

CONSTRUCTION MANAGER AS AGENT AGREEMENT FOR WPCF ODOR CONTROL UPGRADES PROJECT

THIS AGREEMENT is made and entered into this _____ day of _____, _____, by and between the **CITY OF LAS VEGAS**, a municipal corporation within the State of Nevada (herein the "City") whose address is **400 Stewart Avenue, Las Vegas, Nevada 89101**, and fax number is **(702) 431-7611**, and **BLACK & VEATCH CORPORATION**, (the "Consultant"), a , whose address is **4040 S. Eastern Ave., Suite 330, Las Vegas, NV, 89119**, and fax number is **(702) 732-7578**.

WITNESSETH:

WHEREAS, the City intends to construct the **WPCF Odor Control Upgrades Project** (herein the "Project"); and

WHEREAS, the Consultant is properly licensed pursuant to NRS Chapter 338, 623, 623A, 624, or 625, whichever is legally required for the services to be provided within the State of Nevada, and if applicable to the Consultant's business organization, is in compliance with NRS 623.349 for architects, interior designers, and residential designers and NRS 623A.250 for landscape architects, which requires that control and no less than two-thirds ownership of the business organization or association be held by persons registered or licensed in the State of Nevada pursuant to NRS Chapters 623, 623A, or 625, and possesses the special knowledge, skills and expertise to perform the services hereinafter set forth within the time required under this Agreement;

WHEREAS, with respect to the Project, the City intends to retain a qualified and licensed contractor (herein the "Contractor") to construct the Project having been designed and engineered by professional architects and engineers;

WHEREAS, the Consultant has not and will not take part in the design or construction of the Project;

WHEREAS, the Consultant will not be assuming the Contractor's overall responsibility for ensuring the Project is completed in a satisfactory manner, or the Contractor's responsibility for the cost, quality or timely completion of the construction;

WHEREAS, the City desires to retain the services of a qualified consultant to assist the City in the management of the construction of the Project; and

NOW, THEREFORE, in consideration of the above premises, the parties hereto agree to the following terms, conditions and covenants set forth in Sections One through Ten hereof:

SECTION ONE CONSULTANT RESPONSIBILITIES

1.01 Description of Consultant's Services. For the compensation set forth in Section Seven, the Consultant hereby agrees to perform the basic services set forth in the Scope of Services, **Exhibit "A"** attached hereto and incorporated herein as a part of this Agreement and, if so requested, the additional services set forth in the Additional Compensation, **Exhibit "E"** attached hereto and incorporated herein as a part of this Agreement and to provide the submittals described in the Required Submittals **Exhibit "B,"** attached hereto.

1.02 Performance Standards. In performing the services set forth in this Agreement, the Consultant shall follow the practices consistent with the generally accepted standards in the profession of the services being provided to the City pursuant to this Agreement.

1.03 Document Review. The Consultant shall be responsible for reviewing each document prepared by the Consultant and its subconsultants for the purpose of ensuring that such documents are technically sound, in conformance with applicable federal, state and local laws and other regulations, and do not violate or infringe upon any patent rights.

1.04 Waiver. The City's approval of any documents or services furnished by the Consultant shall not in any way relieve the Consultant of responsibility for the professional and technical accuracy of its documents or services. The City's review, approval, acceptance or payment for any of the Consultant's services shall not be construed to operate as a waiver of any rights enjoyed by the City under this Agreement or

of any cause of action arising out of the performance of this Agreement. The Consultant shall remain liable for any damages to the City caused by the Consultant's negligent act or omission committed in the performance of this Agreement.

1.05 Designation of Consultant's Representative. The Consultant's representative is the individual identified in the Key Personnel List, **Exhibit "F"** attached hereto (the "Consultant Representative") to act in that capacity, who shall be responsible for the services required under this Agreement. The services specified by this Agreement shall be performed by the personnel identified in the Key Personnel List provided that such associates and employees perform under the personal supervision of the Consultant Representative.

If any person or subconsultant who is expected to provide any of the services required under this Agreement is objectionable to the City for any reason, the Consultant shall, without additional compensation, replace such person or subconsultant with someone acceptable to the City.

If the Consultant's personnel are unable to complete their responsibilities for any reason under this Agreement, or the Consultant desires for any reason to substitute personnel assigned to the Project, the Consultant agrees to obtain the approval of the City for the substitution. The City shall not unreasonably deny approval unless the City adjudges the substitution not be in the interest of the City or the Project.

If the Consultant fails to make an acceptable replacement within thirty (30) days, the City may terminate this Agreement for default as provided in Section 10.03 of this Agreement.

1.06 Correspondence Review. The Consultant shall furnish the City Representative copies of each correspondence, if any, sent to any contractor involved with the Project, and to any regulatory agencies, for approval and review prior to mailing such correspondence.

1.07 Cooperation with the City. The Consultant agrees that its officers, associates, employees and subconsultants will cooperate with the City in providing the services under this Agreement and will be, with advance notice, available for consultation with the City at such reasonable times as to not conflict with the City's other responsibilities.

SECTION TWO CITY RESPONSIBILITIES

2.01 City Representative. The Director of Public Works or his authorized representative identified in the Key Personnel List is hereby designated as the City's representative (the "City Representative") with respect to this Agreement. The City Representative shall have complete authority to transmit instructions, receive information, interpret and define the City's policies and decisions with respect to the services of the Consultant. The City Representative is not authorized to change or waive any of the provisions set forth in Sections 1.01 through 10.24 of this Agreement.

2.02 Review of Consultant's Services and Documents. The services to be performed by the Consultant shall be subject to periodic review by the City Representative. To prevent an unreasonable delay in the Project, the City Representative will endeavor to examine and comment in writing on the documents furnished by the Consultant including, without limitation, test results, evaluations, and reports within twenty-one (21) days of receipt of such documents, unless the Contract provides for a different review time with respect to the document.

2.03 Access to Records. The City shall, without charge, furnish a copy to, or make available for examination or use by, the Consultant, as it may request, any documents and data which the City has available including, without limitation, reports, maps, plans, specifications, surveys, records, ordinances, codes, regulations, and other documents related to the services required under this Agreement. The City shall assist the Consultant in obtaining data and documents from public agencies and from private citizens and business firms whenever the City determines that such material is necessary for the completion of the services required by this Agreement.

2.04 Cooperation with Consultant. The City agrees that its officers and employees will cooperate with the Consultant in the performance of this Agreement and will be, with advance notice, available for consultation with the Consultant at such reasonable times as to not conflict with the Consultant's other responsibilities. The City shall provide access to the Consultant on to the Project site as may be required to perform the services under this Agreement.

SECTION THREE CHANGES TO CONSULTANT'S SERVICES

3.01 Requested Changes. The City may at any time, by written order, make a change in the services to be performed by the Consultant under this Agreement.

3.02 Adjustment of Compensation. If the change requested by the City causes an increase or decrease in the cost or time required to perform any of the services required under this Agreement, an equitable adjustment shall be made in the compensation to be paid to the Consultant under Section Seven, or in the performance schedule under Section Eight, or both, and this Agreement shall be modified in writing accordingly. Each claim for adjustment under this Section must be asserted in writing within thirty (30) days from the date of receipt by the Consultant of written notification of the change, unless the City grants in writing an extension. Provided proper notice has been given to the City as required herein, the claim for an adjustment shall be handled pursuant to the provisions of 10.20B and 10.20C of this Agreement. The failure to provide notification of the claim within the time required herein shall constitute a waiver of the right to seek any equitable or legal adjustment in compensation with respect to that change.

SECTION FOUR ADDITIONAL SERVICES OF CONSULTANT

4.01 Additional Services. The Consultant shall provide the additional services described in the Additional Compensation if, and only if, so requested in writing by the City. Payment for the additional services will be made to the Consultant in accordance with Section Seven of this Agreement.

4.02 Attendance at Meetings or Public Hearings. The Consultant shall notify the City in advance of any additional costs which may be incurred prior to attending any meetings or public hearings as may be necessary in connection with the services performed by the Consultant under this Agreement.

SECTION FIVE SUBCONSULTANT AGREEMENT

5.01 Subconsultant Provisions. If, with the approval of the City as required pursuant to Section 10.07, the Consultant enters into an agreement with a subconsultant for the performance of any of its obligations under this Agreement, the Consultant agrees to include in each subconsultant agreement a provision that:

(i) the Consultant agrees to pay the subconsultant when paid by the City for that portion of the services provided to the City and that no liability arises on the part of the Consultant for payment of the subconsultant services until payment has been made by the City. If the City has paid the Consultant for the subconsultant services, the subconsultant's only recourse is against the Consultant and not against the City, either through the institution of legal or equitable action or the attachment of any lien,

(ii) the subconsultant shall have no more rights against the City than that of the Consultant,

(iii) the subconsultant agrees to be bound by the terms, conditions and obligation of this Agreement unless the City has approved any deviation, change or modification in writing, and

(iv) unless otherwise approved in writing by the City Representative, the subconsultant shall obtain and maintain professional liability insurance (Errors and Omissions coverage) in connection with the subconsultant services in an amount equal to that required of the Consultant in this Agreement.

SECTION SIX TERM OF AGREEMENT

6.01 *Term.* This Agreement shall commence on the day it is approved by the City (which date shall be inserted in the introductory paragraph of this Agreement) and shall remain in force and effect until the Project is completed unless terminated earlier pursuant to Section 10.02 or 10.03 of this Agreement. Such termination shall not release either party from any of its continuing obligations under this Agreement.

6.02 *Disputes.* This Section shall not be construed to preclude the filing of any dispute arising out of the performance of this Agreement or in connection with the subject matter hereof, nor shall this Section be construed to change the date or the time on which a cause of action arising out of the performance of this Agreement or in connection with the subject matter hereof, would otherwise accrue under the statutes of limitation or doctrines of law.

SECTION SEVEN COMPENSATION AND TERMS OF PAYMENT

7.01 *Compensation: Basic Services.* For the services to be performed by the Consultant under this Agreement and set forth in the Scope of Services, the City agrees to pay the Consultant the fee in the amount identified in the Fee Breakdown, **Exhibit "D"** attached hereto, pursuant to invoices submitted in accordance with Section 7.04 of this Agreement.

7.02 *Compensation: Additional Services.* For any services not set forth in the Scope of Services, the City shall pay to the Consultant either a lump sum fee, or an hourly fee based on the hourly labor rate schedule set forth in the Additional Compensation, whichever is agreed to by the parties, provided prior written approval for such services is given by the City Representative.

7.03 *Compensation: Reimbursable Expenses.* The Consultant agrees that all of its direct and indirect expenses are included in the fee for Basic Services and the agreed upon compensation for any Additional Services, except as may be specifically allowed for reimbursable expenses as part of the Additional Compensation.

7.04 *Payment Invoicing.* The Consultant may submit an invoice for payment for the services provided by the Consultant based on the manner or method of payment set forth in the Fee Breakdown. The City Representative will notify the Consultant of any problems regarding the invoice within fourteen (14) days from receipt thereof. If no response is received from the City Representative within the aforementioned period of time, the Consultant may expect payment within a period of (60) days from the date of receipt by the City. If payment has not been received within the sixty (60) days, the Consultant agrees to contact the City Representative to resolve the problem causing the delay. If resolution of the delay is not satisfactory to the Consultant, the Consultant may submit a claim pursuant to Section 10.20A of this Agreement.

7.05 *Right to Off-Set.* The City Representative may subtract or offset from any unpaid invoice from the Consultant any claims which the City may have for failure of the Consultant to comply with the terms, conditions or covenants of this Agreement, or any damages, costs and expenses caused by, resulting from, or arising out of the negligent act or omission of the Consultant in the performance of the services under this Agreement including, without limitation, any error or deficiency in the report or other documents prepared by the Consultant. The City Representative shall provide a written statement to the Consultant of the off-set which has been subtracted from any payment to the Consultant along with appropriate documentation and receipts, if any, and a description of the failure, error or deficiency attributed to the Consultant. If the Consultant disputes the right or amount of the off-set made by the City, the Consultant may file a claim pursuant to Section 10.20 of this Agreement.

7.06 *Final Payment.* Upon completion of the services required under this Agreement, and acceptance thereof by the City (which acceptance will not be unreasonably withheld), the Consultant will, within sixty (60) days of the City's acceptance, be paid the balance of any money due for such services.

SECTION EIGHT PERFORMANCE SCHEDULE

8.01 *Performance Schedule.* The Consultant shall perform and complete the services required under this Agreement according to the schedule (the "Performance Schedule") set forth in the Schedule of Performance, **Exhibit "C"** attached hereto. If the performance of services is delayed or submittals are not delivered in the time period as outlined in the Performance Schedule, the Consultant shall notify the City Representative in writing of the reasons for the delay and include a plan which brings the Consultant's performance into compliance with the Performance Schedule.

