ATTACHMENT 1

DRAFT CONSULTANT SERVICES AGREEMENT BETWEEN CITY OF SUNNYVALE AND CDM SMITH FOR WATER POLLUTION CONTROL PLANT PROGRAM MANAGEMENT SERVICES

THIS AGREEMENT dated ______ is by and between the CITY OF SUNNYVALE, a municipal corporation ("CITY"), and CDM SMITH ("CONSULTANT").

WHEREAS, CITY desires to secure professional program management services necessary for oversight, analysis, coordination, review, consultation, services during construction and other services for a project known as Water Pollution Control Plant Program Management; and

WHEREAS, CONSULTANT represents that it, and its sub-consultants, possess the professional qualifications and expertise to provide the required services and are licensed by the State of California to practice engineering in the required disciplines;

NOW, THEREFORE, THE PARTIES ENTER INTO THIS AGREEMENT.

1. <u>Services by CONSULTANT</u>

CONSULTANT shall provide Program Management Core Services in accordance with Exhibit "A" entitled "Scope of Work."

At CITY'S sole option, CONSULTANT may be required to perform Additional Reconstruction Program Tasks as detailed in Exhibit "B-1" in accordance with the provisions set forth in this Agreement.

All exhibits referenced in this Agreement are attached hereto and are incorporated herein by reference.

CONSULTANT agrees to assign David Parry, P.E. to this project, to act in the capacity of Program Manager and personally direct the professional services to be provided by CONSULTANT.

Except as specified in this Agreement, CONSULTANT shall furnish all technical and professional services, including labor, material, equipment, transportation, supervision and expertise to perform all operations necessary and required to satisfactorily complete the services required in this Agreement.

2. Notice to Proceed/Completion of Services

- (a) CONSULTANT shall commence services upon receipt of a Notice to Proceed from CITY. Notice shall be deemed to have occurred three (3) calendar days after deposit in the regular course of the United States mail.
- (b) When CITY determines that CONSULTANT has satisfactorily completed the services defined in Exhibit "A," CITY shall give CONSULTANT written Notice of Final Acceptance, and CONSULTANT shall not incur any further costs hereunder. CONSULTANT may request this determination of completion when, in its opinion, it has satisfactorily completed the Scope of Work (Exhibit "A"), and if so requested, CITY shall make this determination within fourteen (14) days of such request.

3. <u>Time for Performance</u>

The term of this Agreement will be for a three (3) years period effective upon contract execution unless otherwise terminated. CONSULTANT shall deliver the agreed upon services to CITY as specified in Exhibit "A" and Exhibit "B-1", if authorized. Extensions of time may be granted by the City Manager upon a showing of good cause, and by written amendment signed by both parties.

4. Payment of Fees and Expenses for Core Services and Additional Reconstruction Program Tasks

CITY agrees to pay CONSULTANT for the services rendered pursuant to this Agreement the not-to-exceed amounts and/or rates set forth in in the attached Exhibit "B" – Compensation Schedule and Exhibit "B-1" – Additional Reconstruction Program Tasks. CONSULTANT acknowledges that any work associated with Additional Reconstruction Program Tasks shall be authorized by CITY on an as-needed basis, and the scope and fee for individual tasks will be negotiated in advance and agreed to in writing by both parties through duly executed task orders.

Payments shall be made to CONSULTANT on a monthly basis. Compensation will not be due until a detailed billing is submitted to CITY within a reasonable time before payment is expected to allow for normal CITY processing. An estimate of the percent of total completion associated with the various categories of the services shall be furnished by CONSULTANT with said billing. Costs for reimbursable expenses will be paid in accordance with the amounts and terms established in Exhibit "C" – Compensation for Reimbursable Expenses.

In no event shall the total amount of compensation payable under this Agreement for Program Management Core Services exceed the sum of Six Million One Hundred Sixty Six Thousand Eight Hundred Seven and No/100 Dollars (\$6,166,807), unless upon written modification of this Agreement executed by both parties.

In no event shall the total amount of compensation payable under this Agreement for Additional Reconstruction Program Tasks exceed the sum of Two Million Four Hundred Eighty Thousand and No/100 Dollars (\$2,480,000), unless upon written modification of this Agreement executed by both parties.

All invoices, including detailed backup, shall be sent to City of Sunnyvale, attention Accounts Payable, P.O. Box 3707, Sunnyvale, CA 94088-3707.

5. No Assignment of Agreement

CONSULTANT bind themselves, their partners, successors, assigns, executors, and administrators to all covenants of this Agreement. Except as otherwise set forth in this Agreement, no interest in this Agreement or any of the work provided for under this Agreement shall be assigned or transferred, either voluntarily or by operation of law, without the prior written approval of CITY. However, claims for money due to or to become due to CONSULTANT from CITY under this Agreement may be assigned to a bank, trust company or other financial institutions, or to a trustee in bankruptcy, provided that written notice of any such assignment or transfer shall be first furnished to CITY. In case of the death of one or more members of CONSULTANT's firm, the surviving member or members shall complete the services covered by this Agreement. Any such assignment shall not relieve CONSULTANT from any liability under the terms of this Agreement.

6. Consultant is an Independent Contractor

CONSULTANT is not an agent or employee of CITY but is an independent contractor with full rights to manage its employees subject to the requirements of the law. All persons employed by CONSULTANT in connection with this Agreement will be employees of CONSULTANT and not employees of CITY in any respect. CONSULTANT is responsible for obtaining statutory Workers' Compensation coverage for its employees.

7. Consultant's Services to be Approved by a Registered Professional

All reports, costs estimates, plans and other documents which may be submitted or furnished by CONSULTANT shall be approved and signed by a qualified registered professional in the State of California. The title sheet for calculations, specifications and reports, and each sheet of plans, shall bear the professional seal, certificate number, registration classification, expiration date of certificate and signature of the professional responsible for their preparation.

8. <u>Standard of Workmanship</u>

CONSULTANT represents and maintains that it is skilled in the professional calling necessary to perform the services and its duties and obligations, expressed and implied, contained herein, and CITY expressly relies upon CONSULTANT's representations regarding its skills and knowledge. CONSULTANT shall perform such services and duties in conformance to and consistent with the standards generally recognized as being employed by professionals in the same discipline in the State of California.

The plans, designs, specifications, estimates, calculations reports and other documents furnished under the Scope of Work (Exhibit "A") and Additional Reconstruction Program Tasks (Exhibit "B-1"), if authorized, shall be of a quality acceptable to CITY. The criteria for acceptance of the work provided under this Agreement shall be a product of neat appearance, well-organized, technically and grammatically correct, checked and having the maker and checker identified. The minimum standard of appearance, organization and content of the drawings shall be that used by CITY for similar projects.

9. <u>Responsibility of CONSULTANT</u>

CONSULTANT shall be responsible for the professional quality, technical accuracy and the coordination of the services furnished by it under this Agreement. Neither CITY's review, acceptance nor payment for any of the services required under this Agreement shall be construed to operate as a waiver of any rights under this Agreement or of any cause of action arising out of the performance of this Agreement and CONSULTANT shall be and remain liable to CITY in accordance with applicable law for all damages to CITY caused by CONSULTANT's negligent performance of any of the services furnished under this Agreement.

Any acceptance by CITY of plans, specifications, calculations, construction contract documents, reports, diagrams, maps and other material prepared by CONSULTANT shall not, in any respect, absolve CONSULTANT for the responsibility CONSULTANT has in accordance with customary standards of good engineering practice in compliance with applicable Federal, State, County and/or municipal laws, ordinances, regulations, rules and orders.

10. Right of CITY to Inspect Records of CONSULTANT

CITY, through its authorized employees, representatives, or agents, shall have the right, at any and all reasonable times, to audit the books and records including, but not limited to, invoices, vouchers, canceled checks, time cards of CONSULTANT for the purpose of verifying any and all charges made by CONSULTANT in connection with this Agreement. CONSULTANT shall maintain for a minimum period of three (3) years from the date of final payment to CONSULTANT or for any longer period required by law, sufficient books and records in accordance with generally accepted accounting practices to establish the correctness of all charges submitted to CITY by CONSULTANT. Any expenses not so recorded shall be disallowed by CITY.

11. Confidentiality of Material

All ideas, memoranda, specifications, plans, calculations, manufacturing procedures, data, drawings, descriptions, documents, discussions or other information developed or received by or for CONSULTANT and all other written information submitted to CONSULTANT in connection with the performance of this Agreement shall be held confidential by CONSULTANT and shall not, without the prior written consent of CITY be used for any purposes other than the performance of the Project services, nor be disclosed to an entity not connected with the performance of the Project services. Nothing furnished to CONSULTANT which is otherwise known to CONSULTANT or is or becomes generally known to the related industry shall be deemed confidential. CONSULTANT shall not use CITY's name, insignia or distribute exploitative publicity pertaining to the services rendered under this Agreement in any magazine, trade paper, newspaper or other medium without the express written consent of CITY.

12. No Pledging of CITY's Credit

Under no circumstances shall CONSULTANT have the authority or power to pledge the credit of CITY or incur any obligation in the name of CITY.

13. <u>Ownership of Material</u>

All material, including information developed on computer(s), which shall include, but not be limited to, data, sketches, tracings, drawings, plans, diagrams, quantities, estimates, specifications, proposals, tests, maps, calculations, photographs, reports and other material developed, collected, prepared or caused to be prepared, under this Agreement shall be the property of CITY, but CONSULTANT may retain and use copies thereof.

CITY shall not be limited, in any way, in its use of said material, at any time, for work associated with Project. However, CONSULTANT shall not be responsible for damages resulting from the use of said material for work other than Project, including, but not limited to the release of this material to third parties for work other than on Project.

14. Hold Harmless/Indemnification

To the extent permitted by law (including, without limitation, California Civil Code section 2782.8), CONSULTANT agrees to indemnify, defend and hold harmless CITY, its officers and employees from any and all claims, demands, actions, causes of action, losses, damages, liabilities, known or unknown, and all costs and expenses, including reasonable attorneys' fees in connection with any injury or damage to persons or property to the extent arising out of any negligence, recklessness or willful misconduct of CONSULTANT, its officers, employees, agents, contractor, subcontractors or any officer, agent or employee thereof in relation to CONSULTANT's performance under this Agreement. Such defense and indemnification shall not apply in any instance of and to the extent caused by the sole negligence, recklessness or willful misconduct of CITY, its officers, employees, agents or representatives.

15. Insurance Requirements

CONSULTANT shall take out and maintain during the life of this Agreement policies of insurance as specified in Exhibit "D" attached and incorporated by reference, and shall provide all certificates and/or endorsements as specified in Exhibit "D."

16. <u>No Third Party Beneficiary</u>

This Agreement shall not be construed or deemed to be an agreement for the benefit of any third party or parties and no third party or parties shall have any claim or right of action hereunder for any cause whatsoever.

