# Ivins City Staff Report
# City Council Meeting 4/7/16

Agenda Item: Approval of expenditure for design of Ivins Reservoir Parking and Entrance project

Submitted by: Benny Sorensen, Parks and Recreation Director

**Recommended City Council Action:**

**Approve expenditure of $9,966 for design of Ivins Reservoir Parking and Entrance project**

**Approve expenditure of $5,914 for construction management of Ivins Reservoir Parking and Entrance project**

**BACKGROUND:**
The City has budgeted for the design and construction management of the parking lot and entrance to the Ivins Reservoir park project. Design Staff has requested Alpha Engineering to provide a cost estimate for providing this design and construction management. Alpha Engineering was considered in this case because it is has been involved with the Washington County Water Conservancy District projects at Ivins Reservoir. The construction management portion is on an as needed basis to provide construction staking, coordination, drawing of record, and other miscellaneous services.

The plan is to have Alpha Engineering provide the design to begin the approval process with Utah Dam Safety. Following approval, construction would likely occur this fall or spring of 2017 using funds and in-kind contributions from the City, WCWCD, and Washington County.

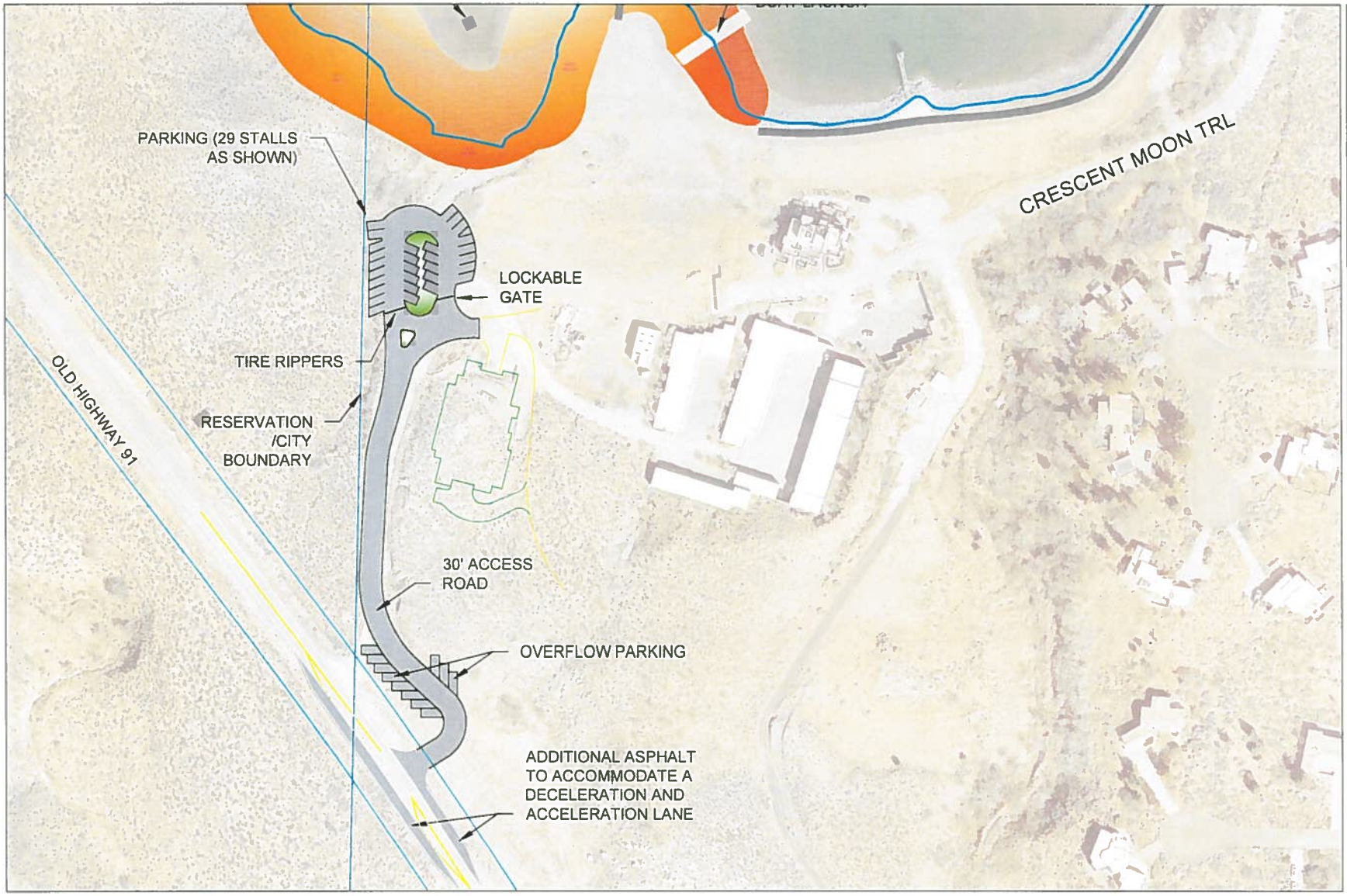
**FINDINGS AND ANALYSIS:**
Alpha Engineering has provided a cost of $9,966 for design and $5,914 as shown in the attached proposal letters. Since each of these services are less than $10,000, it is not necessary to proceed with a formal RFP process. Staff considers this cost to be competitive and reasonable.

