#### PROFESSIONAL ENGINEERING SERVICES AGREEMENT FOR THE WEST CHEYENNE REHABILITATION PROJECT

This Professional Engineering Services Agreement (as such may be modified, amended or supplemented, the "Agreement") is made and entered into as of the  $\frac{18\,\mathrm{th}}{18\,\mathrm{th}}$  day of  $\frac{13\,\mathrm{th}}{18\,\mathrm{th}}$  day of  $\frac{13\,\mathrm{th}}{18\,\mathrm{th}}$  by and between the City of North Las Vegas, a Nevada municipal corporation, (the "City"), and Carollo Engineers, Inc., a Delaware corporation, (hereinafter referred to as "Consultant").

#### **RECITALS:**

- 1. The City intends to construct a production well as a replacement of an abandoned well located at 3049 California Avenue, North Las Vegas, NV 89032 (APN 139-18-501-004) (hereinafter referred to as the "Improvements").
- The City desires to obtain quality professional services of the Consultant to perform design, bid support and construction support services for the West Cheyenne Rehabilitation Project as described in Exhibit "A". (hereinafter referred to as the "Project") for construction of the Improvements; and
- The Consultant's scope of service and compensation has been arrived at after meaningful negotiations between the City and the Consultant.

NOW, THEREFORE, in consideration of the above recitals and mutual promises contained herein, the parties hereto agree to the following terms, conditions and covenants set forth in Sections I through XII hereof.

#### SECTION I - RESPONSIBILITY OF CONSULTANT

In addition to any other responsibilities of Consultant set forth in this Agreement, Consultant shall have the following responsibilities:

A. The Consultant shall be responsible for the professional quality, technical accuracy, timely completion, and coordination of all services furnished by the Consultant, by Consultant's subconsultants, and by any of the principals, officers, employees and agents of Consultant or any subconsultant under this Agreement. In performing these services, Consultant shall follow practices consistent with generally accepted professional engineering standards of care. The Consultant shall, without additional compensation, promptly correct and revise any errors or deficiencies in its design, drawings, specifications, reports and other services, or in any portion of the Project performed by Consultant's subconsultants. Approval by the City of any products or services furnished by Consultant shall not in any

- way relieve the Consultant of responsibility for the professional and technical accuracy of its services.
- B. Consultant shall assign Lisa M. Freestone, whose Nevada Professional Engineer license number is 13621, as the Principal-in-Charge ("Principal-in-Charge"), and Keli A. Callahan, whose Nevada Professional Engineer license number is 17285, as the Project Manager ("Project Manager"). All of the services specified by this Agreement shall be performed by the Project Manager, or by Consultant's associates, employees and subconsultants under the personal supervision of the Project Manager. Should the Principal-in-Charge or the Project Manager be unable to complete his or her responsibility for any reason, the Consultant shall notify the City in writing, and within four (4) calendar days thereafter, nominate a replacement for City approval, in its reasonable discretion, who has an equivalent amount of experience performing the same type of services as required for the Project. An approved replacement shall be assigned to the Project within ten (10) calendar days.
- C. In accordance with NRS 338.140, the Consultant shall not produce a design and/or specification for the Project which would limit the bidding, directly or indirectly, to any one specific concern unless a unique or novel product application is required to be used in the public interest, or only one brand or trade name is known to the City. The City shall be notified of and must pre-approve any sole source proposals.
- D. Consultant and any subconsultant shall furnish City with a preliminary draft of any proposed correspondence to any federal, state or other regulatory agency for the City's review and approval at least seven (7) calendar days prior to mailing such correspondence.
- E. The Consultant agrees that its officers, partners, employees, and subconsultants will cooperate with the City in the performance of services under this Agreement and will be available for consultation with City at such reasonable times with advance notice as to not conflict with other responsibilities.

#### SECTION II - RESPONSIBILITY OF CITY

- A. The City will cooperate with Consultant in the performance of services under this Agreement and will be available for consultation with Consultant at such reasonable times with advance notice as to not conflict with their other responsibilities.
- B. The services to be performed by Consultant under this Agreement are subject to periodic review by the City. For those documents submitted to the City by the Consultant with regard to the Project, the City will examine and respond in writing to the Consultant within twenty-eight (28) calendar days of receipt of such documents. It is understood that City comments upon review of the Consultant's

documents do not relieve Consultant from the responsibility for the professional and technical accuracy of all work delivered under this Agreement.

- C. The City shall assemble selected data and information related to the Project and provide same to the Consultant on or prior to the kick-off meeting. The data and information to be provided by the City is identified as follows:
  - Drafting and plan sheet layout standards;
  - 2. Standard "front-end" contract documents and general conditions;
  - 3. Cover sheet format and City logo in AutoCAD Civil 3D format;

The Consultant shall be responsible for updating this data and information during the Project development process, and shall be responsible for acquiring supplemental data and information which the Consultant deems necessary.

- D. The City will be responsible for performing the work noted below and upon completion will provide the results thereof to the Consultant:
  - 1. Obtaining preliminary title reports on those properties involving right-ofway acquisition, permanent easement or temporary construction access;
  - 2. Preparing property acquisition parcel maps, and writing legal descriptions for property and easement acquisition;
  - 3. Preparing right-of-way plans to illustrate the overall property ownership and acquisition aspects of the Improvements;
  - Obtaining right-of-way and easements;
  - 5. Printing of the construction bidding document package;
  - 6. Completing the competitive bidding procedures for public works projects; and
  - 7. Performing construction management, inspection and quality assurance during construction of the Improvements.

#### **SECTION III - SCOPE OF SERVICES**

Services to be performed by the Consultant shall consist of the Basic Services described in Exhibit "A", and may consist of those Supplemental Services described in Exhibit "A-1" of this Agreement.

#### **SECTION IV - CHANGES TO SCOPE OF SERVICES**

- A. The City may at any time, but only by written order, make changes within the general scope of this Agreement and in the services or work to be performed. If such changes cause a significant increase or decrease in the Consultant's cost or time required for performance of any services under this Agreement, the Parties shall formally amend this Agreement. Any claim of Consultant for adjustment under this clause must be asserted in writing within thirty (30) calendar days from the date of receipt by the Consultant of notification of changes by the City, or such claim shall be deemed waived by Consultant and Consultant will be deemed to have agreed to the changes without modification of the compensation or time of performance hereunder.
- B. No additional compensation shall be paid, and no increase in the time of performance shall be awarded, to the Consultant for changes in scope of work without the prior written authorization of the City to proceed with such changes.
- C. No additional compensation shall be paid to Consultant for additional costs or delay due to the negligence or intentional acts of Consultant or any subconsultant or any of the officers, employees, or agents of Consultant or any subconsultant.

#### SECTION V - SUPPLEMENTAL SERVICES OF CONSULTANT

Supplemental Services will be provided only as specifically authorized in writing by the City's representative and may consist of any or all of the work described in Exhibit "A-1". Any other significant change of work determined by the City as essential to efficient and timely completion of the Project shall require a formal Amendment to this Agreement as provided by Section IV of this Agreement.

