

Contract Routing Form

ROUTING: **Urgent Rush**

printed on: 05/03/2017

Contract between: Timmons Group, Inc
 and Dept. or Division: Information Technology
 Name/Phone Number:

Project: Asset Management System

Contract No.: IT-2017-009
 Enactment No.: RES-17-00228
 Dollar Amount: 271,350.00
 Requisition #: 17001662

File No.: 46228
 Enactment Date: 03/21/2017

(Please DATE before routing)

Signatures Required	Date Received	Date Signed
City Clerk	5-3-17	5-4-2017
Director of Civil Rights	5/4/17	5.10.17 FS
Risk Manager	5.10.17	5/11/17 ren
Finance Director	5.10.17	5/11/17 MCR
City Attorney	043 5-25-17	5-25-17
Mayor	5.25.17	5.25.17
Finance (For Scanning)		

Please return signed Contracts to the City Clerk's Office
 Room 103, City-County Building for filing.

Original + 2 Copies

05/03/2017 10:26:26 itacl - Resolution attached to routing slip for information.

05/03/2017 10:26:42 itacl - There are 2 contracts for this project being routed at the same time.

05/03/2017 10:26:57 itacl - Please contact Amanda Lythjohan at 267-2675 for questions or routing issues

Dis Rights: OK / N/A Problem - Hold
 Prev Wage: AA / Agency / No
 Contract Value: 271,350
 AA Plan: 30 days
 Amendment / Addendum # 11/4
 Type: POS / Dvlp / Sbdv / Gov't /
 Grant / PW / Goal / Loan / Agrmt



City of Madison

City of Madison
Madison, WI 53703
www.cityofmadison.com

Master

File Number: 46228

File ID: 46228

File Type: Resolution

Status: Passed

Version: 1

Reference:

Controlling Body: BOARD OF
ESTIMATES

File Created Date : 02/21/2017

File Name: CMMS for Public Works

Final Action: 03/21/2017

Title: Authorizing the Mayor and City Clerk to execute contracts for acquisition, implementation services, training, software licensing and maintenance on a recurring basis for the useful life of the software, for the implementation and support of Cityworks Public Works Asset Management System, with Azteca Systems, LLC and Timmons Group, Inc.

Notes:

Sponsors: Paul R. Soglin and Samba Baldeh

Effective Date: 03/23/2017

Attachments:

Enactment Number: RES-17-00228

Author: Dave Faust

Hearing Date:

Entered by: lstarzewski@cityofmadison.com

Published Date:

History of Legislative File

Ver- sion:	Acting Body:	Date:	Action:	Sent To:	Due Date:	Return Date:	Result:
1	Department of Information Technology	02/21/2017	Referred for Introduction				
	Action Text: This Resolution was Referred for Introduction						
	Notes: Board of Estimates						
1	COMMON COUNCIL	02/28/2017	Refer	BOARD OF ESTIMATES		03/13/2017	Pass
	Action Text: A motion was made by Verveer, seconded by Rummel, to Refer to the BOARD OF ESTIMATES. The motion passed by voice vote/other.						
	Notes:						
1	BOARD OF ESTIMATES	03/13/2017	RECOMMEND TO COUNCIL TO ADOPT - REPORT OF OFFICER				Pass
	Action Text: A motion was made by Rummel, seconded by Harrington-McKinney, to RECOMMEND TO COUNCIL TO ADOPT - REPORT OF OFFICER. The motion passed by voice vote/other.						
	Notes:						
1	COMMON COUNCIL	03/21/2017	Adopt				Pass
	Action Text: A motion was made by Verveer, seconded by Rummel, to Adopt. The motion passed by voice vote/other.						

Text of Legislative File 46228

Fiscal Note

The 2016 capital budget includes \$950,000 for an Asset Management System (MUNIS Project 17097), funded by an appropriation from the General Fund (\$200,000) and Utility Reserves (\$750,000). The proposed resolution authorizes \$550,000 for implementation (\$260,000), licensing (\$140,000), and support/maintenance services (\$150,000) associated with the project. Anticipated future expenditures include servers, additional licensing, and field devices.

Title

Authorizing the Mayor and City Clerk to execute contracts for acquisition, implementation services, training, software licensing and maintenance on a recurring basis for the useful life of the software, for the implementation and support of Cityworks Public Works Asset Management System, with Azteca Systems, LLC and Timmons Group, Inc.

Body

WHEREAS, Information Technology, working with the Purchasing Division, Engineering, Traffic Engineering, Parking Utility, and the Water Utility has advertised, received, and reviewed proposals for RFP-8524-0-2016/JA for a computerized maintenance management system (CMMS) for Public Works Infrastructure Asset Management. This includes the purchase of software, implementation services, training, and support for the system and the process was conducted in accordance with Section 4.26 of the Madison General Ordinances; and

WHEREAS, through this RFP, staff have selected the Cityworks Public Works Asset Management System which includes software product licensed by Azteca Systems, LLC, and implementation and training services to be provided by Timmons, Inc.; and

WHEREAS, MGO 4.26 requires Common Council approval for both of these contracts based upon the price and duration. The Timmons contract for implementation services will be for 2 years at a total price not to exceed \$400,000 and the Azteca contract for support and maintenance services for the CityWorks software will likely exceed three (3) years;

NOW, THEREFORE, be it resolved that the Mayor and City Clerk are authorized to execute contracts with Timmons Group, Inc. for implementation and related services and with Azteca Systems, LLC for software licensing with a combined amount not to exceed \$400,000.00; and

BE IT FURTHER resolved that the Mayor and City Clerk are authorized to execute contract(s) as needed on a recurring basis with Azteca Systems, LLC for ongoing licensing, support and maintenance services for the duration of the City's use of this software, at an annual cost of \$150,000.00 for the first year and a price to be negotiated in the future, subject to availability in the budget.



CITY OF MADISON

Purchase Order

Fiscal Year 2017

Page 1 of 1

THIS NUMBER MUST APPEAR ON ALL INVOICES,
PACKAGES AND SHIPPING PAPERS.

Purchase Order # 17001512-00

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OINFORMATION TECHNOLOGY CCB 500
210 MARTIN LUTHER KING JR BLVD
ROOM 500
MADISON WI 53703
(608) 266-4454
ALYTHJOHAN@CITYOFMADISON.COMV
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D
O
RTIMMONS GROUP INC
1001 BOULDERS PARKWAY
SUITE 300
RICHMOND VA 23225S
H
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P
T
OINFORMATION TECHNOLOGY CCB 500
210 MARTIN LUTHER KING JR BLVD
ROOM 500
MADISON WI 53703

Vendor Phone Number		Vendor Fax Number	Requisition Number	Delivery Reference		
			17001662	AARON COHEN		
Date Ordered	Vendor Number	Date Required	Freight Method/Terms		Department/Location	
05/11/2017	705497				INFORMATION TECHNOLOGY	
Item#	Description/Part No.		Qty	UOM	Unit Price	Extended Price
1	ASSET MANAGEMENT- IMPLEMENTATI Asset Management Implementation		1.0	EACH	\$271,350.000	\$271,350.00

THIS PURCHASE IS SUBJECT TO THE "CONDITIONS OF PURCHASE"
PRINTED ON THE REVERSE SIDE.By Dana Philmeduke
Finance Director

VENDOR COPY

PO Total

\$271,350.00

CONDITIONS OF PURCHASE

ENTIRE AGREEMENT

Furnishing of items and/or fulfillment of services under this purchase order by the vendor named on the front of this form ("vendor," "Contractor" or "you") constitutes a contract between you and the City of Madison, a Wisconsin municipal corporation, and your agreement to (i) the City of Madison Standard Terms and Conditions ("STC") (available at

www.cityofmadison.com/finance/documents/STC.pdf

or by calling 608-266-4521), (ii) the Request for Bids, Quotations or Proposals (if any), and (iii) these Conditions of Purchase, all of which are incorporated by reference herein (hereafter, "PO"). This PO (including the documents incorporated by reference) is the entire agreement and no other terms or conditions, oral or written, shall be effective or binding unless expressly agreed in writing by the City of Madison. If this PO is issued in conjunction with another written instrument covering this purchase that is signed by an authorized representative of the City and the vendor in a form approved by the City Attorney ("Contract"), and there is a conflict in language between this PO and the Contract, the language of the Contract shall control. If a vendor document, such as a quote, order form, invoice, or contract includes a statement that disclaims the applicability of a purchase order, terms and conditions on a purchase order, or other customer terms and conditions, or a statement that the vendor document is the "entire agreement," such statement shall be deemed rejected and superseded by this PO unless the City has expressly agreed otherwise in writing through an individual authorized to do so.

F.O.B. DESTINATION

Unless otherwise agreed in writing, the vendor shall bear all handling, transportation and insurance charges. Title of goods shall pass upon acceptance of goods at the City's dock.

INVOICING INFORMATION

- Send invoices directly to the procuring agency.
- Reference the Purchase Order number on all invoices.
- Show discounts for early payment as a percent reduction of invoice. Invoice discounts shall be determined where applicable, from the date of acceptance of goods and/or receipt of invoice, whichever is later. Discounts for early payment terms stated on the bid/proposal must be shown plainly on the invoice; discounts for early payment not shown on the invoice will be taken.
- The City will pay properly submitted Contractor invoices within 30 days of receipt, for completed and accepted deliveries of specified services and/or goods, unless the City notifies the Contractor in writing of a dispute, before payment is due.
- Invoices submitted not in accordance with these instructions will be removed from the payment process and returned.

APPLICABLE LAW, VENUE

This purchase shall be governed by and construed, interpreted and enforced in accordance with the laws of the State of Wisconsin. The parties agree the venue for disputes arising hereunder will be in a court of competent jurisdiction within the State of Wisconsin.

INDEMNIFICATION

The Contractor shall be liable to and hereby agrees to indemnify, defend and hold harmless the City of Madison, and its officers, officials, agents, and employees against all loss or expense (including liability costs and attorney's fees) by reason of any claim or suit, or of liability imposed by law upon the City or its officers, officials, agents or employees for damages because of bodily injury, including death at any time resulting therefrom, sustained by any person or persons or on account of damages to property, including loss of use thereof, arising from, in connection with, caused by or resulting from the Contractor's and/or Subcontractor's acts or omissions in the performance of this Agreement, whether caused by or contributed to by the negligence of the City, its officers, officials, agents or its employees.

INSURANCE

Contractor will insure, and require each subcontractor to insure against the following risks to the extent stated below. Contractor shall not commence work under this PO, nor shall Contractor allow any Subcontractor to commence work, until said insurance has been obtained and certificate(s) of insurance approved by the City Risk Manager.

- Commercial General Liability. Covering as insured the Contractor and naming the City, its officers, officials, agents and employees as additional insureds, with minimum limits of \$1,000,000 per occurrence. This policy shall also provide contractual liability in the same amount and apply on a primary and non-contributory basis.

- Worker's Compensation. Securing compensation for the benefit of the employees of the Contractor and the employees of each subcontractor, as required by Wisconsin Worker's Compensation Law.
- Automobile Liability. Covering as insured the Contractor with minimum limits of \$1,000,000 combined single limit per accident, covering owned, non-owned and hired automobiles.

Contractor and/or Insurer shall give City thirty (30) days advance written notice of cancellation, non-renewal or material changes to any of the above-required policies during the term of this PO. Certificate Holder should be listed as: City of Madison, ATTN: Risk Management, Room 406, 210 Martin Luther King, Jr. Blvd., Madison, WI 53703

LIVING WAGE (Applicable to contracts exceeding \$5,000) Contractor agrees to pay all employees employed by Contractor in the performance of this contract, whether on a full-time or part-time basis, a base wage of not less than the City minimum hourly wage as required by Madison General Ordinances, Section 4.20.

NONDISCRIMINATION In the performance of work under this PO, the Contractor agrees not to discriminate against any employee or applicant for employment because of race, religion, marital status, age, color, sex, handicap, national origin or ancestry, income level or source of income, arrest record or conviction record, less than honorable discharge, physical appearance, sexual orientation, gender identity, political beliefs, or student status. Contractor further agrees not to discriminate against any subcontractor or person who offers to subcontract on this PO because of race, religion, color, age, disability, sex, sexual orientation, gender identity or national origin.

AFFIRMATIVE ACTION

If contractor employs 15 or more employees and does aggregate annual business with the City of \$25,000 or more for the calendar year in which the PO takes effect, Contractor shall file, within thirty (30) days from the PO effective date and BEFORE RELEASE OF PAYMENT, an **Affirmative Action Plan**

(<http://www.cityofmadison.com/dcr/aaFormsVS.cfm>) designed to ensure that the Contractor provides equal employment opportunity to all and takes affirmative action in its utilization of applicants and employees who are women, minorities or persons with disabilities. The model Affirmative Action Plan for Vendors, Request for Exemption form, and instruction are available at: <http://www.cityofmadison.com/dcr/aaFormsVS.cfm> or by contacting the City of Madison Affirmative Action Division, Attn: Contract Compliance Specialist at (608) 266-4910. Such contractors are further required to comply with all applicable provisions of Madison General Ordinances, Sec. 39.02(9)(e) including the "Articles of Agreement." (accessible at www.municode.com) Further, Contractor shall allow maximum feasible opportunity to small business enterprises to compete for any subcontracts entered into pursuant to this PO.

If Contractor employs 15 or more employees, regardless of dollar amount, Contractor must notify the City of all external job openings at locations in Dane County, WI and Contractor agrees to interview candidates referred by the City or its designee. Job posting information is available at: <http://www.cityofmadison.com/dcr/aaJobSkillsBank.cfm>

SWEATFREE PROCUREMENT OF ITEMS OF APPAREL

If this PO is for the procurement of \$5,000 or more in garments or items of clothing, any part of which is a textile, or any shoes/ footwear, then Madison General Ordinances Sec. 4.25 "Procurement of Items of Apparel", is hereby incorporated by reference and made part of this PO. See MGO 4.25(2) for applicability. Contractor shall follow labor practices consistent with international standards for human rights, meaning that, at a minimum Contractor shall adhere to the minimum employment standards in Sec. 4.25 and require all subcontractors and third-party suppliers to do the same. For purposes of sec.4.25, "Subcontractor" means a person, partnership, corporation or other entity that enters into a contract with Contractor for performance of some or all of the City-contracted work and includes all third-party suppliers or products from whom the Contractor or its contractors obtains or sources goods, parts or supplies for use on this PO, and is intended to include suppliers at all levels of the supply chain. The standards in sec. 4.25 shall apply to all aspects of Contractor's and subcontractor's operations, including but not limited to, manufacture, assembly, finishing, laundering or dry cleaning, (where applicable), warehouse distribution, and delivery. Contractor acknowledges that by accepting this PO, contractor is subject to all of the requirements and sanctions of Madison General Ordinances sec. 4.25. Additional information is available in the STC at www.cityofmadison.com/finance/documents/STC.pdf.

City of Madison
CONTRACT FOR PURCHASE OF SERVICES

1. **PARTIES.**

This is a Contract between the City of Madison, Wisconsin, hereafter referred to as the "City" and Timmons Group, Inc. hereafter referred to as "Contractor" or "Timmons."

The Contractor is a: ☒ Corporation ☐ Limited Liability Company ☐ General Partnership ☐ LLP
(to be completed by contractor) ☐ Sole Proprietor ☐ Unincorporated Association ☐ Other: _____

2. **PURPOSE.**

The purpose of this Contract is as set forth in Section 3.

3. **SCOPE OF SERVICES AND SCHEDULE OF PAYMENTS.**

The purpose of this contract is for Contractor to provide implementation and related services for the installation of a CMMS System using the Cityworks Server AMS software, as further described in the attachments listed below. (The Cityworks software and future support and maintenance of that software will be purchased under a separate contract made directly with Azteca Systems, LLC.) Timmons will perform the following services and be paid according to the following attachment:

Attachment A: CMMS Software, Implementation and Training – Scope of Work (Only)

Attachment B: Milestone Billing Plan and Payment Schedule

Attachment C: Total Project Cost and Work Breakdown Structure

Attachment D: Chapter 5 (System Overview) and Chapter 6 (Technical and Functional Requirements Checklist) of Timmons Group, Inc. response to RFP # 8524-0-2016-JA.

Attachment E: Acceptance Procedure for Payment Milestones and Final System Acceptance

Order of Precedence: In the event of a conflict between the terms of this Contract for Purchase of Services and the terms of any document attached or incorporated herein, the terms of this Contract for Purchase of Services shall control and supersede any such conflicting term.

4. **TERM AND EFFECTIVE DATE.**

This Contract shall become effective upon execution by the Mayor, (or the Purchasing Agent, if authorized) on behalf of the City of Madison, unless another effective date is specified in the Attachment(s) incorporated in Section 3, however in no case shall work commence before execution by the City of Madison. The term of this Contract shall commence upon the date of final signature and shall continue through completion and the City's acceptance of all tasks set forth in the SOW (Attachment A) and until the City uses the 80 hours of Ad-Hoc support described in Task 18 and Section C of the SOW, or one (1) year after Go-Live, whichever occurs sooner.

5. **ENTIRE AGREEMENT.**

This Contract for Purchase of Services, including any and all attachments, exhibits and other documents referenced in Section 3 (hereafter, "Agreement" or "Contract") is the entire Agreement of the parties and supersedes any and all oral contracts and negotiations between the parties. If any document referenced in Section 3 includes a statement that expressly or implicitly disclaims the applicability of this Contract for Purchase of Services, or a statement that such other document is the "entire agreement," such statement shall be deemed rejected and shall not apply to this Contract.

6. **ASSIGNABILITY/SUBCONTRACTING.**

Contractor shall not assign or subcontract any interest or obligation under this Contract without the City's prior written approval. All of the services required hereunder will be performed by Contractor and employees of Contractor.

7. **DESIGNATED REPRESENTATIVE**

- A. Contractor designates Ronald R. Butcher as Contract Agent with primary responsibility for the performance of this Contract. In case this Contract Agent is replaced by another for any reason, the Contractor will designate another Contract Agent within seven (7) calendar days of the time the first terminates his or her employment or responsibility using the procedure set forth in Section 15, Notices.
- B. In the event of the death, disability, removal or resignation of the person designated above as the Contract agent, the City may accept another person as the Contract agent or may terminate this Agreement under Section 25, at its option.

8. **PROSECUTION AND PROGRESS.**

- A. Services under this Agreement shall commence upon written order from the City to the Contractor, which order will constitute authorization to proceed; unless another date for commencement is specified elsewhere in this Contract including documents incorporated in Section 3.
- B. **Project Management Plan.** The Contractor shall complete the services under this Agreement within the time for completion set forth in the schedule established in the approved Final Project Management Plan, including any changes to that schedule agreed by both parties through the Change Control process in the SOW (Attachment A). The Contractor's services are completed when the City notifies the Contractor in writing that the services are complete and are acceptable. The time for completion shall not be extended because of any delay attributable to the Contractor, but it may be extended by the City in the event of a delay attributable to the City, or in the event of unavoidable delay caused by war, insurrection, natural disaster, or other unexpected event beyond the control of the Contractor. If at any time the Contractor believes that the time for completion of the work should be extended because of unavoidable delay caused by an unexpected event, or because of a delay attributable to the City, the Contractor shall notify the City as soon as possible, but not later than seven (7) calendar days after such an event. Such notice shall include any justification for an extension of time and shall identify the amount of time claimed to be necessary to complete the work. The parties shall agree to an

adjustment to the project schedule and resulting changes to the Project Management Plan using the Change Control process described in the SOW (Attachment A.)

- C. Services by the Contractor shall proceed continuously and expeditiously through completion of each phase of the work.
- D. Progress reports documenting the extent of completed services shall be prepared by the Contractor and submitted to the City with each invoice under Section 24 of this Agreement, and at such other times as the City may specify, unless another procedure is specified in Section 3.
- E. The Contractor shall notify the City in writing when the Contractor has determined that the services under this Agreement have been completed. When the City determines that the services are complete and are acceptable, the City will provide written notification to the Contractor, acknowledging formal acceptance of the completed services.

9. **AMENDMENT.**

This Contract shall be binding on the parties hereto, their respective heirs, devisees, and successors, and cannot be varied or waived by any oral representations or promise of any agent or other person of the parties hereto. Any other change in any provision of this Contract may only be made by a written amendment, signed by the duly authorized agent or agents who executed this Contract.

10. **EXTRA SERVICES.**

The City may require the Contractor to perform extra services or decreased services, according to the procedure set forth in Section 24. Extra services or decreased services means services which are not different in kind or nature from the services called for in the Scope of Services, Section 3, but which may increase or decrease the quantity and kind of labor or materials or expense of performing the services. Extra services may not increase the total Contract price, as set forth in Section 23, unless the Contract is amended as provided in Section 9 above.

11. **NO WAIVER.**

No failure to exercise, and no delay in exercising, any right, power or remedy hereunder on the part of the City or Contractor shall operate as a waiver thereof, nor shall any single or partial exercise of any right, power or remedy preclude any other or further exercise thereof or the exercise of any other right, power or remedy. No express waiver shall affect any event or default other than the event or default specified in such waiver, and any such waiver, to be effective, must be in writing and shall be operative only for the time and to the extent expressly provided by the City or Contractor therein. A waiver of any covenant, term or condition contained herein shall not be construed as a waiver of any subsequent breach of the same covenant, term or condition.

12. **NON-DISCRIMINATION.**

In the performance of work under this Contract, the Contractor agrees not to discriminate against any employee or applicant for employment because of race, religion, marital status, age, color, sex, handicap, national origin or ancestry, income level or source of income, arrest record or conviction record, less than honorable discharge, physical appearance, sexual orientation, gender identity, political beliefs or student status. Contractor further agrees not to discriminate against any subcontractor or person who offers to subcontract on this Contract because of race, religion, color, age, disability, sex, sexual orientation, gender identity or national origin.

13. **AFFIRMATIVE ACTION.**

A. The following language applies to all contractors employing fifteen (15) or more employees (MGO 39.02(9)(c):

The Contractor agrees that, within thirty (30) days after the effective date of this Contract, Contractor will provide to the City of Madison Department of Civil Rights (the "Department"), certain workforce utilization statistics, using a form provided by the City.

If the Contract is still in effect, or if the City enters into a new Agreement with the Contractor, within one year after the date on which the form was required to be provided, the Contractor will provide updated workforce information using a second form, also to be furnished by the City. The second form will be submitted to the Department no later than one year after the date on which the first form was required to be provided.

The Contractor further agrees that, for at least twelve (12) months after the effective date of this Contract, it will notify the Department of each of its job openings at facilities in Dane County for which applicants not already employees of the Contractor are to be considered. The notice will include a job description, classification, qualifications, and application procedures and deadlines, shall be provided to the City by the opening date of advertisement and with sufficient time for the City to notify candidates and make a timely referral. The Contractor agrees to interview and consider candidates referred by the Department, or an organization designated by the Department, if the candidate meets the minimum qualification standards established by the Contractor, and if the referral is timely. A referral is timely if it is received by the Contractor on or before the date stated in the notice.

The Department will determine if a contractor is exempt from the above requirements (Sec. 13.A.) at the time the Request for Exemption in 13.B.(2) is made.

B. Articles of Agreement, Request for Exemption, and Release of Payment:

The "ARTICLES OF AGREEMENT" beginning on the following page, apply to all contractors, unless determined to be exempt under the following table and procedures:

NUMBER OF EMPLOYEES	LESS THAN \$25,000 Aggregate Annual Business with the City*	\$25,000 OR MORE Aggregate Annual Business with the City*
14 or less	Exempt**	Exempt**
15 or more	Exempt**	Not Exempt

*As determined by the Finance Director

**As determined by the Department of Civil Rights

(1) Exempt Status: In this section, "Exempt" means the Contractor is exempt from the Articles of Agreement in section 13.B.(5) of this Contract and from filing an Affirmative Action plan as required by Section IV of the Articles of Agreement. The Department of Civil Rights ("Department") makes the final determination as to whether a contractor is exempt. If the Contractor is not exempt, sec. 13.B.(5) shall apply and Contractor shall select option A. or B. under Article IV therein and file an Affirmative Action Plan.

(2) Request for Exemption – Fewer Than 15 Employees: (MGO 39.02(9)(a)2.) Contractors who believe they are exempt based on number of employees shall submit a Request for Exemption on a form provided by the Department within thirty (30) days of the effective date of this Contract.

(3) Exemption – Annual Aggregate Business: (MGO 39.02(9)(a)c.): The Department will determine, at the time this Contract is presented for signature, if the Contractor is exempt because it will have less than \$25,000 in annual aggregate business with the City in the calendar year. CONTRACTORS WITH 15 OR MORE EMPLOYEES WILL LOSE THIS EXEMPTION AND BECOME SUBJECT TO SEC. 13.B.(5) UPON REACHING \$25,000 OR MORE ANNUAL AGGREGATE BUSINESS WITH THE CITY WITHIN THE CALENDAR YEAR.

(4) Release of Payment: (MGO 39.02(9)(e)1.b.) All non-exempt contractors must have an approved Affirmative Action plan meeting the requirements of Article IV below on file with the Department within thirty (30) days of the effective date of this Contract and prior to release of payment by the City. Contractors that are exempt based on number of employees agree to file a Request for Exemption with the Department within thirty (30) days of the effective date and prior to release of payment by the City.

(5) Articles of Agreement:

ARTICLE I

The Contractor shall take affirmative action in accordance with the provisions of this Contract to insure that applicants are employed, and that employees are treated during employment without regard to race, religion, color, age, marital status, disability, sex, sexual orientation, gender identity or national origin and that the employer shall provide harassment-free work environment for the realization of the potential of each employee. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation and selection for training including apprenticeship insofar as it is within the control of the Contractor. The Contractor agrees to post in conspicuous places available to employees and applicants notices to be provided by the City setting out the provisions of the nondiscrimination clauses in this Contract.

ARTICLE II

The Contractor shall in all solicitations or advertisements for employees placed by or on behalf of the Contractors state that all qualified or qualifiable applicants will be employed without regard to race, religion, color, age, marital status, disability, sex, sexual orientation, gender identity or national origin.

ARTICLE III

The Contractor shall send to each labor union or representative of workers with which it has a collective bargaining Agreement or other Contract or understanding a notice to be provided by the City advising the labor union or workers representative of the Contractor's equal employment opportunity and affirmative action commitments. Such notices shall be posted in conspicuous places available to employees and applicants for employment.

ARTICLE IV

(This Article applies to non-public works contracts.)

The Contractor agrees that it will comply with all provisions of the Affirmative Action Ordinance of the City of Madison (MGO 39.02) including the Contract compliance requirements. The Contractor warrants and certifies that one of the following paragraphs is true (check one):

- ☐ A. Contractor has prepared and has on file an affirmative action plan that meets the format requirements of Federal Revised Order No. 4, 41 CFR part 60-2, as established by 43 FR 51400 November 3, 1978, including appendices required by City of Madison ordinances or it has prepared and has on file a model affirmative action plan approved by the Madison Common Council.
- ☒ B. Within thirty (30) days after the effective date of this Contract, Contractor will complete an affirmative action plan that meets the format requirements of Federal Revised Order No. 4, 41 CFR Part 60-2, as established by 43 FR 51400, November 3, 1978, including appendices required by City of Madison ordinance or within thirty (30) days after the effective date of this Contract, it will complete a model affirmative action plan approved by the Madison Common Council.
- ☐ C. Contractor believes it is exempt from filing an affirmative action plan because it has fewer than fifteen (15) employees and has filed, or will file within thirty (30) days after the effective date of this Contract, a form required by the City to confirm exempt status based on number of employees. If the City determines that Contractor is not exempt, the Articles of Agreement will apply.
- ☐ D. Contractor believes it is exempt from filing an affirmative action plan because its annual aggregate business with the City for the calendar year in which the contract takes effect is less than twenty-five thousand dollars (\$25,000), or for another reason listed in MGO 39.02(9)(a)2. If the City determines that Contractor is not exempt, the Articles of Agreement will apply.

