

DUPLICATE ORIGINAL

**AGREEMENT BETWEEN
THE CITY OF SAN DIEGO
AND
BLACK & VEATCH CORPORATION
FOR
PROGRAMMATIC WATER TRANSMISSION PIPELINES
CONDITION ASSESSMENT**

CONTRACT NUMBER: H146197

R- 309451

TABLE OF CONTENTS

**ARTICLE I
CONSULTANT SERVICES**

1.1	Scope of Services	1
1.2	Contract Administrator.....	1
1.3	City Modification of Scope of Services.....	2
1.4	Written Authorization	2
1.5	Confidentiality of Services	2
1.6	Competitive Bidding	2

**ARTICLE II
DURATION OF AGREEMENT**

2.1	Term of Agreement.....	3
2.2	Time of Essence.....	3
2.3	Notification of Delay	3
2.4	Delay.....	3
2.5	City's Right to Suspend for Convenience	3
2.6	City's Right to Terminate for Convenience.....	3
2.7	City's Right to Terminate for Default.....	4

**ARTICLE III
COMPENSATION**

3.1	Amount of Compensation.....	4
3.2	Additional Services	6
3.3	Manner of Payment	6
3.4	Additional Costs.....	6
3.5	Eighty Percent Notification	7

**ARTICLE IV
CONSULTANT'S OBLIGATIONS**

4.1	Industry Standards	7
4.2	Right to Audit.....	7
4.3	Insurance	8
4.4	Subcontractors	10

4.5	Contract Activity Report	12
4.6	Non-Discrimination Requirements	12
4.7	Drug-Free Workplace	12
4.8	Product Endorsement.....	13
4.9	Conflict of Interest.....	13
4.10	Mandatory Assistance	14
4.11	Compensation for Mandatory Assistance	14
4.12	Attorney Fees related to Mandatory Assistance.....	14
4.13	Notification of Increased Construction Cost.....	15
4.14	ADA Certification	15
4.15	Prevailing Wage Rates	15

**ARTICLE V
RESERVED**

**ARTICLE VI
INDEMNIFICATION**

6.1	Indemnification and Hold Harmless Agreement.....	17
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**ARTICLE VII
MEDIATION**

7.1	Mandatory Non-binding Mediation.....	18
7.2	Mandatory Mediation Costs	18
7.3	Selection of Mediator.....	18
7.4	Conduct of Mediation Sessions.....	19

**ARTICLE VIII
INTELLECTUAL PROPERTY RIGHTS**

8.1	Work For Hire	19
8.2.	Rights in Data.....	19
8.3	Intellectual Property Rights Assignment	19
8.4	Moral Rights.....	20
8.5	Subcontracting	20
8.6	Publication.....	20
8.7	Intellectual Property Warranty and Indemnification	20
8.8	Enforcement Costs	20
8.9	Ownership of Documents	21

**ARTICLE IX
MISCELLANEOUS**

9.1	Notices	21
9.2	Headings	21
9.3	Non-Assignment	21
9.4	Independent Contractors	21
9.5	Consultant and Subcontractor Principals for Consultant Services	21
9.6	Covenants and Conditions	22
9.7	Compliance with Controlling Law	22
9.8	Jurisdiction and Attorney Fees.....	22
9.9	Successors in Interest	22
9.10	Integration	22
9.11	Counterparts	22
9.12	No Waiver.....	22
9.13	Severability.....	22
9.14	Additional Consultants or Contractors	23
9.15	Employment of City Staff	23
9.16	Municipal Powers	23
9.17	Drafting Ambiguities	23
9.18	Signing Authority.....	23
9.19	Conflicts Between Terms	23
9.20	Consultant Evaluation.....	23
9.21	Exhibits Incorporated	23
9.22	Survival of Obligations.....	23
9.23	Contractor Standards.....	24
9.24	Equal Benefits Ordinance	24
9.25	Public Records	24

CONSULTANT AGREEMENT EXHIBITS

- Exhibit A - Scope of Services
- Exhibit B - Compensation and Fee Schedule
- Exhibit C - Time Schedule
- Exhibit D - City's Equal Opportunity Contracting Program Consultant Requirements
 - (AA) Work Force Report
 - (BB) Subcontractors List
 - (CC) Contract Activity Report
 - (DD) Consultant Past Participation List
- Exhibit E - Reserved
- Exhibit F - Consultant Evaluation Form
- Exhibit G - Contractor Standards Pledge of Compliance
- Exhibit H - Determination Form
- Exhibit I - Equal Benefits Ordinance Certification of Compliance
- Exhibit J - Regarding Information Requested Under the California Public Records Act
- Exhibit K - Reserved

**AGREEMENT BETWEEN
THE CITY OF SAN DIEGO
AND BLACK & VEATCH
FOR CONSULTANT SERVICES
FOR PROGRAMMATIC WATER TRANSMISSION PIPELINES
CONDITION ASSESSMENT**

THIS Agreement is made and entered into between the City of San Diego, a municipal corporation [City], and Black & Veatch Corporation [Consultant] for the Consultant to provide civil engineering services for the Programmatic Water Transmission Pipelines Condition Assessment project.

RECITALS

The City wants to retain the services of a civil engineering firm to provide civil engineering services for the Programmatic Water Transmission Pipelines Condition Assessment project [the Services].

The Consultant has the expertise, experience and personnel necessary to provide the Services. The City and the Consultant [Parties] want to enter into an Agreement whereby the City will retain the Consultant to provide, and the Consultant shall provide, the Services.

In consideration of the above recitals and the mutual covenants and conditions set forth, herein, and for good and valuable consideration, the sufficiency of which are hereby acknowledged, the Parties hereby set forth their mutual covenants and understandings as follows:

**ARTICLE I
CONSULTANT SERVICES**

The above-listed recitals are true and correct and are hereby incorporated by reference.

1.1 Scope of Services. The Consultant shall perform the Services as set forth in the written Scope of Services (Exhibit A) at the direction of the City

1.2 Contract Administrator. The Public Utilities Department is the contract administrator for this Agreement. The Consultant shall provide the Services under the direction of a designated representative of the Public Utilities Department. The City's designated representative will communicate with the Consultant on all matters related to the administration of this Agreement and the Consultant's performance of the Services rendered hereunder. When this Agreement refers to communications to or with the City, those communications will be with the designated representative, unless the designated representative or the Agreement specifies otherwise. However, when this Agreement refers to an act or approval to be performed by City, that act or approval shall be performed by the Mayor or his designee, unless the Agreement specifies otherwise.

1.3 City Modification of Scope of Services. The City may, without invalidating this Agreement, order changes in the Scope of Services by altering, adding to or deducting from the Professional Services to be performed. All such changes shall be in writing and shall be performed in accordance with the provisions of this Agreement. If any such changes cause an increase or decrease in the Consultant's cost of, or the time required for, the performance of any of the Professional Services, the Consultant shall immediately notify the City. If the City deems it appropriate, an equitable adjustment to the Consultant's compensation or time for performance may be made, provided that any adjustment must be approved by both Parties in writing in accordance with Section 9.1 of this Agreement.

1.4 Written Authorization. Prior to performing any Services, the Consultant shall obtain from the City a written authorization to proceed. Further, throughout the term of this Agreement, the Consultant shall immediately advise the City in writing of any anticipated change in the Scope of Services (Exhibit A), Compensation and Fee Schedule (Exhibit B), or Time Schedule (Exhibit C), and shall obtain the City's written consent to the change prior to making any changes. In no event shall the City's consent be construed to relieve the Consultant from its duty to render all Services in accordance with applicable laws and accepted industry standards.

1.5 Confidentiality of Services. All Services performed by the Consultant, including but not limited to all drafts, data, correspondence, proposals, reports, and estimates compiled or composed by the Consultant, pursuant to this Agreement, are for the sole use of the City, its agents and employees. Neither the documents nor their contents shall be released to any third party without the prior written consent of the City. This provision does not apply to information that (a) was publicly known, or otherwise known to the Consultant, at the time that it was disclosed to the Consultant by the City, (b) subsequently becomes publicly known through no act or omission of the Consultant, or (c) otherwise becomes known to the Consultant other than through disclosure by the City. Except for Subcontractors covered by Section 4.4, neither the documents nor their contents shall be released to any third party without the prior written consent of the City.

1.6 Competitive Bidding. If applicable, the Consultant shall comply with the following: Consultant shall ensure that any plans, specifications, studies, or reports prepared, required, or recommended under this Agreement allow for competitive bidding. The Consultant shall prepare such plans, specifications, studies, or reports so that procurement of services, labor or materials are not available from only one source, and shall not prepare plans, specifications, studies, or reports around a single or specific product, piece of major equipment or machinery, a specific patented design, or a proprietary process, unless required by principles of sound engineering practice and supported by a written justification that has been approved in writing by the City. The Consultant shall submit this written justification to the City prior to beginning work on such plans, specifications, studies, or reports. Whenever the Consultant recommends a specific product or equipment for competitive procurement, such recommendation shall include at least two brand names of products that are capable of meeting the functional requirements applicable to the Project.

ARTICLE II DURATION OF AGREEMENT

2.1 Term of Agreement. This Agreement shall be effective on the date it is executed by the last Party to sign the Agreement, and approved by the City Attorney in accordance with San Diego Charter Section 40. Unless otherwise terminated, it shall be effective until completion of the Scope of Services or January 30, 2020 whichever is the earliest but not to exceed five years unless approved by City ordinance.

2.2 Time of Essence. Time is of the essence for each provision of this Agreement, unless otherwise specified in this Agreement. The time for performance of the Scope of Services (Exhibit A) is set forth in the Time Schedule (Exhibit C).

2.3 Notification of Delay. The Consultant shall immediately notify the City in writing if the Consultant experiences or anticipates experiencing a delay in performing the Services within the time frames set forth in the Time Schedule (Exhibit C). The written notice shall include an explanation of the cause for, and a reasonable estimate of the length of the delay. If in the opinion of the City, the delay affects a material part of the City's requirements for the Services, the City may exercise its rights under Sections 2.5-2.7 of this Agreement.

2.4 Delay. If delays in the performance of the Services are caused by unforeseen events beyond the control of the Parties, such delay may entitle the Consultant to a reasonable extension of time, but such delay shall not entitle the Consultant to damages or additional compensation. Any such extension of time must be approved in writing by the City. The following conditions may constitute such a delay: war; changes in law or government regulation; labor disputes; strikes; fires, floods, adverse weather or other similar condition of the elements necessitating cessation of the Consultant's work; inability to obtain materials, equipment, or labor; required additional Services; or other specific reasons agreed to between the City and the Consultant; provided, however, that: (a) this provision shall not apply to, and the Consultant shall not be entitled to an extension of time for, a delay caused by the acts or omissions of the Consultant; and (b) a delay caused by the inability to obtain materials, equipment, or labor shall not entitle the Consultant to an extension of time unless the Consultant furnishes the City, in a timely manner, documentary proof satisfactory to City of the Consultant's inability to obtain materials, equipment, or labor.

2.5 City's Right to Suspend for Convenience. The City may, at its sole option and for its convenience, suspend all or any portion of the Consultant's performance of the Services, for a reasonable period of time not to exceed six months. In accordance with the provisions of this Agreement, the City will give written notice to the Consultant of such suspension. In the event of such a suspension, in accordance with the provisions of Article III of this Agreement, the City shall pay to the Consultant a sum equivalent to the reasonable value of the Services the Consultant has satisfactorily performed up to the date of suspension. Thereafter, the City may rescind such suspension by giving written notice of rescission to the Consultant. The City may then require the Consultant to resume performance of the Services in compliance with the terms and conditions of this Agreement; provided, however, that the Consultant shall be entitled to an extension of time equal to the length of the suspension, unless otherwise agreed to in writing by the Parties.

2.6 City's Right to Terminate for Convenience. The City may, at its sole option and for its convenience, terminate all or any portion of the Services agreed to pursuant to this Agreement by giving written notice of such termination to the Consultant. Such notice shall be

delivered by certified mail with return receipt for delivery to the City. The termination of the Services shall be effective upon receipt of the notice by the Consultant. After termination of this Agreement, the Consultant shall complete any and all additional work necessary for the orderly filing of documents and closing of the Consultant's Services under this Agreement. For services satisfactorily rendered in completing the work, the Consultant shall be entitled to fair and reasonable compensation for the Services performed by the Consultant before the effective date of termination. After filing of documents and completion of performance, the Consultant shall deliver to the City all documents or records related to the Consultant's Services. By accepting payment for completion, filing and delivering documents as called for in this paragraph, the Consultant discharges the City of all of the City's payment obligations and liabilities under this Agreement.

2.7 City's Right to Terminate for Default. If the Consultant fails to satisfactorily perform any obligation required by this Agreement, the Consultant's failure constitutes a Default. A Default includes the Consultant's failure to adhere to the Time Schedule. If the Consultant fails to satisfactorily cure a Default within ten calendar days of receiving written notice from the City specifying the nature of the Default, the City may immediately cancel and/or terminate this Agreement, and terminate each and every right of the Consultant, and any person claiming any rights by or through the Consultant under this Agreement. The rights and remedies of the City enumerated in this Section are cumulative and shall not limit, waive, or deny any of the City's rights under any other provision of this Agreement. Nor does this Section otherwise waive or deny any right or remedy, at law or in equity, existing as of the date of this Agreement or hereinafter enacted or established, that may be available to the City against the Consultant.

**ARTICLE III
COMPENSATION**

3.1 Amount of Compensation. The total compensation payable by the City to the Consultant for performance of all Professional Services rendered in accordance with this Agreement, including reasonably related expenses, shall not exceed \$7,997,857.00. The compensation for the Scope of Services shall not exceed \$7,497,857.00 and the compensation for Additional Services (described in Section 3.2), if any, shall not exceed \$500,000.00. Moreover, the total compensation to be paid to the Consultant by the City for all work performed under each phase of this Agreement shall not exceed the amount for each phase as specified in the Phased Funding Schedule in Section 3.1.1 unless said amount is modified in writing by an amendment to this Agreement.

3.1.1 Phased Funding Schedule. The work to be performed under this Agreement shall be performed during the separate and specific phases identified in the following Phased Funding Schedule.

PHASED FUNDING SCHEDULE		
<u>Funding Phases</u>	<u>Dates</u>	<u>Total Not to Exceed Amount</u>
1	From date of execution of	\$1,315,000.00

	Agreement through completion of Agreement	
2	From July 1, 2015 through completion of the Agreement	\$1,875,000.00
3	From July 1, 2016 through completion of the Agreement	\$2,325,000.00
4	From July 1, 2017 through completion of the Agreement	\$1,790,000.00
5	From July 1, 2018 through completion of the Agreement	\$692,857.00
Total		\$7,997,857.00

3.1.2 It is expressly understood by and between the City and the Consultant that the work and compensation for each Funding Phase is subject to funds being appropriated and authorized by the City Council for said services and compensation. The City's obligations and the Consultant's obligations under this multi-phase contract which shall be funded by multi-phase funding authorizations are as follows:

a. The amount of funds available at time of contract award is not considered sufficient for the performance required for any Funding Phase other than Funding Phase 1. When additional funds are available for the full requirements of the next Funding Phase, the City shall so notify the Consultant in writing. The City shall also modify the amount of funds as available for contract performance as described in the Funding Schedule. This procedure shall apply for each successive Funding Phase.

b. The City is not obligated to the Consultant for any amount over that specified in the Funding Schedule as available for contract performance and authorized by the City Council.

c. The Consultant is not obligated to incur costs for the performance of work required for any Funding Phase after the first phase, unless and until written notification is received from the City of an increase in availability of funds. If so notified, the Consultant's obligation shall increase only to the extent contract performance is required for the additional Funding Phase for which funds are made available.

d. If the Agreement is terminated under Section 2.6 "City's Right to Terminate for Convenience", the settlement proposal shall be determined pursuant to procedures established in that section. The Consultant shall be entitled to compensation for only those Services provided under those specific Funding Phases for which funds have been made available. If the Agreement is terminated for default, the City's rights under this Agreement shall apply to the entire multi-phase requirements.

e. Notification to the Consultant of an increase or decrease in the funds available for performance of this Agreement under another clause (e.g., an "option" or "changes" clause), shall not constitute the notification contemplated by subparagraph *a* above.

3.1.3 The not-to-exceed amounts stated in the Funding Schedule in Paragraph 3.1.1 above include the following two specific elements:

3.1.3.1 A shall not exceed amount as full compensation for all work described in this Agreement and its Exhibits, except for Additional Services that may be authorized under Paragraph 3.2; and

3.1.3.2 A shall not exceed amount for Additional Services that may be authorized under Paragraph 3.2.

Funding Phases	Fixed Amount	Not to Exceed Amount for Additional Services	Total Not to Exceed Amount
1	\$1,165,000.00	\$150,000.00	\$1,315,000.00
2	\$1,575,000.00	\$300,000.00	\$1,875,000.00
3	\$2,275,000.00	\$50,000.00	\$2,325,000.00
4	\$1,790,000.00	\$0	\$1,790,000.00
5	\$692,857.00	\$0	\$692,857.00
Total	\$7,497,857.00	\$500,000.00	\$7,997,857.00

3.2 Additional Services. The City may require that the Consultant perform additional Professional Services [Additional Services] beyond those basic services described in the Scope of Services [Exhibit A]. Prior to the Consultant's performance of Additional Services, the City and the Consultant must agree in writing upon a fee for the Additional Services, including reasonably related expenses, in accordance with the Compensation and Fee Schedule [Exhibit B]. The City will pay the Consultant for the performance of Additional Services in accordance with Section 3.3.

3.3 Manner of Payment. The City shall pay the Consultant in accordance with the above Phased Funding Schedule and the Compensation and Fee Schedule [Exhibit B]. For the duration of this Agreement, the Consultant shall not be entitled to fees, including fees for expenses, that exceed the amounts specified in the Phased Funding Schedule and Compensation and Fee Schedule. The Consultant shall submit one invoice per calendar month in a form acceptable to City in accordance with the Compensation and Fee Schedule. The Consultant shall include with each invoice a description of completed Professional Services, reasonably related expenses, if any, and all other information, including but not limited to: the progress percentage of the Scope of Services and/or deliverables completed prior to the invoice date, as required by the City. The City will pay undisputed portions of invoices within thirty calendar days of receipt.

3.4 Additional Costs. Additional Costs are those costs that can be reasonably determined to be related to the Consultant's errors or omissions, and may include Consultant,

City, or Subcontractor overhead, construction, materials, demolition, and related costs. The Consultant shall not be paid for the Professional Services required due to the Consultant's errors or omissions, and the Consultant shall be responsible for any Additional Costs associated with such errors or omissions. These Additional Costs may be deducted from monies due, or that become due, the Consultant. Whether or not there are any monies due, or becoming due, the Consultant shall reimburse the City for Additional Costs due to the Consultant's errors or omissions.

3.5 Eighty Percent Notification. The Consultant shall promptly notify the City in writing of any potential cost overruns. Cost overruns include, but are not limited to the following: (1) where anticipated costs to be incurred in the next sixty calendar days, when added to all costs previously incurred, will exceed 80 percent of the maximum compensation for this Agreement; or (2) where the total cost for performance of the Scope of Services appears that it may be greater than the maximum compensation for this Agreement.

ARTICLE IV CONSULTANT'S OBLIGATIONS

4.1 Industry Standards. The Consultant agrees that the Services rendered under this Agreement shall be performed in accordance with the standards customarily adhered to by an experienced and competent civil engineering firm using the degree of care and skill ordinarily exercised by reputable professionals practicing in the same field of service in the State of California. Where approval by the City, the Mayor or his designee, or other representatives of the City is required, it is understood to be general approval only and does not relieve the Consultant of responsibility for complying with all applicable laws, codes, and good consulting practices.

4.2 Right to Audit.

4.2.1 Access. The City retains the right to review and audit, and the reasonable right of access to Consultant's and any Subcontractor's premises to review and audit the Consultant's or Subcontractor's compliance with the provisions of this Agreement [City's Right]. The City's Right includes the right to inspect and photocopy same, and to retain copies, outside of the Consultant's premises, of any and all records related to the Services provided hereunder with appropriate safeguards, if such retention is deemed necessary by the City in its sole discretion. This information shall be kept by the City in the strictest confidence allowed by law.

4.2.2 Audit. The City's Right includes the right to examine any and all books, records, documents and any other evidence of procedures and practices that the City determines are necessary to discover and verify that the Consultant or Subcontractor is in compliance with all requirements under this Agreement.

4.2.2.1 Cost Audit. If there is a claim for additional compensation or for Additional Services, the City's Right includes the right to examine books, records, documents, and any and all other evidence and accounting procedures and practices that the City determines are necessary to discover and verify all direct and indirect costs, of whatever nature, which are claimed to have been incurred, or anticipated to be incurred.

4.2.2.1.1 Accounting Records. The Consultant and all subcontractors shall maintain complete and accurate records in accordance with generally accepted accounting practices in the industry. The Consultant and Subcontractors shall make available to the City for review and audit, all Service related accounting records and documents, and any other financial data. Upon the City's request, the Consultant and Subcontractors shall submit exact duplicates of originals of all requested records to the City.

4.2.3 City's Right Binding on Subcontractors. The Consultant shall include the City's Right as described in Section 4.2, in any and all of their subcontracts, and shall ensure that these sections are binding upon all Subcontractors.

4.2.4 Compliance Required before Mediation or Litigation. A condition precedent to proceeding with mandatory mediation and further litigation provided for in Article VII is the Consultant's and Subcontractors full compliance with the provisions of this Section 4.2 within sixty days of the date on which the City mailed a written request to review and audit compliance.

4.3 Insurance. The Consultant shall not begin the Services under this Agreement until it has: (a) obtained, and provided to the City, insurance certificates reflecting evidence of all insurance as set forth herein; however, the City reserves the right to request, and the Consultant shall submit, copies of any policy upon reasonable request by the City; (b) obtained City approval of each company or companies as required in Section 4.3.3 of this Agreement; and (c) confirmed that all policies contain the specific provisions required in Section 4.3.4 of this Agreement. Consultant's liabilities, including but not limited to Consultant's indemnity obligations, under this Agreement, shall not be deemed limited in any way to the insurance coverage required herein. Except as provided for under California law, all policies of insurance required hereunder must provide that the City is entitled to thirty (30) days prior written notice (10 days for cancellation due to non-payment of premium) of cancellation or non-renewal of the policy or policies. Maintenance of specified insurance coverage is a material element of this Agreement and Consultant's failure to maintain or renew coverage or to provide evidence of renewal during the term of this Agreement may be treated as a material breach of contract by the City.

Further, the Consultant shall not modify any policy or endorsement thereto which increases the City's exposure to loss for the duration of this Agreement.

4.3.1 Types of Insurance. At all times during the term of this Agreement, the Consultant shall maintain insurance coverage as follows:

4.3.1.1 Commercial General Liability. Commercial General Liability (CGL) Insurance written on an ISO Occurrence form CG 00 01 07 98 or an equivalent form providing coverage at least as broad which shall cover liability arising from any and all personal injury or property damage in the amount of \$1 million per occurrence and subject to an annual aggregate of \$2 million. There shall be no endorsement or modification of the CGL limiting the scope of coverage for either insured vs. insured claims or contractual liability. All defense costs shall be outside the limits of the policy.

4.3.1.2 Commercial Automobile Liability. For all of the Consultant's automobiles including owned, hired and non-owned automobiles, the Consultant shall keep in full force and effect, automobile insurance written on an ISO form CA 00 01 12 90 or a later version of this form or an equivalent form providing coverage at least as broad for bodily injury and property damage for a combined single limit of \$1 million per occurrence. Insurance certificate shall reflect coverage for any automobile (any auto).

4.3.1.3 Workers' Compensation. For all of the Consultant's employees who are subject to this Agreement and to the extent required by the applicable state or federal law, the Consultant shall keep in full force and effect, a Workers' Compensation policy. That policy shall provide a minimum of \$1 million of employers' liability coverage, and the Consultant shall provide an endorsement that the insurer waives the right of subrogation against the City and its respective elected officials, officers, employees, agents and representatives.

4.3.1.4 Professional Liability. For all of the Consultant's employees who are subject to this Agreement, the Consultant shall keep in full force and effect, Professional Liability coverage for professional liability with a limit of \$1 million per claim and \$2 million annual aggregate. The Consultant shall ensure both that: (1) the policy retroactive date is on or before the date of commencement of the Project; and (2) the policy will be maintained in force for a period of three years after substantial completion of the Project or termination of this Agreement whichever occurs last. The Consultant agrees that for the time period defined above, there will be no changes or endorsements to the policy that increase the City's exposure to loss.

4.3.2 Deductibles. All deductibles on any policy shall be the responsibility of the Consultant and shall be disclosed to the City at the time the evidence of insurance is provided.

4.3.3 Acceptability of Insurers.

4.3.3.1 Except for the State Compensation Insurance Fund, all insurance required by this Contract or in the Special General Conditions shall only be carried by insurance companies with a rating of at least "A-, VI" by A.M. Best Company, that are authorized by the California Insurance Commissioner to do business in the State of California, and that have been approved by the City.

4.3.3.2 The City will accept insurance provided by non-admitted, "surplus lines" carriers only if the carrier is authorized to do business in the State of California and is included on the List of Approved Surplus Lines Insurers (LASLI list). All policies of insurance carried by non-admitted carriers are subject to all of the requirements for policies of insurance provided by admitted carriers described herein.

4.3.4 Required Endorsements

The following endorsements to the policies of insurance are required to be provided to the City before any work is initiated under this Agreement.

4.3.4.1 Commercial General Liability Insurance Endorsements

ADDITIONAL INSURED. To the fullest extent allowed by law including but not limited to California Insurance Code Section 11580.04, the policy or policies must be endorsed to include as an Additional Insured the City of San Diego and its respective elected officials, officers, employees, agents and representatives with respect to liability arising out of (a) ongoing operations performed by you or on your behalf, (b) your products, (c) your work, including but not limited to your completed operations performed by you or on your behalf, or (d) premises owned, leased, controlled or used by you.

PRIMARY AND NON-CONTRIBUTORY COVERAGE. The policy or policies must be endorsed to provide that the insurance afforded by the Commercial General Liability policy or policies is primary to any insurance or self-insurance of the City of San Diego and its elected officials, officers, employees, agents and representatives as respects operations of the Named Insured. Any insurance maintained by the City of San Diego and its elected officials, officers, employees, agents and representatives shall be in excess of Consultant's insurance and shall not contribute to it.

4.3.4.2 Automobile Liability Insurance Endorsements

ADDITIONAL INSURED. To the fullest extent allowed by law including but not limited to California Insurance Code Section 11580.04, the policy or policies must be endorsed to include as an Additional Insured the City of San Diego and its respective elected officials, officers, employees, agents and representatives with respect to liability arising out of automobile owned, leased, hired or borrowed by or on behalf of the Consultant.

4.3.4.3 Worker's Compensation and Employer's Liability Insurance Endorsements

WAIVER OF SUBROGATION. The Worker's Compensation policy or policies must be endorsed to provide that the insurer will waive all rights of subrogation against the City and its respective elected officials, officers, employees, agents and representatives for losses paid under the terms of this policy or these policies which arise from work performed by the Named Insured for the City.

4.3.5 Reservation of Rights. The City reserves the right, from time to time, to review the Consultant's insurance coverage, limits, deductible and self-insured retentions to determine if they are acceptable to the City. The City will reimburse the Consultant for the cost of the additional premium for any coverage requested by the City in excess of that required by this Agreement without overhead, profit, or any other markup.

4.3.6 Additional Insurance. The Consultant may obtain additional insurance not required by this Agreement.

4.3.7 Excess Insurance. All policies providing excess coverage to the City shall follow the form of the primary policy or policies including but not limited to all endorsements.

4.4 Subcontractors. The Consultant's hiring or retaining of any third parties [Subcontractors] to perform Services [Subcontractor Services] is subject to prior approval by the

City. The Consultant shall list on the Subcontractor List (Exhibit D Attachment BB) all Subcontractors known to the Consultant at the time this Agreement is entered. If at any time after this Agreement is entered into the Consultant identifies a need for additional Subcontractor Services, the Consultant shall give written notice to the City of the need, at least forty-five days before entering into a contract for such Subcontractor Services. The Consultant's notice shall include a justification, a description of the Scope of Services, and an estimate of all costs for the Subcontractor Services. The Consultant may request that the City reduce the forty-five day notice period. The City agrees to consider such requests in good faith.

