

DUPLICATE ORIGINAL

**AGREEMENT BETWEEN
THE CITY OF SAN DIEGO
AND
DELOITTE CONSULTING
FOR**

**ENTERPRISE ASSET MANAGEMENT (EAM) PROJECT - SYSTEMS
INTEGRATOR CONSULTANT SERVICES**

CONTRACT NUMBER: H166584

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- Exhibit A, Attachment 2 - Legacy Application List
- Exhibit A, Attachment 3 - Additional Sources for Data Migration
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- (AA) Disclosure of Discrimination Complaints
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**AGREEMENT BETWEEN
THE CITY OF SAN DIEGO
AND DELOITTE CONSULTING
FOR CONSULTANT SERVICES**

THIS Agreement is made and entered into between the City of San Diego, a municipal corporation [City], and Deloitte Consulting LLP [Consultant] for the Consultant to provide Professional Services to the City for Enterprise Asset Management.

RECITALS

The City wants to retain the services of a consulting firm to provide Enterprise Asset Management Systems Integration services [Professional Services].

The Consultant has the expertise, experience and personnel necessary to provide the Professional 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 Professional 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 Professional Services set forth in the written Scope of Services (Exhibit A) at the direction of the City.

1.2 Contract Administrator. The Office of the Deputy Chief Operating Officer, Infrastructure/Public Works is the contract administrator for this Agreement. The Consultant shall provide the Professional Services under the direction of a designated representative of the Office of the Deputy Chief Operating Officer, Infrastructure/Public Works. 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 Professional 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 agreed to 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 such changes and 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 Professional 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 Professional Services in accordance with applicable laws and accepted industry standards.

1.5 Confidentiality of Services. All Professional 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.

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 June 30, 2018, 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 Professional 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 Professional Services, the City may exercise its rights under Sections 2.5-2.6 of this Agreement.

2.4 Delay. If delays in the performance of the Professional 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 Professional 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. Consultant shall be entitled to compensation for its actual costs as a result of City caused delay.

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 Professional 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 Professional 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 Professional 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 Professional 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 Professional 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 Professional Services under this Agreement. For services satisfactorily rendered in completing the work, the Consultant shall be entitled to fair and reasonable compensation for the Professional 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 Professional 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 twenty (20) 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 \$20,570,000. The compensation for the Scope of Services shall not exceed \$18,700,000 and the compensation for Additional Services (described in Section 3.2), if any, shall not exceed \$1,870,000. Moreover, the total compensation to be paid to the Design Professional 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 Agreement through June 30, 2016	\$2,851,750
2	From July 1, 2016 through completion of the Agreement	\$12,809,500
3	From July 1, 2017 through completion of the Agreement	\$4,908,750
Total		\$20,570,000

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 of this AGREEMENT; and

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

<u>Funding Phases</u>	<u>Fixed Amount</u>	<u>Not to Exceed Amount for Additional Services</u>	<u>Total Not to Exceed Amount</u>
1	\$2,851,750	\$0	\$2,851,750
2	\$11,407,000	\$1,402,500	\$12,809,500
3	\$4,441,250	\$467,500	\$4,908,750
Total	\$18,700,000	\$1,870,000	\$20,570,000

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 milestone in a form acceptable to City in accordance with the Compensation and Fee Schedule. The Consultant shall include with each invoice a description of milestone and deliverables accepted 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 incurred by Consultant that are determined to be caused by the Consultant's errors or omissions, and may include Consultant overhead, materials, and related costs. The Consultant shall not be paid for the Additional Cost for Professional Services required due to the Consultant's errors or omissions, and the Consultant shall be responsible for any Additional Costs caused by such errors or omissions. The foregoing shall not limit the City's rights and remedies under the Contract to seek damages as a result of Contractor's negligence or breach.

ARTICLE IV

CONSULTANT'S OBLIGATIONS

4.1 Industry Standards. The Consultant agrees that the Professional Services rendered under this Agreement shall be performed in accordance with the standards customarily adhered to by an experienced and competent Enterprise Asset Management 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 Professional 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 Professional 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 Professional Services; and (2) the policy will be maintained in force for a period of three years after substantial completion of the Professional Services 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 Agreement 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 related to the Project [Subcontractor Services] is subject to prior approval by the City. The Consultant shall list on the Subcontractor List (Exhibit D, Attachment CC) 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 addition, deletion, or substitution of Subcontractor Services, the Consultant must submit a written notice to the City requesting approval for the change modifying the Subcontractor Services. The Consultant's written notice shall include a justification, a description of the scope of services, an estimate of all costs/percentage of contract participation for the Subcontractor Services, and an updated Exhibit D, Attachment CC reflecting the requested change(s). 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 Records and Reports.

4.5.1 The Consultant shall maintain records of all subcontracts entered into with all firms, all project invoices received from Subcontractors. Records shall show name, telephone number including area code, and business address of each Subcontractor and the total amount actually paid to each firm. Project relevant records, regardless of tier, may be periodically reviewed by the City.

4.5.2 The Consultant shall retain all records, books, papers, and documents directly pertinent to the Contract for a period of not less than five (5) years after Completion of the contract and allow access to said records by the City's authorized representatives.

4.5.3 The Consultant must submit the following reporting using the City's web-based contract compliance i.e., Prism® portal:

4.5.3.1 Monthly Employment Utilization. Consultant and their Subcontractors must submit Monthly Employment Utilization Reporting by the fifth (5th) day of the subsequent month.

4.5.3.2 Invoicing and Payments. Consultant and their Subcontractors must submit Invoicing and Payment Reporting concurrent with the schedule of the payment milestones (Exhibit B, item 2).

4.5.3.3 To view the City's online tutorials on how to utilize PRISM® for compliance reporting, please visit: <http://stage.prismscompliance.com/etc/vendortutorials.htm>

Incomplete and/or delinquent reporting may cause payment delays, non-payment of invoice, or both. 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.

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 written 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. The Consultant 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. The Consultant shall certify to the City that it will provide a drug-free workplace by submitting a Consultant Certification for a Drug-Free Workplace form (Exhibit E).

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 stated in this Agreement 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 Professional 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 Professional 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 Professional 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 Professional 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 may include, but is not limited to, providing professional consultations, attending mediations, arbitrations, depositions, trials or any event related to the dispute resolution and/or litigation provided that Consultant may decline to provide assistance if such assistance would render Consultant in violation of applicable professional rules, its own client conflict principles, or applicable law, rule or regulation.

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 RESERVED

4.14 ADA Certification. The Consultant hereby certifies (Exhibit K) 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 RESERVED

ARTICLE V

RESERVED

ARTICLE VI

INDEMNIFICATION

6.1 Indemnification and Hold Harmless Agreement. With respect to any liability, claims asserted or costs, losses, or payments attributable to the claims of third parties for bodily or personal injury to any person or damage to real or tangible personal property caused or claimed to be caused by the acts or omissions of the Consultant, or Consultant's employees, subcontractors, 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 such liability. 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.

6.2 Limitation on Damages. Consultant, its subsidiaries and subcontractors, and their respective personnel shall not be liable to the City for any claims, liabilities, or expenses relating to this Agreement or the Services ("Claims") for an aggregate amount in excess of the fees paid by the City to Consultant under this Agreement, except to the extent resulting from the recklessness, bad faith or intentional misconduct of Consultant or its subcontractors. In no event shall Consultant, its

subsidiaries or subcontractors, or their respective personnel be liable to the City for any loss of use, data, goodwill, revenues, or profits (whether or not deemed to constitute a direct Claim), or any consequential, special, indirect, incidental, punitive, or exemplary loss, damage, or expense relating to this Agreement or the Services. In circumstances where any limitation on damages or indemnification provision hereunder is unavailable, the aggregate liability of Consultant, its subsidiaries and subcontractors, and their respective personnel for any Claim shall not exceed an amount that that is proportional to the relative fault that the conduct of Consultant and its subcontractors bears to all other conduct giving rise to such Claim. Similarly, in no case shall the City be liable to Consultant for an aggregate amount in excess of the fees paid by the City to the Consultant under this Agreement and proportionate to any fault of the City, or the total price remaining to be paid on the Agreement. This limitation does not limit Consultant's obligation to maintain any insurance coverage provided in this Agreement. In circumstances where any limitation on damages or indemnification provision hereunder is unavailable, the aggregate liability of the City, its subsidiaries and subcontractors, and their respective personnel for any Claim shall not exceed an amount that that is proportional to the relative fault that the conduct of the City and its subcontractors bears to all other conduct giving rise to such Claim.

ARTICLE VII

MEDIATION

7.1 Mandatory Non-binding Mediation. With the exception of Sections 2.5-2.6 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 a 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. To initiate mediation, the initiating Party shall serve a Request for Mediation on the opposing Party.

7.3.1 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 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. Except for any intellectual property created prior to or independently of the performance of the Services ("Consultant Technology"), all original designs, plans, specifications, reports, documentation, software code, 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, except with respect to any Consultant Technology included therein. The Consultant hereby grants the City the right to use, for the City's internal business purposes, any Consultant Technology included in the Deliverable Materials in connection with the City's use of the Deliverable Materials. Except for the foregoing license grant, the Consultant or its licensors retain all rights in and to all Consultant Technology.

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 Deliverable Materials 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 written 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 (excluding any Consultant Technology included therein) 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 (excluding any Consultant Technology included therein) 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 Materials to the City, the agreement between Consultant and the Subcontractor [Subcontractor Agreement] shall include a statement that identifies that the Deliverable Materials/Work product as a "work-for hire" as defined in the Act and that all intellectual property rights in the Deliverable Materials/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 Materials, 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 (excluding Consultant Technology included therein), 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 elected officials, 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, Deliverable Materials, 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 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: Office of the Deputy Chief Operating Officer, Infrastructure/Public Works, 202 C Street, Ninth Floor, MS 9A, San Diego, CA 92101, Attn: Erin Noel, MS614C and notice to the Consultant shall be addressed to: Ian Wright, Deloitte, 1700 Market Street, Philadelphia PA 19103.

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 Professional 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 and Subcontractors: Ian Wright, Tim Martin, Dan McPartland, Norbert Klinger, Felicia Lyon, Ron Wagner, Chandra Krishnamurthy, Chinni Chinni, Kevin Heckel, Ketul Odich, Anuj Babel, and Karthik Sukumar ["Key Personnel" of Project Team]. Accordingly, performance of Professional Services under this Agreement 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 Key Personnel are the principal persons responsible for delivery of all Professional Services and may not be removed from the Project Team without the City's prior written approval. Removal of any of the Key Personnel from 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 of the Key Personnel 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 performance of the Scope of Services.

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 without regard to the conflicts or choice of law provisions thereof.

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 Professional 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 Professional 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 30 adopted by Ordinance No. O-20148. 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.

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, Consultant must certify it 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)]. Consultant 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.

Consultant also must give the City access to documents and records sufficient for the City to verify the Consultant is 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.

9.25 Public Records. This contract is public document subject to the California Public Records Act, and as such may be subject to public review per Exhibit J (Regarding Information

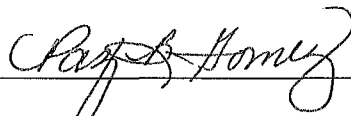
Requested under the California Public Records Act).

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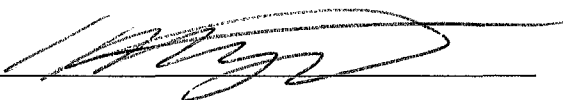
IN WITNESS WHEREOF, this Agreement is executed by the City of San Diego, acting by and through its Mayor, pursuant to R - 310321, authorizing such execution, and by the Consultant pursuant to I AM San Diego Project contract H166584.

Dated this 22nd day of April, 2016.

THE CITY OF SAN DIEGO
Mayor or Designee


By 
Paz Gomez,
Deputy Chief Operating Officer
Infrastructure / Public Works

I HEREBY CERTIFY I can legally bind DELOITTE CONSULTING and that I have read all of this Agreement, this day of 12 FEBRUARY, 2016.

By 
Ian Wright
Principal

I HEREBY APPROVE the form of the foregoing Agreement this 26th day of April, 2016.

JAN I. GOLDSMITH, City Attorney

By 
Christine Leone, Deputy City
Attorney

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CONSULTANT AGREEMENT EXHIBITS



EXHIBIT A
SCOPE OF SERVICES

1. Introduction and Background

The City of San Diego owns and maintains a large and complex network of infrastructure assets valued at well over \$9.7 billion, including streets, sidewalks, storm drains, buildings and facilities, water and wastewater assets, and parks, among others. The City currently does not have an effective strategy for managing these assets. In addition, tight financial constraints on the City have led to underinvestment in infrastructure assets over many years. This has resulted in aging and deteriorating assets and a significant and growing backlog of deferred maintenance and capital project needs throughout the City. Infrastructure issues have the potential to impact public health, safety, and the quality of life for San Diego communities as well as the tourism industry which is an important part of the City's economy. Addressing these issues, including reducing the backlog and more effectively planning for needed maintenance and capital renewal, is one of the highest priorities for the City.

The City plans to implement Asset Management leading business practices as a result of the work described in this Agreement, and implement an integrated Infrastructure Asset Management (IAM) solution using the SAP suite of Enterprise Asset Management (EAM) tools, ESRI Geographic Information System (GIS), Riva Modeling, and other products outlined in this document in order to more effectively and sustainably manage infrastructure assets at a desired level of service for the lowest lifecycle cost. This new IAM solution will enable the City to use information on assets, including condition, status, and maintenance history, to assess and measure lifecycle costs, evaluate the broader costs and benefits of infrastructure projects and to develop optimal routine maintenance and capital investment strategies. This project is called Infrastructure Asset Management San Diego (I AM San Diego), herein referred to as "The Project". This Scope of Services details scope for the Systems Integrator (SI) per this Agreement for the I AM San Diego Project.

The integrated, SAP-centric Enterprise Asset Management solution to be implemented by the SI and City shall utilize the City's existing SAP ERP platform, while implementing new products and expanding the use of existing products based on the scope identified in this document. The list of asset types in scope for the project, with approximate quantities, as obtained from master data in legacy systems is provided in Exhibit A, Attachment 1. It is to be noted that the data in the list, while highly representative of the types of assets and quantities that are to be managed using the solutions to be developed by this project, is not exhaustive and could be modified through the change control process.

Disparate Computerized Maintenance Management Systems (CMMS) are currently in use across the various City Departments in order to manage the operations and maintenance of assets. This project will consolidate the complete lifecycle management of assets in to a single, integrated IAM solution set. Exhibit A, Attachment 2 provides a list of legacy systems and applications with associated scope disposition to either replace or retain and integrate with. In addition to the legacy applications listed for retirement from which data is to be migrated, there are several other City data sources with data essential to asset lifecycle management. Exhibit A, Attachment 3 provides the list of such data sources that are in scope for data migration.

Exhibit A, Attachment 4 lists the as-is business scenarios based on the current processes and

applications in use. It is expected that inefficient legacy practices will not be carried over as-is, and that the participating City departments and divisions will be expected to modify their business processes based on standardized leading practices, except where regulatory and/or audit specifications require a customized process.

2. Project Method and Approach

2.1. Enterprise Value Delivery Method

Deloitte Consulting's Enterprise Value Delivery (the "EVD") method will be the technology implementation method used for phases of the Project in scope for this Agreement. The services provided under this Agreement apply to each of the following phases described in this section. The Parties agree to utilize Deloitte Consulting's SAP EAM preconfigured solution and leverage it to the extent it meets the City's requirements and objectives. The City seeks to standardize its business processes and adopt business leading practices and expects strong alignment of Deloitte's SAP EAM preconfigured solution to meet these objectives. The SAP EAM preconfigured solution contains accelerators, such as process flows, configuration and conversion templates, test scripts, and training documentation, and it is expected that the preconfigured solution will require adaptation to be City-specific. In addition, it is also recognized that there are scope areas, as laid out in this document, that are not covered by the SAP EAM preconfigured solution – and the project team will design a solution using the method and approach outlined below. The EVD method consists of the EVD phases described below. The Parties' roles and responsibilities with respect to the phases covered by this Agreement are described in Section 5.2 below of this Scope of Services.

2.1.1. Phase 0 – Greenhouse

A Greenhouse visioning workshop will be conducted with Deloitte and City project leadership and sponsors. This will use a facilitated approach to define the overall goals of the Project, align these with the broader infrastructure goals of the City, and define a common framework in which to communicate this to the broader group of stakeholders.

2.1.2. Phase 1 – Project Preparation

Project Preparation is the Project's start-up phase, during which the Parties plan and prepare for subsequent phases of the Project. Project Preparation activities include developing a Project charter, Project and quality management processes, a master plan, a work plan, and a Deliverables log. During this phase, the Parties establish the Project organization structure, develop the Project tool strategy, and assign resources.

2.1.3. Phase 2 – Blueprint

During the Blueprint phase, the Parties establish a common understanding of how the integrated IAM solution that includes SAP, bolt-ons, and legacy systems will be used by the City. Workshops are conducted to gather detailed business requirements; design business processes, data, and technology solutions; and design business roles. The City's Business Process Consultant's input and recommendations will be available as input for the to-be process design,

and is to be adopted as applicable. Fit/gap analysis is performed in order to determine options for gap resolution. A plan for data cleansing is developed, taking in to consideration the preliminary work conducted by the City towards legacy data quality assurance, and cleansing activities for the remainder of the project are initiated. Configuration design and functional specifications are documented. Change impacts are identified and the end user training curriculum is defined. During this phase the project team starts Sprints to design and configure the major processes. Each Sprint will incorporate an agile approach to design, prototype, configure and build the solution for a specific process area. Sprints will be conducted throughout the Blueprint and Realization Build phases.

2.1.4. Phase 3a – Realization – Build

The Realization – Build phase focuses on SAP configuration and documentation, security role configuration, and completion of remaining functional specifications, technical specifications, and software development. Business intelligence analytics and report layouts are created. Data cleansing is performed. Business process procedures and end user training materials are developed. Role to position mapping is performed. Business freeze and cutover plans are developed. Unit and string testing are conducted and the final Sprints for process variations are completed.

2.1.5. Phase 3b – Realization – Test

The Realization – Test phase focuses on various types of testing to confirm that the business, data, security, and technical requirements have been addressed. This consists of developing test cases and conducting testing and defect resolution. During this phase, end user training schedules are finalized and go/ no-go criteria are defined. The following test types will be executed as part of the Project:

Unit	The first testing activity completed during the Sprints, it focuses on testing individual SAP transactions and FRICE-W objects before combining it with other tested units.
String	Conducted at the sub-process level to confirm the process tasks and transactions of the sub process interact correctly, focusing on the system functions within a business process.
Integration	A comprehensive test of the components of IAM solution to assess the entire end-to-end execution of system process to confirm components of the solution (including security design) integrate, including interfaces for integration with non-IAM systems.
User-Acceptance	Introduces the application to the user environment, where key end users verify the business is ready to cutover to the new solution by executing select integration tests
Regression	Regression testing assesses whether the existing functionality works correctly along with the changes implemented for the IAM solution
Data Conversion	This allows to test conversion programs and provides the opportunity to determine the validity of the master and transactional data converted from legacy systems for use in the new system.

Performance and Stress	Assesses performance of the entire technical architecture, which consists of software applications, integration, database, network, and the hardware components
Batch Performance	Confirms that the batch schedule operates as designed and within performance parameters
Security Role	As part of the Integration test City users will log onto the test system using the appropriate production security roles and execute each test script step to confirm that the user is able to perform their role. They will also perform a negative test to confirm that the script cannot access other system functions that the user should not have access to.
Physical Infrastructure	This test will use the end user device / access point in the field to confirm that each method for accessing the system has connectivity and can be used in the production system. The project team will also test the connectivity and data replication between SAP instances and legacy systems.
Cutover Dress Rehearsal	The build of the test and production systems including those for Integration test cycle 2, 3, regression test and user acceptance test will be used to develop and confirm the cut over schedule for placing the IAM functions into production. During Final Preparation at least two end to end, 24x7 dress rehearsals will be executed to confirm that the cut over can be performed in the available schedule.
Production Verification	Post cut over and prior to the system being released to the full end user community selected users will access the system and confirm that existing business functions and new functionality can be accessed, that data views are substantially similar for the existing systems, and that key transactions can be posted and reversed.

2.1.6. Phase 4 – Final Preparation

During the Final Preparation phase, the production SAP system and end users are prepared for go live. This consists of end user training, user acceptance testing, final cutover dress rehearsal, and mobilization of production support organization and procedures. The cutover is executed, which includes loading data into the production systems, confirming that the data is loaded, managing transports, and creating the end user system access.

2.1.7. Phase 5 – Go Live & Support

The Go Live and Support phase is the transition from the readiness activities of a preproduction environment to conducting business operations in the production system. This phase consists of production verification testing before release of the system to business end users, provision of production support, monitoring of business processes and system transactions, transition of support to the production support organization, the City’s coordination of legacy system retirement activities, and closing of the Project.

2.2. Project Tools

The Parties agree that the following tool(s) will be used in the performance of the Services for the project. The use of these tools will be enabled for all of the participants on the project – to include Deloitte Consulting, City employees and contract staff, the Business Process Consultant –

EXHIBIT A

ARCADIS, SAP, Riva Modeling, the City’s application support vendor CGI, and any additional parties engaged for the project, and will be used to manage their respective deliverables associated with the project. For specific functions that these tools below support, no other project management tool will be used. For each of the tools below for which the City has licenses, the project will use the City’s instance of the tool.

It is agreed that the use of the Deloitte Project Management Center will be limited in access to only those City vendors who are engaged on the I AM San Diego project. Section 8.2 – Assumptions contains the terms of use for the tools provided by Deloitte Consulting, to which City hereby agrees.

Tool	Description	Value Delivered
Project Management Center	On line project management tool Used to track work plan tasks, issues, risks and action items	Out of the box templates Accessible to all project team members Proven effective on hundreds of SAP projects
HP Quality Center Test Management tool (HPQC)	Test management tool used to define test cases, record test results, and enter and report on defects Can be hosted by Deloitte or on-premise at the City	Proven tool that has been used on hundreds of SAP projects Supplements Worksoft test automation tool
Worksoft*	Enables automation of regression and other test types	Enables automation of key test types (e.g. regression testing)
Solution Manager*	Tool for recording documentation of configuration and development objects	Compliments Deloitte EVD methodology
ARIS*, with Industry Print	Modeling tool for developing flow charts of business processes	Deloitte has used ARIS on hundreds of SAP projects to document process flows
Business Objects Data Services*	Tool that enables the extraction and integration of data into SAP Business Objects tools, and later used for development of reports	Integrates with other SAP solutions
SAP Information Steward**	Tool that allows data managers to assess, monitor and improve data quality Useful for data analysis and cleansing prior to conversion to SAP	Integrated with other SAP solutions

Tool	Description	Value Delivered
Deloitte SAP EAM Template	<p>Preconfigured solution for EAM delivers industry-leading scenarios across multiple modules</p> <p>Other processes and functions in the asset lifecycle are also pre-delivered including asset lifecycle accounting (ALA), multi-resource scheduling (MRS), work clearance management (WCM), and project and portfolio management (PPM).</p>	<p>By delivering a preconfigured solution, we are able to jump start prototyping in blueprint workshops through demonstrating live transactions.</p> <p>Without the need to build a system from scratch, we can quickly help the City team and workshop participants to visualize system design options and quickly leverage those demos in completing process design.</p>
EAM Capability Maturity Model	<p>Tool to help evaluate an organization’s capability across a number of EAM disciplines.</p>	<p>Allows for comparisons of current capability and provides understanding of what good and great performance is. Used during blueprinting to assess current state of process and vision for the future state.</p>
SAP Work Manager Accelerator	<p>The SAP Work Manager Accelerator is a mobile solution with a series of enhancements developed by Deloitte. It is integrated into the SAP Utility Template solution.</p> <p>Work Manager includes processes and steps to improve productivity, safety, reliability and compliance related to asset and work management.</p>	<p>These pre-delivered enhancements come free of development or licensing charges and help jump-start the design and build phases for the mobility solution.</p> <p>The most common and advanced features that are not available out of the box are pre-delivered and available for testing as part of the project.</p>
Data Quality Estimation Model	<p>Evaluate and project the resource distribution for high volume of data standardization efforts</p>	<p>Provides estimates for the number of cleansers, classification specialists that should be directed across multiple categories of data.</p>
Cyber Risk Management Tool	<p>Pre-designed cyber risk maturity framework to analyze gaps in security and strategy, centered on leading practices in EAM, HANA, BOBJ, and mobile applications</p> <p>Aligned with National Institute of Standards and Technology (NIST) cyber security framework.</p>	<p>Accelerates definition of cyber risk security requirements, strategy and roadmap</p> <p>Jump start cyber risk security design and architecture for EAM, HANA, BOBJ, and mobile solutions.</p>

Tool	Description	Value Delivered
SVGA	SVGA is a diagnostic process used to access and improve organization's ability to change	Analysis/results are used to report risks and recommend mitigation strategies.
Readiness Assessment Tool	Tool for change readiness assessment and evaluation	Recognize gaps in willingness and capability for technology implementation projects
As-One Methodology	Used for Leadership Alignment, survey diagnostic that assesses various degrees of support for your organization's goals & priorities	Helps manage risk & organizational change in a complex business environment
R2PM Tool	Role-to-position mapping tool is used to plan, design, implement and execute roles	Proven effective for role-to-position mapping activities, establishing go-live transition plans
Cutover Tool	Helps organize cutover tasks and enables notification and management via integration with email system.	Simplifies and streamlines the cutover process.
uPerform*	Software package used to develop learning content for end users	Automates capture of screen shots and process documentation to document transaction and scenario based end user procedures.
Captivate*	Adobe eLearning tool that allows training development for multiple devices	Allows the rapid development of eLearning courses from storyboards and allows the incorporation of materials from multiple sources including SAP

* Licenses provided by the City

2.2.1. Project Tool Licenses

Deloitte Consulting's PMC is available for use in connection with scope of services under this Agreement. Deloitte Consulting will host PMC on a United States based server for use by all project personnel – to include City's end users ("Client End Users") and third party end users ("End Users"). PMC may not be used by City for activities unrelated to the I AM San Diego project. Access to PMC will be through the Internet via a Web browser. As such, PMC is available to Project Team members worldwide. Deloitte Consulting agrees to grant the Client End Users and End Users perpetual licenses to PMC content, and will host and maintain the project environment for a period not to exceed 9 months after completion of project deliverables and final sign off. The City's Project Management team will have authorization that allows for download of project content from PMC. There are no license fees to be paid by City for the use of PMC. PMC is built using HP Project and Portfolio Management (PPM) Center, an industry leading PPM tool. Should the City wish to continue to use HP PPM Center after completion of the 9 month period, the City would need to acquire and implement HP PPM Center from Hewlett Packard. Should the

City not wish to continue to use HP PPM Center after the project, prior to completion of the go-live support period, and as part of project closing activities, project data maintained in PMC, including but not limited to, the Project Work Plan, issues, risks, change requests, decisions, and action items will be downloaded from PMC by Deloitte Consulting and delivered to the City in Microsoft Excel or Microsoft Project formats. Administrator rights to PMC will be limited to Deloitte Consulting personnel.

3. Project Scope

The following sections describe the scope of the Project. The scope will be refined during the Blueprint phase of the Project and the definitions supplemented by the agreed project deliverables from that Phase. Where a material difference between the agreed Blueprint Deliverables and the scope defined in this Agreement exists this will be documented through an agreement amendment process – which could result in either an increase or a decrease in the fee awarded to Deloitte, based on the net difference between the fee specified in this Agreement and the estimate from the Blueprint deliverables, or may result in a schedule or other change not resulting in a fee impact.

3.1. Organizational Scope

The Project is a citywide strategic initiative being led out of the Infrastructure Asset Management (IAM) Program in the Office of the Deputy Chief Operating Officer (DCOO) for Infrastructure/Public Works. The Project will implement a solution for the City Departments and Divisions identified below.

Table 1 Participating City Departments and Divisions

Department	Branch or Division
Public Utilities	Water Systems Operation
	Water Construction and Maintenance
	Wastewater Treatment and Disposal
	Wastewater Collection
	Customer Support Division
	Engineering and Program Management
Public Works	Engineering and Capital Projects
	Facilities
	Publishing Services
Transportation and Storm Water	Storm Water
	Streets
	Transportation Engineering and Operations
Information Technology	Wireless Technology

All written and oral communications on the Project will be in English, and all deliverables submitted in English language only.

3.2. Business Processes

The SI shall be responsible for the delivery of the to-be business process solution. The City expects

a structured, value-based approach to business process management, with the BPC managing the corresponding value management deliverables. The recommendations of the BPC in support of to-be business process solution are to be provided as a resource to the SI for blueprinting.

Key objectives in the development of to-be business processes include the following:

- Incorporation of leading practices for Asset Management, equipment/infrastructure maintenance, and asset-based maintenance and capital investment planning
- Standardization of business processes across the multiple City Departments where applicable
- Efficient work processes, including elimination of redundant work steps and efficient handoffs across multiple departments
- Simplification of day-to-day field and plant maintenance activities
- Timely and efficient service-oriented processes
- Cost-effective service of customers
- Increase efficiency through suitable adoption of mobile technology
- Automation of communication where possible
- Improved operational efficiencies in labor deployment
- Effective management of spare parts
- Comprehensive reporting and analysis capabilities
- Effective asset-based investment planning
- Effective project and portfolio management

Table 2 lists the preliminary in-scope business processes. Additional processes may be identified prior to finalizing the business blueprint and will be addressed through the change control process.

Table 2 Preliminary list of business processes in the SI Scope of Services

Process Group	Business Process
Asset Maintenance and Service Operations	Inspection
	Counter-Based Preventive Maintenance
	Time-Based Preventive Maintenance
	Condition-Based Maintenance
	Corrective Maintenance
	Emergency Maintenance
	Work Clearance Management
	Refurbishment Processing
	Asset Scrapping
	Resource Capacity Planning
	Scheduling and Dispatching
	Shift Management
	Route Management (e.g. Street Sweeping)
	Service Notification Processing
	Service Order Processing
Service Confirmation Processing	
Service Order Quotations	

Process Group	Business Process
Asset Data and Content Management	Service Order Billing
	Phase-In Equipment
	Phase-Out Equipment
	Change and Configuration Management
	Document Management
Asset Investment Planning, Portfolio and Project Management	Master Data Management for IAM
	Asset Investment Planning
	Maintenance Cost Budgeting
	Strategic Portfolio Management
	Project Planning
	Project Execution
Procurement, Inventory and Warehouse Management	Project Accounting
	Master Data Management for Materials
	Determination of Source of Supply for Query and Quotation
	Evaluating Vendors and Monitoring
	Negotiating Contracts
	Consumption based planning
	Processing Contracts and Sourcing Rules
	Processing Purchase Orders
	Processing Purchase Requisitions
	Verifying Logistics Invoices
	Managing returns and reverse logistics
	Entering Services
	Inbound Processing and Receipt Confirmation with Warehouse Management
	Physical Inventory on Storage Bin Level
	Outbound Processing with Warehouse Management
Warehousing and Storage	
Asset Lifecycle Accounting	Acquiring Assets
	Constructing Assets
	Removing Assets
	Replacing Assets
	Preliminary Work
	Preliminary Engineering
	Purchasing and Installing Pre-capitalized Assets
	Purchasing General Plant Assets
	Asset Transfers
	Asset Retirement and Sales
Sales	Maintaining Master Data for Sales and Distribution
	Processing Sales Documents
	Processing Billing Documents

3.3. Application Scope

The applications identified in this section are included in the Services and will be implemented, where appropriate, to meet the business requirements defined as part of the Blueprint phase of the project.

3.3.1. Implementation and Integration

The following products and applications are identified for implementation and integration in order to achieve the objectives of the project. Other applications may be identified for inclusion during implementation project and documented with a change order.

1. SAP Plant Maintenance and Customer Service, including Linear Asset Management
2. Geographically enabled Enterprise Asset Management with ESRI integration (SAP GEO.e, GEF, or similar)
3. SAP Project Systems
4. SAP Portfolio and Project Management
5. Riva Modeling Asset Management Planning (implementation of Riva AMP not in scope for the SI; only integration with SAP)
6. SAP Work Manager (mobile)
7. SAP Multiresource Scheduling
8. SAP Materials Management
9. SAP Warehouse Management
10. SAP Inventory Manager (mobile)
11. SAP Master Data Governance for materials data
12. Utopia for EAM Master Data Governance
13. SAP Integration with OpenText for Enterprise Content Management
14. SAP 3D Visual Enterprise
15. SAP Sales and Distribution
16. SAP Business Warehouse and Business Objects
17. SAP Asset Lifecycle Accounting
18. Project System and Project Portfolio integration with Primavera P6
19. SAP Asset Analytics

The SI is to support the City in confirming the software products and respective licensing units required for the project.

3.3.2. ERP Business Systems Integration

The IAM San Diego solution will integrate with the following existing SAP solutions deployed at the City:

1. SAP Financial Accounting, including Asset Accounting
2. SAP Controlling
3. SAP Materials Management

4. SAP Customer Relationship and Billing – Industry Specific Solution for Utilities Customer Care and Services (IS-U/CCS), SAP Customer Relationship Management (CRM), Web Interaction Center, and Utilities Customers E-Services (UCES) portal
5. SAP Human Capital Management
6. SAP Public Sector Management
7. SAP Public Budget Formulation

This consists of the integration of business processes and data (both master data and transactional data) across the two-instance landscape in the context of the scope identified for this project.

The City will upgrade the current ERP landscape to the SAP HANA platform, on which the I AM San Diego Project solution shall be implemented. Upgrade of the landscape to SAP HANA is out of scope for the SI.

3.3.3. Legacy System Integration

In addition to integration with the City's ERP business applications, some of the legacy systems not being replaced by the IAM San Diego Project are to be integrated as part of the overall IAM solution. This list, which is in scope, is included in Exhibit A, Attachment 2. The SI shall collaborate with the other responsible groups (including the City's business process owners, application support vendor, software vendor, etc.) in these areas to collect and analyze integration requirements and design and implement the overall integrated IAM solution. The SI shall identify and document gaps or modifications required of these applications to integrate within the IAM solution.

3.3.4. Other Applications and Bolt On Solutions Scope

Applications or bolt-on solutions not identified in Exhibit A – Scope of Services will not be implemented as part of the scope of the Services.

3.4. Software Development Scope

The Project includes custom development of Forms, Reports, Interfaces, Conversions, Enhancements, and Workflow ("FRICEW"). Exhibit A, Attachment 6 provides an inventory of the FRICEW custom development objects that are included in the Services. Exhibit A, Attachment 7 defines software development complexity for such software development scope.

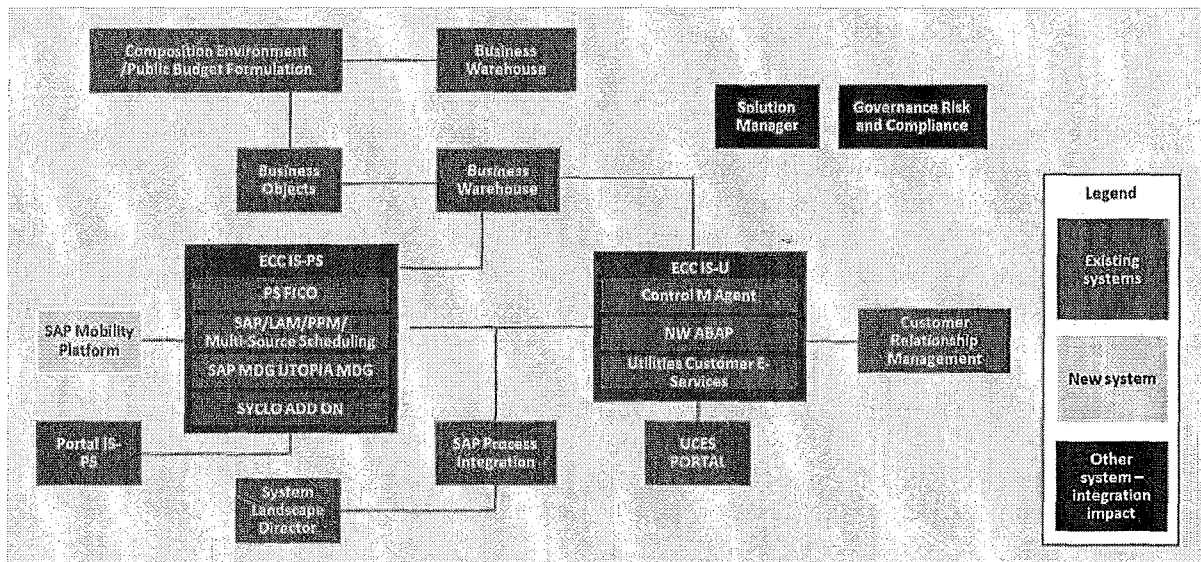
Legacy data will be provided by the City in the format and timing as agreed to by the City and Deloitte Consulting during the Blueprint. The City will be responsible for all data extraction, cleaning, and post conversion validation of the data. Deloitte will be responsible for data conversion rules, data transformations, and data loads. The City will also be responsible for the legacy system side of all interfaces. Deloitte will coordinate with the City legacy teams in requirements gathering, design, development, and testing of interfaces to legacy applications.

3.5. Technical Scope

The Project will implement a solution architecture to support the IAM solution on the current SAP IS-PS instance by enabling several add-ons and integrating with the SAP IS-U instance. This approach is subject to the following key assumptions:

- An upgraded landscape to the SAP HANA Platform up on which the project solution will be implemented (the project does not include the actual upgrade to the SAP HANA Platform, which the City will undertake as part of a separate initiative)
- The City will retain two ECC instances with their existing functionality
- The approach is non-disruptive to the City’s current solution architecture
- Leverages an n+1 environment for Project activities

The picture below shows the high-level SAP system landscape with the critical systems involved in the end-to-end IAM solution. This includes mobility components such as SMP (SAP Mobile Platform) and Syclo. The diagram above is preliminary, and is limited to the SAP solution components. The overall landscape diagram to be delivered by Deloitte will include legacy and bolt-on applications.



The key aspects of the technical architecture are as follows:

- The new functionality including Linear Asset Management, SAP Portfolio project management (PPM), SAP Multi-Source Scheduling and others are installed as Add-ons on the existing ECC IS-PS box
- SAP Mobility Platform (SMP) with an Agency component will be interfaced with SAP ECC PS-IS box
- SYCLO add-ons will be installed on the SAP ECC IS-PS box
- SAP MDG will be deployed on SAP ECC IS-PS box for Material Master Data.
- Utopia MDG will be deployed as an Add-on to SAP MDG solution for EAM master data
- Use of SAP PO (instead of PI)

The main components that are net new to the architecture are the add-ons that need to be installed on the current IS-PS system and the mobility components needed to enable IAM mobility solutions.

Add-Ons to be installed on SAP IS-PS System:

- Linear Asset Management (LAM)
- SAP Portfolio and Project Management
- SAP Multi-Source Scheduling
- SAP SYCLO Add-on for Work Manager and Inventory Manager
- MDG and Utopia for EAM MDG

Add-Ons to be installed on SAP IS-U System:

- No add-ons will be installed on the IS-U System

Mobility Components to be installed as part of the proposed solution:

- SAP Mobile Platform 3.0 (Syclo Work Manager and Inventory Manager add-ons)

3.6. Out of Scope

Anything not specifically listed in the Scope of Services as being within the scope of Services will be out of the scope. Specifically, upgrade of the existing City environment to the SAP HANA Platform and the implementation of OpenText for Enterprise Content Management are excluded from the scope of services and are being pursued as separate initiatives which will be completed on a timeline that does not impact the I AM San Diego project. The following related services are, however, in scope:

- Implementation of the identified products on the upgraded SAP HANA Platform, as described in Scope of Services Exhibit A
- Integration with OpenText Enterprise Content Management for content associated with project scope – inclusive of application integration, content management and content migration – as described in Scope of Services Exhibit A. This does not include setup, configuration or customization of the OpenText product suite.

3.7. Background and Summary per Solution Area

This section provides a brief overview of existing capabilities along with a scope narrative for the various solution areas of the IAM San Diego Project. Unless specifically called out where there are exceptions, the delivery of all of the solution areas shall be the responsibility of the SI.

3.7.1. Maintenance Operations

There is widespread use of legacy Computerized Maintenance Management System (CMMS) applications within the participating departments, with both Commercial Off-The-Shelf (COTS) and custom-developed applications. These applications, which include EMPAC, SWIM, PSTools, and FSTools, Synergy, and iMaint, have mature capabilities to support asset maintenance operations but are not integrated with the other business applications at the City. Business processes supported by the legacy CMMS systems include asset inspections, preventive maintenance, condition-based maintenance, corrective maintenance, emergency maintenance, and refurbishment processing. In addition, there are several analysis tools used by the Public Utilities Department in order to support condition-based maintenance – Cathodic Protection, FLIR, AMS, and SmartView.

Scope for the SI in this area consists of the implementation of a consolidated, highly integrated

SAP EAM solution to manage asset maintenance operations for all of the participating departments and divisions identified.

3.7.2. Service Operations

Multiple streams require integration for the initiation of service operations:

- As part of a separate project, the City is identifying options for a citywide CRM/311 solution for the intake of information and service requests from customers and for the management of customer engagement across multiple communication channels.
- As part of a separate initiative outside of I AM San Diego, the City is considering the implementation of a municipal code compliance solution.
- Customer Service Requests received by Customer Support Division of PUD are created in IS-U/CCS, with the intake channels being either the SAP CRM WebIC for the Customer Service Rep call center, or the UCES portal for customer initiation.
- Wireless Technology division receives internal service requests from other City departments via the intranet portal. These services, which are billable to the respective departments based on actual costs, are currently enabled on the SAP Synergy instance.

The scope for the SI is to deliver solutions to manage the work that results from initiation through the above streams. The exception being the IS-U/CCS stream, for which the scope is limited to work managed by the Water Construction and Maintenance Division of PUD. These service notifications, which include meter sets and removals, are currently interfaced from IS-U/CCS (in use by the PUD Customer Support Division) to the SWIM legacy CMMS system (in use by Water Construction and Maintenance Division). It is to be noted that, given two ECC instances at the City, special consideration would be required for the management of work generated through the IS-U/CCS instance with regards to integration of customer, asset, work, and location data.

The SI is to implement an effective service operation solution that integrates in near real-time with the sources of these work streams (CRM, IS-U/CCS, and web-portals) for the initiation of service requests; management of resulting work; management of updates to customer, asset, and location data; and status updates across the service notification/order lifecycle.

3.7.3. Geographically enabled Enterprise Asset Management

The City currently uses ESRI and GE SmallWorld GIS, and is in the process of consolidating on the ESRI platform which will be completed prior to the IAM implementation. Multiple GIS-based applications are in use at the City to integrate these GIS platforms with legacy CMMS systems – such as GeoSAP, PSTools, FSTools, and SHARQ. These applications have mature geographic asset and work management capabilities and are widely in use at the City to perform work initiation, planning, scheduling, and work execution functions.

The scope for the SI is to deliver an integrated, geographically-enabled IAM business processes in support of maintenance and service operations for both back-office desktop users and mobile field users. The SI shall be responsible for delivering integration between the IAM suite of tools with the ESRI platform, including delivery of the GIS-based applications.

3.7.4. Mobile Work Management

There is currently limited mobile work management capability within the participating departments. Existing mobile applications include SWIMPEN, GeoMAM, and a mobile version of PSTools. The remainder of the groups manages work execution activities using paper-based processes or through remote access to office-based desktop computers.

The SI is to enable a consolidated mobile platform, with mobile applications for tabular and geographically-enabled work management, with capability for visualization and interaction with object 3D models. The mobile solution is to be integrated in near real-time with backend systems for asset information, work management, scheduling and dispatch functions, materials management, document management, personnel data and timesheet, and be capable of functioning in an offline mode with seamless transition to the user when the device moves in and out of wireless network coverage.

The City plans to procure mobile devices for the field workforce. Towards this, the SI shall support the City in gathering requirements and determining the specifications for the mobile devices. The SI shall also support the configuration and deployment of the Work Manager application.

3.7.5. Multiresource Scheduling

There is currently limited use of specialized tools for the scheduling and dispatch of resources across the participating City departments. These tools, which include PSTools, and FSTools, are geographically enabled and allow a Planner/Scheduler to search for pending work with temporal and geographic correlation and assign to specific personnel/crew. Scheduling outside of these is primarily performed using spreadsheet, whiteboard, and on paper.

The scope for the SI is to deliver a multi-resource planning, scheduling, and dispatching solution to manage short and long cycle maintenance and service operations. The types of resources to be scheduled include personnel, crews, vehicles, and production resources/tools. The scheduling and dispatch functions are to be geographically enabled, with real-time visibility to work and vehicle location on a map, and be capable of determining best available resource(s) for assignment of planned and emergent work. The scheduling and dispatching solution is to be integrated in near real-time with source systems that manage work and asset data, vehicle location data, personnel and qualification data, and with mobile work management applications.

3.7.6. Plant Operations and Control Systems Integration

The Public Utilities Department operates several Process Control, Distributed Control Systems (DCS) and Supervisory Control and Data Acquisition (SCADA) systems. These include InfoWorks, PCS, SCADA Wastewater, SCADA Water (Dynac, Schneider WonderWare), COMNET (Emerson Ovation), and WIMS (Hach). The scope for the SI is to design and deliver a solution to integrate with these systems in near real-time to trigger work initiation based on the receipt of malfunction reports or measurement data and update status across the lifecycle of the resulting maintenance order and return completed work information to the systems.

3.7.7. Asset Data Management

Asset data is defined in multiple legacy CMMS applications (such as EMPAC, SWIM, Synergy, IMAINT, IS-U/CCS) for technical object models; in GIS for spatial representation; and in the SAP asset accounting solution on the IS-PS ECC instance. It is to be noted that the CMMS systems currently do not utilize linear asset models. Data management is in silos within legacy, GIS, and ERP application systems and overall data governance is lacking.

In support of business processes associated with data maintenance, there is an application in use within Public Utilities Department (PUD) to track pending work associated with drafting and data mapping.

The SI shall model and configure, prepare and deploy asset and location data, establish procedures for data governance, and enable an effective solution to create, monitor, maintain, and distribute this information over the lifecycle of assets. Asset data is to be integrated in near real-time across the multiple applications that support various business functions using the asset – such as maintenance and service management, GIS, asset accounting, and materials management.

Legacy data cleansing in support of the data migration effort is out of scope for the SI.

3.7.8. Content Management

The City currently has asset management related documents stored in multiple content repositories, including Axacore, Documentum, and SAP DMS. The City is, as a separate initiative outside of I AM San Diego, implementing OpenText a single Enterprise Content Management system. The specific ECM platform is yet to be finalized, and the decision is expected prior to the start of the IAM implementation project. The responsibility for the basic set-up of the ECM system will lie with the Document Management OpenText project team, and this is out of scope for the SI.

The SI shall enable the integration of IAM suite of tools with the ECM system OpenText; content management for IAM documents – including governance structure, content management process, and taxonomy / metadata; and the conversion of legacy documents with links to IAM data objects. Content management shall also include management of asset 3D/2D model data and integration of SAP 3D Visual Enterprise as part of the overall IAM solution.

3.7.9. Asset Investment Planning

The City currently does not have an integrated solution for asset-based maintenance and capital investment planning and prioritization of needs. The software tools currently in use to support asset investment planning and prioritization across the various departments include CARLA, CCTV Toolbox, and multiple spreadsheet applications. The City's objective for this project is to replace the legacy software tools used for asset-based investment planning and consolidate this function using Riva Modeling Asset Management Planning (AMP).

