

**PROFESSIONAL ENGINEERING SERVICES AGREEMENT
FOR THE
NORTH LAS VEGAS DETENTION BASIN UPGRADE**

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 _____, 2022, by and between the City of North Las Vegas, a Nevada municipal corporation, (the "City"), and WSP USA Inc., a New York Corporation, (hereinafter referred to as "Consultant").

RECITALS:

1. The City intends to improve, by way of expanding the existing Clark County Regional Flood Control Facility designated in the 2018 Las Vegas Mater Plan Update as facilities LVPO0406 and LVUP070, identified as the North Las Vegas Detention Basin Upgrade, (hereinafter referred to as the "Improvements").
2. The City desires to obtain quality professional services of the Consultant to perform preliminary engineering, final design, bid phase support, and construction management support (hereinafter referred to as the "Project") for construction of the Improvements; and
3. The Consultant's scope of service and compensation have 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 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 Syndi J. Flippin-Dudley, PE, whose license number is 11070, as the Principal-in-Charge ("Principal-in-Charge"), and Jeffrey Steven Douglas, PE, whose license number is 18417, 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:
 - 1. Drafting and plan sheet layout standards;
 - 2. Standard "front-end" contract documents and general conditions; and,
 - 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-of-way acquisition, permanent easement or temporary construction access;
 2. Obtaining right-of-way and easements;
 3. Printing of the construction bidding document package;
 4. Completing the competitive bidding procedures for public works projects; and,
 5. 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 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 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:

<u>Basic Services - Task</u>	<u>Lump Sum Amount</u>
1. Preliminary Engineering Services	\$331,570.00
2. Final Design Services	\$555,500.00
3. Bid Phase Support Services	\$13,600.00
	Subtotal (Tasks 1-3) \$900,670.00
	<u>Time & Material Amount</u>
4. Construction Management Support Services	No-to-exceed \$158,900.00
	Subtotal (Tasks 1-4) \$1,059,570.00

Supplemental Services

Time & Material Amount
Not-to-exceed \$140,000.00

GRAND TOTAL

Not-to-Exceed \$1,199,570.00

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 completed Basic Services Tasks 1 through 3, the City shall pay that percentage of the lump sum amount for as set forth in Subsection VIII.A.1 above.
 - (b) With respect to progress payments for completed Basic Services Task 4, the City shall pay on a Time and Material Basis in accordance with the Fee Schedule provided in Exhibit "B" as set forth in Subsection VIII.A.1 above.
 - (c) 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.
 - (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. 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 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 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 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;
 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.

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.** Insurance Services Office Form CG 00 01 covering CGL on an "occurrence" basis, including products and completed operations, property damage, bodily injury and personal and advertising injury with limits no less than \$2,000,000.00 per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location (ISO CG 25 03 05 09 or 25 04 05 09) or the general aggregate limit shall be twice the required occurrence limit.
3. **Automobile Liability:** ISO Form Number CA 00 01 covering any auto (Code 1), or if Consultant has no owned autos, covering hired, (Code 8) and non-owned autos (Code 9), with limits no less than \$1,000,000.00 per accident for bodily injury and property damage.

4. Requested liability limits can be provided on a single policy or combination of primary and umbrella, so long as the single occurrence limit is met.
5. 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 \$1,000,000 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.
6. The insurance policies are to contain, or be endorsed to contain, the following provisions:
 - (a) **Additional Insured Status:** The City, its officers, officials, employees, and volunteers are to be covered as additional insureds on the CGL policy with respect to liability arising out of work or operations performed by or on behalf of the Consultant including materials, parts or equipment furnished in connection with such work or operations. General liability coverage can be provided in the form of an endorsement to the Consultant's insurance (at least as broad as ISO Form CG 20 10 11 85 or both CG 20 10, CG 20 26, CG 20 33, or CG 20 38; and CG 20 37 forms if later revisions are used).
 - (b) **Primary Coverage:** For any claims related to this Agreement, the Consultant's insurance coverage shall be primary insurance coverage at least as broad as ISO CG 20 01 04 13 with respect to the City, its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by the City, its officers, officials, employees, or volunteers shall be excess to the Consultant's insurance and shall not contribute with it.
 - (c) **Notice of Cancellation:** Each insurance policy required above shall provide that coverage shall not be canceled, except with notice to the City.
 - (d) **Contractual Liability:** Cover Consultant's contractual liability to the City.
 - (e) **Waiver of Subrogation:** Consultant hereby grants to the City a waiver of any right to subrogation that any insurer of said Consultant may acquire against the City by virtue of the payment of any loss under such insurance. Consultant agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation, but this provision applies regardless of whether or not the City has received a waiver of subrogation endorsement from the insurer.

The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of the City for all work performed by the Consultant, its employees, agents, and subconsultants.
 - (f) **Self-Insured Retentions and Deductibles:** Self-Insured retentions and deductibles must be declared to the City. The City may require the Consultant to purchase coverage with a lower retention or provide proof of ability to pay losses and related investigations, claim administration, and defense expenses

within the retention. No deductible or self-insured retention may exceed \$250,000 without the written approval of the City.

- (g) **Acceptability of Insurers:** Insurance is to be placed with insurers authorized to conduct business in the state with a current A.M. Best's rating of no less than A-VII, unless otherwise acceptable to the City.
- (h) **Claims Made Policies:** If any of the required policies provide claims-made coverage:
 - i. The retroactive date must be shown and must be before the date of the contract or the beginning of contract work.
 - ii. Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of the contract work.
 - iii. If coverage is cancelled or not renewed, and not replaced with another claims-made policy form with a Retroactive Date prior to the contract effective date, the Consultant must purchase "extended reporting" coverage for a minimum of five (5) years after completion of work.
- (i) **Verification of Coverage:** Consultant shall furnish the City with original certificates and amendatory endorsements or copies of the applicable policy language effecting coverage required by this clause. 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 certificates and endorsements are to be received and approved by the City before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the Consultant's obligation to provide them. The City reserves the right to require complete, certified copies of all required insurance policies, including endorsements required by these specifications, at any time.
- (j) **Special Risks or Circumstances:** The City reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

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 "Indemnitees"), 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 Parties 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 Indemnitees 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 Indemnitees, 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 that 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, all state and federal laws prohibiting and/or related to discrimination by reason of race, sex, age, religion or national origin. Consultant shall ensure that it is familiar with all applicable safety and health standards promulgated by state and federal governmental authorities including, but not limited to, all applicable requirements of the Occupational Safety and

Health Act of 1970, including all applicable standards published in 29 C.F.R. parts 1910, and 1926 and applicable occupational safety and health standards promulgated under the state of Nevada. Contractor further recognizes that, while Contractor is performing any work on behalf of the City, under the terms of this Agreement, Contractor agrees that it has the sole and exclusive responsibility to assure that its employees and the employees of its subcontractors comply at all times with all applicable safety and health standards as above-described and all applicable City safety and health rules. Contractor will supply all of its employees with the appropriate Safety equipment required for performing functions at the City facilities.

