SWEETWATER SPRINGS WATER DISTRICT

TO: Board of Directors **AGENDA NO. VI-B**

FROM: Steve Mack, General Manager

Meeting Date: October 1, 2015

Subject: APPROVAL OF RESOLUTION 15-20 AWARDING A CONTRACT TO COASTLAND ENGINEERING FOR DESIGN SERVICES AND CONSTRUCTION MANAGEMENT AND INSPECTION SERVICES FOR THE 2017 CIP

RECOMMENDED ACTION: Approve Resolution 15-20 awarding a contract to Coastland Engineering for design and construction management and inspection services for the FY 2017 Capital Improvement Program.

FISCAL IMPACT: The Coastland proposed cost is $285,884. Extra services allowance of $10,000 result in a not to exceed amount of $295,884. Funds for this contract are included in the FY 2015 Budget.

DISCUSSION:

The District has an aggressive Capital Improvement Program (CIP) with a priority aim of reducing system water losses. We have had an annual CIP or more every year since 2008 and we take our annual projects from the approved Capital Improvement Plan. The current Plan is the 2016-2023 Plan which was approved at the August meeting. Slated for the 2017 CIP is the River Road/Old River Road Project which, as stated in the plan, would replace approximately 3,500 ft of existing main and 70 services on Old River Rd at Morningside east to the eastern section of Foothill Drive and include Orchard Rd and Foothill Drive and River Rd on river side of the road. Funds for the 2017 CIP is in the budget for award of contract at the end of this fiscal year, although the Budget identifies the Park Avenue project. The District's CIP was reviewed this spring and summer and revised to include the River Road/Old River Road Project as the 2017 CIP with a similar estimated cost.

The District requires professional engineering services for design, and construction management and inspection of the construction. Staff has been in discussions with Coastland Engineering (Coastland) for these services and have received the attached proposal (Exhibit A). Coastland has done these services for the District since 2011 and we have been very satisfied with their work. By undertaking the design element of this project relatively soon, the project can be ready to start construction in late spring 2016 or early next summer.

Completion of these projects will reduce system leakage, improve water service and fire protection, and better guarantee water supply to Rio Nido which is a concern because the pipe being replaced is old cast iron, similar to the pipe that failed catastrophically on Mill Street two years ago. Upon more investigation of the River Road/Old River Road

Project staff have found that the lengths of pipe replacement are longer than originally anticipated. Coastland has worked up more accurate numbers - - and that increases the cost of the project beyond what the District has in reserves without going into Reserve Policy amounts which are being held for unexpected expenses. Base on the current estimates, the estimated total cost of the FY 2017 CIP will be approaching $2 million. The FY 2016 Budget includes $1,070,000 for the construction contract and design and construction management and inspection (for the Park Avenue Project which has been changed as noted above).

We propose that Coastland design the entire project with specific cutoff points for keeping the project within the Budget amount. Staff will look for additional funding for 'shovel ready' projects which we are told is or will be available. Being shovel ready with a 50% match will be a good selling points if this funding is out there. If not, we can build a substantial portion of the project and complete it in a following year with the focus on replacing the most vulnerable parts of the water main (probably that closest to Rio Nido) first.

The cost of the work proposed by Coastland is $285,884, split $128,422 for design services and $157,462 for construction management and inspection services. This is an appropriate cost for the amount of work requested. Resolution 15-19 also requests $10,000 for additional extra services for a total not-to-exceed amount of $295,884.

While approval of this contract will create an obligation to pay the contract amount, most of the cost of the contract will occur in FY 2016-2017, as that is when most of the construction management and inspection services will be needed. The design costs of the contract should be fully expended in this fiscal year.

Table 1. Sweetwater Springs Water District Proposed Fiscal Year 2017 CIP (from Approved 2016-2023 CIP)

Year	Projects	Estimated Cost	Cost per Service
2017			
	River Road/Old River Road (GV) Replace approximately 3,500 ft of existing main and 70 services on Old River Rd at Morningside east to the eastern section of Foothill Drive. Include Orchard Rd and Foothill Drive and River Rd on river side of the road. Feeds Rio Nido.	$985,000	$14,071

RESOLUTION 15-20

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE SWEETWATER SPRINGS WATER DISTRICT APPROVING AN AGREEMENT FOR ENGINEERING SERVICES FOR FY 2017 CAPITAL IMPROVEMENT PROGRAM (CIP) WITH COASTLAND ENGINEERING INC. (COASTLAND) AND AUTHORIZING THE GENERAL MANAGER TO SIGN

WHEREAS, the FY 2017 CIP consists of replacement of existing mainline along River Road and Old River Road from Rio Nido to Morningside Drive, as well as mainline on Orchard Road and Foothill Drive, with approximately 70 services; and

WHEREAS, completion of these projects will reduce system leakage, improve water service and fire protection, and better guarantee water supply to Rio Nido by replacing aging cast iron water main which may be subject to catastrophic failure; and

WHEREAS, the District has need of consulting engineering services for design and construction management and inspection for the 2017 CIP; and

WHEREAS, Coastland Engineering has done the engineering services for design and construction management and inspection for several recent CIP projects since 2011; and:

WHEREAS, staff has been very satisfied with the performance of Coastland Engineering for the design and construction management and inspection services for these projects; and

WHEREAS, Coastland has proposed an amount of $285,884 for the FY 2017 CIP design, construction management and inspection services; and

WHEREAS, staff has reviewed this proposal and finds it responsive to the District's need for the FY 2017 CIP design, construction management and inspection services and the price proposed is fair for the needed amount of consulting services; and

WHEREAS, it is appropriate to include an allowance of $10,000 for extra or changed work that may be authorized only by express permission or direction by the General Manager.

