<center>SERVICES AGREEMENT</center>

THIS SERVICES AGREEMENT ("Agreement") is made as of this 21st day of June, 2016 ("Effective Date"), by and between Pinellas County, a political subdivision of the State of Florida ("County"), and Woolpert, Inc., Dayton, Ohio ("Contractor") (individually, "Party," collectively, "Parties").

<center>**WITNESSETH:**</center>

WHEREAS, the County has a need for an experience Enterprise Asset Management software implementer; and

WHEREAS, based upon the County's assessment of Contractor's qualifications, experience and pricing, the County selected the Contractor to provide the Services as defined herein; and

WHEREAS, Contractor represents that it has the experience and expertise to perform the Services as set forth in this Agreement.

NOW, THEREFORE, in consideration of the above recitals, the mutual covenants, agreements, terms and conditions herein, and other good and valuable consideration, the receipt and sufficiency of which is hereby mutually acknowledged, the Parties agree as follows:

1. **Definitions.**

    A. **"Agreement"** means this Agreement, including all Exhibits, which are expressly incorporated herein by reference, and any amendments thereto.

    B. **"County Confidential Information"** means any County information deemed confidential and/or exempt from Section 119.07, Florida Statutes, and Section 24(a), Article 1 of the Florida Constitution, or other applicable law, and any other information designated in writing by the County as County Confidential Information.

    C. **"Contractor Confidential Information"** means any Contractor information that constitutes a trade secret pursuant to Chapter 688, Florida Statutes, and is designated in this Agreement or in writing as a trade secret by Contractor (unless otherwise determined to be a public record by applicable Florida law). Notwithstanding the foregoing, Contractor Confidential Information does not include information that: (i) becomes public other than as a result of a disclosure by the County in breach of the Agreement; (ii) becomes available to the County on a non-confidential basis from a source other than Contractor, which is not prohibited from disclosing such information by obligation to Contractor; (iii) is known by the County prior to its receipt from Contractor without any obligation or confidentiality with respect thereto; or (iv) is developed by the County independently of any disclosures made by Contractor.

    D. **"Contractor Personnel"** means all employees of Contractor, and all employees of subcontractors of Contractor, including, but not limited to temporary and/or leased employees, who are providing the Services at any time during the project term.

    E. **"Services"** means the work, duties and obligations to be carried out and performed safely by Contractor under this Agreement, as described throughout this Agreement and as specifically described in **Exhibit A** ("Statement of Work") attached hereto and incorporated herein by reference. As used in this Agreement, Services shall include any component task, subtask, service, or function inherent, necessary, or a customary part of the Services, but not specifically described in this Agreement, and shall include the provision of all standard day-to-day administrative, overhead, and internal expenses, including costs of bonds and insurance as required herein, labor, materials, equipment, safety equipment, products, office supplies, consumables, tools, postage, computer hardware/software, telephone charges, copier usage, fax charges, travel, lodging, and per diem and all other costs required to perform Services except as otherwise specifically provided in this Agreement.

2. **Conditions Precedent.** This Agreement, and the Parties' rights and obligations herein, are contingent upon and subject to the Contractor securing and/or providing the performance security, if required in Section 3, and the insurance coverage(s) required in Section 13, within <u>ten (10)</u> days of the Effective Date. No Services shall be performed by the Contractor and the County shall not incur any obligations of any type until Contractor satisfies these conditions. Unless waived in writing by the County, in the event the Contractor fails to satisfy the conditions precedent within the time required herein, the Agreement shall be deemed not to have been entered into and shall be null and void.

3. **Services.**

   A. Services. The County retains Contractor, and Contractor agrees to provide the Services. All Services shall be performed to the reasonable satisfaction of the County, and shall be subject to the provisions and terms contained herein and the Exhibits attached hereto.

   B. Services Requiring Prior Approval. Contractor shall not commence work on any Services requiring prior written authorization in the Statement of Work without approval from <u>the County BTS Project Manager.</u>

   C. Additional Services. From the Effective Date and for the duration of the project, the County may elect to have Contractor perform Services that are not specifically described in the Statement of Work attached hereto but are related to the Services ("Additional Services"), in which event Contractor shall perform such Additional Services for the compensation specified in the Statement of Work attached hereto. Contractor shall commence performing the applicable Additional Services promptly upon receipt of written approval as provided herein.

   D. De-scoping of Services. The County reserves the right, in its sole discretion, to de-scope Services upon written notification to the Contractor by the County. Upon issuance and receipt of the notification, the Contractor and the County shall enter into a written amendment reducing the appropriate Services Fee for the impacted Services by a sum equal to the amount associated with the de-scoped Services as defined in the payment schedule in this Agreement, if applicable, or as determined by mutual written consent of both Parties based upon the scope of work performed prior to issuance of notification.

   E. Independent Contractor Status and Compliance with the Immigration Reform and Control Act. Contractor is and shall remain an independent contractor and is neither agent, employee, partner, nor joint venturer of County. Contractor acknowledges that it is responsible for complying with the provisions of the Immigration Reform and Control Act of 1986 located at 8 U.S.C. 1324, et seq, and regulations relating thereto, as either may be amended from time to time. Failure to comply with the above provisions shall be considered a material breach of the Agreement.

   F. Non-Exclusive Services. This is a non-exclusive Agreement. During the term of this Agreement, and any extensions thereof, the County reserves the right to contract for another provider for similar services as it determines necessary in its sole discretion.

   G. Project Monitoring. During the term of the Agreement, Contractor shall cooperate with the County, either directly or through its representatives, in monitoring Contractor's progress and performance of this Agreement.

4. **Term of Agreement.**

   A. Initial Term. The term of this Agreement shall commence on the Effective Date and shall remain in full force and effect for five years from that date, unless terminated sooner in accordance with the terms of this Agreement.

   B. Term Extension. The term of this Agreement may not be extended. All Services shall be completed by the expiration of the initial term as defined in 4.A.

5. **Compensation and Method of Payment.**

A. Services Fee. As total compensation for the Services, the County shall pay the Contractor the sums as provided in this Section 5 ("Services Fee"), pursuant to the terms and conditions as provided in this Agreement. It is acknowledged and agreed by Contractor that this compensation constitutes a limitation upon County's obligation to compensate Contractor for such Services required by this Agreement, but does not constitute a limitation upon Contractor's obligation to perform all of the Services required by this Agreement. In no event will the Services Fee paid exceed the not-to-exceed sums set out in subsections 5.B. and C., unless the Parties agree to increase this sum by written amendment as authorized in Section 21 of the Agreement.

B. ☒ The County agrees to pay the Contractor the not-to-exceed sum of $ 6,547,551.94, for Services completed and accepted as provided in Section 15 herein if applicable, payable on a fixed-fee basis for the deliverables, and at the hourly rates, as set out in **Exhibit B,** payable upon submittal of an invoice as required herein.

C. Travel Expenses. The Services Fee includes all travel, lodging and per diem expenses incurred by Contractor in performing the Services.

D. Taxes. Contractor acknowledges that the County is not subject to any state or federal sales, use, transportation and certain excise taxes.

E. Payments. Contractor shall submit invoices for payments due as provided herein and authorized reimbursable expenses incurred with such documentation as required by County. Invoices shall be submitted as provided in **Exhibit E** attached hereto.

For time and materials Services, all Contractor Personnel shall maintain logs of time worked, and each invoice shall state the date and number of hours worked for Services authorized to be billed on a time and materials basis. All payments shall be made in accordance with the requirements of Section 218.70 et seq., Florida Statutes, "The Local Government Prompt Payment Act." The County may dispute any payments invoiced by Contractor in accordance with the County's Invoice Payments Dispute Resolution Process established in accordance with Section 218.76, Florida Statutes, and any such disputes shall be resolved in accordance with the County's Dispute Resolution Process, attached hereto as **Exhibit F** and incorporated herein by reference.

6. **Personnel.**

    A. Qualified Personnel. Contractor agrees that each person performing Services in connection with this Agreement shall have the qualifications and shall fulfill the requirements set forth in this Agreement.

    B. Approval and Replacement of Personnel. The County shall have the right to approve all Contractor Personnel assigned to provide the Services, which approval shall not be unreasonably withheld. Prior to commencing the Services, the Contractor shall provide at least ten (10) days written notice of the names and qualifications of the Contractor Personnel assigned to perform Services pursuant to the Agreement. Thereafter, during the term of this Agreement, the Contractor shall promptly and as required by the County provide written notice of the names and qualifications of any additional Contractor Personnel assigned to perform Services. The County, on a reasonable basis, shall have the right to require the removal and replacement of any of the Contractor Personnel performing Services, at any time during the term of the Agreement. The County will notify Contractor in writing in the event the County requires such action. Contractor shall accomplish any such removal within forty-eight (48) hours after receipt of notice from the County and shall promptly replace such person with another person, acceptable to the County, with sufficient knowledge and expertise to perform the Services assigned to such individual in accordance with this Agreement. In situations where individual Contractor Personnel are prohibited by applicable law from providing Services, removal and replacement of such Contractor Personnel shall be immediate and not subject to such forty-eight (48) hour replacement timeframe and the provisions of Section 7. A.1. shall apply if minimum required staffing is not maintained.

7. <u>**Termination**</u>.

    A. **Contractor Default Provisions and Remedies of County**.

        1. <u>Events of Default.</u> Any of the following shall constitute a "Contractor Event of Default" hereunder: (i) Contractor fails to maintain the staffing necessary to perform the Services as required in the Agreement, fails to perform the Services as specified in the Agreement, or fails to complete the Services within the completion dates as specified in the Agreement; (ii) Contractor breaches Section 9 (Confidential Information); (iii) Contractor fails to gain acceptance of a deliverable per Section 15, if applicable, for two (2) consecutive iterations; or (iv) Contractor fails to perform or observe any of the other material provisions of this Agreement.

        2. <u>Cure Provisions.</u> Upon the occurrence of a Contractor Event of Default as set out above, the County shall provide written notice of such Contractor Event of Default to Contractor ("Notice to Cure"), and Contractor shall have thirty (30) calendar days after the date of a Notice to Cure to correct, cure, and/or remedy the Contractor Event of Default described in the written notice.

        3. <u>Termination for Cause by the County.</u> In the event that Contractor fails to cure a Contractor Event of Default as authorized herein, or upon the occurrence of a Contractor Event of Default as specified in Section 7.A.1.(iii), the County may terminate this Agreement in whole or in part, effective upon receipt by Contractor of written notice of termination pursuant to this provision, and may pursue such remedies at law or in equity as may be available to the County.

    B. **County Default Provisions and Remedies of Contractor.**

        1. <u>Events of Default.</u> Any of the following shall constitute a "County Event of Default" hereunder: (i) the County fails to make timely undisputed payments as described in this Agreement; (ii) the County breaches Section 9 (Confidential Information); or (iii) the County fails to perform any of the other material provisions of this Agreement.

        2. <u>Cure Provisions.</u> Upon the occurrence of a County Event of Default as set out above, Contractor shall provide written notice of such County Event of Default to the County ("Notice to Cure"), and the County shall have thirty (30) calendar days after the date of a Notice to Cure to correct, cure, and/or remedy the County Event of Default described in the written notice.

        3. <u>Termination for Cause by Contractor.</u> In the event the County fails to cure a County Event of Default as authorized herein, Contractor may terminate this Agreement in whole or in part effective on receipt by the County of written notice of termination pursuant to this provision, and may pursue such remedies at law or in equity as may be available to the Contractor.

    C. **Termination for Convenience.**
      Notwithstanding any other provision herein, the County may terminate this   Agreement, without cause, by giving thirty (30) days advance written notice to the Contractor of its election to terminate this Agreement pursuant to this provision.

8. <u>**Time is of the Essence.**</u> Time is of the essence with respect to all provisions of this Agreement that specify a time for performance, including the Services as described in Exhibits attached hereto; provided, however, that the foregoing shall not be construed to limit a Party's cure period allowed in the Agreement.

9. **Confidential Information and Public Records.**

   A. County Confidential Information.   Contractor shall not disclose to any third party County Confidential Information that Contractor, through its Contractor Personnel, has access to or has received from the County pursuant to its performance of Services pursuant to the Agreement, unless approved in writing by the County Contract Manager. All such County Confidential Information will be held in confidence from the date of disclosure by the County, and discussions involving such County Confidential Information shall be limited to Contractor Personnel as is necessary to complete the Services.

   B. Contractor Confidential Information.   All Contractor Confidential Information received by the County from Contractor will be held in confidence from the date of disclosure by Contractor and discussions involving such Contractor Confidential Information shall be limited to the members of the County's staff and the County's subcontractors who require such information in the performance of this Agreement. The County acknowledges and agrees to respect the copyrights, registrations, trade secrets and other proprietary rights of Contractor in the Contractor Confidential Information during and after the term of the Agreement and shall at all times maintain the confidentiality of the Contractor Confidential Information provided to the County, subject to federal law and the laws of the State of Florida related to public records disclosure. Contractor shall be solely responsible for taking any and all action it deems necessary to protect its Contractor Confidential Information except as provided herein. Contractor acknowledges that the County is subject to public records legislation, including but not limited to Chapter 119, Florida Statutes, and the Florida Rules of Judicial Administration, and that any of the County's obligations under this Section may be superseded by its obligations under any requirements of said laws.

   C. Public Records.   Contractor acknowledges that information and data it manages as part of the services may be public records in accordance with Chapter 119, Florida Statutes and Pinellas County public records policies. Contractor agrees that prior to providing services it will implement policies and procedures to maintain, produce, secure, and retain public records in accordance with applicable laws, regulations, and County policies, including but not limited to the Section 119.0701, Florida Statutes. Notwithstanding any other provision of this Agreement relating to compensation, the Contractor agrees to charge the County, and/or any third parties requesting public records only such fees allowed by Section 119.07, Florida Statutes, and County policy for locating and producing public records during the term of this Agreement.

10. **Audit.** Contractor shall retain all records relating to this Agreement for a period of at least three (3) years after final payment is made. All records shall be kept in such a way as will permit their inspection pursuant to Chapter 119, Florida Statutes. In addition, County reserves the right to examine and/or audit such records.

11. **Compliance with Laws.**   The laws of the State of Florida apply to any purchase made under this Request for Proposal. Proposers shall comply with all local, state, and federal directives, orders and laws as applicable to this proposal and subsequent contract(s) including but not limited to Americans with Disabilities Act (ADA), Section 504 of the Rehabilitation Act of 1973, Equal Employment Opportunity (EEO), Minority Business Enterprise (MBE), and OSHA as applicable to this contract.

12. **Public Entities Crimes.**   Contractor is directed to the Florida Public Entities Crime Act, Section 287.133, Florida Statutes, and represents to County that Contractor is qualified to transact business with public entities in Florida.

13. **Liability and Insurance.**

   A. Insurance. Contractor shall comply with the insurance requirements set out in **Exhibit D,** attached hereto and incorporated herein by reference.

B. Indemnification. For claims pertaining to the services rendered, to the fullest extent permitted by law, Contractor agrees to indemnify and hold harmless County from and against all claims, demands, suits, causes of action, losses, penalties and expenses, including reasonable defense attorneys' fees, for property damage, personal injury or death to the extent caused by the negligence, willful misconduct, or material breach of contract of Contractor under this Agreement.

For claims involving other than the services rendered, to the fullest extent permitted by law, Contractor agrees to defend, indemnify, and hold harmless County from and against all claims, demands, suits, causes of action, losses, penalties and expenses, including reasonable defense attorneys' fees if Contractor is not retained to defend the claim, demand, suit, or cause of action, for property damage, personal injury or death arising out of or resulting from or in connection with the acts or omissions of Contractor under this Agreement. .

C. Liability. Neither the County nor Contractor shall make any express or implied agreements, guaranties or representations, or incur any debt, in the name of or on behalf of the other Party. Neither the County nor Contractor shall be obligated by or have any liability under any agreements or representations made by the other that are not expressly authorized hereunder. The County shall have no liability or obligation for any damages to any person or property directly or indirectly arising out of the operation by Contractor of its business, whether caused by Contractor's negligence or willful action or failure to act.

D. Contractor's Taxes. The County will have no liability for any sales, service, value added, use, excise, gross receipts, property, workers' compensation, unemployment compensation, withholding or other taxes, whether levied upon Contractor or Contractor's assets, or upon the County in connection with Services performed or business conducted by Contractor. Payment of all such taxes and liabilities shall be the responsibility of Contractor.

14. County's Funding. The Agreement is not a general obligation of the County. It is understood that neither this Agreement nor any representation by any County employee or officer creates any obligation to appropriate or make monies available for the purpose of the Agreement beyond the fiscal year in which this Agreement is executed. No liability shall be incurred by the County, or any department, beyond the monies budgeted and available for this purpose. If funds are not appropriated by the County for any or all of this Agreement, the County shall not be obligated to pay any sums provided pursuant to this Agreement beyond the portion for which funds are appropriated. The County agrees to promptly notify Contractor in writing of such failure of appropriation, and upon receipt of such notice, this Agreement, and all rights and obligations contained herein, shall terminate without liability or penalty to the County.

15. Acceptance of Services. For all Services deliverables that require County acceptance as provided in the Statement of Work, the County, through the County BTS Project Manager or designee, will have ten (10) calendar days to review the deliverable(s) after receipt or completion of same by Contractor, and either accept or reject the deliverable(s) by written notice to Contractor. If a deliverable is rejected, the written notice from the County will specify any required changes, deficiencies, and/or additions necessary. Contractor shall then have seven (7) calendar days, unless otherwise agreed to by the parties, to revise the deliverable(s) to resubmit and/or complete the deliverable(s) for review and approval by the County, who will then have seven (7) calendar days to review and approve, or reject the deliverable(s); provided however, that Contractor shall not be responsible for any delays in the overall project schedule that result from the County's failure to timely approve or reject deliverable(s) as provided herein. Upon final acceptance of the deliverable(s), the County will accept the deliverable(s) in writing.

16. Subcontracting/Assignment.

    A. Subcontracting. Contractor is fully responsible for completion of the Services required by this Agreement and for completion of all subcontractor work, if authorized as provided herein. Contractor shall not subcontract any work under this Agreement to any subcontractor other than the subcontractors specified in the proposal and previously approved by the County, without the prior written consent of the County, which shall be determined by the County in its sole discretion.

    B. Assignment.
    This Agreement, and any rights or obligations hereunder, shall not be assigned, transferred or delegated to any other person or entity. Any purported assignment in violation of this section shall be null and void.

17. Survival. The following provisions shall survive the expiration or termination of the Term of this Agreement: 7, 9, 10, 13, 20, 23, and any others which by their nature would survive termination.

18. Notices. All notices, authorizations, and requests in connection with this Agreement shall be deemed given on the day they are: (1) deposited in the U.S. mail, postage prepaid, certified or registered, return receipt requested; or (2) sent by air express courier (e.g., Federal Express, Airborne, etc.), charges prepaid, return receipt requested; or (iii) sent via email and addressed as set forth below, which designated person(s) may be amended by either Party by giving written notice to the other Party:

For County:	For Contractor:
Business Technology Services Department	Woolpert, Inc
Attn: Mary Buccigrossi, Contracts Administrator	Attn: David Feuer
400 S. Ft. Harrison Ave.,	116 Inverness Drive East, Suite 105
Clearwater, FL 337756	Englewood, CO 80112-5125
Phone: 727-464-3395	(720) 279-3712

with a copy to:
Purchasing Director
Pinellas County Purchasing Department
400 South Fort Harrison Avenue
Clearwater, FL 33756

19. Conflict of Interest.

    A. The Contractor represents that it presently has no interest and shall acquire no interest, either direct or indirect, which would conflict in any manner with the performance of the Services required hereunder, and that no person having any such interest shall be employed by Contractor during the agreement term and any extensions.

    B. The Contractor shall promptly notify the County in writing of any business association, interest, or other circumstance which constitutes a conflict of interest as provided herein. If the Contractor is in doubt as to whether a prospective business association, interest, or other circumstance constitutes a conflict of interest, the Contract may identify the prospective business association, interest or circumstance, the nature of work that the Contractor may undertake and request an opinion as to whether the business association, interest or circumstance constitutes a conflict of interest if entered into by the Contractor. The County agrees to notify the Contractor of its opinion within (10) calendar days of receipt of notification by the Contractor, which shall be binding on the Contractor.

20. <u>Right to Ownership.</u> All work created, originated and/or prepared by Contractor in performing Services pursuant to the Agreement, to the extent that such work, products, documentation, materials or information are described in or required by the Services (collectively, the "Work Product") shall be County's property when completed and accepted, if acceptance is required in this Agreement, and the County has made payment of the sums due therefore. The ideas, concepts, know-how or techniques developed during the course of this Agreement by the Contractor or jointly by Contractor and the County may be used by the County without obligation of notice or accounting to the Contractor. Any data, information or other materials furnished by the County for use by Contractor under this Agreement shall remain the sole property of the County.

21. <u>Amendment.</u> This Agreement may be amended by mutual written agreement of the Parties hereto.

22. <u>Severability.</u> The terms and conditions of this Agreement shall be deemed to be severable. Consequently, if any clause, term, or condition hereof shall be held to be illegal or void, such determination shall not affect the validity or legality of the remaining terms and conditions, and notwithstanding any such determination, this Agreement shall continue in full force and effect unless the particular clause, term, or condition held to be illegal or void renders the balance of the Agreement impossible to perform.

23. <u>Applicable Law and Venue.</u> This Agreement shall be governed by and construed in accordance with the laws of the State of Florida (without regard to principles of conflicts of laws). The Parties agree that all actions or proceedings arising in connection with this Agreement shall be tried and litigated exclusively in the state or federal (if permitted by law and a Party elects to file an action in federal court) courts located in or for Pinellas County, Florida. This choice of venue is intended by the Parties to be mandatory and not permissive in nature, and to preclude the possibility of litigation between the Parties with respect to, or arising out of, this Agreement in any jurisdiction other than that specified in this section. Each Party waives any right it may have to assert the doctrine of *forum non conveniens* or similar doctrine or to object to venue with respect to any proceeding brought in accordance with this section.

24. <u>Waiver.</u> No waiver by either Party of any breach or violation of any covenant, term, condition, or provision of this Agreement or of the provisions of any ordinance or law, shall be construed to waive any other term, covenant, condition, provisions, ordinance or law, or of any subsequent breach or violation of the same.

25. <u>Due Authority.</u> Each Party to this Agreement represents and warrants that: (i) it has the full right and authority and has obtained all necessary approvals to enter into this Agreement; (ii) each person executing this Agreement on behalf of the Party is authorized to do so; (iii) this Agreement constitutes a valid and legally binding obligation of the Party, enforceable in accordance with its terms.

26. <u>No Third Party Beneficiary.</u> The Parties hereto acknowledge and agree that there are no third party beneficiaries to this Agreement. Persons or entities not a party to this Agreement may not claim any benefit from this Agreement or as third party beneficiaries hereto.

27. <u>Entire Agreement.</u> This Agreement including the following incorporated exhibits constitutes the entire Agreement between the Parties and supersedes all prior negotiations, representations or agreements either oral or written:
- Exhibit A- Statement of Work
- Exhibit B – Price Proposal
- Exhibit C – Project Schedule
- Exhibit D – Insurance Requirements
- Exhibit E – Payment / Invoices
- Exhibit F – Dispute Resolution for Matters of Invoice Payment

(Signature Page Follows)

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement the day and year first written.

PINELLAS COUNTY, FLORIDA
by and through its Board of County
Commissioners

By: _____
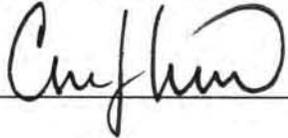
ATTEST: KEN BURKE, CLERK
By: _____
Deputy Clerk
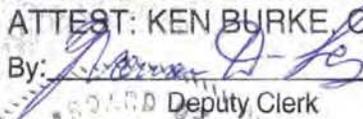
ATTEST:
KEN BURKE, CLERK OF COURT
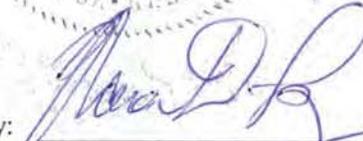
By: _____
Deputy Clerk

Woolpert, Inc.

By: _____

Name: Scott Cattran

Title: CEO and President

ATTEST:
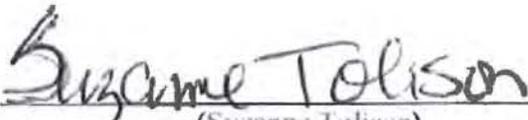
By: _____
(Suzanne Tolison)

APPROVED AS TO FORM

By: _____
Office of the County Attorney

EXHIBIT A – STATEMENT OF WORK

STATEMENT OF WORK

Pinellas County Asset Management Program Development and Cityworks Implementation

Pinellas County, Florida

May 1, 2016

Prepared by Woolpert, Inc.
6802 Paragon Place
Suite 410
Henrico, VA 23230

www.woolpert.com

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Introduction

Pinellas County, FL is part of the growing Tampa/St. Petersburg/Clearwater Metropolitan Statistical Area. The county business, under the direction of the Board of County Commissioners (BCC), is responsible to provide different levels of services to citizens across the county, including courts, jails, animal services, economic development, 911, emergency medical system, mosquito control, social services, and arterial roads.

