

CITY COUNCIL

For City Clerk's Use:

☐ **APPROVED** ☐ **DENIED**

Reso No. _____ File No. _____

Ord No. _____

Agenda Item No.: 4
Date: September 12, 2012

TO: Honorable Mayor and Members of the City Council

FROM: Christopher W. McKinney, Director of Utilities

SUBJECT: Lift Station Consolidation Design Consulting Agreement

RECOMMENDATION:

The Utilities Department requests that the City Council adopt Resolution No. 2012-151 authorizing the Mayor and City Clerk to execute a Consulting Agreement with Brown and Caldwell Corporation for the Lift Station Consolidation Design in the amount of \$862,759.

FISCAL ANALYSIS:

The West Side Lift Station Evaluation Project, CIP (808810), currently has \$3,950,892 available.

PREVIOUS ACTION:

In November 2011, the City contracted with Brown and Caldwell for professional consulting services to develop design parameters and preliminary pipeline alignments for the consolidation of Lift Stations 6, 9, and 11 into a single lift station.

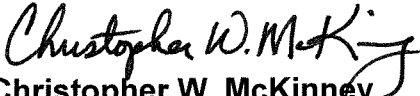
BACKGROUND:

Study of Lift Stations 6, 9, and 11 revealed economic benefits of consolidating these three stations into one new lift station. The new station would be located near the present location of Lift Station 6. Benefits would be realized primarily from maintenance cost savings and greatly reduced energy use.

This contract with Brown and Caldwell Corporation includes full design drawings and specifications and all required environmental studies and documentation. It also includes acquisition of all required permits. The design will include the new wastewater lift station, approximately 1 mile of wastewater force main, and approximately 1 mile of gravity sewer.

This design contract is the first element required to consolidate Lift Stations 6, 9, and 11. In the near future, the Department will bid and award a construction contract for the new lift station and the associated sewer lines necessary to place the new lift station into service.

Respectfully submitted,


Christopher W. McKinney

Director of Utilities

RESOLUTION NO. 2012-151

A RESOLUTION OF THE CITY COUNCIL OF
THE CITY OF ESCONDIDO, CALIFORNIA,
AUTHORIZING THE MAYOR AND CITY
CLERK TO EXECUTE, ON BEHALF OF THE
CITY, A CONSULTING AGREEMENT WITH
BROWN AND CALDWELL FOR THE LIFT
STATION CONSOLIDATION DESIGN

WHEREAS, the City desires to improve the cost efficiency of pumping for wastewater in the collection system; and

WHEREAS, it is in the best interest of the City operationally to consolidate three existing wastewater pump stations into one new pump station; and

WHEREAS, a selection panel has selected Brown and Caldwell as being the most qualified proposer; and

WHEREAS, the Director of Utilities recommends that the Consulting Agreement ("Agreement") with Brown and Caldwell be approved; and

WHEREAS, this City Council desires at this time and deems it to be in the best public interest, to approve said Agreement with Brown and Caldwell.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Escondido, California, as follows:

1. That the above recitations are true.
2. That the Mayor and City Clerk are hereby authorized to execute, on behalf of the City, an Agreement with Brown and Caldwell. A copy of the Agreement is attached as Exhibit "1" and is incorporated by this reference.



CITY OF ESCONDIDO

CONSULTING AGREEMENT FOR DESIGN PROFESSIONALS

(ONLY for licensed architects, landscape architects, professional engineers, and professional land surveyors who are performing design services for the City)

This Agreement is made this _____ day of _____, 20__.

Between: CITY OF ESCONDIDO
a Municipal Corporation
201 N. Broadway
Escondido, California 92025
Attn: _____ Paul Keck _____
760-839-6299
("CITY")

And: Brown and Caldwell
9665 Chesapeake Drive, Suite 201
San Diego, CA, 92123
Victor Occiano, P.E.
858-514-8822
("CONSULTANT")

Witness that whereas:

- A. It has been determined to be in the CITY's best interest to retain the professional services of a consultant to design a replacement for Lift Station No. 6, and all necessary pipe infrastructure to consolidate the functions of the existing lift stations 6, 9, and 11; and
- B. The CONSULTANT is considered competent to perform the necessary professional services for CITY;

