



**CITY OF LODI  
COUNCIL COMMUNICATION**

**AGENDA TITLE:** Adopt Resolution Authorizing City Manager to Execute Amendment No. 1 to Professional Services Agreement with RMC Water and Environment, of Walnut Creek, for Water Meter Planning, Design and Program Management (\$1,977,417) and Appropriating Funds (\$2,250,000)

**MEETING DATE:** November 17, 2010

**PREPARED BY:** Public Works Director

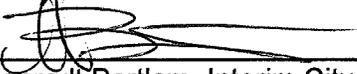
**RECOMMENDED ACTION:** Adopt resolution authorizing City Manager to execute Amendment No. 1 to professional services agreement with RMC Water and Environment, of Walnut Creek, for water meter planning, design, and program management in the amount of \$1,977,417 and appropriating funds in the amount of \$2,250,000.

**BACKGROUND INFORMATION:** On October 7, 2009, City Council approved a professional services agreement with RMC Water and Environment (RMC) for water meter planning, design, and program management. Since that time, the water meter program (WMP) has undergone a number of changes, requiring an amendment to the professional services agreement. The changed conditions and revisions to the scope of services and associated fees are described below. The current rate structure will support the costs associated with this amendment. The approved contract detailed scope of work is attached as Exhibit A. The proposed revised scope of work is attached as Exhibit B. The approved contract fees and proposed revised fees are summarized in Exhibit C. The additional cost of this contract is included in the Water Utility Financial Model.

The following describes the changed conditions in the WMP.

1. Duration of the WMP expanded from three years then to five years and finally to seven years.
2. The length of pipeline to be replaced in the WMP is 25.4 miles, or 14 percent greater than the 22.2 miles determined earlier by City staff.
3. Dwelling unit type and occupancy (property owner versus tenant) could not be established by the City's databases. To address this shortcoming, parcel-by-parcelfield reconnaissance and City/County database comparisons are required to establish accurate information for implementing billing to property owners, enabling distribution of comparative billing to the correct persons, and allowing for targeted distribution of WMP mailings (i.e., meter charge, meter cost payment options, low-income grant applications, construction phasing information, and metered billings). This work is approximately 95 percent complete. It is important to remember that 46 percent of the single-family housing in Lodi is not owner-occupied.
4. It was determined that Proposition 218 provisions stipulate that the meter installation class and associated cost (\$300 to \$1,200) be recorded for every parcel in the WMP (approximately 13,000 locations). This permits a parcel-specific invoice to be sent to each parcel. This required the WMP team to observe and record the type, location, and any special conditions for every

APPROVED: \_\_\_\_\_

  
Konradt Bartlam, Interim City Manager

residential water service. This work is also approximately 95 percent complete. Although, with setting the cap at \$300 per parcel, the billing task is now simplified. Staff estimates cost savings of \$1.5 million to \$3.0 million by having this information available to the contractors. The savings result from reduced uncertainty in bidding the project and fewer change orders during construction. This is partly based upon experience from the recently-completed Infrastructure Replacement Project No. 3.

5. The phasing assumptions have changed twice since the contract was approved, once to five years and again to seven years. Phased inventories of pipe replacement, service replacement and service relocation have needed adjustments.
6. The Water Utility Financial Model required the WMP phased construction costs be included in the model. This work was accelerated ahead of the normal timing, which would be at completion of the plans and specifications. Additionally, this work was done for three-year, five-year and seven-year phased construction alternatives.
7. In the first year of the WMP, a much greater effort has been required than anticipated in working with the public and coordinating efforts with the Water Utility, Information Services, and Finance staff. Local consultant presence at City Hall has consisted of two staff members, four days a week, for much of the past year. Their assignment has been to assist City staff with myriad issues related to the WMP, including database development, issuance of comparative billings, meter reading, fixed network analysis, meter procurement, issuance of meter invoices to property owners, transitioning usage-based billing from tenant to property owner, and much more. The City's existing Water Utility billing system and customer database is very basic and not yet compatible with a commodity-based billing system. The work required to "evolve" the City's existing system has been time consuming and, therefore, almost two-thirds of the total program administration budget has been spent in the first year of the WMP.

A summary of the proposed revised scope of work (Exhibit B) is provided below. The table presented as Exhibit C provides a comparison between the approved and proposed fees. Expressed as a percentage of the construction budget, the proposed revised fee is approximately 12 percent of the \$40 million construction cost. This fee as a percentage of construction cost is reasonable for this type of work and includes the consultant performing most of the services that would normally be provided by City staff.

Task 1 Extends project management services from three years to seven years.

Task 2 Expands the data collection to include billing account, dwelling type, ownership, parcel number, address, water service type, water service location, and special conditions about the service for all 13,000 parcels in the WMP. It had been assumed most of this information resided in the City's existing database.

Task 3 Expands to include three-, five- and then seven-year phases.

Task 4 No change.

Task 5 Additional effort required at direction of City staff to restructure the original phasing to include the greatest number of the easiest installations in the first phase of the WMP.

Task 6 Increases the number of sets of construction documents from three to seven.

Task 7 Reduces the scope to include Bid Period Assistance only. It is normal for the City to contract for construction support services at the time of construction contract award. Costs for construction services average from five to eight percent of the construction cost.

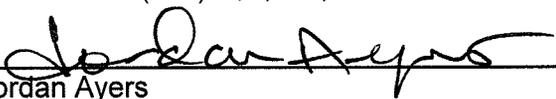
Task 8 Expands the scope to include building a functional billing database that will be turned over to the City. Critical linkages were created between City account/billing tier information and County parcel/ownership/situs information and field data for service/dwelling type. This task required extraordinary effort in the first year of the WMP. Water meter procurement has been added to the scope of work. For each of the remaining seven years of the WMP, the administration effort will be approximately half of what it was in the first year.

Task 9 This task is added to the contract to prepare an update of the Lodi Standard Construction Specifications that were last updated more than 20 years ago. For a project of this size and type, it is a prudent investment to complete this update prior to the start of construction.

Amendment No. 1 will increase the RMC contract value by \$1,977,417 and the appropriation of \$2,250,000 is requested.

**FISCAL IMPACT:** The cost of this amendment is included in the Water Utility Financial Model.

**FUNDING AVAILABLE:** Requested Appropriation:  
Water Fund (181): \$2,250,000

  
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Jordan Ayers  
Deputy City Manager/Internal Services Director

  
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F. Wally Sandelin  
Public Works Director

FWS/pmf

Attachments

# Task Order No. 1

## Exhibit A - Detailed Scope of Work

The City of Lodi Water Meter Program consists of the construction/installation of the following:

- Approximately 2.1 miles of new 6-inch water main to replace undersized (less than 6-inch diameter) existing mains located in backyard easements.
- Approximately 2,958 front yard water services and meters to replace back yard services rendered unusable by the relocation of back yard water mains.
- Approximately 13,300 residential meters, including approximately 624 meter only installations in existing meter boxes, approximately 2,669 standard meter box installations, approximately 10,058 Rich Box meter installations, and 2,958 new water services and meters.
- Administration and management support for the Water Meter Program to support ongoing City staff efforts.

This Scope of Work (SOW) for the City of Lodi (City) Water Meter Program includes eight major tasks that make-up the **SOW**. Each task outlines the various work components, identifies the responsible person(s), specifies the applicable work phase and duration when the task is to be completed, identifies the deliverables, and states the assumptions. The performance of this SOW by Consultant is for the sole benefit of the City and shall not be relied upon or sued by third party without the express written consent of the City and Consultant.

### Task 1-Project Management

Purpose: The Consultant shall manage its team in accordance with the defined tasks in effort to meet the programs objectives, schedule and budget. The Consultant shall establish and maintain open communication with the City representatives to ensure the project is progressing consistent with the City's objectives.