#### **SECTION VI - SUBCONSULTANTS**

Consultant agrees to include in all professional service subcontracts in connection with performance of the terms and obligations imposed under this Agreement provisions in substantially the following form:

- A. Consultant agrees to pay the subconsultant when Consultant is paid for the subconsultant's portion of the work by the City and, upon written request by the City, to obtain and provide to City lien releases from the subconsultant for such payment.
- B. The subconsultant does not have any rights against the City.
- C. The subconsultant agrees to be bound by all terms, conditions and obligations of Consultant under this Agreement. Consultant shall provide a copy of this Agreement to each subconsultant.

- D. City has the right in its reasonable discretion to approve every subconsultant prior to such subconsultant's performance of any portion of the Project.
- E. The term "subconsultant" as used herein, also means a sub-subconsultant.

#### SECTION VII - TERM OF AGREEMENT

This Agreement commences upon the date this Agreement is approved by the City in a formal City Council proceeding and shall end one (1) year after the date the City makes final payment to the Consultant for services rendered under this Agreement, unless this Agreement is terminated by the City.

#### SECTION VIII - COMPENSATION AND TERMS OF PAYMENT

#### A. TOTAL COMPENSATION

1. The City shall pay the Consultant an amount for each of the tasks described in Exhibits "A" and "A-1" as follows:

Basic Services	<b>Lump Sum Amount</b>
Project Management	\$ 17,579
Preliminary Engineering Services	<b>\$ 138,432</b>
3. Final Design Services	\$ 62,832
Bid Phase Support Services	\$ 7,724

#### **Time & Materials Amount**

5. Construction Management Support Services	\$ 30,463
Subtotal	\$ 257,030

#### Time & Material Amount

Supplemental Services	Not-to-exceed \$ 20,000
Grand Total Not-to-Exceed	\$ 277,030

#### B. TERMS OF PAYMENT

1. Subject to the City's right to dispute any charges, the City shall make monthly progress payments to the Consultant for services performed as follows:

(a) With respect to progress payments for Basic Services completed, the City shall pay that percentage of the lump sum amount for each task (as set forth in Subsection VIII.A.1 above) which relates to the percentage of completion of such task, less amounts paid by the City to Consultant in prior progress payments.

With respect to progress payments for Time & Materials Basic Services completed, the City shall make payments for completed services on a Time and Material basis in accordance with the Fee Schedule provided in Exhibit "B".

- (b) With respect to Supplemental Services that are authorized in writing by the City's representative, the City shall make progress payments for completed Supplemental Services on a Time and Material basis in accordance with the Fee Schedule provided in Exhibit "B".
- 2. Payment to the Consultant under Section VIII.A.1 shall be made within thirty (30) calendar days of the date City receives each invoice provided by the Consultant to the City, provided that such invoice is complete, correct, and undisputed by the City, and that it contains the following information:
  - (a) With respect to progress payments for Basic Services, the Consultant shall prepare and submit to the City a written invoice indicating the percentage of completion of each Basic Services task set forth in Section VIII.A.1 during the invoice period. The invoice amount shall be supported with a written summary noting the various tasks worked on during the invoice period.

With respect to progress payments for Time & Materials Basic Services, the Consultant shall prepare and submit to the City a written invoice of costs for the work completed during the invoice period. The invoice amount shall be determined on a Time and Material basis in accordance with the Fee Schedule provided in Exhibit "B" and shall be supported by backup documentation detailing labor costs and other expenses directly related to the authorized work.

(b) For payment of Supplemental Services authorized in writing by the City's representative, the Consultant shall prepare and submit to the City a written invoice of costs for the work completed during the invoice period. The invoice amount shall be determined on a Time and Material basis in accordance with the Fee Schedule provided in Exhibit "B", and shall be supported by backup documentation

detailing labor costs and other expenses directly related to the authorized work.

- 3. The City shall have fourteen (14) calendar days after receipt of an invoice to dispute any or all of the charges on the invoice. Undisputed amounts shall be paid to the Consultant within thirty (30) calendar days of the date City receives the invoice. Disputed amounts shall be resolved through the Dispute Resolution mechanism in Section XII.O.
- 4. If the City fails to pay the Consultant an undisputed amount within thirty (30) calendar days after the date the City receives the invoice, the City may be assessed one-half of one percent (½%) of the undisputed amount each month, not to exceed \$1,000 total for the Project.
- 5. Billings shall be submitted during the first week of each month for work performed during the preceding month. Invoices shall conform to the format provided by the City.

#### **SECTION IX - TIME OF PERFORMANCE**

Consultant shall commence work immediately following written notice to proceed by the City. Work shall be completed in accordance with the Project Schedule attached as Exhibit "C", as it may be amended from time to time by written agreement between the Consultant and the City.

If the Consultant's performance of services is delayed, Consultant shall notify the City's representative in writing of the reasons for delay and prepare a revised schedule for performance of services and submit the revised schedule to the City's representative. If the Consultant is delayed, the City shall have the right to retain from monthly payments up to ten percent (10%) of subsequent invoices until such time as the Consultant has complied with the schedule or presented an acceptable plan for compliance with the schedule.

No additional time shall be given to Consultant for delay due to the negligence or intentional acts of Consultant or any subconsultant or any of the officers, employees, or agents of Consultant or any subconsultant.

#### SECTION X - AUDIT: ACCESS TO RECORDS

A. The Consultant shall maintain books, records, documents, and other evidence directly pertinent to performance under this Agreement in accordance with generally accepted accounting principles and practices. The Consultant shall also maintain the financial information and data used by the Consultant in the preparation or support of the invoices, and a copy of the cost summaries and invoices submitted to the City. The City, or any of its duly authorized representatives shall have access to such books, records, documents, and other

- evidence for the purpose of inspection, audit and copying. The Consultant will provide proper facilities for such access and inspection.
- B. Audits conducted pursuant to this provision shall be in accordance with generally accepted auditing standards and established procedures and guidelines for the reviewing or audit agencies.
- C. The Consultant agrees to the disclosure of all information and reports resulting from access to records pursuant to paragraph "A" above, to any Project funding agency provided that the Consultant is afforded the opportunity for an audit exit conference and an opportunity to comment and submit any supporting documentation on the pertinent portions of the draft audit report.
- D. Records pursuant to paragraph "A" above shall be maintained and made available during performance under this Agreement and until three (3) years from date of final payment for the Project. In addition, those records which relate to any dispute resolution, litigation or appeal, or the settlement of claims arising out of such performance, or costs or items to which an audit exception has been taken, shall be maintained and made available until three (3) years after the date of resolution of such dispute, litigation, appeal, claim, or exception. This Section X.D. shall survive the completion of the Project and the termination or expiration of this Agreement.
- E. Public Records Act. Pursuant to NRS 239.010, each and every document provided to the City is a "public record" open to inspection and copying by any person, except for those documents otherwise declared by law to be confidential. The City shall not in any way be liable to Consultant for the disclosure of any public record. In any event the City is required to defend an action with regard to a public records request for documents submitted by Consultant, Consultant agrees to indemnify, hold harmless, and defend the City from all damages, costs, and expenses, including court costs and attorney fees, in any action or liability arising under or because of the Nevada Public Records Act, NRS 239.010. This Section X.E. shall survive the completion of the Project and the termination or expiration of this Agreement.
- F. The Consultant agrees to include language substantially similar to the language of paragraphs "A" through "E" of this section in all Consultant subcontracts directly related to performance of services specified in this Agreement which are in excess of \$10,000.00.

