

The following is a summary of the ratings with the highest total being the most qualified:

	Richard C. Slade & Associates, LLC Studio City, CA	Camp Dresser & McKee, Inc. Irvine, CA	MWH Americas, Inc. Irvine, CA	Geoscience Support Services, Inc. Claremont, CA	Daniel B. Stephens & Associates, Inc. Goleta, CA
Rater A	177.25	170	162	153	117
Rater B	127.5	146.5	129	117.5	119.5
Rater C	166.5	153	126.5	150.5	92.5
Rater D	171	159.5	130.5	142	126.5
Totals	642.25	629	548	563	455.5

Upon selection of the most qualified firm, Water Services staff interviewed Richard C. Slade & Associates, LLC and negotiated an agreement for its services.

FINANCIAL IMPACT

Water funds were appropriated for the FY 2009/10 Budget for this project. There is no impact to the General Fund.


RECOMMENDATION

It is recommended that the City Council:

- Award the contract for professional engineering services to Richard C. Slade & Associates, LLC for the Well 31 Drilling Project and Well 28 repairs;
- Authorize the City Manager to sign and execute the professional service agreement with Richard C. Slade & Associates, LLC for hydrogeologic and engineering services for the Well 31 Drilling Project and Well 28 repairs in the amount of \$218,096.


 KEITH G. JONES
 Public Works Director


 By: David E. Entsminger
 Water Services Manager

Recommended for Approval

 Matthew Fertal
 City Manager

Attachment No. 1: Professional Services Agreement
 Attachment No. 2: Panel Rating Sheets

PROFESSIONAL SERVICES AGREEMENT

THIS PROFESSIONAL SERVICES AGREEMENT is made and entered into, to be effective the 18th day of February, 2010, by and between the CITY OF GARDEN GROVE, a municipal corporation, hereinafter referred to as "City," and Richard C. Slade and Associates, LLC, a California Corporation, hereinafter referred to as "Consultant." City and Consultant are sometimes hereinafter individually referred to as "Party" and hereinafter collectively referred to as the "Parties."

RECITALS

WHEREAS, City has determined that there is a need for Research & Data Collection, Hydrogeologic Assistance, Permitting, Engineering, Bidding Assistance, Construction Assistance, O&M Manual & Training and Warrantee Assistance services for the Well No. 31 Drilling Project (the "Project");

WHEREAS, City desires to retain Consultant to provide such services; and

WHEREAS, Consultant is qualified by virtue of experience, training, education, and expertise to perform the professional services required by this Agreement and has agreed to provide such services.

NOW, THEREFORE, in consideration of the promises and mutual benefits which will result to the Parties in carrying out the terms of this Agreement, it is mutually agreed as follows:

AGREEMENT

I. SCOPE OF WORK

City agrees to retain Consultant, and Consultant agrees to perform the services set forth in the Scope of Services described in Exhibit "A", attached hereto and by reference made a part of this Agreement (hereinafter the "Services"). Consultant agrees that its provision of Services under this Agreement shall be within accepted standards within the profession, and its specialized services shall be in accordance with customary and usual practices in Consultant's profession. By executing this Agreement, Consultant warrants that it has carefully considered how the work should be performed and fully understands the facilities, difficulties, and restrictions attending performance of the work under this Agreement.

II. TERM

This Agreement shall be effective as of the date first set forth above. This Agreement shall commence upon the effective date of this Agreement, and shall remain and continue in effect until tasks described herein are completed unless otherwise terminated prior to this date pursuant to the provisions of this Agreement.

III. FEES

A. Accounting Records

Consultant shall keep complete, accurate, and detailed accounts of all time, costs, expenses, and expenditures pertaining in any way to this Agreement. Upon request of City, Consultant shall provide City with all records pertaining to this Agreement.

B. Total Payment

The Parties agree that Consultant shall bill for the Services provided by Consultant to City on an hourly basis and in accordance with the charges and fee schedule attached as Exhibit "B," except as otherwise set forth herein, provided compensation under this Agreement shall not exceed \$218,096.

C. Monthly Payment

1. City agrees to pay Consultant monthly, in accordance with the payment rates and terms and the schedule of payment, as set forth in Exhibit "B," attached hereto based upon actual time spent providing the services outlined in this Agreement. Consultant shall submit to City monthly or periodic statements requesting payment. Such requests shall be based upon the amount and value of the Services performed by Consultant under this Agreement and shall be prepared by Consultant and accompanied by such reporting data including a detailed breakdown of all costs incurred and tasks performed during the period covered by the statement, as may be required by City. Invoices shall be submitted on or about the first business day of each month, for Services provided the prior month. City shall use reasonable efforts to make payment to Consultant within forty-five (45) days after the date of the invoice or as soon thereafter as reasonably practicable. If City determines that the approved written Scope of Work under this Agreement or any specified task hereunder is incomplete, the City Manager, or his or her designee, shall notify Consultant and may withhold the payment amount for the unfinished work accordingly.

2. Consultant shall not be compensated for any services rendered in connection with its performance of this Agreement, which are in addition to those set forth herein, unless such additional services are authorized in advance and in writing by the City Manager.

IV. TERMINATION

City may terminate this Agreement for its convenience at any time, with or without cause, in whole or in part, upon giving Consultant thirty (30) days written notice. Upon said notice, City shall pay Consultant its allowable costs incurred to date of termination and those allowable costs determined by City to be reasonably necessary to effect such termination. Upon receipt of said notice, Consultant shall immediately cease all work under this Agreement, unless the notice provides otherwise. If City terminates a portion of this Agreement, such termination shall not make void or invalidate the remainder of this Agreement. Thereafter, Consultant shall have no further claims against City under this Agreement. Upon termination of the Agreement pursuant to this Section, Consultant will submit an invoice to City pursuant to Section 3. Consultant may terminate this Agreement, with or without cause, upon thirty (30) days written notice to City.

V. DEFAULT OF CONSULTANT

A. Consultant's failure to comply with the provisions of this Agreement shall constitute a default. In the event Consultant is in default, except as provided for in Section XXI, City shall have no obligation or duty to continue compensating Consultant for any work performed after the date of default and can terminate the Agreement immediately upon written notice to Consultant.

B. If the City Manager, or his/her designee, determines that Consultant is in default in the performance of any of the terms or conditions of this Agreement, it shall notify Consultant in writing of such default. Consultant shall have ten (10) days to cure the default by rendering a satisfactory performance. In the event Consultant fails to cure its default within such period of time, City shall have the right, notwithstanding any other provision of this Agreement, to terminate this Agreement without further notice and without prejudice of any remedy to which City may be entitled at law, in equity or under this Agreement. Consultant shall be liable for any and all reasonable costs incurred by City as a result of such default including, but not limited to, reprocurement costs of the same or similar services defaulted by Consultant under this Agreement.

VI. LEGAL RELATIONSHIP BETWEEN THE PARTIES

A. The legal relationship between the Parties hereto is that of an independent contractor, and nothing herein shall be deemed to make Consultant a City employee. During the performance of this Agreement, Consultant and its officers, employees, and agents shall act in an independent capacity and shall not act as City officers, employees, or agents. The personnel performing the Services under this Agreement on behalf of Consultant shall at all times be under Consultant's exclusive direction and control. Neither City nor any of its officers, employees, or agents shall have control over the conduct of Consultant or any of its officers, employees, or agents, except as set

forth in this Agreement. Consultant, its officers, employees, or agents shall not maintain an office or any other type of fixed business location at City's offices.

B. Consultant shall not incur or have the power to incur any debt, obligation, or liability against City, or bind City in any manner.

C. No City benefits shall be available to Consultant, its officers, employees, or agents in connection with any performance under this Agreement. Except for fees paid to Consultant as provided for in this Agreement, City shall not pay salaries, wages, or other compensation to Consultant for the performance of Services under this Agreement. City shall not be liable for compensation or indemnification to Consultant, its officers, employees, or agents for injury or sickness arising out of performing Services hereunder. If for any reason, any court or governmental agency determines that City has financial obligations, other than pursuant to Section III herein, of any nature related to salary, taxes, or benefits of Consultant's officers, employees, servants, representatives, subcontractors, or agents, Consultant shall indemnify City for all such financial obligations.

VII. MODIFICATIONS AND AMENDMENTS TO AGREEMENT

No modification or amendment of this Agreement or any of the provisions hereof shall be effective for any purpose unless set forth in writing signed by duly authorized representatives of both Parties.

VIII. ASSIGNMENTS AND SUBCONTRACTING

The experience, knowledge, capability, and reputation of Consultant, its principals and employees were a substantial inducement for City to enter into this Agreement. Consultant may not assign the performance of this Agreement, nor any part thereof, nor any monies due hereunder, voluntarily or by operation of law, without the prior written approval of City. Except as otherwise expressly provided in the Scope of Services (Exhibit "A"), Consultant shall not contract with any other person or entity to perform the Services required without written approval of City. If Consultant is permitted to subcontract any part of this Agreement by City, Consultant shall be responsible to City for the acts and omissions of its subcontractor as it is for persons directly employed. Nothing contained in this Agreement shall create any contractual relationships between any subcontractor and City. All persons engaged in the work will be considered employees of Consultant. City will deal directly with and will make all payments to Consultant as provided for in Section III.

IX. SUCCESSORS IN INTEREST

This Agreement shall be binding upon and inure to the benefit of the Parties' successors and assignees.

X. THIRD PARTY BENEFICIARY

Except as may be specifically provided for herein, nothing contained in this Agreement is intended to confer, nor shall this Agreement be construed as conferring, any rights, including, without limitation, any rights as third-party beneficiary or otherwise, upon any entity or person not a party hereto.

XI. INSURANCE

A. Insurance Required

Consultant shall procure and maintain the insurance described herein for the duration of this Agreement, or as otherwise specified herein, against claims for injuries to persons or damage to property which may arise from or in connection with the performance of the work hereunder by Consultant, its agents, representatives, or employees. Insurance required herein shall be provided by a reputable insurance company in good standing with the State of California and having a minimum A.M. Best's Guide Rating of A-, Class VII or better. City will require Consultant to substitute any insurer whose rating drops below the levels specified herein. Such substitution shall occur within twenty (20) days of written notice to Consultant by City.

Consultant shall provide to City certificates of insurance in a form acceptable to City indicating the deductible or self-retention amounts and the expiration date of the policy, and shall provide renewal certificates not less than ten (10) days prior to the expiration of each policy term. The certificates of insurance shall specifically identify this Agreement and shall contain express conditions that City is to be given at least thirty (30) days advance written notice of any material modification in or termination of insurance. Such insurance shall be primary to and not contributing with any other insurance maintained by City and shall name the City of Garden Grove and its officers, councilmembers, officials, employees, agents and volunteers as additional insureds by endorsement to the insurance policies. Except as expressly authorized herein, all insurance shall be on an occurrence basis.

1. Errors and Omissions Insurance

Consultant shall maintain in full force and effect throughout the term of this Agreement, standard industry form professional negligence errors and omissions insurance coverage in an amount of not less than One Million Dollars (\$1,000,000.00) per claim or occurrence, in accordance with the provisions of this Section. If the policy of insurance is written on a "claims made" basis, the policy shall be continued in full force and effect at all times during the term of this Agreement, and for a period of three (3) years from the date of the completion of the Services provided hereunder. In the event of termination of the policy during this period, Consultant shall obtain continuing insurance coverage for the prior acts or omissions of Consultant during the course of performing Services under the terms of this Agreement. The coverage shall be

evidenced by either a new policy evidencing no gap in coverage, or by obtaining separate extended "tail" coverage with the present or new carrier.

In the event the policy of insurance is written on an "occurrence" basis, the policy shall be continued in full force and effect during the term of this Agreement, or until completion of the Services provided for in this Agreement, whichever is later. In the event of termination of the policy during this period, new coverage shall be obtained for the required period to ensure coverage for the prior acts of Consultant during the course of performing the Services under the terms of this Agreement.

2. Workers' Compensation

Consultant shall obtain and maintain, during the term of this Agreement, Workers' Compensation Employer's Liability Insurance in the statutory amount as required by state law. Such worker's compensation insurance shall be endorsed to provide for a waiver of subrogation against City.

B. Minimum Limits of Insurance

Consultant shall maintain limits no less than:

1. General Liability:

\$1,000,000 per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.

2. Automobile Liability:

\$1,000,000 per accident for bodily injury and property damage.

3. Employer Liability:

\$1,000,000 per accident for bodily injury or disease.

C. Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions must be declared to and approved by the City Manager. At the option of the City Manager, either the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the City and its councilmembers, officials, officers, employees, agents or volunteers, or Consultant shall procure a bond guaranteeing payment of losses and related

investigations, claim administration and defense expenses, or Consultant shall otherwise provide an alternative satisfactory to the City Manager.

D. Other Insurance Provisions

The general liability and automobile liability policies are to contain, or be endorsed to contain, the following provisions:

1. The City of Garden Grove and its councilmembers, officers, officials, employees, agents and volunteers are to be covered as insureds with respect to: liability arising out of activities performed by or on behalf of Consultant; products and completed operations of Consultant; premises owned occupied or used by Consultant; or automobiles owned, leased, hired, or borrowed by Consultant. The coverage shall contain no special limitations on the scope of protection afforded to the Garden Grove Sanitary District, the City of Garden Grove, the Garden Grove Agency for Community Development and their respective councilmembers, board members, officers, officials, employees, agents, or volunteers.

2. For any claims related to this Agreement, Consultant's coverage shall be primary insurance as respects the City and its councilmembers, officers, officials, employees, agents, and volunteers. Any insurance or self-insurance maintained by Garden Grove Sanitary District, the City of Garden Grove, the Garden Grove Agency for Community Development and their respective councilmembers, board members, officers, officials, employees, agents, and volunteers shall be in excess of Consultant's insurance and shall not contribute with it.

3. Any failure to comply with reporting or other provisions of the policies, including breaches of warranties shall not affect coverage provided to the City and its respective councilmembers, board members, officers, officials, employees, agents, and volunteers.

4. Consultant's insurance shall apply separately to each insured against whom claim is made or suit is brought except with respect to the limits of the insurer's liability.