Lead: Mike Matson

Phase/Duration: Entire Contract Period/ 4-yrs

#### 1.1 Budget and Schedule Tracking

Consultant shall manage the budget and overall Program schedule consistent with City objectives. Consultant is not responsible for delays beyond its control. Consultant shall communicate budget status and concerns with City monthly or more frequently if warranted.

- Prepare monthly invoicing (invoice at the task level and by phase). Invoice shall include a summary worksheet showing budget, reallocated budget, previously billed amount, current billing and percent billed
- Prepare detailed monthly progress reports to accompany the invoice. The progress report shall include the budget status (% spent, remaining), schedule status, and a list of project issues or outstanding items.

#### Deliverables:

- Monthly invoices, progress reports, and schedule updates.

#### 1.2 Project Meetings and Communication

The following meetings and workshops are included under this task:

- Prepare for and administer monthly progress meetings throughout the project.
- Prepare for and administer project workshops including:
  - Project kick-off Workshop (one per phase)
  - Draft Self Installation Manual Workshop (one after first phase kickoff)
  - Phasing Goals/Criteria Workshop (one early in pre-design phase)

Scope of Work

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- Public Communications Workshop (one early in pre-design phase)
  - Database Development Workshop (one during pre-design phase)
  - Draft Phasing<sup>TM</sup> Review Workshop (one during pre-design phase)
  - Draft Preliminary Design<sup>TM</sup> Review Workshop (one during pre-design phase)
  - 60% Design Submittal Workshop (one each during phases 4, 5, and 6)
  - 90% Design Submittal Workshop (one each during phases 4, 5, and 6)
  - Meter Database Workshop (one each during phases 4, 5, and 6)
  - Meter Reading Workshop (one each during phases 4, 5, and 6)
- Consultant and City will create an executive committee to provide a high level overview of the program. The committee shall consist of City management staff and elected representatives, the Consultant program manager and the technical advisors for Consultant and its partner Nolte Associates, Inc. The meetings will be held quarterly and shall coincide with monthly project status meetings.

Summary of Meetings

Meetings, up to a maximum as identified in table.	Program Mobilization/ Predesign (2009 – 2010)	Phase 4 Design and Construction (2010 – 2011)	Phase 5 Design and Construction (2011 – 2012)	Phase 6 Design and Construction (2012 - 2013)
Kickoff Meetings	1	1	1	1
Progress Meetings	4	9	12	12
City Council/ Shirtsleeve Meetings	2	1	1	1
Executive Committee Meetings	4	2	2	2
Technical Workshops	4	2	2	2
Design Review Workshops	2	3	3	3
Construction Progress Meeting	26	26	26	26

**Deliverables:**

- Meeting and workshop agendas, prepare project materials, and meeting minutes.

**Assumptions:**

- Monthly project status meetings shall be held with the City at the City's offices or by teleconference.

**1.3 Project Quality Assurance/Quality Control Plan**

- Prepare a QA/QC procedures/plan
- Perform internal QA/QC on project deliverables

Deliverables:

- Project QA/QC Plan memorandum

**Task 2 - Data Collection**

Purpose: Data collection is essential to help characterize the proposed setting for the project and identify City requirements and policies for the proposed construction during each phase. A thorough data collection effort will assist in design and implementation of a comprehensive water meter installation and water main replacement program.

Lead: Tom Dugan

**Phase/Duration:** All Contract Phases

**2.1 Conduct Field Reconnaissance**

Consultant shall conduct field visits to assist in characterizing conditions (i.e. utilities, land features, constructability concerns) that will be encountered. These observations will lay the groundwork to developing the existing conditions database. The Consultant will investigate the location and type of existing services and new service locations, and identify front yard hose bibbs (for service connections to relocated distribution mains) during these field visits. Consultant will review potential water main alignments and identify a proposed location for construction.

Deliverables:

- Field reconnaissance memoranda for each phase of work.

**2.2 Information Research**

Consultant shall research data available from the City including, but not limited to: water distribution system drawings, existing water meter data, available aerial photography and mapping, available MapGuide data, existing electric meter read schedule (for coordination with project phasing and meter read starts). Consultant shall define other data needs, as required to complete the project.

Deliverables:

- Data requests during each phase of work.

Assumptions:

- City will provide available information for current or forecasted City projects that may cause construction and scheduling impacts, and pavement moratorium
- City will provide available geotechnical data and information from nearby relevant projects along the proposed pipeline alignments. Further geotechnical investigations are assumed not required for the Program design and construction elements.
- City will review project area and provide information on potential contaminated soil and groundwater. For purposes of this scope, it is assumed that potentially hazardous materials will not be encountered along the proposed pipeline alignments. If there are known or suspected hazardous materials at any project location, the City shall notify the Consultant. The Consultant shall modify its approach as agreed upon with the City. In the event that potential hazardous subsurface materials are encountered visually or by odor, the Consultant's work in that area shall be immediately terminated. Consultant shall immediately notify the City so that a mutual decision can be reached on whether to continue, modify, or cease exploration of that area and whether more environmental assessment needs to be conducted.
- All proposed pipelines and appurtenances are assumed to be located on existing City property or ROW/easements. No pipeline easement legal descriptions and plats have been assumed.

- City is responsible for acquiring the property owner's permission to access their property for exploratory investigations in an effort to design and establish a water connection from the mainline to the meter. RMC will facilitate and support this process.

### 2.3 *Utility Research and Mapping*

Consultant and its subconsultant, Nolte Associates, Inc. (collectively "Consultant") shall perform utility research, perform survey and prepare mapping for the project as follows.

Consultant shall research all underground utilities within project areas, including but not limited to service laterals to affected residences, water, sewer, storm drain, natural gas, telecommunications, power and cable lines. Utility owners shall be contacted to confirm locations.

Consultant shall collect limited pot hole data for critical identified utility lines in conflict with the design pipeline alignment and profile. The pot hole data shall include a surveyed horizontal and vertical location, utility type, utility size and depth.

Consultant shall develop suitable background mapping for the pipeline and meter construction components. Meter construction will be portrayed on 1" = 30' approximate scale non-rectified aerial photography. Pipeline plan and profile design will be presented on 1" = 30' topographic mapping. The mapping will be prepared based on the City horizontal and vertical datums. Features to be located and identified on the base mapping shall be determined with the City during preliminary design.

Consultant shall establish control points from City horizontal and vertical control monuments and/or up to six additional project control points per phase that can be used as benchmarks for construction staking. Consultant shall perform high order leveling to establish accurate vertical elevations for existing City monuments.

Consultant will perform a vertical control differential leveling survey to establish elevations on the twenty-four (24) horizontal control GPS Monuments established for the City of Lodi. This survey will be performed to Second-Order specifications as outlined in Chapter 8 of the Caltrans Survey Manual "Differential Leveling Survey Specifications" and will be tied to existing National Geodetic Survey (NGS) monuments with elevations established by differential leveling methodology and maintain a 1<sup>st</sup> Order, Class II, Stability C or better designation. Elevations shall be established on North American Vertical Datum 1988 (NAVD88).

Up to four (4) primary control loops and four (4) secondary control loops shall be conducted in the performance of the survey. Each primary loop will be tied to a minimum of four (4) NGS monuments, where available. Leveling will be performed using a Leica DNA Digital Level with Standard Bar Code Staffs. The primary loops will be constrained to the NGS monuments and adjusted using StarNet least squares software.

In addition to providing vertical control on the horizontal control GPS Monuments, Consultant shall include a maximum of twelve (12) existing City benchmarks into the Vertical Control differential leveling survey.

The vertical control survey shall include:

- Research of existing National Geodetic Survey (NGS) monuments and obtain Datasheets
- Performing field reconnaissance to confirm existence of NGS monuments
- Field planning for differential level primary and secondary loops
- Performing field surveys
- Performing Least Squares Adjustment
- Providing copies of field notes and final adjustment report

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- Providing spreadsheet delineating Point No., Monument Description, Monument Location and Elevation
- Providing geo-referenced photograph of monuments.

