#### PROFESSIONAL ENGINEERING SERVICES AGREEMENT FOR THE DEER SPRINGS RESERVOIR #2 PROJECT

This Professional Engineering Services Agreement (as such may be modified, amended or supplemented, the "Agreement") is made and entered into as of the \_\_\_\_\_ day of \_\_\_\_\_, 2023, by and between the City of North Las Vegas, a Nevada municipal corporation, (the "City"), and Jacobs Engineering Group, Inc., a Delaware corporation (hereinafter referred to as "Consultant").

#### **RECITALS:**

- 1. The CITY requires preliminary engineering, final design, bidding phase support, and construction management support services for the new potable water storage tank designated as Deer Springs Reservoir #2. The site is located at 4710 Deer Springs Way, North Las Vegas, NV 89084, USA. The Deer Springs Reservoir #2 will be referred to as the "PROJECT." Exhibit A, which is attached to this Agreement, outlines the scope of services the CONSULTANT will provide for the PROJECT;
- 2. The City desires to obtain the quality professional services of the Consultant for the design of a 5-million-gallon potable water tank. The PROJECT will include site improvements, site piping, site access, current reservoir layout, reservoir appurtenances, disinfection byproduct mitigation, cathodic protection, instrumentation, and controls for construction of the water tank; and
- 3. The Consultant's scope of service and compensation have been arrived at after meaningful negotiations between the City and the Consultant and will be performed on a time and material basis for work performed and invoices submitted.

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 standards of care for the profession of the services provided to the City pursuant to this Agreement. 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 subconsultants. The City's review or comment, approval, acceptance, or payment for any of the Consultant's documents, products or services shall not be construed to operate as a waiver of any rights the City has under this Agreement or of any cause of action arising out of the performance of this Agreement, and shall not in any way relieve the Consultant of responsibility for the professional and technical accuracy of all work delivered under this Agreement. The Consultant shall

remain liable to the City for any damages caused by negligent acts or omissions by Consultant or its agents in the performance of the Agreement.

- B. Consultant shall assign Kyle Foss, P.E., whose license number is 21695, as the Principalin-Charge/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-one (21) 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:
  - 1. 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;
- 4. Copies of existing, publicly available assessor's maps, record-of-surveys, parcel maps, final maps, improvement plans, drainage studies, utility plans, geotechnical studies, and survey datum which are within the Project specific area; and
- 5. Basis of bearing, bench mark and aerial topographic mapping for the Project. Aerial mapping will be in AutoCAD Civil 3D format with 1-foot contour intervals. Upon written request by the Consultant, the City will provide additional survey data directly related to the Project.

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-of-way acquisition, permanent easement or temporary construction access;
  - 2. Preparing property acquisition parcel maps, and writing legal descriptions for property and easement acquisition;

## 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" 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". 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 the 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.
- F. Unless otherwise approved in writing by the City, the subconsultant shall obtain and maintain professional liability insurance in connection with the subconsultant services in an amount equal to that required of the Consultant in this Agreement.

#### **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 three (3) 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" as follows:

	<u> Time &amp; Material</u>
Basic Services	<u>Amount</u>
1. Project Management	\$60,935
2. 30% Preliminary Design	\$138,687
3. 60% Design Development	\$129,310
4. 90% Review Contract Documents	\$184,585

- 5. 100% Contract Documents
- 6. Bid Documentation
- 7. Bid Period Services

Supplemental Services

8. Construction Services Support

\$189,595 \$81,660 \$37,160 \$260,295

#### Subtotal \$1,082,227

**Time & Material Amount** 

Not-to-Exceed \$1,162,227

Not-to-exceed \$80,000

#### GRAND TOTAL

## 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 payments for Basic Services, the City shall make progress payments for completed Basic Services on a Time and Material basis as set forth in Section VIII.A.1 above and in accordance with the Fee Schedule provided in Exhibit "A."
  - (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 payments for 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 as set forth in Section VIII.A.1 above and in accordance with the Fee Schedule provided in Exhibit "B". The invoice shall be supported by backup documentation detailing labor costs and other expenses directly related to the authorized work and a written summary of the various tasks worked on during the invoice period.
  - (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 an agreed upon Project Schedule for each on-call service needed.

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. The books, records and other documents 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

Consultant hereby represents for the benefit of City, in addition to any other representations 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 and is in good standing pursuant to the laws of the State of Delaware, and is duly qualified to do business in, and is in good standing in, 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 consent, 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/Principal-in-Charge is each a duly licensed Engineer with the State of Nevada, and 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;
  - 2. Is a duly licensed engineer, as the case may be, with the State of Nevada, and such license 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 made by Consultant herein shall survive the completion of the Project and the termination or expiration of the Agreement. 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.

