

# COUNCIL DECISION REQUEST

SUBJECT: Engineering Design Work at the Airport

MEETING DATE: 7-01-10

PAYSON GOAL: NEW:      EXISTING:

ITEM NO.:

TENTATIVE SCHEDULE:

SUBMITTED BY: LaRon Garrett, Pub. Works Dir.

AMOUNT BUDGETED: \$315,000

SUBMITTAL TO AGENDA

EXPENDITURE REQUIRED: \$90,000

APPROVED BY TOWN MANAGER

CONT. FUNDING REQUIRED: \$0

  
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EXHIBITS (If Applicable, To Be Attached): Authorization of Services for the Engineering Work

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## POSSIBLE ACTION

I move to approve Authorization of Services #10-01 substantially in the form attached, and to authorize the Mayor to sign Authorization of Services #10-01 upon FAA approval of the of Services #10-01 and Scope of Services.

## SUMMARY OF THE BASIS FOR POSSIBLE ACTION:

The Payson Airport's Capital Improvement Plan includes constructing a Blast Pad at each end of the runway, installation of additional signage and striping, and miscellaneous drainage improvements. The FAA has given the Town a preliminary grant approval for this design and construction work. The final grant will be issued once the project is bid and the final construction costs are known.

In January, 2010 the Town entered into an agreement with Armstrong Consultants to perform the engineering work at the Payson Airport. That agreement requires and Authorization of Services for each project. This is the project for the 10-11 federal fiscal year.

The FAA will fund 95% of the design and construction and ADOT will fund 2.5% with the Town funding 2.5%

**PROS:** This will allow the project to move forward.

**CONS:** None

**PUBLIC INPUT (if any):** N/A

**BOARD/COMMITTEE/COMMISSION ACTIONS/RECOMMENDATIONS (if any) (give dates and attach minutes):** N/A

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## FUNDING:

Account Number: 260-5-4445-00-8818

Title: Signage, Striping, Etc.

Amount: \$ 315,000

Account Number:

Title:

Amount: \$

Account Number:

Title:

Amount: \$

Account Number:

Title:

Amount: \$

JUL 01 2010 I.1\*

# COUNCIL DECISION REQUEST

Total Cost: \$

CFO: Hope A Cribb

Date: 6/23/10

AUTHORIZATION OF SERVICES #10-01  
PAYSON MUNICIPAL AIRPORT  
GENERAL AIRPORT TECHNICAL SERVICES  
(BLAST PADS, SIGNAGE, STRIPING, & DRAINAGE IMPROVEMENTS)

1. Scope of Services. The consultant shall provide the professional airport consulting services described in Attachment A of this Authorization of Services Amendment to the General Services Agreement (General Airport Technical Services) dated January 21, 2010
2. Compensation. It is expressly understood and agreed that the total compensation to be paid to the Consultant shall be a firm fixed price amount of Ninety Thousand Dollars and NO/100 Dollars (\$90,000) for the services specified in Attachment A – Scope of Services. If any additional studies, analysis or coordination, including but not limited to those items specifically identified in the Scope of Services shall be required, a separate addendum to the Scope of Services and associated costs shall be approved by the Sponsor, ADOT Aeronautics, and the FAA prior to proceeding with the work.
3. Method of Payment. Payments shall be at monthly intervals subject to receipt of requisitions for payments from the Consultant specifying that he has performed the work and is entitled to the amount requisitioned under the terms of this Agreement.
4. Consultant Responsibilities for Compensation. The Consultant shall prepare monthly invoices and progress reports which clearly indicate the progress to date and the amount of compensation due by virtue of that progress. All requisitions for payment shall be for work completed unless otherwise agreed by the Sponsor.
5. Sponsor Responsibilities for Compensation. The Sponsor agrees to pay the Consultant's invoices net upon receipt. At no time will payment of requisitions exceed thirty (30) days from the of the in invoice without notification to the Consultant. It is expressly understood that the Sponsor has the right to withhold payment on any invoice if he feels that the Consultant has not performed the requisitioned work efforts in a satisfactory manner. If the Sponsor does decide to withhold payments to the Consultant for any reason, he must provide written notification and an explanation to the Consultant within ten (10) days of the date of the invoice.
6. Release. The Consultant, upon final payment of the amount due under this Agreement, releases the Sponsor, its officers and employees, for all liabilities, claims and obligations whatsoever, arising from or under this Agreement. The Consultant agrees not to purport to bind the Sponsor to any obligation not assumed herein by the Sponsor unless the Consultant has written authority to do so, and then only within the strict limits of that authority.
7. Additional Services. The fee for any additional services required by the Sponsor will be computed either on a negotiated lump sum basis or upon actual hours and expenses incurred by the Consultant.
8. Time of Performance. The total time of performance for this project shall be Six (6) months from the date of the official Notice to Proceed letter issued by the Sponsor. This timeframe is exclusive of governmental reviews and approvals.
9. Notice to Proceed. The official Notice to Proceed will be issued by the Sponsor. The Consultant may proceed with work elements associated with this project prior to the issuance of a Notice to Proceed at his own risk if he so desires.