The BCC operates based on five strategic directions and expects all enterprise level projects to conform to the following standards:

- Establish, define and focus on a core set of services
- Maximize and improve the service delivery of core services
- Continuously improve efficiency of operations
- Increase community partnership through leadership and improved communication
- Maintain a high performing workforce

Pinellas County's business enterprise includes more than 50 separate departments with oversight provided by constitutional officers, public boards, and appointing authorities; each with the common goal of serving the nearly one million citizens of Pinellas County. In an effort to provide improved and sustainable services to citizens in a more consistent manner, Pinellas County is looking for a more effective and efficient means of managing assets at an enterprise level.

There are $4.0 billion in horizontal and vertical assets within these departments that need to be tracked, maintained, repaired, and replaced. Additionally, there are a number of federal and state reporting requirements that are tied to these assets and an overarching responsibility to the citizens of Pinellas to provide management of these assets in the most effective and efficient way possible. The goal is to provide a comprehensive enterprise asset management plan with the highest priority placed on optimizing the life cycle of these assets and the resources supporting them.

This document provides the first Phase of a two-step process to implement the County's chosen Enterprise Asset Management Software system, Azteca Cityworks. Following successful completion of this project, the second Phase will be performed, which will result in a fully operational Enterprise Asset Management system across the County.

Overview

Woolpert's Asset Management Program Development and Enterprise Asset Management System Implementation projects are focused on delivering a comprehensive set of management strategies, technology tools and asset management best practices that support our clients' planned asset sustainability performance objectives. **Through this and a subsequent scope of services, Woolpert will deliver foundational asset management policies and strategies, and a feature-rich, fully functional, and integrated Cityworks AMS solution meeting Pinellas County's (County) objectives** by first understanding your Asset Management (AM) Vision and then defining the Planned Performance Management strategies to achieve the Vision. We will conduct a comprehensive set of planning activities which will define the foundation of the County's AM program, assess departmental readiness for the new software solution, establish County-wide business processes and AM standards, and define a set of global configuration settings. Then Woolpert will design and deploy the Performance Management System Application (Cityworks AMS and related system integrations) required to support sustained Performance Management & Monitoring activities that are aligned with your long-term Enterprise Asset Management Program objectives.

There are many related Tasks and Sub-Tasks that have to be properly managed, executed, delivered, and accepted to ensure a successful outcome of a high-value Cityworks AMS Enterprise Asset Management System deployment. **Woolpert's proven project methodology fully addresses all aspects of this complex project and ensures all critical success factors are fully addressed in a logical order**.

Services, and associated deliverables, are categorized into several groupings called phases, as more fully detailed in the following sections. Completion of each phase will culminate with the execution of a Phase Acceptance and Close document signifying the County's acceptance of the services rendered to date and authorization for Woolpert to proceed with work on subsequent phases. In some cases, work in subsequent phases will not begin until the deliverables in previous phases have been accepted by the County. In other cases, work in multiple phases will occur simultaneously.

The foundation of the County's Asset Management Program will be developed, and the Cityworks AMS solution will be configured per this Statement of Work (Scope of Services) for the County Departments (5) and Divisions (24) identified in the following table:

Departments	Divisions	
Parks and Conservation Resources Department	• Air Quality • Business Service Management	• Parks / Other • Trades

Departments	Divisions	
Public Works Department	• Customer Service • Construction Management Division • Engineering Services • Environmental Management	• Stormwater and Vegetation • Survey and Mapping Division • Transportation
Real Estate Management	• Building Design and Construction, Facilities Operations, Maintenance Programs Real Property • Detention Section	• Fleet Management • Northwest, Southeast Section • STAR Center Facility
Solid Waste Department	• Landfill and Solid Waste Operations • Recycling and System Management • Waste to Energy (Admin)	
Utilities Department	• Customer, Field Service (Admin) • Engineering • Maintenance	• Plant Operations • Water Quality

Our project plan, its associated budget, and schedule were developed based on a number of bounding assumptions inferred from information provided to us by the County and discussions with County staff. The following assumptions apply to this scope of work:

- The make-up of the County's project team will be as follows:
  - **County Project Manager** – The County is to identify and empower a Project Manager who will jointly manage the project along with the Woolpert Project Manager. The County Project Manager will be responsible for ensuring the availability, readiness and participation of the County resources including County-directed subconsultants, as well as the execution of the County assigned tasks, and completion of the County assigned deliverables.
  - **County Implementation Team** – The County is to identify and empower a set of individuals that constitute the County Core Team, also referred to as the Implementation Team. The Team will consist of Subject Matter Experts from each of the implementing divisions/departments/groups. The selected representatives from each of the participating departments will be available for the project throughout its entirety. Woolpert recommends two power users from each of the divisions to be implemented. We recognize that this will result in a large number of staff being involved in the project, so Team Members who can represent multiple divisions are encouraged. We also strongly recommend that no single set of expertise is single threaded; each division should be championed by multiple core team members so that staff workloads and turnover does not unduly affect the project.

- o **County Technical Team** – The County is to identify and empower a set of IT professionals to support this project. These individuals will be known collectively as the Technical Team. The selected representatives from each of the participating departments will be available for the project throughout its entirety. The Technical Team will be comprised of experts on each of the software and hardware components involved in this project including, but not limited to, County servers and workstations, County network infrastructure, Esri GIS and the County's Esri deployment, each of the software solutions from which data may be migrated and each of the software solutions to which Cityworks may be integrated. When Technical Team participation is noted within the detailed scope of services, the expectation is that the appropriate Technical Team experts will participate, not all of the team members.

- o **County System Administrators** – The County is to identify several individuals as Cityworks System Administrators. The selected individuals will serve as System Administrators for the Cityworks AMS solution once it has been deployed in a Production environment. System Administrators are expected to be involved in the project tasks that directly relate to system configuration decisions, such as business process and configuration workshops, as well as tasks that indirectly relate to system configuration such as integration workshops. These individuals will benefit from learning both how the system can be / is configured but also how external systems can affect / drive its configuration.

- o **Organizational Change Readiness Manager** – The County is to identify and empower a Change Readiness Manager who will support the County PM in ensuring the readiness of the organization, from executive leadership through front line operators and technicians. This individual will work across departments / divisions to prepare the organization for upcoming tasks. The Change Readiness Manager is responsible for looking well into the future of the project and identifying potential issues related to readiness or willingness to adopt the coming changes and for taking the necessary steps to mitigate those issues. The Change Readiness Manager will also be responsible for measuring the adoption and benefit of the implemented solution.

- o **Communications Lead** – The County is to identify and empower a Communications Lead who will support the County PM in ensuring that the appropriate messaging is permeated throughout the organization during all of phases of the project. The Communications Lead will set meetings, coordinate mass e-mail communications, author / edit project newsletters, maintain a project website, and organize readiness activities.

- The County desires a foundation for an _ISO-Driven Asset Management Program_. As such, Woolpert will conduct several tasks in _Phase 2: Implementation Planning_ to provide consulting services and develop content in-line with this certification. At the conclusion of this scope of services, the County will have the foundational building blocks of their ISO 55000-aligned AM Program documented.

- The efforts defined in _Phase 3: Core System Design and Configuration_ are based on three (3) implementation tracks, each including multiple departments and divisions. After the _Departmental Readiness Assessment_ task, should the configuration tracks need to be revised to accommodate those departments / divisions that are / are not ready to

implement per the existing schedule, Woolpert and the County will modify the scope, schedule and fee accordingly.

- During the _Departmental Readiness_ task in _Phase 2: Implementation Planning_, Woolpert will provide guidance related to the asset register, geodatabase(es) design, and equipment hierarchies for all of the implementing departments and divisions. Unless otherwise specified in this scope of services or included in a subsequent scope of services, the County will be responsible for the development and management of an enterprise ArcGIS / ArcSDE geodatabase and ArcGIS Server deployment and population of said geodatabase(s) with all asset records and associated attribute details. Other departmental readiness recommendations may be addressed in this scope of services. If addressing a recommendation is not specifically called out in this scope of services then it its inclusion is **_not_** implied as a result of the Woolpert recommendation. The County will be responsible for acting on readiness recommendations not specifically addressed by existing tasks in this scope of services.

- A series of _Global System Configuration_ workshops in _Phase 2: Implementation Planning_ will establish a set of system configurations that will apply to all departments and divisions that will use the system. Exceptions to the global configuration settings will be reviewed on a case by case basis.

- System Configuration will be performed during _Phase 3: Core System Design and Configuration_ of this project. The implemented system will support a multitude of service request, work order and inspection workflows through the Cityworks AMS software. Cityworks Work Orders will be configured to support a variety of maintenance activities including preventive maintenance, scheduled corrective maintenance, and unplanned reactive maintenance. If, during the Configuration Phase, it is determined that neither standard nor advanced configuration options are able to satisfy a County requirement, Woolpert will develop a business use case, and upon request, a specification and scope to address the requirement via system customization, application development, system integration and/or implementation of a third-party solution. Execution of these efforts will be scoped and contracted external to this scope of services.

- The County desires that the required effort and resulting benefit of migrating data from legacy software solutions (to be retired as a result of this project) be evaluated. The effort included in this scope of work is to perform an analysis for the migration from each of these systems. Upon acceptance of the migration requirements, Woolpert will develop a scope of services to perform the migrations. The effort to develop the migration specifications and perform the migrations is not included in this scope of services.

  Woolpert will evaluate the migration of data from the following legacy software solutions:

  - Maximo 4.0.3
  - Maximo 4.0.3 STAR CENTER
  - Maximo 6.0.2 REM/ PCR
  - M4/Maximus
  - VCMS
  - Traffic Copp
  - Agile Assets

- The County desires that several existing County software solutions be integrated with the Cityworks solution for the purpose of providing a true enterprise asset management program solution. The effort in this scope of work is to develop a Software Requirements Specification (SRS) document for each system integration. Upon acceptance of

the integration SRS documents, Woolpert will develop a scope of services to develop the integrations. The effort to perform integrations is not included in this scope of services.

Woolpert will develop SRS documents for integrations to the following, existing County software solutions:

- o Oracle eBusiness Suite R12.1.3
- o SAP Customer Information System (Hosted Solution)
- o Wonderware SCADA v3.5.001
- o Granite XP

- o Ward Fuel
- o Micropaver
- o SeeClickFix

- The County desires that Woolpert provide a formal Organizational Change Management (OCM) team to lead the OCM activities throughout the implementation. The Woolpert OCM team will work closely with the County Organizational Change Readiness Manager in managing change and assuring the readiness of the County stakeholders for the shift to an asset management mindset. The scoped OCM tasks are contingent upon the involvement of the Woolpert team as explicitly described in the scope of services, which include many workshops and the development and use of tools to assess and quantify the organization's readiness for, and adoption of, the asset management program and software implementation. The County will be responsible for the field-level execution of many of the tasks defined by the Woolpert OCM team. Additional involvement, such as executive coaching, and hands-on readiness workshops and communication management are not included in this scope of services, but can be added if necessary.

- A typical Cityworks software implementation's Deployment Phase consists of User Acceptance Testing, Configuration Updates, End User Training, and System Go-Live Support. At the time of this scope development, the type of deployment (phased by department versus all at once) has not been decided. As such, both Woolpert and the County agree that Deployment will be addressed in a separate scope of services.

- The County has requested a full-time, onsite Woolpert Project Manager. Woolpert has included this full-time, onsite resource into the project scope and fee for a two-year period. In order to minimize the cost of this resource to the project, Woolpert anticipates employing an experienced asset management or software implementation project manager capable of performing other roles within the project, in addition to day-to-day project management duties. Woolpert has included the cost of the full-time, dedicated, local Project Manager for 100 weeks (two years) from the start of the project. Should the project extend beyond two (2) years, Woolpert and the County will re-evaluate the Project Manager position and budget additional Woolpert PM resource(s) as appropriate.

Technical Approach

The Woolpert Technical Approach will consist of the following:

- Phase 1: Project Management
- Phase 2: Implementation Planning
- Phase 3: Core System Design and Configuration
- Phase 4: Advanced Configuration and Functionality
- Phase 5: Organizational Change Management

Each of the three technical phases, phases 2-4, is executed in conjunction with the Project Management and Organizational Change Management activities defined in phases 1 and 5, respectively. Each will also include the Quality Management activities included in the technical phases and the intrinsic Knowledge Transfer that occurs naturally throughout the implementation by virtue of our teams' many collaborative activities. Deliberate execution of each technical phase, with continuous County involvement and feedback enables Woolpert to ensure a successfully planned, designed, configured, and deployed asset management solution that is used and useful immediately upon "Go-Live", provides the tools and resources needed to support current and planned asset management activities, and enables the means to monitor and measure continuous improvement activities.

Each of the technical phases is performed as laid out in the project schedule, with specific phase deliverables achieving County sign-off in each of the appropriately defined Tasks or Sub-Tasks. The culmination of each phase is solidified by a Phase Acceptance and Close-out process that signifies delivery and acceptance of the Phase Tasks / Sub-Tasks and clears the way to proceed with the subsequent phase.

Each of the phases is presented in detail in the subsequent sections of this Statement of Work document.

Phase 1: Project Management

The development of an Asset Management Program and the implementation of a Cityworks Asset Management System (AMS) are complex endeavors that present a variety of strategic, technical and organizational challenges that will need to be identified, analyzed, understood, and continually managed in order to ensure a successful outcome. **Woolpert's Project Management approach provides the resources and tools needed to successfully manage the project through all phases / processes**, including:
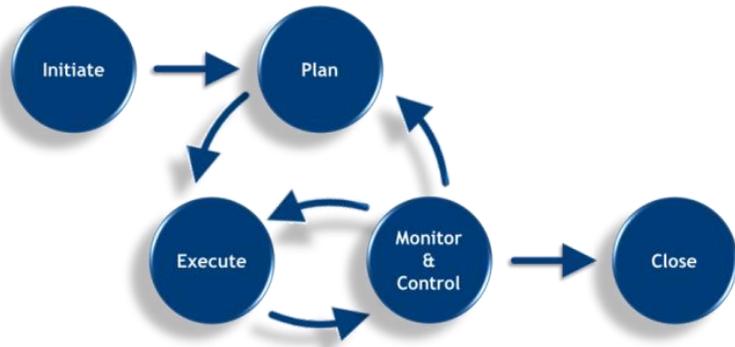
Figure 1 - Project Life-Cycle Process Groups

- **Initiation**: project authorizations and expectations
- **Planning**: project definitions, objectives, deliverables, analysis of alternatives
- **Execution**: coordination of resources, quality management, product and service delivery
- **Monitoring and Controlling**: monitoring and measuring to identify variances and imitate corrective actions
- **Close-Out**: acceptance of project deliverables and results

To fulfill each of these objectives, Woolpert will employ the various project management tools described in the following sections:

WBS Task 1.1.1: Project Charter Development

Woolpert and the County will co-author a Project Charter document to more fully detail items that cannot be thoroughly defined prior to the execution of this scope of services. The Project Charter will be a living document that is expected to be updated as necessary throughout the project. Items included in the Project Charter will include:

- **Project Participants**. Document will include contact information and the role(s) and general responsibility of each project participant.
- **Budget Management and Invoicing**. Document will include details about how the project fees will be managed for each phase / task and how the invoice will be presented such that it contains the information required for prompt payment by the County.
- **Communication Plan**. Document will detail how Woolpert and County project participants will communicate.
- **Quality Management Plan**. Document will list all significant project deliverables and assign a Woolpert resource to perform QAQC prior to delivery to the County.
- **Document Transmittals**. Document will define acceptable means for document transmittals between Woolpert and County project participants.
- **Risk Management / Issue Logging**. Document will define how risk and issues will be recorded and managed to completion.

Deliverables

- Woolpert to create DRAFT and FINAL Project Charter document and submit them to the County Project Manager

Assumptions

- The activities discussed in this section will begin once a Written Notice-to-Proceed is received from the County
- These Project Charter is a living document and may be updated during the project; Woolpert Project Manager will make updates to the document as part of the on-going project management tasks

County Responsibilities

- County to review and provide feedback on the DRAFT version of the Project Charter document
- County to accept the FINAL version of the Project Charter document

WBS Task 1.1.2: Project Kick-Off Meeting

As soon as is reasonably feasible, following receipt of the Written Notice to Proceed, the Woolpert Project Manager will work with the County Project Manager to schedule a Project Kick-Off Meeting. This meeting will be facilitated onsite at County facilities for the purpose of: 1) establishing the necessary project management protocols to be adhered to by all stakeholders, 2) reviewing the County's implementation goals and objectives with all team members, 3) identifying any County-owned source documentation necessary to support the project, 4) identifying all critical path schedule milestones, and 5) addressing any outstanding scope or schedule questions that County stakeholders may have. Said meeting shall be of a duration suitable for addressing each of the items previously listed. Development of the kick-off meeting agenda shall be the joint responsibility of Woolpert's and the County's Project Managers.

Immediately following the kick-off meeting, the Woolpert team will meet with the departments to gain a level of familiarity with each of the groups. A total or twelve (12), 2-hours meetings will allow the departments to share with Woolpert their specific goals for the project, challenges they foresee and concerns regarding the impact of the new asset management program and software use, with their department. The twelve meetings can be re-organized as necessary, but are scoped as follows:

Parks and Conservation Resources	two (2) meetings, each scheduled for 2 hours
Public Works	three (3) meetings, each scheduled for 2 hours
Real Estate Management	two (2) meetings, each scheduled for 2 hours
Solid Waste	two (2) meetings, each scheduled for 2 hours
Utilities	three (3) meetings, each scheduled for 2 hours

Deliverables

- Kickoff meeting agenda
- On-site project kick-off meeting (half day)
- Twelve (12) Departmental Familiarization Meetings, each two (2) hours in duration

Assumptions

- The activities discussed in this section will begin once a Written Notice-to-Proceed is received from the County
- All meetings will take place within a single business week, (Monday – Friday)

County Responsibilities

- Schedule meeting space and supporting technology peripherals suitable for the kick-off meeting
- Coordinate and schedule meeting attendees

WBS Task 1.2: Ongoing Project Management Tasks

Woolpert will provide the following ongoing project management tasks, as defined in this scope of services, throughout the project.

Project Administration

Woolpert will provide the following general project management services:

Figure 2 - Woolpert's Project Collaboration Web Site

- Develop, in cooperation with the County's Project Manager, a project plan and schedule;
- Proactively manage and update project plan and schedule, as required, throughout the duration of the project. Project plan and schedule modifications will be facilitated upon common agreement between the County and Woolpert Project Managers in accordance with the issue control process detailed in the project plan; acceptance by county will be within 5 working days of submission.
- Coordinate project events with the County Project Manager and Woolpert team members;
- Author, edit, review, and distribute project documentation and technical reports as required;
- Facilitate in-process review meetings with the County Project Manager, committees, management, and end-users as scheduled, and appropriate, throughout the duration of the project;
- Maintain a secure project collaboration web site to post project schedule details, in-process tasks and responsible parties, technical documentation, as well as other project collaboration tools;
- Perform miscellaneous project administration (e.g. arrange travel, internal project updates); and

- Anticipate problem areas and propose and facilitate solutions

Deliverables

- Woolpert to create DRAFT and FINAL project plan and submit them to the County Project Manager
- Woolpert to create Monthly project status reports and submit them to the County Project Manager
- Woolpert to provide on-going project management, including resource allocation and scheduling, invoicing and general consulting
- Woolpert to provide a password protected project collaboration environment and issue log management

Assumptions

- The activities discussed in this section will begin once a Written Notice-to-Proceed is received from the County
- These activities are included in this scope of services for the first one hundred (100) weeks of the project; At that time, Woolpert and the County will determine the best method to continue to manage the project

County Responsibilities

- Assemble a team of domain and technical experts and have representation of all divisions / departments / work groups / stakeholders involved throughout each project phase, as appropriate, of the project
- Provide a point of contact for all project management issues and questions
- Review and comment on DRAFT Project Plan document within five days of document delivery
- Acceptance of the FINAL Project Plan document
- Schedule appropriate internal staff and provide facilities for onsite meetings and off-site conference calls
- Review and accept project status reports, or otherwise provide comments within a reasonable time frame

Project Schedule Coordination

Project schedule coordination and management will be performed using Microsoft Project software. Project schedules and tasks will be monitored and adjusted as needed, depending upon the County's priorities and ability to make its staff and facilities available at the appropriate times throughout the project. An updated project schedule delineating resources, scheduled tasks, and com-
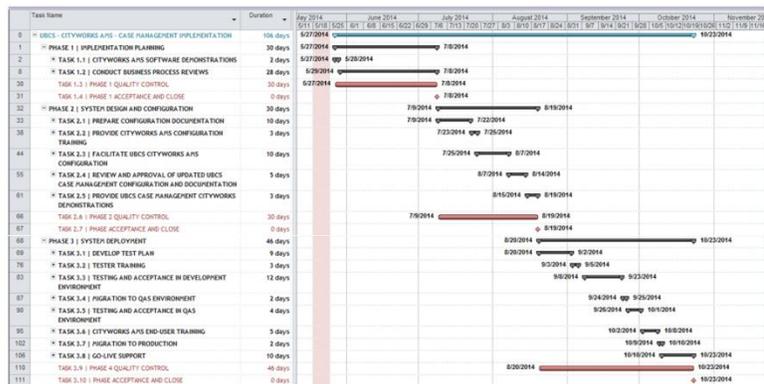
Figure 3 - Microsoft Project Gantt Chart

pleted tasks will be maintained and available to all Woolpert and County project participants.

Deliverables

- Woolpert to maintain a project schedule in Microsoft Project and to update the project schedule with significant changes and percent completes on a regular basis

Assumptions

- The activities discussed in this section will begin once a Written Notice-to-Proceed is received from the County
- These activities are included in this scope of services for the first one hundred (100) weeks of the project; At that time, Woolpert and the County will determine the best method to continue to manage the project

County Responsibilities

- County to participate in project schedule reviews on a regular basis

Project Manager Status Meetings

Woolpert will facilitate regular Project Manager Status Meetings with the County Project Manager. The Woolpert Project Manager and other Woolpert project team members, as appropriate, will participate in regularly scheduled project status meetings with the County Project Manager and designees, as appropriate, for the purpose of reviewing project issues including: 1) activities, action items, and deliverables completed to date; 2) activities, action items, and deliverables in process or scheduled; 3) upcoming activities, action items, and deliverables; and 4) technical or contractual issues that require corrective action. Woolpert meeting participants will include Woolpert's Project Manager and ad hoc team members, as required. County meeting participants will be as determined by the County Project Manager, or as requested by the Woolpert Project Manager.

When feasible, Project Manager Status Meetings will be held onsite at County facilities in conjunction with other scheduled onsite tasks. Otherwise, Project Manager Status Meetings will be facilitated remotely using teleconference and web meeting tools.

Deliverables

- Woolpert to facilitate bi-weekly Project Manager meetings
- Woolpert to author Meeting Minutes for each Project Manager meeting and to upload the minutes to project website

Assumptions

- The activities discussed in this section will begin once a Written Notice-to-Proceed is received from the County
- These activities are included in this scope of services for the first one hundred (100) weeks of the project; At that time, Woolpert and the County will determine the best method to continue to manage the project

County Responsibilities

- County to schedule appropriate internal staff and provide facilities for on-site meetings and off-site conference calls
- County to review and accept project status reports, or otherwise provide comments within a reasonable time frame
- County to schedule meeting space and supporting technology peripherals suitable for on-site meetings
- County to coordinate and schedule meeting attendees

Internal Coordination Meetings

Internal Woolpert-resource coordination meetings will be held on a regular basis to ensure continuous communication about tasks in process, scheduled tasks, and any issues impacting a successful implementation. The Woolpert Project Manager will utilize these meetings to gather information from project team members required to manage on-going resource loading.

Deliverables

- Regularly scheduled internal coordination meetings attended by Woolpert team members

Assumptions

- The activities discussed in this section will begin once a Written Notice-to-Proceed is received from the County
- These activities are included in this scope of services for the first one hundred (100) weeks of the project; At that time, Woolpert and the County will determine the best method to continue to manage the project

County Responsibilities

- None

Man-Power Assessments

Woolpert will facilitate an initial man-power assessment for the purpose of identifying County personnel who will be involved on the County teams and assessing their availability to participate on project tasks over the first six (6) to nine (9) months of the project. Subsequent to the initial man-power assessment, Woolpert will participate in quarterly man-power assessments with the County Project Manager. The quarterly assessments will be used for assessing County resource requirements for the six (6) month period beyond the immediate three (3) month window; a rolling look at months 4-9. The purpose of these assessments is to identify, well in advance, any resource issues such that the can be addressed or the project schedule adjusted before those tasks move into the immediate 3-month timeframe.

