



**PURCHASING ITEM
FOR
COUNCIL AGENDA
Memo No. CP15-135**

1. Agenda Item Number: 27
2. Council Meeting Date: December 11, 2014

TO: MAYOR & COUNCIL

3. Date Prepared: November 25, 2014

THROUGH: CITY MANAGER

4. Requesting Department: Airport

5. SUBJECT: Project Agreement with Dibble Engineering for design services for the Airport Guidance Signs & Runway 4R/22L Precision Approach Path Indicators (PAPI) Replacement in an amount not to exceed \$78,820.

6. RECOMMENDATION: Staff recommends that Council award a project agreement to Dibble Engineering for design services for Airport Signage Replacement project AI1502-201, pursuant to the On-call Airport Facilities and Infrastructure Design Services Contract No. EN1005-101, in an amount not to exceed \$78,820.

7. BACKGROUND/DISCUSSION: The Airfield Guidance Signs project involves replacing or installing new mandatory runway/taxiway guidance signs. This work will not only address changes to the Federal Aviation Administration's (FAA) signage standards, it is anticipated to reduce maintenance time and costs, as most of the signs were installed in 1989.

On October 23, 2014, City Council adopted Resolution No. 4807 authorizing a grant agreement with the Arizona Department of Transportation (ADOT) for Grant No. E5S1K for \$703,800 for the design and construction of approximately 75 airfield guidance signs and Runway 4R/22L Precision Approach Path Indicators (PAPI) replacement. For the design portion of this project, the consultant will provide engineering design, specifications, quantities, construction cost estimating, and bid-phase services for the replacement of approximately 75 airfield guidance signs at Chandler Municipal Airport, as well as the replacement of the PAPI's on Runway 4R-22L.

8. EVALUATION: This project is being performed under the On-call Airport Facilities and Infrastructure Design Services Contract No. EN1005.101, to Dibble Engineering. The cost proposal for this project has been evaluated by Staff and is determined to be reasonable. The contract completion time is 180 calendar days following Notice to Proceed.

9. FINANCIAL IMPLICATIONS:

Fund Source: Under ADOT Grant No. E5S1K, ADOT pays 90% of the total project cost and the City is responsible for 10%.

<u>Acct. No.:</u>	<u>Fund Name:</u>	<u>CIP Funded:</u>	<u>Amount:</u>
417.4110.6910.6AI369	Airport Grant Capital	Yes	\$70,938.00
635.4110.6910.6AI369	Airport Operating		\$7,882.00

10. PROPOSED MOTION: Move that City Council award a project agreement to Dibble Engineering, for the design services for Airport Signage Replacement project AI1502-201, pursuant to On-call Airport Facilities and Infrastructure design Services Contract No. EN1005-101, in an amount not to exceed \$78,820.

ATTACHMENTS: Project Agreement, Location Map

APPROVALS

11. Requesting Department

Lori Quan
Lori Quan, Airport Administrator

12. Transportation & Development

Bob Fortier
Bob Fortier, Capital Projects Manager

13. Department Head

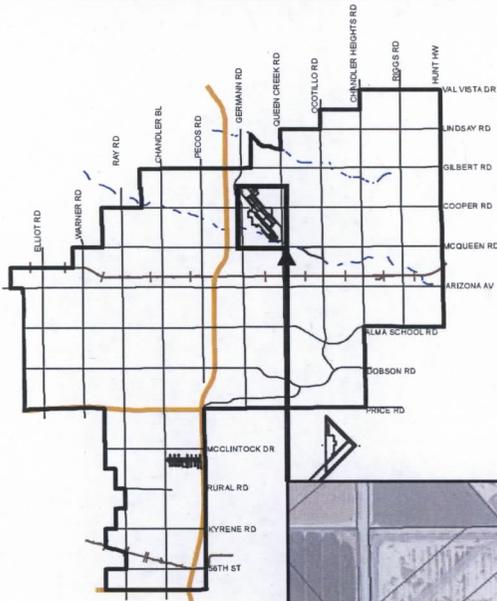
Marsha Reed
Marsha Reed, Assistant City Manager