SECTION NINE AUDIT: ACCESS TO RECORDS

9.01 **Records.** The City shall have the right to audit the Consultant's books, records and other documents directly pertinent to the performance of this Agreement. The Consultant agrees to maintain books, records and other documents directly pertinent to performance of this Agreement in accordance with generally accepted accounting principles and practices. The Consultant shall also maintain the financial information and data used to prepare or support the invoices submitted to the City. Audits conducted pursuant to this provision shall be in accordance with generally accepted auditing standards, procedures and guidelines of the City, or its designated representative. The City, or its duly authorized representatives, shall have access to such books, records, and documents for the purpose of inspection, audit and copying. The Consultant will provide proper facilities for such access and inspection.

9.02 **Disclosure.** The Consultant shall be afforded the opportunity for an audit entrance and exit conference and an opportunity to comment and submit any supporting documentation on the pertinent portions of the draft audit report, and that the final audit report will include the written comments, if any, of the Consultant.

9.03 **Period of Maintenance.** The books, records and other documents under Sections 9.01 and 9.02 of this Agreement shall be maintained for three (3) years after the date of the final payment for the services under this Agreement. In addition, those records and other documents which relate to any arbitration, litigation or the settlement of any claim arising out of this Agreement, or to which an audit exception has been taken, shall be maintained and made available until three (3) years after the date that the arbitration, litigation or exception has been resolved.

9.04 **Subcontract Provisions.** The Consultant agrees to include Sections 9.01 through 9.03 of this Agreement in all its subcontracts directly related to performance of services specified in this Agreement which are in excess of \$10,000.

SECTION TEN MISCELLANEOUS PROVISIONS

10.01 **Suspension.** The City may suspend, without cause, the performance by the Consultant under this Agreement for such period of time as the City, in its sole discretion, may prescribe by providing written notice to the Consultant. The suspension shall be effective as of the date set forth in the written notice. With such suspension, the City agrees to pay to the Consultant the amount of compensation earned as of the effective date of suspension less all previous payments. The Consultant shall not provide any further services under this Agreement after the effective date of suspension until otherwise notified in writing by the City. In no event shall the City be liable to the Consultant for services in excess of the percentage completed at the time of suspension.

If, after notice to resume performance has been given by the City, the suspension was for a period in excess of ninety (90) days, which has resulted in an increase in the performance of the Agreement to the Consultant and:

- (i) the Consultant was not a contributing cause for the suspension,
- (ii) the Consultant has not received an equitable adjustment under another provision of this Agreement,
 and
- (iii) the Consultant could not mitigate the increase in the performance cost,

then the Consultant's fee shall be reviewed by the City and, if justified, equitably adjusted to provide for any additional expenses resulting from the suspension.

10.02. **Termination for Convenience.** The City reserves the right to terminate this Agreement without cause or default on the part of the Consultant with ten (10) days' prior written notification to the Consultant served pursuant to Section 10.18 of this Agreement. In the event of termination, without cause or default, the City agrees to pay to the Consultant the reasonable value for the services performed as of the date that notification of termination is received by the Consultant. In no event shall the City be liable to the Consultant for services in excess of the percentage completed at the time of termination.

10.03 Termination for Cause or Other Resolution.

A. Default. The occurrence of any of the following events shall constitute a default by the Consultant hereunder (herein "Event of Default"). If, during the term of this Agreement, the Consultant:

- (i) defaults in the due observance and performance of any term, condition or covenant contained in this Agreement,
- (ii) (a) voluntarily terminates operations or consent to the appointment of a receiver, trustee or liquidator of the Consultant for all or a substantial portion of its assets, (b) is adjudicated bankrupt or insolvent or files a voluntary petition in bankruptcy, or admits in writing to the inability to pay its debts as they become due, (c) make a general assignment for the benefit of creditors, (d) file a petition or answer seeking reorganization or an arrangement with creditors or take advantage of any insolvency law, or (e) if action shall be taken by the Consultant for the purpose of effecting any of the foregoing,
- (iii) allows any warrant, execution or other writ to be issued or levied upon any property or assets of the Consultant which continues unvacated and in effect for a period of thirty (30) days, or
- (iv) fails, in the judgment of the City, to provide the services hereunder properly and with proper dispatch in accordance with the time schedule set forth in this Agreement,

and the default continues five (5) days after written notice is given to the Consultant pursuant to Section 10.18.

B. City's Rights. Upon the occurrence of an Event of Default, and without prejudice to any other right or remedy it may have at law or equity, the City may:

- (i) terminate this Agreement, suspend payment of all pending invoices otherwise due to the Consultant hereunder, and finish this Agreement by such means as deemed appropriate by the City, reserving the right to deduct from any balance due Consultant the cost of completing this Agreement. In the event the cost of finishing the Consultant's performance of this Agreement exceeds the balance due the Consultant, the excess shall be paid by the Consultant to the City within five (5) days of invoicing by the City,
- (ii) terminate this Agreement, and the obligations imposed hereunder, including the obligation of any further payment for the services of the Consultant except for the reasonable value for the services performed to the date of termination, or
- (iii) continue with performance by the Consultant and serve within a reasonable time after completion of the Agreement a request to arbitrate the Event of Default as a claim or dispute pursuant to the arbitration procedure set forth in Section 10.20.

In the event that the City elects to implement (i) above, the costs and expenses of completing this Agreement shall be computed and audited by the City's designated representative. The audit shall be conducted in accordance with generally accepted accounting principles and the cost thereof shall be paid by the Consultant.

10.04 Ownership of Documents.

A. Architectural Works. To the extent that the Consultant's services involves the design of an architectural work as defined herein, the Consultant shall retain all common law and statutory rights of ownership, including copyrights, to the drawings and specifications prepared by the Consultant for this Project. The Consultant is deemed to be the author of the drawings and specifications as instruments of service to the City. Notwithstanding the foregoing, the Consultant hereby grants to the City the right to use (including the right of reproduction and use in the creation of new documents) the drawings and specifications for the purpose of completing the Project or for any subsequent maintenance, repair, renovation, remodeling or addition thereto. The rights granted herein to the City shall extend and include any new Consultant which the City may retain for the aforementioned purposes. The Consultant hereby releases the City, and any new Consultant retained by the City for the aforementioned purposes, from any and all claims in connection with the use or reproduction of the drawings and specifications. The Consultant agrees to execute such documents reasonably deemed necessary by the City to implement the rights granted to the City pursuant to this subsection.

B. Other Works. To the extent that the Consultant's services does not involve the design of an architectural work, the City shall have all common law and statutory rights of ownership, including copyrights, to the plans, drawings, specifications and other documents (including, without limitation, design concepts and sketches, test results, evaluations, reports and studies, excepting any proprietary forms, templates, and checklists specifically listed for City ownership exclusion elsewhere in this Agreement) (collectively herein the "Documents") prepared or assembled by the Consultant, or any of its subconsultants, for this Project. The Consultant hereby releases the City, and any new Consultant retained by the City from any and all claims in connection with the use or reproduction of the Documents. The Consultant agrees to execute such documents

reasonably deemed necessary by the City to implement the rights granted to the City pursuant to this subsection. The Consultant shall be entitled to retain a reproducible copy of the documents furnished to the City.

C. Definition of Architectural Work. For purposes of this Agreement, "architectural work" shall have the same definition as set forth in Architectural Works Copyright Protection Act of 1990, P. L. 101-650, Title VII, Section 70 et. seq.

D. Delivery of Documents. In the event of the completion, suspension or termination of this Agreement, the City shall have the right to require delivery of any and all of the plans, drawings, specifications, and all 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, not in the possession of the City.

E. 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.

F. Contractual Rights. Notwithstanding the provisions of 10.04 A above, 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. 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.

10.05 Insurance. The Consultant shall procure and maintain, at its own expense, during the entire term of the Agreement, the following insurances:

A. Worker's Compensation Insurance. This insurance shall protect the Consultant and the City from employee claims based on job-related sickness, disease, or accident.

B. Commercial General Liability Insurance. This insurance shall protect the Consultant, its agents and vehicles used to provide the services required under this Agreement from claims of personal injury (including death) and property damage. Such coverage shall be in a minimum amount of \$1,000,000 combined single limit for the period of time covered by this Agreement. The Consultant's general liability insurance policies shall be endorsed to include the City as an additional insured.

C. Commercial Automobile Liability Insurance. This insurance shall protect the Consultant from claims of limits no less than \$1,000,000 combined single limit per occurrence for bodily injury and property damage to include, but not be limited to, coverage against all insurance claims for injuries to persons or damages to property which may arise from services rendered by Company and any auto used to the performance of services under this Contract. The policy must insure all vehicles owned by the Company and include coverage for hired and non-owned vehicles. The Consultant's automobile liability insurance policies shall be endorsed to include the City as an additional insured.

D. Professional Liability Insurance (Errors and Omissions Coverage). This insurance shall protect the Consultant from claims arising out of performance of professional services caused by a negligent act, error, or omission for which the insured is legally liable. Such coverage shall be in a minimum amount of \$1,000,000 for the period of time covered by this Agreement.

E. Cancellation or Modification of Coverage. The Consultant's Commercial General Liability and Professional Liability Insurance Policies shall automatically include or be endorsed to cover the Consultant's contractual liability to the City under this Agreement, and with respect to its Commercial General Liability Policy, to waive subrogation against the City, its officers, agents, servants and employees. The policies shall provide that the City will be given thirty (30) days' notice in writing of any cancellation of, or material change in, the policies.

F. Certificates and Endorsements. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer and licensed by the State of Nevada. All deductibles and self-insured retentions shall be fully disclosed in the Certificate of Insurance. No deductible or self-insured retention may exceed \$25,000 without the written approval of the City. The Consultant shall deliver to the City's authorized designated representative named in **Exhibit "B"** (Required Submittals) certificates indicating that such insurance is in effect before any services are provided under this Agreement and renewal certificates not less than 30 days prior to the expiration date of any policy.

G. Period of Coverage. If the insurance coverage is underwritten on a "claims made" basis, the retroactive date shall be prior to or coincident with the date of this Agreement and the Certificate of Insurance shall state that coverage is "claims made" and the retroactive date. Upon availability, the Consultant shall maintain coverage for the duration of this Agreement and for two years following completion of this Agreement.

10.06 Indemnity. Notwithstanding any of the insurance requirements set forth in Section 10.05, and not in lieu thereof, the Consultant shall defend, indemnify and hold the City, its officers, employees and agents (herein the "Indemnitees"), harmless from any and all claims (including, without limitation, patent infringement and copyrights 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") which the Indemnitees may suffer as a result of, by reason of, or as a consequence of, the negligent errors, omissions, recklessness, intentional misconduct of the Consultant, its subcontractors, agents or anyone employed by the Consultant, its subcontractors or agents, 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 which may be brought against them, or any of them, as a result of, by reason of, or as a consequence of, the negligent act or omission of the Consultant, its subcontractors or agents, for and against which the Consultant is obligated to indemnify the Indemnitees, 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 fails to do so, the Indemnitees shall have the right, but not the obligation, to defend the same and charge the direct and incidental costs of such defense (including attorney fees and court costs) against the Consultant which is proportionate to the liability of the Consultant.

If the professional liability insurer of the Consultant does not so defend the Indemnitees and the Consultant is adjudicated to be liable by a trier of fact, the trier of fact shall award reasonable attorney's fees to be paid to the Indemnitees by the Consultant in an amount which is proportionate to the liability of the Consultant. As used in this Section, "agents" means those persons who are directly involved in and acting on behalf of the City in furtherance of this Agreement or the public work to which this Agreement pertains.

10.07 Assignment. The City and the Consultant each bind itself and its partners, successors, administrators and assigns to the other party of this Agreement and to the partners, successors, executors, administrators and assigns of such other party in respect to all covenants of this Agreement, except the Consultant shall not assign, sublet or transfer any obligation or benefit under this Agreement without the written consent of the City. Nothing contained herein shall be construed as creating any personal liability on the part of any officer or agent of the City.

10.08 Waiver. No consent or waiver, express or implied, by either party to this Agreement, or of any breach or default by the other in the performance of any obligations hereunder, shall be deemed or construed to be a consent or waiver of any other breach or default by such party hereunder. Failure on the part of any party hereto to complain of any act, or failure to act of 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 the Consultant of any of its obligations hereunder.

10.09 Consultant Warranties. The Consultant hereby represents and warrants that:

(i) it is financially solvent, able to pay its debts as they mature, and is possessed of sufficient working capital to complete this Agreement; that it is experienced, competent, qualified and able to furnish the plant, tools, materials, supplies, equipment and labor which is used to perform the services contemplated by this Agreement, and that it is authorized to do business in the City of Las Vegas and the State of Nevada,

(ii) it holds a license, permit or other special license to perform the services included in this Agreement, as required by law, or employs or works under the general supervision of the holder of such license, permit or special license,

(iii) its computer hardware, software, and firmware will continue functioning without interruption, and will continue to accurately process date, time, and data necessary to the performance of this Agreement, and

(iv) it has, pursuant to the requirements of Resolution 79-99 adopted by the City Council on August 4, 1999, (effective October 1, 1999), as amended by resolution 105-99 (adopted by the City Council on November 17, 1999), disclosed on the form attached hereto as **Exhibit "G"** (Disclosure of Ownership/Principals) all of the principals, including partners, of the Consultant, as well as all persons and entities holding more than a one percent (1%) interest in the Consultant or any principals of the Consultant. If the Consultant, or its principals or partners, are required to provide disclosure under federal law (such as Securities and Exchange Commission or the Employee Retirement Income Act) and current copies of such federal disclosures are attached to **Exhibit "G,"** the requirements of this Section shall be deemed satisfied. During the term of this Agreement, the Consultant shall notify the City in writing of any material change in the above disclosure on **Exhibit "G"** within fifteen (15) days of such change.

