

Automated Meter Infrastructure Expansion Project

Budget

Below is the Budget for the AMI Expansion Project. Cost share funding will be provided by EMWD’s Water Replacement and System Betterment Reserve Fund.

Table 8. Budget Table			
Line Item	Requested Grant Funding	Cost Share	Total
Personnel Services	\$0.00	\$335,107.57	\$335,107.57
Land / Easement Acquisition	\$0.00	\$0.00	\$0.00
Grantee Expenses	\$2,500,000.00	\$1,979,000.00	\$4,479,000.00
Equipment	\$0.00	\$295,000.00	\$295,000.00
Professional and Consultant Services	\$0.00	\$19,955.00	\$19,955.00
Construction/Implementation Costs	\$0.00	\$60,000.00	\$60,000.00
TOTAL	\$2,500,000.00	\$2,689,062.57	\$5,189,062.57

Personnel Services

The budget for Personnel Services is estimated based on EMWD labor rates and estimated hours to complete the necessary activities. Estimated hours for EMWD’s meter reading staff to install 21,250 meters is based on an assumed installation rate of two meters per hour.

Tower installation will include both EMWD staff and an outside contractor. Costs associated with tower installation by EMWD personnel are based on an Engineer’s Estimate (Appendix 4-1)

Activity	Discipline	Hourly Wage (\$)	Number of Hours	Total (\$)
Letter to Adopt Categorical Exemption	CEQA/NEPA Analyst	\$40.15	8	\$321.20
Monitoring Plan Preparation	Project Manager	\$49.89	8	\$399.12
Automated Meter Installation	Meter Repair Technician	\$26.61	10,625	\$282,731.25
AMI Project Management	Meter Services Manager	\$49.89	400	\$19,956
Connection of Power to TGB Radio ¹	Various EMWD Staff	LS	LS	\$14,100.00
Construction of Concrete Base for Tower ¹	Various EMWD Staff	LS	LS	\$14,000.00
Construction of Network Enclosure Concrete Pad ¹	Various EMWD Staff	LS	LS	\$3,600.00
Total				\$335,107.57

1) These labor costs were provided in EMWD’s AMR Communications Infrastructure Engineer’s Estimate (Appendix 4-1)

Automated Meter Infrastructure Expansion Project

Budget

Land / Easement Acquisition

No land easements are required for the Project, so there are no budgeted costs associated with this line item.

Grantee Expenses

Grantee Expenses include the equipment (less than \$5,000) used for AMI installation. Each AMI installation requires one automated meter and one transmitter. Costs for these items are based on EMWD's actual costs to purchase these materials for their existing AMI Program. The entire grant request of \$2.5 million will be applied to grantee expenses with approximately \$1,325,000 applied to purchasing the meters and \$1,175,000 applied to purchasing the transmitters. Additionally, communication towers will be installed at 5 locations. Each location has different labor and materials costs depending on what is necessary for the site (See Appendix 4-1 for a cost breakdown). The sum of the sites is shown in the table below.

Line Item	Unit Cost (\$)	Quantity	Total (\$)
Automated Meters	\$112.00	21,250	\$2,380,000.00
Transmitters	\$98.00	21,250	\$2,082,500.00
40' Heavy Duty Tower	\$3,000.00	2	\$6,000.00
Network Switch Enclosure with Racking System & AC Unit	\$3,500.00	3	\$10,500.00
Total			\$4,479,000.00

Equipment

Equipment for Project (greater than \$5,000) includes the transceiver long range radio base station (TGB Radio) required to transmit data between the automated meters and EMWD headquarters. Five TGB Radios will be required to realize the benefits of 21,250 meters that will be installed as part of this Project. Costs per TGB Radio are estimated based on the manufacture's cost estimate (Appendix 4-1).

Line Item	Unit Cost (\$)	Quantity	Total (\$)
TGB Radio ¹	\$59,000.00	5	\$295,000.00

1) Equipment cost was provided in Sensus' cost estimate (Appendix 4-2)

Professional and Consultant Services

Grant application preparation was performed by a consultant for the lump sum cost of \$15,340 (based on consultant scope of work and fee). Grant administration activities that would occur following an award of grant funding would also be completed by an outside consultant. These

Automated Meter Infrastructure Expansion Project

Budget

activities would include preparing invoices, quarterly progress reports, and the progress completion report. The estimated number of hours to complete these activities is based on previous project experience and an outside consultant hourly wage.