ARTICLE V

(This Article applies only to public works contracts.)

The Contractor agrees that it will comply with all provisions of the Affirmative Action Ordinance of the City of Madison, including the Contract compliance requirements. The Contractor agrees to submit the model affirmative action plan for public works Contractors in a form approved by the Director of Affirmative Action.

ARTICLE VI

The Contractor will maintain records as required by Section 39.02(9)(f) of the Madison General Ordinances and will provide the City's Department of Affirmative Action with access to such records and to persons who have relevant and necessary information, as provided in Section 39.02(9)(f). The City agrees to keep all such records confidential, except to the extent that public inspection is required by law.

ARTICLE VII

In the event of the Contractor's or subcontractor's failure to comply with the Equal Employment Opportunity and Affirmative Action provisions of this Contract or Sections 39.03 and 39.02 of the Madison General Ordinances, it is agreed that the City at its option may do any or all of the following:

- A. Cancel, terminate or suspend this Contract in whole or in part.
- B. Declare the Contractor ineligible for further City contracts until the Affirmative Action requirements are met.
- C. Recover on behalf of the City from the prime Contractor 0.5 percent of the Contract award price for each week that such party fails or refuses to comply, in the nature of liquidated damages, but not to exceed a total of five percent (5%) of the Contract price, or five thousand dollars (\$5,000), whichever is less. Under public works contracts, if a subcontractor is in noncompliance, the City may recover liquidated damages from the prime Contractor in the manner described above. The preceding sentence shall not be construed to prohibit a prime Contractor from recovering the amount of such damage from the noncomplying subcontractor.

ARTICLE VIII

(This Article applies to public works contracts only.)

The Contractor shall include the above provisions of this Contract in every subcontract so that such provisions will be binding upon each subcontractor. The Contractor shall take such action with respect to any subcontractor as necessary to enforce such provisions, including sanctions provided for noncompliance.

ARTICLE IX

The Contractor shall allow the maximum feasible opportunity to small business enterprises to compete for any subcontracts entered into pursuant to this Contract. (In federally funded contracts the terms "DBE, MBE, and WBE" shall be substituted for the term "small business" in this Article.)

14. **SEVERABILITY.**

It is mutually agreed that in case any provision of this Contract is determined by any court of law to be unconstitutional, illegal or unenforceable, it is the intention of the parties that all other provisions of this Contract remain in full force and effect.

15. **NOTICES.**

All notices to be given under the terms of this Contract shall be in writing and signed by the person serving the notice and shall be sent registered or certified mail, return receipt requested, postage prepaid, or hand delivered to the addresses of the parties listed below:

FOR THE CITY:

Paul Kronberger

(Department or Division Head)

210 Martin Luther King, Jr. Blvd., Suite 500

Madison, WI 53703

FOR THE CONTRACTOR:

Ronald R. Butcher

Principal

1001 Boulders Parkway, Suite 300

Richmond, VA 23225

16. **STATUS OF CONTRACTOR/INDEPENDENT/TAX FILING.**

It is agreed that Contractor is an independent Contractor and not an employee of the City, and that any persons who the Contractor utilizes and provides for services under this Contract are employees of the Contractor and are not employees of the City of Madison.

Contractor shall provide its taxpayer identification number (or social security number) to the Finance Director, 210 Martin Luther King Jr. Blvd, Room 406, Madison, WI 53703, prior to payment. The Contractor is informed that as an independent Contractor, s/he may have a responsibility to make estimated tax returns, file tax returns, and pay income taxes and make social security payments on the amounts received under this Contract and that no amounts will be withheld from payments made to this Contractor for these purposes and that payment of taxes and making social security payments are solely the responsibility and obligation of the Contractor. The Contractor is further informed that s/he may be subject to civil and/or criminal penalties if s/he fails to properly report income and pay taxes and social security taxes on the amount received under this Contract.

17. **GOODWILL.**

Any and all goodwill arising out of this Contract inures solely to the benefit of the City; Contractor waives all claims to benefit of such goodwill.

18. **THIRD PARTY RIGHTS.**

This Contract is intended to be solely between the parties hereto. No part of this Contract shall be construed to add, supplement, amend, abridge or repeal existing rights, benefits or privileges of any third party or parties, including but not limited to employees of either of the parties.

19. **AUDIT AND RETAINING OF DOCUMENTS.**

The Contractor agrees to provide all reports requested by the City including, but not limited to, financial statements and reports, reports and accounting of services rendered, and any other reports or documents requested. Financial and service reports shall be provided according to a schedule (when applicable) to be included in this Contract. Any other reports or documents shall be provided within five (5) working days after the Contractor receives the City's written requests, unless the parties agree in writing on a longer period. Payroll records and any other documents relating to the performance of services under the terms of this Contract

shall be retained by the Contractor for a period of three (3) years after completion of all work under this Contract, in order to be available for audit by the City or its designee.

20. **CHOICE OF LAW AND FORUM SELECTION.**

This Contract shall be governed by and construed, interpreted and enforced in accordance with the laws of the State of Wisconsin. The parties agree, for any claim or suit or other dispute relating to this Contract that cannot be mutually resolved, the venue shall be a court of competent jurisdiction within the State of Wisconsin and the parties agree to submit themselves to the jurisdiction of said court, to the exclusion of any other judicial district that may have jurisdiction over such a dispute according to any law.

21. **COMPLIANCE WITH APPLICABLE LAWS.**

The Contractor shall become familiar with, and shall at all times comply with and observe all federal, state, and local laws, ordinances, and regulations which in any manner affect the services or conduct of the Contractor and its agents and employees.

22. **CONFLICT OF INTEREST.**

- A. The Contractor warrants that it and its agents and employees have no public or private interest, and will not acquire directly or indirectly any such interest, which would conflict in any manner with the performance of the services under this Agreement.
- B. The Contractor shall not employ or contract with any person currently employed by the City for any services included under the provisions of this Agreement.

23. **COMPENSATION.**

It is expressly understood and agreed that in no event will the total compensation under this Contract exceed \$271,350.

24. **BASIS FOR PAYMENT.**

A. **GENERAL.**

- (1) The City will pay the Contractor for the completed and accepted services rendered under this Contract on the basis and at the Contract price set forth in Section 23 of this Contract. The City will pay the Contractor for completed and approved "extra services", if any, if such "extra services" are authorized according to the procedure established in this section. The rate of payment for "extra services" shall be the rate established in this Contract. Such payment shall be full compensation for services rendered and for all labor, material, supplies, equipment and incidentals necessary to complete the services.
- (2) The Contractor shall submit invoices, on the form or format approved by the City and as may be further specified in Section 3 of this Contract. The City will pay the Contractor in accordance with the schedule, if any, set forth in Section 3. The final invoice, if applicable, shall be submitted to the City within three months of completion of services under this Agreement.
- (3) Should this Agreement contain more than one service, a separate invoice and a separate final statement shall be submitted for each individual service.
- (4) Payment shall not be construed as City acceptance of unsatisfactory or defective services or improper materials.
- (5) Final payment of any balance due the Contractor will be made upon acceptance by the City of the services under the Agreement and upon receipt by the City of documents required to be returned or to be furnished by the Contractor under this Agreement.
- (6) The City has the equitable right to set off against any sum due and payable to the Contractor under this Agreement, any amount the City determines the Contractor owes the City, whether arising under this Agreement or under any other Agreement or otherwise.
- (7) Compensation in excess of the total Contract price will not be allowed unless authorized by an amendment under Section 9, AMENDMENT.
- (8) The City will not compensate for unsatisfactory performance by the Contractor.

B. **SERVICE ORDERS, EXTRA SERVICE, OR DECREASED SERVICE.**

- (1) Written orders regarding the services, including extra services or decreased services, will be given by the City, using the procedure set forth in Section 15, NOTICES.
- (2) The City may, by written order, request extra services or decreased services, as defined in Section 10 of this Contract. Unless the Contractor believes the extra services entitle it to extra compensation or additional time, the Contractor shall proceed to furnish the necessary labor, materials, and professional services to complete the services within the time limits specified in the Scope of Services, Section 3 of this Agreement, including any amendments under Section 9 of this Agreement.
- (3) If in the Contractor's opinion the order for extra service would entitle it to extra compensation or extra time, or both, the Contractor shall not proceed to carry out the extra service, but shall notify the City, pursuant to Section 15 of this Agreement. The notification shall include the justification for the claim for extra compensation or extra time, or both, and the amount of additional fee or time requested.
- (4) The City shall review the Contractor's submittal and respond in writing, either authorizing the Contractor to perform the extra service, or refusing to authorize it. The Contractor shall not receive additional compensation or time unless the extra compensation is authorized by the City in writing.

25. **DEFAULT/TERMINATION.**

- A. In the event Contractor shall default in any of the covenants, agreements, commitments, or conditions herein contained, and any such default shall continue unremedied for a period of ten (10) days after written notice thereof to Contractor, the City may, at its option and in addition to all other rights and remedies which it may have at law or in equity against Contractor, including expressly the specific enforcement hereof, forthwith have the cumulative right to immediately terminate this Contract and all rights of Contractor under this Contract.
- B. Notwithstanding paragraph A., above, the City may in its sole discretion and without any reason terminate this Agreement at any time by furnishing the Contractor with ten (10) days' written notice of termination. In the event of termination under this subsection, the City will pay for all work completed by the Contractor and accepted by the City.

26. **INDEMNIFICATION.**

The Contractor shall be liable to and hereby agrees to indemnify, defend and hold harmless the City of Madison, and its officers, officials, agents, and employees against all loss or expense (including liability costs and attorney's fees) by reason of any claim or suit, or of liability imposed by law upon the City or its officers, officials, agents or employees for damages because of bodily injury, including death at any time resulting therefrom, sustained by any person or persons or on account of damages to property, including loss of use thereof, arising from, in connection with, caused by or resulting from the Contractor's and/or Subcontractor's acts or omissions in the performance of this Agreement, whether caused by or contributed to by the negligence of the City, its officers, officials, agents, or its employees.

27. **INSURANCE.**

The Contractor will insure, and will require each subcontractor to insure, as indicated, against the following risks to the extent stated below. The Contractor shall not commence work under this Contract, nor shall the Contractor allow any Subcontractor to commence work on its Subcontract, until the insurance required below has been obtained and corresponding certificate(s) of insurance have been approved by the City Risk Manager.

Commercial General Liability

The Contractor shall procure and maintain during the life of this Contract, Commercial General Liability insurance including, but not limited to bodily injury, property damage, personal injury, and products and completed operations (unless determined to be inapplicable by the Risk Manager) in an amount not less than \$1,000,000 per occurrence. This policy shall also provide contractual liability in the same amount. Contractor's coverage shall be primary and list the City of Madison, its officers, officials, agents and employees as additional insureds. Contractor shall require all subcontractors under this Contract (if any) to procure and maintain insurance meeting the above criteria, applying on a primary basis and listing the City of Madison, its officers, officials, agents and employees as additional insureds.

Automobile Liability

The Contractor shall procure and maintain during the life of this Contract Business Automobile Liability insurance covering owned, non-owned and hired automobiles with limits of not less than \$1,000,000 combined single limit per accident. Contractor shall require all subcontractors under this Contract (if any) to procure and maintain insurance covering each subcontractor and meeting the above criteria.

Worker's Compensation

The Contractor shall procure and maintain during the life of this Contract statutory Workers' Compensation insurance as required by the State of Wisconsin. The Contractor shall also carry Employers Liability limits of at least \$100,000 Each Accident, \$100,000 Disease – Each Employee, and \$500,000 Disease – Policy Limit. Contractor shall require all subcontractors under this Contract (if any) to procure and maintain such insurance, covering each subcontractor.

Professional Liability

The Contractor shall procure and maintain professional liability insurance with coverage of not less than \$1,000,000. If such policy is a "claims made" policy, all renewals thereof during the life of the Contract shall include "prior acts coverage" covering at all times all claims made with respect to Contractor's work performed under the Contract. This Professional Liability coverage must be kept in force for a period of six (6) years after the services have been accepted by the City.

Acceptability of Insurers. The above-required insurance is to be placed with insurers who have an A.M. Best rating of no less than A- (A minus) and a Financial Category rating of no less than VII.

Proof of Insurance, Approval. The Contractor shall provide the City with certificate(s) of insurance showing the type, amount, effective dates, and expiration dates of required policies prior to commencing work under this Contract. Contractor shall provide the certificate(s) to the City's representative upon execution of the Contract, or sooner, for approval by the City Risk Manager. If any of the policies required above expire while this Contract is still in effect, Contractor shall provide renewal certificate(s) to the City for approval. Certificate Holder language should be listed as follows:

City of Madison
ATTN: Risk Management, Room 406
210 Martin Luther King, Jr. Blvd.
Madison, WI 53703

The Contractor shall provide copies of additional insured endorsements or insurance policies, if requested by the City Risk Manager. The Contractor and/or Insurer shall give the City thirty (30) days advance written notice of cancellation, non-renewal or material changes to any of the above-required policies during the term of this Contract.

28. **OWNERSHIP OF CONTRACT PRODUCT.**

All of the work product, including, but not limited to, documents, materials, files, reports, data, including magnetic tapes, disks or computer-aided designs or other electronically stored data or information (the "Documents"), which the Contractor prepares pursuant to the terms and conditions of this Contract are the sole property of the City. The Contractor will not publish any such materials or use them for any research or publication, other than as expressly required or permitted by this Contract, without the prior written permission of the City. The grant or denial of such permission shall be at the City's sole discretion.

The Contractor intends that the copyright to the Documents shall be owned by City, whether as author (as a Work Made For Hire), or by assignment from Contractor to City. The parties expressly agree that the Documents shall be considered a Work Made For Hire as defined by Title 17, United States Code, Section 101(2).

As further consideration for the City entering into this Contract, the Contractor hereby assigns to City all of the Contractor's rights, title, interest and ownership in the Documents, including the right to procure the copyright therein and the right to secure any renewals, reissues and extensions of any such copyright in any foreign country. The City shall be entitled to the sole and exclusive

benefit of the Documents, including the copyright thereto, and whenever required by the City, the Contractor shall at no additional compensation, execute all documents of assignment of the full and exclusive benefit and copyright thereof to the City. Any subcontractors and other independent Contractors who prepare portions of the Documents shall be required by the Contractor to execute an assignment of ownership in favor of the City before commencing work.

29. **LIVING WAGE (Applicable to contracts exceeding \$5,000).**
Unless exempt by MGO 4.20, the Contractor agrees to pay all employees employed by the Contractor in the performance of this Contract, whether on a full-time or part-time basis, a base wage of not less than the City minimum hourly wage as required by Section 4.20, Madison General Ordinances.

30. **EQUAL BENEFITS REQUIREMENT (Sec. 39.07, MGO.) (Applicable to contracts exceeding \$25,000).**
This provision applies to service contracts of more than \$25,000 executed, extended, or renewed by the City on July 1, 2012 or later, unless exempt by Sec. 39.07 of the Madison General Ordinances (MGO).

For the duration of this Contract, the Contractor agrees to offer and provide benefits to employees with domestic partners that are equal to the benefits offered and provided to married employees with spouses, and to comply with all provisions of Sec. 39.07, MGO. If a benefit would be available to the spouse of a married employee, or to the employee based on his or her status as a spouse, the benefit shall also be made available to a domestic partner of an employee, or to the employee based on his or her status as a domestic partner. "Benefits" include any plan, program or policy provided or offered to employees as part of the employer's total compensation package, including but not limited to, bereavement leave, family medical leave, sick leave, health insurance or other health benefits, dental insurance or other dental benefits, disability insurance, life insurance, membership or membership discounts, moving expenses, pension and retirement benefits, and travel benefits.

Cash Equivalent. If after making a reasonable effort to provide an equal benefit for a domestic partner of an employee, the Contractor is unable to provide the benefit, the Contractor shall provide the employee with the cash equivalent of the benefit.

Proof of Domestic Partner Status. The Contractor may require an employee to provide proof of domestic partnership status as a prerequisite to providing the equal benefits. Any such requirement of proof shall comply with Sec. 39.07(4), MGO.

Notice Posting, Compliance. The Contractor shall post a notice informing all employees of the equal benefit requirements of this Contract, the complaint procedure, and agrees to produce records upon request of the City, as required by Sec. 39.07, MGO.

Subcontractors (Service Contracts Only). Contractor shall require all subcontractors, the value of whose work is twenty-five thousand dollars (\$25,000) or more, to provide equal benefits in compliance with Sec. 39.07, MGO.

31. **BAN THE BOX - ARREST AND CRIMINAL BACKGROUND CHECKS.** (Sec. 39.08, MGO. Applicable to contracts exceeding \$25,000.)

A. **DEFINITIONS.**

For purposes of this section, "Arrest and Conviction Record" includes, but is not limited to, information indicating that a person has been questioned, apprehended, taken into custody or detention, held for investigation, arrested, charged with, indicted or tried for any felony, misdemeanor or other offense pursuant to any law enforcement or military authority.

"Conviction record" includes, but is not limited to, information indicating that a person has been convicted of a felony, misdemeanor or other offense, placed on probation, fined, imprisoned or paroled pursuant to any law enforcement or military authority.

"Background Check" means the process of checking an applicant's arrest and conviction record, through any means.

B. **REQUIREMENTS.** For the duration of this Contract, the Contractor shall:

- (1) Remove from all job application forms any questions, check boxes, or other inquiries regarding an applicant's arrest and conviction record, as defined herein.
- (2) Refrain from asking an applicant in any manner about their arrest or conviction record until after conditional offer of employment is made to the applicant in question.
- (3) Refrain from conducting a formal or informal background check or making any other inquiry using any privately or publicly available means of obtaining the arrest or conviction record of an applicant until after a conditional offer of employment is made to the applicant in question.
- (4) Make information about this ordinance available to applicants and existing employees, and post notices in prominent locations at the workplace with information about the ordinance and complaint procedure using language provided by the City.
- (5) Comply with all other provisions of Sec. 39.08, MGO.

C. **EXEMPTIONS:** This section does not apply when:

- (1) Hiring for a position where certain convictions or violations are a bar to employment in that position under applicable law, or
- (2) Hiring a position for which information about criminal or arrest record, or a background check is required by law to be performed at a time or in a manner that would otherwise be prohibited by this ordinance, including a licensed trade or profession where the licensing authority explicitly authorizes or requires the inquiry in question.

To be exempt under sec. C.(1) or (2) above, Contractor must demonstrate to the City that there is a law or regulation that requires the hiring practice in question. If so, the contractor is exempt from this section for the position(s) in question.

32. **WEAPONS PROHIBITION.**

Contractor shall prohibit, and shall require its subcontractors to prohibit, its employees from carrying weapons, including concealed weapons, in the course of performance of work under this Contract, other than while at the Contractor's or subcontractor's own business premises. This requirement shall apply to vehicles used at any City work site and vehicles used to perform any work under this Contract, except vehicles that are an employee's "own motor vehicle" pursuant to Wis. Stat. sec. 175.60(15m).

33. **IT NETWORK CONNECTION POLICY.**

If this Contract includes services such as software support, software maintenance, network services, and/or system development services and will require a Network Connection the City Network (as defined in the following link), the City's Network Connection Policy found at this link: <http://www.cityofmadison.com/attorney/documents/posNetworkConnection.doc> is hereby incorporated and made a part of this Contract and Contractor agrees to comply with all of its requirements.

34. **AUTHORITY.**

Contractor represents that it has the authority to enter into this Contract. If the Contractor is not an individual, the person signing on behalf of the Contractor represents and warrants that he or she has been duly authorized to bind the Contractor and sign this Contract on the Contractor's behalf.

35. **COUNTERPARTS, ELECTRONIC DELIVERY.**

This Contract may be signed in counterparts, each of which shall be taken together as a whole to comprise a single document. Signatures on this Contract may be exchanged between the parties by facsimile, electronic scanned copy (.pdf) or similar technology and shall be as valid as original. Executed copies or counterparts of this Contract may be delivered by facsimile or email and upon receipt will be deemed original and binding upon the parties hereto, whether or not a hard copy is also delivered. Copies of this Contract, fully executed, shall be as valid as an original.

IN WITNESS WHEREOF, the parties hereto have set their hands at Madison, Wisconsin.

CONTRACTOR

Timmons Group, Inc.

(Type or Print Name of Contracting Entity)

By: _____

(Signature)

Ronald R. Butcher, Principal

(Print Name and Title of Person Signing)

Date: 4/17/17

CITY OF MADISON, WISCONSIN
a municipal corporation

By: _____

Paul R. Soglin, Mayor

Date: 25 May 2017

Approved: _____

David P. Schmiedicke

David P. Schmiedicke, Finance Director

Date: 5/25/17

By: _____

Maribeth Witzel-Bell

Maribeth Witzel-Bell, City Clerk

Date: May 4, 2017

Approved as to Form: _____

Michael P. May

Michael P. May, City Attorney

Date: 25 MAY 2017

Eric T. Veum

Eric T. Veum, Risk Manager

Date: 5/11/17

NOTE: Certain service contracts may be executed by the designee of the Finance Director on behalf of the City of Madison:

By: _____

Randy Whitehead, CPA
Principal Accountant

Date _____

MGO 4.26(3) and (5) authorize the Finance Director or designee to sign purchase of service contracts when all of the following apply:

- (a) The funds are included in the approved City budget.
- (b) An RFP or competitive process was used, or the Contract is exempt from competitive bidding under 4.26(4)(a).
- (c) The City Attorney has approved the form of the Contract.
- (d) The Contract complies with other laws, resolutions and ordinances.
- (e) The Contract is for a period of 1 year or less, OR not more than 3 years AND the average cost is not more than \$50,000 per year, AND was subject to competitive bidding. (If over \$25,000 and exempt from bidding under 4.26(4)(a), regardless of duration of the Contract, the Common Council must authorize the Contract by resolution and the Mayor and City Clerk must sign, per 4.26(5)(b).)

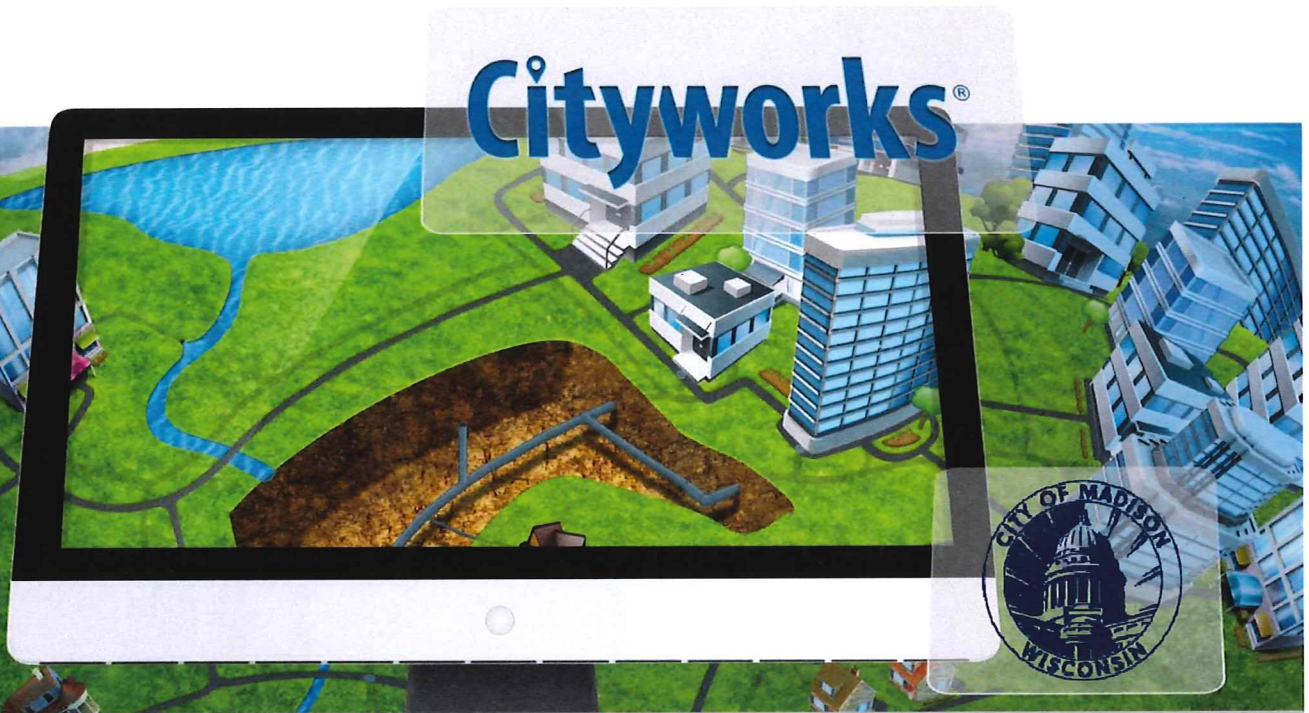
Emergency Service contracts may also be signed by the designee of the Finance Director if the requirements of MGO 4.26(3)(c) are met.

ATTACHMENT A

CMMS SOFTWARE, IMPLEMENTATION, AND TRAINING – SCOPE OF WORK (ONLY)

CITY OF MADISON, WISCONSIN
RFP# 8524-0-2016-JA

AS SUBMITTED ON JUNE 17, 2016, EDITED ON JANUARY 4, 2017 & JANUARY 16, 2017



Contact:

Louis Garcia
1001 Boulders Parkway, Suite 300
Richmond, Virginia 23225
443.904.3897
804.560.1016 fax
Louis.garcia@timmons.com
www.timmons.com





January 16, 2017

John Alliet
Finance Department
City-County Building, Room 406
210 Martin Luther King Jr. Blvd.
Madison, WI 53703

Ref: RFP# 8524-0-2016-JA

Mr. Alliet and members of the selection committee,

The following questions have been asked of the Timmons Group during the contract negotiation phase of the referenced project. Timmons Groups has either answered these questions directly or has provided guidance as to where the answers can be found within the attached scope of work, project schedule or Work Breakdown Structure.

Questions received on January 13, 2017:

1. Yes we would like add the MainTrac migration to the scope.

A: Timmons Group has added this data conversion to the scope (attached) and also added it to the Work Breakdown Structure (WBS), Costs and proposed schedule.

2. Can you include language about ongoing support (after initial 80 hours) in the scope of work and cost proposal?

A: Timmons Group has added language about ongoing support (after the initial 80 hours). Efforts such as these are normally quoted at an agreed upon rate structure. Timmons Group has included this rate structure to the scope of services (attached).

3. We would also like to see more formal change order process laid out in the scope of work.

A: The formal Change Control Process has more fully defined within the attached scope of work.

