

# COUNCIL DECISION REQUEST

SUBJECT: Authorization for Services Agreement No. 3 with Z&H Engineering – Echo Ramp Expansion

MEETING DATE: 6/22/06

CSP ITEM: Yes  No  KRA # 10, Objective 1

ITEM NO.:

TENTATIVE SCHEDULE: N/A

SUBMITTED BY: Ted Anderson *Ted*  
Airport Manager

AMOUNT BUDGETED: \$290,000

SUBMITTAL TO AGENDA:

EXPENDITURE REQUIRED: \$32,270

APPROVED BY TOWN MANAGER: *Jo*

CONT. FUNDING REQUIRED: None

EXHIBITS: A – Authorization for Services Agreement; B – Map with Project Location

## RECOMMENDED MOTION

“I move to approve the Authorization for Services Agreement Number 3 with Z&H Engineering, Inc. for the Echo Ramp Expansion Project.”

## SUMMARY OF THE BASIS FOR RECOMMENDED MOTION:

There is usually a several year lag from when a project is submitted to the FAA and we are notified to start the grant process. Because of a low priority, some submitted projects might not be funded. This project was authorized by the Town Council to be submitted to the FAA on October 16, 2003.

The Town has a five-year General Airport Technical Services Contract for airport related projects with Z & H Engineering that was approved by the Council in 2003. The contract requires that a separate agreement be made for each project. This approach helps in managing costs associated with each project. This is an authorization for services no. 3 agreement with Z & H Engineering for design and bidding services for the echo ramp expansion project. The aggregate limit of the agreement is \$32,270. The funds for this agreement are prorated with the FAA paying 95.0%, ADOT paying 2.5% and the Town paying 2.5% or \$7,250 of the \$290,000 project.

This is a time critical project because of the later than usual notice from FAA. There are only two months available to design, bid and have a bid opening to obtain project costs for FAA to consider by August 25, 2006. We will probably be one of the few rural airports to have a grant awarded this summer. Staff recommends approval of this agreement.

## PROS:

1. Moving the existing helipad from inside the runway's object free area (OFA) to outside the OFA. This is an FAA safety/design standard concern.
2. A second entry/exit taxiway to the ramp allows for one way taxiing of larger aircraft. Currently larger aircraft cannot turn around on the ramp when smaller aircraft are parked on both sides of the ramp.

## CONS:

1. The east section of the ramp will be closed for several months during construction.

**PUBLIC INPUT (if any):** There was no Airport Advisory Committee or Board established when this project was discussed in the FY 2005 - 2009 Five-Year ACIP development process. Instead three separate workshops were held to discuss potential airport projects. About 20 people attended the workshops. This project is one of several that had a general consensus of the attendees at last workshop held on October 14, 2003.

**BOARD/COMMITTEE/COMMISSION ACTIONS/RECOMMENDATIONS (if any) (give dates and attach minutes):** No Airport Advisory Committee/Board was established. Please see above public input paragraph.

JUN 22 2006 *I.3*

**AUTHORIZATION FOR SERVICES NO. 3  
PAYSON MUNICIPAL AIRPORT  
ECHO RAMP EXPANSION PROJECT**

**GENERAL AIRPORT TECHNICAL SERVICES CONTRACT (Contract No. 02035)  
BETWEEN  
TOWN OF PAYSON & Z & H ENGINEERING, INC.**

**ARTICLE I AGREEMENT**

In accordance with the General Airport Technical Services Contract, dated the 18<sup>th</sup> day of June, 2002, the Consultant will perform the Scope of Services detailed in Exhibit A for the purpose of developing plans, specifications, contract bidding documents and performing bidding services in conjunction with the following improvements at the Payson Municipal Airport:

Echo Ramp Expansion

**ARTICLE II COMPENSATION AND PAYMENT**

For the performance of the services identified in EXHIBIT A (Tasks 1.0-15.0), CONSULTANT shall be paid a **not to exceed fee of \$32,270** by the TOWN, in accordance with the schedule outlined in EXHIBIT B.

The Consultant shall not proceed with the services of work until written authorization in the form of a Notice to Proceed is received from the TOWN.

**ARTICLE III TIME OF PERFORMANCE**

The services of the CONSULTANT described in EXHIBIT A (Tasks 1.0-13.0) are to commence on written notice to proceed and shall be completed within six (6) weeks from the date of notice, excluding time required for reviews by the TOWN, the FAA and the Arizona Department of Transportation, Aeronautics Division. Tasks 14.0-15.0 shall be completed in accordance with the bidding schedule.

**Binding Upon Successors:** This Agreement shall be binding upon the undersigned parties, their successors, partners, assigns, and legal representatives.

