



LEGGETTE, BRASHEARS & GRAHAM, INC

**WORK ORDER INITIATION FORM
for the CITY OF CLEARWATER**

Date: May 20, 2015

Project Number: _____

City Project Number: 15-0010-UT

1. PROJECT TITLE:

Groundwater Replenishment Phase 3 - Recharge and Concentrate Injection Well Permitting and Bidding Services.

2. SCOPE OF SERVICES:

Leggette, Brashears & Graham, Inc. (LBG) is nearing completion of Work Order No. 2 for City Project No. 09-0015-UT, Groundwater Replenishment Study. Work Order No. 2 included permitting and construction of a Class V Test recharge well and monitoring wells for the purpose of preliminary aquifer testing, groundwater modeling, geochemical modeling, and core analysis for metals leaching. This Work Order includes hydrogeological services for preparation of an application for a Class V Injection Well Construction Permit, preparation of a Class I Test Injection Well Construction Permit for concentrate disposal, preparation of bid specifications, and support with bidding for well construction. All work will be done under the direction of a Professional Geologist or Engineer licensed in the state of Florida.

I. PRELIMINARY DESIGN PHASE

TASK I.1 – Project Kickoff Meeting

LBG will attend a project kickoff meeting with the City, District staff, and the design Engineers to discuss the project plan and schedule.

Task I.2.1 – Prepare the Class V Test Injection Well Construction Permit Application Package

This task includes preparation of all appropriate application forms and supporting information for a permit to construct the remaining Class V injection (recharge) wells. LBG will prepare an application for construction of four additional recharge wells in accordance with Chapter 62-528.630 and 635 F.A.C. The application package will include the Technical Report prepared in the previous work order, and a well construction and testing program that addresses the requirements of Chapter 62-528.605, and .620. Design drawings for the recharge wells shall be compiled using one of the following two methods: 1) The City of Clearwater CAD standards, as attached, 2) Pinellas County Survey CAD standards for survey base map and 3) City Of Clearwater standards for the design portion. A LBG Professional Engineer licensed in the state of Florida will sign and seal all documents/drawings, as required. This task will include one meeting with the Technical Advisory Committee (TAC) during the permitting process as required.

Task I.2.2 – Prepare the Class I Test Injection Well Construction Permit Application Package

LBG will prepare an application for construction and testing of a Class I Test Injection Well and associated monitoring wells in accordance with Chapter 62-528.440 and 450 F.A.C. The application package will include an Area of Review Report, and a well construction and testing program that addresses the requirements of Chapter 62-528.405, and .410. Design drawings will be prepared for the test injection well and associated monitoring wells. The design plans shall be compiled using one of the following two methods: 1) The City of Clearwater CAD standards, as attached, 2) Pinellas County Survey CAD standards for survey base map and 3) City Of Clearwater standards for the design portion. A LBG Professional Engineer licensed in the state of Florida will sign and seal all documents/drawings, as required. The Exploratory well will be completed as a functional Test Injection Well that will operate for the operational test period when the water purification plant is complete.

Task I.3 Third Party Review

LBG will provide a draft of the application packages for the recharge wells and the concentrate injection well to the City for review and comment. This package will also be reviewed by a third party. LBG will assist the third party reviewer by providing additional information (including 30% cost estimates) as needed and attending an estimated two meetings during the process.

II. DESIGN DEVELOPMENT PHASE

Task II.1 - Revise and Submit Final Permit Application Packages

Comments from the City, District, and third party reviewer will be incorporated into the application packages for the recharge wells construction permit and the concentrate injection well construction and permit. The packages will be finalized and submitted to the FDEP. LBG will prepare one response to a request for additional information during the FDEP review process.

III. FINAL DESIGN PHASE

Task III.1 – Final Design and Specifications

This task includes the final design of the recharge wells system and concentrate injection well system based on the final approved Well Construction Permits. Included will be the location of the recharge wells and associated monitoring wells, and the concentrate injection well and associated monitoring wells. Specifics on well construction and testing will also be included along with a schedule. LBG will also develop a cost estimate for the well construction.

IV. BIDDING PHASE

Task IV.1- Preparation of Bid Documents

The technical specifications prepared in the permitting phase for both the recharge and concentrate injection well systems will be merged with the contract documents provided by the City, and bid forms prepared by LBG to create two separate bid documents for construction and testing of the recharge well system and the concentrate test injection well system.