4. The City has looked more closely at its employee information integration needs. It is expected the integration will only need to move a set of employee related columns one-way into the Cityworks database and periodically maintain those employee records. This data will be in the form of a CSV file that will be previously extracted from MUNIS on a set schedule. There will not be direct integration with MUNIS. It is envisioned that the integration will CREATE records in Cityworks for NEW employees, UPDATE existing employees when attributes change, and set employees to INACTIVE when they are no longer users of the system (fired/retired). The City would like Timmons to reevaluate the level of effort and cost for this integration item now knowing the above simplified information.

A: Timmons Group has reviewed the information provided above and has revised the scope and effort required for the integration to MUNIS within the attached Scope of Work and has edited it as appropriate along with the proposed costs and proposed schedule.



January 4, 2017

John Alliet
Finance Department
City-County Building, Room 406
210 Martin Luther King Jr. Blvd.
Madison, WI 53703

Ref: RFP# 8524-0-2016-JA

Mr. Alliet and members of the selection committee,

The following questions have been asked of the Timmons Group during the contract negotiation phase of the referenced project. Timmons Groups has either answered these questions directly or has provided guidance as to where the answers can be found within the attached scope of work, project schedule or Work Breakdown Structure.

Questions received on December 20, 2016 and discussed on a conference call on December 21, 2016:

5. We (City of Madison) have options to have them (Timmons Group) work and develop directly on our servers, but would like to discuss the pros and cons.
- o There are a number of GIS layers across numerous enterprise geodatabases. Replicating that on Timmons' servers creates issues as we are continually growing the GIS in scope and content.
 - o We are able to efficiently create a development environment, precluding the need to package data, send data, restore data.
 - o A system built on the vendor server will not identify issues until it is installed.

A: Timmons Group is open to working directly within the City of Madison environment(s) during all phases of the project (development, test and production). We would require a few (likely 2 or 3) remote logins. The assumption here is that by doing this we will not experience any significant lag times due to the remote connection, access issues or schedule risks. By working within the City of Madison environment this does not introduce any significant change(s) to our project approach.

6. Not all City GIS data is currently in a condition to utilize it within the project. We were assuming we needed to meet with Timmons to discuss their previous experience related to data that is maintained in CADD.

A: As part of the Timmons Group project we perform a GIS gap analysis as part of Task 2: Implementation planning (noted within the scope of work below). As per our phone discussion of Dec. 21 all assets that the City of Madison wants to track should be within the GIS. This can be done prior to, during the project or following the implementation. The Cityworks database will need to reach a point of being "frozen" for a period of time later in the project and we will guide Madison as to when this occurs. In addition we will also require the database model of the GIS to remain static during later portions of the project as well. During these "static" periods is entirely ok to edit the data contained with the database as long as the datamodel does not change. Timmons Group is also able to work with Madison in converting the CADD data if this is desired, however these services fall outside of the existing scope of work.

7. Timmons needs to identify which items in the SOW require on-site meetings. On-site meetings are a deliverable that need to be listed.

A: The scope of work below has been edited to reflect on-site meetings as well as webinar based meetings. It is the intention of Timmons Group to utilize Webinar meetings whenever possible.

8. All tangible products need to be listed as deliverables, beyond plans and meetings.

A: the scope of work below has been edited to reflect this request.



9. What other functions will be performed at the project kick-off meeting besides "kicking off?" A presentation and minutes are not substantial enough for a deliverable visit.

A: Per our discussion on Dec. 21st the project kickoff meeting will be combined with the first week of the Project Discovery phase (or the workshops). This meeting is not a unique in-person trip with associated travel costs. In addition we expect to present to the implementation team (both City of Madison and Timmons Group resources) the agreed upon Project Schedule, Roles & Responsibilities, Communication Plan, Assumptions and Expectations, etc. we want to "set the table for project success" at this meeting.

10. The interface table in the Proposal needs modification. Incorrect things have been listed.

A: This has been noted and the table in the scope of work below represents this edit.

11. Need a very high level GANNT chart showing dependencies and concurrencies of Tasks and Phases? Estimated "timeframe" by Task in the Proposal does not give a sense of project duration.

A: A proposed project schedule developed in MS Project (with a GNATT view) has been attached.

12. Task 12: Develop testing and Acceptance Plan needs to be done prior to any deliverables of the project.

A: Per our discussion on Dec. 21 this is not correct. The Testing and Acceptance plan outline can be delivered early within the project itself (however several deliverables will proceed this). The draft and final Testing and Acceptance Pan cannot be delivered until later in the project once the preliminary design work for the configuration of Cityworks as well as the functional needs of the integrations have been finalized.

13. Task 3 is **Install Cityworks Server** in the Cloud – see the first bullet above.

A: See Question & Answer #1.

14. Task 11 is **Install Cityworks Server** see the first bullet above.

A: See Question & Answer #1.

15. Task 7 – the deliverable is a plan? Shouldn't it be a fully configured Cityworks database?

A: Task 6 deliverable is the Software Design and Configuration Plan (SD&C), the Task 7 deliverable will be the configured Cityworks database as well as a modified SD&C plan as there are always tweaks and changes made from the initial Task 6 deliverable.

16. Task 7 – does this mean that all work flows identified will be built into the system?

A: This is correct, all identified workflows (from Task 6) will be built into the system. City of Madison will review proposed workflows prior to Task 7 commencement.

17. No need to list Wonderware SCADA at this time in the integrations. (anything that is a future consideration can be removed from the SOW)

A: Noted and the scope of work below has been edited.

18. Task 13 the deliverable is 160 total hours of report writing. The answer seems obvious but we need to clarify.

A: This is correct. Timmons Group has allocated a total of 40 hour per functional group (4 functional groups) for developing reports. Due to the unknowns regarding report development at this time this level of effort can be revisited at the appropriate time within the project to determine if 40 hours is warranted. A formal change process can be initiated if the 40 hours needs revision.

19. We need to be able to read the Task and Deliverable and estimate the budget for the item.



A: Timmons Group has provide a breakout of each task effort within the scope of work below.

Engineering Functional Group Specific questions:

1. Task 1, Project Management: State date and durations for everything in Task 1 needed.

A: A proposed project schedule developed in MS Project (with a GNATT view) has been attached.

2. Initial data gathering: Possibility of adding a web meeting to review and discuss City's GIS data so we know what we are providing and when and there are no issues with data for use in CW.

A: As part of the Timmons Group project we perform a GIS gap analysis as part of Task 2: Implementation planning (noted within the scope of work below). As per our phone discussion of Dec. 21 all assets that the City of Madison wants to track should be within the GIS. This can be done prior to, during the project or following the implementation. The Cityworks database will need to reach a point of being "frozen" for a period of time later in the project and we will guide Madison as to when this occurs. In addition we will also require the database model of the GIS to remain static during later portions of the project as well. During these "static" periods is entirely ok to edit the data contained with the database as long as the datamodel does not change. Timmons Group is also able to work with Madison in converting the CADD data if this is desired, however these services fall outside of the existing scope of work.

3. Implementation Planning: Core System Design, seems like this is all IT; not sure if other project team members need to be involved. The issues I would like addressed are making certain we HW to ensure good performance and ability to use iOS app.

A: As part of the Timmons Group project we perform an IT analysis as part of Task 2: Implementation planning (noted within the scope of work below). As per our phone discussion of Dec. 21 we discussed

4. Configuration documentation: Meetings on-site or web? How much time will be spent with each group?

A: The Timmons Group proposal outlines that each group will be part of a one half (1/2) or 4 hour workshop; as well as ½ day workshops for the enterprise integrations. This was based upon the information provided within the RFP. The initial workshops are proposed to be on-site. Timmons Group feels that it is critical to have these meeting on-site as they are true information gathering sessions and are best conducted in person. On our call of Dec. 21st we discussed adding time to these meetings. Timmons Group proposes to increase these meetings to one full day (8 hours each) for each functional group. The workshops for the enterprise integrations will be held via webinar format. When combined with the project kick-off to be held during the same on-site visit Timmons Group will be on-site at City of Madison for one full week (40 hours). The resultant impacts to the scope of services, schedule and costs have been noted with the Scope of Work below.

5. Business process workshops: I'm concerned that not enough time is allotted for this task. Also, discovery on integrations provided no time; same thing for data conversion requirements.

A: The Timmons Group proposal outlines that each group will be part of a one half (1/2) or 4 hour workshop; as well as ½ day workshops for the enterprise integrations. This was based upon the information provided within the RFP. The initial workshops are proposed to be on-site. Timmons Group feels that it is critical to have these meeting on-site as they are true information gathering sessions and are best conducted in person. On our call of Dec. 21st we discussed adding time to these meetings. Timmons Group proposes to increase these meetings to one full day (8 hours each) for each functional group. The workshops for the enterprise integrations will be held via webinar format. When combined with the project kick-off to be held during the same on-site visit Timmons Group will be on-site at City of Madison for one full week (40 hours). The resultant impacts to the scope of services, schedule and costs have been noted with the Scope of Work below.

6. Off-site configuration: Should we specify which workflows we want Timmons to create? Will City be able to work on the configuration work order templates and tasks during this stage?



A: Timmons Group will configure all of the workflows that are identified within the Discovery Workshops. These will be documented via MS Visio diagrams and shared with City of Madison for comment/approval as a deliverable. (They will also be modified to show edits or changes made as they are configured within Cityworks). Frequently our clients use these as an opportunity to modify existing workflows as well. Timmons Group will grant limited access to the development website as we configure Cityworks, however we request that City of Madison is not granted access for editing or creating workflows during the time Timmons Group will require for configuration. We request that City of Madison does not edit the Cityworks configuration until the GoLive period is over.

7. PipeLogix: Have some questions – interface for structure as well as pipe inspections?

A: Timmons Group has spoken with PipeLogix and it is our understanding that all observations taken and assigned to an asset (horizontal and vertical) will be brought into Cityworks. Therefore both the structure and the pipe inspections will be captured and available within for analysis by Cityworks.

8. Tyler MUNIS : we only need employee info; not project/org codes

A: Timmons Group understands that the Engineering Group only desires that employee info be available to Cityworks via the integration with Tyler MUNIS. However the remaining functional groups will need to identify their integration requirements.

9. Mobile: Very vague, I would like more detail on what is included.

A: As Cityworks is a website all of the assorted modes of Cityworks (Office, Field, Respond, native apps) are just different "flavors" of viewing tools into the same software & database. Office is the full set of tools suite and is best suited for use on a workstation. Field is setup to be a viewer best utilized in the field on a laptop and offers the advantage of being a truncated tool set for ease of use. Respond likewise is a tool best used in the field and is optimized for use on tablet devices. Timmons Group will assist Madison in the configuration and can also modify the XML code for further modifications as to what tools are visible and which are not. The native apps (both Android and iOS) are hard coded tools and we are not able to modify these at all. The Inbox and the configuration of these tools is standard. The native tools have limited functionality and are designed for quick use while in the field and to complete work orders or to see what is "next to do".

10. Configuration Review, Meetings – Webinar: Does this occur in concert with config design? If so weekly meeting specified in proposal for Config design should be adequate. Proposal says 1 day per review. Review of entire config? Each Agency? On-site?

A: the Configuration Review meetings will take place once Timmons has completed our initial configuration of Cityworks. These meetings will take place after Madison has reviewed and approved the workflows and provided all of the necessary data needed for configuration. The Configuration review meetings are proposed to take place via webinar and are proposed to be 4 hours in length, one 4 hour meeting for each functional group. Leading up to this meeting will be several (TBD) webinar meetings where stakeholders will see Cityworks as we ask questions/get clarification during the configuration process. Please note that at this stage we will not have developed any reports, performed any data conversion, or started any enterprise integrations. Configuration tweaks will continue during the balance of the project, however after the Configuration Review meetings these changes should be minor in nature.

11. Develop Testing & Acceptance Plan: When does this occur? Seems like it should be before db installed in test environment on City server.

A: That is correct. Timmons will provide an outline of the Testing & Acceptance Plan early in the project. However the final version with specific testing routines cannot be provided until after the configuration is complete, the data conversion is complete, the report development is complete and the enterprise integrations are complete. Once at this point, and the Testing & Acceptance Plan has been approved Timmons will move the Cityworks configuration to the Test environment.

12. Report Development: Timmons specified conflicting info on hours (160 and 200) for this effort?



A: This is correct. Timmons Group has allocated a total of 40 hour per functional group (4 functional groups) for developing reports. Due to the unknowns regarding report development at this time this level of effort can be revisited at the appropriate time within the project to determine if 40 hours is warranted. A formal change process can be initiated if the 40 hours needs revision.

13. On-site Training – intro to Cityworks: Need more info on this. Who is intended audience for each training session identified? How many people allowed in each session? Timmons on-site for the training?

A: Task 14 below references Section B (also found below) that identifies a) A Training Plan developed in conjunction with Madison and b) Timmons Group proposed breakout of training “courses”. The chart identifies the intended audience. Timmons Group would prefer to keep the maximum number of students to 10 per class. Our current proposal has one trainer on-site for a total of 64 hours. 4 hours will be for Cityworks Administrator level training. 40 hours will be for end user training. These courses and subjects taught, etc. will be defined by the Training Plan to be developed. Timmons Group, per our discussion of Dec. 21 will optional cost to have 2 trainers on-site.

14. GoLive & Project Close-out: Identify and issues: Only have 10 days per proposal – adequate?

A: By the time we reach this point of the project we will have received sign off on several items regarding the delivered Cityworks configuration, Reports, enterprise integrations and data conversion/migration would all have been approved by this point. 10 days to review the final deliverables is adequate as the items to be checked will be very minimal at this point.

15. Post-GoLive Support – On-site coaching: Can each agency have 1 person from Timmons assigned to “live” with each functional work group for this period?

A: Per our discussion of Dec. 21st Timmons Group has provided an optional cost to have 4 Timmons Group resources present for GoLive. We have also provided an second optional cost for a “bucket” of GoLive support hours for a Timmons Group resource to be available and monitoring a “help line” that would be established and allow the Timmons Group resource to take remote control of the questionnaire’s workstation.



IMPLEMENTATION PLAN, TRAINING PLAN, AND MAINTENANCE SUPPORT PROGRAM

A. Implementation Plan

Based upon our understanding of The City of Madison's (The City) requirements as gleaned from Cityworks representatives, correspondence and the Request for Proposals (RFP), The Timmons Group has developed a project approach that will provide the best overall solution to The City. Our approach for each phase is centered on three major program components: Project Management, Core Software Configuration, Department (Functional Group) Specific Implementations and replacement/integration of various existing systems. Successful implementation of Cityworks as a core technology for the City of Madison's asset management plan requires a thorough understanding of the individual processes and information management applications used throughout the organization. An appropriate level of planning and strategizing is required to ensure the end-users' needs are identified, understood, and designed for prior to implementation.

As previously stated, the success or failure of Cityworks implementations is most often not attributable to the technology components, but rather to managing the implementation of the software solution and the organization's ability/inability to effectively achieve the change associated with the implementation. We will partner with The City in developing a strong body of users throughout the implementation process. The widespread adoption that is often anticipated by the project stakeholders during the planning and development of enterprise systems can quickly wane shortly after implementation if the change process is not effectively managed.

The failure to adequately train and support new users is often a cause for immediate and permanent resistance to the adoption of the system. ***Incorporating a strong training and coaching program is an effective change management tool*** and appropriate budget allocations should be made and adhered to throughout the system implementation and adoption life-cycles. In addition, The City would be well-served by identifying and empowering staff responsible for the daily operations and administration of the system. This individual (or individuals) should have a broad understanding of the varied services each department provides, the technique in which services are delivered, and the manner of how Cityworks solution supports the delivery of each service. The responsibilities will also include the coordination of various support mechanisms available to each end user for the assistance for expanding the user's knowledge of not just their role within the asset management program, but also in a broader context of the overall importance of the enterprise work management program to the organization.

Phase I – Cityworks AMS Implementation

During our first project phase, we will implement Cityworks Server AMS.

Task 1: Project Management

Shortly after we receive notice to proceed, we will prepare an initial Project Management Plan (PMP) document, and begin initial data gathering to prepare for the kickoff meeting. We will also hold a webinar meeting with The City PM and IT staff to discuss the proposed solutions we will be implementing and their impacts to your existing computing environment. This "primes the pump" for the kickoff meeting and configuration workshops and ensures there will be no IT related bottlenecks related to hardware or software purchases.

Our project manager will employ a variety of controls and management tools designed to successfully complete this project in a timely manner while keeping The City informed of our progress throughout the duration of the project. The scope of this project will require our team to work with many different City staff members on a number of project tasks.

Our Approach to Project Management

Timmons Group specializes in delivering asset management solutions for our clients. We have accumulated years of experience and lessons-learned that has shaped our project management and implementation approach.



Our project manager will be responsible for:

- Facilitating meetings between the Timmons Group team and the City's project stakeholders;
- Preparing for, and conducting, all on-site and on-line meetings;
- Reporting risks and impediments to the team as issues arise and maintaining a risk registry on our web-based project portal;
- Maintaining the project work plan and project schedule;
- Managing change; and
- Monitoring and reporting project performance.

Project Management Plan (PMP)

The PMP integrates and consolidates all of the subsidiary management plans from the planning process, including:

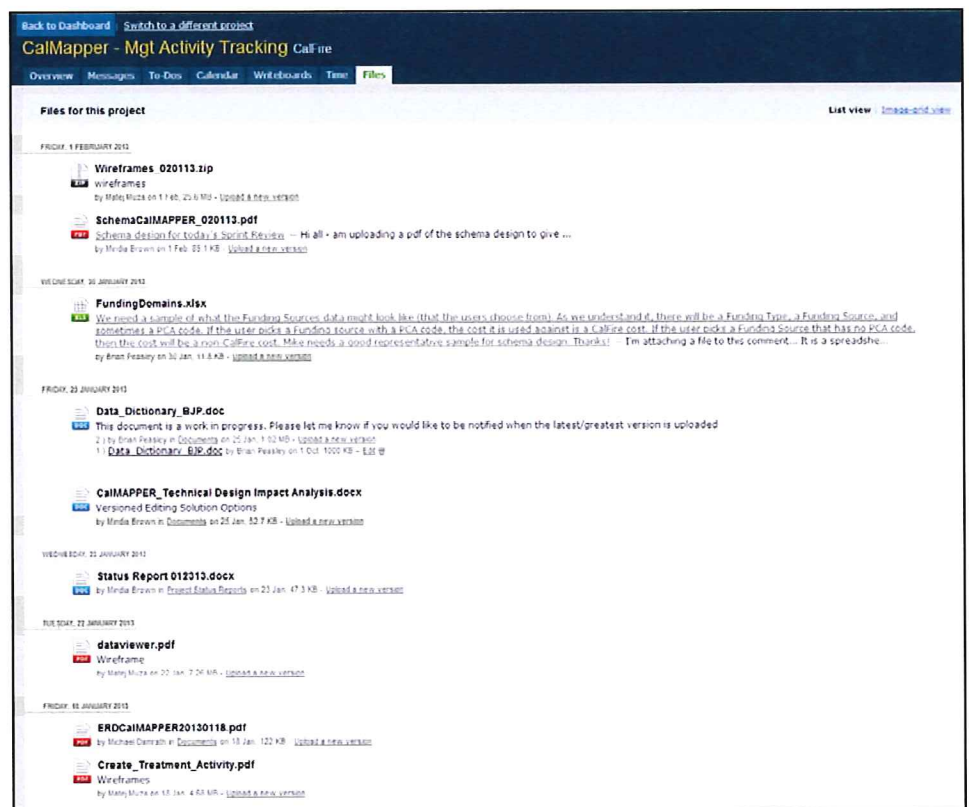
- Scope management plan (including the change
- Schedule management plan
- Cost management plan
- Quality management plan
- Human resource plan
- Communications management plan
- Risk management plan
- Procurement management plan

Project baselines are established for schedule, cost and scope. These baselines are combined into a performance measurement baseline against which integrated performance can be measured throughout project execution. Our Project Manager will develop and deliver a PMP outlining the tasks, schedule, deliverables/milestones, communication plan and the associated resources (internal/external) necessary for the project to be successful.

Project Tracking and Reporting

Timmons Group will maintain procedures throughout the project for tracking and reporting progress. We will establish a dedicated, secure online project portal that provides centralized, on-demand access to project documents and status. Our approach to project management is very "hands-on" and will support constant communication to minimize project risk, remove impediments to progress, and to ensure that we are delivering the best possible solution.

Standard project management documents that will be posted to the project portal include: status reports (MS Word), current and past versions of the project work plan (MS Project), key project decision log, risk register and a task/action item log. At the end of each month we will provide City of Madison with a project status report that documents the activities performed during the previous month. At a minimum the report shall address the



Sample Project Portal



following:

- Status of all tasks;
- Planned work to be carried out in the ensuing month;
- Problems (risks and impediments) encountered;
- Mitigation actions taken to resolve problems;
- Key decisions (technical and administrative);
- Open action items;
- Schedule update;
- Financial update; and
- Project performance measurements.

Questions and Issue Tracking

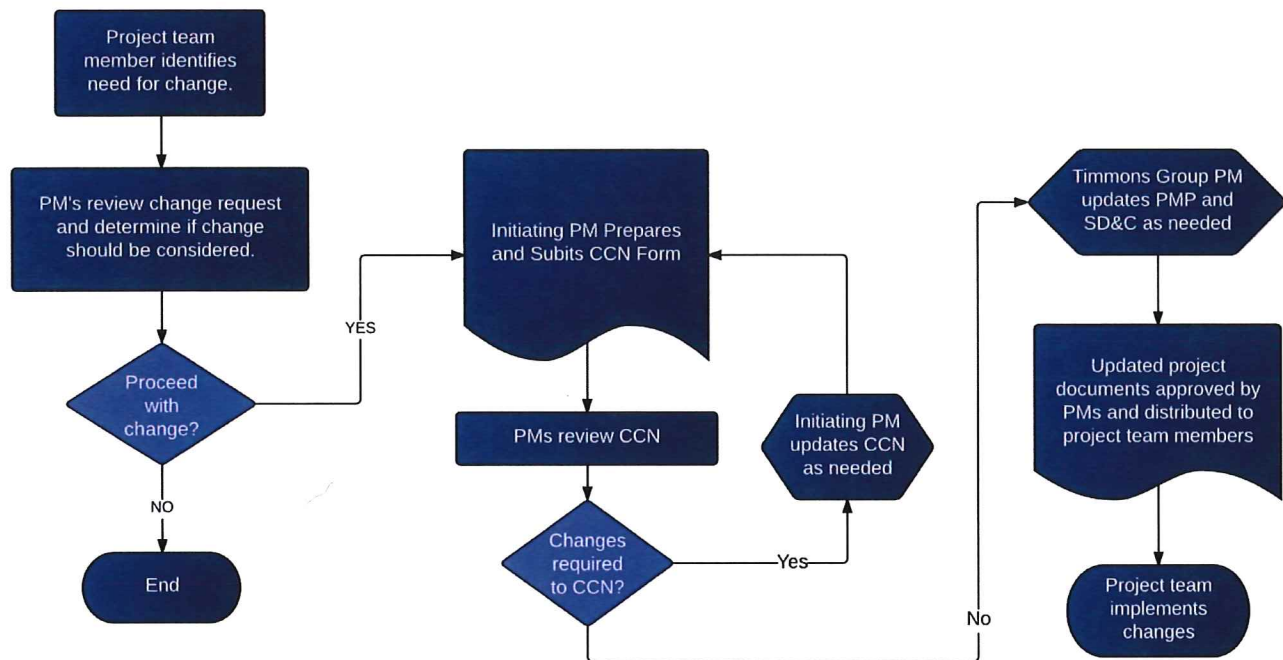
Timmons Group recognizes that communication between The City and our project team must follow a standard flow, if the project is to succeed. We will assume the primary role of controlling communication between our project team members as well as City employees. Should issues arise during the course of the project, we will log and track issues and key decisions (administrative and technical), questions, and action items in order to ensure that the decisions made during the communications are appropriate and that all resolutions are documented. The project tracking log will be maintained on the project portal.

Our Approach to Quality Control

Quality Control on a Timmons Group Cityworks implementation project is on-going throughout the life of the project. In addition to formal items such as a Project Management Plan, Testing Plan and an Acceptance Plan and Acceptance Certification, we employ several quality control measures throughout the life of the project. We have assigned a Project Director to this project. In this role the Project Director will act as the Senior Technical Reviewer for all project deliverables. Specific quality control procedures include internal review meeting between the Project Director and the project team as well as a formal change control process to deal with project changes. Timmons Group has clear and defined roles for the Quality Control responsibilities of all staff members. Because all staff levels of the project team are involved in delivering quality service to our clients, each employee is given the necessary training and orientation to perform a specific task. Prior to being assigned to a specific Quality Control responsibility, staff members must meet minimum qualifications and must be approved by the Principal in Charge. Timmons Group has an established program for project Quality Control that is incorporated into our contract management process. Our primary means of building quality into every phase of each project is through the use of assigned senior technical reviewers (STR) and periodic QA reviews at the program level. Our reputation is built on the execution of existing work and products. Timmons Group has an excellent track record of providing high-quality services to public agencies, as demonstrated by our strong past performance ratings.

Change Management Plan

Understanding that issues will arise during the project that may require changes to the agreed-upon scope of work, a proactive method of identification and management of these issues must be utilized. Timmons Group uses a Change Control Process that is illustrated in the following process flow diagram:



Final project costs are established through the development of a detailed Scope of Work – **one that establishes what products and services will be delivered as well as those that will not be provided as part of the established fee.** A level of open and honest communication among all stakeholders is required such that system functionality can be balanced with available funding, and appropriate and reasonable expectations set. Once these elements have been addressed, cost control becomes a multi-tiered effort involving effective project management, clear communication among stakeholders (especially the Project Managers), schedule management, and quality control. To protect both parties, client and consultant, a Change Control Process must be developed and adhered to throughout all phases of the project.

Any modifications or deviations from the agreed upon Scope of Work, including system functionality, service delivery, technical documentation, or project schedule or budget will be subject to **Change Control** procedures:

Any project team member may initiate a **Change Request** whenever there is a perceived need for a change that will affect the desired or anticipated outcome of the work or any element of the project. The project team member should use a **Change Control Notice (CCN)** form as appropriate for the change:

1. Agreement to a **Change Request** signifies agreement to a change in overall costs, functionality, time scales, or other identified project impact.
2. Changes will be identified and communicated by / to the respective Project Managers by any of the prescribed communication channels. **Change Requests** may be introduced via verbal conversation or other form of communication but must be supported by the appropriate **CCN** document.
3. All **CCN's** will be signed by both the Timmons Group and City of Madison Project Managers to indicate acceptance of the changes.
4. All project participants should understand that time is of the essence when initiating, reviewing, negotiating, and approving **Change Requests**, as any delays to work in progress caused by a **CCN** may impact the overall project schedule.

A complete library of CCN documents will be developed and archived for team reference as the project progresses.



Phase 1, Task 1 – City of Madison Responsibilities:

- City of Madison will review the Project Management Plan and ensure it meets requirements (2FTE hours).
- City of Madison's project manager can assume a need of 4-8 hours per week during project duration
- Key personnel for each functional group can assume a need for 2 hours for project management plan review and 2 hours per week during project duration for communication, status meetings, etc.