17. <u>Notices</u>

All notices required by this Agreement, other than invoices for payment which shall be sent directly to Accounts Payable, shall be in writing, and shall be personally delivered, sent by first class with postage prepaid, or sent by commercial courier, addressed as follows:

To CITY: Manuel Pineda, City Engineer Department of Public Works CITY OF SUNNYVALE P. O. Box 3707 Sunnyvale, CA 94088-3707

To CONSULTANT: CDM SMITH Attn: David Parry, P.E. 100 Pringle Avenue, Suite 300 Walnut Creek, CA 94596

Nothing in this provision shall be construed to prohibit communication by more expedient means, such as by telephone or facsimile transmission, to accomplish timely communication. However, to constitute effective notice, written confirmation of a telephone conversation or an original of a facsimile transmission must be sent by first class mail, by commercial carrier, or hand-delivered. Each party may change the address by written notice in accordance with this paragraph. Notices delivered personally shall be deemed communicated as of actual receipt; mailed notices shall be deemed communicated as of three days after mailing, unless such date is a date on which there is no mail service. In that event communication is deemed to occur on the next mail service day.

18. <u>Waiver</u>

CONSULTANT agrees that waiver by CITY of any one or more of the conditions of performance under this Agreement shall not be construed as waiver(s) of any other condition of performance under this Agreement.

19. <u>Amendments</u>

No alterations or changes to the terms of this Agreement shall be valid unless made in writing and signed by both parties.

20. Integrated Agreement

This Agreement embodies the agreement between CITY and CONSULTANT and its terms and conditions. No verbal agreements or conversation with any officer, agent or employee of CITY prior to execution of this Agreement shall affect or modify any of the terms or obligations contained in any documents comprising this Agreement. Any such verbal agreement shall be considered as unofficial information and in no way binding upon CITY.

21. Conflict of Interest

CONSULTANT shall avoid all conflicts of interest, or appearance of conflict, in performing the services and agrees to immediately notify CITY of any facts that may give rise to a conflict of interest. CONSULTANT is aware of the prohibition that no officer of CITY shall have any interest, direct or indirect, in this Agreement or in the proceeds thereof. During the term of this Agreement CONSULTANT shall not accept employment or an obligation which is inconsistent or incompatible with CONSULTANT'S obligations under this Agreement.

Pursuant to CITY'S Standard Conflict of Interest Code, Council Policy 7.3.7, and the Political Reform Act, CITY has determined that any individual performing services under this Agreement may be required to file a Statement of Economic Interest (Form 700), Disclosure Category 1. See <u>www.fppc.ca.gov</u> for Form 700.

22. California Agreement

This Agreement has been entered into in the State of California and this Agreement shall be governed by California law.

23. <u>Records, Reports and Documentation</u>

CONSULTANT shall maintain complete and accurate records of its operation, including any and all additional records required by CITY in writing. CONSULTANT shall submit to CITY any and all reports concerning its performance under this Agreement that may be requested by CITY in writing. CONSULTANT agrees to assist

CITY in meeting CITY's reporting requirements to the state and other agencies with respect to CONSULTANT's work hereunder. All records, reports and documentation relating to the work performed under this Agreement shall be made available to City during the term of this Agreement.

24. <u>Termination of Agreement</u>

If CONSULTANT defaults in the performance of this Agreement, or materially breaches any of its provisions, CITY at its option may terminate this Agreement by giving written notice to CONSULTANT. If CITY fails to pay CONSULTANT, CONSULTANT at its option may terminate this Agreement if the failure is not remedied by CITY within thirty (30) days after written notification of failure to pay.

Without limitation to such rights or remedies as CITY shall otherwise have by law, CITY also shall have the right to terminate this Agreement for any reason upon ten (10) days' written notice to CONSULTANT. In the event of such termination, CONSULTANT shall be compensated in proportion to the percentage of services performed or materials furnished (in relation to the total which would have been performed or furnished) through the date of receipt of notification from CITY to terminate. CONSULTANT shall present CITY with any work product completed at that point in time.

25. Subcontracting

None of the services covered by this Agreement shall be subcontracted without the prior written consent of CITY. Such consent may be issued with notice to proceed if subcontract consultants are listed in the project work plan.

26. Fair Employment

CONSULTANT shall not discriminate against any employee or applicant for employment because of race, color, creed, national origin, sex, age, condition of physical handicap, religion, ethnic background or marital status, in violation of state or federal law.

27. Changes

CITY or CONSULTANT may, from time to time, request changes in the terms and conditions of this Agreement. Such changes, which are mutually agreed upon by CITY and CONSULTANT, shall be incorporated in amendments to this Agreement.

28. <u>Other Agreements</u>

This Agreement shall not prevent either Party from entering into similar agreements with others.

29. <u>Severability Clause</u>

In case any one or more of the provisions contained herein shall, for any reason, be held invalid, illegal or unenforceable in any respect, it shall not affect the validity of the other provisions which shall remain in full force and effect.

30. Captions

The captions of the various sections, paragraphs and subparagraphs, of the contract are for convenience only and shall not be considered nor referred to for resolving questions of interpretation.

31. Entire Agreement; Amendment

This writing constitutes the entire agreement between the parties relating to the services to be performed or materials to be furnished hereunder. No modification of this Agreement shall be effective unless and until such modification is evidenced by writing signed by all parties.

32. <u>Miscellaneous</u>

Time shall be of the essence in this Agreement. Failure on the part of either party to enforce any provision of this Agreement shall not be construed as a waiver of the right to compel enforcement of such provision or any other provision. This Agreement shall be governed and construed in accordance with the laws of the State of California.

IN WITNESS WHEREOF, the parties have executed this Agreement.

ATTEST: CITY OF SUNNYVALE ("CITY")
By_______
City Clerk By_______
City Manager
CDM SMITH ("CONSULTANT")
By______
By_____
APPROVED AS TO FORM:
City Attorney
By_______
Name/Title

Exhibit A

Water Pollution Control Plant Program Management Core Services SCOPE OF WORK

I. General

This project provides Program Management services for a new Water Pollution Control Plant (plant) in the City of Sunnyvale, California. The anticipated work will be an overall rehabilitation as well as new processes and facilities for some portions of the existing plant. The existing plant must be maintained in operation at all times, for fully compliant discharge, during this work including during new construction.

The City's overall goal is to renovate the existing plant to a new facility suitable to treat and dispose of municipal sewage for the next 40 years. The renovated plant must meet all regulatory and permit requirements, as well as good practices, sustainability, and cost-effectiveness, with a bias toward reducing overall lifecycle costs, and being good stewards of the land and public trust. The plant must be reliable, flexible, and adaptable to meet expected and new challenges over the next generation.

The Program Management Consultant (PMC) shall provide management services to the City's Public Works Department to provide oversight of master planning efforts, oversee and coordinate multiple design and construction contracts, and coordinate the Program with ongoing plant operations. Paramount will be the planning of projects and coordination with continued operations of the plant and compliance with the Programmatic Environmental Impact Report (PEIR) and the City's National Pollutant Discharge Elimination System (NPDES) permit. Several phases of work might occur simultaneously to provide efficiency and optimum value to the City. Coordination of sufficient conceptual design work shall be done to develop the site preparation plans, so that site preparation, such as major grading and utilities can be in advance of final design, at each phase.

The PMC is an experienced firm and shall provide extensive resources in several engineering and financial disciplines including, but not limited to; structural, civil, environmental (treatment process), electrical, mechanical, industrial process control, LEED Certification, construction management, scheduling and coordination of projects with ongoing plant operations, operations training and manual preparation, commissioning and startup, budgeting and fiscal reporting. The PMC shall provide regulatory knowledge of state and federal laws and regulations, particularly relative to water pollution control plants, BAAQMD, NPDES, other related permits, air emissions and greenhouse gas regulations, as well as Cal OSHA (safety) and environmental law for EIR/PEIR management and compliance.

The PMC shall be structured and situated to sustain Program Management services over a period of several years (potentially ten or more) and to be continuously responsible to multiple stakeholders including; the Core Project Team, Public Works Project Administration Section (PAS), Plant Management, City executives and elected officials, and members of the general Sunnyvale public. The PMC shall assist in managing design consultant and construction contracts, including resolution of potential conflicts (scheduling, design and physical), in the City's best interest. The PMC shall also be responsible for managing controls (budget and schedule), establishing and maintaining a document control system, planning and oversight of regulatory and environmental compliance, public outreach, commissioning, and automation and control system integration services.

The PMC shall work with the City and other City consultants who will be working simultaneously on the Master Plan that will guide further design and construction of the facility in the most cost-effective and

efficient manner in compliance with the requirements of the California Environmental Quality Act. The Master Plan includes the following elements at a minimum:

- Pre-Design and Basis of Design Development
- Support Facilities and Site Planning
- Documentation of Existing Conditions
- CEQA Compliance, Mitigation Monitoring
- Design Standards
- Implementation and Operations Planning
- Project Management

The PMC shall also work with the City and other City consultants who will be working simultaneously on the Primary Treatment System. The first major element of this project will be the planning and design for a new Primary Treatment System including all elements of water treatment beginning at the sanitary sewer trunk main. The primary system includes, but is not necessarily limited to the following elements:

- Raw sewage screening and screenings processing and disposal
- Raw sewage pumping and metering
- Grit removal and grit processing and disposal
- Primary sedimentation and primary sludge pumping and metering
- Connection to the existing anaerobic digesters
- Connection to or replacement of the existing primary effluent pipeline and metering
- Testing, commissioning, and transfer to the new Primary system, and decommissioning of the existing primary system.

Once these initial design elements have been established, secondary and tertiary plant phases can begin and will include production facilities for an expanded recycled water program potentially sized to provide complete use of plant effluent flow.

Besides the projects identified in the SIP, the PMC will also be providing services to City on other "gap" projects over the next several years. These "gap" projects shall be considered to be included in the Program and it is understood that any reference to the Program in this document includes these projects. The projects will help the plant continue to operate effectively over the course of the next several years prior to the completion of some of the future improvements. These projects may include (Current total budget in parentheses):

- Emergency Flow Management Improvements (Includes Repairs to Power Generation Facility) (\$4.1 million)
- Improvements to the Primary System (\$500k)
- Improvements to the Secondary System (\$700K)
- Improvements to the Tertiary System (\$1 million)
- Sodium Hypochlorite Disinfection System (PMC to provide commissioning services only) (\$1.6 million)

Existing conditions include an operating plant with primary, secondary and tertiary operating processes, a storm water pump station, storage yard, and ancillary facilities, the City's municipal solid waste landfill, the operating Sunnyvale Material Recovery and Transfer Station, and related property. The proposed Primary Treatment System project site is at the eastern portion of the plant site in an area containing

existing drying tile beds, and paved areas used for dewatering of digester bio-solids. The City started a 5year contract with a contractor that provides removal, processing and disposal of the City's pond biosolids, and may provide processing and disposal of the City's digester bio-solids. The contract allows the City to relocate the bio-solids operation, as necessary for design and construction of the new plant facilities.