Task IV.-2 – Assistance with Bidding

LBG will attend a pre-bid meeting for each well system and prepare any required addenda. We will then review the bids received, and make a recommendation to the City for acceptance of the lowest responsive and qualified bid for each well construction project.

V. ADMINISTRATIVE SERVICES

Task V.1 – Project Administration

LBG performs a number of activities associated with managing this project. These activities include

project coordination of activities with the City staff, subcontractors, FDEP and LBG staff. The task also includes electronic, telephonic, and written communications on a regular basis. Weekly progress reports on project status will be prepared and provided to the City the following week. This task also includes any periodic agency meetings that may arise for discussing overall project issues. LBG will also provide review of all necessary paper work from subcontractors and manage all in-house paper work and electronic files, including invoices, to ensure project is moving on schedule and within budget.

Task V.2 – Attend Monthly Progress Meetings

The LBG Project Manager and/or other appropriate staff as required will attend and participate in the monthly progress meetings held for the Groundwater Replenishment Construction Project. It is assumed that all project meetings will take place at either Public Utilities or at the job site, depending on the needs of the progress update and are anticipated to involve several hours per meeting. LBG will prepare as appropriate correspondence related to and needed for the progress meeting agendas and will provide meeting minutes as needed.

Task V.3 – Assistance With Public Outreach Program

The LBG Project Manager and/or other appropriate staff as required will attend and participate in Public Outreach activities. Services may include assistance with preparing technical materials, reviewing public outreach documents prepared by others, and attendance of public meetings/presentations as needed during the time in which the services in this work order are being provided.

VI. CONSTRUCTION PHASE (if applicable)

3. PROJECT GOALS:

The following work products will be submitted during the project:

- 1) FDEP Class V Well Construction and Testing Permit application
- 2) Well Construction Bid Specifications
- 3) Weekly Well Construction Progress Reports
- 4) Well Construction and Testing Report

4. BUDGET:

Attachment “B” provides a breakdown of the total cost per task for the services included in this Work Order. This price includes all labor and expenses anticipated to be incurred by Leggette, Brashears & Graham, Inc. for the completion of these tasks in accordance with Professional Services Method “A” – Cost Times Multiplier Basis, **for a fee not to exceed Two hundred twenty-seven thousand one hundred fifty-eight Dollars (\$227,158.00).**

5. SCHEDULE:

The project is to be completed **365 days** from issuance of notice-to-proceed. The project deliverables are to be phased as follows:

Obtain Recharge and Concentrate Injection Well Construction Permits	275 days
Prepare Bid Specs and Select Well Drilling Contractor	90 days

6. STAFF ASSIGNMENT (Consultant):

David A. Wiley, P.G. – Project Manager

Jeffrey M. Trommer – Lead Project Hydrogeologist

Roy Silberstein – Lead Professional Engineer

Richard Cofer – Sr. Hydrogeologist (Lead Field Staff)

Ron Ewinski – Sr. Hydrogeologist

Tim Harrell – Drafting

7. CORRESPONDENCE/REPORTING PROCEDURES:

ENGINEER's project correspondence shall be directed to:

David A. Wiley, P.G.

All City project correspondence shall be directed to:

Robert S. Fahey, P.E.

8. INVOICING/FUNDING PROCEDURES:

Invoices for work performed shall be submitted monthly to the City of Clearwater, Engineering Department, Attn.: Veronica Josef, Senior Staff Assistant, PO Box 4748, Clearwater, Florida 33758-4748.

City Invoicing Code: 0315-96773-561300-533-000-0000

9. INVOICING PROCEDURES

At a minimum, in addition to the invoice amount(s) the following information shall be provided on all invoices submitted on the Work Order:

- A. Purchase Order Number and Contract Amount.
- B. The time period (begin and end date) covered by the invoice.
- C. A short narrative summary of activities completed in the time period
- D. Contract billing method – Lump Sum or Cost Times Multiplier

- E. If Lump Sum, the percent completion, amount due, previous amount earned and total earned to date for all tasks (direct costs, if any, shall be included in lump sum amount).
- F. If Cost Times Multiplier, hours, hourly rates, names of individuals being billed, amount due, previous amount earned, total earned to date for each task and other direct costs (receipts will be required for any single item with a cost of \$50 or greater or cumulative monthly expenses greater than \$100).
- G. If the Work Order is funded by multiple funding codes, an itemization of tasks and invoice amounts by funding code.