10. Subcontracts. The Consultant is authorized by the Sponsor to subcontract specific items of work (geotechnical and surveying). All fees charged by the subconsultants are included in the fixed fee as defined in Section 2. At the time additional subcontracted services are anticipated, the Consultant shall notify the Sponsor of the nature of such services and identify the proposed subcontracting firm. The Consultant must receive approval in writing from the Sponsor prior to utilization of a subcontractor.
11. Termination of the Agreement. The Sponsor may by written notice to the Consultant terminate this contract in whole or in part at any time, either for the Sponsor's convenience or because of failure of the Consultant to fulfill the contract obligations. Upon receipt of such notice, services shall be immediately discontinued \*unless the notice directs otherwise) and all materials as may have been accumulated in performing this contract, whether completed or in process, delivered to the Sponsor.

If the termination is for the convenience of the Sponsor and equitable adjustment in the contract price shall be made, but no amount shall be allowed for anticipated profit on unperformed tasks.

If termination is due to failure to fulfill the Consultant's obligations, the Sponsor may take over the work and prosecute the same to completion by contract or otherwise. In such case, the Consultant may be liable to the Sponsor for any additional costs occasioned to the Sponsor thereby.

If after notice of termination for failure to fulfill contract obligations, it is determined that the Consultant had not so failed, the termination shall be deemed to have effected for the convenience of the Sponsor. In such event, adjustment in the contract price shall be made as provided in paragraph 2 of this Section.

The rights and remedies of the Sponsor provided in this Section are in addition to any other rights and remedies provided by law or under this contract.

FOR THE CONSULTANT  
Armstrong Consulting, Inc.

FOR THE SPONSOR  
Town of Payson, Arizona

By: \_\_\_\_\_

By: \_\_\_\_\_

Attest: \_\_\_\_\_

Attest: \_\_\_\_\_

Attached and Incorporated by Reference  
Attachment A – Further Description of Services of Engineer

**ATTACHMENT A  
TO  
PROFESSIONAL SERVICES AGREEMENT  
BETWEEN OWNER AND ENGINEER,  
DATED JAN, 21, 2010**

**FURTHER DESCRIPTION OF SERVICES OF ENGINEER**

1. This Attachment is made a part of and incorporated by reference into the Professional Services Agreement made on January 21, 2010 between the **CITY OF PAYSON, ARIZONA (Owner)** and **ARMSTRONG CONSULTANTS, INC., (Engineer)** providing for professional engineering services. The Services of Engineer as described in Section 1 of the Agreement are amended or supplemented as indicated below and the time periods for the performance of certain services are stipulated as indicated below.