10.10 Consultant's Employees. The Consultant shall be responsible for maintaining satisfactory standards of competency, conduct and integrity, of personnel assigned to the Project, and shall be responsible for taking such disciplinary action with respect to such personnel as may be necessary. In the event the Consultant fails to remove any employee from the work of this Agreement 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.

10.11 *Independent Contractor.* It is hereby expressly agreed and understood that in the performance of the services required herein, the Consultant and any other person employed by him hereunder shall be deemed to be an independent contractor and not an agent or employee of the City.

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

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

10.14 *Severability.* In the event that any provisions 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.

10.15 *Confidentiality.* The Consultant shall treat the information relating to the Project, which has been produced by the Consultant or provided by the City, as confidential and proprietary information of the City and shall not permit its release to other parties or make any public announcement or publicity release without the City's written authorization. The Consultant shall also require each subconsultant to comply with this requirement. The submission or distribution of documents to meet official regulatory requirements or for similar purposes in connection with the Project is not to be construed as publication relieving the Consultant of its confidentiality obligation imposed herein.

10.16 *Site Inspection.* The Consultant represents that it has visited the location of the Project and has satisfied itself 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.

10.17 *Modification.* All modification or amendments to this Agreement are null and void unless reduced in writing and signed by the parties hereto.

10.18 *Notice.* Any written notice required to be given under Sections 1.01 through 10.24 of this Agreement shall be deemed to have been given when the written notice is (i) received by the party to whom it is directed by personal service (ii) telephonically faxed to the telephone number set forth in the introductory paragraph to this Agreement, provided confirmation of the transmission is received by the sender, or (iii) deposited with the United States Postal Service, postage prepaid, addressed to the City Representative or the Consultant Representative, whomever is the proper recipient, and mailed to the address set forth in the introductory paragraph to this Agreement.

10.19 *Prohibition Against Contingent Fees.* The Consultant warrants that no person or entity has been employed or retained to solicit or secure this Agreement with the Agreement or understanding that a commission, percentage, brokerage or contingent fee would be paid to that person. For breach or violation of this provision, the City shall have the right to annul this Agreement without liability or, in its discretion, to deduct from the compensation to be paid to the Consultant, or otherwise recover, the full amount of such commission, percentage, brokerage or contingent fee.

10.20 *Claim or Dispute Resolution.*

A. *Notice of Claim or Dispute.* For each claim or dispute which the Consultant has against or with the City (except for any claim for an equitable adjustment under Section 3.02 which is subject to the 30-day limitation set forth therein), notice thereof must be submitted in writing to the City Representative within a reasonable time after the claim or dispute arises, but no later than thirty (30) days after final payment is made to the Consultant. The purpose of written notification is to place the City on notice so that proper measures can be taken to properly defend against the claim or dispute, and the failure to give such notice shall preclude the Consultant from subsequently arbitrating that particular claim or dispute pursuant to Section 10.20C of this Agreement, and the Consultant shall have no further recourse against the City. Pending a final decision on the claim or dispute under Sections 10.20B or 10.20C, the Consultant shall proceed diligently with the performance of this Agreement.

B. *Resolution by Management.* The City Representative and the Consultant Representative shall meet within a reasonable time after receipt of the written notice received pursuant to Section 10.20A in an attempt to resolve the claim or dispute to the mutual satisfaction of the parties. If the matter is not disposed of by mutual agreement between the City Representative and the Consultant Representative, the claim or dispute shall be decided by the Director of Public Works, whose decision shall be reduced to writing and mailed or otherwise furnished to the Consultant. The decision of the Director of Public Works shall be final and conclusive unless, within thirty (30) days after the date on which the

Consultant receives its copy of such decision, the Consultant mails or otherwise furnishes to the Director of Public Works a written request to arbitrate the claim or dispute, in which event the parties shall proceed with the arbitration pursuant to provisions of Section 10.20B. The failure to make such request shall preclude the Consultant from proceeding any further on the claim or dispute, and the Consultant shall have no further recourse against the City.

C. Resolution by Arbitration. Upon receipt of the request to arbitrate authorized pursuant Section 10.03B or Section 10.20B, the City and the Consultant shall come to an agreement as to the appointment of an arbitrator for purposes of hearing the appeal. If the parties cannot reach an agreement, then each party shall select an arbitrator for purposes of the appeal, and the two shall select a third arbitrator within 20 days of their appointment. If the selected arbitrators are unable to agree upon the third arbitrator, the third arbitrator shall be selected by the American Arbitration Association or the Nevada Arbitration Association, whichever is designated by the City. Each party shall be afforded an opportunity to be heard and to offer evidence in support of or against the appeal. The decision of the arbitrator, or arbitrators, as the case may be for the determination of the appeal, shall be final, conclusive and enforceable under the laws of the State of Nevada.

D. Right of Consolidation. Any arbitration arising out of or relating to this Agreement may include, by consolidation, joinder or in any other manner, any additional party or parties who are not a party to this Agreement if so requested by the City or the Consultant. Any consent to arbitration involving an additional party or parties shall not constitute consent to arbitrate any claim or dispute not described as a part of the original arbitration unless otherwise agreed to by the parties.

E. Right of Joinder. In the event the City is named as a party to any arbitration, or the City commences an arbitration against a party other than the Consultant, which arbitration is related to, or connected with, the construction of the Project or the performance of the Consultant's services hereunder (such as, without limitation, any arbitration between the City and the contractor awarded the contract to construct the Project), the Consultant agrees and irrevocably consents to be joined as a party in the arbitration proceeding and to be bound by any decision resulting therefrom. The decision of the arbitrator or arbitrators, as the case may be, in the arbitration to which the Consultant has been joined as a party, shall be binding and enforceable against the parties thereto under the laws of the State of Nevada.

If the Consultant is named as an additional party by the City, the Consultant shall not be entitled to any additional compensation from the City as a result of preparing for, and participating in, the arbitration.

F. Discovery. In the event of arbitration, the parties agree that all means of discovery including, but not limited to, depositions and interrogatories, will be afforded to the parties involved in the arbitration, and the appointed arbitrator shall have all authority to impose sanctions against either party for failing to comply with the rules of discovery provided under the Nevada Rules of Civil Procedure.

G. Award Final. The award rendered by the arbitrator shall be final, and judgment may be entered upon its accordance with applicable law in any court having jurisdiction thereof.

H. Mediation. Subsequent to the commencement of any arbitration pursuant to Section 10.20C, and prior to any decision arising therefrom, the parties may endeavor with written mutual consent to settle disputes by mediation in accordance with the mediation rules of the mediation service agreed by the parties. The cost of the mediation shall be shared equally by the parties.

10.21 Attorney Fees. The prevailing party in any litigation or arbitration brought to enforce the provisions of this Agreement shall be entitled to reasonable attorney fees and court costs.

10.22 Calendar Day. All references in this Agreement to days are to calendar days unless otherwise indicated.

10.23 Exhibits. All exhibits referenced in this Agreement are hereby incorporated by this reference as a part of this Agreement. Any conflict between the provisions of this Agreement and the Exhibits incorporated herein shall be governed by the provisions of this Agreement.

10.24 Counterparts; Electronic Delivery. This Agreement may be executed in counterparts, all such counterparts will constitute the same contract and the signature of any party to any counterpart will be deemed a signature to, and may be appended to, any other counterpart. Executed copies hereof may be delivered by facsimile or e-mail and upon receipt will be deemed originals and binding upon the parties hereto, regardless of whether originals are delivered thereafter.

10.25 Agreement Version. This document incorporates the standard provisions for the City's Professional Services Agreement updated as of April 8, 2008.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed the day and year first above written.

ATTEST

CITY OF LAS VEGAS

Beverly K. Bridges, MMC
City Clerk

Date

By _____
Kathleen C. Rainey, Manager, Purchasing & Contracts

APPROVED AS TO FORM

CONSULTANT

John S. Ridilla 1/18/11
Deputy City Attorney Date

By _____
Dana V. Reel, P.E., Black & Veatch Corporation

LIST OF EXHIBITS

- EXHIBIT " A " SCOPE OF SERVICES**
- EXHIBIT " B " REQUIRED SUBMITTALS**
- EXHIBIT " C " PERFORMANCE SCHEDULE**
- EXHIBIT " D " FEE BREAKDOWN**
- EXHIBIT " E " ADDITIONAL COMPENSATION**
- EXHIBIT " F " KEY PERSONNEL LIST**
- EXHIBIT " G " DISCLOSURE NOT REQUIRED - FEE IS \$25,000 OR LESS**

EXHIBIT "A"

SCOPE OF SERVICES

ARTICLE 1: GENERAL

1.1 PURPOSE

1.1.1 The services covered by this Agreement are for the purpose of administering the Construction Contract for the Water Pollution Control Facility (WPCF) Odor Control Upgrades Project per, throughout the construction of the Project.

1.1.2 The Scope of Service set forth in this Exhibit and the compensation to the Consultant for the Scope of Services is based on the Consultant and the City each performing its responsibilities in a timely manner.

1.2 SCOPE OF SERVICES

1.2.1 This scope is to be considered preliminary and may be altered as this Project develops. Alterations of scope may not impact Fee amounts unless increased project duration, scope, or workload is encountered by the Consultant. If increased project duration, scope, or workload is encountered, the Consultant shall notify the City in writing and an adjusted fee will be negotiated prior to any work. The Fee for this scope of services is based on a construction-duration of 720 calendar days plus 30 calendar days pre-construction services and 60 calendar days after substantial completion for project close-out.

1.3 GENERAL REQUIREMENTS

1.3.1 The Consultant's work shall, to the extent possible, be prepared using Contract Manager software by Primavera, current version. Where Contract Manager capabilities are limited, provide documents in the following software formats: AutoCAD 2008, Microsoft Office 2007 and Microsoft Project 2007, or more recent versions.

1.3.2 All work shall be in full compliance with applicable codes, ordinances and other regulatory conditions.

1.4 DEFINITIONS

1.4.1 "Contractor" as used herein refers to the party or parties that the City contracts to construct the Project.

1.4.2 "Consultant" as used herein refers to Black & Veatch.

1.5 RELATIONSHIP OF THE PARTIES

1.5.1 Owner and Designer

1.5.1.1 Owner Agreement – The City has entered into a separate agreement, the "Owner-Designer Agreement," with a Design Professional to provide for the design of the Project and certain design-related services during the construction phase of the Project.

1.5.2 Owner and Contractor

1.5.2.1 Construction Contract – The City will enter into a separate contract with a Contractor for the construction of the Project.

1.5.3 Relationship of the CM to other Project participants

1.5.3.1 Working Relationship – In providing the Construction Management Services described in this Scope of Services, the Consultant shall endeavor to maintain, on behalf of the City; a working relationship with the Contractor and Designer.

1.5.3.2 Limitations – Nothing in this Scope of Services shall be construed to mean that the Consultant assumes any of the responsibilities or duties of the Contractor or the Designer. The Contractor will be solely responsible for construction means, methods, techniques, sequences and procedures used in the construction of the Project and for the safety of its personnel, property, and its operations and for performing in accordance with the contract between the City and the Contractor. The Designer is solely responsible for the design requirements and design criteria of the Project and shall perform in accordance with the agreement between the Designer and the City. The Consultant's services shall be rendered compatibly and in cooperation with the services provided by the Designer under the Agreement between the City and Designer. It is not intended that the services of the Designer and the Consultant be competitive or duplicative, but rather be complementary. The Consultant will be entitled to rely upon the Designer for the proper performance of services undertaken by the Designer pursuant to the agreement between the City and Designer.

1.6 SERVICES DURING CONSTRUCTION

1.6.1 The Consultant will provide Professional Services during the Construction Phase as defined in this Exhibit "A". These services are intended to provide the City of Las Vegas (City) with oversight services during construction of the WPCF Odor Control Upgrades Project (Project). By performing these oversight services, the Consultant shall not have the authority or responsibility to supervise, direct, or control the Contractor's work, means, methods, techniques, sequences, or procedures for construction. The Consultant shall not have the authority or responsibility for safety precautions and programs incident to the Contractor's work or for any failure of the Contractor to comply with laws, regulations, rules, ordinances, codes, or orders applicable to the Contractor furnishing and performing the work.

ARTICLE 2: THE CITY'S RESPONSIBILITIES

2.1 The City will be responsible for performing all work necessary to complete their obligation to the Consultant to allow the Consultant to complete their work.