#### **SECTION XI - REPRESENTATIONS AND WARRANTIES**

Consultant hereby represents and warrants for the benefit of City, in addition to any other representations and warranties made in this Agreement, with the knowledge and expectation of City's reliance thereon, as follows:

- A. Consultant is a duly formed and validly existing corporation and is in good standing pursuant to the laws of the State of Nevada, and has the full power, authority and legal right to execute, deliver and perform under this Agreement.
- B. The execution and delivery of this Agreement, the consummation of the transactions provided for herein, and the fulfillment of the terms hereof on the part of Consultant will not result in a breach of any instrument to which Consultant is a party or by which Consultant is bound or of any judgment, decree or order of any court or governmental body or any law, rule or regulation applicable to Consultant.
- C. The execution, delivery and performance of this Agreement and the taking of all other lawful actions necessary to consummate the Project contemplated hereunder, by the persons executing, delivering and performing the same on behalf of Consultant, have been duly and validly authorized (and by their execution hereof or of any document delivered in connection with the Project contemplated hereunder such persons individually represent and warrant that they are so authorized), and this Agreement and the other Agreements and instruments contemplated hereby, constitute legal, valid and binding obligations of Consultant, enforceable in accordance with their respective terms.
- D. No co nsent, approval or authorization of any governmental authority or private party is required in connection with the execution of this Agreement by Consultant.
- E. The Consultant's Project Manager and Principal-in-Charge are each a duly licensed Engineer with the State of Nevada, and each has a license that is in full force and effect. Consultant has obtained any and all licenses, certificates and permits that are required to be obtained by Consultant by the Nevada Revised Statutes and the Nevada Administrative Code, and by any other law, rule, regulation or ordinance applicable to Consultant and to the performance of the Project by Consultant.
- F. Consultant is duly licensed and authorized to do business in the City.
- G. Consultant is a sophisticated and qualified Consultant, whose personnel possess the level of professional expertise and experience that is necessary to properly perform the Project within the required time period, with an appropriate level of diligence, skill and care, and pursuant to the terms, specifications and conditions of this Agreement. Consultant has the necessary personnel, equipment, tools, supplies, materials, and facilities to properly perform the Project within the required time period, with an appropriate level of diligence, skill and care, and pursuant to the terms, specifications and conditions of this Agreement.
- H. Consultant is financially solvent, able to pay its debts as they mature, and possessed of sufficient working capital to complete the Project within the time

period required by this Agreement, and to perform its obligations under this Agreement.

- I. Consultant shall require that each subconsultant performing any portion of the Project:
  - 1. Is duly formed, in good standing, and authorized to do business in the State of Nevada:
  - Is a duly licensed or registered engineer, as the case may be, with the State of Nevada, and such license or certificate of registration is in full force and effect:
  - 3. Has obtained any and all licenses, certificates and permits that are required to be obtained by subconsultant by the Nevada Revised Statutes and the Nevada Administrative Code, and by any other law, rule, regulation or ordinance applicable to subconsultant and to the performance of any part of the Project by subconsultant;
  - 4. Is duly licensed and authorized to do business in the City; and
  - 5. Shall comply with all laws, rules, regulations, and ordinances, as such may be amended, supplemented or modified from time to time, that are applicable to subconsultant and any portion of the Project performed by subconsultant.
- J. This Agreement may be signed in counterparts, each of which shall be deemed to be an original and all such counterparts together shall constitute one and the same original. Facsimile or electronic signatures shall be binding on the parties hereto as if they were original signatures.

The representations and warranties made by Consultant herein shall survive the completion of the Project and the termination or expiration of the Agreement.

#### **SECTION XII - MISCELLANEOUS PROVISIONS**

#### A. SUSPENSION:

City may suspend performance by Consultant under this Agreement for such period of time as City, in its sole discretion may prescribe, by providing written notice to Consultant at least seven (7) calendar days prior to the date on which City wishes to suspend such performance. Upon such suspension, City shall pay Consultant compensation based on percentage of Project completion, earned until the effective date of suspension less all previous payments. Consultant shall not perform further work under this Agreement after the effective date of suspension until receipt of written notice from City to resume performance. In the

event that City suspends performance by Consultant for any cause other than the error or omission of the Consultant for an aggregate period in excess of thirty (30) calendar days, Consultant shall be entitled to an equitable adjustment of the compensation payable to Consultant under this Agreement to reimburse Consultant for additional costs occasioned as a result of such suspension of performance by City. In no event will the City be liable to the Consultant for more than \$2,000.00.

#### B. TERMINATION:

The City may terminate this Agreement, with or without cause, upon fourteen (14) calendar days prior written notification of the termination to the Consultant. Notification to the Consultant of such termination shall be sent by the City in accordance with Section XII.V.

In the event of termination, the City agrees to pay the Consultant the reasonable value for all work and services performed to the date of termination in accordance with the Section entitled "Compensation and Terms of Payment" of this Agreement.

#### C. FISCAL FUNDING OUT:

The City reasonably believes that sufficient funds can be obtained to make all payments during the term of this Agreement. Pursuant to NRS Chapter 354, if the City does not allocate funds to continue the function performed by Consultant obtained under this Agreement, this Agreement will be terminated when appropriate funds expire in accordance with Section XII.B.

#### D. OWNERSHIP OF DOCUMENTS:

All plans, drawings, specifications, reports, photographs, studies, permits, estimates, digital mapping, CAD files, mylar, or other like documents given, prepared or assembled by the Consultant or any subconsultant which are related to the performance of this Agreement are deemed to be the property of the City, except to the extent such is not allowed by the Nevada Administrative Code or the Nevada Revised Statutes.

#### E. INSURANCE:

Consultant shall procure and maintain, and shall cause each subconsultant to procure and maintain, at its own expense, during the entire term of this Agreement, the following insurances:

 Workers' Compensation Insurance. Such insurance must be provided by an insurance company authorized to provide workers' compensation insurance in Nevada by the Nevada Department of Business and Industry, Division of Insurance. Such insurance must protect Consultant and City from employee claims based on Project related sickness, disease or accident.