2. **WORK PROGRAM** - Attached
3. **FEES** - The fees will be as noted below. (All lump sums)

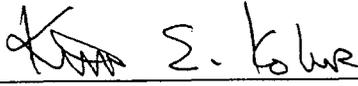
**Project #1 – Blast Pads, Safety Area Grading & Culvert Extension, Runway Signage & Marking**

Phases 1, 2 & 3	\$48,000
Phase 4	\$42,000

**OWNER:  
CITY OF PAYSON, ARIZONA**

By \_\_\_\_\_  
Kenny Evans, Mayor

**ENGINEER:  
ARMSTRONG CONSULTANTS, INC.**

By   
Keith E. Koler, President

**SCOPE OF WORK  
PAYSON MUNICIPAL AIRPORT  
AIP # 3-04-0027-16**

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This project consists of:

**Project #1 – Blast Pads, Safety Area Grading & Culvert Extension, Runway Signage & Marking**

At one time a runway extension was shown on the approved ALP. The ALP is being updated and the runway extension is no longer shown. In lieu of the extension, blast pads are shown on each runway end. The pads will be designed in accordance with AC 150/5300-13. The design strength will be an HS-20 highway load which will support maintenance equipment. P-209 base material and P-401 pavements will be placed.

The FAA Runway Safety Area Inspection Team visited the site several years ago and recommended that several improvements be constructed. As part of this project, the safety areas will be graded to ensure that the pavement edge drops on the runway not exceed 3" and that concrete bases of PAPIs and edge lights do not protrude above the safety area surface. According to the safety action plan, a major culvert lies within the safety that should be extended and covered, this work will also be completed.

The runway safety action plan also recommended that an airport signage and marking plan be developed. This plan will be developed and lighted signs associated with the runway will be installed. The pavements will also be painted in accordance with this plan. Edge markings will be applied to the runway.

The Engineer will also assist the Owner with work required to allow Owner to be reimbursed for previously acquired land.

Estimated Construction Costs are:	\$250,000
Anticipated Contract Construction period:	30 Calendar Days*

\*The fee for the Phase 4 services may be renegotiated if the contract construction period changes.

## **PHASE 1 - PRELIMINARY DESIGN**

The preliminary design phase is intended to identify and evaluate alternatives to assure cost effective and practical solutions for the work items identified. The designer will complete its evaluation of alternatives through contacts with local authorities and review of existing documents, field investigations and a practical design approach. The design will take advantage of local knowledge and experience and utilize expertise from recent construction projects to design a cost-effective project and ensure competitive construction bids.

Activities include:

1. Attend scoping meeting either in person or via telephone.
2. Prepare project scope of work and fee estimate worksheets.
3. Coordinate with Owner, FAA, State Aeronautics and local users to minimize impacts in day-to-day operations.
4. Prepare preliminary cost estimates and schematic design for each element of the project.
5. Determine aircraft usage through coordination with Owner and design the pavements to meet the anticipated aircraft traffic.
6. Complete the FAA environmental checklist.
7. Prepare Project Safety Plan Checklist.
8. Assist the Owner with preparation of the FAA and State Aeronautics grant applications.

## PHASE 2 - ENGINEERING PHASE ACTIVITIES

1. Evaluate local conditions:
  - a. Inventory local material suppliers, sources and capabilities.
  - b. Evaluate drainage alternatives.
  - c. Review electrical lighting layouts and determine conflicts.
2. Review and evaluate project layout.
  - a. Verify ALP dimensions and data.
  - b. Review findings and recommendations with Owner.
3. Complete a soils investigation, soils report and provide recommendations including:
  - a. Field Exploration – Obtain 2 soil borings in each runway blast pad construction area.
  - b. Testing – The following testing will be completed.

<u>Test</u>	<u>Number of Tests</u>
-200 sieve analysis	8 each
In place moisture density	8 each
Atterburgs	4 each
Swell/Consolidation	8 each
CBR & Proctors	4 each
Sulfates	2 each

4. Complete necessary topography and site surveying, including establishment of project control points.
5. Complete pavement section design and strategize bidding procedures and pavement section alternatives to assure competitive bidding.
6. Prepare an overall construction phasing plan in order to maximize project constructability and minimize interference with airport operations. The phasing plan shall take into account other airport construction projects.

7. The following list of drawings will be used as a guideline. Drawings may be added or deleted as necessary during the design process.