NOW, THEREFORE, it is mutually agreed by and between CITY and CONSULTANT as follows:

- 1. Services. The CONSULTANT will furnish all of the services as described in "Attachment A" which is attached and incorporated by this reference.
- 2. Compensation. The CITY will pay the CONSULTANT in accordance with the conditions specified in "Attachment A," in the sum of \$862,759. Any breach of this Agreement will relieve CITY from the obligation to pay CONSULTANT, if CONSULTANT has not corrected the breach after CITY provides notice and a reasonable time to correct it.
- 3. Scope of Compensation. The CONSULTANT will be compensated for performance of tasks specified in "Attachment A" only. No compensation will be provided for any other tasks without specific prior written consent from the CITY.

4. Duties. CONSULTANT will be responsible for the professional quality, technical accuracy, timely completion, and coordination of all reports and other services furnished by the CONSULTANT under this Agreement, except that the CONSULTANT will not be responsible for the accuracy of information supplied by the CITY.
5. Personnel. The performance of services under this Agreement by certain professionals is significant to the CITY. CONSULTANT will assign the persons listed on "Attachment B," which is attached and incorporated by this reference, to perform the Services described in Paragraph 1, and will not add or remove persons from the list without the prior written consent of the CITY. CONSULTANT will not subcontract any tasks under this Agreement without obtaining the advance written consent of the CITY.
6. Termination. Either CONSULTANT or the CITY may terminate this Agreement with thirty (30) days advance written notice.
7. City Property. All original documents, drawings, electronic media, and other material prepared by CONSULTANT under this Agreement immediately becomes the exclusive property of the CITY, and may not be used by CONSULTANT for any other purpose without prior written consent of the CITY.
8. Insurance.
 - a. The CONSULTANT shall secure and maintain at its own costs, for all operations, the following insurance coverage, unless reduced by the City Attorney:
 - (1) General liability insurance. Occurrence basis with minimum limits of \$1,000,000 each occurrence, \$2,000,000 General Aggregate, and \$1,000,000 Products/Completed Operations Aggregate; and
 - (2) Automobile liability insurance of \$1,000,000 combined single-limit per accident for bodily injury and property damage, unless waived as provided in 8(b) below; and
 - (3) Workers' compensation and employer's liability insurance as required by the California Labor Code, as amended, or certificate of sole proprietorship; and
 - (4) Errors and Omissions professional liability insurance with minimum coverage of \$1,000,000.

- b. It is the parties' understanding that the use of a motor vehicle is not a primary subject of this Agreement. CONSULTANT acknowledges that operating a motor vehicle is outside the scope of this Agreement and occurs only at the convenience of the CONSULTANT. A waiver of automobile liability insurance is only effective if both sets of initials appear below, otherwise such insurance is required.

Acknowledged by CONSULTANT _____

Waiver appropriate by CITY _____

- c. Each insurance policy required above must be acceptable to the City Attorney:
 - (1) Each policy must provide for written notice within no more than thirty (30) days if cancellation or termination of the policy occurs. Insurance coverage must be provided by an A.M. Best's A- rated, class V carrier or better, admitted in California, or if non-admitted, a company that is not on the Department of Insurance list of unacceptable carriers.
 - (2) All non-admitted carriers will be required to provide a service of suit endorsement in addition to the additional insured endorsement.