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: Allan Fajardo, PE, PTOE
City of North Las Vegas
PW-Engineering
2250 Las Vegas Boulevard North, Suite 610
North Las Vegas, NV 89030
Phone: 702-633-2044
Email: FajardoA@cityofnorthlasvegas.com

To Consultant: Jeffrey Douglas, PE
WSP USA Inc.
300 South 4th Street, Suite 1200
Las Vegas, NV 89101
Phone: 725-724-4352
Email: jeff.s.douglas@wsp.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:

1. 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.
2. At no time shall the Consultant transfer, disclose, publish, or otherwise make accessible to anyone, any Confidential/Proprietary Information, unless and until such information is readily available in the public domain by reason other than Consultant's disclosure or unless such disclosure is required by applicable law or occurs in the normal course of performing the Consultant's Services to the City.

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 Consultant for the disclosure of any public record,

including but not limited to documents provided to the City by the Consultant. In the event the City is required to defend and action with regard to a public records request for documents submitted by the Consultant, the Consultant 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

WSP USA, Inc.
a New York corporation

By: _____
John J. Lee
Mayor

By:  _____
Juan Diaz-Carreras
Vice President

Attest:

By: _____
Jackie Rodgers
City Clerk

Approved as to Form:

By:  _____
Micaela Rustia Moore
City Attorney

**PROFESSIONAL ENGINEERING SERVICES AGREEMENT FOR THE
NORTH LAS VEGAS DETENTION BASIN UPGRADE
Exhibit "A"**

SCOPE OF BASIC SERVICES

INTRODUCTION

This exhibit outlines the scope of work for Basic Services to be provided to the City by the Consultant for the North Las Vegas Detention Basin Expansion. The City reserves the right to cancel, re-prioritize, and/or alter the schedule of the Project as identified herein.

PROJECT DESCRIPTION

City requires preliminary engineering, final design, bid phase support, and engineering construction management support services to expand the existing North Las Vegas Detention Basin from 1,435 acre-feet to a volume that meets current standard taking into consideration the most current MPU and planned development tributary to the detention basin. The Project is located north of the CC 215 between the North 5th Street and Lamb Boulevard interchange. In juxtaposition with the proposed detention basin expansion, the spillway will also need to be upgraded and both facilities are identified on the 2018 Las Vegas Valley Master Plan Update (MPU) as facilities LVUP0406 and LVUP0470; respectively. The Project also includes replacement of a portion of two (2) inflow structures identified on the MPU as facilities LVUP0422 and LVRW0001.

The Project and Improvements will primarily be funded through appropriation by the Clark County Regional Flood Control District (CCRFCD) that will be administered by the City of North Las Vegas. The following characteristics are associated with the work:

- Enlargement of the detention basin storage volume through excavation within the existing City-owned land extending approximately 350 feet north onto APN 124-14-211-001;
- Enlargement of the detention basin storage volume through relocating approximately 1,700 linear feet of the existing earthen embankment. The relocation will be within City-owned land APN 124-14-896-002;
- Replacement of approximately 600 feet of two (2) earthen inflow channels with concrete inflow structures and energy dissipators;
- Modification and or enlargement of the existing berm west of the detention basin (LVUP0445);
- Retrofit of the existing outlet structure for water quality storage and water quality retention; and,
- Addition of an ogee crest concrete Probable Maximum Flood (PMF) spillway to the existing and/or relocated embankment.

STANDARDS

The Project shall be designed in accordance with the following locally adopted standards and procedures.

1. Uniform Standard Specifications for Public Works' Construction Off-Site improvements, Clark County Area, Nevada, current edition.
2. Uniform Standard Drawings for Public Works' Construction Off-Site Improvements, Clark County Area, Nevada, Volume I and II, current editions.
3. Hydrologic Criteria and Drainage Design Manual (HCDDM), Clark County Regional Flood Control District (CCRFCD), current edition.
4. Standard Plans and Specifications for Road and Bridge Construction, State of Nevada Department of Transportation (NDOT), current edition.
5. 2010 ADA Standards for Accessible Design, Department of Justice, current edition.
6. Mapping of areas protected by levee systems, Code of Federal Regulations, Title 44, Chapter 1, Section 65.10.

When the Project involves other infrastructures, the adopted standards for such shall be recognized and followed. Such standards may include:

1. City of North Las Vegas Water Service District Rules and Regulations, current edition.
2. Uniform Design and Construction Standards for Water Distribution Systems (UDACS), Clark County Nevada, current edition.
7. Design and Construction Standards for Wastewater Collective System (DCSWCS), Southern Nevada, current edition.
8. A Policy on Geometric Design of Highways and Streets, American Association of State Highways and Transportation Officials (AASHTO), current edition.
9. Manual on Uniform Traffic Control Devices (MUTCD), Federal Highway Administration, current edition.
10. PROWAG, United States Access Board, current edition issued by the United States Access Board (USAB).

The above is not intended to enumerate all guidelines and criteria that maybe required throughout the Project's life cycle. Consultant acknowledges that additional literature may surface that will need to be incorporated in the design.

PURPOSE

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

1. **Preliminary Engineering Services** - Services intended to establish the proposed configuration and establish a schematic design for the proposed improvements before proceeding into final design for the work.
2. **Final Design Services** - Services related to preparation of construction contract documents and cost estimates for the Improvements.
3. **Bidding Phase Support Services** - Services intended to support the City during public bidding of the Improvements from the Consultant generated Project design.
4. **Construction Management Support Services** - Services intended to support the City during construction activities which consist of attending preconstruction and construction progress meetings, reviewing shop drawings, responding to Contractor Requests for Information, attending site visits, participating in final inspection, and conducting construction closeout.