5. Each insurance policy required by this Section shall be endorsed to state that coverage shall not be suspended, voided, cancelled by either party, reduced in coverage or in limits, except after thirty (30) days prior written notice by certified mail, return receipt requested, has been provided to City.

6. Consultant agrees to ensure that subcontractors, and any other parties involved with the project who are brought onto or involved in the project by Consultant, provide the same minimum insurance coverage required of Consultant. Consultant agrees to monitor and review all such coverage and assumes all responsibility for ensuring that such coverage is provided in conformity with the requirements of this Section. Consultant agrees that upon request, all agreements with subcontractors and others engaged in the project will be submitted to City for review.

E. Verification of Coverage

Consultant shall furnish City with original endorsements effecting coverage required by this Agreement. The endorsements are to be signed by a person authorized by that insurer to bind coverage on its behalf. All endorsements are to be received and approved by City before work commences.

XII. INDEMNITY

A. Indemnification

To the fullest extent permitted by law, Consultant shall indemnify, defend (at Consultant's sole cost and expense), protect and hold harmless the City of Garden Grove and its councilmembers, officers, officials, employees, agents, and volunteers, (individually "Indemnified Party"; collectively "Indemnified Parties") against any and all liability, claims, judgments, costs, and demands (collectively, "Claims"), including Claims arising from injuries or death of persons (Consultant's employees included) and damage to property, which Claims arise out of, pertain to, or are related to the negligence, recklessness or willful misconduct of Consultant, its agents, employees, or subcontractors, or arise from Consultant's negligent, reckless or willful performance of or failure to perform any term, provision, covenant or condition of this Agreement ("Indemnified Claims"), but Consultant's liability for Indemnified Claims shall be reduced to the extent such Claims arise from the negligence, recklessness or willful misconduct of the City of Garden Grove and its councilmembers, officers, directors, officials, employees, or agents.

Consultant shall reimburse the Indemnified Parties for any reasonable expenditures, including reasonable attorneys' fees, expert fees, litigation costs and expenses that each Indemnified Party may incur by reason of Indemnified Claims. Upon request by an Indemnified Party, Consultant will defend with legal counsel reasonably acceptable to the Indemnified Party all Claims against the Indemnified Party that may arise out of, pertain to, or relate to Indemnified Claims, whether or not Consultant is named as a party to the Claim proceeding. The determination whether a Claim may "arise out of, pertain to, or relate to" Indemnified Claims shall be based on the allegations made in the Claim and the facts known or subsequently discovered by the parties. In the event a final judgment, arbitration award, order, settlement, or other final resolution expressly determines that Claims did not arise out of, pertain to, nor relate to the negligence, recklessness or willful misconduct of Consultant to any extent, then City will reimburse Consultant for the reasonable costs of defending the Indemnified Parties against such Claims, except City shall not reimburse Consultant for attorneys' fees, expert fees, litigation costs and expenses as were incurred defending Consultant or any parties other than Indemnified Parties against such Claims.

Consultant's liability for indemnification hereunder is in addition to any liability Consultant may have to City for a breach by Consultant of any of the provisions of this Agreement. Under no circumstances shall the insurance requirements and limits

set forth in this Agreement be construed to limit Consultant's indemnification obligation or other liability hereunder. The terms of this Agreement are contractual and the result of negotiation between the parties hereto. Accordingly, any rule of construction of contracts (including, without limitation, California Civil Code Section 1654) that ambiguities are to be construed against the drafting party, shall not be employed in the interpretation of this Agreement.

Consultant's indemnification obligation hereunder shall survive the expiration or earlier termination of this Agreement until all actions against the Indemnified Parties for such matters indemnified hereunder are fully and finally barred by the applicable statute of limitations or, if an action is timely filed, until such action is final. This provision is intended for the benefit of third party Indemnified Parties not otherwise a party to this Agreement.

XIII. COMPLIANCE WITH LAW

A. Consultant certifies by the execution of this Agreement the following: that it pays employees not less than the minimum wage as defined by law and that it does not discriminate in its employment with regard to race, color, religion, sex, age, marital status, ancestry, or national origin; that Consultant is in compliance with all federal and state laws, local directives, and executive orders regarding non-discrimination in employment; and that Consultant agrees to demonstrate positively and aggressively the principle of equal opportunity in employment.

B. Consultant shall keep itself informed of State and Federal laws and regulations, which in any manner affect those employed by it or in any way affect the performance of its Services pursuant to this Agreement. Consultant shall at all times observe and comply with all such laws and regulations. The City of Garden Grove and its councilmembers, officers, employees, and agents shall not be liable at law or in equity for Consultant's failure to comply with such laws and regulations.

XIV. LICENSES AND QUALIFICATIONS

Consultant represents and warrants to City that it has obtained all licenses, permits, qualifications, and approvals of whatever nature that is legally required to practice its profession. Consultant represents and warrants to City that Consultant shall, at its sole cost and expense, keep in effect at all times during the term of this Agreement, any license, permit, or approval, which is legally required for Consultant to perform Services under this Agreement.

XV. CONFIDENTIALITY AND OWNERSHIP OF DOCUMENTS

A. All information gained by Consultant in the performance of this Agreement shall be considered confidential and shall not be released by Consultant without City's prior written authorization. Consultant, its officers, employees, agents or subcontractors

shall not without written authorization from the City Manager or unless requested by City's Attorney, voluntarily provide declarations, letters of support, testimony at depositions, response to interrogatories, or other information concerning the Services performed under this Agreement or relating to any project or property location within City. Response to a subpoena or court order shall not be considered "voluntary" for the purposes of this Section, provided Consultant gives City proper notice of such subpoena or court order. Consultant shall properly notify City of any summons, complaints, subpoenas, notice of deposition, request for documents, interrogatories, requests for admissions or other discovery requests received by Consultant, its officers, employees, agents or subcontractors, related to Services performed pursuant to this Agreement. City retains the right, but has no obligation, to represent Consultant and/or be present at any deposition, hearing, or similar proceeding, the cost of which shall be borne by City. Consultant agrees to cooperate fully with City and to provide City with an opportunity to review and respond to discovery requests provided by Consultant, arising out of Services performed pursuant to this Agreement. However, City's right to review any such request or response does not imply or mean City has the right to control, direct, write or rewrite said response.

B. The documents and study materials for this project shall become the property of City upon the termination or completion of the work. Consultant agrees to furnish to City copies of all memoranda, correspondence, computation, and study materials in its files pertaining to the work described in this Agreement, which is requested in writing by City.

XVI. INTERPRETED UNDER LAWS OF THE STATE OF CALIFORNIA

This Agreement and any dispute arising hereunder shall be governed and interpreted in accordance with the laws of the State of California. This Agreement shall be construed as a whole according to its fair language and common meaning to achieve the objectives and purposes of the parties hereto, and the rule of construction to the effect that ambiguities are to be resolved against the drafting party shall not be employed in interpreting this Agreement, all parties having been represented by counsel in the negotiation and preparation hereof. Venue for any litigation concerning this Agreement shall be in the Superior Court for the County of Orange, California.

XVII. ATTORNEYS' FEES

If any action at law or in equity is necessary to enforce or interpret the terms of this Agreement, the prevailing Party shall be entitled to reasonable attorneys' fees, costs, and necessary disbursements in addition to any other relief to which they may be entitled.

XVIII. WAIVER

No waiver of any provision of this Agreement shall be effective unless in writing and signed by a duly authorized representative of the Party against whom enforcement of a waiver is sought. Any waiver by the Parties of any default or breach of any covenant, condition, or term contained in this Agreement, shall not be construed to be a waiver of any subsequent or other default or breach, nor shall failure by the Parties to require exact, full, and complete compliance with any of the covenants, conditions, or terms contained in this Agreement be construed as changing the terms of this Agreement in any manner or preventing the Parties from enforcing the full provisions hereof.

XIX. NOTICES

All notices or other communications required or permitted hereunder shall be in writing and shall be personally delivered, sent by registered or certified mail, postage prepaid, return receipt requested, or delivered or sent by electronic transmission, and shall be deemed received upon the earlier of: (i) the date of delivery to the address of the person to receive such notice if delivered personally or by messenger or overnight courier; (ii) three (3) business days after the date of posting by the United States Post Office if by mail; or (iii) when sent if given by electronic transmission. Any notice, request, demand, direction, or other communication sent by electronic transmission must be confirmed within forty-eight (48) hours by letter mailed or delivered. Notices or other communications shall be addressed as follows:

To City: City of Garden Grove
13802 Newhope Street
Garden Grove, CA 92843
Attention: Water Services Manager

To Consultant: Richard C. Slade & Associates LLC
12750 Ventura Boulevard, Suite 202
Studio City, CA 91604
Attention: Mr. Richard C. Slade

Either Party may, by written notice to the other, designate a different address, which shall be substituted for that specified above.

XX. ENTIRE AGREEMENT

This Agreement constitutes the entire agreement between the parties and supersedes all prior negotiations, arrangements, representations, and understandings, if any, made by or among the parties with respect to the subject matter hereof. No amendments or other modifications of this Agreement shall be binding unless executed in writing by both parties hereto, or their respective successors, assigns, or grantees.

XXI. FORCE MAJEURE

If either party shall be delayed or prevented from the performance of any service under this Agreement by reason of acts of God, strikes, lockouts, labor troubles, restrictive governmental laws or regulations or other cause, without fault and beyond the reasonable control of the party obligated (financial inability excepted), performance of such act shall be excused for the period of delay, and the period for performance of any such act shall be extended for a period equivalent to the period of such delay.

XXII. TIME IS OF THE ESSENCE

The Parties agree that time is of the essence of this Agreement with respect to the deadlines set forth herein.

XXIII. SEVERABILITY

Whenever possible, each provision of this Agreement shall be interpreted in such a manner as to be effective and valid under applicable law, but if any provision of this Agreement shall be invalid under the applicable law, such provision shall be ineffective only to the extent of such prohibition or invalidity, without invalidating the remainder of that provision, or the remaining provisions of this Agreement.

XXIV. PROHIBITED INTERESTS

Consultant covenants that, for the term of this Agreement, no Board Member, official, officer or employee of City during his/her tenure in office/employment, or for one (1) year thereafter, shall have any interest, direct or indirect, in this Agreement or the proceeds thereof. Consultant warrants that it has not given or paid and will not give or pay any third party money or other consideration for obtaining this Agreement.

XXV. SCOPE CHANGES

In the event of a change in the scope of the proposed project, as requested by City, the Parties hereto shall execute an addendum to this Agreement, setting forth, with particularity, all terms of the new Agreement, including but not limited to any additional Consultant's fees.

XXVI. NON-LIABILITY OF CITY OFFICERS AND EMPLOYEES

No officer or employee of the City shall be personally liable to the Consultant, or any successor in interest, in the event of any default or breach by the City or for any amount which may become due to the Consultant or its successor, or for breach of any obligation of the terms of this Agreement.

XXVII. AGREEMENT EXECUTION AUTHORIZATION

Each of the undersigned represents and warrants that he or she is duly authorized to execute and deliver this Agreement and that such execution is binding upon the entity for which he or she is executing this Agreement.

XXVIII. RECITALS

The Recitals above are hereby incorporated into this section as though fully set forth herein and each party acknowledges and agrees that such Party is bound, for purposes of this Agreement, by the same.

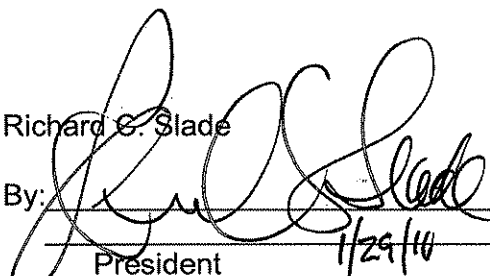
IN WITNESS WHEREOF, this Agreement has been executed in the name of City, by its officers thereunto duly authorized, and Consultant as of the day and year first above written.

CITY OF GARDEN GROVE

By: _____
Matthew J. Fertal
City Manager

ATTEST:

By: _____
Kathleen Bailor
City Clerk

Richard C. Slade
By:  _____
President 1/29/10

If CONTRACTOR is a corporation, a Corporate Resolution and/or Corporate Seal is required. If a Partnership, Statement of Partnership must be submitted to CITY.

APPROVED AS TO FORM:

Woodruff, Spradlin & Smart


By:  _____
Thomas F. Nixon
City Attorney

EXHIBIT A
SCOPE OF SERVICES



EXHIBIT A

RECOMMENDED SCOPE OF HYDROGEOLOGIC & ENGINEERING SERVICES

RCS and AKM understand that the City's Water Services Division is proposing to replace the deep, existing onsite water well (Well No. 23) at the Lampson Reservoir site with a new well, to be designated as replacement Well No. 31. Thus, because the City has already chosen the actual well site, our proposed Scope of Hydrogeologic and Civil Engineering Services is tailored towards focusing on the feasibility and characterization of that site for a new, municipal-supply replacement well. The tasks listed below are presented in the same order as outlined in the City's November 2009 RFP. RCS has provided some changes/additions to this scope where it was deemed necessary to provide a more thorough and complete review, analysis and evaluation of the technical issues for the proposed project.

Task 1: Project Management

Task 1-A: Project Scheduling and Status Reports

This task will be associated with compiling and maintaining a time schedule for the project work tasks. This schedule will be: prepared in the form of a Gantt chart with milestones, using Microsoft Project; updated on at least a monthly or a more frequent basis as needed; and submitted to the City along with RCS monthly invoices. In addition, City Staff will also be apprised of the project on a regular basis via telephone calls, emails and status reports which will also be presented to the City in Memorandum format on a monthly basis, beginning at the outset of the work and continuing through presentation of the Task 3 Final Construction documents.

Following bidding of the well construction project by the City, and during construction activities on the new replacement well, project management activities will be continued. Due to the 24-hour nature of the drilling and well construction work, RCS will provide updates to the City on a daily basis at least, using emails and/or telephone calls. A listing of project management activities during this period are outlined under Subtask 5-A15, below.