Design consultants working on the various projects at the plant shall oversee all design aspects necessary to prepare complete sets of plans and specifications suitable for Public Works bidding, and compliant with all applicable requirements. The PMC shall be responsible for reviewing these documents including coordinating these designs with the other consultants and contractors working at the plant for compatibility and synergy. The PMC shall also be responsible for recommending these plans for bidding to the City Engineer per the following City requirements: 1) plans and technical specifications must be stamped and signed by the Professional Engineer-of-Record, 2) the plans and specifications shall be coordinated with the City's bid documents, standard provisions, and special provisions, and 3) all submittals shall be in both digital and hard copy format. In addition, the plans and specifications shall not have statements obligating the City to do anything other than what is stated in the City's standard construction contract, they shall provide sufficient detail to result in a good quality product while allowing competitive pricing where possible and appropriate, and they shall also provide options to the contractor where appropriate to obtain the same good level of quality for the best bid price. Plans and specifications must be readily biddable and objective, avoiding use of subjective terms, such as; "performing work to the satisfaction of the designer or the City", and proprietary products or services should be avoided unless the Consultant has demonstrated there is no other better option.

A plant Strategic Infrastructure Plan (SIP) was completed in 2010 by Brown and Caldwell, Environmental Engineers and Consultants. A peer review of the SIP was conducted by CH2M-Hill and completed in March 2011. The outcomes were reviewed by the Sunnyvale City Council in May 2011. The plan for moving forward with the reconstruction of the plant was presented to City Council in February 2012, and the staff report (see appendix) details the programmatic elements to be implemented towards that goal. The guidance received at that meeting included:

- Accept staff recommendation that the "Renovation Option" of the SIP be removed from further consideration
- Proceed with the development of the Master Plan/Site Facilities planning including further evaluation of the "Wetlands Option"

Currently the City is in the process of developing a Recycled Water Feasibility Study, a Sanitary Sewer System Master Plan, and a Zero Waste Strategic Plan. These efforts, in particular the Recycled Water Feasibility Study, are anticipated to have a significant impact on the treatment options to be selected for further design and implementation. In addition, the City is looking into the potential for a FOG and food waste receiving station pending the development of the Zero Waste Strategic Plan. These developments could have significant impacts on the sizing of the energy generation and electrical distribution systems of the new plant. It is anticipated that these efforts will be completed in the second half of 2013. Being planning level documents, the above items form the general frame work for implementation of the various programs and services provided by the Environmental Services Department, and should be considered as guidelines for incorporation into the reconstruction of the plant, subject to City Council acceptance of the planning effort and direction for implementation.

II. Consultant Coordination Requirements

The City anticipates awarding multiple consulting contracts over the next several years. The Program Management Consultant (PMC) shall coordinate its work with the City and other City Consultants who will be working simultaneously on the Master Plan, The Primary Treatment Facility Design, maintenance projects, and other manage the gap projects which are described in this document.

III. Program Management Services

The City expects the PMC to be a focal point for oversight of the plant reconstruction process, including the work of other consultants retained by the City to plan, design, and construct the plant projects over multiple years. The PMC will be responsible for providing various services that include design management, construction management, program management, commissioning, schedule and budget controls, records management, public outreach, and the integration of automation and controls systems for various projects included in the program. The PMC's role is to help the City achieve its goals for the PMC Projects which include:

- Continuous compliance with the plant's water quality requirements throughout design, construction, and commissioning
- Design of state-of-the-art wastewater treatment facilities that are energy efficient, safe, environmentally friendly, low maintenance, and cost-effective when evaluating life cycle costs
- Completion of design and construction contracts on time and within budget
- Effective scoping and management of consulting services to provide high quality, cost-effective, results-oriented services are provided to the City
- Production of high quality plans and specifications for construction projects that minimize the City's exposure to delays and cost overruns
- Effective communication and decision making by City staff and elected officials

The following is a general outline of the services:

- Management of the Master Plan And Programmatic Environmental Impact Report (PEIR) work effort
- Management of the Primary Treatment Facility Design work effort
- Planning and management of the overall program implementation including all of its projects
- Oversight of design and construction management services for all the projects included in the program
- Developing and maintaining a Records Management System for the Program
- Planning, management and controls of the overall plant reconstruction budget and schedule
- Planning and management of regulatory and environmental compliance items
- Public Outreach
- Commissioning services for all the projects included in the program
- Integration of automation and controls systems for all projects included in the program

The City recognizes the nature of this contract as providing the program management services contained in this scope of work and in accordance with the agreed-upon level of effort.

The PMC shall provide the following services under this agreement:

1. Project Design Management

The PMC shall be responsible for assisting the City with managing the master planning and design efforts of the various projects outlined in the SIP as well as the "gap" projects identified in this scope of work. The first steps of the program are to complete Master Planning and the Primary Treatment Facility Design. Reference documents for these scopes of work are included in the Appendix. Projects shall be managed in accordance with the guidelines of their contracts and at a minimum specific responsibilities shall include:

1.1. Responsible for the successful planning, management and delivery of aspects of design and master planning through appropriate management of design professionals and vendors as outlined in the scope of work. Coordinate with City staff in areas of the Program as required for successful delivery of each design element using applicable Program standards and procedures. Assure that all projects are coordinated effectively with the WPCP and concerns are addressed.

The objective of this task is to provide project level coordination. PMC will assist the City with the overall project coordination. The program level coordination will be addressed under Task 8.

- 1.2. Assist the City in preparing design services scopes of work and information to support competitive proposal processes. It is anticipated for the first three-year period that the only RFP will be for the Secondary Treatment System design. This includes assisting the City with technical evaluations of proposals received and the evaluation of consultant fee schedules. PMC will assist with pre-proposal meetings and addenda.
- 1.3. Confirm that all permit requirements are identified in each scope of work and that the design consultant submits all necessary documentation to the appropriate agency. Verify that the plans and specifications clearly identify any contractor responsibilities related to the permits. PMC will prepare and maintain a master list of required permits for the ongoing projects.
- 1.4. Review and evaluate any requests for scope changes during design and master planning. Assist with the preparation of necessary documentation assuming a few scope change requests are received for the following projects:
 - Master Plan
 - Primary Treatment System Design
- 1.5. Review all documents and submittals including but not limited to: plans, specifications, cost estimates, schedules, studies, design standards, reports, pre-designs and basis of designs, existing conditions documentation, surveying, geotechnical, and CEQA related items for completeness, accuracy and consistency with the master plan and adopted City standards. The design reviews shall also include technical disciplines, constructability, operability, maintainability, startup, and testing plan reviews. Reviews shall also focus on design assumptions and criteria, fatal flaws and compatibility with existing systems.

The major documents to be reviewed include but not limited to the following:

- Master plan deliverables contained in the City's agreement with Carollo Engineers
- All design deliverables of primary treatment system design.

- 1.6. Provide experienced technical resources (mechanical, electrical, process, controls, automation etc.) to provide comments and a thorough review of the documents to confirm systems are compatible amongst the various projects and are fully integrated without any voids. PMC will develop and maintain up-to-date documents to help communicate and coordinate for integration of the projects. The documents include:
 - Plant Process flow diagram
 - Electrical single line diagram
 - Site plan
- 1.7. Coordinate necessary plan/submittal reviews that include consolidating City review comments and the consultant's responses. Coordinate necessary review meetings with the City and designer so comments can be discussed in detail, clarified as necessary, and resolved.
- 1.8. Coordinate and participate in meetings and workshops to help facilitate the projects. Work with the design engineer and master planning consultant to develop agendas and complete meeting minutes for distribution to team members.
- 1.9. Manage project action item logs, design decision logs, schedules and budgets. Manage the program files of projects that include correspondence, documents, photographs, archives and records.
- 1.10. Identify project CEQA requirements and coordinate with the design consultants tasked with preparing the documents.
- 1.11. Provide technical expertise when needed to advise the City on key decisions during design and master planning. Key decisions are assumed to include such topics as the following:
 - Preliminary and primary treatment
 - Secondary treatment process
 - Recycled water
 - Biosolids management
 - Energy management
 - Nutrient management and future regulations
 - Site layout
- 1.12. Review and make recommendations on all invoices for payment.
- 1.13. Facilitate value engineering reviews when required by the City. Value engineering will be conducted as part of design reviews and will not be standalone value engineering sessions.
- 1.14. Oversee the provision of bid and construction support services by design consultants during the construction phase of projects.
- 1.15. Assist the City with the preparation of contractor pre-qualification documents as necessary. This includes assisting with developing responses to contractor RFIs, meeting with contractors, and reviewing contractor qualifications.

The City acknowledges that the consultant does not have adequate information to provide pricing for the design management of "gap" projects for improvements to the existing Primary, Secondary, and

Tertiary Systems. As these scopes of work are defined more specifically during the program, they will be considered for future inclusion in any resultant contract.

2. <u>Construction Management</u>

The PMC will be eligible for the opportunity to provide Construction Management (CM) services on various construction projects. Proposers are invited to submit qualifications and hourly rates as part of the RFP submittal process, but inclusion of CM services in any resultant contract shall be at the sole discretion of the City. CM services include the management and inspection of the Primary Treatment Facility, various construction projects that are a result of the Master Plan, and "gap" projects. Responsibilities shall include the following at a minimum:

- 2.1. Provide CM services for the construction phase of various projects identified in the Program. Track financial obligations, construction progress, schedules, and contingency levels throughout construction. Facilitate timely decision making through coordination with City staff and design consultants during construction
- 2.2. Provide inspection services for the construction phase of various projects identified in the Program. Inspection services shall include general civil as well as mechanical, electrical, controls, and building as applicable. Assure that projects are constructed in accordance with the plans, specifications, standards, City standards, codes, and all applicable local, state, and federal requirements. Prepare and submit daily inspection logs as well as weekly summaries of working days.
- 2.3. Coordinate all construction projects with City staff, designers, consultants, and contractors.
- 2.4. Establish processes, coordinate and facilitate RFIs, submittals, change orders, potential change orders and other correspondence from the contractor.
- 2.5. Facilitate preconstruction meetings and weekly construction progress meetings. This includes the preparation of meeting minutes for all construction related meetings.
- 2.6. Develop an action item log for each construction project and manage the log so that all actions are completed on time and are documented.
- 2.7. Respond in a timely manner to all RFI's, submittals, notices, change orders, potential change orders or other correspondence from the contractor. This includes preliminary screening of RFIs and Submittals prior to delivery to the design consultant, if required.
- 2.8. Provide claims resolution and avoidance.
- 2.9. Review and process all contractor invoices for payment and provide payment recommendations to the City.
- 2.10. Review and analyze all change orders and provide independent cost estimates. Provide the City with independent recommendations to advise on managing changes. Prepare change order documents, negotiation summary, and justification.
- 2.11. Develop and implement a quality assurance plan to verify that contract documents include appropriate testing and inspection requirements and construction contractors are following established testing protocols.
- 2.12. Verify all final permits and authorizations for use and occupancy have been submitted and approved.
- 2.13. Verify that all Record Drawings have been submitted and review them to confirm they are reflective on the field conditions.
- 2.14. Confirm that all contract requirements have been met and are properly documented. Coordinate all punch list and final inspections, maintain applicable logs and lists, and perform sign off of completed items. Confirm that all guarantees and warranties have been submitted. Validate the application for final payment and retention.

At this time there is not adequate information to provide pricing for Construction Management. As these scopes of work are defined more specifically during the program, they will be considered for inclusion in any resultant contract.

