



July 6, 2016
Project No. 12-0045

Monterey Peninsula Water Management District
5 Harris Court, Building G
Monterey, California 93940

Attention: Mr. Joe Oliver, Water Resources Manager
Mr. Jon Lear, Senior Hydrogeologist

Subject: Monterey Peninsula ASR Project, Proposal for Fiscal Year 2016-2017 Engineering Services

Dear Mr. Oliver and Mr. Lear:

In accordance with your request, Pueblo Water Resources, Inc. (PWR) is pleased to submit this proposal for the provision of ongoing engineering services for the Monterey Peninsula ASR Project. Presented in this proposal is a detailed scope of work, estimated costs, and schedule to provide ASR engineering-related tasks during Fiscal Year 2016-2017 (FY 2016-2017).

PURPOSE AND SCOPE

The purpose of the proposed work is to provide needed engineering services related to the Santa Margarita ASR Facility during FY 2016-2017. It is noted that PWR currently has two previously authorized Contract Amendments (CAs), which include various Santa Margarita Facility engineering-related tasks that have not been completed for various reasons¹, but are planned to be completed in FY 2016-2017. The tasks presented in this proposal are intended to supplement the existing CAs only as necessary to complete the work planned and budgeted by the District for FY 2016-2017, and include the following.

- Site Expansion engineering
- ASR-1 and ASR-2 soundproof enclosure design
- ASR-1 Turbidimeter alarm design
- Backup ASR Well design and specifications

¹ The primary reasons the previous CAs have not been completed include delays in land acquisition and reallocations of engineering task budgets to needed supplemental water-quality investigations.



Scope of Services

Task 1 – Santa Margarita Site Expansion Engineering and Construction Management

This task includes engineering services for the completion of certain expanded Santa Margarita ASR site facilities. Specific work items in this task include the following:

Task 1.1 – Expanded Site Engineering. PWR will finalize engineering design and construction drawings to allow qualified Class A general contractors to construct site improvements for the property, including the following:

- Site grading, drainage, and paving for the expanded site area;
- Underground piping/utilities for CAW 30" and 16" ASR line extensions into the site;
- Grading/excavation for the expansion of the existing Backflush Pit;
- Chemical delivery truck offloading station for disinfectant supply;
- Underground piping and associated electrical/instrumentation conduits for chemical offloading facilities;
- Site landscaping and security fencing.

It is assumed that three meetings will be required to process and complete the approval of the plan set with the City and FORA, including a presentation to the Seaside City Council for the landscape and site improvements.

Task 1.2 – Construction Support Activities. PWR will provide assistance with construction oversight and construction monitoring for the facilities design prepared in Task 1.1 above. Services are envisioned to include the following general activities:

- Bidding support for Task 1.1 work, including an anticipated mandatory pre-bid meeting with prospective bidders, response to bidder questions and review of submitted bid proposals;
- Construction management assistance, including submittal reviews, response to contractor RFI's, change order requests, and progress billing review;
- Construction observation on a periodic basis for critical stages of construction work, including earthwork, underground work and concrete placement;
- Materials testing and documentation of construction testing activities, including soils testing, compaction testing, and concrete placement and strength testing;
- Compilation of Record Drawings for documentation of as-constructed features of the project.



Task 2 – ASR-1 and ASR-2 Soundproof Enclosures

This task consists of the design of sound attenuation enclosures for the ASR-1 and ASR-2 wells to reduce noise impacts to existing neighborhood residential areas. The design will address the following:

- Noise attenuation to areas north and west of the facility;
- Seismic stability of the structure(s);
- Structure disassembly/reassembly for well maintenance;
- Aesthetic compatibility with existing site features.

Engineering design and construction drawings/specifications will be prepared to allow bidding by Class A Contractors for the work. Bidding assistance and construction management services are not included in this proposal for this task, as these services are anticipated to be included in subsequent FY 2017-2018 contract work.

Task 3 – ASR-1 Turbidimeter Alarm

This task includes the design of additional instrumentation for ASR-1 to include a Turbidimeter and alarm interlock function to prevent non-compliant waters from the well from entering the CAW distribution system. The design will be closely coordinated with CAW staff to ensure compatibility of the design and instruments with their standards. PWR will prepare a brief design and specification suitable for bid solicitation to CAW-approved vendors.

Task 4 – Backup ASR Well Design and Bid Specifications

Task 4.1 – Basis-of-Design. PWR will prepare a basis-of-design technical memorandum for a backup ASR well based on the hydrogeologic conditions at the Santa Margarita site. The purpose of the memo is to establish the design features of the ASR well, and will include an evaluation of the hydrogeologic setting, a preliminary design for the well, and the materials and methods to be utilized. An Opinion of Probable Cost will also be provided. District staff and other interested parties (e.g., California American Water) will then have the opportunity to review and comment on the design. With concurrence of the District on the proposed design, preparation of the technical specifications and bid documents (Task 4.2) would immediately follow.

Task 4.2 - Technical Specifications and Bid Documents. Technical specifications for the drilling and construction of the backup ASR well will be prepared. The technical specifications are intended to provide adequate detail for bidding and well construction by competent, licensed (C-57) well drilling contractors. PWR will incorporate the well design and specifications for the well into a bid package using existing standard District format. It is assumed that the District will provide PWR with the District's "boiler plate" contract provisions, including general conditions and special insurance requirements, for incorporation into the final contract package.