Phase 1, Task 1 - Deliverables:

- The Timmons Group Project Manager will draft and deliver a project management plan for an initial review by City of Madison's Project Manager and key staff, as deemed appropriate. The draft plan will be provided in advance of the project kickoff meeting. The project management plan is a dynamic (living) document that will be managed over the life of the project.
- A project collaboration portal will be setup for the duration of the project and for support after Go-live.
- A Testing & Acceptance Plan outline will be provided.
- Webinar based Monthly progress meetings to be held throughout project duration.

Phase 1, Task 1 - Assumptions:

- City of Madison will review all documentation in a timely manner.

Phase 1, Task 1 – Estimated Timeframe:

- Project Management activities will occur throughout the duration of the project



Task 2: Implementation Planning

The goal of this task and its subtasks is to develop a System Design and Configuration (SD&C) Plan that consolidates the gathered data with workflows, data migration requirements, and interface requirements that will be identified and modeled during a series of configuration workshops.

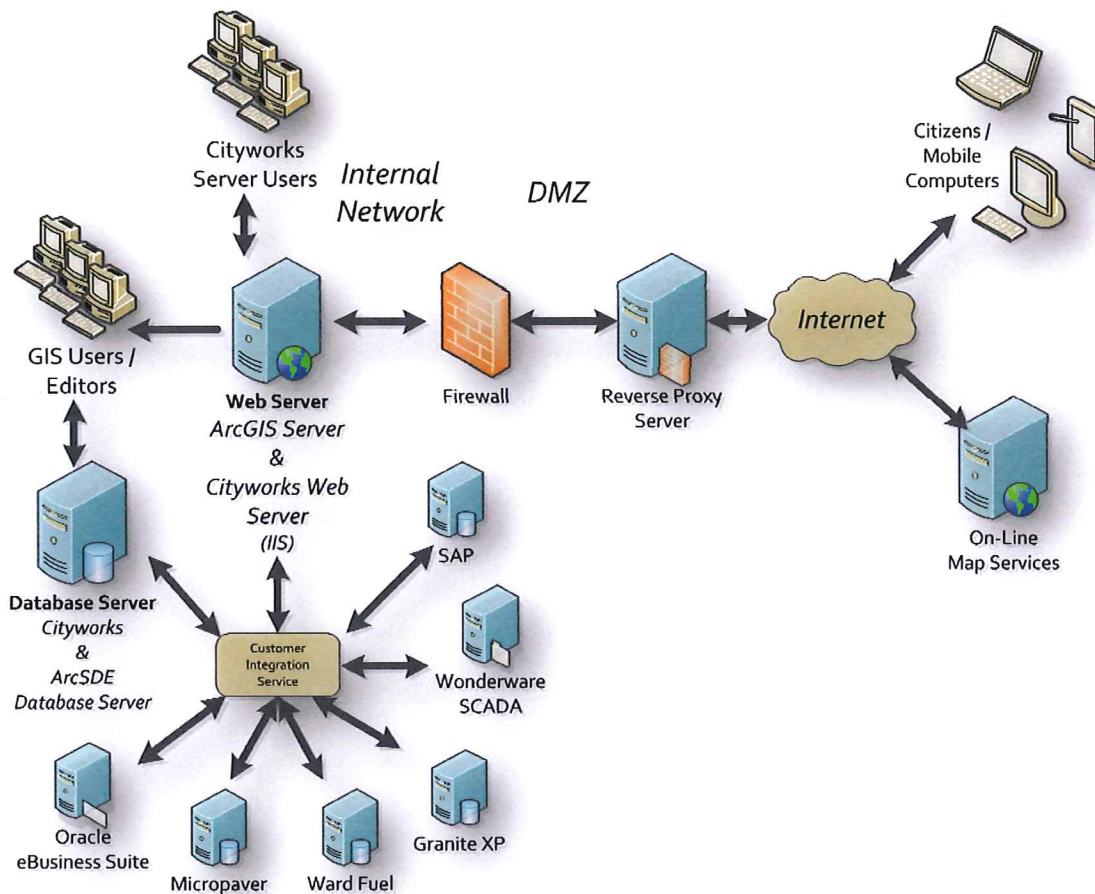
IT System Review

Our implementation team will meet with The City's project management team and IT staff to discuss hardware and environment requirements for the Cityworks implementation. During this meeting, various system architectures and minimum requirements will be explored to ensure a stable implementation for The City. The goal is to ensure hardware is in place and that all related system and security policies are understood prior to initial software configuration.

The implementation team will document the Core System Design Plan components required to support the Cityworks implementation. The Core System Design Plan is developed in preparation for the configuration and implementation of Cityworks. This plan will include the following:

Network Requirements	Hardware Requirements
Peripheral Requirements	Software Applications
Internal Security	DMZ

Following is a standard Cityworks IT architecture:



Phase 1, Task 2: City of Madison Responsibilities:

- City of Madison project manager assistance in scheduling IT review meeting. (1 FTE hour)
- City of Madison Information System stakeholder attendance/participation in meeting. (2 FTE hours each attendee).

Phase 1, Task 2: Deliverables:

- Core System plan for Hardware, Software, and network configuration
- IT Review Meeting (webinar) and memo identifying any gaps
- GIS Data Review (webinar) and memo identifying any gaps

Phase 1, Task 2: Assumptions:

- City of Madison will review and comment on all documentation in a timely manner.

Phase 1, Task 2 – Estimated Timeframe:

- IT Review meeting and task deliverable are estimated to take 2-3 weeks to complete depending on City availability

Configuration Document Meeting

The implementation team will meet with the City Project Manager and key functional group stakeholders to review the contents of the Cityworks Configuration Document. The Cityworks Configuration Document is a collection of spreadsheets related to information required for population of the Cityworks system. With our implementation team's assistance, the City will provide data to populate associated configuration spreadsheets prior to the Configuration Workshops. Any information the City can deliver prior to the workshops will be used by the implementation team to design, configure and implement the initial Cityworks configuration.

The Cityworks Configuration Document contains eleven main configuration categories. Each is identified below and will be discussed in detail during the Configuration Document Meeting:



- **Domain Security** – a security structure and method of organization. The rest of the manual builds on this section; it should be done first.
- **Employee Hierarchy** – A list of all employees with login and domain information.
- **Work Orders** – Lists of all the primary activities each department handles.
- **Tasks** – Lists of all the tasks associated with the work orders.
- **Materials Hierarchy** – A list and organizational method for your work order materials.
- **Equipment Hierarchy** – A list and organizational method for your work order equipment.
- **Service Requests** – Details about all the service requests or calls that may come in.
- **Project Hierarchy** – Define any ongoing municipal and capital improvement projects.
- **Contractors List** – Details about contractors used for work activities.
- **Inspections** – A list of inspections completed against assets along with the information captured during the inspection.
- **Storeroom Configuration** – Details concerning the storeroom names, stock on hand and security.

Our team's Configuration Manager, will work closely with the City Project Manager to ensure that the City understands the configuration documentation and data to be gathered. Our configuration team will take information provided by the City along with the Esri geodatabase and configure the Timmons hosted Cityworks "sandbox" installation that will be used during the kickoff meeting and configuration workshops.

Phase 1 Task 2: City of Madison Responsibility:

- *Configuration Document Review Meeting. (2 FTE Hours per participant)*
- *Review and provide data. (4 -8 FTE Hours Per Functional Group)*

Phase 1, Task 2: Deliverables:

- *Unpopulated configuration documents with spreadsheets for City of Madison to populate with appropriate data.*
- *Configuration document with spreadsheets initially filled out from data supplied by the City of Madison.*

Phase 1, Task 2 : Assumptions:

- *City of Madison will provide data as identified in the Configuration Document and supporting spreadsheets.*
- *City of Madison will provide to Timmons an updated geodatabase of all assets covered within the scope of this project.*

Phase 1, Task 2 – Estimated Timeframe:

- *Configuration Document completion is estimated to take 4-6 weeks to complete*

Task 3: Install Cityworks Server

We will install the core Cityworks software in our secure, cloud environment. The intent of the cloud installation is to meet the initial Cityworks implementation requirements which include initial system configuration and configuration customization. We will work directly with the City's Project Manager to verify that all core system components are installed and appropriately configured. Our implementation team will facilitate Cityworks software installation, set-up, and initial configuration.

The purpose of installing this software at an early stage in the project is two-fold: It establishes the core system that will later be configured and tested, and is the ideal platform for familiarizing City staff with the software as a sandbox for your use. From experience, we have determined that it is important for potential end users to see the software prior to discussions about functional needs so that they have a basic understanding of the software's capabilities and limitations. This server will be linked with a copy of the City's Esri geodatabase.

Phase 1, Task 3: City of Madison Responsibility:

- *Provide a copy of The City of Madison's Esri geodatabase*
- *City of Madison's GIS resource (2 FTE hours)*
- *If utilizing City of Madison development environment the time to setup, ensure all hardware and software necessary for Cityworks is set up, etc. (unknown effort).*

Phase 1, Task 3: Deliverables:

- *The core Cityworks Server AMS software installed in our secure cloud environment (or City of Madison development environment)*

Phase 1, Task 3: Assumptions:



- *N/A. (if utilizing City of Madison development environment: all necessary hardware and software to be installed and configured prior to Cityworks installation. Timmons Group will not experience any significant lag times due to the remote connection, access issues or schedule risks.)*

Phase 1, Task 3 – Estimated Timeframe:

- *The initial installation of Cityworks is estimated to require 2-3 weeks once the City's GIS data is received*



Task 4: Project Kickoff Meeting

Project team members and participating City Functional Group staff will participate in a Project Kickoff Meeting to be held for the purpose of introducing the project participants, to establish the roles and responsibilities of all Project Participants, validate the City's goals and objectives, establish the lines of communication to be employed throughout the duration of the project, and to answer any questions City staff may have. The kickoff meeting shall be one half day in duration.

Phase 1, Task 4: City of Madison Responsibility:

- *City of Madison project manager assistance in scheduling pre-kickoff & kickoff meeting. (4 FTE hours)*
- *City of Madison Information System stakeholder attendance/participation in pre-kickoff meeting. (4 FTE hours each attendee).*
- *City of Madison key stakeholder attendance/participation in kickoff meeting (4 FTE hours each attendee).*

Phase 1, Task 4: Deliverables:

- *Project presentation and meeting minutes. On-site Project Kick-off meeting.*
- *High level review of the Project Management Plan, schedule, roles, responsibilities, etc. during the meeting.*

Phase 1, Task 4: Assumptions:

- *City of Madison will provide a conference room appropriately sized for the number of participants.*

Phase 1, Task 4 – Estimated Timeframe:

- *Project Kick-off meeting should occur approximately 4 weeks after the project has been initiated*

Task 5: Business Process Workshops

Our implementation team will conduct a series of workshops over one (1) four (4) day period to cover configuration data and workflows with the Functional Groups for the asset categories, work order and inspection workflows, interfaces, integration, reporting, and data migration identified in the RFP. The four days of workshops will be broken up into eight (8) half day guided workshops. These workshops are designed to establish and assess the Business Requirements, User Requirements, and Functional Requirements that must be considered when developing the SD&C Plan. It is expected that the City will provide the facility for the on-site workshops and coordinate staff attendance for all workshops. The workshops will be conducted by Functional Group as follows:

1. City Engineering
2. Traffic Engineering
3. Parking Utility
4. Water Utility

In addition we will meet with the required stakeholders to discover the exact methodology and integration points required for the identified integrations with Cityworks, specifically these are:

5. Pipelogix
6. Tyler MUNIS
7. Dynamics SL



8. Data Conversion requirements (MainTrac and Accela)

For the first 30 minutes of the workshop our implementation team will conduct a brief software training session (Casual User) using the City's data and maps provided by the City. The session will give the workshop attendees an opportunity to review and understand the software, potential impacts and changes in their daily business processes, and the purpose of adopting the new tools. There are no prerequisites for this training. It has been our experience that successful adoption of Cityworks is supported by continued, repeated exposure of the software during the workshops and review meetings.

During the workshops, our implementation team will analyze the various technological, operational, and organizational elements of the City's business. This will be an essential procedure in order to ensure the planned Cityworks implementation and expected system interfaces are capable of delivering the feature-rich data needed to support the numerous complex operations and maintenance activities undertaken by the various departments.

In support of these efforts, our implementation team will analyze with each Functional Group the following critical elements:

- **Business Drivers** – The core functions that will benefit from the implementation of the Cityworks solution. These may include inventory, custom billing, time tracking, engineering planning and design, construction inspection and administration, operations and maintenance, inspections, regulatory compliance, customer service, disaster preparedness and emergency response, executive decision processes, etc.
- **Workflows** – Current departmental/Functional Group (internal and external) business processes and work flows that will either contribute to, or be replaced by, the planned Cityworks implementation. Key workflows that should be analyzed include, but are not limited to, inventory / data capture and maintenance, data distribution, data consumption, system planning and analysis, customer inquiry, reporting, etc.
- **Systems and Applications** – Information technology and process automation tools currently deployed and maintained by the City or Functional Group should be investigated and analyzed in terms of their ability to support the increased network traffic, data loads, and application maintenance requirements introduced by the planned Cityworks program. Additionally, existing business applications such as network modeling, mobile computing, customer relationship management, etc., should be investigated to determine the best manner by which to integrate with the planned Cityworks system.
- **Data** – Existing data sets (spatial and tabular) and reports maintained for the purpose of supporting the daily operation and maintenance of the departments and their associated processes must be inventoried and analyzed for the purpose of supporting the development of any required data conversion/migration/development plans.
- **Best Practices** – Established asset management best practices, as they relate to the City or Functional Group's current operational mandates, contrasted with where the various departments currently fall within the spectrum, should be established and benchmarked for the purpose of establishing the required system implementation path needed to guide the City to its ultimate Cityworks deployment and adoption goals and objectives.

These core elements will provide our implementation team and the City with an understanding of the needs and challenges the departments will face as they move to implement Cityworks. The initial business process analysis provides our implementation team with a detailed look into the everyday processes marshaled by City staff. A primary objective of this task is for our implementation team to review and understand how the City conducts business and manages its assets. The ultimate goal is to provide knowledge to support and enable our implementation team to properly address the technological impacts of the system deployment and the City in order to understand the technological impacts and the non-technological impacts related to business processes and workflows.



Phase 1, Task 5: City of Madison Responsibility:

- City of Madison will be responsible for assisting our implementation team's Project Manager with the development of a comprehensive agenda based on department and key staff. It will also be necessary for the participants in the workshops to review the SD&C Plan drafts and to provide data and discuss workflows identified in the workshops.
- City of Madison's project manager assistance in scheduling workshops. (4 FTE hours)
- City of Madison key stakeholder for each Functional Group attendance/participation in on-site Workflow workshop (8 FTE hours each attendee).
- City of Madison key stakeholder for each Functional Group attendance/participation in webinar enterprise integration workshop (2 FTE hours each attendee per integration).
- City of Madison key stakeholder for each Functional Group attendance/participation in webinar data migration workshop (2 FTE hours each attendee).

Phase 1, Task 5: Deliverables:

- Four (4) full day (8 hours) on-site workshop meetings of each Functional group
- Functional Needs requirements gathering for the enterprise integrations will occur via Webinar sessions (2 hours in duration for each integration).
- Data Migration requirements workshop will occur via a webinar session (2 hours in duration)
- Workshop meeting minutes.
- Existing and Proposed workflows in MS Visio format

Phase 1, Task 5: Assumptions:

- City of Madison will provide a conference room appropriately sized for the number of participants. Critical City of Madison staff will attend workshops as defined by the configuration workshop agenda.
- Project Kick-off and 4 full day (8 hours) on-site workshop will occur within the same 5 day work week.
- Functional Needs requirements gathering for the enterprise integrations will occur via Webinar sessions.

Phase 1, Task 5 – Estimated Timeframe:

- Functional Group workshops will occur immediately following the project kick-off and will be 1 week in duration.

Interfaces with Other Systems

During the configuration workshops, we will identify interface requirements between each system identified in the RFP for integration with Cityworks. Cityworks is built using open standards and technology, storing data in an open, published format utilizing standard commercial SQL databases, such as Microsoft SQL Server. The open standards design of Cityworks is the key to developing interfaces to your critical business systems, developing custom applications and reports that enhance each individual system. These interfaces may be created in-house or by a third-party contractor.

Cityworks customers are free to use the Cityworks data structures to build interfaces to other databases such as Customer Information Systems, Financials Information Systems, Human Resource Management Systems, fleet management, and related business applications. Several customer sites have even created their own applications to access their data. Their licensing policy does not prohibit this in any way. This truly means Cityworks is open.

Access and utilization of these data in Cityworks is unencumbered for the client's internal usage for the following uses:

- Data conversion and data migration into or out of Cityworks.
- Internal application development for add-ons to Cityworks or for an application that is complementary to Cityworks, as long as the application is not a reverse engineering of Cityworks.
- The development and maintenance interface from Cityworks to citizen web pages for information and service request systems. The licensee has access to the complete documentation of all Cityworks data structures.

We have integrated Cityworks an ample amount of times to understand that each organization's integration requirements are unique. To be sure, there are elements that are common to many, such as updates to employee records, materials inventory and equipment. Some organizations add additional capabilities such as time entry for payroll, and work order integration. Some organizations capture customer call information in a separate CIS, and have new customer requests automatically create either a service request or work order in



Cityworks. We have developed integrations that update Cityworks and the integrated system in near-real-time as business needs are required. Other integration tasks are better suited for nightly updates.

There are many variations to interface requirements. We recommend that you allow us to help you define your requirements, and understand them within the context of the different integration options available. We will help you design the most economical integration model that meets your business needs. It is not possible to accurately estimate the scope of any integration effort until the detailed requirements are understood.

Task 6: System Design and Configuration (SD&C) Plan

Once all required information regarding the current work order management, service request, and inspection processes are collected and organized, our implementation team will work together to analyze and document the current status of the primary components of the business process. Specifically, these components will be analyzed:

- **Current IT Systems and Applications** – This includes relevant computer, network and peripheral infrastructure that the Cityworks system would utilize. This also includes any existing software applications that the new system might need information from, or need to provide information to (e.g., financial, assessment, codes) and security requirements.
- **Current Data Sets** – Focus on data and best practices for Cityworks. Specifically, this would include the work order, service request, and inspection documentation and data. The Esri geodatabase that will be mapped to Cityworks we expect limited if any, modification will be necessary.
- **Current Workflows** – Define and model Work orders, Service Requests, Inspections, Interface Communication, and migration of existing data leveraging Cityworks and our team's best practices.
- **Required Outputs** – The required outputs of the current business process will be reviewed. Outputs can take many forms, and may include: reports, form letters, e-mails, export files, and receipts.
- **Required System Interfaces** – The RFP identifies the need for the Cityworks system to interface with the Esri GIS, and various other systems. Our project team has reviewed the provided information and has provided details of our proposed integrations within Task 8.

Following the configuration workshops, our implementation team will develop a report that documents the "as-is" situation and puts forth the recommended, or "to-be" (future state), workflows of the new Cityworks system. The recommended changes will strive to enhance the efficiency of required tasks and follow industry best practices, as well as to enhance the satisfaction of the citizens/businesses being served. The resulting Software Design and Configuration (SD&C) plan will be the "floor plan" for the configuration of the Cityworks system.

Phase 1, Task 6: City of Madison Responsibility:

- *Review of draft SD&C's. (4 - 8 FTE Hours Per Department)*

Phase 1, Task 6: Deliverables:

- *SD&C Plan drafts.*

Phase 1, Task 6: Assumptions:

- *City of Madison will review all documentation in a timely manner.*

Phase 1, Task 6 – Estimated Timeframe:

- *The SDC plan will require approximately 8-12 weeks to complete.*

Task 7: Cityworks AMS Configuration

The goal of this task is to configure Cityworks based on the SD&C Plan and deploy on the City's server for review prior to final implementation. The implementation team will take the information gathered and documented and configure the Cityworks database. This task will take place at Timmons Group's office within our computing environment. The configuration of Cityworks will be based on the Cityworks Configuration Document and the SD&C Plan developed from the onsite workshops.



Services for this task will include, but are not limited to:

Work order or request types	System Administration
Work tasks for each work order type	Login, concepts, data model, viewing
Employees and labor classifications in that department	Print Templates
Inventory (material) types	Creating and managing call center activities
Major equipment types	Advanced aspects of call center
Existing datasets used or slated to be used in the work order or request process	Creating and managing problem hierarchy
Samples of service request and work order printout forms	General Configuration Issues

Phase 1, Task 7: City of Madison Responsibility:

- City of Madison project manager and key stakeholders for each Function Group, Weekly Progress Meetings (1 FTE's Every Week).

Phase 1, Task 7: Deliverables:

- Updated Cityworks Configuration Document and SD&C Plan.
- Cityworks configuration reflecting the workflows only (no Reports, integrations or converted/migrated data)

Phase 1, Task 7: Assumptions:

- Cityworks configuration will implemented in Timmons Group cloud environment (or City of Madison development environment). Key City of Madison staff will have full access to this environment for training and review.

Phase 1, Task 7 – Estimated Timeframe:

- The configuration of Cityworks per the SD&C Plan will require approximately 8-12 weeks



Task 8: Enterprise System Integration (Interfaces)

The City has identified three systems that need to integrate with the new system, specifically Pipelogix, Tyler MUNIS and Dynamics SL. The concept of the enterprise system is to create interface points for systems to share appropriate information with other systems. Our team has extensive experience configuring software and systems leveraging Cityworks API's that include Service Request, Work Order, Inspections and metrics, Cityworks SDK, and existing interfaces for numerous customer billing, SCADA, Financial, Fleet Management, Billing, AVL, UDF, leak detection, etc. systems.

Timmons Group has developed and utilized a Modified Agile methodology to successfully implement many heterogeneous systems integrations/interfaces. Our methodology is comprised of five (5) primary steps. These steps are a result of our experience with





business systems integration and help to ensure a smooth and reliable project lifecycle and production outcome.

The steps include Planning, Build, Training, Production Deployment, and Post Production System Review. These steps ensure that we include everyone and every system of record in the development of detailed requirements for the design of the interface(s). Once the interfaces are developed, a rigorous testing plan will be executed. Upon successful completion of this User Acceptance Testing (UAT), the interfaces are ready for deployment. However, prior to the final production deployment, user training is performed for those impacted directly by the project.

The City has requested the creation of interfaces between Cityworks and the following:

System	Description	Data	Technology	Interface
Pipelogix	CCTV	Camera Information	Internet	Pipelogix Interface
Tyler MUNIS	ERP, Budget codes, inventory	Dashboard and Reporting	MS-SQL Server	CSV from MUNIS, Batch Processes to edit tables in Cityworks
Microsoft Dynamics SL	Financial, Pay, General Ledger, Receivables, Payments, Inventory, Costing & time accounting	Labor, Material, Equipment, Cost	MS-SQL Server	Cityworks SDK
Esri ArcGIS	Geographic Information System	Parcels, Streets, Infrastructure, images, etc.	MS-SQL Server and Web Services	Network
Mobile	Mobile	Service Requests, Work Orders, Inspections	MS-SQL Server	Cellular Network, (possible), Native OS or SDK, SR and WO API's

The concept of the enterprise system is to create interface points for users to share appropriate information with other users, without having the overhead of all the software packages for each application. Our team has extensive experience configuring software and systems leveraging Cityworks API's that include Service Request, Work Order, Inspections and Metrics, Cityworks SDK, and existing interfaces for Granite XP and MicroPaver. A good example is our iOS based Cityworks Mobility Application that interfaces with Cityworks software through the Cityworks Work Order and Service Request API's. Following is our Teams approach for the City's integrations:

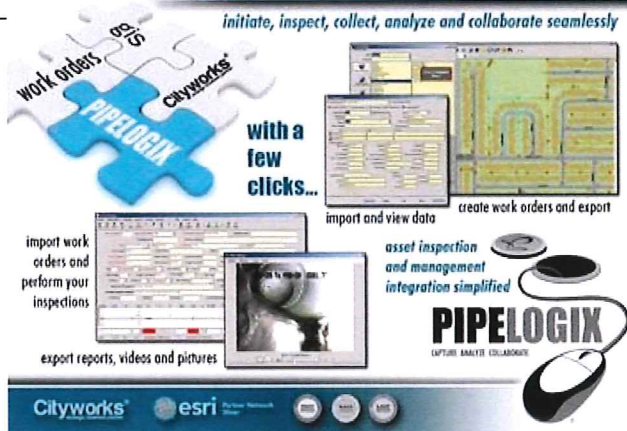
- **GIS (Esri)** – There is no integration necessary as Cityworks® Server AMS directly read/write to the Esri geodatabase. Our team also expects a minimal amount of manipulation to the existing City geodatabase as the RFP states they will be doing the data manipulation work from various sources into Esri.
- **Mobile** – There are a number of COTS mobile applications out on the market that integrate with Cityworks along with offerings by Cityworks. Additionally, Cityworks provides an SDK and API's for developing specialized mobile applications (similar to Timmons Group's VDOT mobile application for iOS). It has been our experience that the first step in this process would be to develop the requirements and then determine the best path for implementation of a mobile strategy. As part of our approach we will assist the County with the development of these requirements and provide a sound Mobile strategy that will lead to a successful Mobile implementation.



CMMS Software, Implementation, and Training Cityworks and PipeLogix...a natural fit

Task 8a: PipeLogix Integration

PipeLogix - Timmons Group has integrated numerous CCTV systems with a number of our Cityworks implementation clients, including Alpharetta, Fayetteville, Auburn and others. The configuration workshops will identify the necessary data linkages between PipeLogix and Cityworks. PipeLogix has had an interface with Cityworks since 2008 that works with PACP mode. In 2009 the ability to work with any Cityworks condition code group was added. A Work Order of inspections for assets is created in Cityworks. With a Full Reporting or Lite Reporting license, the Cityworks import into PipeLogix is selected. The import logs into the Cityworks database, displays the Work Order number to be selected. The import will add mapped asset detail into the PipeLogix pipe tables and create a Project of surveys. The CCTV Inspector just selects the survey and completes the inspection. The export from PipeLogix creates the inspection in Cityworks with the associated links to pictures or movies. The Inspection number is added to the PipeLogix survey form. The existing Cityworks API will be utilized for the integration. The methodology to be utilized for the design and execution of the integration is detailed above.