NOW, THEREFORE, BE IT RESOLVED, that:

1. The Agreement for Engineering Services for the 2017 CIP with Coastland, a copy of which is attached hereto as Exhibit A, is hereby approved in the sum of $285,884 with

an extra services allowance of $10,000, for a total Not to Exceed Amount of $295,884; and

2. The General Manager is authorized to execute said Agreement on behalf of the District.

I hereby certify that the foregoing is a full, true, and correct copy of a Resolution duly and regularly adopted and passed by the Board of Directors of the SWEETWATER SPRINGS WATER DISTRICT, Sonoma County, California, at a meeting held on October 1, 2015, by the following vote:

Director	**Aye**	**No**
Sukey Robb-Wilder	_____	_____
Tim Lipinski	_____	_____
Richard Holmer	_____	_____
Gaylord Schaap	_____	_____

_____
Gaylord Schaap
President of the Board of Directors

_____
Attest: Julie A. Kenny
Clerk of the Board of Directors

COASTLAND

CIVIL ENGINEERING - CONSTRUCTION MANAGEMENT - BUILDING DEPARTMENT SERVICES

September 24, 2015

Mr. Steve Mack
General Manager
Sweetwater Springs Water District
17081 Highway 116, Suite B
Guerneville, CA 95446

Subject: Proposal to Provide Engineering Design, Construction Management and Inspection for District FY 2017 Capital Project

Dear Steve:

Coastland appreciates the opportunity to assist the Sweetwater Springs Water District (District) with engineering design, construction management and inspection services associated with the District's Fiscal Year 2017 Capital Project. Our team has enjoyed working with the District over the past few years and looks forward to continuing our working relationship with the District.

Taking into account our field review of the project site, discussions with you, District staff and our recent experience, we have prepared an approach to this project that takes into account the District's specific needs. Our approach to this project focuses on acting as an extension of District staff, providing personal, flexible and responsive service. We will provide frequent updates of project progress and will work closely with District staff to ensure the goals of the project are met.

Feel free to reach me at (707) 571-8005 or wanger@coastlandcivil.com if you have any questions or are in need of additional information. Thank you for this opportunity and we look forward to working with you.

Sincerely,

John Wanger

John Wanger, PE

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1400 Neotomas Avenue
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UNDERSTANDING & APPROACH

The Sweetwater Springs Water District (District) is continuing their ongoing program to replace aging and undersized water system infrastructure. The project site identified for fiscal year 2017 includes water main replacements in Old River Road and River Road from Morningside Drive to Canyon 2 Road, Orchard Road, Foothill Boulevard, and Outlet Drive. The overall length of main to be replaced with this project is approximately 6,260 feet. The project will also include installing approximately 7 fire hydrants and 66 water services. This project is intended to improve water service flows, improve customer water quality, improve fire protection and reduce water losses from leaks, while minimizing maintenance for years to come.

Old River Road

Based on our field review, the existing 6" cast iron water line that will be replaced on Old River Road beginning at Morningside Drive. It is our understanding that the District will be replacing the cast iron water line with a new 6" main that is tied in to an existing 6" valve at the intersection of Morningside Drive and Old River Road. The new water line will predominately follow the edge of pavement on the north side of Old River Road in order to maintain proper horizontal separation distance between the new water line and the existing sanitary sewer and to avoid the existing water line running along the south side of the street. It appears that there are also existing gas lines within the roadway that will need to be avoided.

Continuing in the easterly direction past the first intersection with Orchard Drive, there is a gas station that borders the south side of Old River Road. Proper investigation will need to take place to determine if there are any known underground contamination in the area as a result of any underground storage tank releases associated with the gas station. Just past the second intersection of Orchard Road, new water services for homes on River Road will need to be connected off of the new water main in Old River Road. It is our understanding that the District would like to directional bore these services underneath River Road from the new water main on Old River Road to the meter boxes on the south side of River Road. These bores would be approximately 100 feet long each.

Continuing in the easterly direction past Foothill Drive, the new 6" water main alignment would likely remain on the north side of the street in order to maintain horizontal clearance from the existing sewer main. In addition to the existing sewer, gas, and water lines there are several large storm drain inlets and culverts that will need to be considered.