Riva Modeling AMP is to be implemented to address this gap as part of the IAM San Diego Project, but on a separate City contract with Riva Modeling. Implementation of Riva Modeling is not in scope for the SI, but the SI shall be responsible for integrating Riva Modeling AMP with

SAP, including the design of the integration solution – to include business process, data, and technical integration. Inbound data to Riva AMP includes technical object data, asset condition information, and asset accounting data. Outbound data from Riva AMP includes project portfolio items and updates to maintenance plans. The frequency and timeliness of integration between SAP and Riva AMP (near real-time vs. batch) requires assessment as part of the solution design.

3.7.10. Portfolio and Project Management

The implementation and management of the City’s Capital Improvement Program (CIP) is centralized in Public Works – Engineering & Capital Projects (E&CP). Once a need becomes a capital project, projects are prioritized using the City Council’s Policy 800-14. The City’s CIP Review and Advisory Committee (CIPRAC) recommends projects to be funded as part of the annual CIP Budget as well as for out-of-cycle funding. The CIP Budget is developed by the Financial Management Department using SAP Public Budget Formulation.

The City currently does not use a specialized toolset for project portfolio management, and SAP’s PPM is sought to address this need. Project requests are captured in separate documents and maintained on SharePoint, and the prioritization of projects is performed using spreadsheets, with reporting performed using SAP Business Warehouse. Major challenges in this area include limited visibility to projects across City departments; poor coordination between future, planned, and ongoing projects; difficulty in efficiently allocating skilled resources across projects; difficulty in identifying priority projects to receive funds across asset types; and inconsistency in the project prioritization process and project reporting across the portfolio.

The SI’s scope in this area consists of the implementation of a project portfolio management solution integrated with asset investment planning (Riva AMP), project management, and budgeting applications.

3.7.11. Project Systems Integration

The PWD E&CP division provides asset-owning departments with centralized engineering services for management and oversight of capital projects, including planning, design, project management, and construction management for about 90% of the City’s projects. E&CP provides preliminary design to all asset-owning departments. Asset owning departments initiate projects and conduct the planning for majority of CIP projects prior to the project being submitted to E&CP. In some instances E&CP performs the planning function as well – for example, working on the “GDP” General Development Plan for Park Projects or planning Water and Sewer Group job replacement projects for PUD.

E&CP uses multiple software tools to support project management business processes. These tools include Primavera P6 and Virtual Project Manager for project logistics and SAP Project Systems for financials. The lack of integration between project logistics and financials data is currently a major gap. The City does not intend to replace Primavera P6 or the other software tools supporting project management logistics and scheduling as part of this project, but seeks to expand the project data model in SAP PS, currently limited to WBS hierarchy, to be able to integrate scheduling data from Primavera and consolidate project financial and logistics reporting. There also exists a gap in data integration between capital projects and asset accounting, asset mapping, and technical object

data modeling in support of asset maintenance and service operations.

The SI's scope in this area consists of design and delivery of business processes and data integration to enable consolidated capital project reporting and to enable efficient handoffs from capital projects to both asset accounting and asset operations and maintenance.

3.7.12. Procurement of Materials and Service

Procurement of materials and service is performed by multiple groups at the City:

- The departments where the demand arises and materials are consumed. Legacy applications, such as EMPAC and Synergy, are used to manage materials and procurement within these groups.
- The Central Stores group within the Purchasing & Contracting Department, which serves as a central point for procurements that exceed a certain threshold. Central Stores operates using SAP Materials Management, implemented on the IS-PS ECC instance as part of a prior ERP initiative called OneSD.

Significant challenges exist in the area of procurement management, including lack of visibility to demand from planned materials and services data on work orders to drive material requirements planning, and the lack of integration between the procurement and inventory/warehouse management processes. Scope for the SI in this area consists of the following:

- Enable effective material and service procurement processes integrated with work management and inventory/warehouse management for departments and divisions in scope for the IAM San Diego Project in SAP. It is to be noted that this would require the addition of new materials and extension of the solution that is current in use by Central Stores, and this needs to be done taking in to consideration impacts to the operations of Central Stores.
- Improvements to the current business process and solution for lifecycle management of meters – for which procurement is performed by Central Stores using SAP MM in IS-PS; installation work order managed by PUD Water Construction and Maintenance in SWIM; and installation and device data management by PUD Customer Support Division in IS-U/CCS.
- Migration of material data from current CMMS application, such as EMPAC and Synergy.
- Establish procedures for data governance, and enable an effective solution to create, monitor, maintain, and distribute material data.

3.7.13. Inventory and Warehouse Management

Inventory and warehouse management processes, managed at the departmental level, is performed in legacy systems such as EMPAC and IS-U/CCS (PUD) and Synergy (Wireless Technology). Several of the participating divisions – Facilities, Streets, and Storm Water, do not currently use inventory or warehouse management applications.

The City's PUD operates five warehouses that manage inventory at the storage bin level, whereas Wireless Technology manages inventory at the storage location level. Challenges for departments performing inventory/warehouse management include the lack of integration between data in procurement and inventory/warehouse management processes, and inconsistent material master data definitions and numbering across the multiple departmental systems and Central Stores. Scope for the SI in this area consists of the following:

- Design and delivery of an integrated Inventory and Warehouse Management solution for efficient inventory and spare parts management.
- Management of tool inventory.
- Migration of inventory and warehouse data from current CMMS application, such as EMPAC and Synergy.

3.7.14. Mobile Inventory Management

There is currently no mobile inventory or warehouse management capability within the participating departments. The scope for the SI in this area is to enable mobile inventory and warehouse processes, with the mobile solution being capable of functioning in an offline mode with seamless transition to the user when the device moves in and out of wireless network coverage.

The City plans to procure mobile devices for warehouse personnel. Towards this, the SI shall support the City in gathering requirements and determining the specifications for the mobile devices. The SI shall also support in the configuration of the devices to deploy the Inventory Manager mobile application.

3.7.15. Sales

The SAP Sales and Distribution (SD) module was previously implemented in the SAP Synergy instance and is in use by Wireless Technology Division of the DoIT. SAP SD is used in support of actual cost-based service order billing by the Wireless Technology Division. As described in Section 3.7.2 above, these requests are initiated via internal web-portals.

Scope for the SI in this area consists of enabling the sales business processes identified, integrated in near real-time with the IAM solution, web-portal, and other ERP business functions, and migrating data from legacy systems in support of these processes.

3.7.16. Analytics and Reporting

The objective of the City with regards to reporting delivery for the project is to not replicate legacy reports as-is, but to rely on standard reports where possible. Towards this, the SI is to rationalize the as-is report list and identify reporting requirements that can be met using standard SAP reports. The SI's scope for reporting consists of the delivery of the SAP Asset Analytics solution, KPI/PPI reports, and development of custom reports only for high-priority reports that are not met using standard reporting options. It should be assumed in effort estimation that up to 50 custom reports, with dashboards, would require to be delivered – this is in addition to reports and dashboards delivered with the SAP Asset Analytics solution that is in scope.

4. Technical Standards and Requirements

4.1. Overview and General Requirements

4.1.1. City of San Diego Information Technology Standards

The parties agree that this section 4.1.1 is informational.

The City has standardized on Hewlett-Packard (HP) brand business-class office computers and laptops, and operates these computer systems running the Microsoft Windows Operating System. The current standard desktop Operating System is Microsoft Windows 7 Enterprise. The Microsoft Office Suite is the standard for office productivity. Office 2007 and Office 365 are currently supported. The standard also includes the Standard and Professional versions of Microsoft Project and Microsoft Visio, with the 2007, 2010 and 2013 versions currently supported. The City's standard web browser is Microsoft Internet Explorer IE9. IE11 upgrades are in the planning and testing phases and should be available in time for project go-live. Firefox is supported as a backup browser for functions that fail under IE9. Applications which support interaction with desktop productivity tools should support interoperability with the Microsoft Office Suite. The City standard desktop image is supported via Microsoft SCCM, version 2007 R3 and SUS. Anti-virus protection is provided by Microsoft Forefront, and ESET Anti-virus should be available in time for project go-live. Some of the other software in the standard image include Java V7 update 51, Microsoft Silverlight V5.1.10411.0, Adobe Reader X and SAPGUI V7.30 Patch Level 9. The desktop/laptop software standards require that support be maintained for the current production release and the major release immediately prior to the current production release.

The City's standard Data Center class of computing is the Integrated Infrastructure Model or Converged Infrastructure; defined as, server, shared-storage, networking equipment, and software for IT Infrastructure management. The City's standard Integrated Infrastructure Model is the VCE Vblock 300. The City's standard standalone server platform is the HP Proliant Generation 7 or higher system running Microsoft Windows Server 2008R2 up to Windows Server 2012. The standard web servers are Microsoft IIS (6.0 up to 7.5) and Apache (v.2.2.21).

The City's standard for a virtual server hosting environment is Vmware ESX (5.0 or higher). The Network Operating System (NOS) standard requires that the NOS support cluster configurations with multiple physical and virtual servers with automatic failover should one server fail. Either active-active or active-passive configurations are acceptable. The NOS standard requires that support be maintained for the current production release of the NOS and the major release immediately prior to the current production release.

The City standard for Relational Database Management Systems (RDBMS) is Microsoft SQL Server. The minimum supported version is SQL Server 2008 with SQL Server 2012 being preferred. The database standard requires support of high-availability solutions that can be leveraged in either physical or virtual configurations for the database. The DB standard requires support be maintained for the current production release of the RDBMS and the major release immediately prior to the current production release.

The City standard for front-end (desktop platform) report design and generation is Web Intelligence and Crystal Reports. For ad-hoc reporting, applications should provide a data dictionary or similar provision to allow non-technical users to identify the appropriate data elements for inclusion in their reports. The City also uses other Business Objects tools for more complex report and data analysis requirements.

The City standard for a single point of user authentication is Microsoft Active Directory (AD), using the Lightweight Directory Access Protocol (LDAP). The City standard for authentication is to allow properly authorized users to login just once and be able to access all applications during that active session.

Applications should support industry standard methods for the encryption of sensitive data in transit to/from the host/server system, storage subsystem, and client computer, such as secure versions of SSL, TLS, or Secure FTP. The City does not maintain PCI-compliant systems or networks internally and uses external service providers that are PCI certified to handle all payment card processing.

4.1.2. ADA Compliance for Technology Solutions

Any proposed system solution must be “ADA compliant” by following the U.S. federal standards set forth in the “Electronic and Information Technology Accessibility Standards” (Section 508), found at: <http://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-section-508-standards/section-508-standards> and with the international standards set by the World Wide Web Consortium (W3C), found at: <http://www.w3.org/WAI/guid-tech.html>. It is highly desirable that Proposer provide a Voluntary Product Accessibility Template (VPAT) with their response, to assist the City in making preliminary assessments regarding Section 508 accessibility of their products and services. The VPAT is provided by the Information Technology Industry Council at <http://www.itic.org/index.php?submenu=Resources&src=gendocs&ref=vpat&category=resources#1194,22>.

4.1.3. Infrastructure Support

The City of San Diego currently operates two datacenters in Texas through Atos as an IT partner. This transition was recently completed and is in a stable operating mode at this point in time. One datacenter in Carrollton houses non-production environments while the other in Arlington houses production. The two datacenters are linked through a 20 Gbps MAN. All datacenter support and staffing is supplied by Atos. The city operates on VCE converged infrastructure with storage provided by EMC. Networking and blade servers are provided by Cisco, and the underlying database for all systems is currently SQL Server 2008. Every environment is virtualized and running Windows 2008. Upgrades to both SQL Server and Windows are being discussed with Atos resources. In addition to the datacenters mentioned above, there are other local servers/databases, such as GIS Enterprise servers and the Cartegraph Pavement VIEW server/database.

4.1.4. Software Environment

The City of San Diego has an existing SAP and ESRI footprint which will be used for delivery of the IAM solution. The SI will supply BASIS and Security resources for component deployments and any patches needed to support this scope of work (specifically excluding the HANA upgrade). All datacenter needs will be supplied through our datacenter partner Atos. Atos does not support Basis or SAP Security. Basis support is on-site at our San Diego offices and is supplied through CGI. Security support is delivered by City resources.

Currently the City operates with the following SAP and GIS environments at the following releases:

- ECC 6.0 EHP 6 SP 7 with the Public Sector industry solution (EHP 7 planned for November 2015)
- ECC 6.0 EPH 6 SP7 with the Utilities industry solution (EHP 7 planned for November 2015)
- CRM 7.0 EHP 2 SP 7
- 2 BW 7.0 EHP 1 SP 6 with the public budget formulation content
- Enterprise Portal 7.40 SP7 Enterprise Portal 7.01 SP16 supporting UCES 6
- SAP PI 7.11 (New 7.4 PO instance is planned)
- Solution Manager 7.
- ESRI 10.2 for GIS (10.3 is completing testing)

4.1.5. Application Support

All applications at the City of San Diego are supported via a mixed model of City employees, the City’s application support partner CGI, and other application-specific vendors. The City currently has an SAP production support team to support IS-PS, IS-U, and an older version of EAM. The Service Level Agreement (SLA) for issue resolution during the stabilization period is listed in Table 3. All timeframes in the table below refer to elapsed hours or days and not work hours or days.

Table 3 SLA for issue resolution

Priority of Ticket	Resolution Target
Very High	24 hours
High	72 hours
Medium	7 days
Low	14 days

Table 4 lists the definitions of the priority associated with SLA requirements.

Table 4 SLA Priority definitions

Priority	Description
Very High	Critical business functions cannot be completed for multiple users and no workaround is available. It may include issues that materially affect data integrity or breach of security.

Priority	Description
High	Critical business functions cannot be completed as designed. A workaround is available.
Medium	Non-critical business functions cannot be completed as designed and affects more than 1000 users within the end user population. A workaround is available.
Low	Non-critical business functions cannot be completed as designed and affects less than 100 users within the end user population. A workaround is available.

4.1.6. Minimum Performance Specifications

Currently the City operates two ECC, two BW, one CRM, and one PI environment. The environment currently runs at the following average performance as reported by ST03 from the Primary ECC:

- Dialog: 525 ms
- Batch: 2200 ms
- HTTP: 150 ms
- RFC: 200 ms

It is expected that the following performance benchmarks will be delivered as part of this program:

- Batch response time: The entire nightly batch processing window starts at 6PM and completes at 4AM.
- GUI Transaction Opening time: 2 seconds or less
- GUI Transaction save time: 5 seconds or less
- GUI Online report: 5 minutes or less if used as designed
- RFC Response: 5 seconds
- Web Transaction Opening Time: 5 seconds or less
- Web Transaction Save time: 15 seconds or less
- Web Online report: 5 minutes or less if used as designed

It is the responsibility of the SI to meet these performance objectives for the I AM San Diego solution.

4.2. Software Requirements

4.2.1. Data Integrity

The system must ensure the integrity of the data which it maintains. Interruptions in processing due to incidents such as aborted transactions, hardware failures, or network unavailability must not result in inaccurate or inconsistent data residing in the system. If data transfers occur, the system must provide a method of audit validation to ensure that all data sent was received in the target application. All SAP middleware configured must support solution manager data consistency management and configuration of this functionality shall be the responsibility of the Systems Integrator.

4.2.2. Application Security Coding Requirements

1. Parameter Manipulation – Applications shall be designed to ensure that parameter manipulation does not provide access to data or application functionality that the user is not authorized to see or use.
2. Input Validation – Sanitize all user input fields to ensure that cross-site scripting, SQL injection and other input related vulnerabilities are closed through secure application coding. This is particularly important when dealing with external data sources. Input validation should be performed on the server/application and not on the client devices.
3. Temporary Files – If the code reads and writes files (and in particular if it uses files for inter-process communication), then those files should be placed in a safe directory in which only the coder has write access. Make sure that file paths do not contain wildcard characters, such as ./ or ~, which an attacker can use to switch the current directory to one under the attacker's control.
4. Default Deny – Access decisions should be based on permission rather than exclusion. By default, access should be denied, and the conditions under which access is permitted should be clearly understood and coded accordingly.
5. Principle of Least Privilege – Every process should execute with the least set of privileges necessary to complete the task. Any elevated permissions should only be held for the minimum time they are necessary. This approach reduces an attacker's opportunities to execute arbitrary code with elevated privileges.
6. Utilize Quality Assurance Techniques – Good quality assurance should be used to identify and eliminate vulnerabilities. Comprehensive, end-to-end testing and source code audits should be incorporated into all application development lifecycles. Such audits help to identify and correct invalid assumptions.
7. Hidden Fields – System should not use "hidden fields" for Security.
8. Cookies – System should not rely on cookies to define security settings. Cookies must not contain or be used to obtain sensitive information.
9. Session Identifiers – If system uses session identifiers, they should be generated with unpredictable numbers and should contain enough key space to prevent unauthorized use or guessing of the session ID's.
10. Error Messages – System should handle system errors in an appropriate manner. Failed login attempts to the system should not generate detailed information about the failed login attempt (e.g., incorrect password or unknown user account). Other security related errors (e.g., file not found or permission denied) should generate generic error responses. Detailed error information should be written to secure logs so that developers and system administrators have access to error details required to address the error.
11. Integrate secure coding principles into SDLC (software development life cycle) components and provide a general description of how these secure coding principles are addressed in Architecture, Design, and Technical documents. If no secure coding is needed, this should be explicitly documented along with a brief explanation.

4.2.3. Interfaces

The City of San Diego uses two interface technologies: Business Objects Data Services and SAP's PI and PO products supply interfaces from SAP to other systems, and from SAP to SAP

systems. The general requirement is that all interfaces that begin or terminate in SAP should be managed through SAP's PI or PO products. Ideally, at no time should the interfaces use a file as an intermediate format for data transfer, but should always reside as data within a respective system. It is expected that the Systems Integrator will provide resources to develop interfaces identified in the requirements and abide by the following guidelines:

1. Where an RFC exists, it will be the preferred interface technique.
2. All interfaces into or out of SAP should be through PI or PO.
3. SAP – SAP interfaces should never use a file as an intermediate format for data transfer
4. SAP to non-SAP interfaces should use JDBC or web service connections to the non-SAP environment whenever possible.
5. SAP – External Vendor interfaces should use secure communication whenever possible on the vendor side.
6. SAP – External Vendor interfaces should use direct communication with XML data transfer over HTTPS whenever the vendor has such capability, and this will be facilitated through PI or PO.

4.3. Hardware and Infrastructure Requirements

4.3.1. Client roll-out

The City of San Diego currently has both WEB-based and SAP GUI-based clients for SAP systems.

- The current version of SAP GUI is 7.30 Patch Level 9.
- The current version of web browser for access to SAP systems is Microsoft Internet Explorer version 9 with a version 11 upgrade imminent. Firefox is also available should Internet Explorer prove inadequate to meet the desired function.

All desktop software rollouts are managed by Atos to the desktop using SCCM. It is expected that the Systems Integrator will supply resources who will work with Atos to bundle any needed desktop deployment package, and that Atos will deploy these packages to the desktop for the IAM San Diego Project.

4.3.2. Installation and configuration of network

The parties agree that this section 4.3.2 is informational and not applicable to this Agreement.

The City of San Diego currently operates numerous WAN's, MAN's, and LAN's in support of all operations necessary. It is expected that the City will supply all necessary capacity for this project through our networking partner. Key components relevant for this project are:

- MAN – connects the majority of city employees to each other and the WAN and operates at 1 Gbps of capacity for most sites.
- WAN – connects the City MAN to Texas. This currently operates at approximately 30ms latency with 1 Gbps of capacity.
- Internet Connectivity – The city has redundant internet links operating at 500 Mbps.

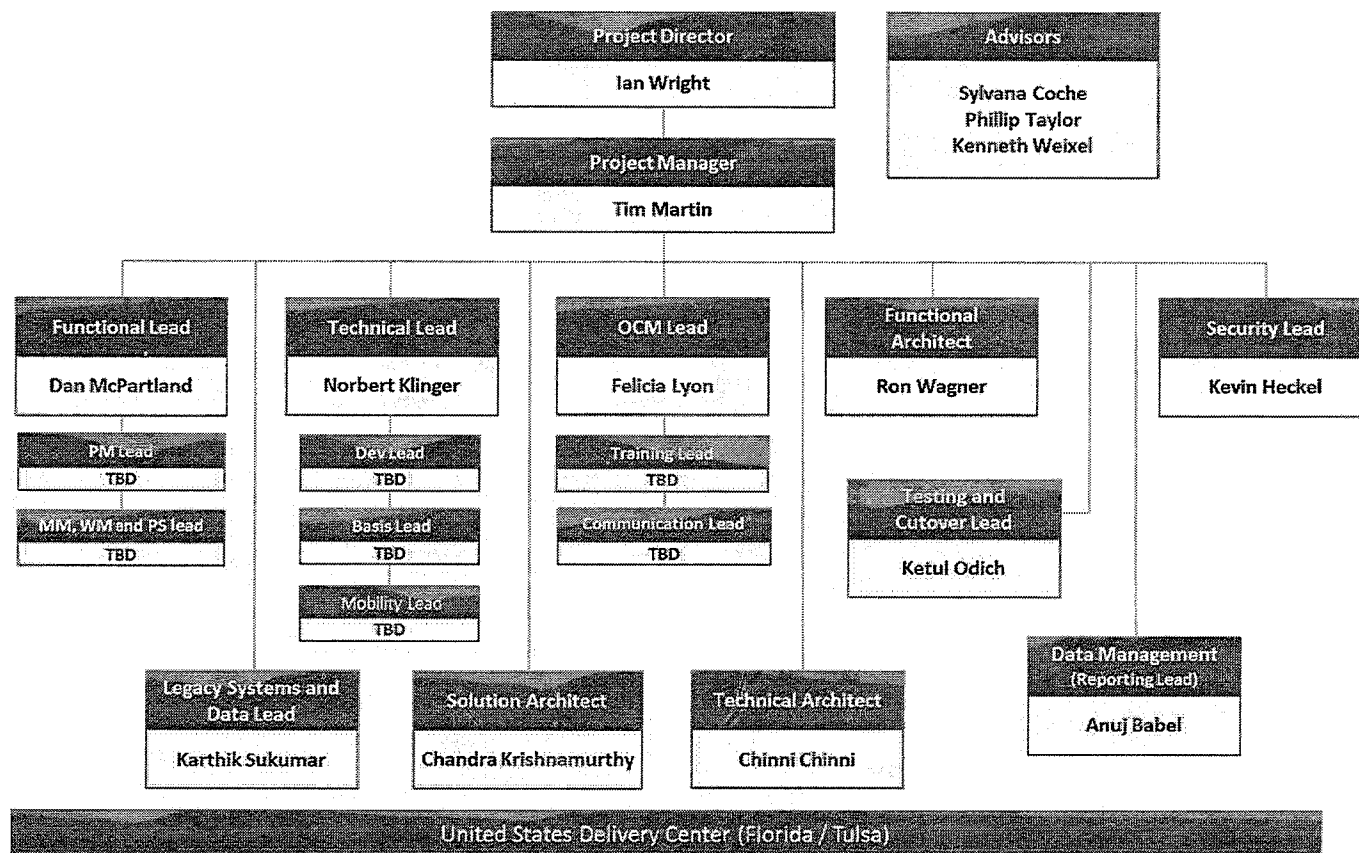
4.3.3. Server remediation

The City operates with current Microsoft product Stack including SQL Server 2008 or newer, and Windows server 2008 or newer. If any solution proposal requires remediation of existing servers at the database or operating system levels, sufficient notice should be given to the City's partner Atos, and the required project management to perform and align the upgrade with the IAM San Diego Project is to be supplied by the SI. Similarly, if any software that already exists at the City is not at an appropriate level, then the SI should provide BOTH project management and resources necessary to complete the upgrade.

5. Project Organization

5.1. Project Organization Chart

The Deloitte “Project Team” will consist of the following Deloitte Consulting roles. Resources identified by name are defined as “Key Personnel” for the purposes of this Agreement.



5.2. Roles and Responsibilities

The roles and responsibilities of each project team are as defined below.

Project Role	The City Responsibility	Deloitte Consulting Responsibility
<p>Project Management</p> <p><i>City:</i> Project Director; Project Manager; Project Advisor</p> <p><i>Deloitte:</i> Project Director; Project Manager</p>	<ul style="list-style-type: none"> • Co-lead the project in day-to-day management activities • Work with the Deloitte Project Manager to help promote adherence to the project methodology • Work with Deloitte Project Manager to lead in identification and approval of project work products and planned deliverables, and support their development • Help complete project management deliverables for each phase • Conduct status briefings with stakeholders as appropriate • Responsible for the final decisions regarding resource allocations, priority setting, negotiations, problem resolution, and risk mitigation strategies • Manage the City staff assigned to the project • Co-manage change control process • Manage sign-off of project deliverables • Manage the City responsibilities connected with the project’s scope, schedule, quality, and budget • Report project status to Steering Committee and other City management. • Identify implementation risks and mitigations, and issue resolutions with the Deloitte Project Manager • Attend and participate in all required meetings and workshops, to include project management meetings and others. • Manage project budget and financials • Approval of initial Project Plan and changes 	<ul style="list-style-type: none"> • Co-lead the project in day-to-day management activities • Bring Project Management method tools and controls to the engagement • Manage Deloitte deliverables • Lead in developing the detailed project plan and refine it as needed • Team with the City Project Manager in monitoring project budget, expenditures, schedule, milestones, and deliverables. • Help to achieve timely issue resolution and issue escalation • Manage Deloitte staff assigned to the project • Provide overall quality control • Co-manage change control process • Monitor issue log, promote timely issue resolution, and co-manage issue escalation • Develop and co-manage risk management log, help to achieve timely risk mitigation, risk escalation • Prepare and report project status to project leadership. Assist City PM and PD with reporting to Steering Committee and other non-project management. • Manage Deloitte Budget and Financials • Develop and maintain the Project Plan, taking in to consideration the existing Project Plan in use by the City for the project’s Discovery and Pre-Planning phase. • Manage Deloitte budget, billings, and EAC

Project Role	The City Responsibility	Deloitte Consulting Responsibility
Functional Team Lead / Team	<ul style="list-style-type: none"> • Resolve design issues across functional teams, to provide unified solution to the City requirements • Manage the City Subject Matter Expert participation in the Project, serving as a liaison to the business leads, bringing the right SME resources to the Project according to the project plan. • The Functional Lead will serve as the liaison to the business leads 	<ul style="list-style-type: none"> • Work with project managers to lead functional and technical activities • Develop and enforce project standards for documentation and deliverables. • Facilitate issue resolution and risk mitigation • Facilitate cross team communication and consistency of functional and technical solution design and build • Plan and facilitate testing activities • Plan and facilitate cutover activities
Technical Lead / Team	<ul style="list-style-type: none"> • Lead the City technical resource responsible for validating the technical design • Resolve technical design issues across teams • Bring the right technical SME resources to the Project • Note: May be a combination of the City resources who fulfil this responsibility under the leadership of the City's Technical Team Lead 	<ul style="list-style-type: none"> • Manage technical aspects of the project • Develop data conversion / cleansing strategy • Manage custom development effort • Develop testing strategy • Develop cutover strategy • Manage integrations • Manage technical knowledge transfer
Data Management Lead / Team	<ul style="list-style-type: none"> • Participate in required meetings and workshops • Define specific reporting requirements • Execute testing and data validation for reports • Identify data owners for the production system • Perform legacy data cleansing activities • Review and confirm data conversion accuracy 	<ul style="list-style-type: none"> • Develop Extractors, Info Providers and other required structures to support BI usage • Develop queries to be used by BI reporting • Design, develop, and unit test reports to be enabled using BI • Manage and document BI objects • Writing and maintaining test cases • Define data conversion rules • Execute data conversion activities

Project Role	The City Responsibility	Deloitte Consulting Responsibility
Organization and Change Management (OCM) Lead / Team	<ul style="list-style-type: none"> • Lead the organizational readiness work on a project, including organizational change management, communications, and training • Be a direct liaison to the City business stakeholders, user base, and business effectiveness organizations • Conduct change readiness assessment in collaboration with Deloitte counterpart • Actively contribute to the production, review, and finalization of change management team deliverables • Support implementation of Communication Plan • Management training development • Support training development • Schedule end user training and coordinate with City Departments • Manage the Change Readiness Plan implementation 	<ul style="list-style-type: none"> • Work with the City OCM Lead to drive the OCM work on the project • Develop the Organization Change Management Plan and change imperative statement • Develop change management, end-user training, and communication strategies and plans • Develop the implementation of Communication Plan • Coordinate the production, review, and finalization of change management team deliverables • Manage training planning, training material development, and delivery • Support the management of Change Readiness Plan implementation • Collaborate with Security & Controls team to facilitate role-to-position mapping
<i>City:</i> Project Advisor <i>Deloitte:</i> Functional Architect	<ul style="list-style-type: none"> • Support mitigation of business and technology risks • Provide QA reviews of the functional and technical design 	<ul style="list-style-type: none"> • Oversee the overall business process and functional design of the IAM solution • Lead/participate in key design workshops • Identify business and technology risks • Resolve critical design, process and technology issues • Provide QA reviews of the functional and technical design
Solution Architect	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • Oversee end to end integrated business and technology process designs • Prepare key design deliverables • Identify design risks and issues and assist in issue resolution • Lead Integration test scenario development • Lead Integration test planning and execution

Project Role	The City Responsibility	Deloitte Consulting Responsibility
Security Lead / Team	<ul style="list-style-type: none"> • Retain primary responsibility for approving security and control environment design • Work with business and functional analysts, as well as with business readiness team members, to determine job role security requirements • Shared responsibility for design, build, test and implementation of security roles • Define and document Application security standards • Execute role-to-position mapping effort to facilitate deployment efforts • Establish user master records and link to appropriate job roles • Review segregation of duties analysis results and approve related risk mitigation plans • Shared responsibility for the design, build, test and implementation of business process internal controls • Provide overall direction to the Security & Controls team • Facilitate integration with other implementation project teams, and legacy City Security & Controls / compliance organizations • Represent Security & Controls thread in project leadership meetings • Review and approve team deliverables • Attend all project meetings on an as required basis 	<ul style="list-style-type: none"> • Develop Application security strategy and approach • Provide ‘Why Not’ security and controls approach, sample deliverables and guidance • Shared responsibility for the design, build, test and implementation of security roles • Shared responsibility for the design, build, test and implementation of business process internal controls • Develop specifications for custom security objects • Documentation related to build, test and implementation of security roles • Support end users and City security & controls team members • Support the City team in the completion of segregation of duties analysis of the security solution • Provide knowledge transfer to City security team members • Support the City Security & Controls thread lead • Develop and deliver status reports • Guide and educate the City Security & Controls lead, and the City Security & Controls team as they support the broader implementation project teams • Share oversight of Security & Controls team resources

Project Role	The City Responsibility	Deloitte Consulting Responsibility
Legacy Systems and Data Lead	<ul style="list-style-type: none"> • Responsible for the final decisions in the development area regarding resource allocations, priority setting, problem resolution, and risk mitigation strategies • Implement the Project’s technology policies and procedures • Manage relationships with hardware and software vendors • Assign information technology work assignments • Attend all project meetings on an as required basis 	<ul style="list-style-type: none"> • Provide leadership to the legacy systems and data team members • Assign development work assignments • Form primary coordination point for offsite coordination and development effort management • Oversee custom object quality assurance processes including Unit and String testing • Deliver development standards and controls • Coordinate day to day work between functional team and development team members
Technical Architect	<ul style="list-style-type: none"> • Serve as primary City team member responsible for providing guidance, insights and leading practice to Infrastructure and Infrastructure and Application delivery • Periodically review and provide formal feedback on Infrastructure and Application progress 	<ul style="list-style-type: none"> • Serve as primary consultant responsible for providing guidance, insights and leading practice to Infrastructure and Infrastructure and Application delivery • Periodically review and provide formal feedback on Infrastructure and Application progress

6. Staffing Model

The primary work location(s) will be at City facilities in San Diego, CA, although Deloitte Consulting may perform the Services at other locations.

6.1. Deloitte Staffing

The table below shows the planned number of Deloitte’s onsite resources by roles per month in number of FTEs. Use of alternative Deloitte resource models will be discussed by the Deloitte and City project managers in advance, but Deloitte Consulting maintains control over its staffing. However, without an agreed change order such staffing changes shall not result in a change in fees.

Post go-live functional and technical team resources will be available, as listed in the table below, to complete outstanding knowledge transfer deliverables, resolve system issues and transition to the long term support team.

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Deloitte Onsite Resources	Month																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Engagement Principal	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.1	0.1
QA Principal	0.05	0.1	0.1	0.1	0.1	0	0	0	0.02	0.1	0.1	0.1	0.05	0	0	0	0
Project Director	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Method Coach	0.2	0.3	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0
Project Analyst	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.5
IAM Project Manager	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
PPM Consultant	0.25	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0
EAM Work Order Consultant	0.25	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0
Technical Lead	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.5	0.5	0.5
Change Specialist	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0
Change / Communication Specialist	0	0	0	0	0	0.5	1	1	1	1	1	0	0	0	0	0	0
EAM Lead	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0
OCM Lead	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.25	0	0	0	0	0
Security Lead	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0	0	0	0
Security Specialist 1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0
Security Specialist 2	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0
Controls Specialist	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0
GRC Specialist	0	0	0	0	0	0	0	0	1	1	1	1	0.5	0	0	0	0
Security Principal	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0
Development Lead	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
BI Lead	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0.5	0
MDG Lead	0	0	0.5	1	1	1	1	1	1	1	1	1	1	1	1	0.5	0
User Experience Lead	0.25	1	1	1	1	1	1	1	1	1	1	1	1	0.5	0	0	0
SCM (PR/IM/WM)	0.25	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
GIS Integration	0.25	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.5	0.5
Mobility	0.25	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.5	0
Data Quality Lead	0.25	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0
Training Lead	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0.4	0	0
Total FTE	10.2	15.6	15.9	19.4	19.4	20.7	21.2	22.2	22.2	22.3	22.3	21	19.2	16.4	10.2	7.7	4.7

The offsite resources located in Deloitte’s Orlando Development Center are estimated as listed in the table below. Offsite resources will be available to work on the project during the City’s core working hours – 8:00 AM – 5:00 PM PST during peak periods of project activity or when necessary to support the project schedule, Monday through Friday.

Deloitte Offsite Resources	Month
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	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Development Lead	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Portal Developer	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
Middleware Developer	0	0	0	0	0.5	1	1	1	1	1	1	1	1	1	1	1	0.5
Middleware Developer	0	0	0	0	0	0.5	1	1	1	1	1	1	1	0	0	0	0
Middleware Developer	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0
Application Developer	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Application Developer	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1
Application Developer	0	0	0	0	0	0	0.5	1	1	1	1	1	1	0	0	0	0
Application Developer	0	0	0	0	0	0	0.5	1	1	1	1	1	0	0	0	0	0
Application Developer	0	0	0	0	0	0	0.5	1	1	1	1	0	0	0	0	0	0
Application Developer	0	0	0	0	0	0	0.5	1	1	1	0.5	0	0	0	0	0	0
Training Developer	0	0	0	0	0	0.8	1	1	1	1	1	1	1	0.25	0	0	0
Training Developer	0	0	0	0	0	0.8	1	1	1	1	1	1	1	0.25	0	0	0
Training Developer	0	0	0	0	0	0.8	1	1	1	1	1	1	0.75	0	0	0	0
Training Developer	0	0	0	0	0	0	0	1	1	1	0.75	0	0	0	0	0	0
Back End Lead	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0
BI Developer	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0
Front End Lead	0	0	0	0.4	1	1	1	1	1	1	1	1	1	1	1	1	0.25
Data Analyst	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0.5
Data Integration Developer	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0.5
App Analyst – Mobility	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.5	0.5
App Analyst – GIS	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
App Analyst – PPM	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.5	0.5
App Analyst – PM	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0
Org Design Specialist	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0
Change Specialist	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0
Technical Infrastructure Analyst	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.5	0.5
Total FTE	5	7	7.5	12.4	14.5	18.9	23	29	29	27	26.2	24	21.7	16.5	15	11.5	7.2

When assigning personnel to perform the Services, Deloitte Consulting may be requested by relevant government authorities to validate the relationship between Deloitte Consulting and the City. To facilitate the staffing of the Project, City agrees to provide Deloitte Consulting with a Project Validation Letter (refer to Exhibit A, Attachment 11 for letter format) upon request.

The Deloitte Project Manager shall be responsible for identifying a strategy to address issues with underperforming Deloitte resources and to backfill a resource if necessary in order meet project goals.

6.2. City Staffing

The following table provides the planned number of City resources required for the project. They may serve as a guide and rough gauge of the level of effort required from City resources, but are by no means complete or final and would require detailed validation and confirmation during the project preparation phase. Also note, the table below does not include subject matter experts that will be could be potentially required from the business to attend blueprint design workshops and other part time resources that may be assigned to specific project tasks.

The City Resources	Month																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Project Manager	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Functional Lead	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Technical Lead	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
OCM Lead	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Reporting Lead	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Data Migration Lead	0.25	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0
Trainer	0	0	0	0	0	0	0	0	0	0	0	5.8	5.8	0	0	0	0
Legacy Analyst	0	5	5	5	5	5	5	5	5	5	5	5	5	5	0	0	0
Legacy Developer	0.4	0.4	0.4	0.4	1	1	1	1	1	1	4	4	4	4	0	0	0
Data Analyst	0	0.5	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0
Controls Specialist	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.1	0.1	0.1	1	1	0	0	0
Security Specialist	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1
Business Process Analyst	13	13	13	13	15	15	15	15	15	6	6	6	9	12	6	6	6
Total FTE	19.9	26.15	26.65	26.65	29.29	29.25	29.25	29.25	29.25	20.1	20.1	25.9	33.8	34	13	12	12

Other part time City resources, including subject matter specialists, business process owners, testers, super users, and change agents, will be needed. City Project Management shall be responsible for identifying a strategy to address issues with underperforming City resources and to and/or backfill a resource if necessary in order to meet project goals.

7. Deliverables and Responsibility Matrix

7.1. Core Deliverables and Primary Areas of Responsibility

City and Deloitte Consulting will have either primary or secondary responsibility for the deliverables identified below. Responsibility definitions

Primary: Responsible for executing the task and creating the resulting item.

Secondary: Responsible for supporting the “Primary” role, but is not responsible for executing the resulting item. Exceptions are the following deliverables, for which it is agreed that the Secondary Role will be responsible for creating subsidiary deliverables where mutually agreed by the City and Deloitte Consulting Project Managers.

- 4.5.11 Integration Test cases – scripting and test data preparation
- 4.5.12 Regression Test cases – scripting and test data preparation
- 4.5.14 User Acceptance Test cases – scripting and data preparation

7.1.1. Project Preparation

Deliverable Group	ID	Deliverable	Primary	Support
Project Management	1.1.01	Project Charter development	City of San Diego	Deloitte
Project Management	1.1.02	Business Case development	City of San Diego	Deloitte
Project Management	1.1.03	Project organization, with assigned roles and responsibilities for project team members	Deloitte	City of San Diego
Project Management	1.1.04	Set-up and documentation of project standards and project support tools	Deloitte	City of San Diego
Project Management	1.1.05	Team onboarding document	Deloitte	City of San Diego
Project Management	1.1.06	Implementation strategy and roadmap	Deloitte	City of San Diego
Project Management	1.1.07	Scope statement	City of San Diego	Deloitte
Project Management	1.1.08	Work Breakdown Structure	Deloitte	City of San Diego
Project Management	1.1.09	Scope Management Plan	Deloitte	City of San Diego
Project Management	1.1.10	Time Management plan	Deloitte	City of San Diego
Project Management	1.1.11	Cost Management plan	Deloitte	City of San Diego
Project Management	1.1.12	Staffing Management Plan	Deloitte	City of San Diego
Project Management	1.1.13	Quality Management Plan	Deloitte	City of San Diego
Project Management	1.1.14	Issue Management Plan	Deloitte	City of San Diego
Project Management	1.1.15	Risk Management Plan	Deloitte	City of San Diego
Project Management	1.1.16	Communication Management Plan	Deloitte	City of San Diego
Project Management	1.1.17	Change Control Management Procedure	Deloitte	City of San Diego

Deliverable Group	ID	Deliverable	Primary	Support
Technical Solution Management	1.4.01	Recommendation on requisite hardware, including devices for mobile work and inventory management	Deloitte	City of San Diego

7.1.2. Business Blueprint

Deliverable Group	ID	Deliverable	Primary	Support
Business Process Management	2.2.01	Business Requirements documentation	Deloitte	City of San Diego
Business Process Management	2.2.02	Recommendation on finalized software BOM list with justification	Deloitte	City of San Diego
Business Process Management	2.2.03	Business Process Map	Deloitte	City of San Diego
Business Process Management	2.2.04	Business process flow documentation	Deloitte	City of San Diego
Business Process Management	2.2.05	Business Organization Structure	Deloitte	City of San Diego
Business Process Management	2.2.06	Fit-gap analysis results	Deloitte	City of San Diego
Business Process Management	2.2.07	To-be business scenario documentation	Deloitte	City of San Diego
Business Process Management	2.2.08	Functional requirements and design specifications	Deloitte	City of San Diego
Business Process Management	2.2.10	Logical data models	Deloitte	City of San Diego
Business Process Management	2.2.11	Visualization documentation for custom transactions	Deloitte	City of San Diego
Business Process Management	2.2.19	Definition of user role concept	Deloitte	City of San Diego
Business Process Management	2.2.22	Report, Interface, Conversion, Enhancement, Form and Workflow (RICEFW) Inventory	Deloitte	City of San Diego
Organizational Change Management	2.3.02	Stakeholder Analysis	City of San Diego	Deloitte
Organizational Change Management	2.3.04	Organizational alignment approach	Deloitte	City of San Diego
Organizational Change Management	2.3.06	Communication Plan	Deloitte	City of San Diego
Technical Solution Management	2.4.02	Solution landscape and deployment – plan and execution, excluding hardware setup	Deloitte	City of San Diego
Technical Solution Management	2.4.03	Capacity Planning Approach and System sizing documentation	Deloitte	City of San Diego

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Deliverable Group	ID	Deliverable	Primary	Support
Technical Solution Management	2.4.04	Technical infrastructure design document and specifications	Deloitte	City of San Diego
Technical Solution Management	2.4.05	Interface Inventory	Deloitte	City of San Diego
Technical Solution Management	2.4.06	Security and Controls plan	Deloitte	City of San Diego
Technical Solution Management	2.4.07	Authorization requirements and design	Deloitte	City of San Diego
Technical Solution Management	2.4.13	Define User Experience Approach	Deloitte	City of San Diego
Technical Solution Management	2.4.14	Define Integration Exception and Error-Handling Mechanism	Deloitte	City of San Diego
Technical Solution Management	2.4.15	Define (Update) Software Development Standards	Deloitte	City of San Diego
Technical Solution Management	2.4.16	Project Landscape System Build activities (Development, QAS, Training)	Deloitte	City of San Diego
Technical Solution Management	2.4.18	Network / Security Architecture for Mobility	Deloitte	City of San Diego
Test Management	2.5.01	Testing Policy document	Deloitte	City of San Diego
Test Management	2.5.02	Test Management Procedure	Deloitte	City of San Diego
Test Management	2.5.03	Test Strategy document	Deloitte	City of San Diego
Data Management	2.6.01	Data Migration Scope and Requirements Document	City of San Diego	Deloitte
Data Management	2.6.02	Data Migration approach and strategy	Deloitte	City of San Diego
Data Management	2.6.03	Documentation of ownership of Master Data Management Processes	Deloitte	City of San Diego
Data Management	2.6.06	Data Security Design	Deloitte	City of San Diego
Data Management	2.6.10	Data Governance Strategy & Framework	Deloitte	City of San Diego
Data Management	2.6.11	Data Assessment and Profiling	Deloitte	City of San Diego
Training	2.7.01	Project training strategy and training plan	Deloitte	City of San Diego
Training	2.7.02	Training Strategy and Training Plan For trainers, super users and end-users	Deloitte	City of San Diego
Training	2.7.03	Knowledge Transfer Plans by City individual	City of San Diego	Deloitte

Deliverable 2.4.15 (Define-Update Software Development Standards): It is required for deliverable acceptance that the software development standards used by Deloitte meet or exceed any software development standards mutually agreed to by the City and Deloitte Consulting as of the date of this Agreement.