## 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:

The Consultant agrees that all documents of any kind whatsoever, and in whatever medium expressed, prepared by the Consultant and the Consultant's subconsultants in connection with the Project or otherwise pursuant to this Agreement (collectively, the "Documents") and all rights therein (including without limitation trademarks, trade names, rights or use and reuse, copyrights and/or all other proprietary rights) shall be and remain the sole property of the City (regardless of whether the City or Consultant terminates this Agreement for any reason whatsoever). The Consultant hereby agrees that the Documents are or shall be deemed to be "Works for Hire" within the meaning of Section 101 of the Copyright Act, and the Consultant hereby assigns to the City all right, title, and interest therein. If for any reason the Documents should not be considered a "Work for Hire" under applicable law by a court or other tribunal of competent jurisdiction, then it is mutually agreed that under this Section XII.D, the Consultant shall hereby be deemed to have transferred to the City, its successors and assigns, the Consultant's entire right, title and interest in and to the Documents and the legal rights therein including, but not limited to, copyright, included therein.

The Consultant further agrees that neither it nor any of its employees shall exercise any of the rights embodied in the copyrights in or to such Documents, unless authorized to do so by the City under the terms of a separate written agreement executed by the Consultant and the City. The Consultant shall place a conspicuous notation upon each such Document that indicates that the copyright thereto is owned by the City.

City agrees to waive any and all claims against the Consultant resulting from the City's use, reuse, or alteration by any new consultant or other agent of the City, of the Documents. The Consultant shall be entitled to retain a reproducible copy of the Documents furnished to the City; however, the Consultant shall not sell, license, or otherwise market the Documents in any way.

- 1. Confidentiality. The plans, drawings, specifications and other documents (including, without limitation, design concepts and sketches, test results, evaluations, reports and studies) (including the magnetic or electronic media of the aforementioned documents) which are prepared or assembled by the Consultant, or its subconsultants, under this Agreement shall not be made available to any individual or organization without the prior written consent of the City. Except for marketing pamphlets and submittals to clients, the Consultant shall not publish, submit for publication, or publicly display the Project without the written consent of the City. The obligations of confidentiality shall survive the termination of this Agreement.
- 2. Contractual Rights. Notwithstanding the provisions of this Section XII.D, the City is hereby licensed to use all design concepts developed by the Consultant and subconsultants under this Agreement, including the right to construct derivative works of the Project, and to use the design concepts for other projects of the City. Provided, that however, none of the documents or materials are intended or represented by Consultant to be suitable for reuse by the City, or others on extension of the Project or on any other project. Any reuse without written verification or adaptation by Consultant for the specific purpose intended will be at City's sole risk. The design concepts include, but are not limited to, the form, aesthetic appeal, site layout, the arrangement and composition of spaces and elements, the use of colors and materials, system designs, construction methods and interior design.

## E. INSURANCE:

The 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:

- 1. 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. This insurance shall protect the Consultant and the City from employee claims based on job-related sickness, disease or accident.
- 2. Comprehensive General Liability. This insurance shall protect the Consultant, its agents and vehicles assigned to the prosecution of work under this Agreement from claims of limits no less than \$1,000,000 for combined single limit per occurrence for bodily injury (including death) and property damage to include, but

not be limited to, coverage against all insurance claims for injuries to persons or damages to property which may arise from services rendered by the Consultant and any auto used for the performance of services under this Agreement. The Consultant's general liability insurance policies shall be endorsed as to include the City as an additional insured.

- 3. Professional Liability Insurance (Errors and Omissions Coverage). This insurance shall protect the Consultant from claims arising out of the performance of professional services caused by a negligent act, error, or omission for which the insured is legally liable. Such coverage shall be 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. The 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 Insurance Policies shall automatically include or be endorsed to cover the Consultant's contractual liability to the City under this Agreement, and to waive subrogation against the City, its officers, agents, servants, and employees. The policies shall provide that the City will be given thirty (30) calendar days' notice in writing of any cancellation of, or material change in, the policies.
- 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. Any deductible or self-insured retention will be the sole responsibility of the Consultant and may not exceed \$100,000 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 set forth in Section XII.E, limits of liability set forth therein, or not in lieu thereof, the Consultant shall:

1. **Claims Not Based Upon or Arising out of Professional Services.** The Consultant shall defend, indemnify, and hold the City, its Mayor, Councilpersons, officers, employees, and agents (herein the "Indemnities"), harmless from any and all claims (including, without limitation, patent infringement, and copyright claims), damages, losses, expenses, suits, actions, decrees, judgments, arbitration awards, or any other form of liability (including, without limitation, reasonable attorney fees and court costs) (collectively herein the "Claims") to the extent that such Claims are caused by the negligence, errors, omissions, recklessness, or

intentional misconduct of the Consultant, its employees, subcontractors, agents, or anyone employed by the Consultant's subcontractors or agents (herein the "Consultant Parties"), which are not based upon or arising out of the professional services performed by the Consultant Parties in the performance of this Agreement.

As part of its obligation hereunder, the Consultant shall, at its own expense, defend the Indemnitees against the Claims brought against them, or any of them, which is caused by the negligence, errors, omissions, recklessness, or intentional misconduct of the Consultant, its employees, subcontractors, or agents, for and against which the Consultant is obligated to indemnify the Indemnitees pursuant to this Section, unless the Indemnitees, or any of them elect to conduct their own defense which, in such case, shall not relieve the Consultant of its obligation of indemnification set forth herein. If the Consultant or the Consultant's insurer fails to defend the Indemnities as required herein, the Indemnitees shall have the right, but not the obligation, to defend the same and, if the Consultant is adjudicated by the trier of fact to be liable, the Consultant agrees to pay the direct and incidental costs of such defense (including reasonable attorney fees and court costs) which is proportionate to the liability of the Consultant.