Deliverables

- Woolpert Project Manager and Program Manager will facilitate one (1) initial man-power assessment workshop and then quarterly, scheduled workshops through the duration of this scope of work

- Woolpert Project Manager will make the agreed-upon modifications, as required, to the project schedule document

Assumptions

- The activities discussed in this section will begin once a Written Notice-to-Proceed is received from the County
- These activities are included in this scope of services for the first one hundred (100) weeks of the project; beyond that timeframe, if the man-power workshops are still required, Woolpert will adjust the scope accordingly
- When possible, workshops will be conducted onsite, else the workshops will be facilitated remotely via WebEx; no additional travel expenses are included for these workshops

County Responsibilities

- County Project Manager will prepare for and actively participate in the workshops
- County Project Manager will involve other County resources as required to make resource decisions
- County Project Manager will document all County resource issues, concerns and / or decision and then work to resolve issues

Change Control

This section defines how changes to the original objectives and/or deliverables defined in this Statement of Work will be handled. Both Woolpert and the County recognize that change is a normal part of the project life cycle. Woolpert believes that managing change to project scope, cost, and schedule is critical to a project's success. We employ a comprehensive approach to change control. Woolpert's established change control process is documented as follows:

Any project team member (County or Woolpert) 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 will use a Change Control Notice (CCN) form as appropriate for the change:

- Agreement to a change and execution of the CCN signifies agreement to a change in overall costs, functionality, time scales, schedule or other identified project impact.
- Changes will be identified and communicated by/to the respective Project Man-
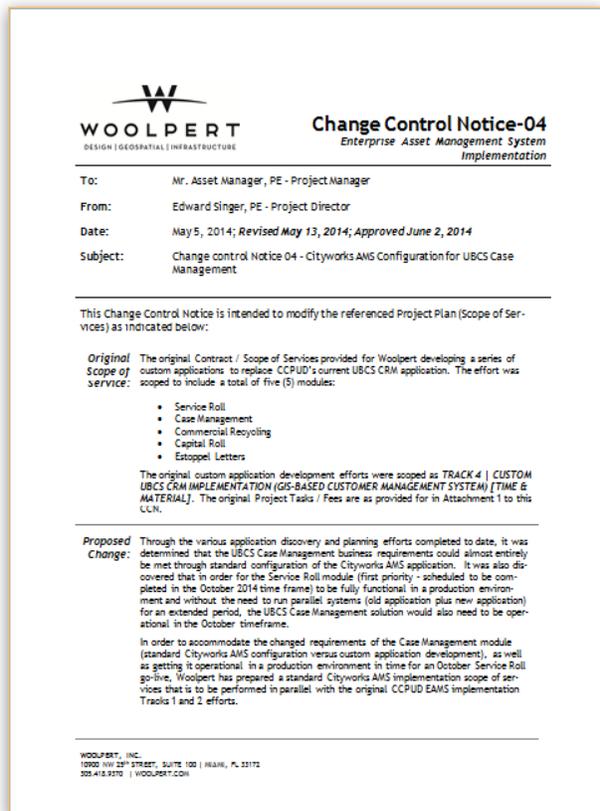
Figure 4 - Sample Change Control Notice

agers 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.

- All CCN's will be signed by both the County and Woolpert Project Managers to indicate acceptance of the changes.
- All project participants should understand that time is of the essence when initiating, reviewing, negotiating, and approving requested changes, as any delays to work in progress caused by a CCN may impact the overall project schedule and budget.

All change requests should be managed from their initiation through to their completion (acceptance or rejection) within five (5) business days from the start of the process. If the County and Woolpert Project Managers cannot reach common agreement on the request change within this time frame, the issue will be elevated to the next level of management (both County and Woolpert) for resolution. During the resolution process, all downstream project tasks potentially impacted by the requested change will be placed on hold until such time that resolution is achieved.

The following workflow diagram graphically depicts the above detailed process:
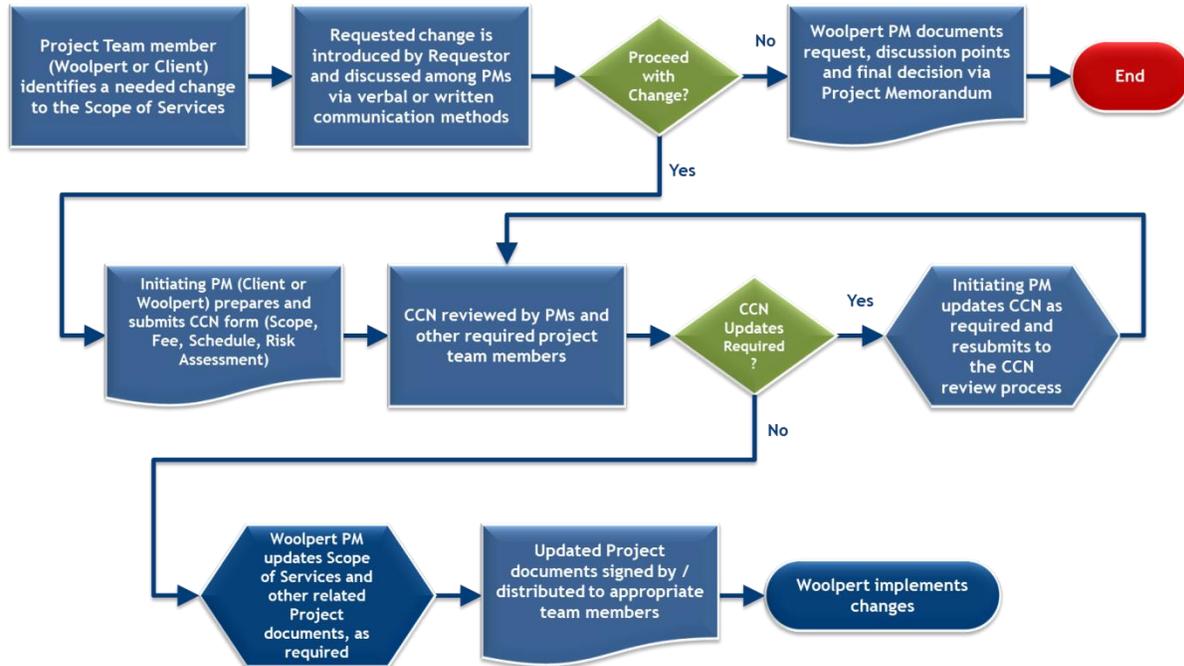
Figure 5: Change Control Process

Each Change Control Notice (CCN) will clearly document the following:

- Date
- Change Control Number
- CCN Initiated By
- Original Scope of Services (language from the original scope that is being considered for change)
- Proposed Change (narrative of the proposed change(s) being sought)

- Schedule Impact (details about the proposed change(s) impact to the overall project schedule
- Fee Impact (details on the proposed change(s) impact to the project budget)
- Risk Assessment (narrative discussion about the risks the proposed change(s) will introduce to the project and the ways in which said risk will be mitigated)
- Acceptance Signatures (Woolpert and County Project Managers)

Phase 2 – Implementation Planning

The Implementation Planning tasks are performed for the purpose of establishing an asset management program foundation, assessing the readiness of the implementing departments for the new Cityworks AMS software solution, developing common asset management-related business process workflows, defining global system configurations, and documenting a clear purpose for the asset management program and enterprise Cityworks AMS solution implementation. Functional and technical

Key Implementation Planning (Phase 2) Deliverables

- **ISO 55000 Framework and Content**
- **Departmental Readiness Assessment**
- **Common Business Processes and Global Configuration Standards**
- **Installed Cityworks Solution**
- **Asset Management Software Solution Demonstrations**

requirements that were published in the request for proposal and communicated in subsequent documents and meetings are reviewed with the Woolpert implementation team and the County management and technical team leads in order to align goals and expectations and to establish critical success factors as a means to measure implementation milestones.

Woolpert will facilitate a number of Implementation Planning tasks. One set of tasks will result in the development of asset management policies, strategies, plans and metrics; the foundational elements of any good asset management program. A second set of tasks will result in a readiness assessment report that details each department's readiness for the Cityworks implementation as well as the tasks that need to be performed by each department to bring them to the point where they can begin their implementation. A third set of tasks will result in a set of global asset management-related business processes and Cityworks configurations. Lastly, a set of tasks will result in the installation of a working Cityworks environment and a set of demonstrations to the County's future system users.

Asset Management Best Practices Industry Standards

Beginning in 2007, the Institute for Asset Management (IAM) led the development of the British Standards Institute's Publicly Available Standard 55 (PAS 55) for optimized management of physical assets. PAS 55, which is asset-type independent, provides a 28 point specification for establishing and verifying an integrated whole-life management system for physical assets. It is mostly focused on developing the philosophy and framework to enable Asset Management, rather than the specifics of any individual Asset Management implementation.

PAS 55 requires development of an Asset Management Policy which serves as the basis to develop organizational values, functional standards, and required asset management processes for acquisition, utilization, maintenance, and disposal of assets. PAS 55 also requires performance and condition monitoring so that continual improvements can be made to policies and procedures. As such, it provides a viable Asset Management implementation framework.

The elements of PAS 55 are defined such that they correlate with the requirements of other commonly employed international organizational frameworks including ISO 14000 (Environmental) and ISO 9000 (Quality Management).

In 2014, a multi-year effort through the International Organization for Standardization (ISO) led to the development of three international standards for Asset Management; ISO 55000 (overview), ISO 55001 (management systems), and ISO 55002 (guidelines). These standards, which are referred to collectively as ISO 5500x, are based on the PAS 55 and other international methodologies, have become the best practice industry standards in asset management.

Woolpert will leverage the ISO 55000 standards to develop the foundations for best practice asset management for the County.

WBS Task 2.1: ISO 55000 Framework and Content
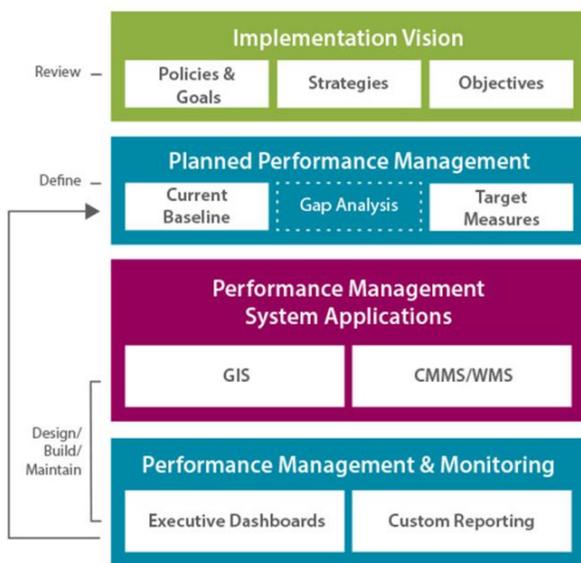
Figure 6: Performance Management Roadmap

Woolpert will provide IAM-certified Asset Management consultants to deliver the consulting services necessary to define and document the framework for, and specific content within, the County's Strategic Asset Management Program (SAMP). This task will consist of two main groups of tasks. The first group of tasks will result in the development of the SAMP framework for which the County will develop and maintain content throughout and after this project. The second group of tasks will result in the development of specific content within the SAMP framework.

A typical asset management framework is shown in Figure 9. The framework developed in this task will establish a greater level of detail for each of the aspects depicted in the graphic. The framework will follow the Institute of Asset Management (IAM) model, resulting in ISO 55000 compliant SAMP content. The framework will support the County's Asset Management Program objectives, and will also prepare the County to obtain ISO certification, should management desire to pursue it in the future.

WBS Task 2.1.1: ISO 55000 Framework Development

Woolpert will facilitate a series of ISO 55000 Asset Management Framework Development workshops with County management and departmental Asset Management (AM) leadership. Woolpert will present the thirty nine (39) AM subjects, as defined by the Institute of Asset Management (IAM), to the County participants. During the workshops, the County will make decisions as to how the framework should be structured in order to best support their organization. Many of the decisions to be made will be predicated upon the level within the organization to which content will be developed. For example, a single AM Policy should be developed at the County level, AM Strategies at the Department level, and Demand Analysis at the Division level. Other decisions will involve the appropriateness of certain aspects of the 39 subjects, for example, Outage Planning may be appropriate for certain parts of the organization (water treatment facilities) but not for others (parks and recreation). At the conclusion of this task, the

WOOLPERT

County will know exactly what content they need to develop and to what level the content applies in order to have a robust SAMP, developed in alignment with international best practices and standards.

The IAM Subjects are grouped into six (6) Subject Areas. The Subjects and Areas to be covered in the workshops are listed in the following table. Not all subjects are included will be addressed in this scope of work. See Notes section following the table.

6 Subject Groups	39 Subjects
A. Strategy & Planning	1. Asset Management Policy
	2. Asset Management Strategy & Objectives
	3. Demand Analysis
	4. *Strategic Planning
	5. Asset Management Planning
B. *Asset Management Decision-Making	1. *Capital Investment Decision-Making
	2. *Operations & Maintenance Decision-Making
	3. *Lifecycle Value Realization
	4. *Resourcing Strategy
	5. *Shutdowns & Outage Strategy
C. Lifecycle Delivery (NOTE: these topics will be addressed for a single asset type during the creation of the Asset Management Plan is subject A.5)	1. #Technical Standards & Legislation
	2. #Asset Creation & Acquisition
	3. #Systems Engineering
	4. #Configuration Management
	5. #Maintenance Delivery
	6. #Reliability Engineering
	7. #Asset Operations
	8. #Resource Management
	9. #Shutdown & Outage Management
	10. #Fault & Incident Response
	11. #Asset Decommissioning & Disposal
D. Asset Information	1. Asset Information Strategy
	2. Asset Information Standards
	3. Asset Information Systems
	4. Data & Information Management
E. Organization & People	1. Procurement & Supply Chain Management
	2. Asset Management Leadership
	3. Organizational Structure
	4. Organizational Culture
	5. Competence Management
F. *Risk & Review	1. *Risk Assessment & Management
	2. *Contingency Planning & Resilience Analysis
	3. *Sustainable Development
	4. *Management of Change
	5. *Asset Performance & Health Monitoring

6 Subject Groups	39 Subjects
	6. *Asset Management System Monitoring
	7. *Management Review, Audit & Assurance
	8. *Asset Costing & Valuation
	9. *Stakeholder Engagement

Notes:

* Subject Group / Subject will not be addressed within this scope of services.

Subject is included in Subject A.5, Strategy and Planning | Asset Management Planning, as part of the Asset Specific Plan that will be developed as described within this scope of services.

Related Sub-Tasks

2.1.1	**ISO 55000 Framework Development**
2.1.1.1	**ISO 55000 Framework Development Workshops Agenda and Presentation**
2.1.1.1.1	Woolpert to Develop DRAFT Agenda and Presentation
2.1.1.1.2	Woolpert to Submit DRAFT Agenda and Presentation to County
2.1.1.1.3	County to Review DRAFT Agenda and Presentation (COUNTY TASK)
2.1.1.1.4	County to Provide Feedback on DRAFT Agenda and Presentation (COUNTY TASK)
2.1.1.1.5	Woolpert to Incorporate County Feedback
2.1.1.1.6	Woolpert to Submit FINAL Agenda and Presentation
2.1.1.2	**ISO 55000 Framework Development Workshops**
2.1.1.2.1	Woolpert to Prep for Workshops
2.1.1.2.2	County to Prep Facility for Workshops (COUNTY TASK)
2.1.1.2.3	**Woolpert to Conduct Workshops (ONSITE TASK)**
2.1.1.3	**ISO 55000 Framework Development**
2.1.1.3.1	Woolpert to Document Workshops in a DRAFT Technical Memorandum
2.1.1.3.2	Woolpert to Submit DRAFT Tech Memo to County
2.1.1.3.3	County to Review DRAFT Tech Memo
2.1.1.3.4	Woolpert and County to Jointly Review DRAFT Tech Memo
2.1.1.3.5	Woolpert to Update Tech Memo
2.1.1.3.6	Woolpert to Submit FINAL Tech Memo
2.1.1.4	County to Accept ISO 55000 Framework Development Task (COUNTY TASK)

Deliverables

- Woolpert will prepare a DRAFT Agenda and Presentation for the workshop and submit them to the County Project Manager
- Woolpert will incorporate County feedback into the Agenda and Presentation and submit a FINAL version of each to the County Project Manager
- Woolpert will facilitate up to twenty (20) hours of onsite Asset Management Framework Development workshops
- Woolpert will develop a DRAFT Technical Memorandum of the Asset Management Framework and deliver it to the County Project Manager
- Woolpert will facilitate a remote joint review of the DRAFT Technical Memorandum
- Woolpert will update and submit a FINAL version of the Technical Memorandum

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Assumptions

- All County Asset Management decision-makers and stakeholders will participate in the workshops
- All activities, other than the actual workshops, will be performed remotely
- All workshops will take place within a single business week (Monday – Friday)

County Responsibilities

- County will provide feedback on the DRAFT versions of the Agenda and Presentation and will accept the FINAL versions
- County Project Manager will schedule all County workshop attendees and ensure site readiness and staff participation for the workshops
- County workshop attendees will actively participate in the on-site meetings without undue interruption
- County workshop attendees will review the DRAFT version of the Technical Memorandum prior to the joint review facilitated by Woolpert
- County workshop attendees will participate in a remote conference call to review the Technical Memorandum
- County will accept the FINAL version of the Technical Memorandum

WBS Task 2.1.2: ISO 55000 Content Development

Woolpert will facilitate a series of Asset Management Content Development workshops with County and Department asset management leadership. Of the 39 IAM Subjects, County-specific content will be developed for only those subjects identified in this section. The subjects included in this scope of services are those that Woolpert advises are the most beneficial to an organization to have established prior to the implementation of an enterprise asset management software solution.

WBS Task 2.1.2.1: Strategy and Planning | Asset Management Policy

Description of Task. Woolpert will provide the services to facilitate the development of a county-wide Asset Management Policy statement for the Strategic Asset Management Program. While benchmarking peer organizations and understanding their policy statement is an excellent starting point, Woolpert IAM-certified consultants will conduct a half-day SAMP Policy Development workshop for the purpose of tailoring the policy specific to the County.

The final deliverable from this task will be a Microsoft Word document that conveys the County-level Asset Management Policy. The AM Policy shows that the County leadership has committed the Asset Management Program. Periodically, particularly when the statement is relatively new (in the first few years) the AM Policy statement should be reviewed and adapted to better define and describe the County leaders' vision for the AM Program.

Asset Management Policy (IAM A.1) The Asset Management Policy defines the high-level principles by which the organization adheres to in the management of its physical assets. The Asset Management

Many organizations find it difficult to achieve the right balance for their particular circumstances. Some produce a single page Asset Management Policy that can be posted on all their notice boards for all to see. They then struggle to fit all the defined requirements to a single page. The Asset Management Policy should realistically be written on a few well-written pages, with the main objective being clarity of thought and presentation, coherently describing how Asset Management will contribute to the achievement of the organization's strategic plan. Of most importance, is to make it clear to anyone reading the Asset Management Policy exactly how the organization's Asset Management System works to develop and maintain the appropriate "line of sight".

Policy memorializes the intentions and direction of an organization as expressed by its top management. The policy is agreed upon and signed off on by an executive officer, thereby demonstrating the organization's commitment to Asset Management.

An Asset Management policy is the cornerstone of the organization's approach to Asset Management. It provides confidence the organization is translating its corporate strategic plan into effective Asset Management Plans, and provides the starting point of the organization's "line of sight", which ultimately justifies all Asset Management activities undertaken within the organization.

Alignment ("line of sight") is a critical concept for effective Asset Management. A project manager, team leader, or technician interacting with assets "out in the field" should be able to trace the rationale for what s/he is doing upwards through a clear set of objectives and strategic statements defined within the organization's strategic plan. Such a concept requires a clear framework within which Asset Management Decision-Making is made and communicated through the organization. The purpose of the Asset Management Policy is to establish this framework.

PAS 55 / ISO 55000 establishes Asset Management Policy requirements within the following five (5) broad categories:

- **Consistency**. Is the Asset Management Policy consistent with the organization's strategic plan, other organizational policies, and the organization's overall approach to managing risk?
- **Appropriateness**. Is the Asset Management Policy appropriate for the nature and scale of the organization?
- **Compliance**. Is there a commitment in the Asset Management Policy for the organization to comply with all relevant regulations and laws, whether voluntary or not?
- **Principles and Framework**. Is there a clearly laid out set of principles and framework within which an effective Asset Management System can be created?
- **Continual Improvement**. Is the Asset Management Policy supported by top management, effectively communicated, and reviewed regularly with a commitment to continual improvement of the Asset Management System it defines?

Related Sub-Tasks

2.1.2.1	**Strategy and Planning: Asset Management Policy**
2.1.2.1.1	Woolpert to Perform Peer Organization Research
2.1.2.1.2	Woolpert to Prep for Asset Management Policy Workshop
2.1.2.1.3	**Asset Management Policy Workshop**
2.1.2.1.4	**Travel for Asset Management Policy Workshop**
2.1.2.1.5	Woolpert to Document Asset Management Policy
2.1.2.1.6	Woolpert to Submit Asset Management Policy Document to County
2.1.2.1.7	County to Accept Asset Management Policy Document

Deliverables

- Woolpert will prepare for the workshop by performing peer-organization research
- Woolpert will facilitate a single workshop for up to four (4) hours onsite
- Woolpert will document the asset management policies defined in the workshop

Assumptions

- All County Asset Management decision-makers and stakeholders will participate in the workshop

- All activities, other than the actual workshops, will be performed remotely
- All workshops will take place within a single business week (Monday – Friday)

County Responsibilities

- County Project Manager will schedule all County workshop attendees and ensure site readiness and staff participation for the workshops
- County will accept the Asset Management Policy document

WBS Task 2.1.2.2: Strategy and Planning | Strategy and Objectives

Description of Task. Woolpert will provide the services to facilitate the development of a set of Asset Management Strategies and Objectives for each of the six (6) implementing departments.   While benchmarking peer organizations and understanding typical Strategies and Objectives is an excellent starting point, Woolpert IAM-certified consultants will conduct seven (7) individual workshops; one (1) workshop will explain the expected results of the individual Strategy and Objectives workshops, and one (1) workshop each, for the six (6) implementing departments. Woolpert will develop the DRAFT versions of the department-specific documents and submit them for County review. Woolpert will facilitate a remote review of each document with each department, make the necessary updates and submit the FINAL versions of the documents.

Asset Management Strategy & Objectives (IAM A.2). An Asset Management Strategy and its associated Objectives constitutes the second stage of establishing the organization's "line of sight". ISO 55000 defines this as the Strategic Asset Management Plan (SAMP). As described under Asset Management Policy (above), alignment or "line of sight" is essential to effective Asset Management, ensuring that all asset management activities "out in the field" are clearly justified at all levels of the organization.

Asset Management Strategy & Objectives define what the organization intends to achieve through its asset management activities and when they intend to achieve them. This should include:

- Current and future demand, condition, and performance requirements of the organization's assets and how the organization intends to deliver upon these requirements;
- Current and future Asset Management capabilities (processes, information, systems, people, tools, resources, etc.) of the organization and how the organization plans to develop future capabilities to an appropriate level of maturity to deliver its organizational goals.

> The Asset Management Strategy need not be a single document. In practice, it is often advantageous to produce multiple, focused documents, each aligned to the organization's standard way of working. Many organizations develop separate Asset Class Strategies, defining the strategies and objectives for the different asset classes an organization operates and maintains, with each individual strategy aligning with the overarching organizational Asset Management Strategy & Objectives. Regardless of how this is achieved, it is necessary that a coherent set of Asset Management Strategy & Objective documents be developed and maintained for an organization to be an effective Asset Manager.

A key requirement for an effective Asset Management Strategy is the inclusion of Asset Management objectives that are Specific, Measurable, Achievable, Realistic, and Time-bound (SMART).

PAS 55 / ISO 55000 establishes Asset Management Strategy requirements within the following seven (7) broad categories:

- ***Consistency***. Is the Asset Management Strategy consistent with the Asset Management Policy (and organizational strategic plan) and other organizational policies and strategies?

- *Risk-Based Approach*. Is the Asset Management Strategy risk-based in its approach, i.e. does it prioritize activities according to the criticality of the asset or Asset Management activity under consideration and the levels of risk associated with each one?
- *Life-Cycle Approach*. Does the Asset Management Strategy explicitly consider the life-cycle of the assets and the interdependencies between each of the life-cycle stages?
- *Framework*. Does the Asset Management Strategy set out a clear framework for the development of Asset Management objectives and plans which includes the appropriate level of optimization, prioritization, and management of information?
- *Stakeholders*. Does the Asset Management Strategy include assessment of how stakeholders will be engaged and communicated with?
- *Functional Performance and Condition Requirements*. Does the Asset Management Strategy identify present and future functional, performance, and condition requirements for the assets and how the organization plans to meet these?
- *Continual Improvement*. Is the Asset Management Strategy supported by top management, effectively communicated, and reviewed regularly to ensure it is still fit for purpose in meeting the Asset Management Policy and organizational strategic plan?

Creation of an Asset Management Strategy that clearly maintains the alignment ("line of sight") initiated by the Asset Management Policy is a significant challenge for most asset intensive organizations. Many organizations find the development of an Asset Management Framework helps with this. Within this Asset Management Framework, an organization can clearly define the structure and content of the Asset Management Strategies, with the documented relationships clearly articulated in the form of a high-level diagram and the development of lower level document templates to support the consistent development of each document within the established framework.