7.1.3. Realization – Build

Deliverable Group	ID	Deliverable	Primary	Support
Business Process Management	3.2.09	Configuration documentation	Deloitte	City of San Diego
Business Process Management	3.2.12	Technical requirements and design specifications	Deloitte	City of San Diego
Business Process Management	3.2.13	Business Process Procedures	Deloitte	City of San Diego
Business Process Management	3.2.14	Application configuration	Deloitte	City of San Diego
Business Process Management	3.2.15	Functional Unit Test Cases – identification, scripting, data preparation, and execution	Deloitte	City of San Diego
Business Process Management	3.2.16	Technical Unit Test Cases – identification, scripting, data preparation, and execution	Deloitte	City of San Diego
Business Process Management	3.2.17	String Test Cases – identification, scripting, data preparation and execution	Deloitte	City of San Diego
Business Process Management	3.2.18	Custom application code	Deloitte	City of San Diego
Business Process Management	3.2.21	Solution documentation	Deloitte	City of San Diego
Organizational Change Management	3.3.01	Organizational Change Management Roadmap and Strategy	Deloitte	City of San Diego
Organizational Change Management	3.3.03	Change Impact Analysis	Deloitte	City of San Diego
Organizational Change Management	3.3.05	Baseline of current state	City of San Diego	Deloitte
Organizational Change Management	3.3.10	User role document	Deloitte	City of San Diego
Organizational Change Management	3.3.11	Communications Development	Deloitte	City of San Diego
Technical Solution Management	3.4.09	Batch job requirements	Deloitte	City of San Diego
Technical Solution Management	3.4.12	System User Roles and Authorization Administration	Deloitte	City of San Diego
Technical Solution Management	3.4.16	Security Role Development	Deloitte	City of San Diego
Technical Solution Management	3.4.17	Production Environment Design	Deloitte	City of San Diego
Technical Solution Management	3.4.18	Solution architecture diagram	Deloitte	City of San Diego
Test Management	3.5.04	Test Plan	Deloitte	City of San Diego
Data Management	3.6.04	Data Mapping Documentation	Deloitte	City of San Diego

Deliverable Group	ID	Deliverable	Primary	Support
Data Management	3.6.05	Data Quality Plan	Deloitte	City of San Diego
Training	3.7.09	End User Training Curriculum	Deloitte	City of San Diego

7.1.4. Realization – Test

Deliverable Group	ID	Deliverable	Primary	Support
Technical Solution Management	4.4.19	Set-up and preparation of testing and training environments	Deloitte	City of San Diego
Test Management	4.5.05	Integration Test cases – identification and execution	City of San Diego	Deloitte
Test Management	4.5.07	Regression Test cases – identification and execution	City of San Diego	Deloitte
Test Management	4.5.08	Performance Test cases –identification, scripting, test data preparation, and test execution	Deloitte	City of San Diego
Test Management	4.5.09	Physical Infrastructure Test cases – identification, scripting, test data preparation, and test execution	Deloitte	City of San Diego
Test Management	4.5.10	Security Role Test cases – identification and execution	City of San Diego	Deloitte
Test Management	4.5.11	Integration Test cases – scripting and test data preparation	Deloitte	City of San Diego
Test Management	4.5.12	Regression Test cases – scripting and test data preparation	Deloitte	City of San Diego
Test Management	4.5.13	User Acceptance Test cases – identification and test execution	City of San Diego	Deloitte
Test Management	4.5.14	User Acceptance Test cases – scripting and data preparation	Deloitte	City of San Diego
Test Management	4.5.15	Security Role Test cases – scripting and test data preparation	Deloitte	City of San Diego
Data Management	4.6.07	Data Quality Assessment Reports	Deloitte	City of San Diego
Data Management	4.6.08	Data Migration Test Reports	Deloitte	City of San Diego
Training	4.7.03	Knowledge transfer plan	Deloitte	City of San Diego
Training	4.7.06	End-user training content	Deloitte	City of San Diego

Deliverable Group	ID	Deliverable	Primary	Support
Training	4.7.11	End User Training Logistics Plan	City of San Diego	Deloitte

7.1.5. Final Preparation

Deliverable Group	ID	Deliverable	Primary	Support
Organizational Change Management	5.3.07	Organizational Change Management readiness documentation	Deloitte	City of San Diego
Organizational Change Management	5.3.08	Production support readiness documentation	Deloitte	City of San Diego
Organizational Change Management	5.3.09	End User acceptance survey	City of San Diego	Deloitte
Technical Solution Management	5.4.08	Technical Operations and Handover Plan	Deloitte	City of San Diego
Technical Solution Management	5.4.10	Batch job scheduling	City of San Diego	Deloitte
Technical Solution Management	5.4.11	Support Center/Help Desk Staffing Strategy	City of San Diego	Deloitte
Data Management	5.6.09	Plan and Execute Data Migration – Extraction, Transformation, Enrichment, Load, and Reconciliation	Deloitte	City of San Diego
Training	5.7.04	Educational Readiness Review	City of San Diego	Deloitte
Training	5.7.05	Training Evaluations feedback	City of San Diego	City of San Diego
Training	5.7.07	Training delivery for trainers and super-users	Deloitte	City of San Diego
Cutover Management	5.8.01	Cutover plan and execution	Deloitte	City of San Diego
Cutover Management	5.8.02	Operations Maturity Assessment Report	Deloitte	City of San Diego
Cutover Management	5.8.03	Go-live checklist	Deloitte	City of San Diego
Cutover Management	5.8.04	Go-live simulation	Deloitte	City of San Diego
Cutover Management	5.8.05	Readiness for Cutover – document for sign-off	City of San Diego	Deloitte
Cutover Management	5.8.06	Go-live check – verification tests	City of San Diego	Deloitte
Cutover Management	5.8.07	Coordination Plan for Legacy System Retirement	City of San Diego	Deloitte
Application Lifecycle Management	5.9.01	Project and operational standards procedure documentation	Deloitte	City of San Diego
Application Lifecycle Management	5.9.02	ALM plan to transition to production support organization	Deloitte	City of San Diego

7.1.6. Go-Live and Support

Deliverable Group	ID	Deliverable	Primary	Support
Training	6.7.08	Knowledge Transfer Plans Completed	City of San Diego	Deloitte
Cutover Management	6.8.08	Post go-live production support – resolution of functional and technical issues	Deloitte	City of San Diego

7.2. Additional Areas of Responsibility

7.2.1. Value Management

Majority of the deliverables associated with value management on the I AM San Diego IAM project shall be the responsibility of ARCADIS, the Business Process Consultant (BPC), with the exception of the areas identified in this section 7.2.1. The delivery of KPI/PPI dashboards in support of value management is in Deloitte’s scope of work under Analytics and Reporting. Deloitte shall collaborate with the BPC in order to support completion of the value management deliverables, to include Value Maps and Value Audit Reports. In addition, as the prime SI for the project, Deloitte shall provide project management coordination with the BPC for deliverables and tasks within this work stream, but shall not be responsible in any way for the performance of BPC, including its execution of corresponding tasks or deliverables.

7.2.2. Data Archiving and Legacy System Retirement

Deliverables associated with data archiving and the retirement of legacy systems replaced by the IAM San Diego Project shall be handled by the City’s respective application system owner department in conjunction with DoIT. As part of its project management responsibility, Deloitte shall provide project management coordination with the respective groups for deliverables and tasks within this work stream as part of the overall project, but shall not be responsible in any way for the performance of such groups, including their execution of corresponding tasks or deliverables.

8. Acceptance Procedure

8.1. Deliverable Acceptance

Acceptance by the City is required of all of the Deliverables provided by Deloitte Consulting in association with this Statement of Work.

Deloitte Consulting will submit drafts of each deliverable, review with the City, incorporate feedback and changes iteratively as appropriate prior to submitting a Final Deliverable to the City for acceptance and sign-off. The City will approve each Final Deliverable that conforms in all material respects with the specifications for the Deliverable set forth in this Agreement or as otherwise agreed in writing by the Parties as part of the Deliverable Acceptance Criteria deliverable prepared and approved during Project Preparation. Within ten (10) business days (or such other period agreed upon in writing by the parties in the work plan or otherwise) from its receipt of a Final Deliverable, the City will provide Deloitte Consulting with (i) written approval of such Deliverable or (ii) a written statement which identifies in reasonable detail, with references to the applicable Specifications, all of the deficiencies preventing approval (the "Deficiencies").

Deloitte Consulting will complete corrective actions in order for such Deliverable to conform in all material respects to the applicable Specifications. City will complete its review of the corrected Deliverable and notify Deloitte Consulting in writing of acceptance or rejection in accordance with the foregoing provision.

Approval of a Deliverable will be deemed given by City if City has not delivered to Deloitte Consulting a notice of Deficiencies for the Final Deliverable version prior to the expiration of any period for City's review thereof as set forth in this Section, or if City uses the Deliverable in production.

To the extent that any Deliverable has been approved by City at any stage of Deloitte Consulting's performance under this Agreement, Deloitte Consulting will be entitled to rely on such approval of that specific deliverable for purposes of all subsequent stages of Deloitte Consulting's performance under this Agreement. City agrees that, in the event an approved Deliverable differs from the Specifications for such Deliverable, the Specifications will be deemed modified to conform with such approved Deliverable.

If Deloitte Consulting is unable to correct any Deficiency in a Deliverable within a mutually agreed period of time, City shall be entitled, at its option, to a refund or credit of professional fees paid to Deloitte Consulting hereunder with respect to the Services giving rise to such Deliverable and this shall be City's sole and exclusive remedy, and Deloitte Consulting's sole and exclusive obligation, with respect to any claim that the Deliverables do not conform to the requirements of this Agreement.

Refer to Exhibit A, Attachment 9 For the Deliverable Acceptance Form.

8.2. Final System Acceptance

The services under this Agreement will be deemed complete and the final milestone payment released when:

- Deliverables identified in this Agreement are completed and updated where appropriate to be current, and signed off or deemed accepted as defined in Section 8.
- Medium and High project issues identified in writing prior to the end of the 90 day support period immediately following go-live that are the responsibility of and assigned to Deloitte have been closed
- Medium, High and Very High defects in the system software Deliverables (as defined in Table 4 of Section 4.1.5) identified in writing prior to the end of the 90 day support period immediately following go-live that are caused by Deloitte have been resolved

At the completion of the ninety (90) day stabilization period and meeting the success measures outlined above, the system will be deemed accepted and the final payment will be made as outlined in Exhibit B.

9. Assumptions

The following is a list of assumptions and expectations upon which Deloitte Consulting has relied in agreeing to perform the Services and upon which it is based (the “Assumptions”). Any deviation from the Assumptions may affect the fees, expenses, and timelines set forth herein.

No.	RFP Item Reference	Assumption
1	General	The City will be responsible for cleansing legacy data and providing it in the required format for load into the IAM solution. Deloitte can offer data cleansing services as part of the implementation for additional cost.
2	General	The City will be responsible for regression testing existing functionality during the Realization Test phase of the project.
3	General	The City will provide a centralized Program Management Office that will provide direction around dependencies, coordination across projects and act as an escalation point for project issues and risks.
4	General	Our response to this request for proposal is based on the information in the RFP and relevant attachments such as Attachment A, Exhibit A – Requirements. If during blueprint, additional or reduced development or complexity for development items is found to be different, a change order will result
5	General	Any changes to the overall timeline, scope, or City resources may impact our estimates. The need for additional Deloitte Consulting resources will not result in a change order except as permitted under Section 1.3.

EXHIBIT A

No.	RFP Item Reference	Assumption
6	General	Any scope changes resulting from increased or decreased functionality, software customization, or other additional or reduced requirements outside of the original project scope will be subject to a formal Change Order Process. Services will not commence on new requirements outside of the original budget and scope without written approval from both the City and Deloitte Consulting in the form of a Change Order. Approved scope changes may have a cost and timeline impact as may be set forth in the relevant Change Order.
7	General	Final project scope and estimates will be confirmed after the Fit/Gap activities during Blueprint when all of the interfaces, conversion, enhancements, and process redesigns have been identified. Resulting changes to scope or any other aspect of this Agreement, as applicable, shall be subject to a Change Order to document these changes.
8	General	Deloitte Consulting will have no responsibility for the performance of other contractors or vendors engaged directly by the City, or delays caused by them in connection with the Project or the selecting of such contractors or vendors.
9	General	The SAP system language to be implemented will be English only.
10	General	All project documentation/Deliverables and related materials will be developed in English.
11	General	The SAP software, and any other software, will work as specified by the vendor; any significant issues not previously known with the quality of the software could impact Deloitte Consulting's estimate, timeline, and resources; in the event there are issues with SAP software, Deloitte Consulting in conjunction with the City will raise an SAP OSS message, track the issue, and make a reasonable attempt to drive issue resolution.
12	General	Any changes in the City organization, business unit composition, or processes that occur during the Project, and that may impact the scope of the Project, shall be addressed promptly by both parties, and may result in changes to the timeline or costs. Any such changes will be documented and approved following the Change Order Process.
13	General	Pricing assumes the City intends to purchase SAP Safeguarding or other review and support services independently prior to the start of the Realization phase of the project. The cost of this service is not included in this proposal.
14	General	Deloitte Consulting will be the lead integrator for this Project and will assist the City in its management of the Project.
15	General	The City and third parties assigned to the project team will follow the Deloitte EVD methodology and will complete tasks assigned to them by project management according to the project plan. All City and third parties assigned to the project will be provided with access to the agreed up on project tools.

EXHIBIT A

No.	RFP Item Reference	Assumption
16	General	Travel and work location will be limited to the City offices and Deloitte offsite locations, including Deloitte Consulting's development center in Tulsa and/or Orlando. Resources based outside the United States shall not be used for this project.
17	General	The City will provide working space, access to telephones, network connections, software, firmware, infrastructure, administrative support and other services and materials reasonably requested by Deloitte Consulting to perform Project work. All core team members will be relocated to this facility.
18	General	Deloitte Consulting makes no representations or warranties, expressed, or implied, regarding the performance of third-party tools, products, and/or services.
19	General	Only the English language will be used during the performance and completion of all Project services, including Project documentation.
20	General	All project team members will follow the EVD methodology and Deloitte deliverable templates and standards. No additional deliverables will be prepared without approval by project management. As part of project onboarding, Deloitte Consulting will provide training to project team members, including City and Deloitte subcontractors, on the EVD methodology, templates, and standards.
21	General	All City resources will report to the City project manager for the duration of the project for annual appraisal and staff administrative purposes.
22	General	SAP standard functionality will be adopted and processes changed to support leading practices unless a clear business case is developed and approved to enhance / replace standard functionality.
23	6.2.4 Project Approach	The City will make technical and functional resources available on an as-needed and timely basis to the Deloitte Consulting team.
24	6.2.4 Project Approach	The City technical staff will be familiar with existing systems, software tools, and components of technical architecture. The City will facilitate Deloitte Consulting's reasonable access to the City's facilities, people, and documents as requested.
25	6.2.4 Project Approach	The City team members will complete tasks assigned to them by the project management team in a timely manner. If other City critical work, for example storm recovery, impacts this ability then the Project Managers will identify the impact, contingency/mitigation and if necessary document a schedule, fees, and/or or resource change order subject to the change process.
26	6.2.4 Project Approach	The City executive sponsor will be identified who is empowered to make project decisions and will be available to the project management team on an as required basis.
27	6.2.4 Project Approach	Project schedules, tasks, costs, and deliverables are based on the Parties' mutual understanding of the Project scope and objectives.

No.	RFP Item Reference	Assumption
28	6.2.4 Project Approach	The City will be providing resources as outlined in this proposal. In addition to resources assigned to the project additional resources will be provided as needed to attend workshops, training, and other meetings. Other 3 rd party firms may supply resources as mutually agreed to by between the City and Deloitte Consulting.
29	6.2.4 Project Approach	The City may contract with an external party to provide PMO support. Deloitte will be happy to work with that party and share project documentation and deliverables on condition that there is a signed confidentiality agreement that contains substantially the same provisions as in the Agreement, in place between that third party and the City.
30	6.2.4 Project Approach	The City staff assigned full time to the project will be relieved of other primary professional duties.
31	6.2.4 Project Approach	The City staff assigned to the project will be able to represent the City's business and technical requirements and will be empowered to make decisions related to the scope of their role on the project.
32	6.2.4 Project Approach	All regression testing of legacy systems including existing SAP systems will be performed by City and its supporting resources.
33	6.2.4.7 Project Tools	Deloitte Consulting may utilize proprietary security implementation accelerators, such as ACTT, for this project. These accelerators will be used to expedite security tasks during the project if necessary and will be removed after the implementation.
34	6.2.4.18 S&C Plan	The definition of requirements and approvals of security design, end user mapping, and controls are the responsibility of the City's management.
35	6.2.4.18 S&C Plan	The City will be responsible for coordinating and fulfilling any requirements from auditors (both internal or external) or other regulators.
36	6.2.4.18 S&C Plan	Deloitte Consulting will not perform any management functions, make management decisions, or perform in a capacity equivalent to that of an employee of the City.
37	6.2.4.18 S&C Plan	Deloitte Consulting will provide onsite post go-live support for Security for 90 days after go-live, at which point full responsibility for support of the IAM security and GRC solution will transition to the City.
38	6.2.4.18 S&C Plan	Deloitte Consulting will not provide any legal advice regarding our Services nor will we provide any assurance regarding the outcome of any future audit or regulatory examination or other regulatory action; the responsibility for all legal issues with respect to these matters, such as reviewing all deliverables and work product for any legal implications to the City, will be the City Attorney's Office.

No.	RFP Item Reference	Assumption
39	6.2.4.18 S&C Plan	Application security will use a standardized, role based design and user mapping approach, leveraging the employee to position role-mapping to be established on the project. The Deloitte team will review the existing application security model that is in use at the City and build upon it. Specifically, Deloitte Consulting will perform a review of the reasons for IS-U-CCS role redesign and adopt the lessons learnt for the IAM San Diego project.
40	6.2.4.18 S&C Plan	The City will be responsible for mapping employees to business roles to be assigned for SAP EAM and mobile application security purposes and will be accountable for the validity of user master data in both the SAP system and the legacy systems.
41	6.2.4.18 S&C Plan	Security and controls design scope includes only the SAP systems implemented as part of the IAM project (e.g., IAM, HANA, BOBJ). Design and implementation of security and controls for other applications, including legacy and bolt-on systems, will be the responsibility of the City. Infrastructure security, identity and access management, database security, operating system security, directory integration, and single sign-on security are the responsibility of the City. Security and controls design scope for mobility is the responsibility of Deloitte.
42	6.2.4.18 S&C Plan	The City will provide SAP application security resource based on the staffing requirement detailed in Section 6.2. The resource will have experience designing, documenting, configuring, testing, deploying, and supporting application security. The resource will assist Deloitte Consulting in the development and completion of SAP application security deliverables and related application security activities for the IAM project.
43	6.2.4.18 S&C Plan	The City assumes ownership for all production and non-production legacy system developments and legacy system security updates. The City will also provide security support for non-production SAP systems.
44	6.2.4.18 S&C Plan	The City will provide controls resource based on the staffing requirement detailed in Section 6.2. The resource will have experience designing, documenting and testing internal controls as they pertain to financial reporting or its compliance with laws, regulations, or other matters.
45	6.2.4.18 S&C Plan	The City is, and will continue to be, solely responsible for establishing and maintaining an effective internal control system, including, without limitation, systems designed to assure achievement of its control objectives and its compliance with applicable laws and regulations.

No.	RFP Item Reference	Assumption
46	6.2.4.18 S&C Plan	Deloitte Consulting will have primary responsibility for recommending new controls or modifications to existing controls related to the implementation of SAP EAM modules, processes and sub-processes in-scope for the IAM implementation project. Deloitte Consulting's scope will focus on internal controls as they pertain to financial reporting, and data privacy controls related specifically to customer privacy within the IAM solution. Deloitte Consulting will provide these services during the blueprint/design phase of the IAM project. The City will be responsible for all internal control deliverables pertaining to the other phases of the project, including updating internal controls documentation and performing testing of controls. The City will also be responsible for addressing controls for other regulatory requirements in scope.
47	6.2.4.18 S&C Plan	Existing internal controls documentation developed and maintained by the City will be provided to the Internal Controls team at the start of the project.
48	6.2.4.18 S&C Plan	The City will be responsible for the documentation and testing required for newly designed internal controls, and updating existing financial internal controls documentation to reflect the new control environment.
49	6.2.4.18 S&C Plan	Entity-level controls are out of scope for the project.
50	6.2.4.18 S&C Plan	The services will be performed in accordance with the Statement on Standards for Consulting Services issued by the American Institute of Certified Public Accountants ("AICPA"). Deloitte Consulting will provide its observations, advice, and recommendations. However, Deloitte Consulting's services will not constitute an engagement to provide audit, compilation, review, or attestation services as described in the pronouncements on professional standards issued by the AICPA, and, therefore, Deloitte Consulting will not express an opinion or any other form of assurance with respect to the Company's system of internal control over financial reporting or its compliance with laws, regulations, or other matters.
51	6.2.4.18 S&C Plan	Deloitte Consulting will be responsible for configuring the existing SAP GRC Access Control solution to interface with SAP instances using the standard SAP connector. It is not within the proposed scope to connect SAP GRC AC to non-SAP applications within the City's landscape.
52	6.2.4.18 S&C Plan	The SAP GRC AC User Access Management (UAM) component will be used to provision user access to SAP systems.
53	6.2.4.18 S&C Plan	Segregation of duties testing and critical transaction analysis will be performed only for select risks that are identified and documented by the City. It is assumed that this will be done using SAP GRC Access Control. Deloitte Consulting will be responsible for identifying and recommending remediating or mitigating actions for SOD violations introduced as a result of the IAM project. SOD violations attributable to the existing SAP environment will be the responsibility of the City.

EXHIBIT A

No.	RFP Item Reference	Assumption
54	6.2.4.18 S&C Plan	. The City will provide GRC resource based on the staffing requirement detailed in Section 6.2. The resource will be responsible for assisting with GRC configuration and deployment activities and will provide support after the system is deployed.
55	6.2.6 Project Organization	Services will be performed during a Monday through Friday on-site project team workweek, with some individuals onsite 4 days per week and working remotely on Friday. This work week may be converted to an extended on-site workweek based on Project needs and mutual agreement between the City and Deloitte.
56	6.3.2 Pricing	Expenses are included in the pricing proposal, at a rate of 15% of fees for onsite traveling resources. Expenses are part of the overall fixed fee for the project.
57	Data	SAP Data Archiving is out of scope for the project.
58	Data Conversion	Data cleansing in the legacy system will be performed by the City and will be completed prior to the extraction of the data for final conversion as noted in the project schedule.
59	Data Conversion	The City will provide data in a predefined format, per the functional conversion specifications, for loading into SAP according to the project timeline. Deloitte will be responsible for transformation and loading of the data in to SAP
60	Data Conversion	Manual data cleanup tasks required post-conversion will be completed by City, unless they are the result of error in the Data Migration process performed by Deloitte, in which case they will be completed by Deloitte
61	Data Conversion	Extract of data from the legacy system will be in a format that will be easily consumed by SAP Data Management Services for data transformation. The format will be agreed during Blueprint and will be aligned to standard SAP data conversion maps.
62	Hypercare	After go live, the City’s standard incident management solution will be used for Hypercare issue tracking.
63	Scope/Deliverables	The functional and technical scope of the project is outlined in the Statement of Work and Exhibit A – Scope of Services. Any additions or deletions to this scope must be jointly approved by both the City and Deloitte Consulting prior to work proceeding, subject to the change control process for the project.
64	Scope/Deliverables	Data extract programs for conversions from legacy applications will be developed by City resources.
65	Scope/Deliverables	A preliminary list of the Forms, Reports, Interfaces, Conversions, Enhancements, and Workflows (FRICEW Objects) required for the project have been identified in Exhibit A, Attachment 6. The need for any additions or reductions to FRICEW objects identified during the project will be subject to the Change Order process.
66	Scope/Deliverables	The discovery of additional ‘shadow’ systems within the City current environment may result in a change order if additional work is incurred as a result of this discovery.

No.	RFP Item Reference	Assumption
67	Scope/Deliverables	Post Go-Live support will be performed using a balanced team based on Deloitte's prior experience to provide 90 days of post Go-Live support. Changes to the hours and specific resources provided for support may result in a change order. Deloitte will ensure that Go-Live support is provided in the in-scope areas, and to the extent required, as described in this Agreement.
68	Scope/Deliverables	Not all functionality provided by the SAP modules listed by the City as in scope will be implemented, rather the functionality necessary to meet the City's business requirements and processes will be deployed.
69	Scope/Deliverables	The project will be implemented using Deloitte's proposed implementation method and timeline as outlined in this proposal.
70	Scope/Deliverables	All estimates for the number and complexity of Forms, Reports, Interfaces, Conversions, Enhancements, and Workflow (FRICEW) are based on the information provided in the RFP.
71	Scope/Deliverables	The City must decide on a GIS integration strategy (whether to use SAP GEF, GEO.e, custom or HANA) during the early blueprint phase. Deloitte will facilitate this decision making process for the City.
72	Security	The City will limit sensitive information, such as PII, PHI, trade secrets and other information that it considers sensitive or highly confidential, it provides to Deloitte (or otherwise makes available to Deloitte) to only that which is reasonably necessary to allow Deloitte to provide the Services. Deloitte will provide City with a list of Deloitte personnel who are authorized to receive or have access to City sensitive information. Such list may be updated as needed. Any disclosure of sensitive information by City to Deloitte will utilize levels of information security and data encryption appropriate to maintain security of City sensitive information being accessed by or transferred to Deloitte, and as required by applicable information protection laws
74	Security	Security scope includes only the SAP application layer. Design and implementation of other layers as well as legacy and bolt-on systems, such as database, operating system and infrastructure layers, will be the responsibility of City.
75	Technical	Any activities in regards to legacy system decommissioning is not in scope for Deloitte
76	Technical	The IAM solution implemented as part of this project will continue to use the same batch process management tool that is currently being used at the City. City will provide technical expertise in the set-up of this tool to support the new IAM batch processes.
77	Technical	The City will provide the system infrastructure (i.e., software, hardware, licenses and network) at an appropriate capacity level to support the nonproduction and production environments. System infrastructure will be sized with input from Deloitte Consulting to support the Project Team and business operations to minimize any downtime and performance issues, according to applicable timelines and milestones.

EXHIBIT A

No.	RFP Item Reference	Assumption
78	Technical	The City will provide required capabilities for any third party/bolt-on applications and any boundary applications that are not included in the scope of the Services.
79	Technical	The User Interface Strategy shall cover standard SAP applications and leverage user interface technologies delivered by SAP, such as Fiori and SAP Screen Personas, for the scope of this project.
80	Testing	The City will provide the required tools for Test and Defect Management during the testing phase, e.g. HPQC unless a request is made for Deloitte to host these tools, which Deloitte agrees to host for the project duration at no additional cost.

Exhibit A, Attachment 1: List of Asset Types

No.	Asset Type	Data Ownership (Primary Dept./Div.)	Approx. Quantity
1	Basement Excavation	Facilities	100
2	Basement Walls	Facilities	600
3	Boiler (HVAC)	Facilities	87
4	Ceiling Finishes	Facilities	5,000
5	Chiller	Facilities	75
6	Commercial Equipment	Facilities	100
7	Communications and Security Systems	Facilities	5,000
8	Controls	Facilities	29
9	Controls and Instrumentation Systems	Facilities	2,000
10	Conveyance	Facilities	142
11	Cooling Distribution Systems	Facilities	2,000
12	Cooling Generating Systems	Facilities	100
13	Distribution Systems	Facilities	375
14	Domestic Water Distribution Systems	Facilities	2,000
15	Drinking Fountain	Facilities	1,500
16	Electrical Distribution Systems	Facilities	2,000
17	Electrical Service Distribution Systems	Facilities	2,000
18	Elevators and Lifts	Facilities	136
19	Energy Supply Systems	Facilities	300
20	Escalators and Moving Walks	Facilities	14
21	Exterior Doors	Facilities	6,000
22	Exterior Walls	Facilities	12,000
23	Exterior Windows	Facilities	100,000
24	FCU	Facilities	69
25	Fire Alarm	Facilities	61
26	Fire Suppression	Facilities	123
27	Fittings	Facilities	100,000
28	Fixed Furnishings	Facilities	3,000
29	Fixtures/Plumbing	Facilities	16,000
30	Floor Construction	Facilities	2,000
31	Floor Finishes	Facilities	5,000
32	Fuel Distribution Systems	Facilities	2,200
33	Generator	Facilities	120
34	Heat Generating Systems	Facilities	375

EXHIBIT A, ATTACHMENT 1

No.	Asset Type	Data Ownership (Primary Dept./Div.)	Approx. Quantity
35	Heating Distribution Systems	Facilities	2,000
36	Institutional Equipment	Facilities	100
37	Interior Doors	Facilities	34,000
38	Landscaping	Facilities	2,000
39	Lighting and Branch Wiring Systems	Facilities	2,000
40	Other Conveying Systems	Facilities	50
41	Other Electrical/ Generator	Facilities	150
42	Other Equipment	Facilities	15,000
43	Other Fire Protection Systems	Facilities	20
44	Other HVAC Systems	Facilities	500
45	Other Plumbing Systems	Facilities	2,000
46	Other Site Construction	Facilities	2,000
47	Parking Lots	Facilities	6,000
48	Partitions	Facilities	10,000
49	Pedestrian Paving	Facilities	6,000
50	Plumbing Fixtures	Facilities	50,000
51	Pump	Facilities	32
52	Purification	Facilities	40
53	Rain Water Drainage Systems	Facilities	2,000
54	Roadways	Facilities	6,000
55	Roof	Facilities	2,085
56	Roof Construction	Facilities	2,000
57	Roof Coverings	Facilities	2,000
58	Sanitary Sewer Systems	Facilities	2,000
59	Sanitary Waste Systems	Facilities	2,000
60	Service and Pedestrian Tunnels	Facilities	20
61	Site Communications and Security Systems	Facilities	2,000
62	Site Development	Facilities	2,000
63	Site Earthwork	Facilities	2,000
64	Site Lighting Systems	Facilities	2,000
65	Slab on Grade	Facilities	1,800
66	Special Foundations	Facilities	100
67	Special Structures	Facilities	2,000
68	Sprinkler Systems	Facilities	100
69	Stair Construction	Facilities	7,500
70	Stair Finishes	Facilities	7,500
71	Standard Foundations	Facilities	100

EXHIBIT A, ATTACHMENT 1

No.	Asset Type	Data Ownership (Primary Dept./Div.)	Approx. Quantity
72	Standpipes	Facilities	60
73	Storm Sewer Systems	Facilities	2,000
74	Terminal and Package Units	Facilities	10,000
75	Vehicular Equipment	Facilities	50
76	Wall Finishes	Facilities	5,000
77	Water Heater	Facilities	500
78	Water Supply Systems	Facilities	2,000
79	Actuator	Public Utilities	173
80	Adsorber	Public Utilities	72
81	Air Dryer	Public Utilities	22
82	Air Receiver	Public Utilities	18
83	Air Valve	Public Utilities	3,404
84	AMI collectors/repeaters	Public Utilities	570
85	AMI transmitters	Public Utilities	18,000
86	Amplifier	Public Utilities	12
87	ATV	Public Utilities	3
88	Backflow	Public Utilities	2,321
89	BALANCER	Public Utilities	1
90	BAND SAW	Public Utilities	5
91	Bin	Public Utilities	2
92	Blower	Public Utilities	55
93	Blowoff	Public Utilities	5,248
94	BOAT	Public Utilities	19
95	Boiler (Industrial)	Public Utilities	6
96	Burner	Public Utilities	5
97	CAMERA	Public Utilities	48
98	Cap	Public Utilities	7,356
99	Cathodic Protection Site	Public Utilities	1,161
100	Centrifuge	Public Utilities	13
101	Channel	Public Utilities	69
102	CHLORINATOR	Public Utilities	14
103	Classifier	Public Utilities	15
104	Clean Out	Public Utilities	824
105	Clutch	Public Utilities	2
106	Comfort Stop	Public Utilities	35
107	Compressor	Public Utilities	124
108	Concentrator	Public Utilities	5
109	CONDUIT BENDER	Public Utilities	2

EXHIBIT A, ATTACHMENT 1

No.	Asset Type	Data Ownership (Primary Dept./Div.)	Approx. Quantity
110	Conveyor	Public Utilities	34
111	Cooling Tower	Public Utilities	10
112	Corp Stop	Public Utilities	51
113	Crane	Public Utilities	129
114	Creek	Public Utilities	19
115	CUTOFF SAW	Public Utilities	1
116	Dam	Public Utilities	11
117	Dampener	Public Utilities	71
118	DCS	Public Utilities	222
119	DESTRUCT CAT	Public Utilities	12
120	Distribution Reservoir	Public Utilities	32
121	DISTRIBUTION RESERVOIR	Public Utilities	32
122	DIVE GEAR	Public Utilities	6
123	DIVE HELMET	Public Utilities	2
124	DIVE RESCUE	Public Utilities	2
125	Diversion Connection	Public Utilities	1
126	DOCK	Public Utilities	30
127	DRILL PRESS	Public Utilities	2
128	Driveline	Public Utilities	37
129	EDR	Public Utilities	54
130	Elevator	Public Utilities	25
131	Engine	Public Utilities	9
132	EVAPORATOR	Public Utilities	8
133	Fan	Public Utilities	92
134	FEEDER	Public Utilities	5
135	FILL AIR STAT	Public Utilities	1
136	Filter	Public Utilities	24
137	Filter Unit	Public Utilities	79
138	Flame Arrestor	Public Utilities	45
139	Flocculator	Public Utilities	20
140	Flume	Public Utilities	15
141	Fountain	Public Utilities	1
142	Gate	Public Utilities	397
143	Gate Operator	Public Utilities	9
144	Gearbox	Public Utilities	176
145	Grinder	Public Utilities	8
146	Heat Exchanger	Public Utilities	44
147	HEAT PUMP	Public Utilities	15

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No.	Asset Type	Data Ownership (Primary Dept./Div.)	Approx. Quantity
148	Heater	Public Utilities	12
149	Hopper	Public Utilities	44
150	HVAC	Public Utilities	855
151	Hydrant	Public Utilities	25,352
152	Hydraulic Unit	Public Utilities	19
153	Induction Unit	Public Utilities	2
154	Influent Structure	Public Utilities	4
155	INJECTOR	Public Utilities	13
156	Instrumentation	Public Utilities	600
157	Interceptor Sta	Public Utilities	88
158	Inverter	Public Utilities	12
159	IRONWORKER	Public Utilities	2
160	Lamp	Public Utilities	352
161	LAPPING MACHINE	Public Utilities	1
162	Lateral	Public Utilities	261,819
163	LATHE	Public Utilities	5
164	Manhole	Public Utilities	61,214
165	MCC	Public Utilities	307
166	Membrane	Public Utilities	16
167	Meter	Public Utilities	280,025
168	MILL	Public Utilities	2
169	Mixer	Public Utilities	116
170	Motor	Public Utilities	403
171	OIL PURIFIER	Public Utilities	1
172	OUTLET TOWER	Public Utilities	20
173	OUTLET WORKS	Public Utilities	3
174	PANEL	Public Utilities	87
175	PARTS WASHER	Public Utilities	2
176	PIPE THREADER	Public Utilities	2
177	Pipeline	Public Utilities	29
178	Piping (Industrial)	Public Utilities	11
179	Pitot Tap	Public Utilities	30
180	Plug	Public Utilities	8,307
181	PNEUMATIC PLUG	Public Utilities	3
182	PRESS	Public Utilities	3
183	Pump	Public Utilities	2,393
184	PUMP SET	Public Utilities	11
185	Radiator	Public Utilities	2

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No.	Asset Type	Data Ownership (Primary Dept./Div.)	Approx. Quantity
186	Radio Station	Public Utilities	1
187	Reducer	Public Utilities	6,122
188	Regulating Reservoir	Public Utilities	7
189	Regulator Valve	Public Utilities	989
190	Reservoir	Public Utilities	11
191	REVERSING MODUL	Public Utilities	6
192	Rheostat	Public Utilities	7
193	Rotating Assy	Public Utilities	14
194	ROV	Public Utilities	1
195	SAMPLER	Public Utilities	20
196	SAND BLASTER	Public Utilities	1
197	SCADA	Public Utilities	94
198	SCALE	Public Utilities	38
199	SCREEN	Public Utilities	41
200	Screening Press	Public Utilities	5
201	SCREW	Public Utilities	26
202	Separator	Public Utilities	4
203	Sewer Main	Public Utilities	71,862
204	Sewer Node	Public Utilities	2,895
205	SHEAR	Public Utilities	1
206	Shop Equipment	Public Utilities	4
207	Skid	Public Utilities	124
208	Sludge Collector	Public Utilities	12
209	SOFT START	Public Utilities	33
210	Solar Energy	Public Utilities	12
211	Stabilizing Structure	Public Utilities	10,297
212	Stack	Public Utilities	5
213	STATION	Public Utilities	2,876
214	Structure	Public Utilities	11
215	Substation	Public Utilities	84
216	SUPPLY AIR STAT	Public Utilities	1
217	Support Structure	Public Utilities	1
218	Switchgear	Public Utilities	420
219	Tank	Public Utilities	526
220	Telecom Conduit	Public Utilities	115
221	Transformer	Public Utilities	8
222	TRAVELING BRIDG	Public Utilities	2
223	TREATMENT PLANT	Public Utilities	10

EXHIBIT A, ATTACHMENT 1

No.	Asset Type	Data Ownership (Primary Dept./Div.)	Approx. Quantity
224	Truck Was Arch	Public Utilities	3
225	Tunnel	Public Utilities	19
226	Turbine	Public Utilities	2
227	Ultraviolet	Public Utilities	4
228	UNDERWATER COMM	Public Utilities	1
229	Valve	Public Utilities	92,341
230	VAPORIZER	Public Utilities	6
231	Vault	Public Utilities	72
232	VEHICLE	Public Utilities	46
233	VFD	Public Utilities	102
234	WATER MAIN	Public Utilities	110,098
235	WATER PUMP STATION	Public Utilities	64
236	Water Service	Public Utilities	327,072
237	Water Softener	Public Utilities	12
238	Weather Station	Public Utilities	10
239	Weir	Public Utilities	1
240	WELDER	Public Utilities	3
241	WELL	Public Utilities	21
242	WET SCRUBBER	Public Utilities	39
243	Wet Well	Public Utilities	117
244	WINCH	Public Utilities	11
245	Channel	Storm Water	54
246	Desilting Basin	Storm Water	2
247	Drainage Box	Storm Water	N/A
248	Drainage Clean Out	Storm Water	12,000
249	Drainage Connector	Storm Water	4,975
250	Drainage Culvert	Storm Water	19
251	Drainage Ditch	Storm Water	5
252	Drainage Headwall	Storm Water	4,125
253	Drainage Inlet	Storm Water	23,650
254	Drainage Outlet	Storm Water	5,950
255	Drainage Pipe	Storm Water	950
256	Drainage Pipe Cap	Storm Water	308
257	Drainage Spillway	Storm Water	123
258	Drainage Tidegate	Storm Water	13
259	Drainage Weep Sump	Storm Water	31
260	Encased Storm Drain	Storm Water	0.63 miles
261	Energy Dissipator	Storm Water	850

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No.	Asset Type	Data Ownership (Primary Dept./Div.)	Approx. Quantity
262	Filtration BMP/LID	Storm Water	3
263	Forced Storm Drain	Storm Water	0.6 miles
264	Infiltration BMP/LID	Storm Water	3
265	Low Flow Diversion	Storm Water	25
266	Pump Station	Storm Water	15
267	Pumps	Storm Water	55
268	Street Sweeping Route	Storm Water	125
269	Treatment & Trash Removal BMP	Storm Water	3
270	Underdrain	Storm Water	24 segments
271	Alley	Street Division	2,721
272	Bridge	Street Division	N/A
273	Buildings & Grounds	Street Division	280
274	Center Island	Street Division	338
275	Guardrail	Street Division	10,000
276	Parcel	Street Division	700,000
277	Sidewalk	Street Division	50,000 segments; 5,200 miles
278	Street Intersection	Street Division	16,823
279	Street Light	Street Division	50,485
280	Street Section	Street Division	32,199
281	Street Sign	Street Division	400,000
282	Traffic Signal	Street Division	2,095
283	Tree	Street Division	212,564
284	Adtran Opti 3	Wireless Services	2
285	Alias Database Manager	Wireless Services	6
286	Antenna System	Wireless Services	150
287	Base Stations	Wireless Services	300
288	Channel Bank	Wireless Services	80
289	Comparator	Wireless Services	30
290	Console	Wireless Services	50
291	Console Database Manager	Wireless Services	2
292	Control Electronics Bank	Wireless Services	11
293	Control Station	Wireless Services	40
294	Controller	Wireless Services	12
295	Data Switch	Wireless Services	5
296	David Clark System	Wireless Services	150
297	Digital Interface Unit	Wireless Services	1

EXHIBIT A, ATTACHMENT 1

No.	Asset Type	Data Ownership (Primary Dept./Div.)	Approx. Quantity
298	Embassy Switch	Wireless Services	1
299	Genset	Wireless Services	20
300	Intercomm	Wireless Services	10
301	Logging Recorder	Wireless Services	6
302	MCT	Wireless Services	900
303	Microwave Radio	Wireless Services	200
304	Modem	Wireless Services	700
305	Multiplexer	Wireless Services	50
306	Network Clock	Wireless Services	2
307	Phasing Receiver	Wireless Services	2
308	Power Supply	Wireless Services	500
309	Protection Switch	Wireless Services	50
310	Radar	Wireless Services	155
311	Radio	Wireless Services	12,000
312	Rectifier Battery Plant	Wireless Services	14
313	Router	Wireless Services	120
314	RTU	Wireless Services	14
315	SCADA Master Station	Wireless Services	20
316	SCADA Remote Radio	Wireless Services	500
317	Server	Wireless Services	50
318	Siren	Wireless Services	900
319	UPS	Wireless Services	18
320	Work Station	Wireless Services	50

Exhibit A, Attachment 2: Legacy Application List

A.2.1. Legacy Applications to Replace

Application Name	Application System	Application Description	Department(s)	Division(s)
CARLA (Capital Asset Renewal Look Ahead)	CARLA	This application is an asset renewal forecasting tool. It forecasts future water facility renewal needs, and costs within the City of San Diego's water system.	Public Utilities	Engineering and Program Management, Water System Operations
CCTV Toolbox	CCTV	HDR application for assessing pipe replacement prioritization. CCTV utilizes both tabular and video data generated during video inspections of the wastewater collection system.	Public Utilities	Engineering and Program Management, Wastewater Collection
EMPAC Labor Entry	EMPAC	EMPAC Labor Entry is a custom add-on to EMPAC. This tool allows users to enter labor information into the EMPAC Core database via the intranet. It is much faster than the COTS app. Once Labor Information is submitted, it is sent to Supervisor Signoff for approval.	Public Utilities	Wastewater Treatment and Disposal, Water System Operations, Wastewater Collection
EMPAC Senior Tool	EMPAC	EMPAC Senior Tool is a custom add-on to EMPAC. This tool allows senior supervisor users to close out work orders that have had suggested reconciliation codes assigned to them by a supervisor. It does the same thing as the EMPAC COTS app, but it is much faster and users friendly. Work orders that are in the user's crew and have suggested reconciliation codes are displayed. Users have the ability to close out multiple work orders at time, simplifying the process. Work orders can be printed.	Public Utilities	Wastewater Treatment and Disposal, Water System Operations, Wastewater Collection
EMPAC Stock Setup	EMPAC	EMPAC Stock Setup is a custom add on to EMPAC. This tool allows fast approval of stock item requests.	Public Utilities	Wastewater Treatment and Disposal, Water System Operations, Wastewater Collection
EMPAC Supervisor Signoff	EMPAC	EMPAC Supervisor Signoff is a custom add on to EMPAC. This tool allows Supervisors to quickly view, review and approve EMPAC work orders.	Public Utilities	Wastewater Treatment and Disposal, Water System Operations, Wastewater Collection
EMPAC WO Followup	EMPAC	EMPAC WO Followup is a custom add on to EMPAC. This tool allows supervisors to manage WO which require future follow up.	Public Utilities	Wastewater Treatment and Disposal, Water System Operations, Wastewater Collection
Enterprise Maintenance Planning and Control (EMPAC)	EMPAC	The EMPAC Core application is a Commercial off the Shelf package from Ventyx Inc. that Public Utilities Wastewater and Water Division uses to manage and maintain their asset-care activities in the treatment and pumping facilities. EMPAC includes not only traditional maintenance management activities such as preventive maintenance planning and tracking equipment history, but also features tools for resource management, inventory management and control, and procurement operations.	Public Utilities	Wastewater Treatment and Disposal, Water System Operations, Wastewater Collection
SQR (EMPAC Reporting)	EMPAC	SQR is an embedded report and data processing application for EMPAC.	Public Utilities	Wastewater Treatment and Disposal, Water System Operations, Wastewater Collection

Application Name	Application System	Application Description	Department(s)	Division(s)
UV Runtime Manager	EMPAC	The City of San Diego uses UV Lamps to purify water in the South Bay Channel. Mandated by the EPA guidelines, UV Lamps must be replaced after 5000 hours of runtime. The UV Runtime Manager is a simple user interface used to track the number of UV lamps and their runtimes in order to determine whether an UV lamp must be replaced. When a lamp is replaced, a user resets the lamp runtime.	Public Utilities	Wastewater Treatment and Disposal
FSTools (Food Establishment Waste Disposal (FEWD) Scheduling Tools)	FSTools	FS Tools handles work order management for Food Establishment Waste Disposal (FEWD) inspections along with tracking of laboratory and inspection schedules. It is a GIS based application that schedules inspections for a given period of time (one day, one week, etc.)	Public Utilities	Wastewater Collection
iMaint - Facilities Work Management	iMaint	Service Notification and Work Management for Facilities	Public Works	Facilities
PSTools (Planner Scheduler Tools) MDU	PSTOOLS	<p>PS Tools is used for planning maintenance and inspection tools for Wastewater collection mains and manholes. This application manages the pipe cleaning schedule for both cyclic maintenance and unscheduled maintenance. Additionally, PS Tools tracks the completion of all tasks. It reports on resource allocations and once in flight enhancement is complete will provide costing data as well. Data is mined for various ad hoc requests and for yearly EPA reporting.</p> <p>The core application runs as a desktop client on Windows workstations and interfaces to MDUs (Mobile Data Units) which are utilized by the field crews. Built with ESRI ArcMap integration, tabular data from SWIFT (Oracle v.9i) and GIS spatial data to map the work locations Once costing enhancement is complete, PSTools will interface with WOCC for cost data.</p>	Public Utilities	Wastewater Collection

Application Name	Application System	Application Description	Department(s)	Division(s)
SHARQ (Sewer History Activities Repository and Query)	SHARQ	<p>The SHARQ system is a custom application developed on the ArcGIS platform for Public Utilities – Waster Water Collection Division to facilitate preliminary analysis of select segments of the sewerage system. This custom application is intended to identify pipe segments that may need remedial action thereby resulting in Capital Improvement Projects (CIP). SHARQ is a GIS driven interface designed to access existing sewer inspection videos, still photos, inspection reports, along with analytical tools. The application was written specifically for Public Utilities – Wastewater Collection, customized to access the data sources currently used by City of San Diego. The application is designed to perform the following functions:</p> <ol style="list-style-type: none"> 1. Provide viewing access to Closed Circuit Television(CCTV) video, photos, and inspection reports associated with a specific pipe. 2. Ability to view portions or a group of inspection information based on a query 3. Ability to identify potential sewer/manhole problems and determine a course of action. 4. Ability to provide preliminary analysis of the pipe segments based upon inspection defect scores. 5. Ability to create customized reports of the pipe segments. 6. Ability to visually Identify pipelines in environmentally sensitive land areas. 7. Identify and reports discrepancies between SWIFT and CCTV consultant database attributes (length, diameter, and material) 8. Ability to search for pipe/manhole information by Facility Sequence Number, Address, Fieldbook page or Map ID. 9. Ability to view information on existing or pending CIP Pipeline projects. 10. Ability to view multiple layers of information simultaneously in relation to the sewer system. 	Public Utilities	All
SWEATS/Drawing Log	SPLASH	Work tracking for GIS work tracking	Public Utilities	Asset Mgmt
CMMS – Employee Roster	SWIM	This application provides a system for work-related employee information for sharing with other computer programs. It provides enhanced security features, and retains historical information of changes to employees' records for SWIM/SWIFT Applications.	Public Utilities	Water System Operations, Water Construction and Maintenance, Wastewater Collection
Secure H2O	SWIM	This application provides security in support of SWIFT/SWIM based enterprise applications. It manages application and Oracle access security based on predefined roles assigned to all system users.	Public Utilities	All
Sewer and Water Infrastructure Management (SWIM – Sewer)	SWIM	SWIM Wastewater is a work order management system in the Public Utilities Department - Wastewater Collection Division., It is used by field crews. Additionally, it manages inventory control tracking, tracks pipes, valves, pump stations and many other Wastewater controlling devices.	Public Utilities	Wastewater Collection