SUBCONSULTANTS

The following sub-consultants will be used for this Project:

Geotechnical: Ninyo and Moore

Topographical Mapping/Survey Control: Wallace Morris Kline Surveying, LLC

Utility Potholing: KCI Technologies

Replacement of the above named subconsultants require that the City be notified in writing within ten (10) days outlining the reason(s) for such dismissal coupled with providing the qualification of the replacement firm. Any action taken by the City does not constitute an extension of the Project schedule nor be used as a basis for additional compensation.

TASK 1 PRELIMINARY ENGINEERING SERVICES

1.1 Project Management

Consultant shall:

- Perform day-to-day work to administer interrelated activities, manage personnel, subconsultants, and resources. Monitor schedules and budgets, coordinate with City Departments/Divisions such as Engineering and Construction Services, Development and Flood Control, Real Property Services, Survey, Transportation Services, Roadway Operations, Utilities, Building Department, Planning & Zoning and other agencies as required to obtain information on existing and proposed facilities within the area of the proposed improvements.
- Prepare and distribute Project schedule updates.
- Prepare and distribute monthly status reports.

- Draft schedules and status reports shall be submitted to the City for review and approval prior to distribution.

1.2 Kick-Off Meeting

Consultant shall:

- Organize and participate in a Project kickoff meeting with the City, and other stakeholders to discuss the scope and schedule for the Project; request and obtain data and information from the City and other agencies. The kick-off meeting is intended to introduce key Project personnel, define areas of responsibilities and communication protocols, review the scope of work and the Project schedule, review the timing and intent of Project deliverables, review procedures and schedules, and establish procedures for communicating potential changes in the work or schedule. A separate kick-off meeting will be scheduled with non-City owned Utility agencies.
- Prepare a full-color site aerial display board to be used at this and other meetings and presentations. The display boards shall be kept by the City.
- Prepare meeting agenda to be provided to the City two (2) days in advance of the meeting date, and meeting minutes to be provided to the City within three (3) days after the meeting date to be reviewed by the City prior to issuing final versions for distribution.

1.3 Progress Meetings

Consultant shall:

- Conduct monthly progress meetings throughout Task 1 that includes inviting, at a minimum, City and Clark County Regional Flood Control District (CCRFCD).
- Prepare the agendas to be provided to the City two (2) days in advance of the meeting date and prepare meeting minutes to be provided to the City within three (3) days after the meeting date, recording the issues discussed and decisions reached.
- Prepare and deliver appropriate correspondence, meeting notices, work plans, and schedules in draft review form for review by the City, prior to issuing final versions for distribution.

1.4 Records Review and Information Research

Consultant shall:

- Obtain and review all pertinent documents and data related to this Project, including but not limited to City water, sewer, and storm drainage facility GIS information, dry utility and fiber optic information, assessor's maps, record-of-surveys, parcel maps, final maps, improvement plans, grading, drainage, and regional flood control plans, geotechnical reports, hydrology studies, traffic signal plans, utility plans, drainage studies, survey datum, basis of bearing, benchmark(s), aerial topographic mapping,

design criteria and standards, development improvement plans, and other reports or studies currently being processed by the City which will likely affect the Project.

- Provide ongoing supplemental research of public records during the Project development.

1.5 Utility, Entity & Development Coordination

Consultant shall:

- Coordinate with the affected utility companies, and agencies to obtain information on existing and proposed utility facilities within the area of proposed improvements.
- Coordinate with private developers currently or planning to develop within and around the influence of the Project area. Assess and review their development plans to ensure compatibility with the Project design.
- Coordinate with other design consultants working on other capital improvement deliverables from either the City or other agencies that directly or indirectly impacts the Project design.
- Conduct a field review and site inventory of the proposed design footprint to visually determine the presence of buried and overhead utilities in the Project area identified in the topographic and field surveys and superimpose the findings on an aerial photograph. Any differences between record drawings and field observations will be identified.
- Contact and coordinate with agencies that may include, but not be limited to: City Departments/Divisions including Utilities, Roadway Operations, Traffic, Development & Flood Control, Engineering & Construction Services, and Real Property Services, Southern Nevada Water Authority (SNWA), NV Energy Transmission and Distribution, Century Link, Cox Communications, Southwest Gas, Kern River Gas Company, Regional Transportation Commission of Southern Nevada, Freeway Arterial Systems of Transportation (FAST), Clark County, State of Nevada Division of Water Resources, Clark County Regional Flood Control District, Bureau of Land Management, and other local, state, and federal agencies to collect available records regarding the size and location of their facilities, as applicable, and to determine where there may be conflicts.
- Meet with affected utility companies, agencies, affected and impacted private developers, and other Stakeholders to address their concerns on Project related issues. Record meeting minutes to document key information items, action items, and/or decisions made.
- Review City water, sewer, and storm drainage facility GIS information, fiber optic information, and other available records in the area of proposed improvements.
- Track all utility submittals and comments on a Utility Conflict Matrix.

- Identify potential utility conflicts and provide a preliminary indication regarding the need to physically pothole and/or relocate interfering utilities in order to construct the work. Prepare a pothole plan for potholing as described in Task 1.18.
- Provide progress drawings to utilities, coordinate with utility representatives, and prepare formal notification letters to alert affected utility agencies of the City's needs and requirements and of utility removals or relocations, including proposed undergrounding of utilities (aerial to underground), per the City's utility franchise agreements.

1.6 Right-of-Way Mapping and Coordination

Consultant shall:

- Conduct a field survey to locate benchmarks and existing survey monumentation, following the City of North Las Vegas Vertical Control Network.
- Prepare a Horizontal Control Plan.
- Prepare right-of-way mapping, and if title reports are needed, City shall furnish such documents.
- Identify the existing public rights-of-way on which the improvements will be constructed, and identify thereon the limits of additional public right-of-way, permanent easement and construction easements that will be needed to effectuate the work.
- Prepare the legal descriptions needed for right-of-way, easements, and temporary construction easements for City to execute acquisitions.
- Use the recently recorded Record of Survey for TVS Village 2, recorded in Book 158, Page 0033, as the basis for this Project.

1.7 Survey Mapping

Consultant shall:

- Provide Topographic Survey Mapping at 1-foot contour accuracy of the existing detention basin to the extent needed to perform an adequate and viable Project design. Consultant shall also conduct ground survey of the detention basin outlet, spillway, inflow channels, berms, surface utilities, and other site features within the project area. 3D coordinates will be generated for all topographic data.
- Survey ten (10) potholes.
- Survey eight (17) geotechnical borings.