- (3) Both the General Liability and the Automotive Liability policies must name the CITY specifically as an additional insured under the policy on a separate endorsement page. The endorsement must be ISO Form CG2010 11/85 edition or its equivalent for General Liability endorsements and CA 20-01 for Automobile Liability endorsements.
 - (4) The General Liability policy must include coverage for bodily injury and property damage arising from CONSULTANT's work including its ongoing operations and products-completed operations hazard.
 - (5) The General Liability policy must be primary and noncontributory and any insurance maintained by CITY is excess.
 - d. In executing this Agreement, CONSULTANT agrees to have completed insurance documents on file with the CITY within fourteen (14) days after the date of execution. Failure to comply with insurance requirements under this Agreement will be a material breach of this Agreement, resulting in immediate termination at CITY's option.
9. Indemnification. CONSULTANT (which in this paragraph 9 includes its agents, employees and subcontractors, if any) agrees to indemnify, defend, and hold harmless the CITY from all claims, lawsuits, damages, judgments, loss, liability, or expenses, including attorneys' fees, for any of the following:
- a. Any claim of liability arising out of, pertaining to, or relating to the negligence, recklessness, or willful misconduct of CONSULTANT in the performance of this Agreement, excepting only those claims resulting from the sole negligence, active negligence or intentional misconduct of CITY, its employees, officials, or agents, not including CONSULTANT;
 - b. Any personal injuries, property damage or death that CONSULTANT may sustain while using CITY-controlled property or equipment, while participating in any activity sponsored by the CITY, or from any dangerous condition of property; or
 - c. Any injury or death which results or increases by any action taken to medically treat CONSULTANT.
10. Anti-Assignment Clause. The CONSULTANT may not assign, delegate or transfer any interest or duty under this Agreement without advance written approval of the CITY, and any attempt to do so will immediately render this entire Agreement null and void.
11. Costs and Attorney's Fees. In the event that legal action is required to enforce the terms and conditions of this Agreement, the prevailing party will be entitled to reasonable attorneys' fees and costs.
12. Independent Contractor. CONSULTANT is an independent contractor and no agency or employment relationship, either express or implied, is created by the execution of this Agreement.
13. Merger Clause. This Agreement and its Attachments, if any, are the entire understanding of the parties, and there are no other terms or conditions, written or oral, controlling this matter. In the event of any conflict between the provisions of this Agreement and any of its Attachments, the provisions of this Agreement must prevail.
14. Anti-Waiver Clause. None of the provisions in this Agreement will be waived by CITY because of previous failure to insist upon strict performance, nor will any provision be waived by CITY because any other provision has been waived, in whole or in part.

15. Severability. The invalidity in whole or in part of any provision of this Agreement will not void or affect the validity of any other provisions of this Agreement.
16. Choice of Law. This Agreement is governed by the laws of the State of California. Venue for all actions arising from this Agreement must be exclusively in the state or federal courts located in San Diego County, California.
17. Multiple Copies of Agreement/Counterparts. Multiple copies and/or counterparts of this Agreement may be executed, including duplication by photocopy or by computerized scanning device. Each duplicate will be deemed an original with the same effect as if all the signatures were on the same instrument. However, the parties agree that the Agreement on file in the office of the Escondido City Clerk is the copy of the Agreement that shall take precedence should any differences exist among copies or counterparts of the document.
18. Provisions Cumulative. The foregoing provisions are cumulative and in addition to and not in limitation of any other rights or remedies available to the CITY.
19. Notices to Parties. Any statements, communications or notices to be provided pursuant to this Agreement must be sent to the attention of the persons indicated below. Each party agrees to promptly send notice of any changes of this information to the other party, at the address first above written.
20. Business License. The CONSULTANT is required to obtain a City of Escondido Business License prior to execution of this Agreement.
21. Compliance with Applicable Laws, Permits and Licenses. CONSULTANT shall keep itself informed of and comply with all applicable federal, state, and local laws, statutes, codes, ordinances, regulations, and rules in effect during the term of this Agreement. CONSULTANT shall obtain any and all licenses, permits, and authorizations necessary to perform services set forth in this Agreement. Neither CITY, nor any elected nor appointed boards, officers, officials, employees, or agents of CITY shall be liable, at law or in equity, as a result of any failure of CONSULTANT to comply with this section.
22. Immigration Reform and Control Act of 1986. CONSULTANT shall keep itself informed of and comply with the Immigration Reform and Control Act of 1986. CONSULTANT affirms that as an employer in the State of California, all new employees must produce proof of eligibility to work in the United States within the first three days of employment and that only employees legally eligible to work in the United States will be employed on this public project. CONSULTANT agrees to comply with such provisions before commencing and continuously throughout the performance of this Agreement.

IN WITNESS WHEREOF, the parties below are authorized to act on behalf of their organizations, and have executed this Agreement as of the date set forth below.

CITY OF ESCONDIDO

Date: _____

Sam Abed
Mayor

Date: _____

Diane Halverson
City Clerk

Date: _____

(Contractor signature)

Title

(The above signature must be notarized)

APPROVED AS TO FORM:

OFFICE OF THE CITY ATTORNEY
JEFFREY R. EPP, City Attorney

By: _____

THE CITY OF ESCONDIDO DOES NOT DISCRIMINATE AGAINST QUALIFIED PERSONS WITH DISABILITIES.

