

FORM APPROVED COUNTY COUNSEL 10/22/14  
 BY: GREGORY P. PRIAMOS DATE

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

270



**SUBMITTAL DATE:**  
 November 12, 2014

**FROM:** Economic Development Agency

**SUBJECT:** French Valley Airport – South Apron Pavement Rehabilitation Project District 3/District 3 [\$126,375] Federal Aviation Administration Airport Improvement Grant Funds 95%, Airport Budget Fund (22350) 2.5%, State Division of Aeronautics Funds 2.5%

**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 South Apron Pavement Rehabilitation Project - 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.

**BACKGROUND:**

Summary

(Commences on Page 2)

Robert Field  
 Assistant County Executive Officer/EDA

FINANCIAL DATA	Current Fiscal Year:	Next Fiscal Year:	Total Cost:	Ongoing Cost:	POLICY/CONSENT (per Exec. Office)
<b>COST</b>	\$ 126,375	\$ 0	\$ 126,375	\$ 0	Consent <input type="checkbox"/> Policy <input checked="" type="checkbox"/>
<b>NET COUNTY COST</b>	\$	\$ 0	\$	\$	

**SOURCE OF FUNDS:** Federal Aviation Administration Airport Improvement (AIP) Grant Funds (95%) Airport Budget Fund (22350) 2.5%, State Division of Aeronautics Funds 2.5%  
**Budget Adjustment:** No  
**For Fiscal Year:** 2014/15

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

APPROVE

BY:   
 Rohini Dasika

County Executive Office Signature

**MINUTES OF THE BOARD OF SUPERVISORS**

FISCAL PROCEDURES APPROVED  
 PAUL ANGULO, CPA, AUDITOR-CONTROLLER  
 BY: Esteban Hernandez 11/12/14

Departmental Concurrence

- A-30
- 4/5 Vote
- Positions Added
- Change Order

Prev. Agn. Ref.:

District: 3/3

Agenda Number:

3-24

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

Economic Development Agency

**FORM 11:** French Valley Airport – South Apron Pavement Rehabilitation Project District 3/District 3 [\$126,375]

Federal Aviation Administration Airport Improvement Grant Funds 95%, Airport Budget Fund (22350) 2.5%,

State Division of Aeronautics Funds 2.5%

**DATE:** November 12, 2014

**PAGE:** 2 of 2

**BACKGROUND:**

**Summary**

The purpose of the project is to replace the asphalt pavement for 36,950 square yards of the South Apron area at French Valley Airport.

The South Apron Pavement Rehabilitation Project 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 Citizens and Businesses**

The rehabilitation of the South Apron will improve the airport operations and enhance capacity and safety.

**SUPPLEMENTAL:**

**Additional Fiscal Information**

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

WORK ORDER AGREEMENT  
FOR  
**FRENCH VALLEY AIRPORT – SOUTH APRON PAVEMENT REHABILITATION**  
BY AND BETWEEN  
RIVERSIDE COUNTY ECONOMIC DEVELOPMENT AGENCY  
AND  
MEAD & HUNT, INC.

**This Agreement** is made and entered into this \_\_\_ day of \_\_\_\_\_, 2014, 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 & HUNT, INC., (hereinafter "CONSULTANT").

**RECITALS**

**WHEREAS**, the proposed services provided in this Agreement are necessary to maintain airport pavement conditions, critical to the airport's operation.

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

**WHEREAS**, the COUNTY and the CONSULTANT have entered into a MASTER SERVICE AGREEMENT, dated 27 day of August, 2014 the terms of which apply to this Work Order Agreement; and

**WHEREAS**, CONSULTANT is uniquely qualified based on their prior knowledge by completing prior 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 to design and prepare construction plans and specifications for South Apron Pavement Rehabilitation, the Scope of Services, which is attached hereto as Exhibit A, 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 August 27, 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 the attached Exhibit "A", Scope of Services.