2.2 The City shall provide all System Integration (Programming) and Instrumentation & Control Construction Services, though a separate contract, for this project. If any such services are required of the Consultant, it will be provided under Additional Services.

2.3 The City shall provide the Consultant with:

2.3.1 Any other information required to complete the work, as available, which is not in the Consultant's Scope of Services.

2.3.2 The full use of two utility vehicles for use of the Consultant's on-site personnel to travel around within plant the site. The vehicles shall be available for the exclusive use of the Consultant during the term of the construction contract, from Contractor's Notice to Proceed to Substantial Completion as defined by the construction contract. The City shall maintain the vehicles in proper working order and pay all operating costs. The Consultant shall be responsible for keeping the vehicles clean and for any damages as a result of the Consultant's misuse of the vehicle.

2.3.3 The full use of any on site facilities that the Contractor is obligated to provide for the City's use, including a conditioned and furnished field office with phone, fax, desk, table, storage cabinet, plan rack, filing cabinet, bookshelves, chairs, tackboard, wastebasket, parking space(s), access to sanitary facilities and drinking fountain, if so indicated in the Contract Documents for the Project. It is the Consultant's duty to review the documents for such information and to determine and include in the total Fee, any field office requirements that the Contractor is not providing.

2.3.4 Access arrangements for the Consultant to enter upon public and private property as required to perform their services.

2.3.5 A management team to review submittals, and to work with the Consultant to achieve an acceptable, cost effective Project.

ARTICLE 3: THE CONSULTANT'S RESPONSIBILITIES

3.1 The Consultant shall be responsible for performing all work necessary to complete the following schedule of work, more fully described following:

3.1.1 Project Management

3.1.2 Program Coordination Services

3.1.3 Pre-Construction Services

3.1.4 Construction Management and Contract Administration

3.1.5 Project Close-Out

3.1.6 Material Testing Services

3.1.7 Additional Services

3.2 PROJECT MANAGEMENT

3.2.1 Project Team: The Consultant staff will be available through the completion of the Project. The Identified Individuals must perform the roles identified herein. The Consultant may not make a change to the Identified Individuals list without prior written approval from CLV. A Consultant staff plan will be submitted to the City Representative for review and acceptance prior to notice to proceed:

Project Director: Jim Morley, P.E.

Project/Construction Manager: Steve Hennes, P.E.

Office Engineer/Document Control Administrator: Ganesh Kadam, P.E.

Lead Resident Project Representative: Scott Patrick

3.2.1.1 Construction Manager. The Consultant shall provide a qualified Construction Manager to be in responsible control of the Project. The Construction Manager shall possess an active civil engineer license in the State of Nevada pursuant to NRS 625. The Construction Manager shall have a minimum of four years of post-licensure/registration progressively responsible experience in managing and administering large construction projects, preferably on public sector construction projects of similar size and scope to the Project.

3.2.1.1.1 Responsible control requires at least: a) weekly on-site field observations of the Project, b) supervision of staff's work, and c) review of pertinent Project documents to ensure the success of the Project.

3.2.1.2 Field Staffing Requirements. The Consultant shall provide a Lead Resident Project Representative and assistants as outlined in the Construction Management section below.

3.2.1.3 Office Engineer/Document Control Administrator. The Consultant shall provide an experienced Office Engineer/Document Control Administrator to assist the RPR in preparing and maintaining all correspondence and documents (i.e. submittals, daily reports, requests for information, change orders, etc.) required by this Agreement. Reference the computer software requirements of this Exhibit for the technical skill requirements of this position.

3.2.1.4 Qualifications. The Consultant shall furnish a resume for each staff person assigned to the Project, including proof of licensure, registration, and /or certifications. In addition to the resume, the City may require references, request an in-person interview, or other means to confirm qualifications and experience of proposed Project staff. The determination of the qualification of proposed Project staff shall be at the sole discretion of the City. Any proposed Project staff that do not meet the aforementioned qualifications and experience requirements shall be promptly replaced with staff acceptable to the City.

3.2.1.5 Subconsultants. Services may be performed by subconsultants of the Consultant if the subconsultant is listed in **Exhibit "F"** Key Personnel List or approved in writing by the City prior to the subconsultant providing services. Otherwise all services will be performed by employees of the Consultant, who are approved in advance by the City. The City reserves the right to require the Consultant to replace any employee or subconsultant at any time for any reason.

3.2.2 Interface Management: The Consultant shall interface with the Contractor, the City Representative, and others as necessary to facilitate construction of the Project.

3.2.3 Project Accounting: The Consultant shall establish and maintain a project accounting system to organize and track its project costs in accordance with the Contract and as approved by the City. Prepare and submit monthly invoices in accordance with the Contract.

3.2.4 Monthly Progress Report: The Consultant shall establish and report Consultant and Contractor activities and budgets on the actual vs. planned Project expenditures throughout the Project to the City.

3.2.5 Quality Assurance/Quality Control (QA/QC) & Construction Management Plan: The Consultant shall review the Contractor's QA/QC & Construction Management Plan, as applicable, to document the Contractor's processes, review procedures, documentation requirements, and audits to assure that its services are performed in accordance with this agreement. The Consultant shall provide a copy of the Plan to the City for review and comments.

3.2.6 Document Management System and Procedures: The Consultant shall implement a set of procedures for logging, managing, tracking and storing in electronic and hard copy form documents prepared by or received from the Contractor, the City and other's during the final design, construction and close out phases of the Project. Documents shall be stored in electronic format in the Consultant's document management system known as Primavera Contract Manager, formerly known as Primavera Expedition.

3.3 PROGRAM COORDINATION SERVICES

3.3.1 GENERAL: This Scope of Work defines the PROGRAM COORDINATION SERVICES (PCS) to be provided by BLACK & VEATCH (B&V) for the City of Las Vegas (City) Water Pollution Control Facility, herein referred to as the PROGRAM. The design and construction is to be accomplished under multiple contracts. B&V shall provide PCS Services described and required in this Scope, including the development and management of a master PROGRAM construction CPM schedule. B&V shall also attend and participate in progress meetings, assist with project coordination during construction, and provide related services to the extent provided in this Scope of Services or requested by the City as additional services.

3.3.2 PROGRAM DESCRIPTION: The following Projects within the PROGRAM that are currently under contract or in the early planning stages for Design and/or Construction Services include the following:

Project Title	Start	Finish	Consultant	Value
WPCF Odor Control - Design	06/11/08	11/30/10	MWH	
WPCF Odor Control - Construction	03/01/11	04/30/13	B&V	\$42,651,000.00
NTP Modifications - Design	06/11/08	10/01/10	MWH	
NTP Modifications - Construction	02/01/10	02/01/11	City Staff	\$2,734,641.00
WPCF Flare Project - Design	01/01/10	10/01/10	MWH	
WPCF Flare Project - Construction	01/01/11	06/01/11	City Staff	\$1,500,000.00
WPCF Mech. Repl., Code & Energy Efficiency - Design	06/11/08	01/02/11	MWH	
WPCF Mech. Repl., Code & Energy Efficiency - Construction	02/01/11	02/01/12	City Staff	\$6,744,000
WRC Improvements DHWRC – Design	12/08/08	07/01/11	MWH	
WRC Improvements DHWRC - Construction	08/02/10	03/07/11	Unknown	\$8,000,000.00
WPCF Infrastructure Replacement - Design	01/01/11	01/01/13	CH2MHill	
WPCF Infrastructure Replacement - Construction	01/01/12	01/01/15	Unknown	\$100,000,000.00
Nitrification Air Header - Design	04/06/09	07/17/09	CH2MHill	
Nitrification Air Header - Construction	10/12/09	12/01/10	City Staff	\$866,288.00
3 MW Solar - Design-Build	08/23/10	10/27/11	B&V	\$19,754,695.87
Dewatering Building Rehab - Design	08/03/09	06/07/10	CH2MHill	
Dewatering Building Rehab - Construction	11/01/10	10/01/11	City Staff	\$1,059,737.00
Nitrification Ground Water Dewatering - Construction	01/11/10	10/04/10	City Staff	\$1,565,300.00
Digester Gas Scrubbing - Design	02/02/09	08/01/10	B&V	
Digester Gas Scrubbing - Construction	10/01/10	10/01/11	City Staff	\$5,000,000.00
Dewatering Backdrives	01/01/09	06/06/11	City Staff	\$1,200,000.00
Filtration Backwash Air System Rehabilitation	05/03/10	07/01/11	City Staff	\$2,000,000.00
RMP-CAPP 2009	06/02/08	01/01/11	A&N	\$458,865.00
RMP-CAPP 2011	01/01/11	06/01/12		\$500,000.00
Sludge Blending and Pumping Facility - Design	08/17/09	10/04/10	MWH	
Sludge Blending and Pumping Facility - Construction	02/07/11	02/01/13	Carollo	\$12,000,000.00
SCADA Upgrades - Design	01/04/10	01/03/11	WME	
SCADA Upgrades - Installation	01/03/11	01/07/13	Unknown	\$14,000,000.00
WPCF Corrosion Repair Project - Design	08/02/10	04/01/11	PEC	
WPCF Corrosion Repair Project - Construction	07/01/11	06/29/12	Unknown	\$9,000,000.00
WRC Improvements BOMO - Design	09/01/10	06/01/11	B&V	
WRC Improvements BOMO - Construction	09/01/11	08/31/12	Unknown	\$4,000,000.00
Electrical Efficiency & Arcflash Study	08/01/10	08/01/11	Brown & Caldwell	\$566,116.00
WPCF Facility Plan Update	01/01/11	01/01/12	Unknown	\$200,000.00
WPCF Reduced Loading Improvements - Design	01/01/11	01/01/12	HDR	
WPCF Reduced Loading Improvements - Construction	01/01/12	01/01/13	Unknown	\$8,300,000.00
FOG Pilot Project - Design	02/01/11	08/01/11	MWH	
FOG Pilot Project - Construction	10/01/11	10/01/12	City Staff	\$400,000

The PROJECT overall durations and values are based upon information obtained from the City.

3.3.3 PROJECT INITIATION: B&V will conduct a Program Kick-Off Meeting with the City, and follow-on meetings, as necessary, to understand the Program so its details can be documented and incorporated into a Program Management Administration Plan (MAP). B&V will confirm the implementation strategy required for the Management Information System (MIS) that is being implemented on the Program as the collaboration platform, the purpose of which will be for: communication, document control, schedule monitoring, and contract administration.

3.3.3.1 Program Kick-Off Meeting: The Program Kick-off meeting participants will review the overall outline of the PROGRAM and the delivery approaches for each project. Specific emphasis will be on the implementation of the PCS short-term work plan.

DELIVERABLES:

1. Meeting agenda
2. Meeting minutes

3.3.3.2 Management Information System (MIS): B&V will use Management Information System (MIS) using Primavera P6 Scheduling software and Contract Manager documentation software for the reports, logs, and schedules to control the PROGRAM. The MIS will present an up-to-date status of the PROGRAM schedule, sources of information and facts needed to manage each PROJECT, to promote effective decision-making, and provide prompt, current status reporting.

3.3.3.3 PCS Management Administration Plan (MAP): Project and contract procedures for managing and administering the PROGRAM will be set in place. The output of this task will be a PCS Management Administration Plan (MAP). Procedures will be established for the following management and decision-making tasks:

- Overview of Program understanding, goals and deliverables
- Program milestones
- Identify team members and their roles, lines of communication, and authority
- Management protocols for each phase of the Program
- Communications / Document Control
- Project Controls / MIS

This activity will be integrated and consistent with the Contract Documents and will support the development of a job record and documentation system. The MAP will be a working document, which may be changed or modified at intervals during the design and construction effort.

DELIVERABLE: PCS Management Administration Plan (MAP)

3.3.3.4 Master Program Schedule and Implementation Approach: B&V will develop a Master Program Schedule to identify key project milestones and constraints. B&V will evaluate the PROGRAM and develop a preliminary milestone schedule integrating all PROJECTS. Scope, delivery times of major equipment or material, and impacts of weather on construction, will be included.

Program Master Schedule Development:

1. Review existing facility plan, master plan, or capital infrastructure plan.
2. Develop with the City a Work Breakdown Structure (WBS) that will provide the Program with an organized approach for scheduling and reporting within framework of the PROGRAM.
3. Develop with the City an Organizational Breakdown Structure that will define the framework at the PROGRAM Level for upward reporting.
4. Define the PROGRAM schedule milestones and other applicable milestones.
5. Develop PROGRAM codes that will provide additional sorting and filtering capability for future reporting.
6. Review and document inter-project relationships or constraints.

DELIVERABLES:

1. Program Work Breakdown Structure
2. Draft Program Schedule Report that documents the above-described information
3. A Master Program Schedule that includes the framework of the Program in a workable schedule that will allow further development of the detail schedules

3.3.4 PROGRAM COORDINATION SERVICES: B&V will provide the services of a qualified CPM Scheduler and Construction Manager, support staff, and engineering support, as needed, to exercise the duties defined in this Scope of Services.