### Deliverables:

- Data requests
- Summary of data collected
- Field reconnaissance memoranda
- Existing utility “dip” sheets
- Aerial photography proofs (1set)
- Composite aerial photography, not rectified, in AutoCAD format
- AutoCAD mapping files including base map drawing showing street layout, lot lines, contours, and select planimetric features, utilities from back of sidewalk (or City right-of-way) to back of sidewalk (or City right-of-way) along public streets proposed for new water mains.
- Project Site Control for use during construction. List in MS Excel defining northing, easting, elevation, datums, physical description of points and narrative description of points
- Project Site Survey Control Diagram

### Assumptions:

- City will provide assistance and access for Consultant to obtain information for existing water, storm water, sewer, power and other City utility information, as needed.
- City will provide available information on City survey control monuments that will be used for survey control for the project.
- Potholing will be limited to 5 field days over the three phases of *design/construction*.
- A Phase 1 Environmental Site Assessment for hazardous materials contamination is not part of this scope of work.

### Task 3 -Phasing Technical Memorandum

Purpose: The City has identified a proposed phasing approach for the Water Meter Program. The Consultant shall review the City's proposed phasing plan identify potential refinements and adjustments that could provide additional benefits relative to cost, community impacts and overall efficiency of implementing the metering program.

Lead: Tony Valdivia

Phase/Duration: Preliminary Design Phase

#### **3.1 – Review Existing Phasing Plan**

Consultant shall review the existing phasing plan, including conducting discussions with City staff to understand the basis for the current plan. Consideration will also be given to discussions from the phasing workshop.

#### **3.2 – Identify Phasing Goals/Criteria**

Consultant shall identify phasing goals and criteria. Key phasing goals to be considered include:

- Cash flow: City will collect fees for installation, allowing for multi-year financing at low interest rates, self installation **or** upfront payment. Phasing plan must balance cash flow over the years of implementation

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- Minimize repeated disruption to neighborhoods and roadways, minimize duration of disruptions
- Coordinate with other City and utility projects
- Distribute work evenly over phases relative to:
  - Length of pipe
  - Number of connections/meters
  - Type of services
  - Compatibility with current Electric Utility Department (EUD) meter reading routes
  - Cost (develop cost estimates for each phase)
- Consider age and condition of pavement and pavement moratoria status

### Assumptions:

- Phasing goals and criteria will be held with the City at the Phasing Goals/Criteria Workshop (part of **Subtask 1.2 –Project Meetings and Communication**). Results of this meeting will be used to guide the review and optimization of the Phasing Plan.
- City will provide cash flow constraints for evaluating phasing refinements/adjustments

### 3.3 – Evaluate Phasing Plan against Goals/ Criteria

Consultant shall compare the existing phasing plan with the goals and criteria identified in task 3.2.

### 3.4 – Optimize Phasing Plan

Consultant shall evaluate optimizations to the phasing plan to efficiently meet the criteria and goals identified in task 3.2

### 3.5 – Draft Phasing TM

Consultant shall prepare a draft phasing TM summarizing the changes recommended in the optimized phasing plan.

### Assumptions:

- The City shall participate in a workshop to discuss results of the Draft Phasing TM and shall provide comments for consultant to incorporate into the Final Phasing TM.

### Deliverables:

Draft Phasing Technical Memorandum (one pdf and one hard copy)

### 3.6 – final Phasing TM

Consultant shall submit a final phasing TM.

### Deliverables:

- Final Phasing Technical Memorandum (one pdf and one hard copy)
- GIS Map(s) identifying areas/pipelines included in each phase and the proposed construction schedule within each phase

### **Task 4 - Self-Installation Manual**

Purpose: Consultant shall prepare the City's Self Installation Manual to instruct property owners wishing to self-install their meters. Manual will provide property owners with information regarding eligibility to participate, property owner

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rights and obligations upon undertaking self-installation, instructions on where and when to obtain a meter, pricing of (fees for) the meter, permitting of the installation, inspection requirements, and instructions on where to find additional information. Consultant shall be the primary contact for questions/concerns and for organizing distribution of meters. All communications shall be logged.

Lead: Mike Matson

Phase/Duration: Preliminary Design/ November – December 2009

### 4.1 – *Define City/Owner Responsibilities*

Consultant shall define City and homeowner roles and responsibilities.

### 4.2 – *Define Meter Procurement Strategy*

Consultant shall define a meter procurement strategy. The strategy needs to address uncertain meter needs during the self installation period, including bulk delivery, storage and distribution of meters to property owners. The end use registration to the proper customer must also be provided for. Strategies include pre-negotiation of a supply and service agreement with a meter vendor, purchase of meters by the City on an as-needed basis, procurement of meters through a construction contract or a combination of these strategies. Consultant shall work with City procurement staff to define the needs and evaluate the alternatives. Consultant shall make a recommendation for consideration by the City.

Consultant shall also perform an evaluation of fixed meter reading network alternatives for consideration in the meter procurement strategy development. Consultant shall research up to four alternative fixed network alternatives (selected based on discussions with City staff) and prepare a comparative matrix evaluation that identifies the capabilities, cost and implementation requirements for the alternatives, and identifies compatibility issues with the City's existing Itron 60W series ERTs. Consultant shall recommend a fixed network solution for consideration by the City.

#### **Deliverables:**

- Technical Memo –Water Meter Procurement Strategy (one pdf and one hard copy)

#### **Assumptions:**

- City of Lodi will negotiate all agreements with any third party for the procurement of water meters.
- City of Lodi will select the fixed network solution for implementation outside of the scope of this project. The fixed network solution will drive the meter/ERT specification for the project.
- Implementation of the recommended meter procurement strategy by Consultant is not included in the scope of work.

### 4.3 – *Identify Program Implementation Strategy*

Consultant shall identify a meter self-installation program implementation strategy.

### 4.4 – *Develop Program Information Dissemination Campaign*

Consultant shall develop a meter self-installation program information dissemination campaign.

### 4.5 – *Draft Self-Installation Manual*

Consultant shall prepare a Draft Meter Self-Installation Manual for City review.

#### **Deliverables:**

- Draft Self Installation Manual (one pdf and one hard copy)

**Assumptions:**

- The City shall participate at a workshop to discuss the draft Meter Self Installation Manual and shall provide comments for Consultant to incorporate into the final Self Installation Manual.
- The draft Self Installation Manual shall be limited to a public works review for acceptability.

**4.6 – Final Self-Installation Manual**

Consultant shall prepare a final Self-Installation Manual. The final Self-Installation Manual shall be ready for distribution by January 2010.

**Deliverables:**

- Final Self Installation Manual (one pdf and one hard copy)
- Communications log

**Assumptions:**

- The final Self Installation Manual will be a desktop published document with a layout acceptable to City. The look of the document will be based on other similar City documents. City will provide electronic templates and graphics necessary for the layout. RMC will provide graphics associated with the manual instructions and content.

**Task 5 – Preliminary Design (30%)**

Purpose: The Consultant shall prepare a complete preliminary design (approximately 30% design level) submittal covering all phases of implementation in accordance with the Phasing Plan TM developed under Task 3. The purpose of the preliminary design is to establish a consistent basis for the subsequent Phases 4,5 and 6 final design efforts.

Lead: Tony Valdivia

Phase/Duration: Preliminary Design/January to May 2010

**5.1 Define Submittal Content at each Project Stage**

Consultant shall define submittal content requirements for each Final Design stage. Assumptions regarding these deliverables are presented under Task 6, Task 7 and Task 8 of this Scope of Work. The intent of this subtask is to document the assumed deliverables and content for these submittals and to provide the opportunity to refine these assumptions early in the project.

**5.2 Develop Design Criteria and Standards**

Consultant shall develop design criteria, assumptions and standards for final Design (Task 6). Criteria will include pipeline material and sizing, standards for pipeline installation and abandonment, preferred construction techniques (minimally invasive for meter installation), meter and electronic meter reading standards, surface restoration, traffic control (as appropriate), etc.