Related Sub-Tasks

2.1.2.2	**Strategy and Planning: Asset Management Strategy and Objectives**
2.1.2.2.1	Woolpert to Prep for Asset Management Strategy and Objectives Workshop
2.1.2.2.2	**Woolpert to Facilitate Asset Management Strategy and Objectives Workshops (ONSITE TASK)**
2.1.2.2.2.1	Overview Workshop Asset Management Strategy and Objectives (ONSITE TASK)
2.1.2.2.2.2	PCR Workshop Asset Management Strategy and Objectives (ONSITE TASK)
2.1.2.2.2.3	Public Works Workshop Asset Management Strategy and Objectives (ONSITE TASK)
2.1.2.2.2.4	REM Workshop Asset Management Strategy and Objectives (ONSITE TASK)
2.1.2.2.2.5	Solid Waste Workshop Asset Management Strategy and Objectives (ONSITE TASK)
2.1.2.2.2.6	Utilities Workshop Asset Management Strategy and Objectives (ONSITE TASK)
2.1.2.2.3	**Woolpert to Develop DRAFT Asset Management Strategy and Planning Documents**
2.1.2.2.3.1	PCR Document Asset Management Strategy and Objectives
2.1.2.2.3.2	Public Works Document Asset Management Strategy and Objectives
2.1.2.2.3.3	REM Document Asset Management Strategy and Objectives
2.1.2.2.3.4	Solid Waste Document Asset Management Strategy and Objectives
2.1.2.2.3.5	Utilities Document Asset Management Strategy and Objectives
2.1.2.2.4	**Woolpert to Facilitate Joint Review of Asset Management Strategy and Planning Documents**
2.1.2.2.4.1	Joint Review of PCR Document Asset Management Strategy and Objectives
2.1.2.2.4.2	Joint Review of Public Works Document Asset Management Strategy and Objectives
2.1.2.2.4.3	Joint Review of REM Document Asset Management Strategy and Objectives
2.1.2.2.4.4	Joint Review of Solid Waste Document Asset Management Strategy and Objectives
2.1.2.2.4.5	Joint Review of Utilities Document Asset Management Strategy and Objectives

2.1.2.2.5   Woolpert to Submit FINAL Asset Management Strategy and Objectives Document
2.1.2.2.6   County to Accept Asset Management Strategy and Planning Documents (COUNTY TASK)

Deliverables

- Woolpert will prepare for the workshop by performing peer-organization research
- Woolpert will facilitate a single onsite Asset Management Strategy and Objective Overview workshop for up to two (2) hours
- Woolpert will facilitate up to five (5) department-specific Asset Management Strategy and Objectives workshops each of up to four (4) hours
- Woolpert will create and deliver five (5) DRAFT versions of Asset Management Strategy and Objectives documents to the County Project Manager
- Woolpert will facilitate five (5) remote joint reviews of the DRAFT documents each of up to two (2) hours
- Woolpert will modify and submit FINAL versions of the five (5) documents

Assumptions

- All County department-level Asset Management decision-makers and stakeholders will participate in the appropriate workshops
- All activities, other than the actual workshops, will be performed remotely
- All workshops will take place within a single business week (Monday – Friday)

County Responsibilities

- County Project Manager will schedule all County workshop attendees and ensure site readiness and staff participation for the workshops
- County workshop attendees will review the DRAFT versions of the documents prior to the joint review facilitated by Woolpert
- County workshop attendees will participate in a remote conference call to review the DRAFT documents
- County will accept the FINAL version of the Strategy and Objectives documents

WBS Task 2.1.2.3: Strategy and Planning | Demand Analysis

Description of Task. Performing a demand analysis can be a large and complex undertaking. A tremendous amount of information about the assets and services, on which demands are placed, both historical and forward-looking, must be collected and analyzed. Demand analyses include assumptions, and oftentimes multiple demand scenarios are run against varying combinations of assumptions in a sensitivity analysis that allows the organization to more thorough understand the effects of various potential scenarios.

This task will culminate with the delivery of a series of Demand Analysis Technical Memoranda in which Woolpert will document all of the potential changes (inputs), increases and decreases, to the future demand on the assets and services provided by each group. Some future demand inputs are self-evident, such as water use by the future County populace. Other demand inputs are dependent on established Level of Service (LOS) statements. LOS discussions will be part of the workshops and established LOS will be recorded in the technical memoranda. Where no LOS standards exist, Woolpert will offer exam-

ples of LOS adopted by similar organizations. Woolpert will identify in the technical memoranda analysis tools available within the industry that the County could consider to track compliance (metric dashboards) with existing metrics and facilitate the development of future demand for the assets they maintain and services they provide.

Woolpert will facilitate up to eight (8) Demand Analysis workshops for the evaluation of the demands strategies on the following assets and services:

Department	Asset or Service	Department	Asset or Service
Water Production and Distribution	Solid Waste and recycling
Wastewater Collection and Treatment	Facilities
Parks and Conservation Resources	Fleet
Stormwater	Transportation

Woolpert will develop the corresponding DRAFT versions of the Technical Memoranda and submit them to the County for Review. Each County demand analysis group should review their Tech Memo and provide feedback as appropriate. Woolpert will incorporate the feedback and deliver the FINAL version of the Tech Memos to the County.

Performing the demand analyses is _not_ included in this task.

Demand Analysis (IAM A.3). When developing the Asset Management Strategy & Objectives, it is important to consider both current and future demands for the product(s) or service(s) being delivered and how this demand translates into the outputs required from the organization's physical assets. Some organizations will find it easy to forecast future demand and take it into consideration when developing their strategic plan. However, others will find this more complex and difficult. For this reason, it is important to undertake a structured demand analysis before fully developing the Asset Management objectives and developing the organization's Asset Management Plans.

One of the underlying reasons to perform such a Demand Analysis is to be able to forecast the return on investments utilizing a net present value (NPV) method based on the incremental costs and revenues for each of the identified asset investments. Developing and optimizing a NPV model and incorporating the demand analysis allows asset managers to run different scenarios and to optimize the Asset Management Strategy and resulting Asset Management Plans.

Demand Analysis may involve a market review on the expected future demand, incorporation of historic figures, external data, analyses, and statistical models. The objective is to forecast demand for the product or service being produced and the requirements the demands will impose on the organization's asset portfolio. There are several Demand Analysis aspects that need to be considered:

- Historical demand;
- Change in demand over time;
- Price changes over time;
- Changes in required levels of service;
- Impact on future performance, condition, and capability of and organization's assets

Additional factors that should be considered include price elasticity, income elasticity, and cross elasticity. Elasticity identifies what the demand or price will do as a result of the factor itself. In other words, if a product or service is price inelastic it means that a large change in quantity of sales does not translate into a corresponding price change. While these are well-understood economic concepts, they can be difficult to model and calibrate for a given situation, thus resulting in the need for a thorough analysis to assess not only the central prediction, but the different levels of uncertainty around it. Consideration must also be given for the impact of price controls for organizations operating in regulated sectors.

The level of uncertainty tends to increase as the length of the planning horizon increases. This uncertainty needs to be reflected in the Strategic Planning processes and the resulting Asset Management Strategy & Objectives. The Strategic Planning Process must also consider the physical assets' capability and capacity to deliver the forecasted demand and how this may limit the organization's ability to service an increased demand.

It may be necessary to develop various scenarios for the future demand analyses on the organization's physical assets to reflect uncertainties of future demand projections. This is further discussed in Strategic Planning (below).

Related Sub-Tasks

2.1.2.3	**Strategy and Planning: Demand Analysis Strategy**
2.1.2.3.1	Woolpert to Prep for Asset Management Demand Analysis Strategy Workshops
2.1.2.3.2	**Woolpert to Facilitate Asset Management Demand Analysis Strategy Workshops (ONSITE TASK)**
2.1.2.3.2.1	DA Strategy Workshop 1	Water Production and Distribution (ONSITE TASK)
2.1.2.3.2.2	DA Strategy Workshop 2	Wastewater Collection and Treatment (ONSITE TASK)
2.1.2.3.2.3	DA Strategy Workshop 3	PCR (ONSITE TASK)
2.1.2.3.2.4	DA Strategy Workshop 4	Stormwater (ONSITE TASK)
2.1.2.3.2.5	DA Strategy Workshop 5	Solid Waste and Recycling (ONSITE TASK)
2.1.2.3.2.6	DA Strategy Workshop 6	Facilities (ONSITE TASK)
2.1.2.3.2.7	DA Strategy Workshop 7	Fleet (ONSITE TASK)
2.1.2.3.2.8	DA Strategy Workshop 8	Transportation (ONSITE TASK)
2.1.2.3.4	Woolpert to Develop DRAFT Demand Analysis Strategy Tech Memos
2.1.2.3.5	Woolpert to Submit DRAFT Demand Analysis Strategy Tech Memos to County
2.1.2.3.6	County to Review Demand Analysis Strategy Tech Memos and Provide Feedback
2.1.2.3.7	Woolpert to Modify Demand Analysis Strategy Tech Memos
2.1.2.3.8	Woolpert to Submit FINAL Demand Analysis Strategy Tech Memos to County
2.1.2.3.9	County to Accept Demand Analysis Strategy Tech Memos

Deliverables

- Woolpert will facilitate up to eight (8) Demand Analysis workshops for up to three (3) hours each
- Woolpert will create and deliver up to eight (8) DRAFT versions of Asset Management Demand Analysis Strategy documents to the County Project Manager; document will detail the strategy and potential tools that the County should consider in order to perform each demand analysis but will not include the actual results of a demand analysis
- Woolpert will modify and submit FINAL versions of eight (8) documents

Assumptions

- Woolpert has scoped 24 hours of workshop time that can be used as deemed appropriate by Project Team. For the purposes of this document we have scoped eight (8) 3-hour workshops. The eight (8) workshops can be re-purposed as necessary, but are scoped for the groups identified in the table in the **Description of Task** section.
- All County demand planners and stakeholders will participate in the appropriate workshops

- All activities, other than the actual workshops, will be performed remotely
- DRAFT documents will not require joint reviews, only feedback from County staff in order to produce FINAL versions of the documents
- All workshops will take place over a single business week (Monday – Friday)

County Responsibilities

- County Project Manager will schedule all County workshop attendees and ensure site readiness and staff participation for the workshops
- County workshop attendees will review the DRAFT versions of the documents and provide the necessary feedback to Woolpert
- County will accept the FINAL version of the Demand Analysis documents

WBS Task 2.1.2.4: Strategy and Planning | Asset-Specific Plan

The Scope of Services includes the development of a single Asset-Specific Plan

Description of Task. Woolpert will facilitate workshops and develop, in conjunction with the appropriate County asset subject matter experts, a single Asset-Specific Plan to document the ISO 55000 subjects of Technical Standards and Legislation, Asset Creation and Acquisition, Systems Engineering, Configuration Management, Maintenance Delivery, Reliability Engineering, Asset Operations, Resource Management, Shutdown and Outage Management, Fault and Incident Response Management and Asset Decommissioning and Disposal, as each subject relates to the asset. Workshops will be repetitive in nature, meaning that Round 2 workshops will cover the same topics as Round 1 workshops, but in greater depth. The expectation is that much of the content will be readily available within the organization and that these workshops will be to assemble that content, identify and fill the gaps and knit it together into a single life-cycle plan for assets of that type.

The final deliverable for this task is a single Microsoft Word document that defines the life-cycle activities for the selected asset type. The document will contain, at a minimum, a section for each of the ISO subjects. Within each subject section, the document will identify specific tactics that will be applied as well as potential tactics that should be considered under various circumstances and asset conditions. The document will be focused on a single asset type and may reference yet-to-be-created documents so that its focus is not diluted with content specific to other types of assets.

Asset Management Planning (IAM A.5). Asset Management Planning determines how assets will be managed, over a specific period of time, to achieve the Asset Management Objectives in accordance with the Asset Management Strategy. As an example, this could be to maintain current customer service and/or to improve customer service or environmental service in specific areas for a given level of funding.

The Asset Management Planning process should yield the Asset Management Plans defining the activities the organization plans to undertake in order to deliver on their asset management objectives. Asset Management Planning activities may address: capital investments to acquire new assets; capital investments to replace end-of-life assets; operations and maintenance strategies; asset disposal; rationalization of assets; or an education campaign. As an example, an Asset Management objective to reduce storm water flooding of properties could be achieved by a combination of activities, including but not limited to:

- providing protection to properties by installing flood gates;
- capital investment to replace under-sized storm sewers and pump stations;
- maintenance activities to remove debris in sewers and drains;

- a public education campaign to reduce run-off through installation of previous materials, rain barrels, and landscaping.

Decisions about the optimum mix of activities needed to achieve a specific objective would be analyzed using the approaches described in the subject group Asset Management Decision-Making.

The Asset Management Planning process should establish responsibilities for who leads each activity and which part of the organization or its suppliers will execute each activity. The planning process may also specify how decisions are made and who in the organizations is responsible for Asset Management Decision-Making.

Resources required to deliver each activity (human, financial, physical, natural, and knowledge) should be identified. The plans may also specify funding sources (general fund, enterprise fund, bonds, rate increases, etc.). Timescales should also be applied to each activity defined within the Asset Management Plans such that delivery schedules and realization of benefits can be planned and anticipated.

The Asset Management Plans may also describe how the plan has been justified and how activities and resources have been optimized to deliver the lowest asset life-cycle cost. The justification describes the costs and benefits associated with delivering the Asset Management objective. In addition, Asset Management Plans may also include details on existing assets and their performance, on stakeholders' engagement, and how the plan will be approved, monitored, reviewed, and updated.

Related Sub-Tasks

2.1.2.4	**Strategy and Planning: Asset Specific Plans**
2.1.2.4.1	**Develop Asset Specific Plan for ONE SINGLE ASSET CLASS**
2.1.2.4.1.1	**Request for Information**
2.1.2.4.1.1.1	Woolpert to Develop Request for Information
2.1.2.4.1.1.2	Woolpert to Submit Request for Information
2.1.2.4.1.1.3	County to Collect Information (COUNTY TASK)
2.1.2.4.1.1.4	County to Submit Information to Woolpert (COUNTY TASK)
2.1.2.4.1.1.5	Woolpert to Perform Desktop Audit of Information
2.1.2.4.1.2	**Asset Specific Plan Workshop Round 1**
2.1.2.4.1.2.1	Woolpert to Develop Agenda for Asset Specific Plan Workshop
2.1.2.4.1.2.2	Woolpert to Submit Asset Specific Plan Agenda to County
2.1.2.4.1.2.3	Woolpert to Prepare for Asset Specific Plan Workshop
2.1.2.4.1.2.4	County to Prepare for Asset Specific Plan Workshop (COUNTY TASK)
2.1.2.4.1.2.5	**Asset Specific Plan Workshop 1 (ONSITE TASK)**
2.1.2.4.1.2.5.1	ASP Workshop 1: Technical Standards and Legislation (ONSITE TASK)
2.1.2.4.1.2.5.2	ASP Workshop 1: Asset Creation and Acquisition (ONSITE TASK)
2.1.2.4.1.2.5.3	ASP Workshop 1: Systems Engineering (ONSITE TASK)
2.1.2.4.1.2.5.4	ASP Workshop 1: Configuration Management (ONSITE TASK)
2.1.2.4.1.2.5.5	ASP Workshop 1: Maintenance Delivery (ONSITE TASK)
2.1.2.4.1.2.5.6	ASP Workshop 1: Reliability Engineering (ONSITE TASK)
2.1.2.4.1.2.5.7	ASP Workshop 1: Asset Operations (ONSITE TASK)
2.1.2.4.1.2.5.8	ASP Workshop 1: Resource Management (ONSITE TASK)
2.1.2.4.1.2.5.9	ASP Workshop 1: Shutdown and Outage Management (ONSITE TASK)
2.1.2.4.1.2.5.10	ASP Workshop 1: Fault and Incident Management (ONSITE TASK)
2.1.2.4.1.2.5.11	ASP Workshop 1: Asset Decommissioning and Disposal (ONSITE TASK)
2.1.2.4.1.3	**Asset Specific Plan DRAFT Document**
2.1.2.4.1.3.1	Woolpert to Develop DRAFT ASP Document

2.1.2.4.1.3.2	Woolpert to Submit DRAFT ASP Document
2.1.2.4.1.3.3	County to Review DRAFT ASP Document (COUNTY TASK)
2.1.2.4.1.4	**Asset Specific Plan Workshop Round 2**
2.1.2.4.1.4.1	Woolpert to Develop Agenda for Asset Specific Plan Workshop
2.1.2.4.1.4.2	Woolpert to Submit Asset Specific Plan Agenda to County
2.1.2.4.1.4.3	Woolpert to Prepare for Asset Specific Plan Workshop
2.1.2.4.1.4.4	County to Prepare for Asset Specific Plan Workshop (COUNTY TASK)
2.1.2.4.1.4.5	**Asset Specific Plan Workshop 1 (ONSITE TASK)**
2.1.2.4.1.4.5.1	ASP Workshop 1: Technical Standards and Legislation (ONSITE TASK)
2.1.2.4.1.4.5.2	ASP Workshop 1: Asset Creation and Acquisition (ONSITE TASK)
2.1.2.4.1.4.5.3	ASP Workshop 1: Systems Engineering (ONSITE TASK)
2.1.2.4.1.4.5.4	ASP Workshop 1: Configuration Management (ONSITE TASK)
2.1.2.4.1.4.5.5	ASP Workshop 1: Maintenance Delivery (ONSITE TASK)
2.1.2.4.1.4.5.6	ASP Workshop 1: Reliability Engineering (ONSITE TASK)
2.1.2.4.1.4.5.7	ASP Workshop 1: Asset Operations (ONSITE TASK)
2.1.2.4.1.4.5.8	ASP Workshop 1: Resource Management (ONSITE TASK)
2.1.2.4.1.4.5.9	ASP Workshop 1: Shutdown and Outage Management (ONSITE TASK)
2.1.2.4.1.4.5.10	ASP Workshop 1: Fault and Incident Management (ONSITE TASK)
2.1.2.4.1.4.5.11	ASP Workshop 1: Asset Decommissioning and Disposal (ONSITE TASK)
2.1.2.4.1.5	**Asset Specific Plan FINAL Document**
2.1.2.4.1.5.1	Woolpert to Develop FINAL ASP Document
2.1.2.4.1.5.2	Woolpert to Submit FINAL ASP Document
2.1.2.4.1.5.3	County to Review and Accept FINAL ASP Document (COUNTY TASK)

Deliverables

- Woolpert will develop a Request for Information and submit it to the County Project Manager
- Woolpert will perform a desktop audit of the information
- Woolpert will develop an agenda and submit it to the County Project Manager
- Woolpert will facilitate up to thirty six (36) hours within a single business week (Monday – Friday) for Round 1 of Asset Planning workshops coving the following topics:
  - Technical Standards and Legislation
  - Asset Creation and Acquisition
  - Configuration Management
  - Maintenance Delivery
  - Reliability Engineering
  - Asset Operations
  - Resource Management
  - Shutdown and Outage Management
  - Fault and Incident Management
  - Asset Decommissioning and Disposal
- Woolpert will develop a DRAFT version of the Asset Specific Plan and submit it to the County Project Manager
- Woolpert will facilitate up to thirty six (36) hours within a single business week (Monday – Friday) for Round 2 of Asset Planning workshops coving the following topics:
  - Technical Standards and Legislation
  - Asset Creation and Acquisition
  - Configuration Management
  - Maintenance Delivery
  - Reliability Engineering
  - Asset Operations
  - Resource Management
  - Shutdown and Outage Management

o   Fault and Incident Management   o   Asset Decommissioning and Disposal

- Woolpert will develop a FINAL version of the Asset Specific Plan and submit it to the County Project Manager

Assumptions

- All County maintenance, operations, engineering, planning and other personnel involved in the life cycle of the assets for which the ASP is developed will participate in all workshops will participate in the appropriate workshops
- All activities, other than the actual workshops, will be performed remotely
- The DRAFT document will not require joint reviews, only review by County staff in preparation for the Round 2 workshops
- The FINAL version of the document will be submitted after the second round of workshops; no joint review or County feedback will be required
- All Round 1 workshops will take place within a single business week (Monday – Friday)
- All Round 2 workshops will take place within a single business week (Monday – Friday)

County Responsibilities

- County Project Manager will schedule all County workshop attendees and ensure site readiness and staff participation for the workshops
- County workshop attendees will review the DRAFT versions of the documents in preparation for the Round 2 workshops
- County will accept the FINAL version of the ASP

WBS Task 2.1.2.5: Asset Information | All Subjects

Description of Task. Woolpert will facilitate workshops to support the documentation of the current state of the ISO 55000 subject in the subject area *Asset Information*. The workshops are scheduled to be conducted over several consecutive business days and will involve County and Department-level leadership. The outcome of the workshops is to *define the expected future state at the outcome of this project for the following subjects: Asset Information Strategy, Asset Information Standards, Asset Information Systems and Data & Information Management*. As the team tries to project the future state of these subjects it is natural to ask questions such as, 'is this really what's best for our organization?' and 'how are other organizations doing this?' The Woolpert team will be ready to offer insight into how peer organizations manage similar data and how their data management drives business processes and affect the organization's structure and culture.

The deliverable from this task is a single document created in Microsoft Word. The document will have a section for each of the four subject areas. Within each section the document will define the expected future state of the data management. In some subjects, a single future state for data management may not be universal, but rather multiple future states will exist dependent on the type of data or how the data will be collected, consumed and shared with other groups either within or outside of the County. The document will define the determining data conditions for each variant within each subject. In some subjects, the future state(s) may not be conclusively known until the project is completed. In these instances, the document will intentionally include open-ended sections where an update will be required. Should a gap be recognized, Woolpert will ensure that it is properly identified in an Issue Log and addressed during the appropriate software implementation task.

Part of ISO 55000 compliance is a periodic review and modification, as required, of the Asset Management documentation. In the case of the documented Asset Information subject area, the County should plan to review this document at least annually over the first few years of this project and update its content as the strategies, standards, systems and data management processes become more fully defined.

Subject Area Overview. Asset intensive organizations maintain a heavy reliance on asset data, information, knowledge, and wisdom as key enablers for undertaking asset management and operational activities. These four terms are widely used to segment an ever-expanding area of work.

- *Data*. Numbers, words, symbols, pictures, without context or meaning, i.e. data in raw format, e.g. 140 feet.
- *Information*. A collection of data expressed with a supporting context, e.g. the span of the bridge is 140 feet.
- *Knowledge*. A combination of experience, values, information in context, and in sight that forms a basis for decision-making.
- *Wisdom*. The result of evaluation of and understanding of knowledge. It is sometimes defined as "the ability to increase effectiveness". Wisdom can be considered to be the output of the whole asset management system and is not explicitly explored further in this section.

Data and information can generally be improved through a specific management approach set out in an overall Asset Management Strategy, thus defining the activities an organization will undertake to ensure its asset information meets current and future requirements. Asset management information typically includes:

- Records of the existence of a physical asset, collectively termed an asset inventory or asset register;
- Attributes about the assets, e.g. make, model, serial number, age, rated capacity, etc.;
- Attributes about the asset systems, e.g. capability, capacity, etc.
- Location, spatial information, dependencies, and connectivity information – especially in geographic information systems (GIS);
- Logical groupings, e.g. systems, equipment types, zones, etc.
- Access requirements, e.g. permits, right-of-way, easements, safety-related information, etc.;
- Performance information about assets. This can be subjective (from experience and knowledge) or objective (from measurements and data). It covers information such as asset reliability, condition, and serviceability assessments;
- Historical records of past events and carried out on the asset; either during short, medium, or long-term planned activities or as the consequence of unplanned tasks (e.g. breakdown repairs);
- Documents, design models and drawings, and photographs of the asset;
  - Asset types: an understanding of the types of assets within the asset management system and how they are represented in data is critical, for example:
    - Point assets, Linear assets, Area assets; Volume assets, System level assets;
  - Meta data – This is data that describes data including its structure, data types, business rules, data locations, and data qualities
  - Data attributes – a quality or feature as a characteristic or inherent part of an asset. Types of attributes can be further broken down to:
    - Function
    - What
    - Condition
    - Topography – spatial, photogrammetry
    - Topology – e.g. component, command & control, telemetry, energy, functional and operational relationships
    - Capability

- Utilization
- Cost
- Risk
- Failure modes
  o Intervention data
    - Workbank – maintenance, renewal, enhancements & failures
  o Unstructured data – user manuals, drawings

IAM's Asset Information Guidelines provide further detail on this subject (http://theIAM.org/knowledge/iam-project-work/subject-or-sector-specific-guidance/asset-information-guidelines-aig).

Asset Information Standards are used to explicitly define the required data and information, why the data is required, how the data is collected and measured, the required data format(s), who should provide the data, and when the data should be provided. Useful guidance on the management of asset information can be found in the ISO 8000 series of standards.

Asset Information Systems are comprised of a collection of processes, applications, and technologies used to automate Asset Management processes and to enable consistent decision support analyses. Asset Information Systems are often integrated, but they must always share common key fields and codes to avoid misinformation and be able to provide a single version of truth.

Data & Information Quality should be assessed, understood, and managed to ensure it effectively supports the business decisioning processes and that these processes include suitable controls given the assessed data quality. Typically, asset intensive organizations do not initially have all of the asset information they would ideally require, and the information they do have may not be of the quality they desire. Therefore, the organization will need to assess and prioritize the data gathering and data scrubbing activities, with a focus on those areas that will be most beneficial. Further guidance can be found in the IAM Asset Information Quality Handbook (http://theIAM.org/wiki/IAM_Asset_Information_Quality_Handbook).

The Asset Information subject group includes the following specific subjects:

- Asset Information Strategy
- Asset Information Management
- Asset Information Systems
- Data & Information

Asset Information Strategy (IAM D.1). Asset information is a combination of data about assets collectively used to inform decisions about how they are managed. Good asset information enables better decisions, such as determining the optimal asset maintenance or renewal frequency. Decisions may be based on information regarding an asset's location, condition, probability and consequence of failure, constraints such as resource availability, and other business priorities such as regulatory compliance.

An asset information strategy should define how an organization collates, maintains, utilizes, and disposes of asset information for the purpose of supporting strategic planning and asset life-cycle delivery activities. The Asset Information Strategy should take into account the life-cycle cost of the asset, collection and maintenance of asset information, and the value the information provided in terms of improved decision-making and support of day-to-day delivery of Asset Management activities. The Asset Information Strategy should align with an organization's Asset Management Strategy & Objectives and Asset Management Processes.