Specific activities, which B&V will perform, include:

- Provide upward reporting of all PROGRAM-related activity in a summarized format.
- Endeavor to resolve problems in a timely manner as the work proceeds among the City Staff and the individual PROJECTS' Construction Management Teams.
- Maintain management information systems and PROGRAM recordkeeping in an up-to-date manner for the MASTER PROGRAM.

3.3.4.1 Monthly Reports: B&V will issue monthly reports to the City that will keep team members apprised of the PROGRAM status and focus attention on critical issues requiring action. The reports will summarize schedules; claims, potential claims, or problems related to work by other contracts; as well as the status of each contract. They will also provide the City with recommendations and set action priorities and responsibilities for critical issues. B&V will attend PROGRAM- and PROJECT-related meetings as required to obtain status and disseminate information regarding schedule, cost, and coordination items.

In addition, B&V will provide input to the Project Construction Manager on the detailed monthly reports for individual PROJECTS during the construction phase.

DELIVERABLES:

1. Monthly PROGRAM status reports including at minimum:
 - Program Overview
 - Program Schedule Summary
 - Critical Issues requiring decisions
 - Coordination Items
 - Project Summary Updates
 - Program Schedule Gantt Chart

3.3.4.2 Time Control – Critical Path Method (CPM) Schedule: B&V will employ CPM scheduling for the Master Program Schedule. Schedules will be the basic tool for managing, assessing delay impacts, and making adjustments in time and resources to recover time.

The Master Schedule will incorporate detailed schedules provided from each construction contract of the PROGRAM. The Master schedule must be accepted by the City before being given to the Engineers, Project Construction Managers, and Contractors.

B&V will use Primavera 6.0 CPM Scheduling Program for the master schedule.

DELIVERABLE:

1. Maintain continuous development and updating of the Master Program Schedule for the duration of the Program. Activities include attending necessary PROGRAM and PROJECT meetings to obtain status and updates from all stakeholders participating in the Program Schedule information.
2. Providing reporting of the schedule to Program Stakeholders on an ongoing basis.

3.3.5 CONSTRUCTION PHASE: Construction phase services ensure that B&V is aware of the status of the PROGRAM and the individual PROJECTS on a current basis, thus enabling B&V to provide timely and accurate support and advice to the City.

3.3.5.1 Pre-Construction Conferences: Attend pre-construction conferences for each construction contract delineating PROJECT procedures, requirements and constraints. B&V will attend a pre-construction conference with the City, the Project Construction Manager, and each selected Contractor to assure that the Contractor is aware of his obligations.

DELIVERABLES:

1. Attend pre-construction conferences for each construction contract.

3.3.5.2 CPM Schedule Analysis: B&V will use the Critical Path Method (CPM) to analyze the Contractor's proposed path for construction; and to provide an overview to the Project Construction Manager as he reviews and verifies the Contractor's progress throughout the PROJECT. B&V will perform the following:

- Review the Contractor's initial CPM submittals.
- Assist the Project Construction Manager, as necessary, to resolve construction problems and obstacles to construction.
- Update master CPM schedule to reflect changes resulting from PROJECT-specific schedule reviews.
- Prepare schedule review comments for monthly progress meetings and correspondence, as required.

The Contractor's will be required to provide the Project Construction Managers with detailed scheduling information, which will be made available to B&V. B&V will review the initial CPM schedules and all updates for coordination requirements. B&V will review the schedules' status and recommend specific actions required to correct coordination issues at the monthly schedule review meetings.

The scheduling requirements will be broken down into the following components:

- Developing master schedule
- Monitoring schedules
- Monthly updating/revising schedules

3.3.5.3 Monitoring Schedules: The Project Construction Manager for each individual PROJECT will monitor and record actual start and finish dates of all their Contractor's schedule activities. This data will be reviewed and compared during the monthly update meetings attended by B&V and recorded by the Project Construction Manager. The agreed upon dates will serve as the historical record of the PROJECT.

The Contractor will be responsible for notifying the Project Construction Manager for each individual PROJECT promptly if work is not progressing, or will not progress, as scheduled. This will enable proper notification and coordination with all parties and allow timely revisions to assure the PROJECTS are completed on time.

3.3.5.4 Monthly Updating/Revisions to Schedules: B&V, based on information provided by the Project Construction Manager for each individual PROJECT, will report PROGRAM progress to the City monthly. The reporting procedures will include a listing of activities on which the Contractor has reported activity in accordance with the format established, to the City during the month. B&V will furnish updated listings of printed reports monthly, indicating the effect of progress on the original schedule. Corrective action will be required of the Contractor to comply with the schedule and will be initiated by the Project Construction Manager for each individual PROJECT, as necessary. Where extensions in time are to be made, they will be included in the schedule revisions.

3.3.5.5 Progress Meetings: B&V will participate in the progress meetings for each PROJECT in order to understand the progress of each PROJECT and the interface with all other PROJECTS in order to communicate the coordination needs of the PROGRAM.

DELIVERABLES:

1. Participate in monthly progress meetings in order to communicate PROGRAM coordination needs among all PROGRAM stakeholders.

3.4 PRE-CONSTRUCTION SERVICES

3.4.1 Plan and Specification Review. The Consultant shall:

3.4.1.1 Review the Plans and Specifications.

3.4.1.2 Review the geotechnical report.

3.4.1.3 Review the Contractor's Dust Permit for Construction Contract compliance.

3.4.1.4 Review the Contractor's Dust Mitigation Plan for Construction Contract compliance

3.4.1.5 Review the Contractor's Storm Water Permit for Construction Contract compliance.

3.4.1.6 Forward any comments to the City Representative.

3.4.2 Pre-Construction Meetings. The Consultant's team shall:

3.4.2.1 Organize and hold periodic "Partnering Meetings" with the City and the Construction Contractor for discussion of shared goals, processes, and procedures during the construction process, which shall be attended by a Consultant team member who has high-level decision-making authority, and require the same in all subconsultant contracts. Meeting dates, times, and place will be determined by the City.

3.4.2.2 Organize and hold the pre-construction conference in accordance with Section 01 11 00 of the Construction Contract Project Manual.

3.4.2.3 Be responsible for taking and issuing the Pre-Construction Meeting Minutes to the City Representative and Contractor.

3.4.2.4 Be responsible for making any adjustments to the Meeting Minutes as may be deemed reasonable.

3.4.3 Pre-Construction Schedules. The Consultant shall:

3.4.3.1 Receive from the Contractor, all Schedules including Schedule of Values.

3.4.3.2 Review and provide to the City Representative and the designer comments and recommendations on the Contractor's Preliminary Progress Schedule in accordance with Section 01 32 16 of the Construction Contract Project Manual.

3.4.3.3 Review any revision to the Preliminary Progress Schedule in accordance with Section 01 32 16 of the Construction Contract Project Manual and forward comments and recommendations to the City Representative and the designer for review.

3.4.4 Pre-Construction Condition Photos. The Consultant shall:

3.4.4.1 Coordinate and execute the photographing of the existing Project conditions prior to the commencement of construction.

3.4.4.2 Develop a pre-construction photo log with related comments and provide a copy to the City Representative.

3.4.4.3 Along with the "Existing Condition" Photo Log, the Consultant shall provide a detailed condition summary for review by the City Representative and the designer.

3.4.5 Pre-Construction Document Review. The Consultant shall:

3.4.5.1 Prior to the start of construction, the Contractor shall submit the approved Project permits, as described in the permit matrix, to the Consultant for review.

3.4.5.2 Prior to the start of construction, the Contractor shall submit the approved Project bonds, as described in the bond matrix, to the Consultant for review.

3.4.5.3 Forward copies of permits and bonds to the City Representative as required.

3.5 CONSTRUCTION MANAGEMENT AND CONTRACT ADMINISTRATION

3.5.1 General. Provide full-service Construction Contract Administration during the construction phase of the Project. The Consultant shall provide staff and documentation to oversee compliance with the Contract Documents.

3.5.2 Project Field Office. The Contractor shall provide an office for Consultant use as specified in the Construction Contract Documents. The Consultant shall provide for any of their own needs not provided by the Contractor, including:

3.5.2.1 An on-site computer system and printer to manage the Project, which may be of a portable design and removed when the Consultant is not on site.

3.5.2.2 Furniture and office supplies and other furnishing needed to make the Consultant's field office available and usable for use by the Consultant's personnel and sub-consultants when they are on site.

3.5.2.3 Public notice information as required by law and the City.

3.5.2.4 Five hard hats and safety vests for City visitor's use while on site.

3.5.3 Equipment Requirements. The Consultant shall provide all equipment needed to provide the scope of services and to ensure compliance with the Contract Documents including, but not limited to:

3.5.3.1 Utility Vehicles to travel the Project site shall be provided by the City as stipulated in Article 2 above. The Consultant shall operate the vehicles in a safe manner and shall keep the vehicles clean.

3.5.3.2 A cellular telephone for each Consultant staff member assigned to the Project to facilitate communication with the City and the public.

3.5.3.3 Computer and communications systems required to manage the Project.

3.5.3.4 Surveying and GPS equipment, devices to measure lighting levels, coating thickness, material thickness gages, horizontal and vertical dimensions, slopes, flashlights, calculators, a level/transit, and camera.

3.5.3.5 Personal safety equipment for each Consultant staff member while on site including hard hats, safety vests, ear and eye protection, and safety shoes.

3.5.3.6 A library of reference standards applicable to the Project, see list above.

3.5.4 Resident Project Representative Services During Construction: Consultant will furnish a Resident Project Representative and assistant Resident Project Representatives. The Resident Project Representative and assistants will observe the Contractor's work and perform the services listed below. The Resident Project Representative shall not have responsibility for the superintendence of construction site conditions, safety, safe practices or unsafe practices or conditions, operation, equipment, or personnel other than employees of the Consultant. This service will in no way relieve the Contractor of complete supervision and inspection of the work or the Contractor's obligation for complete compliance with the drawings and specifications. The Contractor shall have sole responsibility for safety and for maintaining safe practices and avoiding unsafe practices or conditions. Specific services performed by the Resident Project Representative and assistants and durations of their services are as follows:

- | | |
|--|---------------|
| a. Resident Project Representative | 25 Months |
| b. Assistant Resident Project Representative | 21 Months |
| c. Mechanical Engineer | 160 Man-hours |
| d. Electrical Engineer | 480 Man-hours |

3.5.5 Site Observations and Liaison with Owner and Contractor(s)

3.5.5.1 Conduct onsite observations of the general progress of the work to assist Consultant in determining if the work is proceeding in accordance with the construction contract documents.

3.5.5.2 Serve as Consultant's liaison with the Contractor, working principally through the Contractor's superintendent, and assist Consultant in providing interpretation of the construction contract documents. Transmit Designer's clarifications and interpretations of the construction contract documents to the Contractor.

3.5.5.3 Assist Consultant in serving as Owner's liaison with the Contractor when the Contractor's operations affect Owner's onsite operation.

3.5.5.4 As requested by Consultant, assist in obtaining from Owner additional details or information when required at the jobsite for proper execution of the work.

3.5.5.5 Advise Consultant and the Contractor or its superintendent immediately of the commencement of any work requiring a shop drawing or sample submission if the submission has not been accepted by Designer.

3.5.5.6 Verify that the Contractor has contacted utilities in the general construction area and advised them of Contractor's schedule. Assist in coordinating scheduling of utility activities to minimize conflicts with Owner's activities.

3.5.5.7 Assist the Contractor with gathering information needed to establish necessary baselines and control points that will be used as datum for the work. All survey and construction staking will be done by the Contractor.

3.5.5.8 Visually inspect materials, equipment, and supplies delivered to the worksite. Reject materials, equipment, and supplies that do not conform to the construction contract documents.

3.5.5.9 Submit to Consultant, with a copy to Owner, weekly construction progress reports containing a summary of the Contractor's progress, general condition of the work, problems, and resolutions or proposed resolutions to problems.

3.5.5.10 During the course of the work, verify that specified certificates, operation and maintenance manuals, and other data required to be assembled and furnished by the Contractor are applicable to the items actually installed; and deliver this material to Designer for his review and forwarding to Owner prior to final acceptance of the work.

3.5.5.11 Receive all certified payrolls submitted by Contractors and forward payrolls to Owner. Owner will be responsible for all procedures required by statute, including personnel interviews.

3.5.6 Project Contacts: The Consultant shall:

3.5.6.1 Develop and issue a list of telephone numbers, including emergency numbers for use by the City Representative, Consultant and Contractor personnel.

3.5.6.2 Oversee that public information is provided in the field office as required by law and the City.

3.5.7 Photographs. The Consultant shall:

3.5.7.1 Be responsible for thoroughly photographing the progress of construction for the duration of the Project. Photos will be taken daily, each business day, to show both activity and the lack of activity. This includes but is not limited to providing the City with a monthly progress summary showing a pictorial representation of work completed during each month. All photos will be taken with a digital camera showing the picture's date imprinted on the face of each photo and a written description of location taken, work shown or lack of work shown, problem or defect demonstrated, or other purpose of the photo.