Task 8b: Tyler MUNIS Integration

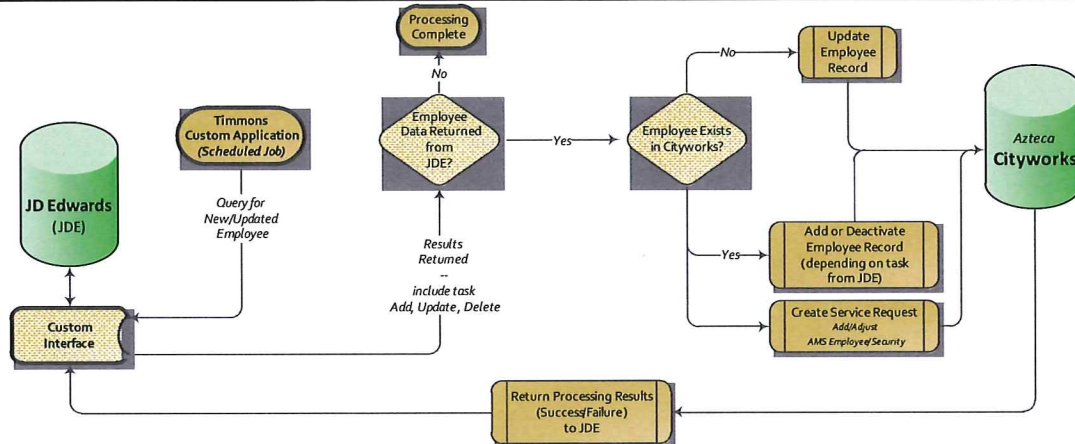
Tyler MUNIS – Timmons Group has worked extensively with a number of financial and ERP software's ability to integrate data with the Cityworks environment. We recently have integrated Tyler MUNIS with Alpharetta and Newport News. The configuration of the integration with MUNIS was defined in an email to Timmons Group on January 13, 2017 as follows:

The City has looked more closely at its employee information integration needs. It is expected the integration will only need to move a set of employee related columns one-way into the Cityworks database and periodically maintain those employee records. This data will be in the form of a CSV file that will be previously extracted from MUNIS on a set schedule. There will not be direct integration with MUNIS. It is envisioned that the integration will CREATE records in Cityworks for NEW employees, UPDATE existing employees when attributes change, and set employees to INACTIVE when they are no longer users of the system (fired/retired).

Based upon the email received on January 13, 2017 and detailed above Timmons Group will utilize a batch process, to be designed by Timmons Group, to accomplish the transfer of the necessary datasets from MUNIS to Cityworks. The City of Madison will develop a CSV file from MUNIS which the batch process designed by Timmons Group will then utilize to edit (add, modify or delete) the indicated employee tables within Cityworks.

Task 8c: Microsoft Dynamics SL Integration

Microsoft Dynamics SL – Timmons Group has worked extensively with a number of financial software's ability to integrate data with the Cityworks environment. The configuration workshops will identify the communication conduits between the two software's either through API/Web Services and/or database triggers. The methodology to be utilized for the design and execution of the integration is detailed above. Below is an example of the interface between Cityworks and JD Edwards Financial that Timmons developed for American States Utility Systems:



Phase 1, Task 8: City of Madison Responsibility:

- Gather information for integration needs requirements (8-16 FTE Hours Per integration).
- Additional meetings as required (approximately 16 FTE Hours Per integration per participant).

Phase 1, Task 8: Deliverables:

- Functional Needs requirements gathering for the enterprise integrations will occur via Webinar sessions.
- Workflow Diagram and Application Design Document.

Phase 1, Task 8: Assumptions:

- City of Madison will provide a conference room appropriately sized for the number of participants and review all documentation in a timely manner.

Phase 1, Task 8 – Estimated Timeframe:

- The completion of the integrations to Cityworks will require approximately 6-10 weeks per integration



Task 9: Data Migration

One of the key objectives of the City is to migrate the Water Utility from its current CMMS platform, Accela AMS, to the chosen CMMS as well as data from MainTrac. Inherent to that process is establishing a strategy to deal with the data that is being managed in what will become a legacy system. This task specifically addresses the datasets and systems that are slated for conversion into the proposed Cityworks solution.

Data Migration Approach

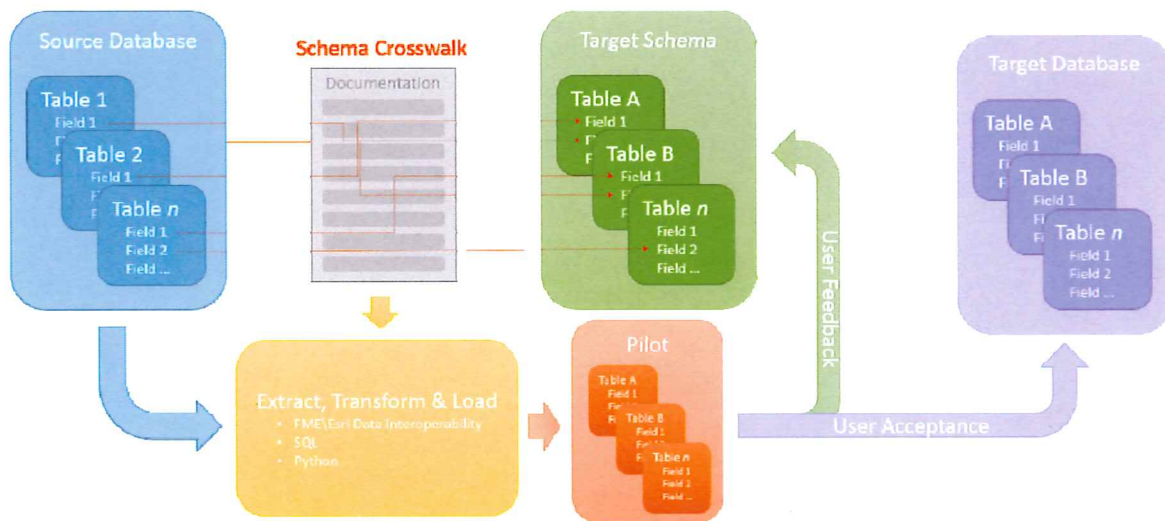
The legacy datasets and systems targeted for conversion possibly span multiple database schemas, database versions and even database formats, which implies that each will be handled in a unique way. While this is true in many ways, the fundamental approach to successfully migrating data from one system to the other is, in fact, the same.

Coordination

As is evident by this proposal, the migration effort is just one facet of the system implementation and cannot be undertaken independently. The foundation of the proposed Cityworks solution needs to be in place in order for the data migration to be performed, but even then the conversion may drive specific configuration items and changes. Coordination and communication between the project team members will be an ongoing element of



the conversion process that starts with project kickoff and terminates with a successful migration of all data into the production environment.



Orientation Workshop

The conversion process of each legacy system will include a workshop wherein the proposed project team will meet with appropriate City staff to review the specific implementations. The discussions will allow the project team to gain an understanding of how the applications are being used, what data has been recorded. At the same time, details associated with the data required as part of the conversion process will be reviewed, documented and approved.

During the workshops, the project team will also initiate the process of gaining access to the underlying database and will work with City staff to gather any available documentation (i.e., system specifications, entity relationship diagrams, etc.) specific to the software and specific versions being reviewed. This information will help to streamline the subsequent navigation and interpretation that will be necessary to perform the migration.

Database Schema Crosswalk

Perhaps the most critical task in a data conversion effort is performing a crosswalk of the source and target schemas to identify and document how various objects between the two systems are related, resulting in a documented "data map" that will guide the migration process.

While some of the source systems are well known commercial software packages, the software companies do not typically make database diagrams and workflows publicly available. Data structure even within commercial systems can vary across versions and, more importantly, each implementation can be setup differently based on workflow or data requirements. More data and custom solutions may have an even wider range or completely unknown schema. As such, the discussions and documentation resulting from the workshops will be critical to the completion of a highly detailed system crosswalk. Throughout the process, additional City of Madison input or clarification may be solicited as needed and is vital to ensuring that the resulting data mapping will reflect an accurate foundation for all subsequent activities.

Translation Scripting

Following the schema crosswalks, the project team will develop a series of processes to facilitate the actual migration of the source system data into Cityworks. Depending on the complexity and volume of the source data, the process may be a mix of manual and a scripted solution, but will be established in a manner to ensure repeatability. The scripted solutions will be tailored to each specific data conversion effort and may range from



native SQL Server scripts to third party migration tools, but will ultimately follow a pattern referred to as extract, transform and load (ETL). The ETL approach is common within the GIS industry, but applies much more generically to moving data between systems. The ETL process will be designed as a one-time process that will result in data migrated into a development Cityworks database.

NOTE: (1) The project team will be performing a data translation, but will not be completing any data generation as part of this process. (2) While the scripts are being developed and data is being translated into development, City departments can use the source systems as always. At the time the data is ready for production conversion, the source systems will need to be taken offline or transitioned into a read only state.

Multi-Staged Execution

Once the scripts are developed, the project team will test our methodology through a 3 stage process. This process is designed so that after the first data migration run (Draft) we will meet with the City to review the data, note issues and errors, edit our scrips and process, and then repeat the process. The 3 stages will be:

- 1) *Draft Data Migration*
- 2) *Pre-Final Data Migration*
- 3) *Final Data Migration*

Although the details underlying each conversion may vary substantially, automation is assumed based on the volume indicated by the City within the RFP. As part of the process, the project team will be analyzing and evaluating the output to identify potential anomalies that are not sufficiently systematic to be detected or trapped by the scripts. The approach to addressing those anomalies will be documented and discussed with the City.

Validation & Quality Control

With the conversion process completed against a subset of the data, the project team will perform a series of validation and quality control processes to verify a successful migration. This task will largely focus on back-end analytics that compare data in both the source and target systems, but will also consist of front-end testing prior to release to the City for testing. Results from this quality control process will be documented and shared with the City.

Acceptance Testing

In contrast with the validation and quality control phase, which is based on a review by the project team, the acceptance testing phase offers City staff the opportunity to review the data within the context of the proposed Cityworks system in contrast with the information contained in the source systems. The acceptance testing places more emphasis on the front-end testing, wherein users will interact with, interrogate and visualize data through the Cityworks interface. Feedback will be incorporated into a revision process that will guide modifications to the scripts and processes that initially drove the conversion.

Upon completion of the testing process and acceptance by the City, the project team will prepare for the production conversion, which will coincide with the release of the proposed system and the retirement of the legacy solutions.

Production Conversion

The production conversion effort will encompass the migration of the full data sets from each of the source systems into Cityworks. The processes established through the crosswalk and encapsulated in the refined translation scripts will be executed as part of the production release management process. The conversion team will coordinate with the City to transition the source systems into a static state to ensure that no further data entry occurs that could result in data loss. The automated aspects of the conversion will be applied followed by any documented manual processes that are required to address data anomalies.

The production conversion will wrap-up with a coordinated, but truncated, validation sufficient to verify a successful data migration. Based on the preceding step-wise approach with multiple points of quality control and an ongoing feedback loop, the final conversion process is anticipated to adhere to the expectations of the project team and the City and will result in a more consolidated system with centralized access to a wealth of historic information.



Phase 1, Task 9: City of Madison Responsibility:

- Gather information for data migration requirements (8-16 FTE Hours).
- Additional meetings as required (approximately 16 FTE Hours per participant).

Phase 1, Task 9: Deliverables:

- Orientation Workshop (webinar)
- Database Crosswalk Schema Document
- Migrated/converted data into Cityworks database from Accela source data
- Migrated/converted data into Cityworks database from MainTrac source data

Phase 1, Task 9: Assumptions:

- City of Madison will provide a conference room appropriately sized for the number of participants and review all documentation in a timely manner.

Phase 1, Task 9 – Estimated Timeframe:

- The conversion of the legacy data will require approximately 8-12 weeks



Task 10: Configuration Review Meetings

The implementation team will conduct multiple (see schedule) webinar review workshops of the Cityworks configuration to gather feedback from the four Functional Groups. Review workshops will be held in 4 hour intervals and will cover the administrative configuration, system tools (service requests, work orders, and inspections), data loading/data migration, and interface.

Phase 1, Task 10: City of Madison Responsibility:

- Configuration Review Meetings. (2 FTE Hours x 21 Functional Group participants)

Phase 1, Task 10: Deliverables:

- Configuration Review meetings held via webinar, each Functional Group, each 4 hours in duration for a total of 16 hours
- Configuration meeting minutes and updated Cityworks Configuration Document and SD&C Plan.

Phase 1, Task 10: Assumptions:

- City of Madison will ensure attendance by staff and provide review comments in a timely manner.

Phase 1, Task 10 – Estimated Timeframe:

- The Configuration Review meetings will require approximately 1 day per review

Task 11: Install Cityworks Server

Our implementation team will work with City IT staff to install and configure the Cityworks software at the City's facilities and migrate the Cityworks configuration from the Timmons Group computing environment. Our implementation team will work directly with the City's Project Manager to verify that all core system components (servers, clients, RDBMS, networking devices, and supporting software programs) are installed and appropriately configured. Our implementation staff will be onsite to facilitate Cityworks software installation, set-up, and configuration.

Phase 1, Task 11: City of Madison Responsibility:

- Software and hardware for Cityworks installation and configuration.
- City of Madison Information Systems resources as required for software installation (approximately 4-8 FTE hours)

Phase 1, Task 11: Deliverables:

- Cityworks configuration files migrated from the Timmons Group cloud environment (or from City of Madison development to Test environments).

Phase 1, Task 11: Assumptions:

- City of Madison's IT Department will ensure that software, hardware, and network connectivity meets Cityworks implementation specifications as specified in the Core System Design Plan.



- City of Madison IT staff will be available to assist our implementation team during Cityworks installation.

Phase 1, Task 11 – Estimated Timeframe:

- The installation of Cityworks in the City's Test environment will require approximately 1 week

Task 12: Develop Testing and Acceptance Plan

The implementation team will work with the City to develop and administer a Testing and Acceptance Plan. Testing and Acceptance Plan objectives shall remain consistent with the application functionality detailed in the System Design and Configuration Plan and Application Design Document (for enterprise interfaces). The Testing and Acceptance Plan will address, in sufficient detail (as collectively deemed by the City and the implementation team) the elements required to support the City's testing of the Cityworks software functionality and database configuration, security matrix, data migration plan, documentation of application performance issues/errors experienced during the testing, documentation of the resolutions to noted issues/errors, and certification and acceptance of the final deliverable database configuration and software functionality.

The test server and final production server environments will be measured against the results of the testing performed in accordance with this Testing and Acceptance Plan, and it is the baseline to which the scoped projects tasks will adhere. The Testing and Acceptance Plan shall be subject to the review and acceptance as to its reasonableness for its intended effort, which is defined herein as the ability to support the logical and thorough testing of the Cityworks application functionality, platform stability, and database configurations.

Upon completion of development of the Testing and Acceptance Plan, the Team shall submit said plan to the City for review and approval. It is important for the City staff to review the draft plan for technical accuracy and completeness. Our configuration team will update the Draft Testing and Acceptance Plan, incorporating City comments and re-submit said plan as Final.

Phase 1, Task 12: City of Madison Responsibility:

- Review and comment on plan. (4 -8 FTE Hours Per Functional Group)

Phase 1, Task 12: Deliverables:

- Testing and Acceptance Plan drafts and final.

Phase 1, Task 12: Assumptions:

- City of Madison will review all documentation in a timely manner.

Phase 1, Task 12 – Estimated Timeframe:

- The development of the Testing & Acceptance Plan will require 4-6 weeks

Task 13: Report Development

Over the years our team has developed hundreds of custom reports for our clients. Cityworks has also provided several standard reports and has a customer driven report data repository on their www.mycityworks.com support website. During our workshops and review meetings with each Functional Group, we will identify the reports that are critical to the City's operations and leverage existing reports when it makes sense or create new reports as necessary. Additionally, Cityworks contains ad-hoc search and report tools to query Cityworks data. Nearly every field in Cityworks is searchable, allowing for comprehensive data reporting. Ad-hoc reports can be sorted and grouped by field into multiple descriptive displays. Ad-hoc results can be exported to Microsoft Office products (Access, Excel, Word) or other products for further analysis or presentation. Reports can be shared among enterprise users, departments and divisions. Cityworks includes search and reporting by geography which is accessed through the fully integrated GIS interface. Searching by feature, feature type, map page, tile numbers, or any other data element is readily available as defined in the GIS. Our implementation team will use a four step approach to meet City of Madison's immediate reporting needs and ensuring they will be self-sufficient to create your own reports in the future.

1. **Catalog Existing Reports** – Our configuration team will work with the City to identify and catalog and prioritize all reports and do a gap analysis between what is in our existing repository (as well as Cityworks) versus what will be created from scratch.
2. **Create Identified Reports** – Our implementation team has experience creating both Crystal and SQL reports and will develop and modify reports as necessary.



3. **Ad-Hoc and Crystal Server Report Training** – Our implementation team will train the designated City report writers on:
- how to best leverage the MyCityworks website
 - Developing Ad-Hoc reports
 - The process of developing additional Crystal reports (not Crystal Reports training). This will be as part of the Admin training.
4. **Report Training Support** – Our implementation team will train City staff on creating reports for Cityworks as well as support hours for creating additional reports after Go Live.

Phase 1, Task 13: City of Madison Responsibility:

- City of Madison will be responsible for assisting our implementation team with the generation of a comprehensive catalog of existing reports. (8-16 hours per Functional Group)
- Review of reports once designed and configured (2-4 FTE hours per Functional Group)

Phase 1, Task 13: Deliverables:

- Modification and development of reports based on a total budgeted allotment of 40 hours per each functional Group (160 hours total).

Phase 1, Task 13: Assumptions:

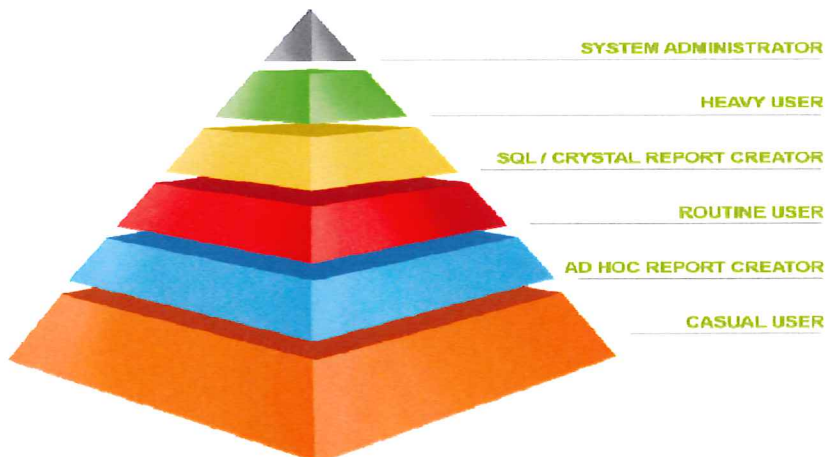
- City of Madison will designate a report writer/s who will work with our implementation team to generate the catalogued list of reports, review reports developed by our implementation team, and be trained on ad-hoc and leveraging Crystal for Cityworks report creation (not Crystal Reports training).
- Timmons Group has applied 160 hours to accomplish the creation of new reports as information provided to make a definitive LOE calculation is not possible at this time.

Phase 1, Task 13 – Estimated Timeframe:

- The development of reports will require approximately 8-10 weeks

Task 14: Onsite Training

During each onsite meeting (kickoff, workshops, configuration review, etc.) our implementation team will consistently expose City staff to Cityworks and basic workflows within the software. This incremental training augments the training performed after final configuration. Our implementation team, in conjunction with the City's Project Manager and key stake holders, will devise a training plan specific to your environment and data. The approach to developing this plan is detailed in Section B: Training Plan, found below.



Our implementation team assumes that the City will be able to provide the necessary training facilities to conduct onsite training. Cityworks training is modular. Students attend those sections that are relevant to the type of work that they are performing. All courses include relevant materials and sample data. Our implementation team will provide training based on the requirements set forth in the training plan. The City will need to identify who will be trained based upon the criteria and needs that will have been identified by this point.



Phase 1, Task 14: City of Madison Responsibility:

- Assist in development and review of a training plan (4 FTE Hours per reviewer).
- IT Staff & identified Administrator Training (40 FTE hours per participant)
- Attend training (40 FTE hours per participant)

Phase 1, Task 14: Deliverables:

- Training Plan and Training Documentation.
- Training on-site per the agreed upon Training Plan.

Phase 1, Task 14: Assumptions:

- City of Madison will provide a conference or training room appropriately sized for the number of participants.
- City of Madison will ensure attendance by identified staff.
- City of Madison staff attending training should have basic functional knowledge of computers and the windows operating system.

Phase 1, Task 14 – Estimated Timeframe:

- Training will require approximately 2-3 weeks

Task 15: Acceptance Testing

Prior to Go-live there will be a thirty (30) day acceptance testing period (the acceptance period is flexible based on input from the City's Project Manager). During this period the City will test the Cityworks implementation and identify issues and opportunities and submit to the Timmons Group Help Desk. The Help Desk will be configured specific to the City's implementation requirements. The Testing and Acceptance Plan will frame and guide the City through the testing process.

Phase 1, Task 15: City of Madison Responsibility:

- City of Madison Project Manager will work with staff to implement the Testing and Acceptance Plan (8 FTE hours per participant).

Phase 1, Task 15: Deliverables:

- Testing Plan, results, and modifications.

Phase 1, Task 15: Assumptions:

- City of Madison will be prepared to work through the Testing and Acceptance Plan and complete within a thirty (30) day period.

Phase 1, Task 15 – Estimated Timeframe:

- The configuration of Cityworks per the SD&C Plan will require approximately 4-6 weeks

Task 16: Final Product Configuration

Our implementation team will conduct the final product configuration based on the System Design and Configuration Plan and Testing and results of the acceptance testing. Our implementation team will provide documentation for the key aspects of this project and Cityworks components. Proposed documentation is summarized below:

- **Cityworks Configuration Document** – Early on, our configuration team with the City's input, will develop a Cityworks Configuration document that is maintained through the life of the project.
- **Project Management Plan** – Our Team will develop and maintain a project plan that includes the scope of project services (and any changes), budget, schedule, risk management and communication approach.
- **Cityworks® Server Software** – Azteca Systems, Inc. provides standard documentation for the latest product release. Separate documentation is provided for system administration and end users.
- **SD&C Plan** – Timmons Group will provide a copy of the plan resulting from the review, analysis and documentation of the organization and its current workflows; data sets, IT system and applications, system interface needs, output requirements, and public access and service request needs.
- **System Integration and Data Conversion specific documentation.**
- **Training Materials** – Timmons Group will provide a copy of the training plan and all training documents used during casual user, routine user, heavy user, ad-hoc reporting, management, and system administrator training.
- **Testing and Acceptance Plan** – Timmons Group will prepare and deliver a copy of the test plan and test results report to be used for system certification and acceptance by the City.



Phase 1, Task 16: City of Madison Responsibility:

- Final review and acceptance of configuration (40 FTE hours)

Phase 1, Task 16: Deliverables:

Final configured Cityworks system

- City of Madison will receive all documentation in digital format.

Phase 1, Task 16 – Estimated Timeframe:

- The final configuration of Cityworks per the SD&C Plan will require approximately 3-6 weeks

Task 17: Go-live and Project Close Out

Having successfully completed all system upgrades, testing/acceptance procedures, production environment initialization, and Go-Live preparation tasks specified above, the system is deemed prepared for Go-Live.

Pre-Go Live Acceptance: Prior to going live, Timmons shall present the City with a signoff form seeking approval to proceed to Go Live ("Pre-Go Live Acceptance.") This sign-off will be subject to the standard sign-off procedure in Attachment E, paragraphs 2 and 3. Pre-Go Live Acceptance will occur after completion of tasks 15 and 16 and after all UAT is completed and all items to be mitigated identified during UAT have been addressed and corrected to the City's satisfaction. By signing off on the Pre-Go Live Acceptance form, the City indicates the system has been accepted in the testing environment and the City gives permission to transition to the production environment.

Once end-user access has been configured/re-directed to the newly initialized production environment, the system is deemed to be in "Live" status. The City's Cityworks users will now be executing work management tasks in a live configured Cityworks production environment.

Final System Acceptance: After ten (10) days of initialization of the production environment, Timmons shall present the City with the Go-Live Certificate / Final System Acceptance form (appendix XX) shall generate a certificate signifying the Cityworks application functionality and database configuration is operational in a "Live" production capacity and the system meets the specifications for Final System Acceptance described in Attachment E to the contract. The City's Project Manager shall sign said "Go-live Certificate/Final System Acceptance Form" and submit it to Timmons Group following the process for acceptance described in Attachment E.

Phase 1, Task 17: City of Madison Responsibility:

- Identify any issues in system and work with configuration team to modify as necessary. (40 FTE hours per participant)

Phase 1, Task 17: Deliverables:

- Go Live support
- Final project documentation

Phase 1, Task 17: Assumptions:

- Work through the Timmons Group Help Desk to resolve and issues.

Phase 1, Task 17 – Estimated Timeframe:

- Go-Live, Final System Acceptance and project close-out will require approximately 2-3 weeks

Task 18: Post Go-live Support

On-Site Coaching

Our team will provide one week of on-site assistance for the users in their day-to-day activities in using the Cityworks software. The on-site coaching will occur during a single one-week period at a date to be mutually agreed upon by The City of Madison and Timmons Group within 12 months of the Final System Acceptance. Once the software is on-line, the configuration staff will be on-site to assist users as they encounter day-to-day transactions. The purpose for this is to work with users on an individual basis as they use Cityworks in their daily duties to discover and resolve configuration problems, training lapses or other issues that are keeping users from getting the most from the software.



Phase 1, Task 18: City of Madison Responsibility:

- Use Cityworks in a production environment, utilization of Cityworks in daily activities, data analysis, report generations, etc.

Phase 1, Task 18: Deliverables:

- Option 1 = One Timmons Group resource on-site at City of Madison to assist with the utilization of Cityworks in a production capacity, for one week (40 hours).
- Option 2 = One Timmons Group resource on-site at City of Madison with each of 4 Functional Groups (a total of 4 Timmons Group resources) to assist with the utilization of Cityworks in a production capacity, for one week (160 hours).
- Option 3 = One Timmons Group resource on-site at City of Madison to assist with the utilization of Cityworks in a production capacity, for one week (40 hours) plus a dedicated off-site Timmons Resource during business hours to be available to assist via remote desktop and phone support.

Phase 1, Task 17: Assumptions:

- Work through the Timmons Group Help Desk to resolve and issues.

Phase 1, Task 18 – Estimated Timeframe:

- The on-site coaching will occur during a single one-week period at a date to be mutually agreed upon by The City of Madison and Timmons Group within 12 months of the Final System Acceptance

Ad-Hoc Support

Once the system has been rolled out and is being used, our team will provide remote and on site ad-hoc support to address any configuration, implementation, or software installation matters that may arise. For example, these might include the redesign of printout forms or changes in the content of the work management portion of the Cityworks® database. The City will have one year to utilize the remote support by department or functional group. Timmons Group has included 80 hours of Ad-Hoc support within our bid cost for this task.

Additional support, above and beyond those defined in the above scope of services, can be negotiated with Timmons Group based upon The City of Madison working with Timmons Group to develop a defined scope of services, deliverables, budget and schedule. The hourly rates that will be utilized for these additional, to be defined and agreed upon, services are as follows:

Principle in Charge	= \$185 per hour
Project Director	= \$185 per hour
Project Manager	= \$125 per hour
Software Engineer	= \$130 per hour
Software Developer	= \$130 per hour
System Analyst/GIS Analyst	= \$115 per hour
Senior Software Engineer	= \$160 per hour

All expenses incurred (travel, per Diem, etc.) for additional services not defined within this scope of services will be billed at direct cost to the City of Madison

B. Training Plan

We have included our proposed training plan in our overall project implementation approach, which can also be found in the preceding section. However, we have also listed our approach for the training below. Our training plans are unique to each Cityworks implementation client and are designed around each client's unique configuration.

During each onsite meeting (kickoff, workshops, configuration review, etc.) our Team intentionally exposes City staff to Cityworks and basic workflows within the software. This does not replace but augments the training performed after final configuration.



Our implementation team, in conjunction with the City Project Manager and key stake holders, will devise a training plan specific to the City's environment and data. A pro-active training plan will ensure that City staff is equipped to undertake the system utilization and maintenance tasks immediately upon receipt of the system.