**5.3 Develop Preliminary *Typical* Connection Details and Pipeline Alignment**

Consultant shall develop preliminary typical connection details addressing types of existing connection configurations identified during field visits. Details shall be compatible with minimally invasive construction techniques whenever possible (micro-tunneling, connection at existing hose-bibbs, etc.)

Consultant assumes that four typical meter installation types are required:

- Rich Box converted to a standard meter in rear yard or alley (Main size greater than or equal to 6", no main relocation)

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- Rich Box abandoned in rear yard and new service installed in front yard with connection to new main (connection to hose bib or other accessible site)
- Install meter in existing standard meter box
- Install meter in existing non-standard meter box

Consultant shall also develop proposed pipeline horizontal alignments for relocated pipelines showing:

- Background mapping (streets and key topographic features)
- Abandonment or removal of existing pipelines

### 5.4 *Develop Concept for Preliminary Contract Documents and Bid Schedule*

Consultant shall develop a conceptual drawing, specifications and bid schedule for use in the contract documents. The bid schedule will define the structure by which the project is bid by contractors, as well as the basis for payment during construction. It will also identify the cost for which the property owner is responsible for meter installation. The preliminary bid schedule will be refined based on discussions with the City.

Consultant will work with the City to identify the minimum required features that will be shown and located on the background mapping for the pipeline plan and profile drawings and the meter installation drawings.

### 5.5 *Define City/Consultant Roles and Responsibilities during Construction*

Consultant shall coordinate with the City to define City and consultant roles during Construction. Consultant's assumed roles and responsibilities are defined under Tasks 7 and 8 of this Scope of Work; the intent of this subtask is to document the respective roles of the project team and to make any required refinements to these roles and responsibilities early in the project.

### 5.6 *Develop Preliminary Construction Costs*

Consultant shall develop a preliminary construction cost estimate for the project, including pipeline and meter installation. The preliminary construction cost estimate shall be appropriate in detail and accuracy for a planning level effort (+/- 30%). Contingencies will be applied to account for unforeseen conditions and project unknowns. The cost estimate will be developed to correspond to the proposed project phasing; the net present value (NPV) of each phase will be developed and the cost estimate for each phase will be projected to the assumed mid-point of construction.

### 5.7 *Develop Preliminary Construction Schedule*

Consultant shall develop a construction schedule for the project, based on the revised Phasing Plan developed under Task 3 and the preliminary pipeline alignments developed under this task. The construction schedule shall be separated into three-year increments (not including the self-installation period), and for each construction year the preliminary schedule will define the assumed bid date, award date, start of construction, completion of construction and post-construction activities.

### 5.8 *Draft Preliminary Design TM*

Consultant shall develop a preliminary design TM for internal review. The TM will be comprised of the items developed under the subtasks above, with reference to the previously developed Phasing Plan. Content is anticipated to include:

- Project overview (planning, design, construction and post-construction)
- Description of project schedule and anticipated deliverables
- Project design and performance criteria

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- Typical meter/connection details
- Preliminary pipeline alignments
- Preliminary cost estimates (by phase)
- Preliminary construction schedules (by phase)
- Defined roles throughout project (RMC, City, others)

### 5.11 Final Preliminary Design TM

Consultant shall develop a Final Preliminary Design TM, incorporating comments from the City. The final TM will bear the stamp of the Consultant's Project Manager and will form the basis for Final Design.

#### Deliverables:

- Draft Preliminary Design Technical Memorandum (one pdf and one hard copy)
- Final Preliminary Design Technical Memorandum (one pdf and one hard copy)

#### Assumptions:

- The City shall participate at a workshop to discuss results of the Admin Draft Preliminary Design Technical Memorandum and shall provide comments for consultant to incorporate into the Final Preliminary **Design** TM.
- Pipeline alignments presented as part of the preliminary design deliverables will be general and illustrative in nature. Detailed backgrounds (aerial photography or survey contours) are not anticipated to be available, nor required; backgrounds are anticipated to be street and parcel backgrounds (GIS shape files) provided by the City or otherwise made available to Consultant.
- This task does not include the development of pipeline profiles.
- City will identify cost items for which individual property owners are responsible for use in developing a conceptual bid schedule.

### Task 6 - Final Design

Consultant shall develop drawings (plan and profile for new mains and plan view for meters and services) for each phase. The final design will ultimately result in a comprehensive set of bid documents and plans for each phase (4, 5, 6) of work that the City of Lodi can publicly bid for the water meter installation and mainline relocations. Project phases shall be designed and constructed in sequence, in accordance with the preliminary construction schedule developed under Task 5. It is assumed that Phase 4 design shall be completed and ready for bid by January 1, 2011. Design of subsequent phases (5 and 6) shall be completed during construction of previous phase(s) to be advertised for bid in January of subsequent years. Each phase shall go through 60%, 90% and Final Design, as defined below, with separate submittals for each phase, and each submittal shall gain detail and respond to City's comments on previous submittals.

Lead: Tony Valdivia

Phase/Duration: Phase 4, Phase 5, Phase 6

#### 6.1 60% Design

Consultant shall perform engineering and design activities to develop a 60% level of completion for the project facilities. The submittal shall include the following components:

- Plan and section views of all relocated pipelines showing points of connection for relocated connections and utilities.
- Location and type of meter for new meter installations

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- Design details, including meter installation, connections, roadway paving, trenching, etc.
- Technical specifications for major equipment or project components and a complete table of contents for the final design package.
- Engineer's cost estimate (current phase only), projected to mid-point of construction.
- Design memorandum summarizing contents of the submittal package, outstanding items, etc.

### Deliverables:

- 60% Design Submittal Packages
  - Five (5) hard copy sets of 11x17 drawings and 8-1/2 x 11 specifications
  - One (1) CD-Rom containing pdf format files of the drawings, specifications, and supporting documentation)

### Assumptions:

- Consultant shall prepare drawings in AutoCAD using the City's standard title block and CAD standards. Drawings to be developed in AutoCAD 2008 unless City provides a preferred standard prior to Preliminary Design (Task 5)
- Specifications **shall** be 16 Division CSI **format**, prepared in MS Word. Consultant shall use the City's front end specifications (Division 0 and 1) edited to make them project specific.
- Consultant shall organize the submittal CD-Rom for easy navigation. Drawing and specification files will be titled for easy identification.
- Backgrounds for project drawings shall be appropriate for the intended use, as defined under Task 2.3.
- Drawing scale is assumed to be 1" = 30', as defined in Task 2.3. All distribution main pipeline design shall be presented on two panel plan and profile drawings using Consultant drawing template.

## 6.2 90% Design

Consultant shall perform engineering and design activities to develop a 60% level of completion for the project facilities. The 90% Design Submittal shall incorporate City comments received on the 60% Design submittal. The 90% submittal shall include the following components:

- Plan and section views of all relocated pipelines showing points of connection for relocated connections.
- Plan, section, and detail drawings showing the location and type of meter installation for new meter installations and providing notes for special-circumstance installations.
- Design details including meter installation, connections, roadway paving, trenching, etc.
- Complete technical specifications.
- Engineer's cost estimate.
- Design memorandum summarizing contents of the submittal package, outstanding items, etc.

### Deliverables:

- 90% Design Submittal Packages
  - Five (5) hard copy sets of 11x17 drawings and 8-1/2 x 11 specifications
  - One (1) CD-Rom containing pdf format files of the drawings, specifications, and supporting documentation)

Assumptions:

- Same as 60% Design.

6.3 *Final Design*

Consultant shall finalize the drawings and specifications based on the 90% design submittal review comments from the City. The final design submittal shall be signed and stamped by the responsible engineer. The final design submittal shall include the following components:

- Final drawings and specifications
- Final engineer's cost estimate

Deliverables:

- Final Design Submittal Package
  - One (1) full-size, camera ready, unbound mylar set of drawings
  - Five (5) hard copy sets of 11x17 drawings and 8-1/2 x 11 specifications
  - One (1) CD-Rom containing pdf format files of the drawings, specifications, and supporting documentation

Assumptions:

- Same as 60% Design.