River Road

Based on our field review, there is existing sewer, water, gas, and storm drain systems in or near the northern shoulder of River Road. As such, it is our understanding that the alignment of the new 6" water line will need to be on the south side of River Road for a majority of the alignment in order to avoid conflicts with existing utilities. Along this stretch of River Road (Old River Road to Canyon 2 Road) there is also a section of rock outcroppings. Soils investigations will be needed to determine if there will be rock issues encountered during trench excavation. As part of our design team, we will include a geotechnical engineering firm to determine the existence of any subsurface rock and how that may affect the design/alignment of the new water line. There is also a section along River Road that is shored with a retaining wall on the south side of the road. It is our understanding that in areas where there is not adequate space to place the new water line in the shoulder of River Road, the District would be open to the option of strapping the new water line on the exterior of the retaining structure.

The tie-in location at the end of the project will be in the intersection of Canyon 2 Road and Canyon 7 Road, approximately 50 feet north of River Road. There is an existing pedestrian tunnel underneath River Road near this intersection that will prohibit typical water line installation (installed with 30" of cover) in this area. As such, it is our understanding that the District would like the alignment of the new waterline to run north of River Road through a dirt area that leads to Canyon 7

Road in order to avoid the pedestrian tunnel. Our team includes a land surveying firm to verify there are no property issues in this location and to ensure we stay within the prescribed District easement. Past the tie-in point at the intersection of Canyon 2 Road and Canyon 7 Road there are two additional water services that will need to be connected to the new 6" water line. These will likely be longer services, one of which will be installed by directional drilling underneath River Road.

Orchard Drive

Based on a brief site review, it is our understanding that there is existing 6" and 2" ACP water lines in Orchard Drive are to be replaced with a new 6" water line. Tie-in locations at either end of Orchard Drive will be at valve locations on the north side of Old River Road. There is evidence of existing sewer that runs mostly down the middle of the roadway, which will need to be avoided to maintain horizontal separation between the new 6" water line and existing sewer.

Foothill Boulevard / Outlet Drive

Based on a brief site review, it is our understanding that there is existing 8" PVC water main for a portion of Foothill Boulevard. New water main on Foothill Boulevard would be limited to approximately 360 feet of new 6" mainline that serves nine water services. Additionally, it is our understanding that 210 feet of new 2" main line with four associated services will be installed in this vicinity as well. Tie-in locations at either end of Foothill Blvd/Outlet Drive will be at valve locations on the north side of Old River Road. Along this stretch of roadway there is existing sanitary sewer that will need to be avoided to maintain horizontal separation between the new water main and existing sewer.

General Issues

Due to the overall size of this project, it is our understanding that the District would like to break the project up into sections that can be constructed under different contracts, if necessary. In order to do this, Coastland will design the entire project but will separate out a base bid from bid alternates based on available District funding at bid time. The base bid work will include Old River Road / River Road from Orchard Drive to Canyon 2 Road. One bid alternate will include Orchard Drive in its entirety. Another bid alternate will include Foothill Boulevard and Outlet Drive in their entirety. The final bid alternate will include the section of Old River Road from Morningside Drive to Orchard Drive.

It is our understanding that the District believes there are several stretches of new water line that would be good candidates for directional drilling, as the existing topography and roadway alignment is relatively straight and flat. Additionally, it is our understanding that crossings for services under River Road would be best accomplished by directional drilling due to traffic control constraints. In areas utilizing directional drilling as a means of construction, HPDE material would need to be used. In areas of open trenching, either HDPE or PVC material could be used. Proximity to existing sewer and gas lines will also be a determination in pipe material selection. In areas where the new water line must be installed less than 10 feet horizontally from the existing sewer or gas line, HDPE or Class 200 PVC will need to be used. Final pipe material and construction method will need to be finalized during the design phase.

Additionally, it is our understanding that all work for this project is within County right-of-way (no Caltrans encroachment permit needed.) We will coordinate with the County during the design stage to ensure that County encroachment permit requirements are incorporated into the plans. At the onset of the project, we will also coordinate with the County for all plans associated with the sewer lines within the boundaries of the projects, as well as with the Sonoma County Water Agency for storm drain facilities. We will also work with the District to generate a Notice of Exemption for the California Environmental Quality Act (CEQA).

Based on this understanding of the work required for this project, the following is our scope of work:

SCOPE OF WORK - DESIGN

The following Scope of Work is based on our understanding of the project details following discussions with the District and our detailed site investigation.

Task 1 – Meetings with District Representatives

Immediately after the Notice to Proceed is issued by the District, Coastland will schedule a kick-off meeting with District staff to gather all background information and complete a thorough site review with District Staff to ensure we are aware of all project goals and constraints. Included in this task will be one (1) project kick-off / pre-design meeting to discuss project goals and coordination efforts and three (3) progress design review meetings.

Task 2 – Background Information

We will assemble all of the available District, County and Sonoma County Water Agency information. Coastland has already conducted one preliminary site review for the purpose of preparing this proposal. Our goal is to further analyze existing site characteristics through completion of the site review, observing general site conditions and utilities to identify opportunities for improvements. Our site review will enable us to identify any unusual or special conditions that may affect the project design or construction.

Task 3 – Coordination with Agencies

We will coordinate with outside utility companies to ensure that all existing facilities, both underground and overhead, are identified accurately during the design phase. This task will include writing letters to PG&E, AT&T, Comcast, Ferrell Gas, Sonoma County (storm drain and retaining walls), and the Sonoma County Water Agency (sanitary sewer) informing them of the project and requesting their facility drawings. Due to the proximity of the existing sewer main throughout the project, we also anticipate coordination with the State Water Board to obtain waivers for horizontal separation distances between the existing sewer and new water lines.