Application Name	Application System	Application Description	Department(s)	Division(s)
Sewer and Water Infrastructure Management (SWIM - Water)	SWIM	Program is used to track and manage asset maintenance history, and work performed on assets from the process of initiating work orders, creating preventive maintenance schedules and managing key asset information. Also keeps history of daily vehicle assignments by WSTS supervisor and individual crews and captures job information that includes SWIM work orders and WAO work orders along with job description and locations.	Public Utilities	Water System Operations, Water Construction and Maintenance
Sewer and Water Infrastructure Management Application Hand Held Devices (SWIMPEN)	SWIM	Mobile work order management. Allows the crew to download the data on Pen based computer and upload the data from Pen based computer onto their dock station. The system is used to download their new work orders in the mornings and complete on their laptop at their working locations and upload in the evening to oracle database.	Public Utilities	Wastewater Collection
Tool Room Inventory Management (TRIM)	SWIM	This application is used to track tool room inventory and usage, together with information on vendors, repair providers, employees and work crews.	Public Utilities	Water System Operations, Water Construction and Maintenance, Wastewater Collection
Wastewater Condition Assessment Data Base	SWIM	Linear Asset Condition assessment	Public Utilities	Engineering and Program Management, Wastewater Collection
Work Order Cost Capture (WOCC)	SWIM	Application collects costs associated to work orders for Public Utilities	Public Utilities	Wastewater Collection
Customer Service Request (CSR) Application (Synergy)	Synergy	Application used to view requests submitted via the Wireless Technology Internet and Intranet Service Request Applications. Agents review, update and submit request to be made into Notifications/Work Orders.	Dept of Information Technology	Wireless Technology
Wireless Technology Intranet Service Request Application (Synergy)	Synergy	Web application accessible from City intranet for City staff to notify Wireless Technology Division of issues/requests for work.	Dept of Information Technology	Wireless Technology
GeoMAM	Synergy	Mobile SAP application used for work management (notifications and work orders) in the field. Includes GIS interface.	Transportation and Storm Water	Street, Storm Water
GeoSAP	Synergy	Custom built GIS application based on ArcGIS. Map interface is used to view functional locations, equipments and materials. Once object is selected notification creation in EAM is possible. Can also view characteristics of technical objects in EAM by selecting them in GeoSAP. Has many layers for related information that is not managed in EAM (i.e.. PUD related, parks, parcels). Application also used to view requests submitted via the Street/Storm Water Internet Service Request Applications. CSR agents review, update and submit web request to be made into Notifications Scope for CSR functionality in scope for CRM/311 project. EAM scope related to the management of resulting service orders.	Transportation and Storm Water	Street, Storm Water
Notification Status Batch Program (Street and Storm Water)	Synergy	Creates notifications in batches from Street Division Internet Service Request Application and from Storm Water Internet Service Request Application.	Transportation and Storm Water	Street, Storm Water

Application Name	Application System	Application Description	Department(s)	Division(s)
Street Sweeping Tool in GeoSAP (interface with CALAMPS previously FM2002 Fleet Manager for Sweepers)	Synergy	Tool built in GeoSAP to use GPS info from street sweepers to create work orders in EAM.	Transportation and Storm Water	Storm Water
Traffic Request and Maintenance System (TRAMS)	Synergy	Custom built application to track resident, City and agency requests for information and changes to traffic control and street infrastructure. Investigation work is tracked in the system. It is intended that users of this system will transition to use of Synergy EAM by end of FY15.	Transportation and Storm Water	Street
SAP EAM Legacy system (Synergy) – Partial replacement of System	Synergy	Implementation of SAP EAM (Q01). Service Notification, Work Management and Asset Management for Streets, Storm Water, Wireless Technology (excluding Code Compliance and Publishing Services)	Transportation and Storm Water, Dept of Information Technology,	All
Cartegraph (Pavement View, Pavement View Plus, VersaView)	Cartegraph	Pavement Condition Assessment Application – street data modeling and management of condition data from projects, maintenance, and inspections; supporting information for capital and maintenance investment planning	Transportation and Storm Water	Streets

A.2.2. Legacy Applications to Retain and Integrate With

Application Name	Application System	Application Description	Department(s)	Division(s)
CalAmps (Vehicle Tracking)	CalAmps	CalAmps is an application which is used to provide real time and historical vehicle tracking data of mobile assets. The application receives data from devices (GPS transponders) installed on the vehicles using variable cycles. The data collected locates, tracks and provides velocity rates of the vehicle. Also, used by TSW Street Division to track Sweeper operational parameters for work management.	All	All
ESRI – Multiple Applications on Platform	ESRI	Provides mapping functionality to support City operations and planning. Supports the functional areas of: water, sewer, and reclaimed facilities; Street/Storm Water infrastructure such as streets, street lights, traffic signals, storm drain structures/conveyances, trees, signs	All	All – Excluding Public Works Facilities and Publishing Divisions
Project Tracking System (PTS) AMS Suite; Machine Health Manager	PTS	Building Permit Issuance and Tracking	Development Services	All
	AMS	Vibration and Oil Analysis	Public Utilities	All
Cathodic Protection	Cathodic Protection	Monitors and analyzes cathodic protection data in on pipelines	Public Utilities	All
Customer Care Solution	CCS	Public Utilities Department SAP (IS-U:CCS) billing system used for managing and billing residential, commercial and industrial, and prospective customers. In addition, the system tracks water, sewer, storm drain, fire service, reclaimed water, backflow and associated meter customer billing information.	Public Utilities	Customer Support, Water Construction and Maintenance
Enterprise Daily Operations Reporting System (WIMS)	HACH WIMS	Compliance application records information associated with industrial discharge inspections and provides monitoring reports.	Public Utilities	Wastewater Treatment and Disposal, Water System Operations
Food Establishment Waste and Disposal (FEWD)	FEWD	Food Establishment Waste and Disposal Inspection Planning, Tracking, Condition Assessment and Scheduling.	Public Utilities	Wastewater Collection
IR Analysis	FLIR	Infrared Analysis Reporting	Public Utilities	All
Iron's ChoiceConnect™ fixed network AMI system	AMI	This system will allow water meters to be read electronically rather than through direct visual inspection by field staff. The meters transmit customer consumption and time-of-use data to the Department via radio or cellular frequency. Time-of-use data can be used to manage and analyze customer consumption patterns and alert staff and customers of unusual consumption patterns which could indicate leaks on a customer's property or meter tampering.	Public Utilities	Customer Support, Water Construction and Maintenance
SmartView	SmartView	Thermal Imaging Software	Public Utilities	All
Supervisory Control and Data Acquisition- Water (SCADA Water)	SCADA Water	Water Monitoring and Control. Monitors water distribution facilities, their nominal settings, functional status, detects and rectifies equipment malfunctions and operational problems. Provides remote Activation and Articulation of system devices.	Public Utilities	Water System Operations, Water Construction and Maintenance
Supervisory Control and Data Acquisition- Wastewater (SCADA Wastewater)	SCADA Wastewater	To monitor water distribution facilities, their nominal settings, functional status, detects/rectifies equipment malfunctions and operational problems	Public Utilities	Wastewater Treatment and Disposal, Wastewater Collection

EXHIBIT A, ATTACHMENT 2

Application Name	Application System	Application Description	Department(s)	Division(s)
Treatment Plant Process Control System (PCS)	WonderWare by Schneider	Water treatment plants Alvarado, Miramar and Otay's system that controls and monitors the flow of water from multiple raw water sources, through the treatment process, resulting in the release of potable water to the distribution system.	Public Utilities	Water System Operations, Water Construction and Maintenance
Wastewater Distributed Control System (COMNET)	Emerson Ovation	The Distributed Control System (DCS) monitors and controls the operation of Waste Water Treatment facilities. The project is responsible for graphics, change request support, DCS/Ovation trouble shooting, problem isolation, solution development, plant, manager, vendor COMNET integration checking and verification, I&C review.	Public Utilities	Wastewater Treatment and Disposal
Dig-Smart	ESRI	811 Dig System	Public Utilities, Transportation and Storm Water, Public Works	All
Primavera P6	Primavera P6	Primavera is a project management tool for scheduling and cost forecasting for capital improvement projects within the City of San Diego. Primavera is used by ECP and PUD. Only active projects in the city are tracked, using this application, and all new projects use the Project template developed by ECP. There are over a thousand active projects for ECP with over a hundred tasks each. Primavera function is to provide project forecasting as well as financial forecasting against the actuals in the SAP Database. The PUD and ECP projects are presented to each department only by ownership. PUD is using the Project template developed by ECP, but it still coming up to speed. Primavera is a 3 rd party COTS application owned by Oracle, a solution for globally prioritizing, planning, managing, and executing projects, programs, and portfolios. An integrated enterprise project portfolio management (EPPM) solution comprising role-specific functionality to satisfy each team member's needs, responsibilities, and skills.	Public Works, Public Utilities	Engineering divisions

Exhibit A, Attachment 3: Additional Sources for Data Migration

No.	Title	Dept./Div.	Description	Software Application
1	Radio Inventory	DoIT – Wireless Services	Tracking/Reporting – An Excel spreadsheet	Microsoft Excel
2	ADS Flow Meter Data	Public Utilities	Used by the Sewer Modeling Section to store time series data from the City's 150 permanent flow meters. Used to calibrate the model and analyze the system - Sewer Modeling Data	Oracle
3	Canyon Database	Public Utilities	Used by the Environmental Section to track habitat impacts, habitat mitigation, environmental permitting, and CEQA determinations. – Environmental Habitat Data	Oracle
4	Confined Space Permit Tracker	Public Utilities	Used to store Confined Space Permit data for PUD employees – Confined Space Permit Tracking	Access Database
5	Documentum	Public Utilities	RMS DOCUMENTUM is a COTS product used for Document and Records Management. The Documentum Platform provides essential capabilities for managing enterprise content as well as provides for a migrating tool used for migrating other repositories into the existing Documentum taxonomy.	Documentum
6	Energy Reports	Public Utilities	Used by the Energy Management Section to store wastewater facility electrical usage, generation and cost to generate quarterly reports – Wastewater Facility Electrical Usage and Costing Tracking	Oracle
7	Hydrography Report	Public Utilities	Weekly and monthly reports are shared with specific water districts. The report contains data that captures: Lake water levels; water storage at Reservoirs; Evaporation Rates; Runoffs - Reservoirs Statistical Data Reporting	Web Based Display/ Source Unknown/ Most Likely MS Excel
8	City Council's Policy 800 CIP Prioritization	Public Utilities	Capital and maintenance planning – Capital Planning	Microsoft Excel
9	Rehabilitation and Replacement Planning System (RRPS)	Public Utilities	This software is used in prioritizing the replacement program of all Asbestos Cement potable water pipes in the system. This provides replacement dates and planning level costs. - Asbestos Cement Pipe Replacement Scheduling	MS Access
10	XDOC	Public Utilities, Development Services, Transportation and Storm Water	Services for scanning/digital filing and storage of historic paper documents, aperture (microfilm) cards, large format paper map documents and pdf file uploads to a server. The XDOC file viewer application allows for searches on various indexes and displays the resultant images via an intranet session with their filtering viewer that allows the user to see faint or muddy images better document management.	Axacore
11	Facilities Condition Assessment database – General Fund Buildings	Public Works - Eng Capital Projects	Capital and maintenance planning – Maintenance backlog, capital backlog, and 19 year capital renewal schedule, ADA requirements for select facilities, solar/energy feasibility reports for select facilities	Microsoft Access
12	Facilities Condition Assessment database – Park & Rec Developed Parks	Public Works - Eng Capital Projects	Capital and maintenance planning – Maintenance backlog, capital backlog, and 19 year capital renewal schedule, select ADA reports, and select playing field turf/irrigation reports	Microsoft Access
13	Facilities Condition Assessment database – Public Utilities Facilities (not including process equipment)	Public Works - Eng Capital Projects	Capital and maintenance planning – Maintenance backlog, capital backlog, and 19 year capital renewal schedule select ADA reports	Microsoft Access
14	Active Grants	T&SW Storm Water	Managerial reporting and invoicing -- Tracking data to report to City Comptrollers	Microsoft Excel
15	As Needed Agreement Task Orders (TetraTech, URS, RBF)	T&SW Storm Water	Managerial tracking and reporting – Tracking data to prepare ad-hoc reporting	Microsoft Excel

No.	Title	Dept./Div.	Description	Software Application
16	Channel Maintenance Work Flow Schedule	T&SW Storm Water	Managerial Tracking – Track schedule for individual channels	Microsoft Project
17	Grant Application and Status	T&SW Storm Water	Managerial Tracking – Tracking data to report to City Grant Coordinator	Microsoft Excel
18	Grant Project Locations	T&SW Storm Water	Grant Applications / Reporting – Tracking data to prepare ad-hoc reporting	ArcGIS
19	JURMP Activates by City Department	T&SW Storm Water	Managerial tracking and reporting – Identify regulatory compliance activates by department	Microsoft Excel
20	MSWMP Conveyance Maintenance Permit Status	T&SW Storm Water	Managerial tracking and reporting – Plan project implementation dates and budget forecasting	Microsoft Excel
21	MSWMP Conveyance Maintenance Tasks, Assign, Cost	T&SW Storm Water	Managerial tracking, project planning and reporting – Tracks project schedule, plans, resources, expenses	Microsoft Excel
22	O&M Env. Budget & Spending Plan	T&SW Storm Water	Managerial Tracking -- Track spending and propose budget requests	Microsoft Excel
23	Performance Measures Storm Water O&M	T&SW Storm Water	Recording and tracking of the SW O&M crews production. – This is a daily recording and tracking of the O&M field crews production. This information is used to track production in relation to the quarterly goals of the division.	Microsoft Excel
24	Prioritized MSWMP Conveyance Maintenance	T&SW Storm Water	Project Planning and Budgeting – Plan project implementation dates and budget forecasting	Microsoft Excel
25	Project Photo Logs	T&SW Storm Water	Managerial tracking, project planning and reporting – Tracks project schedule, plans, resources, expenses	Microsoft Excel
26	Storm Drain Televising	T&SW Storm Water	CIP Project Planning – Video of storm drains (Condition Assessment)	Digital Video (mpg)
27	Storm Water Repair Needs List	T&SW Storm Water	CIP Project Planning – Prioritized list of storm water infrastructure repair projects	Microsoft Excel
28	Storm Water Replace/Refurbish Needs List	T&SW Storm Water	CIP Project Planning – Prioritized list of storm water infrastructure replacement projects	Microsoft Excel
29	SUSMP/LID/BMP Implemented by Public Works	T&SW Storm Water	Managerial tracking and reporting – Identify regulatory Storm Water compliant Capital Projects	Microsoft Excel
30	SUSMP/LID/BMP Implemented by Public Works	T&SW Storm Water	Managerial tracking and reporting – Identify regulatory Storm Water compliant Capital Projects	Microsoft Excel
31	WAMP – Projects by Watershed	T&SW Storm Water	Project Planning and Budgeting – Plan project implementation dates and budget forecasting	Microsoft Excel
32	WQIP – Projects by Watershed	T&SW Storm Water	Project Planning and Budgeting – Plan project implementation dates and budget forecasting	Microsoft Excel
33	SAP Document Management System (DMS) for EAM Legacy system	Transportation and Storm Water	Stores photo, pdf, MS Office documents which are attached to notifications in EAM.	Synergy

Exhibit A, Attachment 4: As-Is Business Scenarios and Use Cases

A.4.1. Facilities Division

Business Scenario	Description
After Hours Emergency Request	Facilities Emergency service that is called out from Station 38 and is performed before or after regular working hours.
Daytime Emergency Request	Facilities Emergency work requested during regular working hours – Daytime Call Out
Elevator Emergency	Facilities Elevator Emergency Calls – Anybody in the elevator / yes or no
HVAC & Fire – Contract Work Request	Facilities Work Order for Contracted Work. – Not being used in iMaint
HVAC & Fire Emergency Request	Facilities HVAC Emergencies with Fire Dept. – Not being used in iMaint
Improvements	Facilities Work performed to enhance the facility
PREVENTATIVE MAINTENANCE	Facilities systematic inspection, detection, correction, and prevention of developing failures, before they become actual or major failures.
Standard Work Request	Facilities Customer request sent to the iMaint Requestor from an email website

A.4.2. Department of Information Technology – Wireless Technology

Business Scenario	Description
Service processing for repairs	Wireless Technology process for routine repair requests
Preventive Maintenance	Wireless Technology process for performing routine maintenance
Projects	Wireless Technology process for scheduling large scale projects
Emergency Repairs	Wireless Technology process for emergency repairs
Materials Management – Goods Receipt	Wireless Technology process for the receipt of purchased materials and parts
Mobile Provisioning – Inventory AS-IS Process	Wireless Technology Mobile Provisioning Group process for the receipt and inventory of mobile communication devices
Material Management AS-IS Shipping Process	Wireless Technology process for shipping and tracking of vendor repaired equipment
Material Management Inventory AS-IS for Spares/Refurbished Equipment	Wireless Technology process for inventory of spare and/or vendor repaired equipment
Materials Management – Goods Receipt AS-IS for Refurbished Items	Wireless Technology process for the receipt of vendor repaired equipment
Mobile Provisioning – Installation AS-IS Process	Wireless Technology Mobile Provisioning Group process for the installation of communication devices in vehicles AS-IS
Mobile Provisioning – Repair and Garage Run AS-IS Process	Wireless Technology Mobile Provisioning Group process for the repair of vehicular communication devices AS-IS
Mobile Provisioning – Installation TO-BE Process	Wireless Technology Mobile Provisioning Group process for the installation of communication devices in vehicles TO-BE
Mobile Provisioning – Repair and Garage Run TO-BE Process	Wireless Technology Mobile Provisioning Group process for the repair of vehicular communication devices TO-BE

A.4.3. Public Utilities Department

Business Scenario	Description
Asset Determination	The purpose of the Asset Determination use case is to identify if the unit/equipment meets the criteria for Fixed asset processing using the following criteria: purchase price ≥ \$5,000; Is the equipment useful design life ≥ 1 year; Will equipment failure disrupt a critical process? Assume no backup is available; Should an equipment history be maintained; Is the equipment critical for safety compliance or reporting; Is the equipment critical for regulatory compliance or reporting; Do yearly maintenance costs exceed the replacement cost of this equipment; Has Dept. management or Asset Management Group requested that the equipment be called an asset? Contact Asset Management Group for input. THE EQUIPMENT MAY NOT NEED AN ASSET NUMBER. IF IN DOUBT, CONTACT THE ASSET MANAGEMENT GROUP FOR MORE GUIDANCE.
Asset Creation	The purpose of the Asset Creation use case is to create assets records for unit/equipment that have met the designated asset criteria. This use case will allow the actor to submit and route an asset request form to their supervisor. The supervisor then reviews the requests and submits the Form to the Asset Management Program. The Asset Management Program receives and reviews the request and informs Planning/SPTS of the validation/approval and may make suggestions and recommendations. The Asset Management Program will assign an asset number.
Asset Deletion	The purpose of the Asset Deletion use case is to evaluate and process Asset Deletion recommendations(s) for an existing asset record. This use case will allow an actor to submit and route a SMM Form C deletion request form to their process supervisor. Other methods for submitting deletion recommendations are emails or phone calls. The supervisor then reviews the request and submits the Form to the Asset Management Program. The Asset Management Program receives and reviews the request and informs Planning / SPTS of the validation / approval and may make suggestions and recommendations. The Asset Management Program Will Mark Status of Asset to Delete and forward COM-10 Asset Retirement Form to the appropriate Fixed Asset Coordinator for completion and submittal to the Office of the Comptroller.
SWIM Manage Asset Lifecycle	Manage Asset- The purpose of the Manage Asset Lifecycle use case is to provide the actor the ability to create, read, update or retire an ASSET, by also being able to create or associate an Asset to an Asset Type. To place a part individual unit (e.g. pump) into service as an asset into an asset slot (e.g. building). Manage Accounting- The purpose of the Manage Accounting use case is to provide the actor the ability to post costs and value associated with a Work Order to the Accounting Systems General Ledger. Tracking Asset Lifecycle Costs- The purpose of the Track Asset Life Cycle Costs use case is to post actual labor using Time Sheet Entry and parts, equipment and materials used by an Asset from a work order. The total labor cost, total material costs, total parts cost, total equipment costs and any additional cost (e.g. permits and over-the-count purchases) are summed and added to the total cost of maintenance for the asset attribute, after the Work Order has been assigned an Asset and is closed.
EMPAC PM Development Process	The purpose of the Preventive Maintenance (PM) Development Process is to identify and document maintenance procedures necessary for the asset. This use case allows the Supervisor to create and approve maintenance procedures, and route for a second level approval if needed. When necessary the PM Procedure is returned to the requester with notes for rejection or corrective action needed. Ultimately, when the PM procedure has received all approvals (second level and CSF SPTS/Planner), and it meets "other like PM standardization", the CSF SPTS/Planner enters PM procedure to asset database and develops the PM work package (parts, outside services, etc.). CSF SPTS/PLANNER puts completed asset PM Work procedure in the schedule with start date and frequency recommended by facility staff. PM work schedules are run four (4) weeks in advance.
EMPAC PM Suppression Functionality	The purpose of the PM Suppression Functionality use case is to automatically merge PMs that coincide (i.e. a monthly would be combined with a weekly PM if they fall within a pre-defined timeframe).
SWIM PM and Scheduling Process	The purpose of the PM and Scheduling Process use case is to create, track, and manage maintenance schedules for assets. This use case allows the actor to create a record for the Facilities/Assets SPLASH. The SWIM PM supervisor then enters required data for SR/WO creation and generates a PM screen and reviews PM's ready for scheduling and assigns SR/WO to crews. Some PM's require a map. Crews receive a hard copy of the PM, perform the assigned work, enter the required data, and return it to the supervisor. The Supervisor receives the completed hard copy of the PM's, and approves work. They check for any referrals for additional work or crews and that all the data is correct for Data Management to close the SR/WO. The Supervisor or Data Entry creates WO with same SR number and assigns to the appropriate supervisor. Some result in a new SR being generated. If so, additional crews receive the hard copy of the WO and perform the assigned work, enter the required data, and return it to the supervisor.
SWIM Preventive Maintenance (PM)	The purpose of the Preventative Maintenance use case is to customize and utilize specific features of the created maintenance schedules such as Maintain Job Plan and Maintain PM Trigger. The Maintain Job Plan aspect provides the actor the ability to maintain job plans to be attached to work orders. The Maintain PM Trigger aspect provides the actor the ability to set-up and assign Preventive Maintenance Triggers for selected assets. Examples include, run time of an asset, condition of an asset or elapsed time. PM jobs range from non-intrusive inspection, adjustment, lubrication, rebuild to factory specifications, or even replacement.

Business Scenario	Description
<p>PSTools Maintenance Frequency Optimization</p>	<p>The purpose of the Maintenance Frequency Optimization use case is to create and manage work orders using specific criteria, capture field data relating to asset attribute changes, and assign follow-up referral work if necessary. This use case allows the actor to create work orders based on the following inputs: assigned color codes for piping and PSTools "due facilities" data (1. Two weeks out 2. ROW, No ROW, Canyons 3. Type of cleaning – Criteria: History (originally from SWIM, now based on readings) Look out further than 2 weeks if necessary to reach 12,000 ft /wk – (15 day increments) Group MR's by cleaning type, geography Color coding is generated automatically through a Computer software program which looks at the due date and prioritizes pipe repairs). The Maintenance Coordination Scheduler (MCS) assigns work orders to the maintenance cleaning supervisor who then assigns the work order to the work crew. The crew completes the MR task and documents the findings using MDU. Crew leads will assess if work cannot be completed due to referrals or others requirements. Work is completed and crew leads return the MR to crew the supervisor. The crew makes Comments and submits to Crew supervisor for referral event. Crew supervisor reviews FSN and assesses for (QAQC), reviews crew data entry, verifies attribute changes/recommendations and determines task items, submits data for automated processing, and decides if attribute change recommendations and/or referrals are needed. The crew supervisor discusses referrals/recommendations with crew and a decision is made. The resulting data from the decision flows to the MCS, who makes notes of Crew Lead recommendations. Data entry inputs the report which is automatic with MDU. MCS (Planner/Coordinator) decides on recommendations; if the planner coordinator agrees, research procedure to verify size of line, material and cleaning type and history. If the MCS does not agree, the computer programmed algorithm assesses data and determines if the change is required; if change is required the proposed information is sent to MCS planner /coordinator for research. If no change is required the proposed changes are archived. If a change is required, complete the Proposed change table (Database Table) (Crew Schedule, MCS Function – Cleaning Frequency and Type). Then, the MCS supervisor either accepts or declines proposed changes; if accepted proceed to Archive for MCS changes otherwise end of the road. The Crew supervisor makes referrals to planners for re-assignment to night crew or to construction or CCTV and sends MR back to planning at the same time the crew supervisor generates the referral. Referrals are generated through SWIM. The planner reviews referral queue – reviews comments to schedule work – high traffic, environmental, new construction etc. and via notes should already know what assignment goes to the night crew. – assigns referrals to the appropriate section/crew. The Crew Supervisor reviews referral findings and archives referral and the Planner periodically checks MRs/SRs created based on referrals to see if they are completed. Finally, send to Data Entry – SWIM / PSTools for closeout.</p>
<p>EMPAC Work Order Process</p>	<p>The purpose of the Work Order Process is to identify work and assign work orders based on the scope of maintenance/repair needed: preventative maintenance, corrective/proactive, or emergency. The work order type will determine how the work/work order is processed, routed, assigned, and completed. This use case allows the actor to identify work and determine the type of work: PM, CORRECTIVE/PROACTIVE, or an EMERGENCY. If work required is a PM, refer to ASSET PM Development. If work is for corrective maintenance or proactive, a Work Request (W.R.) is created. If work required is an emergency an EMERGENCY work order is created. If the work request is not approved by the supervisor and is rejected, note the reason for rejection in the work request notes. Email notification is sent to requester of the rejection action. If the Work request is approved by the supervisor, forward it to the second level supervisor for approval if needed. If second level approval is not given, note the reason for rejection in the work request notes. Email notification is sent to requester of the rejection action. If second level approval is given, Review for Work Request (W.R.) and Work Order (W.O.) duplications. After second level approval, forward to the PMC who creates the Work Order. Then decide if the Work Order should be transferred to CSF. If No, CSF/Facility Plant Maintenance Coordinator (PMC) starts developing the work package (SIR, outside services, step text, estimate Crew/craft hours, etc.). Note: This is a dual role process, if work required is assigned to CSF the CSF PMC starts the package; if work is within the capability of the facility the facility PMC starts the package. If the Work Order is transferred to CSF, decide if parts are required. If Yes, see Stock Issue Request (SIR) Process. When all Warehouse and Outside supplies/parts are received, OR if no parts are needed, the Plant Maintenance Coordinator (PMC) puts Work Order Package in Ready for Scheduling. The W.O. is scheduled and printed. Note: Auto-Print from ASSET PM Development Process is system generated. Then, the Supervisor assigns the crew member to perform work. If Emergency Parts are required, See Stock Issue Request (SIR) Process; if no Emergency parts are needed, the Crew performs work, enters notes, time/labor hours in TABASCO. At work completion, decide if Additional Parts are required. If yes, See Stock Issue Request (SIR) Process. If the work order is completed, the Supervisor/Senior Supervisor signs off the work order as completed, assigns RECON codes & SPTS/PMC closes out W. O. and the Word Processing Operator (WPO) verifies data into the system and files completed work order package. Note: Process ends after completed W.O. is filed. If a Sub Work Order is required, the PMC creates a sub-work order and starts developing the work package (SIR, outside services, step text, estimate Crew/craft hours, etc.).</p>

Business Scenario	Description
SWIM Manage Work Requests	<p>The purpose of the Manage Work Requests use case is to create work requests and locate assets. This use case is to provide the actor with the ability to initiate the work management process by creating work request based on a caller's request or an internal request. A caller can be a customer, perhaps calling from the service address, an individual, or employee in the service area. A work request can be updated with additional information if one already exists, viewed or cancelled if the problem is no longer valid. A work request can be given a priority, so that emergency work requests can be identified. The actor in this use case has the ability to locate an in-plant or out-plant asset. However, the method for locating an in-plant asset is much different than the method and technology to locate an out-plant asset. Locating an out-plant asset uses a GIS. The asset may be located exactly and the use case returns the ASSET_ID. The approximate location of an asset may also be determined, in the form of an (x,y) coordinate, GPS coordinate, an address or a street intersection, in the event that an out-plant asset cannot be clearly identified, because information is insufficient or it is too early in the workflow to properly and unambiguously identify the ASSET_ID. This use case also determines if there are any duplicate work requests or outstanding work orders associated with or in the vicinity of the asset. The actor may enter search criteria into the GIS that will display the location and any relevant infrastructure on a map. The system will display all asset infrastructures within the chosen area. Locating in-plant asset does not use a GIS. Locating an in-plant asset uses an asset hierarchy programmed into the CMMS. The asset may be located exactly and the use case returns the ASSET_ID. The use case can identify other possible outstanding work requests or work orders in the vicinity (neighborhood) of the problem. This will help the actor determine if the problem has already been reported. The Create Work Request also uses this use case. The actor may select an asset and obtain further information about any selected asset (an asset profile).</p>
SWIM Plan Work	<p>The purpose of the Plan Work use case is to allow crew personnel to actively plan and manage their work by giving them access to work orders, and giving them the ability to generate reports, manage multiple work events, reserve inventory, and generate purchase requests. This use case enables the actor to generate work order reports. They have the ability to select, view and print portions (short form, long form with attached images, notes, permits and any subset) of the work order to complete the job. They can also plan the work order and make sure that parts and materials are available to execute the work order. As part of this use case, the actor can also create/utilize event handlers which allows them to handle a variety of different events. The actor configures an event handler using a business rule and associates it with events that occur in the system. A business rule is configured such as: "Notify the following when there is an emergency or very high priority work request or work order containing a main break of greater than 16". An event is configured to notify various parties by many and various methods. (E.g. if the above business rule is satisfied Page the following: Senior Supervisor and Store Room Manger and Email the following: Water Utility Director, Senior Supervisor and Store Room Manager). An unlimited number of event handlers can be configured and assigned to a business rule. Actors can also reserve inventory and generate a purchase request. They can generate service and material purchase requests against an approved work order. Its purpose is to enhance maintenance operations by having the necessary services and parts/materials available prior to the scheduling and assignment of work (e.g. equipment rental, welding services, traffic control, etc.).</p>
SWIM Schedule Work	<p>The purpose of the Schedule Work use case is to assign work, query and view work orders, and schedule "planned" work orders. This use case provides the actor the ability to view the backlog; query and view work orders that are not completed, canceled or closed. Work orders are automatically placed in the backlog upon creation. The actor can also schedule work orders that have a status of "Planned". This use case is used to schedule labor (crews) and equipment on a task-by-task basis. For capital improvement projects (also referred to as CIP), the Create Capital Improvement Work Order use case provides summary task expected start and end dates that must be met. This use case also provides that actor the ability to assign or move a worker to/from selected crews and display manpower availability.</p>
SWIM Service Request & Work Order Process	<p>The purpose of the Service Request & Work Order process use case is demonstrate how to route and assign emergency and non-emergency Service Requests, factoring in whether the request was received before or after hours. Based on these inputs, the service request is appropriately routed, approved, assigned to a crew, completed, and ultimately closed out by the Data Management section. For Emergency calls 7PM to 11 PM: Station 38 receives call and a SR/WO is generated. A supervisor receives Emergency SR/WO, investigates and appropriate crew's response. For non-Emergency calls 7PM to 11 PM: A Planner/Scheduler creates SR/WO and sends to appropriate crew supervisors. For Emergency calls 11 PM to 7 AM Fire Dispatch receives call and takes information from Consumer, then calls the information in to SCADA Center. SCADA Operator then generates an SR/WO. A supervisor receives Emergency SR/WO, investigates and appropriate crew's response. For non-Emergency calls 11 PM to 7 AM: Fire Dispatch receives call and takes information from Consumer, then calls the information in to SCADA Center. SCADA Operator then generates an SR/WO. A Planner/Scheduler creates SR/WO and sends to appropriate crew supervisors. For Emergency calls 7AM to 7PM: Customer Service Phone receives call and a SR/WO is generated. A supervisor receives Emergency SR/WO, investigates and appropriate crew's response. For non-Emergency calls 7AM to 7PM: Customer Service Phone receives call and a SR/WO is generated. Process Planner/Scheduler creates SR/WO and sends to appropriate crew supervisors. Then, Supervisor's review the WO and assigns appropriate crews. Supervisor can also create SR/WO if needed. Crews perform work assigned and returns SR/WO to supervisor as completed. Supervisor's reviews/approves and completes WO and sends to Data Management to close. The DMG receives completed work documents with SR/WO numbers entered required data and referrals and closes. If all of the data is not complete or correct, the WO is returned to the Supervisor for additional information. If an Emergency Crews Responds, determine if the work can be completed by the crew. If YES, Supervisor's reviews/approves and completes WO and sends to Data Management to close. If NO, Supervisor Creates SR/WO for additional crews sends to supervisor for approval and crews complete work.</p>
SWIM Service Request & Work Order Process (SCADA SYSTEM)	<p>The purpose of the Service Request & Work Order Process (SCADA SYSTEM) use case is to evaluate, initiate, and process Service Requests received through the SCADA monitoring system or SCADA personnel. This use case provides the actor the ability to process requests initiated from SCADA triggered alarms such as low pressure etc ... or to electronically create an SR/WO for crews to investigate and repair. A Crew receives hard copy WO completes work and notes problem or requests additional work to supervisor. The Supervisor receives completed WO for review/approval and sends to Data Management Group for data entry, close and archives paper work. If additional work is needed, Supervisor or Data Entry electronically creates an SR/WO for additional work required by other crews and sends to crews to perform work.</p>

Business Scenario	Description
SWIM Service Request & Work Order Process for Data Management Group	The purpose of the Service Request & Work Order Process for Data Management Group use case is to initiate and process Service Requests/Work Orders. These requests are initiated either directly from supervisors or management (verbally or in writing) or from Station 38. The DMG creates an SR/WO as requested and/or assigns to appropriate supervisors as requested. Supervisor can also create SR/WO if needed. Supervisor's reviews WO and assigns appropriate crews. Crews receive hard copy of WO, completes work and notes problems or requests for additional work required by other crews to supervisor. The Supervisor reviews/approves and completes WO and sends to Data Management for closing. If all data is complete and correct, DMG enters required data and closes SR/WO. If additional work is needed DMG electronically creates an SR/WO for additional work required by other crews and send to appropriate supervisor.
SWIM Execute Work	The purpose of the Execute Work use case is to utilize a synchronized handheld device to facilitate work processes remotely. This use case is to enable the actor to synchronize a handheld field device with the CMMS system by uploading (from the device) or downloading the following information, data or files: 1. Assigned Work Orders 2. Crew/Individual Schedules 3. Daily Job Reporting 4. Job Plans and 5. GIS Map Data. This use case will also enable the actor to Record Job Progress on a selected work order and give the actor the ability to make redline edits on top of copies of GIS maps that are on a handheld device. These redline edits can be attached to work orders for uploading to the server. These redlines will be used to investigate and amend GIS drawings elsewhere.
SWIM Closeout Work Order	The purpose of the Closeout Work Order use case is to demonstrate the ability to closeout a work order and track labor simultaneously with the close-out of that work order, and generate work order evaluation reports. The purpose of this use case is to provide the actor the ability to select and close out a work order. Also, this use case allows time posted from Work Orders to also be posted to Time sheet Entry so that actors need only enter work hours once (with posting from Work Order to Time Sheet Entry). The system also will calculate labor costs and charge cost to a Work Order Role or Work Order (without a pre-assigned work order role), an Activity Assignment, or an Activity (summary task), where there was not an Activity Assignment. Time is submitted by a person or crew and if "charge rate" is an attribute of person or persons on a crew submitting a time sheet entry, this can be multiplied by the "hours worked" to arrive at the "cost", which is a derived attribute of Time Sheet Entry. The sum of all persons costs on a crew for the Activity (or Activity Assignment) is the "labor cost" of the Activity. This is added to the "labor cost" of all activities for the Work Order to arrive at the work orders "total labor cost". Therefore, the labor cost of each Job Plan can be tracked by summary task (Activity). If there are no Activity steps, and therefore no Job Plan, the Time Sheet entry is charged to the Work Order directly. In this closeout work order use case, the actor has the ability to Generate Work Order Evaluation Reports: select, view, and print portions (short form, long form with attached images, notes, permits or any subset) of any work order for evaluation purposes or to produce summary statistics about aspects of the history of similar work orders.
PSTools Maintenance Request (MR) Generation	The purpose of the Maintenance Request (MR) Generation use case is to create a Maintenance Request factoring in the type of request and the resulting processes involved. This use case give the (PMC or MCS) actor the ability to create the request utilizing the Selection Set Creator. The actor selects one of three choices: CLEAN TREATMENT or INSPECTION and enters anticipated start date (two weeks ahead) and clicks OK. For CLEANING- MCS picks the maintenance type FLUSH, ROD, HAND ROD, BUCKET, etc. and the (CANYON, RW, NRW) crew type from the drop down boxes. If additional maintenance types are to be included MCS can click on the text "Optional" Maintenance Types and select appropriate maintenance types. For TREATMENT- MCS picks the appropriate treatment type: ROOT FOAMING, etc. and the (CANYON, RW, NRW) crew type from the drop down boxes. Root-foaming treatment is scheduled within 60 days starting 30 days after the cleaning schedule is completed for canyon areas included in the Accelerated Cleaning Program. For INSPECTION - MCS picks the appropriate INSPECTION type: CCTV, etc. and the (CANYON, RW, NRW) crew type from the drop down boxes. Then, MCS chooses the desired frequencies or single frequency from the Frequency Filter and clicks the refresh button on the MR Generation Toolbar. The information will be updated and the facilities that fit the selected criteria will be shown in a category of importance. The location of the pipes will be shown on the map along with their selected color or priority category, and selects which pipe to include. The MCS Supervisor Reviews FSN's and MR's and assigns the MR to the appropriate Supervisor and finalizes the MR. To finalizing the MR, it is sent to the Supervisor's Queue for acceptance. Supervisor accepts the MR and assigns CREW to the MR via the Supervisors MR Assignment Command Bar. At any time during the whole process the MR needs to go back to MCS for additional data or work requirements it can be assigned - Returned with comments. Crew completes work and reports completion to Supervisor in the MDU. Crew completes work and reports completion to Supervisor. Supervisor marks the MR as Complete through the Supervisor's MR Assignment Command Bar. MR goes back to MCS MR Assignment Command Bar. MCS checks the MR for completeness and assigns the MR Data Entry completes all the FSN data in the MR into the system and assigns the MR - Archived and stores hardcopy on file. (If not done by crew on MDU), Completed MR in the Archives.
PSTools "Days to Black" process	This "Days to Black" use case process is an algorithm within PSTools that determines the "past due" status of preventive maintenance procedures based on the frequency, and a percentage past due. For example, a weekly PM is considered past due (black) after 2 days, whereas a monthly PM is considered past due after 7 days. There are color assignments, green, red and black to represent on a map, how past due a particular asset is on its schedule.

Business Scenario	Description
PSTools Routes – Significant Rain Event (SRE)	<p>The purpose of the SREs use case is to schedule and plan inspections of a subset of manholes (called SRE Routes) that have been determined to be particularly susceptible to high rainfall events. These inspections are triggered if rainfall in the vicinity of the SRE Route exceeds a predetermined level. Planner Scheduler Tools were designed to include features for generating and tracking Manhole Inspection Maintenance Requests and to maintain the associated scheduling data. Significant Rain Events (SREs) require that certain manholes get inspected within a certain period of time after that rain event. These manholes are inspected on routes and subsequent maintenance is scheduled based on inspection findings as follows: MCS selects from an existing active route or creates a new route; if an ACTIVE ROUTE exists MCS selects which pipe to include. Otherwise the planner creates a NEW Route in the next Event. MCS selects one of three work types: CLEAN, TREATMENT or INSPECTION and enters anticipated start date and clicks OK. For CLEANING – MCS picks the maintenance type FLUSH, ROD, HAND ROD, BUCKET, etc. and the (CANYON, RW, NRW) crew type from the drop down boxes. MCS Adds the desired FSNs and activates Map Selection tool to set the map active for selection. For PROCESS TREATMENT- MCS picks the appropriate treatment type: ROOT FOAMING, etc. and the (CANYON, RW, NRW) crew type from the drop down boxes. MCS Adds the desired FSNs and activates Map Selection tool to set the map active for selection. For PROCESS INSPECTION – MCS picks the appropriate INSPECTION type: CCTV, etc. and the (CANYON, RW, NRW) crew type from the drop down boxes. MCS Adds the desired FSNs and activates Map Selection tool to set the map active for selection. Process MCS selects which pipe to include. MCS Supervisor Reviews FSN's and MR's. MCS assigns the MR to the appropriate Supervisor and finalizes the MR. Finalizing the MR brings the MR to the Supervisor's Queue for acceptance. Supervisor accepts the MR and assigns CREW to the MR via the Supervisors MR Assignment Command Bar. At anytime during the whole process the MR needs to go back to MCS for additional data or work requirements it can be assigned – Returned with comments. Crew completes work in the MDU and reports completion to Supervisor. Crew completes work and reports completion to Supervisor. Supervisor marks the MR as Complete through the Supervisor's MR Assignment Command Bar. MR goes back to MCS MR Assignment Command Bar. MCS checks the MR for completeness and assigns the MR. Data Entry completes all the FSN data in the MR into the system and assigns the MR – Archived and stores hardcopy on file if not done by crew on MDU. Completed MR in the Archives.</p>
PSTools Route Optimization	<p>The Route Optimization use case demonstrates how Assets can be displayed on a map based upon due date and criticality. The planner/coordinator then uses the map to assign geographically based assets to a single work order.</p>
PSTools Referral (SWIM)	<p>The purpose of the Referral (SWIM) use case is to initiate, process, schedule and complete referrals for pipe repairs/investigations. Crew Supervisor Generates referrals through SWIM. Planning section reviews and verifies daily referrals in SWIM. Planning section assigns work order to Construction or CCTV Crew supervisor. Construction or CCTV Crew goes out and completes the work order and documents findings in the SWIM SR. CCTV Burns a copy of video for SHARQ. Crew makes Recommendations/Comments. Work is completed and Crew lead closes work order in SWIM and returns work order to the supervisor. Supervisor reviews work order, to determine whether work was completed or needs another referral. Supervisor reviews the finding and archives the referral. MCS changes referral status to complete.</p>
Sewer Overflow Response Tracking System	<p>The purpose of the Sewer Overflow Response Tracking System use case is process and respond to reported spills and complete the proper reporting documentation. The method of response depends on the type of spill. Spills can either be reported by customers, who are routed to Station 38, or by other City Department & Field Crew who observe spills and call Station 38. Station 38 receives requests for service and generates Service Request and first work order using SWIM. If it's a Sewer Problem, Station 38 contacts appropriate WWC Supervisor. If not, Station 38 dispatches Water emergency services Investigator. Water ES Investigator Investigates. If it's a Sewer Problem, Station 38 contacts appropriate WWC Supervisor. If there is an event, Station 38 contacts appropriate WWC Supervisor. If there is no Event, it is not WWC Responsibility, stop. Further evaluate the situation: Is the problem 733-Overflow, 735-Spill to Public Water, 731-Private Spill, 732-Blockage, BSO (Bad Sewer Odor) or open manhole Process Duty Supervisor dispatches WWC ES investigate crew. If it is a City Sewer problem and an emergency, the Duty Supv. Dispatches a cleaning crew who investigates and acts and notifies the Supv. Of the situation. The crew completes work using best practices and standard procedures, and completes the work order. If the City Sewer problem is not an emergency, a referral is created. Create referral – notify Station 38 of finding, get info to Supervisor and Planner/Scheduler. Generate referral. Track Referral. Terminate Emergency Process Complete. If 733 or 735, Duty Supervisor dispatches cleaning crew who investigates and notifies the Supv. Of the situation. Crew completes work using best practices and standard procedures, Emergency Complete. Crew Leader fills out spill report. Sr. Supv. Begins filling out spill report form. Duty Supervisor investigates the spill. Duty Supervisor reviews and completes spill report form and makes appropriate notifications. Duty Supervisor faxes draft report per event notification protocol. Regional Board documents in SSO database. Duty Supervisor performs historical investigation of SSO site and cause. Has the line been televised recently? Duty Supervisor initiates Request. Get CCTV and Review. Duty Supervisor makes recommendation and /or referral (cleaning freq., Maint. Method). Generate Referral. Area Supervisor reports spill, cause, and corrective action at SORT meeting. Duty Supervisor enters SSO Report in to SSO Database. Duty Supervisor routes SSO Report to GWUS and Financial Management staff. Financial Administrative staff files in SSO binder. Financial Administrative staff prepares electronic monthly report. Financial Administrative staff submits quarterly report to RWQCB.</p>

Business Scenario	Description
Purchasing/Procurement Process	The purpose of the Purchasing/Procurement use case is to utilize the work order to purchase parts from warehouse stock or process procurements via other established methods. This use case gives the actor the ability to obtain stock and non-stock items from the warehouse by submitting an SIR form and search to see if the items are available. If the items are not available, the actor can request the Warehouse to Order Items. In that case, does a Purchase Order (PO) Exist? If yes, and there is money available, make the purchase. If there is no money available, Decide on Sole Source or Bid (P.A.), which will result in one of the following: Max PO is \$5K Balance = _____. How much \$ is Needed? Need more \$ but < \$5K; Request Modification of PO, Need more \$ but > \$5K Total; Competitive Quotes/Bid, or Request Modification of PO. If there is no existing PO, consider the cost of the item to determine how to proceed. For items greater than \$5K: BID- Competitive Quotes/Bid, For SOLE SOURCE OR CONTRACT- Submit Material Request. For items less than \$5K, use a Material Request/P-Card/DP/Petty Cash. If there is no money available for the purchase, Sole Source or Bid (P.A.). Request Modification of PO.
EMPAC Order Materials	The purpose of the Order Materials use case is to utilize the EMPAC application to issue a stock issue request to the warehouse to order materials for the work order.
EMPAC Stock Issue Request (SIR) Process	The purpose of the Stock Issue Request process use case is to purchase stock items from the warehouse against a work order. This use case gives the actor the ability to initiate a stock issue request (SIR). If the item is on hand in stock, a pick ticket is generated for the item. If the item is not on hand, there is a parts shortage. The stock item on hand may be a rebuild or fabrication. If it is, See REBUILD Stock Item or FABRICATION processes. If it is not, Stock Clerk pulls, stages, verifies, and issues stock item. Then, it is determined if there needs to be a Re-stocking/Replenishment? Reorder Point (ROP) Re-order Quantity (ROQ) if YES, EMPAC Reorder Report. If NO, no action is required, User receives stock item from Stock Clerk. System checks for existing orders, calculates # to order, etc. Process Storekeeper monitors EMPAC Reorder Report. Storekeeper creates EMPAC Requisition. Storekeeper orders item/s. WWTD Parts Buyer order item/s. See City Purchasing Process. Note: City has already implemented SAP purchasing process. Create EMPAC Purchase Order (PO). Receive into Warehouse Inventory (Create Receiving Notice).
EMPAC Scrap Material Process	The purpose of the Scrap Material Process use case is to provide a process for the removal/disposal of stock items once the rebuild shop has determined they are beyond economical repair. In this use case, the actor will notify the SPTS and that Stock item is tagged for Scrap. SPTS closes or cancels W.O. with scrap code. Storekeeper electronically receives stock item number via the W.O. in Fab/Rebuild receipt. Storekeeper goes to stock location then links to General Adjustments and chooses the option of Scrap as the type. Record the scrapping of material in the W.O. notes. Will the Scrapped stock item/material satisfy warehouse re-order point (ROP) requirements? If YES go to END. If NO, Storekeeper starts the Purchasing / Procurement Process. See City Purchasing / Procurement Process. Supervisor/Senior Supervisor generates fixed asset deletion paperwork and submits COM-10 form to the office of the Comptroller.
SWIM Manage Inventory	The purpose of the Manage Inventory use case is to demonstrate specific tasks related to this process such as: invoice approvals, approve purchase requests, manage contracts, receive inventory, manage physical inventory, and issue parts. This use case provides the actor the ability to approve invoices and provide actors with procedures to receive items into inventory. This use case provides the actor the necessary steps to receive inventory so that the storeroom can maintain a specific level of materials (e.g. dirt), parts (e.g. pump seal), part individual units (e.g. pump), tools (e.g. jack hammer) and equipment (e.g. backhoe). In this use case, the actor has the ability to maintain correct and up-to-date information about inventory items within the system and to issue parts/materials/equipment/tools that have been requested as part of the requirements of a Work Order.
SWIM Manage Reports and Records	The purpose of the Manage Reports and Records use case is to identify, manage, and obtain work related permits and other related safety records and reports. The purpose of this use case is to provide the actor the ability to manage work related permits including the process of obtaining a permit. Work related permits are required for the following: 1. Bacti Testing 2. Confined Spaced Entry 3. Hot Work 4. Lock and Tag Out Procedures 5. Noise Permits 6. Traffic Control 7. Cal Trans 8. Environmental Sensitive Area 9. ATDP (Trolley Permits) and 10. State Property. The requirement for a permit is stated in the job plan. The CMMS would provide the actor the ability to select from a list of permits so they could be attached to job plans. The CMMS would provide detailed information on when to use the work related permits. The planner/scheduler prints the work related permit and the associated documentation are printed when he schedules the work order. The senior supervisor provides the work related permit and documentation to the crew lead. This use case also provides the ability to track permits for the duration of the job and permit history once the job has been completed. In this use case, the actor is provided procedures relating to Safety Data Sheets (SDS) – previously Material Safety Data Sheets (MSDS). The actor follows this procedures when attaching the correct SDS to the correct Work Order, and retrieving new/updated SDS and status tracking of an asset's SDS. This use case also enables the actor to create, edit and print management reports that contain summary statistics or detailed information about any aspect of enterprise asset management.
SWIM Manage Capital Projects	The purpose of the Manage Capital Projects use case is to provide procedures to create a capital improvement project work order from a schedule taken from an external planning tool, such as Primavera Project Planner. This use case provides the necessary steps to create and manage a CIPWO within the CMMS. The actor for Capital Improvement Projects will manage these similar to other work orders.
SWIM Manage Employee Roster	The purpose of the Maintain Employee Roster (Work Record) use case is to provide the actor the ability to add, update, delete and view employee records.