3.1 CONSULTANT shall be paid a LUMP SUM amount of One Hundred Twenty-six Thousand Three Hundred Seventy-five Dollars (\$126,375.00) for Engineering Design Services as described in Exhibit "A", Scope of Services. 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 COUNTY and CONSULTANT respectively to act as liaison between the parties:

<b>AGENCY</b>	<b>CONSULTANT</b>
Daryl Shippy Airports Manager County of Riverside, EDA Aviation 3403 10 <sup>th</sup> Street Suite 400 Riverside, CA 92501 Phone: (951) 955-9418 Fax: (951) 955-6686 Email: <a href="mailto:dshippy@rivcoeda.org">dshippy@rivcoeda.org</a>	Robert Casagrande Project Manager Mead and Hunt, Inc. 133 Aviation Boulevard, Suite 100 Santa Rosa, CA 95403 Phone: (707) 526-5010 Fax (707) 526-9721 Email: <a href="mailto:bob.casagrande@meadhunt.com">bob.casagrande@meadhunt.com</a>

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

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**

Daryl Shippy  
Airports Manager  
County of Riverside, EDA Aviation  
P.O. Box 1180  
Riverside, CA 92502

**CONSULTANT**

Jon J. Faucher  
Vice President  
Mead & Hunt, Inc.  
133 Aviation Boulevard, Suite 100  
Santa Rosa, CA 95403

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

**COUNTY OF RIVERSIDE**

\_\_\_\_\_  
Jeff Stone  
Chairman, Board of Supervisors

**MEAD & HUNT, INC.**

  
\_\_\_\_\_  
Jon J. Faucher  
Vice President

**ATTEST**

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

**APPROVED AS TO FORM:**

FORM APPROVED COUNTY COUNSEL  
BY:   
NEAL R. KIPNIS DATE

**Scope of Services  
for  
Design Engineering for South Apron Pavement Rehabilitation  
at  
FRENCH VALLEY AIRPORT  
County of Riverside, EDA Aviation  
AIP Project No.3-06-0338-027-2014  
August 26, 2014**

**DESCRIPTION**

This project involves the replacement of the asphalt pavement for 36,950 square yards of the South Apron area at French Valley Airport. The estimated budget for construction of this project is approximately One Million Nine Hundred Fifty Thousand Dollars. This Work Scope includes the survey, geotechnical soils investigation, engineering design, construction safety and phasing planning, and preparation of contract documents for the replacement pavement with tie downs, as detailed herein.

**DESIGN SERVICE PHASES**

**PHASE I     CONTRACTS AND PROJECT SCOPING**

This phase involves those activities required for defining the scope of project, negotiating contract and subcontracts, and general coordination and administration for the duration of the project, 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 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 a separate the work scope. The COUNTY shall provide the CONSULTANT with any existing 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 2 meetings 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 subconsultant contracts.

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 in the Contract. Weekly progress meetings will be held via telcon with the design team and COUNTY along with monthly meetings with the FAA.

4.0 GENERAL CONTRACT COORDINATION

Provide general coordination during the Phase I – Contracts and Project Scoping. A Project Manager will be assigned to this Project to ensure continuity through all phases of work. The Project Manager will be responsible for all work performed by the Project Team. The Project Manager shall:

- a. Define tasks, schedules, and costs.
- b. Monitor work progress and address 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 quality based, cost-effective Project that meets the needs of the COUNTY.
- f. Provide internal quality control on all work of the CONSULTANT and subconsultants by implementation and monitoring of a Quality Control (QC) and Quality Assurance (QA) program.
- 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 Grant Application before design has been completed and revisions to the Application after bids are accepted. Preparation of the Application will include the following:

- a. Prepare Federal SF424 form
- b. Prepare Project Funding Summary
- c. Prepare Program Narrative, discussing the Purpose and Need of the work and the Method of Accomplishment
- d. Prepare Preliminary Estimate
- e. Prepare the Sponsor Certification for COUNTY signature
- f. Attach the current FAA Grant Assurances



- g. Prepare an exhibit to be submitted with application showing location and limits of the project.
- h. Obtain photographs of project site to be submitted with application (if possible)

The CONSULTANT will submit the Application to the COUNTY for approval and signatures. After obtaining the necessary signatures, the COUNTY will forward at least two (2) copies of the signed Application to the FAA for further processing.