2. **Claims Based Upon or Arising out of Professional Services.** The Consultant shall indemnify and hold the Indemnities, harmless from any and all claims (including, without limitation, patent infringement and copyright claims), damages, losses, expenses, suits, actions, decrees, judgments, arbitration awards, or any other form of liability (including, without limitation, reasonable attorney fees and court costs) (collectively herein the "Professional Liability Claims") to the extent that such Professional Liability Claims are caused by the negligence, errors, omissions, recklessness, or intentional misconduct of the Consultant Parties, which are based upon or arising out of the professional services performed by the Consultant Parties in the performance of this Agreement.

If the Consultant Parties are adjudicated to be liable by a trier of fact, the trier of fact shall award reasonable attorney's fees and costs to be paid by the Consultant to the Owner, as reimbursement for the attorney's fees and costs incurred by the Owner in defending the Professional Liability Claims, in an amount proportionate to the liability of the Consultant.

As used in this Section XII.F., "agents" means those persons who are directly involved in and acting on behalf of the City or the Consultant, as applicable, in furtherance of the 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. 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 have complete 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:

The Consultant shall in the performance of its obligations hereunder comply with all applicable laws, rules, regulations, and ordinances of all governmental authorities having jurisdiction over the performance of this Agreement, including, without limitation, the Federal Occupational Health and Safety Act and all state and federal laws prohibiting and/or related to discrimination by reason of race, sex, age, religion or national origin.

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

## 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:	John Fitch, P.E. City of North Las Vegas 2580 N. Betty Ln Las Vegas, NV 89156 Phone: 702-277-4691 Email: fitchj@cityofnorthlasvegas.com
To Consultant:	Kyle Foss, P.E. Jacobs Engineering Group, Inc. 1301 N. Green Valley Parkway, Suite 200 Henderson, NV 89074 Phone: 702-953-1213 Email: kyle.foss@jacobs.com

#### 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.

## Y. PUBLIC RECORDS:

Pursuant to NRS 239.010 and other applicable legal authority, each and every document provided to the City may be 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 be liable in any way to the Provider for the disclosure of any public record, including but not limited to documents provided to the City by the Provider. In the event the City is required to defend and action with regard to a public records request for documents submitted by the Provider, the Provider agrees to indemnify, hold harmless, and defend the City from all damages, costs, and expenses, including court costs and reasonable attorney's fees related to such public records request. This section XII.Y shall survive the expiration or early termination of the Agreement.

In Witness Whereof, the Parties have caused this Agreement to be executed the day and year first above written.

City of North Las Vegas, Nevada a Nevada municipal corporation

By:\_

Pamela A. Goynes-Brown Mayor

Attest:

By:

Jackie Rodgers City Clerk

Approved as to Form:

By:\_

Micaela Rustia Moore City Attorney Jacobs Engineering Group, Inc. A Delaware corporation

By:

Ken Gilbreth, P.E. Vice President

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## PROFESSIONAL ENGINEERING SERVICES AGREEMENT FOR THE DEER SPRINGS RESERVOIR UPGRADE 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 JACOBS ENGINEERING GROUP (CONSULTANT) for the Deer Springs Reservoir Upgrade (PROJECT). The CITY reserves the right to cancel, re-prioritize, and/or alter the schedule of the PROJECT as identified herein.

## **PROJECT DESCRIPTION**

The CITY requires preliminary engineering, final design, bidding phase support, and construction management support services for the new potable water storage tank designated as Deer Springs Reservoir #2. The site is located at 4710 Deer Springs Way, North Las Vegas, NV 89084, USA. The Deer Springs Reservoir #2 will be referred to as the "PROJECT." This exhibit A outlines the scope of services the CONSULTANT will provide.

The PROJECT includes design of a 5-million-gallon potable water tank with a high-water elevation of approximately 2330 feet. The PROJECT will include site improvements, site piping, site access, current reservoir layout, reservoir appurtenances, disinfection byproduct mitigation, cathodic protection, instrumentation, and controls.

## **STANDARDS**

The PROJECT will utilize the following standards.

- 1. City of North Las Vegas Water Service District Rules and Regulations, current edition.
- 2. Uniform Design and Construction Standards for Water Distribution Systems, Clark County Nevada, current edition.
- 3. Hydrologic Criteria and Drainage Design Manual, Clark County Regional Flood Control District, current edition.
- 4. Manual on Uniform Traffic Control Devices, Federal Highway Administration, current edition.
- 5. American Association of State highway and Transportation Officials (AASHTO), current edition.
- 6. Nevada Department of Transportation (NDOT), Standard Plans and Specifications for Road and Bridge Construction, current editions.
- 7. Department of Justice, Code of Federal Regulations, 28 CFR Part 36, Revised as of July 1, 1994, for Americans with Disabilities, (ADA) Standards for Accessible Design.

