\$ 75.00
	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0 Days	\$ 75.00
	0	1	0	0	0	0	0	0	0	1	\$ 75.00
	\$0.00	\$175.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	1 Days	\$ 75.00
	0	2	0	0	0	0	0	0	0	175	\$ 0.535
	\$0.00	\$350.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	Miles	\$ 93.63
	0	1	0	0	0	0	0	0	0	2	\$150.00
	\$0.00	\$150.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	Trips	\$ 300.00
	0	2	0	0	0	0	0	0	0	1	\$600.00
	\$0.00	\$1200.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	Trips	\$ 600.00
	0	2	0	0	0	0	0	0	0	2	\$250.00
	\$0.00	\$500.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	Days	\$ 100.00
	0	0	0	0	0	0	0	0	0	0	\$ 45.00
	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	Other	\$ 45.00
	0	0	0	0	0	0	0	0	0	0	\$100.00
	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	Other	\$ 100.00
	0	0	0	0	0	0	0	0	0	0	\$ 50.00
	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	Other	\$ 50.00
	0	0	0	0	0	0	0	0	0	0	\$ 50.00
	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	Other	\$ 50.00
	0	0	0	0	0	0	0	0	0	0	\$ 1,168.63
	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	Total Expenses	\$ 1,168.63

PHASE III FINAL DESIGN (6% & FINAL) TOTAL \$ 3,399.83



**EXHIBIT B**

Item No.	Senior Associate	Senior Project Engineer	Project Engineer	Engineer III	Engineer II	Senior Engineering Technician	Technician III	Administrative Assistant	Clerical	Total Hours	Cost Summary
	\$271.00	\$220.00	\$182.00	\$148.00	\$137.00	\$165.00	\$114.00	\$98.00	\$80.00		
30.0	<b>Prepare Advertisement for Bids</b>										
	Estimated Total Man-hours	0	0	0	0	0	0	4	0	6	\$ 756.00
	Summary Costs	\$0.00	\$0.00	\$364.00	\$0.00	\$0.00	\$0.00	\$382.00	\$0.00		\$ 756.00
31.0	<b>Bid Documents Distribution</b>										
	Estimated Total Man-hours	0	1	2	0	0	0	6	1	10	\$ 1,252.00
	Summary Costs	\$0.00	\$220.00	\$364.00	\$0.00	\$0.00	\$0.00	\$568.00	\$80.00		\$ 1,252.00
32.0	<b>Respond to Bidders Questions</b>										
	Estimated Total Man-hours	0	3	5	0	5	0	2	1	16	\$ 2,671.00
	Summary Costs	\$0.00	\$660.00	\$910.00	\$0.00	\$825.00	\$0.00	\$196.00	\$80.00		\$ 2,671.00
33.0	<b>Prepare and Distribute Addendums</b>										
	Estimated Total Man-hours	0.5	1	0	3	3	2	1	1	11.5	\$ 1,700.50
	Summary Costs	\$135.50	\$220.00	\$0.00	\$444.00	\$495.00	\$228.00	\$96.00	\$80.00		\$ 1,700.50
34.0	<b>Pre-Bid Conference</b>										
	Estimated Total Man-hours	0	3	3	0	0	0	2	0	8	\$ 1,402.00
	Summary Costs	\$0.00	\$660.00	\$546.00	\$0.00	\$0.00	\$0.00	\$196.00	\$0.00		\$ 1,402.00
35.0	<b>Bid Opening - NYC</b>										
	Estimated Total Man-hours	0	0	0	0	0	0	0	0	0	\$ 0.00
	Summary Costs	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$ 0.00
36.0	<b>Bid Review and Bid Tabulation</b>										
	Estimated Total Man-hours	0.5	1	3	0	0	0	2	0	7.5	\$ 1,234.50
	Summary Costs	\$135.50	\$220.00	\$546.00	\$0.00	\$0.00	\$0.00	\$196.00	\$0.00		\$ 1,234.50
37.0	<b>Prepare Recommendation for Award</b>										
	Estimated Total Man-hours	0	1	0	0	0	0	2	1	4	\$ 496.00
	Summary Costs	\$0.00	\$220.00	\$0.00	\$0.00	\$0.00	\$0.00	\$196.00	\$80.00		\$ 496.00
	<b>Expenses</b>										
	Subconsultant	0	0	0	0	0	0	0	0	0	\$ 75.00
	Auto Rental	0	1	0	0	0	0	0	0	1	\$ 75.00
	Mileage	0	175	0	0	0	0	0	0	175	\$ 93.63
	Lodging and Per Diem	0	1	0	0	0	0	0	0	1	\$ 150.00
	Travel and Airline Costs	0	1	0	0	0	0	0	0	1	\$ 600.00
	Computer Costs	0	0	0	0	0	0	0	0	0	\$ 50.00
	Trips	0	0	0	0	0	0	0	0	0	\$ 250.00
	Miscellaneous	0	0	0	0	0	0	0	0	0	\$ 100.00
	Other	0	0	0	0	0	0	0	0	0	\$ 50.00
	Other	0	0	0	0	0	0	0	0	0	\$ 100.00
	Other	0	0	0	0	0	0	0	0	0	\$ 50.00
	Other	0	0	0	0	0	0	0	0	0	\$ 50.00
	<b>Total Expenses</b>										\$ 918.63