The training plan will include:

- Product training curriculum descriptions
- Listing of instructors
- Training Materials
- City responsibilities
- Schedule

This training plan will be used as a guide—but may be modified when necessary to support the goals and techniques of your staff resources.

Cityworks training is modular. Students attend those sections that are relevant to the type of work that they are performing. All courses include relevant materials and sample data. The City will need to identify who will be trained based upon the criteria and needs that will have been identified during the Configuration Workshops.

Training will be developed for the following user types (along with the Casual User and Report training identified earlier in the proposal):

- Routine User – Staff who will have the ability to update a request/work order after the crew has completed their work
- Heavy User – Staff who will create work orders, schedule work orders, create PM's, maintain the parts, create reports and generally will have the ability to use the whole system based on their security level
- System Administrator – Staff who have full system access and be responsible for the daily operations and maintenance of the Cityworks environment

It is assumed that the City will provide the training facility including computers and a high-resolution computer screen projector. Coming into training, the users will need to possess basic functional knowledge of Personal Computers and Windows.

Training Module	Course Description	Duration	User Group Level	Course Prerequisites
Introduction to Cityworks	Cityworks® Introduction. Course is designed to give an overview of Cityworks functionality from an end user's point of view. Users will learn basic operations within ArcMap, the Cityworks toolbar and functions, along with the creation of Service Requests and Event Layers.	Ongoing during Workshops and Configuration Reviews	Casual Group Users	N/A
Cityworks Report Creating and Writing	Cityworks® Reporting with Crystal. Expose students to the Cityworks Report Engine to produce concise summary reports including Ad Hoc Reports, Predefined Reports, and Budget Reports. Cover Crystal Reports basics; becoming familiar with the tool bars and basic functionality. Students will work hands-on to create basic Crystal reports.	4 hours each class	Ad Hoc Report Creator and Crystal Report Writer	N/A
Service Requests	Cityworks® Service Requests Creating and processing Service Requests. Adding labor, submitting, searching, canceling, closing, combining, geo-locating and reports. Associating to projects and work orders.	4 hours each class	Routine and Heavy Users	Intro to Cityworks



Work Orders	Cityworks® Work Orders Creating and processing Work Orders and Tasks. Adding labor, material, and equipment. Submitting, searching, canceling, closing, scheduling, repeating, geo-locating and reports. Associating to projects and service requests.	8 hours each class	Routine and Heavy Users	Intro to Cityworks
Designer and System Administration	Cityworks® Designer and System Administration Covers system and database administration issues such as software installation, user accounts, security, code table creation, work order and service request templates and resource (labor, material, equipment) hierarchies, table creation, and permits. Includes a review for GIS personnel as well; covers items needed to successfully manage the setup and maintenance of the GIS for Cityworks® use.	8 hours each class	System Administrators	ArcGIS & Intro to Cityworks

Ongoing Training Options:

Timmons and Cityworks offer the following ongoing training options:

- 1) Timmons can provide any customized training upon demand based upon a flat rate of \$135 per hour and associated expenses to provide training either on-site, or via WebX to City staff. This training could be repeats for previously provided training or the development of and delivery of newly identified training needs.
- 2) Cityworks (Azteca Systems, Inc.) has several options for product related training. Virtual campus, Training at Cityworks locations (including West Bend, WI & University of Wisconsin- Madison) or at City location by Cityworks trainers. These options can be found here:

<http://www.cityworks.com/tag/training/>

C. Maintenance and Support Program

Once the system has been rolled out and is being used, our configuration team will provide eighty (80) hours of ad-hoc support to address any configuration, implementation, or software installation matters that may arise. The costs for this are included within our proposal. For example, these might include the redesign of printout forms or changes in the content of the work management portion of the Cityworks database. The City will have one (1) year after Go-live to utilize the remote support.

In addition, should the need arise, Timmons can provide support and or additional services at a flat rate of \$135 per hour (plus any needed travel expenses) for support tasks and/or additional implementation, integration, consulting, training, and data conversion services.

Azteca provides ongoing software updates, documentation and technical support as part of the license fees paid by the City. Therefore, the City should contact Azteca directly regarding ongoing system support issues. One of the most important aspects of software is the timeliness of user support. Azteca's goal is to have the very best customer support in the industry. They recognize that if a user cannot use the software to their fullest expectation, then it doesn't matter how great the software might be. They answer all questions as quickly as possible. If a question is due to a software problem that causes the software to not function as designed, the programming staff's number one priority becomes the resolution of the problem. See below for details.

Telephone Support

- Normal Business Hours 8:00 am – 5:00 pm MST
- Weekdays excluding holidays. Project manager will be available for handling severe problems during after hour periods.
- Phone numbers: (801) 523-2751, (888) 523-2751

Online and Dialup Support



- Normal Business Hours 8:00 am – 5:00 pm MST
- Weekdays excluding holidays.
- Internet support utilizes GoToMeeting software. An internet browser connected to the system is required
- VPN, dialup, and web access requires secure access through telephone to system

Website Support

- www.azteca.com (general information, links to other Cityworks support sites, news releases, event listings, white papers, partner information, contact information, etc.)
- www.mycityworks.com (User support site, includes latest documentation, support files, knowledgebase of known bugs and work around solutions, user forum, downloads of patches, etc.)

Documentation

- Online help is accessed from within the Cityworks AMS/PLL environment.
- Clients can download current documentation or access online help from the secure www.mycityworks.com website.
- The periodical *InPrint* is published twice a year, and posted on the www.cityworks.com website.
- Database diagrams are available to clients on www.mycityworks.com.

User Groups

- Cityworks regional user group meetings are held periodically at client sites and at our offices located in West Bend, Wisconsin, and DeSoto, Texas.
- The Cityworks Conference is held in Salt Lake City, Utah. The next conference is scheduled for December 6-8, 2016.
- Cityworks forums are available through www.mycityworks.com.

Fixes and Enhancements

The Update and Support Agreement allows clients to receive all subsequent upgrades, enhancements, and bug fixes for all future releases of the licensed applications as long as the client renews the agreement annually.

Fixes and enhancements are a major part of software development. Problems and enhancement requests can be submitted to Azteca Systems by phone or email. These are reviewed by the Cityworks Product Development team and recorded in a database. The development team schedules, prioritizes, and assigns these items for programming and testing.

Most of the product enhancement suggestions are managed through the project manager during the initial implementation phase, the customer support representative during ongoing maintenance, or through www.mycityworks.com. Additional suggestions for enhancements are gathered on the Ideas page on www.mycityworks.com.

Enhancement priority is based on many factors: user response for new ideas posted on www.mycityworks.com, information gained from the Cityworks User Conference, market drivers, magnitude of effort, the needs of the user community, timing of software releases, comparison to other initiatives, and decisions made by a Cityworks internal software development committee.

The development committee is composed of upper management, representing key areas of the company. The committee reviews software enhancement suggestions identified through ongoing projects, customer feedback, and competitive issues brought forth in sales presentations.

Release Schedule and Supported Software

Each Cityworks major release contains enhancements, new functionality, and bug fixes. Service pack revisions contain bug fixes.



All software within the Cityworks platform are developed and released on their individual cycles, followed by service packs containing bug fixes released as needed every few months until the next major release, and as needed until the subsequent major release. Numbers are incremented for each major release (2015 becomes 2016, 1.0 becomes 2.0, and so on). Releases are designed to be as problem-free as possible through heavy testing and quality control.

Corporate releases are intended to have a maintained lifespan of at least two years. Azteca Systems fully supports the current version and the previous version of software with service pack updates. For example, if Cityworks 2015 is the current version, then Cityworks 2014 and Cityworks 2015 are both supported with service pack updates. Beyond two versions, Azteca Systems will no longer release software service packs for that product except for data corruption issues.

Software Notification and Distribution

Clients are notified of corporate releases and service pack releases by email announcement or posts on www.cityworks.com or www.mycityworks.com. For clients with a current Update and Support Agreement, Azteca Systems will make new releases and supporting documents available on www.mycityworks.com.

Upgrade Installation

Upgrade installation is the responsibility of the client. Upgrades are typically coordinated with their Cityworks project manager or customer support. New software can be downloaded by supported clients and includes upgrade details and instructions. When problems are encountered during upgrade or installation of Cityworks while following the Cityworks Server Install Guide or the Cityworks Server Upgrade Guide, Cityworks technical support staff is available to remotely assist the client.



APPENDIX A

GO-LIVE CERTIFICATE / FINAL SYSTEM ACCEPTANCE FORM



User Acceptance and Custody Transfer, Go Live Acceptance Final System Acceptance

Client: City of Madison	Date: 04/xx/2017
Client Contact: Aaron Cohen	Timmons Group Project Manager: Vicki Gardiakos
Client Phone Number: xxx.xxx.xxxx	Timmons Group Phone Number: xxx.xxx.xxxx
Project Name: Project name	Timmons Group Job Number: TG #

Timmons Group and the City of Madison agree that the project deliverables shown below have been completed and accepted per the Contract for Purchase of Services. This document memorializes that the custody of the project deliverables shown below are transferred to the City and that the City has signed off on Final System Acceptance as defined in Attachment E to the Contract for Purchase of Services.

Project Deliverable(s):

- List deliverables
- Final System Acceptance, as defined in Attachment E to the Contract for Purchase of Services, means that the System installed by Timmons meets the requirements of: Attachment D (Chapters 5 and 6 of Timmons' response to RFP) and all documents prepared during the implementation according to Attachment A (SOW,) including but not limited to, the Business Requirements, User Requirements, Functional Requirements, the testing and acceptance criteria laid out in the Test and Acceptance Plan, and any change orders, the versions of all of which that have been agreed to by the parties for each Functional Group identified in the SOW.

Acknowledged and accepted:

Client Project Manager

Timmons Group Project Manager

Print Name

Print Name

Signature

Signature

Date

Date

Attachment B - MILESTONE BILLING PLAN and PAYMENT SCHEDULE

The following table sets forth invoicing periods, numbered 1-18. All items within each numbered grouping must be completed before Timmons may invoice the City for that invoice. If a City sign-off is required for any task within the numbered invoice group, Timmons shall not invoice the City for any of the work listed with that invoice number unless all "yes" item(s) have been signed off by the City, using the acceptance and sign-off procedure in Attachment E. If no City sign-off is required for that invoice number, Timmons may invoice the City once all of the tasks listed for that invoice number are complete.

Invoice #	Payment Milestones	City Sign-Off Required ?	Fee
1	- Pre-kick off coordination - Cityworks System Specs & GIS Requirements Document - IT/GIS System Review Meeting & Meeting Minutes - Draft & Final Draft Project Management Plan (V1) ?? - Project management website - Pre-workshop Checklist - Complete an affirmative action plan per sec. 13.B. of the City of Madison Purchase of Services contract		\$9,400
2	Final Project Management Plan (V1) (Phase 1 Task 1) - Project Kickoff meeting, presentation & notes - Bi-weekly progress meeting - Monthly progress report - Cityworks preview/launch demonstration - Workshop # 1 & Meeting Minutes – City Engineering - Workshop # 2 & Meeting Minutes – Traffic Engineering - Workshop # 3 & Meeting Minutes – Parking Utility - Workshop # 4 & Meeting Minutes – Water Utility	yes	\$23,000
3	- IT System Architecture WebEx - Test & Validate VPN & Remote Desktop connection to Madison's development environment GIS Gap Analysis Document (Phase 1 Task 2 pg 13 SOW) - Bi-weekly progress meeting - Monthly progress report	yes	\$3,700
4	- Cityworks Administration & System Configuration WebEx Cityworks Installed in Madison's development environment (Phase 1 Task 3 pg 13 SOW) Configuration Review: Cityworks Domains, Administrators, & Menus (Phase 1 Task 7 pg 19 SOW) - Cityworks Employees & Users WebEx - Cityworks Materials & Storeroom WebEx - Ad-hoc configuration progress meetings - Bi-weekly progress meeting - Monthly progress report	yes yes	\$8,500

5	• Configuration Review: Employees (Phase 1 Task 7 pg 19 SOW)	yes	
	• Configuration Review: Materials & Storeroom (Phase 1 Task 7 pg 19 SOW)	yes	
	• Cityworks Equipment, Contractors, & Customer Accounts WebEx		
	• Ad-hoc configuration progress meetings		
	• Bi-weekly progress meeting		
	• Monthly progress report		
6	• Configuration Review: Equipment, Contractors, & Customer Accounts (Phase 1 Task 7 pg 19 SOW)	yes	\$4,500
	• Cityworks GIS Setup, Map Services, & Asset Configuration WebEx – City Engineering		
	• Cityworks GIS Setup, Map Services, & Asset Configuration WebEx – Traffic Engineering		
	• Cityworks GIS Setup, Map Services, & Asset Configuration WebEx – Parking Utility		
	• Cityworks GIS Setup, Map Services, & Asset Configuration WebEx – Water Utility		
	• Ad-hoc configuration progress meetings		
	• Bi-weekly progress meeting		
	• Monthly progress report		
7	• Configuration Review: Asset Configuration & Map Services – City Engineering (Phase 1 Task 7 pg 19 SOW)	yes	\$4,500
	• Configuration Review: Asset Configuration & Map Services – Traffic Engineering (Phase 1 Task 7 pg 19 SOW)	yes	
	• Configuration Review: Asset Configuration & Map Services – Parking Utility (Phase 1 Task 7 pg 19 SOW)	yes	
	• Configuration Review: Asset Configuration & Map Services – Water Utility (Phase 1 Task 7 pg 19 SOW)	yes	
	• Cityworks Preferences & System Codes WebEx		
	• Ad-hoc configuration progress meetings		
	• Bi-weekly progress meeting		
	• Monthly progress report		
8	• Configuration Review: Preferences & System Codes (Phase 1 Task 7 pg 19 SOW)	yes	\$7,500
	• Reactive/Corrective Workflows & User Stories WebEx – City Engineering		
	• Reactive/Corrective Workflows & User Stories WebEx – Traffic Engineering		
	• Ad-hoc configuration progress meetings		
	• Bi-weekly progress meeting		
	• Monthly progress report		

9	• Configuration Review: Reactive/Corrective Workflows – City Engineering (Phase 1 Task 7 pg 19 SOW)	yes	\$7,500
	• Configuration Review: Reactive/Corrective Workflows – Traffic Engineering (Phase 1 Task 7 pg 19 SOW) • Preventative Maintenance Workflows & User Stories WebEx – City Engineering • Preventative Maintenance Workflows & User Stories WebEx – Traffic Engineering • Ad-hoc configuration progress meetings • Bi-weekly progress meeting • Monthly progress report	yes	
10	• Configuration Review: Preventative Maintenance Workflows – City Engineering (Phase 1 Task 7 pg 19 SOW)	yes	\$7,600
	• Configuration Review: Preventative Maintenance Workflows – Traffic Engineering (Phase 1 Task 7 pg 19 SOW) • Reactive/Corrective Workflows & User Stories WebEx – Parking Utility • Reactive/Corrective Workflows & User Stories WebEx – Water Utility • Ad-hoc configuration progress meetings • Bi-weekly progress meeting • Monthly progress report	yes	
11	• Configuration Review: Reactive/Corrective Workflows – Parking Utility (Phase 1 Task 7 pg 19 SOW)	yes	\$7,600
	• Configuration Review: Reactive/Corrective Workflows – Water Utility (Phase 1 Task 7 pg 19 SOW) • Preventative Maintenance Workflows & User Stories WebEx – Parking Utility • Preventative Maintenance Workflows & User Stories WebEx – Water Utility • Ad-hoc configuration progress meetings • Bi-weekly progress meeting • Monthly progress report	yes	
12	• Configuration Review: Preventative Maintenance Workflows – Parking Utility (Phase 1 Task 7 pg 19 SOW)	yes	\$23,800
	• Configuration Review: Preventative Maintenance Workflows – Water Utility (Phase 1 Task 7 pg 19 SOW) • Cityworks Contracts WebEx • System Integrations Kickoff WebEx • Pipelogix Integration: User Story Development WebEx • Pipelogix Integration: Deliver User Stories (Phase 1 Task 8a pg 21 SOW) • Integration Review & Testing: Pipelogix Sprint #1 (Phase 1 Task 8a pg 21 SOW)	yes yes	

	• MUNIS Integration: User Story Development WebEx (Phase 1 Task 8b pg 21 SOW) • MUNIS Integration: Deliver User Stories • Data Migration Kickoff WebEx • Accela Migration: User Story Development WebEx • Accela Migration: Data Mapping Review WebEx • MainTrac Migration: User Story Development WebEx • MainTrac Migration: Data Mapping Review WebEx • Ad-hoc integration & data migration meetings • Bi-weekly progress meeting • Monthly progress report	yes	
13	• Configuration Review: Cityworks Contracts (Phase 1 Task 7 pg 19 SOW) • Report Discovery/Review WebEx – City Engineering • Report Discovery/Review WebEx – Traffic Engineering • Report Discovery/Review WebEx – Parking Utility • Report Discovery/Review WebEx – Water Utility • Deliver Master Report List (Phase 1 Task 13 pg 26 SOW) • Integration Review & Testing: Pipelogix Sprint #2 (Phase 1 Task 8a pg 21 SOW) • Integration Review & Testing: MUNIS Sprint #1(Phase 1 Task 8b pg 21 SOW) • Integration Review & Testing: MUNIS Sprint #2 (Phase 1 Task 8b pg 21 SOW) • Dynamics SL Integration: User Story Development WebEx • Dynamics SL Integration: Deliver User Stories (Phase 1 Task 8c pg 22 SOW) • Integration Review & Testing: Dynamics SL Sprint #1 (Phase 1 Task 8c pg 22 SOW) • Accela Migration: Run Migration #1 & Deliver Results(Phase 1 Task 9 pg 22 SOW) • Accela Migration: Run Migration #2 & Deliver Results (Phase 1 Task 9 pg 22 SOW) • MainTrac Migration: Run Migration #1 & Deliver Results (Phase 1 Task 9 pg 22 SOW) • MainTrac Migration: Run Migration #2 & Deliver Results (Phase 1 Task 9 pg 22 SOW) • Ad-hoc integration & data migration meetings • Bi-weekly progress meeting • Monthly progress report	yes	\$47,000

14	- Report Delivery & Review WebEx – City Engineering - Report Delivery & Review WebEx – Traffic Engineering - Report Delivery & Review WebEx – Parking Utility - Report Delivery & Review WebEx – Water Utility - Cityworks Print Template & Email Functionality WebEx (All Depts) - Print Template & Email Requirements WebEx – City Engineering - Print Template & Email Requirements WebEx – Traffic Engineering Integration Review & Testing: Dynamics SL Sprint #2 (Phase 1 Task 8c pg 22 SOW) Integration Review & Testing: Dynamics SL Sprint #3 (Phase 1 Task 8c pg 22 SOW) - Accela Migration: Run Migration #3 (if needed) & Deliver Results - Ad-hoc integration & data migration meetings - Bi-weekly progress meeting - Monthly progress report	yes	yes	\$29,200
15	- Print Template & Email Requirements WebEx – Parking Utility - Print Template & Email Requirements WebEx – Water Utility Configuration Review: Print Templates & Email – City Engineering (Phase 1 Task 7 pg 19 SOW) Configuration Review: Print Templates & Email – Traffic Engineering (Phase 1 Task 7 pg 19 SOW) Configuration Review: Print Templates & Email – Parking Utility (Phase 1 Task 7 pg 19 SOW) Configuration Review: Print Templates & Email – Water Utility (Phase 1 Task 7 pg 19 SOW) System Integration Sign Off (Phase 1 Task 8 pg 19 SOW) Data Migration Sign Off (Phase 1 Task 9 pg 22 SOW) - Draft Training Plan Final Training Plan(Phase 1 Task 14 pg 27 SOW) - Draft Test Plan Final Test Plan (Phase 1 Task 12 pg 26 SOW) - Monthly progress meeting - Bi-weekly progress meeting	yes	yes	\$11,400
16	Conduct Cityworks Administrator Training (Phase 1 Task 14 pg 27 SOW) Conduct Cityworks End User Training (Phase 1 Task 14 pg 27 SOW) - Begin Acceptance Testing - Bi-weekly progress meeting	yes	yes	\$26,000

17	• Final Configuration Modifications (Phase 1 Task 16 pg 28 SOW)	yes	\$16,000
	• Testing of Final Modifications (Phase 1 Task 16 pg 28 SOW)	yes	
	• Configure Production Cityworks Environment		
	• Timmons and Madison Joint Test of Production Environment		
	• Pre-Go Live Acceptance: Proceed to Go-Live/Transition to Production Environment (Task 17, page 29)	yes	
18	• Bi-weekly progress meeting		
	•		
	• Accela Migration: Push to Production and Deliver Results (Phase 1 Task 9 pg 22 SOW)	yes	\$18,350
	• MainTrac Migration: Push to Production and Deliver Results (Phase 1 Task 9 pg 22 SOW)	yes	
	• Go Live coordination/planning		
	• Go Live		
	• City Signs Go-Live Certificate indicating Final System Acceptance (Task 17, Page 29)	yes	
	• Project Close out		

ATTACHMENT C

Resource	Project Director (Lisa Garcia)	Project Manager (Victor Gutierrez)	Software Engineer (Mark Hummer)	Software Developer	Systems Analyst	Sr. Software Engineer
TOTAL HOURS	14	210	402	252	1112	12
City of Madison, WI - Cityworks Implementation - Work Breakdown Structure (WBS)						
16-Jan-17						
The Timmons Group, Post Stage 3 - Desired Edits - December 7, 2016 & changes per Dec 21 conference call & email of Jan 13						
	Senior Consultant	Project Manager	Software Engineer	Software Developer	Systems Analyst	Sr. Software Engineer
Phase 1 - Task 1						
111 Project Management & Quality Control						
111.1 Pre-Work of Preparation	0	4	0	0	0	0
111.2 Develop Project Management Plan	0	10	0	0	4	0
111.3 Monthly progress meetings	0	40	12	0	0	0
sub-total - Task 1	0	54	12	0	4	0
Phase 1 - Task 2						
121 Implementations Planning						
121.1 IT System Meeting/Workshop	0	4	2	0	4	0
121.2 Develop Pre-Configuration Documents	0	4	2	0	8	0
sub-total - Task 2	0	8	4	0	12	0
Phase 1 - Task 3						
131 Initial Cityworks Server						
131.1 Initial Cityworks Configuration	0	2	8	0	20	0
sub-total - Task 3	0	2	8	0	20	0
Phase 1 - Task 4						
141 Project Kick-off Meeting						
141.1 Kick-off meeting	4	4	4	0	4	0
141.2 Travel to project Kick-off (and workshops)	5	8	8	0	0	0
sub-total - Task 4	9	12	12	0	12	0
Phase 1 - Task 5						
151 Business Process Workshops						
151.1 AMS Launch meeting (same day as kick-off)	2	2	2	0	0	0
151.2 Travel (Workshops 1, 2, 3 and 4) - accounted for in Phase 1 Task 4 (same day)	0	0	0	0	0	0
151.3 Data Gathering - Workshop 1 (City Engineering) Preparation	0	0	4	0	4	0
151.4 (Onsite 10 Day) Workshop 1 - City Engineering	0	4	8	0	0	0
151.5 Data Gathering - Workshop 2 (Traffic Engineering) Preparation	0	0	4	0	4	0
151.6 (Onsite 10 Day) Workshop 2 - Traffic Engineering	0	4	8	0	0	0
151.7 Data Gathering - Workshop 3 (Parking Utility) Preparation	0	0	4	0	4	0
151.8 (Onsite 10 Day) Workshop 3 - Parking Utility	0	4	8	0	0	0
151.9 Data Gathering - Workshop 4 (Water Utility) Preparation	0	0	4	0	4	0
151.10 (Onsite 10 Day) Workshop 4 - Water Utility	0	4	8	0	0	0
151.11 Twice weekly conference calls for validation	0	0	80	0	80	0
sub-total - Task 5	2	18	120	0	128	0
Phase 1 - Task 6						
161 Software Design & Configuration Plan (SDAC)						
161.1 Phase 1 - Draft System Design and Configuration Plan	0	4	4	0	40	0
161.2 Phase 1 - Finalize System Design and Configuration Plan	1	4	4	1	16	0
sub-total - Task 6	1	8	8	1	56	0
Phase 1 - Task 7						
171 Cityworks Server AMS Configuration						
171.1 Phase 1 - GIS GAP analysis (GIS files)	0	2	4	0	10	0
171.2 Workshop 1 - Configuration - City Engineering	0	2	8	0	40	0
171.3 Workshop 2 - Configuration - Traffic Engineering	0	2	8	0	40	0
171.4 Workshop 3 - Configuration - Parking Utility	0	2	8	0	40	0
171.5 Workshop 4 - Configuration - Water Utility	0	2	8	0	40	0
171.6 Phase 1 - Configuration of Cityworks Stomach	0	2	8	0	10	0
sub-total - Task 7	0	12	44	0	208	0
Phase 1 - Task 8						
181 Enterprise System Integration (Interfaces)						
181.1 Interface Integration - Pedagog	0	4	16	40	8	0
181.2 Interface Integration - Tyler MANS	0	4	16	40	4	0
181.3 Interface Integration - Dynamics SL	0	4	16	140	16	8
181.4 Migrate from Testing to Production environment	0	0	2	0	0	0
sub-total - Task 8	0	12	50	228	28	8
Phase 1 - Task 9						
191 Data Migration - ArcGIS						
191.1 Data Migration - ArcGIS	0	4	16	24	120	0
191.2 Data Migration - Interfaced	0	4	8	0	20	0
sub-total - Task 9	0	4	16	24	120	0
Phase 1 - Task 10						
110 Configuration Review Meetings						
110.1 Workshop 1 - Configuration Review Webinar - City Engineering	0	4	4	0	4	0
110.2 Workshop 2 - Configuration Review Webinar - Traffic Engineering	0	4	4	0	4	0
110.3 Workshop 3 - Configuration Review Webinar - Parking Utility	0	4	4	0	4	0
110.4 Workshop 4 - Configuration Review Webinar - Water Utility	0	4	4	0	4	0
110.5 Configuration edit per Configuration Review	0	4	8	0	10	0
sub-total - Task 10	0	20	24	0	20	0
Phase 1 - Task 11						
111 Initial Cityworks Server						
111.1 Phase 1 - Install Cityworks Server on Madison server(s)	0	4	8	0	16	0
sub-total - Task 11	0	4	8	0	16	0
Phase 1 - Task 12						
112 Testing & Acceptance Plan						
112.1 Phase 1 - Testing and Acceptance Plan	1	4	8	0	24	0
sub-total - Task 12	1	4	8	0	24	0