14. City Manager

Rich Dlugas
Rich Dlugas, City Manager

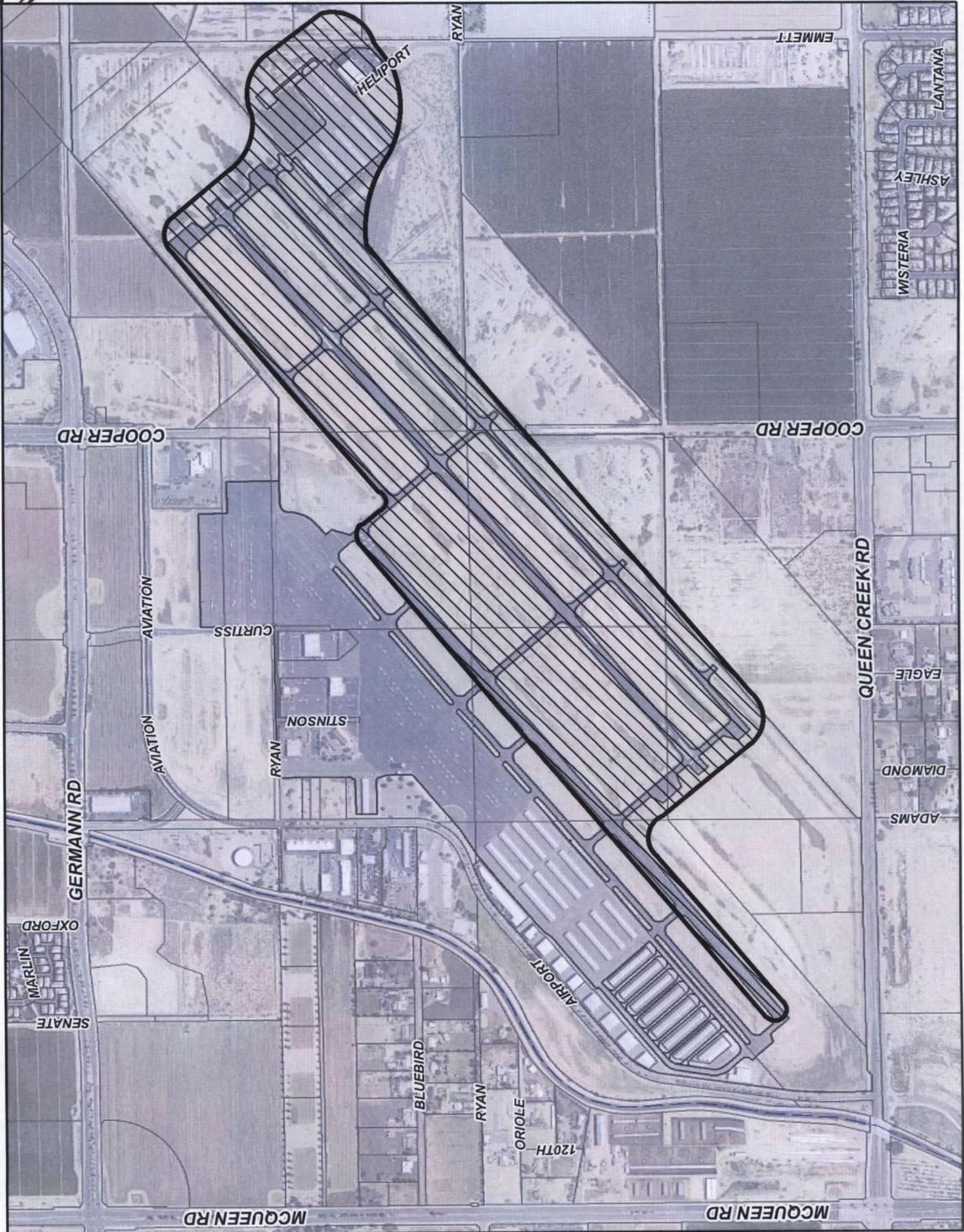


AIRPORT GUIDANCE SIGNS AND RUNWAY 4R/22L PRECISION APPROACH PATH INDICATORS (PAPI) REPLACEMENT AI1502.201



MEMO NO. CP15-135

PROJECT LOCATION



**PROJECT AGREEMENT
PURSUANT TO ANNUAL CONTRACT NO. EN1005.101**

PROJECT AGREEMENT NO: AI1502.201

This PROJECT AGREEMENT is made this _____ day of _____, 2014, by and between the City of Chandler, a municipal corporation (hereinafter referred to as "CITY") and Dibble & Associates Consulting Engineers, Inc. an Arizona corporation doing business as Dibble Engineering, Inc., (hereinafter referred to as "Annual Consultant") and is a project agreement entered into pursuant to Annual Contract No. EN1005.101.