Business Scenario	Description
EMPAC Rebuild Stock Item Process	The purpose of the Rebuild Stock Item process use case identifies the procedures for rebuilding a stock item and returning it to stock for future use. In this process, an actor would process a Stock Issue Request (SIR) for a REBUILD stock item. If the parts are on hand, a Pick ticket is generated for Rebuild stock item. If the parts are not on hand, the Storekeeper consults with site PMC/Senior staff whether to WAIT for REBUILD spare to be completed, process a new W.O. as an OVERHAUL or BUY a new item from supplier. If OVERHAUL, Issue sub W.O. with OVERHAUL action code, if WAIT, Wait for REBUILD to be completed and received by Warehouse, if BUY, Terminate See CITY Purchasing Process Note: City has already implemented SAP purchasing process. Stock clerk pulls, stages, verifies and issues Rebuild stock item with a green REBUILD tag annotating the original W.O. # on the tag. Logs in BOOK. Process Maintenance crew picks up the stock item for installation from warehouse. REBUILD Sub-Work Order is generated AUTOMATICALLY. Then decide, Is item replaced? If YES, place the green REBUILD tag on the broken equipment, cleans and remove hazardous materials from item prior to return to Warehouse. If NO, Terminate See RETURN TO STOCK Procedures. Facility Stock clerk receives the non-functional REBUILD/OVERHAUL stock item and sends email to MOC 3 warehouse requesting pick-up of non-functional Rebuild stock item. MOC 3 Stock clerk picks up and stages the non-functional REBUILD/OVERHAUL stock item at the machine shop staging area and LOG in REBUILD book. Process Machine shop crew schedules and performs evaluation of non-functional item. Then, decide is the item economical to repair? If YES, Machine shop crew orders parts, and completes REBUILD/OVERHAUL work. If NO, Terminate See SCRAP Materials Process. Machine shop Supervisor signs off the REBUILD W.O. and has the REBUILD stock returned to the MOC 3 warehouse with GREEN tag. Machine shop Supervisor signs off the OVERHAUL W.O. and has the OVERHAUL item returned to the MOC 3 warehouse for delivery to facility. MOC 3 Stock clerk/Storekeeper receives Rebuild stock item from Machine shop and returns Rebuild item to originating warehouse with GREEN tag. MOC 3 Storekeeper received OVERHAULED item for delivery to facility. Terminate. Facility stock clerk receives REBUILD stock item into Warehouse inventory using GREEN tag info. (Create Receiving Notice from Rebuild Fabrication Receipt) Deliver OVERHAULED item to facility. Process Parts Shortage, once received/satisfied.
Engineering CIP Prioritization for Water/Sewer Assets	The purpose of the ECP CIP Prioritization use case is to demonstrate the process for determining the prioritization of projects based on: City Council Policy scoring, regulatory or legal mandates, condition/capacity assessments, and advanced facility planning. Other pertinent factors include identification of requirements, identifying conflicts and constraints, preliminary scoping and cost estimates, and draft planning reports.

A.4.4. Transportation and Storm Water Department

A.4.4.1. Storm Water Division

Business Scenario	Description
Channel Inspection	Drain Channel Inspection, non-routine
Channel Inspection (Planned)	Drain Channel Inspection, routine
Channel Cleaning	Drain Channel Cleaning, non-routine
Channel Cleaning (Planned)	Drain Channel Cleaning, routine
Channel Repair	Drain Channel Repairs
Drain Pipe Cleaning	Drain Pipe Cleaning process, non-routine
Drain Pipe Cleaning (Planned)	Drain Pipe Cleaning process, routine
Drain Pipe Repair	Drain Pipe repair process
Drain Structure Cleaning	Drain Structure Cleaning, non-routine
Drain Structure Cleaning (Planned)	Drain Structure Cleaning, routine
Drain Structure Repair	Drain Structure Repair, non-routine
Drain Structure Repair (Planned)	Drain Structure Repair, routine
De-Silting Basin Inspection (Planned)	De-Silting Basin Inspection, routine
De-Silting Basin Cleaning (Planned)	De-Silting Basin Cleaning, routine
De-Silting Basin Repair	De-Silting Basin Repair, non-routine
URMP Inspection (Planned)	Urban Runoff Management Plan Inspection process, routine
URMP Cleaning (Planned)	Urban Runoff Management Plan Cleaning process, routine
Drain Operational Inspection	Drain Operational Inspection process, non-routine
Critical Drain Inspection (Planned)	Critical Drain Inspection process, routine
Critical Drain Cleaning (Planned)	Critical Drain Cleaning process, routine

Business Scenario	Description
Critical Drain Operation (Storm Conditions)	Critical Drain Inspection process during Storm Conditions
Pump Station PMs (Planned)	Pump Station Inspection process, routine maintenance
Pump Station Repair	Pump Station Repair process, non-routine
Pump Station Patrol (Planned)	Pump Station Patrol process, routine
Create Partner and Contact Person in SAP	Creation of Customer and/or Contact person process in SAP
Change Partner and Contact Person in SAP	Changing of Customer and/or Contact person process in SAP
Change TC BMP Project FL in SAP	process for changing of Treatment Control-Best Management Practices Functional Location in SAP
Change TS BMP/IC Equipment in GIS/SAP	process for changing of Treatment Control-Best Management Practices Impervious Land Cover Equipment in SAP
Delete Partner and Contact Person in SAP	Deletion of Customer and/or Contact person process in SAP
Delete TC BMP Project FL in SAP	process for Deletion of Treatment Control-Best Management Practices Functional Location in SAP
Delete TS BMP/IC Equipment in GIS/SAP	process for Deletion of Treatment Control-Best Management Practices Impervious Land Cover Equipment in SAP
Mass Upload of New Partner and Contact Person IN SAP	Mass Uploading of Customers and/or Contact persons process in SAP
Mass Upload of New TC BMP Projects FLs into SAP	process for Mass Uploading of Treatment Control-Best Management Practices Functional Location in SAP
Mass Upload of New TC BMP/IC Equipment into GIS/SAP	process for Mass Uploading of Treatment Control-Best Management Practices Impervious Land Cover Equipment in SAP
Drains CHANNEL CLEANING	Process for Channel Cleaning
Drains DRAIN REPAIR	Process for Drain Repairs
Drains REQUEST FOR ENGINEERING	Process for Requests for Engineering Site Inspections
Sweeping SCHEDULED SWEEPS	Process for Scheduled Sweeps
Sweeping SPECIAL SWEEPS FOR CITY DEPARTMENTS	Process for Special Sweeps for other City Departments
Sweeping SPECIAL SWEEPS	Process for Special Sweeps (unscheduled)

A.4.4.2. Streets Division

Business Scenario	Description
Administration CREATE NOTIFICATION VIA GEOSAP	Street Administration process in response to request for service from the public
Administration CSR	Street Administration process in response to request for service from the public via the City's Web Page
Street Division Contracts AC OVERLAY/CONCRETE CONTRACTS	Street Contracts process for street surface renewal
Engineering/Contracts ADD NEW MASTER DATA	Street Contracts process for adding new asset into GIS and SAP

Business Scenario	Description
Engineering/Contracts CURB RAMPS/SIDEWALK REQUESTS	Street Contracts process for evaluation of sidewalk, curbs and access ramp renewal and repair
Engineering/Contracts EDIT MASTER DATA	Street Contracts process for editing existing asset in GIS and SAP
Engineering/Contracts SLURRY	Street Contracts process for street surface slurry sealing and crack filling
Electrical After Hours Emergency Notification	Street Electrical process for responding to after-hours emergencies
Electrical CABLE LOCATE	Street Electrical process for marking underground wiring as requested by excavators within the right of way
Electrical Traffic Signals Preventive Maintenance	Street Electrical process for perform Planned Maintenance on traffic signals
Electrical Standard Notification Street and Park Lighting	Street Electrical process in response to request for service from the public with regards to street and park lighting
Electrical Standard Notification Traffic Signals	Street Administration process in response to request for service from the public with regards to traffic signals
Roadways ASPHALT MAINTENANCE	Street Roadways process to perform spot repairs to asphalt
Roadways CONCRETE MAINTENANCE	Street Roadways process to perform spot repairs to concrete
Roadways CONCRETE MAINTENANCE – NOT TREE RELATED	Street Roadways process for spot concrete repairs, non-tree related
Roadways CONCRETE MAINTENANCE – TREE RELATED	Street Roadways process for spot concrete repairs, non-tree related
Roadways CURB RAMPS	Street Roadways process for installation of curb ramps
Roadways RAMPING	Street Roadways process for ramping and temporary repairs to trip hazards in sidewalks
Roadways SIDEWALK 50/50 COST SHARES	Street Roadways process for cost sharing with property owners for sidewalk repairs
Roadways SLA	Street Roadways process for Service Level Agreement with Public Utilities for roadway repairs after excavation
Traffic CREATE SIGN FOR CITY DEPARTMENT	Street Traffic process for manufacturing new signs for other City Departments
Traffic INSTALLING NEW SIGN/PYLONS/DELINEATORS/THERMAL/STRIPING	Street Traffic process for installation of fixed traffic control device such as signs, delineators, striping and legends
Traffic SET TRAFFIC PATTERNS FOR CALTRANS	Street Traffic process for setting traffic patterns for California Department of Transportation (CalTrans)
Traffic REPLACE SIGN	Street Traffic process for sign replacement
Traffic STRIPING MAINTENANCE	Street Traffic process for refreshing or changing striping
Urban Forestry RIGHT OF WAY TRIMMING REQUESTS/PALM/EVALUATION FOR REMOVAL/EMERGENCY	Street Urban Forestry process for emergency response to tree removal or trimming within the right of way

Exhibit A, Attachment 5: Preliminary High-Level Requirements

Req #	Category	High-Level Functional Requirement
1	Asset Investment Planning	Ability to create projects requests based on inputs from asset-based investment planning application (Riva Modeling AMP)
2	Asset Investment Planning	Ability to output technical object information, associated work history and failure data from SAP in support of asset investment planning (to Riva Modeling AMP)
3	Asset Investment Planning	Ability to update technical object data with calculated asset condition from asset investment planning application (Riva Modeling AMP)
4	Asset Investment Planning	Ability to update maintenance plan schedules based on data from asset investment planning application (Riva Modeling AMP)
5	Asset Investment Planning	Ability to output fixed asset accounting data in support of asset investment planning
6	Budgeting	Ability to perform cost center budgeting
7	Budgeting	Ability to perform budgeting with WBS elements
8	Budgeting	Ability to perform order budgeting
9	Budgeting	Ability to perform maintenance cost budgeting
10	Budgeting	Ability to support ongoing budget re-forecasts based on updates
11	Budgeting	Ability to monitor budget-relevant maintenance processes
12	Budgeting	Ability to distribute budgets to technical objects
13	Budgeting	Ability to perform active budget availability controls
14	Budgeting	Ability to perform project budgeting
15	Budgeting	Ability to aggregate projects costs to portfolio and programs and output to planning
16	Budgeting	Ability to forecast project budgets across multiple years and for various time periods (monthly, quarterly, annually)
17	Condition-based Maintenance	Ability to automatically create notifications based on control/monitoring system inputs (e.g. SCADA, PCS)
18	Condition-based Maintenance	Ability to maintain measurements and results from inspections and tests (e.g., oil, infrared, vibration analysis, etc.) with validations

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Req #	Category	High-Level Functional Requirement
19	Condition-based Maintenance	Ability to automatically initiate follow-on action based on processing and analysis of condition data. Follow-on actions could include creation of work orders or notifications.
20	Condition-based Maintenance	Capability to specify thresholds and limits for condition data to define follow-on actions.
21	Condition-based Maintenance	Ability to reset SCADA/DCS objects based on work completion
22	Condition-based Maintenance	Ability to record asset damage and malfunction information
23	Condition-based Maintenance	Ability to view graphical representation of measurement readings over time.
24	Controlling	Ability to automatically derive and assign settlement rules for work orders
25	Controlling	Ability to assign plant maintenance as service recipient and provider to the cost center structure
26	Controlling	Ability to define required cost elements and cost element groups
27	Controlling	Ability to define and manage activity types and activity rates
28	Controlling	Ability to define costing procedures
29	Controlling	Ability to allocate overhead costs
30	Controlling	Ability to settle work order costs
31	Controlling	Ability to prevent posting charges to work orders based on status
32	Controlling	Ability to assign internal orders as account assignment objects
33	Controlling	Ability to manage settlement rules and settle project costs
34	Controlling	Ability to determine and generate settlement rules for work orders
35	Document Management	Ability to manage documents with business transaction context
36	Document Management	Ability to attach documents (e.g. design drawings, work instructions, checklists, images, etc.) to master data objects and transactional data objects
37	Document Management	Ability to launch documents in their native application or viewer (e.g., SAP Visual Enterprise Viewer, Adobe Acrobat, etc.)
38	Document Management	Ability to secure and control access to documents based on role
39	Document Management	Ability to support document versioning
40	Document Management	Ability to automatically assign metadata to documents based on reference data at upload
41	Document Management	Capability to attach documents, including photographs, to technical objects, work orders, and notifications from either tabular or map view
42	External Services	Ability to manage external services using service specifications

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Req #	Category	High-Level Functional Requirement
43	External Services	Ability to manage external services using purchase orders
44	External Services	Ability to manage external services using work centers
45	Financial Accounting	Ability to create and modify assets under construction for work orders
46	Financial Accounting	Ability to assign technical objects in Plant Maintenance to financial asset master data and integrate for bidirectional creation/updates
47	Financial Accounting	Ability to capitalize maintenance services in fixed assets
48	Financial Accounting	Ability to create and modify assets under construction for projects
49	Financial Accounting	Ability to process invoice receipt without good receipt
50	Financial Accounting	Ability to capitalize project costs in fixed assets
51	Financial Accounting	Ability to settle work order costs to assets under construction
52	Financial Accounting	Ability to settle project costs to assets under construction
53	Financial Accounting	Ability to create and modify fixed assets for projects
54	Financial Accounting	Ability to create and modify fixed assets for work orders
55	GIS Integration	Ability to seamlessly navigate between GIS features and corresponding SAP data objects
56	GIS Integration	Capability for real time data synchronization between GIS and SAP
57	GIS Integration	Capability for GIS feature symbology based on SAP data attributes
58	GIS Integration	Ability to associate route information from GIS with SAP maintenance plans
59	GIS Integration	Capability for map-based work scheduling and dispatching – select, drag-and-drop orders and notifications to resources
60	GIS Integration	Capability to integrate linear data models between SAP and GIS
61	GIS Integration	Ability to perform a search for technical objects in SAP and view output on map
62	GIS Integration	Capability to view truck location on a map based on real-time vehicle location data updates
63	GIS Integration	Capability to search and display on a map work orders and notifications by work type, status, region, crews, date range, etc.
64	GIS Integration	Ability to select features within an area on the map, or based on spatial relationships, and create unique orders or notifications for each selected feature
65	GIS Integration	Ability to create work orders and notifications from map
66	GIS Integration	Ability to view pending work on a map with color codes or other symbology based on status and remaining days to required completion date

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Req #	Category	High-Level Functional Requirement
67	GIS Integration	Ability to associate geometry for plant maintenance transactional data without a reference master data object
68	GIS Integration	Ability to select features within an area on the map, or based on spatial relationships, and group to create an order or project (dynamic selection)
69	GIS Integration	Capability to link/view SAP project details to GIS, including not-yet-created objects and ability to establish projects through selection of objects on GIS. Ability to identify retired assets as part of project lifecycle.
70	GIS Integration	Ability to view documents attached through SAP (including mobile Work Manager) in GIS
71	GIS Integration	Ability to identify the residential addresses connected to an asset or location
72	GIS Integration	Ability to maintain inspection areas for different inspections, and assign an inspector to an area
73	GIS Integration	Ability to schedule and dispatch work from legacy work management systems (that are not being replaced)
74	Maintenance Planning	Ability to manage maintenance task lists for technical objects, including ability to duplicate task lists for objects
75	Maintenance Planning	Ability to transfer maintenance task lists to orders
76	Maintenance Planning	Ability to manage maintenance task that are not technical object-specific
77	Manage Materials	Ability to reserve stock materials for a work order or project
78	Manage Materials	Ability to perform availability checks for stock material
79	Manage Materials	Ability to perform inventory management for equipment
80	Manage Materials	Ability to perform goods issue for planned or unplanned materials on a work order
81	Manage Materials	Ability to perform material requirements planning for spare parts, including triggering of procurement orders
82	Manage Materials	Ability to manage serial numbers in inventory and warehouse management.
83	Manage Materials	Ability to perform inbound processing and receipt confirmation without Warehouse Management
84	Manage Materials	Ability to perform inbound processing and receipt confirmation with Warehouse Management
85	Manage Materials	Ability to perform reverse logistics
86	Manage Materials	Ability to post goods issue to return delivery

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Req #	Category	High-Level Functional Requirement
87	Manage Materials	Ability to issues stocks to order, cost center, network, WBS
88	Manage Materials	Ability to transfer stocks from plant to Subcontractor; transfer stocks from Subcontractor to plant
89	Manage Materials	Ability to adjust stock at subcontractor for over/under consumption
90	Manage Materials	Ability to issue stocks to scrap account
91	Manage Materials	Ability to transfer stocks from one project to another project
92	Manage Materials	Ability to transfer stock plant-to-plant, from plant to in-transit, from in-transit to destination plant
93	Manage Materials	Ability to perform physical inventory management at storage location level, with ability to use barcoding and RFID
94	Manage Materials	Ability to perform physical inventory management at bin level, with ability to use barcoding and RFID
95	Manage Materials	Ability to process transfer order and place item in corresponding location in Warehouse
96	Manage Materials	Ability to process transfer order and pick/issue corresponding item to requestor
97	Manage Materials	Ability to monitor warehouse activity
98	Manage Materials	Ability to report on hazardous material
99	Manage Materials	Ability to report on transfer requirements
100	Manage Materials	Ability to report on transfer orders
101	Manage Materials	Ability to report on posting changes
102	Manage Materials	Ability to report on physical inventory with bin inventory management
103	Manage Materials	Ability to perform salvage activities
104	Manage Materials	Ability to manage and process warranty claims
105	Manage Materials	Ability to process refurbished items with serial number tracking
106	Manage Materials	Ability to create kits/assemblies
107	Mobile	Capability to attach documents, including photographs, to technical objects, work orders, and notifications from either tabular or map view
108	Mobile	Capability to associate uploaded documents with new data objects that are to be created based on mobile transactions (e.g. scenario – new notification created from field, but SAP notification number not available at the time of document attachment)
109	Mobile	Ability to dispatch and download work electronically to the mobile device in real time

Req #	Category	High-Level Functional Requirement
110	Mobile	Capability to automatically trigger workflows for data validation and approval based on data updates
111	Mobile	Ability to maintain work status and partial/full completion information on orders and notifications
112	Mobile	Ability to enter time on individual work orders / operations
113	Mobile	Ability to indicate if the time entered is regular, overtime, and other categories, including classification
114	Mobile	Ability to record additional problems found in the field for the technical object on an existing work order or notification
115	Mobile	Ability to initiate the creation of technical object records when missing (technical object found in field, but no corresponding data record)
116	Mobile	Ability to view all of the technical objects corresponding to a work order, notification, or project in either tabular or map view
117	Mobile	Ability to select a technical object and view detailed attributes
118	Mobile	Ability to seamlessly navigate between tabular and map view of technical objects and work list
119	Mobile	Ability to clearly distinguish symbology for technical objects, work location, vehicles
120	Mobile	Ability to select a technical object in map view and create a work order or notification
121	Mobile	Ability to select work order, notification, or project in map view and initiate completion activities
122	Mobile	Ability to update technical object attributes, including location
123	Mobile	Ability to select a technical object, work order, or notification and view associated documents
124	Mobile	Ability to select equipment parts from 2D/3D model
125	Mobile	Ability to view animation or video work instructions associated with a technical object
126	Mobile	Ability to view count of technical objects associated with a work order or project
127	Mobile	Ability to capture and record ad-hoc work against a technical object
128	Mobile	Ability to record additional operations performed that were not planned on a work order
129	Mobile	Ability to update tasks and record activities performed on a notification

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Req #	Category	High-Level Functional Requirement
130	Mobile	Ability to launch a document in its native application or viewer (based on document file type)
131	Mobile	Ability to view technical objects and work on GIS map
132	Mobile	Ability to view user's assigned work list
133	Mobile	Ability to select and view a different user's assigned work list
134	Mobile	Capability for data entry validation based on type, size, length, field ranges, etc.
135	Mobile	Capability for cross-field data validation (validation of entered data based on the data in a different field)
136	Mobile	Capability to display data validation failure messages – information messages based on specific validation failure information
137	Mobile	Capability to enforce repeat entries for validated data entry for certain fields
138	Mobile	Ability to enter inspection results, measurements, and counter readings
139	Mobile	Capability to validate measurement entries based on custom rules
140	Mobile	Capability to auto stamp user name and date/time when comments are entered
141	Mobile	Capability for real-time data integration with backend systems when within wireless coverage
142	Mobile	Capability to indicate data objects that have not be synchronized with the server
143	Mobile	Capability to automatically download documents to mobile device based on technical object and work allocated
144	Mobile	Capability to search for additional documents and download
145	Mobile	Ability to visually distinguish work based on priority in tabular and map view
146	Mobile	Ability to visually distinguish between completed, in-progress, and pending work in tabular and map view
147	Mobile	Ability to select a map area and view all technical objects, work orders, notifications, or projects
148	Mobile	Ability to select technical objects, work orders, or notifications in map area, apply filter criteria, and switch to a tabular view of the list
149	Mobile	Capability to cache data updates when offline and synchronize seamlessly when back online
150	Mobile	Ability to initiate cancellation of a work order or notification, with cancellation reason
151	Mobile	Ability to retrieve and display technical object data based on barcode scan

EXHIBIT A, ATTACHMENT 5

Req #	Category	High-Level Functional Requirement
152	Mobile	Ability to search features on the map based on supplied criteria (search criteria managed as SAP business data)
153	Mobile	Ability to automatically record start and finish times on a job based on status changes and propose as duration for confirmation (with ability to override)
154	Mobile	Ability to warn user when a duplicate work order or notification is initiated for the technical object or location
155	Mobile	Ability to specify the use of materials for an order
156	Mobile	Ability to view percentage complete at the order level based on existing confirmations
157	Mobile	Ability to add comments for work orders and notifications, with comments to be appended and sorted chronologically
158	Mobile	Ability to delete an attachment that was attached from the field during the session (scenario – incorrect document or photo attached)
159	Mobile	Capability for informative and specific warning messages when mandatory fields are not populated
160	Mobile	Ability to reject work assigned to a crew, with specification of rejection reason
161	Mobile	Ability to sort and filter work list based on any data attributes available locally
162	Mobile	Ability to turn on/off GIS layers on map
163	Mobile	Ability to obtain list of technical objects, pending work orders, notifications, or projects within a radius from a specified point on the map
164	Mobile	Ability to save sort preferences for lists for the user
165	Mobile	Ability to select multiple line items from the tabular work list and view on map
166	Mobile	Ability to view previous inspection and measurement data
167	Mobile	Ability to list work based on assigned sequence
168	Mobile	Ability to select a job outside the assigned sequence to process
169	Mobile	Ability to perform lock-out/tag-out process updates using mobile application
170	Mobile	Ability to install or dismantle equipment, and update field level data
171	Mobile	Ability to display order and notification history
172	Mobile	Ability to display partner data for technical objects, work orders and notifications
173	Mobile	Ability to enter material withdrawals
174	Mobile	Ability to capture electronic signatures

EXHIBIT A, ATTACHMENT 5

Req #	Category	High-Level Functional Requirement
175	Mobile	Ability to scan barcodes, RFID, and access data associated with object
176	Mobile	Capability to alert field technicians when new orders are dispatched and added to the work list
177	Mobile	Ability to geo-tag technical objects, work orders, and notifications. Ability to either center map or drop pin on a location, obtain coordinates, and transfer.
178	Mobile	Capability to alert field technicians when an order from the work list is cancelled
179	Mobile	Ability for the crew to request additional resources required to complete a job
180	Mobile	Capability to define triggers for alerts
181	Mobile	Ability to support guided workflows
182	Mobile	Ability to perform physical and cycle counts
183	Mobile	Ability to check availability of materials
184	Mobile	Ability to accept and distribute incoming materials by purchase order
185	Mobile	Ability to process good receipts
186	Mobile	Ability to transfer a job to another crew
187	Order Costing	Ability to maintain estimated costs on an order
188	Order Costing	Ability to generate planned and actual costs for an order
189	Order Costing	Ability to compare estimated, planned, and actual costs based on value categories
190	Order Costing	Ability to compare planned and actual costs for an order based on cost elements
191	Organizational Structure	Ability to model the City from a maintenance perspective
192	Organizational Structure	Ability to model maintenance-specific organizational units
193	Personnel	Ability to assign personnel to work centers
194	Personnel	Ability to assign personnel to plant maintenance technical objects
195	Personnel	Ability to plan personnel for orders and notifications
196	Personnel	Ability to include personnel number in confirmations
197	Personnel	Ability to plan qualifications in order and task lists
198	Personnel	Ability to consolidate personnel master data across multiple systems
199	Portal	Ability to perform plant maintenance master data and transactional data queries through internal portal
200	Portal	Ability to execute reports through internal portal
201	Portal	Ability to initiate service request and track status via internal portal

Req #	Category	High-Level Functional Requirement
202	Portal	Ability to request and receive quotation via internal portal
203	Preventive Maintenance	Ability to automatically update maintenance plans while phasing out a technical object from service
204	Preventive Maintenance	Ability to trigger maintenance tasks for time-based preventive maintenance
205	Preventive Maintenance	Ability to trigger maintenance tasks for performance-based preventive maintenance
206	Preventive Maintenance	Ability to trigger maintenance tasks for status-based preventive maintenance
207	Preventive Maintenance	Ability to manage single-cycle plans
208	Preventive Maintenance	Ability to manage strategy plans
209	Preventive Maintenance	Ability to manage multiple counter plans
210	Preventive Maintenance	Ability to manage inspection rounds
211	Preventive Maintenance	Ability to perform automatic deadline monitoring
212	Preventive Maintenance	Ability to automatically assign preventive maintenance plans to a technical object at the time of creation, taking in to consideration factors such as technical object type, in-service date, etc.
213	Preventive Maintenance	Ability to schedule preventive maintenance based on specifying list of dates
214	Preventive Maintenance	Ability to adjust the frequency of a maintenance plan based on condition
215	Preventive Maintenance	Ability to schedule preventive maintenance based on previous completion date
216	Preventive Maintenance	Ability to suppress coinciding preventive maintenance activities
217	Print Documents	Ability to generate formatted, hard-copy printed notifications
218	Print Documents	Ability to print formatted work order packet, including material pick-list and withdrawal slip.
219	Print Documents	Ability to print tags for work clearance management
220	Print Documents	Ability to print purchase orders and purchase requisitions
221	Print Documents	Capability to generate and print crew schedules for a day (or specified period)
222	Print Documents	Ability to print and present the quotation to a customer
223	Procurement	Ability to consolidate material, vendor, and service master data maintenance across multiple systems
224	Procurement	Ability to receive and process invoice document
225	Procurement	Ability to perform invoice verification in background
226	Procurement	Ability to allocate invoice to purchase order

EXHIBIT A, ATTACHMENT 5

Req #	Category	High-Level Functional Requirement
227	Procurement	Ability to create service entry sheets
228	Procurement	Ability to perform service entry and acceptance
229	Procurement	Ability to use subcontracting for maintenance, repair, and overhaul
230	Procurement	Ability to create and maintain bill of materials
231	Procurement	Ability to perform manual reorder point planning
232	Procurement	Ability to perform automatic reorder point planning
233	Procurement	Ability to create and maintain purchasing information records manually
234	Procurement	Ability to maintain purchasing info records during quotation maintenance
235	Procurement	Ability to maintain purchasing info records during purchase order maintenance
236	Procurement	Ability to create requests for quotations
237	Procurement	Ability to process, analyze, and score vendor quotations
238	Procurement	Ability to create and maintain contracts
239	Procurement	Ability to generate source list
240	Procurement	Ability to monitor contracts
241	Procurement	Ability to create and process manual purchase requisition
242	Procurement	Ability to create and process purchase requisition from reorder point planning
243	Procurement	Ability to create and process manual purchase order
244	Procurement	Ability to manage approvals of purchase orders
245	Procurement	Ability to manage approvals of purchase requisitions
246	Procurement	Ability to monitor purchase orders
247	Procurement	Ability to create and process purchase order from purchase requisition
248	Procurement	Ability to create and process manual subcontract purchase order
249	Procurement	Ability to create and process subcontract order from purchase requisition
250	Procurement	Ability to process stock transport order without delivery
251	Procurement	Ability to process stock transport order with delivery via shipping
252	Procurement	Ability to harmonize material, vendor, and service master data across multiple systems
253	Procurement	Ability to trigger purchase requisitions for materials and service for work orders
254	Procurement	Ability to perform goods receipt for materials procured for work orders
255	Procurement	Ability to create and process purchase requisition from work orders

EXHIBIT A, ATTACHMENT 5

Req #	Category	High-Level Functional Requirement
256	Procurement	Ability to enable data governance and standardize procurement-related master data creation, maintenance, and approvals
257	Procurement	Capability for role-based, workflow-driven process for procurement-related master data creation, change and approval
258	Procurement	Ability to perform duplicate checks for procurement-related master data at entry
259	Procurement	Ability to generate and process cleansing cases for duplicate procurement-related master data records
260	Procurement	Ability to track status of and metrics for procurement-related data change requests
261	Procurement	Ability to model custom validations for procurement-related master data attributes
262	Projects and Project Portfolios	Ability to model project structures – WBS and Network structures, including standard structures and versions
263	Projects and Project Portfolios	Ability to perform project scheduling (top-down, bottom-up, open planning, etc.)
264	Projects and Project Portfolios	Ability to perform project costs and revenue planning
265	Projects and Project Portfolios	Ability to plan materials, procure, and manage delivery for projects
266	Projects and Project Portfolios	Ability to perform external procurement of services and manage sub-contracts for projects
267	Projects and Project Portfolios	Ability to confirm material usage for projects
268	Projects and Project Portfolios	Ability to perform individual and collective confirmations for projects
269	Projects and Project Portfolios	Ability to perform resource-related billing for projects
270	Projects and Project Portfolios	Ability to track and report project commitments and actuals
271	Projects and Project Portfolios	Ability to perform project overhead calculation
272	Projects and Project Portfolios	Ability to perform project interest calculation
273	Projects and Project Portfolios	Ability to perform financial results analysis for projects
274	Projects and Project Portfolios	Ability to manage template allocation of overheads for projects
275	Projects and Project Portfolios	Ability to forecast costs for projects
276	Projects and Project Portfolios	Ability to manage project portfolio groupings
277	Projects and Project Portfolios	Ability to enter project requests, and assign to appropriate portfolio group, and classify
278	Projects and Project Portfolios	Ability to score project requests using predefined questionnaires
279	Projects and Project Portfolios	Ability to prioritize project requests and projects using scoring models
280	Projects and Project Portfolios	Ability to plan required funds on projects according to cost categories

EXHIBIT A, ATTACHMENT 5

Req #	Category	High-Level Functional Requirement
281	Projects and Project Portfolios	Ability to combine individual project requests in to programs
282	Projects and Project Portfolios	Ability to plan project checklist and to-do lists
283	Projects and Project Portfolios	Ability to automatically create projects and internal orders based on project request approval
284	Projects and Project Portfolios	Ability to manage approval of individual project phases
285	Projects and Project Portfolios	Ability to maintain percentage completion and actual start and end times for projects
286	Projects and Project Portfolios	Ability to manage approval of time entry recorded by project personnel
287	Projects and Project Portfolios	Ability to monitor projects for the entire portfolio using dashboards
288	Projects and Project Portfolios	Ability to define and monitor key success factors in the areas of budget, employee workload and project progress
289	Projects and Project Portfolios	Ability to plan resource demands for projects
290	Projects and Project Portfolios	Ability to compare planned and actual deadlines for projects
291	Projects and Project Portfolios	Ability to set up automatic notifications for projects in the event of missed deadlines or when certain limits are reached
292	Projects and Project Portfolios	Ability to evaluate all projects within a portfolio with regards to status and percentage completion
293	Projects and Project Portfolios	Ability to compare planned times with the times entered by project personnel
294	Projects and Project Portfolios	Ability to perform financial and capacity analysis of entire project portfolio or of individual subareas
295	Projects and Project Portfolios	Ability to plan and enter dates for projects
296	Projects and Project Portfolios	Ability to plan and invoice revenues for projects
297	Projects and Project Portfolios	Ability to plan and monitor payment flows for projects
298	Projects and Project Portfolios	Ability to capitalize project costs in fixed assets
299	Projects and Project Portfolios	Ability to place projects on hold, with the reason for the hold, in a reportable and queryable field
300	Projects and Project Portfolios	Ability to create and process purchase requisition for projects
301	Projects and Project Portfolios	Capability to determine permits that have been obtained and those pending for a project
302	Refurbishment	Ability to identify equipment in need of refurbishment
303	Refurbishment	Ability to settle refurbishment orders based on standard price or moving average price
304	Refurbishment	Ability to refurbish materials or serial numbers

EXHIBIT A, ATTACHMENT 5

Req #	Category	High-Level Functional Requirement
305	Reporting and analytics	Ability to perform breakdown analysis
306	Reporting and analytics	Capability for repair or replace decision support
307	Reporting and analytics	Ability to provide early warnings regarding plant maintenance functions
308	Reporting and analytics	Ability to perform cost analysis, including planned/actual cost deviation
309	Reporting and analytics	Capability for performance dashboards to monitor work and asset management processes
310	Reporting and analytics	Ability to perform failure reporting and analysis
311	Reporting and analytics	Ability to obtain object statistics
312	Reporting and analytics	Ability to perform damage and cause reporting
313	Reporting and analytics	Ability to perform location reporting
314	Reporting and analytics	Ability to generate manufacturer report
315	Reporting and analytics	Ability to report on number of service and maintenance requests and orders; processing time; closed, pending, and overdue work; planned and unplanned work; etc.
316	Reporting and analytics	Ability to report on the number of technical object installations and duration of installations
317	Reporting and analytics	Ability to report on mean time to repair
318	Reporting and analytics	Ability to report on mean time between repair
319	Reporting and analytics	Ability to report on schedule fulfillment
320	Reporting and analytics	Ability to report on measurement results
321	Resource Planning and Scheduling	Ability to evaluate resource capacity
322	Resource Planning and Scheduling	Ability to perform capacity requirements planning
323	Resource Planning and Scheduling	Capability to roll-forward partially completed work to the following day, with the capability to assign pending work to a different crew
324	Resource Planning and Scheduling	Ability to plan resources demands on project requests
325	Resource Planning and Scheduling	Ability to manage and schedule internal and external resources
326	Resource Planning and Scheduling	Ability to manage resource qualifications
327	Resource Planning and Scheduling	Ability to manage assignment of employees to projects

EXHIBIT A, ATTACHMENT 5

Req #	Category	High-Level Functional Requirement
328	Resource Planning and Scheduling	Ability to perform resource search for projects based on availability and qualifications
329	Resource Planning and Scheduling	Ability to manage staffing of resources requirements on projects
330	Resource Planning and Scheduling	Ability to manage qualifications catalog
331	Resource Planning and Scheduling	Ability to dynamically generate a ranked list of resources based on qualifications, available spare parts and tools, and proximity to respond to unplanned work
332	Resource Planning and Scheduling	Ability to assign time windows, in hours, as unavailable for work scheduling of individuals, with ability to maintain reason (such as vacation, sick time, training, etc.)
333	Resource Planning and Scheduling	Capability of receiving and updating real time information from the field to support dynamic schedule optimization
334	Resource Planning and Scheduling	Ability to maintain the makeup of each crew, including the personnel, vehicles, tools
335	Resource Planning and Scheduling	Ability to manage changes to the default makeup of a crew for a given period of time (e.g., substitutions and reassignments).
336	Resource Planning and Scheduling	Ability to identify crews and personnel as emergency responders
337	Resource Planning and Scheduling	Capability to utilize real-time information from the field to assess the schedule risk and flag orders/notifications that are in jeopardy of meeting scheduled times
338	Resource Planning and Scheduling	Capability to manually update and complete work orders (scenario – when crew is out of wireless coverage). The system shall manage the synchronization of data when the work order is eventually updated from the mobile application.
339	Resource Planning and Scheduling	Capability for manual scheduling using graphical planning board
340	Resource Planning and Scheduling	Capability to view a queue of pending work for a geographic area
341	Resource Planning and Scheduling	Capability to view capacity and demand information for a crew by day and week
342	Resource Planning and Scheduling	Capability to filter and manage crew information based on department, region, etc.

Req #	Category	High-Level Functional Requirement
343	Resource Planning and Scheduling	Capability to automatically perform validations during crew assignments (e.g., when work is assigned to a crew beyond their allocated capacity; when work is assigned that is not a skill set match for the crew)
344	Resource Planning and Scheduling	Ability to override the warning with an explanation and continue with the crew assignments in the case of failed validations
345	Resource Planning and Scheduling	Capability to configure and define operating shift profiles
346	Resource Planning and Scheduling	Capability to assign a notification, work order or order operation to multiple crews (internal or external)
347	Resource Planning and Scheduling	Ability to push high priority work into the schedule at the cost of other lower priority work
348	Resource Planning and Scheduling	Capability to define work priority based on individual properties or combinations of properties, configurable within the system.
349	Resource Planning and Scheduling	Ability to manually reschedule or reassign work
350	Resource Planning and Scheduling	Capability to queue scheduled work for crew to view – the crew may be able to view the work but not work on it, as it is yet to be dispatched.
351	Resource Planning and Scheduling	Capability to perform plan vs. actual analysis of scheduling data
352	Resource Planning and Scheduling	Capability to automatically route work assignments taking in to consideration travel time based on real-road information.
353	Resource Planning and Scheduling	Capability to automatically un-assign work that was not started by the end of the day (or a configurable period) and reschedule/reassign the following day
354	Resource Planning and Scheduling	Capability to automatically assign certain types of work to crews based on pre-defined parameters
355	Resource Planning and Scheduling	Capability to determine optimal schedule based on algorithms with user defined parameters
356	Resource Planning and Scheduling	Ability to plan and assign vehicles to a work order
357	Resource Planning and Scheduling	Ability to allocate work to a scheduling window

EXHIBIT A, ATTACHMENT 5

Req #	Category	High-Level Functional Requirement
358	Resource Planning and Scheduling	Ability to automatically incorporate strict rules based on region, capacity, date constraints, work times, skills, etc., while optimizing work schedule
359	Resource Planning and Scheduling	Ability to optimize schedule taking in to consideration travel time, SLA, work priority, capacity leveling, etc.
360	Resource Planning and Scheduling	Ability to schedule work taking in to consideration availability of required equipment, spare parts, vehicles, and tools
361	Resource Planning and Scheduling	Ability to pause a job temporarily in order to reassign the crew to an emergency and have the crew pick up the paused job on completion of the emergency
362	Resource Planning and Scheduling	Ability to perform shift planning
363	Resource Planning and Scheduling	Ability to maintain shift notes
364	Resource Planning and Scheduling	Ability to generate shift reports
365	Resource Planning and Scheduling	Ability to update external systems on schedule updates to orders and notifications
366	Resource Planning and Scheduling	Capability for real-time scheduling updates based on receiving confirmations
367	Resource Planning and Scheduling	Capability to display unscheduled work orders geographically to enable a dispatcher to assign work to field technicians on a fill-in basis
368	Resource Planning and Scheduling	Ability to configure effective scheduling windows for short and long cycle work
369	Resource Planning and Scheduling	Capability for schedule compliance monitoring and alert issuance
370	Resource Planning and Scheduling	Ability to generate visual capacity and demand reports
371	Resource Planning and Scheduling	Ability to determine resource utilization based on attendance record
372	Resource Planning and Scheduling	Ability to track employee time and attendance
373	Resource Planning and Scheduling	Ability to manage employee roster

EXHIBIT A, ATTACHMENT 5

Req #	Category	High-Level Functional Requirement
374	Sales	Ability to maintain customer data for service requests without duplication of customer records, including across departments
375	Sales	Ability to generate a fixed price quotation
376	Sales	Ability to create and process sales order and invoice for a customer
377	Sales	Ability to process payment from customer for service billing
378	Sales	Ability to configure service products
379	Service Operations	Capability for bi-directional integration with a Customer Relationship Management system
380	Service Operations	Ability to automatically create work orders or notifications based on customer initiation via a CRM system (source channels for CRM could be multiple – web, mobile app, phone, etc.)
381	Service Operations	Ability to generate a quotation based on resources required for a job
382	Service Operations	Ability to create a sales order based on actual costs on an order
383	Service Operations	Ability to update work order completion status via the initiating channel
384	Street Sweeping	Ability to maintain City streets, sections, and post codes
385	Street Sweeping	Ability to maintain the political regional structure for the City
386	Street Sweeping	Ability to breakdown the service territory in order to manage schedules for periodic street sweeping, and re-plan based on changes in the service territory
387	Street Sweeping	Ability to take holidays in to consideration in generating schedules for street sweeping
388	Street Sweeping	Ability to manage static and dynamic routes for street sweeping
389	Street Sweeping	Ability to track and record completion information, including location-time profile associated with street sweeping
390	Street Sweeping	Ability to generate schedule records over a period of time for street sweeping
391	Technical Object	Ability to perform geospatial queries of technical objects
392	Technical Object	Ability to define multiple physical or logical locations on a technical object for which condition data is to be maintained.
393	Technical Object	Ability to associate permits to a technical object
394	Technical Object	Ability to maintain partner data, including customer data, associated with technical objects
395	Technical Object	Ability to create equipment records based on templates
396	Technical Object	Ability to model equipment and components in support of asset maintenance operations
397	Technical Object	Ability to structure technical systems based on spatial, functional, or process-oriented criteria

EXHIBIT A, ATTACHMENT 5

Req #	Category	High-Level Functional Requirement
398	Technical Object	Ability to create and maintain data for equipment with serial numbers
399	Technical Object	Ability to place and remove equipment from storage
400	Technical Object	Ability to manage vendor warranties for technical objects
401	Technical Object	Ability to manage a single, continuous asset with dynamic segmentation, with varying characteristics and conditions
402	Technical Object	Ability to link a linear asset with other assets to represent a network or route
403	Technical Object	Ability to locate point assets along a linear asset
404	Technical Object	Capability to segregate master data corresponding to the different organizations and territories within the City at the database level.
405	Technical Object	Capability to output asset data, including condition information, to external systems
406	Technical Object	Ability to harmonize plant maintenance technical object data creation and updates across multiple systems
407	Technical Object	Ability to automatically create condition, measurement, and counter readings based on control/monitoring system inputs (e.g. SCADA, PCS) with validations
408	Technical Object	Ability to create and maintain 2D/3D models of assets
409	Technical Object	Ability to access animated work instructions associated with a technical object
410	Technical Object	Ability to select components of an equipment from 2D/3D models and initiate material requests
411	Technical Object	Ability to access 2D/3D models of a technical object
412	Technical Object	Ability to assign responsible individual/group for technical object
413	Technical Object	Ability to enable data governance and standardize plant maintenance master data creation, maintenance, and approvals
414	Technical Object	Capability for role-based, workflow-driven process for plant maintenance master data creation, change and approval
415	Technical Object	Ability to perform duplicate checks for plant maintenance master data at entry
416	Technical Object	Ability to generate and process cleansing cases for duplicate plant maintenance master data records
417	Technical Object	Ability to track status of and metrics for plant maintenance data change requests
418	Technical Object	Ability to model custom validations for plant maintenance master data attributes

EXHIBIT A, ATTACHMENT 5

Req #	Category	High-Level Functional Requirement
419	Technical Object	Ability to create and maintain animated work instructions associated with a technical object
420	Technical Object	Ability to consolidate technical master data manage across multiple systems
421	Technical Object	Capability to output asset work history to external systems
422	Tools	Ability to manage tools – schedule, reserve, confirm, issue, and process returns
423	Tools	Ability to perform availability checks for tools
424	Tools	Ability to manage calibration data for tools
425	Vehicles	Ability to manage vehicles used by crews – schedule, reserve, confirm, issue, and return vehicles
426	Work Clearance	Ability to manage lock-out/tag-out process
427	Work Clearance	Ability to manage work clearance applications and work clearance documents
428	Work Management	Ability to integrate work confirmations with timesheets
429	Work Management	Ability to automatically send emails based on data changes, including status changes, for work orders and notifications
430	Work Management	Ability to automatically update source systems with work order or notification status updates, including completion status
431	Work Management	Ability to place work orders on hold, with the reason for the hold (in a standardized reportable and query able field) as well as documentation corresponding to the reason for hold.
432	Work Management	Ability to create and process work orders and notifications in the system manually
433	Work Management	Ability to prioritize, approve, and put in process work orders and notifications for different types of work
434	Work Management	Ability to assign work priority based on type of work, technical object, and other input data while creating work order or notification
435	Work Management	Ability to manually plan the materials, labor, tools, and resources required for a work order
436	Work Management	Ability to create a work order from one or more notifications
437	Work Management	Ability to maintain the dependencies between operations on a work order
438	Work Management	Ability to automatically assign permits to a work order and track status of permits
439	Work Management	Ability to automatically determine dates on a notification or work order based on priority, work type, and other attributes
440	Work Management	Ability to manage sub-orders and work order hierarchy

EXHIBIT A, ATTACHMENT 5

Req #	Category	High-Level Functional Requirement
441	Work Management	Ability to include bill of materials on a work order
442	Work Management	Ability to determine storage location for a component
443	Work Management	Ability to plan and procure non-stock material
444	Work Management	Ability to distinguish between prioritized normal and emergent work
445	Work Management	Ability to automatically determine and assign work orders as capital or O&M prior to releasing for charges. Determination could be based on multiple factors.
446	Work Management	Capability to segregate data required to track handoffs between multiple groups involved in a business process at the database level.
447	Work Management	Capability to distinguish between requirements and dependencies that are either mandatory (work cannot proceed without the requirement) or optional (work can proceed without the requirement).
448	Work Management	Ability to automatically update external systems based on data changes, including status changes, for work orders and notifications
449	Work Management	Capability to segregate transactional data corresponding to the different organizations and territories within the City at the database level.
450	Work Management	Ability to have supervisor accept/reject work and time entry

Exhibit A, Attachment 6: Preliminary Software Development Scope

The following list identifies the custom development objects that are included in the scope of services. Changes to this list necessary to meet the other requirements of this Agreement, for example to integrate with a retained legacy system, are subject to the change order process.