Task 1-B: Meetings

Attend an initial, kick-off meeting between the RCS/AKM team, you and City Staff to become acquainted with the key individuals who will be associated with the project and to discuss the overall objectives of and scheduling for the project. Prior to this meeting, RCS will provide a data request letter to the City to identify the specific types of data desired from the City for its existing water wells at the site, namely Well Nos. 23 and 28. The requested data would also include information on water quality, water levels, pumping data, driller's logs and any available electric logs of City wells. (Particularly, Well No. 30 to the northeast, due to its relatively recent construction and its Summary of Well Construction Operations report). As noted in the Project Understanding portion of this Technical Proposal, RCS already has considerable data in its in-house files for Well Nos. 23, 28 and 30; certain types of more current data are still needed, if available (specific capacity, pumping rates and water levels).

Following the kick-off meeting, additional meetings will be performed during associated following tasks, Task 2 and 3; these meetings will be performed on a monthly basis and attended jointly by RCS and AKM and City Staff.



Prior to each meeting, RCS will prepare and submit a meeting agenda to desired City Staff for review, and subsequent to each meeting, RCS will write and provide minutes to the City for documentation purposes. It is anticipated that five (5) additional meetings will be performed during Tasks 2 and 3.

Task 1-C: Deliverables

In accordance with the City's RFP, the following items will be delivered to the City:

- Meeting Agenda; one day before the meeting, in electronic format, to each attendee via email in Adobe Portable Document Format (PDF).
- Meeting Minutes; five working days after each meeting, in electronic format, to each attendee via email in Adobe PDF.
- Monthly Status Report; one to each attendee in hardcopy and electronic format, in Adobe PDF.
- Monthly Project Schedule Update; one to each attendee in hardcopy and in electronic format, in Adobe PDF.
- All letters or memoranda generated during the project to the City in electronic format via Adobe PDF.
- Copies of key data obtained from outside sources, such as from OCWD and/or from our in-house files for nearby projects, that will be reviewed and/or used during the project will be submitted to the City, in hardcopy or electronic format, as appropriate.

Task 1D- Public Meeting (OPTIONAL Task)

Should the City schedule a neighborhood meeting with the residents near the drill site prior to the construction of the replacement well, RCS and AKM will be available to assist the City in these meetings in addressing any technical issues and/or scheduling/timing issues regarding the drilling, development and testing of the new replacement well, as needed. It is anticipated that the City would likely schedule only one meeting with regard to the upcoming project. This is offered to the City as an Optional task and will only be performed should the City request it.

As mentioned in the Project Understanding portion of this Technical Proposal, RCS suggests this public meeting would be very useful for the local neighbors particularly in regard to: noise generation and mitigation; and restricting night-time deliveries along Jerry Lane and Waterworks Way.

Task 2: Preliminary Design Report (PDR)

Task 2-A: Preliminary Design Report Preparation

Task 2-A1: Data Collection, Review & Analysis

This task will primarily consist of performing additional data collection, review and analysis during the project. This will include the requisite hydrogeologic data, such as well construction documents, water levels, pumping, water quality data and all available maps, design drawings, shop drawings and operation records for the engineering aspects of the project.



In this task RCS will conduct a review and analysis of electric logs (E-logs) for nearby City wells, OCWD groundwater monitoring wells (like GGM-1 located to the southwest) and for known wildcat oil wells in the region, as outlined in Task I-A above, and as discussed in the Project Understanding portion of this Technical Proposal. Further, OCWD will also be contacted for additional data on driller's logs, E-logs, water levels and water quality for proximal OCWD groundwater monitoring wells and wells owned by nearby cities, as deemed necessary to the study.

RCS considers the evaluation and correlation of E-log signatures will be vital to the successful completion of the PDR, and ultimately, the entire drilling and construction of the new well. These E-logs will be used to geologically correlate the geologic strata and particularly the key aquifers and aquicludes in the subsurface across the City and the proposed well site, to aid in understanding the depth, thickness and continuity of these systems beneath the proposed replacement well site.

The objective of this correlation will be to see if it is feasible to drill to deeper depths (i.e., to depths to perhaps 1400 ft or so) at the proposed well site for the purpose of encountering additional, deeper aquifer systems for potable water supply; this is discussed as a possible alternative option, should the City desire, to the 1000-foot depth stated in the RFP. Additional information on this possible option is provided in the Project Understanding section of this Technical Proposal. We will also use known E-logs for proximal wildcat oil wells to assist us in this important endeavor (RCS already has in its in-house data files the E-logs of the wells that lie nearest the proposed well site based on our long term work in the region over time). It is understood that all data requested verbally from the City will be confirmed in writing to the City's Water Service project manager and all original data obtained will be returned to the City. Further, it is understood that the Final PDR shall contain copies of all data reviewed and/or used by RCS on the project.

Task 2-A2: Field Reconnaissance

Conduct a second field visit of the subject Reservoir property and the proposed well site (the site has already been visited by RCS and AKM during pre-bid meetings). The purpose of this second field reconnaissance is to observe existing site conditions in more detail and to assess site logistics for such reasons as mobilization of drilling equipment and needs for noise control around the drill site. Also important to this task will be to identify the key site parameters necessary for the preparation of the PDR and the subsequent Technical Specifications for the drilling and testing of the replacement well. Such site parameters to be observed will consist of items such as:

- Size of site for the placement of drill rig equipment and accessories and for storage of well construction materials.
- Proximity of site to nearby residences (for noise mitigation & safety issues).
- Needs for special timing and scheduling of all deliveries due to the proximity of homes and the narrow nature of the alleyway access between some of those homes for all equipment and trucks to the site.
- Presence of nearby above ground and below ground utilities.
- Source of and distance to "make-up" water needed for drilling at the site.



- Possible issues for the initial Contractor work effort to create a new connection to the nearby buried stormdrain prior to construction of the well.
- The possible existence of safe, unimpeded downwell access for installation of RCS transducers into existing Well Nos. 23 and 28 during the final pumping tests of Well No. 31.

The items listed above have already been preliminarily evaluated, during our initial pre-bid site visit with the City. Thus, we have already provided the City with several preliminary comments regarding each of these issues in our Project Understanding section of our proposal.

Task 2-B: Preliminary Design Report

Provide hydrogeologic analysis of the data and information generated during the above listed tasks, and prepare a detailed Preliminary Design Report (PDR), with regard to subsurface geologic/hydrogeologic conditions at the replacement well site. This PDR will be presented in two parts.

Subtask 2-B1: Part 1- Hydrogeologic and Well PDR

The information presented in the first part of the PDR will be used directly for the preparation of the eventual Technical Specifications for the entire construction of the proposed replacement well and will be tailored to site-specific conditions at the City-selected drill site. Part 1 of the PDR will be concerned primarily with the following issues related to preliminary design criteria and will include, but will not necessarily be limited to, the following:

1. Geologic conditions at and beneath the site (as identified by our independent and detailed correlation of nearby E-logs).
2. Site logistical issues affecting well construction and testing.
3. Anticipated well yields (potential operational pumping rates).
4. Anticipated groundwater quality for the replacement well.
5. Potential mutual drawdown interference between the replacement well and the two onsite wells, namely Wells 23 and 28.
6. Noise mitigation methods (e.g. sound attenuation) to be used, and specific requirements relating to the timing and scheduling of all equipment and supply deliveries to the jobsite by the Contractor (due to the intimate "feel" of the local neighborhood).
7. A listing of the requisite permits needed for construction of the well.
8. Preferred method of drilling and the anticipated depths and diameter(s) for the pilot hole and borehole ream(s).
9. Testing methods and sample analyses to be performed downhole in the pilot hole (such as during the recommended isolated aquifer zone testing in the open pilot borehole).
10. Diameter and type of well casing to be used.
11. Type of and depth settings for the perforated well casing.
12. Anticipated gradation of and depth placement for the gravel pack.
13. Anticipated footage lengths for the cement seal(s) and gravel pack.
14. Mechanical and pumping development criteria.
15. Parameters for the final pumping tests.



16. Downwell testing (spinner and depth-specific sampling in the newly cased well).
17. Disposal and treatment options for fluids generated during well development and testing. It is understood that discharge of well testing and development fluids will be conducted under the City's existing National Pollutant Discharge Elimination System (NPDES) permit. Thus, the discharge options under this permit will also be discussed in the PDR, including the need for the Contractor to construct a new connection to the nearby buried stormdrain before mobilizing the drill rig and constructing the new well.

It is understood that the City in its RFP has estimated that the depth of the pilot hole for the well will be 1000 ft. However, it is possible that based on our preliminary evaluation that the drilling depth could extend deeper, perhaps to as great as 1400 ft below ground surface (bgs), in order to obtain potable groundwater. Consequently, the rationale for this possibly deeper drilling depth, if feasible and if agreed upon by the City, could be discussed in detail in our PDR.

A proposed general Outline for the Hydrogeologic Evaluation and the PDR for the new well will include the following listed sections, at least:

- Executive Summary
- Introduction
- Findings
 - Local Hydrogeologic Conditions
 - Local Well Construction Parameters
 - Water Level Data
 - Pumping Data
 - General Water Quality Conditions
- Local Environmental Conditions
- Conclusions and Recommendations
- Preliminary Well Design Criteria
 - Pilot Borehole Drilling and Reaming
 - Well Casing and Gravel Pack
 - Well Development
 - Downwell Testing
 - Opinion of Probable Well Construction Costs
- Preliminary Assessment of Pumping Rates
- Potential Water Level Drawdown Interference
- Copies of Data Reviewed

A Draft PDR will be provided for your review. After receipt of any comments, RCS will incorporate those comments and prepare the Final PDR for the project as soon as possible.

Subtask 2-B2: Part 2- Engineering PDR

Part 2 of the PDR will be concerned with the engineering aspects of the project. This will include interim blending of water from Well Nos. 23 and 28 on an interim basis, until Well No. 31 is constructed, and then a permanent blending facility with water from Well Nos. 28 and 31 to



provide acceptable concentrations of nitrate as NO_3 relative to its California Department of Public Health (CDPH) MCL of 45 milligrams per Liter (mg/L). The Engineering PDR will consist of the following elements:

1. **Base Map Preparation:** preparation of a base map showing all existing facilities on-site. The map will be used to depict the location of the new Well No. 31, and locations for the new nitrate sensors to be installed. **Data Collection:** collection of data on historic nitrate levels and pump data for Well Nos. 28 and 23 for use in preparing blending calculations.
2. **Determine Nitrate Sensor Locations:** recommend locations for installing the nitrate sensors and controller. It will also develop a typical detail for installing the probes.
3. **Pump Analysis:** development of a system curve for existing Well No. 28 and future Well No. 31 to determine the pump's operation at various speeds. The system curve will be plotted on the pump's performance curve, and the minimum pump output will be determined, that will not cause damage to the pump. This minimum pump output will then be compared to the blending requirements for the project to determine the suitability of using a VFD to control flow from Well No. 28 and future Well No. 31 and/or replacement of Well No. 28 with a smaller pump.
4. **Blending Analysis:** Based upon historic nitrate levels in Well No. 23 and Well No. 28, AKM will calculate the maximum and minimum flows that can be expected out of Well No. 28 and future Well No. 31. This analysis may be used to help determine the capacity which Well No. 31 is ultimately finished.
5. **Control Strategies:** in conjunction with the City, will develop control strategies for operating Well No. 28 and future Well No. 31. These strategies will ultimately be programmed into the PLC during the construction phase of the project. **Cost Estimate;** preparation of construction cost estimates for the new nitrate monitoring system, VFD, and PLC programming.
6. **Energy Analysis:** calculation of the energy savings which will be created by using a VFD in lieu of throttling the discharge valve at Well No. 28. This analysis will be used for completing the SCE Rebate Program application.

The Engineering PDR include background information on the wells, a detailed evaluation and discussion of the recommended improvements, design parameters, costs, phasing, catalog information for the recommended equipment and all calculations. This report will guide the preparation of the subsequent construction documents. A proposed outline for the engineering report is as follows:

- Section 1 Executive Summary
- Section 2 Introduction
- Section 3 Pump Analysis
- Section 4 Blending Analysis
- Section 5 Energy Analysis/SCE Rebate Program
- Section 6 Recommended Improvements
- Section 7 Cost Estimates and Schedule
- APPENDIX A – Calculations
- APPENDIX B – Preliminary Drawings



APPENDIX C – Catalog Information

APPENDIX D – Water Quality Data

Task 2-C: Deliverables

In accordance with the City's November 2009 RFP, RCS/AKM will deliver five (5) copies of both the Draft and Final PDRs to the City, in loose leaf binders. In addition, an electronic version of the Final PDRs will also be provided to the City on a CD, in Adobe PDF.

Task 3: Final Construction Documents

Task 3-A: Preparation of Technical Specifications for Well Construction

For this task, RCS will prepare the Technical Specifications for the construction of the new replacement well. These documents can then be incorporated by the City into its other standard bid-package documents. In essence, RCS will prepare the Technical Provisions for the entire well construction and testing project, including the related line item Bid Sheets. RCS, based on its substantial amount of recent experience with the construction of new municipal-supply wells in southern California, will also provide its detailed and independent estimate of the probable cost of construction of the new well for the City's in-house use. Our Technical Specifications will include, but will not be limited to the following important details:

1. Site modifications needed to drill and construct the well.
2. Specific requirements for the contractor to create a new, permanent connection to the stormdrain which lies buried beneath the paved driveway near the well site.
3. Specific requirements for the allowable hours for the Contractor to deliver equipment and supplies throughout the entire project due to the proximity of homes and the narrow alleyway access (aka, Waterworks Way) to the site from Jerry Lane.
4. Drilling/construction method for the replacement well and drilling fluids control parameters and methods.
5. Types and materials for sound attenuation for noise mitigation.
6. The possible need for any additional fencing/enclosures that might be needed for public safety around the drill site.
7. Estimated pilot hole drilling depth to 1000 ft per the RFP (or to a depth as great as about 1400 ft, if so desired by the City, based on an alternative option discussed by RCS in Project Understanding).
8. Downhole geophysical surveying (type of electric logs) in the open borehole.
9. The estimated number of and methods for isolated aquifer zone testing in the open borehole, including sampling requirements and analytes for testing in the laboratory.
10. Depth(s) and diameter(s) of the final borehole ream(s).
11. Casing material types (possibly to be Corten steel), casing diameters and casing depths.
12. The type and size of casing perforations and the estimated lengths of such casing, based on our E-log correlations.
13. The depths of the cement annular sanitary seal, a possible bottom-hole seal, and possible intervening aquifer seals.