CITY and Dibble Engineering, in consideration of the mutual covenants herein set forth, agree as follows:

ARTICLE 1 - DESCRIPTION OF WORK:

This project is Airport Guidance Signs & Runway 4R/22L Precision Approach Path Indicators (PAPI) Replacement, Project Number AI1502.201. The scope of work consists of preparing studies, design plans, special provisions, specifications, quantities, engineer's opinions of probable construction costs, and bid assistance services for the replacement of approximately 75 airfield guidance signs at Chandler Municipal Airport, as well as the replacement of the Precision Approach Path Indicators (PAPI's) on Runway 4R-22L, all as more particularly set forth in Exhibit A attached hereto and incorporated herein by reference.

The Annual Consultant shall not accept any change of scope, or change in contract provisions, unless issued in writing, as a contract amendment and signed by the Contract Administrator.

ARTICLE 2 - CONTRACT PRICE:

CITY shall pay Annual Consultant for completion of the Work in accordance with the Contract Documents a fee not to exceed Seventy Eight Thousand Eight Hundred Twenty Dollars (\$78,820) determined and payable as set forth in Annual Contract EN1005.101 and Exhibit B attached hereto and made a part hereof by reference.

ARTICLE 3 - CONTRACT TIME:

The contract time is One Hundred Eighty calendar days and Annual Consultant agrees to complete all work within One Hundred Eighty (180) calendar days of the date CITY issues a Notice to Proceed.

ARTICLE 4 - GENERAL:

This Project Agreement is entered into pursuant to Annual Contract No. EN1005.101 and the terms and conditions contained therein are incorporated herein by reference as if set forth in full.

IN WITNESS WHEREOF, the parties hereto have executed this Project Agreement on the day and year first written above.

This Project Agreement will be effective on this _____ day of _____, 2014.

CITY OF CHANDLER

FOR THE ANNUAL:

MAYOR DATE:

By: Steven E Rex
Title: COO

ADDRESS FOR NOTICE
City of Chandler
P.O. Box 4008, Mail Stop 407
Chandler, AZ 85244-4008
480-782-3307

ADDRESS FOR NOTICE
Mr. Steve Rex
Dibble Engineering
7500 N. Dreamy Draw Dr., Ste. 200
Phoenix, AZ 85020

APPROVED AS TO FORM:

Phone: 602-957-1155

City Attorney By: [Signature]

ATTEST:

City Clerk

EXHIBIT A SCOPE OF WORK

ANNUAL CONSULTANT shall provide the following specific services for this project:

A. Data Collection

1. Record Information: Gather and review all available as-built drawings, utility drawings, design drawings, studies, reports and plans relevant to the project.
2. Site Visit: Perform up to two (2) site visits with Airport staff in order to verify existing conditions and features, key constraints, and areas of noticeable or significant concern that may require additional considerations.

B. Topographical Survey (Allowance)

Limited topographic survey is included in this Scope of Work. While topographic survey is not anticipated to be needed for areas where new signs will be in the same locations as existing signs, topographic survey may be needed where new and existing sign locations differ and/or to establish horizontal and vertical control for the placement of the PAPI's along Runway 4R-22L. The survey will be a topographic survey only, based on existing City of Chandler Vertical Datum (NAVD 88) based on Chandler Benchmarks #40A, 41A, 42 and existing Airport control. For horizontal control, ANNUAL CONSULTANT will use the Arizona State Plane Coordinate System, Central Zone, US Survey feet.

ANNUAL CONSULTANT will gather and review all available as-built drawings, utility drawings, design drawings, studies, reports and past projects relevant to the project. All utility information useful on this project will be evaluated and included as needed.

A base map shall be drawn in AutoCad Civil 3D 2013 showing all visible existing features and utilities based on field observations and available record data.

C. Electrical/Signage Design (CR Engineers)

Prepare electrical design and construction drawings for the following:

- Construction phasing and detouring;
- Existing signage demolition and associated electrical infrastructure;
- New signage location plans and associated electrical infrastructure including sign bases, electrical hand holes, conduit, etc.
- New PAPI location plans associated electrical infrastructure including bases, electrical hand holes, conduit, etc.
- Electrical construction details

Also included is a complete airfield sign plan for the airport's use.

Refer to the attached Scope of Work provided by CR Engineers for more detailed scope information.

D. Civil Design

Prepare civil construction drawings, specifications and estimates for the following:

- Project location/site plan; Contractor staging, stockpile and borrow locations; and Contractor site access;
- Grading and drainage plans (as required for sign relocations);
- Siting for the replacement of the Runway 4R-22L PAPI's;
- Civil construction details.