- 2. Comprehensive General Liability (bodily injury and property damage) insurance with respect to Consultant's agents and vehicles assigned to the prosecution of work under this Agreement in a policy limit of not less than \$1,000,000 for combined single limit per occurrence. Consultant's General Liability insurance policies shall be endorsed as to include the City as an additional insured.
- 3. Professional Liability insurance, for the protection from claims arising out of performance of professional services caused by a negligent act, error, or omission for which the insured is legally liable; such Professional Liability insurance will provide for coverage in an amount of not less than \$1,000,000 for each occurrence and \$2,000,000 in the aggregate for the period of time covered by this Agreement. Consultant will provide City thirty (30) calendar days notice in writing of any cancellation of, or material change in, the above described policy.
- 4. The Consultant's Comprehensive General Liability policy shall automatically include or be endorsed to cover Consultant's contractual liability to the City, to waive subrogation against the City, its officers, agents, servants and employees, and to provide that the City will be given thirty (30) calendar days notice in writing of any cancellation of, or material change in, the policy.
- 5. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer and licensed by the State of Nevada. All deductibles and self-insured retentions shall be fully disclosed in the Certificate of Insurance. No deductible or self-insured retention may exceed \$250,000 without the written approval of the City.
- 6. Certificates indicating that such insurance is in effect shall be delivered to the City before work is begun under this Agreement. If the Consultant is underwritten on a claims-made basis, the retroactive date shall be prior to or coincident with the date of this Agreement, and the Certificate of Insurance shall state that coverage is claims-made and the retroactive date. Consultant shall provide the City annually with a Certificate of Insurance as evidence of such insurance. It is further agreed that the Consultant and/or Insurance Carrier shall provide the City with 30-day advance written notice of policy cancellation of any insurance policy required to be maintained by Consultant.

#### F. INDEMNITY:

Notwithstanding any of the insurance requirements herein above set forth or limits of liability set forth therein, Consultant shall defend, protect, indemnify and hold harmless the City, its officers, agents and employees from any liabilities, claims, damages, losses, expenses, proceedings, suits, actions, decrees, judgments, reasonable attorney fees, and court costs which the City suffers, and/or its officers or employees suffer, as a result of, or arising out of, the intentional or negligent acts or omissions of the Consultant, its subconsultants, or agents or anyone employed by the Consultant or its subconsultants or agents, in fulfillment or performance of the terms, conditions or covenants of this Agreement. This Section XII.F. shall survive the completion of the Project and the termination or expiration of this Agreement until such time as the applicable statutes of limitation expire.

#### G. ASSIGNMENT:

This Agreement shall inure to the benefit of, and be binding upon, the Parties hereto and their respective successors and assigns. The Consultant shall not assign, sublet or transfer its interest in this Agreement without the prior written approval of the City representative. Nothing contained herein shall be construed as creating any personal liability on the part of any officer or agent of any public body which may be a party hereto.

#### H. WAIVER:

No consent or waiver, express or implied, by either party to this Agreement or of any breach by the other in the performance of any obligations hereunder shall be deemed or construed to be a consent or waiver to or of any other breach by such party hereunder. Failure on the part of any party hereto to complain of any act or failure to act on the other party or to declare that other party in default hereunder, irrespective of how long such failure continues, shall not constitute a waiver of the rights of such party hereunder. Inspection, payment, or tentative approval or acceptance by the City or the failure of the City to perform any inspection hereunder, shall not constitute a final acceptance of the work or any part thereof and shall not release Consultant of any of its obligations hereunder.

#### I. DESIGNATION OF REPRESENTATIVE:

The Director of Public Works or the Director's authorized representative is hereby designated as the City's representative with respect to the work to be performed under this Agreement. Said representative shall only have the authority to transmit instructions, receive information, and interpret and define the City's policies and decisions with respect to the services of the Consultant.

#### J. CONSULTANT'S EMPLOYEES:

The Consultant shall be responsible for maintaining satisfactory standards of employee competency, conduct and integrity, and shall be responsible for taking such disciplinary action with respect to its employees as may be necessary. In the event that Consultant fails to remove any employee from the contract work whom the City deems incompetent, careless or insubordinate, or whose continued employment on the work is deemed by the City to be contrary to the public interest, the City reserves the right to require such removal as a condition for the continuation of this Agreement.

#### K. INDEPENDENT CONTRACTOR:

It is hereby expressly agreed and understood that in the performance of the services provided herein, the Consultant and any other person employed by Consultant hereunder shall be deemed to be an independent contractor and not an agent or employee of the City. This Agreement is not intended to create, and shall not be deemed to create, any partnership, joint venture or other similar business arrangement between City and Consultant.

#### L. APPLICABLE LAW:

This Agreement shall be construed and interpreted in accordance with the laws of the State of Nevada.

#### M. COMPLIANCE WITH LAWS:

In connection with the performance of work under this Agreement, the Consultant agrees not to discriminate against any employee or applicant for employment because of race, creed, color, national origin, sex, sexual orientation or age, including, without limitation, with regard to employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including, without limitation, apprenticeship.

The Consultant further agrees to insert this provision in all subcontracts hereunder, except subcontracts for standard commercial supplies or raw materials.

Consultant shall comply with laws, rules, regulations, and ordinances applicable to the work performed by Consultant with respect to the Project, as such laws, rules, regulations and ordinances may be modified, supplemented or amended from time to time.

#### N. PROHIBITION AGAINST CONTINGENT FEES:

The Consultant warrants that no person or entity has been employed or retained to solicit or secure this Agreement upon an agreement or understanding for a commission, percentage, brokerage or contingent fee. For breach of this warranty, the City shall have the right to annul this Agreement without liability or, in its discretion, to deduct from the contract price or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage or contingent fee.

#### O. DISPUTE RESOLUTION:

Disputes concerning standards of performance, time of performance, scope of work, compensation or terms specified in the Agreement shall be resolved in the following manner:

- 1. The City's representative and the Consultant's Project Manager will endeavor to conduct good faith negotiations in an effort to resolve any and all disputes in a timely manner.
- 2. If any disputes between the Parties remain unresolved after thirty (30) calendar days, the City's representative and the Consultant's Project Manager shall, within fourteen (14) calendar days, prepare a brief, concise written report summarizing the:
  - (a) basis for the dispute,
  - (b) negotiations accomplished and results thereof, and
  - (c) current status of all relevant unresolved issues.

Copies of each written summary shall be exchanged between the City's representative and the Consultant's Project Manager, and provided to the City's Public Works Director and the Consultant's Principal-in-Charge. Within thirty (30) calendar days thereafter, the City's Public Works Director, or his designee, and the Consultant's Principal-in-Charge will meet to resolve the dispute. A written record of these negotiations will be made. The record will-summarize:

- (a) all issues of dispute,
- (b) the resolutions to resolved issues, and
- (c) unresolved issues, if any.

The written record will be reviewed by the City's Public Works Director or his designee, and the City's Public Works Director or his designee, will render a determination regarding such dispute.

3. If the Consultant disagrees with the determination of the City's Public Works Director, or his designee, the Consultant may only initiate an action in the Eighth Judicial District Court in and for Clark County to resolve such dispute. The City retains the right to all remedies available in law or equity. The Parties agree that no dispute under this Agreement shall be submitted to or resolved through arbitration or mediation.

#### P. ATTORNEY'S FEES:

In the event any action is commenced by either Party against the other in connection herewith, the prevailing Party shall be entitled to its reasonable costs and expenses, including reasonable attorney's fees, as determined by the court. This Section XII.P shall survive the completion of the Project and the termination or expiration of this Agreement.