4.4.1 Subcontractor Contract. All contracts entered into between the Consultant and any Subcontractor shall contain the information as described in Sections 4.6 and 4.7, and shall also provide as follows:

4.4.1.1 The Consultant shall require the Subcontractor to obtain insurance policies, as described in Section 4.3.1, and those policies shall be kept in full force and effect during any and all work on this Project and for the duration of this Agreement. Furthermore, Subcontractor policy limits, and required endorsements shall be determined by the Consultant proportionate to the services performed by the Subcontractor.

4.4.1.2 The Consultant is obligated to pay the Subcontractor, for Consultant and City-approved invoice amounts, out of amounts paid by the City to the Consultant, not later than fourteen working days from the Consultant's receipt of payment from the City. Nothing in this paragraph shall be construed to impair the right of the Consultant and any Subcontractor to negotiate fair and reasonable pricing and payment provisions among themselves.

4.4.1.3 In the case of a deficiency in the performance of Subcontractor Services, the Consultant shall notify the City in writing of any withholding of payment to the Subcontractor, specifying: (a) the amount withheld; (b) the specific cause under the terms of the subcontract for withholding payment; (c) the connection between the cause for withholding payment and the amount withheld; and (d) the remedial action the Subcontractor must take in order to receive the amount withheld. Once the Subcontractor corrects the deficiency, the Consultant shall pay the Subcontractor the amount withheld within fourteen working days of the Consultant's receipt of the City's next payment.

4.4.1.4 In any dispute between the Consultant and Subcontractor, the City shall not be made a party to any judicial or administrative proceeding to resolve the dispute. The Consultant agrees to defend and indemnify the City as described in Article VI of this Agreement in any dispute between the Consultant and Subcontractor should the City be made a party to any judicial or administrative proceeding to resolve the dispute in violation of this position.

4.4.1.5 The Subcontractor is bound to the City's Equal Opportunity Contracting Program covenants set forth in Article IV, Section 4.6 and Exhibit D of this Agreement.

4.4.1.6 The City is an intended beneficiary of any work performed by the Subcontractor for purposes of establishing a duty of care between the Subcontractor and the City.

4.5 Contract Activity Report. The Consultant shall submit statistical information to the City as requested in the City's Contract Activity Report (Exhibit D Attachment CC). The statistical information shall include the amount of subcontracting provided by firms during the period covered by the Contract Activity Report. With the Contract Activity Report, the Consultant shall provide an invoice from each Subcontractor listed in the report. The Consultant agrees to issue payment to each firm listed in the Report within fourteen working days of receiving payment from the City for Subcontractor Services as described in Section 4.4.1.

4.6 Non-Discrimination Requirements.

4.6.1 Compliance with the City's Equal Opportunity Contracting Program. The Consultant shall comply with the City's Equal Opportunity Contracting Program Consultant Requirements (Exhibit D). The Consultant shall not discriminate against any employee or applicant for employment on any basis prohibited by law. The Consultant shall provide equal opportunity in all employment practices. The Consultant shall ensure that its Subcontractors comply with the City's Equal Opportunity Contracting Program Consultant Requirements. Nothing in this Section shall be interpreted to hold the Consultant liable for any discriminatory practice of its Subcontractors.

4.6.2 Non-Discrimination Ordinance. The Consultant shall not discriminate on the basis of race, gender, religion, national origin, ethnicity, sexual orientation, age, or disability in the solicitation, selection, hiring or treatment of Subcontractors, vendors or suppliers. The Consultant shall provide equal opportunity for Subcontractors to participate in subcontracting opportunities. The Consultant understands and agrees that violation of this clause shall be considered a material breach of the contract and may result in contract termination, debarment, or other sanctions. This language shall be in contracts between the Consultant and any Subcontractors, vendors and suppliers.

4.6.3 Compliance Investigations. Upon the City's request, the Consultant agrees to provide to the City, within sixty calendar days, a truthful and complete list of the names of all Subcontractors, vendors, and suppliers that the Consultant has used in the past five years on any of its contracts that were undertaken within San Diego County, including the total dollar amount paid by the Consultant for each subcontract or supply contract. The Consultant further agrees to fully cooperate in any investigation conducted by the City pursuant to the City's Nondiscrimination in Contracting Ordinance [San Diego Municipal Code sections 22.3501-22.3517.] The Consultant understands and agrees that violation of this clause shall be considered a material breach of the contract and may result in remedies being ordered against the Consultant up to and including contract termination, debarment, and other sanctions for violation of the provisions of the Nondiscrimination in Contracting Ordinance. The Consultant further understands and agrees that the procedures, remedies and sanctions provided for in the Nondiscrimination Ordinance apply only to violations of said Nondiscrimination Ordinance.

4.7 Drug-Free Workplace. By signing this agreement, the Consultant certifies and agrees to comply with the City's Drug-Free Workplace requirements set forth in Council Policy 100-17, adopted by San Diego Resolution R-277952 and incorporated into this Agreement by this reference.

4.7.1 Consultant's Notice to Employees. The Consultant shall publish a statement notifying employees that the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited in the work place, and specifying the actions that will be taken against employees for violations of the prohibition.

4.7.2 Drug-Free Awareness Program. The Consultant shall establish a drug-free awareness program to inform employees about all of the following:

4.7.2.1 The dangers of drug abuse in the work place.

4.7.2.2 The policy of maintaining a drug-free work place.

4.7.2.3 Available drug counseling, rehabilitation, and employee assistance programs.

4.7.2.4 The penalties that may be imposed upon employees for drug abuse violations.

4.7.3 Posting the Statement. In addition to Section 4.7.1 above, the Consultant shall post the drug-free policy in a prominent place.

4.7.4 Subcontractor's Agreements. The Consultant further certifies that each contract for Subcontractor Services for this Agreement shall contain language that binds the Subcontractor to comply with the provisions of Article IV, Section 4.7 of this Agreement, as required by Sections 2.A.(1) through (3) of Council Policy 100-17. Consultants and Subcontractors shall be individually responsible for their own drug-free work place program.

4.8 Product Endorsement. The Consultant acknowledges and agrees to comply with the provisions of City of San Diego Administrative Regulation 95.65, concerning product endorsement. Any advertisement identifying or referring to the City as the user of a product or service requires the prior written approval of the City.

4.9 Conflict of Interest. The Consultant is subject to all federal, state and local conflict of interest laws, regulations, and policies applicable to public contracts and procurement practices, including but not limited to California Government Code sections 1090, et. seq. and 81000, et. seq., and the City of San Diego Ethics Ordinance, codified in the San Diego Municipal Code at sections 27.3501 to 27.3595.

4.9.1 If, in performing the Services set forth in this Agreement, the Consultant makes, or participates in, a "governmental decision" as described in Title 2, section 18701(a)(2) of the California Code of Regulations, or performs the same or substantially all the same duties for the City that would otherwise be performed by a City employee holding a position specified in the department's conflict of interest code, the Consultant shall be subject to a conflict of interest code requiring the completion of one or more statements of economic interests disclosing the Consultant's relevant financial interests. The determination as to whether any individual members of the Consultant's organization must make disclosures of relevant financial interests is set forth in the Determination Form (Exhibit H).

4.9.1.1 Statements of economic interests shall be made on Fair Political Practices Commission Form 700 and filed with the City Clerk. The Consultant shall file a Form 700 (Assuming Office Statement) within thirty calendar days of the City's determination that the Consultant is subject to a conflict of interest code. The Consultant shall also file a Form 700 (Annual Statement) on or before April 1, disclosing any financial interests held during the previous calendar year for which the Consultant was subject to a conflict of interest code.

4.9.1.2 If the City requires the Consultant to file a statement of economic interests as a result of the Services performed, the Consultant shall be considered a "City Official" subject to the provisions of the City of San Diego Ethics Ordinance, including the prohibition against lobbying the City for one year following the termination of this Agreement.

4.9.2 The Consultant shall establish and make known to its employees and agents appropriate safeguards to prohibit employees from using their positions for a purpose that is, or that gives the appearance of being, motivated by the desire for private gain for themselves or others, particularly those with whom they have family, business, or other relationships.

4.9.3 The Consultant's personnel employed for the Services shall not accept gratuities or any other favors from any Subcontractors or potential Subcontractors. The Consultant shall not recommend or specify any product, supplier, or contractor with whom the Consultant has a direct or indirect financial or organizational interest or relationship that would violate conflict of interest laws, regulations, or policies.

4.9.4 If the Consultant violates any conflict of interest law or any of the provisions in this Section 4.9, the violation shall be grounds for immediate termination of this Agreement. Further, the violation subjects the Consultant to liability to the City for attorneys fees and all damages sustained as a result of the violation.

4.10 Mandatory Assistance. If a third party dispute or litigation, or both, arises out of, or relates in any way to the Services provided under this Agreement, upon the City's request, the Consultant, its agents, officers, and employees agree to assist in resolving the dispute or litigation. The Consultant's assistance includes, but is not limited to, providing professional consultations, attending mediations, arbitrations, depositions, trials or any event related to the dispute resolution and/or litigation.

4.11 Compensation for Mandatory Assistance. The City will compensate the Consultant for fees incurred for providing Mandatory Assistance as Additional Services under Section 3.3. If, however, the fees incurred for the Mandatory Assistance are determined, through resolution of the third party dispute or litigation, or both, to be attributable in whole, or in part, to the acts or omissions of the Consultant, its agents, officers, and employees, the Consultant shall reimburse the City. The City is then entitled to reimbursement of all fees paid to the Consultant, its agents, officers, and employees for Mandatory Assistance.

4.12 Attorney Fees related to Mandatory Assistance. In providing the City with dispute or litigation assistance, the Consultant or its agents, officers, and employees may incur expenses and/or costs. The Consultant agrees that any attorney fees it may incur as a result of assistance provided under Section 4.11 are not reimbursable. The Parties agree this provision

does not in any way affect their rights to seek attorney fees under Article VIII, Section 8.8 of this Agreement.

4.13 Notification of Increased Construction Cost. If applicable, at any time prior to the City's approval of the final plans, specifications, studies, or report, the Consultant anticipates that the total construction cost will exceed the estimated construction budget, the Consultant shall immediately notify the City in writing. This written notification shall include an itemized cost estimate and a list of recommended revisions which the Consultant believes will bring the construction cost to within the estimated construction budget. The City may either: (1) approve an increase in the amount authorized for construction; or (2) delineate a project which may be constructed for the budget amount; or (3) any combination of (1) and (2).

4.14 ADA Certification. By signing this agreement, the Consultant hereby certifies that it agrees to comply with the City's Americans With Disabilities Act Compliance/City Contracts requirements set forth in Council Policy 100-04, adopted by San Diego Resolution R-282153 and incorporated into this Agreement by this reference.

4.15 Prevailing Wage Rates: Prevailing wage rates apply to this Agreement.

Pursuant to San Diego Municipal Code section 22.3019, construction, alteration, demolition, repair and maintenance work performed under this Agreement is subject to State prevailing wage laws. For construction work performed under this Agreement cumulatively exceeding \$25,000 and for alteration, demolition, repair and maintenance work performed under this Agreement cumulatively exceeding \$15,000, the Consultant and its subconsultants shall comply with State prevailing wage laws including, but not limited to, the requirements listed below.

4.15.1. Compliance with Prevailing Wage Requirements. Pursuant to sections 1720 through 1861 of the California Labor Code, the Consultant and its subconsultants shall ensure that all workers who perform work under this Agreement are paid not less than the prevailing rate of per diem wages as determined by the Director of the California Department of Industrial Relations (DIR). This includes work performed during the design and preconstruction phases of construction including, but not limited to, inspection and land surveying work.

4.15.1.1. Copies of such prevailing rate of per diem wages are on file at the City and are available for inspection to any interested party on request. Copies of the prevailing rate of per diem wages also may be found at <http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm>. Consultant and its subconsultants shall post a copy of the prevailing rate of per diem wages determination at each job site and shall make them available to any interested party upon request.

4.15.1.2. The wage rates determined by the DIR refer to expiration dates. If the published wage rate does not refer to a predetermined wage rate to be paid after the expiration date, then the published rate of wage shall be in effect for the life of this Agreement. If the published wage rate refers to a predetermined wage rate to become effective upon expiration of the published wage rate and the

predetermined wage rate is on file with the DIR, such predetermined wage rate shall become effective on the date following the expiration date and shall apply to this Agreement in the same manner as if it had been published in said publication. If the predetermined wage rate refers to one or more additional expiration dates with additional predetermined wage rates, which expiration dates occur during the life of this Agreement, each successive predetermined wage rate shall apply to this Agreement on the date following the expiration date of the previous wage rate. If the last of such predetermined wage rates expires during the life of this Agreement, such wage rate shall apply to the balance of the Agreement.

4.15.2. Penalties for Violations. Consultant and its subconsultants shall comply with California Labor Code section 1775 in the event a worker is paid less than the prevailing wage rate for the work or craft in which the worker is employed.

4.15.3. Payroll Records. Consultant and its subconsultants shall comply with California Labor Code section 1776, which generally requires keeping accurate payroll records, verifying and certifying payroll records, and making them available for inspection. Consultant shall require its subconsultants to also comply with section 1776. Consultant and its subconsultants shall submit weekly certified payroll records online via the City's web-based Labor Compliance Program. Consultant is responsible for ensuring its subconsultants submit certified payroll records to the City.

4.15.3.1. For agreements entered into on or after April 1, 2015, Consultant and their subconsultants shall furnish records specified in Labor Code section 1776 directly to the Labor Commissioner in the manner required by Labor Code section 1771.4.

4.15.4. Apprentices. Consultant and its subconsultants shall comply with California Labor Code sections 1777.5, 1777.6 and 1777.7 concerning the employment and wages of apprentices. Consultant shall be held responsible for the compliance of their subconsultants with sections 1777.5, 1777.6 and 1777.7.

4.15.5. Working Hours. Consultant and their subconsultants shall comply with California Labor Code sections 1810 through 1815, including but not limited to: (i) restrict working hours on public works contracts to eight hours a day and forty hours a week, unless all hours worked in excess of 8 hours per day are compensated at not less than 1½ times the basic rate of pay; and (ii) specify penalties to be imposed on design professionals and subcontractors of \$25 per worker per day for each day the worker works more than 8 hours per day and 40 hours per week in violation of California Labor Code sections 1810 through 1815.

4.15.6. Required Provisions for Subcontracts. Consultant shall include at a minimum a copy of the following provisions in any contract they enter into with a subconsultant: California Labor Code sections 1771, 1771.1, 1775, 1776, 1777.5, 1810, 1813, 1815, 1860 and 1861.

4.15.7. Labor Code Section 1861 Certification. Consultant in accordance with California Labor Code section 3700 is required to secure the payment of compensation of its employees and by signing this Agreement, Consultant certifies that “I am aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for workers’ compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this Agreement.”

4.15.8. Labor Compliance Program. The City has its own Labor Compliance Program authorized in August 2011 by the DIR. The City will withhold contract payments when payroll records are delinquent or deemed inadequate by the City or other governmental entity, or it has been established after an investigation by the City or other governmental entity that underpayment(s) have occurred. For questions or assistance, please contact the City of San Diego’s Equal Opportunity Contracting Department at 619-236-6000.

4.15.9. Contractor and Subcontractor Registration Requirements. This project is subject to compliance monitoring and enforcement by the DIR. As of March 1, 2015, no Consultant or subconsultant may be listed on a bid or proposal for a public works project unless registered with the DIR pursuant to Labor Code section 1725.5. As of April 1, 2015, a Consultant or subcontractor shall not be qualified to bid on, be listed in a bid or proposal, or enter into any contract for public work, unless currently registered and qualified to perform public work pursuant to Labor Code section 1725.5. By submitting a bid or proposal to the City, Consultant is certifying that he or she has verified that all subcontractors used on this public work project are registered with the DIR in compliance with Labor Code sections 1771.1 and 1725.5, and Consultant shall provide proof of registration to the City upon request.

4.15.9.1. A Design Professional’s inadvertent error in listing a subconsultant who is not registered pursuant to Labor Code section 1725.5 in response to a solicitation shall not be grounds for filing a protest or grounds for considering the bid or proposal non-responsive provided that any of the following apply: (1) the subconsultant is registered prior to proposal due date; (2) within twenty-four hours after the proposal due date, the subconsultant is registered and has paid the penalty registration fee specified in Labor Code section 1725.5; or (3) the subconsultant is replaced by another registered subconsultant pursuant to Public Contract Code section 4107.

**ARTICLE V
RESERVED**

**ARTICLE VI
INDEMNIFICATION**

6.1 Indemnification and Hold Harmless Agreement. With respect to any liability, including but not limited to claims asserted or costs, losses, or payments for injury to any person or property caused or claimed to be caused by the acts or omissions of the Consultant, or Consultant's employees, agents, and officers, arising out of any services performed under this

Agreement, the Consultant agrees to defend, indemnify, protect, and hold harmless the City, its agents, officers, and employees from and against all liability. Also covered is liability arising from, connected with, caused by, or claimed to be caused by the passive negligent acts or omissions of the City, its agents, officers, or employees which may be in combination with the active or passive negligent acts or omissions of the Consultant, its employees, agents or officers, or any third party. The Consultant's duty to defend, indemnify, protect and hold harmless shall not include any claims or liabilities arising from the active or sole negligence or sole willful misconduct of the City, its agents, officers or employees.

ARTICLE VII MEDIATION

7.1 Mandatory Non-binding Mediation. With the exception of Sections 2.5-2.7 of this Agreement, if a dispute arises out of, or relates to this Agreement, or the breach thereof, and if said dispute cannot be settled through normal contract negotiations, prior to the initiation of any litigation, the Parties agree to attempt to settle the dispute in an amicable manner, using mandatory mediation under the Construction Industry Mediation Rules of the American Arbitration Association [AAA] or any other neutral organization agreed upon before having recourse in a court of law.

7.2 Mandatory Mediation Costs. The expenses of witnesses for either side shall be paid by the Party producing such witnesses. All other expenses of the mediation, including required traveling and other expenses of the mediator [Mediator], and the cost of any proofs or expert advice produced at the direct request of the Mediator, shall be borne equally by the Parties, unless they agree otherwise.

7.3 Selection of Mediator. A single Mediator that is acceptable to both Parties shall be used to mediate the dispute. The Mediator will be knowledgeable in construction aspects and may be selected from lists furnished by the AAA or any other agreed upon Mediator. To initiate mediation, the initiating Party shall serve a Request for Mediation on the opposing Party. If the Mediator is selected from a list provided by AAA, the initiating Party shall concurrently file with AAA a "Request for Mediation" along with the appropriate fees, a list of three requested Mediators marked in preference order, and a preference for available dates.

7.3.1 If AAA is selected to coordinate the mediation [Administrator], within ten working days from the receipt of the initiating Party's Request for Mediation, the opposing Party shall file the following: a list of preferred Mediators listed in preference order after striking any Mediators to which they have any factual objection, and a preference for available dates. If the opposing Party strikes all of initiating Party's preferred Mediators, opposing Party shall submit a list of three preferred Mediators listed in preference order to initiating Party and Administrator. Initiating Party shall file a list of preferred Mediators listed in preference order, after striking any Mediator to which they have any factual objection. This process shall continue until both sides have agreed upon a Mediator.

7.3.2 The Administrator will appoint or the Parties shall agree upon the highest, mutually preferred Mediator from the individual Parties' lists who is available to serve within the designated time frame.

7.3.3 If the Parties agree not to use AAA, then a Mediator, date and place for the mediation shall be mutually agreed upon.

7.4 Conduct of Mediation Sessions. Mediation hearings will be conducted in an informal manner and discovery will not be allowed. All discussions, statements, or admissions will be confidential to the Party's legal position. The Parties may agree to exchange any information they deem necessary.

7.4.1 Both Parties must have an authorized representative attend the mediation. Each representative must have the authority to recommend entering into a settlement. Either Party may have attorney(s) or expert(s) present. Upon reasonable demand, either Party may request and receive a list of witnesses and notification whether attorney(s) will be present.

7.4.2 Any agreements resulting from mediation shall be documented in writing. All mediation results and documentation, by themselves, shall be "non-binding" and inadmissible for any purpose in any legal proceeding, unless such admission is otherwise agreed upon, in writing, by both Parties. Mediators shall not be subject to any subpoena or liability and their actions shall not be subject to discovery.

ARTICLE VIII INTELLECTUAL PROPERTY RIGHTS

8.1 Work For Hire. All original designs, plans, specifications, reports, documentation, and other informational materials, whether written or readable by machine, originated or prepared exclusively for the City pursuant to this Agreement (Deliverable Materials) is "work for hire" under the United States Copyright law and shall become the sole property of the City. The Consultant, including its employees, and independent Subcontractor(s), shall not assert any common law or statutory patent, copyright, trademark, or any other intellectual proprietary right to the City to the deliverable Materials.

8.2. Rights in Data. All rights (including, but not limited to publication(s), registration of copyright(s), and trademark(s) in the Deliverable Materials, developed by the Consultant, including its employees, agents, talent and independent Subcontractors pursuant to this Agreement are the sole property of the City. The Consultant, including its employees, agents, talent, and independent Subcontractor(s), may not use any such Product mentioned in this article for purposes unrelated to Consultant's work on behalf of the City without prior written consent of the City.

8.3 Intellectual Property Rights Assignment. Consultant, its employees, agents, talent, and independent Subcontractor(s) agree to promptly execute and deliver, upon request by City or any of its successors or assigns at any time and without further compensation of any kind, any power of attorney, assignment, application for copyright, patent, trademark or other intellectual property right protection, or other papers or instruments which may be necessary or desirable to fully secure, perfect or otherwise protect to or for the City, its successors and assigns, all right, title and interest in and to the content of the Deliverable Materials; and cooperate and assist in the prosecution of any action or opposition proceeding involving said rights and any adjudication of the same.

8.4 Moral Rights. Consultant, its employees, agents, talent, and independent Subcontractor(s) hereby irrevocably and forever waives, and agrees never to assert, any Moral Rights in or to the Deliverable Materials which Consultant, its employees, agents, talent, and independent Subcontractor(s), may now have or which may accrue to Consultant, its employees, agents, talent, and independent Subcontractor(s)' benefit under U.S. or foreign copyright laws and any and all other residual rights and benefits which arise under any other applicable law now in force or hereafter enacted. The term "Moral Rights" shall mean any and all rights of paternity or integrity in or to the Deliverable Materials and the right to object to any modification, translation or use of said content, and any similar rights existing under judicial or statutory law of any country in the world or under any treaty, regardless of whether or not such right is denominated or referred to as a moral right.

8.5 Subcontracting. In the event that Consultant utilizes a Subcontractor(s) for any portion of the Work that is in whole or in part of the specified Deliverable(s) to the City, the agreement between Consultant and the Subcontractor [Subcontractor Agreement] shall include a statement that identifies that the Deliverable/Work product as a "work-for hire" as defined in the Act and that all intellectual property rights in the Deliverable/Work product, whether arising in copyright, trademark, service mark or other belongs to and shall vest solely with the City. Further, the Subcontractor Agreement shall require that the Subcontractor, if necessary, shall grant, transfer, sell and assign, free of charge, exclusively to the City, all titles, rights and interests in and to said Work/Deliverable, including all copyrights and other intellectual property rights. City shall have the right to review any Subcontractor agreement for compliance with this provision.

8.6 Publication. Consultant may not publish or reproduce any Deliverable Materials, for purposes unrelated to Consultant's work on behalf of the City without prior written consent of the City.

8.7 Intellectual Property Warranty and Indemnification. Consultant represents and warrants that any materials or deliverables, including all Deliverable Materials, provided under this contract are either original, not encumbered and do not infringe upon the copyright, trademark, patent or other intellectual property rights of any third party, or are in the public domain. If Deliverable Materials provided hereunder become the subject of a claim, suit or allegation of copyright, trademark or patent infringement, City shall have the right, in its sole discretion, to require Consultant to produce, at Consultant's own expense, new non-infringing materials, deliverables or Works as a means of remedying any claim of infringement in addition to any other remedy available to the City under law or equity. Consultant further agrees to indemnify and hold harmless the City, its officers, employees and agents from and against any and all claims, actions, costs, judgments or damages of any type alleging or threatening that any materials, deliverables, supplies, equipment, services or Works provided under this contract infringe the copyright, trademark, patent or other intellectual property or proprietary rights of any third party (Third Party Claims of Infringement). If a Third Party Claim of Infringement is threatened or made before Consultant receives payment under this contract, City shall be entitled, upon written notice to Consultant, to withhold some or all of such payment.

8.8 Enforcement Costs. The Consultant agrees to pay any and all costs the City incurs enforcing the indemnity and defense provisions set forth in Article 8, including but not limited to, attorney's fees.

8.9 Ownership of Documents. Once the Consultant has received any compensation for the Professional Services performed under this Agreement, all documents, including but not limited to, original plans, maps, studies, sketches, drawings, computer printouts and disk files, and specifications prepared in connection with or related to the Scope of Services or Professional Services, shall be the property of the City.

ARTICLE IX MISCELLANEOUS

9.1 Notices. In all cases where written notice is required under this Agreement, service shall be deemed sufficient if the notice is deposited in the United States mail, postage paid. Proper notice shall be effective on the date it is mailed, unless provided otherwise in this Agreement. For the purpose of this Agreement, unless otherwise agreed in writing, notice to the City shall be addressed to: Public Utilities Department, 9192 Topaz Way, San Diego, Ca 92123», Attn: Richard VanderSchaaf, MS901 and notice to the Consultant shall be addressed to: Black & Veatch Corporation, c/o Andi Corrao, P.E., Project Manager, 300 Rancheros Drive, Suite 250, San Marcos, CA 92069.

9.2 Headings. All article headings are for convenience only and shall not affect the interpretation of this Agreement.

9.3 Non-Assignment. The Consultant shall not assign the obligations under this Agreement, whether by express assignment or by sale of the company, nor any monies due or to become due, without the City's prior written approval. Any assignment in violation of this paragraph shall constitute a Default and is grounds for immediate termination of this Agreement, at the sole discretion of the City. In no event shall any putative assignment create a contractual relationship between the City and any putative assignee.

9.4 Independent Contractors. The Consultant and any Subcontractors employed by the Consultant shall be independent contractors and not agents of the City. Any provisions of this Agreement that may appear to give the City any right to direct the Consultant concerning the details of performing the Services, or to exercise any control over such performance, shall mean only that the Consultant shall follow the direction of the City concerning the end results of the performance.

9.5 Consultant and Subcontractor Principals for Consultant Services. It is understood that this Agreement is for unique Professional Services. Retention of the Consultant's Professional Services is based on the particular professional expertise of the following members of the Consultant's organization: Kevin N. Davis, P.E. and Andi Corrao, P.E. [Project Team]. Accordingly, performance of Professional Services on the Project may not be delegated to other members of the Consultant's organization or to Subcontractors without the prior written consent of the City. It is mutually agreed that the members of the Project Team are the principal persons responsible for delivery of all Professional Services and may not be removed from the Project without the City's prior written approval. Removal of any member of the Project Team without notice and approval by the City may be considered a default of the terms and conditions of this Agreement by the Consultant. In the event any member of the Project Team becomes unavailable for any reason, the City must be consulted as to any replacement. If the City does not approve of a proposed replacement, the City may terminate this Agreement pursuant to section 2.6 of this

Agreement. Further, the City reserves the right, after consultation with the Consultant, to require any of the Consultant's employees or agents to be removed from the Project.

9.6 Covenants and Conditions. All provisions of this Agreement expressed as either covenants or conditions on the part of the City or the Consultant, shall be deemed to be both covenants and conditions.

9.7 Compliance with Controlling Law. The Consultant shall comply with all laws, ordinances, regulations, and policies of the federal, state, and local governments applicable to this Agreement. In addition, the Consultant shall comply immediately with all directives issued by the City or its authorized representatives under authority of any laws, statutes, ordinances, rules, or regulations. The laws of the State of California shall govern and control the terms and conditions of this Agreement.