EXHIBIT 4-B

Monterey Peninsula Water Management District
Monterey Peninsula ASR Project - FY 2016-2017 Engineering
July 6, 2016 (12-0045)



It is noted that bidding assistance and construction management services are not included in this proposal. These services are anticipated to be included in subsequent FY 2017-2018 contract work.

Services Not Included

Services which are (or may be) necessary for the completion of this project, which are not included in our proposal include the following:

- Planning/design services for Santa Margarita facility building water treatment facilities (currently anticipated in subsequent FY 2017-2018);
- Water-quality sampling and analyses (assumed District and/or CAW provided);
- Construction of any site facilities;
- Permit fees;
- Cost of water, electricity, or other utilities;
- Any others items not specifically included in PWR's scope of services.

Estimated Fees and Schedule

Based on the scope of services presented herein, we estimate the fees for our services will be \$273,390; which will be billed on a time-plus-expenses basis in accordance with our current Fee Schedule (attached). An estimated fee summary worksheet is attached summarizing the estimated man-hours and costs per task/work item. A 10 percent contingency has been noted in the attached budget summary (total with contingency is \$300,729) in the event that unforeseen project complications or constraints arise. We recommend the contingency be held for authorization by District staff upon written justification by PWR.

We understand that in order to authorize this work, your Board must first approve a formal contract amendment. Based on our current workload, we believe that we can commence work within two weeks of your authorization; we believe the work will be completed by the end of the fiscal year (June 30, 2017).

We appreciate the opportunity to provide assistance to the District on this important water supply project. If you require additional information regarding this or other matters, please call us.

EXHIBIT 4-B

Monterey Peninsula Water Management District
Monterey Peninsula ASR Project - FY 2016-2017 Engineering
July 6, 2016 (12-0045)



Sincerely,

PUEBLO WATER RESOURCES, INC.

Robert C. Marks, P.G., C.Hg
Principal Hydrogeologist

Stephen P. Tanner, P.E.
Principal Engineer

RCM:SPT

Attachments: Cost Estimation Spreadsheet
2016 Fee Schedule

EXHIBIT 4-B
MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
Professional Services for Monterey Peninsula ASR Project - Engineering

Fiscal Year 2016-2017

PWR Project No.: 12-0045

**ESTIMATED FEE SUMMARY**

LABOR		Principal Professional	Senior Professional	Drafting	WP	Hours by Task	Estimated Task Cost
Hourly Fee		\$195	\$180	\$110	\$90		
Task No.	Task Description						
1	Site Expansion Engineering and Construction Mgmt	250	420	90	40	800	\$137,850
2	ASR-1 and ASR-2 Soundproof Enclosures	56	17	12	4	89	\$15,660
3	ASR-1 Turbidimeter and PLC Interlock	24	-	12	2	38	\$6,180
4	Backup ASR Well Design and Bid Specifications	20	55	5	5	85	\$14,800
		-	-	-	-		
		-	-	-	-		
		-	-	-	-		
		-	-	-	-		
		-	-	-	-		
		-	-	-	-		
Hours by Labor Category:		350	492	119	51		
Costs by Labor Category:		\$68,250	\$88,560	\$13,090	\$4,590		
						Total Labor Hours:	1012
						Total Labor Costs:	\$174,490

OTHER DIRECT COSTS (ODC's)		Units	Unit Price	No. of Units	Fee
Task No.	Item				
	Vehicle	Daily	\$75	18	\$1,350
	Travel Per Diem	Daily	\$150	14	\$2,100
					\$0
					\$0
					\$0
Subtotal ODCs:					\$3,450

OUTSIDE SERVICES		Units	Unit Price	No. of Units	Fee
Task No.	Item				
1.1	Geotechnical Engineering	LS	\$18,000	1	\$18,000
1.1	Landscape Design	LS	\$14,000	1	\$14,000
1.2	Soils Monitoring / Materials Testing	LS	\$31,000	1	\$31,000
2	Structural Engineering	LS	\$8,000	1	\$8,000
3	Electrical Engineering	LS	\$12,000	1	\$12,000
Subtotal Outside Services:					\$83,000
Subtotal Outside Services w/ Markup (15%):					\$95,450

COST SUMMARY	
Labor	\$174,490
Other Direct Costs	\$3,450
Outside Services	\$95,450
Subtotal:	\$273,390
10 % Contingency	\$27,339
TOTAL ESTIMATED PROJECT COST:	\$300,729



**PUEBLO WATER RESOURCES, INC
2016 FEE SCHEDULE**

Professional Services

Principal Professional.....	\$195/hr
Senior Professional.....	\$180/hr
Project Professional.....	\$165/hr
Staff Professional.....	\$135/hr
Technician.....	\$125/hr
Illustrator.....	\$110/hr
Word Processing.....	\$90/hr

Other Direct Charges

Subcontracted Services.....	Cost Plus 15%
Outside Reproduction.....	Cost Plus 15%
Travel Expenses.....	Cost Plus 15%
Per Diem*.....	\$150/day
Vehicle	\$75/day

Equipment Charges

Drilling Fluid Test Kit.....	\$100/day, \$400/week
Field Water Quality Meter (Hach DR890).....	\$75/day, \$275/week
Orion ORP/pH/Temp Probe.....	\$75/day, \$275/week
Water Level Probes (In-Situ Mini-Troll/Level Troll).....	\$100/day, \$300/week
Fuji Ultrasonic Flowmeter.....	\$200/day, \$750/week

*Regionally and seasonally specific to project.