3. Program Controls Development

Program Baseline: The PMC shall prepare a program baseline schedule and budget report that includes the following activities:

- 3.1. Develop an overall program schedule. Develop a logical sequence of construction bid packages such that the plant remains operational during construction. Identify key milestones and timelines to meet all regulatory and permitting requirements. Identify potential conflicts or long lead-times and find timely cost-effective resolutions to conflicts as they arise, and adjust/revise schedules as necessary.
- 3.2. Develop a comprehensive overall project budget and cash flow projection of financial needs based on current schedules to assist the City with bond sales and cash management.

Controls Procedures and Guidelines: The PMC shall develop a set of program controls procedures that clearly define roles and responsibilities for the management of the individual project scope, schedule and budget.

- 3.3. Develop cost estimating and budgeting preparation guidelines, cost tracking and reporting processes, schedule management, and budget change management procedures.
- 3.4. Develop and implement a standard procedure and format for cost estimating so that design and construction contingencies, escalation factors, construction management fees, allowances for furniture, fixtures and equipment are applied consistently and appropriately.
- 3.5. Develop a plan for design and construction that establishes change identification, documentation, tracking and resolution procedures, delegated authority levels and change escalation procedures.

4. Program Controls System

The PMC shall design and implement a Program Management Information System (PMIS) to support the Program team throughout Program execution. The high-level purpose of the system is to facilitate business processes and team collaboration, communicate to stakeholders, control operations, provide transparency into Program performance, and support management decisionmaking. Integration of the PMIS with the existing City financial systems as well as configuration of the information system to support construction management is not required under this task. As these scopes of work are defined more specifically during the program, they may be added to the contract through a modification process determined by the City.

For the core platform of the PMIS, CDM Smith will license Oracle Primavera Unifier software. The license will provide for 25 named application users for the duration of this Agreement. Access and use of the Unifier software will be managed by the Controls Manager in support of scope covered in this Agreement; the Controls Manager will collaborate with the City for approval of system access outside of CDM Smith. The City owns the right to all data and documents stored within the Unifier software. At the end of the Unifier license term, if the City chooses not to renew with Oracle Primavera, all program data and documents stored within the Unifier software will be provided to the City on an external hard drive or similar storage media; documents will be in their native file format. In the event of termination of this Agreement between the City and CDM Smith, any remaining term of the license agreement with Oracle Primavera for Unifier may be transferred to the City.

At a minimum program controls system responsibilities shall include:

- 4.1. Develop an electronic records management system. The Consultant will work with the City to provide options and select an appropriate system that is acceptable to the City.
- 4.2. Provide information, records, and photos from the PMIS to support the program website.

5. Program Controls Management

Records Management: The PMC shall be responsible for providing and maintaining a records management system. This includes being responsible for the management, coordination, logging, tracking, and sharing of all documents. All correspondence for the project including pertinent emails shall also be stored in the records management system. At the end of the Program all systems and documents shall be transferred over the City. At a minimum records management responsibilities shall include:

- 5.1. Maintain an electronic records management system.
- 5.2. Retain electronic copies of all project correspondence, plan submittals, review comments, study reports, contracts, change orders, invoices, and other project records.
- 5.3. Responsible for the collection, scanning, and distribution of all project related documents.
- 5.4. Manage the records management system and assure that all documents are properly coded, numbered, and are searchable.
- 5.5. Develop and maintain a platform that allows the project team to easily share documents from different locations while maintaining appropriate security protocols.
- 5.6. Take and maintain a repository of photos to document Program progress. These photos should be included with Program updates.

Schedule Management: The PMC shall be responsible for developing, monitoring, tracking and coordinating the overall Program schedule as well as individual project schedules. The PMC shall coordinate with other consultant's working on the various components of the Program and incorporate these schedules into the master schedule. The PMC shall make sure all schedules are updated monthly and in the event any milestones slip, shall make sure action plans are initiated to make up the lost time. At a minimum these tasks shall include:

- 5.7. Verify that schedules include the necessary timeframes for temporary or permanent shutdowns of plant utility systems, pipelines and treatment processes during construction.
- 5.8. Review and advise the City on all project schedules submitted by design consultants and construction contractors. Incorporate all these individual schedules into a master schedule and provide monthly updates for the entire Program based on actual progress. Track all start and finish dates and perform CPM analysis as necessary.

Financial Management: The PMC shall be responsible for providing financial oversight for the entire program. This includes not only for the Program Management Contract but for all the other design and construction projects included in the Program. The PMC shall coordinate with all the consultants and contractors working on the Program to track expenditures and make sure expenditures are within applicable budgets. The PMC shall be responsible for preparing monthly updates that show updated budgets and expenditures. The following financial oversight services

shall be provided at a minimum:

- 5.9. Review and advise the City on the acceptability of all project invoices. Ensure invoices are in compliance with appropriate contract documents and that payments are only made for services authorized and received by the City.
- 5.10. Keep and maintain complete records of all expenses by project throughout the life of the program.
- 5.11. Maintain a comprehensive overall project budget and cash flow projection of financial needs based on current schedules to assist the City with bond sales and cash management. The project budget should track all encumbered as well as spent project costs, and projected project costs. The project budget shall also track contingencies and liabilities related to each contract, and contract dates for contract compliance and fiscal control.
- 5.12. Assist the City when necessary to apply for and track grant funds, bond-financing or loans needed to finance the program.

6. Regulatory and Environmental Compliance

The PMC shall be responsible for overseeing the regulatory and environmental compliance effort for the entire Program. This includes verifying that the Programmatic Environmental Impact Report (PEIR) and all permits and authorizations necessary are being carried out in accordance with applicable guidelines and requirements. The PMC shall confirm that all necessary items are shown on the schedules and all items are tracked and completed on time to avoid any unnecessary delays. At a minimum the work consists of:

- 6.1. Review and comment on the work effort being performed by various consultants including the Master Plan and Primary Treatment Facility design consultant. Confirm that the work meets applicable regulations and guidelines and that it is being performed in accordance with the work scope.
- 6.2. Assist the City with implementation of the mitigation monitoring plan adopted as part of the PEIR. Verify mitigation measures are included in appropriate plans and specifications.
- 6.3. Maintain a mitigation monitoring program indicating how each mitigation measure has been satisfied or is in progress.
- 6.4. Advise the City on various regulatory permit processes and requirements and include application and processing times in the necessary design packages as well as the master schedule. Confirm that the required regulatory and environmental compliance documentation is included in the appropriate Design RFP and scope of work.
- 6.5. Identify studies or other work products needed to secure permits and identify appropriate technical expertise to assist the City in permit acquisition.

7. <u>Public Outreach Support</u>

The PMC shall be responsible for all public outreach efforts for the entire Program. This includes developing outreach strategies, approaches, and templates to help communicate the scope, status, and objectives of the Program to stakeholders, residents and businesses located in the City. Stakeholders include the media, City Council, commissions, other agencies, organizations, and special interest groups etc. The PMC shall also be responsible for updating newsletters and web pages throughout the duration of the Program. At a minimum tasks shall include:

- 7.1. Develop a program communications plan to articulate the goals, audiences, and specific strategies to be used for public outreach.
- 7.2. Assist the City with leading public outreach efforts by coordinating the efforts of design consultants and construction contractors who conduct outreach meetings for this Program.

- 7.3. Plan, coordinate, attend, lead and present project/program information to interested stakeholder groups as requested by the City. Prepare all the necessary handouts, visual aids, presentations etc.
- 7.4. Establish the standards, strategy, framework, and overall themes for the communication efforts. Coordinate program's communication efforts with City staff including the City's Communication Officer.
- 7.5. Assist the City by creating a web page, or link to the City's web page, for the Program. Maintain this web page or link, and provide regular updates to reflect the current status of the Program.
- 7.6. Complete a quarterly communication in the form of a report and/or e-newsletter to highlight key events, opportunities for public input, progress and accomplishments. Maintain a database of interested parties for distribution via e-mail.
- 7.7. Provide updated information for the City's existing communication channels such as the quarterly report, social media (Facebook/Twitter), etc.

8. Project/Program Coordination

The PMC shall take the lead in assisting the City with coordinating all efforts of the Program and shall develop the necessary standards, processes and templates to facilitate this coordination effort. These tools shall be utilized to make sure tasks are well planned and items are being tracked and completed in a timely manner. These documents and processes shall also be used to maintain a level of consistency across the program. At a minimum the coordination effort includes:

- 8.1. Assist the City in managing the overall program by conducting regular project team meetings. Facilitate timely decision making on technical issues by bringing together consultants, staff and decision makers. Overall program coordination includes regular meetings for three years. Facilitation of major technical decision making workshops is included under subtask 1.11. PMC will develop a project management plan (PMP) that will include the key elements of the PMC activities on the Program. The PMP will set the framework for roles and responsibilities, critical success factors, project quality management (PQM) session, safety, etc. A PQM session convenes key City staff as well as key personnel from PMC.
- 8.2. PMC shall be responsible for developing, implementing, and maintaining all the logs and tracking systems required to facilitate the Program. These include at a minimum: action item tracking system to confirm that responsibilities among the project team are understood and tasks are completed; design decision logs (covered under Task 1.9) to document key project decisions; plan/document review logs to track comments and responses; inspection logs to document construction progress, change orders, and contingency use; logs and checklists to document equipment installation, integration, testing and start up.
- 8.3. (Task 8.3 moved to Task 3.5)
- 8.4. (Task 8.4 moved to Task 3.4)
- 8.5. Develop decision making and issue resolution procedures. These shall include approval levels, types of decisions, resolution timelines, and procedures to resolve conflicting issues. The goal is to define a structure and procedure for decision-making throughout all phases of the Program and to facilitate critical early decisions that have an immediate, significant impact on the program.
- 8.6. Develop and implement a QA/QC plan to verify all projects are being completed in accordance with Program and Project guidelines

- 8.7. Develop and implement a plant/system shutdown protocol. Ongoing coordination with the plant staff is imperative. Develop the forms and communication tools to identify and plan for necessary temporary or permanent shutdowns of plant utility systems, pipelines and treatment processes during construction. Coordinate with plant staff, CMs and construction contractors to minimize disruption caused by shutdowns. Verify that construction bid packages clearly identify the obligations of contractors to plan and coordinate shutdown activities. It includes protocol development and ongoing coordination with Plant staff and developing forms, communication plan, and plan for shutdown.
- 8.8. Assist the City with providing plant safety training for consultants and contractors working on site. This consists of reviewing and fully understanding the plant safety training video (approximately 20 minutes) and conducting a site walk (approximately 30 minutes) reviewing the plant safety areas. Once the plant is satisfied with the PMC's knowledge of the safety training, certain individuals will be approved by the plant to become a site safety trainer. The effort level does not include development of any new separate safety plan but only implements the safety plan.
- 8.9. Assist the City with preparing the necessary presentation materials and reports for Council updates.
- 8.10. Conduct quarterly executive level briefings to provide an overview of key issues, schedule, and budget status. This includes the development of a quarterly report for the program which should provide updates on the overall program status as well as updates on individual projects. At a minimum the information shall include an executive summary; budget status and updates; schedule status and updates; progress updates including major milestones and accomplishments; construction progress photos; current issues and potential resolutions. The PMC shall provide the City with several report format options to select from.