9.8 Jurisdiction. The jurisdiction and applicable laws for any suit or proceeding concerning this Agreement, the interpretation or application of any of its terms, or any related disputes shall be in accordance with the laws of the State of California.

9.9 Successors in Interest. This Agreement and all rights and obligations created by this Agreement shall be in force and effect whether or not any Parties to the Agreement have been succeeded by another entity, and all rights and obligations created by this Agreement shall be vested and binding on any Party's successor in interest.

9.10 Integration. This Agreement and the Exhibits and references incorporated into this Agreement fully express all understandings of the Parties concerning the matters covered in this Agreement. No change, alteration, amendment, or modification of the terms or conditions of this Agreement, and no verbal understanding of the Parties, their officers, agents, or employees shall be valid unless made in the form of a written change agreed to in writing by both Parties. All prior negotiations and agreements are merged into this Agreement.

9.11 Counterparts. This Agreement may be executed in counterparts, which when taken together shall constitute a single signed original as though all Parties had executed the same page.

9.12 No Waiver. No failure of either the City or the Consultant to insist upon the strict performance by the other of any covenant, term or condition of this Agreement, nor any failure to exercise any right or remedy consequent upon a breach of any covenant, term, or condition of this Agreement, shall constitute a waiver of any such breach of such covenant, term or condition. No waiver of any breach shall affect or alter this Agreement, and each and every covenant, condition, and term hereof shall continue in full force and effect without respect to any existing or subsequent breach.

9.13 Severability. The unenforceability, invalidity, or illegality of any provision of this Agreement shall not render any other provision of this Agreement unenforceable, invalid, or illegal.

9.14 Additional Consultants or Contractors. The City reserves the right to employ, at its own expense, such additional Consultants or contractors as the City deems necessary to perform work or to provide the Services.

9.15 Employment of City Staff. This Agreement may be unilaterally and immediately terminated by the City, at its sole discretion, if the Consultant employs an individual who, within the last twelve months immediately preceding such employment did, in the individual's capacity as an officer or employee of the City, participate in, negotiate with, or otherwise have an influence on the recommendation made to the City Council or Mayor in connection with the selection of the Consultant.

9.16 Municipal Powers. Nothing contained in this Agreement shall be construed as a limitation upon the powers of the City as a chartered city of the State of California.

9.17 Drafting Ambiguities. The Parties agree that they are aware that they have the right to be advised by counsel with respect to the negotiations, terms and conditions of this Agreement, and the decision of whether or not to seek advice of counsel with respect to this Agreement is a decision which is the sole responsibility of each Party. This Agreement shall not be construed in favor of or against either Party by reason of the extent to which each Party participated in the drafting of the Agreement.

9.18 Signing Authority. The representative for each Party signing on behalf of a corporation, partnership, joint venture or governmental entity hereby declares that authority has been obtained to sign on behalf of the corporation, partnership, joint venture, or entity and agrees to hold the other Party or Parties hereto harmless if it is later determined that such authority does not exist.

9.19 Conflicts Between Terms. If an apparent conflict or inconsistency exists between the main body of this Agreement and the Exhibits, the main body of this Agreement shall control. If a conflict exists between an applicable federal, state, or local law, rule, regulation, order, or code and this Agreement, the law, rule, regulation, order, or code shall control. Varying degrees of stringency among the main body of this Agreement, the Exhibits, and laws, rules, regulations, orders, or codes are not deemed conflicts, and the most stringent requirement shall control. Each Party shall notify the other immediately upon the identification of any apparent conflict or inconsistency concerning this Agreement.

9.20 Consultant Evaluation. City will evaluate Consultant's performance of Services using the Consultant Evaluation Form (Exhibit F).

9.21 Exhibits Incorporated. All Exhibits referenced in this Agreement are incorporated into the Agreement by this reference.

9.22 Survival of Obligations. All representations, indemnifications, warranties and guarantees made in, required by or given in accordance with this Agreement, as well as all continuing obligations indicated in this Agreement, shall survive, completion and acceptance of the Professional Services and termination or completion of the Agreement.

9.23 Contractor Standards. This Agreement is subject to the Contractor Standards clause of the Municipal Code Chapter 2, Article 2, Division 32 adopted by Ordinance No. O-19383. All consultants are required to complete the Contractor Standards Pledge of Compliance included herein as Exhibit G. The Contractor Standards are available online at www.sandiego.gov/purchasing/vendor/index.shtml or by request from the Purchasing & Contracting Department by calling (619) 236-6000. By signing this Agreement, the consultant here by certifies they have complied with this requirement.

9.24 Equal Benefits Ordinance. This Agreement is subject to the Equal Benefits Ordinance [EBO]. All consultants are required to complete the Equal Benefits Ordinance Certification of Compliance included herein as Exhibit I. Effective January 1, 2011, any contract awarded from this solicitation is subject to the City of San Diego's Equal Benefits Ordinance [EBO], Chapter 2, Article 2, Division 43 of the San Diego Municipal Code [SDMC].

In accordance with the EBO, contractors must certify they will provide and maintain equal benefits as defined in SDMC §22.4302 for the duration of the contract [SDMC §22.4304(f)]. Failure to maintain equal benefits is a material breach of the contract [SDMC §22.4304(e)]. Contractors must notify employees of their equal benefits policy at the time of hire and during open enrollment periods and must post a copy of the following statement in an area frequented by employees:

During the performance of a contract with the City of San Diego, this employer will provide equal benefits to its employees with spouses and its employees with domestic partners.

Contractors also must give the City access to documents and records sufficient for the City to verify the contractors are providing equal benefits and otherwise complying with EBO requirements. Full text of the EBO and the Rules Implementing the Equal Benefits Ordinance are posted on the City's website at www.sandiego.gov/purchasing/ or can be requested from the Equal Benefits Program at (619) 533-3948. By signing this Agreement, the consultant here by certifies they have complied with this requirement.

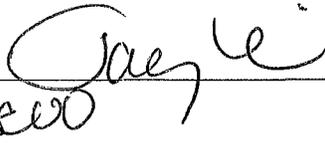
9.25 Public Records. By signing the agreement, the Consultant agrees that this contract is a public document subject to the California Public Records Act, and as such may be subject to public review per Exhibit J (Regarding Information Requested under the California Public Records Act).

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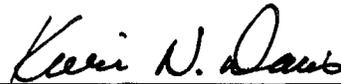
IN WITNESS WHEREOF, this Agreement is executed by the City of San Diego, acting by and through its Mayor, pursuant to R- 309451 authorizing such execution, and by the Consultant pursuant to Black & Veatch Corporation's signature authority document.

Dated this 23 day of February, 2015

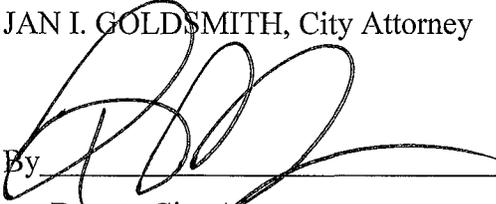
THE CITY OF SAN DIEGO
Mayor or Designee

By 

I HEREBY CERTIFY I can legally bind Black & Veatch Corporation and that I have read all of this Agreement, this 31 day of October, 2014.

By 
Kevin N. Davis, P.E.
Associate Vice President

I HEREBY APPROVE the form of the foregoing Agreement this 2 day of March, 2015

JAN I. GOLDSMITH, City Attorney
By 
Deputy City Attorney
Raymond C. Palmucci

CONSULTANT AGREEMENT EXHIBITS

- Exhibit A - Scope of Services
- Exhibit B - Compensation and Fee Schedule
- Exhibit C - Time Schedule
- Exhibit D - City's Equal Opportunity Contracting Program Consultant Requirements
 - (AA) Work Force Report
 - (BB) Subcontractors List
 - (CC) Contract Activity Report
 - (DD) Consultant Past Participation List
- Exhibit E - Reserved
- Exhibit F - Consultant Evaluation Form
- Exhibit G - Contractor Standards Pledge of Compliance
- Exhibit H - Determination Form
- Exhibit I - Equal Benefits Ordinance Certification of Compliance
- Exhibit J - Regarding Information Requested Under the California Public Records Act
- Exhibit K - Reserved

SCOPE OF SERVICES
For Programmatic Water Transmission Pipelines
Condition Assessment
(H146197)

This Scope of Services defines the extent of the Black & Veatch's (CONSULTANT's) services necessary to complete the required work and documents specified herein for the PROGRAMMATIC WATER TRANSMISSION PIPELINES CONDITION ASSESSMENT, herein referred to as the PROJECT.

1.0 PURPOSE AND DESCRIPTION

The City of San Diego, (City), Public Utilities Department (PUD) requires professional engineering consultant services to perform condition assessment inspections and risk analysis of 34 water transmission pipelines. These transmission pipelines have been in service for 40 or more years and vary in size from 20-inch to 54-inch in diameter. In addition, 16-inch and 18-inch extensions to the transmission pipelines will be included in the assessment work. Pipeline materials are primarily reinforced concrete steel cylinder (RCSC) pipe, steel cylinder rod wrapped (SCRW) pipe, and cement mortar lined and coated (CML&C) steel pipe. Of the 34 pipelines, three convey raw water and 31 convey potable water.

There are two Scope Elements, described as follows:

1.1 Condition Assessment of Three Raw Water Transmission Pipelines

The three raw water transmission pipelines for inspection and condition assessments are the San Vicente Raw Water Pipeline No. 1, San Vicente Raw Water Pipeline No. 2, and the Sutherland Raw Water Pipeline. The objectives of raw water pipeline inspections and assessments are to determine the current condition, estimate the remaining service life, determine rehabilitation needs, and estimate the costs of rehabilitation. This will be accomplished by 1) identifying and locating defects and other conditions that may present a risk of water supply service interruption, and 2) evaluating and documenting structural integrity, liner integrity, and other defects that affect the serviceability and reliability of the pipeline.

1.1.1 San Vicente Pipelines

The San Vicente Raw Water Pipeline No. 1 was constructed in the early 1940s and consists of approximately 22,100 feet of 42-inch SCRW pipe. In 2000, 20 test stations were installed on this pipeline and, through testing, the line was found to be electrically discontinuous. Pipe-to-soil

potential testing indicates that slow uniform corrosion activity likely occurring.

The San Vicente Raw Water Pipeline No. 2 was constructed in the mid 1940s and consists of approximately 21,800 feet of 48-inch RCSC pipe.

The pipelines receive raw water from either the San Vicente Reservoir via the new County Water Authority (CWA) Interconnect Pipeline or from the CWA Aqueduct Pipeline via the Weir Structure and interconnecting pipelines. The raw water pipelines terminate at their connections to the 68-inch El Monte Raw Water Pipeline near the Lakeside Pump Station at River Street and Woodside Avenue in Lakeside, CA. Operations and maintenance records of the pipelines are limited and do not indicate major problems.

The San Vicente Raw Water Pipelines serve a vital component for the City PUD in delivering raw water from the San Vicente Reservoir to the El Monte Raw Water Pipeline and ultimately to the Alvarado Water Treatment Plant. As described above, the San Vicente Pipeline system includes connections to the CWA system, which enhances the reliability and security of the City's and the regional water supply.

1.1.2 Sutherland Pipeline

The Sutherland Raw Water Pipeline is located in Ramona and transports raw water from the Sutherland Reservoir to San Vicente Creek, which subsequently discharges into San Vicente Reservoir. Construction of the pipeline was completed in 1952. The pipeline consists of three sections of SCRW pipe. The first section starting at the dam is 42-inch diameter Class A/B/C with an approximate length of 17,200 feet; the second section is 36-inch diameter Class E/F with an approximate length of 47,000 feet (part of this pipe section is in a tunnel); and the third and last section is 27-inch diameter Class F with an approximate length of 800 feet. The pipeline alignment is through long stretches of mountainous terrain parallel to Black Canyon Road, before traversing under Ramona Street and a large field where it discharges into San Vicente Creek. The operation and maintenance records of the pipeline are limited and do not indicate major problems. Although there is no cathodic protection on the pipeline, there are four test stations located along a 3,000 foot stretch of Ramona Street. The pipeline is connected to the 20-inch diameter CML&C steel Ramona Pipeline at Station 263+00.

1.2 Condition Assessment of 31 Potable Water Transmission Pipelines

The objectives of this condition assessment are to identify the pipelines and pipeline segments that present risks of failure. This includes evaluating potential likelihood and consequences of pipeline failure, prioritizing the pipelines or

portions of pipelines for future rehabilitation or replacement, preparing planning level action plans and cost estimates for pipeline repair or replacement based on assigned priorities, estimating costs, and incorporating funding levels provided by the City. The work includes performing detailed condition assessments to identify defects and determine the physical conditions that reduce the serviceability of the pipelines to provide continued reliable service. Selection of the pipelines for the detailed assessments will be through a programmatic risk analysis study. Recommended inspection technologies, methodologies, and work plans will be identified. Pipeline appurtenances such as valves, cathodic protection systems, manways, air release valves, vacuum relief valves, drain and blow-off valves, and pipeline structures will be included in the assessments as further defined below in tasks 3 through 6. The list of pipelines is presented in the table below.

List of Pipelines					
No.	Potable Water Transmission Pipeline	Approx. Year Installed	Predominant Pipe Material	Predominant Diameter (inches)	Approx. Length (feet)
1	PERSHING ST. PIPELINE	1941	RCSC	36	4,900
2	MURRAY 1 ST PIPELINE	1942	RCSC	42	13,400
3	ALVARADO 1 ST PIPELINE	1943	RCSC	36	47,200
4	OTAY MESA-BONITA CONNECTION PIPELINE	1944	RCSC	36	9,000
5	THORN STREET PIPELINE	1945	RCSC	42	30,100
6	LAUREL STREET PIPELINE	1946	RCSC	24	6,100
7	COMMERCIAL STREET PIPELINE	1947	RCSC	30	18,500
8	BONITA PIPELINE	1948	SCRW	24	44,100
9	ELECTRIC AVENUE PIPELINE	1949	RCSC	24	27,100
10	TROJAN PIPELINE	1949	RCSC	54	24,500
11	MONTGOMERY PIPELINE	1955	RCSC	36	43,300
12	COLLEGE RANCH FEEDER PIPELINE	1956	RCSC	20	6,600
13	MURRAY 2 ND PIPELINE	1956	RCSC	48	12,200
14	BALBOA PARK PIPELINE	1959	RCSC	24	12,300
15	BALBOA AVENUE PIPELINE	1959	SCRW	24	14,000
16	CATALINA PIPELINE	1959	RCSC	24	16,500
17	DEL MAR HEIGHTS PIPELINE	1960	SCRW	36	50,500
18	ELLIOT PIPELINE	1960	RCSC	42	22,600
19	PARADISE MESA PIPELINE	1960	RCSC	24	3,500
20	RANCHO BERNARDO PIPELINE	1960	SCRW	36	41,000
21	SOUTH SAN DIEGO PIPELINE	1960	RCSC	33	20,400
22	TEXAS STREET PIPELINE	1961	RCSC	24	5,700
23	MIRAMAR EXTENSION PIPELINE	1962	RCSC	36	21,800

24	OTAY MESA PIPELINE	1962	SCRW	24	13,600
25	LOMICA PIPELINE	1962	SCRW	20	17,200
26	SOLEDAD VALLEY PIPELINE	1963	SCRW	24	20,200
27	MIRAMAR CROSS PIPELINE	1964	RCSC	36	6,100
28	PENASQUITOS PIPELINE	1964	SCRW	24	36,300
29	CORONADO PIPELINE	1972	SCRW	20	1,100
30	LINDA VISTA PIPELINE	1972	SCRW	30	12,700
31	OTAY2 PIPELINE - SCRW	1973	SCRW	36	6,300
Approximate total length — 115 miles					608,800

2.0 PROJECT REQUIREMENTS

2.1 Condition Assessment of Three Raw Water Transmission Pipelines

- 1) Review existing documentation on construction, operation, maintenance and condition.
- 2) Evaluate and select most relevant inspection technologies. Identify inspection and access sites based on inspection technologies identified.
- 3) Prepare inspection work plans and schedules. Coordinate schedule with Water Operations staff.
- 4) Identify permit needs (environmental, excavation, and traffic control) and assist in obtaining the necessary permits and clearances to facilitate the inspection from the City and other impacted jurisdictions.
- 5) Provide licensed contractor services to support and facilitate condition assessment scope of services. Activities may include:
 - a. Dewatering pipelines following depressurization and turnover by Water Operations staff.
 - b. Providing filtering of water prior to discharge for Quagga Mussel control.
 - c. Making excavations and removing manway covers to access pipelines.
 - d. Installing necessary appurtenances and equipment for inspection.
 - e. Restoring impacted site areas and pipelines after inspections.
 - f. Providing traffic control.
- 6) Perform inspections by providing and managing field services for inspection, including operations of inspection service providers, subconsultants, and contractor inspection support. Obtain and analyze

material samples, as necessary. Comply with confined space entry, environmental, and other regulatory requirements and regulations as required. Assessments to include pipelines and their appurtenances including but not limited to line valves, vacuum and air relief valves, and blow-off valves, as further defined in the tasks below.

- 7) Interpret inspection data, perform engineering analysis, and document pipeline condition and structural integrity. Identify and locate defects and pipeline conditions within the sections observed and tested that may present a risk of pipe leakage, interruption to service, or failure.
- 8) Determine and assess the risk and consequences of pipeline failure.
- 9) Determine estimated remaining service life.
- 10) Recommend future inspection interval frequency and coverage.
- 11) Develop planning level action plans and cost estimates (as further defined in the tasks below) for identified/recommended rehabilitation, maintenance, and repairs as applicable.
- 12) Summarize all findings in Engineering Reports for each pipeline. Provide inspection data in electronic form (as further defined in the tasks below) coordinated with pipeline station in suitable format for inclusion in City's geographic information system (GIS) based system.
- 13) Perform minor repairs where condition assessment activities may reveal the need to perform immediate or urgent minor repairs of pipelines. The minor repair work which is anticipated to be undertaken may include, but is not limited to, repairs of the following: localized lining defects, inoperative valves and access ways, pipeline joints, fittings, flanges, pipe supports, and cathodic protection systems. The Consultant will have the necessary forces, equipment, experience, and proper license classification. Minor pipeline repairs will be performed as Additional Services Tasks based on an agreed scope and fee for the identified work.

2.2 Condition Assessment of 31 Potable Water Transmission Pipelines

- 1) Obtain, review, and organize existing documentation on construction, condition, and operation of the pipelines. Determine and obtain additional information as necessary through spot inspections and tests to build a risk model for the program-wide analysis.
- 2) Develop lists identifying risk of failure and consequence of failure factors. Develop methodology matrices to evaluate, rank, and quantify risk of failure and consequences of failure factors.

- 3) Perform initial program-wide risk assessment. Evaluate, and set pipeline priority according to risk, consequences, urgency, and other criteria as appropriate. Prepare and deliver a draft and final Initial Programmatic Risk Assessment Technical Memorandum summarizing the findings from the scope tasks above.
- 4) Develop and discuss the methodology and select the pipelines or pipeline segments recommended for secondary, detailed pipeline inspections and condition assessment coverage. Select appropriate inspection technologies to utilize. Package pipelines together based on priority and similar assessment technologies and scheduling criteria for execution of field work. Deliver the results of this task as a Memorandum on the Recommendations for Detailed Pipeline Inspection and Condition Assessments.
- 5) Prepare inspection work plans and schedules for the detailed inspection packages. Identify inspection sites, coordinate schedules with Water Operations, identify permit requirements, and assist in obtaining necessary permits and clearances to facilitate the inspection.
- 6) Provide licensed contractor services to support and facilitate condition assessment scope of services. Activities may include, but are not limited to:
 - a. Dewatering pipelines following depressurization and turnover by Water Operations staff.
 - b. Providing dechlorination of water prior to discharge.
 - c. Making excavations and removing manway covers to access pipelines.
 - d. Providing, installing, and operating necessary appurtenances and equipment for inspections.
 - e. Restoring impacted areas and pipelines after inspections.
 - f. Providing traffic control.
 - g. Disinfecting and flushing potable water pipelines before return to service by Water Operations staff. (Water quality testing will be conducted by City.)
- 7) Provide licensed contractor services to perform minor pipeline repair work, as necessary, in order to conduct proper and effective condition

assessment and for the identified immediate and urgent repairs. Minor pipeline repair work will be performed as Additional Services Tasks based on a negotiated scope and fee for the identified work. The minor repair work which is anticipated to be undertaken may include, but is not limited to, repair of localized lining or coating defects and repairs to inoperative valves, access ways, pipe joints, fittings, pipe supports, and cathodic protection systems.

- 8) Perform inspections by providing and managing field services for inspection, including operations of inspection service providers, subconsultants, and contractor inspection support. Obtain and analyze material samples, as necessary. Comply with confined space entry, environmental, and other regulatory requirements and regulations as required.
- 9) Provide testing and inspection data in hard copy and in electronic format coordinated with pipeline station suitable for inclusion in the City's GIS based system.
- 10) Provide engineering evaluation and interpretation of the detailed inspection and testing data. Identify and locate pipe defects and conditions that may present a risk of pipeline leakage, interruptions to service, or failure. Determine estimated remaining life of pipelines; recommend future inspection frequency and coverage; and develop program level action plans and budget cost estimates for the identified/recommended pipeline replacement, rehabilitation, and repair, as applicable. For Low Priority Pipelines, estimated remaining useful life will be based on available drawings and data provided by the City, limited field investigations, and industry knowledge for similar pipelines and like pipe materials. Deliver the results of field inspections and engineering evaluations in draft and final engineering reports on Programmatic Condition Assessments. Organize data and results by pipelines.
- 11) Update and expand the Initial Programmatic Risk Assessment Technical Memorandum based in the findings and recommendations of the detailed pipeline assessments. Update likelihood of failure and consequence of failure factors, as necessary. Update pipeline replacement/rehabilitation priority ranking based on criticality, need, and other factors. Perform financial analysis for the recommended replacement/rehabilitation of the transmission pipelines utilizing budget level cost estimates. Determine a program pipeline rehabilitation/replacement schedule based on available funding levels provided by the City. Recommend future program-wide pipeline inspection frequency and coverage. Summarize and deliver the results of this task in a draft and final Programmatic Transmission Pipeline Risk Assessment Analysis and Pipeline Replacement Program Report.

- 12) Plan and conduct Technical Workshops with City staff to 1) solicit project information, 2) collaborate on project work plans, schedules, and decisions, and 3) present project findings.
- 13) Prepare and present the project final reports to City staff and management. Provide presentations on the Initial Programmatic Risk Assessment, Inspection Results, and Final Risk Assessment Analysis and Pipeline Replacement Program.

3.0 PROJECT MANAGEMENT, MEETINGS, AND WORKSHOPS

3.1 PROJECT MANAGEMENT AND COORDINATION

The CONSULTANT will be responsible for leading the direction of the CONSULTANT/City team, corresponding with and coordinating with the City's Project Management staff and various City groups (including water modeling, corrosion, environmental, water operations, public relations, asset management, etc.), corresponding with and coordinating the CONSULTANT's internal team, including subconsultants, and corresponding with and coordinating with outside agencies and others involved in the planning or execution of the work. This includes contracting, budgeting, scheduling, planning the work, executing the work, coordinating meetings and workshops (outside of meeting preparation and actual attendance), and other general team leadership efforts.

3.2 MEETINGS AND WORKSHOPS

3.2.1 Kick-Off Meeting

The CONSULTANT, with input from the City's Project Manager, will prepare for and conduct an initial Kick-off meeting with City staff. The agenda will include as a minimum:

- a. Introduction of project team
- b. Primary lines of communication, with distribution of project team directory
- c. Review of project background, goals, and objectives
- d. Review of project scope
- e. Presentation of project schedule and milestones
- f. Identification of critical concerns and success factors related to the project
- g. Coordination requirements
- h. Workshops
- i. Deliverables (Project Procedures Manual, Project Quality Plan, Technical Memos)

Deliverables: ▪ Kick-off Meeting Agenda and Handout two (2)

working days in advance of meeting

- Meeting Minutes within five (5) working days of meeting

3.2.2 Coordination Meetings

The CONSULTANT will coordinate project activities with the City's Project Manager, representatives from Water Operations, Corrosion, Hydraulic Modeling, Asset Management, Environmental, Public Relations, and other groups within PUD, as well as outside agencies such as the County of San Diego, Caltrans, and the San Diego County Water Authority. For budgeting purposes, 6 hours/month have been estimated for Andi Corrao (Project Manager) and 8 hours/month have been estimated for Brian Briones (Project Engineer) over the 54-month project schedule.

3.2.3 Technical Workshops

The CONSULTANT will prepare for and conduct nine (9) technical workshops with City staff. Each workshop will be two hours in duration. The workshops will be held at the following key project stages:

- 1: Use of Black & Veatch ArcGIS Online Portal
- 2: Results of Risk Analysis
- 3: Post-Field Inspection Reporting – Phase 1 Field Assessments: Three Raw Water Pipelines (Including Results of Valve Assessments)
- 4: Post-Field Inspection Reporting – Phase 2 Field Assessments: Three Raw Water Pipelines
- 5: Final Prioritization of Pipe Segments: 31 Potable Water Pipelines
- 6: Post-Field Inspection Reporting – Phase 1 Field Assessments: 31 Potable Water Pipelines (Including Results of Valve Assessments)
- 7: Post-Field Inspection Reporting – Phase 2 Field Assessments: 31 Potable Water Pipelines
- 8: Condition Assessment Reports: Three Raw Water Pipelines
- 9: Condition Assessment Report: 31 Potable Water Pipelines

Budgets for the above workshops are carried in the respective technical task(s).

- Deliverables:
- Workshop Agenda and Handout two (2) working days in advance of each workshop
 - Meeting Minutes within five (5) working days of each workshop

3.3 PROJECT PROCEDURES MANUAL

The CONSULTANT will prepare a Project Procedures Manual (PPM) that will establish the scope of work, budget, schedule, organizational procedures, responsibilities, and lines of communication for the PROJECT. The management procedures and systems outlined in this plan will be instituted to encourage communication and the exchange of information between the CONSULTANT's team and the City.

Deliverables:

- Six (6) hard copies of initial PPM
- Updates in electronic format

3.4 SCHEDULE AND PROGRESS REPORTING

3.4.1 Initial Project Schedule

The CONSULTANT will prepare a schedule in MS Project. The initial schedule will be submitted with the Project Procedures Manual (3.3). The schedule will include project tasks, task interrelationships, milestones, and intermediate and final product deliverables in accordance with Chapter 3, Volume I of the PUD Clean Water Program Design Guidelines. The schedule will incorporate the work breakdown structure format.

Deliverable: Six (6) hard copies of Initial Schedule

3.4.2 Schedule Updates

The schedule will be updated as required to maintain an accurate schedule that reflects actual and planned activities. Schedule updates will be included in the monthly Project Status Reports (3.4.3).

3.4.3 Monthly Progress Updates

The CONSULTANT will provide a monthly Project Status Report (PSR) to the City's Project Manager that will include:

- a. A brief narrative of the PROJECT's current status
- b. Outstanding items to be resolved and required City actions
- c. Schedule status
- d. Progress
- e. Budget/Cost
- f. Deliverable status
- g. Issues-Decision Log (updated monthly)

Deliverable: Monthly Project Status Reports, submitted with Monthly Invoices (3.5)

3.5 INVOICING

All invoices will be prepared monthly and submitted in accordance with Article III - Compensation Section 3.3 of the agreement. Monthly Project Status Reports (3.4.3) will be submitted with the monthly invoices.

Deliverable: Monthly Invoices

3.6 QUALITY MANAGEMENT

The CONSULTANT will prepare a Project Quality Plan at the onset of the PROJECT that must be approved by the CONSULTANTS's Water Quality Manager.. All deliverables will be reviewed by the CONSULTANT's Project Manager and a member of the CONSULTANT's QC Review Team prior to submission to the City. Documentation of the CONSULTANT's internal QC review will be included with each submittal to the City.