**PHASE I DELIVERABLES**

- Draft Scope of Services – Electronic submittal
- Final Scope of Services – Two (2) originals
- Executed Contract – Two (2) originals
- Grant Application – Electronic submittal

**PHASE II PRELIMINARY DESIGN**

**6.0 TOPOGRAPHICAL SURVEYING**

**6.1. Coordination to Collect Existing Data and Locate Existing Facilities and Utilities**

CONSULTANT will coordinate the collection of existing data and locate known utilities. This task includes collection and review of as-built plans and available existing survey information in order to gather information on existing topography, facilities, and utilities. This also includes coordination for field utility locates with COUNTY and FAA. The CONSULTANT will coordinate with field survey crews to establish survey limits, coordinate access, establish survey schedule, and provide available survey control information.

**6.2. Survey Control**

Survey control will be established and used for design surveys. The CONSULTANT will provide the surveyor a drawing showing the location of the existing or established control for the project. The CONSULTANT will coordinate necessary bench loop and traverse procedures to verify accuracy of vertical and horizontal control points. The CONSULTANT will establish runway end coordinates and runway centerline alignments, and tie these into the project survey control.

**6.3. Field Work (Subcontract)**

Limits of survey work to be shown on a site plan. CONSULTANT may meet with subconsultant in the field to coordinate collection of survey data for the project.

**6.4. Convert Survey Data for Design Software**

This work includes analyzing the topographical surveying data and preparing the data for use with computer modeling. Included are the following separate tasks:

- a. Establish design coordinates and alignments to be used for CAD drawings.
- b. Input raw survey data into the computer program in order to sort data into company standard layers for efficient analyzing.
- c. Verify survey data from previous project with latest field survey.
- d. Sort all data points by layers and description for computer modeling.

- e. Verify surveyor horizontal and vertical control.
- f. Prepare digital terrain model (DTM) of existing ground contours, pavement edges, roadways, electrical equipment, drainage features, buildings, fences, and other miscellaneous entities.
- g. Generate three-dimensional contour model from the DTM.
- h. Prepare and process data for pavement profiles, grading and/or paving cross sections, and drainage features.

## 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.

### 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 (Subcontract)

Limits of geotechnical work are shown on a site plan. CONSULTANT may meet with subconsultant in the field to coordinate collection of field data for the project.

### 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

### 8.1 Project Layout Sheet

CONSULTANT will complete a project layout sheet that will depict the proposed improvements.

8.2 Design Alternatives

Compare full depth removal, dependent on geotechnical testing results, and replacement with new pavement section to:

- a. Removal of existing pavement section and replacement with stabilized subgrade, recycled base with new asphalt.
- b. Removal of existing pavement section and replacement with stabilized subgrade, use of recycled material for a sub-base, new aggregate base layer with new asphalt surface course.
- c. Removal of existing pavement section and replacement with stabilized subgrade, new aggregate base and new asphalt surface course.
- d. Removal of existing asphalt surface course and replace with new asphalt.

8.3 Planning Analysis

Review future apron expansion to south and vertical grade tie-in as well as reconfiguration of tie-downs.

9.0 PREPARE FAA PAVEMENT DESIGN REPORT AND FAA FORM 5100.

This task will consist of using information obtained in the geotechnical investigation to calculate the required pavement sections required to support the design vehicle or aircraft using FAA Advisory Circular 150/5320-6E, *Airport Pavement Design and Evaluation*.

The following effort will be completed under this task:

- a. Determine critical design aircraft or vehicle based on current and forecasted aircraft fleet mix and vehicular use.
- b. Verify the pavement section based on accepted FAA pavement design programs. The applicable design program to be used is FAARFIELD. Develop pavement design alternatives and make recommendations as to the most economical pavement section and/or rehabilitation alternative. A total of four pavement design alternatives will be evaluated.
- c. Evaluate interim and ultimate pavement strength requirements.
- d. Evaluate effects of pavement profile on adjacent operational areas and future pavement rehabilitation.
- e. Calculate sub-excavation, undercutting, and other techniques for subgrade stabilization, as necessary.
- f. Review proposed pavement analysis with FAA Engineer.
- g. Prepare pavement design narrative to describe the design procedure, historic design, and justification for the FAA and COUNTY.
- h. Prepare FAA Pavement Design Form 5100 for each separate pavement section for inclusion in the Preliminary Design Report and the final Engineer's Design Report.

