

**REQUEST FOR QUOTATION**

PROJECT: P16-019: Elm Creek Complex Geotechnical Investigation
LOCATION: Elm Creek Complex
NEAR: Elm Creek, Nebraska
CONTACT: Kevin Werbylo, werbylok@headwaterscorp.com, 720-524-6115

The undersigned acknowledges receipt of the following forms, plans and specifications:

- # 1 () Bid/Quotation Form
- # 2 () Attachment A – Site Layout

PROJECT DESCRIPTION:

The goal of this work is to identify the depth to and thickness of a low permeability layer believed to be about 35 to 40 feet below the ground surface in the area of interest. In addition, the estimated permeability/hydraulic conductivity of the low permeability layer is desired, as are the classification and gradation of the subsurface layers between the ground surface and the low permeability layer. In order to meet the project goals, the contractor will be responsible for all items on the ‘Bid/Quote Form’. The contractor may perform the work solely (which is preferred) or may hire a subcontractor(s) for one or more of the items. The contractor will be responsible for three main tasks: (1) drilling soil borings, (2) performing laboratory tests on samples from the borings, and (3) compiling the information in the form of boring logs/schematics and grain size distributions. Detail on each of the tasks is provided below.

PROJECT LOCATION:

The Elm Creek Complex is located about 3.5 miles south and east of the Elm Creek exit (#257) on I-80. Access to the Bartels property is located off of Boxwood Rd (see **Attachment A**).

DETAILS AND SPECIFICATIONS:

An approximate site layout is shown in **Attachment A**. Please, note that the number and specific location of borings may change as the project progresses. Details and necessary specifications are outlined below (quotes must include all costs of whatever nature to complete the work).



Item 1 – Mobilization and Demobilization

- Lump sum unit cost must include all costs of whatever nature necessary for mobilization of all personnel, equipment and supplies associated with each bid item to the project site.
- Payment will be made based on the lump sum provided on the quote form.

Item 2 – Drilling of Soil Borings

- It is assumed that the 6 borings specified on the map in **Attachment A** will need to be drilled to an average depth of about 50 feet as to locate and penetrate the low permeability layer of interest. However, because the depth to the low permeability layer might vary from one boring to the next, the depths of the borings are expected to vary. The maximum depth of a single boring will be 80 feet, regardless of whether the low permeability layer is identified and/or penetrated.
- Payment will be made based on the actual linear feet drilled multiplied by the unit cost per linear foot supplied on the bid form. The unit cost per linear foot must include all costs of whatever nature necessary for drilling the bore holes and collecting samples for laboratory testing.

Item 3a – Laboratory Testing (Permeability/Hydraulic Conductivity)

- At least one laboratory permeability/hydraulic conductivity test on the low permeability layer from each boring is needed. It is assumed that 6 permeability/hydraulic conductivity tests will be performed (1 per boring).
- Payment will be made based on the actual number of permeability/hydraulic conductivity tests performed multiplied by the unit cost per permeability test supplied on the bid form. The unit cost per permeability/hydraulic conductivity test must include all costs of whatever nature necessary for performing the tests in the laboratory.

Item 3b – Laboratory Testing (Grain Size Analyses)

- One laboratory grain size analysis on each of the layers from each of the borings is needed. The analyses should be detailed enough to classify the soil layers based on their percent of sand, silt and/or clay. It is assumed that 30 grain size analyses will be performed (5 per boring).
- Payment will be made based on the actual number of grain size analyses performed multiplied by the unit cost per grain size analysis supplied on the bid form. The unit cost per grain size analysis must include all costs of whatever nature necessary for performing the tests in the laboratory.



Item 4 – Development of Boring Logs/Schematics

- The information must be compiled in the form of boring logs/schematics for each of the locations, and grain size distributions for each of the grain size analyses.
- Boring logs should include: (1) location (X,Y) of boring in NAD83 State Plane Nebraska FIPS 2600 ft coordinates; (2) ground elevation at location of boring; (3) groundwater elevation at location of boring; (4) description and classification of each of the soil layers encountered; and (5) any other important information included on your typical soil boring log/schematic.
- Grain Size distributions should be presented in tabular and graphical form and should be marked so that they can be easily matched with the appropriate boring and soil layer.

TIMING:

Please fill out the following bid page if you are interested in submitting a quote. Quotes must be submitted by email (scanned) to Kevin Werbylo by 5pm CT on Tuesday, August 9th, 2016. It is desired that work be completed as soon as possible.