1.8 Section 8 Environmental Analysis

Consultant shall:

- Prepare and submit two (2) copies of a Section 8 Facility-Specific Environmental Analysis, including Phase I Site Assessment to the City and CCRFCD.
- Address comments received from both the City and CCRFCD.

It is not anticipated that biological, paleontological, and/or cultural surveys will be required.

1.9 Sediment Transport Analysis

Consultant shall:

- Review previous geotechnical investigations and the sediment transport analysis prepared for the existing detention basin design and the Range Wash Diversion Dike.
- Prepare a sediment transport analysis using soil gradations from previous studies to evaluate potential wash load and bedload sediment volumes for the 100-year flood and average annual yield for both the interim and ultimate conditions. The wash load sediment volumes will be calculated using the Modified Universal Soil Loss Equation (MUSLE) as described in the HCDDM, Equation 1307. The bedload volumes will be calculated as described in the HCDDM, Equation 704. The results of the sediment transport analysis will be included in the Preliminary Hydrologic and Hydraulic Memorandum and the Final Hydrologic and Hydraulic Memorandum.

1.10 Water Quality Volume Analysis

Consultant shall:

- Evaluate the required water quality volume for the 85th percentile storm and Antecedent Moisture Condition I (ACM I) for ultimate development conditions.
- Update hydrologic parameters (lag time and curve numbers) including HEC-1 model prepared by the Consultant and basin maps with resultant tables and developable areas tributary to the detention basin.
- Perform preliminary hydraulic calculations (normal depth, stage/storage/discharge) to retrofit the existing outlet structure such that retention of water quality volume for a 24-hour drain time is achieved.
- Include the results of the water quality analysis and recommendations for the outlet structure retrofit in the Preliminary Hydrologic and Hydraulic Memorandum and the Final Hydrologic and Hydraulic Memorandum.

1.11 Permit Matrix

Consultant shall:

- Research permits and/or agency approvals applicable to the Project which may include regulatory permits from federal, state, and local agencies, including the National Parks Service (NPS), United States Army Corps of Engineers (USACE), NDOT, Nevada Department of Environmental Protection (NDEP), Nevada Department of Water Resources (NDWR), City, Clark County, CCRFCD, RTC, Southern Nevada Water Authority (SNWA), Nevada Energy Transmission and Distribution, Southwest Gas, Kern River Gas, Century Link, Cox Communications and others as required.
- Prepare a summary matrix of required approvals and permits.

1.12 Geotechnical Engineering

Consultant shall:

- Prepare a draft and final geotechnical report for the Project area to identify and assess potentially adverse conditions, such as previously recorded ground fissures, the location of mapped faults, and/or areas of known collapsible or expansive soils outlining remediation strategy to address such soil issues.
- Drill seventeen (17) exploratory borings along the top of the existing embankment and north of the existing detention basin. Two (2) borings will be conducted along the top of the existing embankment and eight (8) borings will be conducted along the proposed embankment spaced approximately 300 feet on center. Four (4) borings will be conducted along the northern excavation area. Three (3) borings will be conducted along the western levee. The boring depths will vary between 25 and 45 feet below the existing ground surface with a total boring depth of approximately 700 feet.
- Provide geotechnical evaluation and recommendations for earthwork, subgrade preparation, berm relocation / construction, inflow channels, outfall storm drain, retaining walls and the spillway slab.

1.13 Preliminary Hydrology and Hydraulic Memorandum

Consultant shall:

- Conduct an ultimate conditions hydrologic analysis for 100-year and the Probable Maximum Flood (PMF) events. Hydrologic analysis will include calculation of the Probably Maximum Precipitation (PMP) and modification of the MPU HEC-1 model as necessary to determine the ultimate condition inflow and out flow rates.
- Conduct a hydraulic analysis of the outlet structure, PMF Spillway and two (2) inflow channels. Establish preliminary inverts and cross sections, energy dissipators, transition structures, and other elements for the existing inflow channels. The hydraulic analysis will meet the requirements established by the CCRFCD HCDDM, current edition.

- Prepare and submit four (4) copies in both hard copy and digital format of a Preliminary Hydrology and Hydraulic Memorandum for distribution to City, CCRFCD and NV Division of Water Resources (NVDWR). The memorandum shall describe previous hydrologic studies, the development of the Project design hydrology, the results of the hydrologic analysis, and the hydraulic modeling results.

1.14 Preliminary Cost Estimate

Consultant shall:

- Prepare a preliminary opinion of the probable cost of construction, including a summary of bid items, and preliminary construction cost estimate and total project cost to include design, permits, easements and R/W costs; and contingency to correspond with a 50% level of Project completion.

1.15 QA/QC Review

Consultant shall:

- Utilize personnel independent of the Consultant's team assigned to this Project to perform a QA / QC review of the design and engineering elements provided in Task 1.
- Release to the City comments provided by the personnel performing the QA/QC review.

1.16 30% Preliminary Design Submittal

Consultant shall prepare and submit four (4) copies and electronic media of the 30% Preliminary Design Submittal to the City. The submittal will include, but is not limited to the following items:

- Geotechnical Investigation Report;
- Preliminary hydrologic and hydraulic memorandum;
- Permit Matrix;
- Preliminary cost estimate broken out by bid item and funding source(s);
- Summary of utility installations and potential conflicts and/or relocations associated with responsible party. If the relocation is determined to be borne by the Project, the cost and the conceptual/30% relocation design shall be provided and;
- Meeting minutes and pertinent correspondence, including coordination with City divisions and other agencies.

This task will also include:

- a. QA/QC Review as described in Task 1.15.
- b. 30% Complete Design Submittal that provides for:
 - Preparing drawings, construction cost estimates, an updated permit matrix and schedule for the Project to reflect a 30 percent level of completion.
 - Preparing and furnishing three (3) sets of 24" x 36" and (3) sets of 11" x 17" Progress Drawings, and three (3) copies of the construction cost estimate, three (3) copies of the utility permit matrix, and Project schedule and the electronic files of said documents to the City whereby it will include, but not necessarily limited to:
 - Cover, Legend, Drawing Index, Site Map, and General Notes;
 - Watershed Map;
 - Overview Plan;
 - Horizontal Control Plan;
 - Removal Plans;
 - Grading Plans;
 - Inflow Channel Plan and Profiles';
 - Spillway Plans'; and,
 - Typical Sections.