10. SPECIAL CONSIDERATIONS:

Not Applicable

PREPARED BY:

APPROVED BY:

David A. Wiley
Senior Vice President
Leggette, Brashears & Graham, Inc.

Michael D. Quillen, PE
City Engineer
City of Clearwater

Date

Date



CITY OF CLEARWATER ENGINEERING DEPARTMENT

WORK ORDER INITIATION FORM CITY DELIVERABLES

1. **FORMAT**

The design plans shall be compiled utilizing the following methods:

1. City of Clearwater CAD standards.
2. Datum: Horizontal and Vertical datum shall be referenced to North American Vertical Datum of 1988 (vertical) and North American Datum of 1983/90 (horizontal). The unit of measurement shall be the United States Foot. Any deviation from this datum will not be accepted unless reviewed by City of Clearwater Engineering/Geographic Technology Division.

2. **DELIVERABLES**

The design plans shall be produced on bond material, 24" x 36" at a scale of 1" = 20' unless approved otherwise. Upon completion the consultant shall deliver all drawing files in digital format with all project data in Autodesk Civil 3D file format. If not available Land Desktop files are still acceptable, however the City or Clearwater is currently phasing out Land Desktop.

NOTE: If approved deviation from Clearwater CAD standards are used the Consultant shall include all necessary information to aid in manipulating the drawings including either PCP, CTB file or pen schedule for plotting. The drawing file shall include only authorized fonts, shapes, line types or other attributes contained in the standard AutoDesk, Inc. release. All block references and references contained within the drawing file shall be included. Please address any questions regarding format to Mr. Tom Mahony, at (727) 562 4762 or email address Tom.Mahony@myClearwater.com.

All electronic files (CAD and Specification files) must be delivered upon completion of project or with 100% plan submittal to City of Clearwater.

Recharge/Injection Well Permitting and Contractor Selection

Leggette, Brashears and Graham, Inc.

**WORK ORDER INITIATION FORM
PROJECT BUDGET**

Task	Description	Subconsultant Services	Labor	Total
I	Preliminary Design			
I.1	Attend Project Kickoff Meeting		\$2,000	\$2,000
I.2.1	Prepare Class V Permit package		\$34,216	\$34,216
I.2.2	Prepare Class I Permit package		\$40,256	\$40,256
I.3	Third Party Review		\$22,000	\$22,000
				\$98,472
II	Design Development			
II.1	Revise and Submit Final Permit Application Packages			\$19,808
				\$19,808
III.	Final Design Plans and Specifications			
3.1	Prepare Final Well Design		\$13,912	\$13,912
				\$13,912
IV.	Bidding Services			
IV.1	Prepare Bid Documents		\$11,136	\$11,136
IV.2	Bidding Assistance		\$6,160	\$6,160
				\$17,296
V.	Administrative Services			
V.1	Project Administration		\$26,260	\$26,260
V.2	Attend Monthly Progress Meetings		\$18,476	\$18,476
V.3	Assistance with Public Outreach Program		\$28,480	\$28,480
				\$73,216
Subtotal, Labor and Subcontractors				\$222,704
Permit Review Fees				\$0
Other Direct Costs (prints, photocopies, postage, etc.) (Not applicable to lump sum Work Orders)				\$4,454
Grand Total				\$227,158

Attachment "B"

2012 DIRECT HOURLY RATES**LEGGETTE, BRASHEARS AND GRAHAM, INC.**

Job Classification	Minimum	Rate (\$ / hour) Typical	Maximum
Senior Vice President	\$70	\$72	\$74
Vice President/Officer-in-Charge	\$70	\$72	\$74
Project Manager/Associate Principal	\$55	\$57	\$60
Construction Manager	\$28	\$30	\$35
Construction Engineer	\$28	\$30	\$35
Senior Engineer/Scientist	\$28	\$30	\$35
Engineer/Scientist (III-IV)	\$26	\$28	\$30
Engineer/Scientist (I-III)	\$24	\$26	\$28
Planner			
Landscape Architect			
Field Technician	\$26	\$28	\$35
Senior Designer			
Drafter/CADD Operator	\$26	\$28	\$35
Operations Specialist			
Fiscal/Accounting	\$20	\$22	\$30
Administrative/Clerical	\$20	\$22	\$30

MULTIPLIER: 3.4