14. The anticipated gravel pack gradation and depth placement.
15. Specific criteria for mechanical, chemical and pumping development.
16. Water quality sampling and analysis for isolated aquifer zone testing and for the Final wellblend water quality samples.
17. NPDES permit requirements, sampling, analysis, and treatment and compliance measures that must be adhered to and/or performed by the Contractor.
18. Criteria for the final pumping tests (step drawdown and constant rate pumping tests).
19. Criteria for spinner log testing and depth discrete groundwater sampling under pumping conditions.
20. Requirements for the final video survey, the alignment survey and for completion of the wellhead.

Selection of casing materials, borehole and casing diameters, required noise and safety mitigation measures, onsite treatment and/or disposal of drilling fluid (including special provisions) for the construction of the replacement well, and other aspects of the construction project, will be specifically tailored to the well site at the Reservoir property.

Work for this task will also include preparing, for the City's in-house use, a detailed estimate for our opinion of the probable cost of the drilling, construction and testing of the replacement well. This construction cost estimate should provide the City with a reasonable and realistic expectation of drilling construction costs for the proposed replacement well, because of the unusually large number of recent similar municipal water well construction projects with which RCS geologists have been involved; these other RCS projects have also involved virtually all drilling contractors in the region that would be realistically expected to provide the City with a bid for the new well.

An outline of the Technical Specifications for well construction would include, at least, the following sections:

Outline of General Construction Section 33.21.13 Public Water Supply Wells

Section 33.21.13.1: Special Conditions

- 1.1 Purpose
- 1.2 Project Location
- 1.3 Overview of Work To Be Done
- 1.4 Permits & Notifications
- 1.5 Qualifications of Contractor
- 1.6 Local Conditions
- 1.7 Method of Drilling
- 1.8 Mandatory Pre-Bid Site Walk
- 1.9 Pre-Construction Meeting
- 1.10 Construction Completion Schedule
- 1.11 Traffic Control
- 1.12 Drilling Supervision and Coordination
- 1.13 Termination
- 1.14 Liquidated Damages
- 1.15 Field Offices and Facilities
- 1.16 Job Site Protection
- 1.17 Temporary Water & Power Services



- 1.18 Disposal of Materials
- 1.19 Discharge of Well Development and Testing Water
- 1.20 Measurement and Payment of Bid Items
- 1.21 Submittals

Section 33.21.13.2: Special Provisions

- 2.1 Mobilization and Demobilization
- 2.2 Noise Control
- 2.3 Discharge Compliance
- 2.4 Conductor (Surface) Casing
- 2.5 Pilot Borehole Drilling
- 2.6 Downhole Geophysical Surveying
- 2.7 Isolated Aquifer Zone Testing
- 2.8 Pilot Borehole Bottom Seal (Optional)
- 2.9 Pilot Borehole Reams
- 2.10 Caliper Survey
- 2.11 Well Casing & Tubings
- 2.12 Gravel Pack
- 2.13 Annular Grout Seal
- 2.14 Alignment of Well
- 2.15 Standby Time
- 2.16 Mechanical Well Development
- 2.17 Chemical Well Development
- 2.18 Test Pump and Accessories
- 2.19 Pumping Development
- 2.20 Pumping Testing of Well
- 2.21 Flow Meter Survey
- 2.22 Depth Specific Water Sampling
- 2.23 Color Video Survey
- 2.24 Disinfection and Well Capping
- 2.25 Abandonment & Destruction

Typical Exhibits (Appendices)

- Exhibit A, "Bid Documents"
- Exhibit B, "City Noise Ordinance"
- Exhibit C, "Discharge of Well Development and Testing Water"

The actual sections to be utilized in the Technical Specifications will be specifically tailored to the well site and based on our site specific findings during the preliminary well design stage. However, it is likely that most or all of the above sections will be used for the final well construction documents.

Task 3-B: VFD, 4-Prong Analyzer, SCADA/Electric Modifications

Special provisions describing the project related issues and the technical requirements will be prepared. The special provisions will describe special design and coordination features of the project as well as provide requirements for materials, equipment, installation and workmanship.



A bid schedule will also be generated which will be broken out into sufficiently detailed tasks to assist in evaluating the bids and preparing progress payments. City-furnished contract and insurance documents as well as a reduced set of drawings will be included to complete the specification package. An outline of the proposed technical specifications for the engineering aspects of the project is as follows:

Outline for Division 1 – General Requirements

- 01011 Summary of Work
- 01300 Submittal
- 01340 Shop Drawings, Samples and Project Data
- 01505 Mobilization
- 01510 Temporary Utilities
- 01522 Contractors Sanitary Facilities
- 01530 Protection of Existing Facilities
- 01550 Field Testing and Training
- 01560 Maintenance of Work Site
- 01730 Operation and Maintenance Manuals

Division 2 – Site Work

- 02050 Demolition
- 02200 Earthwork
- 02740 Asphalt Concrete Paving

Division 3 – Concrete

- 03305 Cast-In-Place Concrete
- 03485 Precast Vault
- 03600 Grout
- 03740 Modifications and Repairs to Concrete

Division 9 – Finishes

- 09900 Painting and Coating

Division 13 – Specialty Equipment

- 13000 Nitrate Sensing Equipment

Division 16 – Electrical

- 16000 General Provisions
- 16111 Rigid Conduit
- 16112 Flexible Conduit
- 16122 600 Volt Cable
- 16126 Instrumentation Cable
- 16131 Pull and Device Boxes
- 16920 PLC Programming and Instrumentation



Task 3-C: Deliverables

As noted in the City's RFP, RCS/AKM will provide the following materials to the City for both the Technical Specifications for Well Construction and for the VFD, 4-Prong Analyzer, and SCADA/Electric modifications:

- Two (2) sets of full size plans at 60%, 99% and 100% completions.
- Two (2) sets of the Technical Specifications, at 99% and 100% completions.
- Two final print sets of plans with mylars (reverse read), on 24-inch by 36-inch plan sizes and at a scale of one inch=20 feet. These drawings will be to City standards and stamped and signed by a Certified Hydrogeologist (HG) and Registered Civil Engineer (RCE).
- A CD with the plan drawings in AutoCAD DWG format, and also with the Technical Specifications in Microsoft Word (for all bidding documents) and the Opinion of Probable Construction Cost Estimate in Excel files.

Task 4: Bidding Documents

The RCS/AKM team will prepare for and attend a pre-bid meeting and provide pre-bid clarifications and/or addenda, as necessary and address questions/issues that the bidders may have with regard to this well construction and testing project. The pre-bid meeting and bidding process should allow potential bidders to understand site logistics (such as access), the available water supply for drilling, location of nearby underground utilities, the location of the buried storm drain that must be connected to by the contractor, and disposal requirements for all fluids generated during the entire drilling and testing work. In addition, the pre-bid meeting will enable the bidders to become familiar with the requirements of the City and to become aware of the City's needs and desires in completing the goals of the construction project. RCS will also review and analyze contractor bids received.

Task 5: Well Construction Management and Engineering Services

Task 5-A: Well Drilling, Testing and Construction Activities

Task 5-A outlines our proposed subtasks and approach for managing the project and monitoring/observing Contractor activities during the drilling, construction and testing of the proposed replacement well.

Subtask 5-A1: Pre-Construction Meeting

Prepare for and attend the pre-construction meeting for the proposed replacement well and review information provided by the drilling contractor who has been awarded the well construction contract. Discuss key issues in the Technical Specifications and to the Contractor-proposed mobilization and scheduling of personnel and equipment. This meeting will also better acquaint the drilling firm with the well construction site, and help define the logistical issues at the well site, such as: nearest available water and electrical supply; placement of equipment with respect to buried utilities allowable hours for delivery of materials and supplies during construction (due to narrow streets and the small access road from Jerry Lane to the drill site); and disposal of drilling fluids into the new connection to the stormdrain that the Contractor must construct. Most importantly, however, will be the driller's responsibility during this meeting to inform the City what will need to be performed in order to prepare the site for the required work, when



work will actually commence, including a detailed time schedule for completing the work. The minutes of this meeting will be recorded and distributed to all meeting attendees, via hardcopy and email. The initial work by the Contractor for 2 important elements of the project, namely connection to the stormdrain and limiting the delivery times for his equipment and supplies to the drill site (due to the proximity of the houses).

Subtask 5-A2: Conductor Casing and Rig Mobilization

Provide telephone coordination during mobilization of the drilling contractor, construction of the storm drain connection, drilling of the conductor casing and installation of sound barrier wells. This coordination is to help keep the City informed on the progress of drilling contractor activities during mobilization.

Subtask 5-A3: Pilot Hole Logging

Based on the City's RFP, the replacement well is estimated to be drilled to an approximate depth of 1000 ft bgs (even though the actual depth could be deeper, as defined by our E-log correlation work and as to be described in our PDR, RCS will assume for our tasks that the pilot hole and the well will be to 1000 ft and to as great as 1400 ft should the City so desire). We anticipate that the average drilling rate by the reverse circulation drilling method could be on the order of 8 feet per hour. Thus, the Contractor will require approximately 125 hours (5 days; not counting breakdowns or other delays) to attain a depth of approximately 1000 ft.

During drilling, we propose that the RCS geologists will be present on a part-time basis to geologically log the cuttings (formation samples) collected by the driller. Possibly the most important part of this drilling project will be for the geologist to identify the thickness of the potentially water-bearing deposits; part of this evaluation will be based on analyses of the E-logs for the oil well in the nearby park and for monitoring well GGM-1 to the southwest.

When onsite during pilot hole drilling, RCS geologists will also check the drilling fluid characteristics of viscosity, weight, and sand content to help assess contractor conformance with the Specifications. Samples of representative formation materials will be collected by the Contractor during drilling to permit RCS to have grain size distribution curves of these materials performed by others. Grain size testing is needed to select the final slot size for the casing perforations and the gradation of the final gravel pack. Grain size distribution tests will be performed on selected representative formation samples. While onsite, the RCS geologist can be available to discuss drilling conditions and the results of in-progress geologic logging with City field personnel.

This subtask helps provide a detailed geologic log of drill cuttings at the drill site so that drilling conditions can be well-documented. This necessitates the use of experienced RCS geologists to examine and record (log) the drill cuttings and to accurately interpret the subsurface geologic conditions. Documentation of the subsurface geologic conditions provides actual physical data to support subsequent analysis of the downhole geophysical surveys of the pilot hole. Also important to this task is to check that the Contractor is accurately monitoring drill rates at depth.

Subtask 5-A4: Downhole Geophysical Survey Log Analysis

RCS geologists will analyze and review the downhole geophysical surveys (i.e., electric logs) of the pilot hole. Review and compare data from geophysical logs and the geologic log and then provide a Draft of our casing completion recommendations to the City and the driller for the final ream diameters and casing depths as soon as possible. The new E-logs will be compared to



and correlated with the E-logs available from nearby wells owned by the City (GG-28 and GG-30) and to the two nearby wildcat oil wells and to the nearby groundwater monitoring well (GGM-1).

Geophysical logging is conducted to accurately determine the depth(s) to and thickness of possible water-bearing formations (aquifers), based on their electronic signatures. RCS uses geologic logging as physical evidence to help support our interpretations regarding the depth and nature of subsurface materials penetrated during drilling.

These data and E-log correlations are also needed to provide our recommendations for the specific water-bearing zones for isolated aquifer zone testing and to eventually help select the final depths for installation of all blank and perforated casing.

Subtask 5-A5: Isolated Aquifer Zone Testing

RCS geologists will observe downhole isolated aquifer zone testing of groundwater in selected aquifers in the pilot hole. RCS will select specific depth zones on the basis of our review and analysis of drill cuttings and the new E-log. We recommend at this time, that a maximum of five (5) zones be selected for the isolated aquifer zone testing in the open pilot borehole for the proposed replacement well. Such down-hole testing in the open pilot borehole is important to help identify the possible presence of certain groundwater contaminants (like perchlorate, nitrate and/or certain VOCs) that may currently be present beneath the drill site in selected depth zones. RCS geologists will be present during the latter stages of development and submersible pumping of each zone test to collect samples for water quality testing. During pumping of each zone, our field geologist will observe/monitor the following field parameters:

- Temperature (T).
- pH.
- Electrical conductivity (EC).
- Turbidity.
- Static water levels.
- Pumping water levels.
- Pumping rates and estimates of the specific capacity of each tested zone.

Monitoring of the above-listed parameters is necessary to help determine whether or not formation water is being produced and to help identify the rates of possible groundwater production from each tested zone. In addition, the collected samples will need to be of sufficient clarity to obtain representative groundwater samples for water quality analysis. Further, monitoring of pumping water levels, static water levels and specific capacities of each zone will provide preliminary data on the relative production capabilities of each tested aquifer zone.

Subtask 5-A6: Final Well Design Memorandum and Monitor Borehole Ream(s)

Communicate in-progress findings to the City and prepare a Draft of the Final well construction design Memorandum for the replacement well. This Draft Well Design Memorandum will be submitted to the City for its review. Following receipt of any City Staff comments, RCS will prepare a Final version and promptly submit it to the City and the driller. This Well Design Memorandum will provide the Final recommendations for the following items for the new well:

- Casing types, lengths and diameters.
- Type, slot size and depth placements for the perforations.



- Gravel pack type, gradation and depth placement, based on testing of actual samples of selected drill cuttings.
- Depth of the cement seal(s).
- Recommended depth of the test pump intake for development and testing.

Also during this task, RCS will provide on-going telephone/email communication with the City and the driller in the field during the final reaming of the borehole. When reaming operations have been completed, the RCS field geologist will review the results of the caliper survey of the final reamed borehole to check that the appropriate depths and diameters have been completed by the Contractor. Daily field memoranda and/or telephone calls will be provided to the City.