9. Commissioning

The PMC shall be responsible for commissioning services related to all projects constructed under the Program. These efforts include being engaged during the design process to assure all the necessary components of commissioning and start-up are included in the various projects. The PMC shall be responsible for coordinating all aspects of these commissioning services with the design engineer and City's construction manager. At a minimum these services shall include:

- 9.1. Provide oversight for testing, commissioning, and start-up services so that critical components of the plant are properly installed, calibrated, tested, integrated, perform as intended, and meet performance standards.
- 9.2. Coordinate testing, commissioning and start-up requirements in design scopes of work, designs, and construction contracts to ensure obligations of the designers and contactors during the commissioning process are identified.
- 9.3. Review plans and specifications from a commissioning perspective and provide comments during the various review periods for the designer to incorporate into the project.
- 9.4. Identify and verify new equipment is supplied with adequate training for operations staff and supplied with appropriate operations and maintenance manuals.
- 9.5. Review and coordinate commissioning sequencing plans prepared by the design consultants.

- 9.6. Review and critique commissioning work plans prepared by contractors during the submittal process. These plans shall be coordinated between the contractor, designer and PMC.
- 9.7. Read and become familiar with key equipment and system submittals to prepare for the commissioning and startup period.
- 9.8. Document and observe equipment final installation, testing, integration, system functional testing, and start up.
- 9.9. Coordinate with the construction manager to resolve any non-compliance issues related to testing, commissioning, and start-up.
- 9.10. Coordinate with the construction manager to assure that all testing, commissioning and start-up services have been successfully completed in accordance with the applicable plan.
- 9.11. Review and comment on O&M Manuals.
- 9.12. Review and comment on training materials.
- 9.13. Prepare a commissioning report to document testing activities of all equipment, observations made during commission, and log sheets of operational data taken during the start-up. Provide photographs of equipment installation and inspection reports, equipment vendor/supplier certificates of installation completeness, and other pertinent documents that provide back-up documentation of the installation and startup activities.

At this time there is not enough information to provide pricing for all Commissioning services included in this section of the work scope. As these scopes of work are defined more specifically during the program, they may be added to the contract through a modification process determined by the City. Under this task, the Consultant shall provide commissioning services related to the Hypochlorite Disinfection System.

10. Automation and Control Systems Integration Services

As part of the Master Planning effort being performed under a separate contract, the City is developing an automation and controls systems plan (ACSP) as well as design standards to accompany it. The PMC shall be responsible for overseeing these efforts and ensuring all design and construction projects conform with the established design standards and fit within the frame work of the ACSP. The PMC shall also be responsible for control systems programming and integration support for all projects, including ensuring contractor performance with regard to conformance with design specifications for materials, equipment and construction/installation. The City has no dedicated or specialized technical resources to support control systems programming or integration services. Therefore for the purposes of this task, the PMC shall provide the necessary programming, QA/QC, and integration for the successful implementation of the automation aspects of the program. The City intends to procure separate design contracts for the various processes and the role of the PMC is to oversee the development of controls systems related technical specifications and plans developed by design consultants. Specific responsibilities and tasks include at a minimum:

Preliminary and pre-design phase services

- 10.1. As the Master Plan development of the ACSP progresses, the PMC shall be responsible for advising the City on the appropriate technologies and platforms being considered and enable decision making for the selection of the right platform for the supervisory control and data acquisition (SCADA) and control systems.
- 10.2. Confirm sufficient level of detail and analysis is provided for the alternatives being developed by the Master Plan Consultant, gathering input from operations and maintenance (O&M) staff on technology preferences, and projecting accurate life time costs.

- 10.3. The PMC shall be responsible for ensuring the developed control philosophy and automation strategy is reflected in the pre-design development of the various processes as part of the Master Plan.
- 10.4. One of the first developments of the ACSP may be the recommendation to integrate the three major existing SCADA systems (Opto 22, I-FIX, and Intellution). There are also stand-alone systems (GE Fanuc) for controlling the power generation facility, and programmable logic controllers (PLC) for gas conditioning and digester drain controls. Should the City decide to proceed with this as a pre-step to any major construction project implementation, the PMC shall be required to provide the technical support and programming associated with such an integration, including overseeing the development of any specifications necessary to procure designers and contractors to implement the recommendations.

Design Phase Services

- 10.5. Verify that all the design engineers develop comprehensive piping and instrumentation diagrams (P&IDs) and specifications that will result in successful project implementation.
- 10.6. Verify that the drawings, P&IDs, and specifications have all the necessary information, free of ambiguity for prospective contractors to bid and provide competitive pricing.
- 10.7. Integrate and coordinate all drawings and specifications with existing systems to help ensure continuous operation of the plant during construction.
- 10.8. It is anticipated that during active construction periods that plant will have to run some processes manually. The PMC shall be responsible for working with the O&M staff to identify impacts and minimize them during construction.
- 10.9. The PMC shall oversee the development of interim control scenarios and strategies included with various design packages to be implemented by the contractor. The design engineer shall provide the basic equipment and instrumentation list along with the necessary P&IDs. The PMC shall be responsible for overseeing the development of control strategies, block diagrams, network diagrams, PLC (or digital control system (DCS)) panel drawings, remote input/output (I/O) drawings, and any other documentation necessary to create a comprehensive bid-set to give adequate direction to the control's contractor performing the installation.

Control Strategy Developments

- 10.10. The PMC shall be responsible for working with the various design engineers responsible for taking the Basis of Designs produced under the Master Plan to 100% completion and the O&M staff in developing control strategies. The design engineers shall lead the development of the P&IDs and control narratives and the PMC shall take the lead in developing the control strategies. The control strategies shall take the design information mentioned above, which largely relates to how the equipment and facility are to operate, and provides additional detail required by the programmers to fully program the system. This includes defining how the software will be structured (which will be critical when programming the plant-wide strategies), the operation of the graphics, the information to be provided on the graphics and in the alarm system, as well as additional detail about the operational logic which is required for programming (what to do in the event of different failure situations, defining software interlocks, identifying any operator access levels, etc.).
- 10.11. The control strategies shall be of sufficient detail to serve as the basis for the PLC programming and human machine interface (HMI) configuration activities. The PMC shall lead control strategy workshops as necessary during the design development. The control strategies shall include but not be limited to the following information:

- Summary description of the control strategy
- Detailed descriptions of the equipment control modes and operational status, strategy control modes and service operational status
- Hardwired and software interlocks including level, temperature and flow interlock descriptions
- Graphic display requirements
- Alarming requirements

Bid and Construction Phase Services

- 10.12. With respect to the automation and control systems aspects of projects, the design engineers will be required to take the lead in coordinating responses on any issues that arise during the bid and construction phases with coordination and input from PMC.
- 10.13. The design engineer shall coordinate with the PMC to provide input and clarification for responding to the RFIs, addenda, submittals, change orders and reviewing costs break downs for the control systems elements.

Control Systems/SCADA Configuration and Start-up Services

- 10.14. PMC shall provide all control systems configuration and start-up services associated with all Plant reconstruction projects. This includes, development of PLC (or DCS) programs according to the control strategies developed, hardware and software programming, developing local and central control systems graphic displays, database development, network configuration and report development.
- 10.15. The PMC shall work closely with City staff in configuring the systems and developing the reports in a format conducive for immediate process control and compliance monitoring and long-term historical storage.
- 10.16. The City is in the process of procuring a new Laboratory Information System (LIMS) and the decision to integrate the LIMS with the plant control systems will be made at a future date. The PMC shall assist with this analysis and help support the decision making effort.
- 10.17. As part of start-up services the PMC shall be required to attend any factory acceptance testing on behalf of the City for the SCADA elements, attend start-up coordination meetings with the design engineer and City staff, verify that the Contractor's field calibrations are coordinated with controller programming, witness loop checkout testing to verify successful completion by the Contractor, verify control system installation following PLC and control system communication testing.
- 10.18. Once the contractor verification of equipment functionality in local manual mode has been completed, the PMC shall install the PLC programs, the operator workstation displays, the historian database points, the reports, and test the programs. The PMC shall also support any necessary contractor site acceptance testing periods.

Post start-up Training and Modifications

- 10.19. PMC shall be responsible for coordinating any contractor and manufacturer required trainings related to the control systems as specified in the bid documents.
- 10.20. PMC shall be required to develop comprehensive site specific training curriculum based on the Sunnyvale Plant operating conditions and provide that training to the Plant and other City staff involved in the operations and maintenance of the control systems. The training shall be interactive in nature and conducted on the installed systems so that staff can familiarize themselves with the new systems and control options.

- 10.21. The PMC shall maintain a punch list item during start-up and post start-up for up to a period of one year to document any control systems issues and will provide additional programming as necessary to address these items.
- 10.22. At the end of one year of completion of every major project, the PMC shall conduct a control systems review workshop with City staff and develop a report with any required improvements needed.
- 10.23. At the direction of the City PMC shall provide technical and implementation support of such "post break-in period" improvements.

At this time there is only enough information to provide pricing for Automation and Control Systems Integration services pertaining to the oversight, planning, and development of the Master Plan. As the remainder of the scope of work in this section is defined more specifically during the program, they may be added to the contract through a modification process determined by the City.

Under this task, the PMC shall provide services for tasks 10.1 through 10.4 which only relate to the Master Plan development, with the exception of any programming services.

