

## Work Authorization No. 14 –Les Lacs Pond Water Well Rebuilding Project

### Attachment 1: Scope of Services

#### PROJECT DESCRIPTION

The scope of work to be performed under this Work Authorization shall generally consist of preliminary design, final design, bidding phase, and construction phase services for a water well rebuilding project for making capabilities for discharging well water to the south end of Les Lacs pond. The pipe line from the well is under a different set of conditions and is referred to in Work Authorization 15. A water quality program and assessment has been completed and residence complaints regarding odors and appearance of the pond during summer conditions have been addressed. The purpose of the improvements is to assist in better water quality through operating the well more frequently. A water quality program will be developed outside the scope of this services.

CONSULTANT shall provide the following services in accordance with recognized industry standards which are similar in size, scope and budget to the project.

#### SCOPE OF SERVICES

<b>2</b>	<b>Les Lacs Pond – Water Well Rebuilding Project - Preliminary Design Phase and Final Design Phase.</b>	
<b>2.1</b>	<b>Preliminary Design Phase</b>	
<b>2.1.1</b>	Well Pump electrical power conditions	
<b>2.1.2.</b>	Well pump flow characteristics	
<b>2.1.2.1</b>		Halff shall perform simple flow test for existing gpm capabilities.
<b>2.1.2.2</b>		Halff shall obtain original 1992 water well installation data.
<b>2.1.2.3</b>		Halff shall obtain water well 1982 rebuild installation improvements from Town of Addison, and rehabilitation data for 2000 improvements from Town of Addison.
<b>2.1.2.4</b>		Halff shall obtain “As Build” information of improvements from the Town of Addison.
<b>2.1.3</b>	<b>Topographic surveys</b>	
<b>2.1.3.1</b>		Halff shall perform a design survey shall consist of surface improvements extending to North Right of Way line for Beltway Drive with 200 feet in each direction perpendicular to well pump.

**2.1.3.2**

Halff shall survey adjacent to lot 8 for surface improvements within 200 feet of existing water well.

**2.1.3.3**

Halff shall survey surface improvements of Ridge 1 Lake Court within 200 feet of lot 8.

**2.1.3.4**

Halff shall Prepare working base map preparation on 1 inch to 40 feet scale for design of project.

**2.2**

2.2 Prepare preliminary drawings for staging areas, pump rehabilitation, electrical improvements, piping discharge modifications, well flow meter, suggested storm water erosion control, well flow testing program, landscape, and sprinkler system repairs, concrete repairs, traffic control items, and address any removal and replacement items. Meet with Town of Addison for review, coordination, and comment solicitation. Meeting is listed under item below.

**2.2.1.**

Halff shall design for a new well pump - hydraulic design and system curve design,

**2.2.1.**

design of new pump - electrical improvements,

**2.2.1.**

design of well flow testing program,

**2.2.1.**

design of piping discharge modifications,

**2.2.1.**

design of flow meter,

**2.2.1.**

design of staging area and suggested storm water erosion control,

**2.2.1.**

design of landscape removal areas,

**2.2.1.**

design of sprinkler system removal plan and repairs,

**2.2.1.**

design of concrete flatwork repairs

**2.2.1.**

design of staging area traffic control items,

**2.2.1.**

design of any removal and replacement items.

**2.2.1.**

design of staging areas and laydown areas,

**2.2.2.** Provide Internal reviews and Quality assurance/quality control and submit to Town staff for review.

**2.2.3** Halff shall prepare technical specifications, and incorporate Town of Addison Staff comments and prepare final construction drawings.

**2.4** Prepare 2 monthly progress reports and perform regular quality reviews.

**2.5** Up to two (2) project meetings with town staff during design phase. Meet with Town of Addison for review, coordination, and comment solicitation

**4 Bid Phase and Construction Phase Services for Water Well improvements**

**4.1** Prepare Front end bid specifications for well improvement project.

**4.2** Bid phase services

- 4.2.1.a** Attend pre- bid meeting
- 4.2.1.b** Contact three prospective well driller contractors and document bid activities for non-bids.
- 4.2.2** Prepare addenda as required
- 4.2.3** Attend bid opening
- 4.2.4.** Tabulate bids
- 4.2.5** Contact references of apparent low bidder
- 4.2.6** Provide bid tabulations and reference results

**4.3** Construction and post-

## construction phase services

- 4.3.1** Attend pre-construction meeting.
- 4.3.2** Establish two (2) horizontal and vertical survey control points for contractors use.
- 4.3.3** Three (3) site visits with staff as described under item 1 above.
- 4.3.4.** Halff shall perform in conjunction with the Contractor and the Town of Addison a 36 hour well pumping test to measure well drawn down and pumping flow performance.
- 4.3.5** Assist Owner in and warranty claims during the 12 months warranty period.
- 4.3.6** Prepare record drawings based on contractors and town staff mark-ups (town shall not hold consultant liable for the information supplied to the consultant).

**Work Authorization No. 14 –Les Lacs Pond Water Well Rebuilding Project****Attachment 2: Fee Schedule**

No.	Phase & Task Description	Task Fee	Phase Total
2	<b><u>Water Well Transfer Piping System – Preliminary Design Phase and Final Design Phase –</u></b>	<b>\$45,000</b>	
4	<b><u>Bid Phase and Construction Phase Services for Water Well Transfer Piping Improvements –</u></b>	<b>\$32,000</b>	
	<b>Work Authorization #14 Total Fee</b>		<b>\$77,000</b>

**Work Authorization No. 14 –Les Lacs Pond Water Well Rebuilding Project**Attachment 3: **Project Schedule**

No.	Activity	Duration (days)
2	<b><u>Water Well Rebuilding Project – Preliminary Design Phase and Final Design Phase –</u></b>	<b>45</b>
4	<b><u>Bid Phase and Construction Phase Services for Water Well Rebuilding Project –</u></b>	<b>90</b>