#### Q. SITE INSPECTION:

Consultant represents that Consultant has visited the Project location and is satisfied as to the general condition thereof and that the Consultant's compensation as provided for in the Agreement is just and reasonable compensation for performance hereunder including reasonably foreseen and foreseeable risks, hazards and difficulties in connection therewith based on such above-ground observations.

#### R. SEVERABILITY:

In the event that any provision of this Agreement shall be held to be invalid or unenforceable, the remaining provisions of this Agreement shall remain valid and binding on the Parties hereto.

#### S. AMENDMENTS:

This Agreement may only be modified by a written Amendment that is executed by both Parties hereto.

#### T. FINAL INTEGRATION:

This Agreement is fully integrated and constitutes the entire Agreement and understanding between the Parties concerning the subject matter of this Agreement. This Agreement supersedes all other oral and written negotiations, Agreements and understandings of any and every kind relating to the subject matter of this Agreement.

#### U. CONSTRUCTION:

In the event of any dispute regarding any provision of this Agreement, the terms of this Agreement shall not be construed more strongly against or in favor of either party. The parties acknowledge that each has participated equally in the negotiation and drafting of this Agreement.

#### V. NOTICE:

Any notice required to be given hereunder shall be deemed to have been given when sent to the party to whom it is directed by personal service, hand delivery or U.S. certified mail, return receipt requested, at the following addresses:

To City:

Allan Fajardo, P.E., PTOE

City of North Las Vegas

2250 Las Vegas Boulevard North, Suite 610

North Las Vegas, NV 89030

To Consultant:

Keli Callahan, P.E.

376 East Warm Springs Road, Suite 250

Las Vegas, NV 89119

#### W. HEADINGS:

The headings of the various Sections of this Agreement have been inserted only for convenience, and shall not be deemed in any manner to modify or limit any of the provisions of this Agreement, or to be used in any manner in the interpretation of this Agreement.

#### X. CONFIDENTIALITY:

Consultant shall treat all information relating to the Project and all information supplied to the Consultant by the City as confidential and proprietary information of the City and shall not permit its release by Consultant's employees to other parties or make any public announcement or release without the City's prior written authorization. Consultant shall also require subconsultants and vendors to comply with this requirement.

In Witness Whereof, the Parties have cau and year first above written.	used this Agreement to be executed the day
City of North Las Vegas, Nevada a Nevada municipal corporation  By:  John J. Lee  Mayor  Attest:	Carollo Engineers, Inc. a Delaware corporation  By: Muldpethe Malodol Lisa M. Freestone, P.E. Vice President  Keu' A. CALLAMW, P.E. Associate VP
By: <u>Catheline &amp; Lagran</u> Catherine A. Raynor, MMC City Clerk	
Approved as to Form:	

Bethany Rudd Sanchez Acting City Attorney

## PROFESSIONAL ENGINEERING AGREEMENT FOR THE WEST CHEYENNE WELL REHABILITATION PROJECT EXHIBIT "A" SCOPE OF BASIC SERVICES

#### INTRODUCTION

This exhibit outlines the scope of work for Basic Services to be provided to the City of North Las Vegas (City) by the Carollo Engineers, Inc. (Consultant) for the West Cheyenne Well Rehabilitation Project (Project). The City reserves the right to cancel, reprioritize, and/or alter the schedule of the Project as identified herein. The City will give written authorization, by means of a "Notice to Proceed," on a task-by-task basis.

#### PROJECT DESCRIPTION

The City of North Las Vegas is being proactive about its water supply. By drilling and equipping a new groundwater production well, the City is providing a continued long-term, reliable, and balanced water supply portfolio. In addition, the City realizes significant savings year over year by producing water through wells rather than purchasing water. The original West Cheyenne Well was constructed in 1964 to a depth of 978 feet, with a yield of 3,000 gpm (4.3 mgd). Under State of Nevada Division of Water Resources (DWR) Permit Number 21759, this supply well was available for operation until 2013 when it failed. The City pulled the pump and inspected the well appurtenances and decided to abandon the well due to reduced water quality and production.

In 2015, the well was abandoned accordingly, and the City is now able to drill a replacement well at the same location with concurrence from the DWR. The new West Cheyenne Well will maximize the value of the City's existing water resource assets and increase water supply availability. This project will provide design, bid assistance, and engineering services during construction for drilling and equipping a new groundwater production well and related appurtenances, site design, structural and architectural elements, electrical, instrumentation and control, and a new chlorination system.

Carollo Engineers (Carollo) will be the prime consultant and will contract with the City of North Las Vegas. The City's plan for this project is to design and construct equipment and site improvements for the new well to be located on the existing West Cheyenne Well site. The pre-design services will include data review and initial site layout and well design concepts, including appurtenances. Carollo will be responsible for the design, bid, and construction phase services related to equipping the well, connection to the water system, utilities, and site development, and will manage the overall services under this contract.

#### **STANDARDS**

The Project shall be designed in accordance with local, state, and Federal adopted standards and procedures. Such standards may include, but are not limited to:

- 1. City of North Las Vegas Building Safety Division.
- Nevada Administrative Code (NAC) 445A.
- 3. American Water Works Association (AWWA) Standards.
- 4. City of North Las Vegas Water Service District Rules and Regulations, current edition.
- 5. Uniform Design and Construction Standards for Water Distribution Systems, Clark County Nevada, current edition.
- 6. Hydrologic Criteria and Drainage Design Manual, Clark County Regional Flood Control District, current edition.
- 7. City of North Las Vegas Title 17.
- 8. Nevada Revised Statute 534 Underground Water and Wells.
- 9. Nevada Division of Water Resources.

Consultant acknowledges and agrees that the above referenced standards are not comprehensive. Consultant shall verify and add to the list as needed to complete the project.

#### **ASSUMPTIONS**

The Consultant's scope of work is based on the following assumptions:

- Consultant shall assign Nathan Nutter to serve as the Project Engineer.
- City of North Las Vegas will provide boundary survey and topo for the project, and will prepare and file any required supplemental survey related documents, to generally include easements, and records of survey. City has confirmed that points of diversion surveys will not be required.
- City of North Las Vegas currently maintains or will obtain the applicable water rights necessary to support the proposed well and pumping rates.
- City of North Las Vegas currently maintains or will obtain the applicable water discharge permit(s), with Consultant support if requested, such as National Pollution Discharge Elimination System (NPDES) permits, necessary for discharge of bypass water during well startup.
- City of North Las Vegas will provide water sampling and analysis as necessary to support well permitting including Clean Water Act (CWA), NPDES and other applicable permits.