Under this task we will follow up with each utility provider by preparing submittal packages to each so they can verify the accuracy of their facilities and the need for relocation. In addition to the agencies listed above we will prepare a submittal to the fire chief at the Russian River Fire District for review of the proposed fire hydrant locations.

As part of our background research for this proposal, we reviewed the State's Geotracker website to determine if any area within or adjacent to the project has known areas of soil or groundwater contamination. Per our research, the gas station at 15224 River Road was a former cleanup site for a leaking underground storage tank (LUST). The records show that the cleanup efforts at this site were completed and this case closed as of June 2011. Accordingly, we do not anticipate having to coordinate with the Regional Water Quality Control Board regarding this issue for this project; however, provisions will be included in the project specifications regarding how to handle contaminated soil, if encountered.

As the project is replacement of existing water lines, we anticipate that the project is categorically exempt under CEQA. Accordingly, we will include preparing a Notice of Determination finding the project exempt in accordance with CEQA, and providing this to the District for adoption and recordation with the County.

For work proposed within the County right-of-way, we will coordinate with the County to obtain an Encroachment Permit. We have included time for coordination via email and phone conversations, as well as a meeting with the County and our Construction Manager to discuss feasibility of County requirements during construction.

Task 4 –Surveying and Site Exploration

Cinquini & Passarino (CPI) of Santa Rosa will be a subconsultant to Coastland and will complete a topographic survey to support the design efforts for this project. The topographic surveys will include features such as, but not limited to; edges of pavement, buildings, fences, striping and pavement markings, utility poles, meter boxes, valve boxes, overhead wires, driveway locations, trees six (6) inches and larger, drip line radii, limits of retaining walls, viaduct cross sections, sanitary sewer and storm drain facilities including inverts, subsurface utilities marked or found, steps/stairs, trails and any other pertinent information that could apply to the project during design.

Topographic surveys will be performed within the apparent public right-of-way throughout the project reach. Record public right-of-way will be drafted and placed on the topographic survey. This will include information available through the County's GIS. Additional boundary surveying is not included within this scope of work. If additional boundary surveying or investigation is needed near the tie-in location at Canyon 7 Rd. and Canyon 2 Road to confirm easements/property lines outside of the roadway, this will be additional work contracted to CPI for an additional fee.

The end product of the survey will include a topographic map in AutoCAD format showing existing topographic features and utilities along the project reach based on the above described approach. The map will be at a 1 inch = 20 feet scale.

RGH Consultants of Santa Rosa will be a subconsultant to Coastland and will complete a geologic survey to determine locations of any subsurface rock near the area on River Road where rock outcroppings are present. RGH will geologically map the existing cut slopes on the inside shoulder of the road, review the slopes on the outside shoulder of the road and perform a seismic refraction survey in three or four locations along the road in the area in question. The seismic refraction survey will get shear wave velocity measurements of the subsurface materials and will tell us at what depth rock is encountered based on shear wave velocities in the rock. Shear wave velocity data is very useful in determining excavation characteristics. Coastland will use this information to ensure water line installation is feasible in this area and make sure the project plans accurately show existing subsurface site conditions.

Task 5 –50% Submittal

Following our background research, utility coordination, survey and field review with District staff, we will develop a preliminary design for mainline and service replacement. We will review our approach with District staff to assure all District goals are met. Based on District input we will adjust our approach and prepare a 50% submittal. The submittal will include all water main and services improvements, as well as any needed asphalt overlay and striping plans, as applicable. Also included in this submittal will be a recommended construction method for the new water main at the culvert crossings, sewer crossings and any other challenging crossings discovered in our field investigations or gathering background information. We will provide the District with a summary of our evaluation of the design options and our findings of the most cost effective and feasible design approach at these locations.

The 50% submittal will include three (3) sets of full size plans and a preliminary engineer's estimate of probable construction costs. We will include submittals to the County and utility providers to ensure their respective facilities are accurately shown on the plans.

Task 6 – 90% Submittal

Following the District's review of the 50% submittal, we will prepare the 90% submittal. The submittal will address all comments on the 50% submittal and will essentially be a comprehensive design package. The plans will include details for all improvements. The specifications will be complete. The 90% submittal will include three (3) sets of full-size plans, specifications and an engineer's cost estimate. Also included in this submittal will be roadway improvement limits and the proposed repair methods based on coordination with the County.

At the 90% complete stage, we will also make a submittal to the County for the encroachment permit.

Coastland's Construction Management Department will perform a constructability review of the contract documents. Through this review, we will help minimize claims and potential change orders.

Task 7 - 100% Plans & Specifications

Following the review of the 90% submittal, Coastland will prepare the final construction drawings, specifications and estimate. We will provide a final submittal to the District for a final review to verify comments have been addressed prior to producing the 100% bid documents. Upon final District review, we will provide stamped and signed drawings and specifications for bidding purposes. An electronic copy of the drawings, specifications and final cost estimate will also be provided in both PDF and AutoCAD formats. We will work with the District to determine the number of bid documents to reproduce for bidding purposes.