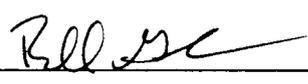
**EXHIBIT "A"**

IN WITNESS WHEREOF, the parties hereto have entered into this AGREEMENT effective as of the day and year first hereinabove written.

Z & H ENGINEERING, INC.  
A PROFESSIONAL COMPANY

BY:  \_\_\_\_\_

ITS: V.P. \_\_\_\_\_

ATTEST:  \_\_\_\_\_

TOWN OF PAYSON  
A MUNICIPAL CORPORATION

BY: \_\_\_\_\_

ITS: \_\_\_\_\_

APPROVED TO AS FORM: \_\_\_\_\_

ITS: \_\_\_\_\_

## EXHIBIT A SCOPE OF WORK

Consultant will provide the following engineering services for the design and bidding services associated with expanding Echo Ramp approximately 250 feet to the east.

Specific improvements to be designed include the following:

The existing Echo Ramp will be expanded 250 feet to the east to increase aircraft parking spaces and to also incorporate two new helipads. The helipads are necessary to accommodate larger helicopters and to replace the existing helipad, located within the runway object free area. The design will include earthwork, paving, paintstriping and drainage improvements.

### I. DESIGN SERVICES

#### 1.0 Design Scope Meeting

1.1 Key members of the design team will meet with members of the Town and the Airport staff to introduce the team members and discuss project objectives of each individual, the detailed scope, approach, schedules, quality control, management and administrative procedures.

1.2 Key members of the design team will attend a field review of the project at the airport with the Town and airport representatives.

#### 2.0 Data Collection

Collect existing data, records, mapping and information from the TOWN, ADOT Aeronautics Division, utility companies, and other agencies, including but not limited to project mapping, survey notes for horizontal and vertical control, as-built plans, drainage reports, existing utility information, master plans, and geotechnical/pavement reports.

#### 3.0 Design Field Surveys

Conduct a field topographic survey to verify field topography in the project area including around the existing Echo Ramp. Establish survey control for use during construction. The topography will include the location of existing striping, existing fencing, gates, lighting, fuel tanks, culverts, pavement, utilities, trees and other physical features. Vertical elevations for cross-sections every 560 feet within the project area, every 25 feet on pavement surfaces, and at all pipe inverts, ditch flow lines and grade breaks will be taken. Existing pavement grades at match points will be taken.

#### 4.0 Topographic Base Maps

Prepare AutoCAD DWG format base sheets for the project areas with existing physical features, tree locations, contours (1 foot contour interval) and/or existing spot elevations. Plot the location of underground utilities.

## 5.0 Drainage Study

- 5.1 Hydrologic Analysis – Delineate drainage areas for contributions to the airport drainage system. Utilizing the City and FAA design procedures, calculate the runoff volumes for various frequency storms including 5, 10, 25 and 100 year events for the individual basins within the project area. Calculate pre and post development flows.
- 5.2 Existing System Evaluation – Evaluate the existing storm drain and open channel system carrying capacity. Identify any deficiencies in the existing system for the present conditions and with the proposed improvements.
- 5.3 Drainage Facility Design – Size and locate pipes, channels, drainage structures and detention facilities to carry the design flows.
- 5.4 Drainage Report – Prepare a report containing the design parameters, the hydrological and hydraulic analyses and the design recommendations.

## 6.0 Geotechnical Investigation/Pavement Design

- 6.1 Coordinate access to the airport property with Airport officials and have areas Blue Staked for utility clearances.
- 6.2 Soils Investigation – Take 3 soil borings to a 10 ft. depth below finished grade line or auger refusal in the following locations:  
  
Log the borings with visual examination by a qualified soils engineer.
- 6.3 Lab Analysis – Perform laboratory testing for gradation, plasticity index, maximum density, and California Bearing Ratio on the boring's samples.
- 6.4 Pavement Alternates/Costs – Perform pavement design analyses in accordance with FAA AC 150/5320-6C for existing subgrade and the design aircraft for the taxiway, apron, service roads, and helipads. Develop pavement alternatives. Develop cost estimates for all alternates and prepare a report with the results of the field investigation and laboratory testing as well as the design and construction alternates and recommendations. Include recommendations for materials specifications.

## 7.0 Design Concepts

- 7.1 Prepare a design concept for the apron and helipads. Assess drainage alternatives, paving alternatives, construction sequencing, construction scheduling, and budget. Prepare a phasing plan based on the established design objectives.
- 7.2 Summarize the results in a design concept report that will include the proposed layouts, a conceptual cost estimate, the pavement design report and the drainage study. Submit to the Town, FAA and ADOT for review and comment.