Line Item	Hourly Wage (\$)	Number of Hours	Total (\$)
Grant Application Preparation	LS	LS	\$15,340.00
Direct Project Administration and Reporting	\$71.00	65	\$4,615.00
Total			\$19,955.00

Construction/Implementation Costs

A contractor will be hired to assist with the installation of the 5 TGB Radios. Activities for the TGB radio installation include connecting the antennae and the associated Base Station Radio that will be required for transmitting data. The estimated lump sum contractor cost per TGB installation is based on the manufacturer's cost estimate (Appendix 4-1)

Activity	Discipline	Cost (\$)	Quantity	Total (\$)
TGB Radio Installation ¹	Contractor	\$12,000.00/TGB Radio	5 TGB Radios	\$60,000.00

1) Contractor cost was provided in Sensus' cost estimate (Appendix 4-1)

Appendix 4-1

**Supporting Documentation for the Automated Meter Infrastructure Expansion
Project**

██████████ 450 North Gallatin Avenue
 ██████████ P.O. Box 487
 ██████████ Uniontown, PA 15221 USA

1-800-MeterIt
 1-800-638-3748
 www.sensus.com

QUOTATION
 Your Quote Number: 24090
 Reference: ENDPOINTS & AMI



Bill to Customer: 232129

Ship to Customer:

ATTENTION: MAISHA CAMPBELL
 EASTERN MUNICIPAL WTR DIST-AM

EASTERN MUNICIPAL WTR DIST-AM
 2270 TRUMBLE RD

2270 TRUMBLE RD
 PERRIS CA 92570

USA

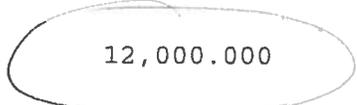
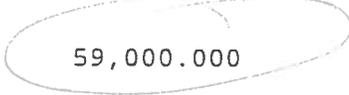
PERRIS CA 92570

Salesman: BURNS ARTHUR
 Terms: NET 30 DAYS

Effective Date: 4/01/14
 Expiration Date: 3/31/15



Line	Description	Quantity	U/M	US Dollar Unit Price
1	Part#: 5396353752201MI M520M TRANSCEIVER UNIT PIT SET, SINGLE PORT TOUCHCOUPLER, LEAK DETECTION, HOURLY READ & INTERVAL DATA	270	EA	98.000
2	Part#: 5396153752063AL MXU 520R TRANSCEIVER UNIT DUAL PORT, PIT TOUCHCOUPLER W/ALL OPTIONS	324	EA	104.000
3	Part#: 5396153752001AL MXU 520R TRANSCEIVER UNIT SINGLE PORT, PIT TOUCHCOUPLER W/ALL OPTIONS	324	EA	98.000
4	Part#: 5396353752203MI M520M TRANSCEIVER UNIT PIT SET, DUAL PORT TOUCHCOUPLER, LEAK DETECTION HOURLY READ & INTERVAL DATA	64	EA	104.000
5	Part#: S50 S50 SINGLE TRANSCEIVER LONG RANGE RADIO BASE STATION SPEC TO BE ADVISED	1	EA	59,000.000
6	Part#: 5396383700048 INSTALL BS STATION INDOOR	1	EA	12,000.000



+ Tower structure = \$7,000

This Quotation is an offer to sell which includes and is subject to the Sensus Metering Systems Terms of Sale available for viewing and downloading at <http://www.sensus.com/c> Please contact Customer Service at 1-800-638-3748 if you are unable to access this site and require a printed copy of the Terms of Sale.