## <u>PURPOSE</u>

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

# Task 1 – Project Management

## Task 1.01 – Chartering Workshop

CONSULTANT will conduct a workshop to establish the key success factors, risks, and roles and responsibilities for the PROJECT.

#### Task 1.02 – PROJECT Workplan

CONSULTANT will develop the PROJECT workplan including the quality plan, schedule, roles and responsibilities, budget, health and safety plan, risk management plan, communications plan, work breakdown structure, closure plan, and change management plan.

#### Task 1.03 – PROJECT Schedule

CONSULTANT will develop the PROJECT schedule based on the work breakdown structure for the PROJECT. CONSULTANT will update the schedule monthly and provide it with the status report.

#### Task 1.04 – PROJECT Controls

CONSULTANT will establish the PROJECT controls process for the PROJECT to track costs and schedule.

#### Task 1.05 – Progress Meetings

CONSULTANT will moderate progress meetings for the PROJECT status with the CITY every other week.

#### Task 1.06 – Quality Control

CONSULTANT will develop the quality control plan for the PROJECT.

#### Task 1.07 – Health and Safety

CONSULTANT will develop the health and safety plan for the PROJECT.

#### Task 1.08 – PROJECT Administration

CONSULTANT will perform the administrative functions for the PROJECT including invoicing, progress reports, etc.

#### Task 1 Deliverables:

- Progress meeting minutes
- Monthly invoice (template to be provided by the CITY) and progress report

#### **CITY Responsibilities:**

• Participation in PROJECT Chartering Workshop.

Task 1 Assumptions:

• All key stakeholders will be available for the chartering workshop, which will be held at CITY facilities. Two CONSULTANT staff will attend the meeting.

## Task 2 – 30% Predesign

## Task 2.01 – Discipline Pre-Design

## Subtask 2.01.1: Civil and Site Development

Develop the current and future site layout for the Deer Springs Reservoir site. This will
include activities such as: (1) determine size, location, and orientation of equipment and
facilities; and (2) layout access corridors and define maneuvering requirements (design

vehicle); determine emergency vehicle access requirements, and (3) future piping layouts to prepare for the site expansion improvements.

- Establish preliminary finished grades; overall major surfaces, and road profiles so surface runoff is conveyed around and not trapped by the new improvements.
- Review concepts and draft work products with and seek approval from quality control reviewer prior to submission to the CITY.
- Download survey data to create site-drawing files.

#### Subtask 2.01.2: Structural

- Develop concepts for tank. Prepare sizing calculations and perform internal review.
- Coordinate with geotechnical engineer to establish foundation design criteria for proposed structures and equipment.
- Coordinate with mechanical discipline on the selection of equipment pad locations.
- Develop foundation and structure concepts based on preliminary layouts.
- Review concepts and draft work products with and seek approval from quality control reviewer prior to submission to the CITY.

#### Subtask 2.01.3: Geotechnical

- CONSULTANT will use the geotechnical information gathered by the subconsultant in the execution of this task.
- CONSULTANT will perform field exploratory testing and sampling to determine subsurface geotechnical conditions at the sites.
- CONSULTANT will perform laboratory testing on representative soil samples to evaluate general physical and engineering properties of the subsurface soils.
- CONSULTANT will prepare a geotechnical data report (GDR) presenting the findings, geology and geologic hazards, and laboratory testing results.
- CONSULTANT will use the geotechnical information gathered by the subconsultant in the GDR in the execution of this task to include a geotechnical recommendations report that will summarize the following:
  - Earthwork and compaction requirements, including subgrade preparation, excavation characteristics, and suitability of the on-site soil for subgrade and use as structural fill or trench backfill material.
  - Design parameters for tank and valve vault foundations, including allowable bearing capacity, lateral load resistance, foundation embedment depth and estimated settlement.
  - Soil type and seismic coefficients for seismic design consistent with the 2018 International Building Code (IBC).
  - Evaluation and assessment of effects that seismic hazards are predicted to have on design elements, including liquefaction, lateral spreading, and deformation analyses.
  - Conclusions, and recommendations for design and construction, including geotechnical recommendations regarding earthwork/grading and design and construction of conventional foundations, suitability of native soils for use as structural fill and trench backfill, default seismic design parameters, modulus of soil reaction (E'), excavatability of the subsurface materials, pipe zone and trench backfills, lateral earth pressures, unit weight, coefficient of friction, concrete and pipe corrosion, and cathodic protection evaluation.
- A dynamic response analysis (e.g. SHAKE analysis) is not currently scoped. It is assumed that the period of the structure will be less than 0.5 and will not require this

analysis (per IBC) or that native foundation soils will not have deep soft deposits or highly sensitive soils.

• The Geotechnical Recommendations Report (GRR) will be prepared for the design team use for design coordination, the CITY, and building officials. It is not recommended the GRR be included in the bid documents. The Geotechnical Data Report (GDR) should be included in the bid documents.