Scope of Work

City of Escondido Lift Stations 6, 9, and 11 Consolidation Design Project

August 9, 2012

Background

The City is interested in reducing the number of sewer lift stations within their service area and has evaluated the potential to combine several lift stations. In May 2010, an evaluation and feasibility study was completed, which recommended consolidating existing sewer Lift Stations 6, 9, and 11 into a new single lift station. Brown and Caldwell (BC) reviewed and refined the feasibility Study and presented results in a Technical Memorandum (TM) in May 2012. This consolidation would require modifications to the area's existing local sewer collection system and abandonment of each of the existing stations forcemain piping, to be replaced with a single new forcemain. The selected option requires a new station to be constructed in the vicinity of existing Lift Station 6. Once the new station is complete and in operation, each of the three existing stations will be demolished.

For clarity the new station will be designated Lift Station 15 in this scope of work. It is anticipated that Lift Station 15 will have a firm capacity of approximately 700 gpm, and will consist of a below grade reinforced concrete epoxy lined wet well with two or three submersible pumps, including one standby. Electrical and ancillary equipment will be located above grade and housed in a new reinforced masonry block building. The structure will be designed to blend with the architecture of the surrounding community. The site will be secured with either a perimeter wall or wrought iron fence and automatic electric gate. Lift Station 15 will include a below grade emergency overflow basin used to provide passive storage of wastewater in the event of station failure. BC will work with the City to determine the volume of storage required for the project. The overflow basin will be constructed of either reinforced concrete or fiberglass. Ancillary equipment will include an emergency generator, odor control units, electrical, instrumentation, and control equipment.

Lift Station 15 will discharge to a new 8-inch forcemain that will run along Felicita Road, under I-15 and discharge to a new access manhole located at the highpoint of Felicita Road. From there it will flow by gravity through a new gravity sewer line that will convey the flow to the Center City Interceptor. The gravity collection system will be reconfigured to convey all existing and future inlet flows of Lift Stations 6, 9, and 11 to the inlet of new Lift Station 15 wet well.

Objectives

Per City request, BC is presenting this proposal to prepare construction documents necessary to construct a new lift station including, a new below ground wet well complete with new pumps, piping, and valves, a new above ground building, electrical and instrumentation equipment, odor control system, an emergency generator, approximately 4,500 linear feet of new 8-inch diameter force main,

approximately 1,600 linear feet of new discharge 12-inch gravity sewer and connection, and approximately 5,000 linear feet of new inlet 10-inch gravity sewer. The project will also add about 120 lineal feet of curb and gutter.

Scope

Tasks that will be undertaken to achieve the study objectives and specific deliverables are described in this section. Work required for certain disciplines and some tasks required for this project will be subcontracted to other firms. BC will coordinate the activities and incorporate work products of the various subconsultants including structural, surveying, geotechnical, and architectural into the design of Lift Station 15. Architectural and structural engineering work will only commence after the 30-percent design submittal, to be included in the 60-percent, 90-percent, and final design submittals.

Task 100 – Project Management

This task is comprised of the subtasks described below.

Subtask 101 – Project Management & Administration

This subtask includes general project management, internal project meetings, cost tracking and invoicing, project accounting, and general document management.

Subtask 102 - Meetings

It is anticipated that project meetings will be held at the City offices and generally will be attended by BC's Project Manager and Project Engineer. Specifically, the following meetings are anticipated:

- Project Kickoff Meeting: BC's Project Manager and Project Engineer will attend the project kickoff meeting.
- Project Coordination Meetings: BC's Project Manager and Project Engineer will attend four (4) project coordination meetings. The coordination meetings will be scheduled as needed.
- Design Review Meetings: BC's Project Manager, Project Engineer and other technical staff as required will attend three (3) design review meetings. It is anticipated that review meetings will be conducted following the 30-percent, 60-percent, and 90-percent design submittals.

Task 100 Deliverables

- Meeting Agendas: An electronic copy of the meeting agenda in PDF format will be provided to the City's Project Manager prior to each meeting.