10.0 PREPARE PRELIMINARY SURFACE DRAINAGE ANALYSIS

10.1 Preliminary surface drainage design will be completed in accordance with standard engineering practices, local requirements, and in accordance with the FAA Advisory Circular 150/5320-5D, *Surface Drainage Design*.

10.2 The CONSULTANT will also examine the need for a Storm Water Pollution Prevention Plan (SWPPP) to be provided by the Contractor to address the proposed development. The CONSULTANT will also determine which drainage permits will be needed by the proposed development.

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. The Preliminary 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, 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 Preliminary Cost Estimate. This report will also discuss funding, budget, strategies for bidding the project and potential use of bid alternates.

13.0 PREPARE FAA FORM 7460 (if required)

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 – **NIC**<sup>1</sup>

The Categorical Exclusion (CAT EX) Document for the project will be covered under a separate contract.

15.0 PRELIMINARY DESIGN PROJECT MEETINGS

The CONSULTANT will arrange and lead meetings at the conclusion of Phase II – Preliminary Design, as described in the subtasks below. The CONSULTANT will produce drawings and handouts, as needed, to conduct the meetings and will prepare minutes to document the discussions.

15.1 Present Preliminary Design Alternatives and Recommendations to COUNTY

The CONSULTANT will prepare for and conduct a meeting with the COUNTY to present the findings of the preliminary engineering phase presenting any alternatives and recommendations for the project.

15.2 Coordination Meetings (with FAA, Caltrans Division of Aeronautics, COUNTY, subconsultants, etc. and site investigation visits)

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<sup>1</sup> NIC = Not in Contract

The CONSULTANT will conduct additional coordination and attend one meeting including a site visit to the Airport (or other named site) as needed.

**PHASE II DELIVERABLES**

Prior to the completion of Phase II, the CONSULTANT will deliver the following information to the COUNTY:

- Preliminary Design Report (including Preliminary Cost Estimate) – Two (2) copies
- Plans in support of Preliminary Design – Three (3) copies
- Geotechnical Report – Two (2) copies
- FAA Form 7460 – Filed electronically

**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-041 Survey Control Plan
- G-081 Construction Safety and Phasing Plan

**Geotechnical:**

- B-051 Soil Boring Log Plan

**Civil:**

**General**

- C-021 Erosion Control Plans
- C-031 Erosion Control Details
- C-051 Demolition Plans
- C-061 Demolition Details

**Site**

- C-101 Grading and Drainage Plans
- C-141 Intersection Details
- C-201 Plan and Profiles
- C-301 Typical Sections
- C-311 Paving Details

**Marking**

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

**Cross Sections**

C-901 Cross Sections

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), List of Subcontractors, FAA Required Certifications, Equal Employment Opportunity Clauses, DBE Requirements, Suspension and Debarments Requirements, Certification of a Drug-free Workplace, 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 Prepare FAA Required Provisions

Prepare specifications detailing the current FAA Required Provisions for construction including: Requirements for Bids for AIP Contracts, Federal Contract Clauses and Requirements for Construction Contracts, Federal EEO Requirements, Requirements Under the DBE Program, Federal Wage Rates, and State Wage Rates.

17.3 Prepare General Provisions

The CONSULTANT will prepare General Provisions in conformance with the current COUNTY Standards. The CONSULTANT will review the COUNTY Standards to identify any conflicts with FAA requirements and shall submit any recommended modifications to the COUNTY for approval.

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, but are not limited to the following items:

- a. General Safety Requirements (Provided in the Construction Safety and Phasing Plan)
- b. Lines and Grades
- c. Record Drawings
- d. Material Testing
- e. Schedule of Values
- f. Time Limitations
- g. Liquidated Damages
- h. Barricades
- i. Access and Security
- j. Work Hours
- k. Dust Control

- l. SWPPP Requirements and guidance for Contractor
- m. Construction Water

17.5 Prepare Technical Specifications

The CONSULTANT will prepare Technical Specifications using FAA Standard Specifications and FAA Specification format whenever possible. For work not covered by FAA Standards, COUNTY or Caltrans modified Standard Specifications shall be used.