An Asset Information Strategy should consider:

- Key decisions and the information required to support them;
- Relationships with the end-to-end business processes for Asset Management;

- The proposed approach to defining information requirements taking into account the costs of providing asset information and the value of the information;
- Information flows and he overall logical data model;
- Data management and governance standards;
- The costs, benefits, and timescales for delivery of improvements to asset information;
- Main outcomes and functionality required from Asset Information Systems;
- Core Asset Information Systems required;
- A description of how different asset information systems (existing and proposed) will integrate;
- A strategy for migrating data and users from existing systems to new systems.

The Asset Information Strategy should address objectives related to the proposed improvements in asset information that are Specific, Measurable, Achievable, Realistic, and Time bound (SMART).

Stakeholder (internal and external) consultation should be undertaken to ensure the Asset Information Strategy captures all relevant information and access requirements. The Asset Information Strategy should be signed off on by all appropriate stakeholders within the organizations.

Asset Information Standards (IAM D2). Asset intensive organizations rely on asset data, information, and asset knowledge as key enablers in understanding both strategic Asset Management and operational activities. Asset Information Standards are helpful in ensuring that asset information is collected, categorized, and provided to agreed-upon levels and timescales. Standards for the measurement process also determine the correlation between the data and its actual meaning (for example, "height" means height above ground level, or condition is tested by standard methods).

Asset Information Standards will typically include:

- Classification of assets within an established topology in order to support development and management of an asset inventory;
- Definition of the required asset attribution and attribute quality criteria to be collected and maintained for each asset class, and what each attribute defines or represents;
- Common approaches to the assessment and recording of asset conditions for the purpose of supporting strategic Asset Management planning;
- Common methods for the categorization of asset defects and failures for the purpose of improving service and reliability through the planning of remedial activities;
- Defined approaches to the assessment and recording of asset performance and serviceability to support both long and short term planning activities;
- Agreed-upon methods for assessing and recording asset utilization to help inform and determine overall asset lives and prescribed intervals between intervention activities

Asset Information Standards should also define the level of quality and accuracy appropriate for the different types of information, while taking into consideration the criticality of the different assets and the criticality of the decisions made using the asset information.

Asset Information Systems (IAM D.3). Asset Information Systems are the software applications, databases, and other related systems use to collect, store, process, analyze, and disseminate the asset information an organization requires to manage its assets over the Life-Cycle. These systems store, or are otherwise integrated with, a corporate-wide asset register. This enables the effective performance of integrated planning and performance activities.

Asset Systems can range from complex integrated Enterprise Asset Management (EAM) solutions to mixed environments of best-in-class software applications. The optimum mix of applications will de-

pend largely on the size and complexity of the organization, its asset portfolio, and the nature of the regulatory environment it operates within.

Typical Asset Information Systems include:

- An asset register to provide detail of an organization's various assets;
- A geographic information system (GIS) to record the location, topological relationships, and other spatial details about an organization's assets;
- Work management systems to plan and record work activities performed against assets;
- Logistics systems to manage the storage, issuing, and use of materials and spares;
- Possession management systems to plan access to assets for work activities;
- Demand management systems to forecast how demand on assets will change over time and changing conditions;
- Decision support tools such as investment modeling systems used to support strategic planning activities;
- Process, telemetry, and SCADA systems to record details of asset performance;
- Common data environments;
- Condition monitoring systems to monitor key condition indicators such as temperature, vibration, run-time hours, on/off cycles, pressures, etc., to predict possible future failures;
- Mobile computing devices

Throughout all phases of the Asset Life-Cycle, various functions of the organization will have an interest in the asset and will require asset information presented in different formats. Therefore, it is equally important to have a robust reporting system as part of the overall asset information system solution.

Note that there is not a clear line between Asset Information Systems and other corporate enterprise information systems – information maintained in asset systems may be used for broader organizational purposes and vice versa. For example, training and competency records in an enterprise HR system may support the decisioning process as to who should respond to an asset failure.

Data & Information Management (IAM D.4). Data & Information are heavily relied upon by asset intensive organizations as key enablers in undertaking both Strategic Asset Management and operational activities. Asset Data quality is a generic term covering a number of specific data quality measures, including:

- Accuracy – the data is a true reflection of the physical entity it represents
- Completeness – a complete set of data is available for each data record
- Consistency – data is consistent in its definition, rules, format, and value
- Validity – all data held complies with data storage rules
- Timeliness – data reflects the current state of an asset and complies with organizational standards for data update timescales
- Uniqueness – all keys should be unique with no duplication of data

Organizations should assess the quality of their data and then develop a data capture plan to facilitate remediation of missing or sub-standard data within a reasonable timeframe. It is acceptable for an organization to forego data capture if it is determined the data would not be beneficial, as long as it has been decided at the appropriate level within the organization. Processes for the provision of asset information resulting from asset interventions (i.e. asset replacement) should be specified (i.e. asset onboarding procedures). Business decisions must incorporate suitable controls based upon actual data quality.

Asset Knowledge is a more subjective topic that can be influenced in many ways. Knowledge is derived from a combination of experience, values, information in context, and insight and can be reliant on key

individuals to recall specific historical events or to otherwise know where information is kept. The quality of this understanding will affect the reliability and quality of decision making, for example, forecasts of future behavior require good knowledge and not just good data. Organizations should endeavor to ensure that such personal knowledge and insights are secured and made widely available for use in future decisioning scenarios and to counteract the loss of knowledge when staff leave the organization.

Related Sub-Tasks

2.1.2.5	**Asset Information: All Subjects**
2.1.2.5.1	Woolpert to Develop DRAFT Asset Information Analysis and Recommendation Document
2.1.2.5.2	Woolpert to Submit DRAFT Asset Information Analysis and Recommendation Document
2.1.2.5.3	Woolpert to Prep for Asset Information Document Review
2.1.2.5.4	County to Prep for Asset Information Document Review (COUNTY TASK)
2.1.2.5.5	**Asset Information Document Review (ONSITE TASK)**
2.1.2.5.5.1	Asset Information Strategy Review (ONSITE TASK)
2.1.2.5.5.2	Asset Information Standards Review (ONSITE TASK)
2.1.2.5.5.3	Asset Information Systems Review (ONSITE TASK)
2.1.2.5.5.4	Data and Information Management Review (ONSITE TASK)
2.1.2.5.7	Woolpert to Update Asset Information Analysis and Recommendation Document
2.1.2.5.8	Woolpert to Submit FINAL Asset Information Analysis and Recommendation Document
2.1.2.5.9	County to Accept Asset Information Analysis and Recommendation Document (COUNTY TASK)

Deliverables

- Woolpert will develop a DRAFT version of the Asset Information Analysis document based on the asset information gathered to-date and submit the document to the County Project Manager; Document will contain guidelines of strategies, standards, systems and data management and review processes that the implementing departments and divisions should consider during their respective implementations

- Woolpert will facilitate up to eight (8) hours for Round 1 of Asset Planning workshops coving the following topics:
  - Asset Information Strategies
  - Asset Information Standards
  - Asset Information Systems
  - Data and Information Management

- Woolpert will develop a FINAL version of the Asset Specific Plan and submit it to the County Project Manager

Assumptions

- During the software configuration workshops, the specific details of the asset information strategies, standards, systems and information management processes will be defined for each department / division; it will be the responsibility of the County to ensure that this document is appropriately updated to include those details

- All activities, other than the actual workshops, will be performed remotely

- The DRAFT document will not require joint reviews, only review by County staff in preparation for the workshops

- The FINAL version of the document will be submitted after the workshops; no joint review or County feedback will be required
- All workshops will take place within a single business week (Monday – Friday)
- County workshop participants will include representative personnel responsible for asset data creation and on-going management in each division

County Responsibilities

- County Project Manager will schedule all County workshop attendees and ensure site readiness and staff participation for the workshops
- County workshop attendees will review the DRAFT versions of the documents in preparation for the Round 2 workshops
- County will accept the FINAL version of the Asset Information document

WBS Task 2.1.2.6: Organization and People | All Subjects

Description of Task. Woolpert will facilitate workshops to support the documentation of the current state of the ISO 55000 subject in the subject area *Organization and People*. The workshops are scheduled to be conducted over several consecutive business days and will involve County and Department-level leadership. The outcome of the workshops is to *define the expected future state at the outcome of this project for the following subjects: Procurement and Supply Chain Management, Asset Management Leadership, Organizational Structure, Organizational Culture and Competence Management*. As the team tries to project the future state of these subjects it is natural to ask questions such as, 'is this really what's best for our organization?' and 'how are other organizations doing this?' The Woolpert team will be ready to offer insight into how peer organizations manage similar data and how their data management drives business processes and affect the organization's structure and culture.

The deliverable from this task is a single document created in Microsoft Word. The document will have a section for each of the five subject areas. Within each section the document will define the expected future state of the subject. In some subjects, a single future state may not be universal, but rather multiple future states will exist dependent on the type of level within the organization the subject is defined. The document will define the determining data conditions for each variant within each subject. In some subjects, the future state(s) may not be conclusively known until the project is completed. In these instances, the document will intentionally include open-ended sections where an update will be required. Should a gap be recognized, Woolpert will ensure that it is properly identified in an Issue Log and addressed during the appropriate software implementation task.

Part of ISO 55000 compliance is a periodic review and modification, as required, of the Asset Management documentation. In the case of the documented Organization and People subject area, the County should plan to review this document at least annually over the first few years of this project and update its content as the processes and organizational-roles in asset management become more clearly defined.

Subject Area Overview. Asset Management is a way of thinking that shines new light on the way an organization conducts its business, often calling into question traditional ways of looking at things, existing organizational structures,

> Effective Asset Management organizations understand what activities should be kept in-house and what needs to be outsourced. Their approach to Procurement & Supply Chain Management reflects strategic cost, risk, quality, and performance management objectives. These organizations develop and manage supplier and contractor relationships and capabilities with long-term Asset Management goals in mind.

staff roles and responsibilities, and contractual relationships. This new way of business can often make the introduction of Asset Management thinking, and its associated practices, an uncomfortable proposition for many organizations, from the board room, to the plant floor, and in the supply chain. Many lessons learned from the early Asset Management adopters strongly suggest these issues should be taken up sooner rather than later in the asset management journey.

The Organization & People Enablers subjects are highly interdependent and collectively exert a strong influence on an organization's ability to successfully adopt and embed asset management. The main justification for investing in these enablers is to produce a set of desired behaviors and performance needed to deliver upon the Asset Management Strategy & Objectives.

The relationship between Asset Management Strategy and the Organization & People Enablers subjects is multi-faceted, each having implications for the other that need to be defined, risk assessed, and proactively managed if the strategy is to prove successful. All are important mechanisms for delivering an appropriate level of business integration that characterizes a mature asset management capability.

The Organization & People enablers group consists of the following subjects:

- Procurement & Supply Chain Management
- Asset Management Leadership
- Organizational Structure
- Organizational Culture
- Competence Management

Organization & People Subjects

Procurement & Supply Chain Management (IAM E.1). One challenge facing organizations that embrace whole life, whole cost asset management practices is how to embed this in the way they manage their supplier relationships. For many, transforming from short-cycle contracts to longer-term relationships requires changing long-standing institutionalized habits. While supplier collaboration is not new, research indicates organizations that use their supply chains strategically are still a minority.

Mature asset management organizations have achieved full alignment between Procurement & Supply Chain Management and their Asset Management Strategy & Objectives, including cost risk assumptions. These organizations work in partnership with their suppliers to develop and mature the capabilities they need to achieve. The most successful organizations manage their supply chains in much the same way they would manage any of their other critical assets, applying the same principals and focusing on the same issues, such as ensuring the relationships between asset supplier performance and asset value transparent.

Asset Management organizations have an unambiguous understanding of what activities can be performed in-house and which ones need to be outsourced. In arriving at these decisions, they:

- Consider the criticality of the work required relative to their asset management objectives, their volumes of work, management overheads, and the availability of competent staff;
- Identify and set objectives for their suppliers, and consider how to best deploy contracted staff and integrate them into their own workforce;
- Specify procurement requirements and service level agreements and assess the criticality of individual supplier relationships to overall asset management strategy, objectives, and plans;
- Ensure that asset management activities achieve organizational objectives;
- Engage in effective supplier recruitment activities, develop clear criteria and process for choosing suppliers and design effective contracts that fit their asset management policy;

- Consider how best to incentivize suppliers and build sustainable relationships with their suppliers that ensure their capabilities meet service level needs;
- Use appropriate performance indicators to monitor and manage supplier contracts that minimize the introduction of risk into the business;
- Monitor their suppliers commercial circumstances and ownership to ensure that relationships are viable and on-going;
- Decide how best to make the transition from one supplier management approach to the other.

Designing contracts that deliver upon these requirements is vital to aligning supplier expectations, obligations, and rights within the asset management strategy. As an example, in some circumstances it may be counterproductive for asset maintenance contract to be shorter than the life of the assets being maintained, whereas in others the focus might be on aligning the contract term with service level requirements. Forms of contracts which suit short-term, or generate adversarial relationships are unlikely to generate the types of long-term relationships required to underpin successful asset management.

Asset Management Leadership (IAM E.2). Full comprehension of Asset Management Leadership requires an understanding of what it means to be an effective leader. People with different styles, approaches, and personalities can be effective leaders, but they must all be able to do the following:

> Asset Management Leadership is required at all levels of an organization to ensure Asset Management strategies and plans are not undone by conflicting perspectives and priorities among different departments, divisions, workgroups on what constitutes best value or by lack of clarity on organizational objectives and priorities.

- Provide their teams direction. In the context of Asset Management, this means leaders must communicate a clear vision of how the organization will optimize asset usage to maximum benefit and be able to persuasively articulate this vision;
- Make the difficult decisions. Difficult is not the same as complex. Difficult Asset Management decisions include those where the problem is not well defined and non-routine and where the decision requires tough choices to be made impacting individuals and the organization as a whole. Asset Management leaders need to be decisive in the face of ambiguity.
- Inspire staff to achieve the organization's goals;
- Provide confidence to the stakeholders of the direction being taken and the benefits that will be realized.

Asset Management leaders must be able to motivate their staff by acting as role models, providing the needed organizational support, treating staff well by providing incentives, etc. Exceptional leaders have a toolbox of techniques which they utilize as appropriate given a particular situation. Strong leaders are trusted by their staff, are consistently fair, and are prepared to "take the heat" when problems arise.

Leading is not the same as managing or supervising. Managers and supervisors plan, organize, control, and ensure work gets performed in situations where the work and procedures are well defined. Leaders are not needed in these instances. However, leadership is important in defining, developing, and implementing such procedures and systems.

Strong Asset Management leadership is crucial in those organizations seeking to deliver effective asset management – this leadership will set the direction and priorities for development of the organization's asset management capabilities necessary to achieve the organization's overall objectives.

Organizational Structure (IAM E.3). *Where should we put it?* This is a common question relating to asset management. There is no one right answer – the answer depends on how your organization is structured, how asset management is perceived by top management, and the level of Asset Management maturity in the organization.

In hierarchical organizations where departments and divisions operate under separate agendas, with their work integrated "at the top", asset management accountability should be assigned to the senior management team. But if they perceive asset management to be "*something engineers do*", it may be difficult to persuade them of this model.

> Organizational Structure should complement the Asset Management Strategy. It is important for senior management to give careful consideration to where asset management responsibilities are located within the organization, lines of reporting and communication, roles and responsibilities to ensure they are conducive to information sharing, cross functional working, multidisciplinary teamwork, and other features of good asset management behavior.

In organizations where asset management responsibilities are delegated to one department/division, but there is no explicit accountability for asset management among the senior leadership team, the asset management team may deliver incremental benefits but struggle to drive asset management practices across the organization. A stalemate often forms in this type of situation, where asset management is perceived by senior management as a tactical issue because those responsible for executing asset management activities lack the authority to act more strategically.

The situation will be entirely different for those organizations that operate under other organizational structures such as bureaucracies, project based companies, matrixed organizations, or loosely based network companies. This is why Organizational Structure is such a key Asset Management issue – it could take years (if ever) for asset management to achieve its full potential if it is positioned incorrectly in the organization.

Organizational structures and cultures must: support the achievement of organizational goals and objectives; have clear commitment from leadership; be clearly committed to by leadership; be consistently applied; be viable, and; maintain a clear line of sight between top management and staff working out in the field.

Organizational Culture (IAM E.4). An organization's culture impacts all aspects of its performance. Asset management is no exception, any more than are safety, security, financial management, customer service, or corporate reputation. This is why a proactive approach to culture management is critical to organizations seeking to benefit from asset management.

> Organizational Culture has a profound effect on what people perceive as good or believe is possible, how they behave, and how committed they feel. Senior management should commit to proactively shape the organizational structure / climate and cultures such that they are conducive to Asset Management thinking, while tailored to their specific Asset Management goals.

Culture is "the way things are done" and there is no one correct culture that fits all organizations. Each organization must determine the right type of culture it needs to be successful and then seek to establish it.

The first step in creating a culture conducive to asset management is for senior management to articulate a clear idea of what it is they are trying to achieve and why their selected approach is likely to succeed. This should support both the Asset Management Strategy & Objectives as well as the wider goals of the organization. It should also be considerate of any constraints the organization operates under.

A number of best practices senior managers should apply when determining the appropriate Organization Structure & Culture for their Asset Management activities include:

- Provide clarity about the purpose of the organization;
- Be consistent across the entire organization;
- Ensure understanding among staff about the boundaries of their responsibilities and accountability;
- Ensure staff members are motivated to accept their responsibilities and accountabilities;
- Ensure everyone is clear about the chain of command and how, under what circumstances, issues are escalated;
- Ensure everyone is clear about the organization's communication channels and how information is passed from top to bottom, sideways, and up again;
- Ensure communications are acted upon;
- Ensure everyone knows where, when, and how decisions are made and by whom;
- Ensure senior management provides visible support and engagement for any Asset Management changes or improvement initiatives.

Competence Management (IAM E.5). Competence is the *ability to perform activities to the expected standard*. However, competence does not guarantee acceptable performance. A number of reasons for this include:

- Competence is a condition that will deteriorate over time if it is not practiced;
- Competent people will struggle to perform well in dysfunctional teams or organizations;
- Some activities occur infrequently, making it hard to maintain the competence of those that perform them;
- Attitudes, beliefs, lifestyles, and work relationships all exert important influences on people's ability to perform.

> Competence Management is focused on ensuring competent people are available to match the demands of individual roles and work effectively in teams. A systematic approach to defining competence and behavioral requirements, selecting and developing staff, deploying and developing them, and managing their work are best practices in leading Asset Management organizations.

A fundamental task for Asset Management organizations is to ensure enough suitably competent people are available to undertake the activities the organization's success depends on. Senior management needs to understand the implications of the Asset Management Strategy & Objectives on the competence of the workforce. This means clearly articulating competency requirements at all levels and ensuring these requirements are used to select, develop, and review people and define their roles and responsibilities and the relationships among them. The IAM Competences Framework is widely used by Asset Management organizations to specify their particular competence requirements and develop competence management systems around them.

Developing a structured Competence Management approach need not be expensive or bureaucratic. There is no single formula organizations should be striving to adopt. Even where there is general agreement about a particular approach and its benefits, such as a risk based approach, there is no agreement about the best way to design and implement it. This is evidenced in the variety of guidance and practices promoted by different regulatory bodies. However, it is generally agreed among researchers that organizations need to adopt a strategic approach to competence and behavior management and that it should cover the development of both individual and organizational competence.

People come into asset management roles from different technical, operational, and management backgrounds, bringing with them differing perspectives, concepts, methodologies, and networks. Pull-

ing all of this diversity together to form coherent and effective asset management teams should be a key component of asset management strategy and planning.

Related Sub-Tasks

2.1.2.6	**Organization and People: All Subjects**
2.1.2.6.1	Woolpert to Develop DRAFT Tech Memo of Organization and People Subjects
2.1.2.6.2	Woolpert to Submit DRAFT Tech Memo of Organization and People Subjects
2.1.2.6.3	Woolpert to Prep for Organization and People Workshop
2.1.2.6.4	County to Prep for Organization and People Workshop (COUNTY TASK)
2.1.2.6.5	**Organization and People Workshop (ONSITE TASK)**
2.1.2.6.5.1	Procurement and Supply Chain Management Workshop (ONSITE TASK)
2.1.2.6.5.2	Asset Management Leadership Workshop (ONSITE TASK)
2.1.2.6.5.3	Organizational Structure Workshop (ONSITE TASK)
2.1.2.6.5.4	Organizational Culture Workshop (ONSITE TASK)
2.1.2.6.5.5	Competence Management Workshop (ONSITE TASK)
2.1.2.6.7	Woolpert to Update Tech Memo of Organization and People Subjects
2.1.2.6.8	Woolpert to Submit FINAL Tech Memo of Organization and People Subjects
2.1.2.6.9	County to Accept Organization and People Tech Memo (COUNTY TASK)

Deliverables

- Woolpert will develop a DRAFT version of the Technical Memorandum based on the information gathered to-date and submit the document to the County Project Manager; Document will contain guidelines of strategies, standards, systems and data management and review processes that the implementing departments and divisions should consider during their respective implementations
- Woolpert will facilitate up to twelve (12) hours for workshops coving the following topics:
  - Procurement and Supply Chain Management
  - Asset Management Leadership
  - Organizational Structure
  - Organizational Culture
  - Competence Management
- Woolpert will develop a FINAL version of the Technical Memorandum and submit it to the County Project Manager

Assumptions

- As the project progresses, these topics will be periodically, informally revisited during many other workshops and meetings between Woolpert and County personnel; it will be the responsibility of the County to ensure that this document is appropriately updated as necessary throughout the life of the project and beyond
- All activities, other than the actual workshops, will be performed remotely
- The DRAFT document will not require joint reviews, only review by County staff in preparation for the workshops

- The FINAL version of the document will be submitted after the workshops; no joint review or County feedback will be required
- All workshops will take place within a single business week (Monday – Friday)
- County workshop participants will include representative personnel responsible for County-level strategies related to asset management

County Responsibilities

- County Project Manager will schedule all County workshop attendees and ensure site readiness and staff participation for the workshops
- County workshop attendees will review the DRAFT versions of the documents in preparation for the Round 2 workshops
- County will accept the FINAL version of the Technical Memorandum

WBS Task 2.2: Departmental Readiness Assessments

Woolpert will conduct a readiness assessment for all of the implementing divisions in each of the implementing departments. The assessment will focus on the divisions' completeness and accuracy of critical asset management system foundational data, in particular the asset registry. Specific to the asset registry, not only does the data need to be relatively complete and accurate, but to implement Cityworks it must also exist in an Esri GIS data structure. Woolpert will also assess other factors that play important roles in a division's ability to successfully adopt a Cityworks AMS such as the sophistication of its existing work processes, staffing levels and resource competencies.

Woolpert will develop a Readiness Assessment document for each of the County's implementing Departments. The Readiness Assessment will include the topics identified in the following table. Also included in the Readiness Assessment will be recommendations as to which departments / divisions are ready to begin a Cityworks implementation and, for those that are not yet ready, what tasks they should undertake in order to ready themselves for the implementation.

Topic	Description
Existing CMMS	Does the division currently use a work management system? How well is it used? What processes are defined for system use and are they followed?
Existing CMMS Data	What is the state of the current Static and Transactional data? Static data should be fairly complete and accurate in a well-used system, particularly the asset registry. This data will likely be migrated to the newly implemented solution. Transactional data may or may not be migrated to the newly implemented system. Woolpert has seldom found value in migrating legacy transactional data to new systems. Alternatives include maintaining a stand-alone version of the legacy system or developing a data warehouse and key reports for historical research.
Asset Repository / GIS Analysis	Evaluate the completeness (total records versus total assets) of asset datasets. Particularly for departments / divisions where the majority of the assets are represented and networked within a GIS system, what is the division's perception of the relative completeness and accuracy of the datasets? What GIS tools are currently being used to manage the asset systems; hydraulic models, network tracing, etc.?
Asset Data Management	Is there a process for creating new asset records (asset on-boarding processes), retiring (or archiving) records when assets are taken out of service,

	and validating asset attributes for in-service assets?
Inventory Management	Does the division maintain a stock of repair materials? How is that stock tracked (quantity), costed (value) and charged to work orders?
Inventory Procurement	How are repair materials procured for jobs? How are inventory stores replenished when their stock is low.
Contracting	Does the division contract any maintenance activities? What is the process for identifying jobs to be outsourced? How are the costs tracked back to the assets being repaired? What is the role of procurement in outsourced work?
Equipment / Tool Management	Does the division maintain equipment to be used in the course of maintenance work (vehicles, lawn mowers, snow plows, etc.)? How are their costs assigned to work orders? How are they tracked and scheduled for jobs? Do they maintain the equipment / tools or do they contract their maintenance?
Management Reporting	What reports exist for each division and how do they use each to make decisions?
Asset Criticality, Condition, Consequence of Failure and Business Risk Exposure (BRE)	Each asset should have a Business Risk Exposure (BRE) value assigned to it. A BRE is calculated by multiplying Asset Criticality by Consequence of Failure. When the criticality is high and / or the consequence of failure is high, the asset has a higher BRE. While BRE values likely don't exist, Woolpert can evaluate the asset attributes most likely to be used in calculating these values for the various asset classes.