3.5.8 Daily Reports. The Consultant shall:

3.5.8.1 Be responsible for producing, in Contract Manager and separate from the Contractor's daily report requirement, a report for each day describing the events which took place, including any relevant conversations, construction conflicts and site meetings.

3.5.8.2 Oversee that the Contractor develops its own daily report and provides such reports to the Consultant daily.

3.5.8.3 Oversee that the Consultant's and Contractor's daily reports include all of the items required in the Contract Documents, including: working and non-working hours on the Project site, the weather conditions and possible weather delays, name of contractors on site and number of workers for each, deliveries, equipment on site and whether it was active or idle, accidents and safety issues, inspections and tests conducted, construction activities, and work completed. The Consultant shall immediately notify the City of any safety concerns.

3.5.8.4 When Consultant determines that any of the Contractor's daily reports are inaccurate, incomplete or contain potential claim information, the Consultant shall generate a response, in Contract Manager, detailing any concerns and requested changes and will forward these documents to the City Representative for review and approval.

3.5.9 Payment Application (Review & Approval). The Consultant shall:

3.5.9.1 Review all applications for payment to verify that all invoices reflect actual work completed in accordance with the Contract Documents.

3.5.9.2 Verify that submittals required from the Contractor with each Application for Payment are attached. Request any items from the Contractor that are required but have not been provided and hold application until all required items are provided.

3.5.9.3 In regard to each payment application, issue a recommendation (approval or denial) to the City Representative providing written response as to rationale in accordance with the Nevada Revised Statute (NRS). The City Representative will then have the responsible charge of either forwarding the application for payment or rejecting it accordingly.

3.5.10 Project Construction Schedules (Weekly, Monthly & Revisions). The Consultant shall:

3.5.10.1 In accordance with Section 01 32 16 of the Construction Contract Project Manual, verify that the Contractor develops and submits schedules for each progress meeting whenever any of the conditions referenced are encountered.

3.5.10.2 Thoroughly review the Contractor's Baseline Schedule to verify that such schedule complies with the Construction Contract requirements. Furthermore, the Consultant shall use its construction and claims experience to verify that the Contractor's Baseline Schedule adequately depicts all of the significant work activities with reasonable timelines and with emphasis on milestone dates, construction sequencing, and operation of existing facilities during construction. Consultant's review shall not include an analysis of contractor's approach, means or methods of construction to perform the work specified in the construction contract documents.

3.5.10.3 Review all monthly progress schedules for Construction Contract compliance. In addition, the Consultant shall thoroughly review each progress schedule to verify that all changes are represented reasonably.

3.5.10.4 Generate a response, which either approves or rejects the Contractor's monthly progress schedules and provide written explanation to the City Representative for review and approval.

3.5.10.5 Maintain an as-built schedule on site and update it monthly to accurately represent completed work, plus the Contractor's latest schedule for future work. Provide these schedules to the City Representative each month.

3.5.11 Signatures. Under no circumstances shall the Consultant sign or initial any paperwork generated by the Contractor, including verifications of work completed or quantities removed or delivered. All such work verifications and other Contractor paperwork issues shall be noted in the Consultant's Daily Reports. The exception to this policy is the receipt of documents, samples, drawings, and similar items received from the Contractor, which may be signed as received.

3.5.12 Substitutions. The Consultant shall:

3.5.12.1 Receive all requests for substitutions from the Contractor and review them for Construction Contract compliance, log them into Contract Manager, reject or forward them to the City Representative and designer for review and approval.

3.5.12.2 In the event Substitution Requests are submitted after the allowable time period, and the Contractor has not provided evidence that the product is no longer available through no fault of the Contractor, the Consultant will forward a written notice of rejection to the City Representative for review and approval.

3.5.13 Contractor Submittals. The Consultant shall:

3.5.13.1 Prepare a Master List of all contractually required submittals and forward copies to the field office, the City Representative, and the designer for record.

3.5.13.2 Receive all Submittals from the Contractor and review each for Construction Contract compliance. In the event the submittal is received in a manner contrary to the Construction Contract requirements, the Consultant will forward a notice of rejection to the Contractor, designer and the City Representative for review and record.

3.5.13.3 Develop a Submittal Log in Contract Manager showing each submittal, the date received, date forwarded to the designer, number of days with the designer, date returned, designer's response, and the date returned to Contractor.

3.5.13.4 All submittals that are received in accordance with the Construction Contract requirements will be logged into Contract Manager and forwarded to the designer for review and approval or rejection.

3.5.13.5 Re-Submittals will be handled in the same manner as Submittals.

3.5.13.6 Forward all Submittals to the City Representative.

3.5.14 RFI'S. The Consultant shall:

3.5.14.1 Create and maintain in Contract Manager a Request For Information (RFI) Log.

3.5.14.2 Develop an RFI Log in Contract Manager that shows the date each RFI was received, the content of the RFI, the date forwarded to the designer and the City Representative, the date returned, the number of days with the designer, and the response and the date returned to the Contractor.

3.5.14.3 Receive all RFIs from the Contractor and log them into Contract Manager and coordinate the reply for each.

3.5.14.4 Answer RFIs that can easily be answered without a constructive change to the Construction Contract and forwarded to the City Representative for review and approval.

3.5.14.5 Immediately notify the City Representative whenever the Consultant determines that an RFI is frivolous and unwarranted.

3.5.14.6 Forward all RFIs to the City Representative for review and response.

3.5.14.7 All responses to RFIs will be routed through the Consultant who shall log them into Contract Manager.

3.5.15 Change Orders. The Consultant shall:

3.5.15.1 Create a Change Order Request (COR) log in Contract Manager.

3.5.15.2 Receive and log all Contractor submitted CORs accordingly.

3.5.15.3 Review all CORs and forward them to the City Representative and designer. The Consultant shall generate a summary of the events/circumstances surrounding the COR that includes the Consultant's recommendation regarding each matter.

3.5.15.4 Assist in the negotiations of all Change Order pricing.

3.5.15.5 Draft rejections of CORs as deemed appropriate and forward them to the City Representative for review and approval.

3.5.15.6 In the event a change is required but pricing is unable to be mutually agreed upon, the Consultant shall draft a Construction Contract Change Directive to the Contractor and will forward copies to the City Representative and designer for review and approval.

3.5.15.7 Coordinate and seek the signatures for approval from the City Representative, designer and Contractor for all change orders that have obtained a mutually agreed upon price.

3.5.16 Field Directives. The Consultant shall:

3.5.16.1 Issue Field Directives for emergencies and items that require immediate response.

3.5.17 Coordinate Project Progress and Partnering Meetings. The Consultant shall:

3.5.17.1 Coordinate and execute all progress meetings in accordance with Section 01 11 00.

3.5.17.2 Take and draft all Progress Meeting Minutes and distribute copies to the City Representative, designer and Contractor for review and approval.

3.5.17.3 Make any reasonable and merited adjustments to the meeting minutes when requested by the Contractor and designer within the time specified.

3.5.17.4 Organize and hold any partnering meetings and draft minutes from such with copies forwarded to the City Representative for review and approval.

3.5.18 Notices of Non Compliance. The Consultant shall:

3.5.18.1 Issue Notices of Non-Compliance for any work activity that is not in compliance with the Contract Documents and forward copies to the City Representative and designer.

3.5.18.2 Report to Consultant, giving opinions and suggestions based on the Resident Project Representative's observations regarding defects or deficiencies in the Contractor's work and relating to compliance with drawings, specifications, and design concepts.

3.5.19 Notices of Potential Claim. The Consultant shall:

3.5.19.1 Monitor changes of apparent integrity of the site, such as differing subsurface and physical conditions, existing structures, and site-related utilities when such utilities are exposed.

3.5.19.2 Observe pertinent site conditions when the Contractor maintains that differing subsurface and physical conditions have been encountered, and document actual site conditions. Review and analysis of the Contractor's claims for differing subsurface and physical conditions are supplemental services.

3.5.19.3 Forward any and all Notices of Potential Claim to the City Representative and designer for review and record.

3.5.19.4 Develop a summary of events and submit it with the Notices of Potential Claim.

3.5.19.5 Draft a response to any Notices of Potential Claim and forward to the City Representative for review and approval.

3.5.20 Quality Control – (Inspections & Material Testing). The Consultant shall:

3.5.20.1 Assist in, be aware of the Contractor's schedule of, and note in the daily report on the Contractor's coordination with the on-site quality inspections, special inspections, and material testing services provided by the Consultant.

3.5.20.2 Observe field tests of equipment, structures, and piping.

3.5.20.3 Review and respond to all inspections and test results with the Contractor and forward copies of each to the City Representative and designer for review and approval.

3.5.20.4 Monitor the Contractor's compliance with the approved NPDES permit and applicable Best Management Practices; issue Notices of Non-Compliance and/or notify the applicable enforcement agency, as appropriate.

3.5.21 Public Information. The Consultant shall:

3.5.21.1 Refer all public inquiries to the City Representative.

3.5.21.2 Accompany visitors representing the public or other agencies having jurisdiction over the Project pursuant to direction by the City Representative, record the outcome of these visits or inspections, and submit a report to the City Representative concerning these visits.

3.5.22 Project Documentation Control. The Consultant shall:

3.5.22.1 Develop a system in Contract Manager for logging all correspondence received and generated.

3.5.22.2 Maintain a marked set of drawings and specifications at the jobsite based on data provided by the Contractor. This information will be combined with information from the record documents maintained by the Contractor, and a master set of documents conforming to construction records will be produced.

3.5.22.3 Verify that the Contractor is maintaining as-built drawings and specifications in accordance with the Contract Documents.

3.5.23 Reporting. The Consultant shall:

3.5.23.1 Prepare a monthly progress and summary report and submit it to the City with the monthly payment request. Reference **Exhibit "B"**.

3.5.23.2 Phone the City Representative each day activity is occurring on site or outstanding issues remain unresolved, to update the City on the Project status.

3.5.24 Traffic Control. The Consultant shall:

3.5.24.1 Monitor and respond to all traffic control issues.

3.5.24.2 Review any traffic control plans submitted by the Contractor and forward them to the City with recommendations.

3.5.25 Punchlists and Substantial Completion. The Consultant shall:

3.5.25.1 Upon receiving a Notice of Substantial Completion request from the Contractor, the Consultant will coordinate and participate in the walk through with the City Representative, designer and Contractor.

3.5.25.2 Collect from the Contractor and forward the Certificate of Occupancy to the City Representative and file a copy in the Project records. The Certificate of Occupancy is a minimum prerequisite to requesting the Substantial Completion walk through.

3.5.25.3 Develop in Contract Manager a punchlist generated from the walk through and forward it to the City Representative and designer for review and approval prior to forwarding to the Contractor.

3.5.25.4 Upon a finding by the City Representative that the Project is Substantially Complete, the Consultant shall prepare in Contract Manager and issue a Certificate of Substantial Completion for signature by the City Representative and designer. Copies will be forwarded to the City Representative and designer for record.

3.5.25.5 Observe and verify that all punchlist items are completed in accordance with the Construction Contract requirements.

3.5.25.6 Upon proper completion of the punchlist items, the Consultant will assist in ensuring that the City Representative is properly and promptly notified to allow for Contractor payment.

3.6 PROJECT CLOSEOUT

3.6.1 General. Provide a complete record of Project documentation to the City Representative for Project closeout items such as daily reports, photos, approved payment applications, submittals, change orders, field directives, notices of non compliance, notices of potential claims, inspection and testing results, punchlist and substantial completion items, permit closeout and bond release.

3.6.2 Final Quantities and Payment. The Consultant shall:

3.6.2.1 Determine the final quantities for unit price items and forward a summary to the City Representative and designer for review and record.

3.6.2.2 To facilitate Final Payment to the Contractor, the Consultant will collect the required affidavits and related documents and issue them to the City Representative.

3.6.2.3 Obtain the Final Payment approval from the City Representative.

3.6.3 Equipment Verification. The Consultant shall:

3.6.3.1 Upon completion of the Project, observe and document that all equipment is demonstrated by the Contractor (to the City) to be operational in accordance with the Construction Contract requirements.

3.6.3.2 Observe and verify that all related equipment manuals are accounted for and delivered to the City Representative.

3.6.3.3 Verify that all spare parts and materials are provided and/or accounted for in accordance with the Construction Contract requirements.

3.6.4 Final Report and Delivery of Project Documentation. The Consultant shall:

3.6.4.1 Prepare a final Project summary report and forward to the City Representative.

3.6.4.2 Complete the City's Contractor evaluation form.

3.6.4.3 Deliver all electronic and Contract Manager files on computer disk (CD or DVD).

3.6.4.4 Place and label Project files in standard stackable cardboard file storage boxes 12x15x10 with lids and deliver to the City Representative within 30 days of final payment to the Contractor.

3.6.4.5 Provide the City Representative with a complete and final set of Construction Record Drawings.

3.7 MATERIAL TESTING SERVICES

3.7.1 GENERAL: This Scope of Services describes the services to be provided by the Consultant through a subcontract with Terracon for the services during construction of the PROJECT.