18.0 PREPARE FINAL SURFACE DRAINAGE ANALYSIS AND FINAL STORM SEWER DESIGN

Using the findings from the preliminary drainage analysis completed in Phase II, a final surface drainage and storm sewer design will be completed in accordance with standard engineering practices, local requirements, and the FAA Advisory Circular 150/5320-5D, *Airport Drainage Design*.

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 (AND MODIFICATION OF STANDARDS IF NECESSARY)

The CONSULTANT will complete the Sponsor Certifications verifying the plans and specifications were developed in accordance with Federal guidelines, and that the contract(s) complies with Federal grant program standards. If necessary, the CONSULTANT will also prepare a Request for Modification of Federal Construction Standards, if found to be necessary for the project. The certification will discuss modifications required under the bid packages. The certification will be submitted to the COUNTY for acceptance. Signed copies will be forwarded to the FAA along with final plans, contract documents, specifications, and Engineer's Design Report, which will include the certifications.

23.0 PREPARE 60% SUBMITTAL – **NIC**

**24.0 PREPARE 95% SUBMITTAL**

Based on COUNTY's written review comments on the Preliminary Design submittal, prepare 95% engineering and design documents 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 via telecom to go over submitted data and discuss schedule for upcoming submittals.

**25.0 PREPARE AND SUBMIT FINAL PLANS AND SPECIFICATIONS**

A final set of plans, specifications, and contract documents will be prepared incorporating revisions, modifications, and corrections determined during the FAA and COUNTY's review of the 95% submittal.

**26.0 PREPARE AND SUBMIT FINAL COST ESTIMATE**

**26.1 Calculate Estimated Final Quantities.**

**26.2 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.

**27.0 PREPARE AND SUBMIT ENGINEER'S DESIGN REPORT (EDR)**

Prepare the Engineer's Design Report in conformance with FAA requirements. The report will include a summary and explanation of the project design including geometrics, pavement 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, as well as the Final Engineer's Cost Estimate. This report will also include details for bidding the project and recommended bid alternates. The report shall include, 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. Pavement Marking Considerations
- i. Airport Operational Safety (reference Federal Advisory Circular 150/5370-2F)
- j. Construction Estimate
- k. Project Schedule and Construction Phasing
- l. Summary of Contract Documents



- m. Construction Inspection and Testing
- n. Deviations From FAA Standards
- o. Sponsor's Certifications for Project Plans and Specifications and Equipment/Contract Projects.

**28.0 PREPARE A CONSTRUCTION SAFETY AND PHASING PLAN**

CONSULTANT will prepare a Construction Safety and Phasing Plan (CSPP) in conformance with FAA AC 150/5370-2F. A draft of the CSPP will be submitted to the COUNTY for approval, and then digitally uploaded to the FAA site for approval. The final CSPP will be included with the project specifications/bid documents. The CSPP will be a bound report and will include the following items:

- a. Overview
- b. Purpose
- c. Construction Safety and Phasing Responsibilities
- d. Construction Safety and Phasing, including:
  - 1) Coordination
  - 2) Phasing and Time Limitations
  - 3) Areas and Operations Affected by Construction
  - 4) NAVAID Protection
  - 5) Contractor Access
  - 6) Wildlife Management
  - 7) Foreign Object Debris (FOD) Management and Dust Control
  - 8) Hazardous Materials (Hazmat) Management
  - 9) Notification of Construction Activities
  - 10) Inspection Requirements
  - 11) Underground Utilities and Notification Responsibilities
  - 12) Penalties
  - 13) Special Conditions
  - 14) Runway and Taxiway Visual Aids
  - 15) Marking and Signs For Access Routes
  - 16) Hazard Marking and Lighting
  - 17) Protection of Runway and Taxiway Critical Areas
  - 18) Other Limitations on Construction Safety Plan Compliance Document

**29.0 PHASE III PROJECT MEETINGS**

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

- a. 95% Submittal review meeting (1)
- b. Coordination meetings with COUNTY and FAA (2) (As needed)

**PHASE III DELIVERABLES**

During the Phase III design effort, the CONSULTANT will deliver the following information to the COUNTY:

- 95% Plans, Specifications, and Contract Documents – Three (3) copies each
- Final Plans, Specifications and Contract Documents – Three (3) hard copy sets of full and half-size plan sheets, specifications, and contract documents. Also, electronic copy of all documents.
- Final Engineer's Design Report – Two (2) bound copies
- Construction Safety and Phasing Plan – Two (2) bound copies (CSPP will also be included in final Bid Documents).