Deliverables:

- Project Quality Plan – Six (6) hard copies
- Documentation of CONSULTANT's internal QC review with each submittal

4.0 DATA COLLECTION AND MANAGEMENT

4.1 DATA MANAGEMENT PLAN

The CONSULTANT will update and expand the Data Management Plan previously developed for the Three Water Transmission Pipelines project based on City comments and City needs, such as the preferred format of data delivered back to the City for incorporation into the City's GIS. This Plan will address items such as establishing an abbreviation for each pipeline, establishing a unique ID numbering system for every 100-foot pipe segment, and establishing a consistent stationing.

4.2 FILE RECEIPT, STORAGE, TRANSFER

All data received from the City, outside agencies, or other team members will be logged and stored in a secure environment. All team members will have access to ProjectWise, Black & Veatch's secure server, to upload and download files.

4.3 DATA COLLECTION FORMS AND DEVICES

The CONSULTANT will make use of the most efficient process(es) for streamlining field data collection. Based on the unique needs of each inspection type and vendor, either paper or digital forms (on a mobile device) will be used. A unique asset identification numbering system and/or GPS coordinates will be used to accurately reference the inspection location on each inspection form.

4.4 ARCGIS ONLINE PORTAL

The CONSULTANT will update and expand the ESRI ArcGIS Online Portal previously developed for the Three Water Transmission Pipelines project to include the 34 pipelines in this PROJECT. The CONSULTANT will publish data produced during this PROJECT on the Portal as web layers to allow sharing and collaboration with the City and other team members.

4.5 Workshop: Use of Black & Veatch ArcGIS Online Portal (See 3.2.3)

5.0 RISK ANALYSIS AND PRIORITIZATION

5.1 LINEAR REFERENCING

The CONSULTANT will collect background GIS data from the City for all 34 pipelines. Linear referencing techniques will be used to cut the GIS data into 100-foot pipe segments. The City's FSN numbering system will still be accessible, yet a new ID numbering system will be used for this project. Abbreviations for each pipeline name will be used with a numeric 5-digit number. Stationing will also be reconciled to establish an accurate base for the project.

5.2 LOF AND COF FACTORS

The CONSULTANT will apply the twenty (20) Likelihood of Failure (LOF) factors and eleven (11) Consequence of Failure (COF) factors (see table below) and their associated weighting factors previously developed for the Three Water Transmission Pipelines project to the 34 pipelines. The CONSULTANT will identify source information required to accurately apply the LOF and COF Risk Factors to each of the pipe segments for the 34 pipelines and will request such source information from the City, County, or other agency(ies). A list of City data sources necessary to accurately apply the LOF and COF factors (such as GIS, SWIM CMMS, SynerGEE files, or other) will be sent to the City. The CONSULTANT will review all deliverables from the City or other agencies for quality and accuracy. Each pipe segment will receive an overall Risk Rating based on the LOF and COF factors (with weightings) applied to the segment. Details on the specific scoring system, data sources, and methodology used will be unique to each Risk Factor and will be discussed with and agreed upon with the City.

TYPE/LOGIC OF FAILURE (LOF)	
Physical Characteristics	
LOF 1	Age
LOF 2	Compliance with Current AWWA Design Standards
LOF 3	Material
LOF 4	Joint Type
LOF 5	Safety Factor
Pipe Condition	
LOF 6	Lining Condition
LOF 7	Joint Condition
Installation Practices & Modifications	
LOF 8	Installation Defects
LOF 9	Tie-in Connections
LOF 10	Potential for 3rd Party Damage Due to Pipe Depth
LOF 11	Potential for 3rd Party Damage Due to Pipe Location
External Loading & Soil Factors	
LOF 12	Soil Type
LOF 13	Soil Corrosivity
LOF 14	Faulting
LOF 15	Geotechnical/Geologic Hazards
LOF 16	Existing Ground Slope
LOF 17	Additional Cover on Pipe
Current & Historical Performance	
LOF 18	Leaks/Failures
LOF 19	Cathodic Protection Performance
Internal Pressure Surges	
LOF 20	Distance from PS, CV or Reservoir Fill Valve

CONSEQUENCE OF FAILURE (COF)	
Cost of Failure	
COF 1	Direct Costs (Pipe Repair, Property Damage, Water Loss)
COF 2	Indirect Costs (Fines, Lawsuits, Non-Compliance)
Environmental Impacts	
COF 3	Proximity to "Sensitive Areas"
Social Impacts	
COF 4	Population Impact
COF 5	Impact to Desired Level of Service
COF 6	Traffic Disruption
COF 7	Proximity to Commercial or Business Areas
COF 8	Proximity to a Critical Facility
Impact to City Operations	
COF 9	Response & Isolation Time
COF 10	Impact to Emergency Storage Mandate
COF 11	Difficulty of Repair

5.3 RISK MODEL

5.3.1 Risk Analysis

The CONSULTANT will incorporate data obtained during the field reconnaissance, desktop and field assessments, and field inspections as well as other assessment data into the risk model. As examples:

Assessment or Inspection Source	Risk Factor
Black & Veatch	<ul style="list-style-type: none"> • LOF 5 – Safety Factor • LOF 10 – Potential for 3rd party damage due to Pipe Depth • LOF 11 – Potential for 3rd Party Damage due to Pipe Location • COF 6 – Traffic Disruption • COF 7 – Proximity to Commercial or Business Areas • COF 11 – Difficulty of Repair

Olson Engineering	<ul style="list-style-type: none"> • LOF 2 – Compliance with Current AWWA Design Standards • LOF 8 – Installation Defects
GL Noble Denton DBA DNV GL	<ul style="list-style-type: none"> • COF 4 – Population Impact • COF 5 – Impact to Desired Level of Service
KLR Planning	<ul style="list-style-type: none"> • COF 3 – Proximity to Sensitive Areas
Allied Geotechnical Engineers	<ul style="list-style-type: none"> • LOF 12 – Soil Type • LOF 14 – Faulting • LOF 15 – Geotechnical/Geologic Hazards
RF Yeager Engineering	<ul style="list-style-type: none"> • LOF 13 – Soil Corrosivity • LOF 19 – Cathodic Protection Performance
Arrieta Construction	<ul style="list-style-type: none"> • COF 1 – Direct Costs of Pipe Repair
Wachs LDS1000™ Video Inspection	<ul style="list-style-type: none"> • LOF 6 – Lining Condition • LOF 7 – Joint Condition

The CONSULTANT will configure Black & Veatch’s custom Asset Prioritization Tool to be used for this project. This is a custom .NET Add-In file for ArcGIS (v10.1 and higher) and does not require additional licensing. Used to streamline the risk analysis process, the Asset Prioritization Tool assists in determining the most appropriate criteria and weighting factors by enabling the user to save weighting factor scenarios, view risk matrix results, zoom to map location, and export results to Excel. This tool allows the CONSULTANT to package-up the results of the Risk Analysis and enables the City to update this Risk Analysis in-house, as the City’s needs evolve over time.

The CONSULTANT will conduct a sensitivity analysis and adjust LOF and COF weighting factors, as necessary, in order for the risk model to produce accurate, repeatable, and defensible results.

5.3.2 Prioritization and Ranking – Raw Water Pipelines

The CONSULTANT will prioritize and rank pipe segments for criticality. This ranking will be used to recommend schedules for rehabilitation and repair projects.

Deliverable: Technical Memorandum: Risk Analysis & Prioritization of Segments – Three Raw Water Pipelines

5.3.3 Prioritization and Ranking – Potable Water Pipelines

The CONSULTANT will prioritize and rank pipe segments for criticality. This ranking will be used to prioritize and select pipelines or pipe segments for field inspections.

Deliverable: Technical Memorandum: Initial Programmatic Risk Assessment

5.3.4 Workshop: Results of Risk Analysis (See 3.2.3)

6.0 CONDITION ASSESSMENT OF THREE RAW WATER PIPELINES

Condition assessment field activities on the three raw water pipelines will be conducted in phases, as detailed in the Table 6-1. Additional details related to the field activities are noted in Tables 6-3, 6-4, and 6-5 which are presented at the end of this section. Locations of field activities are shown on the aerial maps included at the end of this Scope of Services as Exhibit A – Figure 1 (Sutherland Pipeline) and Exhibit A – Figure 2 (San Vicente 1 and 2 Pipelines)

Table 6-1 Raw Water Pipelines: Order of Desktop and Field Activities		
Order of Activities	Activities and Assessment Methods	Task(s)
Preliminary Investigations	▪ Records and Data Review	6.1.1
	▪ Field Reconnaissance	6.1.2
	▪ Geotechnical Investigations	6.1.3
	▪ Corrosion Engineering Evaluations	6.1.4
Phase 1 Field Assessments	▪ Planning and Coordination	6.2.1
	▪ Permitting	6.2.2
	▪ Field Work Plan	6.2.3
	▪ Valve Assessments	6.2.4
	▪ Visual and NDT Inspections on Exposed Reaches: pH, SPR, IE/SIR	6.2.5
Phase 2 Field Assessments	▪ Planning and Coordination	6.2.1
	▪ Permitting	6.2.2
	▪ Field Work Plan	6.2.3
	▪ Excavations with Visual, pH, SPR, IE/SIR, soil sample for corrosivity	6.2.6
	▪ Manned Entries	6.2.8
	▪ Internal Video Inspection	6.2.9

6.1 PRELIMINARY INVESTIGATIONS

6.1.1 Records & Data Review

The CONSULTANT will review available records on the design, performance history, and existing in-situ environments of each pipeline. Records include design calculations, design drawings, specifications, lay drawings, shop drawings, as-built drawings, O&M manuals, cathodic protection system test station records, leak/break records, hydraulic records, flow modeling maps, gate book pages, and other maps and records that may be available and appropriate to this PROJECT. Records will be provided to the CONSULTANT by the City.

6.1.2 Field Reconnaissance

The CONSULTANT will conduct a reconnaissance of the alignments and surrounding areas under the escort of City pipeline operations staff and accompanied by the City's Project Manager. The purpose of the field reconnaissance is to finalize pipeline access locations, identify access issues, identify critical areas and areas of concern, finalize condition assessment approaches and methodologies, and collect information that will be useful to the Risk Analysis for each pipeline (e.g., Likelihood of Failure and Consequence of Failure criteria and weighting). The City will assist the CONSULTANT in identifying the general alignments of the pipelines.

6.1.3 Geotechnical Investigations

Using readily available geologic and geotechnical data, such as published literature from the California Geological Survey, USGS, and topographic maps, the CONSULTANT will identify and assess geotechnical hazards along the three pipeline alignments, including (as examples): liquefaction, unstable slopes/landslides, clay soils, hydraulic fill, flooding, scour potential, and fault crossings. This information will be used for Engineering Evaluations and will also be used for Task 5.0, Risk Analysis & Prioritization.

Deliverables: Technical Memorandums: Geotechnical Hazards & Considerations (one TM for each pipeline)

6.1.4 Corrosion Engineering Evaluations

The CONSULTANT will measure soil resistance of the three pipeline alignments using the Wenner Four Electrode Method in unpaved accessible areas. For the Sutherland Pipeline, Wenner Four Pin tests will be conducted on the reach from the south boundary of Ramona to the southern terminus of the pipeline only. The resistivity testing will be conducted at 2,000 foot intervals to a depth of 10 feet below grade. The

CONSULTANT will research and document the history of corrosion protection and monitoring facilities installed on the pipelines, along with replaced or altered sections of pipeline, and will correlate and interpret field corrosion measurements with predictions of corrosion potential and recommendations for corrosion protection facilities.

Deliverables: Technical Memorandums: Corrosion Evaluation (one TM for each pipeline)

6.2 FIELD INSPECTIONS (RAW WATER PIPELINES)

6.2.1 Planning and Coordination

The CONSULTANT will coordinate the planning and execution of field inspections with Black & Veatch team members, PUD staff, and other parties.

6.2.2 Permitting

Identify permit needs and obtain the necessary permits for encroachment, excavation, and traffic control. The cost of permits within the City will be paid for by the City. The cost of permits obtained outside the City will be reimbursed to the CONSULTANT. Coordinate with City on potential environmental permits needed to access the pipelines for field inspections. Provide the necessary technical and site-specific information to assist City staff in obtaining environmental permits and clearance to facilitate the field inspections.

6.2.3 Field Work Plans

The CONSULTANT will prepare two (2) field assessment work plans (one for each phase of the field work) detailing the work to be accomplished, roles and responsibilities, inspection processes, and safety planning. A detailed schedule for the field activities will be included. All activities will be coordinated with Water Operations.

Deliverables: Field Work Plans

6.2.4 Valve Assessments

From above-ground, evaluate and assess 22 valves included in Table 6-2. All valves must be accessible by truck. The evaluation will include both a visual and an operational assessment of accessible inline and sideline valves. To the extent allowed by City Water Operations, CONSULTANT will operate each valve through its full range of motion utilizing torque (microprocessor) controlled, hydraulically operated specialized valve operating equipment. The CONSULTANT will provide a Valve Assessment Work Plan to the City for City approval prior to scheduling

the work. The Work Plan will include methods, safety, data collection, and reporting/deliverables.

- Deliverables:
- Valve assessment reports
 - Work orders for valve repairs by City
 - Esri ready GIS files
 - Valve database (minimum 33 data points per valve, developed exclusively for this project) for inclusion in SPLASH or ArcGIS

**Table 6-2
Valve Count for Raw Water Pipelines**

Pipelines	San Vicente 1st	San Vicente 2nd	Sutherland	Sub Total
Inline Valves				
Gate Valves	0	0	2	15
Cone Valves	0	0	0	
Plug Valves	5	3	1	
Check Valve	0	1	1	
Butterfly Valves	0	0	2	
Isolation Valves to Branch Pipelines (≥ 18")				
Gate Valves	0	0	0	6
Cone Valves	0	0	0	
Plug Valves	2	1	0	
Check Valve	0	0	0	
Butterfly Valves	1	1	1	
Isolation Valves to Branch Pipelines (< 18")				
Gate Valves	0	0	1	1
Cone Valves	0	0	0	
Plug Valves	0	0	0	
Check Valve	0	0	0	
Butterfly Valves	0	0	0	
Total	8	6	8	22

6.2.5 Visual and NDT Inspections on Exposed Reaches

Visual inspections and non-destructive testing (NDT) will be conducted on accessible exposed sections of the Sutherland Pipeline and at one (1) identified location each on the San Vicente 1 and San Vicente 2 Pipelines. Tests conducted on the mortar coating will include pH, surface penetrating radar, impact echo, and slab impulse response.

6.2.6 Excavations

The CONSULTANT will expose the pipelines at three (3) locations on the Sutherland Pipeline and at two (2) locations each on the San Vicente 1 and San Vicente 2 Pipelines (total of seven (7) excavations). Excavation locations will be selected jointly by the CONSULTANT and PUD staff. Excavations will be made to two feet below bottom of pipe. Tests to be conducted on the mortar coating at these excavations will include pH, surface penetrating radar, impact echo, and slab impulse response.

In order to conduct an internal condition assessment of the San Vicente 1 Pipeline, the CONSULTANT will install access manways with 20-inch bolted covers at the two excavation locations to facilitate manned entries and camera inspections. The CONSULTANT will prepare a design of the piping modifications and will submit the design to the City for approval prior to beginning work. In order to allow the City to locate the access manways in the future, the CONSULTANT will install a pipeline marker at grade directly above each manway and will provide GPS coordinates of the manways for inclusion in the City's GIS.

At one (1) location on each pipeline, the CONSULTANT will chip off the mortar coating around the circumference of the pipe and expose a joint for visual inspection and/or continuity testing. The CONSULTANT will re-coat the pipe in the areas where coating was removed with a product and through a method approved by the CITY

For budgeting purposes, the following parameters will be used regarding the excavations:

Sutherland Pipeline Excavations:

- 8' wide x 10' long x 10' deep excavations
- Within dirt

San Vicente 1 Pipeline Excavations:

- 8' wide x 10' long x 10' deep excavations
- Within street ROW (traffic control and pavement restoration required)

San Vicente 2 Pipeline Excavations:

- 8' wide x 10' long x 12' deep excavations
- Within dirt

The City will locate and mark out pipes for excavations. The CONSULTANT will conduct field surveys and will correlate survey information, along with visible pipe features such as vaults or air valves, as well as information on existing record drawings and City mark-outs, to

verify the accuracy of excavation locations prior to digging. CITY will reimburse CONSULTANT at cost for all permitting and inspection fees assessed by the CITY or other regulatory agencies for work on the PROJECT, including permitting, testing, and inspection fees for excavations and backfill operations.

If the CONSULTANT encounters toxic or hazardous materials during excavations, including contaminated soil or groundwater, the cost of handling or disposal of such materials will be considered Additional Services.

CONSULTANT will collect soil samples at excavation locations and conduct laboratory analyses on soil samples for soil resistivity and for corrosive constituents such as chlorides, sulfates, bicarbonates, and pH. Seven (7) soil samples are included.

6.2.7 Pipeline Shutdowns

Where a pipeline shutdown is required to allow for a CCTV inspection or other non-destructive testing, the CONSULTANT will be responsible for the following tasks:

- a. Coordinating the field work with Water Operations.
- b. Dewatering pipelines following depressurization and turnover by Water Operations. Includes assistance with obtaining dewatering discharge permits from Regional Water Quality Control Board for discharges under the City's blanket discharge permit. Also includes filtering of discharge water for Quagga Mussels. Sampling and analysis of discharges to be conducted by CITY and reported to Regional Board by CITY.
- c. Making excavations and removing manway covers to access pipelines.
- d. Installing necessary appurtenances and equipment for inspection.
- e. Restoring impacted site areas and pipeline after inspections.
- f. Providing traffic control.

6.2.8 Manned Entries

The CONSULTANT will perform the pipeline shutdowns, including draining and dewatering of the pipelines, for interior inspections.

The CONSULTANT will submit a Safety Plan to the City prior to the confined space entries. The safety plan will document the entry approach,

identify possible hazards, and provide rescue procedures for the confined space entries.

In order to conduct internal condition assessments, the CONSULTANT will remove/replace the bolts on the 20-inch flanges in the designated vaults. The CONSULTANT will establish traffic control and enter the confined space vaults to remove/replace the existing bolts and remove the 20-inch flange. The work will occur during the day and the CONSULTANT will provide provisions for traffic control and confined space entry. During this time, the CONSULTANT will also enter the vaults to assess the condition of the 20-inch flange by collecting UT measurements, where possible.

During a coordinated shutdown of the Sutherland and San Vicente 2 raw water pipelines, a manned entry assessment will be conducted from the 20-inch flange vaults. Confined space entries will be made in accordance with OSHA requirements. The CONSULTANT will remove the 20-inch flange so that the inspector can enter the pipe. The entrant will traverse through the 42-inch and 36-inch Sutherland Pipeline and 48-inch San Vicente 2 Pipeline to evaluate approximately 100 feet of the piping in each direction from the access point (or to the extent possible). The condition assessment will collect data, perform physical measurements, and document pipe conditions with regards to corrosion. The assessments will document conditions using the following methods:

- Digital photographs and/or video for documentation of corrosion and defects such as deteriorated mortar lining, cracks, and spalling, including pipe conditions. Locations of defects will be noted by distance as recorded by a distance wheel measurement from the 20-inch flange and by pipe clock position.
- Lining integrity testing by sounding measurements and collection of mortar lining samples for pH testing. Discrete samples of mortar will be collected for pH testing. Up to three samples will be collected in each pipe. Pipe sounding to listen for discontinuities for the interior of the pipe mortar surfaces will be conducted at intervals of 20 feet.
- Joints that are determined to be un-mortared, displaced greater than 20%, and/or separated by more than $\frac{1}{2}$ of an inch will be documented by measuring the gap separation and the amount of offset at 4 clock positions around the circumference of the pipe. These joints will be noted by distance from the 20-inch flange manhole opening.
- Ultrasonic thickness (UT) to determine the pipe wall thickness. UT testing will be conducted only at locations where the interior mortar lining has failed/spalled, exposing the underlying steel pipe surfaces.

- Impact Echo and Slab Impulse Response technologies to determine the thickness and integrity of the mortar lining. Impact Echo tests will be conducted at 50-foot intervals along the pipe interior. Slab Impulse Response tests will be conducted within 10 feet of the entry point.

6.2.9 Inspections with In-Pipe Technologies

In order to conduct internal condition assessments, the CONSULTANT will remove/replace 20-inch standard flanges (Sutherland and San Vicente 2 Pipelines) and install/remove/replace 20-inch standard flanges (San Vicente 1 Pipeline) in the designated vaults to allow for the insertion for a long-range tethered crawler for video inspection of the pipe interior. A standard definition video (480 TV lines) will be produced with a Spectrum 90 pan-tilt-zoom camera. Anticipated minimum travel distances are given in Tables 6-3, 6-4, and 6-5 (see above).

The CONSULTANT will establish traffic control (if necessary) and enter the confined space vaults to remove/replace the existing bolts and remove the access opening flange.

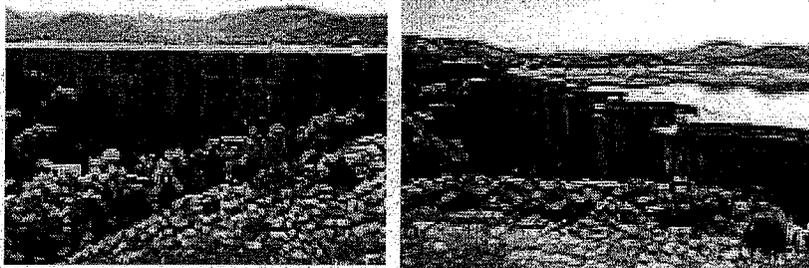
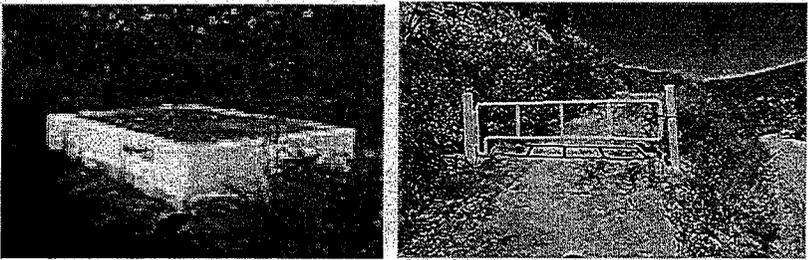
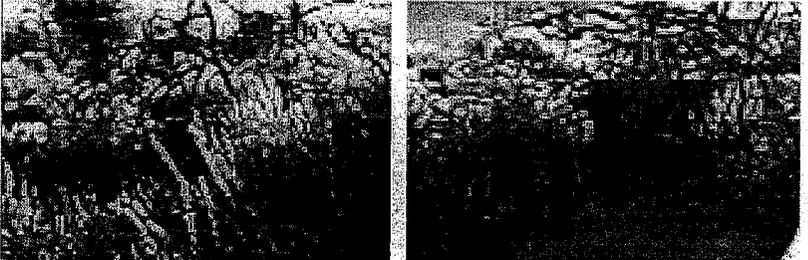
Deliverables for Tasks 6.2.5, 6.2.6, 6.2.7, and 6.2.8:

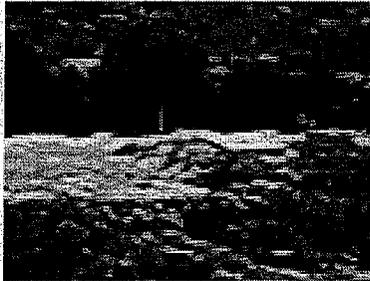
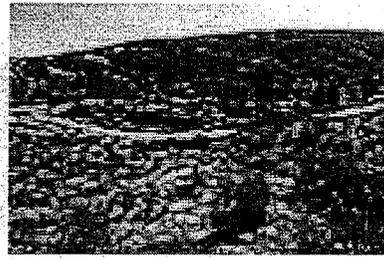
- Draft and Final Condition Assessment Reports (one report for each pipeline); see Task 6.4
- Field data and inspection results formatted and compiled for inclusion in SPLASH or ArcGIS

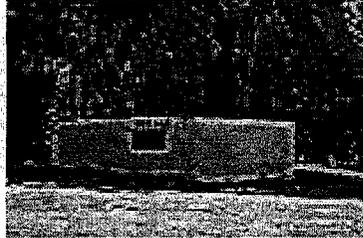
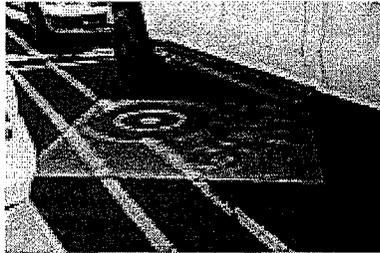
6.2.10 Workshops (2): (See 3.2.3)

- Post-Field Inspection Reporting – Phase 1 Field Assessments (Including Results of Valve Assessments)
- Post-Field Inspection Reporting – Phase 2 Field Assessments

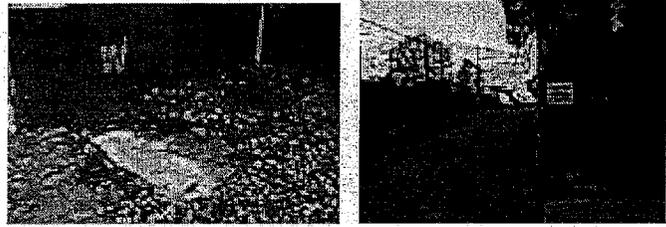
**Table 6-3
Sutherland Pipeline
Field Inspection Scope of Services**

STA	Inspection Test/Method	Estimated Coverage	Remarks	Contractors	Days of Inspection	Photos
0+00	Visual, pH, Surface Penetrating Radar, Impact Echo, Slab Impulse Response	120 ft.	Exposed pipe under dam	B&V	5 days total, all exposed reaches	
44+07	Manned entry (visual, pH sounding, Impact Echo, Slab Impulse Response, mortar penetration, measurement of cracks and (unmortared) joint separation/displacement), video	Upstream: 100 ft. manned entry, 3,000 ft. video Downstream: 100 ft. manned entry, 2,500 ft. video	20" flanged manway in air valve vault	B&V, Arrieta, RIT	Manned Entry: 1 Video Inspection: 1	
59+67	Visual, pH, Surface Penetrating Radar, Impact Echo, Slab Impulse Response	100 ft.	Exposed reach	B&V	See STA 0+00	

177+50	Manned entry (visual, pH, sounding, Impact Echo, Slab Impulse Response, mortar penetration, measurement of cracks and (unmortared) joint separation/displacement), video <i>Requires coordination with Homeowner.</i>	<u>Upstream:</u> 100 ft. manned entry, 2,500 ft. video (partial tunnel coverage) <u>Downstream:</u> 100 ft. manned entry, 3,000 ft. video	20' flanged manway in air valve vault	B&V, Arrieta, RIT	Manned Entry, 1 Video Inspection: 1		
179+45	Visual, pH, Surface Penetrating Radar, Impact Echo, Slab Impulse Response <i>Requires coordination with Homeowner.</i>	200 ft.	Exposed reach	B&V	See STA 0+00		
240+15	Visual, pH, Surface Penetrating Radar, Impact Echo, Slab Impulse Response	50 ft.	Exposed reach	B&V	See STA 0+00		