Bid/Quotation Form

Item No	Description	Unit	Estimated Quantity	Unit Bid Price	Bid Price
1	Mobilization and Demobilization	LS	1		
2	Bore Hole Drilling	LF	300		
3a	Permeability/Hydraulic Conductivity Lab Test	# TESTS	6		
3b	Grain Size Analysis	# TESTS	30		
4	Documentation and Deliverables	LS	1		

TOTAL QUOTE: _____

EARLIEST WORK DATES: _____

Please list the names and phone numbers of any sub-contractors that will be used and include the item number (from the bid table) they will be used for:

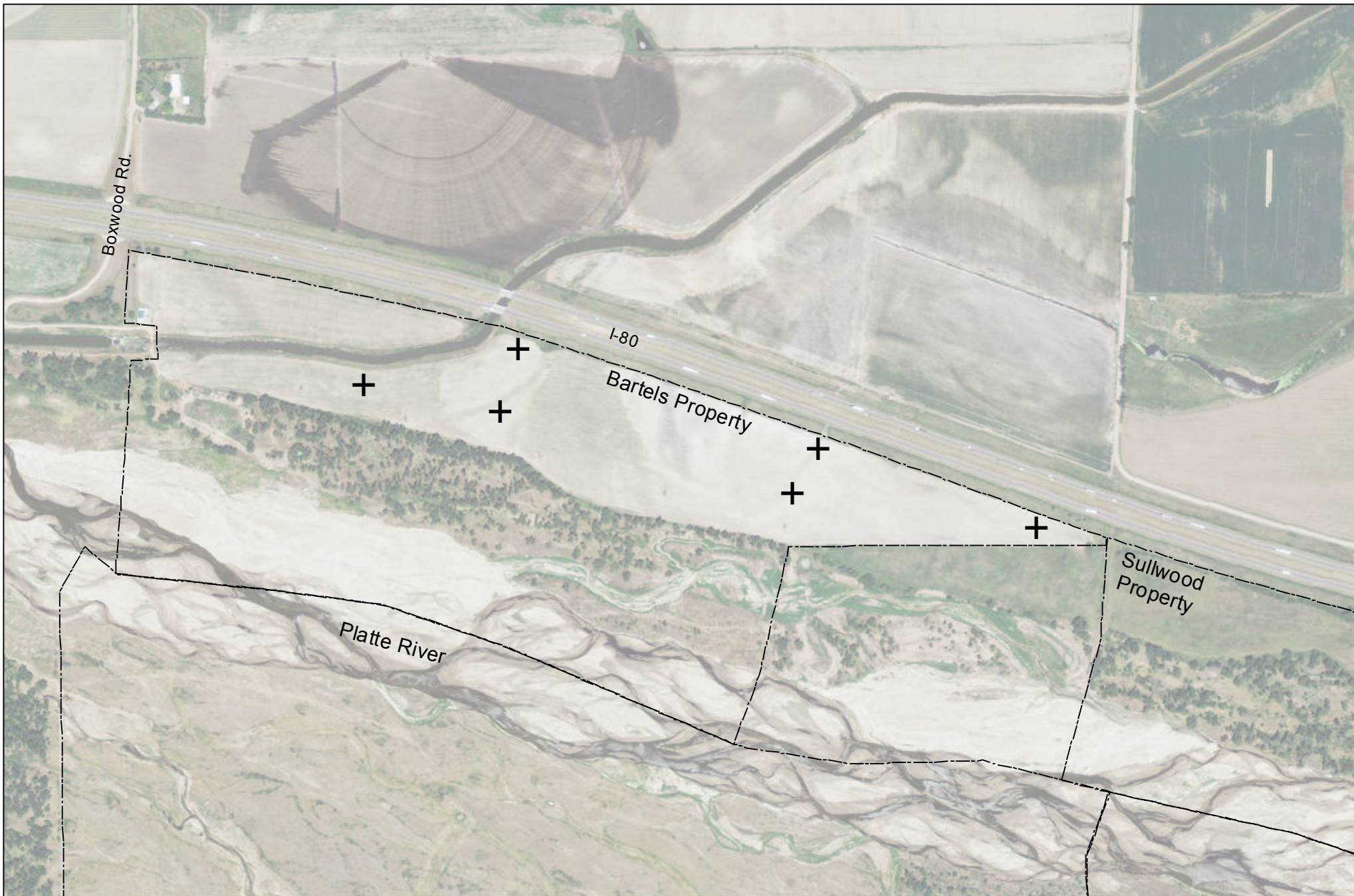


SUBMITTED BY:

(Company)

(Individual)

(Sign/Date)



Elm Creek Geotechnical Investigation

-DRAFT-

Legend

- +** Proposed Bore Hole
- PRRIP Land Boundary

0 500 1,000 Feet



Attachment: **A**

Date: 7/29/2016