**PHASE IV BIDDING SERVICES**

**30.0 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. CONSULTANT will place ads in the various national trade journals.

**31.0 BID DOCUMENTS DISTRIBUTION**

31.1 CONSULTANT will prepare, reproduce and distribute bidding documents to interested contractors and suppliers at the cost of preparation. The CONSULTANT will keep a current list of plan holders and distribute this to interested parties upon request.

31.2 CONSULTANT will also prepare electronic copies of all bid documents and upload them to an online data network (QuestCDN.com) to enable bidders/contractors to obtain bid documents and all related project information electronically for a small fee.

These tasks also include coordination required to facilitate and monitor these requests.

**32.0 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.

**33.0 PREPARE AND DISTRIBUTE ADDENDA**

CONSULTANT will issue up to two (2) bid addenda as appropriate to interpret, clarify, or change the bidding documents as required by the COUNTY or the FAA. Addenda may be made available to the plan holders either through mail, electronic mail, online (via QuestCDN), hand delivering or via facsimile transmission. 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.

**34.0 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.

**35.0 BID OPENING (NIC)**

**36.0 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.

**37.0 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**

- Bid Documents – Hard copies as required for bidding, and electronic files.
- Bid Tabulation – Three (3) copies and electronic files.
- Recommendation for Award – Three (3) copies and electronic files.

**SCHEDULE OF COMPLETION**

The CONSULTANT will complete work described under Phase I – Contracts and Project Scoping, and coordination to perform topographical survey and geotechnical investigation of the site, and the work described under Phase II – Preliminary Design, within forty-five (45) working days from the date the COUNTY issues the Notice to Proceed with the work. A ten (10) working day period is scheduled for the COUNTY (and FAA, if required) to review plans, specifications, and cost estimates, and offer comments. The CONSULTANT will complete the 95% submittal detailed in Phase III – Final Design within twenty-five (25) working days of receipt of COUNTY's review comments on the Preliminary Design submittal. Another ten (10) working days review period is scheduled for both COUNTY and FAA review for the 95% submittal. The CONSULTANT will complete the 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**

- A.** Payment for all work outlined in Scope of Work, Phases I, II, III, and IV shall be a fixed fee of One Hundred Twenty-six Thousand Three Hundred Seventy-five Dollars (\$126,375.00). This fee shall include all labor, materials, expenses, and incidentals necessary to complete the work as described herein. An Engineering Services Cost Estimate is included as *Attachment 1* to this Scope of Services. Payments will be made monthly based on the percentage of work complete.
  
- B.** Payment for any additional services requested by the COUNTY will be performed on a time-and-expense basis in conformance with the Mead & Hunt, Inc. Standard Billing Rate Schedule (2014) included as *Attachment 2* to this Scope of Work. The CONSULTANT will establish the budget for additional services prior to the start of work and may not exceed the budget without written authorization from the COUNTY. Any additional services must be authorized in writing by the COUNTY.

Aviation Services Design Engineering Workscope

AIRPORT: French Valley Airport  
 LOCATION: Murietta, CA  
 AIP PROJECT NO. 3-06-0338-027-2014  
 PROJECT DESCRIPTION: South Apron Pavement Rehabilitation Design

PROJECT NUMBER: 3171300-140035.01  
 DATE: 11/22/13  
 REV. NO:

PHASE I - CONTRACTS AND PROJECT SCOPING	Engineering Fee
Project Scoping	\$6,519.00
Prepare Contract and Sub-Contracts	\$987.00
Project Coordination	\$3,591.00
General Contract Coordination	\$2,571.00
Grant Application and Administration	\$746.00
Expenses	\$200.00
<b>TOTAL PHASE I - CONTRACTS AND PROJECT SCOPING</b>	<b>\$14,614.00</b>
<b>PHASE II - PRELIMINARY DESIGN</b>	
Topographic Surveying	\$5,198.50
Geotechnical Investigation	\$5,821.50
Prepare Plan Sheets for Preliminary Submittal	\$5,538.00
Prepare FAA Pavement Design Report and FAA Form 5100	\$4,112.50
Prepare Preliminary Surface Drainage Analysis	\$2,661.50
Prepare Preliminary Cost Estimate	\$2,252.75
Prepare Preliminary Design Report	\$2,311.75
Prepare FAA Form 7460	\$645.00
Prepare Environmental Documentation (NIC)	\$0.00
Preliminary Design Project Meetings	\$2,696.75
Expenses	\$807.50
<b>TOTAL PHASE II - PRELIMINARY DESIGN</b>	<b>\$32,045.75</b>
<b>PHASE III - FINAL DESIGN (95% AND FINAL)</b>	
Prepare Plans	\$13,464.00
Prepare Specifications	\$6,376.75
Prepare Final Surface Drainage Analysis and Final Storm Sewer Design	\$2,487.00
Prepare Lighting Layout and Circuit Calculations (NIC)	\$0.00
Update Airport Signing and Marking Plan (NIC)	\$0.00
Erosion Control Plan	\$1,279.00
Prepare Sponsor Certifications (Plans & Specs, and Equipment-Construction)	\$578.00
Prepare 60% Submittal (NIC)	\$0.00
Prepare 95% Submittal	\$2,957.00
Prepare and Submit Final Plans and Specifications	\$2,957.00
Prepare and Submit Final Cost Estimate	\$1,656.00
Prepare and Submit Engineer's Design Report	\$2,185.00
Prepare Construction Safety and Phasing Plan	\$4,357.00
Phase III Project Meetings	\$1,827.00
Expenses	\$882.50
<b>TOTAL PHASE III - FINAL DESIGN (95% AND FINAL)</b>	<b>\$40,006.25</b>
<b>PHASE IV - BIDDING SERVICES</b>	
Prepare Advertisement for Bids	\$384.00
Bid Documents Distribution	\$1,779.00
Respond to Bidders Questions	\$740.75
Prepare and Distribute Addenda	\$1,480.00
Pre-Bid Conference	\$2,616.00
Bid Opening (NIC)	\$0.00
Bid Review and Bid Tabulation	\$1,162.75
Prepare Recommendation for Award	\$403.25
Expenses	\$1,132.50
<b>TOTAL PHASE IV - BIDDING SERVICES</b>	<b>\$9,708.25</b>
<b>AL MEAD &amp; HUNT FEES</b>	<b>\$96,375.00</b>

DIRECT SUB CONSULTANTS	Fee
Topographic Surveying (for Design)	\$ 10,000.00
Pavement/Soil Testing (for Design)	\$ 20,000.00
Other	
Other	
Other	
Other	
Other	
<b>TOTAL DIRECT SUB CONSULTANTS</b>	<b>\$30,000.00</b>

TOTAL MEAD & HUNT FEES	\$ 96,375.00
TOTAL DIRECT SUB CONSULTANTS	\$ 30,000.00
<b>TOTAL ENGINEERING FEES</b>	<b>\$ 126,375.00</b>











