



# City of Biggs

Agenda Item for the  
Next regular City Council Meeting  
November 10, 2015 at 6:30pm

To: **Honorable Mayor  
And Members of the City Council**

**Date: November 3, 2015**

**From: Trin Campos, PE – City Engineer**

**Subject: Task Order No. 34 to the Engineering Services Agreement dated June 11, 2011,**

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**Regarding:** C Street Well Treatment, Storage Reservoir, & Grant Application

## **Background**

The C Street well exceeds State drinking water standards and with State approval is used only under emergency conditions. This issue and the proposed Task Order were considered by the Public Works Committee at the October 20, 2015 meeting.

To address this issue Task Order No. 34 has been prepared and is submitted for the Council's consideration.

Task Order includes the following tasks: evaluation of the C Street well condition, identification of well water treatment options, investigation of water storage reservoir options, and preparation & submittal of the grant application. The improvement options will be developed in coordination with City staff. Once the improvement options have been considered and a recommendation approved by the City, the grant application will be prepared and submitted.

## **Budget**

The total cost of Task Order No. 34 is estimated at \$39,592.

The source of funds for this task order will come from Water Improvement Fund, 110.

## **Recommendation**

Staff recommends that the City Council authorize the City Administrator to execute Task Order No. 34 for the C Street well treatment, storage reservoir, and grant application.



## CITY OF BIGGS

465 C STREET  
P.O. Box 307  
BIGGS, CALIFORNIA 95917  
TELEPHONE (530) 868-5493  
www.biggs-ca.gov

Date: November 10, 2015

TASK ORDER No. 34

Bennett Engineering Services  
1082 Sunrise Ave, Ste 100  
Roseville, CA 95661

This Task Order authorizes you to provide the professional services described below. Services are to be performed in accordance with the Agreement dated June 21, 2011 between the City of Biggs and Bennett Engineering Services, as amended.

**Project Name:** C Street Well Treatment, Storage Reservoir, and Funding Application

**Budget:** \$39,592 to be invoiced at Project Studies and Design Standard Rates per Agreement and Revised Compensation Schedule for Fiscal Year 2015/2016, effective July 1, 2014.

**Scope of Work:** Services include evaluation of the C Street well condition, identification of well treatment options, investigation of water storage reservoir options, and preparation of a funding application, as described in attached Exhibits A - Scope of Services and B - Fee Estimate dated October 5, 2015.

### City of Biggs

Approved: \_\_\_\_\_  
Mark Sorensen, City Administrator

Date: \_\_\_\_\_

### Bennett Engineering Services

Approved: \_\_\_\_\_  
Orin N. Bennett, President

Date: \_\_\_\_\_

## SCHEDULE OF FEES

### City of Biggs City Engineer

The City of Biggs is the size and type of client we serve best. We recognize the budget constraints and offer the following reduced rates:

Standard City Engineer Duties	\$105/hour
Special City Assignments	\$120/hour
Project Studies and Design	Standard Rates, Below

### Rate Schedule | Fiscal Year 2015/2016 *(Unchanged from 2014/2015)*

#### Professional Staff

<i>Professional Staff</i>	<i>Hourly Rate</i>	<i>Professional Staff</i>	<i>Hourly Rate</i>
Principal Engineer .....	\$188	Designer IV .....	\$140
Project Manager IV .....	\$175	Designer III.....	\$125
Project Manager III.....	\$162	Designer II.....	\$115
Project Manager II.....	\$155	Designer I.....	\$105
Project Manager I.....	\$148	CAD Tech IV .....	\$120
Engineer VI .....	\$168	CAD Tech III .....	\$110
Engineer V .....	\$160	CAD Tech II .....	\$100
Engineer IV .....	\$152	CAD Tech I .....	\$90
Engineer III .....	\$145	Inspector III.....	\$130
Engineer II .....	\$137	Inspector II.....	\$120
Engineer I .....	\$125	Inspector I.....	\$105
Engineering Tech IV .....	\$125	Administrative .....	\$65
Engineering Tech III.....	\$115	Engineering Intern .....	\$60
Engineering Tech II.....	\$105	Special Technical Consultant .....	\$150
Engineering Tech I.....	\$95	Expert Witness.....	\$375

#### Additional Rate Information

- ▶ Direct expenses & subconsultant costs will be billed at cost plus ten percent (10%).
- ▶ Standard hourly rates may not apply to a demand to perform work during an overtime period.
- ▶ These rates are for Fiscal Years 2014/2015 and 2015/2016, beginning July 1, 2014.