**Task 7 - Bidding and Construction Support**

Purpose: City of Lodi, at their discretion, may utilize the Consultant's services during the Bid Period and Construction activities. The engineer's service shall facilitate the City's effort to bid and award the pipeline replacement and meter installation contracts.

Lead: Tony Valdivia

Phase/Duration:

Phase 4 / NTP - April 2011, Construction – April to Oct 2011, Closeout – Oct to Dec 2011

Phase 5 / NTP – April 2012, Construction – April to Oct 2012, Closeout – Oct to Dec 2012

Phase 6 / NTP – April 2013, Construction – April to Oct 2013, Closeout – Oct to Dec 2013

**7.1 Bid Period Services**

Consultant shall assist the City in administering bid-phase activities for each project phase including:

- Coordinate with City's printing vendor to produce bid sets for contractor distribution. Vendor typically handles distribution and charges bidders by the set. Consultant shall deliver a .pdf file to vendor.
- Maintain plan holders list
- Respond to bidder questions
- Prepare and distribute addenda to plan holders, as required
- Administer pre-bid meeting (1 per phase)
- Evaluate bids for completeness

Deliverables:

## Scope of Work

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- Bid documents (up to 30 sets, specifications and half-size drawings)
- Pre-Bid meeting agenda and minutes
- Plan holders list
- Bidder inquiry and response log
- Up to two Addenda, as needed
- Bid evaluation forms and recommendations
- Submittal review comments
- Responses to RFIs and/or Clarifications

### **Assumptions:**

- Consultant shall be the main point of contact for bid inquiries.
- City shall provide data and/or input as necessary to address bidder questions.
- City shall appoint a construction manager who shall be responsible for administering the construction contract and shall be the Consultant's main point of contact.

### *7.2 Engineering Services During Construction*

Consultant shall provide construction support to the City for each project construction phase including:

- Maintain a project office, furnished by the City, within the City of Lodi and provide staff as required to perform construction phase activities. Project office shall be suitable for meetings with tenants and property owners and shall include space for construction contractor community liaison.
- Advise construction contractor/construction manager, as required, during meter and pipeline installation on a site-by-site basis. For example, Consultant **shall** confirm with the contractor which type of meter installation is applicable for each affected property and shall determine if special conditions or conflicts exist at properties, and direct contractor regarding how to address issues in the field.
- Attend construction meetings, as requested, up to one a week. Attendance is assumed to be coincident with Consultant presence in local project office and not requiring a separate trip to the City project site.
- Review of construction submittals.
- Respond to requests for information (RFIs) and/or clarifications.
- Review of proposed change orders and participation in negotiations on behalf of the City, as needed.

### **Deliverables:**

- Construction meetings and site visit memos
- RFI/Clarification Log
- Change order reviews/negotiations
- Contractor as-built drawings documentation

### **Assumptions:**

- Field inspections are not included in the scope
- City shall provide data and/or input as necessary to address Contractor's questions.

## Scope of Work

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- The City shall be responsible for implementing its policies and procedures for public works procurement, purchasing and construction.
- City shall appoint a construction manager who shall be responsible for administering the construction contract and shall be the Consultant's main point of contact.
- Consultant shall provide public coordination; meter coordination with property owner

### **Task 8 - Meter Program Administration**

Purpose: Consultant shall serve as the program administrator for the Meter Program. This approach will centralized all incoming and outgoing correspondence relating to the installation, implementation, and troubleshooting of the meter program. The centralized information will be processed in a usable format and accessible at the City's request.

Leader: Tom Dugan

Phase/Duration: All Phases

#### **8.1 – Development of Public Communications Materials**

Consultant shall be the primary public contact for questions/concerns prior to and during construction and shall maintain a local presence as needed.

Consultant shall provide notices to affected property owners/residents. City shall provide a mailing list database of property owners and residents. Both property owners and customers must be contacted, as appropriate. Consultant shall develop draft notices, as defined in the following table, and submit to City for review/comment. Consultant shall be responsible for all reproduction and mailing costs.

Consultant shall maintain a database containing a record of communications, including all notices mailed, responses to such notices, dates on which individual meters installed and dates on which meters are initially read by the City. Such information shall be entered into a database compatible with the City existing billing database such that complete records can be turned over to the City at any time **during** program implementation **and at** the conclusion of the project.

Consultant shall provide information to City suitable for posting on City website for public notice of project status.

The specific communications, content and timing are outlined preliminarily in the table below. A public communications workshop will be held early in the preliminary design phase to review the attached and adjust as deemed necessary. Public outreach **is** not included in this scope of work except to provide informational notifications as shown in the table.

## Proposed Codi Water Meter Program Mailings and Door Hangers (subject to modification based on City and Consultant discussions)

Mailing	Addressed to	Number of parcels	Number of mailings or hangers	Type	Content	Timing/Approx Date
<b>Program Startup and Phase 4</b>						
1	All residents + owners	13,289	21,700	Postcard	Announcement to introduce meter program & procedures to self-install meter	Prior to Self Install Program commencement December 2009
2	All Phase residents + owners	13,289	21,700	Postcard	Preliminary Design Announcement and Phasing of work	Preliminary Design Complete April 2010
3	All Phase 4 residents + owners	3,961	6,500	Postcard	Announcement to all parcels in Phase 4 with general construction planning information	Final Design Complete November 2010
4	Phase 4 residents - main replacement plus spares	971	2,000	Door Hanger	Description of locator stake, Announce construction week	1 month prior to installation April-October 2011
5	All Phase 4 residents	3,961	4,400	Door Hanger	Announce Completion of Construction and when meters would be read	After Completion of Construction December 2011
6	Phase 4 non-resident owners	3,961	1,900	Postcard	Announce Completion of Construction and when meters would be read	After Completion of Construction December 2011
<b>Phase 5</b>						
7	All Phase 5 residents + owners	2,801	4,600	Postcard	Announcement to all parcels in Phase 5 with general construction planning information	Final Design Complete November 2011
8	Phase 5 parcels - main replacement plus spares	670	1,400	Door Hanger	Description of locator stake, Announce construction week	1 month prior to installation April-October 2012
9	All Phase 5 residents	2,801	3,100	Door Hanger	Announce Completion of Construction and when meters would be read	After Completion of Construction December 2012
10	Phase 5 non-resident owners	2,801	3,100	Postcard	Announce Completion of Construction and when meters would be read	After Completion of Construction December 2012
<b>Phase 6 and Program Close Out</b>						
11	All Phase 6 residents + owners	6,527	10,700	Postcard	Announcement to all parcels in Phase 6 with general construction planning information	Final Design Complete November 2012
12	Phase 6 parcels - main replacement plus spares	1,307	2,700	Door Hanger	Description of locator stake, Announce construction week	1 month prior to installation April-October 2012
13	All Phase 6 residents	6,527	7,200	Door Hanger	Announce Completion of Construction and when meters would be read	After Completion of Construction December 2013
14	Phase 6 non-resident owners	6,527	3,100	Postcard	Announce Completion of Construction and when meters would be read	After Completion of Construction December 2013

Upon receiving City approval of the notification layout and content, the Consultant will produce the necessary number of mailers, then address, stamp and mail the notifications. All responses to the mailers will be directed to the Consultant at the City office location.