1.17 Preliminary Design Review Meeting

Consultant shall:

- Meet with the City, CCRFCD, and other stakeholders to review and achieve consensus on the preliminary Project design concept.
- Prepare meeting minutes that will summarize any design considerations or plan revisions.
- Prepare a comment matrix including responses within two weeks of the Preliminary Design Review Meeting, and revise the reports and documents prepared under Task 1.
- Submit two (2) copies of the comment matrix and any revised reports and documents.

1.18 Utility Potholing

Consultant shall:

- Provide potholing of underground utilities at ten (10) locations.
- Provide the pothole locations to the City for review and approval prior to engaging in such activity.

- Obtain the necessary permits from all governing agencies to perform the pothole.
- Replace the disturbed pothole area to its original condition.
- Perform the survey for the pothole areas.

TASK 2 FINAL DESIGN SERVICES

Upon receipt of written authorization by the City, Consultant shall perform all final design services necessary to provide for the construction of the Improvements including furnishing plans, specifications, and Engineer's Cost Estimate to the City for review, approval, and printing.

2.1 Project Management

Consultant shall:

- Continue to perform the day-to-day work to administer interrelated activities.
- Manage personnel, subconsultant and resources.
- Monitor schedules and budgets.
- Coordinate with the City and other stakeholders.
- Prepare and distribute Project monthly schedule updates.
- Prepare and distribute monthly status reports, draft schedules and status reports that shall be submitted to the City for review and approval prior to distribution.

2.2 Progress Meetings

Consultant shall:

Conduct monthly progress meetings throughout Task 2 that includes inviting, at a minimum, City and Clark County Regional Flood Control District (CCRFCD) and prepare the meeting agendas and meeting minutes as defined in Task 1.3.

2.3 Utility, Entity & Development Coordination

Consultant shall:

- Provide ongoing utility and entity coordination as established under Task 1.5
- Review and provide comments to non-City owned Utility agencies related to their respective relocation design ensuring that their design is compatible with the Project's footprint.
- Obtain final approval signatures from utility agencies.

2.4 Section 404 Permit and 401 Water Quality Certification

Consultant shall:

- Conduct a field surey to document the boundaries of all jurisdictional areas within the Project limits.
- Prepare and submit a Jurisdictional Determination Report to the USACE.
- Prepare and submit a Section 404 permit application and Preconstruction Notification Form under Regional General Permit 7 to the USACE.
- Prepare and submit the Clean Water Act 401 Water Quality Certification application to the NDEP.
- Address any comments released from the agencies identified herein.

2.5 Draft Final Hydrology and Hydraulic Memorandum

Consultant shall:

- Update the hydrologic and hydraulic analysis as necessary based on the 70% design configuration and Stakeholder comments received.
- Conduct 2-dimensional hydraulic analysis for spillway activation events and embankment failure events. The modeling will be consistent with the currently adopted emergency action plan. The modeling will include a PMF spillway flow through event; three 100-year full pool dam failure events; and, a multi failure scenario that includes breach failure of the Cheyenne Peaking Basin during a PMF event at the North Las Vegas Detention Basin.
- Prepare and submit four (4) copies of a Preliminary Hydrologic/Hydraulic Technical Memorandum for distribution to City and CCRFCD. The Technical Memorandum shall describe previous hydrologic studies, the development of the design hydrology for the Project, the results of the hydrologic analysis, and the conveyance facilities hydraulic modeling results.
- Address comments received from the City and CCRFCD.

2.6 70% Design Submittal

Consultant shall:

- Design and prepare drawings, Contract Documents and specifications, bid schedule, and construction cost estimate to reflect a 70% level of completion.
- Provide the Special Conditions, Special Provisions, and Appendices for insertion into the Contract Documents.

- Prepare and submit a 70% Opinion of Probable Cost of Construction estimate.
- Prepare and furnish ten (10) sets of 11" x 17" Progress Drawings and one (1) 24" x 36" set, utilizing AutoCAD Civil 3D and ten (10) sets of Specifications along with electronic media of such submittal for review and comment. Submit one (1) sets of 11" x 17" Progress Drawings, Specifications, and Engineers Cost Estimate to CCRFCD for review. The "front end" legal and contractual sections including Invitation to Bid, Instruction to Bidders, Bid Form and General Conditions will be provided by the CITY and reviewed and completed by the Consultant for insertion in the Bid Package.
 - The drawings are anticipated to consist of the following:
 - Cover, Legend, Drawing Index, Site Map, and General Notes.
 - Watershed Map
 - Hydrologic Information, Stage, Storage and Discharge Curves
 - Overview Plan
 - Horizontal Control Plan
 - Removal Plan
 - Grading Plans
 - Inflow Channel Plan and Profiles
 - Spillway Plans
 - Typical Sections
 - Details (excluding structural details) and,
 - CCRFCD Flood Threat Recognitional System (FTRS) Monitoring Station Plan and Details
 - The 70% submittal shall also consist of:
 - Updated Project schedule.
 - Updated construction cost estimates.
 - Updated permit matrix.
 - Utility Conflict Matrix.
 - Draft Final Hydrologic and Hydraulic Memorandum.
 - Updates on any Engineering related studies performed in Task 1 warranting such revision due to deviation to the design from Task 1 to Task 2.

2.7 70% Design Review Meeting

Consultant shall:

- Meet with the City, following a three (3) week review of the plans, to review comments and conduct a detailed "plans-in-hand" on-site review.
- Prepare meeting minutes that will summarize any design considerations or plan revisions.

2.8 Final Hydrology and Hydraulic Memorandum

Consultant shall:

- Update the hydrologic and hydraulic analysis as necessary based on the 90% design configuration and Stakeholder comments received.
- Conduct 2-dimensional hydraulic analysis for spillway activation events and embankment failure events. The modeling will be consistent with the currently adopted emergency action plan. The modeling will include a PMF spillway overtopping event; three 100-year full pool dam failure events; and, a multi failure scenario that includes breach failure of the Cheyenne Peaking Basin during a PMF event at the North Las Vegas Detention Basin.
- Prepare and submit four (4) copies of a Final Hydrologic and Hydraulic Memorandum for distribution to the City, CCRFCD and NVDWR. The Memorandum shall include updated hydrologic and hydraulic analysis and the 2-dimensional inundation modeling described above.
- Address comments received from the City and CCRFCD.