**MEAD & HUNT, Inc.**  
**California Billing Rate Schedule**  
**Effective January 1, 2018**

**Standard Billing Rates**

Clerical.....	\$73.00 / hour
Interior Designer, Technical Editor .....	\$106.00 / hour
Senior Editor .....	\$156.00 / hour
Registered Land Surveyor.....	\$120.00 / hour
Accounting, Administrative Assistant.....	\$100.00 / hour
Technician I, Technical Writer .....	\$92.00 / hour
Technician II, Surveyor - Instrument Person .....	\$106.00 / hour
Technician III .....	\$115.00 / hour
Technician IV .....	\$132.00 / hour
Senior Technician .....	\$160.00 / hour
Engineer I, Scientist I, Architect I, Planner I .....	\$120.00 / hour
Engineer II, Scientist II, Architect II, Planner II.....	\$130.00 / hour
Engineer III, Scientist III, Architect III, Planner III .....	\$140.00 / hour
Senior Engineer, Senior Scientist, Senior Architect, Senior Planner, Senior Economist.....	\$165.00 / hour
Project Engineer, Project Scientist, Project Architect, Project Planner .....	\$190.00 / hour
Senior Project Engineer, Senior Project Scientist, Senior Project Architect, Senior Project Planner.....	\$222.00 / hour
Senior Associate, Principal, Senior Client/Project Manager .....	\$300.00 / hour

**Expenses**

Geographic Information or GPS Systems .....	\$32.00 / hour
Total Station Survey Equipment .....	\$16.00 / hour
Charges for other equipment may appear in a proposal	
Out-Of-Pocket Direct Job Expenses.....	cost plus 15%
Such as reproductions, sub-consultants / contractors, etc.	

**Travel Expense**

Company or Personal Car Mileage .....	\$ IRS rate / mile*
* the current IRS rate as of Jan. 1, 2018 is: <b>54.5 cents per mile</b>	
Air and Surface Transportation.....	cost plus 15%
Lodging and Sustenance.....	cost plus 15%

**Billing & Payment**

Travel time is charged for work required to be performed out-of-office. A minimum of two hours will be billed for any work out-of-office.

Invoicing is on a monthly basis for work performed. Payment for services is due within 30 days from the date of the invoice. An interest charge of 1.5% per month is made on the unpaid balance starting 30 days after the date of invoice.

This schedule of billing rates is effective January 1, 2018, and will remain in effect until December 31, 2018, unless unforeseen increases in operational costs are encountered. We reserve the right to change rates to reflect such increases.