Task 200 – Investigations

This task is comprised of the subtasks described below.

Subtask 201 – Survey

BC and subconsultants will prepare a base map of the project area in AutoCAD format. The base map will include the pipeline and station site, and will include all existing features such as landmarks, roads, topography and existing utility information. This Subtask includes, aerial mapping, locating surface utilities, and AutoCAD survey file preparation.

Subtask 202 – Geotechnical Investigation

BC subconsultant Ninyo & Moore will review readily available published and in-house geotechnical literature; groundwater data; topographic, geologic, and fault maps; and aerial photographs. They will obtain boring permits from the County of San Diego Department of Environmental Health (DEH), traffic control and encroachment into the City's Right-of-Way, and mark-out of existing underground utilities.

They will perform a subsurface evaluation to consist of excavating, logging, and sampling of eight (8) borings at various locations along the project. Three (1) boring will be at a depth up to 50 feet, four (4) borings will be up to a depth of 30 feet, and the remaining four (3) borings will be up to a depth of 10 to 15 feet. A draft and final geotechnical report will be prepared.

Assumptions:

- Permission for site access will be granted to the geotechnical subcontractor equipment and personnel and the site is drive-up accessible. Field exploration will be performed during normal daylight hours.
- The fee estimate has budgeted up to \$1,700 (one thousand seven hundred dollars) for the acquisition of City of Escondido traffic control permits (encroachment permits) and creating traffic plans. If the costs for these traffic-related services exceed \$1,700, an amendment will be required to cover the additional costs. If additional costs are anticipated, we agree to notify the City of any additional charges as soon they are known. Permit fees will be waived, or paid by the City.
- Maps of existing utilities will be provided for our review. If Underground Service Alert (USA) cannot locate underground utilities at the planned boring locations, a geophysical utility locating service will be retained for utility clearance. The cost of this service is not included in this fee estimate.
- Environmental consulting services (i.e. Phase I and II ESA, assessment of hazardous materials, soil and groundwater contamination, and analytical testing services) are not included in the scope of services.
- The drilling subcontractor is not subject to Prevailing Wage rates.
- Borings will be backfilled per County of San Diego Department of Environmental Health requirements.

Subtask 203 – Utility Research

BC will obtain, print, and review record drawings of existing utilities along the alignment. Locations of utilities identified by record drawings will be used as the basis for design. In the absence of other data, locations shown on record drawings will be considered accurate. Actual locations will be field investigated as follows: surface utilities will be shown on survey files, and critical utility crossings will be further investigated by BC and potholed for verification at critical locations under Subtask 800 below. The City will provide BC with access to record drawings for all City owned utilities along the alignment. BC will contact private utility companies to identify private utilities for inclusion in the contract documents.

Subtask 204 – Permitting

BC will identify and contact appropriate permitting agencies, investigate permit requirements, and assist the City in obtaining the necessary permits required for the Project. At this time Caltrans encroachment, RWQCB County, Site Development, and AQMD Permits are anticipated for the project. Potentially a mine safety and classification permit may be required, depending on the trenchless technology selected. BC will provide engineering support and technical information needed to prepare permit applications, BC will provide drawings and/or figures developed during the normal course of design. Special figures are not included in this task. BC will complete permit application for City submittals. Permit fees are not included in this scope and are to be paid directly by the City. The permit requirements and level of effort have been assumed for budgeting purposes. The actual effort and cost associated with the task will be billed on a time and materials basis.

Subtask 205 – Electrical Service Plan

BC will investigate existing electrical utility service and coordinate with SDG&E for electrical service to the lift station. BC will review SDG&E electrical service plan and provide design loads and electrical requirements to SDG&E for design of the site electrical service, including feed cable, transformer and

meter. Service design will be included in the final design documents with Contractor interface point identified.

Subtask 206 – Environmental Investigations and Permitting

Provide environmental services including the preparation of environmental documentation in accordance with the California Environmental Quality Act (CEQA) of 1970 (as amended) for the project. The project site is located in the City of Escondido (City) and unincorporated County of San Diego (County). Subconsultant HELIX will assume primary responsibility for completing the services described in this proposal with assistance from ASM Affiliates, Inc. (ASM), which will be responsible for cultural resources services.