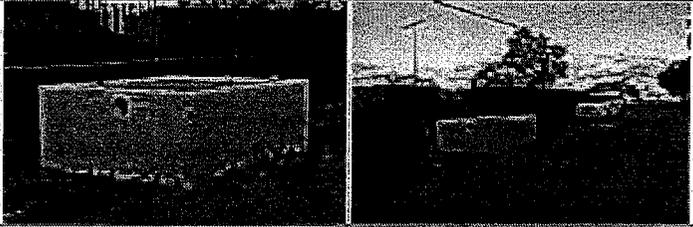
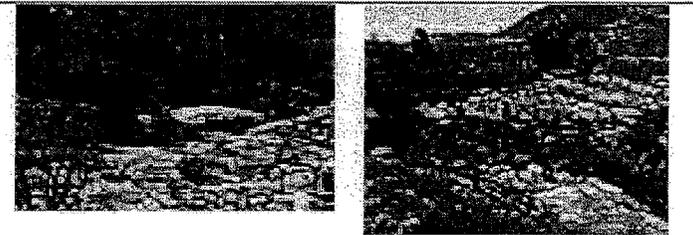
251+76	Visual, pH, Surface Penetrating Radar, Impact Echo, Slab Impulse Response	50 ft.	Exposed reach	B&V	See STA 0+00		
365+02	Manned entry (visual, pH, sounding, Impact Echo, Slab Impulse Response, mortar penetration, measurement of cracks and (unmortared) joint separation/displacement), video <i>Requires coordination with Homeowner.</i>	<u>Upstream:</u> 100 ft. manned entry, 2,750 ft. video <u>Downstream:</u> 100 ft. manned entry, 2,750 ft. video	20' flanged manway in air valve vault	B&V, Arrieta, RIT	Manned Entry: 1 Video Inspection: 1		
509+25	Manned entry (visual, pH, sounding, Impact Echo, Slab Impulse Response, mortar penetration, measurement of cracks and (unmortared) joint separation/displacement), video	<u>Upstream:</u> 100 ft. manned entry, 2,500 ft. video <u>Downstream:</u> 100 ft. manned entry, 3,000 ft. video	20" flanged manway in air valve vault in grocery store parking lot	B&V, Arrieta, RIT	Manned Entry: 1 Video Inspection: 1		
TBD (3)	Visual, pH, Surface Penetrating Radar, Impact Echo, Slab Impulse Response, soil sample for corrosivity testing	10 ft. per excavation (30 ft. total)	See Task 6.2.6 for parameters	B&V, Arrieta	3 excavations, locations to be determined; 3 weeks for excavation, testing, and site restoration		
N/A	Soil Resistivity Testing	N/A	Wenner 4-pin test every 2,000 ft.	Yeager	Testing to be done along alignment south of Ramona; see scope for details; 1 week		
Total coverage = 22,550 ft. (35%) [65,000 ft. total length]							

**Table 6-4
San Vicente 1 Pipeline
Field Inspection Scope of Services**

STA	Inspection Test/Method	Estimated Coverage	Access	Contractors	Days of Inspection	Photos
TBD (2)	Manned entry (visual, pH, sounding, Impact Echo, Slab Impulse Response, mortar penetration, measurement of cracks and (unmortared) joint separation/displacement), video	Upstream: 100 ft. manned entry, 2,000 ft. (estimated) video Downstream: 100 ft. manned entry, 2,000 ft. (estimated) video	20" flanged manway installed by Arrieta	B&V, Arrieta, RIT	Manned Entry: 1 per location Video Inspection: 1 per location	 <p>Note: This location (STA 26+67) contains an 18" boiler-type access manway that will not be used on this project.</p>
TBD (2)	Visual, pH, Surface Penetrating Radar, Impact Echo, Slab Impulse Response, soil sample for corrosivity testing	10 ft. per excavation (20 ft. total)	See Task 6.2.6 for parameters	B&V, Arrieta	2 excavations; locations to be determined; 2 weeks for excavation, testing, and site restoration	
N/A	Soil Resistivity Testing		Wenner 4-pin test every 2,000 ft.	Yeager	Testing to be done along entire alignment; see scope for details; 1 week	

Total coverage = 8,030 ft. (36%) [22,100 ft. total length]

**Table 6-5
San Vicente 2 Pipeline Field Inspection Scope of Services**

STA	Inspection Test/Method	Estimated Coverage	Access	Contractors	Days of Inspection	Photos
25+01	Manned entry (visual, pH, sounding, Impact Echo, Slab Impulse Response, mortar penetration, measurement of cracks and (unmortared) joint separation/displacement), video	<u>Upstream:</u> 100 ft. manned, 600 ft. video <u>Downstream:</u> 100 ft. manned, 1,500 ft. video	20" flanged manway in blowoff vault	B&V, Arrieta, RIT	Manned Entry: 1 Video Inspection: 1	
136+73	Manned entry (visual, pH, sounding, Impact Echo, Slab Impulse Response, mortar penetration, measurement of cracks and (unmortared) joint separation/displacement), video (Alternate location: 145+48 BO vault in bottom of river.)	<u>Upstream:</u> 100 ft. manned, 1,500 ft. video <u>Downstream:</u> 100 ft. manned, 1,500 ft. video	20" flanged manway in vault	B&V, Arrieta, RIT	Manned Entry: 1 Video Inspection: 1	
166+63	Manned entry (visual, pH, sounding, Impact Echo, Slab Impulse Response, mortar penetration, measurement of cracks and (unmortared) joint separation/displacement), video	<u>Upstream:</u> 100 ft. manned, 1,500 ft. video <u>Downstream:</u> 100 ft. manned, 1,500 ft. video	20" flanged manway in blowoff vault	B&V, Arrieta, RIT	Manned Entry: 1 Video Inspection: 1	
TBD (2)	Visual, pH, Surface Penetrating Radar, Impact Echo, Slab Impulse Response	10 ft. per excavation (20 ft. total)	See Task 6.2.6 for parameters	B&V, Arrieta	2 excavations; locations to be determined; 3 weeks for excavation, testing, and site restoration	
N/A	Soil Resistivity Testing		Wenner 4-pin test every 2,000 ft.	Yeager	Testing to be done along entire alignment; see scope for details; 1 week	
Total coverage = 8,130 ft. (37%) [21,800 ft. total length]						

6.3 ENGINEERING EVALUATIONS

6.3.1 Interpretation of Inspection Data

The CONSULTANT will review and evaluate the inspection data obtained in the Field Inspections in order to develop the extent of further inspection in subsequent phases of the PROJECT. Inspection data collected will be used to locate pipeline defects within the areas inspected and assess the condition of the pipelines.

The CONSULTANT will apply an appropriate statistical model to determine the average and minimum remaining wall thickness as well as the structural integrity of each of the three pipelines. An engineering analysis will be undertaken to determine the safety factor of each pipeline under existing conditions. Pipe segments with critical level of safety factors will be identified and may indicate if the pipeline segment is prone to failure, leakage, or interruption of service.

6.3.2 Determination of Remaining Useful Life

An age-based deterioration model will be developed for each pipeline. The model will be calibrated based on the field inspection data as well as the CONSULTANT's knowledge and experience with similar projects across the U.S. The model will be used to develop a "survival curve" for each pipeline to predict the pipeline's remaining useful life. The curve will be based on the manufacturer's design data and the current in-situ pipe conditions.

6.3.3 Recommendations for Future Inspection Frequency and Coverage

The frequency and extent of future inspection is a function of the existing condition of each pipeline, the soil environment around the pipeline, the remaining service life of the pipeline, and the position of the pipeline on the "survival curve." The frequency of inspection would be higher when the status point is on the steep-slope portion of the survival curve. The future inspection frequency will be developed by the CONSULTANT based on these factors as well as input from CITY staff.

6.3.4 Development of Planning Level Action Plans and Cost Estimates

Based on the results of the condition assessment, engineering analysis, risk analysis, and remaining service life determination, the CONSULTANT will develop a prioritized list of improvement for rehabilitation, maintenance, and repair. Each recommended item will have a planning level cost associated with it. Additionally, each recommendation will be placed into one of three time-dependent buckets: short-term, mid-term, and long-term. The CONSULTANT will

collaborate with City staff to ensure that the recommended priorities are aligned with the City's goals and service levels.

The CONSULTANT will prepare opinions of probable cost using the appropriate standard of care and pertinent guidelines established by the Association for the Advancement of Cost Estimating (AACE). Cost estimates provided for recommended rehabilitation or repairs will be budget level estimates, categorized as Class 5 (screening or feasibility estimates) by the AACE.

6.4 CONDITION ASSESSMENT REPORTS

The CONSULTANT will summarize assessment methods, findings, engineering analyses, and recommendations in three (3) Engineering Reports, one report for each pipeline. All field inspection data will also be provided in electronic format coordinated with pipeline station numbering and in a suitable format for inclusion in the City's SPLASH/Smallworld GIS or ArcGIS system.

Each report will contain the following sections. The technical memoranda created throughout the PROJECT, including all back-up data, will be included in the reports as appendices.

- 1) Executive Summary
- 2) Overview – map, history, material, design, performance, operating conditions (flows, pressures), connections to other pipelines
- 3) Inspection Methods and Results: geotechnical hazards, corrosivity analysis, pipeline condition, valve assessments, etc. (with reference to Technical Memoranda in Appendices)
- 4) Interpretation and Analysis of Inspection Results
- 5) Recommendations and Cost Estimates

6.4.1 DRAFT Pipeline Condition Assessment Reports will be submitted for City review and comment. The City will provide review comments to the CONSULTANT in spreadsheet format and will consolidate all review comments into one (1) spreadsheet.

6.4.2 FINAL Pipeline Condition Assessment Reports will incorporate City review comments.

Deliverables: DRAFT Reports – Five (5) hard copies plus PDF of each report
FINAL Reports – Eight (8) hard copies plus PDF of each report

6.4.3 Workshop: Presentation of Reports (See 3.2.3)

7.0 CONDITION ASSESSMENT OF 31 POTABLE WATER PIPELINES

Condition assessment field activities on the 31 potable water pipelines will be conducted in phases, as detailed in the Table 7-1.

Table 7-1 Potable Water Pipelines: Order of Desktop and Field Activities		
Order of Activities	Activities and Assessment Methods	Task(s)
Preliminary Investigations	▪ Records and Data Review	7.1.1
	▪ Field Reconnaissance	7.1.2
	▪ Corrosion Evaluations (Soil Resistivity Tests)	7.1.3
	▪ Geotechnical Investigations – for Risk Analysis	7.1.4
	▪ Environmental Evaluation	7.1.5
	▪ Surge Analysis	7.1.6
	▪ Prioritize Pipelines for Inspections	7.1.7
Phase 1 Field Assessments	▪ Planning and Coordination	7.2.1
	▪ Permitting	7.2.2
	▪ Field Work Plan	7.2.3
	▪ Valve Assessments	7.2.4
	▪ LDS1000™ Video Inspections	7.2.5
	▪ Geotechnical Investigations – Specific Pipelines	7.2.6
Phase 2 Field Assessments	▪ Planning and Coordination	7.2.1
	▪ Permitting	7.2.2
	▪ Field Work Plan	7.2.3
	▪ Visual and NDT Inspections (at excavations)	7.2.7
	▪ Excavations with Visual, pH, SPR, IE/SIR, UT testing, soil sample for corrosivity	7.2.8

7.1 PRELIMINARY INVESTIGATIONS

7.1.1 Records & Data Review

The CONSULTANT will review available records on the design, performance history, and existing in-situ environments of each pipeline. Records include design calculations, design drawings, specifications, lay drawings, shop drawings, as-built drawings, O&M manuals, cathodic protection system test station records, leak/break records, hydraulic

records, flow modeling maps, gate book pages, and other maps and records that may be available and appropriate to this PROJECT. Records will be provided to the CONSULTANT by the City.

7.1.2 Field Reconnaissance

The CONSULTANT will conduct a reconnaissance of the alignments and surrounding areas under the escort of City pipeline operations staff. The purpose of the field reconnaissance is to identify pipeline access locations and access issues, identify critical areas and areas of concern, identify applicable condition assessment approaches and methodologies, and collect information that will be useful to the Risk Analysis for each pipeline (e.g., Likelihood of Failure and Consequence of Failure criteria and weighting). The City will assist the CONSULTANT in identifying the general alignments of the pipelines.

7.1.3 Corrosion Evaluations (Soil Resistivity Tests)

The CONSULTANT will measure soil resistance along the alignments of all 31 pipelines using the Wenner Four Electrode Method in unpaved accessible areas. The resistivity testing will be conducted at 2,000 foot intervals to a depth of 10 feet below grade.

Deliverable: Technical Memorandum: Soil Resistivity Test Results
(one TM for all pipelines)

7.1.4 Geotechnical Investigations

Using readily available geologic and geotechnical data, such as published literature from the California Geological Survey, USGS, and topographic maps, the CONSULTANT will identify and assess significant geotechnical hazards along the pipeline alignments, including (as examples): liquefaction, unstable slopes/landslides, clay soils, hydraulic fill, flooding, scour potential, and fault crossings. This information will be used for Task 5.0, Risk Analysis & Prioritization.

Deliverable: Technical Memorandum: Geotechnical Hazards & Considerations (City-Wide)

7.1.5 Environmental Evaluation

Based on information obtained in Task 5.0, the CONSULTANT will conduct a high level evaluation of the potential for environmental impacts associated with the consequences of a pipeline failure on any of the 31 pipelines. The evaluation may require field inspections to identify restrictions related to pipeline access due to environmental conditions. A summary of the environmental constraints for each pipeline will be documented in a technical memorandum. This information will be used for Task 5.0, Risk Analysis & Prioritization, and for the planning of subsequent field inspections.

Deliverable: Technical Memorandum: Environmental Evaluation of Potable Water Transmission Pipeline Alignments

7.1.6 Surge Analysis

The CONSULTANT will conduct a high level surge analysis on the 31 potable water pipelines to identify pipelines or pipe segments that may be at risk of premature failure or damage due to excessive pressure surges in the pipelines. This information will be used in Task 5.0, Risk Analysis & Prioritization, and to aid the City and the CONSULTANT in selecting locations for transient pressure monitoring in Task 7.2.5. The City will build the surge model. GL Noble Denton has a budget in this base scope of services of 80 hours to run the surge model and to assist the City with building the model. Hours in excess of 80 will be considered Additional Services.

7.1.7 Prioritize Pipelines for Inspections

Based on the results of the risk analysis, the CONSULTANT will categorize each of the 31 potable water pipelines according to overall risk and will establish groups of pipelines as High, Medium, and Low priorities for pipeline inspection.. The CONSULTANT will identify the preferred method(s) and/or technology(ies) to be used in the inspections. Consideration will be given to pipeline criticality, access availability and restrictions, relevance and use of data to be generated, and cost.

Deliverable: Technical Memorandum: Prioritization of Pipe Segments and Recommendations for Detailed Pipeline Inspection and Condition Assessments

7.1.8 Workshop: Final Prioritization of Pipe Segments (See 3.2.3)

7.2 FIELD INSPECTIONS (POTABLE WATER PIPELINES)

The scope of work for Field Inspections and corresponding level of effort and budget cost estimates are based on the preliminary projections and assumptions contained in Table 7-2. This scope of work and level of effort will be refined following the completion of Task 7.1, including the outcome of Task 7.1.6, the ranking and prioritization of pipelines for field inspections based on each pipeline's overall level of risk (High, Medium, or Low).

Pipeline Priority Level	Estimated Number of	Inspection Method(s)
------------------------------------	--------------------------------	-----------------------------

	Pipelines	
High	4	<ul style="list-style-type: none"> ▪ Wachs LDS1000™ Video and Leak Detection [Task 7.2.5] ▪ Excavations (3 per pipeline) with Visual and Non-Destructive Testing [Tasks 7.2.7 and 7.2.8] ▪ One (1) soil sample per excavation; test for corrosive properties [Task 7.2.8.1] ▪ Soil Resistivity testing along entire alignments at 2,000 foot intervals [Task 7.1.3] ▪ Geotechnical Investigations [Task 7.2.6]
Medium	12	<ul style="list-style-type: none"> ▪ Wachs LDS1000™ Video and Leak Detection [Task 7.2.5] ▪ Excavations (1 per pipeline) with Visual and Non-Destructive Testing [Tasks 7.2.7 and 7.2.8] ▪ One (1) soil sample at excavation; test for corrosive properties [Task 7.2.8.1] ▪ Soil Resistivity testing along entire alignments at 2,000 foot intervals [Task 7.1.3]
Low	15	<ul style="list-style-type: none"> ▪ Visual assessment for pipelines that are available or exposed ▪ Soil Resistivity testing along entire alignments at 2,000 foot intervals [Task 7.1.3]

7.2.1 Planning and Coordination

The CONSULTANT will coordinate the planning and execution of field inspections with Black & Veatch team members, PUD staff, and other parties. This includes updating condition assessment approaches and methods and finalizing inspection locations based on the results of Task 7.1 and input from the City, conducting field investigations and verifying field conditions, updating schedules and cost estimates for the field inspections based on Water Operations input and updated inspection plans, providing information for environmental permitting, obtaining permits from other agencies, coordinating pipe locating by the City, and other coordination activities, as required.

7.2.2 Permitting

The CONSULTANT will identify permit needs and obtain the necessary

permits for encroachment, excavation, and traffic control. The cost of permits within the City will be paid for by the City. The cost of permits obtained outside the City will be reimbursed to the CONSULTANT. The CONSULTANT will coordinate with City on potential environmental permits needed to access the pipelines for field inspections. The CONSULTANT will provide the necessary technical and site-specific information to assist City staff in obtaining environmental permits and clearance to facilitate the field inspections.

7.2.3 Field Work Plans

The CONSULTANT will prepare two (2) field assessment work plans (one for each phase of the field work) detailing the work to be accomplished, roles and responsibilities, inspection processes, and safety planning. A detailed schedule for the field activities will be included. All activities will be coordinated with Water Operations.

Deliverables: Field Work Plans

7.2.4 Valve Assessments

From above-ground, the CONSULTANT will evaluate and assess 100 large inline valves and branch valves to other large diameter transmission pipelines. The actual valves to be assessed will be identified during the PROJECT jointly by the CONSULTANT and PUD EPM (Hydraulic Modeling) and Water Operations staffs. All valves must be accessible by truck. The evaluation will include both a visual and an operational assessment. To the extent allowed by City Water Operations, the CONSULTANT will operate each valve through its full range of motion utilizing torque (microprocessor) controlled, hydraulically operated specialized valve operating equipment. The CONSULTANT will provide a Valve Assessment Work Plan to the City for City approval prior to scheduling the work. The Work Plan will include methods, safety, data collection, and reporting/deliverables.

Deliverables:

- Valve assessment reports
- Work orders for valve repairs by City
- Esri ready GIS files
- Valve database (minimum 33 data points per valve, developed exclusively for this project) for inclusion in SPLASH or ArcGIS

7.2.5 LDS1000™ Video Inspections

The CONSULTANT will conduct video inspection and leak detection in live pipes using the LDS1000™ inspection system. Inspection coverage will show signs of cracks, discoloration, debris in pipe, illicit connections, misaligned or exposed joints, or other features of interest.

This base scope and budget includes 32 days of video inspections over four (4) mobilizations, with eight (8) inspection days per mobilization, one (1) insertion/inspection per day, and an anticipated coverage of 2,200 feet per inspection (70,400 feet total). The work will be planned and scheduled with Water Operations. The pipelines selected for each mobilization will be determined during the project, and will be based on factors such as logistics, coordination requirements, and flow adjustments requested from Water Operations. PUD EPM (Hydraulic Modeling) will run the SynerGEE model to assist the CONSULTANT in selecting locations for camera insertions and to assist Water Operations in making system (flow) adjustments to accommodate the camera inspections.

This base scope of services assumes all camera insertions will be through existing air valve piping directly over the top of the pipe (i.e., excavations to access the pipe and/or hot taps onto the pipe are not included).

The Consultant services and minor repairs (as described in Section 2.1.13) include planning, design submittal and approval, minor modifications to manholes, vaults, or other structures for pipe access, air valve piping modifications, and site restoration (piping, structures, pavement).

Deliverables: Report by Wachs Water Services of Video and Leak Detection Inspection Results and video inspection screen shots (data) for inclusion in City's GIS

7.2.6 Geotechnical Investigations

Using readily available geologic and geotechnical data, such as published literature from the California Geological Survey, USGS, and topographic maps, the CONSULTANT will identify and assess geotechnical hazards along the High Priority pipelines, including (as examples): liquefaction, unstable slopes/landslides, clay soils, hydraulic fill, flooding, scour potential, and fault crossings. This information will be used for Task 7.3, Engineering Evaluations.

Deliverables: Technical Memorandums: Geotechnical Hazards & Considerations (one TM for each pipeline)

7.2.7 Visual and NDT Inspections

Visual and non-destructive testing (NDT) will be conducted at an estimated twenty-four (24) excavated pipe locations on the High and Medium Priority Pipelines. Non-destructive testing will consist of pH

measurement on the mortar coating, impact echo and slab impulse response testing on mortar coatings, surface penetrating radar on concrete cylinder pipe, and ultrasonic thickness measurements on steel pipe.

Deliverables: Technical Memorandums: Results of Non-Destructive Testing (one TM for each pipeline)

7.2.8 Excavations

The CONSULTANT and its contractor will excavate the High Priority Pipelines at three (3) locations on each pipeline (total of 12 excavations) and at one (1) location on each Medium Priority pipeline (total of 12 excavations) to expose the pipe for visual inspection and non-destructive testing. Attempts will be made to excavate at a joint or a tie-in, as seen and measured from the in-line video inspections. In each excavation, a 2-foot long section of pipe will be exposed around its entire circumference to 2 feet below the bottom of the pipe. Once the inspections and testing are complete, the CONSULTANT with their sub contractor (as described in Section 2.1.13) will conduct backfill operations to City standards and will conduct surface improvement repairs and repairs to surrounding or nearby structures.

At one (1) location on each of the High Priority and Medium Priority pipelines, the CONSULTANT will chip off the mortar coating around the circumference of the pipe to verify pipe material and to expose a joint for visual inspection and/or continuity testing. The CONSULTANT will re-coat the pipe in the areas where coating was removed with a product and through a method approved by the CITY

If the CONSULTANT encounters toxic or hazardous materials during excavations, including contaminated soil or groundwater, the cost of handling or disposal of such materials will be considered Additional Services.

For budgeting purposes, the following parameters will be used:

One-half of excavations (total of 12):

- 8' wide x 10' long x 8' deep excavations
- Outside of the roadway (no traffic control or pavement restoration required)

One-half of excavations (total of 12):

- 8' wide x 10' long x 10' deep excavations
- Within street ROW (traffic control and pavement restoration required)

7.2.8.1 Laboratory Analyses of Soil Samples

The CONSULTANT will collect soil samples at twenty-four (24) excavation locations (High Priority and Medium Priority Pipelines) and from two (2) additional locations on any of the 31 pipelines, as determined necessary during the project. The CONSULTANT will conduct laboratory analyses on the soil samples for soil resistivity and for corrosive constituents such as chlorides, sulfates, bicarbonates, and pH. Soil samples will be taken from the pipe zone in native geologic formation.

Deliverables: Technical Memorandum: Interpretation of Laboratory Analysis of Soil Samples

7.2.9 Workshops (2): (See 3.2.3)

- Post-Field Inspection Reporting – Phase 1 Field Assessments (Including Results of Valve Assessments)
- Post-Field Inspection Reporting – Phase 2 Field Assessments

7.3 ENGINEERING EVALUATIONS

7.3.1 Interpretation of Inspection Data

The CONSULTANT will review and evaluate the inspection data obtained in the Field Inspections in order to develop the extent of further inspection in subsequent phases of the PROJECT. Inspection data collected will be used to locate pipeline defects within the areas inspected and assess the condition of the pipelines.

The CONSULTANT will apply an appropriate statistical model to determine the average and minimum remaining wall thickness as well as the structural integrity of each of the three pipelines. An engineering analysis will be undertaken to determine the safety factor of each pipeline under existing conditions. Pipe segments with critical level of safety factors will be identified and may indicate if the pipeline segment is prone to failure, leakage, or interruption of service.

7.3.2 Determination of Remaining Useful Life

An age-based deterioration model will be developed for each pipeline. The model will be calibrated based on the field inspection data as well as the CONSULTANT's knowledge and experience with similar projects across the U.S. The model will be used to develop a "survival curve" for each pipeline to predict the pipeline's remaining useful life. The curve will be based on the manufacturer's design data and the current in-situ pipe conditions.

7.3.3 Recommendations for Future Inspection Frequency and Coverage

The frequency and extent of future inspection is a function of the existing condition of each pipeline, the soil environment around the pipeline, the remaining service life of the pipeline, and the position of the pipeline on the “survival curve.” The frequency of inspection would be higher when the status point is on the steep-slope portion of the survival curve. The future inspection frequency will be developed by the CONSULTANT based on these factors as well as input from City staff.

7.3.4 Development of Planning Level Action Plans and Cost Estimates

Based on the results of the condition assessment, engineering analysis, risk analysis, and remaining service life determination, the CONSULTANT will develop a prioritized list of improvements for rehabilitation, maintenance, repair, and replacement. Each recommended item will have a planning level cost associated with it. Additionally, each recommendation will be placed into one of three time-dependent buckets: short-term, mid-term, and long-term. The CONSULTANT will collaborate with City staff to ensure that the recommended priorities are aligned with the City’s goals and service levels.

The CONSULTANT will prepare opinions of probable cost using the appropriate standard of care and pertinent guidelines established by the Association for the Advancement of Cost Estimating (AACE). Cost estimates provided for recommended rehabilitation or repairs will be budget level estimates, categorized as Class 5 (screening or feasibility estimates) by the AACE.

7.3.5 Financial Analysis for Recommended Replacement/Rehabilitation

The CONSULTANT will perform a financial analysis for the recommended replacement/rehabilitation of the potable water transmission pipelines using the budget level opinions of probable cost prepared under Task 7.3.4. A viable pipeline replacement/rehabilitation schedule will be determined based on available funding levels provided by the City.

7.4 RISK ASSESSMENT REPORTS

7.4.1 Final Programmatic Risk Assessment TM

7.4.2 Draft Programmatic Transmission Pipeline Risk Assessment Analysis and Pipeline Replacement Program Report

A DRAFT Programmatic Transmission Pipeline Risk Assessment Report will be submitted for CITY review and comment. The CITY will provide review comments to the CONSULTANT in spreadsheet

format and will consolidate all review comments into one (1) spreadsheet.

7.4.3 Final Programmatic Transmission Pipeline Risk Assessment Analysis and Pipeline Replacement Program Report

A FINAL Programmatic Transmission Pipeline Risk Assessment Report will incorporate CITY review comments.

Deliverables:

- DRAFT Reports – Five (5) hard copies plus PDF of each report
- FINAL Reports – Eight (8) hard copies plus PDF of each report
- Field inspection data formatted for inclusion in City’s SPLASH/Smallworld GIS or ArcGIS system

7.4.4 Workshop: Presentation of Report (See 3.2.3)

8.0 ADDITIONAL SERVICES

The CONSULTANT may provide additional services identified during the PROJECT and as requested by the City. The CONSULTANT shall submit detailed scope, schedule, and fee proposals for the additional services, and the City will review and, if approved, provide written authorization to proceed with each additional task.