**SUPPORT MATERIALS:**
- Map
- Engineering Cost Proposal

**FINANCIAL IMPACT:**
GL 4940699: $9,966
GL 4940699: $5,914

Respectfully Submitted: _____
Benny Sorensen, Parks and Recreation Director

Content Review: _____
Dale Coulam, City Manager




IVINS CITY
55 N. Main Street
Ivins, Utah 84738
435-634-0689
435-674-5486 (fax)

SCALE
PAPER UNITS | DRAWING UNITS
1 | 125
0.5" | 62.5'
0.25" | 31.25
0 | 0

IVINS RESERVOIR PARK

PARKING LOT CONCEPTUAL DESIGN

DATE 3/18/2016
DRAWN BY JJ
CHECKED BY CRG

SHEET NO.
1

TOTAL SHEETS 1

ALPHA ENGINEERING

43 South 100 East, Suite 100
St George, Utah 84770

T 435.628.6500
F 435.628.6553

alphaengineering.com

March 21, 2016

Ivins City
Attn: Mr. Tom Jorgensen, P.E.
55 North Main Street
Ivins, Utah 84738

**Re: Proposal to Provide Engineering Design Services for the Ivins Reservoir Park Project**

Dear Mr. Jorgensen:

We appreciate the opportunity to submit this proposal to provide engineering design services for the proposed park to be located adjacent to Ivins Reservoir. We understand the project will consist of preparation of construction documents for an access road and parking area for the proposed park adjacent to Ivins Reservoir, easements through Terry Martin's property, as well as a deceleration and acceleration lane to accommodate the new park entrance from Old Highway 91.

Outlined on the following pages is our proposed scope of work to provide professional civil design engineering services for design and the associated costs (Exhibit A).

We appreciate the opportunity to work with you on this project. We have staff available to start immediately on this project as we understand the timeline is critical. Please let us know if you have any questions regarding this proposal.

Sincerely,

Brent E. Gardner

Brent E. Gardner, P.E.
Alpha Engineering Company

# EXHIBIT A - SCOPE OF WORK
# IVINS RESERVOIR PARK PROJECT

## ARTICLE I

## DESIGN ENGINEERING SCOPE OF WORK

**1.1 Existing Conditions and Topographic Survey.** The ENGINEER will perform an existing conditions and topographic survey of the project area to determine the project boundaries and prepare a topographic map with contours at intervals of one foot. The ENGINEER will plot property boundaries by deed and will also plot existing Old Highway 91 right-of-way at the entrance location. The survey will also extend +- 200 feet either side of the project area to provide information for necessary grade transitions. Existing utilities and drainage infrastructure will be identified within and adjacent to the project area, where possible.

As part of this task, easements for the access and parking areas will be prepared and submitted to the City and property owner for approval.

**1.2 Site Plan.** The ENGINEER will coordinate with the OWNER and the conceptual design that has already been prepared to prepare a dimensioned Site Plan for the project. We have assumed the OWNER will provide the conceptual site plan to us in AutoCAD or GIS format for our use and coordination. The ENGINEER will identify access points, ADA accessible routes with dimensions for entrances, roads, walks and drive lanes on the Site Plan. It will also call out the various improvements throughout the addition (ie. concrete work, asphalt, etc.) with references to corresponding details, which will be included as part of the Construction Drawings. The site plan will be submitted to the OWNER for review and approval.

As part of this task, a deceleration and acceleration lane will be laid out on Old Highway 91 to accommodate the project per UDOT standards.

**1.3 Hydrology Study, Grading and Drainage Plan.** The ENGINEER will prepare a Hydrology Study to determine pre- and post-development project storm water runoff characteristics. Based on the Hydrology Study, a grading and drainage plan will be completed for the project as required by the *Ivins City Standards*.

Existing storm water facilities will be identified, if available, to connect to. Detention requirements will be determined and discussed and addressed in the Hydrology Study and plans. The hydrology study, grading and drainage plan will be submitted to the OWNER for approval.