This proposal assumes that the new lift station will be located within disturbed habitat and/or non-native grassland, with some trees and shrubs potentially present at or near the lift station site, and that an MND will be prepared. This task includes investigation of biological and cultural resources, preparation of letter reports for each describing the findings, and preparation of Draft MND, Final MND, and Notice of Determination. Biological resources study will include: Vegetation Mapping, General Botanical and Zoological Surveys, and preparation of finding in a letter report.

Some coastal sage scrub habitat may also be present in the area. however, this task does on include focused species (such as coastal California gnatcatcher) and/or rare plant surveys. These additional survey(s), if required, will require an augment.

Subtask 207 – Hydraulic Analysis (Excluding Surge)

BC will conduct a detailed design level analysis of the new lift station hydraulics to determine final hydraulics to be used for design level pump sizing and selection. The City has elected that the evaluation will not include a surge analysis to quantify pressure transients that would occur during sudden stopping of operating pumps as a result of a power outage. The surge evaluation and potential surge mitigation measures are considered unwarranted by the City and will not be incorporated into the design.

Subtask 208 – Potholing

Potholing will be utilized where practical to confirm critical data from the existing utility research. Record drawings will be utilized to identify design locations for the existing sewers and other utility data. Potholes will be excavated at various locations to locate the actual horizontal and vertical field position of the existing sewer or to obtain existing utility data and/or existing pipe material. Exposed utilities will be tape measured by AirX. Up to 10 potholes to a maximum of 10 feet in depth will be provided by BC through our Subcontractor, AirX Utility Surveyors, as part of this scope of services. Additional potholes or additional depth will considered additional work and paid on a per unit basis, as authorized in advance by the City.

Subtask 209 – Trenchless Construction Evaluation

BC Subconsultant will review geotechnical conditions and evaluate tunneling options including: conventional tunneling, bore and jacking, micro-tunneling, and HDD. Recommend preferred tunneling approach to be incorporated into final design. This task will include the preparation of short report describing findings and recommend preferred approach to be carried into design.

Task 300 – 30-Percent Design

Under Task 300, BC will prepare plans developed to the 30-percent design level, and a list (table of contents only) of applicable technical specifications. Design will be prepared using AutoCAD and utilizing appropriate layer capabilities. The submittal will include preliminary Civil, Mechanical, and Electrical,

drawings. Cost estimating, Scheduling, Architecture, Landscaping and Structural Engineering will not be part of the 30 percent submittal. All work shall be conducted under the direct supervision of a professional engineer licensed in the State of California.

This task also includes a subtask for conducting a quality assurance/quality control (QA/QC) review of the work products before they are submitted to the City. BC will designate an independent Quality Manager who will direct the QA/QC and review process. The review of design plans and calculations for each discipline will be conducted by the Quality Manager or an independent reviewer as directed by the Quality Manager.

Task 300 Deliverables

- 30-percent design drawings: An electronic copy in PDF format and two (2) hardcopy sets on 11x17 tabloid paper will be provided. The plans will include a cover sheet, Civil and Mechanical layouts, Electrical one-line diagrams, process and instrumentation diagrams (PIDs)
- List of specifications: An electronic copy in PDF format and two (2) hardcopy sets will be provided.

Task 400 – 60-Percent Design

Under this task, BC will advance the plans to the 60-percent design level, and also prepare a preliminary draft of applicable technical specifications. BC will address City comments received during the 30- percent design submittal review meeting in preparing the 60-percent design. In addition to the engineering disciplines listed earlier, the 60-percent design will include Architecture, Landscaping, and structural engineering, and demolition. It is assumed that BC will use existing drawings in PDF format for the demolition plans.

This task also includes a subtask for conducting a quality assurance/quality control review of the work products before they are submitted to the City. BC's Quality Manager will continue to direct the QA/QC review process. The review of design plans and calculations for each discipline will be conducted by an independent reviewer as directed by the Quality Manager.