## Subtask 2.01.4: Survey

- CONSULTANT will use the survey information gathered by the subconsultant in the execution of this task.
- CONSULTANT will perform an on-the-ground field survey utilizing modern technologies to search for and tie out boundary monuments and lines of occupation to determine site boundaries and right-of-way limits. CONSULTANT will locate survey control monuments, sufficient to establish sectional control, parcel and right-of-way lines.
- CONSULTANT will provide a topographic survey to obtain horizontal and vertical locations of existing conditions within the access roadway and 15-acre parcel (200 feet outside of the roadway/parcel). CONSULTANT will locate the valve vault location and provide horizontal and vertical values.
- CONSULTANT will provide a Record of Survey to be reviewed by the CITY.
- CONSULTANT will prepare a Horizontal Control and Right-of-Way Plan based upon the results of the Research and field work performed above. The plan sheet(s) will include the results of surveys, parcel lines, right-of-way lines and found monumentation.
- CONSULTANT will prepare legal descriptions and exhibits for Right-of-Way, ingress/egress easements, sanitary sewer easements, drainage easements, water district easements, vacation and abandonment of easements, as required.

## Subtask 2.01.5: Mechanical

- Select and size the yard pipe, appurtenances, and equipment for the PROJECT. Prepare sizing calculations and perform internal review. Implement the level of redundancy previously established in the PROJECT definition phase.
- Prepare equipment list. Coordinate with the CITY on preferences of equipment manufacturers.
- Prepare preliminary 3D model for equipment arrangements.
- Develop schematic diagram for the reservoir.
- Develop control narrative for the reservoir
- Evaluate corrosion control requirements and select materials and method for control.
- Review concepts and draft work products with and seek approval from quality control reviewer prior to submission to the CITY.

Subtask 2.01.6: Instrumentation and Control Systems (I&CS)

- Prepare schematic drawings for the PROJECT. Information to be included on the schematic will be flow paths and valve locations.
- Develop equipment/instrument tag numbering, naming, and abbreviation conventions.
- Prepare control narrative for the reservoir.
- Develop preliminary P&ID's for the reservoir.
- Develop overall control philosophy including local control approach, control system, level of automation, supervisory control.
- Develop overall SCADA communication concept including fiber network and connections.
- Review concepts and draft work products with and seek approval from quality control reviewer prior to submission to the CITY.

## Subtask 2.01.7: Electrical

- Prepare preliminary overall one-line diagram for power connection to the Deer Springs site
- Coordinate with NV Energy to establish services
- Prepare preliminary load calculations.
- Determine redundancy requirements for PROJECT.
- Establish preferred voltages for power distribution and utilization equipment.
- Evaluate code compliance.
- Review concepts and draft work products with and seek approval from quality control reviewer prior to submission to the CITY.

#### Task 2.02 30% Predesign Workshop and Report

The CONSULTANT will conduct a two-hour workshop with the CITY's personnel to review the work products from the tasks and subtasks as defined above. The workshop will be held in the CITY's offices and will incorporate the needed COVID-19 safety restrictions. Final meeting summary and the work products as defined above will be assembled in the Preliminary Design Report and submitted to the CITY.

Task 2 Deliverables

- Preliminary Design Report one (1) electronic copy in pdf format. Class 4 construction cost estimate summary, permit matrix, and draft geotechnical recommendations report will be included in this report.
- 30% Design Drawings (approximately 8-10 sheets) and Specifications Table of Contents five (5) hard copies and one (1) electronic copy in pdf format.
- Meeting Summary Preliminary Design Report Review Workshop one (1) electronic copy in Word format.

**CITY Responsibilities:** 

• Provide review comments on deliverables within two (2) weeks of receipt.

Task 2 Assumptions:

- CITY will facilitate internal review of documents.
- CITY will acquire appropriate permission for the CONSULTANT to perform survey, geotechnical, and biological work at the proposed sites at the beginning of Task 2.
- Key stakeholders will be available for the workshop, which will be held at CITY facilities. Two CONSULTANT staff will attend the meeting.

# Task 3 – 60% Design Development Phase

## Task 3.01 – Discipline Design Development

Subtask 3.01.1: Civil and Site Development

- Freeze civil design concept. Structures, road, and major site element horizontal locations are finalized. Finished grades are finalized.
- Define contractor staging, storage, access, and off-site access corridors.
- Prepare preliminary site grading drawings.
- Set final structure and equipment pad elevations.
- Develop preliminary yard piping.
- Show storm water control concepts (swales, curb, and gutter), if applicable, on the design development drawings.

- Finalize and lay out onsite facility access.
- Prepare first draft of technical specifications.
- Review design development and draft work products with and seek approval from quality control reviewer prior to submission to the CITY.

## Subtask 3.01.2: Structural

- Review final geotechnical recommendations report and finalize foundation design approach with geotechnical engineer and senior structural reviewer.
- Document structural design concept for equipment pads and structures.
- Prepare 3-D electronic models for all major structures.
- Prepare first draft of technical specifications.
- Review design development and draft work products with and seek approval from quality control reviewer prior to submission to the CITY.