Notices, incorporating City comments, shall be mailed at approximately the following project milestones:

- December 2009 – Program and Self Installation Announcement: Consultant shall mail notices to residential property owners under the program to introduce the water meter program, describe the intent and scope of the program and present payment/financing options to residential water customers, including the option to self-install in accordance with the Self-Installation Manual developed by the Consultant.
- April 2010 – At the conclusion of Preliminary Design: Consultant shall mail notices to residential property owners and tenant customers under the Meter Program describing the intent and scope of the Water Meter Program, estimated schedule for implementation for each affected property, answers to frequently asked questions, and Consultant contact information to obtain additional information.
- November 2010/November 2011/November 2012 – At the conclusion of 90% Design: Consultant shall mail notices to residential property owners and tenant customers affected under the current phase. The notice shall present the general construction schedule and describe the general construction activities and impacts and provide the Consultant contact for obtaining additional information and/or submitting concerns/complaints prior to or during construction. Information on estimated cost and property owner payment plans will also be included in this notice.
- April to October 2011/ April to October 2012/ April to October 2013 – After award of Construction Contract: Consultant shall mail notice to **residential** property owners and tenant customers affected under the current phase with specific dates for meter installation at least one month ahead of planned construction. Notice shall confirm that property owners and/or tenants **did/did not** submit written concerns, and whether such concerns have been resolved, and remind recipients of Consultant contact information for additional inquiries. Final cost and payment information will also be provided in the notice.
- December 2011/December 2012/December 2013 – At the conclusion of meter installation: Consultant shall mail notices to residential property owners and tenant customers affected under the current phase confirming that meter installation is complete, noting the date of completion and notifying property owners of the date on which meter reading and billing will begin in accordance with City of Lodi requirements for public notification.

Deliverables:

- Draft and Final Public Notices

Assumptions:

- City shall provide Consultant working office space within City offices that will be a main point of interfacing with the public.

- City shall provide an up-to-date mailing list database of residential property owners and tenant residents. Including both owners and tenants, the City estimates a total of 25,000 mailing addresses affected by the Meter Program.
- Consultant shall be responsible for all reproduction and mailing costs of public notices and shall not utilize City resources for these activities without City approval.

### *8.2 –Develop and Maintain Meter Database*

Consultant shall be responsible for ensuring that meter installations are properly registered to the correct customer/parcel, administering and documenting meter installation and acceptance by City and coordinating City start of meter reads. Consultant shall work closely with and follow direction of the City and shall implement the program in keeping with City's policies and procedures.

Consultant shall maintain and complete documentation in the form of an electronic database as required by the City of Lodi for meter installation. This information includes meter specifications, meter serial number, electronic radio transmitter specifications and register numbers, electronic radio transmitter serial number, address, parcel number and initial meter read and date.

The Consultant shall develop a Meter installation Documentation Plan that will define how the information will be collected: processed, and administered to the City. The plan will discuss the database format and content, and how the database will be integrated into the City's system.

#### Deliverables:

- Final Meter Installation Documentation Plan (one .pdf and one hard copy)
- Meter Installation Documentation
- Meter Program Database (compatible with Oracle DB2/400 format)

#### Assumptions:

- City will work with Consultant to provide access to City database, if proprietary. Purchase of database software is not included in this scope of work.

### *8.3 – Develop and Implement Meter Reading Program*

Consultant shall work with the City to develop a meter reading schedule that complements existing electricity meter readings. Consultant will communicate to the City's meter reading staff when meters have been accepted and are ready for initial read. The initial intent is that water and electric meters will be read concurrently using remote reading methods). Presence will be maintained at a local Lodi office to address any concerns regarding the meter reading program.

#### Deliverables:

- Draft and Final Meter Reading Schedule (one .pdf and one hard copy)
- Final Meter Database (including initial meter reads)

#### Assumptions:

- Consultant shall be present during initial meter reads.

**Scope of Work**

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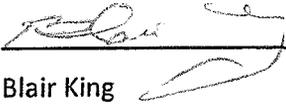
Fee Estimate

The fee estimate for this scope of work is attached.

Schedule

The schedule for this scope of work is attached.

Approved per Resolution No. 2009 -



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Blair King

City Manager

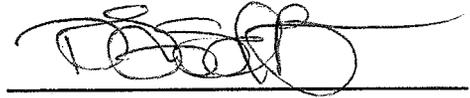


ATTEST:

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Randi Johl

City Clerk



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D. Stephen Schwabauer

City Attorney

**Amendment No. 1 to Task Order No. 1**  
**Exhibit B**  
**Detailed Scope of Work**

This Amendment No. 1 to Task Order No. 1 (Amendment No. 1) has been prepared to account for changes in the Scope of Work and Budget for the Water Meter Program (WMP) as originally scoped in October 2009. The following amended Scope of Work describes these changes that are necessary to accommodate a 7 phase construction program through to the end of 2017. Design of the seven construction packages will be consolidated over a two year period from 2011 to 2012/13.

The following generally describe the scope modifications and changed project conditions addressed in this Amendment No. 1.

- The original project duration has been lengthened twice since work on the WMP began in October 2009. The original scope was intended for a three phase construction program ending in 2013. Action by the City associated with review of the Water Utility reserves and the water rate setting process extended the implementation of the WMP to five phases, ending in 2015. Recent action by the City has extended the implementation to seven phases, extending the WMP implementation period starting in 2010 and ending in 2017. This Amendment No. 1 extends the WMP support services and project management activities to the end of 2017.
- The meter installation classification process was accelerated so that all properties could be noticed through a Proposition 218 process in early 2011 and then billed for meter installation starting in July 2011. The field reconnaissance effort was also expanded from the original scope to collect information that would allow early notification to each parcel owner of their meter installation class and associated cost. This information will also be provided to the installation contractors to reduce unknowns.
- The existing City database, from which the original scope of work was developed, required significant verification, investigation and supplementing, including a parcel by parcel review of service information and serving main identification in order to validate the meter installation class quantities and main replacement pipeline length. The database also proved to be inadequate in determining the type of residence (single family, duplex, triplex, quad-plex, higher density apartments, condominiums and trailer parks) and whether the residence was occupied by the parcel owner or a tenant. The level of effort required to perform these data reviews exceeded the original scope.
- Additional main replacements were identified (increase from 22.2 miles to 25.4 miles) and will be included in the design of seven construction phase packages.
- The initial level of effort for communication with the community has been substantially greater than anticipated, resulting in a higher level of effort to meet the City's needs. This additional effort is included in Amendment No. 1 along with extending this activity at a reduced level of effort to the end of 2017.
- Modification and reconciliation of the County Assessor's Parcel Map (APN) database and City's Customer Information System (CIS) database and the City's MapGuide GIS database to support the water usage based billing process resulting from the WMP exceeded original scope level of effort assumptions and estimates.

- Administration of the Privately Contracted Meter Installation (PCMI) program has been performed during the 2010 calendar year. Administration of the program was not included in the original scope of services
- Additional support services for the Water Meter Program have been identified in the initial ten months of the project. This includes assisting the City in creating the WMP cash flows for several phasing alternatives and working with the City's rate consultant to refine the water utility rate model.

The original Scope of Services is amended as follows:

### **Task 1-Project Management**

Purpose: The Consultant shall manage its team in accordance with the defined tasks to meet the WMP objectives, schedule and budget. The Consultant shall establish and maintain open communication with the City representatives to ensure the project is progressing consistent with the City's objectives.

Amendment Changes:

1. The project management level of effort has been increased since the start of work due to ongoing additional work requests, requiring additional coordination, tracking, and reporting. Additional meetings have been conducted to maintain information flow between the City and Consultant team. The result has been a definition of the work and the process for executing the scope of services that will allow for a reduced level meetings and management time. The quality assurance and quality control level of effort will increase due to additional phase bid packages and additional main replacement design work.

Original TO1 Budget: \$330,960

Proposed Amendment Budget: \$770,000

### **Task 2 -Data Collection**

Purpose: Data collection is essential to help characterize the proposed setting for the project and identify City requirements and policies for the proposed construction during each phase. A thorough data collection effort will supplement available City information from its CIS and MapGuide databases to assist in design and implementation of a comprehensive water meter installation and water main replacement program.