END OF SCOPE OF WORK

City	of	Sunny	Aleva

Program Management Services for a New WPCP

CDM Smith

CDWS	Tasks											L	abor												Su	oconsultan	its			ODCs	ODCs	Total
		Program Manager	Program & Resource Manager		Quality Manager	Safety Manage		Program Control Lead	Scheduler	Document Control Lead	Financial Ops	Unifier Technician	Risk Manager		Discipline Reviewers	Estimating	Commiss. Manager	Commiss. Engineer	Const. Manager	Regulatory/ Permit Manager	Outreach Technician				cess/ mation Prod		ublic reach	Regulatory	Advisor			
Task #	Task Description	Parry	Akela	TBD	Pickus	Opem	Lutzen- burger/	Enser/	Cody	Jeannie	TBD	Spiller	TBD	Fernbach /	Various	Johnson	Taylor	Kapushinski	Foster	Pelletier	Stevens	Total T Hours	otal Labor Costs		lex BI	.P Aj	pex	LWA	PRB	Unifier	Other Direct Costs	Total Fee
		\$260	\$204	\$100	\$230	\$204	Surgen, Button \$240	Krabacher \$220	Belcher \$230	Rosser \$135	\$135	\$135	\$240	Strehler \$230	\$204	\$230	\$240	\$204	\$240	\$204	\$135		·	Er	200 \$2		260	\$230	\$240	License Fee/Hr or		
1.0	Project Design Management	1,004	400			_					72	40		1,042	1,607	200	80	-	80	-		4,913 \$	1,055,674		\$0 \$		\$0		\$186,520	LS \$0	\$0	\$2,157,152
1.1	Design coordination	120	-	120				-		-		-	-	120	-	-	-	-	-	-		, .	\$79,584		\$0 \$		\$0	\$0 \$0	\$11,520	\$0	\$0	\$91,104
12	Scope of work preparation and proposal review	80	24			_					-		_	130	-	-	-			-		258	\$57,996		\$0 \$		\$0	\$0	\$0	\$0	\$0	\$91,596
1.3	assistance Confirm permit requirements and contractor responsibilities	24	-	-	-	-	-	-	-	-	-	-	-	40	-	-	-	-	-		-		\$15,440		\$0 \$		\$0	\$0 \$0	\$0	\$0 \$0	\$0	\$29,840
1.4	Evaluate scope change requests	24	-	24	-	-	-	-	-	-	-	-	-	48	-	-	-	-	-	-	-	96	\$19,680	\$5,760	\$0 \$	0 5	\$0	\$0	\$0	\$0	\$0	\$25,440
1.5	Review design documents and submittals	80	60	40	-	24	4 -	-	-	-	-	-	-	160	1,359	200	80	-	80	-	-	2,083	\$440,318	\$470,334	\$0 \$	0 9	\$0	\$0	\$0	\$0	\$0	\$910,652
1.6	Confirm integration across project designs	40	-	4	-	-	-	-	-	-	-	-	-	-	80	-	-	-	-	-	-	124	\$27,120	\$45,120	\$0 \$	0 9	\$0	\$0	\$0	\$0	\$0	\$72,240
1.7	Coordinate review comments and responses	48	60	60	-	-	-	-	-	-	-	-	-	80	-	-	-	-	-	-	-	248	\$49,120	\$22,400	\$0 \$	0 9	\$0	\$0	\$0	\$0	\$0	\$71,520
1.8	Coordinate and participate in design meetings	144	120	-	-	-	-	-	-	-	-	-	-	120	-	-	-	-	-	-	-	384	\$89,520	\$129,840	\$0 \$	0 5	\$0	\$0	\$0	\$0	\$0	\$219,360
1.9	Manage design decision logs, schedules and budgets (covered under Task 5)	80	-	-	-	-	-	-	-	-	-	40	-	-	-	-	-	-	-	-	-	120	\$26,200	\$0	\$0 \$	0 9	\$0	\$0	\$0	\$0	\$0	\$26,200
1.10	Identify and coordinate CEQA requirements	20	-	-	-	-	-	-	-	-	-	-	-	80	-	-	-	-	-	-	- 1	100	\$23,600	\$18,400	\$0 \$	0 9	\$0	\$0	\$0	\$0	\$0	\$42,000
1.11	Assist with City decisions during planning and design	168	96	28	-	-	-	-	-	-	-	-	-	-	168	-	-	-	-	-	-		\$100,336		\$0 \$		\$0	\$0	\$175,000	\$0	\$0	\$365,000
1.12	Review designer invoices	36	-	-	-	-	-	-	-	-	72	-	-	72	-	-	-	-	-	-	-	180	\$35,640	\$0	\$0 \$	0 9	\$0	\$0	\$0	\$0	\$0	\$35,640
1.13	Value engineering	60	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	84	\$18,000	\$0	\$0 \$	0 9	\$0	\$0	\$0	\$0	\$0	\$18,000
1.14	Oversee designer services during bid and construction	40	-	-	-	-	-	-	-	-	-	-	-	192	-	-	-	-	-	-	-	232	\$54,560	\$66,240	\$0 \$	0 9	\$0	\$0	\$0	\$0	\$0	\$120,800
1.15	Assist City in contractor pre-qualification	40	40		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	80	\$18,560	\$19,200	\$0 \$	0 9	\$0	\$0	\$0	\$0	\$0	\$37,760
2.0	Construction Management	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	\$0	\$0	\$0 \$	0 9	\$0	\$0	\$0	\$0	\$0	\$0
2.1	Provide CM services when requested	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	\$0	\$0	\$0 \$	0 9	\$0	\$0	\$0	\$0	\$0	\$0
2.2	Provide inspection services on assigned projects	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	\$0	\$0	\$0 \$	0 9	\$0	\$0	\$0	\$0	\$0	\$0
2.3	Coordinate with City, designers, contractors	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	\$0	\$0	\$0 \$	0 9	\$0	\$0	\$0	\$0	\$0	\$0
2.4	Establish CM processes and coordinate submittals	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	\$0		\$0 \$		\$0	\$0	\$0	\$0	\$0	\$0
2.5	Facilitate construction meetings	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	\$0		\$0 \$		\$0	\$0	\$0	\$0	\$0	\$0
2.6	Develop and manage action log Screen submittals before designer review and monitor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	\$0		\$0 \$		\$0	\$0	\$0	\$0	\$0	\$0
2.7	timeliness	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	\$0		\$0 \$		\$0	\$0	\$0	\$0	\$0	\$0
2.8	Provide claim resolution	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	\$0		\$0 \$		\$0	\$0	\$0	\$0	\$0	\$0
2.9	Review contractor invoices	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	\$0		\$0 \$		\$0	\$0	\$0	\$0	\$0	\$0
2.10	Review and analyze change orders	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	\$0		\$0 \$		\$0	\$0	\$0	\$0	\$0	\$0
2.11 2.12	Develop and implement quality assurance plan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	\$0 \$0		\$0 \$ \$0 \$		\$0 \$0	\$0 ©0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
2.12	Verify permit requirements Verify Record Drawings	-	-	-	-	-	-	-		-	-		-	-	-	-	-	-	-	-	-	0	\$0 \$0		\$0 \$ \$0 \$		\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
2.13	Coordinate contract closeout				-				-									-	-			0	\$0 \$0		\$0 \$		\$0	\$0 \$0	\$0	\$0 \$0	\$0 \$0	\$0
3.0	Program Controls Development	56	-	30	-		50	440	220	-	200	-	12	32	-	220	-	-	-	-	-	1,260	\$264,800		\$0 \$ \$0 \$		\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$275,360
3.1	Develop program schedule	20	-	10	-	-	10	60	100	-	-		6	12	-	-	-	-	-	-	-		\$49,000		\$0 \$		\$0	\$0 \$0	\$0	\$0	\$0	\$59,560
3.2	Develop program budget	20	-	-	-	-	10	100	-	-	80	-	6	12	-	100	-	-	-	-	- 1	328	\$67,600	\$0	\$0 \$	0 9	\$0	\$0	\$0	\$0	\$0	\$67,600
3.3	Develop program control procedures	8	-	10	-	-	20	200	100	-	100	-	-	8	-	40	-	-	-	-	-		\$99,420		\$0 \$		\$0	\$0	\$0	\$0	\$0	\$99,420
3.4	Develop estimating guidelines	8	-	10	-	-	10	40	-	-	-	-	-	-	-	80	-	-	-	-	-	148	\$32,680		\$0 \$		\$0	\$0	\$0	\$0	\$0	\$32,680
3.5	Develop change management procedure	-	-	-	-		-	40	20	-	20	-	-		-			-	-	-	<u> </u>		\$16,100		\$0 \$		\$0	\$0 \$0	\$0	\$0 \$0	\$0 \$0	\$16,100
4.0	Program Controls System	-	-	-	-	-	-	520	-	-	-	680		-	-	-	-	-	-	-	-		\$209,080		\$0 \$		\$0	\$0	\$0	\$19,000	\$0 \$0	\$228,080
4.1	Develop information system	-	-	-		-	-	520	-	-	-	680		-	-	-	-	-	-	-	-		\$209,080		\$0 \$		\$0	\$0 \$0	\$0	\$19,000	\$0	\$228,080
5.0	Program Controls Management	168	-	-	-	-	120		960	1,584	2,592	480		-	-	-	-	-	-	-	-		1,348,080		\$0 \$		\$0	\$0	\$0	\$66,500	\$0	\$1,431,140
5.1	Maintain electronic records system	-	-	-	-	· ·	-	480	-	-	-	480		-	-	-	-	- 1	-	-	- 1		\$170,400		\$0 \$		\$0	\$0	\$0	\$66,500	\$0	\$236,900
5.2	Retain electronic copies of records	-	-	-	-	-	-	120	-	600	-	-	-	-	-	-	-	-	-	-		720	\$107,400	\$16,560	\$0 \$	0 5	\$0	\$0	\$0	\$0	\$0	\$123,960
5.3	Collect, scan and distribute records	-	-	-	-	-	12	200	-	616	-	-			-	-	-	-	-	-		828	\$130,040	\$0	\$0 \$	0 :	\$0	\$0	\$0	\$0	\$0	\$130,040
5.4	Code, number and manage records	-	-	-	-	-	-	40	-	80	-	-	-	-	-	-	-	-	-	-	-	120	\$19,600	\$0	\$0 \$	0 9	\$0	\$0	\$0	\$0	\$0	\$19,600
5.5	Maintain document platform (under 5.1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	\$0	\$0	\$0 \$	0 3	\$0	\$0	\$0	\$0	\$0	\$0
5.6	Maintain program photos	-	-	-	-	-	-	-	-	288	-	-	-	-	-	-	-	-	-	-	-	288	\$38,880	\$0	\$0 \$	0	\$0	\$0	\$0	\$0	\$0	\$38,880
5.7	Coordinate project schedules with plant operations	80	-	-	-	-	-	120	160	-	-	-	-	-	-	-	-	-	-	-	-		\$84,000		\$0 \$		\$0	\$0	\$0	\$0	\$0	\$84,000
5.8	Update master schedule	28	-	-	-	-	12		800	-	-	-	-	-	-	-	-	-	-	-	-	· ·	\$246,960		\$0 \$		\$0	\$0	\$0	\$0	\$0	\$246,960
5.9	Review project invoices	18	-	-	-	-	-	30	-	-	120	-	-	-	-	-	-	-	-	-	-		\$27,480		\$0 \$		\$0	\$0	\$0	\$0	\$0	\$27,480
5.10	Maintain records of expenses	24	-	-	-	-	-	200	-	-	720	-	16	-	-	-	-	-	-	-	-		\$151,280		\$0 \$		\$0	\$0	\$0	\$0	\$0	\$151,280
5.11	Maintain budget and cash flow	18	-	-	-	-	96	450	-	-	1,512	-	-	-	-	-	-	-	-	-	-		\$330,840		\$0 \$		\$0	\$0	\$0	\$0	\$0	\$330,840
5.12	Apply for and track fund sources	-	-	-	-	-	-	40	-	-	240	-	-	-	-	-	-	-	-	-	-	280	\$41,200	\$0	\$0 \$	0 9	\$0	\$0	\$0	\$0	\$0	\$41,200

EXHIBIT "B"