The existing spillway overflow will be reviewed and evaluated to incorporate it into the site design and ensure that there is adequate capacity provided in the event the reservoir spills. We will utilize existing hydrology that has been prepared for the reservoir, or calculate the maximum capacity of the spillway based on the existing geometry to be used in this analysis.

**1.4 Construction Drawings.** The ENGINEER will prepare construction drawings with corresponding details in accordance with City Standards, including grading and drainage

plans for the project. (We have assumed that utility design for the future park will not be required at this time) The ENGINEER will provide plan and profile sheets for the access road with the construction drawings. The Construction Drawings will be submitted to the OWNER for approval. The ENGINEER will review the geotechnical report and incorporate recommendations of the report for parking lot pavement design and compaction requirements.

## ARTICLE II
## BASIS OF COMPENSATION

The OWNER agrees to pay compensation to the ENGINEER for work performed on the project as specified below:

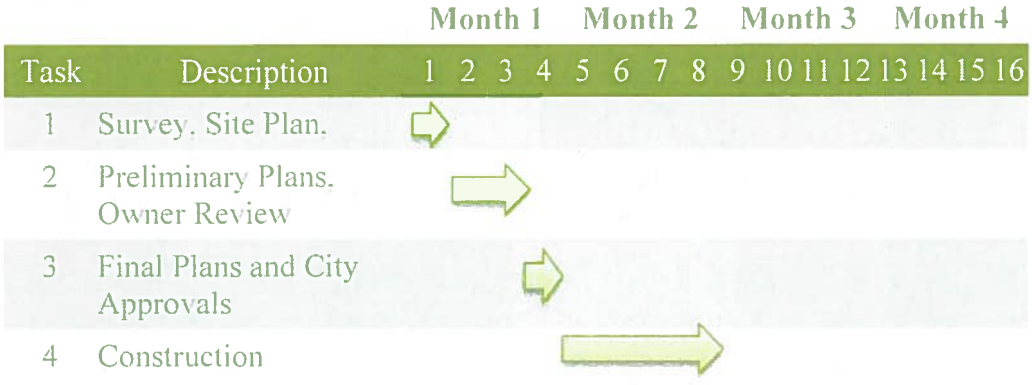
**2.1** **Design Fee.** For all design engineering services as outlined in Article I "Design Engineering Scope of Work", the ENGINEER shall be compensated a lump sum of **Nine Thousand Nine Hundred and Sixty Six Dollars ($9,966.00)**. The lump sum amount is broken down for different aspects of the project as follows::

| | | |
|---|---|---|
| **2.1.1** | Existing Conditions and Topographic Survey | $1,737.00 |
| **2.1.2** | Site Plan | $1,891.00 |
| **2.1.3** | Hydrology Study, Grading and Drainage Plan | $2,124.00 |
| **2.1.4** | Construction Drawings | $4,214.00 |
| | **Total Design Fee** | **$9,966.00** |

**2.2** **Additional Services.** Additional work and reproduction expenses will be invoiced per our Standard Rate Schedule (Attachment "A"). No extra work will be performed without the consent of the OWNER.

We have prepared the following 1-month design process for this project as we understand it is time critical, however much of this schedule is dictated by the City review process. This would provide for approximately 1 month for construction to meet the June 1st deadline, assuming the project is awarded immediately.

PROPOSED DESIGN SCHEDULE



Attachment "A", which includes our Standard Hourly Rates is incorporated herein by this reference.

Encl: Attachment A

## ATTACHMENT "A"

## ALPHA ENGINEERING COMPANY
## STANDARD RATE SCHEDULE

March 2015

Principal Engineer (PE): $152.00 / hour

Senior Engineer II (PE): $126.00 / hour

Senior Engineer I (PE): $113.00 / hour

Project Engineer II (PE): $103.00 / hour

Project Engineer I (PE): $96.00 / hour

Project Engineer (PE): $83.00 / hour

Engineer (EIT): $77.00 / hour

Head Design Technician: $67.00 / hour

Design Technician: $58.00 / hour

Senior Licensed Surveyor: $106.00 / hour

Licensed Survey Crew Chief: $77.00 / hour

Survey Crew Member: $53.00 / hour

GPS Survey Equipment: $35.00 / hour

Inspector: $53.00 / hour

Accountant: $64.00 / hour

Secretary: $43.00 / hour

Type I Survey Monuments: $364.00 each

Type II Survey Monuments: $156.00 each

Mileage: $0.55 / mile

| | | |
|---|---|---|
| Large Format Prints / Copies: | 24x36 (b&w) $2.00 / print | 24x36 (color) $8.00 |
| | 30x42 (b&w) $3.00 / print | 30x42 (color) $9.00 |
| Photocopies: | 8.5x11 (b&w) $0.10 / page | 8.5x11 (color) $1.00 / page |
| | 11x17 (b&w) $0.20 / page | 11x17 (color) $2.00 / page |

*Other expenses will be billed at cost plus 10%.
*Rates will be adjusted periodically to reflect inflation and cost changes.