Subtask 5-A7: Casing, Gravel Pack and Cement Seal Installation

RCS considers the installation of the casing, gravel pack and the cement seal to be the most critical task in the construction of the new well, because any significant deviation from the recommended design could impact the production capacity of the well. RCS geologists will be present on a full-time basis to monitor, record and check Contractor compliance with the Final well design during the installation of the recommended blank and perforated casings, the gravel pack, and the cement seal (seals) for the replacement well. Thus, such monitoring will be conducted to help permit conformance with the appropriate methods and materials in the Specifications and/or the RCS recommendations based on accurately defined in-situ, downhole conditions in the borehole.

During casing installation, RCS geologists will observe and record the lengths of the blank and perforated casing installed, spot check the slot width of the casing perforations, and observe and record the type and amount of gravel pack and cement emplaced downhole by the Contractor.

Subtask 5-A8: Well Development (Mechanical and Chemical Methods)

Provide a RCS geologist on a part-time basis to monitor well development by mechanical and chemical methods for the new well. Monitoring development operations and checking for conformance with the Technical Specifications is useful because proper mechanical and chemical development of the replacement well is considered by RCS to be another one of the most crucial activities during well construction. Also during this task, RCS geologists will check Contractor compliance with the City's NPDES permit discharge requirements.

Subtask 5-A9: Well Development (Pumping Methods)

A RCS geologist will be present on a part-time basis to monitor well development by pumping methods. The geologist will also be present during start-up of pumping development and at other occasional time intervals to spot-check the progress of this pumping development. Contractor compliance with City's NPDES permit discharge requirements will also be checked during pumping development.

Subtask 5-A10: Step Drawdown Testing

RCS will provide a geologist to monitor step drawdown testing on a part-time basis. It is anticipated that three to four pumping rates will be recommended for this test. During testing, water levels in the replacement well will be recorded automatically with the use of an RCS pressure



transducer; this device will also be used to monitor and record water levels during the subsequent constant rate pumping test.

RCS will also, based on its second field visit, identify the feasibility of installing its own pressure transducers in Well Nos. 23 and 28 during the pumping tests of new Well No. 31. If this is feasible, then the collected water level data will help to accurately define the drawdown interference between the new well and the other two onsite wells.

Subtask 5-A11: Constant Rate Pumping Test (Aquifer Test)

Provide a RCS geologist, on a part-time basis, to monitor water level drawdown and recovery during and after the final constant rate pumping test (aquifer test) in the new well. Critical times will be those during the first few hours of drawdown and recovery measurements. The contractor's pump crew will also be used to conduct occasional water level measurements (using their electric tape sounder) to maintain the monitoring schedule recommended by RCS geologists. It is anticipated, at this time, that the constant rate discharge test will be 48 hours in duration. The RCS pressure transducers will automatically record water levels during the step test and the constant rate test.

Field values of pH, T and EC of the well discharge will be obtained by the RCS geologist during the test. Water samples of the final wellblend from the new replacement well will be collected for quality testing and delivered to a City-approved laboratory.

At the end of aquifer testing, the Contractor will be required by the RCS Technical Specifications to perform a flow meter (spinner log) survey of the well to help identify the present flow regime of the various perforated zones in the replacement well. The Technical Specifications will provide for appropriately-sized camera ports/sounding tubes to permit this survey. Depth discrete groundwater sampling will also be performed at this time.

The accurate collection of reliable aquifer test data is important to provide an adequate analysis of aquifer transmissivities and production capabilities for the well. Further, these data are used in conjunction with water quality data to establish the final wellblend water quality in the replacement well. Field monitoring of water levels in the replacement well during aquifer testing is vital in helping to determine the final operational pumping parameters for the replacement well.

Subtask 5-A12: Casing Alignment Testing, Video Survey and Well Disinfection

Review data obtained from during alignment and deviation testing of the well, using gyroscopic methods. It is important to check that the video survey log is of sufficient quality to reliably document as-built well conditions. The Contractor will then need to chlorinate the well for final well disinfection.

Subtask 5-A13: Recommended Pumping Rate and Pump Depth Setting Memorandum

Based on the step drawdown and constant rate pumping test data, RCS shall promptly provide a Memorandum to the City and AKM detailing static and pumping water levels, pumping rates and the specific capacity for the replacement well. This Memorandum will also provide our recommendations to the City for the final operational pumping rate and pump depth setting for the permanent pump; these parameters will include factors for anticipated declines in specific capacity over time, and anticipated seasonal variations in water levels. This Memorandum will also include the results of final water quality testing of the wellblend so that our engineer, AKM, can prepare details for the future permanent pump, along with any possible treatment options.



Subtask 5-A14: Summary of Well Construction Operations Report

The RCS-prepared Summary of Well Construction Operations Report for the replacement well will serve to help document the drilling, construction, testing activities, and the materials used during construction of the well.

The report will include the following items:

- Description of lithologic units and possible aquifers, including a complete geologic log.
- Copies of all electric logs, including caliper and spinner surveys.
- Results of sieve analysis, including plots of grain size distribution curves.
- Table of well construction materials and depths.
- As-built well design drawings (in paper and electronic form).
- A basic chronology of well construction and testing.
- Data acquired during isolated aquifer zone test data along with the resulting field water quality test data.
- Field water quality results, water levels and pumping rates during zone testing and constant rate pumping tests.
- Analytical test reports showing water quality results for isolated aquifer zone testing and the final wellblend sample.
- Well development logs.
- Pumping test data for the step drawdown test and the constant rate test, including water level recovery measurements; water level data from our transducers in Well Nos. 23 and 28 will be provided (assuming there is safe, unimpeded access into each well for the transducer).
- Analysis of pumping test data with a description of the hydraulic characteristics of the aquifers, including well performance and plots of drawdown relationships as a function of flow rate and time.
- Plumbness and alignment data.
- Other pertinent data relating to materials used.
- Conclusions and recommendations.

Five (5) copies of the Final Summary of Well Construction Operations report will be submitted to the City. The report, including all drawings, tables, and appendices, will also be provided to the City in Adobe PDF format. All electronic files will be placed on a CD and included in the report, along with copies of the key data used in our analyses.

Subtask 5-A15: Well Construction Management Services

The RCS Project Geologist will provide overall daily project management services to help keep the City informed of events and details during each task of well construction. These project management services will include:

- Digital photographs of well drilling, construction and testing operations will be obtained at various periods during the project.
- Attend weekly status/update meetings (a total of 12 meetings are anticipated) with City staff and preparing and submitting meeting minutes for each meeting, during



the construction of the well. In addition, the RCS Project Geologist will keep the City informed, via e-mail and/or telephone calls of events during construction activities.

- Preparation of daily field reports, when our field geologists are onsite. Any changes during construction will be noted in the field and immediately provided to the City.
- Addressing and responding to Requests for Information (RFIs) that may be submitted by the driller.
- Evaluate change order requests (CORs), if needed, and provide recommendations to the City to approve/disapprove these requests, if applicable.
- Checking for Contractor compliance with the Technical Specifications and permit requirements.
- Review of progress billings submitted by the Contractor in order to check that the drilling contractor has provided the City with an accurate accounting and billing for time and materials used in conducting work associated with the drilling, construction, and testing of the replacement well.
- Provide a final “punch list” at the end of construction activities to identify construction deficiencies, if any, and to help resolve possible deficiencies between the Contractor and the City.

Subtask 5-A16: Drinking Water Source Assessment Program Report

Prepare a Source Water Assessment Program (SWAP) report for the Drinking Water Source Assessment Program (DWSAP) administered by the California Department of Public Health (CDPH) for the replacement well. This task is usually performed after the new replacement well is completed and has been equipped with a pump; RCS does recognize that the City does not plan on equipping the well for some time after its construction. However, our preparation of the SWAP report will consist of completing specific CDPH forms, as far as is possible (because of the lack of the permanent pump for the near future) with regard to the following elements:

- Delineation of groundwater protection zones.
- The preparation of a map illustrating these groundwater protection zones.
- An inventory/listing of potential contaminating activities (PCAs).
- Preparation of a well data sheet listing pertinent details of the construction of the well, along with preliminary information on the future permanent pump.

A report of environmental conditions in the area of the well site will also be obtained from Environmental Data Resources (EDR) of Milford, MA. This report will assist in the listing of PCAs in the area of the new replacement well.



Task 5-B: Engineering Services for VFD, 4-Prong Analyzer, SCADA/Electric Modifications

Task 5-B provides the proposed subtasks and approach for the engineering services and construction management/inspection services for the VFD, nitrate monitoring phase of the project as follows:

Subtask 5-B1: Attend Preconstruction and Construction Progress Meetings

The Project Manager and the Project Engineer will attend the pre-construction meeting. Also included is the Project Engineer's attendance at four (4) construction meetings.

Subtask 5-B2 Response to Requests for Information and Change Order Requests.

AKM will provide responses to requests for information and change order proposals submitted by the Contractor. Clarification drawings will be prepared and distributed, as required.

Subtask 5-B3 Shop Drawing Review

The shop drawings will be received by the City and transmitted to AKM for review. Two reviews of each shop drawing have been included in the scope of work. AKM will maintain a complete log of the shop drawing submittal and review process. Shop drawing reviews will be completed within two weeks of receipt. It is currently anticipated that shop drawings will be required for the nitrate sensors and controller, wire and conduit, VFD, A.C. pavement, and precast vault.

Subtask 5-B4 Start-Up Assistance

It is proposed that AKM prepare a start-up testing protocol and submit it to the City and the Contractor for review and comments. Following the acceptance of the testing protocol, start-up testing should be scheduled and conducted to ensure that all systems function as designed. A report will be prepared and submitted to the City summarizing the results. The report will also provide directions to the Contractor for corrective action.

Subtask 5-B5: Pre-Construction Meeting

The Construction Manager will schedule a pre-construction meeting for the work. The purpose of the meeting will be to introduce project participants, review project procedures, and address any comments or concerns regarding the proposed work.

Subtask 5-B6: Monthly Meetings with the City

The Construction Manager and inspection personnel will meet with the City on a monthly basis to present construction progress, review the upcoming construction schedule, discuss future work, and resolve outstanding issues related to the project.

Subtask 5-B7: Construction Meetings

The Construction Manager will conduct a regularly scheduled construction progress meeting to define and review existing construction problems, and to coordinate project elements. In general, the meeting will address the following:

- Work completed the previous week



- Schedule of work to be completed in the next two weeks
- Schedule review
- Future items requiring coordination
- Submittal status
- RFP Status
- Progress Payments
- Materials and equipment delivered
- Safety

The meeting will be conducted by the Construction Manager at the construction site, or other mutually agreed upon location. Minutes will be prepared and distributed to all meeting participants and interested parties.

Subtask 5-B6: Inspection Services

AKM field engineers will provide full time inspection to ensure conformance of the constructed work with the contract documents and specifications, and to verify that the quality of work is equal to or better than industry standards. Duties of the Construction Manager/Inspectors will include the following:

- Review of Initial and Updated Schedules
- Monitor Construction Progress
- Monitor Conformance with the Contract Documents
- Prepare Daily Construction Reports and Photographs
- Attend Construction Meetings
- Review Progress Pay Estimate – Provide Recommendations for Payment
- Review Contractor Construction Change Order Requests
- Schedule Compaction and Materials Testing
- Prepare a Punch List and Follow It to Completion
- Coordinate Project Start-Up
- Schedule Special Inspections as required
- Coordinate Water System Shutdowns with the City
- Maintain As-Built Drawings for the Project – Verify Contractor As-Built Drawings
- Prepare Project Close-Out Documents, including Project Final Report

Subtask 5-B7: Change Order Review

Potential change orders will be brought to the immediate attention of the City by the Construction Manager. Change order proposals will be received by the Construction Manager, and will be reviewed for merit and reasonableness of cost. If determined to be appropriate, the change order will be forwarded to the City for review and comment. Change orders approved by the City will be processed by the Construction Manager, with the appropriate direction provided to



the Contractor. AKM will not authorize work by the Contractor without prior written approval by the City.

Subtask 5-B8: Daily Inspection Reports

All project field inspectors will maintain daily inspection reports of the construction activities. The reports will summarize; Contractor manpower and equipment on site; weather conditions; details of completed work; directives given to the Contractor; and all construction issues which may have been identified.

Daily reports will be submitted to the City every month, along with a written and photographic summary of the construction progress.

Subtask 5-B9: Photos and Details

A photo log, with captions, will be maintained and provided monthly to the City, and at the completion of the project. Electronic files of the photos will also be furnished to the City.

Subtask 5-B10: As-Built Drawings

AKM will prepare as-built drawings based upon the Project Inspector and Contractor's field notes. Drawings will be changed electronically and plotted on mylar. One complete set of as-built mylar drawings and electronic files in AutoCAD format will be delivered to the City.

Task 5-C: Deliverables

In accordance with the City's RFP, RCS/AKM will provide the following items during the well construction and engineering portions of the project:

- Daily Inspection Reports (1 copy in hardcopy and Adobe PDF, via email, each week).
- Weekly meetings minutes (Adobe PDF, via email within 5 days following meeting).
- Response to RFIs (1 copy, hardcopy and Adobe PDF, via email, within 3 days).
- Response to CORs (1 copy, hardcopy and Adobe PDF, via email within 5 days).
- The well drillers report will be prepared by RCS and submitted to the driller, who will then sign and send it to the California Department of Water Resources and other appropriate local agencies.
- Digital photographs of well construction operations on CD.
- Color video survey of post-construction condition of well on DVD.
- Final well design memorandum and pumping rate and pump depth setting (4 copies of each in loose binders and on separate CDs).
- Final Summary of Well Construction Operations Report (5 copies in loose binders and an Adobe PDF copy on a CD).