3.7.1.1 Terracon shall provide staffing and AASTHO certified lab services to provide quality control testing and inspection during construction. The Consultant shall be responsible for reviewing documentation including test reports to ensure compliance with the Contract Documents.

3.7.1.2 Upon discovery the Consultant shall immediately reject unacceptable materials during delivery or installation, and so notify the Contractor verbally and in writing within 24 hours, without prior consultation with the City Representative. Notify the City Representative as soon as practical and enter in the Daily Report.

3.7.2 DOCUMENTATION

3.7.2.1 The Consultant shall prepare Daily Reports noting the following minimum information over the course of the Project:

3.7.2.1.1 Time beginning inspection and testing.

3.7.2.1.2 Time ending inspection and testing.

3.7.2.1.3 Total man-hours for each pay rate spent for each day.

3.7.2.1.4 Tests or inspections performed.

3.7.2.1.5 Rejected materials, failed tests or inspections, re-inspections conducted, uncorrected work.

3.7.2.2 The Consultant shall immediately report to the City Representative verbally and in writing any:

3.7.2.2.1 Testing or inspection that fails specifications or requirements.

3.7.2.2.2 Missed testing or inspections.

3.7.2.2.3 Testing where there is a reasonable doubt that the future test results may not meet the specifications.

3.7.2.2.4 Construction that proceeds without the required testing or inspection.

3.7.2.2.5 Construction that proceeds after uncorrected failed test results or doubtful future results.

3.7.2.2.6 Construction that is not in compliance with the Contract Documents.

3.7.2.2.7 Structural failure or collapse.

3.7.2.2.8 Disciplinary actions taken by regulatory authorities against the Consultant or Contractor.

3.7.3 SAMPLING AND TESTING CRITERIA

3.7.3.1 Field Testing

3.7.3.1.1 The Consultant shall provide field testing for soil, aggregate, concrete, and asphalt required by the Contract Documents.

3.7.3.1.2 The Consultant shall review and maintain field-testing data and reports for contract compliance.

3.7.3.2 Laboratory Testing

3.7.3.2.1 The Consultant shall provide laboratory testing for soil, aggregate, concrete, asphalt, and pipe lining required by the Contract Documents.

3.7.3.2.2 The Consultant shall maintain all source testing data and reports, including retesting of failed tests.

3.7.3.3 Laboratory Test Results

3.7.3.3.1 Soil Tests

3.7.3.3.1.1 Terracon shall perform relative compaction test of subgrade, aggregate base grade and trench backfill for verification of compliance with the project specifications when directed by the Consultant and follow testing frequencies as shown in Paragraph 3.8.3.3.4 – Testing Requirements. Test results shall be reviewed and delivered to the Consultant prior to Terracon leaving the construction site daily.

3.7.3.3.1.2 Terracon shall retrieve samples from the Project site and perform laboratory Moisture Density tests when requested by the Consultant. Test results shall be delivered to the Consultant within 2 working days following samples being retrieved from the Project site.

3.7.3.3.1.3 Terracon shall retrieve samples from the Project site and perform laboratory Sieve Analysis tests when requested by the Consultant. Test results shall be delivered to the Consultant within 2 working days following samples being retrieved from the Project site.

3.7.3.3.1.4 Terracon shall retrieve samples from the Project site and perform laboratory R-Value tests when requested by the Consultant. Test results shall be delivered to the Consultant within 3 working days following samples being retrieved from the Project site.

3.7.3.3.1.5 Terracon shall retrieve samples from the Project site and perform laboratory Percent of Wear tests when requested by the Consultant. Test results shall be delivered to the Consultant within 2 working days following samples being retrieved from the Project site.

3.7.3.3.1.6 Terracon shall retrieve samples from the Project site and perform laboratory Plasticity Index tests when requested by the Consultant. Test results shall be delivered to the Consultant within 2 working days following samples being retrieved from the Project site.

3.7.3.3.1.7 Terracon shall retrieve samples from the Project site and perform laboratory Sulfate Content tests when required by the Consultant. Test results shall be delivered to the Consultant within 3 working days following samples being retrieved from the Project site.

3.7.3.3.2 Concrete Tests

3.7.3.3.2.1 Terracon shall perform on-site slump, temperature, air content, determination of unit weight and consistency tests for verification of compliance with the Project specifications when directed by the Consultant. Test results shall be delivered to the Consultant prior to Terracon leaving the construction site daily.

3.7.3.3.2.2 Terracon shall prepare a minimum of 5 test cylinders on the Project site at the time of concrete placement and perform laboratory compressive strength tests when requested by the Consultant. Cylinders shall be cured on-site in a cure box supplied by Terracon, for a period of 24 hours before removal. Results shall be delivered to the Consultant within 2 working days following each cylinder being tested.

3.7.3.3.3 Asphaltic Concrete Tests

3.7.3.3.3.1 Terracon shall perform on-site density tests by utilizing "Density of Bituminous Concrete in Place by Nuclear Method" ASTM D 2950 methodology at the time of asphaltic concrete placement for verification of compliance with the Project specifications when directed by the Consultant. Test results shall be delivered to the Consultant prior to Terracon leaving the construction site daily.

3.7.3.3.3.2 Terracon shall retrieve samples from the Project site and perform laboratory Extraction/Gradation tests when requested by the Consultant. Test results shall be delivered to the Consultant within 2 working days following samples being retrieved from the Project site.

3.7.3.3.3.3 Terracon shall retrieve samples from the Project site and perform laboratory Maximum Theoretical Specific Gravity tests utilizing the Rice methods, when requested by the Consultant. Test results shall be delivered to the Consultant within 2 working days following samples being retrieved from the Project site.

3.7.3.3.3.4 Terracon shall retrieve samples from the Project site and perform laboratory Unit Weight and Thickness tests when requested by the Consultant. Test results shall be delivered to the Consultant within 2 working days following samples being retrieved from the Project site.

3.7.3.3.3.5 Terracon shall retrieve samples from the Project site and perform laboratory Marshall Series tests when requested by the Consultant. Test results shall be delivered to the Consultant within 3 working days following samples being retrieved from the Project site.

3.7.3.3.4 Testing Requirements. The following requirements for material control are included as reference standards and incorporated into the scope of work. Terracon shall be responsible for the following testing methodology:

3.7.3.3.4.1 Trench Backfill – Material sampled shall be tested in accordance with the test method and frequency indicated:

<u>1.1.1.1.1.1 Control Test</u>	<u>1.1.1.1.1.2 Test Method</u>	<u>1.1.1.1.1.3 Frequency</u>
Maximum Density/Opt. Moisture	ASTM D1157	1 per soil type
Sieve Analysis	AASHTO T27	1 per soil type
Plasticity Index	ASTM D4318	1 per soil type
Liquid Limit	ASTM D4318	1 per soil type

3.7.3.3.4.2 Subgrade Material – Material sampled shall be tested in accordance with the test method and frequency indicated:

<u>1.1.1.1.1.3.1 Control Test</u>	<u>1.1.1.1.1.3.2 Test Method</u>	<u>1.1.1.1.1.3.3 Frequency</u>
Maximum Density/Opt Moisture	ASTM D1157	1 per soil type, Minimum 2
Sieve Analysis	AASHTO T27	1 per soil type, Minimum 2
Plasticity Index	ASTM D4318	1 per soil type, Minimum 2
Liquid Limit	ASTM D4318	1 per soil type, Minimum 2

3.7.3.3.4.3 Structural Fill – Material sampled shall be tested in accordance with the test method and frequency indicated:

<u>1.1.1.1.1.3.4 Control Test</u>	<u>1.1.1.1.1.3.5 Test Method</u>	<u>1.1.1.1.1.3.6 Frequency</u>
Maximum Density/Opt Moisture	ASTM D1157	1 per 10,000 cy or each soil type
Sieve Analysis	AASHTO T27	1 per 10,000 cy or each soil type
Plasticity Index	ASTM D4318	1 per 10,000 cy or each soil type
Liquid Limit	ASTM D4318	1 per 10,000 cy or each soil type
Sulfate Content		1 per 10,000 cy or each soil type
Swell Potential		1 per 10,000 cy or each soil type

3.7.3.3.4.4 Type II Aggregate Base – Material sampled shall be tested in accordance with the test method and frequency indicated

<u>1.1.1.1.1.3.7 Control Test</u>	<u>1.1.1.1.1.3.8 Test Method</u>	<u>1.1.1.1.1.3.9 Frequency</u>
Maximum Density/Opt Moisture	AASHTO T180	1 per supplier
Sieve Analysis	ASSHTO T27	1 per supplier
Fractured Faces	Nev T230	1 per supplier
Plasticity Index	ASTM D4318	1 per supplier
Liquid Limit	ASTM D4318	1 per supplier
Resistance (R-Value)	ASTM D2844	1 per supplier
Percent of Wear (500 Rev.)	ASTM C131	1 per supplier

3.7.3.3.4.5 Portland Cement Concrete – Concrete cylinders shall be cast and tested in accordance with ASTM. Material shall be sampled and tested as indicated

<u>Portion of Work</u>	<u>Sampling Frequency</u>	<u>No. of Cylinders/Break Days</u>
Concrete Placement	1 set per 150 c.y.	(5)/7, 28, 28, 28, H
Shrinkage	1 set per	
Sieve Analysis	ASSHTO T27	1 per supplier
Fractured Faces	Nev T230	1 per supplier
Plasticity Index	ASTM D4318	1 per supplier
Liquid Limit	ASTM D4318	1 per supplier
Percent of Wear (500 Rev.)	ASTM C131	1 per supplier

3.7.3.3.4.6 Bituminous Pavement – Material sampled during paving operation shall be tested in accordance with ASTM using Marshall Apparatus as indicated:

<u>Control Test</u>	<u>Test Method</u>	<u>Frequency</u>
Marshall Series	ASTM D1559	1 per day
Maximum Theoretical Density	ASTM D2041	1 per day
Asphalt Content	ASTM D2172	2 per day
Aggregate Gradation	ASTM C136 & C117	2 per day

3.7.3.3.5 Relative Compaction Testing. The following requirements for Relative Compaction Testing are included as reference standards and incorporated into the scope of work. Terracon shall be responsible for the following field relative compaction tests:

3.7.3.3.5.1 Trench Backfill – Backfill shall be tested as indicated:

3.7.3.3.5.1.1 One test per lift per 100 lineal feet of trench or a minimum of two tests per day.

3.7.3.3.5.1.2 One test per lateral.

3.7.3.3.5.1.3 A minimum of two mainline tests between structures.

3.7.3.3.5.2 Structure Backfill – Backfill shall be tested as indicated:

3.7.3.3.5.2.1 One test per lift per structure or a minimum of one test per day.

3.7.3.3.5.2.2 A minimum of one test per structure.

3.7.3.3.5.3 Subgrade – Subgrade shall be tested as indicated:

3.7.3.3.5.3.1 One test per 300 to 500 lineal feet per lane (12 foot width) or a minimum of two tests per street.

3.7.3.3.5.4 Structural Fill – Structural Fill shall be tested as indicated:

3.7.3.3.5.4.1 One test per 500 c.y. placed.

3.7.3.3.5.5 Type II Aggregate Base – Aggregate base shall be tested as indicated:

3.7.3.3.5.5.1 One test per 300 to 500 lineal feet per lane (12 foot width) or a minimum of two tests per street.

3.7.3.3.5.6 Curb and Gutter – Aggregate base and subgrade shall be tested as indicated:

3.7.3.3.5.6.1 One test per 500 lineal feet of curb and gutter or curb or a minimum of two per street.

3.7.3.3.5.7 Crossgutter – Aggregate base and subgrade shall be tested as indicated:

3.7.3.3.5.7.1 Two tests per complete crossgutter.

3.7.3.3.5.8 Sidewalk – Aggregate base and subgrade shall be tested as indicated:

3.7.3.3.5.8.1 One test per 500 lineal feet of sidewalk or a minimum of one per street.

3.7.3.3.5.9 Hot Plantmix Bituminous Pavement – In-place density testing of hot bituminous pavement per ASTM D2950 (Nuclear Gauge Method) shall be performed as indicated:

3.7.3.3.5.9.1 A minimum of five locations per day.

3.7.3.3.5.9.2 A minimum of 5 cores per pavement day for Unit weight density and thickness determination.

3.7.4CLOSE-OUT

3.7.4.1 The Consultant shall deliver a final report containing all test results, stamped and sealed by a Nevada professional Engineer.

3.7.4.2 Terracon shall, at no additional cost, properly retain samples for a period of one year after completion of the Project, and a longer period if so instructed by the City in which case reasonable storage charges will be negotiated prior to the time extension, or the samples delivered to the City if charges cannot be negotiated.

3.8 ADDITIONAL SERVICES

3.8.1 Other engineering services as requested by the City. The following are examples of what could be included in Additional Services.