- No drainage study is required, with the sole exception of FEMA site mapping as may be required to satisfy well permit submittal to NDEP.
- Survey related services will be performed by the City of North Las Vegas.
- The new well is assumed to be in an area of similar geology as the abandoned West Cheyenne Well and to produce water quality similar to the abandoned West Cheyenne Well to meet drinking water standards.
- Drilling oversight, safety review, logging, and performance pump testing (step test and steady-rate test) will be responsibility of the Contractor.
- The City provided CAD standards to be used on this project. Where possible, the Consultant's drawings standards will be used for all disciplines.
- The new well will be drilled to the same depth and drilled to the same diameter as the original well. The new well will also have the same diameter casing and screened sections as the original well. The City will provide Carollo with a projected pumping rate and drawdown level for designing the pump, motor, piping and valve sizes, chlorine equipment, and building. If, when the new well is tested, the actual flow rate causes the sizing of equipment to change, the City and Carollo will evaluate if a re-design is needed.
- The City will pay for all permitting fees.
- Zonal sampling and post-development water quality sampling are not included in this scope.
- The zone of influence study will use the original Cheyenne Well lithologic log to predict transmissivity and influence on nearby wells. Actual interference value will be verified by the Consultant when well is operational.

#### **PURPOSE**

The purpose of Exhibit "A" is to establish the scope for the following:

- Project Management Services related to monthly project management including project team and schedule controls and monthly invoicing, as well as compilation and review of existing documents.
- 2. **Preliminary Engineering Services** Services related to preparation of a Preliminary Design Report, including construction cost estimate, to serve as the basis for final design elements.
- 3. **Final Design Services** Services related to preparation of construction Contract Documents (drawings and separate specifications for well drilling and well equipping design) and construction cost estimate for the Project.

- 4. **Bidding Phase Support Services** Services intended to support the City during public bidding of the Project.
- Construction Management Support Services Services intended to support the City during construction of the Project.
- 6. **Subconsultants** The following subconsultants will be used for the project:
  - Geotechnical: GES
  - Well Design and Permitting Support: S&B Christ Consulting (SBCC)
  - Subsurface Utility Investigation: KCI Technologies, Inc.

Replacement of any of the mentioned subconsultants will require a two (2) week notification to the City for review that outlines the reason(s) for the proposed change and submission of the qualifications of the replacement firm, including key personnel.

#### TASK 1 PROJECT MANAGEMENT

#### 1.1 Kickoff and Information Meeting

Consultant shall:

- Schedule and conduct a project kickoff meeting with City personnel and other agencies as required within seven (7) working days following issuance of the Notice to Proceed. This meeting will be held to review the scope of work, discuss data and information needed, review the timing and intent of project deliverables, review the Project schedule, introduce key personnel, establish lines of communication, and clarify the City's and other government agency requirements for the Project. A two (2) hour meeting is budgeted with attendance by the Project Manager and Project Engineer.
- Prepare the kickoff meeting agenda and meeting minutes, noting discussion issues, decisions, and action items, for review by the City prior to issuing final versions for distribution. The proposed agenda will be provided to the City at least two (2) business days before the meeting and draft meeting minutes will be provided within five (5) business days of the meeting.

#### Task 1.1 Deliverables:

Agenda and Meeting Minutes.

#### 1.2 Records Review and Information Research

Consultant shall:

 Obtain available information from the City related to the existing well and appurtenances at the West Cheyenne Well site, as well as nearby well sites. Additional information related to the potable water system will also be requested. This work involves performing research up to and including reviewing City's database and extracting the information needed.

- Review all collected information (e.g. plans, maps, reports, record drawings, etc.) that will likely affect the Project.
- Conduct site visits as necessary to complete the design of the Improvements.
- Provide ongoing supplemental research of public records during Project development.
- Coordinate with other design consultants currently working on other capital improvement projects within the area(s).

#### 1.3 Project Administration

#### Consultant shall:

- Provide project management services to include preparing monthly progress/activity reports, collaborating with the City staff on technical issues and problems encountered, schedule updates, proposed changes in scope or schedule, and other management activities.
- Conduct two (2) progress meetings during the Preliminary Design Phase and three (3) progress meetings during the Final Design Phase to discuss and review the progress of the Project and identify any issues that may affect the project deliverables. The progress meetings will be at the City's offices attended by Project Engineer or Principal in Charge. As needed, other staff members will participate via telephone.. Each meeting is budgeted for one (1) hour.
- Prepare meeting agenda and meeting minutes recording the discussion issues, decisions, and action items for review by the City prior to issuing final versions for distribution. The proposed agenda will be provided to the City at least two (2) business days before each meeting and draft meeting minutes shall be provided within five (5) business days of each meeting.
- Direct the activities of the Carollo project team through regular internal progress meetings as well as interaction with reviewing agencies, subconsultants, and the City.

#### Task 1.3 Deliverables:

Meeting Agendas and Minutes; Monthly Progress Reports.

#### TASK 2 PRELIMINARY DESIGN SERVICES

Upon receipt of written authorization by the City, the Consultant shall perform the Preliminary Engineering Services necessary to provide a basis of design for the final design services.

#### 2.1 Model Analyses

#### Consultant shall:

 Coordinate with City staff to evaluate incorporation of the proposed well supply into the existing system, for coordination with future infrastructure needs in the area that are based upon the current water system model, and for pump curve modeling.

#### 2.2 Utility and Agency Coordination

#### Consultant shall:

- Coordinate with affected utility companies, other governmental agencies and design consultants as necessary to obtain information on existing and proposed utility facilities within the vicinity of the proposed Project and determine where there may be conflicts. Agencies to be contacted by the Consultant may include, but are not limited to: City, Clark County Public Works (CCPW), Clark County Department of Aviation (CCDOA), Nevada Division of Water Resources (NDWR), State of Nevada Division of Environmental Protection (NDEP), NV Energy, CenturyLink, Cox Communications, Sprint, and other local and state agencies.
- Provide utility and agency coordination, as needed, throughout the project duration. Track utility/entity submittals and comments on a utility submittal matrix, and identify the permits needed to execute the work, including the permits required by the Contractor.
- Secure the necessary approvals from affected and impacted agencies.

#### Task 2.2 Deliverables:

• Utility submittal matrix (for tracking utility coordination).

#### 2.3 Geotechnical Investigation Report

- Coordinate the services of GES and serve as the primary source of communication with the City.
- Perform two (2) boring to a depth of up to 15 feet and laboratory testing to produce geotechnical design recommendations and a geotechnical report.
- Sample the subgrade soils to determine the R value.
- Provide a footing recommendation design.

#### Task 2.3 Deliverables:

- One (1) electronic PDF copy of the draft geotechnical report and final geotechnical report incorporating the comments received from City review of the draft report. Final geotechnical report will be included in the Preliminary Design Report (PDR), see Task 2.5.
- One (1) unbounded signed and sealed geotechnical report at commencement of Bid Phase Support.

#### 2.4 Subsurface Utility Investigation

#### Consultant shall:

- Provide subsurface utility investigation services through KCI Technologies,
   Inc. to support the design for the well site and equipping.
- Coordinate the services of KCI Technologies, Inc. and serve as the primary source of communication with the City.
- Locate underground utilities through electromagnetic scanning and groundpenetrating radar and provide report / sketches.
- Coordinate with City survey staff to survey identified utilities within the site.
- Provide two (2) potholes at locations to be approved by the City.