Phase 1 Task 13	Report Development							LABOR COST	TRAVEL/EXPENSES	TOTAL
1.13.1	Report Development - City Engineering	0	4	4	0	40	0	\$ 5,620.00	\$ -	\$ 5,620.00
1.13.2	Report Development - Traffic Engineering	0	4	4	0	40	0	\$ 5,620.00	\$ -	\$ 5,620.00
1.13.3	Report Development - Parking Utility	0	4	4	0	40	0	\$ 5,620.00	\$ -	\$ 5,620.00
1.13.4	Report Development - Water Utility	0	4	4	0	40	0	\$ 5,620.00	\$ -	\$ 5,620.00
1.13.5	SSPS Integration - Optional	0	0	0	0	0	0	\$ -	\$ -	\$ -
1.13.6	SSPS deployment (report db) - Optional	0	0	0	0	0	0	\$ -	\$ -	\$ -
	sub-total - Task 13	0	16	16	0	160	0	\$ 22,480.00	\$ -	\$ 22,480.00
Phase 1 Task 14	Citywide Server AMS Onsite Training							LABOR COST	TRAVEL/EXPENSES	TOTAL
1.14.0	Setup Training Environment	0	0	0	0	16	0	\$ 1,640.00	\$ -	\$ 1,640.00
1.14.1	Develop Phase 1 Training Plan	0	8	8	0	16	0	\$ 3,880.00	\$ -	\$ 3,880.00
1.14.2	Phase 1 Administration Training	0	8	24	0	0	0	\$ 3,120.00	\$ -	\$ 3,120.00
1.14.3	Citywide Training Week #1 - Phase 1	0	0	40	0	40	0	\$ 9,600.00	\$ -	\$ 9,600.00
1.14.4	Travel	0	0	16	0	0	0	\$ 3,000.00	\$ 5,875.00	\$ 8,875.00
1.14.5	Develop Custom Training Manuals	0	0	0	0	0	0	\$ -	\$ -	\$ -
	sub-total - Task 14	0	16	88	0	80	0	\$ 21,640.00	\$ 5,875.00	\$ 27,515.00
Phase 1 Task 15	Acceptance Testing							LABOR COST	TRAVEL/EXPENSES	TOTAL
1.15.1	Phase 1 - Acceptance Testing	0	2	8	0	16	0	\$ 3,130.00	\$ -	\$ 3,130.00
	sub-total - Task 15	0	2	8	0	16	0	\$ 3,130.00	\$ -	\$ 3,130.00
Phase 1 Task 16	Final Product Configuration							LABOR COST	TRAVEL/EXPENSES	TOTAL
1.16.1	Phase 1 - Final AMS Configuration	0	2	8	0	16	0	\$ 3,130.00	\$ -	\$ 3,130.00
	sub-total - Task 16	0	2	8	0	16	0	\$ 3,130.00	\$ -	\$ 3,130.00
Phase 1 Task 17	GoLive & Project Close out							LABOR COST	TRAVEL/EXPENSES	TOTAL
1.17.1	Onsite 5 Day GoLive	0	8	0	0	40	0	\$ 6,440.00	\$ -	\$ 6,440.00
1.17.2	GoLive Travel	0	0	0	0	0	0	\$ 920.00	\$ 2,350.00	\$ 3,270.00
	sub-total - Task 17	0	8	0	0	40	0	\$ 7,560.00	\$ 2,350.00	\$ 9,910.00
Phase 1 Task 18	Post GoLive Support							LABOR COST	TRAVEL/EXPENSES	TOTAL
1.18.1	Ad-Hoc Support	0	8	0	0	80	0	\$ 10,200.00	\$ -	\$ 10,200.00
	sub-total - Task 18	0	8	0	0	80	0	\$ 10,200.00	\$ -	\$ 10,200.00
	TOTALS	14	218	402	203	1113	13	\$ 257,270.00	\$ 14,000.00	\$ 271,500.00
Option 2	GoLive option (adds to Line 17.1 - 4 people on-site for GoLive)	0	0	32	0	120	0	\$ 17,960.00	\$ 2,700.00	\$ 20,660.00
Option 3	GoLive option (adds to Line 17.1 or 1.17.1) - dedicated resource plus remote desktop setup/configuration	0	2	2	0	40	0	\$ 5,110.00	\$ -	\$ 5,110.00

this cost reflects Option #2 for GoLive support, this is in addition to the \$ 9910.00 on Line 95
this cost reflects Option #3 for GoLive support, this is in addition to the \$ 9910.00 on Line 95

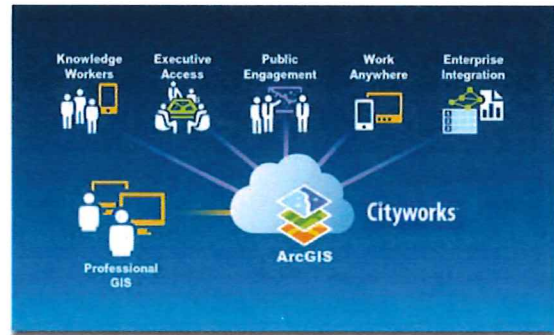


CHAPTER 5: SYSTEM OVERVIEW

The Timmons Group is proposing a system based around the concept of an enterprise platform. This system will be based upon **Cityworks® Server AMS**. By utilizing this system architectural approach, The City of Madison will be able to utilize existing investments made with several tools sets and thus continue to utilize tool sets that are better suited for their designed purpose while leveraging the ability to share data with other systems across the enterprise. Our solution will replace some existing tool sets while integrating with those that are better suited to their functionality than our proposed solution.

Proposed Software Solution Platform

As noted above the City of Madison seeks to replace your existing work order system(s) with a software solution that provides a platform approach to enterprise system integration. We believe that **Cityworks® Server AMS** meets all of your requirements both now and for any future expansions. We have included an in-depth description of our approach, which has led to successful implementations of **Cityworks® Server AMS** at multiple locations across the Country. **Cityworks® Server AMS** & our approach fully align with Madison's goals as well as meet or exceed all of the requirements of the RFP.



Computer Software Licenses

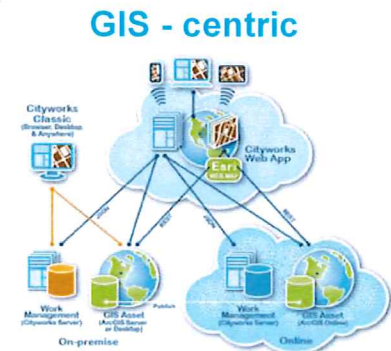
Cityworks®-Azteca Systems is the leading provider of GIS-centric enterprise management solutions. Designed for agencies that care for capital assets, infrastructure, and facilities, the Cityworks approach is unique in the industry, leveraging the inherent value and investment of your Geographic Information System (GIS) database and software.

Cityworks® Server AMS (AMS) provides powerful tools for asset management, customer care, and work management, while **Cityworks® Server PLL** (PLL) provides tools for tracking permits, licenses, planning applications, business and regulatory processes, engineering approvals, as well as code enforcement cases from beginning to completion. Both Server AMS and Server PLL utilize the same database, geodatabase, and interface, and can be used together or independently. In order to effectively manage assets, you need to know what they are and where they are located. At the core of every asset management system there is an asset inventory. Cityworks is unique in utilizing the GIS database (geodatabase) as the asset inventory. Though other approaches may interface with a GIS—generally for map visualization—Cityworks truly utilizes the geodatabase as the asset inventory. Cityworks does not contain separate asset tables that have to be integrated, synchronized, or linked to the GIS. The Cityworks approach is cleaner, more powerful, and inherently simpler. The GIS offers a robust and accurate representation of assets the way you want them—modeled as they are in the real world. Data models are user-definable and non-proprietary, making this information usable with other applications.

Asset Management

Asset management can only be performed with an accurate asset inventory. Today, most asset management systems have incorporated the practices of asset and maintenance management into a single application. Cityworks is unique in that it also brings the location component of these features into the system environment. Using embedded ArcGIS technology, Cityworks brings together powerful technologies in an easy-to-use system performing both asset and maintenance management. The inventory of capital assets and infrastructure is maintained in the GIS geodatabase. By using the GIS tools available in Esri's ArcGIS, users have complete and comprehensive asset data creation, editing, management, and analysis tools at their disposal. Some of these functions include:

- User-definable assets (features)
- User-definable attribute fields (feature attributes)
- Asset inventory directly linked to work management functions
- Assets managed within a visual hierarchy
- Assets directly linked to electronic documents
- Assets used in capital budgeting, planning, and rehabilitation



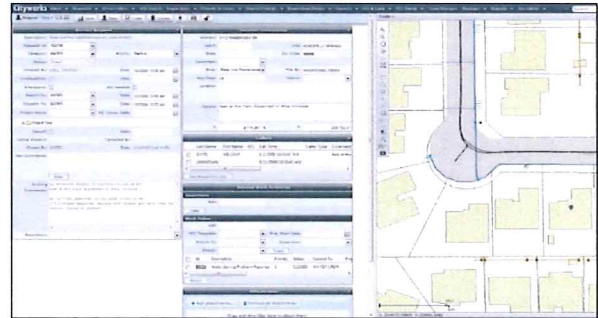


Asset Geodatabase Models

Cityworks—Azteca Systems has developed and refined non-proprietary asset geodata models for common infrastructure, including water, sewer, streets, traffic, parks, facilities, and more. These can be used by our customers as templates to develop a geodatabase design. These models can also be modified for user-specific needs, or a customer may decide to use a model of their own design. Telvent ArcFM data models for the electric and gas industries are also compatible with Cityworks. Because it is data model-independent, Cityworks can read any geodata model created for any feature type. As a result, Cityworks has been deployed to manage a wide variety of assets, including buildings, treatment plants, electric networks, recreation equipment, marinas, and more. Cityworks leverages the inherent value of a GIS-centric enterprise asset inventory by managing the assets and their associated attributes (type, condition, installation date, and so forth), and also by managing the work done to care for assets. The link between assets and work orders is maintained in such a way that the history of completed work orders against a specific asset is viewable and is easily retrieved. If an asset has not yet been identified in the geodatabase, Cityworks can manage work performed by associating it to a valid address, and it can later seamlessly update the history once the asset is reflected in the geodatabase (asset inventory).

Customer Care

People are ever dependent on infrastructure—highways, railways, fresh water, live telephone, uninterrupted energy, and so on. Both businesses and homeowners rely on the operational integrity of systems for transportation, health, and finance. Meeting customer demands is an integral part of asset and maintenance management. Recording customer issues and needs is as much a part of a maintenance system as doing actual work. Customers are often the first to recognize problems. Agencies have long recognized the need to listen to their customers, accurately identify problems, and implement timely resolutions. Cityworks is designed to help organizations care for their customers using built-in, easy-to-use software.



Service Request

Required maintenance may be initiated as a result of a constituent complaint. The Cityworks service request provides the means for users to capture customer needs, collect caller information, and track the caller's request. A service request is typically created after a caller notifies the agency of a problem at a specific location. Service requests contain fields to collect a wide variety of important data, such as caller information, labor usage, status, assignments, and more. It is often difficult to identify the exact cause of an issue from a telephone call. Thus, the service request can be issued to an inspector who can visit the site, speak with the caller, and explore the situation to gather more refined information. If warranted, the inspector may generate a work order to remedy the situation. If the inspector determines that the apparent problem is a private concern or unrelated to the agency, the service requests can be sent to the appropriate agency, yet still capture the comments, time, and costs associated with the customer call or on-site visit. Service requests include the following functionality:

- Caller information tracking
- Labor costs
- Multiple callers on a request
- Combine redundant requests into a single request
- Automatic notification of another request in the area
- Spatial display of requests on the map
- Attach documents
- User-defined problem codes
- Question and answer scripting configured to problem type
- Many to one relationship to work orders
- Email to customer or internal notification
- Customizable printouts per problem type
- Search, retrieve, and reports

Cityworks maintains a dynamic link between the service request and the work order. As work is completed, the service request is automatically updated and both the work order and the service request can be closed simultaneously.

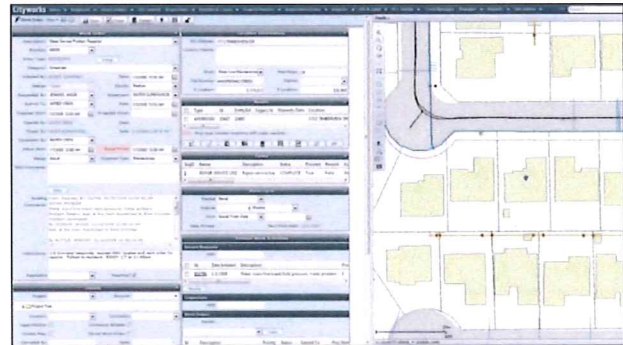
Work Management

Cityworks is a complete, automated system used to identify, track, and record assets and the work performed to care for them. As a GIS-centric asset maintenance management system, Cityworks utilizes a geodatabase as the



asset inventory; and being data model-independent, customers can utilize any data model for any asset type. Cityworks connects directly to the geodatabase with a comprehensive set of maintenance management tools. Work management tools include the following functionality:

- GIS-based asset inventory data management
- Map-based service requests
- Address and asset-based work orders
- Inspections and tests
- Condition analysis tools
- Maintenance analysis tools
- Apps for disconnected mobile usage
- Administration tools

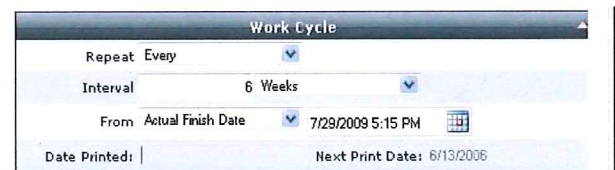
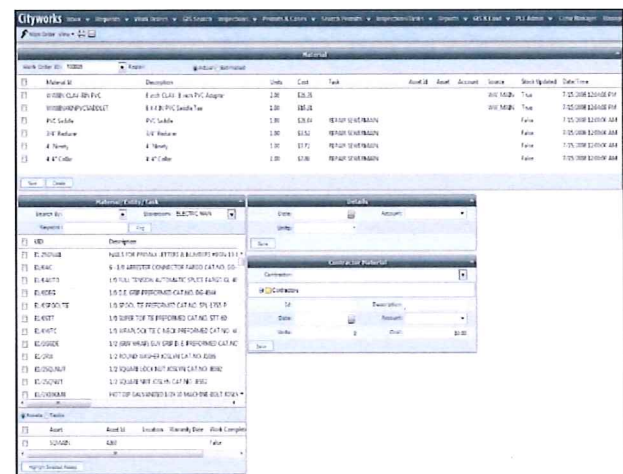


Work Orders

Work orders are the primary tool for maintenance management. Cityworks provides a means to issue and track work orders, activities, tasks, costs, employees, and other information relating to work performed on assets. Asset management involves two fundamental practices—reactive and scheduled maintenance. Reactive maintenance occurs when someone interacts with or recognizes a problem with an asset or with an infrastructure system. For example, a citizen may call the local government agency to report a pothole or damaged street sign. The work done to inspect and resolve the issue is known as reactive maintenance. Most reactive issues begin with a service request. Cityworks handles both scheduled and reactive maintenance. Scheduled maintenance is often driven by general preventative maintenance activities or recurring work schedules (weekly, monthly, and so on). Similarly, reactive work orders can be set up to accommodate unscheduled activities. Both reactive and scheduled work orders can be pre-defined using user-defined work order templates. Work orders can be either attached or unattached. Attached work orders are associated with a specific asset feature or collection of assets. Unattached work orders are not associated with an asset feature, but they are associated to a feature type and a general location, such as an address or intersection. Dynamically linked, work orders are directly associated with their respective asset feature. Multiple assets can be assigned to a single work order, or single assets can be assigned to multiple work orders. Assets can also be associated to a work order after it has been created, as the need arises.

Work order functionality includes the ability to perform the following activities:

- Create, edit, prioritize, assign, schedule, close
- Associate with service request
- Create task procedures with resource utilization and asset association
- Track Equipment, Labor, Material actual and estimated costs
- Create work orders with multiple assets with multiple tasks
- Create multiple work orders associated to individual assets
- Create preventative (scheduled) or reactive maintenance work orders
- Automatically schedule work orders dependent on a time frame
- Attach documents
- Print and email
- Spatially display work orders on the map
- Search and report

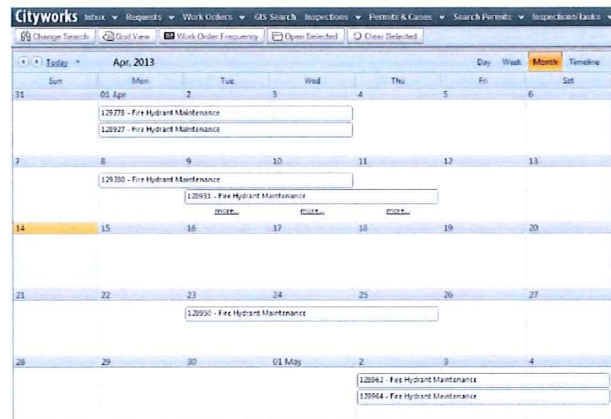




Event layers illustrate work orders in the GIS map view, allowing for a quick and intuitive summary of maintenance activities. They can be configured to represent work related criteria such as open work orders, specific activities, priority, status, assignments, etc. The Cityworks e-URL add-on enables sharing of maps created through inspection, request, and work order searches. This application generates a URL that can be used to show an event layer on another map outside of Server AMS.

Preventative Maintenance

Cityworks provides a mechanism for detailed maintenance planning. By incorporating GIS visualization, the user can easily group assets by location, type, age, or other key parameters. These groupings can then be used to create maintenance activities, such as tests or inspections. Cityworks has the ability to schedule preventative maintenance work orders and have them automatically generate subsequent work orders as each is completed or per a regular cycle. Preventative maintenance can be scheduled in advance for specific assets or groups of assets. These work orders can be set up to repeat a given cycle (daily, monthly, etc.), to repeat once, or to repeat only on a given date. Repeat work orders contain general information found on the original (parent) work order. Subsequent (child) work orders are automatically scheduled. Planning work can be accomplished using ad-hoc searches, budget analysis tools, or spatial searches and selection tools. Asset information is easily queried and retrieved. Work orders can then be planned and created for specific assets. Once scheduled, work orders can be displayed in a calendar interface. This function utilizes drag-and-drop capabilities for work scheduling. Alternatively, the optional Cityworks Metrics API can be used to automatically create work orders based on milestones, thresholds, and measurements. This, as well as other web services and APIs are available to help interface Cityworks with third party applications. Web services and APIs are licensed individually and require configuration services.



The screenshot shows the 'Details' form for a work order. The form includes fields for Start Date, Finish Date, Hours, Account, Description, and checkboxes for Regular, Overtime, Holiday, Benefit, Standby, Shift Diff, Overhead, and Other.

Resource Planning and Utilization

Cityworks work management system is capable of tracking the labor, material, and equipment resources used on each work order. The system is flexible; it allows agencies to design, organize, and modify resources to effectively manage their use. Estimated and actual resource costs can also be tracked for comparison or generation of budget estimates. Resource tracking is intuitive and organized by category—labor, material, and equipment. Tracking resources is performed through the corresponding panel in the work order and can be performed in the office or in the field.

Labor

From the labor panel, Cityworks accounts for labor hours and costs associated with a work order. The labor type can include employees or contractors listed by name or group, or they can be predefined on the work order template. Both estimated and actual resource usage can be recorded. Summary costs statistics are available for each work order, and can be broken out by resource. Labor costs are displayed for those with permission to view costs.

Materials

Cityworks tracks the materials used to complete a work order and the associated costs. At any time, the user can view estimated and actual materials assigned to the work order along with associated costs. Materials can be added or removed based on actual usage. Materials can also be drawn and used from warehouse inventory as they are required. When implemented with Cityworks Storeroom (an add-on software), users can track transactions while having additional security, costing options, vendor and material information, and report functions. Stock on hand is adjusted as materials are added to a work order. If materials are removed from a work order, the stock on hand is adjusted to reflect a return to the storeroom. Material usage can also be associated directly with specific tasks or assets. A Bill of Materials (BOM) can be defined in order to manually build an assembly and add it to a work order.



Equipment

The equipment panels of the work order tracks equipment used; recording the number of hours in use and associated cost to complete the work order. In addition, equipment-tracking functionality includes related information, such as equipment location, supplier, manufacturer, and warranty information. Similar to materials and labor, equipment can be associated to specific tasks and assets on a work order. The Cityworks Equipment Manager add-on adds additional equipment planning and scheduling capabilities.

ELM

ELM panels allow the user to edit work order Equipment, Labor, and Materials (ELM) from a single page. Crew profiles can be created with the default employees, materials, and equipment already associated with them. When a user selects a crew, the associated labor, materials, and equipment are ready to be added to the work order.

The screenshot shows the 'Equipment Manager' interface in Cityworks. It includes a 'Work Order' section with fields for 'Asset', 'Location', 'Status', and 'Assigned To'. Below this is a 'General Information' section with tabs for 'Equipment', 'Labor', and 'Materials'. The 'Equipment' tab is active, showing a list of equipment items with columns for 'Asset', 'Location', 'Status', and 'Assigned To'. There are also sections for 'Equipment Details' and 'Equipment History'.

Inspections

In Cityworks, an inspection is a recurring record of a feature or related object's condition. Inspections record observations about the asset or the results of a test. Assets can have several inspections performed on them. For example, a sewer gravity main can have multiple TV inspections, dye tests, and smoke tests performed on the feature. Each inspection can be associated to a work order, or can be created independent of the work order. Cityworks allows the user to create their own inspection templates with fields pertinent to their inspection processes. Inspections can be queried based on field values. Subsequent ad-hoc or summary reports can be created, or data can be exported to Excel. Similar to work orders and requests, inspections can be displayed spatially on the GIS map.

Tasks

Tasks organize workflows to better manage and account for specific processes associated to a work activity. Tasks can be added, in sequence, to a work order as needed or can be predefined as a set of tasks on a work order template. Each task must be marked with a completion date before the work order record can be closed. Tasks can be associated with specific assets, similar to the process of associating labor, materials, and equipment costs. The user can select appropriate tasks for each work order, using one of several selection options—hierarchy, name, keyword, and so on. Tasks can even be added to a work order template as predefined, default options. For example, in the case of a manhole inspection, the first step may be to set up a temporary barricade. Once the barricade is in place, the supervisor is instructed to file for a Confined Space Permit (CSP) and obtain a CSP-KIT. This helps ensure a safe work environment before the inspection crew arrives on the job site. Other tasks may include diverting flow or defining specific observations.

Paperless

Cityworks supports a paperless office approach, allowing users to take service requests, work orders, tests, and inspections into the field on portable devices, such as laptops or tablet computers. Cityworks Field is Cityworks AMS designed for laptop or tablet usage while connected to the system. Cityworks Mobile Web is designed to utilize Apps for laptop or tablet with an HTML5 application. Cityworks Mobile for iOS and Android systems allows usage on smart devices. Cityworks Mobile Web and iOS and Android Apps allow users to operate in disconnected mode and synchronize data once connected to the system.

The screenshot shows the 'Tasks' interface in Cityworks. It includes a 'Work Order ID' field and a 'Task' table with columns for 'SeqId', 'Name', 'Description', 'Status', 'Proceed', 'Rework', 'Assigned To', 'Shop', 'Start Date', 'Finish Date', 'Proj Start', 'Proj Finish', and 'Assets'. Below the table is a 'Task Entry' section with a 'Search By' dropdown and a 'Find' button. There is also a 'Details' section with fields for 'Sequence', 'Assigned To', 'Shop', 'Comments', 'Projected Start', 'Actual Start', 'Projected Finish', and 'Actual Finish'.



Attaching Files

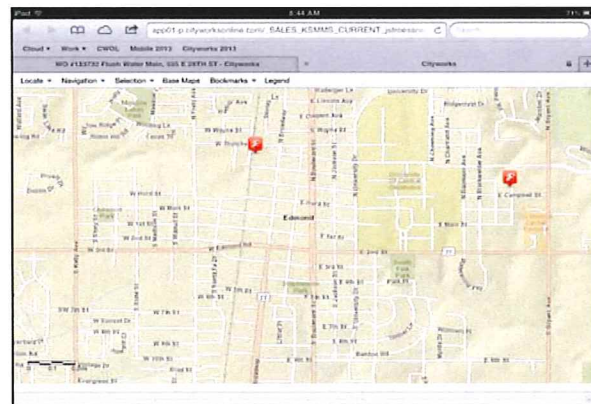
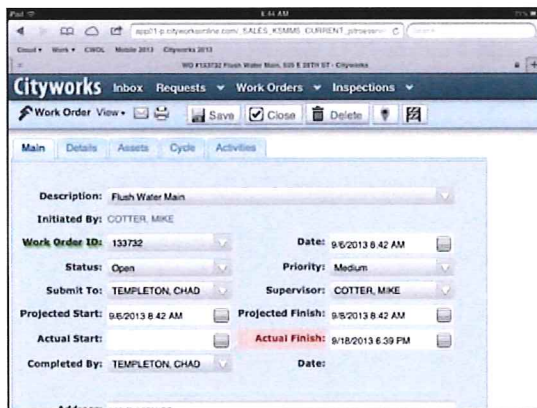
It is often necessary to attach related documents to a work order. Cityworks allows users to attach virtually any type of digital file—images, documents, operations or maintenance manuals, photographs, CAD files, etc. Attached files are stored on a server, and the work order stores a link to the file in question. The files can be opened if the native application of the file is accessible to the user.

Printing Work Orders

Work orders can be printed using user-defined templates that match existing look-and-feel, industry standards, or other driving factors. In addition, users can print out the work order (with an accompanying map that illustrates the area), attachments, and a project inventory. Maps can be set up employing user-defined map templates that may include a key map, legend, north arrow, scale bar, and other pertinent views.

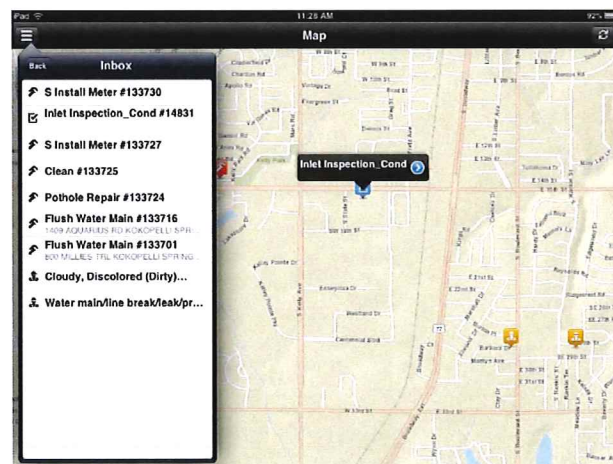
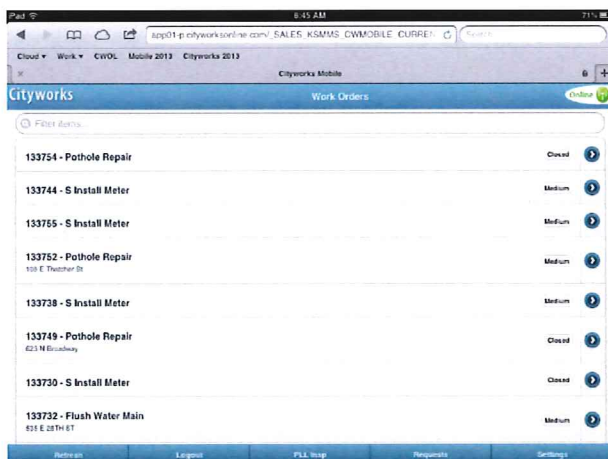
Mobile

Cityworks Field provides full software functionality with a JavaScript map that opens in a separate tab to maximize screen usage. In addition, with the release of Cityworks 2014, users logging into Cityworks Field will have the ability to utilize a different set of XML forms than they access in the office. This option requires a dedicated connection.