Task 8 –Bid Support

Coastland will provide the Notice to Bidders for advertisement in local papers. We will also reproduce and distribute the construction documents to local plan rooms and contractors. During the bidding process, we will answer any questions that may arise and maintain a phone log of inquiries. We will prepare any addenda that may be necessary. Coastland will also conduct the bid opening, tabulate results and review the apparent low bidder's bid package. As part of the bid review we will coordinate with the District's attorney for review the apparent low bidder's bonds, contractor's license verification and insurance.

Once the review of the bid has been completed we will prepare a bid summary and forward it to the District with our recommendation for bid award. Please note that the time associated with this task does not include any time necessary for bid protests. If a bid protest is issued by any of the other bidders, we can provide this as extra service on a time and materials basis, as the time necessary to process the protest is unknown.

SCOPE OF WORK - CONSTRUCTION

Task 1 – Contract Award and Design Construction Support

Once awarded, we will provide a draft Notice of Award letter to the District for signature and mailing to the low bidder. Once the low bidder submits all required documents, we will review all submitted documents for compliance with the requirements in the Construction Documents

(bonds, insurance, signed contract, etc.) Once all information is verified, we will provide the District with a draft Notice to Proceed letter to send to the contractor and set up the Pre-Construction meeting.

Coastland's Project Engineer will be readily available to coordinate with our construction team to provide valuable insight. The Engineer's involvement in the construction phase will ensure important issues are highlighted and all project design issues are addressed promptly.

Task 2 – Pre-Construction Meeting

Immediately following the approval of all submitted information for award of the construction contract, we will schedule and administer the pre-construction meeting. During this meeting we will establish lines of communication and decision making roles with all project stakeholders. We will discuss safety requirements, team member responsibilities, working hours, quality control procedures, submittal requirements, project schedule, change order and potential claim procedures, and safety procedures.

Coastland will be responsible for generating pre-construction meeting invitations including the meeting agenda. Agenda items include lines of communication, public relations, safety, submittals, change procedures, payments, progress schedules, contract time, requests for information, expectations, and other applicable items. Coastland will prepare and distribute meeting minutes to all parties.

Following the pre-construction meeting, Coastland will continue to work closely with the District teams, Design Engineer, and contractor to ensure that all project issues are addressed promptly and that the District's best interests are considered at all times.

Task 3 – Pre-Construction Site Visit and Documentation

Coastland will take pre-construction high definition digital video of the construction site with special attention given to sensitive areas including all private properties adjacent to the project. We will also document residential front yards to ensure all landscaping is returned to its original state. Documenting the site prior to construction will help mitigate possible disputes between the District, contractor and property owners within or adjacent to the project limits. These videos will be logged, labeled and filed with the project files.

Task 4 – Project Start-Up

Coastland will assemble project files in accordance with the District's standard format for administration. Coastland uses Primavera Contract Manager software as a centralized system for document control to create, store, organize, track, and link all project information. Primavera Contract Manager software will distill the constant flow of paperwork to a form that quickly and easily identifies trends and critical issues and will help keep the project moving as it helps document the work. The use of Contract Manager reduces administrative costs, facilitates clearer communication, enhances the sense of a "team effort," and reduces the number of disputes.

Task 5 - Daily Field Inspections and Documentation

A critical aspect of our services is maintaining close communication with District staff to ensure scheduling/quality goals are met. To help maintain close communication, Coastland's inspector will be accessible to the District at all times at the project site and through the use of email and cellular phones. Coastland's on-site inspector will examine all construction activities to ensure that the contract work adheres to the contract documents, District standards and the established schedule.

We will maintain records and provide documentation of the work in the form of daily reports, working days statements, weekly summary of construction activities, deficiency lists, and progress photographs of construction activities. Daily reports will describe the contractor's level of effort, specific work being done, started, or completed, and relevant points raised by the contractor that may require consideration and response. We also document proposed change orders and claims, important conversations, safety issues or accidents, extra work in progress, materials testing performed, information for "as-built" drawings, quantities for progress payments, environmental concerns and hazardous materials.

Coastland will provide a digital photo logbook of construction activities, progress, and areas of concern or interest. The photo log will be compiled on CD's and will identify the location and date of each photo. The log will be maintained through the duration of the project to assure continuity from one week to the next, and will be submitted to the District at the close of the project.

Coastland will continually review the specifications and plans to ensure the work is of good quality and meets the requirements of the contract documents. This review can improve constructability, reduce costs, eliminate ambiguities and improve clarity. We will immediately report any deviation from the approved contract documents.

In summary, our Inspector's responsibilities include:

- Inspect the contractor's work for conformance to the contract documents, codes, regulations and District standards on a daily basis.
- Prepare and submit daily inspection reports that document all job site activities.
- Serve as a daily contact for the contractor as to performance of the construction.
- Respond promptly to District requests.
- Participate in meetings with District staff, contractor and other involved agencies.
- Verify construction material quantities.
- Monitor traffic control procedures to make certain that access is maintained during construction.
- Distribute notifications to impacted public regarding the status of construction.
- Document construction activities with photographs and maintain a photo log.
- Respond to calls from the public promptly and log any complaints in a timely manner.
- Prepare and maintain current redlined construction drawings, documenting unforeseen field conditions and changes to check the contractor's record drawings.
- Identify actual and potential problems and resolve issues by proposing field changes to avoid any delays.
- Document and maintain complete field files containing construction period correspondences, changes, discussions with contractor, memos, reports, and other pertinent items.