#### Task 2.4 Deliverables:

- Paint / flag any detected utilities and field schematic showing utilities determined to exist.
- Pothole data sheet for each location completed that shows depth from grade to top of utility, apparent material and size of exposed utility, swing ties from existing features in field.

#### 2.5 Predictive Well Interference Study

- Develop predictive well interference model showing how the new Cheyenne Well drawdown will potentially affect nearby wells.
- Consultant will insert various transmissivity values into the model to show the effects on other wells.

- Model results will be based on original lithologic logs, which may or may not be representative of the new well lithologic structure.
- Model results will be preliminary in nature. Actual interference results will be verified during the step and constant rate pumping tests after the well has been installed.

#### Task 2.5 Deliverables:

Well interference model with technical memorandum of predictive results.

#### 2.6 Preliminary Design Report (PDR)

- Prepare the PDR that includes the following:
  - Executive Summary;
  - Table of Contents;
  - Assumptions;
  - Description of Improvements;
  - Site review inventory citing existing utilities, topographic features, site photographs, and a Utility Matrix;
  - Geotechnical Report (Appendix);
  - Summary of the findings of the model analysis;
  - Summary of the well drawdown influence analysis;
  - Recommendation for construction schedule, phasing, and scheduling;
  - o Engineer's Cost Estimate;
  - o Permitting requirements;
  - Summary of utility installations or relocations, findings of the pothole information and potential conflicts outlining the responsible party, and if deemed to be the City, the cost associated with the relocation work;
  - Meeting minutes and pertinent correspondence, including coordination with City divisions and other agencies (Appendix);
  - List of proposed instrumentation and equipment;
  - List of existing features and equipment proposed to be salvaged;
  - Preliminary SCADA control descriptions;
  - List of existing plans, report, and documents reviewed;
  - Test performed and its findings;
  - Structural details and calculations;
  - Calculations and other documents used in the development of the PDR; and
  - Plans (11"x17") and Technical Specifications Outline, with major technical specifications included, at a 50 percent design level.
- Prepare preliminary well drilling specifications and well design.
- Address comments from one round of review (15 business day turnaround from the City) and issue a Final PDR incorporating the comments received.

#### Task 2.6 Deliverables:

- Ten (10) hard copies of the Draft/Final PDR and preliminary well drilling specification.
- One (1) electronic PDF copy of the Draft/Final PDR.
- 50 percent design level plans to affected and impacted agencies.

#### 2.7 Preliminary Design and PDR Review Meeting with City Staff

#### Consultant shall:

 Coordinate and conduct a PDR review meeting with the City to discuss the City's review comments. A two (2) hour meeting is budgeted with attendance by the Project Manager and Project Engineer.

#### Task 2.7 Deliverables:

Meeting Agenda and Minutes.

#### TASK 3 FINAL DESIGN SERVICES

Upon receipt of written authorization by the City, the Consultant shall perform Final Design Services necessary to provide for construction of the Improvements including furnishing plans and specifications to the City for review, approval and printing.

#### 3.1 Prepare 90 Percent Plans and Specifications

#### Consultant shall:

- Address and incorporate appropriate comments from the PDR related to the 50 percent plans and specifications into the 90 percent plans and specifications and provide written responses to all comments.
- Prepare 90 percent plans, specifications, and preliminary opinion of probable construction cost for the new well. Submit 90 percent documents for City review.

#### Task 3.1 Deliverables:

- Eight (8) hard copies of the plans in 11"x17" media size and two (2) hard copies of the plans in 24"x36" media size, specifications, and preliminary opinion of probable construction cost to the City for review and comment. In addition, provide electronic PDF copies of the complete submittal.
- Schedule and Utility Submittal Matrix Update.

Responses to PDR comments related to the Plans and Specifications.

#### 3.2 90 Percent Review Meeting with City Staff

#### Consultant shall:

- Coordinate and conduct a 90 percent review meeting with the City to discuss the City's review comments. A two (2) hour meeting is budgeted with attendance by the Project Manager and Project Engineer.
- Prepare meeting agenda and meeting minutes recording the discussion issues, decisions, and action items for review by the City prior to issuing final versions for distribution. The proposed agenda will be provided to the City at least two (2) business days before each meeting and draft meeting minutes shall be provided within five (5) business days of each meeting.

#### Task 3.2 Deliverables:

Meeting Agenda and Minutes.

#### 3.3 Prepare Final Plans and Specifications

#### Consultant shall:

- Address 90 percent review comments and incorporate applicable comments pursuant to the City's 90 percent review into the final plans, contract documents, special conditions, technical specifications, bid schedule and opinion of probable construction cost. Provide written responses to all comments.
- Secure signatures from non City-owned agencies and utilities.
- Ensure that specifications and reports are sealed, signed, and dated for each discipline, by an appropriate professional engineer(s) licensed in the State of Nevada.
- Edit City provided Invitation to Bid, Instructions to Bidders, Bid Proposal, Contract Award Instructions, Construction Contract and General Conditions to be included in the Contract Documents to be project specific.

#### Task 3.3 Deliverables:

 One (1) hard copy set of sealed, original final plans (24"x36" media size), contract documents, special conditions, technical specifications (signed by the appropriate public agencies and utility companies), well drilling specifications, bid schedule, and geotechnical report all in a form approved by the City and suitable for reproduction. The cover sheet will be Mylar.

- One (1) electronic PDF copy of signed final plans, contract documents, special conditions, technical specifications, bid schedule, and opinion of probable construction cost.
- Copies of all Project documents in native format.
- Responses to 90 percent design level review comments.

#### 3.4 Permits and Approvals

Consultant shall:

- Submit project documents to NDEP with application for permit to construct as a modification to the existing CNLV community water system. Coordinate with NDEP regarding plan review comments.
- As required by NDEP submittal, Consultant will create and prepare modeling report for submittal and approval.

#### TASK 4 BIDDING PHASE SUPPORT SERVICES

Upon receipt of written authorization by the City, the Consultant shall perform the following tasks related to providing Bidding Phase Support Services to the City. For budgeting purposes, forty-three (43) hours are estimated for Task 3 and a bidding phase duration of two (2) months is budgeted.

#### 4.1 Pre-Bid Conference

Consultant shall:

 Attend and provide technical support at one pre-bid conference to be held at the City offices. A one (1) hour meeting is budgeted with attendance by the Project Manager.

#### 4.2 Coordination/Clarifications

Consultant shall:

 Provide technical assistance to the City to coordinate issues and provide clarifications as needed during the bid period.

#### Task 4.2 Deliverables:

Provide correspondence to document clarifications, as needed.

#### 4.3 Addenda

#### Consultant shall:

 Prepare and assist the City in preparing addenda to the construction contract documents as requested by the City. Preparation of two (2) addenda is budgeted. The City shall sign and issue addenda to the plan holders. Revisions to the Plans and Specifications necessitating issuance of an addendum due to errors and omissions will not be considered for payment and compensation.

#### Task 4.3 Deliverables:

Addenda, as needed, in the City's required format.