Amendment Changes:

1. Approximately 18,500 feet of replacement main has been added to the WMP and will require additional survey and mapping, utility research and field verification by the design team.
2. The field reconnaissance program has been required for several reasons, consisting of performing a field review of each residential parcel (excluding higher density residential parcels) for the purpose of recording parcel specific information. This information was necessary to:
  - a. meet City notification requirements under Proposition 218 associated with charging property owners for the cost of meter installation through a determination in the field of a meter installation class based on existing water service configuration for each parcel
  - b. verify street address and assessor's parcel number match that was not evident in the City's CIS database but is critical in establishing property owner accounts within CIS for absentee (non-resident) property owners

- c. Additional information was collected through the field reconnaissance program to facilitate an update of the City's CIS database specifically for the premise type. This is necessary for accurate assignment of a water rate structure for each residential parcel under the WMP. The City's existing CIS database is not accurate in this respect.
- d. Additional parcel-specific information has been collected that will be disclosed to the City's construction contractor to reduce unknowns and eliminate contingencies in contractor bids. Experience with the Infrastructure Replacement Project No. 3 indicates this effort will result in savings well in excess of \$1 million.

Field reconnaissance is expected to be complete by the end of 2010.

Original TO1 Budget: \$584,198

Proposed Amended Budget: \$1,100,000

### **Task 3 -Phasing Technical Memorandum**

Purpose: The City identified a proposed phasing approach for the Water Meter Program that served as the basis for the original scope development. The Consultant reviewed the City's proposed phasing plan to verify the approach would result in efficiency in implementing the original 3-phase metering program (2010 to 2013).

Amendment Changes:

1. During the initial months of work on the WMP implementation, the City extended the program from three annual phases to five. The phasing plan was revised to accommodate this extension in February 2010, with a goal of maximizing the more straightforward meter installations in earlier phases and minimizing main replacements. The duration of the WMP was 2010 to 2015.
2. Subsequent to adopting the five phase implementation plan, the City has extended the WMP to seven phases (2010 to 2017). The five WMP phases were rebalanced to maximize initial meter installations and minimize replacement pipeline in the first phase. The Consultant will be developing a new phasing configuration for the current Phases 2 through 7.

Original TO1 Budget: \$20,032

Proposed Amended Budget: \$60,000

### **Task 4 -Self-Installation Manual**

This task is unchanged. Work was complete in January 2010. Subsequent administration of the Privately Contracted Meter Installation program was not in the original scope and is described in Task 8.

### **Task 5 - Preliminary Design (30%)**

Purpose: The Consultant shall prepare a complete preliminary design (approximately 30% design level) submittal covering all phases of implementation in accordance with the Phasing Plan developed under Task 3. The purpose of the preliminary design is to establish a consistent basis for the three subsequent Phase final design efforts.

Amendment Changes:

1. The preliminary design task required additional efforts associated with reviewing the City's MapGuide GIS database. Numerous inaccuracies were identified, impacting the number of meters and classes of meter installation and the length of undersized water mains requiring replacement. A parcel by parcel search of water service and serving water main information

was necessary to properly define the WMP. This verification work was not anticipated in the TO1 scope of work and resulted in identifying an additional 3.2 miles of main replacement and segregating the residential parcels into single family, duplex, triplex, quad-plex and higher density multi-family residential.

2. As the definition of the WMP evolved through the verification process, the City requested that the balance of meter installations by class and simplicity and associated main replacement work be reconfigured in the phasing plan to put the simplest meter installations (newer portions of Lodi) in earlier phases. This effort resulted in several iterations of alternative phasing boundaries.

Original TO1 Budget: \$63,753

Proposed Amended Budget: \$94,000

### **Task 6 - Final Design**

Purpose: Prepare design documents for use in bidding and constructing WMP improvements in three construction phases. Consultant shall develop drawings (plan and profile for main replacements and plan views for meters and services), specifications and construction cost estimates for three annual construction packages between 2010 (Phase 1) and 2012 (Phase 3). Project phases shall be designed and constructed in sequence, in accordance with the preliminary construction schedule and phasing plan developed under Tasks 3 and 5. Each phase design shall go through 60%, 90% and Final Design submittals.

Amendment Changes:

1. The project implementation has been lengthened to include seven construction phases, requiring seven separate construction packages. Also, the main replacement component has expanded by approximately 18,500 feet.
2. To minimize additional design costs, Consultant shall consolidate the design and development of the remaining six phase bid packages into a more efficient design period of approximately 2 years in duration. The Phase 1 design is nearing completion and will be advertised for bid in January 2011.

Original TO1 Budget: \$821,463

Proposed Amended Budget: \$1,200,000

### **Task 7 - Bidding and Construction Support**

Purpose: The Consultant shall support the City in bidding of the three construction projects and during construction. The City is responsible for field inspection and contract administration. The Consultant is responsible for typical engineering services during bidding and construction, coordinating construction with the community and neighborhoods and supporting other associated City efforts.

Amendment Changes:

1. The scope of services is reduced to eliminate construction support services for the WMP. The intent of the City is to address construction management, construction contract administration, field inspection and engineering services during construction at the time of award of a construction contract.

2. The scope of services had been increased to provide bidding support for each of the seven phases of construction. The bid support tasks include developing responses to bidder inquiries, preparing addenda, participating in the pre-bid conference, reviewing the bid results in support of award of the contract, and preparing conformed contract documents.
3. Updating of the bid documents prior to advertising may be required for construction contract bid phases that are initiated more than six months following completion of the design process under the consolidated design approach described for Task 6. The intent of the City is to address this process at the time of approval to advertise a package for bidding. This updating process is not included in the scope of work.

Original TO1 Budget: \$468,551

Proposed Amended Budget: \$175,000

#### **Task 8 - Meter Program Administration**

Purpose: Consultant shall serve as the program manager for the WMP. Program management activities include assisting the City in development of financing information, construction cost projections, implementation policies, community communications and notifications. This approach will centralize all incoming and outgoing correspondence relating to the installation, implementation, and troubleshooting of the meter program.

Amendment Changes: The approach for WMP program administration has evolved based on experience during the initial 10 months of the WMP. The following are the significant changes affecting scope and level of effort.

1. Extraordinary level of effort has been necessary in handling inquiries from the public. As of the end of September 2010, the Consultant has fielded, responded to and documented 723 communications from the community, with a peak month volume at 164 communications. Responding to this level of incoming communications has resulted in two staff people being in Lodi between 3 and 4 days a week for the initial 10 months of the WMP.
2. The program management activities are extended through 2017 at a reduced level of effort that provides for local presence approximately two man-days per week.
3. Consultant will continue to develop a quarterly newsletter outline and materials for development and distribution by the City, and revise and update billing and other notices through to the end of the WMP in 2017.
4. Consultant has conducted presentations for several service clubs, organizations, and stakeholder groups not anticipated in the original scope of services. Consultant will continue to be available for these presentations as requested by the City and within the Consultant's local office presence budget.
5. Because of the state of the City's CIS database relative to the need for modifications to accommodate usage based billing and billing of absentee property owners for meter installation, the Consultant has expended significant effort not anticipated in the TO1 scope of work in development of a metering database from the City's CIS database to prepare the City for initiating usage based water billing. This work included:
  - Developing a correlation between the CIS premise codes and assessor parcel numbers
  - Determining the occupant status of residents (owner or tenant) for use in determining new customers for meter installation billing and for notification purposes. Absentee property

owners will become new billing customers when the City initiates billing for meter installation costs.

- Expanding the database to provide a repository for parcel specific information collected through the field reconnaissance program.
- Verifying the existing CIS information relative to premise type (related to water rate structure), current metered customer accounts and meter read history.
- Soliciting and consideration of input from the City's IS and Finance departments to understand the billing process under the flat water rate structure and help develop a transition plan to convert to a usage based structure over the seven phases of the WMP.
- Addressing City policy implications for metering of parcels with atypical configurations or characteristics.
- Analyzing historic meter read information to assess quality assurance needs for the City.
- Developing water use comparison bills for metered customers in the year prior to initiating metered use bills. The evolving database is being used to generate mailing lists for these billings in cooperation with City ISD.