Cityworks Mobile Web utilizes an app and has a trimmed user interface and set of functionality compared to Cityworks Office. This application runs in a browser utilizing HTML5 so it will run in either a connected or disconnected environment.

Cityworks iOS and Android apps are currently available in their respective app stores online, and are being further enhanced with each release. Users are able to access Cityworks in a disconnected environment, with the ability to sync back to the primary database.

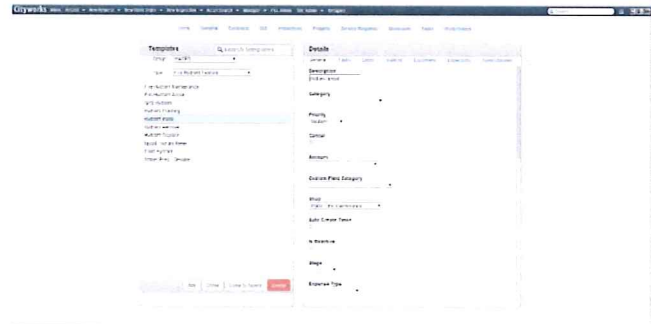




Along with the Standard Software Licensing the organization has the tools available to design process-specific applications using the same software development kit (SDK) used in designing this Cityworks Native Application. In addition, there are several 3rd party citizen engagement mobile apps developed by Cityworks strategic partners, which interface with Cityworks.

Cityworks Administration

Cityworks includes a powerful, yet easy-to-use administration tool to manage your work environment. Cityworks Designer is used to manage employees, materials, equipment, and work order and service request templates. As well, users can manage security, login access, and general preferences. Designer was incorporated into the core Cityworks package to allow clients the ability to control and manage their specific situation.



Cityworks Designer

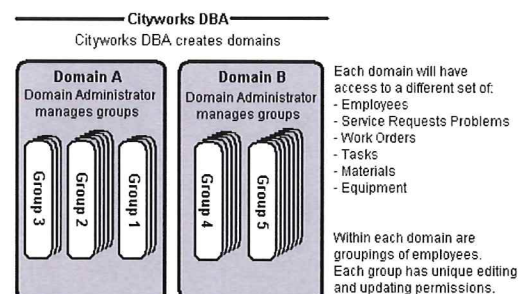
Cityworks Designer allows administrators the ability to control and manage their environment. From defining work domains to administering warehouse criteria, parameters are user defined. Workflow is easily managed using a series of templates. The Cityworks Database Administrator (DBA) will set up security for each domain. From there, domain groups can be organized and employees added. For example, a municipal public works agency may define domains for water and wastewater, electric, streets, stormwater, signs, and signals. They may also add a domain for parks and recreation to manage ball fields, benches, and related infrastructure. Employees are added using the employee template or the import data function. Similarly, contractors, materials, equipment, and other elements are input into the system. Tasks can be used to define specific and procedural steps for completing work. Designer is used to define service request problem code templates. In addition, asset inventory configuration defines the geodatabase assets and fields Cityworks utilizes when attaching work orders to assets. Service request forms can also be scripted to guide call takers through a series of questions to help identify the nature of a situation and gather appropriate information. Designer is also used to define work order templates and their associated data including default fields, assignments, instructions, estimated resources, tasks, and association with asset types. Security is also defined within the templates.

Work Order Template

The work order template is used to define work orders for specific assets. For example, a pressurized water main asset has several pre-defined work order options: flush main, inspect main, install main, and so on. These describe general work activities done to maintain water mains. Activities are user-definable and can easily be cloned to other assets.

System Security

Cityworks allows users to customize work orders specific to the needs of each group or division. This includes creating work orders for any geodatabase asset, security parameters for divisions and assets, support of user-defined fields and inspections, and customizable printouts of work order and service request information. Cityworks security is centrally managed through a set of user and group permissions. Access is managed through Cityworks Designer, the system administration program. Through Designer, administrators can set users, groups, and their permissions through a simple interface. Additional configuration for Cityworks Server AMS and Server PLL is performed within the web page to define administrative logins, end user logins, and security roles. These are unique to the web page and determine which pages and tabs within the Cityworks Server site each user can view.



Search and Report

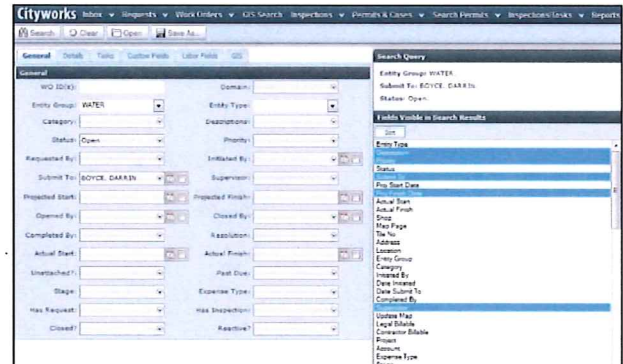
Cityworks contains ad-hoc search and report tools to query the work management data. Searches can be performed displaying future scheduled work, overdue work orders, assignments to specific people or groups,



across date ranges, and a wide variety of parameters. Nearly every field in Cityworks is searchable, allowing for comprehensive data reporting. Designed as an open system, the Cityworks work management database schema is available to Cityworks clients. This allows users to find and extract information that can be used to support preventative maintenance planning, budget analysis, work load balancing, periodic summaries, and other business needs. Search results can be set up to show a variety of displayed values. Combinations of fields can be used in a search, which can form the basis of an ad-hoc report. These fields include account number, address, asset, priority, status, contractor, and many others. In addition, search criteria can be saved as user or domain searches, or they can be used as the basis of an event layer map display.

The Cityworks search engine includes the following functions:

- Search on multiple fields
- Select display fields
- Search on comment text strings
- Search numeric ranges
- Save searches for domain, group, or personal use
- Combine work orders from selected records in the search results
- Sort the search results by a column in ascending or descending order
- Display search results in a map view or in a list view
- Display work schedule in a calendar
- Open selected work orders
- View work order frequencies
- Print current page, print selected work orders, print preview
- Export search results data



Cityworks is compatible with third-party ODBC compliant search and reporting tools, such as Crystal Reports, and has the ability to access customized Crystal Reports from Cityworks Server AMS/PLL.

Work Planning and Budgeting

Cityworks allows users to track the resources and effort needed for each work activity. It also gives users the capability to report on these work activities, providing detailed cost analyses and estimates. Each of the work activities can be linked to labor, materials, equipment, contract services, specific assets, and tasks. Labor, materials, and equipment can be attached to a work order template as estimated cost and units/hours. The work order records actual costs while storing the estimated costs from the template. Cityworks can provide estimates on the resources required for each activity type. Past performance and resources tracked in Cityworks can also be used as a guideline for determining resources needed for future work activities. Using the search tools provided in Cityworks or third-party report tools, administrators can easily determine resource costs and projected costs. Labor, materials, and equipment are organized. Costs can be adjusted to the specific resources periodically, either manually or in batch mode. Cost adjustments can also be made to the estimated resources on the work order template at any time, thereby sticking to the plan throughout the year. Once all templates are generated, the proposed maintenance plan can be generated. The proposed plan is a function of several primary elements—budget, resource constraints, and asset condition. The typical process would include a number of scenarios—such as assets below an acceptable condition—which are assigned proposed work activities, annual inspection programs, Capital Improvement Plan (CIP) schedules, and so forth to find the correct balance, given the business constraints. The Cityworks budgeting tools help create an annual budget with associated inventory, effort levels, and utilization across the year.

Project	Budget	Expended	Remaining
2017 Capital	\$1,000,000.00	\$1,000,000.00	\$0.00
2017 Operating	\$1,000,000.00	\$1,000,000.00	\$0.00
2017 Total	\$2,000,000.00	\$2,000,000.00	\$0.00
2018 Capital	\$1,000,000.00	\$1,000,000.00	\$0.00
2018 Operating	\$1,000,000.00	\$1,000,000.00	\$0.00
2018 Total	\$2,000,000.00	\$2,000,000.00	\$0.00
2019 Capital	\$1,000,000.00	\$1,000,000.00	\$0.00
2019 Operating	\$1,000,000.00	\$1,000,000.00	\$0.00
2019 Total	\$2,000,000.00	\$2,000,000.00	\$0.00

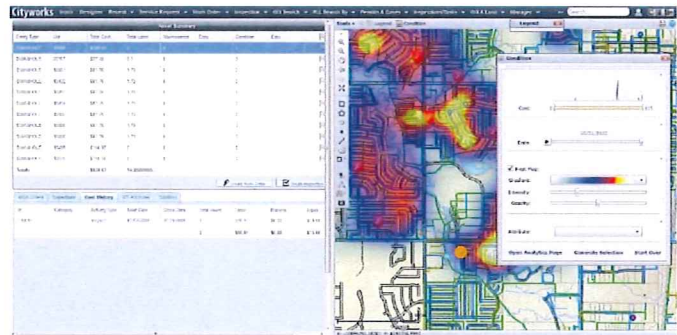


Project Management

Cityworks supports a multi-level project manager, in which the various proposed inspections, maintenance activities, CIP, and other activities are placed into projects. The software supports a security feature so that individual managers can alter their specific projects to meet their needs. Each project can be managed at the detail of individual activities, as well as the project as a whole. This approach allows users to generate a variety of project reports. Projects “roll up” in the hierarchy, allowing a project that contains other projects to incorporate the sub-projects in all reports.

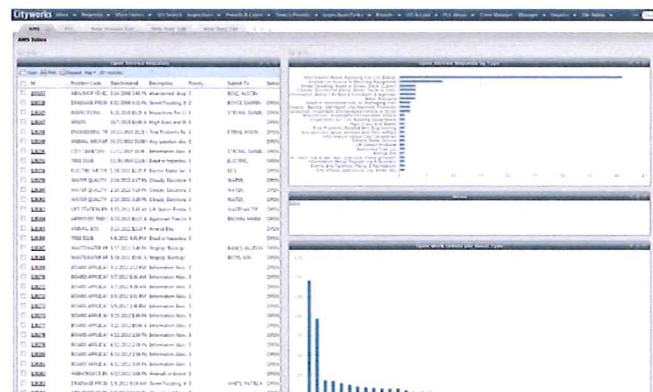
Condition and Maintenance Analysis

Cityworks provides a mechanism for detailed maintenance planning. By incorporating GIS visualization, the user can easily group assets by location, type, age, condition, maintenance cost, or other key parameters. Asset Analytics tools in the map interface provide a means of accessing and visualizing condition and maintenance scores in a spatial view. Maps display distribution of the condition or maintenance scores and an attribute field which can be selected from all available attribute fields for that feature class. Heat maps display the density of scores on the map. Using these tools, administrators can determine where to allocate maintenance money most effectively and visually identify trouble spots on the map. The condition score relates to the condition of an asset tracked on a custom inspection. During an inspection, observations are assigned a value. A formula using weighted observation values produces a condition score. The maintenance score represents the total amount of work done on an asset. The maintenance score is a cumulative score based on score weights per activity type; maintenance costs are factored into the score. Administrators can determine their own scoring and scale system based on their work priorities.



Customization

Cityworks Server AMS includes the ability for users to incorporate individualized reports, queries, charts, map displays, and other web parts into the user's inbox. This allows users to incorporate related data and information that are not core components of Cityworks, but may be directly related to a particular user's needs. In addition, the Cityworks User Interface (UI) can be customized utilizing changes to XML, HTML, and incorporating stored procedures. Moreover, customization can be accomplished using Layout Manager UI rendering tools developed for Cityworks Server AMS/PLL. Users interact with the Layout Manager through specifically formatted XML files. Each time a page loads, Layout Manager reads the files and then interprets them to dynamically create the UI. Documentation and optional training classes are available to help the users understand how to customize the UI.



Interfaces with Other Systems

Cityworks is built using open standards and technology; storing data in an open, published format utilizing standard commercial SQL databases, such as Oracle and Microsoft SQL Server. The open-standards design of Cityworks is the key to developing applications and reports that enhance each individual system, and interface with your critical business systems. These interfaces may be created in-house or by a third-party contractor working for your city. Cityworks customers are free to use the Cityworks data structures to build interfaces to other databases, such as customer information systems, financial information systems, human resource management systems, fleet management systems, and other related business applications. Several customer sites have even created their own applications to access their data. Our licensing policy does not prohibit this in any way. We believe in, and fully support “open systems” and “open standards.” This means Cityworks is truly open. Numerous Cityworks JavaScript Object Notation (JSON) web services have been developed for interfacing Cityworks with other applications. These are licensed individually, and require configuration services. The Cityworks data model and structure is documented for users for internal or neutral third-party consultant use. Azteca Systems requires the



client acknowledge that copyright law protects the Cityworks data structures wherein the data is stored. However, the client is always the owner of data entered into Cityworks and/or data generated by Cityworks. Access to and utilization of the data in Cityworks is unencumbered for the client's internal usage for the following uses:

- Data conversion and data migration into or out of Cityworks
- Internal application development for add-ons to Cityworks or for an application that is complementary to Cityworks, as long as the application is not a reverse engineering of Cityworks
- The development and maintenance interface from Cityworks to citizen web pages for information and service request systems. The licensee has access to the complete documentation of all Cityworks data structures.

Clients may utilize the services of a third-party vendor to support Cityworks for the above items. However, the third-party vendor cannot be a direct competitor of Azteca Systems, and the third-party vendor must execute a Non-Disclosure Agreement with Azteca Systems. Azteca Systems has an extensive network of authorized implementation partners, each having an impressive track record of successful implementations and integrations.

Processes and Workflows

Designing new workflows is a part of the services provided by Timmons for the Cityworks implementation. Providing these within a proposal would be premature as we will need to hold business process workshops with staff to determine what if any modifications will be required to best leverage Cityworks as well as to possibly incorporate industry best practices. Please see Chapter 7 for further explanation.

IT Hardware Needs

Specifications below are guidelines and should be monitored and scaled by City of Madison IT staff to ensure adequate performance.

Cityworks Hardware Requirements:

- Specifications for an Application (Intel®) Server for ~ 100 simultaneous users):
 - Windows Server 2008 R2 or R2 SP1/SP2 (64-bit), IIS 7.5
 - Windows Server 2012 or 2012 R2, IIS 8.0/8.5
 - 12GB RAM (or better)
 - Intel Xeon® 4 core (1 chip) X5677 3.46 GHz (or better)
 - 2 x 146 GB 15000 rpm Serial Attached SCSI (SAS) Disk Drives
 - Gigabit NIC
 - 17" high resolution color monitor; 1024 x 768 or higher
 - .NET 3.5 Framework Windows Server features
 - .NET 4.5 Framework (installed on both application and GIS servers)
 - .NET 4.6 Framework (installed on both application and GIS servers. Requires Crystal Reports Runtime 13.0.16)
- Specifications for a Database (Intel®) Server:
 - Windows Server 2003 SP2, 2008, 2008 R2 or R2 SP1 (64-bit), 2012 or 2012 R2
 - 32GB RAM (or better)
 - Intel Xeon® 8 core (2 chip) X5677 3.46 GHz (or better)
 - 2 x 146 GB 15000 rpm Serial Attached SCSI (SAS) Disk Drives
 - Gigabit NIC
 - 17" high resolution color monitor; 1024 x 768 or higher
- Specifications for a PC(Intel®) Client:
 - 2.0 GHz Intel Core® processor (or better)
 - 2GB RAM (or better)
 - Fast disk (7200 rpm) >40 GB of storage
 - 100 Mbit NIC
 - Windows 8/8.1 (32/64-bit) or Windows 7 Professional® (32/64-bit)
 - 17" high resolution color monitor; 1024 x 768 or higher
 - Silverlight 5
 - Firefox 35-44
 - Internet Explorer 11 and 11.0.15
 - Chrome 39-44



CHAPTER 6: TECHNICAL AND FUNCTIONAL REQUIREMENTS CHECKLIST

Work Orders		
#	Requirement	Response
1	Manages, opens, updates, completes, and closes work activities.	☒ Yes ☐ No ☒ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
2	CMMS stores, on a per work order basis, units and costs for labor, material, equipment and outside resources (contractors).	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
3	Includes asset ID(s) on work order to create history.	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
4	Links to related/originating service requests.	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
This can be a 1:1 or a 1:Many relationship. If there are more than one service requests for a problem, a single work order can be linked to the all service requests.		
5	Routes work orders to the work crews in the field.	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
6	Provides mobile application to enable field crews to enter labor, materials and equipment from the job site.	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
7	Schedules work to be done on a calendar that allows the user to change the day, time or crew by activating the work order from the calendar view.	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		



8	Links multiple assets from multiple feature classes to a single work order.	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
9	Allows more than one task to be assigned to asset(s) in a single work order.	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
10	Tracks work order status in real time.	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		

Service Requests/Customer Service

#	Requirement	Response
1	Creates a service request for internal and external work requests.	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
2	Connects service request to subsequent work order to provide ability to update original requestor.	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
3	Provides automatic email updates to requestors regarding status of request.	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
4	Tracks service requests through various level of employee assignment.	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
5	CMMS is able to store all callers for a given event on one service request record.	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		



The Service Request performs a spatial analysis to find open service requests with the same problem type in the same area as the newly created service request. The option is then given to add the new caller to an existing request or to create a new request.

GIS System

#	Requirement	Response
1	CMMS works with all appropriate GIS data types.	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
2	Displays and utilizes asset hierarchies with the CMMS.	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
3	Displays images and documents associated with an asset record.	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
4	Maps assets using ArcGIS.	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		

Preventative Maintenance (PM)

#	Requirement	Response
1	Sets up PM by various criteria such as by date, time, readings or distance.	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
Manual entry of readings/metrics into Cityworks can automatically create work orders based on set thresholds. The entry of these readings/metrics can be automated via an integration using the Metrics API.		
2	Includes appropriate labor, materials, parts and other requirement work components.	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		



3	Sets various PM start date types, e.g. days, weeks, months, etc.	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
4	Automatically creates work orders for PM and route to field crews.	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
5	Allows a PM work order to be scheduled by set schedule or by completion date.	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		

Inventory/Parts		
#	Requirement	Response
1	Tracks inventory to any bin in any vehicle, storeroom, or warehouse.	☐ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
2	Includes vendor and manufacturer information with a part.	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
3	Updates stock on hand figure based on use through a work order.	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
4	Allows parts to be transferred between storage areas.	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
5	Stores manufacturer and vendor history.	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		



6	Assigns bin location in a warehouse.	☒ Yes ☐ No ☐ Yes; customization required
	Additional Information (Note if information is listed in an additional attachment)	
7	Informs user when minimum parts level is reached.	☒ Yes ☐ No ☐ Yes; customization required
	Additional Information (Note if information is listed in an additional attachment)	

Asset Inspections

#	Requirement	Response
1	Stores information and images about various asset inspections.	☒ Yes ☐ No ☐ Yes; customization required
	Additional Information (Note if information is listed in an additional attachment)	
2	Maps asset inspections.	☒ Yes ☐ No ☐ Yes; customization required
	Additional Information (Note if information is listed in an additional attachment)	
3	Applies a condition assessment rating to an inspection found defect.	☒ Yes ☐ No ☐ Yes; customization required
	Additional Information (Note if information is listed in an additional attachment)	
4	Creates a condition assessment rating report.	☒ Yes ☐ No ☐ Yes; customization required
	Additional Information (Note if information is listed in an additional attachment)	
5	List specific integration capabilities for sanitary and storm sewer main and structure CCTV inspections using PipeLogix software.	
	Integration capabilities (Note if information is listed in an additional attachment)	



Please find information listed in Chapter 7, under Task 8, System Integrations

Asset Management Key Performance Indicators

#	Requirement	Response
1	Allows users to create reports.	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
2	Stores report queries and changes required	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
3	Reviews all reports before they are printed.	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
4	Includes pre-defined general system reports that can be customized by the user.	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
5	Creates and updates key performance indicators (KPI) and adjusts effective service life based on condition ratings and criticality.	☐ Yes ☐ No ☒ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
This is not automated. This could be done in bulk, but is not an out of the box function. Timmons has done with previous clients. A Level of Effort and associated cost can be provided upon request.		
6	Sends reports to printer, file or email.	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
7	Provides compatible file formats for exporting reports.	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		



8	Maps critical condition performance indicators of assets. ☒ Yes ☐ No ☐ Yes; customization required
	Additional Information (Note if information is listed in an additional attachment)

Workflow Management

#	Requirement	Response
1	Supports rules based workflow routing.	☒ Yes ☐ No ☐ Yes; customization required
	Additional Information (Note if information is listed in an additional attachment)	
2	Supports input parameter based workflow routing.	☒ Yes ☐ No ☐ Yes; customization required
	Additional Information (Note if information is listed in an additional attachment)	
	Cityworks can assign work activities based on geographic location as well as priority. Through tasks, a linear workflow can be used to route an activity inter/intra-departmentally if more than one individual is required to perform work.	
3	Supports tasks within work orders.	☒ Yes ☐ No ☐ Yes; customization required
	Additional Information (Note if information is listed in an additional attachment)	
4	Supports task based routing within a given work order.	☒ Yes ☐ No ☐ Yes; customization required
	Additional Information (Note if information is listed in an additional attachment)	

Software Integration

#	Requirement	Response
GIS Integration		
1	CMMS uses ESRI ArcGIS for mapping.	☒ Yes ☐ No ☐ Yes; customization required
	Additional Information (Note if information is listed in an additional attachment)	



2	Vendor is an ESRI Business Partner. Please indicate partnership level.	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
Cityworks / Azteca systems, Inc. is a Platinum level Esri Partner. Timmons is a Silver-level Esri Business partner.		
3	Displays, creates, and manages work orders, and services requests, assets, and condition assessments orders on a map.	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
4	Enables work order and/or inspection creation by selecting one or multiple assets from map	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
5	Allows field employees to display assets by work order in field GIS solution and display work order detail including data entry screens by clicking on asset(s) in GIS	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
CCTV Sewer Inspection System Integration		
1	CMMS must have bi-directional integration with PipeLogix.	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
The CCTV Interface for PACP is a Cityworks add-on that allows for bi-directional integration with any PACP formatted CCTV database.		
2	Work order of inspections for assets is created in CMMS.	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
3	Import function from Pipelogix adds mapped asset detail into the Pipelogix pipe tables and creates a project of surveys.	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		



4	The CCTV Inspector selects the survey and completes the inspection.	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
5	Export from Pipelogix creates the inspection in work order database along with the associated links to pictures or movies. Adds the Inspection number to the Pipelogix survey form.	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
Financial Systems Integration		
1	CMMS utilizes enterprise employee data (i.e. name, position, wage rate, etc.) from the City's ERP system.	☐ Yes ☐ No ☒ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
See Task 8 within Chapter 7 below, costs included within proposed budget.		
2	CMMS utilizes enterprise budget codes for job costing and billing from the City's ERP system.	☐ Yes ☐ No ☒ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
See Task 8 within Chapter 7 below, costs included within proposed budget.		
3	CMMS provides budget and inventory information to the City's ERP system.	☐ Yes ☐ No ☒ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
See Task 8 within Chapter 7 below, costs included within proposed budget.		
Microsoft Dynamics SL		
1	CMMS utilizes Madison Water Utility/Public Service Commission budget codes and accounts from non-ERP sources.	☐ Yes ☐ No ☒ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
See Task 8 within Chapter 7 below, costs included within proposed budget.		
2	Imports parts inventory.	☐ Yes ☐ No ☒ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
See Task 8 within Chapter 7 below, costs included within proposed budget.		



3	Exports costing and time accounting.	☐ Yes ☐ No X Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
See Task 8 within Chapter 7 below, costs included within proposed budget.		

Potential Future Integration		
1	Does the CMMS support web services for integration, i.e., Application Program Interfaces (APIs)?	☒ Yes ☐ No ☐ Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
Cityworks licenses and supports a set of JSON REST web services for the purpose of integrations to 3rd-party software solutions.		
2	Has the CMMS successfully integrated with SCADA systems using Wonderware?	☐ Yes ☐ No X Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
See Task 8 within Chapter 7 below, costs not included within proposed budget. Timmons integrates SCADA with nearly every Cityworks implementation we perform. A Level of Effort and associated costs can be provided upon request.		
3	Has the CMMS successfully integrated with Itron AMI/Meter Data Management AMI system?	☐ Yes ☐ No X Yes; customization required
Additional Information (Note if information is listed in an additional attachment)		
See Task 8 within Chapter 7 below, costs not included within proposed budget. Timmons frequently integrates Cityworks with meter reading/tracking systems. A Level of Effort and associated costs can be provided upon request.		

Attachment E

Acceptance Procedure for Payment Milestones & Final System Acceptance Timmons CMMS Implementation

1. Applicability. This procedure shall apply to all of the items that call for City of Madison sign-off identified with a "yes" on the Milestone Billing Plan and Payment Schedule (Attachment B.) During Task 1, the parties will agree to a format for a written sign-off request form. Timmons shall present the City with the agreed sign-off form for each of the "yes" items in Attachment B. The City's sign-off and acceptance for each such item is required before Timmons may invoice for the group of tasks identified within that invoicing group on Attachment B.

2. Procedure: Upon receipt of a sign-off request form from Timmons, the City will have ten (10) business days to sign and return the sign-off form to Timmons indicating acceptance, or to notify Timmons in writing that the deliverable associated with the sign-off is unacceptable, based on the standards set forth in this Contract. If the City notifies Timmons that the deliverable is unacceptable, Timmons will revise the deliverable and provide the revised deliverable to the City within ten (10) business days of receiving written notice from the City that the deliverable was unacceptable.

Upon receipt of the revised deliverable from Timmons, the City will have ten (10) business days to sign and return the sign-off form to Timmons, signifying the City's acceptance of the corrected/revised deliverable, or to notify Timmons in writing that the deliverable remains unacceptable, based on the standards set forth in this Contract.

This process shall repeat until the City indicates acceptance by signing and returning the sign-off request form to Timmons Group. An unaccepted deliverable is not a basis for extending a due date in this Contract or changing / delaying the schedule established in the Project Management Plan unless the City expressly agrees to such change in writing using the Change Management Procedure in the SOW.

3. Failure to sign off or respond: In the event the City fails to either sign and return a sign-off request form, or fails notify Timmons in writing that the deliverable associated with the sign-off is unacceptable within ten (10) business days of receiving the sign-off request form, the deliverable associated with the sign-off will be deemed accepted by the City.

4. Final System Acceptance.

A. Definition of the System: The System to be installed by Timmons shall meet the requirements of: Attachment D (Chapters 5 and 6 of Timmons' response to RFP) and all documents prepared during the implementation according to Attachment A (SOW,) including but not limited to, the Business Requirements, User Requirements, Functional Requirements, the testing and acceptance criteria laid out in the Test and Acceptance Plan, and any change orders, the versions of all of which have been agreed to by the parties for each Functional Group identified in the SOW.

B. Final System Acceptance Process: Final System Acceptance occurs after the system has been in the production environment and after Pre-Go Live Acceptance in Task 17 of the SOW. Once all tasks leading up to Final System Acceptance (as described in the SOW, all documents generated during the implementation and agreed to be the City, any change orders, and Attachment B) have been completed, and after not less than ten (10) business days of initialization of the production environment, Timmons shall present the City with a sign off form (Go-Live Certificate) requesting Final System Acceptance, using the sign-off procedure described above in paragraphs 2 and 3. The City will use the above Definition of the System in determining whether to sign off on Final System Acceptance.