Related Sub-Tasks

2.2	**Departmental Readiness Assessments**
2.2.1	**Readiness Assessment Agendas and Presentations**
2.2.1.1	Woolpert to Develop DRAFT Agenda and Presentation
2.2.1.2	Woolpert to Submit DRAFT Agenda and Presentation to County
2.2.1.3	County to Review DRAFT Agenda and Presentation (COUNTY TASK)
2.2.1.4	County to Provide Feedback on DRAFT Agenda and Presentation (COUNTY TASK)
2.2.1.5	Woolpert to Incorporate County Feedback
2.2.1.6	Woolpert to Submit FINAL Agenda and Presentation
2.2.2	**Departmental Readiness Assessments**
2.2.2.1	**Readiness Assessment Preparation**
2.2.2.1.1	Woolpert to Prepare Request for Information
2.2.2.1.2	Woolpert to Submit RFI to County
2.2.2.1.3	County to Gather Data and Submit to Woolpert (COUNTY TASK)
2.2.2.1.4	Woolpert to Perform Desktop Audit of Collected Information
2.2.2.1.5	Woolpert to Prepare for Onsite Readiness Assessment Workshops
2.2.2.1.6	County to Prep Facility for Workshops (COUNTY TASK)
2.2.2.2	**Readiness Assessment Workshops**
2.2.2.2.1	**Woolpert to Conduct Readiness Assessment Workshops (ONSITE TASK)**
2.2.2.2.1.1	Parks and Conservation - 4 Divisions (ONSITE TASK)
2.2.2.2.1.2	Public Works Department - 4 Divisions (ONSITE TASK)
2.2.2.2.1.3	Public Works Department - 3 Divisions (ONSITE TASK)
2.2.2.2.1.4	Real Estate Management - 5 Divisions (ONSITE TASK)
2.2.2.2.1.5	Solid Waste Department - 3 Divisions (ONSITE TASK)

2.2.2.2.1.6	Utilities Department - 5 Divisions (ONSITE TASK)
2.2.3	**Readiness Assessment Documentation**
2.2.3.1	**DRAFT Readiness Assessments Documentation**
2.2.3.1.1	Woolpert to Develop DRAFT Readiness Assessment for PCR
2.2.3.1.2	Woolpert to Develop DRAFT Readiness Assessment for Public Works
2.2.3.1.3	Woolpert to Develop DRAFT Readiness Assessment for REM
2.2.3.1.4	Woolpert to Develop DRAFT Readiness Assessment for Solid Waste
2.2.3.1.5	Woolpert to Develop DRAFT Readiness Assessment for Utilities
2.2.3.1.6	Woolpert to Submit DRAFT Readiness Assessment Documents to County
2.2.3.1.7	County to Review DRAFT Readiness Assessment Documents (COUNTY TASK)
2.2.3.2	**Joint Review of Readiness Assessment Documents**
2.2.3.2.1	**Woolpert to Facilitate Joint Reviews of Readiness Assessment Docs (ONSITE TASK)**
2.2.3.2.1.1	Parks and Conservation - 4 Divisions (ONSITE TASK)
2.2.3.2.1.2	Public Works Department - 4 Divisions (ONSITE TASK)
2.2.3.2.1.3	Public Works Department - 3 Divisions (ONSITE TASK)
2.2.3.2.1.4	Real Estate Management - 5 Divisions (ONSITE TASK)
2.2.3.2.1.5	Solid Waste Department - 3 Divisions (ONSITE TASK)
2.2.3.2.1.6	Utilities Department - 5 Divisions (ONSITE TASK)
2.2.3.2.1.7	Review of Implementation Tracks (ONSITE TASK)
2.2.3.3	**FINAL Readiness Assessments Documentation**
2.2.3.3.1	Woolpert to Create FINAL Readiness Assessment for PCR
2.2.3.3.2	Woolpert to Create FINAL Readiness Assessment for Public Works
2.2.3.3.3	Woolpert to Create FINAL Readiness Assessment for REM
2.2.3.3.4	Woolpert to Create FINAL Readiness Assessment for Solid Waste
2.2.3.3.5	Woolpert to Create FINAL Readiness Assessment for Utilities
2.2.3.3.6	Woolpert to Submit FINAL Readiness Assessment Documents to County
2.2.3.4	**Readiness Assessment County Acceptance (COUNTY TASK)**
2.2.3.4.1	County to Accept FINAL Readiness Assessment for PCR (COUNTY TASK)
2.2.3.4.2	County to Accept FINAL Readiness Assessment for Public Works (COUNTY TASK)
2.2.3.4.3	County to Accept FINAL Readiness Assessment for REM (COUNTY TASK)
2.2.3.4.4	County to Accept FINAL Readiness Assessment for Solid Waste (COUNTY TASK)
2.2.3.4.5	County to Accept FINAL Readiness Assessment for Utilities (COUNTY TASK)
2.2.3.4.6	County Acceptance of Readiness Assessment Task (COUNTY TASK)

Deliverables

- Woolpert will develop a DRAFT Agenda and Presentation for the workshops and submit them to the County Project Manager
- Woolpert will incorporate the County feedback in the Agenda and Presentation and submit a FINAL version of the Agenda and Presentation to the County Project Manager
- Woolpert will prepare a Request for Information (RFI) and submit it to the County Project Manager
- Woolpert will perform a desktop audit of the information collected via the RFI process

- Woolpert will facilitate up to six (6) readiness assessment workshops, each up to twelve (12) hours; NOTE: due to the fact that the Public Works department now has seven (7) divisions that manage differing asset bases presumably in very different ways, it has been divided into two different workshop groups. However, only one Readiness Assessment document will be developed for the department with an assessment of all seven (7) divisions.
- Woolpert will develop a DRAFT version of the readiness assessment documents and submit them to the County Project Manager
- Woolpert will facilitate six (6) onsite review sessions with County staff, one for each of the DRAFT documents and two for the Public Works department (one for each of the workshop groups); each review session will not exceed two (2) hours in duration
- Woolpert will develop a FINAL version of the documents and submit them to the County Project Manager

Assumptions

- The six (6) readiness assessment workshops can be re-purposed as necessary; they are currently scoped for:

  - Parks and Conservation Resources
  - Real Estate Management
  - Public Works Workshop 1
  - Public Works Workshop 2
  - Solid Waste
  - Utilities

- All activities, other than the actual workshops and joint review sessions, will be performed remotely
- All workshops will take place over two (2) business weeks (Monday – Friday)
- All onsite reviews of the DRAFT documents will take place within a single business week (Monday – Friday)
- County workshop and document review participants will include the appropriate department and other County staff
- The findings of the workshops may alter the scoped implementation activities that begin in the next phase on this scope of work; As necessary, Woolpert and the County will modify the contracted scope, schedule and fee, as appropriate
- The findings of the workshops may identify required and / or recommended tasks that must / should be undertaken in order to ready one or more divisions / departments for a Cityworks implementation; Unless specifically identified within the contracted scope of services, Woolpert services to perform or support those tasks are not included in this project

County Responsibilities

- County will review and provide feedback on the DRAFT Agenda and Presentation
- County will make all reasonable attempts to provide as much of the information requested in the RFI as possible
- County Project Manager will schedule all County workshop attendees and ensure site readiness and staff participation for the workshops
- County workshop attendees will review the DRAFT versions of the documents in preparation for the joint review workshops

- County will accept the FINAL version of the documents

WBS Task 2.3: Existing Systems Evaluations

Woolpert will conduct an evaluation of existing County systems for the purpose of determining how / if they will be included in the future asset management program. The systems that are included in this analysis are:

- Oracle Inventory Accounting System: Need to determine how the County tracks spare part and material inventory from both a quantity and cost perspective. Specific concerns that need to be vetted are whether the County expects these inventories to be tracked as balance sheet items and, if so, the accuracy and detailed expectations of the sub-ledger systems in order to satisfy County auditing requirements.

- VCMS Mosquito Management System: Need to understand the functionality of the VCMS system and determine if that functionality can be included in the Cityworks AMS solution. If not, need to determine how the County will replace the VCMS with a third-party solution that offers the necessary functionality and can be integrated with Cityworks.

Related Sub-Tasks

2.3	**Existing Systems Evaluations**
2.3.1	Woolpert to Prep for Existing System Evaluation Workshops
2.3.2	**Woolpert to Facilitate Evaluation of Existing Systems**
2.3.2.1	Oracle Inventory Management System Evaluation
2.3.2.2	VCMS Mosquito Control Evaluation
2.3.3	**Woolpert to Document Existing System Evaluations**
2.3.3.1	Oracle Inventory Management Technical Memorandum
2.3.3.2	VCMS Technical Memorandum
2.3.3.3	Woolpert to Submit Existing System Evaluation Technical Memoranda
2.3.4	**Review and Acceptance of Existing System Evaluation Technical Memoranda**
2.3.4.1	County to Review Existing System Evaluation Technical Memoranda (COUNTY TASK)
2.3.4.2	Woolpert to Facilitate Joint Review of Oracle Inventory System Technical Memoranda
2.3.4.3	Woolpert to Facilitate Joint Review of VCMS System Technical Memoranda
2.3.4.4	Woolpert to Update Existing System Technical Memoranda
2.3.4.5	Woolpert to Submit FINAL Existing System Technical Memoranda
2.3.4.6	County to Accept FINAL Existing System Technical Memoranda (COUNTY TASK)

Deliverables

- Woolpert will facilitate two (2) onsite Existing System Evaluation workshops, each up to eight (8) hours

- Woolpert will develop a DRAFT version of the technical memoranda documents and submit them to the County Project Manager. Memoranda will include the functional requirements (needs) that each solution must satisfy in order to be considered viable solutions. As appropriate, memoranda will also identify the preferred functionality (wants) that the County desires for each solution.

- Woolpert will facilitate two (2) remote review sessions with County staff, one for each of the DRAFT documents; each review session will not exceed four (4) hours in duration
- Woolpert will develop a FINAL version of the documents and submit them to the County Project Manager

Assumptions

- All activities, other than the actual workshops will be performed remotely
- All workshops will take place over a single business weeks (Monday – Friday)
- County workshop and document review participants will include the appropriate County staff
- The findings of the workshops may alter the scoped implementation activities that begin in the next phase on this scope of work; As necessary, Woolpert and the County will modify the contracted scope, schedule and fee, as appropriate
- The findings of the workshops may identify required and / or recommended tasks that must / should be undertaken in order to ready the County for Cityworks implementation tasks; Unless specifically identified within the contracted scope of services, Woolpert services to perform or support those tasks are not included in this project

County Responsibilities

- County will review and provide feedback on the DRAFT Agenda and Presentation
- County will make all reasonable attempts to provide as much of the information requested in the RFI as possible
- County Project Manager will schedule all County workshop attendees and ensure site readiness and staff participation for the workshops
- County workshop attendees will review the DRAFT versions of the documents in preparation for the Round 2 workshops
- County will accept the FINAL version of the documents

WBS Task 2.4: Global Configuration Standards

The Woolpert Team will facilitate workshops with the County asset management leadership team for the purpose of establishing global AM standards related to terminology, work / business processes and system configurations. The goal of these workshops is to develop a common platform from which all groups that implement the Cityworks AMS develop their specific configurations. There will be two sets of workshops, Round 1 and Round 2. The result of this task will be a single document called Global Asset Management Business Processes and System Configurations.

The first round of workshops will take place onsite at County facilities over a three week
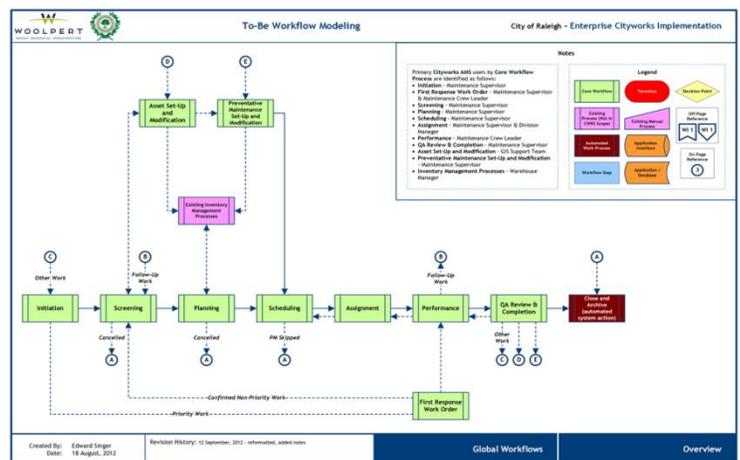
Figure 7: Work Order Management Workflow Best Practices

period. The focus of the Round 1 workshops will be a set of business processes that Woolpert has de-termined over the course of dozens of AMS implementations to be standard workflows executed by nearly every organization that implements an AMS. Woolpert will lead discussions on key AM terms so that the groups can agree to common definitions. Woolpert will facilitate discussions regarding global system configuration items, such as Work Order and Asset Statuses, and common field naming conven-tions, such as Repair Part codes and descriptions. During the Round 1 workshops, the Woolpert Team, led by an IAM-certified professional, will address the following items:

Workshop 1 Topics	Duration	Goals
Work Order Lifecycle and Statuses	4 hours	Overview of the work order lifecycle; agreement on the stages and WO Statuses
Work Initiation	4 hours	Process(es) by which work is initiated by internal and external re-sources; identification of integrations points
First Responder (Emergency Work)	4 hours	Process by which work can be executed without going through the typical lifecycle
Work Order Screening	4 hours	Process by which potential work is evaluated and a decision is made as to whether work should be performed
Work Order Planning	4 hours	Process by which labor skills, materials, and tools / equipment to perform the work are planned and estimated
Work Scheduling	4 hours	Process by which work orders are scheduled to be executed at a spe-cific date / time
Work Assignment	4 hours	Process by which technicians / work crews are assigned to scheduled work
Work Performance and Work Order Completion	4 hours	Process by which technicians / supervisors complete the information on the work order; agreement on how to develop Problem, Failure, Action and Cause (PFAC) codes
Work Order Review and QAQC	4 hours	Process by which a percentage of completed work orders are re-viewed for completeness and accuracy
Asset Record Maintenance	4 hours	Process by which Asset records are created and updated; lifecycle of the Asset records
Preventive Maintenance Schedule Maintenance	4 hours	Process by which the Preventive Maintenance tasks and schedules are developed and maintained
Fleet Inspections	4 hours	Process by which vehicle inspections are executed
Inventory Procurement and Management	4 hours	Processes by which spare part inventories are managed including storage / stocking processes and strategies and procurement-related processes and strategies

Workshop 1 Topics	Duration	Goals
Labor and Equipment Contracting	4 hours	Processes by which external labor and equipment is contracted for work
Asset Management Strategies	4 hours	Discussion of the various asset management strategies such as Predictive / Preventive Maintenance, Corrective, Rehabilitation / Overhaul, and Replacement
Management Reports, Process Indicators and Metrics	4 hours	Discussion and identification of key AM reports, process indicators, metrics and dashboards
FEMA Emergency Response	4 hours	Review documentation and Standard Operating Procedures and processes for FEMA and County interaction including reporting requirements
Projects	4 hours	Review how County set up, tracks, monitors and reports on Projects.
Accounting	8 hours	Financial management discussions related to how Assets are created / depreciated / retired in the accounting fixed asset registry; discussion of how spare part materials are procured and expensed; discussion of potential integration points for work order expenses to general ledger accounts
GIS Data Maintenance	16 hours	Review existing GIS / Asset data maintenance roles and responsibilities; agreed to a standard methodology and note exceptions

After the Round 1 workshops, the Woolpert Team will document the agreed-upon terminology and system configurations and develop / modify the business process workflows and submit the DRAFT document to the County for review. Woolpert will submit all of the workflows and SOPs to the County for review prior to the round two workshops.

The Round 2 workshops will take place onsite at County facilities over a two-week period. The focus of the Round 2 workshops will be to review the DRAFT document, finalize decisions about business processes, global system configuration and record naming conventions. The Round 2 workshops will address the following items:

Workshop 2 Topics	Duration	Goals
Work Order Lifecycle and Statuses	2 hours	Finalize the work order lifecycle; agreement on the stages and WO Statuses
Work Initiation and SOP Review	4 hours	Finalize process(es) for work initiation; agree to DRAFT SOP
First Responder (Emergency Work) and SOP Review	4 hours	Finalize process by which work can be executed without going through the typical lifecycle; agree to DRAFT SOP
Work Order Screening and SOP Review	2 hours	Finalize process by which potential work is evaluated; agree to DRAFT SOP

Workshop 2 Topics	Duration	Goals
Work Order Planning and SOP Review	4 hours	Finalize process for work planning; agree to DRAFT SOP
Work Scheduling and SOP Review	2 hours	Finalize process for work scheduling; agree to DRAFT SOP
Work Assignment and SOP Review	4 hours	Finalize process for work assignment; agree to DRAFT SOP
Work Performance and Work Order Completion, SOP Review and PFAC Codes	4 hours	Finalize process for work order completion; agree to DRAFT SOP
Work Order Review and QAQC and SOP Review	2 hours	Finalize process for work order QAQC; agree to DRAFT SOP
Asset Record Maintenance, SOP Review and Asset Classifications	4 hours	Finalize Asset Lifecycle process; agree to DRAFT SOP; agree to asset classification strategy
Preventive Maintenance Schedule Maintenance and SOP Review	2 hours	Finalize PM Schedule Update processes; agree to DRAFT SOP
Fleet Inspections and SOP Review	4 hours	Finalize fleet inspection process, agree to DRAFT SOP
Inventory Procurement and Management, SOP Review and Inventory Taxonomy	2 hours	Finalize inventory and procurement processes; agree to DRAFT SOPs
Labor and Equipment Contracting and SOP Review	2 hours	Finalize processes; agree to DRAFT SOPs
Asset Management Strategies and Best Practice Reviews	4 hours	Review documentation
Management Reports, Process Indicators and Metrics	4 hours	Finalize key AM reports, process indicators, metrics and dashboards
FEMA Emergency Response	2 hours	Review documentation and Standard Operating Procedures and processes for FEMA and county interaction and reporting requirement
Projects	2 hours	Review how County set up, tracks, monitors and reports on Projects.

Workshop 2 Topics	Duration	Goals
Accounting	4 hours	Financial management discussions related to how Assets are created / depreciated / retired in the accounting fixed asset registry; discussion of how spare part materials are procured and expensed; discussion of potential integration points for expenses to general ledger accounts
GIS Data Maintenance	16 hours	Review existing GIS / Asset data maintenance roles and responsibilities; agreed to a standard methodology and note exceptions

Related Sub-Tasks

2.4	**Global Configuration Standards**
2.4.1	**Round 1 Global Configuration Standards Workshops**
2.4.1.1	Woolpert to Prepare for Global Configuration Standards Workshops
2.4.1.2	County to Prepare for Global Configuration Standards Workshops (COUNTY TASK)
2.4.1.3	**Woolpert to Facilitate Global Configuration Standards Workshops (ONSITE TASK)**
2.4.1.3.1	Work Order Lifecycle and Statuses (ONSITE TASK)
2.4.1.3.2	Work Initiation (ONSITE TASK)
2.4.1.3.3	First Responder / Emergency Work (ONSITE TASK)
2.4.1.3.4	Work Order Screening (ONSITE TASK)
2.4.1.3.5	Work Order Planning (ONSITE TASK)
2.4.1.3.6	Work Scheduling (ONSITE TASK)
2.4.1.3.7	Work Assignment (ONSITE TASK)
2.4.1.3.8	Work Performance and Work Order Completion (ONSITE TASK)
2.4.1.3.9	Work Order Review and QAQC (ONSITE TASK)
2.4.1.3.10	Asset Record Maintenance (ONSITE TASK)
2.4.1.3.11	Preventive Maintenance Schedule Maintenance (ONSITE TASK)
2.4.1.3.12	Fleet Inspections (ONSITE TASK)
2.4.1.3.13	Inventory Procurement - Requisitions, Purchase Orders and Receipts (ONSITE TASK)
2.4.1.3.14	Labor and Equipment Contracting (ONSITE TASK)
2.4.1.3.15	Work Order Fault Coding Strategy (ONSITE TASK)
2.4.1.3.16	Equipment, Labor and Reporting Strategy (ONSITE TASK)
2.4.1.3.17	FEMA Emergency Response (ONSITE TASK)
2.4.1.3.18	Projects (ONSITE TASK)
2.4.1.3.19	Accounting (ONSITE TASK)
2.4.1.3.20	GIS Data Maintenance (ONSITE TASK)
2.4.1.5	Woolpert to Create DRAFT Standards Document
2.4.1.6	Woolpert to Submit Standards Document to County
2.4.1.7	County to Review Standards Document
2.4.2	**Round 2 Global Configuration Standards Workshops**
2.4.2.1	Woolpert to Prepare for Global Configuration Standards Workshops
2.4.2.2	County to Prepare for Global Configuration Standards Workshops
2.4.2.3	**Woolpert to Facilitate Global Configuration Standards Workshops**
2.4.2.3.1	Work Order Lifecycle and Statuses (ONSITE TASK)

Deliverables

- Woolpert will facilitate up to ninety six (96) hours of onsite, Round 1 Global Configuration Standards workshops

- Woolpert will develop a DRAFT version of the Global Asset Management Business Processes and System Configurations document and submit it to the County Project Manager

- Woolpert will facilitate up to sixty eight (68) hours of onsite, Round 2 Global Configuration Standards workshops

- Woolpert will develop a FINAL version of the Global Asset Management Business Processes and System Configurations document and submit it to the County Project Manager

Assumptions

- All activities, other than the actual workshops will be performed remotely

- The Round 1 workshops will take place over three (3) business weeks (Monday – Friday)

- The Round 2 workshops will take place over a two (2) business weeks (Monday – Friday)

- County workshop and document review participants will include the appropriate county asset management staff

- The findings of the workshops may identify required and / or recommended tasks that must / should be undertaken in order to ready one or more divisions / departments for a Cityworks implementation; Unless specifically identified within the contracted scope

of services, Woolpert services to perform or support those tasks are not included in this project

County Responsibilities

- County Project Manager will schedule all County workshop attendees and ensure site readiness and staff participation for the workshops
- County workshop attendees will review the DRAFT versions of the documents in preparation for the Round 2 workshops
- County will accept the FINAL version of the documents

WBS Task 2.5: Install and Configure Core Cityworks AMS Software in a Sandbox Environment

Woolpert will work with County IT to design / architect a hardware environment that meets County internal requirements and supports the Cityworks solution. County staff will provide all documentation and diagrams of the as-is network solution. Woolpert will facilitate a review of the as-is environment, discuss options for a to-be environment with County IT staff, and then develop a recommended to-be network environment that adheres to County standards. Woolpert will develop network diagram(s) with, as much as is known, specific information such as names of servers, IP addresses, administrator IDs and passwords, and other critical network information.   Where specific information is not known, Woolpert will

Figure 8 - Example Virtual (VM) Server Diagram Supporting a 4-Tier AMS Solution Deployment

annotate placeholders on the diagrams for this information that can be replaced when the hardware is installed and configured. County Staff will procure any new hardware and perform all installation tasks. Woolpert will remotely support the acquisition and installation tasks, as appropriate. Woolpert will review the built environment with County staff prior to the onsite software installation task.

Woolpert will install a sample, pre-configured Cityworks AMS solution either on County servers or in a cloud environment accessible to the County project team. This initial system install will be used throughout the implementation phases to "teach and train" users how to navigate the system and ultimately use it to their daily benefit. As the project moves through the phases, this initial database deployment will be updated to reflect the configuration decisions made by the County implementation team until such time that at "Go-Live" it becomes the Production Environment.

This task includes installing the core Cityworks AMS software, other supporting modules and applications, and a pre-configured sample AMS database within the County networked environment. Prior to beginning the installation, Woolpert will provide a full readiness checklist to the County Technical Team to ensure the application and database servers are prepared in advance through the installation and

configuration of the requisite operating system, relational database, and web service applications, along with any additional County-specific security and system administration applications. The readiness checklist will include recommended / minimum requirements for hardware and software specifications suitable for supporting the enterprise software solution. Woolpert will perform the necessary Cityworks software installation, testing and configuration required to ensure a successful deployment within the County on-premise network environment. Also at this time, Woolpert will request the provision of application and database servers to support an n-tier environment consistent with the County-established IT policy. At a minimum, Woolpert envisions a total of three environments – Development (DEV), Testing (TEST), and Production (PROD). ***Woolpert will perform the work onsite so that County Technical Team members can work alongside the installer and learn how to perform the installation and configuration of the various Cityworks software environments.*** Also, at this time, Woolpert will provide a brief system administration knowledge transfer and training session covering software installation, configuration, back-up and recovery, to the County's identified system administrators.