#### Subtask 3.01.3: Mechanical

- Prepare 3-D electronic models and structure layouts (plans and major section(s)).
- Assemble catalog cuts for all major equipment. Complete equipment data sheets or equipment list on all major equipment items.
- Coordinate with Instrumentation & Control System (I&CS) in the finalization of Piping & Instrumentation Diagrams (P&ID)
- Finalize control narrative for the reservoir.
- Finalize equipment selection (type, size, weight, arrangement).
- Select piping materials.
- Prepare first draft of technical specifications.
- Provide the design for any utility water, drain, or other connections.
- Review design development and draft work products with and seek approval from quality control reviewer

#### Subtask 3.01.4: Instrumentation and Control

- Finalize P&IDs.
- Prepare preliminary I/O count.
- Summarize I&C system design philosophy for the Deer Springs reservoir. Include a description of the field elements to be used. Develop preliminary panel drawings for connections to PLC panels.
- Finalize control narrative for the reservoir and motor operated valves.
- Finalize overall SCADA communication concept including fiber network and connections.
- Prepare first draft of technical specifications.
- Review design development and draft work products with and seek approval from quality control reviewer prior to submission to the CITY.

## Subtask 3.01.5: Electrical

- Finalize the connection location for the Deer Springs Reservoir power supply.
- Prepare preliminary one-line diagrams for proposed facilities. Coordinate with discipline engineers to size equipment motors.
- Prepare detailed electrical load calculations.
- Prepare first draft of technical specifications.
- Review design development and draft work products with and seek approval from quality control reviewer prior to submission to the CITY.

#### Task 3.02 – Permit Matrix

Update the permit matrix for anticipated PROJECT permit requirements.

Task 3.03 – Construction Cost Estimate

Update the predesign construction cost estimate to Class 2 estimate.

## Task 3.04 – 60% Design Development Workshop and Construction Documents

The CONSULTANT will conduct a two-hour workshop with the CITY's personnel to review the work products from the tasks and subtasks as defined above. The workshop will be held in CITY's office. Final minutes from the workshop, and the work products as defined above will be assembled in the Design Development Construction Documents and submitted to the CITY.

Task 3 Deliverables

- Final Design Report (1) electronic copy in pdf format
- 60% Design Drawings and Specifications one (1) electronic copy in pdf format
- 60% Draft Specifications
- 60% Class 2 construction cost estimate
- Meeting Summary 60% Design Report Review Workshop one (1) electronic copy in Word format)

CITY Responsibilities:

• Provide review comments on deliverables within two (2) weeks of receipt.

Assumptions:

- CITY will facilitate internal review of documents.
- Key stakeholders will be available for the workshop, which will be held at CITY facilities. Two CONSULTANT staff will attend the meeting.

# Task 4 – 90% Review Contract Documents Preparation

Task 4.01 – Discipline Contract Document Preparation

- Incorporate CITY 60% design review comments
- Finalize specification front-end documents, including General Conditions, General Requirements, bidding documents, bonds, and Instruction to Bidders. CITY input is required at this point to determine construction contract requirements and insurance requirements.
- Coordinate with CITY on advertising and bidding process.
- Prepare final construction drawings.
- Prepare final technical specifications.
- Prepare final calculations.
- Complete final checking and coordination review.
- Develop final construction sequencing plan and include it in the Contract Documents
- Submit 90% Contract Documents to the CITY for review.
- Prepare 90% Contract Documents for CITY to submit for Permitting review.

#### Task 4.02 – Construction Cost Estimate

Update the 60% design construction cost estimate to Class 1 estimate.

## Task 4.03 – 90% Review Workshop

The CONSULTANT will conduct a two hour workshop to conduct a final review of the work products with the CITY's personnel and other key PROJECT staff. The CITY will prepare one set of collated comments and submit them to the CONSULTANT. The workshop will be held in CONSULTANT's office. Final workshop minutes, documenting the key decisions and responses to the CITY's comments will be submitted to the CITY.

Task 4 Deliverables

- 90% Design Drawings and Specifications –one (1) electronic copy in pdf format
- 90% Design Drawings and Specifications wet stamped for permitting and NDEP review

   two (2) sets of full size plans and two (2) sets of specifications
- 90% Class 1 construction cost estimate
- Meeting Summary 90% Design Report Review Workshop one (1) electronic copy in Word format

# Task 5 – 100% Contract Documents Preparation

## Task 5.01 – Incorporation of 90% Review Comments

The CONSULTANT will modify the Contract Documents to reflect all agreed upon final review comments from the CITY, and NDEP delivered during the 90% document review task. CONSULTANTwill provide signed and sealed electronic 100% Contract Documents to the CITY in PDF format.

#### Task 5.02 – Construction Cost Estimate

Update the 90% Class 1 construction cost estimate based on changes made during the 90% document review task.

Task 5 Deliverables

- 100% drawings and specifications one (1) electronic copy in pdf format
- 100% Class 1 construction cost estimate one (1) electronic copy in pdf format

## Task 6 – Bid Documentation Preparation

#### Task 6.01 – Incorporation of 100% Review Comments for Bidding

The CONSULTANT will modify the Contract Documents to reflect all agreed upon final review comments from the CITY, and NDEP delivered during the 90% document review task. CONSULTANT will provide signed and sealed electronic 100% Contract Documents to the CITY in PDF format.