3.8.1.1 Attend and support additional meetings beyond those budgeted for in the scope.

3.8.1.2 Additional geotechnical investigation beyond that identified in the basic scope of services.

3.8.1.3 Work identified in the Terracon scope of services as supplemental services.

3.8.1.4 System Integration (Programming) and Instrumentation & Control Construction Services, including inspections.

3.8.1.5 Provision for permit acquisition and utility approval of plans/specifications if effort is more significant than those budgeted.

3.8.1.6 Commissioning services.

3.8.1.7 Provision to attend off-site inspections and material testing.

3.8.1.8 Litigation support services.

3.8.2 Program Management Additional Services under this AGREEMENT may include, but are not limited to, the following:

3.8.2.1 Preparing investigations and studies involving, but not limited to, detailed consideration of operation, maintenance and overhead expenses; performing Design Reviews, Value Engineering studies, or Constructability Reviews; and providing startup services and training.

3.8.2.2 Technical Support: B&V shall provide technical support services on as-requested basis. The services will be provided to assist in such areas as PROJECT scopes development, design reviews, troubleshooting, claims, training, etc.

3.8.2.3 Assisting the City and the PROJECT CONSTRUCTION MANAGER with bid protests, re-bidding or renegotiating contracts for construction, materials, equipment or services.

3.8.2.4 Preparing to serve or serving as a consultant or witness for the City in any litigation or other legal or administrative proceeding involving the PROJECT, unless the litigation or other proceeding is one for which B&V is required to indemnify the City under this AGREEMENT.

3.8.2.5 Assisting the City and the PROJECT CONSTRUCTION MANAGER in claims mitigation, claims management, and claims adjudication.

3.8.2.6 Extending B&V Services past the end of the Contract Term.

3.8.2.7 Safety Auditing Services.

3.8.2.8 Providing services resulting from changes which the City's Project Officer concludes are significant changes in general scope, extent or character of the PROGRAM or its PROJECTS' designs, including, but not limited to, changes in size, complexity, the City schedule; character of construction or method of financing; and revising previously accepted studies, reports, design documents or Contract Documents when such revisions are required by changes in laws, rules, regulations, ordinances, codes or orders enacted subsequent to the preparation of such studies, reports or documents.

3.8.2.9 Litigation Assistance - B&V shall be prepared to provide the necessary technical support during every phase of litigation including, claims analysis, cost assessment, preparation of and response to interrogatories, assistance in document production, review and preparation of a document data base, assistance prior to and during deposition, assistance in final negotiations, assessment of entitlement, coordination of expert witnesses, expert testimony, and other assistance.

3.8.2.10 Providing any additional technical support services not listed above.

EXHIBIT "B"

REQUIRED SUBMITTALS

ARTICLE 1: GENERAL

1.1 For the services set forth in Exhibit "A" (Scope of Services), the Consultant shall provide the following minimum submittals and deliverables for the Project, delivered to the City unless noted otherwise, which shall be accomplished as soon as practical after the completion of each event, task, phase, and service, and as a prerequisite to payment for each related event, task, phase, and service. Reference the entire Agreement and other Exhibits for additional Consultant submittals, and documents to be forwarded from the Contractor.

1.2 All reports shall be on white acid-free paper, 8-1/2 x 11 inches, suitable for photocopying and bound in booklet form. It is understood that the City may make and distribute copies of the reports as necessary in connection with the Project without incurring obligation for additional compensation.

ARTICLE 2: CERTIFICATES OF INSURANCE

2.1 The Consultant shall deliver to Insurance Tracking Services, Inc. (ITS), the City's authorized designated representative, a certificate of insurance with respect to each required policy to be provided by the Consultant under this Agreement. The required certificates must be signed by the authorized representative of the insurance company shown on the certificate with proof that such person is an authorized representative thereof, and is authorized to bind the named underwriter(s) and their company to the coverage, limits and termination provisions shown thereon.

2.2 Submit certificates of insurance to:

City of Las Vegas
C/O Insurance Tracking Services, Inc. (ITS)
P.O. Box 21919
Long Beach, CA 90801

Account Manager: Michael Palacios
Phone: (888) 435-2955 ext. 503
Fax: 562-435-2999
Email: michael.palacios@instracking.com

2.3 A certified, true and exact copy of each of the Project specific insurance policies (including renewal policies) shall be provided to the City upon request.

2.4 The Consultant shall promptly deliver to ITS a certificate of insurance with respect to each renewal policy, as necessary to demonstrate the maintenance of the required insurance coverage for the terms specified herein. Such certificate shall be delivered to ITS not less than 30 days prior to the expiration date of any policy and bear a notation evidencing payment of the premium thereof.

ARTICLE 3: MONTHLY INVOICES

3.1 Together with the Consultant's monthly invoice for services, provide copies of the following documents for the period covered by the invoice:

3.1.1 A monthly progress and summary report.

3.1.2 The Consultant's Daily Reports, with original signature of the Consultant.

3.1.3 The Consultant's daily photographs labeled and dated.

3.1.4 Current As-Built Schedule of construction progress and future construction schedule, in both paper and Microsoft Project electronic file format.

3.1.5 Electronic copy of the Contract Manager (Expedition) database containing all Project documents generated to date.

ARTICLE 4: CLOSE-OUT PHASE – FINAL PAYMENT

4.1 Together with the Consultant's invoice for final payment, or upon termination of this Agreement for any reason, provide:

4.1.1 A final Project summary report.

4.1.2 All original documents including photographs and negatives, or printed copies and electronic files if digital, relating to the Project produced during the term of this Agreement. Provide electronic files of all documents that are electronically produced or stored. Organize and label all documents in containers.

END OF EXHIBIT "B"

EXHIBIT "C"

PERFORMANCE SCHEDULE

ARTICLE 1: GENERAL

1.1 For the services set forth in Exhibit "A" (Scope of Services), the Consultant's work begins with the date of this Agreement. The Consultant's site mobilization shall be performed upon notification by the City Representative. Services shall be performed by the Consultant in an expeditious manner so as to not delay the progress of the Project, and in accordance with the time requirements described elsewhere in this Agreement.

1.2 The Scope of Service and compensation set forth in this Agreement are based upon the Consultant and the City each performing its responsibilities in a timely manner.

ARTICLE 2: LATE AND EARLY COMPLETION

1.3 The Consultant's Total Fixed Fee for the services set forth in Exhibit "A" (Scope of Services) is based on a construction term of 720 calendar days for the Contractor to achieve Substantial Completion of the Project plus 30 calendar days pre-construction services and 60 calendar days after substantial completion for project closeout.

1.4 If the construction schedule is exceeded, the Consultant's compensation shall be adjusted in accordance with Exhibit "E" (Additional Compensation) as an Additional Service, which shall be agreed to in writing prior to rendering the Additional Services.

END OF EXHIBIT "C"

EXHIBIT "D"

FEE BREAKDOWN

ARTICLE 1: FEE

1.1 TOTAL COMPENSATION

The total compensation to be paid to the Consultant for performance of this Agreement including Basic Services, Additional Services, and Reimbursable Expenses shall not exceed \$3,816,480.00. This amount is comprised of the parts described in this Exhibit "D" (Fee Breakdown).

1.2 BASIC SERVICES PAYMENT BASED ON PERCENTAGE OF COMPLETION OF THE SERVICES

For the services set forth in Exhibit "A" (Scope of Services), the City agrees to pay to the Consultant the fixed fee set forth in this Exhibit "D" (Fee Breakdown) based upon the completed and approved services performed for the prior month. The Consultant agrees to perform the services required under this Agreement Exhibit "A" (Scope of Services) for the amount of the fixed fee set forth in this Exhibit "D" (Fee Breakdown). Payment shall be made pursuant to monthly invoices submitted in accordance with the Agreement. **The fixed fee shall constitute the entire compensation to be paid to the Consultant regardless of the number of man-hours actually expended to complete the performance of the services set forth in Exhibit "A" (Scope of Services).**

Contract Task Description	Contract Task Amount
Project Management	\$163,264.00
Program Coordination Services	\$841,288.00
Pre-Construction Services	\$45,066.00
Construction Management and Contract Administration	\$1,773,134.00
Project Closeout	\$64,128.00
Sub-consultant Services - Terracon	\$179,600.00
TOTAL FIXED FEE	\$3,066,480.00

1.3 ALLOWANCE FOR ADDITIONAL SERVICES

A Not-To-Exceed Allowance for Additional Services is hereby established as set forth below. The City Representative has authority to pre-authorize in writing Additional Services up to the Total Not-To-Exceed Cost. Services performed prior to receiving the required written authorization or in excess of the Total Not-To-Exceed Cost shall not be obligated for compensation.

Additional Services are services that are not set forth in Exhibit "A" (Scope of Services).

The Consultant shall be compensated for Additional Services in accordance with the Additional Services fees set forth in Exhibit "E" (Additional Compensation), or if no Additional Service fee has been established for the service, in accordance with the Consultant Hourly Rates established in Exhibit "E" (Additional Compensation). Additional Service compensation disputes shall be resolved in accordance with the claims and disputes provisions of this Agreement and shall not be cause for the Consultant to delay providing requested services. Payment shall be made for each completed Additional Service pursuant to invoices submitted in accordance with the Agreement.

Increases to this Total Not-To-Exceed Cost for Additional Services may only be authorized by written amendment to this Agreement.

ADDITIONAL SERVICES ALLOWANCE		ALLOWED SERVICES
TOTAL NOT-TO-EXCEED COST	\$750,000.00	For Additional Services required by a construction schedule overrun and for project close-out activities not accounted for in the monthly fixed fee.

END OF EXHIBIT "D"

EXHIBIT "E"

ADDITIONAL COMPENSATION

ARTICLE 1: CONSULTANT HOURLY RATES

- 1.1 The following hourly rates are to be used as the basis for negotiation of added services, except that if added services are due to an extension of the construction schedule, the weekly rates shown in Additional Services shall be the rate basis rather than the hourly rates shown here. These hourly rates are valid for the duration of the Project and include salary costs, overhead, administration and profit. The overhead included in these rates covers all support personnel who normally work on non-specific project tasks including but not limited to receptionists, senior executives together with their assistants, financial accounting personnel, and facility, equipment, and IT maintenance personnel.

CLASSIFICATION	RATE	UNIT
Project Director	\$275	Per Hour
Project / Construction Manager	\$218	Per Hour
Construction Coordinator	\$170	Per Hour
Lead Resident Project Representative	\$141	Per Hour
Construction Engineer / Construction Inspector	\$131	Per Hour
Field Office Engineer / Document Control Coordinator	\$136	Per Hour
Scheduler	\$148	Per Hour
Estimator	\$200	Per Hour
Civil Engineer / Structural Engineer	\$166	Per Hour
Mechanical Engineer	\$170	Per Hour
Electrical Engineer	\$187	Per Hour
Administrative Assistant	\$80	Per Hour

ARTICLE 2: ADDITIONAL SERVICES

- 2.1 The cost of the following potential future Additional Services have been negotiated as of the date of this Agreement.

ADDITIONAL SERVICE	FIXED FEE
Weekly Rate for the services set forth in Exhibit "A" (Scope of Services) except for work under 3.2, 3.7, and 3.8, to be used for calendar adjustments to the scheduled services	\$21,000.00
Weekly Rate for the services set forth in Exhibit "A" (Scope of Services) for work under 3.2, to be used for calendar adjustments to the scheduled services	\$8,500.00

- 2.2 Additions in services due to an extension of time to the construction schedule indicated in **Exhibit "C"** (Performance Schedule) shall be based on the Weekly Rate shown herein.
- 2.3 These fees are valid for the duration of the Project and include salary costs, equipment, overhead, administration and profit. For Additional Services of sub-consultants, the City shall compensate the Consultant a multiple of **one and one tenth (1.10)** times the amounts billed to the Consultant for such services, which multiple has been included in the Additional Services fees shown herein.

END OF EXHIBIT "E"

EXHIBIT "F"

KEY PERSONNEL LIST

CITY PERSONNEL

CITY REPRESENTATIVE: John Bettencourt, P.E.

CONSULTANT'S PROJECT STAFF

The following personnel will be assigned by to work on the Project. Any changes require City approval.

CONSULTANT REPRESENTATIVE/CONSTRUCTION MANAGER: Steven P. Henness, P.E.

OTHER PERSONNEL:

RESIDENT PROJECT REPRESENTATIVE: Scott Patrick

ASSITANT RESIDENT PROJECT REPRESENTATIVE: TBD

FIELD OFFICE ENGINEER/DOCUMENT CONTROL: Ganesh Kadam, P.E.

RESPONSIBLE IN CHARGE PERSON (Mandatory under NRS 338 CM as Agent)
Steven P. Henness, P.E.:

IN CHARGE PERSON'S STATE OF NEVADA LICENSE NUMBER (Mandatory under NRS 338 CM as Agent)
13892

CONSULTANT'S SUBCONSULTANTS

The following subconsultants will be contracted with and utilized by the Consultant to work on the Project. Any changes require City approval.

GEOTECHNICAL ENGINEER:
Terracon

END OF EXHIBIT "F"