ALPHA ENGINEERING

43 South 100 East, Suite 100
St George, Utah 84770

T 435.628.6500
F 435.628.6553

alphaengineering.com

March 21, 2016

Ivins City
Attn: Mr. Tom Jorgensen, P.E.
55 North Main Street
Ivins, Utah 84738

**Re: Proposal to Provide Construction Management Services for the Ivins Reservoir Park Project**

Dear Mr. Jorgensen:

We appreciate the opportunity to submit this proposal to provide construction management services for the proposed park to be located adjacent to Ivins Reservoir. We understand the project will consist of staking and construction management of the access road and parking area for the proposed park adjacent to Ivins Reservoir, easements through Terry Martin's property, as well as a deceleration and acceleration lanes on Old Highway 91.

Outlined on the following pages is our proposed scope of work to provide professional construction management services and the associated costs (Exhibit A).

We appreciate the opportunity to work with you on this project. We have staff available to start immediately on this project as we understand the timeline is critical. Please let us know if you have any questions regarding this proposal.

Sincerely,

Brent E. Gardner

Brent E. Gardner, P.E.
Alpha Engineering Company

# EXHIBIT A - SCOPE OF WORK
# IVINS RESERVOIR PARK PROJECT

## ARTICLE I

## CONSTRUCTION ENGINEERING SCOPE OF WORK

The general extent of construction engineering work to be performed is outlined as follows:

**2.1 Construction Staking.** The following work will be performed as part of construction staking:

a) Staking rough grade.
b) Staking finish grade including curb and gutter, walks and site concrete.
c) Redhead subgrade.
d) Bluetop roadbase.

We have assumed that the above items can be completed in 4 trips and our hours have been estimated accordingly. Additional trips will be completed on a time & materials basis, per our hourly rates, if requested by the OWNER.

**2.2 Construction Coordination.** The ENGINEER will monitor construction and attend up to 3 site meetings with the Contractor (if requested by the OWNER) to coordinate construction and answer questions. A memorandum will be provided to the OWNER for each site visit. The ENGINEER will review submittals provided for the site aspects of the project and prepare a review letter. The submittals will be stamped and returned. Second review will be completed as necessary until the submittals are approved. We have assumed we will review roadbase, asphalt and concrete submittals for this project.

**2.3 Drawing of Record.** The ENGINEER will locate installed improvements by field survey, verify grades and prepare drawings of record as required by the City prior to final inspection. The record drawing will be submitted to the OWNER for record information.

**2.4 Miscellaneous.** The ENGINEER will provide other construction engineering services as requested at our Standard Hourly Rates.

## ARTICLE II

## BASIS OF COMPENSATION

The OWNER agrees to pay compensation to the ENGINEER for work performed on the project as specified below:

**2.1 Construction Engineering Fee.** For all construction engineering services as outlined in Article 2, "Construction Engineering Scope of Work", the ENGINEER shall be paid on an hourly rate basis in accordance with our *Standard Rate Schedule* (Attachment "A"). The following amounts are estimated assuming a 1-month construction period with part time construction observation and construction staking services.

**Construction Management**

| Item | Rate | Quantity | Cost |
|---|---|---|---|
| Project Engineer II, P.E. | $103 | 2 | $ 206.00 |
| Project Engineer I, P.E. | $96 | 8 | $ 768.00 |
| Project Engineer, E.I.T. | $77 | 6 | $ 462.00 |
| Land Surveyor, L.S. | $106 | 8 | $ 848.00 |
| Survey Crew Chief w/ GPS | $112 | 27 | $3,024.00 |
| Design Technician (Record Drawings) | $67 | 8 | $ 536.00 |
| Direct Costs | $70 | 1 | $70.00 |
| **Total Estimated Construction Management** | | | **$5,914.00** |

**2.2 Additional Services.** Additional work and reproduction expenses will be invoiced per our Standard Rate Schedule (Attachment "A"). No extra work will be performed without the consent of the OWNER.

Attachment "A", which includes our Standard Hourly Rates is incorporated herein by this reference.

Encl: Attachment A

## ATTACHMENT "A"

## ALPHA ENGINEERING COMPANY
## STANDARD RATE SCHEDULE

March 2015

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