Task 6 Deliverables

• Drawings and specifications for bidding – one (1) electronic copy in pdf format

## Task 7 – Bid Period Services

#### Task 7.01 – Administration of project Advertisement

PROJECT advertisement and bidding will be managed by the CITY. The CONSULTANT will support the CITY in preparing and placing advertisements and notices announcing or soliciting bids for the construction of the PROJECT.

#### Task 7.02 – Bid Period Information Requests

CONSULTANT will provide technical interpretation of the contract bid documents and will submit to the CITY proposed responses to Bidder's questions and requests. CITY will receive, log, and respond to questions.

#### Task 7.03 – Pre-Bid Conference

CONSULTANT will assist the CITY in arranging and conducting one (1) pre-bid conference. CONSULTANT will assist the CITY in developing the agenda and content of the pre-bid conference. CONSULTANT will take minutes or make other provision for documenting the results of the pre-bid conference. CONSULTANT will also record all questions and requests for additional information and will coordinate with the CITY for issuing responses and additional information.

## Task 7.04 – Addenda

CONSULTANT will assist the CITY by preparing up to three (3) addenda for CITY distribution to bidders.

#### Task 7.05 – Conformed Documents

CONSULTANT will assemble addenda into a set of Conformed Documents. These documents are intended to simplify construction phase reference to amended documents and final executed agreements. The Conformed Documents do not replace the Bid Documents, addenda, bid, agreement, or attachments.

#### Task 7 Deliverables

- Response to bid period questions submitted electronically.
- Up to three (3) addenda submitted electronically.
- Conformed Drawings and Specifications five (5) hard copies and one (1) electronic copy in pdf format

#### **CITY Responsibilities**

- CITY will manage bidding process and will perform a legal evaluation of bid proposals.
- CITY will prepare recommendation of award and other documentation as may be required to secure CITY approval to enter into construction contract with successful bidder.
- CITY will manage advertisement and bidding electronically.

#### Task 7 Assumptions

• CITY will manage advertisement and bidding electronically.

## Task 8 – Engineering Services During Construction

#### Task 8.01 – Document Management System and Procedures

The CONSULTANT will provide technical assistance during the construction phase. CITY will manage construction with internal staff or with a third-party construction manager. CONSULTANT assumes the CITY will establish a system and set of procedures for managing, tracking, and storing all relevant documents between the contractor, CONSULTANT and CITY produced during the Bid/Award, Construction and Closeout phases of the PROJECT.

#### Task 8.02 - Site Coordination/ Administration

Subtask 8.02.1: Pre-Construction Conference

CONSULTANT will attend the pre-construction conference moderated by the CITY.

Subtask 8.02.2: Communications

CONSULTANT will implement and maintain regular communications with the CITY during the construction. CONSULTANT will coordinate with the contractor as directed by the CITY.

#### Subtask 8.02.3: Project Site Meetings

CONSULTANT will attend periodic meetings with the contractor when requested by the CITY. For budgeting purposes, the CONSULTANT has assumed attendance at sixteen (16) progress meetings.

#### Task 8.03 - Changes

#### Subtask 8.03.1: Coordinate Issuance of Changes:

CONSULTANT WILLwill assist the CITY with the issuance of changes to the contract for construction. CONSULTANT will assist the CITY with negotiations of contractor's proposal. Design and engineering services to prepare drawings, specifications and other information for the change will be performed under this task.

#### Subtask 8.03.2: Review of Contractor's Requested Changes:

CONSULTANT will review all contractor requested changes to the contract for construction when requested to do so by the CITY. CONSULTANT will make recommendations to the CITY regarding the acceptability of the contractor's request.

Design and engineering services to review contractor-initiated changes and to prepare drawings and specifications for issuance to the contractor will be performed under this task.

#### Task 8.04 – As Built Drawings and Record Documents

The CONSULTANT will incorporate markups prepared by the contractor in the record drawings into a final set of record documents for the CITY.

#### Task 8.05 - Field Services

Subtask 8.05.1: Design Team Visits:

CONSULTANT will coordinate visits to the site to review progress and quality of the work. The visits will observe the general quality of the work at the time of the visit and review any specific items of work that are brought to the attention of the design team members by the contractor or the CITY. For budgeting purposes, the CONSULTANT has assumed six (6) site visits.

#### Subtask 8.05.2: Substantial and Final Completion:

CONSULTANT will assist the CITY with inspections at substantial and final completion, in accordance with the contract for construction. CONSULTANT will prepare a single punch list of items requiring completion or correction. CONSULTANT will make recommendations to the CITY regarding acceptance of the work based upon the results of the final inspection.

#### Task 8.06 – Shop Drawings, Samples and Submittals

Subtask 8.06.1: Review of Shop Drawings, Samples and Submittals:

CONSULTANT will review contractor's shop drawings, samples, and other submittals when requested to do so by the CITY. For budgeting purposes, the CONSULTANT has assumed fifty (50) first submittals and twenty-five (25) resubmittals for a total of seventy-five (75) submittals. The CONSULTANT assumes the CITY will perform review on non-technical submittals.