2.9 90% Complete Design Submittal

Consultant shall:

- Design and prepare drawings, Contract Documents and specifications, bid schedule, and construction cost estimate to reflect a 90% level of completion.
- Provide the Special Conditions, Special Provisions, and Appendices for insertion into the Contract Documents.
- Prepare and submit a 90% Opinion of Probable Cost of Construction estimate utilizing local recent bid tabs for projects of similar nature, type, and/or size. Such analysis will also reflect the current bid climate.
- Prepare and furnish ten (10) sets of 11" x 17" Progress Drawings and one (1) 24" x 36" set, utilizing AutoCAD Civil 3D and ten (10) sets of Specifications along with electronic media of such submittal for review and comment. Submit one (1) set of 11" x 17" Progress Drawings and Specifications to CCRFCD for review. The "front end" legal and contractual sections including Invitation to Bid, Instruction to Bidders, Bid Form and General Conditions will be provided by the City and reviewed and completed by the Consultant for insertion in the Bid Package. The drawings are anticipated to consist of the following:
 - Cover, Legend, Drawing Index, Site Map, and General Notes;
 - Watershed Map;
 - Hydrologic Information, Stage, Storage and Discharge Curves;
 - Overview Plan;
 - Horizontal Control Plan;
 - Removal Plan;
 - Grading Plans;
 - Inflow Channel Plan and Profiles;
 - Spillway Plans;
 - Typical Sections;

- Details;
- CCRFCD FTRS Monitoring Station Plan and Details; and,
- Structural Details and Sections.

The 90% submittal shall also consist of:

- Updated Project schedule;
- Updated construction cost estimates;
- Updated permit matrix;
- Utility Conflict Matrix;
- Final Hydrologic and Hydraulic Memorandum; and,
- Updates on any Engineering related studies performed in Task 1 warranting such revision due to deviation to the design from Task 1 to Task 2.

2.10 90% Design Review Meeting

Consultant shall:

- Meet with the City, following a three (3) week review of the plans, to review comments and conduct a detailed "plans-in-hand" on-site review.
- Prepare meeting minutes that will summarize any design considerations or plan revisions.

2.11 Application for Dam Approval

Consultant shall:

- Submit the design plans, specifications and the Final Hydrologic and Hydraulic Memorandum to the State Dam Safety (Division of Water Resources) for review and approval, and address comments released by said group.
- Pay the applicable filing fee.

Updates to the Emergency Action Plan for modifications to the existing detention basin will be prepared as part the Construction Management and Support Services outlined in Task 4.

2.12 FEMA Conditional Letter of Map Revision

Consultant shall:

- Utilize FEMA's effective hydrology and hydraulic models for the detention basin and outlet facility to its confluence with the Upper Las Vegas Wash Channel just south of the 5th Street On Ramp to the CC 215 Beltway (FEMA Case Numbers 05-09-1009R, 06-09-BD79P, and 07-09-1521X).
- Prepare a Conditional Letter of Map Revision (CLOMR) which include the following:

- Narrative discussing the project, reference documents, methodologies, results and conclusions;
 - FEMA MT Forms for Overview and Concurrence, Riverine Hydrology and Hydraulics, and Riverine Structures;
 - Updated hydrologic analysis based on the expanded detention basin, revised outlet structure and current hydrologic parameters (e.g., MPU basins, soils and land use);
 - Updated hydraulic analysis for the detention basin's outlet to its confluence with the Upper Las Vegas Wash Channel just south of the 5th Street On Ramp to the CC 215 Beltway; and,
 - Other design elements required by Federal Emergency Management Agency.
- Prepare and submit a draft CLOMR to the City and CCRFCD for review and concurrence.
 - Address City and CCRFCD comments.
 - Submit the CLOMR to FEMA for their review and approval and address comments from said Agency.
 - Pay applicable FEMA application fees, except any additional hourly review fees from FEMA.

2.13 CCRFCD Presentations

Consultant shall:

- Prepare the necessary documentation and participate in presenting to the CCRFCD Technical Advisory Committee, Citizen's Advisory Committee, and Board of Directors for construction funding consideration.

2.14 100% Complete Design Submittal

Consultant shall:

- Develop 100% complete bid quality design documents that incorporate applicable 90% design review comments.
- Provide the comment matrix that includes responses to 90% review comments.
- Prepare and submit a 100% Opinion of Probable Cost of Construction estimate.
- Prepare and submit one (1) set of 24" x 36" drawings along with three (3) 11"x17" drawings, four (4) Contract Documents, specifications, and updated construction cost estimates accompanied with its digital format.
- Prepare and submit the necessary copies and media size to non-City owned utility agencies, that includes, but no limited to, CCRFCD for review and approval.

2.15 100% Review Meeting with City Staff

Consultant shall:

- Meet with the City following a three (3) week review of the plans to review comments and conduct a detailed "plans-in-hand" on-site review.
- Prepare meeting minutes that will summarize any design considerations or plan revisions.

2.16 Final Design Submittal

Consultant shall:

- Address final review comments and incorporate applicable comments pursuant to Stakeholder's 100% review into the final plans, Contract Documents, special conditions, special provisions, technical specifications, bid schedule, and cost estimate
- Furnish to the City copies of all Project drawings diskettes in AutoCAD Civil 3D format.
- Provide one set of final, sealed, full-size original mylar drawings (signed by the appropriate public agencies and utility companies), Contract Documents and Specifications, and Geotechnical Investigation Report, all in a form approved by the City and suitable for reproduction including the electronic media of such files.
- Provide calculations, design worksheets, and other information for the City's files.
- Seal drawings, specifications, and reports by a professional engineer licensed in the state of Nevada.
- Provide all items outlined in this task in electronic media.
- Provide a statement letter, signed and sealed by the engineer-of-record stating that the Consultant provided Project design meets or exceeds ADA and PRO-Wag requirements.
- Provide a statement letter, signed and sealed by the engineer-of-record stating that the Consultant provided Project design adheres to the recommendation(s) set forth in the Consultant generated Geotechnical Investigation Report.

2.17 QA/QC Review

Consultant shall:

- Utilize personnel independent of the Consultant's team assigned to this Project to perform a QA / QC review of the design and engineering elements provided in Task 2.