In the case of interfaces, a directional interface to/from a system/application shall be identified as a single “Interface” entry irrespective of the number of interface message types required for communication.

No	Object ID	Object Type	Name	Complexity	Component
1	CON_0010	Conversion	Functional Location	Low	ECC
2	CON_0020	Conversion	Equipment	Low	ECC
3	CON_0030	Conversion	Material BOM	Medium	ECC
4	CON_0040	Conversion	Functional Location BOM	Low	ECC
5	CON_0050	Conversion	Equipment BOM	Low	ECC
6	CON_0060	Conversion	Compatible Units	Medium	ECC
7	CON_0070	Conversion	Warranty	Medium	ECC
8	CON_0080	Conversion	Linear Reference Pattern	High	ECC
9	CON_0100	Conversion	Class	Medium	ECC
10	CON_0110	Conversion	Master List Characteristics	Medium	ECC
11	CON_0120	Conversion	Characteristic values for Master data	Low	ECC
12	CON_0130	Conversion	Measuring Point	Low	ECC
13	CON_0140	Conversion	Measuring Document	Low	ECC
14	CON_0150	Conversion	Serial Number	Low	ECC
15	CON_0160	Conversion	Work Center	Medium	ECC
16	CON_0170	Conversion	Permits	Low	ECC
17	CON_0180	Conversion	Notifications	Medium	ECC
18	CON_0190	Conversion	Work Orders	Medium	ECC
19	CON_0210	Conversion	Quotation	Medium	ECC

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No	Object ID	Object Type	Name	Complexity	Component
20	CON_0220	Conversion	Maintenance Plan	Low	ECC
21	CON_0230	Conversion	Maintenance Item	Low	ECC
22	CON_0240	Conversion	Task List	Low	ECC
23	CON_0250	Conversion	Work Clearance Application	Low	ECC
24	CON_0260	Conversion	Work Clearance Documents	Low	ECC
25	CON_0270	Conversion	Document info record	Medium	ECC
26	CON_0290	Conversion	Catalog Code Group & Codes	Low	ECC
27	CON_0300	Conversion	Long Text	Medium	ECC
28	CON_0380	Conversion	Standard Project Template	Low	ECC
29	CON_0400	Conversion	Plan cost	Medium	ECC
30	CON_0450	Conversion	Buckets	Low	ECC
31	CON_0460	Conversion	Portfolio Item	Medium	ECC
32	CON_0470	Conversion	Initiatives	Medium	ECC
33	CON_0480	Conversion	Project	Medium	ECC
34	CON_0490	Conversion	Phases	Medium	ECC
35	CON_0500	Conversion	Tasks	Medium	ECC
36	CON_0590	Conversion	Asset Master	Low	ECC
37	CON_0660	Conversion	Asset Value upload	Low	ECC
38	CON_0700	Conversion	Price Master	Low	ECC
39	CON_0710	Conversion	Material Master	High	ECC
40	CON_0720	Conversion	Material Classification	Low	ECC
41	CON_0750	Conversion	Purchase Info Record	Low	ECC
42	CON_0760	Conversion	Source List	Low	ECC
43	CON_0770	Conversion	Outline Agreement	Low	ECC
44	CON_0780	Conversion	Output Conditions	Low	ECC
45	CON_0790	Conversion	WM Storage Bin	Low	ECC
46	CON_0800	Conversion	WM Storage Bin level Inventory	Low	ECC
47	CON_0810	Conversion	Vendor Master	Low	ECC
48	ENH_0010	Enhancement	Condition Based Maintenance User Exit	Low	ECC
49	ENH_0020	Enhancement	Tag Printing for RFID	Medium	ECC

EXHIBIT A, ATTACHMENT 6

No	Object ID	Object Type	Name	Complexity	Component
50	ENH_0030	Enhancement	Work Manager field validation and derivation	High	ECC
51	ENH_0050	Enhancement	Work Manager Auto Populate Timesheet	High	ECC
52	ENH_0060	Enhancement	Work Manager duplicate notification or order check	Medium	ECC
53	ENH_0070	Enhancement	Work Manager custom fields	Medium	ECC
54	ENH_0080	Enhancement	Work Manager Geo-Tag attributes value transfer	Medium	ECC
55	ENH_0090	Enhancement	Request Work - Internal Portal	High	ECC
56	ENH_0100	Enhancement	Auto Update Maintenance Plans based on Tech Object changes/creation	High	ECC
57	ENH_0110	Enhancement	Auto Create Projects based on Approval	Low	ECC
58	ENH_0120	Enhancement	Auto Un-assign Work	Medium	ECC
59	FRM_0010	Form	Notification Form	Medium	ECC
60	FRM_0020	Form	Work Order Package	Medium	ECC
61	FRM_0030	Form	Work Clearance Tags	Low	ECC
62	FRM_0040	Form	Purchase Requisition and Order Forms	Medium	ECC
63	FRM_0050	Form	Crew Schedules Form	Medium	ECC
64	FRM_0060	Form	Customer Quote Form	Medium	ECC
65	INT_0010	Interface	CalAmps to SAP	Medium	ECC
66	INT_0020	Interface	SAP to CalAmps	Medium	ECC
67	INT_0030	Interface	SAP to ESRI	High	ECC
68	INT_0040	Interface	ESRI to SAP	High	ECC
69	INT_0050	Interface	ESRI Routes to BO	Medium	ECC
70	INT_0060	Interface	SAP ESRI Interface	Medium	ECC
71	INT_0070	Interface	PTS	Medium	ECC
72	INT_0080	Interface	AMS	Medium	ECC
73	INT_0090	Interface	IS-U CCS Notifications	Medium	ECC
74	INT_0100	Interface	IS-U CCS Orders	Medium	ECC
75	INT_0110	Interface	IS-U CCS Master Data	High	ECC
76	INT_0120	Interface	Documentum	Medium	ECC
77	INT_0130	Interface	HACH WIMS	Medium	ECC
78	INT_0140	Interface	FEWD	Medium	ECC
79	INT_0150	Interface	FLIR	Medium	ECC

EXHIBIT A, ATTACHMENT 6

No	Object ID	Object Type	Name	Complexity	Component
80	INT 0160	Interface	Kofax	Medium	ECC
81	INT 0170	Interface	AMI	Medium	ECC
82	INT 0180	Interface	SmartView	Medium	ECC
83	INT 0190	Interface	SCADA Water	Medium	ECC
84	INT 0200	Interface	SCADA Waste Water	Medium	ECC
85	INT 0210	Interface	PCS	Medium	ECC
86	INT 0220	Interface	DCS (COMNET)	Medium	ECC
87	INT 0230	Interface	Dig-Smart ESRI	High	ECC
88	INT_0240	Interface	IMPS Sharp Copier Usage Application	Medium	ECC
89	INT 0250	Interface	Primavera	Medium	ECC
90	INT 0260	Interface	Primavera	Medium	ECC
91	INT 0270	Interface	Payment View	Medium	ECC
92	INT 0280	Interface	Riva to SAP PM	Medium	ECC
93	INT_0290	Interface	SAP PM to Riva	Medium	ECC
94	INT 0310	Interface	RFID Scanning	Medium	ECC
95	INT 0320	Interface	ECM integration with Work Manager	Medium	ECC
96	INT 0340	Interface	Update schedule on external system	Medium	ECC
97	INT_0350	Interface	Work Manager - New equipment creation in MDG from Work Manager	Medium	ECC
98	RPT 0010	Report	Report Placeholder - KPI	Low	BI
99	RPT 0020	Report	Report Placeholder - KPI	Low	BI
100	RPT 0030	Report	Report Placeholder - KPI	Low	BI
101	RPT 0040	Report	Report Placeholder - KPI	Low	BI
102	RPT 0050	Report	Report Placeholder - KPI	Low	BI
103	RPT 0060	Report	Report Placeholder - KPI	Low	BI
104	RPT 0070	Report	Report Placeholder - KPI	Low	BI
105	RPT 0080	Report	Report Placeholder - KPI	Low	BI
106	RPT 0090	Report	Report Placeholder - KPI	Low	BI
107	RPT 0100	Report	Report Placeholder - KPI	Low	BI
108	RPT 0110	Report	Report Placeholder - KPI	Low	BI
109	RPT 0120	Report	Report Placeholder - KPI	Low	BI
110	RPT 0130	Report	Report Placeholder - KPI	Low	BI

EXHIBIT A, ATTACHMENT 6

No	Object ID	Object Type	Name	Complexity	Component
111	RPT 0140	Report	Report Placeholder - KPI	Low	BI
112	RPT 0150	Report	Report Placeholder - Dashboards	High	BI
113	RPT 0160	Report	Report Placeholder	Low	BI
114	RPT 0170	Report	Report Placeholder	Low	BI
115	RPT 0180	Report	Report Placeholder	Low	BI
116	RPT 0190	Report	Report Placeholder	Low	BI
117	RPT 0200	Report	Report Placeholder	Low	BI
118	RPT 0210	Report	Report Placeholder	Low	BI
119	RPT 0220	Report	Report Placeholder	Medium	BI
120	RPT 0230	Report	Report Placeholder	Medium	BI
121	RPT 0240	Report	Report Placeholder	Medium	BI
122	RPT 0250	Report	Report Placeholder	Medium	BI
123	RPT 0260	Report	Report Placeholder	Medium	BI
124	RPT 0270	Report	Report Placeholder	Medium	BI
125	RPT 0280	Report	Report Placeholder	Medium	BI
126	RPT 0290	Report	Report Placeholder	Medium	BI
127	RPT 0300	Report	Report Placeholder	Medium	BI
128	RPT 0310	Report	Report Placeholder	Medium	BI
129	RPT 0320	Report	Report Placeholder	Medium	BI
130	RPT 0330	Report	Report Placeholder	Medium	BI
131	RPT 0340	Report	Report Placeholder	Medium	BI
132	RPT 0350	Report	Report Placeholder	Medium	BI
133	RPT 0360	Report	Report Placeholder	Medium	BI
134	RPT 0370	Report	Report Placeholder	Medium	BI
135	RPT 0380	Report	Report Placeholder	Medium	BI
136	RPT 0390	Report	Report Placeholder	Medium	BI
137	RPT 0400	Report	Report Placeholder	Medium	BI
138	RPT 0410	Report	Report Placeholder	Medium	BI
139	RPT 0420	Report	Report Placeholder	High	BI
140	RPT 0430	Report	Report Placeholder	High	BI
141	RPT 0440	Report	Report Placeholder	High	BI
142	RPT 0450	Report	Report Placeholder	High	BI
143	RPT 0460	Report	Report Placeholder	High	BI
144	RPT 0470	Report	Report Placeholder	High	BI

EXHIBIT A, ATTACHMENT 6

No	Object ID	Object Type	Name	Complexity	Component
145	RPT_0480	Report	Report Placeholder	High	BI
146	RPT_0490	Report	Report Placeholder	High	BI
147	RPT_0500	Report	Report Placeholder	High	BI
148	WFL_0010	Workflow	Data maintenance workflow	Medium	ECC
149	WFL_0020	Workflow	Work workflow - Work Manager and ECC	Medium	ECC

Exhibit A, Attachment 7: Development Complexity Definitions

A.7.1. Reports

	Simple	Medium	Complex	Very complex
Programmatic	<ul style="list-style-type: none"> Minimal modifications in an existing report Stand-alone simple report 	<ul style="list-style-type: none"> Modifications to an existing report with new additional fields, alignment, or header/footer changes Report that calls another program internally 	<ul style="list-style-type: none"> Custom-built report with multiple events Consolidation of two to four complex SAP reports 	<ul style="list-style-type: none"> Combination of Legacy and SAP data for report generation Data not readily identifiable for report selection Ambiguous report requirements
Data Selection layout	<ul style="list-style-type: none"> Minimal data retrieval needed Standard SQL statements needed No data computation needed 	<ul style="list-style-type: none"> Data retrieval from multiple tables and views Contains complex checks and/or authorizations needed Dynamic SQL statements needed Arithmetic computations needed 	<ul style="list-style-type: none"> Data computation needed Requires debug specialization to determine underlying SAP logic Requires moderate performance considerations 	<ul style="list-style-type: none"> Contains large number of alternate views Involves multiple currencies and/or their corresponding calculations/tax implications. Requires extensive research
Layout	<ul style="list-style-type: none"> One report layout with page totals 	<ul style="list-style-type: none"> More than one layout with control break totals Logo printing, input-allowed fields, or 2/3D Graphics Printing 	<ul style="list-style-type: none"> Dynamic layout column fields Large number of drilldowns Tree structure report layout 	<ul style="list-style-type: none"> Dynamic layout column fields or single record printed across multiple lines. Special printing considerations Composed of multiple objects
SAP repository	<ul style="list-style-type: none"> Minimal or no SAP repository creation or modification 	<ul style="list-style-type: none"> Some SAP repository creation or modification 	<ul style="list-style-type: none"> Requires large amount of SAP repository object creation or modification Significant effort required to identify SAP components 	<ul style="list-style-type: none"> Components not readily identifiable within SAP Complex aggregation of data and rolup

A.7.2. Interfaces

	Simple	Medium	Complex	Very complex
Data Posting	<ul style="list-style-type: none"> One transaction to be posted in SAP Simple error report No restart functionality required 	<ul style="list-style-type: none"> Contains a few SAP transactions and limited flow decisions Moderate level of error and control reports Some restart functionality 	<ul style="list-style-type: none"> Many SAP transactions involved and/or data conditions Complex error, control, and audit reports required Heavy restart functionality 	<ul style="list-style-type: none"> End-to-end restart functionality Heavy business logic and decision points Composed of multiple objects
Data extraction	<ul style="list-style-type: none"> One output file created Little or no translations Data read from a few tables Simple batch processing 	<ul style="list-style-type: none"> Moderate number of tables accessed One or more output files created Multiple field/table translations Simple processing 	<ul style="list-style-type: none"> Several output files created Complex processing Requires user exit(s) Data read from large number of tables Heavy data translation required Data dependencies 	<ul style="list-style-type: none"> Complex data translation required Interface will include updates in multiple systems Synchronous updates Interface does not fit enterprise architecture Cross-transaction data dependencies Composed of multiple objects
External	<ul style="list-style-type: none"> One file to one SAP transaction Basic validation and error processing Uses SAP standard upload programs 	<ul style="list-style-type: none"> Few files to one or more SAP transactions Field/table translations Moderate validation and error processing May include simple summary/control calculations and reports 	<ul style="list-style-type: none"> Interfaces many files to one or more SAP transactions Requires complex validation and error processing with restart and recovery Includes RFC coding 	<ul style="list-style-type: none"> All of the attributes of a complex interface plus a requirement for multiple files, which will update data in multiple systems Contains multiple characteristics of a "Complex" object or is composed of multiple objects
ALE/IDOC	<ul style="list-style-type: none"> SAP standard ALE message/BAPI and standard IDOC One destination or port Minimal or no data/text translations Simple mapping Standard or no message control Few or no IDOC segments used 	<ul style="list-style-type: none"> Moderate customer function (user exit) enhancements Several destinations/ports. Data/text translations Moderate mapping Several IDOC segments Standard workflow error handling Standard or modified message control 	<ul style="list-style-type: none"> Moderate-to-major IDOC extensions with enhancements Multiple destinations/ports Translations with mapping translations Workflow error handling Message control 	<ul style="list-style-type: none"> Significantly custom IDOC and application module/program with use of tools with complex development logic Composed of multiple objects
Middleware	<ul style="list-style-type: none"> No middleware development required 	<ul style="list-style-type: none"> Minimal middleware development required 	<ul style="list-style-type: none"> Moderate middleware development required. 	<ul style="list-style-type: none"> Significant middleware development required Composed of multiple objects

	Simple	Medium	Complex	Very complex
Data	<ul style="list-style-type: none"> Simple layout changes May require copying/changing the existing program 	<ul style="list-style-type: none"> Complex layout changes New windows with some formatting Substantial changes to print program 	<ul style="list-style-type: none"> New windows with complex formatting Contains multiple main windows with multiple elements Changes to existing print program with complex logic Requires major changes in data and/or layout across pages New functionality/business logic Accesses multiple logical databases 	<ul style="list-style-type: none"> New print program with complex logic Different layouts and data selections for pages Nonstandard print program with complex logic Data drives layout format Composed of multiple objects
Layout				

A.7.3. Conversions

	Simple	Medium	Complex	Very complex
Programmatic	<ul style="list-style-type: none"> One file to one SAP transaction with few variations of SAP data requirements Few field/data translation Basic validation and error processing Use of SAP standard programs Requires no data clean up Online execution 	<ul style="list-style-type: none"> Limited variations of SAP data formatting. Limited conditional screen flow Some table/field translations Summary/control calculations and reports Requires limited data cleanup Online or background (periodic like daily, monthly, and yearly) 	<ul style="list-style-type: none"> Many files to one or more SAP transactions Screen-flow sequence determined by data conditions Complex validations and error processing Includes summary/control calculations and reports Requires extensive data clean up Error logs needed Event-based processing 	<ul style="list-style-type: none"> Complex file structures Uses a combination of call transaction, BAPI, and event-based programming Composed of multiple objects
Data selection/layout	<ul style="list-style-type: none"> Small Data volume Restart mechanism needs moderate effort Minimal dependencies on other conversions 	<ul style="list-style-type: none"> Moderate number of records to be updated Some dependencies on conversions 	<ul style="list-style-type: none"> Significant number of records to be updated Restart mechanism needs high effort Some dependencies conversions 	<ul style="list-style-type: none"> High number of records to be updated Performance will be affected during conversion Might need support from the other teams High dependency on conversions Composed of multiple objects

A.7.4. Enhancements

	Simple	Medium	Complex	Very complex
Exit Identification	<ul style="list-style-type: none"> • Availability of enhancement is known • May include field/menu exit • No modification required through Business transaction event 	<ul style="list-style-type: none"> • User exit/BADI is easily identifiable • Requires moderate effort to understand functionality • Moderate use of enhancement framework 	<ul style="list-style-type: none"> • Significant research needed to locate the enhancement • Menu exits and screen exits required • Requires debugging of SAP code to understand functionality • Significant code changes required 	<ul style="list-style-type: none"> • Requires standard SAP programs to be copied and modified • Involves complex dialog programs with subscreens and Logical Unit of Work considerations • Composed of multiple objects
Data Selection	<ul style="list-style-type: none"> • Small data volume • Restart mechanism needs moderate effort • Minimal dependencies on other conversions 	<ul style="list-style-type: none"> • Moderate number of records to be updated • Some dependencies on conversions 	<ul style="list-style-type: none"> • Significant number of records to be updated • Restart mechanism needs high effort • Some dependencies conversions 	<ul style="list-style-type: none"> • High number of records to be updated • Performance will be affected during conversion • Might need support from the other teams • High dependency on conversions • Composed of multiple objects

A.7.5. Forms

	Simple	Medium	Complex	Very complex
Programmatic	<ul style="list-style-type: none"> • Simple layout or layout changes • One main window with few elements • Minimal changes between pages • Minor changes to an existing program • Changes in the existing subroutine program 	<ul style="list-style-type: none"> • Complex layout with multiple windows • May require new windows with some format changes • May require substantial changes to print program or a new print program • Multiple main windows • Creation of a subroutine 	<ul style="list-style-type: none"> • Requires new windows with complex formatting • Contains multiple main windows with multiple elements • Nonstandard print program with complex logic • New functionality/business logic or multiple subroutines across different areas • Multiple logical databases 	<ul style="list-style-type: none"> • Requires new print program with complex window structures • Different layouts and data selections • Non-SAP standard print program with complex logic • Data-driven layout • New functionality/business logic or multiple subroutines • Composed of multiple objects
Data Selection	<ul style="list-style-type: none"> • No barcode printing • Standard logo printing 	<ul style="list-style-type: none"> • Standard barcode printing • Simple fonts and basic graphics 	<ul style="list-style-type: none"> • Requires creation of custom barcodes or non-SAP barcodes • Conditional barcode printing • Requires creation of cosmetics (grids and boxes) 	<ul style="list-style-type: none"> • Complex barcode logic with barcode rotations • Requires creation of complex graphics • Composed of multiple objects

A.7.6. Workflow

	Simple	Medium	Complex	Very complex
Programmatic	<ul style="list-style-type: none"> • Few methods to be created in existing business objects • Simple business objects (BO) code • Simple attributes implementation • Standard tasks used in workflow template • Few additional methods used for handling 	<ul style="list-style-type: none"> • Moderate number of methods to be created • Function module interface requiring moderate effort • Moderate attributes implementation • Uses SAP standard function module calls • Requires creation of a few roles with custom functions • Minor event triggering for workflow handling 	<ul style="list-style-type: none"> • Requires the creation of a large number of methods • Creation of a function module interface with complex BO code required • Complex attribute implementation • Significant number of complex steps, standard tasks, and additional methods • Requires creation of multiple roles • Requires complex event triggering for workflow handling • Requires complex agent determination 	<ul style="list-style-type: none"> • Requires design and modeling of an SAP Workflow with custom programming of BO and their methods • Composed of multiple objects

Exhibit A, Attachment 8: Development Object Estimation Model

The following estimating model will be used for calculating the impact of changes to the FRICEW Inventory:

Project Role	Complexity	Low			Medium			High		
		Functional	Technical	Total, L	Functional	Tech	Total, M	Functional	Tech	Total, H
ENHANCEMENT										
FS Preparation		27		27	51		51	84		84
Unit Test		13		13	25		25	41		41
FS Review			12	12		24	24		39	39
Tech Spec			12	12		20	20		40	40
Coding			27	27		54	54		90	90
Tech Unit Testing			10	10		20	20		25	25
Integration Testing			15	15		28	28		47	47
Cutover			4	4		7	7		12	12
Go-Live Support			6	6		12	12		19	19
TOTAL, EN				126			241			397
REPORT										
FS Preparation		22		22	41		41	59		59
Unit Test		11		11	20		20	28		28
FS Review			10	10		19	19		27	27
Tech Spec			12	12		18	18		27	27
Coding			20	20		45	45		63	63
Tech Unit Testing			9	9		12	12		18	18
Integration Testing			12	12		23	23		32	32
Cutover			3	3		6	6		8	8
Go-Live Support			5	5		9	9		14	14

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TOTAL, RP				104			193			276
FORMS										
FS Preparation		19		19	36		36	59		59
Unit Test		9		9	18		18	28		28
FS Review			9	9		17	17		27	27
Tech Spec			10	10		16	16		27	27
Coding			18	18		42	42		63	63
Tech Unit Testing			9	9		9	9		18	18
Integration Testing			11	11		20	20		32	32
Cutover			3	3		5	5		8	8
Go-Live Support			4	4		8	8		14	14
TOTAL, FR				92			171			276
INTERFACES										
FS Preparation		31		31	56		56	83		83
Unit Test		15		15	27		27	40		40
FS Review			14	14		27	27		38	38
Tech Spec			9	9		27	27		36	36
Coding			36	36		63	63		72	72
Tech Unit Testing			12	12		18	18		45	45
Integration Testing			17	17		32	32		46	46
Cutover			4	4		8	8		11	11
Go-Live Support			7	7		14	14		19	19
TOTAL, IN				145			272			390
WORKFLOW										
FS Preparation		34		34	68		68	112		112
Unit Test		17		17	33		33	54		54

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FS Review			16	16		32	32		52	52
Tech Spec			18	18		36	36		45	45
Coding			27	27		63	63		126	126
Tech Unit Testing			18	18		27	27		36	36
Integration Testing			19	19		38	38		62	62
Cutover			5	5		9	9		16	16
Go-Live Support			8	8		16	16		26	26
TOTAL, WF				162			322			529
CONVERSION										
FS Preparation		39		39	62		62	90		90
Unit Test		19		19	30		30	44		44
FS Review			18	18		29	29		42	42
Tech Spec			18	18		27	27		45	45
Coding			36	36		63	63		81	81
Tech Unit Testing			18	18		24	24		40	40
Integration Testing			22	22		34	34		50	50
Cutover			5	5		9	9		12	12
Go-Live Support			9	9		14	14		21	21
TOTAL, CN				184			292			425

Exhibit A, Attachment 9: Deliverable Acceptance Form

Document Control Information

Document Identification	
Document Name	Deliverable Acceptance Form
Project Name	<Insert project name>
Client	<Insert client name>
Document Author	<Insert author name>
Document Version	<Insert version number>
Document Status	<Insert document status>
Date Released	<Insert release date dd-mmm-yyyy>
File Name	

Document Edit History

Version	Date	Additions/Modifications	Prepared/Revised by
<Version #>	< dd-mmm-yyyy >	<Provide additional details about this document version.>	<Name>

Document Review/Approval History

Date	Name	Organization/Title	Comments
<dd-mmm-yyy >	<Name>	<Organization/Title>	<Comments>

Distribution of Final Document

The following people are designated recipients of the final version of this document:

Name	Organization/Title
<Name>	<Organization/Title>

Deliverable Acceptance Form

Project Name:	I AM San Diego	
Project Manager:	<Enter project manager's name.>	
Deliverable Name:	<Enter the name of the deliverable under review for deliverable acceptance.>	
Deliverable ID:	<Enter the project deliverable ID. If not applicable, delete this row.>	
Date Deliverable Submitted to Client for Acceptance:	<dd-mmm-yyyy>	Deliverable Acceptance Due Date: <dd-mmm-yyyy>
Phase:	<The project phase where the project deliverable was created.>	
Acceptance Response:	Accepted	<input type="checkbox"/>
	Not accepted until the comments below are addressed	<input type="checkbox"/>

Comments
<p><Document comments regarding the acceptance of the project deliverable.</p> <p>If the deliverable is not accepted, describe in detail the item(s) preventing acceptance, as well as what needs to change in order to make the deliverable acceptable. Changes impacting the agreed scope for the deliverable will need to be documented in a change request and approved through the project's change control process before they can be implemented.></p> <p>Summary comments...</p> <ul style="list-style-type: none"> • Bullet 1 • Bullet 2 • Etc.

Name & Title	Signature	Date
<Name & title of the client representative authorized to accept the project deliverable>	<Signature of the client representative authorized to accept the project deliverable>	<Date of the signature>

Exhibit A, Attachment 10: Task Authorization Form

Services Agreement
Agreement Number <Agreement Number>
Task Authorization Number <Task Authorization Number>
<Date>

[Date]

[Mr./Ms. Addressee's Name]
[Full Legal Name of Client]
[Address]
[City, State, Zip Code]
[Country]

Re: Task Authorization Number [insert number] to Agreement dated [insert date of Agreement]

Dear [Addressee]:

This Task Authorization, including any appendices, schedules, and/or attachments, documents changes to the Statement of Work [insert details of relevant Statement of Work] and the [Insert reference to the original Engagement Letter, Consulting Agreement or Master Services Agreement] between Deloitte Consulting LLP and City of San Diego (the "Client") dated [Insert Date of original agreement], as follows:

PROPOSED TASK AUTHORIZATION

Description of Work
<i>[Insert summary description of work]</i>

IMPACT REVIEW *[The following should be considered and included as impacted by the above Task Authorization (s):]*

Schedule Impact:

EXHIBIT A, ATTACHMENT 10

Cost Impact:
Scope Impact:
Technical Impact:
Staffing Impact:

All other terms and conditions remain unchanged.

If this Task Authorization is consistent with your understanding and acceptable to **[insert full legal name of client]**, please so indicate by countersigning this letter in the space indicated below and returning it to me at the address set out above.

Very truly yours,

DELOITTE CONSULTING LLP

[Name]
[Principal or Director]

ACCEPTED AND AGREED TO BY:

[Full Legal Name of Client]

Authorized Signature

Name (Printed or Typed)

Title (Printed or Typed)

Date of Signature

Exhibit A, Attachment 11: Sample Project Validation Letter

Deloitte.

[TO BE PRINTED ON CLIENT LETTERHEAD]
<DATE>

To Whom It May Concern:

This letter is to confirm that <Client> has engaged the professional services of Deloitte Consulting LLP (“Deloitte Consulting”) in connection with a <XYZ Project>, which entails the following key elements: <List Key Elements of Project (i.e., Data Management, Data Analytics, Performance Management, and SAP BW implementation) >.

Please note that it may be necessary for certain Deloitte Consulting personnel to perform services at our offices located at <List All Client Addresses where work may be performed>, as well as at the offices of Deloitte Consulting. However, Deloitte Consulting personnel are not employees of <Client>, and <Client> does not manage, supervise or control their employment.

Sincerely,

<Client signatory>

EXHIBIT B

COMPENSATION AND FEE SCHEDULE

Exhibit B: Compensation and Fee Schedule

1. Fees and Expenses

Deloitte Consulting will perform the Services on a not to exceed basis. Based on the scope, timing, City responsibilities, and assumptions set forth herein, Deloitte Consulting’s fees for the Services will be \$18,700,000 (including out-of-pocket expenses and applicable taxes).

Notwithstanding the foregoing, City agrees to pay to Deloitte Consulting a pro-rata amount of the applicable fee amount within thirty (30) days of early termination of this Agreement by either Party as permitted under this Agreement.

2. Payment Schedule

Payment will be made on completion of project milestones. Each milestone will be deemed complete when the deliverables assigned to each milestone have been completed. The assignment of deliverables to milestones is as follows:

Milestone	Phase	Deliverable Group	ID	Deliverable	
1	Project Preparation	Project Preparation	Project Management	1.1.01	Project Charter development
		Project Preparation	Project Management	1.1.02	Business Case development
		Project Preparation	Project Management	1.1.03	Project organization, with assigned roles and responsibilities for all project team members
		Project Preparation	Project Management	1.1.04	Set-up and documentation of project standards and project support tools
		Project Preparation	Project Management	1.1.05	Team onboarding document
		Project Preparation	Project Management	1.1.06	Implementation strategy and roadmap
		Project Preparation	Project Management	1.1.07	Scope statement
		Project Preparation	Project Management	1.1.08	Work Breakdown Structure
		Project Preparation	Project Management	1.1.09	Scope Management Plan
		Project Preparation	Project Management	1.1.10	Time Management plan
		Project Preparation	Project Management	1.1.11	Cost Management plan
		Project Preparation	Project Management	1.1.12	Staffing Management Plan

EXHIBIT B

Milestone	Phase	Deliverable Group	ID	Deliverable	
	Project Preparation	Project Management	1.1.13	Quality Management Plan	
	Project Preparation	Project Management	1.1.14	Issue Management Plan	
	Project Preparation	Project Management	1.1.15	Risk Management Plan	
	Project Preparation	Project Management	1.1.16	Communication Management Plan	
	Project Preparation	Project Management	1.1.17	Change Control Management Procedure	
	Project Preparation	Technical Solution Management	1.4.01	Recommendation on requisite hardware, including devices for mobile work and inventory management	
2	Technical Scope	Blueprint	Data Migration	2.6.01	Data Migration Scope and Requirements Document
		Blueprint	Organizational Change Management	2.3.02	Stakeholder Analysis
		Blueprint	Organizational Change Management	2.3.04	Organizational alignment approach
		Blueprint	Organizational Change Management	2.3.06	Communication Plan
		Blueprint	Technical Solution Management	2.4.14	Define Integration Exception and Error-Handling Mechanism
		Blueprint	Technical Solution Management	2.4.15	Define (Update) Software Development Standards
		Blueprint	Business Process Management	2.2.02	Recommendation on finalized software BOM list with justification
		Blueprint	Business Process Management	2.2.19	Definition of user role concept
		Blueprint	Technical Solution Management	2.4.06	Security and Controls plan
		Blueprint	Technical Solution Management	2.4.13	Define User Experience Approach
		Blueprint	Test Management	2.5.01	Testing Policy document
		Blueprint	Data Migration	2.6.02	Data Migration approach and strategy
		Blueprint	Technical Solution Management	2.4.02	Solution landscape and deployment - plan and execution
3	Common Design Complete	Blueprint	Business Process Management	2.2.06	Fit-gap analysis results
		Blueprint	Business Process	2.2.07	To-be business scenario documentation

EXHIBIT B

Milestone		Phase	Deliverable Group	ID	Deliverable
			Management		
		Blueprint	Business Process Management	2.2.10	Logical data models
		Blueprint	Business Process Management	2.2.11	Visualization documentation for custom transactions
		Blueprint	Technical Solution Management	2.4.03	Capacity Planning Approach and System sizing documentation
		Blueprint	Technical Solution Management	2.4.07	Authorization requirements and design
		Blueprint	Training	2.7.01	Project training strategy and training plan
4	Blueprint Complete	Blueprint	Data Migration	2.6.03	Documentation of ownership of Master Data Management Processes
		Blueprint	Data Migration	2.6.11	Data Assessment and Profiling
		Blueprint	Technical Solution Management	2.4.04	Technical infrastructure design document and specifications
		Blueprint	Test Management	2.5.02	Test Management Procedure
		Blueprint	Training	2.7.02	Training Strategy and Training Plan For trainers, super users and end-users
		Blueprint	Data Migration	2.6.10	Data Governance Strategy & Framework
		Blueprint	Business Process Management	2.2.05	Business Organization Structure
		Blueprint	Business Process Management	2.2.22	Report, Interface, Conversion, Enhancement, Form and Workflow (RICEFW) Inventory
		Blueprint	Data Migration	2.6.06	Data Security Design
		Blueprint	Technical Solution Management	2.4.05	Interface Inventory
		Blueprint	Technical Solution Management	2.4.16	Project Landscape System Build activities (Development, QAS, Training)
		Blueprint	Technical Solution Management	2.4.18	Network / Security Architecture for Mobility
		Blueprint	Test Management	2.5.03	Test Strategy document
		Blueprint	Training	2.7.03	Knowledge Transfer Plans by City individual

Milestone	Phase	Deliverable Group	ID	Deliverable	
5	Sprints - Waves 1 and 2	Blueprint	Business Process Management	2.2.03	Business Process Map - 30% Complete
		Blueprint	Business Process Management	2.2.01	Business Requirements documentation - 30% complete
		Blueprint	Business Process Management	2.2.04	Business process flow documentation - 30% complete
		Blueprint	Business Process Management	2.2.08	Functional requirements and design specifications - 30% complete
		Realization Build	Business Process Management	3.2.09	Configuration documentation - 30% complete
		Realization Build	Business Process Management	3.2.15	Functional Unit Test Cases – identification, scripting, data preparation, and execution - 30% complete
		Realization Build	Business Process Management	3.2.16	Technical Unit Test Cases – identification, scripting, data preparation, and execution - 30% complete
		Realization Build	Business Process Management	3.2.17	String Test Cases – identification, scripting, data preparation and execution - 30% complete
		Realization Build	Data Migration	3.6.05	Data Quality Plan
		Realization Build	Organizational Change Management	3.3.01	Organizational Change Management Roadmap and Strategy
		Realization Build	Organizational Change Management	3.3.03	Change Impact Analysis
		Realization Build	Organizational Change Management	3.3.05	Baseline of current state
		Realization Build	Technical Solution Management	3.4.17	Production Environment Design
		Blueprint	Business Process Management	2.2.03	Business Process Map - 65% Complete
		Blueprint	Business Process Management	2.2.01	Business Requirements documentation - 65% complete
		Blueprint	Business Process Management	2.2.04	Business process flow documentation - 65% complete
		Blueprint	Business Process Management	2.2.08	Functional requirements and design specifications - 65% complete
		Realization Build	Business Process	3.2.09	Configuration documentation - 65% complete

EXHIBIT B

Milestone		Phase	Deliverable Group	ID	Deliverable
			Management		
		Realization Build	Business Process Management	3.2.15	Functional Unit Test Cases – identification, scripting, data preparation, and execution - 65% complete
		Realization Build	Business Process Management	3.2.16	Technical Unit Test Cases – identification, scripting, data preparation, and execution - 65% complete
		Realization Build	Business Process Management	3.2.17	String Test Cases – identification, scripting, data preparation and execution - 65% complete
6	Sprints and Build Complete	Realization Build	Business Process Management	3.2.12	Technical requirements and design specifications
		Realization Build	Data Migration	3.6.04	Data Mapping Documentation
		Realization Build	Technical Solution Management	3.4.18	Solution architecture diagram
		Realization Build	Test Management	3.5.04	Test Plan
		Blueprint	Business Process Management	2.2.03	Business Process Map - 100% Complete
		Blueprint	Business Process Management	2.2.01	Business Requirements documentation - 100% complete
		Blueprint	Business Process Management	2.2.04	Business process flow documentation - 100% complete
		Blueprint	Business Process Management	2.2.08	Functional requirements and design specifications - 100% complete
		Realization Build	Business Process Management	3.2.09	Configuration documentation - 100% complete
		Realization Build	Business Process Management	3.2.15	Functional Unit Test Cases – identification, scripting, data preparation, and execution - 100% complete
		Realization Build	Business Process Management	3.2.16	Technical Unit Test Cases – identification, scripting, data preparation, and execution - 100% complete
		Realization Build	Business Process Management	3.2.17	String Test Cases – identification, scripting, data preparation and execution - 100% complete
		Realization Build	Business Process Management	3.2.21	Solution documentation
		Realization Build	Organizational Change Management	3.3.10	User role document

EXHIBIT B

Milestone	Phase	Deliverable Group	ID	Deliverable	
	Realization Build	Technical Solution Management	3.4.09	Batch job requirements	
	Realization Build	Training	3.7.09	End User Training Curriculum	
	Realization Build	Business Process Management	3.2.13	Business Process Procedures	
	Realization Build	Business Process Management	3.2.14	Application configuration	
	Realization Build	Business Process Management	3.2.18	Custom application code	
	Realization Build	Organizational Change Management	3.3.11	Communications Development	
	Realization Build	Technical Solution Management	3.4.12	System User Roles and Authorization Administration	
	Realization Build	Technical Solution Management	3.4.16	Security Role Development	
7	Ready to Test	Realization Test	Data Migration	4.6.07	Data Quality Assessment Reports
		Realization Test	Test Management	4.5.10	Security Role Test cases - identification and execution
		Realization Test	Test Management	4.5.11	Integration Test cases – scripting and test data preparation
		Realization Test	Test Management	4.5.15	Security Role Test cases - scripting and test data preparation
		Realization Test	Data Migration	4.6.08	Data Migration Test Reports
		Realization Test	Technical Solution Management	4.4.19	Set-up and preparation of testing and training environments
		Realization Test	Test Management	4.5.12	Regression Test cases – scripting and test data preparation
		Realization Test	Training	4.7.06	End-user training content
8	Integration Test Cycles 1 and 2 Complete	Realization Test	Test Management	4.5.05	Integration Test cases – identification and execution of Cycle 1
		Realization Test	Test Management	4.5.05	Integration Test cases – identification and execution of Cycle 2
9	Testing Complete	Realization Test	Test Management	4.5.05	Integration Test cases – identification and execution of Cycle 3

EXHIBIT B

Milestone	Phase	Deliverable Group	ID	Deliverable	
	Realization Test	Test Management	4.5.07	Regression Test cases – identification and execution	
	Realization Test	Test Management	4.5.09	Physical Infrastructure Test cases – identification, scripting , test data preparation, and test execution	
	Realization Test	Test Management	4.5.14	User Acceptance Test cases – scripting and data preparation	
	Realization Test	Test Management	4.5.08	Performance Test cases –identification, scripting, test data preparation, and test execution	
	Realization Test	Test Management	4.5.13	User Acceptance Test cases – identification and test execution	
	Realization Test	Training	4.7.11	End User Training Logistics Plan	
10	System Live	Final Preparation	Application Lifecycle Management	5.9.01	Project and operational standards procedure documentation
	Final Preparation	Application Lifecycle Management	5.9.02	ALM plan to transition to production support organization	
	Final Preparation	Cutover Management	5.8.02	Operations Maturity Assessment Report	
	Final Preparation	Cutover Management	5.8.04	Go-live simulation	
	Final Preparation	Cutover Management	5.8.07	Coordination Plan for Legacy System Retirement	
	Final Preparation	Organizational Change Management	5.3.07	Organizational Change Management readiness documentation	
	Final Preparation	Organizational Change Management	5.3.08	Production support readiness documentation	
	Final Preparation	Technical Solution Management	5.4.08	Technical Operations and Handover Plan	
	Final Preparation	Technical Solution Management	5.4.10	Batch job scheduling	
	Final Preparation	Technical Solution Management	5.4.11	Support Center/Help Desk Staffing Strategy	
	Final Preparation	Training	5.7.04	Educational Readiness Review	
	Final Preparation	Training	5.7.07	Training delivery for trainers and super-users	
	Final Preparation	Cutover Management	5.8.01	Cutover plan and execution	
	Final Preparation	Cutover Management	5.8.03	Go-live checklist	
	Final Preparation	Cutover Management	5.8.05	Readiness for Cutover - document for sign-off	

EXHIBIT B

Milestone		Phase	Deliverable Group	ID	Deliverable
		Final Preparation	Cutover Management	5.8.06	Go-live check - verification tests
		Final Preparation	Data Migration	5.6.09	Plan and Execute Data Migration – Extraction, Transformation, Enrichment Load, and Reconciliation
		Final Preparation	Organizational Change Management	5.3.09	End User acceptance survey
11	Support – 50%	Go Live and Support	Cutover Management	6.8.08	Post go-live production support - 50%
		Final Preparation	Training	5.7.05	Training Evaluations feedback
		Final Preparation	Training	6.7.08	Knowledge Transfer - 50%
12	Support Complete	Go Live and Support	Training	6.7.08	Knowledge Transfer Plans Completed
		Go Live and Support	Project Management	N/A	Final System Acceptance as described in Exhibit A, Section 8.2

Deloitte Consulting will invoice the City the fee amounts per the schedule below based upon the completion of each milestone and the acceptance of associated deliverables. On an exceptions basis deliverables may be deferred through mutual agreement and a documented change order, and included in a later milestone. On an exception basis, if a significant portion of a deliverable is complete and meets the relevant acceptance criteria, and there are minor incomplete sub-items of the deliverable that both the City and Deloitte agree can be deferred, then the discrete deliverable sub-items may be separated and deferred to a future deliverable or sub-deliverable and documented as such.

Milestone	Invoice Amount
1 Project Preparation	\$1,513,000
2 Technical Scope	\$1,513,000
3 Common Design Complete	\$1,513,000
4 Blueprint Complete	\$1,513,000
5 Sprints Wave 2	\$1,513,000
6 Build Complete	\$1,513,000
7 Ready to Test	\$1,513,000
8 Integration Cycle 2	\$1,513,000
9 Testing Complete	\$1,513,000
10 System Live	\$1,513,000

Milestone		Invoice Amount
11	Support mid-point	\$1,513,000
12	Support Complete	\$2,057,000
Total		\$18,700,000

Deloitte Consulting may suspend or terminate the Services if City fails to pay invoiced amounts within 30 days of the City’s receipt of the applicable invoice.

3. Long Term Travel Tax

Temporary living reimbursements to Deloitte Consulting’s personnel may be deemed compensatory under federal, state, and local tax laws if such personnel’s assignment in a particular location will exceed or has exceeded one year. The Parties shall cooperate in good faith and plan ahead to limit the duration of a person's assignment in a particular location to not exceed the stipulated one-year limit. If the City’s requirements are such that it becomes necessary for a person’s services in a particular location to continue for a year or more and, as a result, such person’s living expenses are deemed compensatory for tax purposes, then City shall pay Deloitte Consulting the amount of additional compensation provided to Deloitte Consulting’s personnel to compensate for taxes imposed therefor as reflected on a corresponding invoice.