END OF SCOPE OF SERVICES

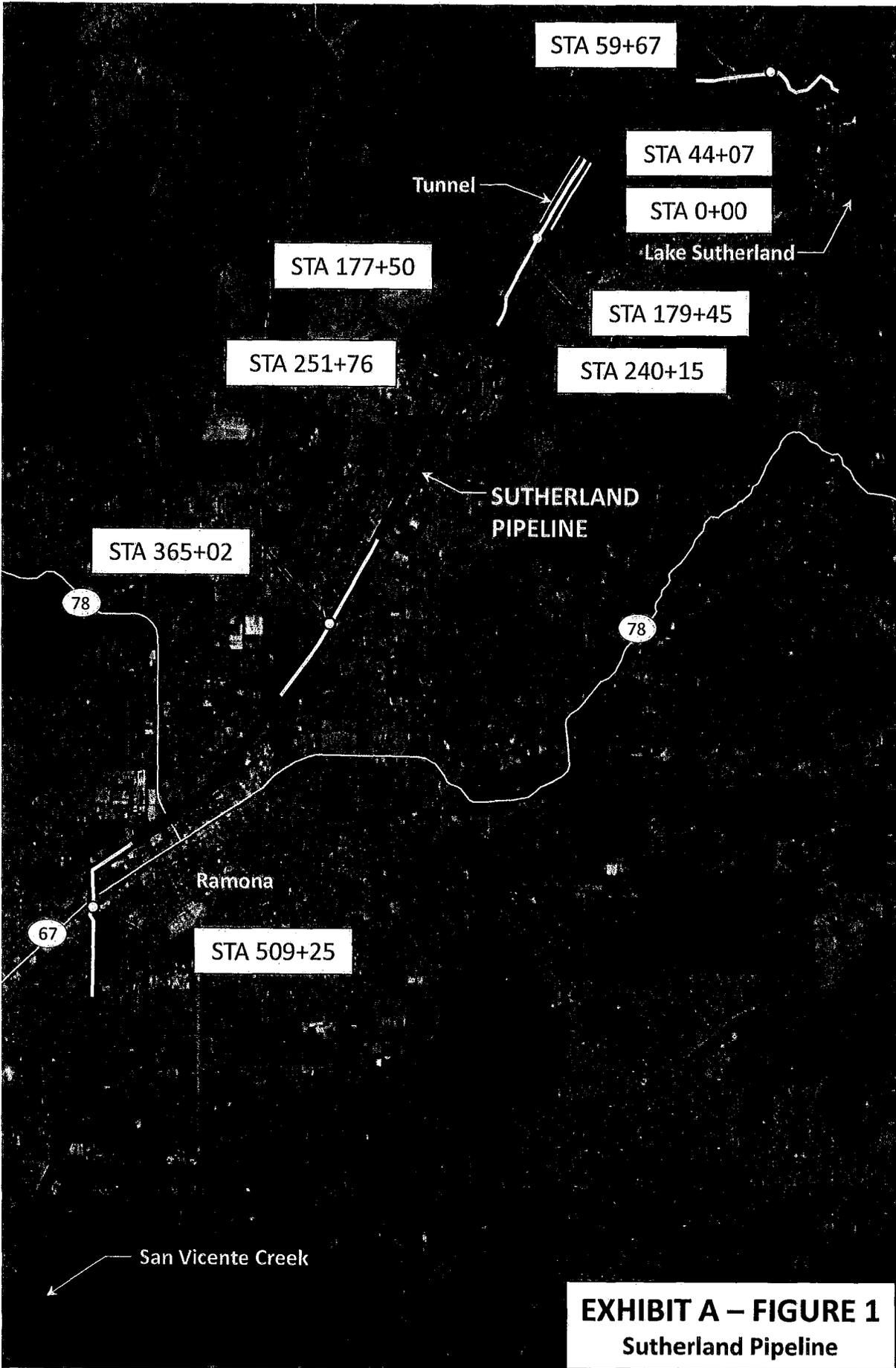


EXHIBIT A – FIGURE 1
Sutherland Pipeline

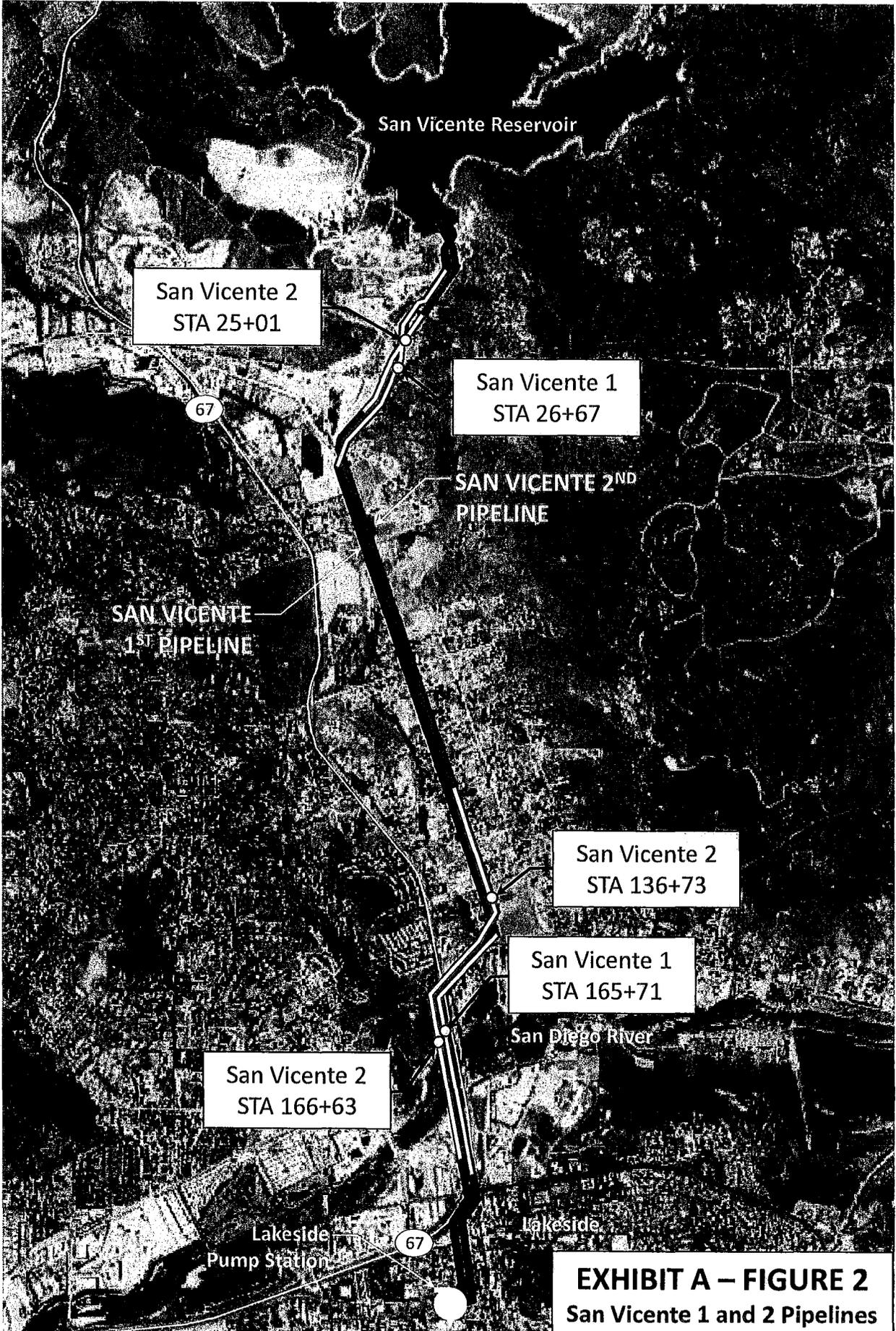


EXHIBIT A – FIGURE 2
San Vicente 1 and 2 Pipelines

COMPENSATION AND FEE SCHEDULE

EXHIBIT B

Project Phase Funding Costs – Consultant Services for Programmatic Water Transmission Pipelines Condition Assessment

Funding Phases	Total Fixed Amount	Task #	Task Description	Fixed Amount	Not to Exceed for Additional Services \$	Total Not to Exceed Amount \$
Phase 1	\$1,165,000.00	3.1	Project Management and Coordination	\$56,175	\$150,000.00	\$1,315,000.00
		3.2	Meetings and Workshops	\$53,350		
		3.3	Project Procedures Manual	\$21,359		
		3.4	Schedule and Progress Reporting	\$15,138		
		3.5	Invoicing	\$11,923		
		3.6	Quality Management	\$8,235		
		4.1	Data Management Plan	\$3,168		
		4.2	File Receipt, Storage, Transfer	\$33,782		
		4.3	Data Collection Forms and Devices	\$49,305		
		4.4	ArcGIS Online Portal	\$2,342		
		4.5	Workshop: Use of Black & Veatch ArcGIS Online Portal	\$10,451		
		5.1	Linear Referencing	\$25,084		
		5.2	LOF and COF Factors	\$93,238		
		5.3	Risk Model	\$21,351		
		6.1	Preliminary Investigations – 3 RWPLs	\$113,823		
		6.2	Field Inspections – 3 RWPLs	\$205,596		
		6.3	Engineering Evaluations – 3 RWPLs	\$6,143		
		7.1	Preliminary Investigations – Potable PLs	\$434,537		
Phase 2	\$1,575,000.00	3.1	Project Management and Coordination	\$68,370	\$300,000.00	\$1,875,000.00
		3.2	Meetings and Workshops	\$34,544		
		3.4	Schedule and Progress Reporting	\$12,340		

EXHIBIT B

		3.5	Invoicing	\$20,439		
		3.6	Quality Management	\$14,117		
		4.4	ArcGIS Online Portal	\$4,016		
		5.2	LOF and COF Factors	\$15,540		
		5.3	Risk Model	\$64,216		
		6.2	Field Inspections – 3 RWPLs	\$1,019,972		
		6.3	Engineering Evaluations – 3 RWPLs	\$97,553		
		7.1	Preliminary Investigations – Potable PLs	\$36,216		
		7.2	Field Inspections – Potable PLs	\$187,677		
Phase 3	\$2,275,000.00	3.1	Project Management and Coordination	\$68,370	\$50,000.00	\$2,325,000.00
		3.2	Meetings and Workshops	\$34,544		
		3.4	Schedule and Progress Reporting	\$12,340		
		3.5	Invoicing	\$20,439		
		3.6	Quality Management	\$14,117		
		4.4	ArcGIS Online Portal	\$4,016		
		5.2	LOF and COF Factors	\$62,159		
		5.3	Risk Model	\$40,430		
		6.2	Field Inspections – 3 RWPLs	\$5,419		
		6.3	Engineering Evaluations – 3 RWPLs	\$69,251		
		6.4	Condition Assess. Reports – 3 RWPLs	\$250,354		
		7.2	Field Inspections – Potable PLs	\$1,644,343		
		7.3	Engineering Evaluations – Potable PLs	\$49,218		
Phase 4	\$1,790,000.00	3.1	Project Management and Coordination	\$68,370	\$0	\$1,790,000.00
		3.2	Meetings and Workshops	\$34,544		
		3.4	Schedule and Progress Reporting	\$12,340		
		3.5	Invoicing	\$20,439		
		3.6	Quality Management	\$14,117		
		4.4	ArcGIS Online Portal	\$4,016		
		5.2	LOF and COF Factors	\$31,079		
		5.3	Risk Model	\$27,919		
		7.2	Field Inspections – Potable PLs	\$1,216,445		

EXHIBIT B

		7.3	Engineering Evaluations – Potable PLs	\$269,646		
		7.4	Risk Assessment Reports	\$91,085		
Phase 5	\$692,857.00	3.1	Project Management and Coordination	\$46,379	\$0	\$692,857.00
		3.2	Meetings and Workshops	\$31,666		
		3.4	Schedule and Progress Reporting	\$11,312		
		3.5	Invoicing	\$18,736		
		3.6	Quality Management	\$12,940		
		4.4	ArcGIS Online Portal	\$3,681		
		5.2	LOF and COF Factors	\$15,540		
		5.3	Risk Model	\$12,500		
		7.3	Engineering Evaluations – Potable PLs	\$165,184		
		7.4	Risk Assessment Reports	\$374,919		
		\$7,497,857.00		Total		

Exhibit B – Compensation and Fee Schedule

BLACK & VEATCH CORPORATION SCHEDULE OF HOURLY FEES FOR PROFESSIONAL SERVICE	
Personnel Classification	Rate
Project Director	\$249
Senior Technical Advisor / Engineer 7-8 / Engineering Specialist 7-8 / Financial Engineering Specialist 7-8	\$249
Project Manager / Engineer 6 / Engineering Specialist 6	\$232
Engineering Manager / Engineer 5 / Engineering Specialist 5	\$207
Engineer 4 / Engineering Specialist 4	\$176
Engineer 3 / Engineering Specialist 3 / Asset Management Consultant	\$157
Engineer 2 / Engineering Specialist 2	\$133
Engineer 1 / Engineering Specialist 1	\$113
QA/QC Manager / Engineering Specialist 7-8	\$249
QA/QC Specialist / Engineering Specialist 6	\$232
QA/QC Specialist / Engineering Specialist 5	\$207
Senior Cost Estimator / Engineer 4	\$176
Cost Estimator / Engineer 3	\$157
CAD / Engineering Technician 4	\$122
CAD / Engineering Technician 3	\$113
Project Support Assistant 2 / GIS Technician 2	\$97
Project Support Assistant 1 / GIS Technician 1	\$85
General Clerk 1	\$65

NOTE:

The consultant may request an adjustment to the labor billing rates in this agreement a minimum of twelve months after the effective date of the Agreement. Any such request must be accompanied by supporting data satisfactory to the City, subject to audit. Any adjustments shall not exceed the lesser of 2.0% or the percentage change in the Bureau Labor Statistics Consumer Price Index-All Urban Consumers (CPI-U) for Los Angeles-Riverside-Orange County, CA. All items shall be used. If the request is made after the twelve-month period, any subsequent request will not be considered prior to the end of the twelve-month adjustment period previously granted. Retroactive rate adjustments will not be considered.

Exhibit B – Compensation and Fee Schedule (cont.)

OTHER DIRECT COSTS-MILEAGE-TRAVEL EXPENSES-MISCELLANEOUS

- The provisions of these clauses also apply to the Consultant's Subcontractors
- Other Direct Costs (ODC) associated with any equipment, phones, cell phones, minor reproduction and other costs which are included in the Consultant's hourly rates or overhead rate(s) shall not be charged to the City as separately priced ODC's.
- Receipts for all ODC's shall accompany Consultant's invoice payment.
- Mileage: The current IRS mileage reimbursement rate shall apply for business miles driven. Mileage logs identifying "To" and "From" locations and "Start" and "End" odometer readings are required, and shall accompany the Consultant's invoice for payment. Mileage reimbursement does not apply to vehicle rentals.
- Travel Expenses: Travel expenses for the lowest cost effective air fare, train, and/or car rental, will be reimbursed at actual cost. Lodging and Per Diem will be reimbursed at actual costs (receipts required) up to the maximum allowance for the San Diego area as published/posted on the U.S. General Services Administration website (<http://www.gsa.gov/portal/category/100120>). Expenses associated with alcoholic beverages are not reimbursable.
- Miscellaneous: All ODC's, including travel expenses, miscellaneous supplies, and delivery charges for courier, FedEx, UPS, express mail, etc., shall be reimbursed at cost. Reproduction charges for printing and reproduction of large sets, reports or oversized drawings shall be reimbursed at cost.

TIME SCHEDULE

Exhibit C
 City of San Diego Public Utility Department
 Programmatic Water Transmission Condition Assessment (H146197)
 Time Schedule

TASK #	DESCRIPTION	DURATION (MONTHS)	DURATION																																																											
			YEAR 1												YEAR 2												YEAR 3												YEAR 4												YEAR 5											
			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
	NOTICE TO PROCEED		[Gantt chart grid with shaded cells indicating task duration]																																																											
TASK 3.0	PROJECT MANAGEMENT, MEETINGS, AND WORKSHOPS		[Gantt chart grid]																																																											
3.1	Project Management and Coordination	54	[Gantt chart grid]																																																											
3.2	Meetings and Workshops	-	[Gantt chart grid]																																																											
3.2.1	Kick-Off Meeting	1	[Gantt chart grid]																																																											
3.2.2	Coordination Meetings	53	[Gantt chart grid]																																																											
3.2.3	Technical Workshops	-	[Gantt chart grid]																																																											
3.3	Project Procedures Manual	2	[Gantt chart grid]																																																											
3.4	Schedule and Progress Reporting	-	[Gantt chart grid]																																																											
3.4.1	Initial Project Schedule	2	[Gantt chart grid]																																																											
3.4.2	Schedule Updates	52	[Gantt chart grid]																																																											
3.4.3	Monthly Progress Updates	53	[Gantt chart grid]																																																											
3.5	Involving	53	[Gantt chart grid]																																																											
3.6	Quality Management	54	[Gantt chart grid]																																																											
TASK 4.0	DATA COLLECTION AND MANAGEMENT		[Gantt chart grid]																																																											
4.1	Data Management Plan	2	[Gantt chart grid]																																																											
4.2	File Receipt, Storage, Transfer	2	[Gantt chart grid]																																																											
4.3	Data Collection Forms and Devices	4	[Gantt chart grid]																																																											
4.4	ArcGIS Online Portal	16	[Gantt chart grid]																																																											
4.5	Workshop: Use of Black & Veatch ArcGIS Online Portal	1	[Gantt chart grid]																																																											
TASK 5.0	RISK ANALYSIS AND PRIORITIZATION		[Gantt chart grid]																																																											
5.1	Linear Referencing	2	[Gantt chart grid]																																																											
5.2	LOF and COF Factors	15	[Gantt chart grid]																																																											
5.3	Risk Model	-	[Gantt chart grid]																																																											
5.3.1	Risk Analysis	40	[Gantt chart grid]																																																											
5.3.2	Prioritization and Ranking - Raw Water Pipelines	5	[Gantt chart grid]																																																											
5.3.3	Prioritization and Ranking - Potable Water Pipelines	7	[Gantt chart grid]																																																											
5.3.4	Workshop: Prioritization of Pipelines	1	[Gantt chart grid]																																																											
TASK 6.0	CONDITION ASSESSMENT OF THREE RAW WATER PIPELINES		[Gantt chart grid]																																																											
6.1	Preliminary Investigations	-	[Gantt chart grid]																																																											
6.1.1	Records & Data Review	5	[Gantt chart grid]																																																											
6.1.2	Field Reconnaissance	1	[Gantt chart grid]																																																											
6.1.3	Geotechnical Investigations	3	[Gantt chart grid]																																																											
6.1.4	Corrosion Engineering Evaluations	3	[Gantt chart grid]																																																											
6.2	Field Inspections (Raw Water Pipelines)	-	[Gantt chart grid]																																																											
6.2.1	Planning and Coordination	19	[Gantt chart grid]																																																											
6.2.2	Permitting	6	[Gantt chart grid]																																																											
6.2.3	Field Work Plans	4	[Gantt chart grid]																																																											
6.2.4	Valve Assessments	2	[Gantt chart grid]																																																											
6.2.5	Visual and NDT Inspections on Exposed Reaches	1	[Gantt chart grid]																																																											
6.2.6	Excavations (7)	3	[Gantt chart grid]																																																											
6.2.7	Pipeline Shutdowns	2	[Gantt chart grid]																																																											
6.2.8	Manned Entries (9)	2	[Gantt chart grid]																																																											
6.2.9	Inspections with In-Pipe Technologies (9 Inspections)	3	[Gantt chart grid]																																																											
6.2.10	Workshops (2): Phase 1 and Phase 2 Post-Field Inspection Reporting	-	[Gantt chart grid]																																																											
6.3	Engineering Evaluations	-	[Gantt chart grid]																																																											
6.3.1	Interpretation of Inspection Data	14	[Gantt chart grid]																																																											
6.3.2	Determination of Remaining Useful Life	5	[Gantt chart grid]																																																											
6.3.3	Recommendations for Future Inspection Frequency and Coverage	2	[Gantt chart grid]																																																											
6.3.4	Development of Planning Level Action Plans and Cost Estimates	3	[Gantt chart grid]																																																											
6.4	Condition Assessment Reports	-	[Gantt chart grid]																																																											
6.4.1	Draft Pipeline Condition Assessment Reports	6	[Gantt chart grid]																																																											
6.4.2	Final Pipeline Condition Assessment Reports	2	[Gantt chart grid]																																																											
6.4.3	Workshop: Presentation of Reports	1	[Gantt chart grid]																																																											
TASK 7.0	CONDITION ASSESSMENT OF 31 POTABLE WATER PIPELINES		[Gantt chart grid]																																																											
7.1	Preliminary Investigations	-	[Gantt chart grid]																																																											
7.1.1	Records & Data Review	5	[Gantt chart grid]																																																											
7.1.2	Field Reconnaissance	1	[Gantt chart grid]																																																											
7.1.3	Corrosion Evaluations (Soil Resistivity Tests)	3	[Gantt chart grid]																																																											
7.1.4	Geotechnical Investigations	2	[Gantt chart grid]																																																											
7.1.5	Environmental Assessment	2	[Gantt chart grid]																																																											
7.1.6	Surge Analysis	2	[Gantt chart grid]																																																											
7.1.7	Prioritize Pipelines for Inspections	1	[Gantt chart grid]																																																											
7.1.8	Workshop: Final Prioritization of Pipe Segments	1	[Gantt chart grid]																																																											
7.2	Field Inspections (Potable Water Pipelines)	-	[Gantt chart grid]																																																											
7.2.1	Planning and Coordination	30	[Gantt chart grid]																																																											
7.2.2	Permitting	8	[Gantt chart grid]																																																											
7.2.3	Field Work Plans	4	[Gantt chart grid]																																																											
7.2.4	Valve Assessments	2	[Gantt chart grid]																																																											
7.2.6	LDS1000™ Video Inspections	5	[Gantt chart grid]																																																											
7.2.7	Visual and NDT Inspections	4	[Gantt chart grid]																																																											
7.2.8	Excavations	4	[Gantt chart grid]																																																											
7.2.8.1	Laboratory Analyses of Soil Samples	5	[Gantt chart grid]																																																											
7.2.9	Workshops (2): Phase 1 and Phase 2 Post-Field Inspection Reporting	2	[Gantt chart grid]																																																											
7.3	Engineering Evaluations	-	[Gantt chart grid]																																																											
7.3.1	Interpretation of Inspection Data	22	[Gantt chart grid]																																																											
7.3.2	Determination of Remaining Useful Life	3	[Gantt chart grid]																																																											
7.3.3	Recommendations for Future Inspection Frequency and Coverage	1	[Gantt chart grid]																																																											
7.3.4	Development of Planning Level Action Plans and Cost Estimates	4	[Gantt chart grid]																																																											
7.3.5	Financial Analysis for Recommended Replacement/Rehabilitation	2	[Gantt chart grid]																																																											
7.4	Risk Assessment Reports	-	[Gantt chart grid]																																																											
7.4.1	Final Programmatic Risk Assessment TM	3	[Gantt chart grid]																																																											
7.4.2	Draft Programmatic Transmission Pipeline Risk Assessment Analysis and Pipeline Replacement Program Report	6	[Gantt chart grid]																																																											
7.4.3	Final Programmatic Transmission Pipeline Risk Assessment Analysis and Pipeline Replacement Program Report	2	[Gantt chart grid]																																																											
7.4.4	Workshop: Presentation of Report	1	[Gantt chart grid]																																																											
TASK 8.0	ADDITIONAL SERVICES		[Gantt chart grid]																																																											
8.0	Additional Services	-	[Gantt chart grid]																																																											

Reserved for winter shutdown(s), if needed

LEGEND:	
[Symbol]	Notice to Proceed
[Symbol]	Meetings
[Symbol]	Workshops

EQUAL OPPORTUNITY CONTRACTING PROGRAM (EOCP)

CONSULTANT REQUIREMENTS

TABLE OF CONTENTS

I. City’s Equal Opportunity Commitment 1

II. Nondiscrimination in Contracting Ordinance..... 1

III. Equal Employment Opportunity Outreach Program..... 2

IV. Small and Local Business Program 2

V. Demonstrated Commitment to Equal Opportunity 3

VI. Definitions 4

VII. Certification 5

VIII. List of Attachments 5

 AA. Work Force Report 6

 BB. Subcontractors List 10

 CC. Contract Activity Report 11

 DD. Consultant Past Participation List..... 12

I. **City’s Equal Opportunity Commitment.** The City of San Diego (City) is strongly committed to equal opportunity for employees and Subcontractors of Consultants doing business with the City. The City encourages its Consultants to share this commitment. Consultants are encouraged to take positive steps to diversify and expand their Subcontractor solicitation base and to offer consulting opportunities to all eligible Subcontractors. *Failure to submit the required EOCP documentation indicated below shall result in a determination of the Consultant being non-responsive.*

II. **Nondiscrimination in Contracting Ordinance.** All Consultants doing business with the City, and their Subcontractors, must comply with requirements of the City’s *Nondiscrimination in Contracting Ordinance*, San Diego Municipal Code Sections 22.3501 through 22.3517.

A. Proposal Documents to include Disclosure of Discrimination Complaints. As part of its bid or proposal, Consultant shall provide to the City a list of all instances within the past ten (10) years where a complaint was filed or pending against Consultant in a legal or administrative proceeding alleging that Consultant discriminated against its employees, Subcontractors, vendors, or suppliers, and a description of the status or resolution of that complaint, including any remedial action taken.

B. Contract Language. The following language shall be included in contracts for City projects between the Consultant and any Subcontractors, vendors, and suppliers:

Contractor shall not discriminate on the basis of race, gender, religion, national origin, ethnicity, sexual orientation, age, or disability in the solicitation, selection, hiring, or treatment of subcontractors, vendors, or suppliers. Consultant shall provide equal opportunity for Subcontractors to participate in opportunities. Consultant understands and agrees that violation of this clause shall be considered a material breach of the contract and may result in contract termination, debarment, or other sanctions.

- C. Contract Disclosure Requirements. Upon the City's request, Consultant agrees to provide to the City, within sixty (60) calendar days, a truthful and complete list of the names of all Subcontractors, vendors, and suppliers that Consultant has used in the past five (5) years on any of its contracts that were undertaken within County of San Diego, including the total dollar amount paid by Consultant for each subcontract or supply contract. Consultant further agrees to fully cooperate in any investigation conducted by the City pursuant to the City's Nondiscrimination in Contracting Ordinance, Municipal Code Sections 22.3501 through 22.3517. Consultant understands and agrees that violation of this clause shall be considered a material breach of the contract and may result in remedies being ordered against the Consultant up to and including contract termination, debarment and other sanctions.

III. **Equal Employment Opportunity Outreach Program.** Consultants shall comply with requirements of San Diego Municipal Code Sections 22.2701 through 22.2707. Consultants shall submit with their proposal a Work Force Report for approval by the Program Manager of the City of San Diego Equal Opportunity Contracting Program (EOCP).

- A. Nondiscrimination in Employment. Consultant shall not discriminate against any employee or applicant for employment on any basis prohibited by law. Contractor shall provide equal opportunity in all employment practices. Consultants shall ensure that their subcontractors comply with this program. Nothing in this Section shall be interpreted to hold a Consultant liable for any discriminatory practice of its subcontractors.
- B. Work Force Report. If based on a review of the Work Force Report (Attachment AA) submitted an EOCP staff Work Force Analysis determines there are under representations when compared to County Labor Force Availability data, then the Consultant will also be required to submit an Equal Employment Opportunity (EEO) Plan to the Program Manager of the City of San Diego Equal Opportunity Contracting Program (EOCP) for approval.
- C. Equal Employment Opportunity Plan. If an Equal Employment Opportunity Plan is required, the Program Manager of EOCP will provide a list of plan requirements to Consultant.

IV. **Small and Local Business Program Requirements.** The City has adopted a Small and Local Business Enterprise (SLBE) program for consultant contracts. SLBE program requirements for consultant contracts are set forth Council Policy 100-10.

- A. SLBE and ELBE Participation for Contracts Valued Over \$50,000:
1. For proposals ranking as qualified or acceptable, or any higher ranking, the City shall apply a maximum of 12 additional points for SLBE or ELBE participation. Points will be awarded as follows:

- a. 20% participation – 5 points
 - b. 25% participation – 10 points
 - c. SLBE or ELBE as prime contractor – 12 points
2. All professional services contracts valued over \$50,000 or more have a voluntary SLBE/ELBE goal of 20%. For the purposes of this Council Policy, the subcontractor requirement may be met by a provider of materials or supplies. Details can be found at <http://www.sandiego.gov/eoc/boc/slbe.shtml>.
- B. Subcontractor Participation List. The Subcontractor Participation List (Attachment BB) shall indicate the Name and Address, Scope of Services, Percent of Total Proposed Contract Amount, Certification Status and Where Certified for each proposed Subcontractor/Subconsultant.
- C. Commitment Letters. Consultant shall also submit Subcontractor Commitment Letters on Subcontractor's letterhead, no more than one page each, from all proposed Subcontractors to acknowledge their commitment to the team, scope of services, and percent of participation in the project.
- D. Contract Activity Reports. To permit monitoring of the winning Consultant's commitment to achieving compliance, Contract Activity Reports (Attachment CC) reflecting work performed by Subcontractors/Subconsultants/Vendors shall be submitted quarterly for any work covered under an executed contract.
- V. **Demonstrated Commitment to Equal Opportunity**. The City seeks to foster a business climate of inclusion and to eliminate barriers to inclusion.
- A. Consultants are required to submit the following information with their proposals:
1. Outreach Efforts. Description of Consultant's outreach efforts undertaken on this project to make subcontracting opportunities available to all interested and qualified firms including SLBE/ELBE/DBE/MBE/WBE/DVBE/OBE.
 2. Past Participation Levels. The Consultant shall list all Subcontractor and Supplier past participation levels on each project (preferably in the City or County of San Diego) in response to Section 6.2.3 of the RFP by using the Past Participation List (Attachment DD). Include the name of project, type of project, value of project, Subcontractor and Supplier firm name, Subcontract amount and identification of the firm's ownership as a certified Minority Enterprise (MBE), Women Business Enterprise (WBE), Disadvantaged Business Enterprise (DBE), Disabled Veteran Business Enterprise (DVBE), Other Business Enterprise (OBE), Emerging Local Business Enterprise (ELBE) or Small Local Business Enterprise (SLBE). To receive credit for past participation levels by certified firms, Consultant shall provide copies of all listed consultant's certifications with the Proposal.
 3. Equal Opportunity Employment. Listing of Consultant's strategies to recruit, hire, train and promote a diverse workforce. These efforts will be considered in conjunction with Consultant's *Workforce Report* as compared to the County's Labor Force Availability.