- Release to the City comments provided by the personnel performing the QA/QC review.

TASK 3 BIDDING PHASE SUPPORT SERVICES

Upon receipt of written authorization by the City, the Consultant shall perform the following tasks to provide bid phase support to the City.

3.1 Pre-Bid Conference

Consultant shall:

- Attend and provide technical support at one pre-bid conference to be held either virtually or at City grounds.

3.2 Coordination/Clarifications

Consultant shall:

- Interpret and provide written responses to City requests for technical clarifications on the construction contract documents during the bid period.
- Assist the City in responding to issues raised by Stakeholders and prospective bidders identifying if such inquiries warrant modifying in part or in whole the bid package. Such revisions will be provided to the City for review, and release of such documentation to the public shall be the responsibility of the City. The City will respond directly to bidder's questions.

3.3 Addenda Preparation

Consultant shall:

- Prepare addenda to the bid documents as requested by the City. The City will sign and issue addenda to the plan holders. Up to two (2) addenda is budgeted herein for activities where the Consultant participated in developing the addendum. If such issues are the result of errors and omission from the Consultant, work associated in revising in part or in whole the Bid Documents released by way of an addendum shall not count toward the two (2) defined herein and shall not be eligible for reimbursement.

3.4 Conformed Plans and Specifications

Consultant shall:

- Prepare a conformed set of drawings and specifications for use during the construction phase incorporating all addenda and changes addressed during the bid period and provide reproducible copies to the City along with remitting the electronic files.

TASK 4 CONSTRUCTION MANAGEMENT SUPPORT SERVICES

Upon receipt of written authorization by the City, the Consultant shall perform the following subtasks. The objective of this task is to provide a description of the services that the Consultant shall provide during the construction phase.

4.1 Preconstruction Meeting

Consultant shall:

- Attend and provide technical support at one pre-construction conference to be held at a location specified by the City.

4.2 Construction Progress Meetings

Upon City request, Consultant shall:

- Provide a Nevada-registered professional engineer having substantial responsibility with respect to the design and preparation of the plans and specifications for the Project to attend monthly construction progress meetings. This level of effort is based upon a maximum of twelve (12) construction progress meetings with up to two (2) hours for each meeting.
- Provide answers to technical questions related to the Consultant's design and construction documents from the City's staff.

4.3 Shop Drawing Review

Consultant shall:

- Review technical submittals, re-submittals, and samples provided by the Contractor during construction, at which submittals shall be marked (all copies), tracked in a submittal log, and promptly returned to the City's Construction Manager.
- Present written recommendations with respect to items submitted by the City for evaluation under a "substitution clause" of the construction contract, evaluate the items and revise the plans and specifications accordingly. This level of effort is based upon a maximum of one "substitution clause" item, and that the resolution of each "substitution clause" item will require up to sixteen (16) hours of engineer time and up to eight (8) hours of CADD designer time to resolve.

4.4 Coordination/Clarifications

Consultant shall:

- Provide written responses from City requests for technical clarifications and information during construction of the Project when such clarifications and needs for technical information are not the results of error or omission on the part of the Consultant. If such errors and omission occurred, Consultant's time spent to resolve the issue and provide the necessary support is not eligible for payment.

- Assist the City in responding to construction issues during the course of construction for up to twenty (20) issues. This level of effort is based upon the resolution of each issue will require up to four (4) hours of engineer time and two (2) hours of CAD designer time to resolve.
- Prepare drawings, details, specifications, and cost estimates as required to support a maximum of three (3) construction change orders.

4.5 Site Visits

Upon City request, Consultant shall:

- Perform site visits to observe the progress and general quality of the work. The level of effort is based upon up to six (6) site visits. These visits intend to provide the City greater assurance that the work when completed shall be in conformance with the Consultant generated construction documents.
- Not be deemed responsible for the contractor's means and methods for performing the work or for the contractor's safety procedures whether observed or not observed by the Consultant.
- Immediately notify the City if safety is found to be compromised during the Consultant site visits.

4.6 Pre-Final Inspection/Punch List

Consultant shall:

- Participate in conducting a pre-final inspection conducted by the City inspector and City Construction Manager to identify construction deficiencies for resolution by the Contractor.

4.7 Final Inspection

Consultant shall:

- Participate in a final inspection conducted by the City inspector to determine that construction deficiencies noted on the punch list from subtask 4.6 have been corrected.

4.8 Emergency Action Plan

Consultant shall:

- Update Chapter 9 of the City's Emergency Action Plan for High Hazard Facilities based on the Project design.

- Prepare and submit a draft of the Emergency Action Plan to both the City and CCRFCD for review.
- Address City and CCRFCD comments.

4.9 Proof of Completion

Consultant shall:

- Following completion of construction, submit a Proof of Completion of Work and Request for Approval to the State Dam Safety (Division of Water Resources) for their review and acceptance. The submittal package shall include, but not limited to the following:
 - Application Cover Sheet;
 - Covert letter;
 - Contractor provided compaction testing summary table and reports;
 - Contractor provided concrete testing summary table and reports;
 - City provided construction progress reports;
 - Updates to the Emergency Action Plan described in Task 4.8; and,
 - Remit applicable filing fees.

4.10 FEMA Letter of Map Revision

Consultant shall:

- Following completion of construction, prepare a Letter of Map Revision based on as-built information.
- Submit a Letter of Map Revision to the Federal Emergency Management Agency (FEMA) for their review and approval as a follow-up to the approved CLOMR.
- Pay applicable filing fees.

4.11 Project Closeout

Following completion of Project construction and within thirty (30) days of receipt of hard copy record drawing markups from the contractor, Consultant shall:

- Prepare "Record" drawing from the Contractor's mark-ups. These documents shall constitute the "Record" contract documents. Each drawing sheet shall be dated and stamped to indicate "Record Drawings." The marked-up drawings, Project files, and documents shall be returned to the City along with one set of mylar reproducible drawings, and one set of bond prints.
- Furnish to the City a CD containing the imaged as-built Project "Record Drawings", imaged preliminary or final design reports, if applicable, and other imaged documents as requested by the City. The format for imaged files shall be Class IV, single image, 200 dpi "tagged image file format" (tiff) or another format acceptable to the City. An index of all files shall also be provided.

- Provide all documentation prepared by or secured by the Consultant in the preparation of and the execution of the Project delivery.
- Provide up to 24 hours of engineer time to assist the City during the 12-month warranty period if corrective work is required.