Task 6 – Progress Meetings & Coordination

Coastland will conduct weekly or as needed coordination and progress meetings to focus on completed and upcoming work, any construction delays, updating the schedule, proposed changes, change orders, contractor's questions, public relations, safety and other concerns that are identified by a project team member. We will work to foster honest, open communication at these weekly meetings which will help in timely resolution of any disputes and potential claims.

Task 7 – Status Reports and Documentation

7a – Reports: It is important to keep the District informed regarding public relations, progress of the work and costs of the project. We will document construction issues with the following: Weekly Statement of Working Days, Progress Meeting Minutes, Field Directive Log, change order tracking and regular phone calls and e-mails.

7b – Submittal Management: Coastland will coordinate all submittals and monitor the status of the submittals to assure the contractor provides timely response. At the pre-construction conference, we will provide the contractor with a log of all required submittals and due dates. Submittals will be stamped, logged and distributed to our in-house project engineer that was responsible for the design of the project for complete review and approval. Submittals will be filed numerically and approved copies will be distributed to the District, project members, and the contractor.

7c – Requests for Information (RFI): Coastland will receive and log all Requests for Information (RFI's) from the contractor, and forward the RFI to the designer. Coastland will track the status of all RFI's by generating a weekly RFI log that lists the "Ball-in-court" status, description, and if an RFI results in a potential change order.

7d – Change Order Management: In the event that a change order is required, Coastland will negotiate the changes with the contractor and prepare documentation. All changes will be approved by the contractor, Coastland and the District prior to starting work on the change. With the District's approval, Coastland can negotiate with the contractor to produce the best construction method for the change at the lowest cost. If a change order requires input from the design engineer, our Construction Manager will coordinate with them to ensure it is reviewed. A Change Order Log will be created that will show Change Order number, description, status, approved date, start and completion dates and cost.

Task 8 – Construction Management

Our goal is to ensure that construction and contract administration are performed in compliance with District requirements and the project plans and specifications. To accomplish this goal, our Construction Manager will oversee inspection and manage the day-to-day construction activities with the contractor. He will be accessible to the District at all times. The Construction Manager will be responsible for keeping the District informed of the progress of the project, changes that may be needed, pay estimate input and releasing information to the public. Our Construction Manager will be available to discuss the best possible options for uncommon situations or contractor issues that impact the project. In addition, our Construction Manager will complete all contract administration documentation in a timely, accurate and orderly fashion.

Task 9 – Cost and Schedule Management

Coastland will continually review construction progress and perform field measurements and quantity calculations. Each month Coastland will provide accurate calculations for all work items completed and accepted to provide progress payment recommendations to the District. Coastland will review the contractor's progress pay estimate request and schedule of values to assess if they are accurate, and will compare this to the field measurements and quantity calculations. Coastland will continually monitor project costs and keep the District informed on a regular basis.

Coastland will review the contractor's construction schedule for accuracy, reasonableness, and will verify that it meets the project schedule, order of work, and contract requirements. Progress schedules will be reviewed weekly to ensure the contractor is meeting the critical dates. If he fails to meet critical dates, it will immediately be brought to his attention and remedies to get back on schedule will be accomplished. Schedule updates may be required once a month or more. We will negotiate any time extensions for the contractor due to change orders, weather or other delays.

Task 10 - Public Relations and Notifications

To be proactive in eliminating any public concerns, Coastland will ensure every effort is made to keep the public informed of construction progress and minimize disruptions to traffic and parking throughout the project area. Our Inspector will provide introductions to the public and provide his contact phone number to all residents. Coastland will log and respond to questions and concerns from the public in a timely manner and will record the contractor's activities as they relate to public safety and public convenience. Additionally, Coastland will accurately document pre-construction conditions with a photo log to verify the project area is restored to its original form following construction. Our goal is to minimize calls to the District by using our on-site inspector / construction manager to respectfully communicate with residents and discuss any concerns.

Task 11 – Conflict Resolution and Claim Management

Coastland's goal is to avoid all unnecessary claims and resolve conflicts during construction. The starting point for avoiding conflicts or notices of potential claims is a clear, biddable set of plans and specifications. To promote effective conflict resolution, our Construction Manager and Inspector will become intimately familiar with the project plans, specifications, the District Standards, and issues specific to this project.

We will assist in the resolution of conflicts quickly by keeping the lines of communication open, and being open and responsive with the contractor. Progress meetings are important to foster communications and to resolve conflicts quickly. We have found that most conflicts can be thoroughly discussed and defused at these meetings. The key is to foster a good, working rapport with the contractor and demonstrate that we are trustworthy, honest and professional which Coastland staff currently has with local contractors.