+ 33,000
 - 5

 10,600

██████████ 450 North Gallatin Avenue
██████████ P.O. Box 487
██████████ Uniontown, PA 15221 USA

1-800-MeterIt
1-800-638-3748
www.sensus.com

Your Quote Number: 24090



US Dollar

Line	Description	Quantity	U/M	Unit Price
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IF MODIFICATIONS IN METER MATERIALS OR PROCESSING ARE REQUIRED TO MEET NEW REGULATIONS, THE PRICING SUBMITTED IS SUBJECT TO IMMEDIATE CHANGE
Thank you for your interest in quality products by Sensus.

Current as of: 7/31/14

Correspondence:

SENSUS
2 Bay Laurel
Aliso Viejo, CA 92656
949-215-9212

Purchase Orders:
SENSUS
PO BOX 487
UNIONTOWN, PA 15401

PHONE: 800-METER-IT
800-638-3748

Arthur Burns Director of Sales

This Quotation is an offer to sell which includes and is subject to the Sensus Metering Systems Terms of Sale available for viewing and downloading at <http://www.sensus.com/tc> Please contact Customer Service at 1-800-638-3748 if you are unable to access this site and require a printed copy of the Terms of Sale



November 4, 2014

Ms. Bonnie Wright
Grants and Loans Administrator
Eastern Municipal Water District
2270 Trumble Road
Perris, CA 92572

Subject: Proposal for Water-Energy Grant Program Application Preparation

Dear Ms. Wright:

RMC Water and Environment is pleased to provide you with a proposal to prepare an application for grant funding from the California Department of Water Resources (DWR) Water-Energy Grant Program. Our proposed services, estimated fee, and a preliminary schedule are provided in Attachments A, B, and C of this letter.

BACKGROUND

On March 1, 2014, the Governor approved funding for the Water-Energy Grant Program through Senate Bill 102, Section 11, which appropriated funds from the Greenhouse Gas Reduction Fund to DWR to establish a grant program. There is \$19 million available in grant funding for this program, with a maximum of \$2.5 million per application, and \$5.0 million per applicant.

PROJECT TEAM

The project team that will be responsible for the preparation of the EMWD's Water-Energy Grant Program application includes Brian Dietrick as Principal in Charge (PIC), Dawn Flores as Project Manager (PM), and Brenda Ponton as Project Planner (PP), all members of our staff are familiar with grant preparation. Our team brings history and experience in preparing grant applications for DWR funding programs.

We thank you for this opportunity to serve the EMWD and look forward to your review of our proposal. Please contact me at 310-566-6479 if you have any questions.

Very truly yours,
RMC Water and Environment

A handwritten signature in black ink that reads "Brian N. Dietrick". The signature is written in a cursive style.

Brian N. Dietrick, P.E.
Principal-in-Charge



Eastern Municipal Water District
Water-Energy Grant Program Application Preparation
Attachment A

PROJECT DESCRIPTION

Eastern Municipal Water District (EMWD) has identified the California Department of Water Resources (DWR) Water-Energy Grant Program as a potential funding mechanism for EMWD's ongoing water use efficiency program. EMWD would like to pursue this funding to install advanced metering infrastructure (AMI) for municipalities and residential areas. EMWD has requested that RMC provide a proposal for preparation of this grant application for the AMI installation project; additional projects will require revisions to the scope, budget and schedule.

SCOPE OF WORK

Task 1: Authorization and Eligibility Requirements

RMC will compile the authorization and eligibility requirements needed for Attachment 1. EMWD will be responsible for obtaining the documents, with signatures as appropriate, and forwarding to RMC in a timely manner. These documents include:

- Authorizing Resolution
- Eligible Applicant Documentation
- DWR verification of Urban Water Management Plan
- Demand Management Measures (AB 1420 Compliance Form)
- Water Meter Requirements (Metering Compliance Form)
- CASGEM Compliance
- Agricultural Water Management Compliance
- Surface Water Diversion Compliance

Task 1 also includes an initial one-hour conference call with EMWD staff to discuss the schedule, required information, and necessary supporting documentation for the application. An electronic copy of Attachment 1 will be submitted to EMWD as a part of the Draft Application Package prepared as part of Task 5.

