

**MEMORANDUM**

**TO:** MAYOR AND CITY COMMISSION

**FROM:** CITY ATTORNEY'S OFFICE

**DATE:** July 7, 2014

**RE:** **Agreement with Sensus USA, Inc. for Fieldlogic-Mobile Workforce Management System**

Attached for your consideration is an Agreement with Sensus USA, Inc. for a modification of the Field Logic Connect application in support of the Maximo Mobile Work Order Management solution for the Water Utilities Water Distribution Division.

On February 17, 2014, you approved an agreement with EMA, Inc. to implement the Maximo Work Order System which included a mobile data solution for the Water Distribution Division. Since the mobile solution will be used to install water smart metering, a purchase order with Sensus USA, Inc. is required. Both Maximo and Sensus have been standardized by the City.

When installing a smart water meter, there are about eight pieces of data that must be captured in the field where the meter is installed concerning the meter and its location. Currently the requisite data is captured manually, recorded on a paper work order, and manually entered into the computer by office staff. We have experienced a 20% error rate in this manual process. The attached proposal will allow us to electronically capture these data elements, pass the data to a laptop and map it to fields in an electronic work order. Thus, eliminating the manual entry and increasing the accuracy of capturing this data.

As part of this proposal, Sensus USA, Inc. will create a module that will work with Field Logic Connect to capture the various data elements for a smart water meter. This module will allow the hand held device to use a Bluetooth connection to transmit these files to the laptop where the mobile work order will reside. An application will be installed on the laptop to ensure the files are received during the transfer process. This will allow the user to select the appropriate file(s) to import the data into the work order and prevent them from manually entering the data during the order completion process. The work will be accomplished in two phases for a total not to exceed cost of \$80,500 and take approximately 24 weeks to complete

It is recommended that the City Commission approve the Agreement with Sensus USA, Inc. for \$80,500, and authorize the appropriate City Officials' execution of said document.

attachment



**Professional Services**

**Lakeland Water Utilities**

**FieldLogic – MWMS integration**

# Change History

Author	Document Revision	Date Modified	Description of change
Jayakumar	1.0	05/16/2014	Initial draft
Jayakumar	1.1	05/19/2014	Changes to use Hot Key to publish the data
Jayakumar	1.2	5/30/2014	Added FieldLogic enhancements

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## 1. Introduction

Lakeland Water Utilities will be using the Sensus FieldLogic Hand-Held tool for their AMI water deployment project to track various data records including activation/deactivation of the Sensus Smart Points. Lakeland Water Utilities is requesting Sensus Professional services to enhance the Hand-Held application software with a custom add-on module to deliver data from certain FieldLogic transactions to their Maximo Mobile Workforce Management System running on a Laptop carried by the Field crew.

### 1.1 Scope

The solution should include the following

- Add-on module deployed on the Sensus FieldLogic v3.5.x Hand-Held to process the data records created from various transactions.
- Handle activation, deactivation, Dual Port records and audit records on swapped Sensus Smart Points.
- Deliver the Sensus FieldLogic data onto a folder within the Local host (Laptop) running Microsoft Windows using a Bluetooth connection. The delivered files will be cleaned up from the target location after a configurable number of days.
- Extend FieldLogic v3.5.x to allow users to manually enter Meter body number within the above transactions and publish it as part of the TRN files. If the Meter body number is included within these transactions, it will be delivered as part of the data sent to the Local host.

#### Out of Scope

Anything not listed in section above is not in scope of this proposed solution.

## 2. Proposed Solution

The solution will address the two different required components as two phases, the modules required for pushing FieldLogic data to the local host will be in Phase A and changes required in FieldLogic for adding the Meter body number will be part of Phase B. It's being split into two so that phase A deliverable can be done independent of FieldLogic changes which is usually part of a release that includes other Sensus Products. The phase A deliverable will include a place holder to accommodate a future change for Meter body number so the Maximo MWMS integration will not be impacted with phase B upgrade.

### Phase A

This section describes the solution to push the FieldLogic transactional data to the local host (a Laptop) running Microsoft Windows. An add-on application to the Hand Held will be created that will support a hot key to push any new data since last update to the local-host. The application will establish a Bluetooth connection to the local host and retrieve transactional data from FieldLogic and send all new/unprocessed data to the local host. The application will display a status message giving the number of records sent out on success and error messages if there's a problem establishing a connection. There

will also be a software component that's deployed on the local host to handle the Bluetooth connection and deliver the data from Hand Held onto a folder on the local host shared with Maximo Mobile Workforce management System (MWMS).

The format of the various records representing different transactional data will be documented and shared with Lakeland Water Utilities for integration with Maximo MWMS. The records will have a place holder for the Meter body number for Maximo MWMS integration purposes and the actual data will be filled only with phase B changes.

**Phase B**

FieldLogic HandHeld application will be extended to allow manual entry of Meter body number as part of Sensus Smart point module activation/deactivation transaction. The manually entered data will be saved as part of the TRN file. The FieldLogic enhancements are included as part of release that includes other Sensus products and goes through standard Sensus development and release cycles. During this cycle, the modules delivered in phase A will be updated to pick up the changes in FieldLogic Handheld and TRN files.

**3. Effort and Price**

The effort to design, develop and test will be 8 weeks and the cost of the effort for Phase A will be \$56,000 with a 15% annual support fee. The effort for phase B will be 3-4 weeks and the cost will be \$24,500. Sensus will own the code developed for the proposed solution.

The annual support fee is payable on the anniversary of the install date of the solution. The support fee will cover any changes/upgrades required to adapt this solution to any upgrades on the Hand Held. The support will continue as long as the annual support fee is paid in full.

The development and testing of phase A is expected to take about 8 weeks and phase B will be 4 weeks to complete after the SOW is executed; however, a final schedule for each phase will be set after the SOW is executed.

Pricing above is valid for a period of 30 days. We look forward to starting this work. If the SOW described herein is acceptable please sign and date this document.

**SENSUS USA INC.**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**LAKELAND WATER UTILITIES**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_