Additionally, Coastland will maintain thorough documentation of the contractor's field activities so that we know exactly what, when, where and why an issue or conflict occurred, and not have to rely on memory or the contractor's version of what happened.

These tasks help reduce the likelihood of change orders during construction or post-construction claims from the contractor; however, if claims are filed at the completion of the project we will have the documentation to assist in any negotiations.

If we cannot successfully facilitate a resolution of a dispute and receive a Notice of Potential Claim from the contractor, we will be ready to support the District's position. Coastland maintains accurate and thoroughly documented project information as backup for claim resolution. Coastland will continue facilitating negotiations while tracking and logging all correspondence, as-built progress schedules, and other backup documentation.

No work will be performed under this task unless specifically authorized in writing by District staff.

Task 12 – Post-Construction Meeting

Following completion of the work, Coastland will organize and conduct the post-construction meeting. The meeting will document all requirements necessary for final closeout and payment, and confirm all contract obligations have been met. Recommendations for improvement will be made and incorporated into future projects. The results of the meeting will be summarized in meeting minutes.

Task 13 – Project Closeout

Coastland will help the District comply with all pertinent requirements and verify completion of punch list items, obtain closing documentation from permitting agencies, verify mitigation measures have been implemented, issue Notice of Completion, prepare recommendations for final acceptance of the project, review as-built plans for accuracy and completeness, prepare and recommend final payment, and transmit all construction documentation to the District. At the completion of the project, we will provide the District with the following:

- Record drawings (red-lined hard copy on bond)
- All contract files and records (hard file & electronic)
- Annotated journal of photos and CD of digital photos

OPTIONAL TASKS

The following work is not included in our proposal. However, Coastland would be pleased to provide these services if the District desires:

- Environmental determination (other than CATEX) or soil contamination.
- Geotechnical investigations beyond what is described in this proposal.
- Right-of-way determination or preparation of associated documents.
- Permitting fees.
- Potholing of utility locations, associated survey or coordination.

SCHEDULE

We understand the District's goal is to have these projects constructed next construction season. After assessing the project site, discussing the project with District staff, and considering our specific approach to this project, we estimate we will be able to complete the design portion of the project in 5 to 6 months and get it to bid in the early spring of 2016, assuming no major changes in the scope of work described herein.

Based on our review of the project site, we have estimated a total of 100 working days for construction and have prepared our estimate accordingly. This is an average of what we have seen from the daily production over the past few years in projects for the District and what we would expect for average production rates, given the nature of the project. We reserve the right to amend our estimate for construction management and inspection services once the design has been completed if the working days change in the bid documents from our assumption herein.

WORK ESTIMATE - DESIGN

Based on our Scope of Work for design services, we have prepared a detailed budget that identifies staffing rates, total cost per task, and direct expenses. As can be seen in the work estimate, we are proposing that the services associated with the design work for this project be completed for a not-to-exceed fee of $128,422 (see following Work Estimate). This amount assumes all of the work for this project will fall under the Scope of Work described in our proposal.

Please also note that in the not-to-exceed amount, we have included an estimated amount of $2,300 for reimbursable expenses (i.e. printing, plotting, mileage, final mylars, copies and binding). These reimbursable costs will be billed at cost plus 15%.

The above fee quotation should be considered a negotiable offer. If the District wishes to modify the proposed Scope of Work, we would be happy to discuss such a change and how it would affect the overall project cost. We can either discuss amendments to the existing Scope or provide these services on a time and materials basis per our adopted schedule of hourly rates and then modify the Work Estimate accordingly.

WORK ESTIMATE

FY 2017 Project - Old River Road, River Road, Orchard Drive, Foothill Blvd. and Outlet Drive	Proposal for Design Services	Sweetwater Springs Water District

Task #	Task Description	Principal Engineer $185	Associate Engineer $135	Assistant Engineer $125	CAD Designer $145	Admin $80	Const Manager $140	Total Hours	Total Cost	Subconsultant / Notes
1	**Meeting with District**									
	Kick Off Meeting (1)	4	4					8	$1,280	
	Progress Design Review (3)	12	12		6			30	$4,710	
	Subtotal							**38**	**$5,990**	
2	**Background Information**									
	Background Mapping	1	8		16			25	$3,585	
	Field Review with District		4		6			10	$1,410	
	Photo Log		4					4	$540	
	Subtotal							**39**	**$5,535**	
3	**Coordination with Agencies**									
	Coordination with Utility Companies		8		4	2		14	$1,820	
	Coordination with County/SCWA		8		4			12	$1,660	
	Coordination with Water Board (DHS)		4					4	$540	
	CEQA Notice of Exemption		2					2	$270	
	Subtotal							**32**	**$4,290**	
4	**Surveying and Site Exploration**									
	Topographic Survey							0	$40,612	Cinquini & Passarino
	Geotechnical Survey							0	$12,100	RGH Consultants
	Coordination with Surveyor and Geotech	2	4		8			14	$2,070	
	Subtotal							**14**	**$54,782**	
5	**50% Submittal**									
	Improvement Plans	12	32		128			172	$25,100	
	Preliminary Specifications		8					8	$1,080	
	Preliminary Cost Estimate		2		8			10	$1,430	
	QC Review/Value Engineering	2					4	6	$930	
	Subtotal							**196**	**$28,540**	
6	**90% Submittal**									
	Improvement Plan Revisions	6	16		64			86	$12,550	
	Specifications		4					4	$540	
	Cost Estimate		4		4			8	$1,120	
	QC Review/Constructability Review	2					2	4	$650	
	Subtotal							**102**	**$14,860**	
7	**100% Submittal**									
	Final Documents	4	16		32			52	$7,540	
	Subtotal							**52**	**$7,540**	
8	**Bid Support**									
	Addendum/questions during bid	2	6		6	2		16	$2,210	
	Notice to bidders/advertisement	1	2			6		9	$935	
	Bid Opening attendance	2	2					4	$640	
	Bid analysis/recommendation	2	2			2		6	$800	
	Subtotal							**35**	**$4,585**	
	Miscellaneous Costs								**$2,300**	Est mileage, photos, reproduction, mylars
	Total Hours	**52**	**152**	**0**	**286**	**12**	**6**	**508**		
	Total Cost	**$9,620**	**$20,520**	**$0**	**$41,470**	**$960**	**$840**		**$128,422**	