PHASE IV - BIDDING SERVICES												
30.0 Prepare Advertisement for Bids												
Estimated Total Man-hours	0	1	0	0	0	0	0	0	0	0	0	3
Summary Costs	\$0.00	\$210.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$184.00	\$0.00	\$0.00	\$394.00
31.0 Bid Documents Distribution												
Estimated Total Man-hours	0	0	3	0	0	0	0	0	6	10	19	
Summary Costs	\$0.00	\$0.00	\$477.00	\$0.00	\$0.00	\$0.00	\$0.00	\$552.00	\$750.00			\$1,779.00
32.0 Respond to Bidders Questions												
Estimated Total Man-hours	0	0	5	0	0	0	0	0	5	3	13	
Summary Costs	\$0.00	\$0.00	\$795.00	\$0.00	\$0.00	\$0.00	\$0.00	\$460.00	\$225.00			\$1,480.00
33.0 Prepare and Distribute Addenda												
Estimated Total Man-hours	0	1	0	3	0	0	0	1	0.25	5.25		
Summary Costs	\$0.00	\$210.00	\$0.00	\$420.00	\$0.00	\$0.00	\$92.00	\$18.75				\$740.75
34.0 Pre-Bid Conference												
Estimated Total Man-hours	0	8	0	0	8	0	0	0	0	0	16	
Summary Costs	\$0.00	\$1,680.00	\$0.00	\$936.00	\$0.00	\$0.00	\$0.00	\$0.00				\$2,616.00
35.0 Bid Opening (NIC)												
Estimated Total Man-hours	0	0	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	\$0.00	\$0.00	\$0.00
36.0 Bid Review and Bid Tabulation												
Estimated Total Man-hours	0.25	0	0	6	0	0	0	2	1	9.25		
Summary Costs	\$63.75	\$0.00	\$0.00	\$940.00	\$0.00	\$0.00	\$184.00	\$75.00				\$1,162.75
37.0 Prepare Recommendation for Award												
Estimated Total Man-hours	0.25	1	0	0	0	0	0	1	0.5	2.75		
Summary Costs	\$63.75	\$210.00	\$0.00	\$0.00	\$0.00	\$0.00	\$92.00	\$37.50				\$403.25
Expenses												
Subconsultant	0	0	0	0	0	0	0	0	0	0	0	Rate
Auto Rental	0	1	0	0	0	0	0	0	0	0	0	0 Days
Mileage	0	175	0	0	0	0	0	0	0	0	0	1.1 Days
Lodging and Per Diem	0	1	1	0	0	0	0	0	0	0	0	175 Miles
Travel and Airline Costs	0	0	0	0	0	0	0	0	0	0	0	2 Days
Computer Costs	0	0	0	0	0	0	0	0	0	0	0	0 Trips
Trips	0	1	1	0	0	0	0	0	0	0	0	0
Miscellaneous	0	0	0	0	0	0	0	1	0	0	0	2
Other	0	0	0	0	0	0	0	0	0	0	0	1
Other	0	0	0	0	0	0	0	0	0	0	0	1
Other	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0
											Total Expenses	\$1,132.50
											PHASE IV - BIDDING SERVICES TOTAL	\$9,708.25

**MEAD & HUNT, Inc.**  
**Western Standard Billing Rate Schedule**  
**Effective January 1, 2014**

**Standard Billing Rates**

Clerical .....	\$77.00 / hour
Interior Designer, Technical Editor .....	\$103.00 / hour
Senior Editor .....	\$152.00 / hour
Registered Land Surveyor .....	\$117.00 / hour
Accounting, Administrative Assistant.....	\$95.00 / hour
Technician I, Technical Writer .....	\$88.00 / hour
Technician II, Surveyor - Instrument Person .....	\$103.00 / hour
Technician III .....	\$111.00 / hour
Technician IV .....	\$134.00 / hour
Senior Technician .....	\$160.00 / hour
Engineer I, Scientist I, Architect I, Planner I .....	\$121.00 / hour
Engineer II, Scientist II, Architect II, Planner II.....	\$133.00 / hour
Engineer III .....	\$144.00 / hour
Senior Engineer, Senior Scientist, Senior Architect, Senior Planner, Senior Economist..	\$164.00 / hour
Project Engineer, Project Scientist, Project Architect, Project Planner .....	\$177.00 / hour
Senior Project Engineer, Senior Project Scientist, Senior Project Architect, Senior Project Planner.....	\$216.00 / hour
Senior Associate .....	\$263.00 / hour
Principal .....	\$273.00 / hour
Senior Client/Project Manager.....	\$273.00 / 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 .....	\$0.90 / mile
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.

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This schedule of billing rates is effective January 1, 2014, and will remain in effect until December 31, 2014, unless unforeseen increases in operational costs are encountered. We reserve the right to change rates to reflect such increases.