4. **Community Activities.** Listing of Consultant's current community activities such as membership and participation in local organizations, associations, scholarship programs, mentoring, apprenticeships, internships, community projects, charitable contributions and similar endeavors.

B. In accordance with the City's Equal Opportunity Commitment, the City will consider the four factors described above as part of the evaluation process. A maximum of 13 additional points will be awarded based on consideration of these four factors. Points awarded based on Consultants demonstrated commitment to equal opportunity will be in addition to any points awarded for SLBE or ELBE participation as described in Section IV.

VI. Definitions.

Certified "**Minority Business Enterprise**" (MBE) means a business which is at least fifty-one percent (51%) owned by African Americans, American Indians, Asians, Filipinos, and/or Latinos and whose management and daily operation is controlled by one or more members of the identified ethnic groups. In the case of a publicly-owned business, at least fifty-one percent (51%) of the stock must be owned by, and the business operated by, one or more members of the identified ethnic groups.

Certified "**Women Business Enterprise**" (WBE) means a business which is at least fifty-one percent (51%) owned by one or more women and whose management and daily operation is controlled by the qualifying party(s). In the case of a publicly-owned business, at least fifty-one percent (51%) of the stock must be owned by, and the business operated by, one or more women.

Certified "**Disadvantaged Business Enterprise**" (DBE) means a business which is at least fifty-one percent (51%) owned and operated by one or more socially and economically disadvantaged individuals and whose management and daily operation is controlled by the qualifying party(s). In the case of a publicly-owned business, at least fifty-one percent (51%) of the stock must be owned by, and the business operated by, socially and economically disadvantaged individuals.

Certified "**Disabled Veteran Business Enterprise**" (DVBE) means a business which is at least fifty-one percent (51%) owned by one or more veterans with a service related disability and whose management and daily operation is controlled by the qualifying party(s).

"**Other Business Enterprise**" (OBE) means any business which does not otherwise qualify as Minority, Woman, Disadvantaged or Disabled Veteran Business Enterprise.

"**Emerging Local Business Enterprise**" (ELBE) – Any for-profit enterprise that is not a broker, that is independently owned and operated; that is not a subsidiary of another business; that meets the definition of a local business; and that is not dominant in its field of operation whose average gross annual receipts in the prior three fiscal years do not exceed:

- \$2.75 million – Construction
- \$1.5 million – Specialty Construction
- \$1.5 million – Goods/Materials/Services
- \$1.5 million – Trucking
- \$1.0 million – Professional Services and Architect/Engineering

If a business has not existed for 3 years, the gross sales limits described above shall be applied based upon the annual averages over the course of the existence of the business.

“Local Business Enterprise” (LBE) – A firm having a Principal Place of Business and a Significant Employment Presence in San Diego City or County, California that has been in operation for 12 consecutive months and a valid business tax certificate. This definition is subsumed within the definition of Small Local Business Enterprise.

“Small Local Business Enterprise” (SLBE) – Any for-profit enterprise that is not a broker, that is independently owned and operated; that is not a subsidiary of another business; that meets definition of a local business; and that is not dominant in its field of operation whose average gross annual receipts in the prior three fiscal years do not exceed:

- \$5.0 million – Construction
- \$3.0 million – Specialty Construction
- \$3.0 million – Goods/Materials/Services
- \$3.0 million – Trucking
- \$2.0 million – Professional Services and Architect/Engineering*

California State certified Micro and Disabled Veteran Owned business enterprises shall also satisfy the income requirements to be defined as a Small Local Business Enterprise.

If a business has not existed for 3 years, the employment and gross sales limits described above shall be applied based upon the annual averages over the course of the existence of the business.

VII. Certification.

Below are the EOCP – accepted certification agencies along with certifiable groups:

City of San Diego:	ELBE, SLBE
Caltrans:	DBE, SMBE, SWBE
Dept. of General Services:	DVBE
CA Public Utilities Commission:	MBE, WBE
City of Los Angeles:	DBE, WBE, MBE
SD Regional Minority Supplier Diversity Council:	MBE, WBE

VIII. List of Attachments.

- AA. Work Force Report**
- BB. Subcontractors List**
- CC. Contract Activity Report**
- DD. Consultant Past Participation List**



City of San Diego

ATTACHMENT AA

EQUAL OPPORTUNITY CONTRACTING PROGRAM (EOCP)

1010 Second Avenue • Suite 1400 • MS 614C • San Diego, CA 92101
Phone: (619) 533-3450 • Fax: (619) 533-3633

WORK FORCE REPORT

ADMINISTRATIVE

The objective of the *Equal Employment Opportunity Outreach Program*, San Diego Municipal Code Sections 22.3501 through 22.3517, is to ensure that contractors doing business with the City, or receiving funds from the City, do not engage in unlawful discriminatory employment practices prohibited by State and Federal law. Such employment practices include, but are not limited to unlawful discrimination in the following: employment, promotion or upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rate of pay or other forms of compensation, and selection for training, including apprenticeship. Contractors are required to provide a completed *Work Force Report (WFR)*.

CONTRACTOR IDENTIFICATION

Type of Contractor: Construction Vendor/Supplier Financial Institution Lessee/Lessor
 Consultant Grant Recipient Insurance Company Other

Name of Company: Black & Veatch Corporation

AKA/DBA: _____

Address (Corporate Headquarters, where applicable): 11401 Lamar Avenue

City Overland Park County Johnson State KS Zip: 66211

Telephone Number: (913) 458-2000 FAX Number: (913) 458-2934

Name of Company CEO: Steve Edwards, Chairman, President, CEO

Address(es), phone and fax number(s) of company facilities located in San Diego County (if different from above):

Address: 300 Rancheros Drive, Suite 250

City San Marcos County San Diego State CA Zip 92069

Telephone Number: (760) 621-8600 FAX Number: (760) 621-8602

Type of Business: Engineering Services Type of License: B1999005288

The Company has appointed: _____

as its Equal Employment Opportunity Officer (EEOO). The EEOO has been given authority to establish, disseminate, and enforce equal employment and affirmative action policies of this company. The EEOO may be contacted at:

Address: 11401 Lamar, Overland Park, KS 66211

Telephone Number: (913) 458-8583 FAX Number: (913) 458-8583

- One San Diego County (or Most Local County) Work Force – Mandatory
- Branch Work Force *
- Managing Office Work Force

Check the box above that applies to this WFR.

**Submit a separate Work Force Report for all participating branches. Combine WFRs if more than one branch per county.*

I, the undersigned representative of Black & Veatch Corporation,
(Firm Name)

San Diego CA hereby certify that information provided
(County) (State)

herein is true and correct. This document was executed on this 18 day of September, 2014

Kevin N. Davis
(Authorized Signature)

Kevin N. Davis, P.E., BCEE, Associate Vice President
(Print Authorized Signature)

OFFICE(S) or BRANCH(ES): San Marcos and Scripps Ranch

COUNTY: San Diego

INSTRUCTIONS: For each occupational category, indicate number of males and females in every ethnic group. Total columns in row provided. Sum of all totals should be equal to your total work force. Include all those employed by your company on either a full or part-time basis. The following groups are to be included in ethnic categories listed in columns below:

- (1) Black, African-American
- (2) Hispanic, Latino, Mexican-American, Puerto Rican
- (3) Asian, Pacific Islander
- (4) American Indian, Eskimo
- (5) Filipino
- (6) White, Caucasian
- (7) Other ethnicity; not falling into other groups

OCCUPATIONAL CATEGORY	(1) Black		(2) Hispanic		(3) Asian		(4) American Indian		(5) Filipino		(6) White		(7) Other Ethnicities		
	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	
Management & Financial			1		1							10	3		
Professional	2		2		1	1						4	3	2	
A&E, Science, Computer					1							2			
Technical			1										1		
Sales													1		
Administrative Support												3	8		
Services			1									11	2		
Crafts															
Operative Workers			1									1			
Transportation															
Laborers*															

*Construction laborers and other field employees are not to be included on this page

Totals Each Column	2	0	5	0	3	1	0	0	0	0	31	18	2	0
--------------------	---	---	---	---	---	---	---	---	---	---	----	----	---	---

Grand Total All Employees

62

Non-Profit Organizations Only:

Board of Directors															
Volunteers															
Artists															

OFFICE(S) or BRANCH(ES): Overland Park, Kansas

COUNTY: Johnson

INSTRUCTIONS: For each occupational category, indicate number of males and females in every ethnic group. Total columns in row provided. Sum of all totals should be equal to your total work force. Include all those employed by your company on either a full or part-time basis. The following groups are to be included in ethnic categories listed in columns below:

- (1) Black, African-American
- (2) Hispanic, Latino, Mexican-American, Puerto Rican
- (3) Asian, Pacific Islander
- (4) American Indian, Eskimo
- (5) Filipino
- (6) White, Caucasian
- (7) Other ethnicity; not falling into other groups

OCCUPATIONAL CATEGORY	(1) Black		(2) Hispanic		(3) Asian		(4) American Indian		(5) Filipino		(6) White		(7) Other Ethnicities	
	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)
Management & Financial	22	13	39	13	48	14	2	0	0	0	998	207	5	3
Professional	61	56	83	49	224	68	7	1	0	0	1811	688	12	5
A&E, Science, Computer	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Technical	40	3	34	8	15	7	4	0	0	0	569	94	3	1
Sales	1	0	0	0	1	0	0	0	0	0	35	3	0	0
Administrative Support	2	44	1	21	2	11	0	1	0	0	43	293	1	5
Services	3	0	0	0	0	0	0	0	0	0	10	0	0	0
Crafts	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Operative Workers	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Transportation	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Laborers*	0	0	0	0	0	0	0	0	0	0	0	0	0	0

*Construction laborers and other field employees are not to be included on this page

Totals Each Column	129	116	157	91	290	100	13	2	0	0	3466	1285	21	14
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Grand Total All Employees 5684

Non-Profit Organizations Only:

Board of Directors														
Volunteers														
Artists														



CITY OF SAN DIEGO WORK FORCE REPORT – ADMINISTRATIVE

HISTORY

The Work Force Report (WFR) is the document that allows the City of San Diego to analyze the work forces of all firms wishing to do business with the City. We are able to compare the firm's work force data to County Labor Force Availability (CLFA) data derived from the United States Census. CLFA data is a compilation of lists of occupations and includes the percentage of each ethnicity we track (Black, Hispanic, Asian, American Indian, Filipino) for each occupation. Currently, our CLFA data is taken from the 2000 Census. In order to compare one firm to another, it is important that the data we receive from the consultant firm is accurate and organized in the manner that allows for this fair comparison.

WORK FORCE & BRANCH WORK FORCE REPORTS

When submitting a WFR, especially if the WFR is for a specific project or activity, we would like to have information about the firm's work force that is actually participating in the project or activity. That is, if the project is in San Diego and the work force is from San Diego, we want a San Diego County Work Force Report.¹ By the same token, if the project is in San Diego, but the work force is from another county, such as Orange or Riverside County, we want a Work Force Report from that county.² For example, if participation in a San Diego project is by work forces from San Diego County, Los Angeles County and Sacramento County, we will ask for separate Work Force Reports representing the work forces of

your firm from each of the three counties.^{1,2} On the other hand, if the project will be accomplished completely outside of San Diego, we ask for a Work Force Report from the county or counties where the work will be accomplished.²

MANAGING OFFICE WORK FORCE

Equal Opportunity Contracting may occasionally ask for a Managing Office Work Force (MOWF) Report. This may occur in an instance where the firm involved is a large national or international firm but the San Diego or other local work force is very small. In this case, we may ask for both a local and a MOWF Report.^{1,3} In another case, when work is done only by the Managing Office, only the MOWF Report may be necessary.³

TYPES OF WORK FORCE REPORTS

Please note, throughout the preceding text of this page, the superscript numbers one ¹, two ² & three ³. These numbers coincide with the types of work force report required in the example. See below:

- ¹ One San Diego County (or Most Local County) Work Force – Mandatory in most cases
- ² Branch Work Force*
- ³ Managing Office Work Force

**Submit a separate Work Force Report for all participating branches. Combine WFRs if more than one branch per county*

Exhibit: Work Force Report Job categories

Refer to this table when completing your firm's Work Force Report form(s).

Management & Financial

Advertising, Marketing, Promotions, Public Relations, and Sales Managers
Business Operations Specialists
Financial Specialists
Operations Specialties Managers
Other Management Occupations
Top Executives

Professional

Art and Design Workers
Counselors, Social Workers, and Other Community and Social Service Specialists
Entertainers and Performers, Sports and Related Workers
Health Diagnosing and Treating Practitioners
Lawyers, Judges, and Related Workers
Librarians, Curators, and Archivists
Life Scientists
Media and Communication Workers

Other Teachers and Instructors
Postsecondary Teachers
Primary, Secondary, and Special Education School Teachers
Religious Workers
Social Scientists and Related Workers

Architecture & Engineering, Science, Computer

Architects, Surveyors, and Cartographers
Computer Specialists
Engineers
Mathematical Science Occupations
Physical Scientists

Technical

Drafters, Engineering, and Mapping Technicians
Health Technologists and Technicians
Life, Physical, and Social Science Technicians
Media and Communication Equipment Workers

Sales

Other Sales and Related Workers
Retail Sales Workers
Sales Representatives, Services
Sales Representatives, Wholesale and Manufacturing
Supervisors, Sales Workers

Administrative Support

Financial Clerks
Information and Record Clerks
Legal Support Workers
Material Recording, Scheduling, Dispatching, and Distributing Workers
Other Education, Training, and Library Occupations
Other Office and Administrative Support Workers
Secretaries and Administrative Assistants
Supervisors, Office and Administrative Support Workers

Services

Building Cleaning and Pest Control Workers
Cooks and Food Preparation Workers
Entertainment Attendants and Related Workers
Fire Fighting and Prevention Workers
First-Line Supervisors/Managers, Protective Service Workers
Food and Beverage Serving Workers
Funeral Service Workers
Law Enforcement Workers
Nursing, Psychiatric, and Home Health Aides
Occupational and Physical Therapist Assistants and Aides
Other Food Preparation and Serving Related Workers
Other Healthcare Support Occupations
Other Personal Care and Service Workers

Other Protective Service Workers
Personal Appearance Workers
Supervisors, Food Preparation and Serving Workers
Supervisors, Personal Care and Service Workers
Transportation, Tourism, and Lodging Attendants

Crafts

Construction Trades Workers
Electrical and Electronic Equipment Mechanics, Installers, and Repairers
Extraction Workers
Material Moving Workers
Other Construction and Related Workers
Other Installation, Maintenance, and Repair Occupations
Plant and System Operators
Supervisors of Installation, Maintenance, and Repair Workers
Supervisors, Construction and Extraction Workers
Vehicle and Mobile Equipment Mechanics, Installers, and Repairers
Woodworkers

Operative Workers

Assemblers and Fabricators
Communications Equipment Operators
Food Processing Workers
Metal Workers and Plastic Workers
Motor Vehicle Operators
Other Production Occupations
Printing Workers
Supervisors, Production Workers
Textile, Apparel, and Furnishings Workers

Transportation

Air Transportation Workers
Other Transportation Workers
Rail Transportation Workers
Supervisors, Transportation and Material Moving Workers
Water Transportation Workers

Laborers

Agricultural Workers
Animal Care and Service Workers
Fishing and Hunting Workers
Forest, Conservation, and Logging Workers
Grounds Maintenance Workers
Helpers, Construction Trades
Supervisors, Building and Grounds Cleaning and Maintenance Workers
Supervisors, Farming, Fishing, and Forestry Workers

SUBCONTRACTORS PARTICIPATION LIST

This list shall include the name and complete address of all Subcontractors who qualify as SLBEs or ELBEs. Contractors may also list participation by MBE, WBE, DBE, DBVE and OBE firms. However, no additional points will be awarded for participation by these firms, except that DVBEs that are certified by the City as local businesses shall be counted as SLBEs.

Contractor shall also submit Subcontractor commitment letters on Subcontractor's letterhead, no more than one page each, from Subcontractors listed below to acknowledge their commitment to the team, scope of services, and percent of participation in the project.

Subcontractors shall be used in the percentages listed. No changes to this Participation List will be allowed without prior written City approval.

NAME AND ADDRESS OF SUBCONTRACTORS	SCOPE OF SERVICES	PERCENT OF CONTRACT	SLBE/ELBE (* /MBE/WBE/DBE/DVBE/OBE)	** WHERE CERTIFIED
Arrieta Construction 1215 North Marshall Ave. El Cajon, CA 92020	Excavations, construction, repairs permitting access, inspection technologies and non-destructive testing	27%	ELBE	City of San Diego SBA-State of CA
Allied Geotechnical Engineers, Inc. 9500 Cuyamaca Street, Suite 102 Santee, CA 92071-2605	Soil and geotechnical engineering	1%	SLBE	City of San Diego
DNV-GL dba GL – Noble Denton 1155 Dairy Ashford, Suite 315 Houston, TX 77079	Hydraulic modeling	1/2%	OBE	N/A
KLR Planning P.O. Box 882676 San Diego, CA 92168	Environmental services	1/2%	ELBE	City of San Diego Caltrans
R.F. Yeager Engineering P.O. Box 734 Lakeside, CA 92040	Soil resistivity testing and interpretation of laboratory analysis of soil samples	.8%	SLBE	City of San Diego
Henry Bardakjian Consultant	Technical Advisor for pipeline construction and remaining useful life predictions	.2%	OBE	
Olson Engineering, Inc. 12401 W. 49 th Ave. Wheat Ridge, CO 80033	Evaluation and interpretation of concrete test results	.3%	OBE	
Remote Inspection Technologies 23083 Highway 190 E Robert, LA 70455	Video Inspection of Sutherland, San Vicente 1. And San Vicente 2 Pipelines	1.2%	OBE	

List of Abbreviations:

Certified Minority Business Enterprise MBE

Certified Woman Business Enterprise WBE

Certified Disadvantaged Business Enterprise DBE

Certified Disabled Veteran Business Enterprise DVBE

Other Business Enterprise OBE

** Listed for informational purposes only.*

*** Consultant shall indicate if Subcontractor is certified by one of the agencies listed in Section VII of the Equal Opportunity Contracting Program (EOCP) Attachment.*

CONSULTANT'S PAST PARTICIPATION LIST

The Consultant shall complete this form for each project Listed in response to the RFP. The Consultant Past Participation List shall include name, address, telephone number (including area code), classification, type of work, dollar amount of participation, certification and certifying agency for each Subcontractor or Supplier who participated in the referenced project.

NAME OF PROJECT: **CRITICAL WATER & SEWER INFRASTRUCTURE STRATEGIES-MARYLAND**

TYPE OF PROJECT: **Condition Assessment**

DOLLAR VALUE OF PROJECT: **\$100,000.00**

NAME, ADDRESS AND TELEPHONE NUMBER OF SUBCONTRACTOR	CONTRACTOR, DESIGNER, SUPPLIER, OR VENDOR	TYPE OF WORK PERFORMED, MATERIALS OR SUPPLIES	DOLLAR AMOUNT OF SUBCONTRACTOR PARTICIPATION OR MATERIALS OR SUPPLIES	MBE, WBE, DBE, DVBE, OBE, ELBE, SLBE, SDB, WoSB, HUBZone, OR SDVOSB	WHERE CERTIFIED
GLS Environmental Associates	Designer	Designer	\$4,000.00	N/A	N/A

As appropriate, Design Professional shall identify Subcontractors or Suppliers as one of the following and shall include a valid proof of certification (except for OBE)

Certified Minority Business Enterprise	MBE	Certified Woman Business Enterprise	WBE
Certified Disadvantaged Business Enterprise	DBE	Certified Disabled Veteran Business Enterprise	DVBE
Other Business Enterprise	OBE	Certified Emerging Local Business Enterprise	ELBE
Certified Small Local Business Enterprise	SLBE	Small Disadvantaged Business	SDB
Woman-Owned Small Business	WoSB	HUBZone Business	HUBZone
Service-Disables Veteran Owned Small Business	SDVOSB		

As appropriate, Design Professional shall indicate if Subcontractor or Subcontractor is certified by:

City of San Diego	CITY	State of California Department of Transportation	CALTRANS
California Public Utilities Commission	CPUC	San Diego Regional Minority Supplier Diversity Council	SRMSDC
State of California's Department of General Services	CADoGS	City of Los Angeles	LA
State of California	CA	U.S. Small Business Administration	SBA

The Consultant will not receive any points for past subcontracting participation percentages if the Consultant fails to submit the required proof of Certification.

CONSULTANT'S PAST PARTICIPATION LIST

The Consultant shall complete this form for each project Listed in response to the RFP. The Consultant Past Participation List shall include name, address, telephone number (including area code), classification, type of work, dollar amount of participation, certification and certifying agency for each Subcontractor or Supplier who participated in the referenced project.

NAME OF PROJECT: **RAW WATER INFRASTRUCTURE IMPROVEMENT PLAN-COLORADO**

TYPE OF PROJECT: **Condition Assessment**

DOLLAR VALUE OF PROJECT: **\$1,000,000.00+**

NAME, ADDRESS AND TELEPHONE NUMBER OF SUBCONTRACTOR	CONTRACTOR, DESIGNER, SUPPLIER, OR VENDOR	TYPE OF WORK PERFORMED, MATERIALS OR SUPPLIES	DOLLAR AMOUNT OF SUBCONTRACTOR PARTICIPATION OR MATERIALS OR SUPPLIES	MBE, WBE, DBE, DVBE, OBE, ELBE, SLBE, SDB, WOSB, HUBZone, OR SDVOSB	WHERE CERTIFIED
Shannon & Wilson, Inc.	Contractor	Dam, pipeline and tunnel geotechnical inspections and assessments	402,340.00	N/A	N/A
Ken Bullard (KJB/CBE-CWI)	Contractor	Steel pipe ultrasonic wall thickness testing	3,300.00	N/A	N/A
Intermountain Testing Company	Contractor	Steel pipe ultrasonic wall thickness testing	5,450.00	N/A	N/A
Dresser Couplings	Contractor	Durameter test on a gasket	250.00	N/A	N/A
Structural Integrity Associates, Inc.	Contractor	Bscan wall thickness testing	16,490.00	N/A	N/A
Quality Pipe Services, LLC	Contractor	Internal pipe inspections using CCTV	9,500.00	N/A	N/A
Rawhide Environmental, Inc.	Contractor	Internal pipe inspections using CCTV	6,340.00	N/A	N/A
DRC Construction Services, Inc.	Contractor	Internal pipe inspections using CCTV	1,125.00	N/A	N/A

As appropriate, Design Professional shall identify Subcontractors or Suppliers as one of the following and shall include a valid proof of certification (except for OBE)

Certified Minority Business Enterprise	MBE	Certified Woman Business Enterprise	WBE
Certified Disadvantaged Business Enterprise	DBE	Certified Disabled Veteran Business Enterprise	DVBE
Other Business Enterprise	OBE	Certified Emerging Local Business Enterprise	ELBE
Certified Small Local Business Enterprise	SLBE	Small Disadvantaged Business	SDB
Woman-Owned Small Business	WoSB	HUBZone Business	HUBZone
Service-Disables Veteran Owned Small Business	SDVOSB		

As appropriate, Design Professional shall indicate if Subcontractor or Subcontractor is certified by:

City of San Diego	CITY	State of California Department of Transportation	CALTRANS
California Public Utilities Commission	CPUC	San Diego Regional Minority Supplier Diversity Council	SRMSDC
State of California's Department of General Services	CADoGS	City of Los Angeles	LA
State of California	CA	U.S. Small Business Administration	SBA

The Consultant will not receive any points for past subcontracting participation percentages if the Consultant fails to submit the required proof of Certification.

CONSULTANT'S PAST PARTICIPATION LIST

The Consultant shall complete this form for each project Listed in response to the RFP. The Consultant Past Participation List shall include name, address, telephone number (including area code), classification, type of work, dollar amount of participation, certification and certifying agency for each Subcontractor or Supplier who participated in the referenced project.

NAME OF PROJECT: **WATER TRANSMISSION MAIN CONDITION ASSESSMENT-TEXAS**

TYPE OF PROJECT: **Condition Assessment**

DOLLAR VALUE OF PROJECT: **\$275,000**

NAME, ADDRESS AND TELEPHONE NUMBER OF SUBCONTRACTOR	CONTRACTOR, DESIGNER, SUPPLIER, OR VENDOR	TYPE OF WORK PERFORMED, MATERIALS OR SUPPLIES	DOLLAR AMOUNT OF SUBCONTRACTOR PARTICIPATION OR MATERIALS OR SUPPLIES	MBE, WBE, DBE, DVBE, OBE, ELBE, SLBE, SDB, WoSB, HUBZone, OR SDVOSB	WHERE CERTIFIED
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Simpson Gumpertz & Heger, Inc.	Contractor	Assessment, inspection, testing, mitigation plan verify alignment	\$25,000.00	N/A	N/A
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As appropriate, Design Professional shall identify Subcontractors or Suppliers as one of the following and shall include a valid proof of certification (except for OBE)

Certified Minority Business Enterprise	MBE	Certified Woman Business Enterprise	WBE
Certified Disadvantaged Business Enterprise	DBE	Certified Disabled Veteran Business Enterprise	DVBE
Other Business Enterprise	OBE	Certified Emerging Local Business Enterprise	ELBE
Certified Small Local Business Enterprise	SLBE	Small Disadvantaged Business	SDB
Woman-Owned Small Business	WoSB	HUBZone Business	HUBZone
Service-Disables Veteran Owned Small Business	SDVOSB		

As appropriate, Design Professional shall indicate if Subcontractor or Subcontractor is certified by:

City of San Diego	CITY	State of California Department of Transportation	CALTRANS
California Public Utilities Commission	CPUC	San Diego Regional Minority Supplier Diversity Council	SRMSDC
State of California's Department of General Services	CADoGS	City of Los Angeles	LA
State of California	CA	U.S. Small Business Administration	SBA

The Consultant will not receive any points for past subcontracting participation percentages if the Consultant fails to submit the required proof of Certification.

RESERVED

CITY OF SAN DIEGO
Consultant Performance Evaluation

EXHIBIT F

The purpose of this form is to provide historical data to City staff when selecting consultants.