# Exhibit A: Scope of Services

To TASK ORDER NO. 34

Client: City of Biggs  
Consultant: Bennett Engineering Services Inc  
Project: C Street Well Treatment, Storage and Funding Application  
Date: October 5, 2015



*Consultant's services shall be limited to those expressly set forth below, and Consultant shall have no other obligations or responsibilities for the Project or to the Client except as agreed to in writing or as provided in this Agreement. All of Consultant's services in any way related to the Project or Client shall be subject to the terms of this Agreement.*

## PROJECT DESCRIPTION:

- The C Street well water exceeds State drinking water standards for the levels of magnesium and arsenic.
- When C Street well water is mixed with other production water, the mixed water can meet drinking water standards.
- The City of Biggs requires the C Street well production during emergency and fire conditions, and has permission from the State Water Resources Control Board to utilize the well in an emergency.
- The City needs a multi-step process for resolving the C Street well issues so the well can be used as soon as possible.

## TASK 1. SHORT TERM STRATEGY FOR C STREET WELL

- Subtask 1.1.** Evaluate the current condition of the C Street well facilities.
- Subtask 1.2.** Evaluate the volume mixing required to meet State water drinking standards.
- Subtask 1.3.** Develop alternatives to quickly get the C Street well useable, including short-term construction options.
- Subtask 1.4.** Develop a technical memorandum delineating steps necessary to begin using the well as soon as possible.

## TASK 2. LONG TERM STRATEGY FOR C STREET WELL

- Subtask 2.1.** Evaluate contamination source aquifers.
- Subtask 2.2.** Prepare a technical memorandum on potential options to improve C Street well water quality.
  1. Revise well screen locations
  2. Provide well head treatment
  3. Relocate well
- Subtask 2.3.** Prepare a schedule and estimate of cost of construction.
- Subtask 2.4.** Evaluate each option and recommend the most cost effective alternative.
- Subtask 2.5.** Estimate production volume available with proposed plan.

## TASK 3. 1 MG STORAGE RESERVOIR

- Subtask 3.1.** Investigate potential sites for new 1 MG storage reservoir.
  1. Develop site layout for reservoir and pump station to determine property size requirements
  2. Identify City owned property

3. Identify other potential vacant property
4. Evaluate water system connections at each location
5. Prepare estimates of cost of construction for each option
6. Prepare technical memorandum which evaluates each option and recommends the most cost effective option

**TASK 4. Grant Application**

- Subtask 4.1.** Prepare grant application for phased well, tank and pump station project.
- Subtask 4.2.** Submit grant application.
- Subtask 4.3.** Gather requested documentation and submit to grant authority as requested.
- Subtask 4.4.** Track grant application through process.

INITIALS:

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## EXHIBIT B: Fee Estimate

To TASK ORDER NO. 34

Client: City of Biggs

Consultant: Bennett Engineering Services Inc

Project: C Street Well Treatment, Storage and Funding Application

Date: October 5, 2015



Fee Estimate	Principal Engineer 188 \$/hr		Project Manager III 162 \$/hr		Engineering Tech II 105 \$/hr		Designer III 125 \$/hr		Administrative 65 \$/hr		BEN EN Subtotal		MISC. EXPENSES	Well Consultant Contract	TOTAL
	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost			
<b>Task 1: Short Term Strategy for C Street Well</b>															
1.1 - Evaluate Condition	1 hrs	\$188	6 hrs	\$972	10 hrs	\$1,050	2 hrs	\$250	hrs	\$0	19 hrs	\$2,460	\$120	\$1,100	\$3,680
1.2 - Evaluate Volume Mix	1 hrs	\$188	8 hrs	\$1,296	6 hrs	\$630	hrs	\$0	hrs	\$0	15 hrs	\$2,114	\$110	\$0	\$2,224
1.3 - Develop Alternative	2 hrs	\$376	6 hrs	\$972	16 hrs	\$1,680	2 hrs	\$250	hrs	\$0	26 hrs	\$3,278	\$160	\$0	\$3,438
1.4 - Technical Memorandum	1 hrs	\$188	4 hrs	\$648	16 hrs	\$1,680	2 hrs	\$250	hrs	\$0	23 hrs	\$2,766	\$140	\$0	\$2,906
<b>Subtotal</b>	<b>5 hrs</b>	<b>\$940</b>	<b>24 hrs</b>	<b>\$3,888</b>	<b>48 hrs</b>	<b>\$5,040</b>	<b>6 hrs</b>	<b>\$750</b>	<b>hrs</b>	<b>\$0</b>	<b>83 hrs</b>	<b>\$10,618</b>	<b>\$530</b>	<b>\$1,100</b>	<b>\$12,248</b>
<b>Task 2: Long Term Strategy for C Street Well</b>															
2.1 - Evaluate Contamination Aquifers	1 hrs	\$188	2 hrs	\$324	4 hrs	\$420	2 hrs	\$250	2 hrs	\$130	11 hrs	\$1,312	\$70	\$4,400	\$5,782
2.2 - Technical Memorandum	1 hrs	\$188	2 hrs	\$324	6 hrs	\$630	4 hrs	\$500	hrs	\$0	13 hrs	\$1,642	\$80	\$550	\$2,272
2.3 - Alternative Cost Schedule	1 hrs	\$188	4 hrs	\$648	12 hrs	\$1,260	hrs	\$0	hrs	\$0	17 hrs	\$2,096	\$100	\$0	\$2,196
2.4 - Options	2 hrs	\$376	4 hrs	\$648	16 hrs	\$1,680	hrs	\$0	hrs	\$0	22 hrs	\$2,704	\$140	\$0	\$2,844
2.5 - Volume Calculations	1 hrs	\$188	2 hrs	\$324	8 hrs	\$840	hrs	\$0	hrs	\$0	11 hrs	\$1,352	\$70	\$0	\$1,422
<b>Subtotal</b>	<b>6 hrs</b>	<b>\$1,128</b>	<b>14 hrs</b>	<b>\$2,268</b>	<b>46 hrs</b>	<b>\$4,830</b>	<b>6 hrs</b>	<b>\$750</b>	<b>2 hrs</b>	<b>\$130</b>	<b>74 hrs</b>	<b>\$9,106</b>	<b>\$460</b>	<b>\$4,950</b>	<b>\$14,516</b>
<b>Task 3: 1 MG Storage Reservoir</b>															
3.1 - Investigate Site	2 hrs	\$376	2 hrs	\$324	8 hrs	\$840	2 hrs	\$250	hrs	\$0	14 hrs	\$1,790	\$90	\$0	\$1,880
<b>Subtotal</b>	<b>2 hrs</b>	<b>\$376</b>	<b>2 hrs</b>	<b>\$324</b>	<b>8 hrs</b>	<b>\$840</b>	<b>2 hrs</b>	<b>\$250</b>	<b>hrs</b>	<b>\$0</b>	<b>14 hrs</b>	<b>\$1,790</b>	<b>\$90</b>	<b>\$0</b>	<b>\$1,880</b>
<b>Task 4: Grant Application</b>															
4.1 - Prepare Application	1 hrs	\$188	24 hrs	\$3,888	8 hrs	\$840	4 hrs	\$500	8 hrs	\$520	45 hrs	\$5,936	\$300	\$0	\$6,236
4.2 - Submit Application	hrs	\$0	4 hrs	\$648	hrs	\$0	hrs	\$0	hrs	\$0	4 hrs	\$648	\$30	\$0	\$678
4.3 - Gather Additional Requested Information	1 hrs	\$188	8 hrs	\$1,296	16 hrs	\$1,680	hrs	\$0	4 hrs	\$260	29 hrs	\$3,424	\$170	\$0	\$3,594
4.4 - Track	hrs	\$0	hrs	\$0	4 hrs	\$420	hrs	\$0	hrs	\$0	4 hrs	\$420	\$20	\$0	\$440
<b>Subtotal</b>	<b>2 hrs</b>	<b>\$376</b>	<b>36 hrs</b>	<b>\$5,832</b>	<b>28 hrs</b>	<b>\$2,940</b>	<b>4 hrs</b>	<b>\$500</b>	<b>12 hrs</b>	<b>\$780</b>	<b>82 hrs</b>	<b>\$10,428</b>	<b>\$520</b>	<b>\$0</b>	<b>\$10,948</b>
<b>PROJECT TOTAL</b>	<b>15 hrs</b>	<b>\$2,820</b>	<b>76 hrs</b>	<b>\$12,312</b>	<b>130 hrs</b>	<b>\$13,650</b>	<b>18 hrs</b>	<b>\$2,250</b>	<b>14 hrs</b>	<b>\$910</b>	<b>253 hrs</b>	<b>\$31,942</b>	<b>\$1,600</b>	<b>\$6,050</b>	<b>\$39,592</b>

\* Rates are subject to change with 30-day notice.

\* This fee estimate is valid for 90 days.

\* This fee estimate contains an abbreviated list of staff classifications and does not restrict BEN|EN to those classifications. The Standard Rate Schedule with a full list of staff classifications is available upon request.

INITIALS:

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