Task 6: Operations & Maintenance (O&M) Manual/Training

Task 6-A: O & M Manual Preparation

The manual will supplement O&M manuals furnished by the Contractor and therefore cannot be completed until the Contractor O&M manuals are submitted and approved. As required by the City's RFP, the final O&M manual will include the following:

- Introduction including Location and Service Area Maps, Owner and Facility Name, Address and Phone Number, and Purpose of Manual
- Description of Facility including Design Parameters, Assumptions and Considerations
- Copy Of Approved Shop Drawings and Submittals
- Safety Precaution And Procedure
- Start-Up Procedure
- Preventative Maintenance Procedure
- Corrective Maintenance Procedure
- Emergency Shutdown Procedure
- Recordkeeping, Reporting and Notification Procedures
- Cut Away View of Equipment with a Parts List
- List of Supplied and/or Recommended Spare Parts List
- List of Equipment Suppliers and Contact Information for Spare Parts and Services

Task 6-B: Training

The Contract Documents for the project will be written to define all training requirements to be provided by the Project Contractor. It is anticipated that training will be required for the VFD, nitrate monitor, and overall operation of the system using the City's SCADA system. Prior to training being scheduled, the Construction Manager will request an agenda from the manufacturer's representative conducting the training and verify that all issues are adequately addressed. This agenda will also be forwarded to the City for comment. Once approved, the Construction Manager will coordinate the training schedule between the Contractor and City.

EXHIBIT B
SCHEDULE OF PAYMENT



EXHIBIT B
FEE PROPOSAL FOR
HYDROGEOLOGIC AND CIVIL ENGINEERING CONSULTING SERVICES
CITY OF GARDEN GROVE WELL NO. 31
ORANGE COUNTY, CALIFORNIA

CONFIDENTIAL & PROPRIETARY

This Fee Proposal provides an estimate of consulting costs prepared by Richard C. Slade & Associates LLC, Consulting Groundwater Geologists (RCS), for hydrogeologic consulting services with regard to a well design and construction project for City of Garden Grove Water Services (City) proposed replacement well No. 31. Also included in this fee proposal are costs for the requisite engineering services, to be provided by AKM Consulting Engineers (AKM), for an interim blending of water for existing Well Nos. 23 and 28, for the four-probe nitrate analyzer, for permanent blending facilities for Well No. 28, and the VFD for new replacement Well No. 31. This estimated budget for our costs is submitted to the City in response to a Request for Proposal (RFP) distributed by the City in November 2009.

COST ESTIMATE FOR SERVICES

For the proposed project, our estimate for the costs of our professional hydrogeologic and engineering services for the preliminary design, preparing specifications and bid sheets, field and office work during the drilling, construction, and testing, the preparing of the construction operations report for proposed City replacement Well No. 31 to a depth of 1000 ft and for all engineering elements regarding the required work for Well Nos. 23, 28 and 31, is as follows:

Task 1	Design Report	\$16,804.00
Task 2	Technical Specifications	\$33,115.00
Task 3	Well Installation Report	\$58,962.00
Task 4	Bid Support and Contract Management Services	\$3,441.00
Task 5	Construction Management and "Inspection" Services	\$85,793.00
Task 6	O & M Manual/Training	\$5,900.00

Total RCS & AKM Cost Estimate: \$204,015.00

Total Direct Costs: \$8,300.00

Total Project Cost Estimate: \$212,315.00

The above estimated costs are on a Not-to-Exceed (NTE) basis and will remain in effect for a 120-day time period, following opening of the bids by the City. Our cost estimates for Task 5 in our proposed scope of work is virtually entirely dependent on third-party operations for the drilling method, the drilling rate for the pilot hole, and the time required for casing installation and well development.

Payment will be based on the RCS hours worked and the hourly rates in accordance with the attached Schedule of Charges and Table 1, "RCS and AKM Cost Estimate Detail, which details the man-hours and costs for each task as listed in the Scope of Work of the Technical Proposal. We have presented the costs for AKM on a lump sum basis. Assumptions for the well



construction portion of the project are outlined below under Well Construction Contingencies. We have provided costs for AKM on a lump sum basis only, as shown throughout Tasks 1 through 6.

Because the exact number of hours required to complete the different tasks of well construction and equipment installation (Task 5 work is outside the direct control of both RCS and AKM), we recommend that all construction monitoring be performed on a time and expenses basis, and that if the time required to complete Task 5 is expected to exceed our estimates once construction is underway (as, for example due to unusually slow drilling, numerous contractor breakdowns, or difficulties in meeting discharge quality requirements), RCS will notify your office, when the budget is 90% expended.

Well Construction Contingencies

The cost estimate is based on the following key assumptions for third-party operations:

1. Pilot hole drilling is estimated to be a depth of 1000 feet. However, should the City so desire, our personnel will be available to observe and geologically log the pilot hole to a depth of 1400 feet (this is outlined as an optional cost, in addition to the above listed costs, in attached Table 1 under Task 5).
2. The overall drill rate is expected to average eight (8) feet per hour for drilling the pilot hole. We propose to geologically log the cuttings on a part-time basis and anticipate a total of 50 field hours for our onsite geologist to perform this Subtask.
3. A maximum of five (5) isolated aquifer isolation zone tests may be conducted in the pilot hole. Our geologists will be present to collect samples from each zone, as required, near the end of each zone test.
4. Casing, screen, gravel pack, and cement installation to 1000 ft is estimated to require approximately 80 hours of field geological time (if drilling and well construction is decided to go to 1400 ft, then additional hours will be needed and the additional costs for this are outlined in Table 1 under Task 5).
5. Well development is estimated to require 120 contractor hours of combined mechanical and chemical development (including all concurrent NPDES monitoring) and 40 additional hours by the contractor for pumping development, exclusive of step drawdown and aquifer testing. The onsite geologist will be present on a part-time basis during these development processes to monitor mechanical and pumping development and to help monitor contractor compliance with NPDES permit requirements.
6. The drilling contractor chosen by the City for this well project will, based on our Technical Specifications, obtain all required permits, and will also pay for all laboratory testing of water samples collected by our field geologists, as follows: for NPDES permit compliance; from down-hole isolated aquifer zone testing, and; for the final wellblend after construction of the well has been completed.

Limits of Liability

The City of Garden Grove, its successors, heirs and assigns, agree to limit the liability of Richard C. Slade and Associates LLC and all third parties arising from RCS negligence, professional acts, errors or omissions, such that the total aggregate liability of RCS to all those names shall not exceed 10% of the total costs for RCS services rendered on this project.



SCHEDULE OF CHARGES AND CONDITIONS

PROFESSIONAL HOURLY RATES

Principal Groundwater Geologist	\$235.00 per hour
Senior Groundwater Geologist	\$168.00 per hour
Staff Groundwater Geologist	\$122.00 per hour
Geologic Logging/Field Work, Water Wells	\$92.00 per hour
Clerical, Graphics and GIS Work	\$62.00 per hour
Depositions and Court Testimony (4-hour minimum per day)	\$375.00 per hour

SPECIAL EQUIPMENT AND SERVICES

Pressure Transducers (for water level monitoring during aquifer testing)	\$100.00 per day (Weekly Rates Available)
Field Water Quality Probe (T, pH, EC)	\$50.00 per day
Electric Tape Water Level Probe	\$25.00 per day
Subsurface Exploration, Water Quality Laboratory	Cost + 15%
Job Supplies, Reproduction, etc.	Cost + 15%
Automobile Mileage	\$0.51 per mile

CONDITIONS

Findings, conclusions, and recommendations will be prepared, within the limits prepared by the client, in accordance with generally accepted professional hydrogeologic practice. No other warranty, either express or implied, is made by any verbal or written reports or services furnished for this project.

Invoices will be issued, at our option, on a monthly basis or when the work is completed. A service charge of 1½% per month will be payable on any amount not paid within 30 days. Any attorney fees or other costs incurred in collecting delinquent charges shall be paid by the client. Client will furnish rights-of-way to land required for field visits and field operations such as sampling or testing of water wells.

November 2009
(For Period 11/09-10/10)

TABLE 1
RCS AND AKM COST ESTIMATE DETAIL
CITY OF GARDEN GROVE WELL CONSTRUCTION AND ENGINEERING PROJECT
 January 13, 2010

TASK LISTINGS	PRINCIPAL GROUNDWATER GEOLOGIST		SENIOR GROUNDWATER GEOLOGIST		STAFF GROUNDWATER GEOLOGIST		FIELD GEOLOGIST (GEOLOGIC LOGGING/FIELD WORK)		CLERICAL PERSONNEL		TOTAL Task COST
	RATE=										
	\$235		\$168		\$122		\$92		\$62		
	HOURS	COST	HOURS	COST	HOURS	COST	HOURS	COST	HOURS	COST	
TASK 1: PROJECT MANAGEMENT											
Task 1-A: Project Scheduling and Status Reports	4	\$940	8	\$1,344	0	\$0	0	\$0	6	\$372	\$2,656
Task 1-B: Meetings	6	\$1,410	25	\$4,200	0	\$0	0	\$0	5	\$310	\$5,920
Task 1-C: Deliverables	4	\$940	12	\$2,016	0	\$0	0	\$0	6	\$372	\$3,328
AKM COSTS (Lump Sum):											\$4,900
SUBTOTALS>	14	\$3,290	45	\$7,560	0	\$0	0	\$0	17	\$1,054	\$16,804
ESTIMATED COSTS FOR TASK 1> \$16,804											
TASK 2: PRELIMINARY DESIGN REPORT (PDR)											
TASK 2-A: Preliminary Design Report Preparation											
Task 2-A1: Data Collection, Review & Analysis	2	\$470	4	\$672	8	\$976	0	\$0	1	\$62	\$2,180
Task 2-A2: Field Reconnaissance	4	\$940	4	\$672	0	\$0	0	\$0	0	\$0	\$1,612
TASK 2-B: Preliminary Design Report											
Task 2-B1: Preliminary Well Design	4	\$940	16	\$2,688	8	\$976	0	\$0	0	\$0	\$4,604
Task 2-B2: Engineering Aspects	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	\$0
Task 2-C: Deliverables	1	\$235	2	\$336	0	\$0	0	\$0	4	\$248	\$819
AKM COSTS (Lump Sum):											\$23,960
SUBTOTALS>	11	\$2,585	26	\$4,368	16	\$1,952	0	\$0	5	\$310	\$33,115
ESTIMATED COSTS FOR TASK 2> \$33,115											
TASK 3: FINAL CONSTRUCTION DOCUMENTS											
Task 3-A: Preparation of Technical Specifications	4	\$940	8	\$1,344	28	\$3,416	0	\$0	3	\$186	\$5,866
Task 3-B: VFD, 4-Prong Analyzer, SCADA/Electric Modifications	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	\$0
Task 3-C: Deliverables	0	\$0	3	\$504	0	\$0	0	\$0	6	\$372	\$876
AKM COSTS (Lump Sum):											\$52,200
SUBTOTALS>	4	\$940	11	\$1,848	28	\$3,416	0	\$0	9	\$558	\$59,962
ESTIMATED COSTS FOR TASK 3> \$59,962											
TASK 4: BIDDING											
Task 4: Bidding	1	\$235	8	\$1,344	0	\$0	0	\$0	1	\$62	\$1,641
AKM COSTS (Lump Sum):											\$1,800
SUBTOTALS>	1	\$235	8	\$1,344	0	\$0	0	\$0	1	\$62	\$3,441
ESTIMATED COSTS FOR TASK 4> \$3,441											
TASK 5: WELL CONSTRUCTION MANAGEMENT											
Task 5-A: Well Drilling	15	\$3,525	70	\$11,760	110	\$13,420	260	\$23,920	14	\$868	\$53,493
SUBTOTALS TASK 5-A>	16	\$3,525	70	\$11,760	110	\$13,420	260	\$23,920	14	\$868	\$53,493
OPTIONAL COSTS FOR DRILLING TO 1400 FT BGS:	1	\$235	2	\$336	6	\$732	48	\$4,410	1	\$62	\$5,781
AKM COSTS (Lump Sum):											\$31,900
SUBTOTALS TASK 5-B>											\$400
SUBTOTALS TASK 5-C>											\$32,300
ESTIMATED COSTS FOR TASK 5> \$85,793 (Without Optional Task for Drilling to 1400 ft bgs)											
TASK 6: OPERATIONS AND MAINTENANCE MANUAL (AKM Only)											
Task 6-A: O&M Manual Preparation (AKM Costs, Lump Sum)											\$3,400
Task 6-A: Training (AKM Costs, Lump Sum)											\$2,500
SUBTOTALS>											\$5,900
ESTIMATED COSTS FOR TASK 6> \$5,900											
PROJECT DIRECT COSTS FOR REIMBURSIBLES:	RCS: \$2,800					AKM: \$5,500					TOTAL DIRECT COSTS: \$8,300
TOTAL RCS PROJECT COSTS: \$85,815											
TOTAL RCS PROJECT COSTS: \$126,500											
TOTAL PROJECT COST>> \$212,315											

NOTE: AKM fees are listed as lump sum items; their man-hour breakdown is available if needed.