#### 4.4 Conformed Contract Documents

#### Consultant shall:

 Prepare a conformed set of plans and specifications incorporating all addenda and changes addressed during the Bid Phase and provide reproducible copies to the City.

#### Task 4.4 Deliverables:

• One (1) full-size and one (1) half-size hard copy of the conformed Contract Documents. Provide one (1) electronic PDF copy of the Contract Documents.

#### TASK 5 CONSTRUCTION MANAGEMENT SUPPORT SERVICES

Upon receipt of written authorization by the City, the Consultant shall perform the following tasks related to providing Construction Management Support Services to the City. For budgeting purposes, two hundred two (202) hours are estimated for Task 5. A drilling duration of six (6) months and a construction duration of 18 months are budgeted for a total construction duration of 24 months.

#### 5.1 Request for Information and Submittal Review

#### Consultant shall:

 Review and respond to Contractor requests for information (RFIs) and submittals.

#### Task 5.1 Deliverables:

RFI and submittal responses will be provided.

#### 5.2 Change Order Assistance

#### Consultant shall:

 Provide change order assistance to the City to develop change order requests and design clarifications, as necessary.

#### Task 5.2 Deliverables:

Change order assistance will be provided.

#### 5.3 Construction Meetings

#### Consultant shall:

• Attend construction meetings monthly (i.e. a maximum of six (6) construction meetings) with the City and/or the Contractor.

#### 5.4 Record Documents

#### Consultant shall:

 Produce a complete set of record documents based on the Contractor's asbuilt mark-ups.

#### Task 5.4 Deliverables:

- One (1) full-size and one (1) half-size hard copy set of record documents.
- One (1) electronic PDF copy of the record documents, and native files for the record documents.

#### 5.5 Other Related Work

- Review construction conflicts identified in the field.
- Assist the City in both pre- and final inspection of the Improvements.
- Assist the City in preparing punch list items and subsequent review if said punch list items have been addressed by the Contractor.
- Assist the City during the 12-month warranty period if corrective work is required.

- Provide in both hard copy and electronic media documents prepared by Consultant, including field notes.
- Perform one monthly site visit (one hour in duration), coordinated with a monthly construction meeting, throughout the duration of the construction activities.
- Compare the predictive interference model with the actual results from the step and constant rate pumping tests, and verify a pumping rate that protects nearby wells from adverse drawdown interference.

# PROFESSIONAL ENGINEERING SERVICES AGREEMENT FOR THE WEST CHEYENNE WELL REHABILITATION PROJECT EXHIBIT "A-1" SUPPLEMENTAL SERVICES

The Consultant shall provide Supplemental Services directly related to the Project when requested and authorized in writing to do so by the City. Compensation for Supplemental Services shall be made pursuant to Section VIII, B.1 (b). The Fee Schedule included as Exhibit "B" shall be in effect for the duration of the Project. Supplement Services of the Consultant may include, but are not limited to the following:

#### SS 1.0 Additional Preliminary Design Services

At the City's written request, the Consultant shall:

 Provide additional preliminary engineering services that were not identified in Exhibit "A". This work could include preparing plans, specifications, engineer's cost estimate, testing, coordination/meetings, and/or engineering studies related to the Project or other areas identified by the City.

#### SS 2.0 Additional Field Investigations

At the City's written request, the Consultant shall:

 Provide additional geotechnical borings and laboratory analysis, potholes, and/or water quality analysis in excess of those specified in Exhibit "A".

#### SS 3.0 Additional Final Design Services

At the City's written request, the Consultant shall:

 Provide additional final design engineering services that are directly related to the Project but which were not anticipated nor which could be reasonably construed to be associated with the work described in Exhibit "A".

#### SS 4.0 Additional Bidding Phase Support Services

At the City's written request, the Consultant shall:

 Provide Bidding Phase Support Services in excess of those specified in Exhibit "A".

#### SS 5.0 Additional Construction Management Support Services

At the City's written request, the Consultant shall:

 Provide Construction Management Support Services in excess of those specified in Exhibit "A".

#### SS 6.0 Supplemental Meetings and Presentations

At the City's written request, the Consultant shall:

 Conduct additional meetings as necessary to present and/or review any aspect of the Project beyond that intended in Exhibit "A".

#### SS 7.0 Additional Engineering Services

At the City's written request, the Consultant shall:

 Provide engineering design services that include production of plans, specifications, studies, evaluation, and engineering estimate for additional items not covered in this Agreement.

### PROFESSIONAL ENGINEERING SERVICES AGREEMENT FOR THE WEST CHEYENNE WELL REHABILITATION PROJECT

#### EXHIBIT "B" FEE SCHEDULE

#### BASIC SERVICES FEE SCHEDULE

Scope of Services, Tasks and Associated Fees

	Description	Fees
1	Project Management	\$ 17,579
2	Preliminary Design Services	\$ 138,432
3	Final Design Services	\$ 62,832
4	Bidding Phase Support Services	\$ 7,724
	Lump Sum Fee	\$ 226,567
5	Construction Management Support Services	\$ 30,463
	Fee Schedule Fee	\$ 30,463
	Subtotal	\$ 257,030
6	Supplemental Services	\$ 20,000
	Total	\$ 277,030

#### SUPPLEMENTAL SERVICES HOURLY RATES

<u>Classification</u>	Hourly Rate (\$/hour)
Carollo Engineers	
Project Principal	\$ 233
Project Manager	\$ 190
Project Professional	\$ 175
Professional	\$ 165
Assistant Professional	\$ 150
Technician	\$ 130
Document Processing / Clerical	\$ 90
S&B Christ Consulting	
Principal	\$ 150
Project Manager	\$ 130
Project Engineer	\$ 110
Designer 1	\$ 95
Administrative Assistant	\$ 50

KCI T	echnologies, Inc.		
	Utility Designation	\$ 250	)
	Utility Potholes (per ea.)	\$ 500	)
GES			
	Principal Engineer	\$ 225	5
	Senior Engineer/Geologist	\$ 165	5
	Project Engineer	\$ 150	)
	Project Geologist	\$ 135	5
	Senior Staff Engineer	\$ 125	5
	Staff Engineer	\$ 105	5
	Staff Scientist	\$ 80	)
	Staff Geologist	\$ 85	5

#### **DIRECT EXPENSES (APPLICABLE TO THE PROJECT)**

Mileage (effective January 1, 2016)	\$0.54/mile
Subconsultant Fees	At Cost
Reproduction	At Cost
Photocopies	
Blueline/Blackline Prints	
Mylar Drawings	
Photographs	At Cost
Permit Fees	At Cost

Direct Expenses (non-salary costs) shall be billed at actual cost without markup, as verified by receipt, invoice or other documentation acceptable to the City.

These hourly billing rates for Consultant and subconsultants shall remain in effect for the duration of the Agreement and include direct salaries, overhead, and profit.

Other Direct Costs

At Cost

# PROFESSIONAL ENGINEERING SERVICES AGREEMENT WEST CHEYENNE WELL REHABILITATION PROJECT FOR THE

# EXHIBIT C PRELIMINARY PROJECT SCHEDULE