4. Detailed Breakdown of Fees and Expenses

	Project Role	Engagement Principal	QA Principal	Project Director	Method Coach	Project Analyst	Functional Lead	EAM Lead	EAM Analyst			
	Hourly Rate	\$404.80	\$402.50	\$380.65	\$319.70	\$219.65	\$355.35	\$161	\$220.80			
	Work Stream									Labor Hours Total	Dollars	Key Deliverables
Project Definition												
PMO Deliverables		52	3	181	40	181				457	\$143,708.28	Project Plan, Management, and Oversight
Functional Deliverables							181	181	181	543	\$133,391.75	Workshop Schedule and Approach
TOTAL NTE, PHASE 1												
Blueprint												
PMO Deliverables		192	58	769	119	769				1907	\$600,679.08	Project Plan, Management, and Oversight
Functional Deliverables							769	769	769	2307	\$566,914.94	Blueprint Design Document
TOTAL NTE, PHASE 1												
Realization Build												
PMO Deliverables		204	5	814	0	814				1837	\$573,053	Project Plan, Management, and Oversight
Functional Deliverables							814	814	814	2443	\$600,262	Configuration and Unit Test
TOTAL NTE, PHASE 1												
Realization Test												
PMO Deliverables		192	66	679	0	679				1615	\$511,586	Project Plan, Management, and Oversight
Functional Deliverables							679	769	769	2217	\$534,763	Integration Test
TOTAL NTE, PHASE 1												
Final Preparation												
PMO Deliverables		57	9	226	0	226				518	\$162,317	Project Plan, Management, and Oversight
Functional Deliverables							226	226	226	679	\$166,739	Dress Rehearsal
TOTAL NTE, PHASE 1												
Closeout												
PMO Deliverables		90	0	317	0	588				995	\$286,344	Project Plan, Management, and Oversight

EXHIBIT B

Functional Deliverables							588	407	271	1267	\$334,467	Support
TOTAL NTE, PHASE 1												
TOTAL NTE, PROJECT		\$318,641	\$56,446	\$1,136,535	\$50,620	\$715,445	\$1,157,449	\$509,843	\$669,247		\$4,614,230	

	Project Role	PPM	Work Order Lifecycle	App Anal - Mobility	App Anal - GIS	App Anal - PPM	App Anal - PM	SCM (PR/IM/WM)	GIS Integration	Mobility	Labor Hours Total	Dollars	Key Deliverables
	Hourly Rate	\$285.20	\$285	\$81.00	\$81.00	\$81.00	\$81.00	\$167.90	\$166.75	\$175.95			
Work Stream													
Project Preparation													
Functional Deliverables		34	34				0	0	0	0	68	\$19,353	Workshop Schedule
TOTAL NTE, PHASE 1													
Blueprint													
Functional Deliverables		735	735	814	814	814	724	888	848	735	7108	\$1,095,679	Blueprint Design Document
TOTAL NTE, PHASE 1													
Realization - Build													
Functional Deliverables		814	814	860	860	860	814	814	814	814	7464	\$1,155,087	Configuration and Unit Test
TOTAL NTE, PHASE 1													
Realization - Test													
Functional Deliverables		452	724	814	814	814	905	769	786	769	6848	\$1,002,131	Integration Test
TOTAL NTE, PHASE 1													
Final Preparation													
Functional Deliverables			226	413	435	413		452	452	452	2844	\$397,645	Dress Rehearsal
TOTAL NTE, PHASE 1													
Go-Live													
Functional Deliverables			271	407	588	407		588	407	486	3155	\$443,211	Support
TOTAL NTE, PHASE 1													

EXHIBIT B

TOTAL NTE, PROJECT		\$799,934	\$267,956	\$284,446	\$267,956	\$197,875	\$589,611	\$551,626	\$573,106		\$4,113,108	
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	Project Role	Overall Tech Lead	Offsite Dev Lead	Onsite Dev Lead	Portal Dev	Middleware Developer	Application Developer	Back End Lead	BI Dev	BI Lead	Front End Lead			
	Hourly Rate	\$354.20	\$127.00	\$175.95	\$59.00	\$59.00	\$59.00	\$81.00	\$59.00	\$177.10	\$81.00			
	Work Stream											Labor Hours Total	Dollars	Key Deliverables
Project Preparation														
Technology & Architecture Deliverables		181										181	\$64,094	Tech Leadership, Methods and Approach
Development & Integration Deliverables			37	37	0	0	0	0	0	0		75	\$11,306	Development Standards
TOTAL NTE, PHASE 1														
Blueprint														
Technology & Architecture Deliverables		769										769	\$272,402	Tech Oversight and Leadership, Strategy Documents
Development & Integration Deliverables			828	828	0	136	362	0	0	181	68	2402	\$317,708	Development Scope and Plans
TOTAL NTE, PHASE 1														
Realization Build														
Technology & Architecture Deliverables		814										814	\$288,425	Tech Oversight and Leadership
Development & Integration Deliverables			916	916	362	1629	5089	814	633	814	814	11988	\$1,008,741	Software Development and Testing
TOTAL NTE, PHASE 1														
Realization Test														
Technology & Architecture Deliverables		769										769	\$272,402	Tech Oversight and Leadership
Development & Integration			865	865	0	2036	2262	769	769	769	769	9104	\$821,839	Test Support

EXHIBIT B

Deliverables															
TOTAL NTE, PHASE 1															
Final Preparation															
Technology & Architecture Deliverables		226											226	\$80,118	Tech Oversight and Leadership
Development & Integration Deliverables			254	254	0	724	523	226	226	226	271		2705	\$244,337	Deployment Support
TOTAL NTE, PHASE 1															
Go-live															
Technology & Architecture Deliverables		294											294	\$104,153	Tech Oversight and Leadership
Development & Integration Deliverables			662	458	0	498	860	226	226	317	407		3653	\$365,421	Go-live Support
TOTAL NTE, PHASE 1															
TOTAL NTE, PROJECT		\$1,081,596	\$452,446	\$591,015	\$21,352	\$296,270	\$536,622	\$164,896	\$109,433	\$408,603	\$188,714			\$3,850,952	

Project Role	Data Analyst	Data Integration Developer	MDG Lead	Technical Infrastructure Analyst	User Experience Team Lead	Change Specialist	Change/Comm. Specialist	Training Developer	Org Design Specialist	Remote Change Specialist				
	Hourly Rate	\$59.00	\$59.00	\$157.55	\$104.00	\$150.65	\$287.50	\$246.10	\$95.00	\$180.00	\$80.00	Labor Hours Total	Dollars	Key Deliverables
Work Stream														
Project Preparation														
Information Management/Data Deliverables		0	0	0	0	0						0	\$0.00	
OCM Deliverables							0	0	0	0	0	0	\$0.00	
TOTAL NTE, PHASE 1														
Program														
Information Management/Data Deliverables		0	0	713	814	713						2239	\$304,284	Information Management Design
OCM Deliverables							181	96	407	407	407	1499	\$220,221	Change

EXHIBIT B

														Assessment and Strategy
TOTAL NTE, PHASE 1														
Realization Build														
Information Management/Data Deliverables		633	633	916	916	916						4015	\$452,347	Report Builds
OCM Deliverables							814	362	3076	0	916	5169	\$688,709	Stakeholder Engagement and Communications
TOTAL NTE, PHASE 1														
Realization Test														
Information Management/Data Deliverables		769	769	865	865	789	769	362		0		5189	\$746,139	Report Testing
OCM Deliverables								362	2092	0	865	3319	\$357,051	Training Development
TOTAL NTE, PHASE 1														
Final Preparation														
Information Management/Data Deliverables		226	226	254	356	25						1088	\$107,581	Cutover Support
OCM Deliverables							226	0	23	0	254	503	\$87,537	Training Delivery
TOTAL NTE, PHASE 1														
Go-Live														
Information Management/Data Deliverables		317	317	356	356	0						1346	\$130,546	Support
OCM Deliverables							0	0	0	0	0			Comm.
TOTAL NTE, PHASE 1														
TOTAL NTE, PROJECT		\$114,771	\$114,771	\$489,118	\$344,042	\$368,023	\$572,273	\$290,858	\$531,841	\$73,287	\$195,432		\$3,094,419	

Project Role	Training Lead	OCM Lead	S&C Lead	Security Specialist 1	Controls Specialist	GRC Specialist	S&C Oversight	Security Specialist 2
Hourly	\$167.90	\$258.75	\$327.75	\$285.20	\$284.05	\$287.50	\$403.65	\$246.10

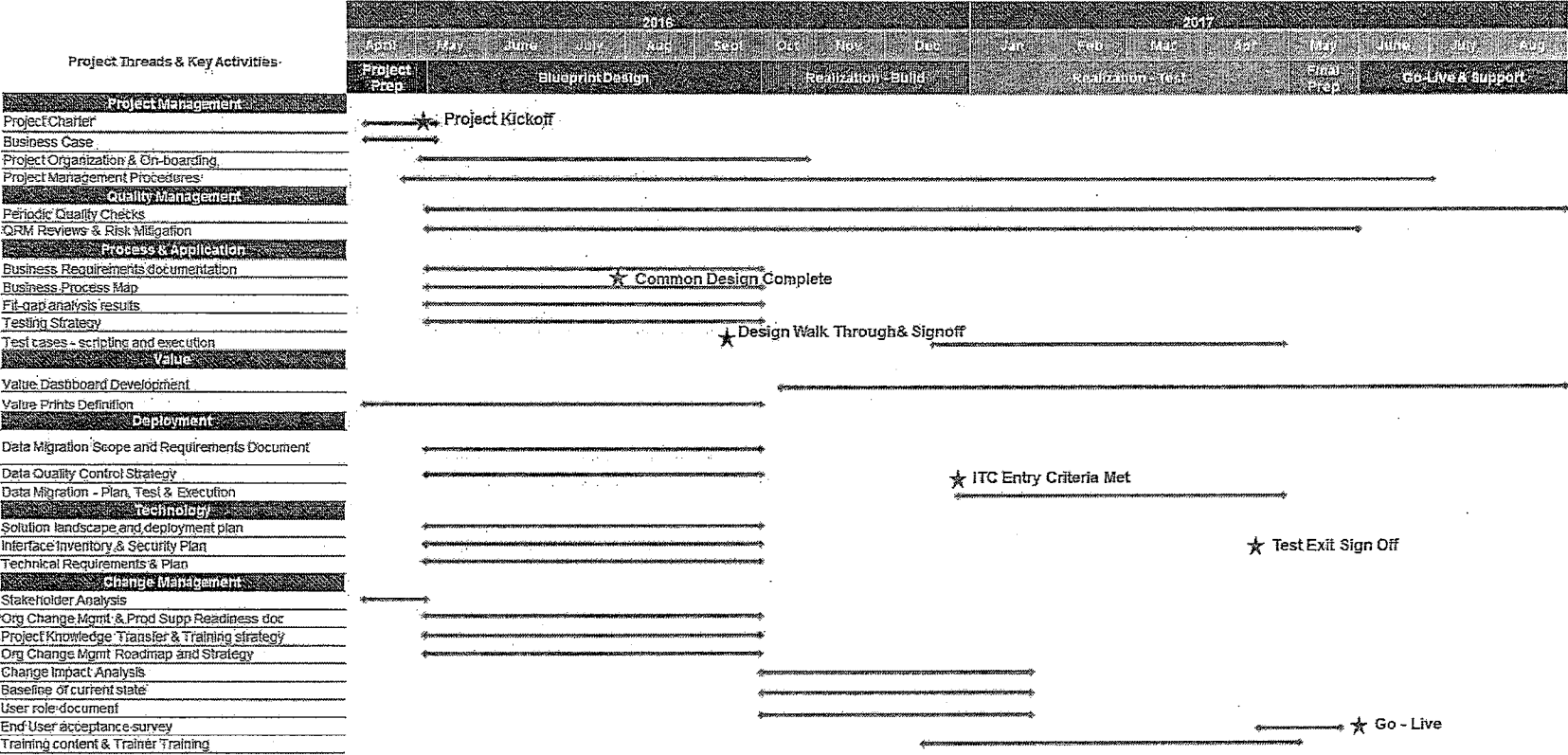
EXHIBIT B

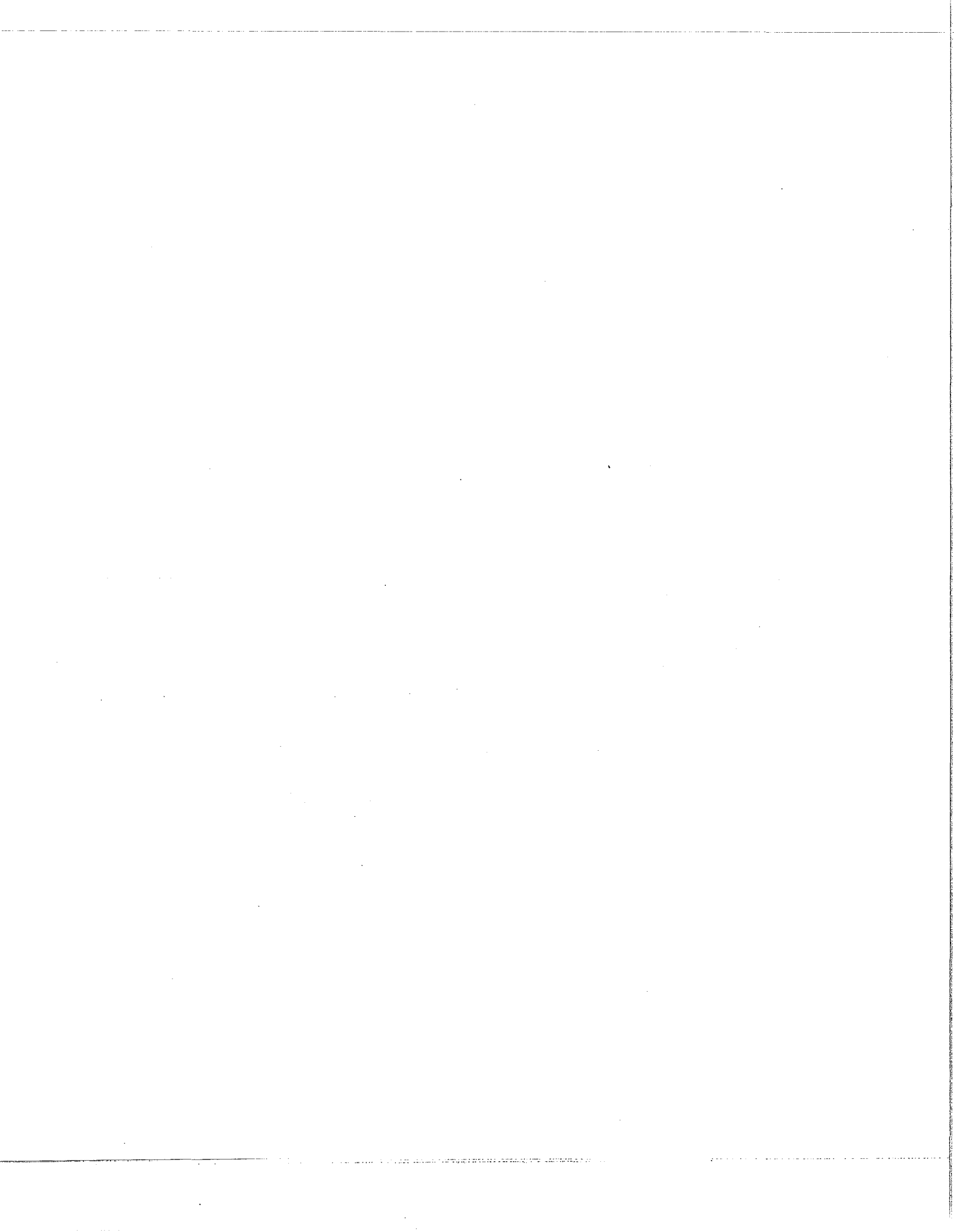
	Rate											
	Work Stream									Labor Hours Total	Dollars	Key Deliverables
Project Preparation												
S&C Deliverables			45	136	0	0	18			199	\$60,837	Project Planning, Security Assessment
OCM Deliverables	0	127								127	\$32,775	Project Planning, Stakeholder Identification
TOTAL NTE, PHASE 1												
Blueprint												
S&C Deliverables			192	769	543	0	72			1577	\$465,770	Security Design
OCM Deliverables	407	461								869	\$187,757	Change and Training Strategies
TOTAL NTE, PHASE 1												
Realization Build												
S&C Deliverables			204	814	181	0	81	452		1733	\$494,563	Security Build and Unit Test
OCM Deliverables	916	489								1405	\$280,231	Training Development
TOTAL NTE, PHASE 1												
Realization Test												
S&C Deliverables			192	769	0	588	77	769		2395	\$671,742	Security Test
OCM Deliverables	865	461								1327	\$264,663	Training Deployment Planning and Preparation
TOTAL NTE, PHASE 1												
Final Preparation												
S&C Deliverables			90	226	0	226	23	226		792	\$223,993	Security Deployment
OCM Deliverables	254	136								390	\$77,842	Training Delivery
TOTAL NTE, PHASE 1												
Go-Live												
S&C Deliverables			23	226	0	90	27	0		366	\$108,893	Support
OCM Deliverables	68	181								249	\$58,215	Communications and Ongoing Training
TOTAL NTE, PHASE 1												
TOTAL NTE, PROJECT	\$421,557	\$479,929	\$244,646	\$838,640	\$205,602	\$260,124	\$120,520	\$356,266			\$2,927,288	

EXHIBIT C
TIME SCHEDULE

Exhibit C: High-Level Estimated Timeline

The project is estimated to be executed on a 17 month timeline as illustrated below. This timeline is preliminary, and the final project timeline will be confirmed during the Blueprint phase. Changes to the timeline, if required, will be managed using an amendment to the Agreement.





EQUAL OPPORTUNITY CONTRACTING PROGRAM (EOCP)

CONSULTANT REQUIREMENTS

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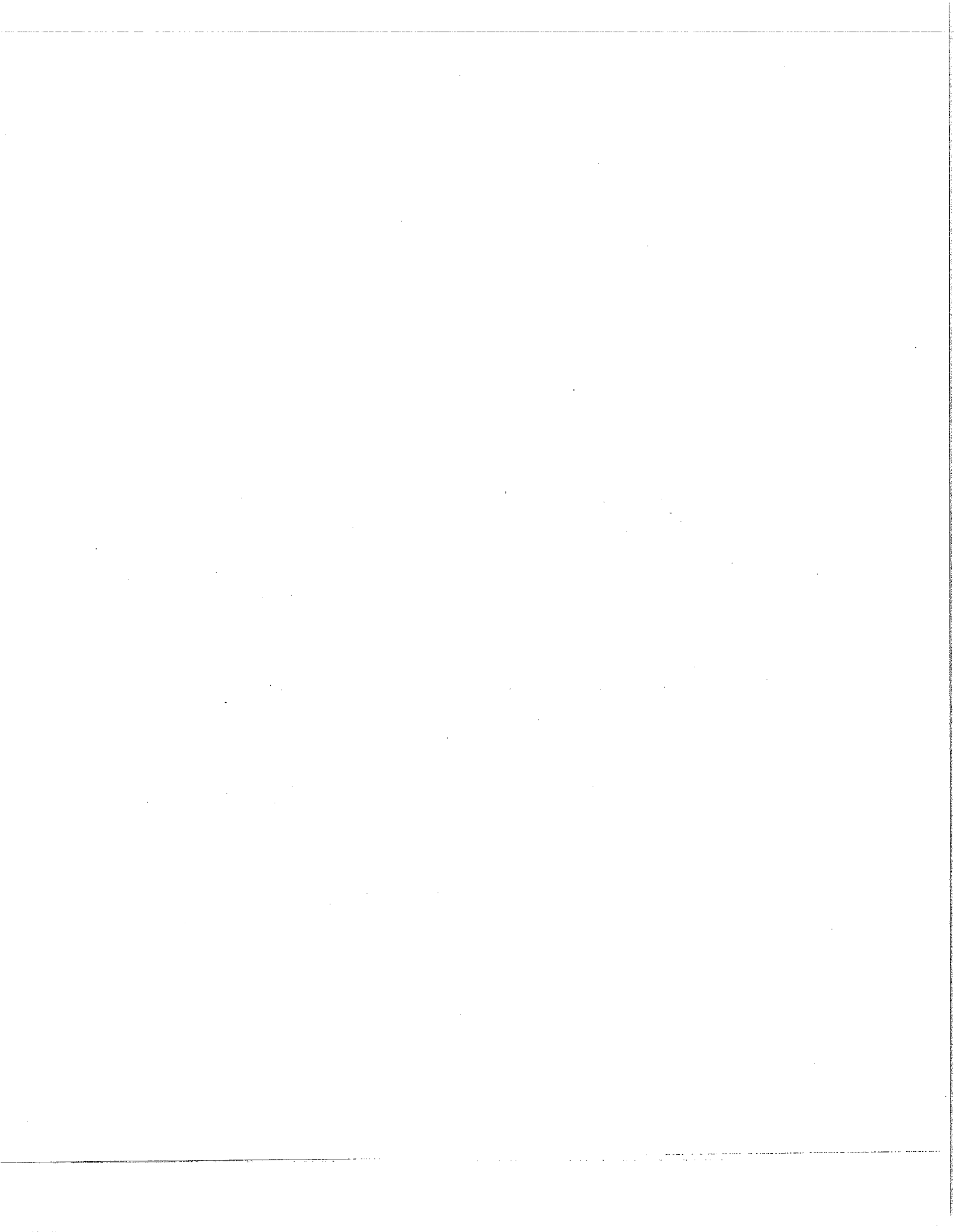
I. **City’s Equal Opportunity Commitment.** The City of San Diego (City) is strongly committed to equal opportunity for employees and Subcontractors of Consultants doing business with the City. The City encourages its Consultants to share this commitment. Consultants are encouraged to take positive steps to diversify and expand their Subcontractor solicitation base and to offer consulting opportunities to all eligible Subcontractors. Consultants are encouraged to take positive steps to diversify and expand their subcontractor and supplier solicitation base and to offer opportunities to all eligible business firms.

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. Disclosure of Discrimination Complaints (Attachment AA). 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, gender expression, gender identity, 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.

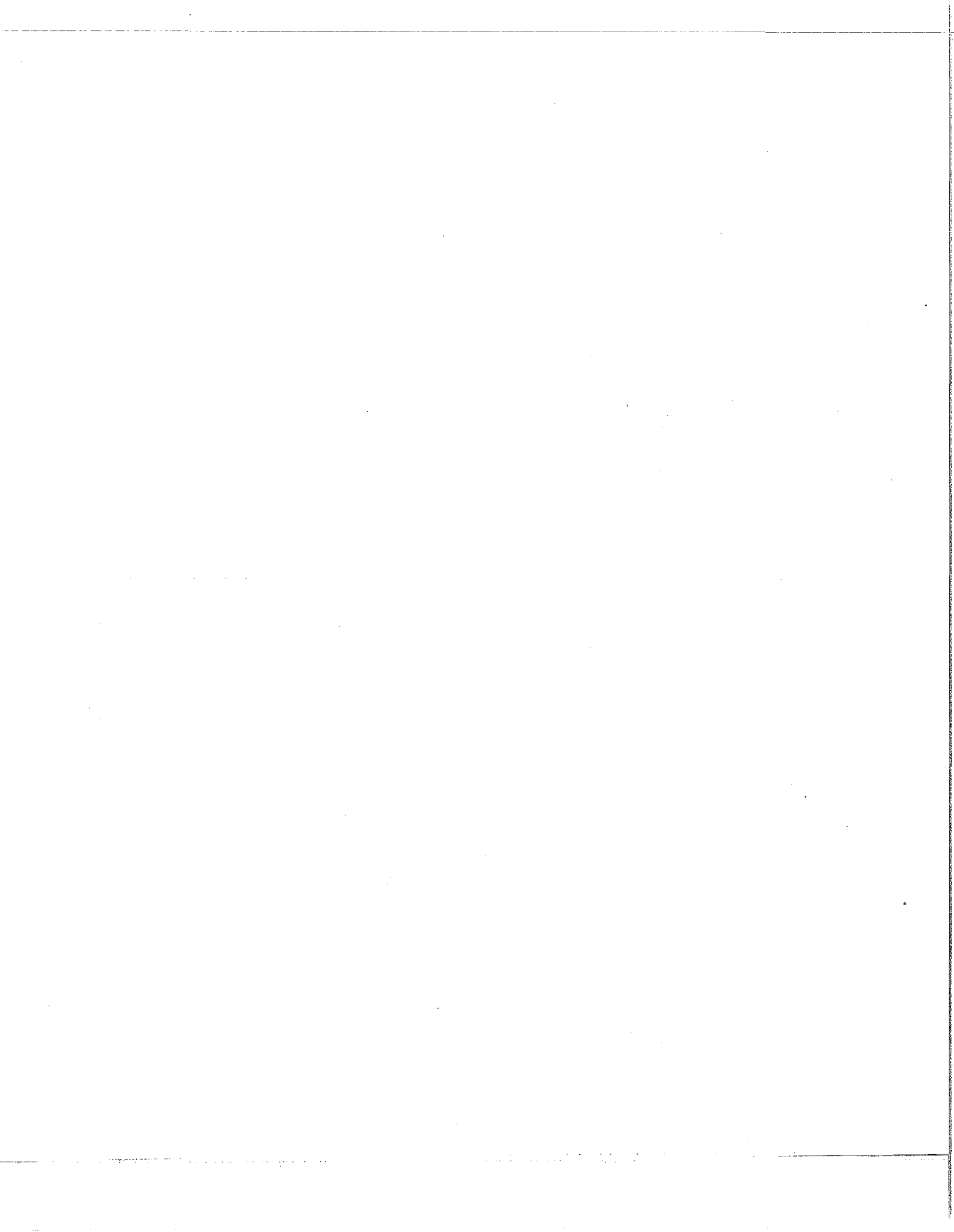
III. **Equal Employment Opportunity Outreach Program.** Consultants shall comply with requirements of San Diego Municipal Code Sections 22.2701 through 22.2707. Consultants shall submit with their proposal a Work Force Report for approval by the Program Manager of the City of San Diego Equal Opportunity 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 BB) 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 all consultant contracts, the City shall apply a maximum of an additional 12 points for SLBE or ELBE participation, to the proposer's subtotal maximum evaluation points. Additional points will be awarded as follows to achieve the proposer's final maximum evaluation points :
 - a. If the proposer achieves 20% participation, apply 5 points to the proposer's score; or



- b. If the proposer achieves 25% participation, apply 10 points to the proposer's score; or
 - c. If the prime consultant is a SLBE or an ELBE, apply 12 points to the proposer's score.
- B. Subcontractor Participation List. The Subcontractor Participation List (Attachment CC) 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.

V. Maintaining Participation Levels.

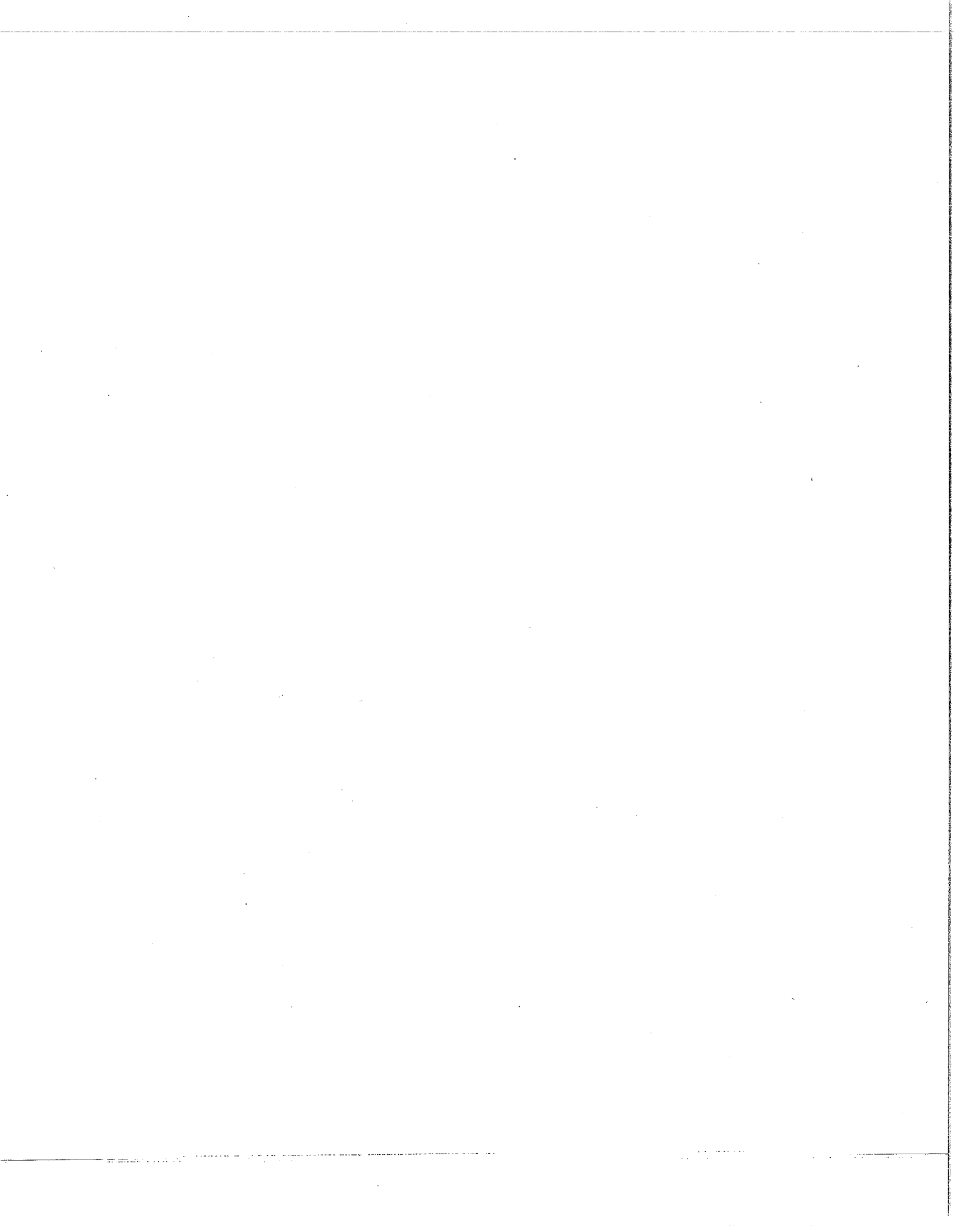
- A. Bid discounts and additional points are based on the Consultant's level of participation prior to the award of goods, services, or consultant contract. Consultants are required to achieve and maintain the SLBE or ELBE participation levels throughout the duration of the goods, services, or consultant contract.
- B. If the City modifies the original specifications, the Consultant shall make reasonable efforts to maintain the SLBE or ELBE participation for which the bid discount or additional points were awarded. The City must approve in writing the reduction in SLBE or ELBE participation levels.
- C. The Consultant shall notify and obtain written approval from the City in advance of any reduction in subcontract scope, termination, or substitution for a designated SLBE or ELBE subcontractor.
- D. Consultant's failure to maintain SLBE or ELBE participation levels as specified in the goods, services, or consultant contract shall constitute a default and grounds for debarment under Chapter 2, Article 2, Division 8, of the San Diego Municipal Code.
- E. The remedies available to the City under Council Policy 100-10 are cumulative to all other rights and remedies available to the City.

VI. Definitions.

Commercially Useful Function: a Small Local Business Enterprise or Emerging Local Business Enterprise (SLBE/ELBE) performs a commercially useful function when it is responsible for execution of the work and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the SLBE/ELBE shall also be responsible, with respect to materials and supplies used on the contract, for negotiating price, determining quantity and quality, ordering the material, and installing (where applicable) and paying for the material itself.

To determine whether an SLBE/ELBE is performing a commercially useful function, an evaluation will be performed of the amount of work subcontracted, normal industry practices, whether the amount the SLBE/ELBE firm is to be paid under the contract is commensurate with the work it is actually performing and the SLBE/ELBE credit claimed for its performance of the work, and other relevant factors. Specifically, a SLBE/ELBE does not perform a commercially useful function if its role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of meaningful and useful SLBE/ELBE participation, when in similar transactions in which SLBE-ELBE firms do not participate, there is no such role performed.

Disadvantaged Business Enterprise (DBE): a certified business that is (1) at least fifty-one (51%) owned by socially and economically Disadvantaged Individuals, or, in the case of a publicly owned business at least fifty-one percent (51%) of the stock is owned by one or more socially and economically Disadvantaged Individuals; and (2) whose daily business operations are managed and directed by one or more socially and economically disadvantaged owners. Disadvantaged Individuals include Black Americans, Hispanic Americans, Asian Americans, and other minorities, or individual found to be



disadvantaged by the Small Business Administration pursuant to Section 8 of the Small Business Reauthorization Act.

Disabled Veteran Business Enterprise (DVBE): a certified business that is (1) at least fifty-one percent (51%) owned by one or more disabled veterans; and (2) business operations must be managed and controlled by one or more disabled veterans. Disabled Veteran is a veteran of the U.S. military, naval, or air service; the veteran must have a service-connected disability or at least 10% or more; and the veteran must reside in California. The firm shall be certified by the State of California's Department of General Services, Office of Small and Minority Business.

Emerging Business Enterprise (EBE): a business whose gross annual receipts do not exceed the amount set by the City Manager, and which meets all other criteria set forth in the regulations implementing the City's Small and Local Business Preference Program. The City Manager shall review the threshold amount for EBEs on an annual basis, and adjust as necessary to reflect changes in the marketplace.

Emerging Local Business Enterprise (ELBE): a Local Business Enterprise that is also an Emerging Business Enterprise.

Local Business Enterprise (LBE): a firm having a Principal Place of Business and a Significant Employment Presence in San Diego 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.

Minority Business Enterprise (MBE): a certified business that is (1) at least fifty-one percent (51%) owned by one or more minority individuals, or, in the case of a publicly owned business at least fifty-one percent (51%) of the stock is owned by one or more minority individuals; and (2) whose daily business operations are managed and directed by one or more minorities owners. Minorities include the groups with the following ethnic origins: African, Asian Pacific, Asian Subcontinent, Hispanic, Native Alaskan, Native American, and Native Hawaiian.

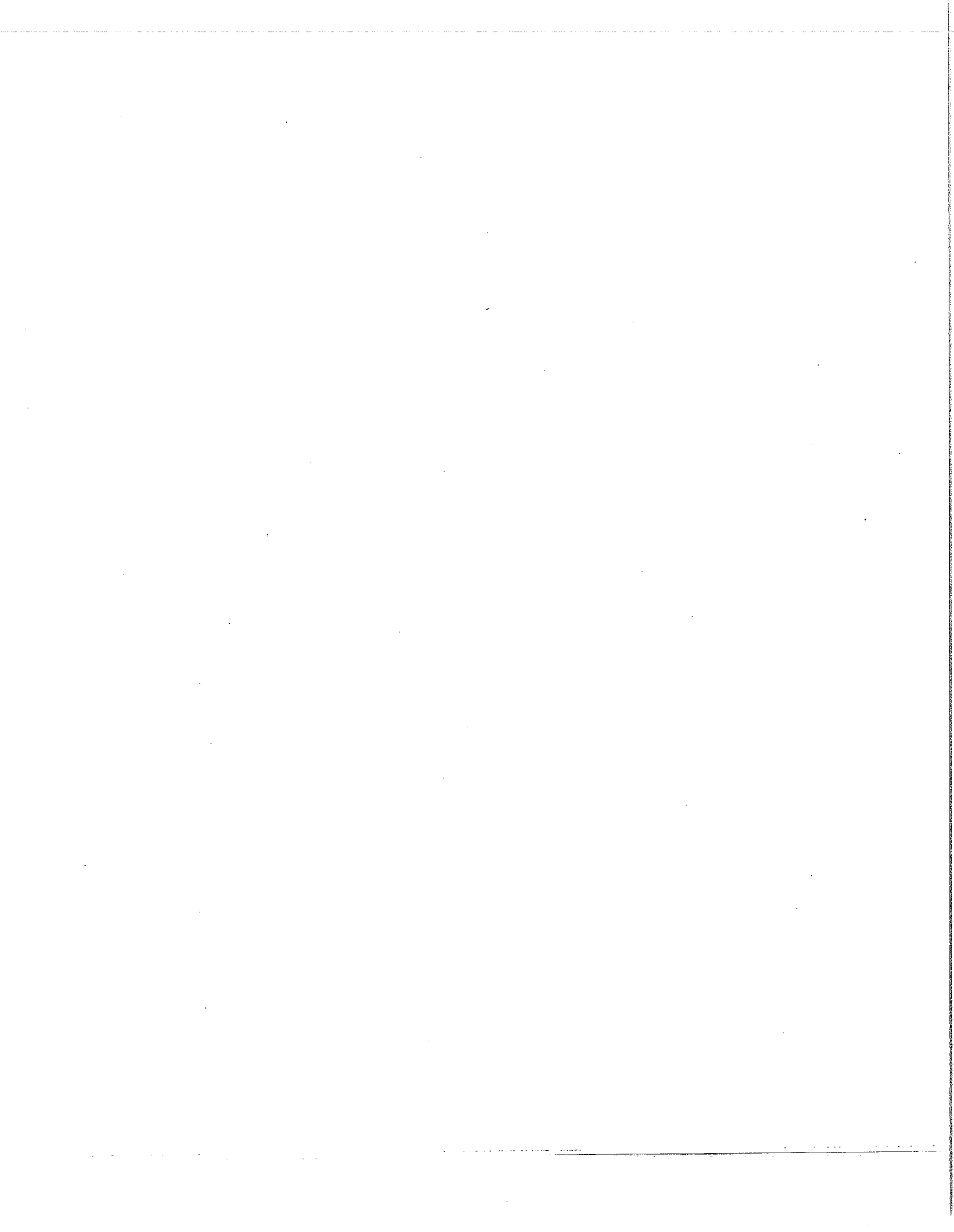
Other Business Enterprise (OBE): any business which does not otherwise qualify as Minority, Woman, Disadvantaged or Disabled Veteran Business Enterprise.

Principal Place of Business: a location wherein a firm maintains a physical office and through which it obtains no less than fifty percent (50%) of its overall customers or sales dollars.

Significant Employee Presence: no less than twenty-five percent (25%) of a business's total number of employees are domiciled in San Diego County.

Small Business Enterprise (SBE): a business whose gross annual receipts do not exceed the amount set by the City Manager, and that meets all other criteria set forth in regulations implementing the City's Small and Local Business Preference Program. The City Manager shall review the threshold amount for SBEs on an annual basis, and adjust as necessary to reflect changes in the marketplace. A business certified as a DVBE by the State of California, and that has provided proof of such certification to the City Manager, shall be deemed to be an SBE.

Small Local Business Enterprise (SLBE): a Local Business Enterprise that is also a Small Business Enterprise.



Women Business Enterprise (WBE): a certified business that is (1) at least fifty-one percent (51 %) owned by a woman or women, or, in the case of a publicly owned business at least fifty-one percent (51%) of the stock is owned by one or more women; and (2) whose daily business operations are managed and directed by one or more women owners.

VII. Certifications.

The City accepts certifications of MBE, WBE, DBE or DVBE from the following certifying agencies:

Current certification by the State of California Department of Transportation (CALTRANS) as DBE.

Current MBE or WBE certification from the California Public Utilities Commission.

DVBE certification is received from the State of California's Department of General Services, Office of Small and Minority Business.

Current certification by the City of Los Angeles as DBE, WBE or MBE.

Current certification by the U.S. Small Business Association as SDB, WOSB, SDVOSB, or Hubzone.

Subcontractors' valid proof of certification status e.g., copy of MBE, WBE, DBE, or DVBE certification must be submitted with RFP. MBE, WBE, DBE, or DVBE certifications are listed for informational purposes only.

VIII. List of Attachments.

- AA. Disclosure of Discrimination Complaints**
- BB. Work Force Report**
- CC. Subcontractors List**



DISCLOSURE OF DISCRIMINATION COMPLAINTS

As part of its proposal, the Design Professional must provide to the City a list of all instances within the past 10 years where a complaint was filed or pending against the Design Professional in a legal or administrative proceeding alleging that Design Professional discriminated against its employees, subcontractors, vendors or suppliers, and a description of the status or resolution of that complaint, including any remedial action taken.

CHECK ONE BOX ONLY.

- The undersigned certifies that within the past 10 years the Design Professional has NOT been the subject of a complaint or pending action in a legal administrative proceeding alleging that Design Professional discriminated against its employees, subcontractors, vendors or suppliers.
- The undersigned certifies that within the past 10 years the Design Professional has been the subject of a complaint or pending action in a legal administrative proceeding alleging that Design Professional discriminated against its employees, subcontractors, vendors or suppliers. A description of the status or resolution of that complaint, including any remedial action taken and the applicable dates is as follows:

DATE OF CLAIM	LOCATION	DESCRIPTION OF CLAIM	LITIGATION (Y/N)	STATUS	RESOLUTION/REMEDIAL ACTION TAKEN
		Deloitte Consulting LLP, like all other major professional services firms in this increasingly litigious environment, has been named as either a defendant or respondent in several civil lawsuits or administrative discrimination charges. These lawsuits and administrative charges are premised primarily on allegations of discrimination in various aspects of employment. In each case, Deloitte Consulting LLP has denied those allegations.			



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Design Professional Name _____

Certified By Ian Wright Name Title Principal



Signature Date 10/19/15

USE ADDITIONAL FORMS AS NECESSARY



City of San Diego

EQUAL OPPORTUNITY CONTRACTING PROGRAM (EOCP)

1200 Third Avenue • Suite 200 • San Diego, CA 92101

Phone: (619) 236-6000 • Fax: (619) 236-5904

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)*.

NO OTHER FORMS WILL BE ACCEPTED

CONTRACTOR IDENTIFICATION

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

Name of Company: Deloitte Consulting LLP

AKA/DBA: _____

Address (Corporate Headquarters, where applicable): 30 Rockefeller Plaza

City: New York County: New York County State: NY Zip: 10112

Telephone Number: (212) 492-4000 FAX Number: (212) 489-1687

Name of Company CEO: Cathy Engelbert

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

Address: 655 West Broadway, Suite 700

City: San Diego County: San Diego County State: CA Zip: 92101

Telephone Number: (619) 235-6500 FAX Number: () Email: _____

Type of Business: _____ Type of License: _____

The Company has appointed: John Nigro

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: 695 East Main Street Stamford, CT, 06901

Telephone Number: (203) 761-3427 FAX Number: (203) 423-6427 Email: JNigro@deloitte.com

- 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 Deloitte Consulting LLP

(Firm Name)

New York, New York hereby certify that information provided

(County)

(State)

herein is true and correct. This document was executed on this 19th day of October, 2015

[Signature]

Ian Wright

(Authorized Signature)

(Print Authorized Signature)

WORK FORCE REPORT – NAME OF FIRM: Deloitte Consulting LLP

DATE: 10/1/2015

OFFICE(S) or BRANCH(ES): San Diego Deloitte & Touche LLP, San Diego Consulting COUNTY: San Diego County

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	0	0	1	0	4	7	0	0	0	0	15	12	1	1
Professional	1	0	2	1	13	6	0	1	0	0	9	23	3	1
A&E, Science, Computer	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Technical	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sales	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Administrative Support	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Services	0	0	0	0	0	0	0	0	0	0	0	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	1	0	3	1	17	13	0	1	0	0	34	35	4	2
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Grand Total All Employees

111

Indicate by Gender and Ethnicity the Number of Above Employees Who Are Disabled

Disabled	Information on disabled employees not available as we do not track this.													
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Non-Profit Organizations Only:

Board of Directors														
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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 (African-American, Hispanic or Latino, Asian, American Indian, Asian Pacific Islander, Caucasian, and Other Ethnicities) for each occupation. Currently, our CLFA data is taken from the 2010 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 WFR.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 WFR from that county.² If participation in a San Diego project is by work forces from San Diego

County and, for example, from Los Angeles County and from Sacramento County, we ask for separate WFRs representing your firm from each of the three counties.¹

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

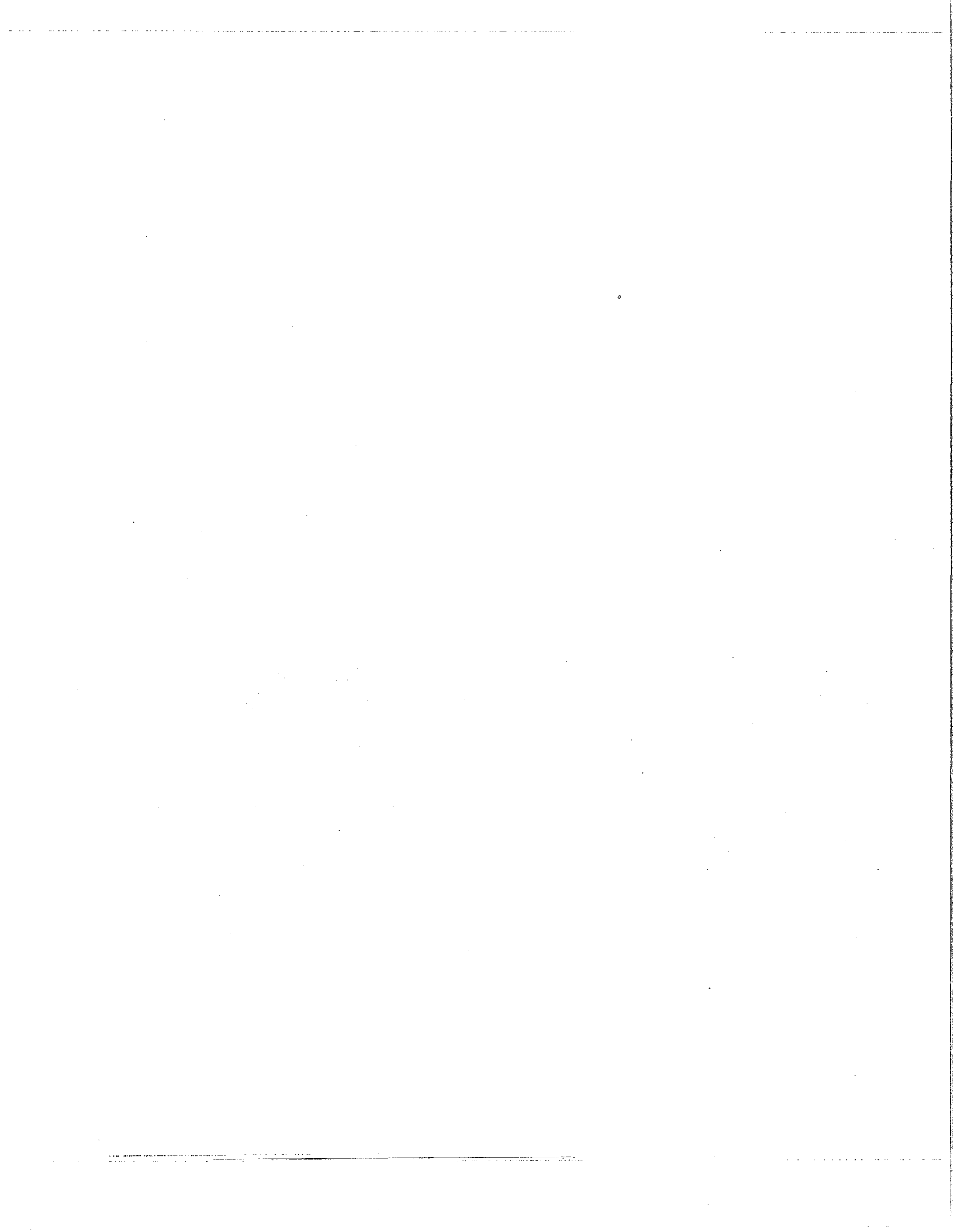
Refer to this table when completing your firm’s Work Force Report form(s).

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

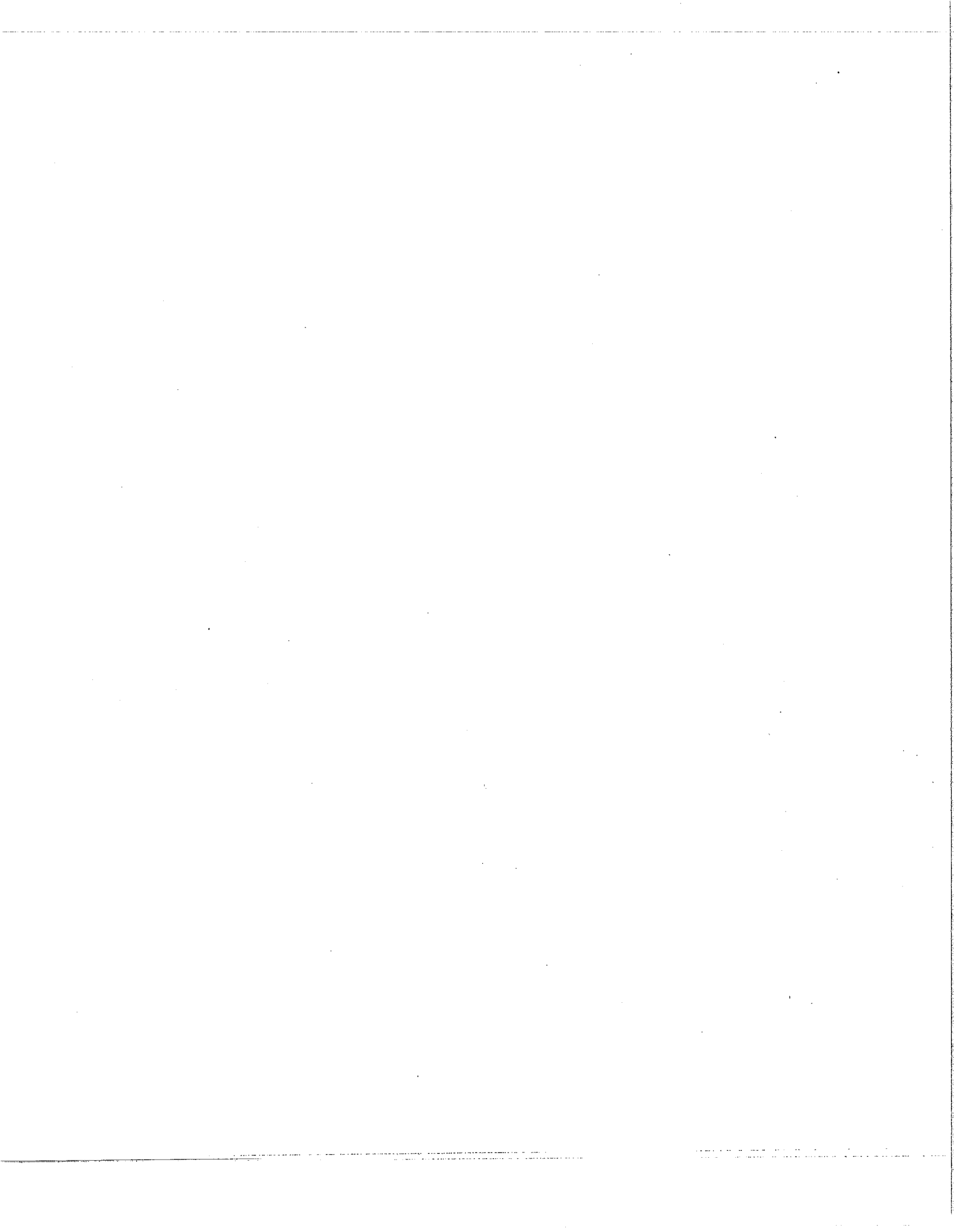
Assemblers and Fabricators
Communications Equipment Operators
Food Processing Workers
Metal Workers and Plastic Workers
Motor Vehicle Operators
Other Production Occupations
Printing Workers
Supervisors, Production Workers
Textile, Apparel, and Furnishings Workers

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



SUBCONTRACTOR PARTICIPATION LIST

This list shall include the name and complete address of all Subcontractors who qualify as SLBEs or ELBEs. Consultants must also list participation by any 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.