PROPOSAL EVALUATION FORM

ATTACHMENT 2

Consultant RCS Date 1/20/10
 (Engineering and Hydrogeological Services)
 Project Well No. 31 Project#

CRITERION	(a) Weight	(b) Score (0-10)	(a) x (b) Weighted Score	comments
INTRODUCTION (Proposal) o Comprehension of the RFP	2.0	9	18	COMPREHENSIVE
QUALIFICATIONS (Proposal) A. Experience of the firm and subcontractors on similar projects B. Qualifications & Experience of Personnel	1.5 2.0	9.5 9.5	14.25 19	ENGINEERING / HYDROGEOLOGY VERY STRONG W/ THE MOST PROJECTS LISTED FOR BOTH CATEGORIES, CPM HAS SLIGHT EDGE W/ ELECTRICAL AKM VERY STRONG W/ NO 3, VFD BLEND PROJECTS
WORK PLAN (Proposal) o Knowledge of project o Knowledge of existing conditions & how it may affect the project o Initiative & Creativity o Hours req'd vs. coverage of work o Availability of team members o Quality Assurance & Supervision	2.0 2.0 1.5 1.5 1.0 2.0	9 9 10 10 10 10	18 18 15 15 10 20	ENGINEERING ON PAR W/ MWH & CDM, HYDROGEOLOGY W A NOTCH ABOVE W/ THEIR RE SEARCH INTO FEASIBILITY OF DEEP SCREENS - FULL CAP - HQ QLTY WELL TO MAXIMIZE US OF WELL 28 & KEEP WELL 2 HEAVY INVOLVEMENT OF SENIOR LEADERSHIP FROM BOTH RCS & AKM
SCHEDULE (Proposal) o Timeliness to target dates in the Scope of Work	1.0	10	10	FINAL PS&E 7 DAYS BEFORE DEADLINE
REFERENCES o The firm's past record of performance on similar projects	2.0	10	20	BOTH AKM & RCS HAVE EXCELLENT REFERENCES, W/ CITY OF CORONA & GARY HOBSON IS VERY COMPETANT - "HANDS-ON" & HAS EYE, TRACK RECORD W/ HQ3 (DF PERMITS.
A. TOTAL (Proposal)			177.25	

Signature David E. [Signature]

State **PROPOSAL EVALUATION FORM**

Consultant RCS Date 1-18-10
 (Engineering and Hydrogeological Services)

Project Well No. 31 Project# _____

CRITERION	(a) Weight	(b) Score (0-10)	(a) x (b) Weighted Score	comments
INTRODUCTION (Proposal) o Comprehension of the RFP	2.0	7	14	Page 4-6 said we wanted to destroy well #28? Error on first page about VED of New well. Later VED is on well #28
QUALIFICATIONS (Proposal) A. Experience of the firm and subcontractors on similar projects	1.5	8	12	
B. Qualifications & Experience of Personnel	2.0	8	16	
WORK PLAN (Proposal) o Knowledge of project	2.0	7	14	
o Knowledge of existing conditions & how it may affect the project	2.0	7	14	
o Initiative & Creativity	1.5	6	9	
o Hours req'd vs. coverage of work	1.5	7	10.5	
o Availability of team members	1.0	6	6	
o Quality Assurance & Supervision	2.0	7	14	San Fernando Valley
SCHEDULE (Proposal) o Timeliness to target dates in the Scope of Work	1.0	6	6	
REFERENCES o The firm's past record of performance on similar projects	2.0	6	12	
A. TOTAL (Proposal)			127.5	

Signature Chris Vera

PROPOSAL EVALUATION FORM

Consultant RES Date 2-16-2010
 (Engineering and Hydrogeological Services)
 Project Well No. 31 Project#

CRITERION	(a) Weight	(b) Score (0-10)	(a) x (b) Weighted Score	comments
INTRODUCTION (Proposal) <ul style="list-style-type: none"> o Comprehension of the RFP 	2.0	9	18	They have a very good understanding of Blending
QUALIFICATIONS (Proposal) <ul style="list-style-type: none"> A. Experience of the firm and subcontractors on similar projects B. Qualifications & Experience of Personnel 	1.5	9	13.5	Great Qualifications
	2.0	9	18	
WORK PLAN (Proposal) <ul style="list-style-type: none"> o Knowledge of project o Knowledge of existing conditions & how it may affect the project o Initiative & Creativity o Hours req'd vs. coverage of work o Availability of team members o Quality Assurance & Supervision 	2.0	9	18	Strong Hydrology experience
	2.0	9	18	
	1.5	9	13.5	
	1.5	9	13.5	
	1.0	9	9	
	2.0	9	18	
SCHEDULE (Proposal) <ul style="list-style-type: none"> o Timeliness to target dates in the Scope of Work 	1.0	9	9	Good Scheduling
REFERENCES <ul style="list-style-type: none"> o The firm's past record of performance on similar projects 	2.0	9	18	Firm has great experience
A. TOTAL (Proposal)			166.5	

Signature 

PROPOSAL EVALUATION FORM

Consultant RCS Date 1-21-10
 (Engineering and Hydrogeological Services)

Project Well No. 31 Project#

CRITERION	(a) Weight	(b) Score (0-10)	(a) x (b) Weighted Score	comments
INTRODUCTION (Proposal) o Comprehension of the RFP	2.0	9	18	Covered all points of project
QUALIFICATIONS (Proposal) A. Experience of the firm and subcontractors on similar projects	1.5	10	15	Has extensive well drilling and hydrogeology experience. Teamed with AEM's strong nitrate blending staff. 250 water supply wells.
B. Qualifications & Experience of Personnel	2.0	10	20	
WORK PLAN (Proposal) o Knowledge of project	2.0	9	18	Understands staff's deadlines and needs and is capable of meeting them.
o Knowledge of existing conditions & how it may affect the project	2.0	9	18	
o Initiative & Creativity	1.5	9	13.5	
o Hours req'd vs. coverage of work	1.5	9	13.5	
o Availability of team members	1.0	9	9	
o Quality Assurance & Supervision	2.0	9	18	
SCHEDULE (Proposal) o Timeliness to target dates in the Scope of Work	1.0	10	10	Consistently makes reference to meeting project's tight schedule. Final papers in 1 wk before deadline.
REFERENCES o The firm's past record of performance on similar projects	2.0	9	18	
A. TOTAL (Proposal)			171	

Signature Robert D. Smith

PROPOSAL EVALUATION FORM

Consultant CDM

Date 1/20/10

(Engineering and Hydrogeological Services)

Project Well No. 31

Project# _____

CRITERION	(a) Weight	(b) Score (0-10)	(a) x (b) Weighted Score	comments
INTRODUCTION (Proposal) <ul style="list-style-type: none"> o Comprehension of the RFP 	2.0	9	18	COMPREHENSIVE
QUALIFICATIONS (Proposal) A. Experience of the firm and subcontractors on similar projects B. Qualifications & Experience of Personnel	1.5	9	13.5	STRONG ENGINEERING HYDROGEOLOGISTS W/ 2ND MOST EXPERIENCE AMONGST PROPOSALS
	2.0	9	18	
WORK PLAN (Proposal) <ul style="list-style-type: none"> o Knowledge of project o Knowledge of existing conditions & how it may affect the project o Initiative & Creativity o Hours req'd vs. coverage of work o Availability of team members o Quality Assurance & Supervision 	2.0	9	18	ENGINEERING / HYDROGEOLOGY WEL RESEARCHED, CDM DID NOT MA INNOVATIVE IDEAS OF ECS TO SCREEN ONLY AT DEEPER AQUIFERS DOWN TO 1400 FT W/ DEEP SANITARY SEAL TO LOWER NO ₂ CONCENTRATION & AVOID INTERFERENCE W/ W 23 TO KEEP USING W 23, ALSO ENERGY REBATE W/ EDISON, AI HAS EXTENSIVE VFD & NO ₂ BL3 EXPERIENCE.
	2.0	9	18	
	1.5	9	13.5	
	1.5	9	13.5	
	1.0	10	10	
	2.0	10	20	
SCHEDULE (Proposal) <ul style="list-style-type: none"> o Timeliness to target dates in the Scope of Work 	1.0	9.5	9.5	FINAL PS & E 3 DAYS BEFORE DEADLINE
REFERENCES <ul style="list-style-type: none"> o The firm's past record of performance on similar projects 	2.0	9	18	CDM HAS GOOD REFERENCES
A. TOTAL (Proposal)			170	

Signature David E. Zimmerman

PROPOSAL EVALUATION FORM

Consultant CDM Date 1-18-10
 (Engineering and Hydrogeological Services)
 Project Well No. 31 Project#

CRITERION	(a) Weight	(b) Score (0-10)	(a) x (b) Weighted Score	comments
INTRODUCTION (Proposal) o Comprehension of the RFP	2.0	8	16	
QUALIFICATIONS (Proposal) A. Experience of the firm and subcontractors on similar projects	1.5	8	12	Lots of wells they did in this area
B. Qualifications & Experience of Personnel	2.0	8	16	well 30 + Electrical Engineer was Application Engineer for Westinghouse.
WORK PLAN (Proposal) o Knowledge of project	2.0	8	16	Knowledge of land in Orange County etc. Back up Nitrate analyzers Irving
o Knowledge of existing conditions & how it may affect the project	2.0	8	16	
o Initiative & Creativity	1.5	8	12	
o Hours req'd vs. coverage of work	1.5	7	10.5	
o Availability of team members	1.0	8	8	
o Quality Assurance & Supervision	2.0	7	14	
SCHEDULE (Proposal) o Timeliness to target dates in the Scope of Work	1.0	8	8	They acknowledge May 20th bid due date
REFERENCES o The firm's past record of performance on similar projects	2.0	9	18	Proposed project manager did well #30
A. TOTAL (Proposal)			146.5	

Signature Chris Vern

Two

PROPOSAL EVALUATION FORM

Consultant CDM Date 2-14-2010
 (Engineering and Hydrogeological Services)
 Project Well No. 31 Project#

CRITERION	(a) Weight	(b) Score (0-10)	(a) x (b) Weighted Score	comments
INTRODUCTION (Proposal) o Comprehension of the RFP	2.0	9	18	
QUALIFICATIONS (Proposal) A. Experience of the firm and subcontractors on similar projects	1.5	8	12	
B. Qualifications & Experience of Personnel	2.0	8	16	In the past we had different options on other projects
WORK PLAN (Proposal) o Knowledge of project	2.0	8	16	Knowledge of our Basin
o Knowledge of existing conditions & how it may affect the project	2.0	8	16	
o Initiative & Creativity	1.5	8	12	
o Hours req'd vs. coverage of work	1.5	8	12	
o Availability of team members	1.0	8	8	
o Quality Assurance & Supervision	2.0	8	16	
SCHEDULE (Proposal) o Timeliness to target dates in the Scope of Work	1.0	9	9	
REFERENCES o The firm's past record of performance on similar projects	2.0	9	18	Very detailed They would do a O.K. Job, but not excellent.
A. TOTAL (Proposal)			153	

Signature ZBans

PROPOSAL EVALUATION FORM

Consultant CDM Date 1-25-10
 (Engineering and Hydrogeological Services)

Project Well No. 31 Project#

CRITERION	(a) Weight	(b) Score (0-10)	(a) x (b) Weighted Score	comments
INTRODUCTION (Proposal) o Comprehension of the RFP	2.0	9	18	thorough
QUALIFICATIONS (Proposal) A. Experience of the firm and subcontractors on similar projects	1.5	9	13.5	Similar project experience but not as extensive as PCS
B. Qualifications & Experience of Personnel	2.0	9	18	
WORK PLAN (Proposal) o Knowledge of project o Knowledge of existing conditions & how it may affect the project o Initiative & Creativity o Hours req'd vs. coverage of work o Availability of team members o Quality Assurance & Supervision	2.0 2.0 1.5 1.5 1.0 2.0	8 9 8 8 9 9	16 18 12 12 9 18	Hydro-geology experience, may have limited CDM's outlook on well 31 possible yield.
SCHEDULE (Proposal) o Timeliness to target dates in the Scope of Work	1.0	9	9	Final papers in 3 days before deadline
REFERENCES o The firm's past record of performance on similar projects	2.0	8	16	
A. TOTAL (Proposal)			159.5	

Signature Peter Smith

PROPOSAL EVALUATION FORM

Consultant MWH Date 1/18/10
 (Engineering and Hydrogeological Services)
 Project Well No. 31 Project# _____

CRITERION	(a) Weight	(b) Score (0-10)	(a) x (b) Weighted Score	comments
INTRODUCTION (Proposal) <ul style="list-style-type: none"> o Comprehension of the RFP 	2.0	9	18	COMPREHENSIVE
QUALIFICATIONS (Proposal) <ul style="list-style-type: none"> A. Experience of the firm and subcontractors on similar projects B. Qualifications & Experience of Personnel 	1.5	8	12	STRONG ENGINEERING CONSIDERABLY LESS DRILLING EXPERIENCE THAN RCS
	2.0	8	16	
WORK PLAN (Proposal) <ul style="list-style-type: none"> o Knowledge of project o Knowledge of existing conditions & how it may affect the project o Initiative & Creativity o Hours req'd vs. coverage of work o Availability of team members o Quality Assurance & Supervision 	2.0	9	18	APPARENTLY WELL RESEARCH ELIHOED TO ALTERNATIVES, BUT WERE VAUGE SO AM NOT SURE IF WORTHWHILE
	2.0	8	16	
	1.5	8	12	
	1.5	10	15	
	1.0	10	10	
	2.0	10	20	
SCHEDULE (Proposal) <ul style="list-style-type: none"> o Timeliness to target dates in the Scope of Work 	1.0	9	9	FINAL PSE 1 DAY BEFORE DEADLINE
REFERENCES <ul style="list-style-type: none"> o The firm's past record of performance on similar projects 	2.0	8	16	CONSIDERABLY LESS DRILLING EXPERIENCE
A. TOTAL (Proposal)			162	

Signature David Eastman

PROPOSAL EVALUATION FORM

Consultant MWH Date 1-19-10
 (Engineering and Hydrogeological Services)

Project Well No. 31 Project# _____

CRITERION	(a) Weight	(b) Score (0-10)	(a) x (b) Weighted Score	comments
INTRODUCTION (Proposal) <ul style="list-style-type: none"> o Comprehension of the RFP 	2.0	6	12	
QUALIFICATIONS (Proposal) A. Experience of the firm and subcontractors on similar projects	1.5	7	10.5	Lots of local wells
B. Qualifications & Experience of Personnel	2.0	7	14	Electrical Eng. + Instrumentation Eng. on Staff
WORK PLAN (Proposal) <ul style="list-style-type: none"> o Knowledge of project o Knowledge of existing conditions & how it may affect the project o Initiative & Creativity o Hours req'd vs. coverage of work o Availability of team members o Quality Assurance & Supervision 	2.0	7	14	
	2.0	7	14	
	1.5	8	12	Solution to each problem
	1.5	7	10.5	
	1.0	7	7	work out of Irvine office
	2.0	7	14	
SCHEDULE (Proposal) <ul style="list-style-type: none"> o Timeliness to target dates in the Scope of Work 	1.0	7	7	
REFERENCES <ul style="list-style-type: none"> o The firm's past record of performance on similar projects 	2.0	7	14	
A. TOTAL (Proposal)			129	

Signature Chris Veron

PROPOSAL EVALUATION FORM

Consultant MWH Date 2-14-2010
 (Engineering and Hydrogeological Services)