**PROFESSIONAL ENGINEERING SERVICES AGREEMENT FOR THE
NORTH LAS VEGAS DETENTION BASIN UPGRADE
Exhibit "A-1"**

SUPPLEMENTAL SERVICES

Consultant shall provide Supplemental Services directly related to the Project when requested and authorized in writing to do so by the City. Execution of additional work will be through submission of the Consultant's proposal citing the scope of additional work, duration of the work, and a detailed fee schedule annotating staff members and sub-consultant(s) who will be used to perform the work. 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. Supplemental Services of the Consultant may include any, or all of the following:

SS 1.0 Additional Mapping and Survey Services

Consultant shall:

- Provide additional mapping and survey services that include additional items not covered in Exhibit "A".

SS 2.0 Addition Right-of-Way Engineering

Consultant shall:

- Provide or obtain additional preliminary title reports in excess of those specified in Exhibit "A", property acquisition parcel maps, legal descriptions and right-of-way plans relating to property ownership and acquisition.

SS 3.0 Additional Soil Exploration/Testing

Consultant shall:

- Perform, or perform through subconsultant, supplemental soil exploration and /or testing determined during the design process to be essential to address unanticipated problematic subsurface soils and geologic conditions. This work shall include amending the geotechnical report to include a description of the problem, additional field exploration program performed, testing done, test results, and recommendations for design and construction.
- Prepare the necessary documents and secure the permit(s) needed for the additional soil exploration and testing.

SS 4.0 Supplemental Utility Potholing

Consultant shall:

- Perform, or perform through a subconsultant, supplemental potholing. This work may be determined to be essential to verify the horizontal and vertical location of

underground utilities. Vacuum excavation technique is the preferred method to be utilized in paved areas. This work shall include obtaining all permits, traffic control, backfilling, compaction and pavement restoration. The Consultant will provide survey services for additional potholing based on semi-permanent markers (hubs/rebars) set by the Consultant during field explorations.

- Prepare the necessary documents and secure the permit(s) needed to execute this task.

SS 5.0 Additional Presentations at Public Workshops and Public Meetings

Consultant shall:

- Assist City with presentations to the CCRFCD, RTC, City Council, City Planning Commission, City Redevelopment Agency and/or Public Information Meetings in addition to the work outlined in Exhibit "A".
- Prepare graphics, and presentation materials required for such presentations.
- Attend public meetings or make formal presentations not outlined in Exhibit "A".

SS 6.0 Additional Meetings/Site Visits

Consultant shall:

- Attend additional progress or coordination meetings in excess of the quantities specified in Exhibit "A".
- Perform a special site visit requested by the City.

SS 7.0 Additional Design and Engineering Services

Consultant shall:

- Provide additional engineering design services that are directly related to the Project but which were not anticipated nor which could be reasonably construed to be associated with work described in Exhibit "A".
- Secure the necessary approval(s), permit(s), and documentation associated with the supplemental engineering and design.
- Perform the necessary interaction and coordination with affected and impacted parties to ensure proper execution of the supplemental engineering and design.

**PROFESSIONAL ENGINEERING SERVICES AGREEMENT FOR THE
NORTH LAS VEGAS DETENTION BASIN UPGRADE
Exhibit "B"**

RATE SCHEDULE

WSP USA INC.

<u>Engineering Services</u>	<u>Hourly Rate</u>
Principal / Senior Technical Advisor.....	\$210.00
Project Manager.....	\$205.00
Project Engineer	\$180.00
Senior Civil Engineer	\$200.00
Civil Engineer.....	\$145.00
Designer / Technician	\$122.00
Senior Structural Engineer.....	\$205.00
Structural Engineer	\$190.00
Structural Designer	\$125.00
Senior Geotechnical Engineer	\$180.00
Geotechnical Engineer.....	\$145.00
Senior Environmental Scientist	\$145.00
Environmental Scientist	\$130.00
CADD Manager.....	\$125.00
CADD Technician	\$108.00
Project Administrator.....	\$90.00

Ninyo and Moore

<u>Professional Services</u>	<u>Hourly Rate</u>
Principal	\$200.00
Senior Engineer/Geologist/Environmental Scientist	\$170
Project Engineer/Geologist/Environmental Scientist	\$155
Senior Staff Engineer/Geologist/Environmental Scientist	\$145
Data Processor	\$70
Laboratory Analyses per test:	
Atterberg Limits, D 4318, T 89, T 90.....	\$100
Soil Suite - Chloride, Sulfate, Sodium, Sodium Sulfate and Solubility	\$190
Moisture and Density, D 2937	\$35
R-Value, D 2844, T 190	\$250
Sieve Analysis, D 422	\$110
Drill Rig (Subcontractor)	\$40/ft
Drill Rig Mob/Demob.....	\$300

Wallace Morris Kline Surveying, LLC.

<u>Professional Services</u>	<u>Hourly Rate</u>
Principal / Project Manager	\$180.00
Field Crew (Party Chief).....	\$170.00
Field Crew (Party Chief + Crew Member)	\$205.00
Survey Analyst / GPS Processing.....	\$140.00
Land Survey Technician	\$95.00
Processor.....	\$80.00
Administrative	\$45.00

Hourly Rates for Consultant and all Subconsultants to remain in effect for the duration of the contract and include Direct Salary, Salary Cost, Overhead and Profit.

Expenses (billed at actual cost without markup):

Expenseses for the Project may include, but are not limited to:

<u>Item</u>	<u>Cost</u>
Reproduction (copies / printing)	At Cost
Blueprinting.....	At Cost
Graphic Art Displays / Exhibits.....	At Cost
Postage / Overnight Mail Delivery.....	At Cost
Photography: Film and Development.....	At Cost
Public Notices / Advertisements.....	At Cost
Travel.....	At Cost
Subconsultants	At Cost

**PROFESSIONAL ENGINEERING SERVICES AGREEMENT FOR THE
NORTH LAS VEGAS DETENTION BASIN UPGRADE
Exhibit "C"**

PROJECT SCHEDULE

<u>Task</u>	<u>Schedule</u>
1 Preliminary Engineering Services	5 months
2 Final Design Services	13 months
3 Bid Phase Support Services	2 months
4 Construction Management Support Services.....	13 months

Note:

1. Duration is upon issuance of a Notice-to-Proceed