## 8.0 Preliminary Construction Plan Preparation

- 8.1 Prepare AutoCAD DWG format base sheets for the project at a scale of 1"=30'. Plot the location of underground utilities and contour lines.
- 8.2 Perform the necessary engineering design to develop construction plans in AutoCAD format for the Echo Ramp. Plans will show all necessary geometrics and ties, paintstriping and construction details.
- 8.3 Preliminary Drainage Plan – Prepare a plan showing the layout, size, slope, location and carrying capacity of all proposed drainage structures.
- 8.4 Preliminary Grading Plan – In conjunction with the drainage plan, the vertical alignment and typical section, prepare a grading plan showing existing and proposed contours in the area of work. Existing cross-sections will be plotted at maximum intervals of 50 feet and the proposed grading templates superimposed on them.
- 8.5 Draft a set of preliminary construction plans to include:
  - A. A cover sheet showing the project title and approvals.
  - B. A second sheet with location and vicinity maps, legend, general notes and quantities.
  - C. A typical section sheet.
  - D. Detail sheets.
  - E. Plan sheets showing the geometry, grading and paintstriping for the ramp.
  - F. Plan and profile sheets showing the existing and proposed ground lines for cross-sections.

All plans will be submitted to the TOWN, the FAA and the ADOT Aeronautics Division for approvals.

## 9.0 Construction Specification Preparation

Prepare a set of applicable contract documents and specifications in accordance with FAA Advisory Circular 150/5370-10B, Standards for Specifying Construction of Airports, to include any necessary special provisions for conditions and materials unique to this project.

## 10.0 Quantities & Cost Estimates

Prepare detailed cost estimates of all line items for the project. Provide an Engineer's Estimate for comparison during the bidding phases.

## 11.0 Engineer's Report

Prepare an Engineer's Report including the basis for the design, all design and quantity calculations, variances from the FAA standards, and the Engineer's Estimate. Prepare FAA required certifications. All design shall be completed in accordance with the latest FAA Advisory Circulars and design standards.

Contract documents, construction specifications and the Engineer's Report will be submitted to the TOWN, the FAA and ADOT Aeronautics Division for approvals.

## 12.0 Final Contract Documents

Compile the specifications in a contract document book along with a bid schedule, bidding instructions, bonds, contract information, general conditions and special Town bidding requirements. Submit final plans, contract documents and estimates to the Town, FAA and ADOT for review and comment. Upon receipt of final review comments from the TOWN, FAA and ADOT, the comments will be addressed and any changes will be incorporated into the final plans, specifications, contract documents and cost estimates, as necessary. The TOWN shall have the final authority for approving and determining the final form of such plans, specifications and contract documents.

## 13.0 Coordination/Meetings/QC

Attend up to three project review meetings with the TOWN, FAA and ADOT personnel as required. Coordinate the work of team members. Maintain a quality control program and coordinate agency approvals for the project. Prepare grant reimbursement requests. Assist the TOWN in the development of the 2007 capital improvement program update.

## II. BIDDING SERVICES

### 14.0 Bid Advertisement

10.1 Advertise for Bid – Print construction plans and specifications and distribute them to plan services and the TOWN. Answer questions of bidders and prepare any required addenda.

10.2 Pre-Bid Conference – Conduct a pre-bid conference with prospective bidders to formally address questions on the project, discuss federal contract requirements, and instruct bidders on the proper procedures for filling out Non-segregated Facilities, EEO, DBE, and other Federal forms.

10.3 Bid Opening – Assist the Town in the receipt of bids for the project.

### 15.0 Review & Contract Award

Assist the TOWN in the bid opening, tabulate bids, verify the bid proposals, make a recommendation to the TOWN for bid award and assist the TOWN in the processing of the construction contract, performance and payment bonds, insurance certifications, and FAA and ADOT Aeronautics Division contract approvals.

## EXHIBIT B

### FEE BREAKDOWN

#### I. DESIGN SERVICES

Task 1.0	Design Scope Meeting	\$1,420.00
Task 2.0	Data Collection	\$695.00
Task 3.0	Design Field Surveys	\$2,600.00
Task 4.0	Topographic Base Maps	\$1,190.00
Task 5.0	Drainage Study	\$1,050.00
Task 6.0	Geotechnical Investigation/Pavement Design	\$2,700.00
Task 7.0	Design Concepts	\$2,050.00
Task 8.0	Preliminary Construction Plan Preparation	\$5,590.00
Task 9.0	Construction Specification Preparation	\$3,090.00
Task 10.0	Quantities & Cost Estimates	\$1,150.00
Task 11.0	Final Engineer's Report	\$1,150.00
Task 12.0	Final Contract Documents	\$3,180.00
Task 13.0	Coordination/Meetings/QC	\$3,825.00