E. FAA Documentation

1. Construction 7460's: Prepare the FAA Form 7460 "Notice of Proposed Construction or Alteration" identifying specific locations, durations, and heights of proposed equipment necessary for construction activities, as well as the permanent construction. 7460 documentation will be provided to the Airport Administrator for submittal to the FAA, or ANNUAL CONSULTANT may perform this on the Airport Administrator's behalf, if desired by the Airport Administrator.

F. Engineer's Reports

Prepare Draft and Final Engineer's Reports documenting design calculations and confirming conformance with FAA and City of Chandler design standards, as appropriate. The Engineer's Report will include identification of standards, any modifications to standards, estimation of project quantities, and Engineer's Opinions of Probable Construction Costs (EOPCC).

G. Specifications

1. Technical Specifications: Prepare Technical Specifications based on FAA, ADOT and MAG (as amended by the City of Chandler) requirements for the elements of the work.
2. Special Provisions/Front End Documents: Since this project is not FAA-funded, prepare City of Chandler-based project Contract Documents/Special Provisions based on the City of Chandler's most current template for Airport construction projects.

H. Bid-Phase Services

Bid-Phase Services: Engineering services during the bid-phase will be provided, including assistance with advertising preparations, attending the Pre-Bid meeting, responding to contractor questions, issuing addenda to the contract documents, and assisting City and Airport staff as necessary in evaluation of bids, including preparation of a Bid Tabulation, and making a recommendation for a construction contractor, if requested.

I. Design Meetings and Coordination

1. Owner Project Meetings: ANNUAL CONSULTANT's key staff will be available, along with sub-consultant staff as necessary, for periodic progress meetings with City and Airport staff, estimated at once per pre-final submittal (30% and 95%). ANNUAL CONSULTANT will attend the 30% and 100% (if required) design/submittal meetings in Phoenix at either the FAA Phoenix ADO or the ADOT Multimodal Planning Division offices.
2. Project Coordination: ANNUAL CONSULTANT will provide management of and coordination of the design team, and will provide coordination between design team members, City of Chandler/Chandler Municipal Airport staff, and other interested stakeholders as necessary.

J. Potholing/Utility Locating (Allowance – RT Underground)

ANNUAL CONSULTANT shall secure the services of a licensed utility locator on an as-needed basis to confirm the locations and depths of known utilities if such information has not been provided on as-built or record drawings. Location information shall be provided to the ANNUAL CONSULTANT in AutoCAD 2013 format.

K. Miscellaneous

1. This proposal is based on an assumed five-month design schedule for design from January through May 2015, with three (3) submittal milestones as described below.

The following are the anticipated hard copies for each submittal level:

30% Submittal

- One (1) full-size (24"x36") set of plans;

- Six (6) half-size (11"x17") sets of plans;
- Two (2) Draft Engineer's Reports with outline specifications, quantities and EOPCC;
- One (1) CD of PDF's of each of these submittal items.

95% Pre-Final Submittal

- Six (6) full-size sets of sealed plans;
- Six (6) half-size sets of sealed plans;
- Six (6) sets of sealed specifications;
- One (1) CD of PDF's of each of these submittal items.

100% Bid-Set Submittal

- Three (3) full-size sets of sealed plans with one (1) mylar cover sheet;
 - Six (6) half-size sets of sealed plans;
 - Two (2) sets of sealed specifications;
 - Two (2) Final Engineer's Reports with quantities and EOPCC;
 - One (1) CD of PDF's of each of these submittal items.
2. All plans are to be prepared in AutoCAD Civil 3D 2011 (or current version used by City of Chandler). All work will be prepared in conformance to MAG standards (as amended by the City of Chandler).
 3. Design Quality Control/Quality Assurance: ANNUAL CONSULTANT will perform quality control reviews of their own work prior to each submittal utilizing standard checking processes plus separate review of project documents by the ANNUAL CONSULTANT's Quality Control Manager.
 4. ANNUAL CONSULTANT will make monthly "Design and Progress Reports", including invoicing, to the City of Chandler in a format acceptable to the City.
 5. Construction phase services (construction administration, inspection, etc.) are not included in this proposal, and are anticipated to be contracted at a later date when the project proceeds to bidding.