Task 400 Deliverables

- 60-percent design drawings: An electronic copy in PDF format and two (2) hardcopy sets on 11x17 tabloid paper will be provided. The plans will include a cover sheet, General Notes sheet, Civil, Mechanical, Structural, and Architectural plans, sections and details, Electrical plans, PIDs and demolition and phasing plans.
- 60-percent specifications: An electronic copy in both PDF and native format (Microsoft Word) and two (2) hardcopy sets of technical specifications will be provided. The City's front end documents are not included in this submittal.

Task 500 – 90-Percent Design

Under this task, BC will advance the plans to the 90-percent design level and prepare draft-final versions of applicable technical specifications. BC will address City comments received during the 60-percent design submittal review meeting in preparing the 90-percent design. The 90 percent submittal will include all drawings. This task also includes a subtask for conducting a quality assurance/quality control review of the work products before they are submitted to the City. BC's Quality Manager will continue to direct the QA/QC review process.

Task 500 Deliverables

- 90-percent design drawings: An electronic copy in PDF format and two (2) hardcopy sets on 11x17 tabloid paper will be provided. The plans will include a cover sheet, General Notes sheet, Civil, Mechanical, Structural, and Architectural plans, sections and details, Electrical plans, PIDs and demolition and phasing plans.

- 90-percent specifications: An electronic copy in both PDF and native (Microsoft Word) format and two (2) hardcopy sets of technical specifications will be provided. The City's front end documents are not included in this submittal.

Task 600 – Final Design

Under this task, BC will finalize the plans and technical specifications. BC will address City comments received during the 90-percent design submittal review meeting in finalizing the design. BC will also finalize the construction cost estimate and schedule. This task also includes a subtask for conducting a quality assurance/quality control review of the work products before they are submitted to the City. BC's Quality Manager will continue to direct the QA/QC review process. Engineering design drawings, specifications, and calculations shall be signed and stamped by the task leader or lead engineer who shall be registered to practice that discipline in the State of California

Task 600 Deliverables

- Final design drawings: An electronic copy in PDF format, two (2) hardcopy sets on 11x17 tabloid paper, and one set of full-size (34" x 22") signed/stamped Mylar sheets will be provided.
- Final specifications: An electronic copy in both PDF and native (Microsoft Word) format and two (2) hardcopy sets of technical specifications will be provided. The City's front end documents will be incorporated into this submittal.
- Calculations: An electronic copy in PDF format and one (1) hardcopy set of the finalized calculations

Task 700 –Design Subconsultants

Under this task, BC will subcontract with subconsultants for design phase services. BC will subcontract and coordinate with design subconsultants for the following disciplines:

- Subtask 701- Trenchless pipeline design
- Subtask 702- Structural engineering
- Subtask 703- Architectural design
- Subtask 704 -Traffic control
- Subtask 705- Landscape architecture

BC will incorporate subconsultant design drawings and specifications into the design package for an integrated contract document.

Structural Engineering will include on site structures only: a below grade wetwell reinforced concrete structure, an above grade CMU block building, and an overflow structure. No off-site structures are included in the scope.

Traffic Engineering includes preparation of Traffic Control Plans for the project limits. Develop construction staging concepts for each pipeline limits. The limits of the project are as follows:

1. Bernardo Ave south of Hamilton Lane
2. Hamilton Lane from Lift Station 9 to Felicita Road
3. Felicita Road/Felicita Ave intersection:
 - Hamilton Lane to Lift Station No. 6 south of Gamble Lane
 - Lift Station No. 6 to Gamble Lane
 - Gamble Lane to Montview Lane
 - Montview Drive to Center City Parkway.

A maximum number of sixteen (16) traffic control plan sheets are anticipated and included in the scope of services.

Task 710 – Cost Estimating

Under this task, BC will prepare the engineer's estimate of anticipated construction cost based on the 90% design packages. As part of this task, BC will prepare a 90% construction cost estimate to meet AACEI Class 1.

Task 710 Deliverables

- AACEI Class 1- construction cost estimate at 90% design

Task 720 – Prepare SWPPP

BC will prepare a storm water pollution prevention plan (SWPPP) for the project. Brown and Caldwell will develop one draft and one final SWPPP that will address storm water management during construction activities, and provide effective deployment of best management practices (BMPs). After City approval, it is anticipated that the City will submit the permit application, along with a copy of the SWPPP, to the California Regional Water Quality Control Board for review, approval, and issuance of an approved construction permit.