Related Sub-Tasks

2.5 **Install and Test Cityworks in County Sandbox Environment**

2.5.1 **IT Hardware Installation**

2.5.1.1 County to Create As-Is IT Hardware Diagrams (COUNTY TASK)

2.5.1.2 County to Submit As-Is IT Hardware Diagrams to Woolpert (COUNTY TASK)

2.5.1.3 Woolpert to Facilitate IT Hardware Discussion with County

2.5.1.4 Woolpert to Develop Network Infrastructure Diagrams

2.5.1.5 Woolpert to Submit To-Be IT Hardware Diagrams to County

2.5.1.6 Woolpert to Facilitate Review of To-Be IT Hardware Diagrams with County

2.5.1.7 County to Procure and Install IT Hardware (COUNTY TASK)

2.5.1.8 Woolpert to Support IT Hardware Installation

2.5.1.9 Woolpert to Facilitate Review of the Installed IT Hardware Environment

2.5.2 **Cityworks Software Installation**

2.5.2.1 Woolpert to Install and Configure Cityworks AMS Software in a Sandbox Environment

2.5.2.2 Woolpert to Test Installation and Configuration and Modify as Required

2.5.2.3 Woolpert to Replicate Initial Sandbox Configuration to Other Environments

2.5.2.4 Woolpert to Provide Core Cityworks AMS Software Admin Training to County Staff

Deliverables

- Woolpert to facilitate a remote review of the County hardware environment not to exceed four (4) hours

- Woolpert to create recommended to-be network diagrams and submit them to the County PM

- Woolpert to facilitate a remote review of the to-be network diagrams with County IT staff; meeting not to exceed four (4) hours

- Woolpert to provide remote support to County staff during the procurement and installation period not to exceed forty (40) hours

- Woolpert to facilitate a remote review of the installed hardware environment not to exceed four (4) hours

- Woolpert to perform on-site installation, configuration, and testing of the core AMS software applications and databases in the County on-premise network environment (Test and Development) over the course of up to two (2) consecutive business days
- Woolpert to provide Core AMS software installation and back-up training to the County system administrators up to four (4) hours immediately following the software installation

Assumptions

- No hardware or hardware installation services will be provided by Woolpert
- The County will procure Cityworks software directly from Azteca.
- The installations will include the setup of the Cityworks AMS; both Woolpert and County will jointly participate in the installation tasks
- The onsite installation tasks and the onsite system administrator training task will occur over consecutive business days within a single business week (Monday – Friday)
- Activities including Installation, configuration, testing and training will be performed on-site at the County facilities
- Training will be facilitated utilizing the newly installed on-premise Cityworks environment
- The County Project Manager will ensure site readiness and staff participation for the training
- The appropriate County Technical Team members will participate in the Cityworks software installation and testing to ensure the proper access and permissions are granted

County Responsibilities

- County will provide diagrams of the as-is network environment to Woolpert
- County Technical staff will participate in the workshop to design / architect the IT hardware environment
- County will review the to-be network diagrams prior to a joint review workshop with Woolpert
- County will participate in the joint review of the to-be network diagrams
- County will procure and install the hardware outside of this contract.
- County will involve Woolpert staff, as necessary, to support the hardware procurement and installation efforts.
- County will provide a remote review of the installed environment for Woolpert prior to the software installation tasks.
- County Technical staff responsible for maintaining the installation shall actively participate with the Woolpert installer to learn how the Cityworks application is deployed.
- County to ensure site readiness and staff participation for all onsite activities
- County to create logins for Woolpert for access to install software, set up databases, and test the software
- County to ensure the Servers are prepared for the installation of the Cityworks software including ArcGIS Server, SDE, RDBMS (Oracle), and other supporting software applications

WBS Task 2.6: Provide Cityworks AMS Software Demonstrations

Once the initial Cityworks AMS software sandbox environment has been installed and configured, Woolpert will facilitate a series of on-site software demonstrations for the purpose of introducing the entire County user community to the core functionality and features of the Cityworks AMS software applications. For many, this will be their first exposure to the new Cityworks software. These demonstrations will provide an initial overview of the features and functions of the new software. For the County Implementation Team and Technical Team, this demonstration will serve as a basis for on-going software exposure and knowledge transfer that will increase in frequency and complexity as the project progresses through the subsequent phases. The on-site software demonstrations will be facilitated multiple times over several days to accommodate County employee schedules.

> **This task doubles as an opportunity for the County to evaluate the readiness of their workforce. It is an early look at each department staff's eagerness or apprehension of the upcoming change. Notable concerns can be addressed well before the software is ready to go-live, giving the County the opportunity maximize end-user buy-in at Deployment.**

As part of Woolpert's continuous knowledge transfer and change control efforts, we provide a series of software demonstrations to all County future system end users. This early introduction to the system imparts a level of understanding among those County team members that will be asked to make design and configuration decisions. But more importantly, it allows the County to gauge the readiness within their organization. Identifying apprehension and uneasiness within the organization early in the project will allow County leadership to manage the change proactively such that at Go-Live all departments are eager for the new solution. This is the first of many software demonstrations that will be used throughout our implementation process.

Woolpert installs a working Cityworks environment during the implementation planning phase so that it is available for the software demonstration task. The software demonstration task is as much about planning change readiness activities as it is showing the software. In addition to supporting the software demonstrations within this phase, software installation now gives the County Implementation Team a working environment in which they can play and experiment on their own prior to the configuration phase.

Shortly after completion of the on-site software demonstrations, Woolpert will work with the County Technical Team to establish Sandbox log-ins for each identified project team member so that they may log into the system at their leisure to further explore the Cityworks software.

Related Sub-Tasks

2.6	Cityworks Software Demonstrations
2.6.1	Woolpert to Prepare Software Demonstration Agenda
2.6.2	Woolpert to Submit Agenda to County
2.6.3	County to Prepare Site for Software Demonstrations (COUNTY TASK)
2.6.4	Woolpert to Provide Software Demonstrations (ONSITE TASK)

Deliverables

- Woolpert to develop a Software Demonstration agenda and submit it to the County Project Manager
- Woolpert to provide multiple onsite software demonstrations for up to three (3) business days

Assumptions

- Each software demonstration will last about 2 hours; Woolpert will perform the demonstrations as many times as possible over the course of three (3) days
- Software Demonstrations will be facilitated utilizing the newly installed on-premise Cityworks software environment, including the use of a sample Cityworks AMS database
- Woolpert will have the appropriate access to the Cityworks software environment installed on-premise

County Responsibilities

- County to ensure site readiness and staff participation for the Software Demonstrations
- County to provide an auditorium seating at least 200 people with a projector. During the Software Demonstrations, individual computers are not needed for the participants. The software functionality will be demonstrated from the instructor's computer.
- County to review and accept the agenda for Software Demonstrations
- County to schedule and accommodate the appropriate County participants such that they are available, without undue interruption, for the demonstration
- Secure an appropriate training facility suitable for participants
- All County personnel, particularly those that will use the implemented Cityworks solution should attend at least one 2-hour demonstration

WBS Task 2.7: Phase 2 Quality Control

Woolpert technical resources not regularly involved with this implementation will perform independent quality review of the work processes and deliverable products in accordance with the Woolpert Total Quality Plan.

WBS Task 2.8: Phase 2 Acceptance and Close

This is the Phase exit document that the County Project Manager signs indicating Woolpert has delivered the Phase 2 services in accordance with the Scope of Work and Project Plan. Phases 3 and 4 of this scope, which are executed concurrently, will not begin until Phase 2 has been approved by County.

Phase 3 – Core System Design and Configuration

Using the "road map" developed in Phase 2 as our guide Woolpert will lead the County's Implementation Team through the AMS software design and configuration tasks and will create the software configuration document. The end result of Phase 2 activities will be a fully configured Cityworks AMS solution deployed to the County's development environment, but without working system integrations, any legacy transactional data records or the development of software customizations, custom application development or the implementation of third-party software solutions that may have been identified during the configuration tasks.

The data migration evaluation and system integration scoping tasks, included in Phase 4 of this scope of services, will run concurrently with the Phase 3 tasks. At the conclusion of the Phase 4 migration and integration scoping tasks, Woolpert and the County will determine how to precede with the actual data migration and integration development efforts.

Scoping any software customizations, custom application development and implementation of third-party software solutions that may have been identified during the configuration tasks will be performed within this phase. Woolpert and the County will evaluate each effort and determine how to proceed with the delivery of each. The delivery of these solutions is not included within this scope of services.

In order to deliver the configuration services required by the County to implement for all of their planned departments and division, Woolpert has organized Phase 3 into three (3) Tracks. Each Track will include one or more County department and multiple divisions. Woolpert will work with all of the divisions in Track 1 to design and configure Cityworks for their work management requirements. Upon completion and sign-off of the Track 1 configuration, Woolpert will work with all of the divisions in Track 2 to design and configure Cityworks for their work management requirements. Track 3 will begin similarly upon acceptance of the Track 2 configuration.

In *Phase 2: Project Planning*, the Global Configuration Standards task resulted in a document called *Global Asset Management Business Processes and System Configurations*. The work processes and configuration items defined in this document will serve as the starting point of the configuration workshops. Woolpert will initiate the configuration activities by developing a set of configuration documents. The documents will include the baseline information from the *Global Asset Management Business Processes and System Configurations* document. Woolpert will submit the baseline configuration document the County Implementation Team for the purpose of gaining a level of familiarity with the various aspects of the system components that will need to be configured (service requests, work orders, inspections, job plans, work crews, default schedule dates, etc.). Then, Woolpert will deliver a Configuration Training workshop so that the County Implementation Team can understand how the Configuration Document ties to the actual system configuration. In essence, the Configuration Training is about telling the County Implementation Team what information they will be asked for during the Configuration Workshops.

Following the Cityworks AMS Configuration Training, Woolpert will facilitate a series of onsite configuration workshops, whereby the Cityworks AMS software solution will be iteratively configured and loaded with information provided by the County Implementation Team. Woolpert conducts the first round of configuration workshops to gather specific information pertaining to types of service requests, activities performed against assets by County's employees for both work orders and inspections and information

pertaining to reporting. The first workshop is critical to gather information that Woolpert can use to design and configure the Cityworks database. After the round one workshop is complete, Woolpert will remotely begin configuration of the Cityworks AMS software in preparation for the round two workshops. The second round of configuration workshops explores the recently configured Cityworks AMS software with the County Implementation Team. This allows the County's Implementation Team to understand more fully how the system will operate and its functionality. This provides the County Implementation Team more exposure to the software and allows them the opportunity to make changes once viewing the information within the actual software. In addition to reviewing the software Woolpert will collect information pertaining to job plans, custom field information, and security and permissions. Along with the core system configuration, Woolpert will also facilitate configuration of the add-on modules such as inventory management needed to render the Cityworks AMS system fully functional.

Once all of the configuration activities have been completed, Woolpert will facilitate a series of on-site system demonstrations. These demonstrations will "walk" the system through asset / maintenance management and permitting workflows in the manner they were configured and provide the COUNTY Implementation Team, Stakeholders and end-users an opportunity to view the system fully configured.

WBS Task 3.1: System Design and Configuration Track 1 – Utilities and Solid Waste

This task is the first of three System Design and Configuration Tracks. The divisions to be configured during this track are those in the Utilities and Solid Waste departments. For the purpose of scoping activities and pricing this effort, Woolpert has assumed that workshops will be organized into the following eight (8) groups as follows:

Department	Grouping
Utilities	Customer, Field Services Division
Utilities	Engineering Division
Utilities	Maintenance Division
Utilities	Plant Operations Division
Utilities	Water Quality Division
Solid Waste	Landfill and Solid Waste Operations
Solid Waste	Recycling and System Management
Solid Waste	Waste to Energy (Admin)

After the Implementation Planning phase is complete, the results of the Departmental Readiness task will yield more information about the implementing departments and divisions such that the order of the Design and Configuration Tracks and the resource groupings within each track can be reorganized and regrouped as appropriate.

WBS Task 3.1.1: Prepare Configuration Document

Woolpert will compile the asset management program data gathered and documented through the multiple on-site workshops and other related project meetings completed project-to-date (Departmental Readiness Assessment, Global Configuration Standards, etc.) and distill this information into an organized configuration document. This configuration documentation, consisting of standard Cityworks AMS system elements, as well as the customized details required to support the County's specific asset management program, will be used to guide the configuration of the Cityworks AMS system such that it is localized to the County's specific work tracking and asset management requirements.

Related Sub-Tasks

3.1.1	**Prepare Configuration Documentation**
3.1.1.1	Woolpert to Prepare Draft Configuration Documentation
3.1.1.2	Woolpert to Submit to Client PM for Review
3.1.1.3	Woolpert to Facilitate Remote Review Meeting with Client Technical Team

Deliverables

- Woolpert will develop a Cityworks AMS configuration document
- Woolpert will facilitate one (1) remote review meetings up to four (4) hours in duration each with the County Implementation Team to review the Cityworks AMS Configuration Document

Assumptions

- All tasks will be performed remotely
- County Implementation Team will attend and actively participate in the document review meeting

County Responsibilities

- Review the prepared Cityworks AMS Configuration Document prior to the review meeting
- Participate in the remote review meeting

WBS Task 3.1.2: Conduct Configuration Training for Core Team

Woolpert will facilitate two (2) onsite Configuration Training sessions for the purpose of providing the Department Implementation Team with the Cityworks AMS software knowledgebase needed to support the system design and implementation decisions. Configuration Training will be comprised of a two-day curriculum designed to cover all relative aspects of the Cityworks AMS configuration. Completion of the configuration training will ensure the Department project participants (those with implementation responsibilities) are provided with enough exposure to, and understanding of, the Cityworks AMS software work order and asset management functionality such that they are able to make smart and informed configuration decisions as they relate to the overall implementation objectives. The intent of the Configuration Training is not to provide the skills needed to maintain the daily operations of the system. This End-User Training is provided at a later date.

Configuration Training will be facilitated in a classroom environment (computer lab or training room) on-site at County facilities.

Related Sub-Tasks

3.1.2	**Conduct Configuration Training for Core Department Team**
3.1.2.1	Woolpert to Prepare Core Team Training Agenda
3.1.2.2	Woolpert to Submit Agenda to Client PM
3.1.2.3	Client PM to Prepare Site for Core Team Training (Client-Owned Task)
3.1.2.4	**Training for Core Departmental Team (ONSITE TASK)**
3.1.2.4.1	Woolpert to Provide Core Team Training - Class 1 (ONSITE TASK)
3.1.2.4.2	Woolpert to Provide Core Team Training - Class 1 (ONSITE TASK)

Deliverables

- Woolpert will develop a Configuration Training agenda and submit it to the County Project Manager
- Woolpert will conduct two (2) 2-day Configuration Training onsite workshops, each workshop to be conducted over to two (2) consecutive business days

Assumptions

- Training will be facilitated utilizing the newly installed on-premise Cityworks AMS software environment
- Workshops to be conducted over four (4) consecutive business days within a single business week (Monday – Friday)
- Ensure Woolpert access to the Cityworks AMS software environment installed on-premise to perform training

County Responsibilities

- County to review and accept agenda for training
- County to schedule the appropriate County project team members such that they are available, without undue interruption, for the required number of days
- County will provide a conference room or training room with a projector. During Configuration Training, individual computers are not needed for the participants. The software functionality will be demonstrated from the instructor's computer.

WBS Task 3.1.3: Core Cityworks AMS Solution

Woolpert will facilitate the Core Cityworks AMS Software Configuration for each Department through a series of three (3) rounds of onsite configuration workshops. Each round of workshops will allow each of the configuration groups to define their system requirements such that the Woolpert implementation team can configure the Cityworks solution to their needs. Also during this task, the Department implementation team members will collect or develop, and deliver to Woolpert, data that be loaded into the Cityworks solution. Each round of workshops will be followed by Woolpert building the Cityworks Development environment by loading the supplied information and performing the necessary configuration to transform the out-of-the-box Cityworks solution to one that meets the needs of the implementing groups. Each successive round of workshops will address the following topics at increasing level of detail:

- **Domains**. This is the security architecture that determines how employees, work orders and other asset maintenance management information can be shared across organization-al boundaries.

- **Employee Hierarchy**. Determines security protocols for each user of the system as well as practical grouping of employees for assignments to work orders, inspections, and service requests (e.g. crews).

> **Cityworks is a complex and powerful software product. But too often, it is implemented in a less than optimal manner and as a result does not deliver the desired results. Our three-round configuration process is a critical factor in capturing user requirements and refining workflows before testing begins. Not all implementation firms use this approach, but our long history shows that the extra time spent at this stage helps make the remainder of the project much smoother.**

- **Work Orders**. Templates for each of the type of maintenance activities that will be performed on each asset in the system
- **Tasks**. Individual work items associated with a work order. For example, a repair sewer main work order might have tasks for establish traffic control, utility locate, excavate, etc.
- **Materials Hierarchy**. Organization and rules for items that are used to repair assets. Examples of materials are things such as pipes and meters.
- **Equipment Hierarchy**. Organization and rules for items that are utilized to complete a work order but are not consumed. Examples are items such as backhoes, vehicles, vacuum trucks, etc.
- **Service Requests**. Templates for requests for service. Many times maintenance activities are initiated starting with a service request whose purpose is to determine if a work is necessary or not.
- **Inspections**. Templates for each type of periodic and ad-hoc asset inspection where detailed attributes need to be stored as individual data elements.
- **Reporting**. Current or future expected reports will be discussed and designed.
- **Projects**. Projects to be managed within the AMS software

At the end of the each round of workshops, there will be a set of action items for the Department Implementation Team members, such as compiling a list of employees, work crews, and contractors, as well as hard copies of work orders, reports, inspection forms, and other relevant data sets. Woolpert will prepare a detailed list of action items and submit them to the County Project Manager. Woolpert will conduct a number of WebEx-style remote meetings to perform tasks such as facilitating understanding of County action items or clarifying configuration requirements. After each round of workshops, Woolpert will work remotely to update the Configuration Document with the decisions made during the workshops, perform the necessary system configuration such that it meets the requirements defined in the workshop, and develop business use case documents for any requirements that cannot be satisfied by standard or advanced Cityworks configuration methods. Business use cases may define system customizations, custom software development, third-party solutions or other methods to satisfy County requirements. PLEASE NOTE that only the development of business use cases for requirements not supported by standard or advanced system configuration are included in this scope of services. Should any recommendations be accepted, Woolpert can prepare a scope of services and fee for their execution for the County's consideration.

At the end of the first round of configuration workshops and subsequent WebEx meetings, Woolpert expects to have gathered enough information to configure approximately 70% of the County's desired asset maintenance management functionality that can be satisfied with and advanced standard Cityworks configuration.

At the end of the second round workshops and subsequent WebEx meetings, Woolpert expects to have gathered enough information to configure approximately 85% of the Department's desired asset maintenance management functionality that can be satisfied with and advanced standard Cityworks configuration.

At the end of the third round of configuration and subsequent WebEx meetings, Woolpert expects to have gathered enough information to configure approximately 100% of the Department's desired asset maintenance management functionality that can be satisfied with and advanced standard Cityworks configuration.

Related Sub-Tasks

3.1.3	**Core Cityworks AMS Configuration**
3.1.3.1	**Round 1 AMS Configuration Workshops**
3.1.3.1.1	Woolpert to Prepare for AMS Configuration Workshops (First Round)
3.1.3.1.2	County to Prepare for AMS Workshops (First Round)
3.1.3.1.3	**Woolpert to Facilitate AMS Configuration Workshops (Round 1)**
3.1.3.1.3.1	Utilities	Customer, Field Services AMS Configuration Workshop 1 (ONSITE TASK)
3.1.3.1.3.2	Utilities	Engineering AMS Configuration Workshop 1 (ONSITE TASK)
3.1.3.1.3.3	Utilities	Maintenance AMS Configuration Workshop 1 (ONSITE TASK)
3.1.3.1.3.4	Utilities	Plant Operations AMS Configuration Workshop 1 (ONSITE TASK)
3.1.3.1.3.5	Utilities	Water Quality AMS Configuration Workshop 1 (ONSITE TASK)
3.1.3.1.3.6	Solid Waste	Landfill and Solid Waste Operations AMS Configuration Workshop 1 (ONSITE TASK)
3.1.3.1.3.7	Solid Waste	Recycling and System Management AMS Configuration Workshop 1 (ONSITE TASK)
3.1.3.1.3.8	Solid Waste	Waste to Energy (Admin) AMS Configuration Workshop 1 (ONSITE TASK)
3.1.3.1.5	Woolpert to Update AMS Configuration Documentation (Round 1)
3.1.3.1.6	Woolpert to Perform AMS Configuration in Development Environment (Round 1)
3.1.3.1.7	Woolpert to Document Business Cases for Potential Customizations (Round 1)
3.1.3.1.8	**Woolpert to Facilitate Remote Configuration Review Meetings With Client Technical Team**
3.1.3.1.8.1	Remote Review Meeting 1
3.1.3.1.8.2	Remote Review Meeting 2
3.1.3.1.8.3	Remote Review Meeting 3
3.1.3.1.8.4	Remote Review Meeting 4
3.1.3.2	**Round 2 AMS Configuration Workshops**
3.1.3.2.1	Woolpert to Prepare for AMS Configuration Workshops (Second Round)
3.1.3.2.2	County to Prepare for AMS Workshops (Second Round)
3.1.3.2.3	**Woolpert to Facilitate AMS Configuration Workshops (Round 2)**
3.1.3.2.3.1	Utilities	Customer, Field Services AMS Configuration Workshop 2 (ONSITE TASK)
3.1.3.2.3.2	Utilities	Engineering AMS Configuration Workshop 2 (ONSITE TASK)
3.1.3.2.3.3	Utilities	Maintenance AMS Configuration Workshop 2 (ONSITE TASK)
3.1.3.2.3.4	Utilities	Plant Operations AMS Configuration Workshop 2 (ONSITE TASK)
3.1.3.2.3.5	Utilities	Water Quality AMS Configuration Workshop 2 (ONSITE TASK)
3.1.3.2.3.6	Solid Waste	Landfill and Solid Waste Operations AMS Configuration Workshop 2 (ONSITE TASK)
3.1.3.2.3.7	Solid Waste	Recycling and System Management AMS Configuration Workshop 2 (ONSITE TASK)
3.1.3.2.3.8	Solid Waste	Waste to Energy (Admin) AMS Configuration Workshop 2 (ONSITE TASK)
3.1.3.2.4	Woolpert to Update AMS Configuration Documentation (Round 2)
3.1.3.2.5	Woolpert to Perform AMS Configuration in Development Environment (Round 2)
3.1.3.2.6	Woolpert to Document Business Cases for Potential Customizations (Round 2)
3.1.3.2.7	**Woolpert to Facilitate Remote Configuration Review Meetings With Client Technical Team**
3.1.3.2.7.1	Remote Review Meeting 1
3.1.3.2.7.2	Remote Review Meeting 2
3.1.3.2.7.3	Remote Review Meeting 3
3.1.3.3	**Round 3 AMS Configuration Workshops**
3.1.3.3.1	Woolpert to Prepare for AMS Configuration Workshops (Third Round)
3.1.3.3.2	County to Prepare for AMS Workshops (Third Round)
3.1.3.3.3	**Woolpert to Facilitate AMS Configuration Workshops (Round 3)**
3.1.3.3.3.1	Utilities	Customer, Field Services AMS Configuration Workshop 3 (ONSITE TASK)

3.1.3.3.3.2   Utilities | Engineering AMS Configuration Workshop 3 (ONSITE TASK)

3.1.3.3.3.3   Utilities | Maintenance AMS Configuration Workshop 3 (ONSITE TASK)

3.1.3.3.3.4   Utilities | Plant Operations AMS Configuration Workshop 3 (ONSITE TASK)

3.1.3.3.3.5   Utilities | Water Quality AMS Configuration Workshop 3 (ONSITE TASK)

3.1.3.3.3.6   Solid Waste | Landfill and Solid Waste Operations AMS Configuration Workshop 3 (ONSITE TASK)

3.1.3.3.3.7   Solid Waste | Recycling and System Management AMS Configuration Workshop 3 (ONSITE TASK)

3.1.3.3.3.8   Solid Waste | Waste to Energy (Admin) AMS Configuration Workshop 3 (ONSITE TASK)

3.1.3.3.4   Woolpert to Update AMS Configuration Documentation (Round 3)

3.1.3.3.5   Woolpert to Perform AMS Configuration in Development Environment (Round 3)

3.1.3.3.6   Woolpert to Document Business Cases for Potential Customizations (Round 3)

3.1.3.3.7   **Woolpert to Facilitate Remote Configuration Review Meetings With Client Technical Team**

3.1.3.3.7.1   Remote Review Meeting 1

3.1.3.3.7.2   Remote Review Meeting 2

3.1.3.3.7.3   Remote Review Meeting 3

Deliverables

- Round 1 Workshop Deliverables
  - Woolpert will facilitate Round 1 workshops for eight (8) configuration groups. Each workshop will be allocated twelve (12) hours of workshop time. Workshop time can be reallocated between the implementation groups, however, the total amount of workshop time will not exceed ninety six (96) hours.
  - Woolpert will perform up to four (4) follow-up remote meetings via WebEx for the Round 1 Workshops. Each meeting will be no longer than four (4) hours.
  - Woolpert will update the configuration documentation based on the outcome of the Round 1 configuration workshops
  - Woolpert will perform system configuration in the County on-premise development environment based on the outcome of the Round 1 workshops
  - Woolpert will document business cases for potential customizations based on the outcome of the Round 1 workshops
- Round 2 Workshop Deliverables
  - Woolpert will facilitate Round 2 workshops for eight (8) configuration groups. Each workshop will be allocated eight (8) hours of workshop time. Workshop time can be reallocated between the implementation groups, however, the total amount of workshop time will not exceed sixty four (64) hours.
  - Woolpert will perform up to three (3) follow-up remote meetings via WebEx for the Round 2 Workshops. Each meeting will be no longer than four (4) hours.
  - Woolpert will update the configuration documentation based on the outcome of the Round 2 configuration workshops
  - Woolpert will perform system configuration in the County on-premise development environment based on the outcome of the Round 2 workshops
  - Woolpert will document business cases for potential customizations based on the outcome of the Round 2 workshops
- Round 3 Workshop Deliverables

- o Woolpert will facilitate Round 3 workshops for eight (8) configuration groups. Each workshop will be allocated eight (8) hours of workshop time. Workshop time can be reallocated between the implementation groups, however, the total amount of workshop time will not exceed sixty four (64) hours.
- o Woolpert will perform up to three (3) follow-up remote meetings via WebEx for the Round 3 Workshops. Each meeting will be no longer than four (4) hours.
- o Woolpert will update the configuration documentation based on the outcome of the Round 2 configuration workshops
- o Woolpert will perform system configuration in the County on-premise development environment based on the outcome of the Round 3 workshops
- o Woolpert will document business cases for potential customizations based on the outcome of the Round 3 workshops

Assumptions

- All work aside from the actual workshops will be performed remotely
- All Round 1 workshops will take place over the course of three (3) business weeks (Monday – Friday)
- All Round 2 workshops will take place over the course of two (2) business weeks (Monday – Friday)
- All Round 3 workshops will take place over the course of two (2) business weeks (Monday – Friday)
- Actual workshops will be administered onsite at County facilities
- County staff participating in the Configuration workshops will do so uninterrupted
- The geodatabase for the participating divisions will be complete before the starting of Round 1 of the Cityworks configuration workshops. This information is essential for Woolpert to configure Cityworks in a timely manner.
- A map service and geocoding service will be available for Woolpert to consume specific to the AMS divisions

County Responsibilities

- County to schedule the appropriate Department project team members such that they are available, without undue interruption, for the required number of days
- County will provide a conference room or training room with a projector. During Configuration Training, individual computers are not needed for the participants. The software functionality will be demonstrated from the instructor's computer.
- Workshop participants shall actively participate in workshop activities
- Workshop participants shall participate in the remote review meetings, as requested
- County Technical Team will provide Woolpert a map service and geocoding service for Woolpert to consume, specific to the AMS divisions

WBS Task 3.1.4: Cityworks Storeroom Configuration

Woolpert will facilitate the Core Cityworks Storeroom Software Configuration for each Department through a series of two (2) rounds of onsite configuration workshops. Each round of workshops will al-

low each of the configuration groups to define their system requirements such that the Woolpert implementation team can configure the Cityworks Storeroom solution to their needs. Also during this task, the Department implementation team members will collect or develop, and deliver to Woolpert, data that will be loaded into the Cityworks Storeroom solution. Each round of workshops will be followed by Woolpert building the Cityworks Storeroom Development environment by loading the supplied information and performing the necessary configuration to transform the out-of-the-box Cityworks Storeroom solution to one that meets the needs of the implementing groups.