EXHIBIT B FEE SCHEDULE

	PRINCIPAL	SR. PROJECT MANAGER	PROJECT MANAGER	SENIOR ENGINEER	ENGINEER (P.E.)	ASSISTANT ENG. (E.I.T.)	TECHNICIAN	ADMIN. ASSISTANT	TOTAL HOURS	
DESIGN PHASE SERVICES										
1	Project Management and Admin.		24		8				32	
2	Topographic Survey Coordination				2	4			6	
3	30% Plans		4			4	16		24	
4	Draft Engineer's Report		2			8	2		12	
5	30% Quantities/EOPCC Coordination					2	2		4	
6	30% QA/QC				8				8	
7	30% FAA/ADOT/City Coord./Review Mtg.		4						4	
8	30% Site Visit					4			4	
9	95% Plans		6			4	24		34	
10	Final Engineer's Report		2			8	2		12	
11	95% Quantities/EOPCC Coordination			2		2	2		6	
12	95% Specifications & Special Provisions		2	4		12			18	
13	95% QA/QC				8				8	
14	95% FAA/ADOT/City Coord./Review Mtg.		4						4	
15	95% Site Visit					4			4	
16	Construction Safety & Phasing Plan		2	2		4		2	10	
17	Comment Resolution Coordination			2		2			4	
18	100% Bid-Set Plans		4			4	12		20	
19	100% Bid-Set Quantities/EOPCC Coord.			2		2	2		6	
20	100% Specifications & Special Provisions		4	2		8			14	
21	100% QA/QC				6				6	
22	Bid Phase Services		4	2			4	4	14	
TOTAL DIRECT LABOR HOURS		0	62	16	32	68	14	62	0	254

LABOR FEE BY TASK	\$154.00	\$146.00	\$137.00	\$126.00	\$121.00	\$95.00	\$82.00	\$49.00		
	PRINCIPAL	SR. PROJECT MANAGER	PROJECT MANAGER	SENIOR ENGINEER	ENGINEER (P.E.)	ASSISTANT ENG. (E.I.T.)	TECHNICIAN	ADMIN. ASSISTANT	TOTAL TASK FEE	
DESIGN PHASE SERVICES										
1	Project Management and Admin.		\$3,504		\$1,008				\$4,512	
2	Topographic Survey Coordination				\$252	\$380			\$632	
3	30% Plans		\$584		\$484		\$1,312		\$2,380	
4	Draft Engineer's Report		\$292		\$968		\$164		\$1,424	
5	30% Quantities/EOPCC Coordination				\$242	\$190			\$432	
6	30% QA/QC				\$1,008				\$1,008	
7	30% FAA/ADOT/City Coord./Review Mtgs.		\$584						\$584	
8	Post-30% Plan-in-Hand Review				\$484				\$484	
9	95% Plans		\$876		\$484		\$1,968		\$3,328	
10	Final Engineer's Report		\$292		\$968		\$164		\$1,424	
11	95% Quantities/EOPCC Coordination			\$274	\$242	\$190			\$706	
12	95% Specifications & Special Provisions		\$292	\$548	\$1,452				\$2,292	
13	95% QA/QC				\$1,008				\$1,008	
14	95% FAA/ADOT/City Coord./Review Mtgs.		\$584						\$584	
15	Post-95% Plan-in-Hand Review				\$484				\$484	
16	Construction Safety & Phasing Plan		\$292	\$274	\$484		\$164		\$1,214	
17	Comment Resolution Coordination			\$274	\$242				\$516	
18	100% Bid-Set Plans		\$584		\$484		\$984		\$2,052	
19	100% Bid-Set Quantities/EOPCC Coord.			\$274	\$242	\$190			\$706	
20	100% Specifications & Special Provisions		\$584	\$274	\$968				\$1,826	
21	100% QA/QC				\$756				\$756	
22	Bid Phase Services		\$584	\$274		\$380	\$328		\$1,566	
TOTAL LABOR FEE		\$0.00	\$9,052.00	\$2,192.00	\$4,032.00	\$8,228.00	\$1,330.00	\$5,084.00	\$0.00	\$29,918.00

DIRECT COSTS	
DESIGN PHASE SERVICES	
1. Submittal Printing	\$2,500.00
2. Mileage	\$150.00
Total - Design Phase Services	\$2,650.00

ALLOWANCE & SUB-CONSULTANT COSTS	
DESIGN PHASE SERVICES	
1. Design Topographical Survey (Dibble - Allowance)	\$3,000.00
2. Potholing/Utility Locating (RT Underground - Allowance)	\$1,500.00
3. Electrical Engineering & Design (CR Engineers)	\$41,752.00
Total - Design Phase Services	\$46,252.00

FEE SUMMARY	
Design Services Labor Fee	\$29,918.00
Direct Costs	\$2,650.00
Allowance (Sub-Consultant) Costs	\$46,252.00
TOTAL CONTRACT AMOUNT	\$78,820.00