WORK ESTIMATE - CONSTRUCTION

Based on a preliminary review of the project, we estimate the project duration to last approximately 100 working days. Note that this is an average of what we would anticipate for a project of this complexity and what has actually been experienced over the last few years with projects in the District. As can be seen on the attached Work Estimate sheet, our efforts include part-time construction management and full-time inspection. Our proposal does not include any overtime work, nor work for more than one inspector during the day. Our proposal also includes factors such as attending meetings, project closeout and vehicle costs. Based on these assumptions, we propose that the work associated with the Construction Observation portion of this project can be provided on a time and materials basis for a not-to exceed fee of $157,462 (see following work estimate).

Please note that the number of working days was determined based on our best estimate of the project at this time. During the design of the project, additional information may come up that may change this estimate. If this occurs, we reserve the right to make modifications to our estimate based on the number of days determined after completion of the design. At that time, we can provide the district with any modifications that may be needed prior to award of the construction contract so it can be done simultaneously.

Also, please note that if the contract time extends beyond 100 working days (due to the inability of the contractor to complete the work in a timely manner), or the scope or level of services change, our costs may also increase. Similarly, if the contract time is reduced, charges will decrease accordingly. We propose to re-evaluate this Work Estimate after the design is complete and the actual contract time is determined.

WORK ESTIMATE

FY 2017 CIP		PROPOSAL FOR CONSTRUCTION MANAGEMENT & INSPECTION SERVICES					Sweetwater Springs Water District		
TASK INFORMATION		BILLING INFORMATION					HOURS AND COST INFORMATION		
Task No. (Coastland Code)	Task Information	CM	Inspector	Principal Engr.	Admin	Direct Costs	Total Hours	Total Costs	Comments
		$140	$115	$185	$80				
1a (700)	**Contract Award**	2		4			6	$1,020	
1b (700)	**Design Support During Construction**			8	2		10	$1,640	
2 (700)	**Pre-Construction Meeting**	4	4		4		12	$1,340	
3 (700)	**Pre-conSite Visit & Documentation**	2	8				10	$1,200	
4 (700)	**Project Start-Up**	8	8	2	8		26	$3,050	
5 (702)	**Daily Field Inspection**		578				578	$66,470	Based on 100 working days
6 (702)	**Progress Meetings & Coordination**	24	24				48	$6,120	Assumes 6 meetings
7 (704)	**Status Reports & Documentation**	18	28				46	$5,740	Review of progress/documentation
7a (704)	**Reports**	22	100		20		142	$16,180	Status / Daily Reports
7b (704)	**Submittal Management**	12	10		2		24	$2,990	Based on 10 Submittals
7c (704)	**Requests For Information**	6	2				8	$1,070	Based on 2 RFI's
7d (704)	**Change Order Management**	6	6				12	$1,530	Based on 2 change orders
8 (704)	**Construction Management**	127					127	$17,780	Misc CM tasks
9 (704)	**Cost and Schedule Management**	15	20				35	$4,400	Based on 5 monthly payments
10 (710)	**Public Relations / Notifications**	20	40				60	$7,400	Notices / phone calls
11 (710)	**Conflict Resolution**						0	$0	T&M as needed
12 (710)	**Post Construction Meeting**	4	4				8	$1,020	Walk through
13 (710)	**Project Closeout**	16	8	2	4		30	$3,850	As-builts / files
	Bid Advertisement Distribution					$850		$850	Bid plan sets (10) & advertisement
	Photographs & video					$50		$50	
	Vehicle expenses					$13,762		$13,762	983 hours x $14/hr=$13,762.00
	Total Hours	286	840	16	40		1,182		
	Project Total	$40,040	$96,600	$2,960	$3,200	$14,662		**$157,462**	

NOTES:

1. Based on an estimated 100 working days *(our working day estimate will be refined following completion of PS&E)*
2. Based on full time inspection at 40 hours per week and part-time construction management of 12.5 hours a week.
3. Based on an estimated number of RFI's, change orders and submittals shown above.