Project Well No. 31 Project#

CRITERION	(a) Weight	(b) Score (0-10)	(a) x (b) Weighted Score	comments
INTRODUCTION (Proposal) ○ Comprehension of the RFP	2.0	7	14	Not as detailed as others with Well drilling.
QUALIFICATIONS (Proposal) A. Experience of the firm and subcontractors on similar projects B. Qualifications & Experience of Personnel	1.5 2.0	7 7	10.5 14	Other firms have done more work in O.C.
WORK PLAN (Proposal) ○ Knowledge of project ○ Knowledge of existing conditions & how it may affect the project ○ Initiative & Creativity ○ Hours req'd vs. coverage of work ○ Availability of team members ○ Quality Assurance & Supervision	2.0 2.0 1.5 1.5 1.0 2.0	7 7 7 7 7 7	14 14 10.5 16.5 7 14	
SCHEDULE (Proposal) ○ Timeliness to target dates in the Scope of Work	1.0	8	8	
REFERENCES ○ The firm's past record of performance on similar projects	2.0	5	10	
A. TOTAL (Proposal)			126.5	

Signature 

126.8

PROPOSAL EVALUATION FORM

Consultant MWH Date 1-19-10
 (Engineering and Hydrogeological Services)
 Project Well No. 31 Project# _____

CRITERION	(a) Weight	(b) Score (0-10)	(a) x (b) Weighted Score	comments
INTRODUCTION (Proposal) o Comprehension of the RFP	2.0	7	14	- 1 page, some type "o" and some info was vague. - missing sample tap on Booster room discharge
QUALIFICATIONS (Proposal) A. Experience of the firm and subcontractors on similar projects	1.5	7	10.5	In general the project team has experience in similar projects but it seems the emphasis has been more on re-spraying H ₂ O
B. Qualifications & Experience of Personnel	2.0	8	16	
WORK PLAN (Proposal) o Knowledge of project o Knowledge of existing conditions & how it may affect the project o Initiative & Creativity o Hours req'd vs. coverage of work o Availability of team members o Quality Assurance & Supervision	2.0 2.0 1.5 1.5 1.0 2.0	7 8 5 7 7 7	14 16 7.5 10.5 7.0 14	Presented projects main tasks clearly but lacked some details or creativity. Said analyzer mentioned in RFP was not acceptable for project
SCHEDULE (Proposal) o Timeliness to target dates in the Scope of Work	1.0	7	7	- Bid docs are in 1 day prior to due date - no 10 day review for 60% & 99%
REFERENCES o The firm's past record of performance on similar projects	2.0	7	14	
A. TOTAL (Proposal)			130.5	

①

Signature Peter [Signature]

PROPOSAL EVALUATION FORM

Consultant GEOSCIENCE Date 1/18/10
 (Engineering and Hydrogeological Services)
 Project Well No. 31 Project# _____

CRITERION	(a) Weight	(b) Score (0-10)	(a) x (b) Weighted Score	comments
INTRODUCTION (Proposal) <ul style="list-style-type: none"> o Comprehension of the RFP 	2.0	9	18	COMPREHENSIVE
QUALIFICATIONS (Proposal) A. Experience of the firm and subcontractors on similar projects B. Qualifications & Experience of Personnel	1.5 2.0	7 7	10.5 14	ENGINEERING HAS LESS EXPERIENCE THAN 3 OTHER FIRMS
WORK PLAN (Proposal) <ul style="list-style-type: none"> o Knowledge of project o Knowledge of existing conditions & how it may affect the project o Initiative & Creativity o Hours req'd vs. coverage of work o Availability of team members o Quality Assurance & Supervision 	2.0 2.0 1.5 1.5 1.0 2.0	8 8 7 10 10 10	16 16 10.5 15 10 20	DID NOT BUY INTO RE-LOCATION OF WELL, POINT WAS TAKEN ABOUT NOT OPERATING WELL 28 DURING DRILLING OF WELL 31, LESS INNOVATIVE THAN OTHER 3 FIRMS NOTE: RELOCATION OF WELL MAKES SITE LESS FUNCTIONAL
SCHEDULE (Proposal) <ul style="list-style-type: none"> o Timeliness to target dates in the Scope of Work 	1.0	9	9	USED EXACT DEADLINE TO FINISH
REFERENCES <ul style="list-style-type: none"> o The firm's past record of performance on similar projects 	2.0	7	14	ENGINEERING LESS EXPERIENCE
A. TOTAL (Proposal)			153	

Signature Said Enturion

May 20th 2010
Bid document

PROPOSAL EVALUATION FORM

Consultant Geo Science / RRF Date 1-20-10
(Engineering and Hydrogeological Services)

Project Well No. 31 Project#

CRITERION	(a) Weight	(b) Score (0-10)	(a) x (b) Weighted Score	comments
INTRODUCTION (Proposal) o Comprehension of the RFP	2.0	7	14	
QUALIFICATIONS (Proposal) A. Experience of the firm and subcontractors on similar projects	1.5	7	10.5	
B. Qualifications & Experience of Personnel	2.0	6	12	
WORK PLAN (Proposal) o Knowledge of project	2.0	7	14	
o Knowledge of existing conditions & how it may affect the project	2.0	7	14	
o Initiative & Creativity	1.5	7	10.5	
o Hours req'd vs. coverage of work	1.5	7	10.5	
o Availability of team members	1.0	6	6	
o Quality Assurance & Supervision	2.0	7	14	
SCHEDULE (Proposal) o Timeliness to target dates in the Scope of Work	1.0	8	8	
REFERENCES o The firm's past record of performance on similar projects	2.0	2	4	Well 30 project RBF Not good on electrical.
A. TOTAL (Proposal)			117.5	

Signature Chris New

PROPOSAL EVALUATION FORM

Consultant Geo Science Date 1-16-2010
 (Engineering and Hydrogeological Services)

Project Well No. 31 Project# _____

CRITERION	(a) Weight	(b) Score (0-10)	(a) x (b) Weighted Score	comments
INTRODUCTION (Proposal) <ul style="list-style-type: none"> o Comprehension of the RFP 	2.0	9	18	
QUALIFICATIONS (Proposal) <ul style="list-style-type: none"> A. Experience of the firm and subcontractors on similar projects B. Qualifications & Experience of Personnel 	1.5	9	13.5	Excellent Qualification They have been not responsible on Well 30 on Electrical
	2.0	10	20	
WORK PLAN (Proposal) <ul style="list-style-type: none"> o Knowledge of project o Knowledge of existing conditions & how it may affect the project o Initiative & Creativity o Hours req'd vs. coverage of work o Availability of team members o Quality Assurance & Supervision 	2.0	9	18	Excellent knowledge of project
	2.0	9	18	
	1.5	9	13.5	
	1.5	9	13.5	
	1.0	9	9	
	2.0	9	18	
SCHEDULE (Proposal) <ul style="list-style-type: none"> o Timeliness to target dates in the Scope of Work 	1.0	9	9	
REFERENCES <ul style="list-style-type: none"> o The firm's past record of performance on similar projects 	2.0	9	18	We have worked with RBF before and we have developed a good working Relationship.
A. TOTAL (Proposal)			150.5	

Signature ZBant

PROPOSAL EVALUATION FORM

Consultant Geoscience / RBF Date 1-21-10
 (Engineering and Hydrogeological Services)
 Project Well No. 31 Project#

CRITERION	(a) Weight	(b) Score (0-10)	(a) x (b) Weighted Score	comments
INTRODUCTION (Proposal) o Comprehension of the RFP	2.0	8	16	Firm has a thorough understanding of ground water basin and experience in Well Constr.
QUALIFICATIONS (Proposal) A. Experience of the firm and subcontractors on similar projects B. Qualifications & Experience of Personnel	1.5 2.0	8 8	12 16	Geoscience has designed & overseen numerous municipal water wells. - RBF will cover civil engineering needs.
WORK PLAN (Proposal) o Knowledge of project o Knowledge of existing conditions & how it may affect the project o Initiative & Creativity o Hours req'd vs. coverage of work o Availability of team members o Quality Assurance & Supervision	2.0 2.0 1.5 1.5 1.0 2.0	8 8 7 7 8 8	16 16 10.5 10.5 8 16	Alternate well location binds Lampson Res. Site.
SCHEDULE (Proposal) o Timeliness to target dates in the Scope of Work	1.0	7	7	Project papers will be done on deadline
REFERENCES o The firm's past record of performance on similar projects	2.0	7	14	
A. TOTAL (Proposal)			142	

Signature Robert Ambley

PROPOSAL EVALUATION FORM

Consultant DB STEPHENS Date 1/15/10
 (Engineering and Hydrogeological Services)
 Project Well No. 31 Project# _____

CRITERION	(a) Weight	(b) Score (0-10)	(a) x (b) Weighted Score	comments
INTRODUCTION (Proposal) <ul style="list-style-type: none"> o Comprehension of the RFP 	2.0	7	14	COVERED RFP W/ GENERAL TERMS, NOT AS DETAILED AS OTHERS. NOT INNOVATIVE AS OTHERS.
QUALIFICATIONS (Proposal) <ul style="list-style-type: none"> A. Experience of the firm and subcontractors on similar projects. B. Qualifications & Experience of Personnel 	1.5	7	10.5	OTHER FIRMS HAVE MUCH MORE PROJECT RELATED EXPERIENCE
	2.0	7	14	SAME COMMENT
WORK PLAN (Proposal) <ul style="list-style-type: none"> o Knowledge of project o Knowledge of existing conditions & how it may affect the project o Initiative & Creativity o Hours req'd vs. coverage of work o Availability of team members o Quality Assurance & Supervision 	2.0	6	12	DID NOT DISCUSS INTERFERENCE COST, WASTE LINE, SOURCE FOR MAKE UP WATER, PUMP COMPATIBILITY ON WELL 28 UP
	2.0	6	12	
	1.5	5	7.5	
	1.5	4	6	
	1.0	10	10	
	2.0	6	12	
SCHEDULE (Proposal) <ul style="list-style-type: none"> o Timeliness to target dates in the Scope of Work 	1.0	5	5	CONTRADICTION OF FINAL P5 § E MAY 20 th OR MAY 30 th
REFERENCES <ul style="list-style-type: none"> o The firm's past record of performance on similar projects 	2.0	7	14	LOTS OF WASTE WATER VERY LITTLE JOB SPECIFIC PAST PERFORMANCE
A. TOTAL (Proposal)			117	

Signature David Entminger

PROPOSAL EVALUATION FORM

Consultant DBS + A Date 1-19-10
 (Engineering and Hydrogeological Services)

Project Well No. 31 Project# _____

CRITERION	(a) Weight	(b) Score (0-10)	(a) x (b) Weighted Score	comments
INTRODUCTION (Proposal) <ul style="list-style-type: none"> o Comprehension of the RFP 	2.0	7	14	
QUALIFICATIONS (Proposal) <ul style="list-style-type: none"> A. Experience of the firm and subcontractors on similar projects B. Qualifications & Experience of Personnel 	1.5	7	10.5	
WORK PLAN (Proposal) <ul style="list-style-type: none"> o Knowledge of project o Knowledge of existing conditions & how it may affect the project o Initiative & Creativity o Hours req'd vs. coverage of work o Availability of team members o Quality Assurance & Supervision 	2.0 2.0 1.5 1.5 1.0 2.0	7 7 7 7 2 7	14 14 10.5 10.5 2 14	Guleta Co.
SCHEDULE (Proposal) <ul style="list-style-type: none"> o Timeliness to target dates in the Scope of Work 	1.0	2	2	No Project Schedule
REFERENCES <ul style="list-style-type: none"> o The firm's past record of performance on similar projects 	2.0	7	14	
A. TOTAL (Proposal)			119.5	

Signature Chris Vero

PROPOSAL EVALUATION FORM

Consultant DBS&A Date 1-14-2010
 (Engineering and Hydrogeological Services)

Project Well No. 31 Project#

CRITERION	(a) Weight	(b) Score (0-10)	(a) x (b) Weighted Score	comments
INTRODUCTION (Proposal) o Comprehension of the RFP	2.0	5	10	
QUALIFICATIONS (Proposal) A. Experience of the firm and subcontractors on similar projects B. Qualifications & Experience of Personnel	1.5 2.0	5 5	7.5 10	
WORK PLAN (Proposal) o Knowledge of project o Knowledge of existing conditions & how it may affect the project o Initiative & Creativity o Hours req'd vs. coverage of work o Availability of team members o Quality Assurance & Supervision	2.0 2.0 1.5 1.5 1.0 2.0	5 5 5 5 5 5	10 10 7.5 7.5 5.0 10	Not enough details
SCHEDULE (Proposal) o Timeliness to target dates in the Scope of Work	1.0	5	5	
REFERENCES o The firm's past record of performance on similar projects	2.0	5	10	No local O.C. Experience
A. TOTAL (Proposal)			92.5	

Signature Z. Bani

PROPOSAL EVALUATION FORM

Consultant Daniel B. Stevens- Date 1-25-10
 (Engineering and Hydrogeological Services)
 Project Well No. 31 Project#

CRITERION	(a) Weight	(b) Score (0-10)	(a) x (b) Weighted Score	comments
INTRODUCTION (Proposal) o Comprehension of the RFP	2.0	7	14	General in comparison to other proposals
QUALIFICATIONS (Proposal) A. Experience of the firm and subcontractors on similar projects B. Qualifications & Experience of Personnel	1.5	7	10.5	Experience seems limited in similar projects
	2.0	7	14	
WORK PLAN (Proposal) o Knowledge of project o Knowledge of existing conditions & how it may affect the project o Initiative & Creativity o Hours req'd vs. coverage of work o Availability of team members o Quality Assurance & Supervision	2.0	7	14	project understanding is general proposal did not mention possibilities or variables to consider.
	2.0	7	14	
	1.5	6	9	
	1.5	6	9	
	1.0	8	8	
	2.0	7	14	
SCHEDULE (Proposal) o Timeliness to target dates in the Scope of Work	1.0	6	6	could not find when final papers would be done 5-20 or 5-30
REFERENCES o The firm's past record of performance on similar projects	2.0	7	14	
A. TOTAL (Proposal)			126.5	

Signature Robert Stumby