6. Consultant has assisted the City in developing potential policies and positions to facilitate implementing the WMP.
7. The City has elected to procure meters and ERTs using a long-term procurement contracting approach. Consultant has prepared justification for sole-source procurement of meters and ERTs and a Request for Quotation/Proposal that will become the basis for a City procurement contract. Consultant will assist the City to develop, negotiate and execute the procurement contract. The intent of the City is to address meter procurement contract administration with the award of construction contracts.
8. City is requiring more accountability for its meter readers to ensure that efforts are made to obtain reads from all active meters. Consultant is assisting ISD in implementing a quality assurance program for meter data so that when released to Finance Department for billing, the data has been screened for anomalous readings. Consultant will assist in implementing this program.
9. Development of Metering Approach for High Density Multi-Family Parcels. The Consultant shall work with the City to develop a metering approach for high density multi-family parcels within the City. This would include apartment buildings, condominium complexes, and mobile home trailer parks. The Consultant shall catalog type and approximate number of units on these parcels through field reconnaissance efforts. Consultant shall develop with City the approach for implementing a metering program for this category of residential land use. The implementation such a program is not included in this subtask and would be subject of a future Task Order.

Deliverable: Draft and final metering approach TM (five hard copies and one .pdf)

10. Development of Metering Approach for Mixed Use and Commercial Parcels. Consultant shall work with the City to develop a metering approach for mixed use residential/commercial, commercial and industrial parcels within the City. The Consultant shall catalog type and approximate number of these parcels through windshield survey efforts. Consultant shall develop with City the approach for implementing a metering program for this category of land use. The implementation such a program is not included in this subtask and would be subject of a future Task Order.

Deliverable: Draft and final metering approach TM (five hard copies and one .pdf)

Original TO1 Budget: \$502,626

Proposed Amended Budget: \$1,350,000

**Task 9 – Lodi Construction Special Provisions Update (New Task)**

Purpose: Bring existing City construction specifications (Special Provisions) current with most recent Caltrans Standard Specifications and current City practice for public works construction projects.

Consultant shall perform this task under the following subtasks.

Subtask 9.1 – Update Special Provisions to 2006 Caltrans Standard Specifications [Note that Caltrans intends to publish a 2010 version of the Standard Specifications]

Consultant shall update Lodi’s existing Special Provisions document to be consistent with the May 2006 Caltrans Standard Specifications. Work included in this task is:

- Conversion of existing printed document to electronic document. It is assumed that the electronic document appearance will be substantially the same as the existing printed document.
- Review of the Special Provisions to ensure that references to the Standard Specifications and Plans are referencing the appropriate content from the 2006 Caltrans Standard Specifications and Plans. RMC will also identify other City information (e.g. phone numbers and values) that the City may wish to update.

Subtask 9.2 – Develop New Special Provisions

Consultant shall prepare new Special Provisions and update language based on City current practices. Work included is:

- Review Special Provisions and Caltrans standard specifications to identify areas or provisions that may require additional consideration by the City. It is assumed that the current Lodi Special Provisions are suitable for the purposes of the City with the proposed updates described below.
- Should there be new Special Provisions that require modifications (as determined by the City), develop concepts, engineering background, and text for new Special Provisions that have been identified as necessary by the City of Lodi. It is assumed that up to six new Special Provisions will be developed.
- Prepare Draft Special Provisions suitable for review at a workshop with City Public Works staff, including input received from City staff and any new Special Provisions. Incorporate any comments on Draft Special Provisions and produce Final document.
- Participate in a workshop with City staff. During this workshop, RMC will identify those areas in the Draft Special Provisions that have updated references to the Standard Specification and Plans and review proposed Special Provisions that the City should consider adding to the City Special Provisions. It is assumed that the City will provide any additional changes that the City requires to be included in the Special Provisions, including comments on the Preliminary Special Provisions.
- Finalize Special Provisions based on input from workshop.

**City of Lodi**  
**Water Meter Program**

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Deliverable: Draft Special Provisions (1PDF and 5 printed copies); Final Special Provisions (1Word File, 1PDF, and 5 printed copies)

Original TO1 Budget: \$0 (none)

Proposed Amended Budget: \$20,000

RMC WATER AND ENVIRONMENT

CITY OF LODI

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name

Konradt Bartlam  
\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
President  
Title

interim City Manager  
\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date

ATTEST:

\_\_\_\_\_  
RANDI JOHL  
City Clerk

APPROVED AS TO FORM:

\_\_\_\_\_  
D. STEPHEN SCHWABAUER  
City Attorney



## Exhibit C

### Lodi Water Meter Program

#### Task Order No. 1

#### Amendment No. 1 Budget Summary

Task	Original Budget	Total Amended Budget
Task 1: Project Management (2015)	\$ 330,960	\$770,000
Task 2: Data Collection	\$ 584,198	\$1,100,000
Task 3: Phasing Technical Memorandum	\$ 20,032	\$60,000
Task 4: Self-Installation Manual	\$ 88,468	\$88,468
Task 5: Preliminary Design Report (30% Design)	\$ 63,753	\$94,000
Task 6: Final Design	\$ 821,463	\$1,200,000
Task 7: Bid Period and Construction Support	\$ 468,551	\$175,000
Task 8: Meter Program Administration	\$ 502,626	\$1,350,000
Task 9: Lodi Construction Special Provisions Update		\$20,000
Additional Work Requests		
<b>TOTAL</b>	<b>\$ 2,880,051</b>	<b>\$4,857,468</b>

RESOLUTION NO. 2010-193

A RESOLUTION OF THE LODI CITY COUNCIL AUTHORIZING  
THE CITY MANAGER TO EXECUTE AMENDMENT NO. 1 TO  
PROFESSIONAL SERVICES AGREEMENT WITH RMC WATER  
AND ENVIRONMENT, OF WALNUT CREEK, FOR WATER  
METER PLANNING, DESIGN, AND PROGRAM MANAGEMENT  
AND FURTHER APPROPRIATING FUNDS

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WHEREAS, on October 7, 2009, City Council approved a professional services agreement with RMC Water and Environment, of Walnut Creek, California, for water meter planning, design, and program management; however, since that time, the water meter program has undergone a number of changes, requiring an amendment to the professional services agreement; and

WHEREAS, the changed conditions in the water meter program include expanded duration of the water meter program from three years to seven years; the length of pipeline replacement has increased from 22.2 miles to 25.4 miles; the dwelling unit type and occupancy could not be established by the City's databases; it was determined that Proposition 218 provisions stipulate that the meter installation class and associated cost be recorded for every parcel in the water meter program; the phasing assumptions have changed twice, once to five years and again to seven years; the Water Utility Financial Model required the phased construction data to be included in the model; and a much greater effort has been required than assumed in working with the public and staff; and

WHEREAS, staff recommends approval of Amendment No. 1 in the amount of \$1,977,417.

NOW, THEREFORE, BE IT RESOLVED that the Lodi City Council does hereby authorize the City Manager to execute Amendment No. 1 to Professional Services Agreement with RMC Water and Environment, of Walnut Creek, California, for water meter planning, design, and program management in the amount of \$1,977,417; and

BE IT FURTHER RESOLVED that funds in the amount of \$2,250,000 be appropriated from the Water Fund for this project.

Dated: November 17, 2010

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I hereby certify that Resolution No. 2010-193 was passed and adopted by the City Council of the City of Lodi in a regular meeting held November 17, 2010, by the following vote:

- AYES: COUNCIL MEMBERS – Hansen, Hitchcock, Johnson, Mounce, and Mayor Katzakian
- NOES: COUNCIL MEMBERS – None
- ABSENT: COUNCIL MEMBERS – None
- ABSTAIN: COUNCIL MEMBERS – None

  
RANDI JOHL  
City Clerk