<u>Description</u>	<u>Project 1</u>
a. Cover Sheet – project title, project/grant number, funding agencies, index to drawings, project key and vicinity maps	1 sheet
b. Survey Control Map, Summary of Approximate Quantities, General Notes and Legends, where applicable	1 sheet
c. Construction Operations Plan, Safety Plan and Phasing Plan – This plan will identify all construction phasing and safety notes for the project. It will identify, to the Contractor, the sequencing of work	1 sheet
d. Plan and Profile Sheets for the Runway Blast Pads – depict the new centerline profile	2 sheets
e. Runway Blast Pad Cross Section Sheets – 4 sections per sheet	4 sheets
f. Project Grading Plans	10 sheets
g. Typical Sections and Details – pavement sections and pavement details	2 sheets
h. Drainage Details – covers drainage site details	1 sheet
i. Runway Marking and Details	2 sheets
k. Runway Signing Plan – Plans for the signage and other associated work	2 sheets

Plan Set Total – Project 1 26 sheets

The standard specifications to be utilized may include the following items:

Item P-101	Surface Preparation
Item P-151	Clearing and Grubbing
Item P-152	Excavation and Embankment
Item P-154	Subbase Course
Item P-156	Temporary Air & Water Pollution & Erosion Control
Item P-209	Crushed Aggregate Base Course
Item P-403	Plant Mix Bituminous Pavements
Item P-602	Bituminous Prime Coat
Item P-603	Bituminous Tack Coat
Item P-610	Structural Portland Cement Concrete
Item P-620	Runway and Taxiway Painting
Item D-701	Pipe for Storm Drains and Culverts
Item D-705	Pipe Underdrains for Airports
Item D-751	Manholes, Catchbasins, Inlets & Inspection Holes
Item T-901/908	Seeding/Mulching
Item L-108	Airport Underground Cable
Item L-110	Airport Underground Electrical Duct & Conduits
Item L-125	Airport Lighting Systems and Guidance Signs

The added technical specifications may include but not be limited to the following items:

Item Special-1	Mobilization
Item Special -2	Removals
Item Special -6	Watering
Item Special L-125	Airport Lighting Systems, Guidance Signs and Edge Markers

8. Complete preliminary lighting, signing and system circuitry layout.
9. Provide recommendations for construction phasing.
10. Provide two sets of review documents.
11. Complete the preliminary design report including:
  - a. Geotechnical investigation
  - b. Preliminary plans
  - c. Pavement section design and analysis
  - d. Drainage design analysis
  - e. Electrical analysis
  - f. Construction cost estimates
  - g. Final summary and recommendations
  - h. Phasing and scheduling recommendations
12. Solicit comments on preliminary design from the Owner, the FAA and State Aeronautics. The ADOT 30% design review will be conducted at this time.

### PHASE 3 - FINAL DESIGN

In the final design phase, the designer will provide well-defined construction requirements, with selected bid alternatives as appropriate to assure competitive construction bids. Construction schedules will be closely coordinated to assure the best possible weather conditions and the least possible interference with airport operations.

This phase will also include assisting the Owner with the advertisement for bids, notification of local airport users of the construction schedule and general completion of the final construction contract documents for the project. The following outline describes in greater detail the tasks and products.

1. Incorporate preliminary design comments and respond as necessary to requests for additional information.
2. Provide final design drawings, specifications and detailed construction cost estimates for the project.
3. Develop specifications using Advisory Circular 150/5370-10E, Standards for Specifying Construction of Airports.
4. Design all improvements in accordance with FAA standards and guidelines.
5. Complete final quantity calculations.
6. Establish DBE plan and goals.
7. Prepare and submit for approval the Construction Operations Plan.
8. Solicit final Owner, FAA and State Aeronautics review and approval.
9. Provide sets of contract documents.
10. Assist the Owner with advertising and interpretation of project requirements.
11. Provide technical assistance and recommendations to the Airport during construction.
12. Attend the pre-bid conference and bid opening. Issue addenda, prepare an abstract of bids, and make recommendations for award.
13. Assist in award notification to successful bidder and notify and return bid bonds to the unsuccessful bidders.

The design schedule is anticipated to be as follows:

Consultant Contract Execution –	Completed
Scope of Work Approval	04/23/2010
Fees Approval –	05/07/2010
Start Design –	05/10/2010
Complete Design, Submit for Review –	06/25/2010
Advertise for Bids –	07/08/2010
Open Bids –	08/12/2010
Prepare Award Memo –	08/20/2010
Award Construction Contract -	08/27/2010