City	of	Sunny	Aleva

Program Management Services for a New WPCP

CDM Smith

	Tasks											I	abor									-			Subcons	sultants			ODCs	ODCs	Total
	Task Description	Program Manager	Program & Resource Manager		Quality Manager	Safety Manager	Program Advisors	Program Control Lead	Scheduler	Document Control Lead	Financial Ops	Unifier Technician	Risk Manager	Design Managers	Discipline Reviewers	Estimating	Commiss. Manager	Commiss. Engineer	Const. Manager	Regulatory/ Permit Manager	Outreach Technician			Process/ Automation	Process	Public Outreach	Regulatory	Advisor		Other	
Task #	rask Description	Parry	Akela	TBD	Pickus	Opem	Lutzen- burger/ Button	Enser/ Krabacher	Cody Belcher	Jeannie Rosser	TBD	Spiller	TBD	Fernbach / Strehler	Various	Johnson	Taylor	Kapushinski	Foster	Pelletier	Stevens Total		B&V	Alex Ekster	BLP	Apex	LWA	PRB	Unifier License	Other Direct Costs	Total Fee
		\$260	\$204	\$100	\$230	\$204	\$240	\$220	\$230	\$135	\$135	\$135	\$240	\$230	\$204	\$230	\$240	\$204	\$240	\$204	\$135			\$200	\$205	\$260	\$230	\$240	Fee/Hr or LS	1	
6.0	Regulatory and Environmental Compliance	20	24	20	-	-	-	-	-	-	-	-	10	120	-	-	-	-	-	120	- 314	\$66,576	\$146,400	\$0	\$0	\$0	\$59,800	\$0	\$0	\$0	\$272,776
6.1	Review requirements in plan and designs	4	8	4	-	-	-	-	-	-	-	-	10	40	-	-	-	-	-	60	- 126	\$26,912	\$86,200	\$0	\$0	\$0	\$5,520	\$0	\$0	\$0	\$118,632
6.2	Assist City with mitigation monitoring plan	4	-	4	-	-	-	-	-	-	-	-	-	24	-	-	-	-	-	-	- 32	\$6,960	\$36,040	\$0	\$0	\$0	\$5,520	\$0	\$0	\$0	\$48,520
6.3	Maintain mitigation monitoring program	4	-	4	-	-	-	-	-	-	-	-	-	24	-	-	-	-	-	-	- 32	\$6,960	\$0	\$0	\$0	\$0	\$18,400	\$0	\$0	\$0	\$25,360
6.4	Coordinate permit requirements with schedules	4	8	4	-	-	-	-	-	-	-	-	-	8	-	-	-	-	-	30	- 54	\$11,032	\$0	\$0	\$0	\$0	\$2,760	\$0	\$0	\$0	\$13,792
6.5	Assist City with permit acquisitions	4	8	4	-	-	-	-	-	-	-	-	-	24	-	-	-	-	-	30	- 70	\$14,712	\$24,160	\$0	\$0	\$0	\$27,600	\$0	\$0	\$0	\$66,472
7.0	Public Outreach Support	176	-	60	-	-	-	40	-	-	-	112	-	-	-	-	-	-	-	-	952 1,340	-	\$0	\$0	\$0	\$174,720	\$0	\$0	\$0	\$0	\$378,920
7.1	Develop communication plan	8	-	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 28	\$4,080	\$0	\$0	\$0	\$15,600	\$0	\$0	\$0	\$0	\$19,680
7.2	Assist City with outreach efforts	48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 48	\$12,480	\$0	\$0	\$0	\$18,720	\$0	\$0	\$0	\$0	\$31,200
7.3	Develop program information presentations	24	-	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	40 104	\$15,640	\$0	\$0	\$0	\$18,720	\$0	\$0	\$0	\$0	\$34,360
7.4	Establish communication standards, strategies, themes with City	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 40	\$10,400	\$0	\$0	\$0	\$37,440	\$0	\$0	\$0	\$0	\$47,840
7.5	Assist City with web site and update status	8	-	-	-	-	-	40	-	-	-	112	-	-	-	-	-	-	-	-	480 640	\$90,800	\$0	\$0	\$0	\$37,440	\$0	\$0	\$0	\$0	\$128,240
7.6	Create quarterly report and maintain stakeholder	48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	276 324	\$49,740	\$0	\$0	\$0	\$46,800	\$0	\$0	\$0	\$0	\$96,540
7.7	database Assist City with social media	-	-		-		-	-			-	-	-	-	-		-				156 156	\$21,060	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$21,060
7.8	Maintain program photos (included under Task 5)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	\$0	\$0	\$0	\$0
8.0	Project / Program Coordination	864	328	128	16	-	20	-	-	-	72	-	-	368	40	-	240	-	40	-	- 2,116		\$230,810	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$713,362
8.1	Assist City with meeting facilitation	312	120		-	-	-	-	-	-	72	-	-	120	-	-	-	-	-		- 624	\$142,920	\$50,730	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$193,650
8.2	Track all aspects of the program	240		-	-	-	-	-	-	-	-	-	-	120	-	-	-	-	-	-	- 480		\$9,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$124,080
8.3	Develop a plan for change resolution and delegated authority (covered under Task 5 & 8.5)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8.4	Develop estimating and cost procedures	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 0	\$0	\$57,300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$57,300
8.5	Develop decision and issue resolution procedures (covered under Task 3)	120	80	40	-	-	20	-	-	-	-	-	-	-	40	-	-	-	-	-	- 300	\$64,480	\$46,220	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$110,700
8.6	Develop & implement QA/QC plan	20	-	-	16	-	-	-	-	-	-	-	-	80	-	-	-	-	-	-	- 116	\$27,280	\$41,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$68,480
8.7	Develop plant shutdown protocol	20	-	-	-	-	-	-	-	-	-	-	-	40	-	-	240	-	40	-	- 340	\$81,600	\$20,160	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$101,760
8.8	Assist City with safety training	8	8	-	-	-	-	-	-	-	-	-	-	8	-	-	-	-	-	-	- 24	\$5,552	\$5,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,152
8.9	Assist City with Council updates	72	-	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 112	\$22,720	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$22,720
8.10	Conduct quarterly executive briefings	72	-	48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 120	\$23,520	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$23,520
9.0	Commissioning	22	4	-	-	-	-	-	-	-	•	-	-	-	-	-	156	136	-	-	- 318	\$71,720	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$71,720
9.1	Provide testing, commissioning and start-up services	22	4	-	-	-	-	-	-	-	-	-	-	-	-	-	40	-	-	-	- 66	\$16,136	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$16,136
9.2	Coordinate commissioning requirements with designers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	-	-	-	- 8	\$1,920	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,920
9.3	Review design packages	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	-	-	-	- 24	\$5,760	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,760
9.4	Ensure appropriate training and manuals to operations for equipment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	24	-	-	- 32	\$6,816	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,816
9.5	Review designer commissioning sequences	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	8	-	-	- 16	\$3,552	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,552
9.6	Review contractor commissioning work plans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	8	-	-	- 24	\$5,472	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,472
9.7	Prepare for commissioning services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	16	-	-	- 20	\$4,224	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,224
9.8	Observe contractor testing and start-up	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	16	-	-	- 32	\$7,104	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,104
9.9	Coordinate with CMs during construction	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	-	- 16	\$3,264	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,264
9.10	Verify acceptable completion of construction services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-	- 12	\$2,880	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,880
9.11	Review O&M Manuals	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	12	-	-	- 20	\$4,368	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,368
9.12	Review training materials	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	12	-	-	- 18	\$3,888	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,888
9.13	Prepare commissioning reports	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	24	-	-	- 30	\$6,336	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,336
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EXHIBIT "B"

City of	Sunnyvale	
	Surinyvale	

Program Management Services for a New WPCP

CDM Smith

	Tasks												Labor													Subcon	sultants			ODCs	ODCs	Total
	Task Description	Program Manager	Program & Resource Manager		Quality Manager	Safety Manager	Program Advisors	Program Control Lead	Scheduler	Document Control Lead	Financial Ops	Unifier Technician	Risk Manager	Design Managers	Discipline Reviewers	Estimating	Commiss. Manager		Const. Manager	Regulatory/ Permit Manager	Outreach Technician				Process/ Automation	Process	Public Outreach	Regulatory	Advisor		Other	
Task #		Parry	Akela	TBD	Pickus	Opem	Lutzen- burger/ Button	Enser/ Krabacher	Cody Belcher	Jeannie Rosser	TBD	Spiller	TBD	Fernbach / Strehler	Various	Johnson	Taylor	Kapushinski	i Foster	Pelletier	Stevens	Total Hours	Total Labor Costs	B&V	Alex Ekster	BLP	Apex	LWA	PRB	Unifier License	Direct Costs	Total Fee
		\$260	\$204	\$100	\$230	\$204	\$240	\$220	\$230	\$135	\$135	\$135	\$240	\$230	\$204	\$230	\$240	\$204	\$240	\$204	\$135				\$200	\$205	\$260	\$230	\$240	Fee/Hr or LS		
10.0	Automation and Control System Integration Services	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28	\$7,280	\$189,632	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$196,912
10.1	Pre-design - Advise City on automation during planning	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	\$2,080	\$58,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$60,680
10.2	Pre-design - Review alternatives	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	\$2,080	\$62,552	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$64,632
10.3	Pre-design - Ensure philosophy and strategy addressed	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	\$1,560	\$33,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$34,760
10.4	Pre-design - Support integration specification development	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	\$1,560	\$35,280	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$36,840
10.5	Design - Ensure acceptable P&IDs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10.6	Design - Verify drawings and specifications	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10.7	Design - Coordinate automation information in designs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10.8	Design - Work with operations during construction	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10.9	Design - Oversee control strategy in design	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10.10	Strategy - Lead control strategy development	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10.11	Strategy - Facilitate control strategy workshops	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10.12	Bid/Construction - Monitor designer during bid	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10.13	Bid/Construction - Monitor designer during construction	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10.14	Configuration - Provide configuration and start-up services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10.15	Configuration - Coordinate with the City	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10.16	Configuration - Assist City with LIMS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10.17	Configuration - Attend factory testing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10.18	Configuration - Install hardware, software and testing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10.19	Post start-up - Coordinate contractor training	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10.20	Post start-up - Develop training curriculum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10.21	Post start-up - Coordinate automation punchlist	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10.22	Post start-up - Conduct workshop after defects period	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10.23	Post start-up - Support City with improvements, if requested	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Proposal Total	2,338	756	562	40	40	190	2,920	1,180	1,584	2,936	1,312	50	1,562	1.647	420	476	6 136	120) 120	052	19,341	\$3,709,962	\$1 508 020	\$0	\$0	\$174,720	\$50.800	\$186,520	\$85.500	\$441 395	\$6,166,807
	Note(s):	2,000	, 30	502	40	40	190	2,320	1,180	1,084	2,330	1,312		1,502	1,047	+20	470	, 130	120	120	332	10,041	ψ0,100,00Z	ψ1,000,920	Ψυ	ΨΟ	φ17 4 ,720	ψ00,000	\$100,320	φ00,000	ψ ττ ,305	φ0,100,007
1	A 3% annual escalation to be applied to hourly rates be	i ginning in Jul	y 2015 shall	not increas	e the not-to-e	exceed cont	tract value c	of \$6,166,807.																						+	+	
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EXHIBIT "B" COMPENSATION SCHEDULE

Billing Rate Schedule

Effective January 1, 2014

The following rates are applicable for CDM Smith and Black & Veatch.