Section I

1. PROJECT DATA		2. CONSULTANT DATA																													
1a. Project (title, location): 1b. Brief Description: 1c. Budgeted Cost: \$ _____ WBS/IO: _____	2a. Name and address of Consultant: 2b. Consultant's Project Manager: Phone: (____) _____																														
3. CITY DEPARTMENT RESPONSIBLE																															
3a. Department (include Division):	3b. Project Manager (address & phone): Phone: (____) _____																														
4. & 5. CONTRACT DATA (DESIGN AND CONSTRUCTION)																															
4. Design																															
4a. Agreement Date: _____ Resolution #: R- _____ \$ _____ 4b. Amendment(s): \$ _____ / # _____ (City) \$ _____ / # _____ (Consultant) 4c. Total Agreement (4a. & 4b.): \$ _____																															
4d. Type of Work (design, study, etc.):	4e. Key Contract Completion Dates: <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width: 20%;"></td> <td style="width: 10%; text-align: center;">_____ %</td> <td style="width: 10%; text-align: center;">100 %</td> </tr> <tr> <td>Agreement</td> <td style="text-align: center;">_____</td> </tr> <tr> <td>Delivery</td> <td style="text-align: center;">_____</td> </tr> <tr> <td>Acceptance</td> <td style="text-align: center;">_____</td> </tr> </table>				_____ %	_____ %	_____ %	_____ %	_____ %	100 %	Agreement	_____	_____	_____	_____	_____	_____	Delivery	_____	_____	_____	_____	_____	_____	Acceptance	_____	_____	_____	_____	_____	_____
	_____ %	_____ %	_____ %	_____ %	_____ %	100 %																									
Agreement	_____	_____	_____	_____	_____	_____																									
Delivery	_____	_____	_____	_____	_____	_____																									
Acceptance	_____	_____	_____	_____	_____	_____																									
5. Construction																															
5a. Contractor _____ Phone (____) _____ <i>(name and address)</i>																															
5b. Superintendent _____																															
5c. Notice to Proceed _____ (date) 5d. Working days _____ (number) 5e. Actual Working days _____ (number)	5f. Change Orders: Errors/Omissions _____ % of const. cost \$ _____ Unforeseen Conditions _____ % of const. cost \$ _____ Changed Scope _____ % of const. cost \$ _____ Changes Quantities _____ % of const. cost \$ _____ Total Construction Cost \$ _____																														
6. OVERALL RATING (Please ensure Section II is completed)																															
	Excellent	Satisfactory	Poor																												
6a. Plans/Specification Accuracy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																												
Consistency with Budget	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																												
Responsiveness to City Staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																												
6b. Overall Rating _____																															
7. AUTHORIZING SIGNATURES																															
7a. Project Manager _____		Date _____																													
7b. Deputy Director _____		Date _____																													

(4/91)

TURN OVER

Section II		SPECIFIC RATING							
PLANS/SPECIFICATION ACCURACY	EXCELLENT	SATISFACTORY	POOR	N/A	RESPONSIVENESS TO CITY STAFF	EXCELLENT	SATISFACTORY	POOR	N/A
	Plan/Specification clear and precise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	Timely Responses	<input type="checkbox"/>	<input type="checkbox"/>
Plans/Specs Coordination	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Attitude toward Client and review bodies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plans/Specs properly formatted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Follows direction and chain of responsibility	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Code Requirements covered	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Work product delivered on time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Adhered to City Standard Drawings/Specs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Timeliness in notifying City of major problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drawings reflect existing conditions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Resolution of Field problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
As-Built Drawings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	CONSISTENCY WITH BUDGET				
Quality Design	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Reasonable Agreement negotiation	EXCELLENT	SATISFACTORY	POOR	N/A
Change Orders due to design deficiencies are minimized	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Adherence to fee schedule	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Adherence to project budget	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Value Engineering Analysis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section III SUPPLEMENTAL INFORMATION
 (Please ensure to attach additional documentation as needed.)

Item _____ : _____

(*Supporting documentation attached: Yes No)

City of San Diego Purchasing & Contracting Department
CONTRACTOR STANDARDS
Pledge of Compliance

Effective December 24, 2008, the Council of the City of San Diego adopted Ordinance No. O-19808 to extend the Contractor Standards Ordinance to all contracts greater than \$50,000. The intent of the Contractor Standards clause of San Diego Municipal Code §22.3224 is to ensure the City of San Diego conducts business with firms that have the necessary quality, fitness and capacity to perform the work set forth in the contract.

To assist the Purchasing Agent in making this determination and to fulfill the requirements of §22.3224(d), each bidder/proposer must complete and submit this *Pledge of Compliance* with the bid/proposal. If a non-competitive process is used to procure the contract, the proposed contractor must submit this completed *Pledge of Compliance* prior to execution of the contract. A submitted *Pledge of Compliance* is a public record and information contained within will be available for public review for at least ten (10) calendar days, except to the extent that such information is exempt from disclosure pursuant to applicable law.

All responses must be typewritten or printed in ink. If an explanation is requested or additional space is required, respondents must use the *Pledge of Compliance Attachment "A"* and sign each page. The signatory guarantees the truth and accuracy of all responses and statements. Failure to submit this completed *Pledge of Compliance* may make the bid/proposal non-responsive and disqualified from the bidding process. If a change occurs which would modify any response, Contractor must provide the Purchasing Agent an updated response within thirty (30) calendar days.

A. PROJECT TITLE:

Programmatic Water Transmission Pipelines Condition Assessment for the Public Utilities Department
Contract Number (H146197)

B. BIDDER/CONTRACTOR INFORMATION:

<u>Black & Veatch Corporation</u>			
Legal Name		DBA	
<u>300 Rancheros Drive, Suite 250</u>	<u>San Marcos</u>	<u>CA</u>	<u>92069</u>
Street Address	City	State	Zip
<u>Kevin N. Davis, P.E., BCEE, Associate Vice President</u>	<u>760-621-8419</u>	<u>760-621-8602</u>	
Contact Person, Title	Phone	Fax	

C. OWNERSHIP AND NAME CHANGES:

1. In the past five (5) years, has your firm changed its name?
 Yes X No

If **Yes**, use *Pledge of Compliance Attachment "A"* to list all prior legal and DBA names, addresses and dates when used. Explain the specific reasons for each name change.

2. In the past five (5) years, has a firm owner, partner or officer operated a similar business?
 Yes X No

If **Yes**, use *Pledge of Compliance Attachment "A"* to list names and addresses of all businesses and the person who operated the business. Include information about a similar business only if an owner, partner or officer of your firm holds or has held a similar position in another firm.

D. BUSINESS ORGANIZATION/STRUCTURE: Indicate the organizational structure of your firm. Check one only on this page. Use *Pledge of Compliance Attachment "A"* if more space is required.

Corporation Date incorporated: 11/16/1998 State of incorporation: Delaware

List corporation's current officers: President: Steve Edwards
Vice Pres: Multiple Vice Presidents
Secretary: Tim Triplett
Treasurer: Dave Kerns

Is your firm a publicly traded corporation? Yes No

If Yes, name those who own five percent (5%) or more of the corporation's stocks:

N/A

Limited Liability Company Date formed: / / State of formation: _____

List names of members who own five percent (5%) or more of the company:

N/A

Partnership Date formed: / / State of formation: _____

List names of all firm partners:

N/A

Sole Proprietorship Date started: _____

List all firms you have been an owner, partner or officer with during the past five (5) years. Do not include ownership of stock in a publicly traded company:

N/A

Joint Venture Date started: _____

List each firm in the joint venture and its percentage of ownership:

N/A

Note: Each member of a Joint Venture must complete a separate *Contractor Standards Pledge of Compliance* for a Joint Venture's submission to be considered responsive.

E. FINANCIAL RESOURCES AND RESPONSIBILITY:

1. Is your firm in preparation for, in the process of, or in negotiations toward being sold?
 Yes No

If **Yes**, use *Pledge of Compliance Attachment "A"* to explain specific circumstances, including name of the buyer and principal contact information.

2. In the past five (5) years, has your firm been denied bonding?
 Yes No

If **Yes**, use *Pledge of Compliance Attachment "A"* to explain specific circumstances; include bonding company name.

3. In the past five (5) years, has a bonding company made any payments to satisfy claims made against a bond issued on your firm's behalf or a firm where you were the principal?
 Yes No

If **Yes**, use *Pledge of Compliance Attachment "A"* to explain specific circumstances.

F. PERFORMANCE HISTORY:

1. In the past five (5) years, has your firm been found civilly liable, either in a court of law or pursuant to the terms of a settlement agreement, for defaulting or breaching a contract with a government agency?
 Yes No

If **Yes**, use *Pledge of Compliance Attachment "A"* to explain specific circumstances.

2. In the past five (5) years, has a government agency terminated your firm's contract prior to completion?
 Yes No

If **Yes**, use *Pledge of Compliance Attachment "A"* to explain specific circumstances and provide principal contact information.

G. COMPLIANCE:

1. In the past five (5) years, has your firm or any firm owner, partner, officer, executives or management been criminally penalized or found civilly liable, either in a court of law or pursuant to the terms of a settlement agreement for violating any federal, state or local law in performance of a contract, including but not limited to laws regarding health and safety, labor and employment, wage and hours, and licensing laws which affect employees?
 Yes No

If **Yes**, use *Pledge of Compliance Attachment "A"* to explain specific circumstances surrounding each instance; include name of entity involved, specific infraction(s) or violation(s), dates of instances, and outcome with current status.

2. In the past five (5) years, has your firm been debarred or determined to be non-responsible by a government agency?
 Yes No

If **Yes**, use *Pledge of Compliance Attachment "A"* to explain specific circumstances of each instance; include name of entity involved, specific infraction, dates, and outcome.

H. BUSINESS INTEGRITY:

1. In the past five (5) years, has your firm been convicted of or found liable in a civil suit for making a false claim or material misrepresentation to a private or governmental entity?

Yes No

If Yes, use *Pledge of Compliance Attachment "A"* to explain specific circumstances of each instance; include the entity involved, specific infraction(s) or violation(s), dates, outcome and current status.

2. In the past five (5) years, has your firm or any of its executives, management personnel, or owners been convicted of a crime, including misdemeanors, or been found liable in a civil suit involving the bidding, awarding, or performance of a government contract?

Yes No

If Yes, use *Pledge of Compliance Attachment "A"* to explain specific circumstances of each instance; include the entity involved, specific infraction(s), dates, outcome and current status.

I. TYPE OF SUBMISSION: This document is submitted as:

Initial submission of *Contractor Standards Pledge of Compliance*.

Update of prior *Contractor Standards Pledge of Compliance* dated: ____ / ____ / ____

Complete all questions and sign below. Each *Pledge of Compliance Attachment "A"* page must be signed.

Under penalty of perjury under the laws of the State of California, I certify I have read and understand the questions contained in this *Pledge of Compliance* and that I am responsible for completeness and accuracy of responses and all information provided is true to the best of my knowledge and belief. I further certify my agreement to the following provisions of San Diego Municipal Code §22,3224:

- (a) To comply with all applicable local, State and Federal laws, including health and safety, labor and employment, and licensing laws that affect the employees, worksite or performance of the contract.
- (b) To notify the Purchasing Agent within fifteen (15) calendar days upon receiving notification that a government agency has begun an investigation of the Contractor that may result in a finding that the Contractor is or was not in compliance with laws stated in paragraph (a).
- (c) To notify the Purchasing Agent within fifteen (15) calendar days when there has been a finding by a government agency or court of competent jurisdiction of a violation by the Contractor of laws stated in paragraph (a).
- (d) To provide the Purchasing Agent updated responses to the *Contractor Standards Pledge of Compliance* within thirty (30) calendar days if a change occurs which would modify any response.
- (e) To notify the Purchasing Agent within fifteen (15) days of becoming aware of an investigation or finding by a government agency or court of competent jurisdiction of a violation by a subcontractor of laws stated in paragraph (a).
- (f) To cooperate fully with the Purchasing Agent and the City during any investigation and to respond to a request for information within ten (10) working days from the request date.

Failure to sign and submit this form with the bid/proposal shall make the bid/proposal non-responsive.

Kevin N. Davis, P.E., BCEE,
Associate Vice President
Print Name, Title


Signature

9/18/2014
Date

City of San Diego Purchasing & Contracting Department
CONTRACTOR STANDARDS
Pledge of Compliance Attachment "A"

Provide additional information in space below. Use additional *Pledge of Compliance Attachment "A"* pages as needed; sign each page. Print in ink or type responses and indicate question being answered. Information provided will be available for public review, except if exempt from disclosure pursuant to applicable law.

Steve Edwards	Bart Schubert	Jim Lewis	Anthony Koodie
Ralph Dyro	John Johnson	Paul Weida	Fredrik Winterlind
David Egger	Carl Petz	Clint Robinson	Derek Cambridge
Dave Lampitt	Brent Burger	Mike Gammill	Richard King
Mark Prenni	Luis Cabreriza	Mike Gaumnitz	Steve Miller
Brad Warn	Mike Baker	Brian Britton	David McMenemie
Mark Bennett	Eric Gaston	Dean Oskvig	Sheri Blauwiel
Ralph Eberts	Dave Kerns	Ed Walsh	Dave Abrams
Cindy Wallis-Lage	Christi Driver	Ernest Wright	Hoe Wai Cheong
David Mendelsohn	Cathy Weber	Kerry Erington	William Yong
Kurt Westermann	John Gustke	Donnie Ginn Jr.	Sheldon Wood
Jim Hengel	Joe Plubell	Mark Amick	Brenda Greig
Dale Lindberg Jr.	Scott Stallard	Craig Anderson	Mark Fournier
Gregory Wayne	Richard Creaturo	Christopher Ruddle	Bob Germinder Jr.
Jim O'Connor	Javid Talib	Myron Brase	George Gruber
Eric Oldenhuis	Gary Townsend	Hector Brouwer De Koning	Patrick Pelissero
Steve Pieschl	Bruce Van Heest	Rich Chapman	Dave Harris
Ted Pintcke	Michael Wadley	Arthur Close	Garry Hart
Keith Small	Dale Williams	Craig Connell	Terry Jordan
Shahid Qadri	Kent Zernickow	James Coyle	Glenda Friesen
Eric Tan	Rick Crowdis	Susan Lee	Dan Schmidt
Kevin Currence	Michael Serafin	James Schnieders	Jim Doull
Les Lampe	Mark Schrimp	Steve Duxbury	Roger Lenertz
Alex Silver	Ted Andry	John Felski	Vladimir Kantor
Tom O'Brien	Terry Apple	Fred Freeland	Prahlad H.R. Kaushik
Anand Pattani	Stan Armbruster	Bob Frendt	Kevin Kerschen
Tom Phillips	Jeffrey Austin	Jim Gettinger	Dave Koehler
Jose Pires	Kevin Davis	Stephen Gibbs	Randy Kriesel
Marijan Podrebarac	Tom Bozeman	Luis Gil	Len Kriesky
James Strayer	Jack Brake	Donnie Griffin	Kerry Kruzal
John Rector	Dave Brill	Steve Williams	Jeff Kurtz
Brian Schmidt	Doug Butcher	Steve Heyborne	Larry Lee
Curt Smith	Andrew Byers	Richard Hirsch	David Lefebvre
Allen Sneath	Albert Cabrera	Dave Holt	David Leligdon
Steve Stark	Dave Campbell	Roosevelt Huggins	Joseph Mahendran
Dan Meyer	Tom Christensen	John Hughes	Chuck Mather
Dave Walker	Bill Crabb Jr.	John Johnson	Mark McDermott
Doug Woody	John Davisson	Bill McAleb	John Morrow
Jim Clark	Scott Dicks	Jennifer Julian	Jack Nagle
Bill Van Dyke	John Voeller	Doug Anderson	Huang Xiaoyong
Bob Joeger	Matt Webber	Gregory Clum	Allen Rose
Mike Goff	Bill Luelf	Jay Sigman	Thomas Wahl
Todd Dudley	Steve Mitts	Karen Daniel	Angela Hoffman
Jeffrey Stamm	John Hardt	Kevin Hinkle	Jerry Myers
Greg Robertson	Lori Kelleher	Skip Gast	Tom Reorda
Tim Triplett	Peter Loftspring	Kirk Woodward	Adrienne Mickells
Dennis Schapker	Stuart Shaw	Curtis Martin	John Chevrette
Hala Titus	Robert Brnilovich	Russ Feingold	Ronald Krage
Lyle White	Owen Newman	Joy Johnson	Ryan Pletka
John Achenbach	Todd Larson	Daniel Rueckert	Jason Schottler
Andy Powell	Suqing Wang	Marty Travers	John Janchar
Jenny Meegan	Rod Unruh	Paul Miller	John Murphy
Dave Hallowell	Christopher Kraft	Guy Parks	Jim Sundberg
Jacque Hansen	John Marshall	Dan Kieny	Lisa Terry
Greg Bahora	Sonya Roshek	Brian Klausner	Tim Palmer
Sean Terrell	Matthew Lee	John Schebler Jr.	William Breckenridge
John George	Shawn Hoffart	Richard Jacober	Charles Mitchell
Joseph Conradt	Robert Crandall	Michael King	Christopher Koller

Michael Orth	Don Stevens
Dana Reel	Seng Chai Tan
Matthew Nott	John Tattersall
Faruk Oksuz	Jim Welp
Steve Phillips	Alan Man
Jonathan Pressde	David Timmerman
Tom Ratzki	Richard Waite
Jon Doane	Jeff Wells
Yien Phin Liew	Dan Buhrmaster
Peter Martin	Dick Kaufman
Jim McKelvey	Dave Roberts
James Morley	Norman Song
Chris Mueller	Brad Hemken
Jeff Coggins	Jay Hesby
Pam Kenel	Les Lampe
Randy Romack	Paul Lloyd-Henry
Alan Fairweather	Brent Reuss
Kent Lackey	Fred Ellermeier
Mark Steichen	Sean Goldwasser
Steve Canney	Jim Hawkins
Mark Allan	Brady Hays
Carlos Araoz	Jeff Henson
David Carlson	Bob Hulsey
Chris Scott	Louis Nemeth
Steve Foellmi	James Currie
Joe Aillet	David Kinchen
Mike Barcroft	Gary Selby
Ian Barrett	Mike Johnson
Paul Boersma	Kyriacos Pierides
Matt Bond Jr.	Bill Davis
David Brown	Paul Kneitz
Kelvin Lau	

Under penalty of perjury under the laws of the State of California, I certify I have read and understand the questions contained in this *Contractor Standards Pledge of Compliance* and that I am responsible for completeness and accuracy of responses on this *Pledge of Compliance Attachment "A"* page and all information provided is true to the best of my knowledge.

Kevin N. Davis, P.E., BCEE,
Associate Vice President



9-18, 2014

Print Name, Title

Signature

Date

INSTRUCTION SHEET FOR
DISCLOSURE DETERMINATION FOR CONSULTANT
(Form CC-1671)

Use the "Disclosure Determination for Consultant" form (CC-1671) to report the disclosure requirement for any consultant hired to provide services to the City of San Diego or the boards, commissions and agencies that fall under the City of San Diego's jurisdiction.

2 California Code of Regulations defines a "consultant" as an individual who, pursuant to a contract with a state or local government agency, either makes a governmental decision or serves in a staff capacity with the state or local government agency and in that capacity participates in making a governmental decision. For the complete definition of "consultant", refer to Government Code section 18701(a)(2). This section can be located at:

http://www.fppc.ca.gov/index.html?ID=52&r_id=/legal/regs/18701.htm

The "Disclosure Determination for Consultant" form is completed for all consultants under contract with the City of San Diego or the boards, commissions and agencies that fall under the City of San Diego's jurisdiction. Please follow the step-by-step directions:

1. List the department, board, commission or agency requesting the consultant service.
2. List the consulting company. If known, also list the individual(s) who will be providing the consultant services.
3. List the mailing address.
4. List the e-mail address of individual(s) providing the consultant service.
5. Provide the date the individual(s) will start providing the consultant service.
6. List all duties/responsibilities the consultant will have. This list will enable you to determine the disclosure requirement for the consultant.
7. Determine the consultant's disclosure category. Your consultant should be required to disclose only those economic interests which could potentially create a conflict of interest as he/she performs his/her contractual obligations. For ideas about possible disclosure categories, review those in your department's, board's, commission's or agency's conflict of interest code, available at:

www.sandiego.gov/city-clerk/elections/eid/codes.shtml

Please fill out the entire "Disclosure Determination for Consultant" form, and have it signed by the appropriate authority. (Individuals with signing authority are described in your conflict of interest code as part of the disclosure requirement for Consultants.) Forward the original form to the City Clerk's Office, MS 2A.

DISCLOSURE DETERMINATION FOR CONSULTANT

*Must be signed by department director, agency president or other individual authorized by the appropriate conflict of interest code regarding consultants.

- 1. Department / Board / Commission / Agency Name: City of San Diego, Public Utilities Department
2. Name of Specific Consultant & Company: Black & Veatch Corporation
3. Address, City, State, ZIP: 300 Rancheros Drive, Suite 250, San Marcos, CA 92069
4. Project Title (as shown on 1472, "Request for Council Action"): Programmatic Water Transmission Pipelines Condition Assessment (H146197)
5. Consultant Duties for Project: Perform water pipeline condition assessment services including pipeline inspections, engineering evaluations and report presentations. Kevin N. Davis, Project Director daviskn@bv.com Andi Corrao, Project Manager - corrao@bv.com

6. Disclosure Determination [select applicable disclosure requirement]:

[x] Consultant will not be "making a governmental decision" or "serving in a staff capacity." No disclosure required.

- or -

[] Consultant will be "making a governmental decision" or "serving in a staff capacity." Consultant is required to file a Statement of Economic Interests with the City Clerk of the City of San Diego in a timely manner as required by law. [Select consultant's disclosure category.]

[] Full: Disclosure is required pursuant to the broadest disclosure category in the appropriate Conflict of Interest Code.

- or -

[] Limited: Disclosure is required to a limited extent. [List the specific economic interests the consultant is required to disclose.]

Blank lines for listing specific economic interests.

By:

[Signature] Rania Amen, Deputy Director

[Date]

10/24/2014

Once completed, with all questions answered and an authorized signature affixed, please forward the original form to the City Clerk's Office, MS 2A. Keep a copy with the contract.

DEFINITION OF "CONSULTANT"

2 California Code of Regulations defines a "consultant" as an individual who, pursuant to a contract with a state or local government agency:

- (A) Makes a governmental decision whether to:
1. Approve a rate, rule or regulation;
 2. Adopt or enforce a law;
 3. Issue, deny, suspend, or revoke any permit, license, application, certificate, approval, order, or similar authorization or entitlement;
 4. Authorize the City to enter into, modify, or renew a contract provided it is the type of contract that requires City approval;
 5. Grant City approval to a contract that requires City approval and to which the City is a party, or to the specifications for such a contract;
 6. Grant City approval to a plan, design, report, study, or similar item;
 7. Adopt, or grant City approval of, policies, standards, or guidelines for the City, or for any subdivision thereof; or
- (B) Serves in a staff capacity with the City and in that capacity participates in making a governmental decision as defined in Regulation 18702.2 or performs the same or substantially all the same duties for the City that would otherwise be performed by an individual holding a position specified in the City's Conflict of Interest Code.

An individual "serves in a staff capacity" if he or she performs substantially all the same tasks that normally would be performed by staff member of a governmental entity. In most cases, individuals who work on only one project or a limited range of projects for an agency are not considered to be working in a "staff capacity." The length of the individual's service to the agency is relevant. Also, the tasks over the relevant period of time must be substantially the same as a position that is or should be specified in the City's conflict of interest code.

An individual "participates in making a governmental decision" if he or she: (1) negotiates, without substantive review, with a governmental entity or private person regarding the decision; or (2) advises or makes recommendations to the decision-maker, by conducting research or an investigation, preparing or presenting a report, analysis or opinion which requires the exercise of judgment on the part of the individual and the individual is attempting to influence the decision.

Regulation 18701 (a)(2)
http://www.fppc.ca.gov/index.html?ID=52&r_id=/legal/reg/18701.htm
1/28/2006

**EQUAL BENEFITS ORDINANCE
CERTIFICATION OF COMPLIANCE**

EQUAL BENEFITS ORDINANCE CERTIFICATION OF COMPLIANCE



For additional information, contact:
CITY OF SAN DIEGO
EQUAL BENEFITS PROGRAM
 202 C Street, MS 9A, San Diego, CA 92101
 Phone (619) 533-3948 Fax (619) 533-3220

COMPANY INFORMATION

Company Name: Black & Veatch Corporation	Contact Name: Kevin N. Davis, P.E., BCEE Associate Vice President
Company Address: 300 Rancheros Drive, Suite 250	Contact Phone: 760-621-8600
San Marcos, CA 92069	Contact Email: DavisKN@bv.com

CONTRACT INFORMATION

Contract Title: Programmatic Water Transmission Pipelines Condition Assessment for the Public Utilities Department – Contract Number (H146197)	Start Date:
Contract Number (if no number, state location):	End Date:

SUMMARY OF EQUAL BENEFITS ORDINANCE REQUIREMENTS

The Equal Benefits Ordinance [EBO] requires the City to enter into contracts only with contractors who certify they will provide and maintain equal benefits as defined in San Diego Municipal Code §22.4302 for the duration of the contract. To comply:

- Contractor shall offer equal benefits to employees with spouses and employees with domestic partners.
 - Benefits include health, dental, vision insurance; pension/401(k) plans; bereavement, family, parental leave; discounts, child care; travel/relocation expenses; employee assistance programs; credit union membership; or any other benefit.
 - Any benefit not offered to an employee with a spouse, is not required to be offered to an employee with a domestic partner.
- Contractor shall post notice of firm's equal benefits policy in the workplace and notify employees at time of hire and during open enrollment periods.
- Contractor shall allow City access to records, when requested, to confirm compliance with EBO requirements.
- Contractor shall submit *EBO Certification of Compliance*, signed under penalty of perjury, prior to award of contract.

NOTE: This summary is provided for convenience. Full text of the EBO and its Rules are posted at www.sandiego.gov/administration.

CONTRACTOR EQUAL BENEFITS ORDINANCE CERTIFICATION

Please indicate your firm's compliance status with the EBO. The City may request supporting documentation.

- I affirm **compliance** with the EBO because my firm (*contractor must select one reason*):
- Provides equal benefits to spouses and domestic partners.
 - Provides no benefits to spouses or domestic partners.
 - Has no employees.
 - Has collective bargaining agreement(s) in place prior to January 1, 2011, that has not been renewed or expired.

- I request the City's approval to pay affected employees a **cash equivalent** in lieu of equal benefits and verify my firm made a reasonable effort but is not able to provide equal benefits upon contract award. I agree to notify employees of the availability of a cash equivalent for benefits available to spouses but not domestic partners and to continue to make every reasonable effort to extend all available benefits to domestic partners.

It is unlawful for any contractor to knowingly submit any false information to the City regarding equal benefits or cash equivalent associated with the execution, award, amendment, or administration of any contract. [San Diego Municipal Code §22.4307(a)]

Under penalty of perjury under laws of the State of California, I certify the above information is true and correct. I further certify that my firm understands the requirements of the Equal Benefits Ordinance and will provide and maintain equal benefits for the duration of the contract or pay a cash equivalent if authorized by the City.

Kevin N. Davis, P.E., BCEE, Associate Vice President

9-18-2014

Name/Title of Signatory

Signature

Date

FOR OFFICIAL CITY USE ONLY

Receipt Date: _____ EBO Analyst: _____ Approved Not Approved – Reason: _____

**REGARDING INFORMATION REQUESTED UNDER THE
CALIFORNIA PUBLIC RECORDS ACT**

The undersigned duly authorized representative, on behalf of the named Consultant declares and acknowledges the following:

The contents of this contract and any documents pertaining to the performance of the contract requirements/Scope of Services resulting from this contract are public records, and therefore subject to disclosure unless a specific exemption in the California Public Records Act applies.

If a Consultant submits information **clearly marked** confidential or proprietary, the City of San Diego (City) may protect such information and treat it with confidentiality only to the extent permitted by law. However, it will be the **responsibility of the Consultant** to provide to the City the specific legal grounds on which the City can rely in withholding information requested under the California Public Records Act, should the City choose to withhold such information.

General references to sections of the California Public Records Act will not suffice. Rather, the Consultant must provide a **specific and detailed legal basis, including applicable case law** that **clearly establishes** the requested information is exempt from the disclosure requirements of the California Public Records Act.

If the Consultant does not provide a specific and detailed legal basis for withholding the requested information within a time specified by the City, the City will release the information as required by the California Public Records Act and the **Consultant will hold the City harmless** for release of this information.

It will be the **Consultant's obligation to defend**, at Consultant's expense, any legal actions or challenges seeking to obtain from the City any information requested under the California Public Records Act withheld by the City at the Consultant's request. Furthermore, the Consultant shall **indemnify** the City and **hold it harmless** for any claim or liability, and **defend any action** brought against the City, resulting from the City's refusal to release information requested under the Public Records Act withheld at Consultant's request.

Nothing in this Agreement creates any obligation for the City to notify the Consultant or obtain the Consultant's approval or consent before releasing information subject to disclosure under the California Public Records Act.

RESERVED