Task 720 Deliverables

- Ten (10) copies of the approved SWPPP will be prepared and submitted to the City. The City will pay the cost of all associated permit application fees.

Task 730 – Bid Phase Services

Under this task BC will provide engineering support services on a time and material basis as-requested by the City during the bid and award period.

Specific tasks to be provided may include the following:

1. Respond to bidder inquiries.
2. Prepare addenda.
3. Attend the pre-bid conference. Respond in-writing to questions and submit those responses to the City Project Manager.
4. Attend a preconstruction conference with the selected Construction Manager and/or Contractor.

Task 750 – Prepare Record Drawings

Under this task Brown and Caldwell will prepare record drawings from Contractor mark-ups. This task includes the following:

- Obtain a set of the approved Contractor's final Project Record Drawings (red-marked full sized prints showing the as-constructed Project configuration) from the City's Project or Construction Manager.
- Compile and review information from the final Contractor's Record Drawings, and change orders.
- Prepare and submit one complete set of full sized (24-inch x 36-inch) original Mylar Final Record Drawings. Each CADD drawing sheet shall be initialed by qualified responsible engineers registered in the state of California verifying the drawings are consistent with the received Contractor hand marked set. BC does not warranty the accuracy of the Contractor's

mark-ups, or that they accurately reflect the field conditions. Mylar shall be 3 mils minimum thickness.

Task 760 – Optional Tasks

This task is comprised of optional subtasks which maybe included at the city's option. They are as described below.

Subtask 761 – Pipe Bursting Design

BC will prepare pipeline design for the installation using a Pipe Bursting Method of replacement. It is assumed that the pipe bursting design will rely on existing drawings and less detailed design will be required. For this reason, the pipe bursting design is a credit.

Subtask 762 – Additional Discharge Pipeline Length

The City may want to realign the forcemain/ gravity portion of the project to connect to the Center City Interceptor at 15th street. This will require an additional 1,000 lf of survey, and pipeline design, and may require additional potholing. One (1) additional sheet is assumed.

Task 800 – Additional Services

This task is an allowance to cover additional services as they become apparent during the course of performing the project. This task will not be undertaken by the CONSULTANT without prior authorization by the CITY. The fees and description of any additional service will be provided to the CITY for approval and authorization.

Additional services are included not to exceed the value shown in the fee proposal.

Key Scope of Work Assumptions

Presented below are BC's key proposal assumptions used for development of the scope, fee and schedule:

1. City to provide all needed flow data. No field flow measurements or monitoring are included in this proposal.
2. City to provide Brown and Caldwell with all City GIS mapping layers and required record drawings on CD at the project kickoff meeting for the entire project area.
3. This scope and attached fee proposal are based on the recommended alternative described in the Basis of Design TM dated May 10, 2012 by BC.
4. Preparation of legal descriptions and plats, and easement acquisition work is not included in the scope of work.
5. Structural engineering for off pump station site structures such as vaults or junction structures, and no structural engineering for on-site retaining walls or site perimeter block wall. Fencing has been used for budgeting purposes. Walls if required will be per the regional standard drawings.
6. The aerial survey will not include aerial photographs.
7. This proposal does not include construction support services.
8. Excluded from this scope of work are: Permit Fees, acoustical analysis, Contractor staging plans, design of contaminated soils remediation and handling, trenchless crossing of I-15, off lift station site structural engineering, Public Outreach Support. No public meetings, business owner outreach meetings, displays, or informational flyers for community presentations are included.
9. The proposal assumes preparation of an MND and a disturbed site. It is assumed that a migratory bird survey will be required prior to construction, and therefore is not included. Special fo-

cused species surveys (such as coastal California gnatcatcher) and/or rare plant surveys are not included.

Fee

Brown and Caldwell propose to complete the scope of work for the cost presented in the attached detailed fee proposal.

Schedule

Brown and Caldwell propose to complete the scope of work with-in 12 months of NTP.

End of Scope

Limitations:

The information contained in this proposal is proprietary and contains confidential information that is of significant economic value to Brown and Caldwell. It is intended to be used only for evaluation of our qualifications to provide services. It should not be duplicated, used, or disclosed, in whole or in part, for any purpose other than to evaluate this proposal.