PROFESSIONAL AND SUPPORT SERVICES	HOURLY RATES
Senior Vice President (Grade 10)	\$260
Vice President (Grade 9)	\$240
Principal, Associate & Senior Engineer/Scientist (Grade 8)	\$230
Senior Engineer/Scientist (Grade 7)	\$220
Senior Engineer/Scientist (Grade 6)	\$204
Engineer/Scientist (Grade 5)	\$185
Engineer/Scientist (Grade 4)	\$150
Staff Engineer/Scientist (Grade 1, 2, & 3)	\$135
Draftsperson/Designer (DNDF1- DNDF8)	\$110
Contract/Project Administrator (FNCA5-8, ASPR8)	\$135
Technical Editor (CDMK5 – CMMK8)	\$135
Secretary/Word Processor (ASWP1-ASWP5)	\$110
Administrative Assistant (ASAD1-ASAD5)	\$100
Technician/Clerk (TEGN1-3)	\$75
CONSTRUCTION MANAGEMENT SERVICES	HOURLY RATES
Construction CM/ Resident Engineer	\$115 - \$150
Construction Inspector	\$100 - \$138

The following table provides the hourly rates of additional team members/sub-consultants.

Name	Sub-consultant	Hourly Rate
Alex Ekster	Ekster & Associates	\$200
Boris Pastushenko	BLP Associates	\$205
Paul Brown	PRB	\$300
Eileen Goodwin	Apex Strategies	\$260

Larry Walker Associates									
	Personnel	Hourly Rate							
	President	\$275.00							
	Vice President	\$255.00							
Denise Conners	Associates	\$230.00							
	Senior Staff	\$205.00							
	Project Staff 2A	\$185.00							
	Project Staff 2B	\$165.00							
	Project Staff 1A	\$150.00							
	Project Staff 1B	\$130.00							
	Contract Administrator	\$140.00							
	Administrative	\$75.00							
	Contract Administrator	\$140.00							
	Administrative	\$75.00							

The above are based on regular rates current at the time of execution of this Agreement. Hourly rates may be increased once each year beginning July 2015 by up to 3% annually for the duration of the contract.

<u>Other Direct Costs</u>

The anticipated other direct costs (ODCs) are accounted for in the fee spreadsheet. Below is a listing of the types of anticipated costs that we have included in the budget for the first three years of the program. The types of budgeted reimbursable costs include:

Travel (out-of-town staff): Air Fare, Auto Rental, Local Mileage (\$0.565/mile or current IRS limit) Mileage (Local Bay Area staff): \$0.565/mile or current IRS limit Subsistence (out-of-town staff): Lodging and Meals Communications: Courier Services Printing: Outside Printing Services Equipment Rental

The following table lists key team members and their billing rate classifications:

Billing Rate Schedule March 14, 2014

PROFESSIONAL AND SUPPORT SERVICES CLASSIFICATIONS	TEAM MEMBERS
Senior Vice President (Grade 10)	Dave Parry, Clark
Vice President (Grade 9)	Lutzenberger, Taylor, Foster, Reddy, Barnard,
Principal, Associate & Senior Engineer/Scientist (Grade 8)	Button, Fernbach, Pickus, Fiorucci, Roberts, Belcher, Johnson
Senior Engineer/Scientist (Grade 7)	Enser, Krabacher,
Senior Engineer/Scientist (Grade 6)	Akela, Opem, Shaw, Smith, Pelletier,
Engineer/Scientist (Grade 5)	Stassi
Engineer/Scientist (Grade 4)	
Staff Engineer/Scientist (Grade 1, 2, & 3)	Rosser
Draftsperson/Designer (DNDF1-DNDF8)	
Contract/Project Administrator (FNCA5-8, ASPR8)	
Technical Editor (CDMK5 - CMMK8)	
Secretary/Word Processor (ASWP1-ASWP5)	
Administrative Assistant (ASAD1-ASAD5)	Ross
Technician/Clerk (TEGN1-3)	

Exhibit B-1

Water Pollution Control Plant Program ManagementAdditional Reconstruction Program Tasks

The City is undergoing major planning efforts to design and implement the various capital improvements necessary to rebuild the Water Pollution Control Plant. As part of this effort, the City may require that the Program Management Consultant (PMC) provide the additional support services briefly enumerated in the 12 sections below. Should the City decide to utilize the PMC for such services, a separate scope and fee shall be negotiated for each required task, and a task order issued which shall be executed by the City Manager or his/her designee and the PMC. The individual task amounts specified herein are estimates and may change once scope and fee are clearly defined and agreed upon. However, the total amount of \$2,480,000 may not be exceeded without City Council approval.

	Task	Est. Not-to-exceed
		Amount
1.	Repairs to the Primary Process – This task is associated with the design and construction management of improvements to the current primary wastewater treatment system while the new primary system is being constructed.	\$90,000
2.	Repairs to the Secondary Process – This task is related to the design and construction of interim repairs to existing secondary treatment processes to maintain functionality during master planning and construction.	\$100,000
3.		\$150,000
4.	Evaluate Technical Design Issues – This task is related to the review, development, or analysis of any technical design issues that arise during the master planning, design or construction process.	\$140,000
5.	Commissioning Primaries – As the commissioning agent, the PMC will be responsible for overseeing the commissioning of master-planned reconstruction projects. Work associated with this task is mainly related to the new primary treatment facility and repairs to existing treatment systems.	\$300,000
6.	Automation & Control System Oversight – This task is associated with reviewing and analyzing plans and specifications for Automation and Controls developed as part of the Primary project. Tasks also may include developing interim solutions for integrating existing Plant control systems with new systems installed as part of the Primary	\$500,000
7.		\$300,000
8.	Regulatory Compliance Coordination – This task is related to additional regulatory review, analysis, and coordination required as a result of further development of the Master Plan and Primary project.	\$100,000
9.		\$100,000

Not-to-exceed Total	\$2,480,000
tasks being added to the project.	
required to manage schedules, budgets and records as a result of any additional	
12. Schedule/Budget/Records Management – This task is for additional work	\$300,00
Environmental Impact Report (PEIR) process.	
facility design and construction phases, and during the Programmatic	
support that may be required during master planning, the primary treatment	
11. Additional Public Outreach Support – This task is related to public outreach	\$200,00
existing systems to function through new construction.	
overseeing commissioning for ongoing "gap" projects which will allow the	
10. Commissioning of Gap Projects – Work associated with this task is related	\$200,000
project.	<u> </u>
required as a result of further development of the Master Plan and Primary	

Exhibit C Compensation for Reimbursable Expenditures/Subconsultant Markups

WPCP Program Management Services

Printing

Printing costs for all project documentation (i.e., meeting notes, technical memos, drawings, etc.) shall be expensed at accepted industry commercial rates.

Postage/Overnight Delivery

Postage/overnight delivery costs for all project documentation shall be expensed at accepted industry commercial rates.

<u>Travel</u>

Expenses for staff assigned to this project required to travel by air (i.e., air travel, lodging, car rental and meals) shall be subject to the following per diem rates and limits:

- Airfare and associated fees shall be reimbursed at the cost of Coach Class only. Business Class or First Class travel costs exceeding the Coach Class fare shall be at no additional cost to the CITY.
- Lodging shall be reimbursed at the per diem rate of one-hundred forty-five dollars (\$145) per night, inclusive of taxes.
- Rental car expenses, including applicable taxes, fees and fuel, shall be reimbursed at the per diem rate of eighty-five dollars (\$85) per day (assumes rental of mid-size car).
- Meals and incidental expenses, including applicable taxes and gratuities, shall be reimbursed at the per diem rate of (\$40) per day. Reimbursement for alcoholic beverages or entertainment shall not be permitted.

The maximum allowable rate for mileage expenses for Northern California staff shall be at the current IRS standard mileage rate.

Other travel costs including bridge fares, parking fees and cab fare shall be reimbursed at cost.

No other expenses are reimbursable, unless the CITY has pre-approved such expense in writing.

Subconsultant Markups

No markups shall be allowed on reimbursable expenses and the maximum markup on subconsultants shall be 5%.

CITY can reject invoices and/or request additional backup as necessary for these expenses.

Exhibit "D"

INSURANCE REQUIREMENTS FOR CONSULTANTS

Consultant shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work by the Consultant, his agents, representatives, or employees.

Minimum Scope and Limits of Insurance: Consultant shall maintain limits no less than:

- 1. <u>Commercial General Liability</u>: \$1,000,000 per occurrence and \$2,000,000 aggregate for bodily injury, personal injury and property damage. ISO Occurrence Form CG 0001 is required.
- 2. Automobile Liability: \$1,000,000 per accident for bodily injury and property damage. ISO Form CA 0001 is required.
- 3. <u>Workers' Compensation</u> and <u>Employer's Liability</u>: \$1,000,000 per accident for bodily injury or disease.
- 4. <u>Errors and Omissions</u> Liability Insurance appropriate to the Consultants Profession: \$1,000,000 per occurrence and \$2,000,000 aggregate.

Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions must be declared and approved by the City of Sunnyvale. The consultant shall guarantee payment of any losses and related investigations, claim administration and defense expenses within the deductible or self-insured retention.

Other Insurance Provisions

The general liability and automobile liability policies are to contain, or be endorsed to contain, the following provisions:

- The City of Sunnyvale, its officials, employees, agents and volunteers are to be covered as additional insureds with respects to liability arising out of activities performed by or on behalf of the Consultant; products and completed operations of the Consultant; premises owned, occupied or used by the Consultant; or automobiles owned, leased, hired or borrowed by the Consultant. The coverage shall contain no special limitations on the scope of protection afforded to the City of Sunnyvale, its officers, employees, agents or volunteers.
- 2. For any claims related to this project, the Consultant's insurance shall be primary. Any insurance or self-insurance maintained by the City of Sunnyvale, its officients, officials, employees, agents and volunteers shall be excess of the Consultant's insurance and shall not contribute with it.
- 3. Any failure to comply with reporting or other provisions of the policies including breaches of warranties shall not affect coverage provided to the City of Sunnyvale, its officients, officials, employees, agents or volunteers.
- 4. The Consultant's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
- 5. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, voided, cancelled by either party, reduced in coverage or in limits except after thirty (30) days' prior written notice by certified main, return receipt requested, has been given to the City of Sunnyvale.

Claims Made Coverage

If the General Liability and/or Errors & Omissions coverages are written on a claims-made form:

1. The retroactive date must be shown, and must be before the date of the contract or the beginning of contract work.

2. Insurance must be maintained and evidence of insurance must be provided for at least five years after completion of the contract work.

- 3. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a retroactive date prior to the contract effective date, the Consultant must purchase an extended period coverage for a minimum of five years after completion of contract work.
- 4. A copy of the claims reporting requirements must be submitted to the City of Sunnyvale for review.

Acceptability of Insurers

Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A:VII, unless otherwise acceptable to the City of Sunnyvale.

Verification of Coverage

Consultant shall furnish the City of Sunnyvale with original a Certificate of Insurance effecting the coverage required. The certificates are to be signed by a person authorized by that insurer to bind coverage on its behalf. All certificates are to be received and approved by the City of Sunnyvale prior to commencement of work.