Deliverable

- *Electronic copy of Attachment 1 submitted as part of Draft Application Package*

Task 2: Water and Energy Savings and GHG Calculations

RMC will complete Attachment 2 (Water and Energy Savings and GHG Calculations) for the project based on information provided by EMWD related to water and energy savings. EMWD is responsible for providing complete water and energy savings information needed to complete the water, energy and GHG savings excel workbook provided by DWR and all supporting documentation. An electronic copy of Attachment 2 will be submitted to EMWD as a part of the Draft Application Package prepared as part of Task 5.

Deliverable

- *Electronic copy of Attachment 2 submitted as part of Draft Application Package*

Eastern Municipal Water District
Water-Energy Grant Program Application Preparation
Attachment A

Task 3: Work Plan, Budget, Schedule, and Proposal Monitoring

RMC will complete Attachments 3 (Work Plan), 4 (Budget), 5 (Schedule), and 6 (Proposal Monitoring) for the project. EMWD is responsible for providing completed templates (to be provided by RMC) for the project and all supporting documentation. Electronic copies of Attachments 3, 4, 5, and 6 will be submitted to EMWD as a part of the Draft Application Package prepared as part of Task 5.

Deliverable

- *Electronic copy of Attachments 3, 4, 5 and 6 submitted as part of Draft Application Package*

Task 4: Disadvantaged Community

RMC will complete Attachment 7 (Disadvantaged Community) for the project. EMWD is responsible for providing complete information required to complete Attachment 7 including, but not limited to, the measurable benefit and percentage of benefit provided to the DAC and supporting basis of information for the claimed percentage of benefit. An electronic copy of Attachment 7 will be submitted to EMWD as part of the Draft Application Package.

Deliverable

- *Electronic copy of Attachment 7 submitted as part of Draft Application Package*

Task 5: Checklist, Draft and Final Application

RMC will complete the “Grant Application Checklist” for the project, and submit to EMWD as a part of the Draft Application Package. EMWD is responsible for providing information required to complete this checklist. RMC will then compile a draft grant application for review by EMWD. It is expected that EMWD will review each attachment and return comments to RMC in a timely manner. RMC will incorporate all comments into a final application package to be uploaded to the GRanTS Online Tool.

Deliverables

- *Electronic copy of Draft Application Package*
- *Electronic copy of Final Application Package uploaded to the GRanTS Online Tool*
- *One signed hardcopy of each of the necessary forms, listed in Attachment 1, submitted to DWR*

BUDGET

The scope of work, as outlined herein, can be completed for an estimated budget of \$15,340. The table in Attachment B provides a detailed breakdown of this budget by task.

SCHEDULE

Attachment C illustrates our proposed schedule for completing the tasks outlined in this proposal. The schedule assumes a start date of November 5, 2014.



Attachment B: Fee Estimate

Eastern MWD

2014 Water-Energy Grant Program Application Preparation

Tasks	Labor			Total Hours	Total Fee
	Brian Dietrick	Dawn Flores	Brenda Ponton		
	EPS-9 (PIC) \$240	EPS-5 (PM) \$205	EPS-1 (PP) \$155		
Task 1: Authorization and Eligibility					
Authorization and Eligibility (Attachment 1)	3	4	6	13	\$2,470
Subtotal Task 1:	3	4	6	13	\$2,470
Task 2: Water and Energy Savings and GHG Calculations					
Water and Energy Savings and GHG Calcs (Attachment 2)	2	4	16	22	\$3,780
Subtotal Task 2:	2	4	16	22	\$3,780
Task 3: Work Plan, Budget, Schedule and Proposal Monitoring					
Work Plan, Budget, Schedule, Monitoring (Attachments 3-6)	4	8	16	28	\$5,080
Subtotal Task 3:	4	8	16	28	\$5,080
Task 4: Disadvantaged Community					
Disadvantaged Community (Attachment 7)	1	6	0	7	\$1,470
Subtotal Task 4:	1	6	0	7	\$1,470
Task 5: Checklist, Draft and Final Application Compilation					
Checklist, Draft and Final Application Compilation	2	4	8	14	\$2,540
Subtotal Task 5:	2	4	8	14	\$2,540
TOTAL	12	26	46	84	\$15,340

1. The individual hourly rates include salary, overhead and profit.