#### II. BIDDING SERVICES

Task 14.0	Bid Advertisement	\$1,290.00
Task 15.0	Bid Review & Contract Award	\$1,290.00

**TOTAL (Not to Exceed) \$32,270.00**

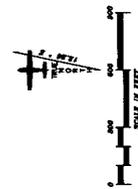
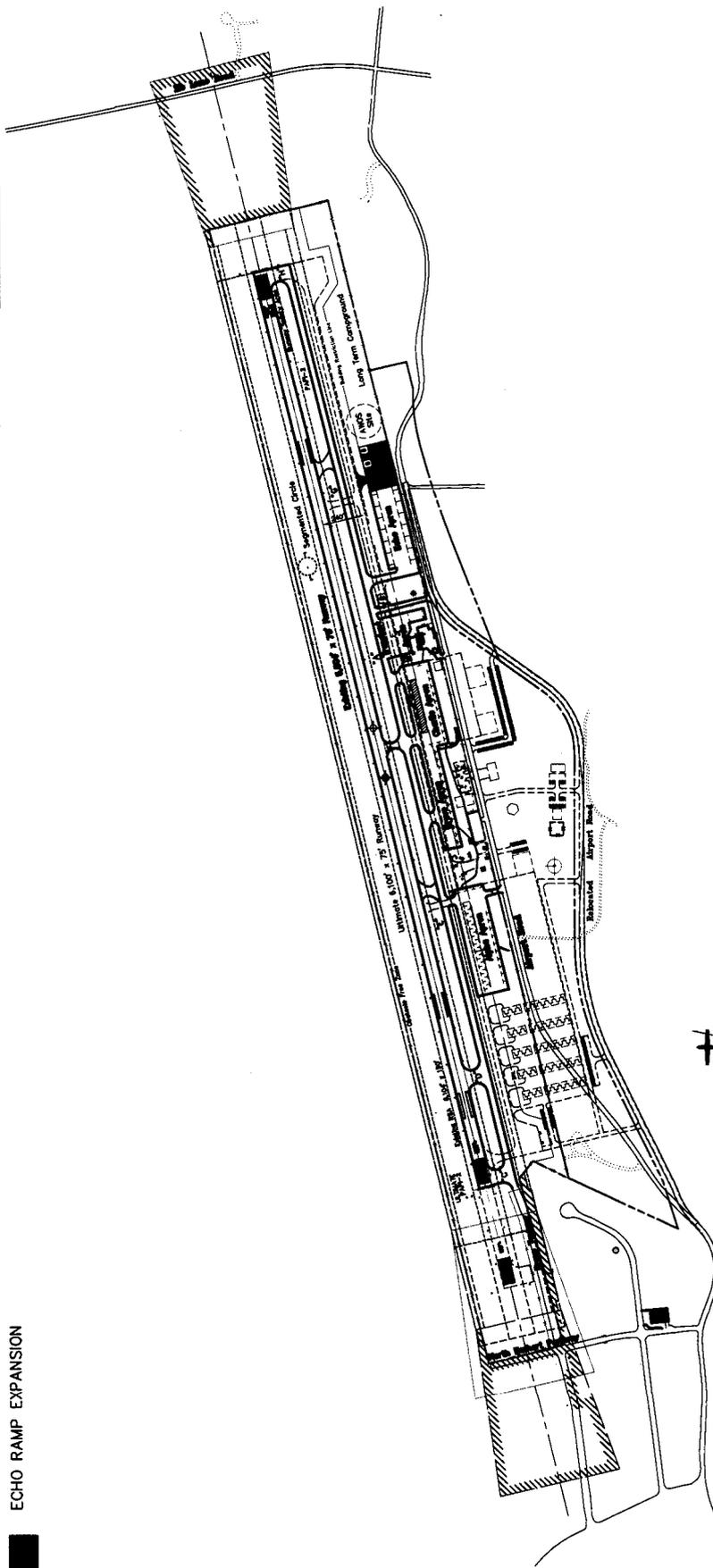
## Z & H FEE SCHEDULE

<u>Classification</u>	<u>Hourly Rate</u>
Principal Engineer	\$125.00
Senior Engineer	\$110.00
Project Manager	\$100.00
Project Engineer	\$70.00
Asst. Project Engineer/Designer	\$60.00
Resident Engineer	\$60.00
Land Surveyor	\$80.00
Clerical	\$35.00
CADD Technician	\$55.00
3-Man Survey Crew	\$125.00
2-Man Survey Crew	\$100.00
Per Diem (overnight)	\$85.00
Other Expenses	At Cost + 10%



# PAYSON MUNICIPAL AIRPORT

**LEGEND**  
ECHO RAMP EXPANSION



AIRPORT CAPITAL IMPROVEMENT PROGRAM  
FY 2006