Subcontractors shall be used in the percentages listed. **NOTE:** If percentages are listed as a range, the **minimum number identified** in the range will be used to calculate overall subcontractor participation.

No changes to this Participation List will be allowed without prior written City approval. 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.

NAME AND ADDRESS SUBCONTRACTORS	SCOPE OF SERVICES	PERCENT OF CONTRACT	SLBE/ELBE (MBE/ WBE/DBE/ DVBE/OBE*)	WHERE CERTIFIED**
Lyon Performance Solutions LLC	Consulting	3%	SLBE / WBE	State of CA
Phoenix Business Inc.	SAP Support Services	5%	MBE	Phoenix is MBE certified with the State of Illinois and the City of Toledo, OH. We are currently in the process of obtaining our certification with the California Public Utilities Commission (via Supplier Clearing House), which is one of the accepted certification entities listed in the RFP. We expect to be fully certified by contract start.
Gravity Pro Consulting	SAP Consulting Services for EAM	12%	WBE	WBENC

--	--	--	--	--

List of Abbreviations:

Small Local Business Enterprise	SLBE
Emerging Local Business Enterprise	ELBE
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) Consultant Requirements.

CONSULTANT PAST PARTICIPATION LIST

The Consultant shall complete this form for the first three projects 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: Snohomish County PUD ONE Program

TYPE OF PROJECT: SAP Implementation

DOLLAR VALUE OF CONTRACT: \$32,000,000

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 [®]
Name: <u>SAP America's Inc</u> Address: _____ City: _____ State: _____ Zip: _____ Phone: _____	Contractor	Services	\$885,000	OBE	
Name: <u>Diabsolut Professional Services</u> Address: _____ City: _____ State: _____ Zip: _____ Phone: _____	Contractor	Services	\$656,000	OBE	
Name: <u>Vesta Partners</u> Address: _____ City: _____ State: _____ Zip: _____ Phone: _____	Contractor	Services	\$230,000	OBE	

① As appropriate, Consultant shall identify Subcontractors or Suppliers as one of the following and shall include a valid proof of certification (except for OBE, SLBE and ELBE):

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-Disabled Veteran Owned Small Business	SDVOSB		

② As appropriate, Consultant shall indicate if Subcontractor or Supplier is certified by:

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

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

CONSULTANT PAST PARTICIPATION LIST

The Consultant shall complete this form for the first three projects 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: ENTERPRISE ASSET MANAGEMENT (EAM) PROJECT

TYPE OF PROJECT: Implementation

DOLLAR VALUE OF CONTRACT: TBD

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 ^o	WHERE CERTIFIED ^o
Name: <u>Phoenix Business Inc.</u> Address: <u>5717 Madge Place</u> City: <u>Haltom City</u> State: <u>TX</u> Zip: <u>76117</u> Phone: <u>310-779-9132</u>	Erie County, NY	SAP Plant Maintenance Implementation	\$ 1.8 M	MBE	CPUC * (Certification in Process)
Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____					
Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____					

① As appropriate, Consultant shall identify Subcontractors or Suppliers as one of the following and shall include a valid proof of certification (except for OBE, SLBE and ELBE):

- | | | | |
|-----------------------------------------------|--------|------------------------------------------------|---------|
| 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-Disabled Veteran Owned Small Business | SDVOSB | | |

② As appropriate, Consultant shall indicate if Subcontractor or Supplier is certified by:

- | | | | |
|------------------------------------------------------|--------|--------------------------------------------------|----------|
| City of San Diego | CITY | State of California Department of Transportation | CALTRANS |
| California Public Utilities Commission | CPUC | City of Los Angeles | LA |
| State of California's Department of General Services | CADoGS | U.S. Small Business Administration | SBA |
| State of California | CA | | |

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

CONSULTANT PAST PARTICIPATION LIST

The Consultant shall complete this form for the first three projects 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: Iberdrola USA SAP Networks Project

TYPE OF PROJECT: SAP EAM standardization and migration to global platform DOLLAR VALUE OF CONTRACT: \$6.8M

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 [®]
Name: Iberdrola did not use any subcontractors. Address: _____ City: _____ State: _____ Zip: _____ Phone: _____					
Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____					
Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____					

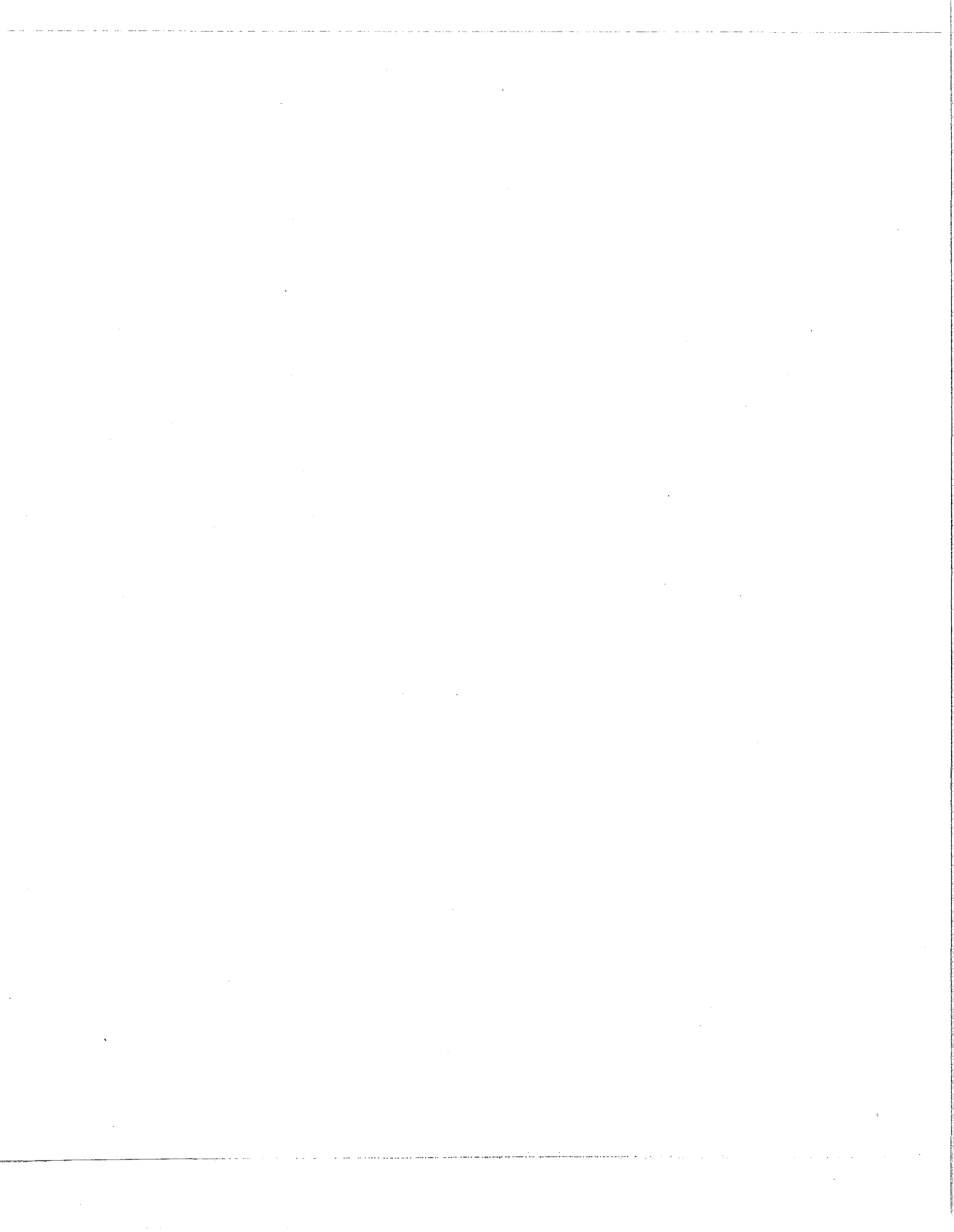
① As appropriate, Consultant shall identify Subcontractors or Suppliers as one of the following and shall include a valid proof of certification (except for OBE, SLBE and ELBE):

- | | | | |
|-----------------------------------------------|--------|------------------------------------------------|---------|
| 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-Disabled Veteran Owned Small Business | SDVOSB | | |

② As appropriate, Consultant shall indicate if Subcontractor or Supplier is certified by:

- | | | | |
|------------------------------------------------------|--------|--------------------------------------------------|----------|
| City of San Diego | CITY | State of California Department of Transportation | CALTRANS |
| California Public Utilities Commission | CPUC | City of Los Angeles | LA |
| State of California's Department of General Services | CADoGS | U.S. Small Business Administration | SBA |
| State of California | CA | | |

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



CONSULTANT CERTIFICATION FOR A DRUG-FREE WORKPLACE

PROJECT TITLE: 1 Am San Diego

I hereby certify that I am familiar with the requirement of San Diego City Council Policy No. 100-17 regarding Drug-Free Workplace as outlined in the request for proposals, and that:

DAVIDITE CONSULTING LLP

Name under which business is conducted

has in place a drug-free workplace program that complies with said policy. I further certify that each subcontract agreement for this project contains language which indicates the Subconsultants agreement to abide by the provisions of Section 4.9.1 subdivisions A through C of the policy as outlined.

Signed [Signature]

Printed Name Jan Wolkoff

Title PRINCIPAL

Date 2/12/16.



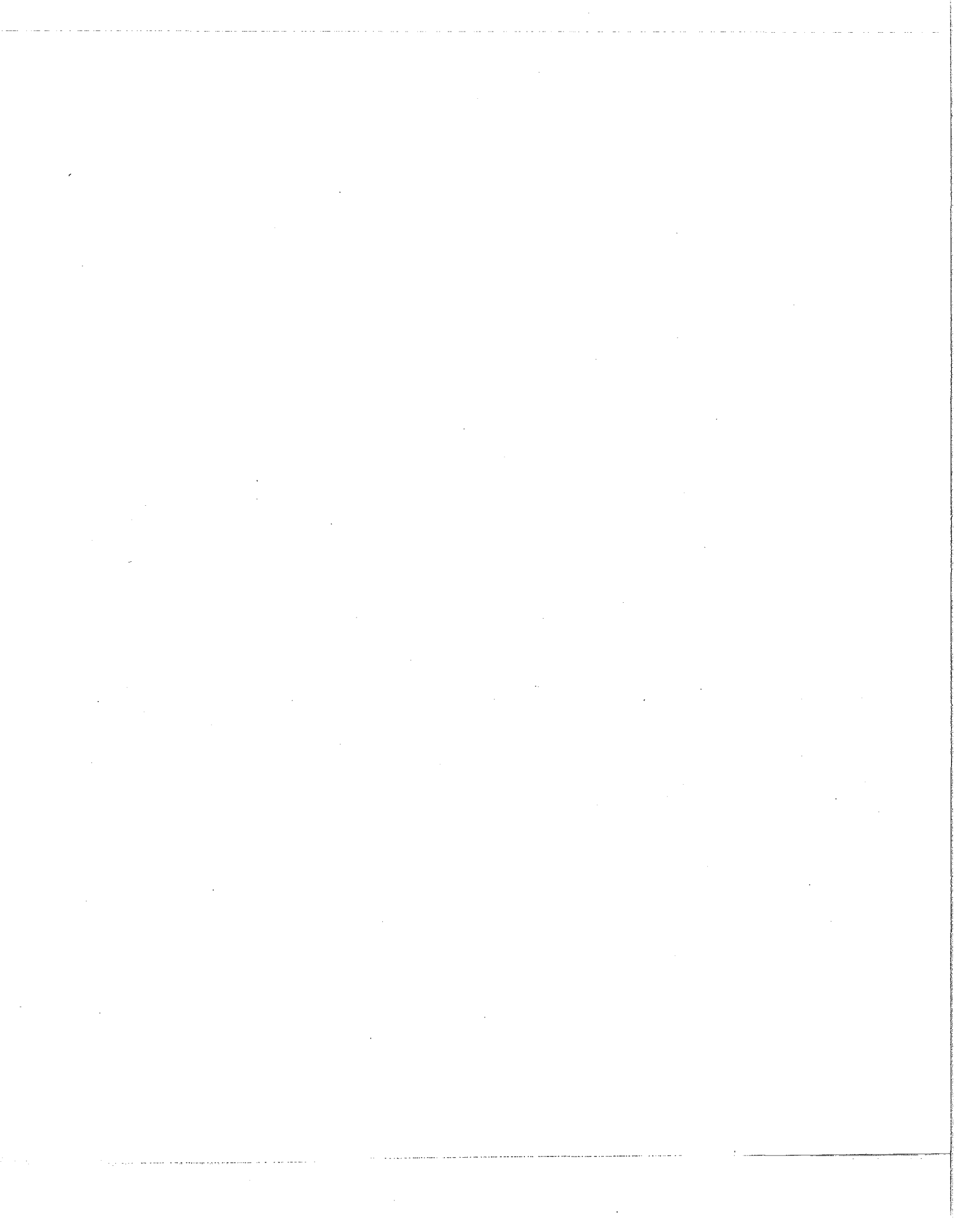
CITY OF SAN DIEGO
Consultant Performance Evaluation

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 PHASE <input type="checkbox"/> OR CONSTRUCTION SUPPORT <input type="checkbox"/>)																			
4. Design Phase																			
Agreement Date: _____ Resolution #: R- _____		Initial Contract Amount 4a. \$ _____ 4b. Prev. Amendment(s): \$ _____																	
4c. Current Amendment: \$ _____ / Number: _____		4d. Total Agreement (4a. + 4b. + 4c.): \$ _____																	
4d. Type of Work (design, study, as-needed services, etc.): _____	4e. Key Design Phase Completion Dates: <table style="width:100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">% of Design Phase Completion</td> <td style="text-align: center;">%</td> <td style="text-align: center;">%</td> <td style="text-align: center;">100%</td> </tr> <tr> <td>Agreed Delivery Date: _____</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>Actual Delivery Date: _____</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>Acceptance of Plans/Specs.: _____</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> </table>		% of Design Phase Completion	%	%	100%	Agreed Delivery Date: _____	_____	_____	_____	Actual Delivery Date: _____	_____	_____	_____	Acceptance of Plans/Specs.: _____	_____	_____	_____	Final Construction Est. Completion: _____ Actual Completion: _____
% of Design Phase Completion	%	%	100%																
Agreed Delivery Date: _____	_____	_____	_____																
Actual Delivery Date: _____	_____	_____	_____																
Acceptance of Plans/Specs.: _____	_____	_____	_____																
5. Construction Support																			
5a. Contractor _____ (name and address)		Phone (____) _____																	
5b. Superintendent _____																			
5c. Notice to Proceed _____ (date) 5d. Working days _____ (number) 5e. Actual Working days _____ (number)	5f. Change Orders: <table style="width:100%; border-collapse: collapse;"> <tr> <td>Errors/Omissions _____</td> <td>% of const. cost \$ _____</td> </tr> <tr> <td>Unforeseen Conditions _____</td> <td>% of const. cost \$ _____</td> </tr> <tr> <td>Changed Scope _____</td> <td>% of const. cost \$ _____</td> </tr> <tr> <td>Changed Quantities _____</td> <td>% of const. cost \$ _____</td> </tr> <tr> <td colspan="2" style="text-align: right;">Total Construction Cost \$ _____</td> </tr> </table>			Errors/Omissions _____	% of const. cost \$ _____	Unforeseen Conditions _____	% of const. cost \$ _____	Changed Scope _____	% of const. cost \$ _____	Changed Quantities _____	% of const. cost \$ _____	Total Construction Cost \$ _____							
Errors/Omissions _____	% of const. cost \$ _____																		
Unforeseen Conditions _____	% of const. cost \$ _____																		
Changed Scope _____	% of const. cost \$ _____																		
Changed Quantities _____	% of const. cost \$ _____																		
Total Construction Cost \$ _____																			
6. OVERALL RATING FOR DESIGN PHASE <input type="checkbox"/> OR FOR CONSTRUCTION SUPPORT <input type="checkbox"/>																			
	Excellent	Satisfactory	Poor																
6a. Quality of Plans/Specifications/As-Built _____ Compliance with Contract & Budget _____ Responsiveness to City Staff _____	<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"/>																
6b. Overall Rating _____																			
7. AUTHORIZING SIGNATURES																			
7a. Project Manager _____	Date _____																		
7b. Section Head _____	Date _____																		



Section II					SPECIFIC RATING				
DESIGN EVALUATION	EXCELLENT	SATISFACTORY	POOR	N/A	CONSTRUCTION SUPPORT EVALUATION	EXCELLENT	SATISFACTORY	POOR	N/A
	Plans/Specifications accuracy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	Drawing reflect existing conditions	<input type="checkbox"/>	<input type="checkbox"/>
Plans/Specs coordination	<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"/>
Plans/Specs properly formatted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Quality design	<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"/>	Change orders due to design deficiencies are minimized	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Adherence to City design standards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Timely responses	<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"/>	Attitude toward Client and review bodies	<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"/>	Follows direction and chain of responsibility	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<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"/>
	<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"/>
COMPLIANCE WITH CONTRACT & BUDGET	EXCELLENT	SATISFACTORY	POOR	N/A	Resolution of Field problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reasonable agreement negotiation	<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"/>
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"/>
Timely responses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Timeliness in notifying City of major issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<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"/>		<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.)

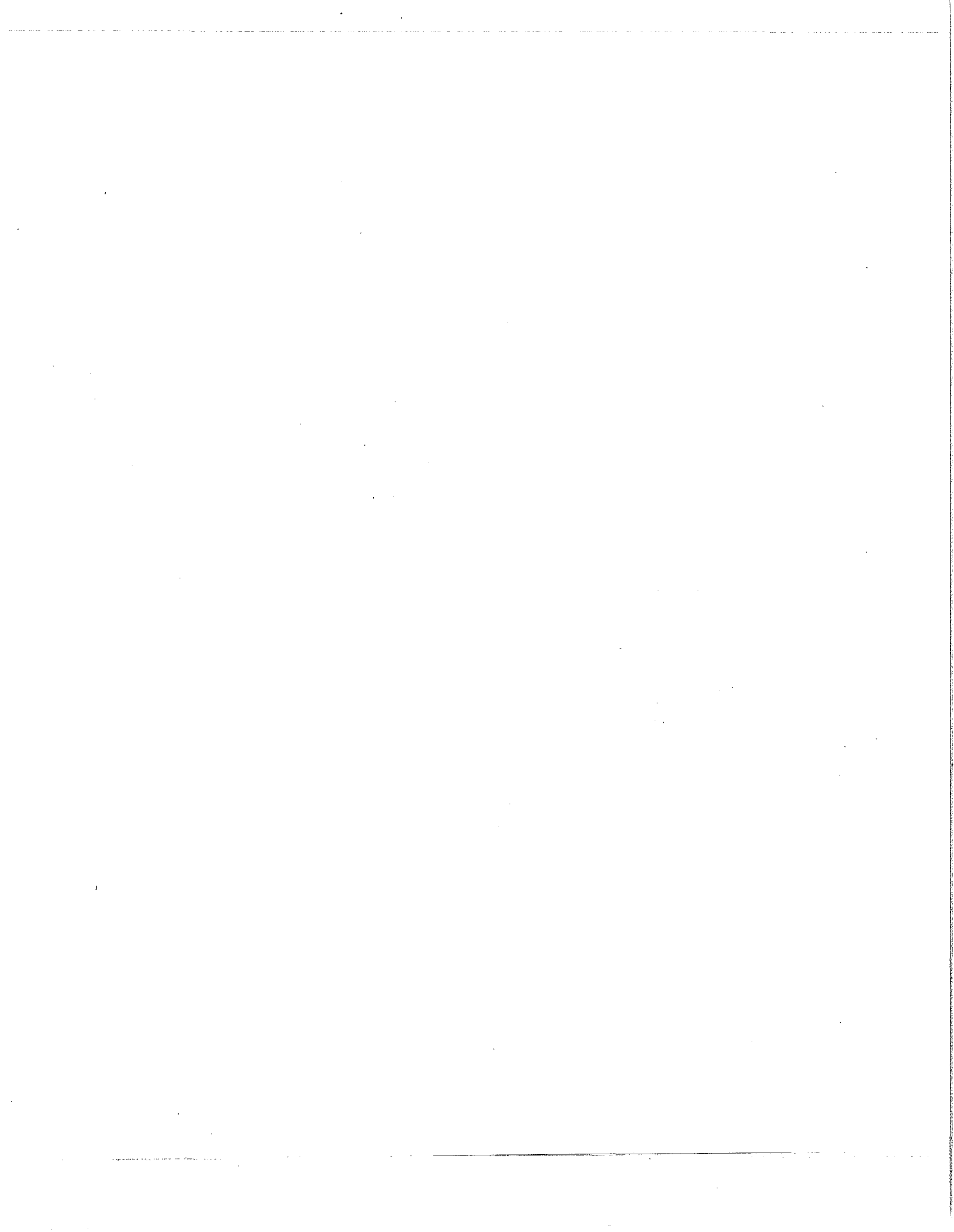
Item _____ : _____

Item _____ : _____

Item _____ : _____

Item _____ : _____

(*Supporting documentation attached: Yes No)



City of San Diego
CONTRACTOR STANDARDS
Pledge of Compliance

The City of San Diego has adopted a Contractor Standards Ordinance (CSO) codified in section 22.3004 of the San Diego Municipal Code (SDMC). The City of San Diego uses the criteria set forth in the CSO to determine whether a bidder or proposer has the capacity to fully perform the contract requirements and the business integrity to justify the award of public funds. This completed Pledge of Compliance signed under penalty of perjury must be submitted with each bid and proposal. If an informal solicitation process is used, the bidder must submit this completed Pledge of Compliance to the City prior to execution of the contract. All responses must be typewritten or printed in ink. If an explanation is requested or additional space is required, Respondents must provide responses on Attachment A to the Pledge of Compliance and sign each page. Failure to submit a signed and completed Pledge of Compliance may render the bid or proposal non-responsive. In the case of an informal solicitation, the contract will not be awarded unless a signed and completed Pledge of Compliance is submitted. A submitted Pledge of Compliance is a public record and information contained within will be available for public review except to the extent that such information is exempt from disclosure pursuant to applicable law.

A. BID/PROPOSER/SOLICITATION TITLE:

ENTERPRISE ASSET MANAGEMENT (EAM) PROJECT - H166584

B. BIDDER/PROPOSER INFORMATION:

Deloitte Consulting LLP

Legal Name DBA
30 Rockefeller Plaza, New York, NY 10112

Street Address City State Zip
Ian Wright, (215) 430-6271

Contact Person, Title Phone Fax

C. OWNERSHIP AND NAME CHANGES:

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

If Yes, use Attachment "A" to list all prior legal and DBA names, addresses, and dates each firm name was 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 No

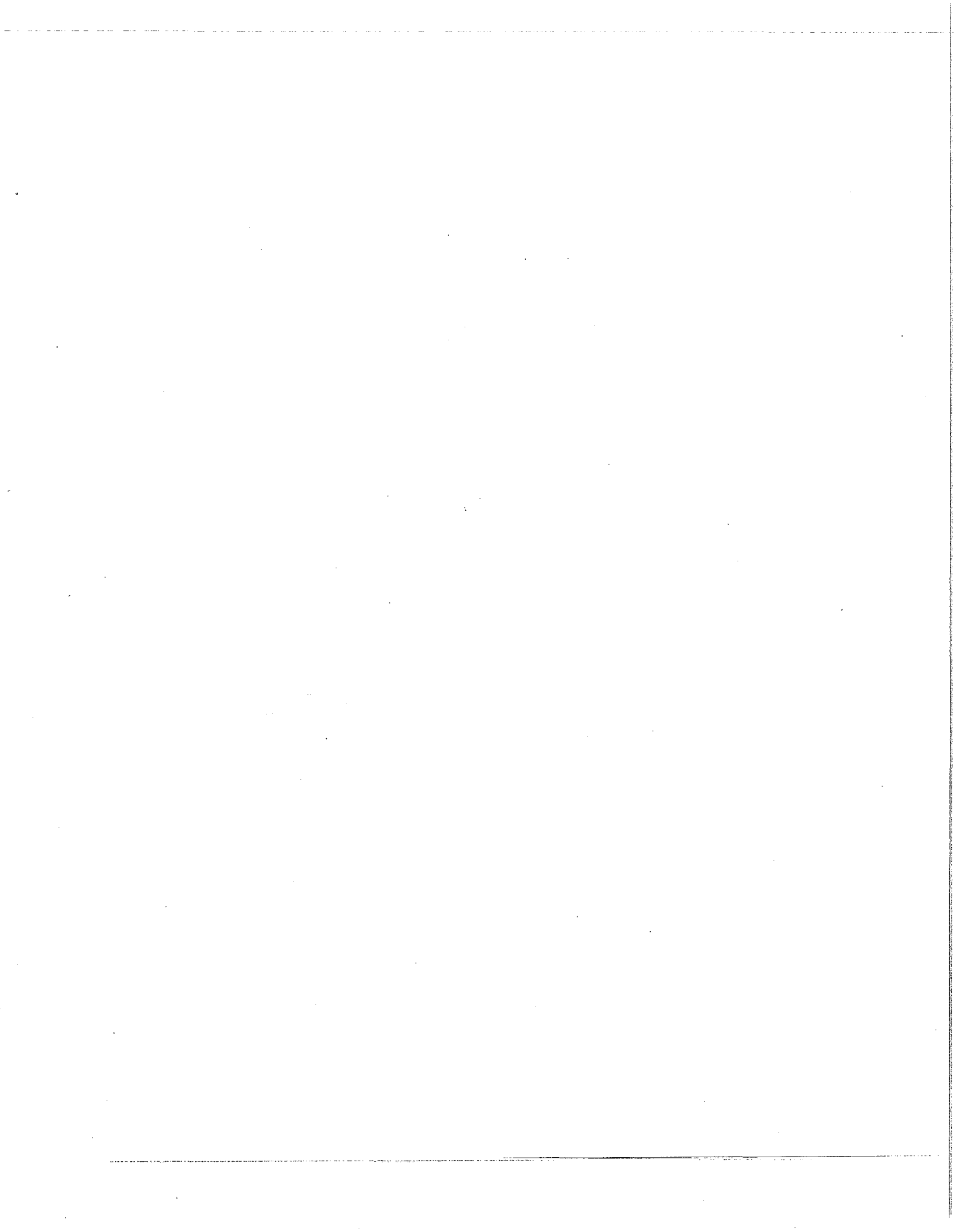
If Yes, use Attachment "A" to list names and addresses of all businesses and the person who operated the business. Include information about a similar business only if an owner, partner, or officer of your firm holds or has held a similar position in another firm.

D. BUSINESS ORGANIZATION/STRUCTURE:

Indicate the organizational structure of your firm. Fill in only one section on this page. Use Attachment "A" if more space is required.

Corporation Date incorporated: ____ / ____ / ____ State of incorporation: _____

List corporation's current officers: President: _____
Vice Pres: _____
Secretary: _____
Treasurer: _____



Is your firm a publicly traded corporation? Yes No

If **Yes**, name those who own ten percent (10 %) or more of the corporation's stocks:

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

List names of members who own ten percent (10%) or more of the company:

Partnership Date formed: / / 1996 State of formation: Delaware

Deloitte Consulting is a Limited Liability Partnership with more than 2,700 partners in the U.S. firm.

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:

Joint Venture Date formed: / /

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

Note: To be responsive, each member of a Joint Venture must complete a separate *Pledge of Compliance*.

E. FINANCIAL RESOURCES AND RESPONSIBILITY:

1. Is your firm preparing to be sold, in the process of being sold, or in negotiations to be sold?
 Yes No

If **Yes**, use Attachment "A" to explain the circumstances, including the buyer's name and principal contact information.

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

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

4. In the past five (5) years, has any insurance carrier, for any form of insurance, refused to renew the insurance policy for your firm?
 Yes **No**

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

5. Within the last five years, has your firm filed a voluntary petition in bankruptcy, been adjudicated bankrupt, or made a general assignment for the benefit of creditors?
 Yes **No**

6. Please provide the name of your principal financial institution for financial reference. By submitting a response to this Solicitation Contractor authorizes a release of credit information for verification of financial responsibility.

Name of Bank: JP Morgan Chase Bank

Point of Contact: David Short, Vice President

Address: Two Corporate Drive, Shelton, CT 06484

Phone Number 203-944-8423

7. By submitting a response to a City solicitation, Contractor certifies that he or she has sufficient operating capital and/or financial reserves to properly fund the requirements identified in the solicitation. At City's request, Contractor will promptly provide to City a copy of Contractor's most recent balance sheet and/or other necessary financial statements to substantiate financial ability to perform.

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 Attachment "A" to explain specific circumstances.

2. In the past five (5) years, has a public entity terminated your firm's contract for cause prior to contract completion?
 Yes **No**

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

3. In the past five (5) years, has your firm entered into any settlement agreement for any lawsuit that alleged contract default, breach of contract, or fraud with or against a public entity?
 Yes **No**

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

4. Is your firm currently involved in any lawsuit with a government agency in which it is alleged that your firm has defaulted on a contract, breached a contract, or committed fraud?

Yes No

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

5. In the past five (5) years, has your firm, or any firm with which any of your firm's owners, partners, or officers is or was associated, been debarred, disqualified, removed, or otherwise prevented from bidding on or completing any government or public agency contract for any reason?

Yes No

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

6. In the past five (5) years, has your firm received a notice to cure or a notice of default on a contract with any public agency?

Yes No

If **Yes**, use Attachment "A" to explain specific circumstances and how the matter resolved.

7. Performance References:

Please provide a minimum of three (3) references familiar with work performed by your firm which was of a similar size and nature to the subject solicitation within the last five (5) years.

Company Name: Snohomish County Public Utility District No 1

Contact Name and Phone Number: Jesse Moreno; Call Becky Ferguson on 425-783-1773

Contact Email: bjbeberness@snopud.com

Address: Snohomish County PUD
PO Box 1107
Everett, WA 98206-1107

Contract Date: 2/6/14

Contract Amount: \$30,584,000

Requirements of Contract: Implementation services to support the ONE Program, Deloitte is the Integrator and prime contractor for all services required to deliver the SAP and related systems functionality for the ONE program including SAP Business Suite for HANA EAM, CR&B, ERP, Clickschedule, Ariba, SuccessFactors, BenefitFocus

Company Name: Erie County

Contact Name and Phone Number: Greg Turner; 716-868-2628

Contact Email: gregory_j_turner@hotmail.com

Address: 92 Franklin Street, Buffalo, New York, 14202

Contract Date: 2011-2012

Contract Amount: \$1.8 million

- Requirements of Contract: •Implementing SAP Plant Maintenance. Plant Maintenance is the sub-module in SAP responsible for the Management of Work Orders in order to support a Predictive/Preventive/Corrective Maintenance solution
- Integrating the existing Materials Management Solution to support the implementation of a Plant Maintenance. This will include delivering a Inventory Management Solution, Materials Resource Planning (MRP) for forecasting inventory demand, Goods Issue Consumption by Work Orders and the implementation of new or changed processes to support a maintenance solution
 - Integrating the existing Financials Solution to support the implementation of a Plant Maintenance. A costing solution to integrate Activities to an internal Order costing system will be implemented. Integration to Asset Accounting (existing Fixed Asset Solution), Project Systems (Capital Projects), Billing (Billing and Accounts Receivable)
 - Integrating the existing Payroll Solution to support the implementation of a Plant Maintenance. This will include the implementation of CATS Timesheets to allow for the charging of employee time to work order during Payroll Processing, Integrating Activity Charges resulting from Employee work effort. Consideration will be given to determine how to best integrate the existing swipe card system into the Plant Maintenance Solution
 - Integrating the existing Public Sector Solution to support integration with Grants and Funds Management requirements for the control of budgets and reporting of funding sources with the needs of a Maintenance Solution for the Division of Sewerage Management
 - Integrate on-going legacy systems to support the proper flow of information to the existing GIS (Geographical Information System) and SCADA system (supervisory control and data acquisition)
 - Conversion of Legacy Information for the appropriate information required to start using SAP as the single source of operations to support a Sewer Maintenance Solution
 - Reporting Solution to support effective decision making by Division of Sewerage Management
-

Company Name: Iberdrola USA

Contact Name and Phone Number: Donna McNally; 207.629.1076

Contact Email: donna.mcnally@iberdrolaus.com

Address: 89 East Avenue, Rochester, NY 14649

Contract Date: 04/2013 – 03/2015

Contract Amount: \$6.8m

Requirements of Contract: Prime systems integrator for the IUSA SAP Networks project. Deloitte provided industry and solution expertise to standardize the client's EAM processes (Workforce Management, Fleet Management, Major and minor Construction projects, Plant Maintenance) across three operating companies, and build one standard solution to be migrated to the Global SAP platform as part of the same project. Global migration had to be tightly coordinated with global teams in the Finance, Commercial, Supply Chain and Human Resource areas.

G. COMPLIANCE:

1. In the past five (5) years, has your firm or any firm owner, partner, officer, executive, or manager 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, permitting, and licensing laws?

Yes No

If **Yes**, use Attachment "A" to explain specific circumstances surrounding each instance. Include the name of the entity involved, the 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 determined to be non-responsible by a public entity?

Yes No

If **Yes**, use Attachment "A" to explain specific circumstances of each instance. Include the name of the entity involved, the 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 public entity?

Yes No

If **Yes**, use Attachment "A" to explain specific circumstances of each instance. Include the entity involved, specific 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.

3. In the past five (5) years, has your firm or any of its executives, management personnel, or owners been convicted of a federal, state, or local crime of fraud, theft, or any other act of dishonesty?

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. WAGE COMPLIANCE:

In the past five (5) years, has your firm been required to pay back wages or penalties for failure to comply with the federal, state or local prevailing, minimum, or living wage laws? **Yes** **No** If **Yes**, use Attachment "A" to explain the specific circumstances of each instance. Include the entity involved, the specific infraction(s), dates, outcome, and current status.

J. STATEMENT OF SUBCONTRACTORS:

Please provide the names and information for all subcontractors used in the performance of the proposed contract, and what portion of work will be assigned to each subcontractor. Subcontractors may not be substituted without the written consent of the City. Use Attachment "A" if additional pages are necessary. If no subcontractors will be used, please write "Not Applicable."

Company Name: Lyon Performance Solutions LLC

Contact Name and Phone Number: Felicia Lyon; (858) 242-7461

Contact Email: felicia@lyonps.com

Address: 5060 La Jolla Blvd Unit PG, San Diego, CA, 92109

Contract Date: October 2015

Sub-Contract Dollar Amount: \$900,000

Requirements of Contract: Provide Change Management services for southern California clients on an as required basis

What portion of work will be assigned to this subcontractor: 3%

Is the Subcontractor a certified SLBE, ELBE, MBE, DBE, DVBE, or OBE? (Circle One) **YES** **NO**

If YES, Contractor must provide valid proof of certification with the response to the bid or proposal.

Company Name: Phoenix Business Inc.

Contact Name and Phone Number: Hanif Sarangi, President, 512-557-4731

Contact Email: rfpteam@phoenixteam.com

Address: 1280 Tree Bay Lane, Sarasota, FL 34242

Contract Date: TBD

Sub-Contract Dollar Amount: TBD

Requirements of Contract: SAP Staffing Services

What portion of work will be assigned to this subcontractor: 5%

Is the Subcontractor a certified SLBE, ELBE, MBE, DBE, DVBE, or OBE? (Circle One) **YES** **NO**

If YES, Contractor must provide valid proof of certification with the response to the bid or proposal.

K. STATEMENT OF AVAILABLE EQUIPMENT:

List all necessary equipment to complete the work specified. Use *Pledge of Compliance Attachment "A"* if additional pages are necessary. In instances where the required equipment is not owned by the Contractor, Contractor shall explain how the equipment will be made available before the commencement of work. The City of San Diego reserves the right to reject any response when, in its opinion, the Contractor has not demonstrated he or she will be properly equipped to perform the work in an efficient, effective manner for the duration of the contract period.

If no equipment is necessary to complete the work specified, please write "Not Applicable."

Equipment Description: Laptop computers

Owned Rented Other (explain below)

If Owned, Quantity Available: _____

Year, Make & Model: Various

Explanation: Laptops leased for the use of Deloitte Consulting employees

Equipment Description: _____

Owned Rented Other (explain below)

If Owned, Quantity Available: _____

Year, Make & Model: _____

Explanation: _____

Equipment Description: _____

Owned Rented Other (explain below)

If Owned, Quantity Available: _____

Year, Make & Model: _____

Explanation: _____

L. 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 09 / 04 / 2015.

Complete all questions and sign below.

Under penalty of perjury under the laws of the State of California, I certify that I have read and understand the questions contained in this Pledge of Compliance, that I am responsible for completeness and accuracy of the responses contained herein, and that all information provided is true to the best of my knowledge and belief. I agree to provide written notice to the Purchasing Agent within five (5) business days if, at any time, I learn that any portion of this Pledge of Compliance. Failure to timely provide the Purchasing Agent with written notice is grounds for Contract termination.

I, on behalf of the firm, further certify that I and my firm will comply with the following provisions of SDMC section 22.3004: (a) I

and my firm will 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.

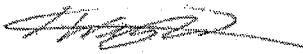
(b) I and my firm will notify the Purchasing Agent in writing within fifteen (15) calendar days of receiving notice that a government agency has begun an investigation of me or my firm that may result in a finding that I or my firm is or was not in compliance with laws stated in paragraph (a).

(c) I and my firm will notify the Purchasing Agent in writing within fifteen (15) calendar days of a finding by a government agency or court of competent jurisdiction of a violation by the Contractor of laws stated in paragraph (a).

(d) I and my firm will notify the Purchasing Agent in writing within fifteen (15) calendar 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).

(e) I and my firm will cooperate fully with the City during any investigation and to respond to a request for information within ten (10) working days.

Failure to sign and submit this form with the bid/proposal shall make the bid/proposal non-responsive. In the case of an informal solicitation, the contract will not be awarded unless a signed and completed *Pledge of Compliance* is submitted.

<u>Ian Wright, Principal</u>		<u>10/19/15</u>
Name and Title	Signature	Date

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

Provide additional information in space below. Use additional *Attachment "A"* pages as needed. Each page must be signed. Print in ink or type responses and indicate question being answered.

Section F, #3: Deloitte, as one of the leading providers of consulting services, is routinely involved in complex consulting projects, often involving large-scale systems implementations and multiple service providers. Although we are justifiably proud of our record of client satisfaction, such projects do occasionally give rise to disagreements over contract requirements, and we are occasionally, though rarely, involved in litigation with clients pertaining to our consulting services. In the past five years, we have had one such matter with a public entity: a dispute with the County of Marin, California, in connection with a contract for the implementation of an enterprise application software package, filed in May 2010 in California Superior Court in Marin County and dismissed in January 2013.

This represents a very small portion of our consulting engagements for public entities in recent years, and there was no determination made that we defaulted on any of our obligations. We do not believe the matter will affect our ability to provide consulting services, or that they will affect our ability to serve the City of San Diego in connection with a contract resulting from this RFP.

Section F, #6: Deloitte does not centrally track notices to cure or notices of default on contracts. Although we are justifiably proud of our record of client satisfaction, large-scale systems implementations do occasionally give rise to disagreements over contract requirements, and we are occasionally, though rarely, involved in disputes with clients pertaining to our consulting services.

J. Statement of Subcontractors:

Company name: Gravity Pro Consulting, LLC

Contact name and phone number: Sylvana Coche (949) 241-3441

Contact email: sylvana.coche@gravitypro.com

Address: 21 Via Lampara San Clemente, CA 92673

Contract date: N/A

Sub-contractor dollar amount: N/A

Requirements of contract: N/A

What portion of work will be assigned to this subcontractor? 12%

Is the subcontractor a certified SLBE, ELBE, MBE, DBE, DVBE, or OBE? If yes, contractor must provide valid proof of certification with the response to the bid or proposal.

I have read the matters and statements made in this Contractor Standards Pledge of Compliance and attachments there to and I know the same to be true of my own knowledge, except as to those matters stated upon information or belief and as to such matters, I believe the same to be true. I certify under penalty of perjury that the foregoing is true and correct.

Ian Wright, Principal
Print Name, Title


Signature

10/19/15
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.

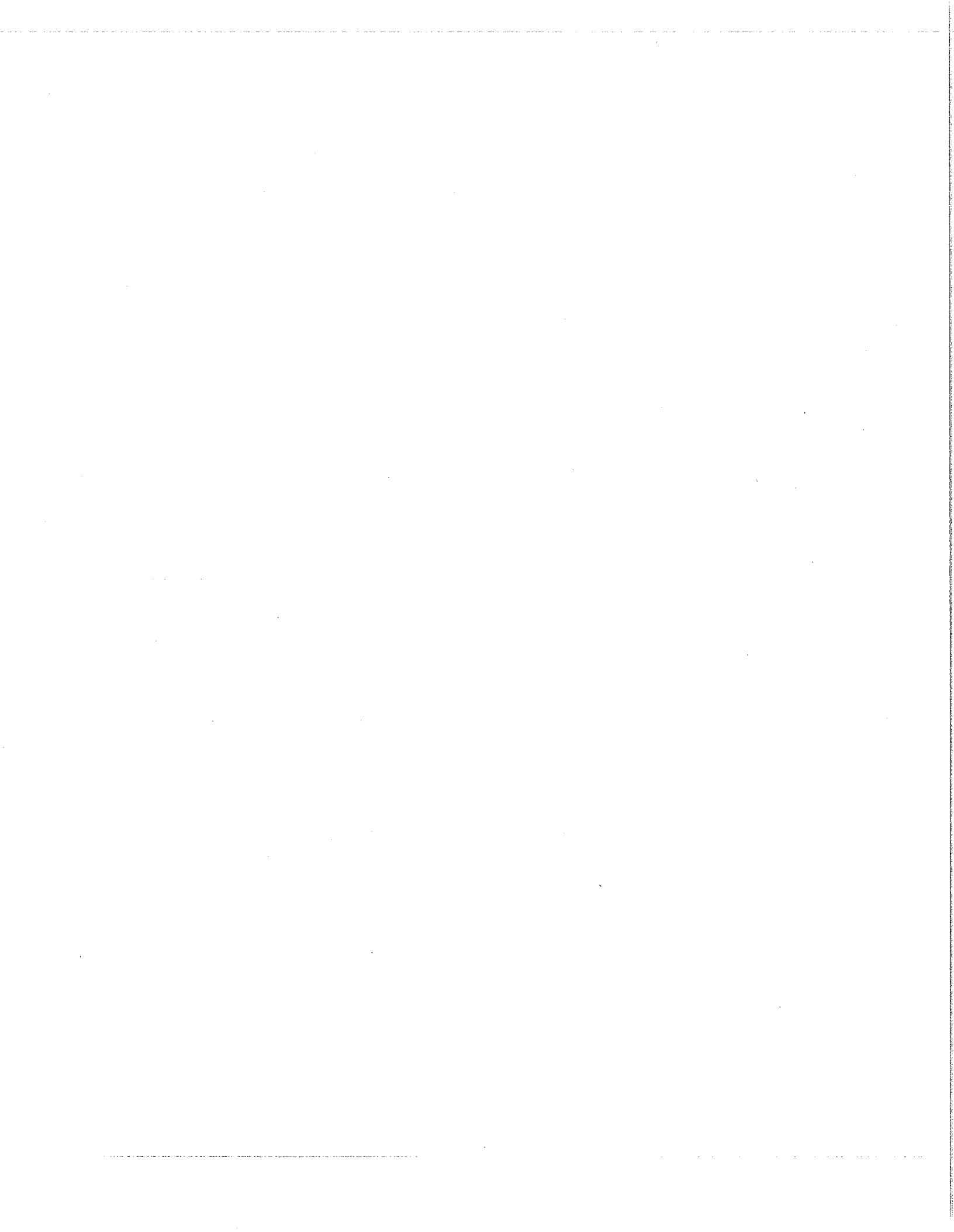


EXHIBIT H

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: Office of the DCOO, Infrastructure/Public Works
- 2. Name of Specific Consultant & Company: Deloitte
- 3. Address, City, State, ZIP: 1700 Market Street
Philadelphia, PA 18940
- 4. Project Title (as shown on 1472, "Request for Council Action"): Awarding Agreement with Deloitte for Systems Integrator Consulting Services for The I AM San Diego Project
- 5. Consultant Duties for Project: Systems Integrator Services, including the design, development, and implementation of the IAM solution in the City's Enterprise Resource Planning (ERP) landscape.

6. Disclosure Determination [select applicable disclosure requirement]:

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.]

By: Paz Gomez
Paz Gomez, DCOO for Infrastructure/Public Works

2/26/16
[Date]

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.

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: BLOTT & COMPANY, INC. LLP Contact Name: Jan Wolkow
Company Address: 1700 MARKET STREET PHILADELPHIA Contact Phone: 215 913 3533
PA 19103 Contact Email: Wolkow@blott.com

CONTRACT INFORMATION

Contract Title: I Am San Diego H166584 Start Date: 4/1/16
Contract Number (if no number, state location): H166584 End Date: 9/30/17

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.

Jan Wolkow Name/Title of Signatory [Signature] Signature 2/12/16 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 Contractor 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 Contractor 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 Contractor 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 Contractor 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 Contractor 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 Contractor will hold the City harmless for release of this information.

It will be the Contractor's obligation to defend, at Contractor'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 Contractor's request. Furthermore, the Contractor 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 Contractor's request.

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

DELWITE CONSULTING LLP

Name of Firm

[Signature]

Signature of Authorized Representative

IAN WALLACE

Printed/Typed Name

2/12/16

Date

CONSULTANT CERTIFICATION

AMERICANS WITH DISABILITIES ACT (ADA) COMPLIANCE CERTIFICATION

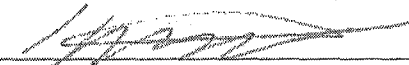
PROJECT TITLE: 1 Am Van 5,000

I hereby certify that I am familiar with the requirements of San Diego City Council Policy No. 100-4 regarding the Americans With Disabilities Act (ADA) outlined in Article IV, "ADA Certification", of the Agreement, and that;

Devoira Consulting LLP

(Name under which business is conducted)

has in place workplace program that complies with said policy. I further certify that each subcontract agreement for this project contains language which indicates the subcontractor's agreement to abide by the provisions of the policy as outlined.

Signed 

Printed Name IAN WALCOTT

Title PRINCIPAL