CONSULTANT's review of shop drawings, samples and submittals will be for general conformance with the design concept and general compliance with the requirements of the contract for construction. Such review will not relieve the Contractor from its responsibility for performance in accordance with the contract for construction, nor is such review a guarantee that the work covered by the shop drawings, samples and submittals is free of errors, inconsistencies or omissions.

Task 8.07 - Contractor Requests for Information

Subtask 7.07.1: Requests for Information:

CONSULTANT will review and respond to the contractor's requests for information when requested by the CITY to do so. For budgeting purposes, the CONSULTANT has assumed forty (40) RFIs.

Task 8.08 – Start-Up Support and O&M Update

Subtask 7.08.1: Start-up Support:

CONSULTANT will furnish assistance to the CITY in the Deer Springs Reservoir #2 reservoir startup and motor operated valve startup. This assistance includes:

- Finalize all IP addressing for the PLC.
- Write the Start-up test plan.
- Preparing a Plan of Operation to identify specific actions.
- Assisting during the startup of the Deer Springs Reservoir #2 in support of the Contract Document requirements for the Contractor.
- Deploy all PLC and HMI software.
- Execute the Start-up test plans for each system.

## Subtask 8.08.2: O&M Manual Update:

The purpose of this task is to incorporate final design elements into an O&M manual including capturing HMI Screen Shots of system, photographing local control panels (LCPs), and documenting final system controls and functionality.

CONSULTANT will submit a draft O&M and conduct one, one-day meeting to review O&M comments with the CITY's personnel and other key PROJECT staff. The meeting will be held at the CITY's facility.

CONSULTANT will finalize the O&M based on CITY comments.

Task 8 Deliverables

- Final record drawings in a single bound set on bond paper and in PDF format.
- Responses to change evaluations, shop drawing reviews, and requests for information in electronic format.
- Startup test plans delivered in electronic format.
- Two bound copies of the O&M Manual update along with a electronic version.

## Task 8 Assumptions

CITY will establish a system and set of procedures for managing, tracking and storing all relevant documents between the contractor, CONSULTANT and CITY produced during the Bid/Award, Construction and Closeout phases of the PROJECT. CONSULTANT assumes the CITY will employ independent firms for the material testing, specialty inspection, survey, or other services related to verifying the quality of the contractor's work.

# SUPPLEMENTAL SERVICES

The CONSULTANT will provide additional services that may be required during completion of the PROJECT but not included under the Basic Services of this Agreement. Prior to beginning work on any Supplemental Services task, CONSULTANT will prepare and obtain written authorization from the CITY for the scope of work, negotiated fee based on the hourly rates provided in Exhibit B, and time of performance for each task.

# CNLV Deer Springs Reservoir Exhibit "B" Fee Breakdown

	Role	Principal Professional 3	Principal Professional 2	Principal Professional 1	Senior Professional 2	Senior Professional 1	Project Professional 2	Project Professional 1	Engineering Tech	Technician	Office / Clerical				
		Principal Professional 3	Principal Professional 2	Principal Professional 1	Senior Professional 2	Senior Professional 1	Project Professional 2	Project Professional 1	Engineering Tech	Technician	Office / Clerical	Labor	Labor	Printing, ODC	Total
Teels Ma	Billing Rate	\$ 210.00	\$ 205.00	\$ 200.00	\$ 195.00	\$ 180.00	\$ 160.00	\$ 150.00	\$ 150.00	\$ 130.00	\$ 100.00	Hours	Budget	and Subs	Cost
Task No.	Task Description	54	54	07	405		0				68	200	¢ 00.005	¢	¢ 00.005
1	Project Management	54	54	27	135	0	0	0	0	0	68	338	\$ 60,935	\$-	\$ 60,935
2	30% Preliminary Design	81	54	54	27	27	14	14	105	70	7	453	\$ 78,895	\$ 59,792	\$ 138,687
3	60% Design Development	138	23	69	69	69	46	46	136	136	31	763	\$ 128,810	\$ 500	\$ 129,310
4	90% Review Contract Documents	198	33	66	66	99	99	99	151	227	75	1,113	\$ 182,585	\$ 2,000	\$ 184,585
5	100% Contract Documents	173	35	69	104	104	104	104	118	275	71	1,157	\$ 189,095	\$ 500	\$ 189,595
6	Bid Documentation	58	15	29	29	58	58	44	39	156	20	506	\$ 81,160	\$ 500	\$ 81,660
7	Bid Period Services	5	8	42	42	45	17	8	8	12	21	208	\$ 36,160	\$ 1,000	\$ 37,160
8	Engineering Services During Construction	64	0	64	255	255	318	318	22	125	183	1,604	\$ 258,295	\$ 2,000	\$ 260,295
	TOTAL:	771	222	420	727	657	656	633	579	1,001	476	6,142	\$ 1,015,935	\$ 66,292	\$ 1,082,227