Related Sub-Tasks

3.1.4	**Cityworks Storeroom Configuration**
3.1.4.1	**Round 1 Storeroom Configuration Workshops**
3.1.4.1.1	Woolpert to Prepare for Storeroom Configuration Workshops (First Round)
3.1.4.1.2	**Woolpert to Facilitate Storeroom Configuration Workshops (Round 1)**
3.1.4.1.2.1	Utilities | Customer, Field Services Storeroom Workshop 1 (ONSITE TASK)
3.1.4.1.2.2	Utilities | Engineering Storeroom Workshop 1 (ONSITE TASK)
3.1.4.1.2.3	Utilities | Maintenance Storeroom Workshop 1 (ONSITE TASK)
3.1.4.1.2.4	Utilities | Plant Operations Storeroom Workshop 1 (ONSITE TASK)
3.1.4.1.2.5	Utilities | Water Quality Storeroom Workshop 1 (ONSITE TASK)
3.1.4.1.2.6	Solid Waste | Landfill and Solid Waste Operations Storeroom Workshop 1 (ONSITE TASK)
3.1.4.1.2.7	Solid Waste | Recycling and System Management Storeroom Workshop 1 (ONSITE TASK)
3.1.4.1.2.8	Solid Waste | Waste to Energy (Admin) Storeroom Workshop 1 (ONSITE TASK)
3.1.4.1.3	Woolpert to Update Configuration Documentation (Round 1)
3.1.4.1.4	Woolpert to Perform Configuration in Development Environment
3.1.4.1.5	**Woolpert to Facilitate Remote Configuration Review Meetings With Client Technical Team**
3.1.4.1.5.1	Remote Review Meeting 1
3.1.4.1.5.2	Remote Review Meeting 2
3.1.4.2	**Round 2 Storeroom Configuration Workshops**
3.1.4.2.1	Woolpert to Prepare for Storeroom Configuration Workshops (Second Round)
3.1.4.2.2	**Woolpert to Facilitate Storeroom Configuration Workshops (Round 2)**
3.1.4.2.2.1	Utilities | Customer, Field Services Storeroom Workshop 1 (ONSITE TASK)
3.1.4.2.2.2	Utilities | Engineering Storeroom Workshop 1 (ONSITE TASK)
3.1.4.2.2.3	Utilities | Maintenance Storeroom Workshop 1 (ONSITE TASK)
3.1.4.2.2.4	Utilities | Plant Operations Storeroom Workshop 1 (ONSITE TASK)
3.1.4.2.2.5	Utilities | Water Quality Storeroom Workshop 1 (ONSITE TASK)
3.1.4.2.2.6	Solid Waste | Landfill and Solid Waste Operations Storeroom Workshop 1 (ONSITE TASK)
3.1.4.2.2.7	Solid Waste | Recycling and System Management Storeroom Workshop 1 (ONSITE TASK)
3.1.4.2.2.8	Solid Waste | Waste to Energy (Admin) Storeroom Workshop 1 (ONSITE TASK)
3.1.4.2.3	Woolpert to Update Configuration Documentation (Round 2)
3.1.4.2.4	Woolpert to Perform Configuration in Development Environment
3.1.4.2.5	**Woolpert to Facilitate Remote Configuration Review Meetings With Client Technical Team**
3.1.4.2.5.1	Remote Review Meeting 1
3.1.4.2.5.2	Remote Review Meeting 2

Deliverables

- Round 1 Workshop Deliverables:

- o Woolpert will facilitate Round 1 Storeroom Configuration workshops onsite for up to thirty two (32) hours. Eight (8) workshops are scheduled for four (4) hours each; however, the thirty two hours can be reallocated as necessary.
- o Woolpert will update the configuration documentation based on the outcome of the Round 1 configuration workshops
- o Woolpert will perform system configuration in the County on-premise development environment based on the outcome of the Round 1 workshops
- o Woolpert will facilitate up to two (2) remote meetings to via WebEx for the Round 1 workshops. Each meeting will be no longer than two (2) hours.
- Round 2 Workshop Deliverables:
  - o Woolpert will facilitate Round 2 Storeroom Configuration workshops onsite for up to thirty two (32) hours. Eight (8) workshops are scheduled for four (4) hours each; however, the thirty two hours can be reallocated as necessary.
  - o Woolpert will update the configuration documentation based on the outcome of the Round 2 configuration workshops
  - o Woolpert will perform system configuration in the County on-premise development environment based on the outcome of the Round 2 workshops
  - o Woolpert will facilitate up to two (2) remote meetings to via WebEx for the Round 2 workshops. Each meeting will be no longer than two (2) hours.

Assumptions

- All work aside from the actual workshops will be performed remotely
- All Round 1 workshops will take place over the course of a single business week (Monday – Friday)
- All Round 2 workshops will take place over the course of a single business week (Monday – Friday)
- Actual workshops will be administered onsite at County facilities
- County staff participating in the Configuration workshops will do so uninterrupted

County Responsibilities

- County to schedule the appropriate Department project team members such that they are available, without undue interruption, for the required number of days
- County will provide a conference room or training room with a projector. Individual computers are not needed for the participants. The software functionality will be demonstrated from the instructor's computer.
- Workshop participants shall actively participate in workshop activities

Workshop participants shall participate in the remote review meetings, as requested

WBS Task 3.1.5: Review and Approval of Updated System and Configuration Documentation

Woolpert will provide an updated system configuration document for review by the County. This document will represent everything that is configured within the database and must be approved before the final demonstration of the Cityworks AMS system can be performed. Woolpert will perform a thorough

remote review of this document with the County implementation team. However, the document is long and complicated. If the County team does not take the time throughout the Phase to learn the document's sections and information, it will be very difficult for the County team to recommend with any degree of confidence the acceptance of the document. Hence, Woolpert strongly recommends that the County team immerse themselves in learning this document throughout this phase.

Related Sub-Tasks

3.1.5   **Review and Approval of Updated System and Configuration Documentation**
3.1.5.1   Woolpert to Submit Updated Configuration Documentation to County
3.1.5.2   County Technical Team to Review Updated Configuration and Documentation (COUNTY TASK)
3.1.5.3   Woolpert to Facilitate Remote Review Meeting with County Technical Team
3.1.5.4   Woolpert to Update Configuration Documentation per County Comments
3.1.5.5   Woolpert to Submit Updated Pre-Final Configuration Documentation to County

Deliverables

- Woolpert to submit updated configuration documentation to the County Project Manager
- Woolpert to facilitate a remote configuration documentation review meeting, up to four (4) hours in duration, with the County Implementation Team
- Woolpert will update the configuration documentation based on the outcome of the County review and re-submit the updated documentation to the County Project Manager

Assumptions

- County implementation team members will understand the documentation for its accuracy
- Configuration Document will be accepted by County before official Testing of the system can begin

County Responsibilities

- County Project Manager and Implementation team will review and provide feedback on the configuration document
- County Project Manager and technical team will participate in a remote configuration document review meeting
- The County Project Manager will approve and sign the configuration document

WBS Task 3.1.6: Provide Demonstrations of Core Cityworks AMS Configured Solution

After completion of the core AMS software configuration and approval of the updated configuration documentation, Woolpert will provide a series of onsite full AMS software demonstrations to the entire future user community and project stakeholders for the config-

This task doubles as an opportunity for the County to evaluate the readiness of their workforce. Staff apprehension early in the project can be re-evaluated. New and continuing concerns can be at this point in the project as there is still time to ready the organization prior to Go-Live.

ured groups. Woolpert will provide the same demonstration up to three (3) times to accommodate the many County employee schedules. Each demonstration will be up to four (4) hours in duration in order to review the configuration in depth and answer any questions. Similar to the demonstrations in Implementation Planning phase, this task provides an opportunity for the County to assess the readiness of their staff. Should any apprehension or reluctance to adopt the new system become apparent, the County still has time to address those concerns and maximize staff readiness prior to Go-Live. After all of the software demonstrations, the Woolpert implementation team and Project Manager and the County Project Manager and stakeholders, will hold a wrap up meeting to discuss the plan to address the business use cases developed for requirements that could not be met with standard or advanced Cityworks configurations and for deployment activities.

Related Sub-Tasks

3.1.6	**Provide Cityworks AMS Software Demonstrations**
3.1.6.1	Woolpert to Prepare for On-Site Software Demonstrations
3.1.6.2	County to Prepare for On-Site Software Demonstrations (COUNTY TASK)
3.1.6.3	**Woolpert to Facilitate On-Site Software Demonstrations (ONSITE TASK)**
3.1.6.3.1	Facilitate Software Demonstration 1 (ONSITE TASK)
3.1.6.3.2	Facilitate Software Demonstration 2 (ONSITE TASK)
3.1.6.3.3	Facilitate Software Demonstration 3 (ONSITE TASK)
3.1.6.3.4	Software Demonstration Wrap-Up (ONSITE TASK)

Deliverables

- Woolpert will provide agendas for the onsite demonstrations
- Woolpert will provide three (3) onsite Cityworks AMS System solution demonstrations. Each demonstration will be up to four (4) hours in duration
- Woolpert to facilitate one (1) configuration wrap-up meeting for up to four (4) hours

Assumptions

- All demonstration preparation activities will be performed remotely
- County staff participating in the demonstrations will do so un-interrupted

County Responsibilities

- Secure an appropriate workshop facility
- Coordinate and schedule demonstration participants
- Coordinate and schedule a configuration wrap-up meeting

WBS Task 3.1.7: Phase 3 Track 1 Quality Control

Woolpert technical resources, not regularly involved with this implementation will perform independent quality review of the work processes and deliverable products in accordance with the Woolpert Total Quality Plan.

WBS Task 3.1.8: Phase 3 Track 1 Acceptance and Close

This is the Phase exit document that the County Project Manager signs indicating Woolpert has delivered the Phase 3 services in accordance with the Scope of Work and Project Plan.

WBS Task 3.2: System Design and Configuration Track 2 – PCR and REM

This task is the first of three System Design and Configuration Tracks. The divisions to be configured during this track are Parks & Conservation Resources and Real Estate Management ~~those in the Utilities and Engineering departments.~~ For the purpose of scoping activities and pricing this effort, Woolpert has assumed that workshops will be organized into the following eight (8) groups as follows:

Department	Grouping
Parks and Conservation Resources	Air Quality Division
Parks and Conservation Resources	Business Service Management
Parks and Conservation Resources	Parks / Other
Parks and Conservation Resources	Trades
Real Estate Management	Building Design and Construction, Facility Operations, Maintenance Programs, Real Property
Real Estate Management	Detention Section
Real Estate Management	Fleet Management
Real Estate Management	Northwest, Southeast Section and STAR Center Facility

After the Implementation Planning phase is complete, the results of the Departmental Readiness task will yield more information about the implementing departments and divisions such that the order of the Design and Configuration Tracks and the resource groupings within each track can be reorganized and regrouped as appropriate.

WBS Task 3.2.1: Prepare Configuration Document

Woolpert will compile the asset management program data gathered and documented through the multiple on-site workshops and other related project meetings completed project-to-date (Departmental Readiness Assessment, Global Configuration Standards, etc.) and distill this information into an organized configuration document. This configuration documentation, consisting of standard Cityworks AMS system elements, as well as the customized details required to support the County's specific asset management program, will be used to guide the configuration of the Cityworks AMS system such that it is localized to the County's specific work tracking and asset management requirements.

Related Sub-Tasks

3.2.1	**Prepare Configuration Documentation**
3.2.1.1	Woolpert to Prepare Draft Configuration Documentation
3.2.1.2	Woolpert to Submit to Client PM for Review
3.2.1.3	Woolpert to Facilitate Remote Review Meeting with Client Technical Team

Deliverables

- Woolpert will develop a Cityworks AMS configuration document
- Woolpert will facilitate one (1) remote review meetings up to four (4) hours in duration each with the County Implementation Team to review the Cityworks AMS Configuration Document

Assumptions

- All tasks will be performed remotely
- County Implementation Team will attend and actively participate in the document review meeting

County Responsibilities

- Review the prepared Cityworks AMS Configuration Document prior to the review meeting
- Participate in the remote review meeting

WBS Task 3.2.2: Conduct Configuration Training for Core Team

Woolpert will facilitate two (2) onsite Configuration Training sessions for the purpose of providing the Department Implementation Team with the Cityworks AMS software knowledgebase needed to support the system design and implementation decisions. Configuration Training will be comprised of a two-day curriculum designed to cover all relative aspects of the Cityworks AMS configuration. Completion of the configuration training will ensure the Department project participants (those with implementation responsibilities) are provided with enough exposure to, and understanding of, the Cityworks AMS software work order and asset management functionality such that they are able to make smart and informed configuration decisions as they relate to the overall implementation objectives. The intent of the Configuration Training is not to provide the skills needed to maintain the daily operations of the system. This End-User Training is provided at a later date.

Configuration Training will be facilitated in a classroom environment (computer lab or training room) onsite at County facilities.

Related Sub-Tasks

3.2.2	**Conduct Configuration Training for Core Department Team**
3.2.2.1	Woolpert to Prepare Core Team Training Agenda
3.2.2.2	Woolpert to Submit Agenda to Client PM
3.2.2.3	Client PM to Prepare Site for Core Team Training (Client-Owned Task)
3.2.2.4	**Training for Core Departmental Team (ONSITE TASK)**
3.2.2.4.1	Woolpert to Provide Core Team Training - Class 1 (ONSITE TASK)
3.2.2.4.2	Woolpert to Provide Core Team Training - Class 1 (ONSITE TASK)

Deliverables

- Woolpert will develop a Configuration Training agenda and submit it to the County Project Manager
- Woolpert will conduct two (2) 2-day Configuration Training onsite workshops, each workshop to be conducted over to two (2) consecutive business days

Assumptions

- Training will be facilitated utilizing the newly installed on-premise Cityworks AMS software environment
- Workshops to be conducted over four (4) consecutive business days within a single business week (Monday – Friday)

- Ensure Woolpert access to the Cityworks AMS software environment installed on-premise to perform training

County Responsibilities

- County to review and accept agenda for training
- County to schedule the appropriate County project team members such that they are available, without undue interruption, for the required number of days
- County will provide a conference room or training room with a projector. During Configuration Training, individual computers are not needed for the participants. The software functionality will be demonstrated from the instructor's computer.

WBS Task 3.2.3: Core Cityworks AMS Solution

Woolpert will facilitate the Core Cityworks AMS Software Configuration for each Department through a series of three (3) rounds of onsite configuration workshops. Each round of workshops will allow each of the configuration groups to define their system requirements such that the Woolpert implementation team can configure the Cityworks solution to their needs. Also during this task, the Department implementation team members will collect or develop, and deliver to Woolpert, data that be loaded into the Cityworks solution. Each round of workshops will be followed by Woolpert building the Cityworks Development environment by loading the supplied information and performing the necessary configuration to transform the out-of-the-box Cityworks solution to one that meets the needs of the implementing groups. Each successive round of workshops will address the following topics at increasing level of detail:

> **Cityworks is a complex and powerful software product. But too often, it is implemented in a less than optimal manner and as a result does not deliver the desired results. Our three-round configuration process is a critical factor in capturing user requirements and refining workflows before testing begins. Not all implementation firms use this approach, but our long history shows that the extra time spent at this stage helps make the remainder of the project much smoother.**

- **Domains**. This is the security architecture that determines how employees, work orders and other asset maintenance management information can be shared across organization-al boundaries.
- **Employee Hierarchy**. Determines security protocols for each user of the system as well as practical grouping of employees for assignments to work orders, inspections, and service requests (e.g. crews).
- **Work Orders**. Templates for each of the type of maintenance activities that will be performed on each asset in the system
- **Tasks**. Individual work items associated with a work order. For example, a repair sewer main work order might have tasks for establish traffic control, utility locate, excavate, etc.
- **Materials Hierarchy**. Organization and rules for items that are used to repair assets. Examples of materials are things such as pipes and meters.

- **Equipment Hierarchy**. Organization and rules for items that are utilized to complete a work order but are not consumed. Examples are items such as backhoes, vehicles, vacuum trucks, etc.

- **Service Requests**. Templates for requests for service. Many times maintenance activities are initiated starting with a service request whose purpose is to determine if a work is necessary or not.

- **Inspections**. Templates for each type of periodic and ad-hoc asset inspection where detailed attributes need to be stored as individual data elements.

- **Reporting**. Current or future expected reports will be discussed and designed.

- **Projects**. Projects to be managed within the AMS software

At the end of the each round of workshops, there will be a set of action items for the Department Implementation Team members, such as compiling a list of employees, work crews, and contractors, as well as hard copies of work orders, reports, inspection forms, and other relevant data sets. Woolpert will prepare a detailed list of action items and submit them to the County Project Manager. Woolpert will conduct a number of WebEx-style remote meetings to perform tasks such as facilitating understanding of County action items or clarifying configuration requirements. After each round of workshops, Woolpert will work remotely to update the Configuration Document with the decisions made during the workshops, perform the necessary system configuration such that it meets the requirements defined in the workshop, and develop business use case documents for any requirements that cannot be satisfied by standard or advanced Cityworks configuration methods. Business use cases may define system customizations, custom software development, third-party solutions or other methods to satisfy County requirements. PLEASE NOTE that only the development of business use cases for requirements not supported by standard or advanced system configuration are included in this scope of services. Should any recommendations be accepted, Woolpert can prepare a scope of services and fee for their execution for the County's consideration.

At the end of the first round of configuration workshops and subsequent WebEx meetings, Woolpert expects to have gathered enough information to configure approximately 70% of the County's desired asset maintenance management functionality that can be satisfied with and advanced standard Cityworks configuration.

At the end of the second round workshops and subsequent WebEx meetings, Woolpert expects to have gathered enough information to configure approximately 85% of the Department's desired asset maintenance management functionality that can be satisfied with and advanced standard Cityworks configuration.

At the end of the third round of configuration and subsequent WebEx meetings, Woolpert expects to have gathered enough information to configure approximately 100% of the Department's desired asset maintenance management functionality that can be satisfied with and advanced standard Cityworks configuration.

Related Sub-Tasks

3.2.3	**Core Cityworks AMS Configuration**
3.2.3.1	**Round 1 AMS Configuration Workshops**
3.2.3.1.1	Woolpert to Prepare for AMS Configuration Workshops (First Round)
3.2.3.1.2	County to Prepare for AMS Workshops (First Round)
3.2.3.1.3	**Woolpert to Facilitate AMS Configuration Workshops (Round 1)**
3.2.3.1.3.1	PCR | Air Quality AMS Configuration Workshop 1 (ONSITE TASK)

3.2.3.1.3.2	PCR	Business Service Management AMS Configuration Workshop 1 (ONSITE TASK)
3.2.3.1.3.3	PCR	Parks / Other AMS Configuration Workshop 1 (ONSITE TASK)
3.2.3.1.3.4	PCR	Trades AMS Configuration Workshop 1 (ONSITE TASK)
3.2.3.1.3.5	REM	Bldg. D&C, FO, MP RP AMS Configuration Workshop 1 (ONSITE TASK)
3.2.3.1.3.6	REM	Detention Section AMS Configuration Workshop 1 (ONSITE TASK)
3.2.3.1.3.7	REM	Fleet Management AMS Configuration Workshop 1 (ONSITE TASK)
3.2.3.1.3.8	REM	NW, SE and STAR Center AMS Configuration Workshop 1 (ONSITE TASK)
3.2.3.1.4	Woolpert to Update AMS Configuration Documentation (Round 1)
3.2.3.1.5	Woolpert to Perform AMS Configuration in Development Environment (Round 1)
3.2.3.1.6	Woolpert to Document Business Cases for Potential Customizations (Round 1)
3.2.3.1.7	**Woolpert to Facilitate Remote Configuration Review Meetings With Client Technical Team**
3.2.3.1.7.1	Remote Review Meeting 1
3.2.3.1.7.2	Remote Review Meeting 2
3.2.3.1.7.3	Remote Review Meeting 3
3.2.3.1.7.4	Remote Review Meeting 4
3.2.3.2	**Round 2 AMS Configuration Workshops**
3.2.3.2.1	Woolpert to Prepare for AMS Configuration Workshops (Second Round)
3.2.3.2.2	County to Prepare for AMS Workshops (Second Round)
3.2.3.2.3	**Woolpert to Facilitate AMS Configuration Workshops (Round 2)**
3.2.3.2.3.1	PCR	Air Quality AMS Configuration Workshop 2 (ONSITE TASK)
3.2.3.2.3.2	PCR	Business Service Management AMS Configuration Workshop 2 (ONSITE TASK)
3.2.3.2.3.3	PCR	Parks / Other AMS Configuration Workshop 2 (ONSITE TASK)
3.2.3.2.3.4	PCR	Trades AMS Configuration Workshop 2 (ONSITE TASK)
3.2.3.2.3.5	REM	Bldg. D&C, FO, MP RP AMS Configuration Workshop 2 (ONSITE TASK)
3.2.3.2.3.6	REM	Detention Section AMS Configuration Workshop 2 (ONSITE TASK)
3.2.3.2.3.7	REM	Fleet Management AMS Configuration Workshop 2 (ONSITE TASK)
3.2.3.2.3.8	REM	NW, SE and STAR Center AMS Configuration Workshop 2 (ONSITE TASK)
3.2.3.2.4	Woolpert to Update AMS Configuration Documentation (Round 2)
3.2.3.2.5	Woolpert to Perform AMS Configuration in Development Environment (Round 2)
3.2.3.2.6	Woolpert to Document Business Cases for Potential Customizations (Round 2)
3.2.3.2.7	**Woolpert to Facilitate Remote Configuration Review Meetings With Client Technical Team**
3.2.3.2.7.1	Remote Review Meeting 1
3.2.3.2.7.2	Remote Review Meeting 2
3.2.3.2.7.3	Remote Review Meeting 3
3.2.3.3	**Round 3 AMS Configuration Workshops**
3.2.3.3.1	Woolpert to Prepare for AMS Configuration Workshops (Third Round)
3.2.3.3.2	County to Prepare for AMS Workshops (Third Round)
3.2.3.3.3	**Woolpert to Facilitate AMS Configuration Workshops (Round 3)**
3.2.3.3.3.1	PCR	Air Quality AMS Configuration Workshop 3 (ONSITE TASK)
3.2.3.3.3.2	PCR	Business Service Management AMS Configuration Workshop 3 (ONSITE TASK)
3.2.3.3.3.3	PCR	Parks / Other AMS Configuration Workshop 3 (ONSITE TASK)
3.2.3.3.3.4	PCR	Trades AMS Configuration Workshop 3 (ONSITE TASK)
3.2.3.3.3.5	REM	Bldg. D&C, FO, MP RP AMS Configuration Workshop 3 (ONSITE TASK)
3.2.3.3.3.6	REM	Detention Section AMS Configuration Workshop 3 (ONSITE TASK)
3.2.3.3.3.7	REM	Fleet Management AMS Configuration Workshop 3 (ONSITE TASK)
3.2.3.3.3.8	REM	NW, SE and STAR Center AMS Configuration Workshop 3 (ONSITE TASK)
3.2.3.3.4	Woolpert to Update AMS Configuration Documentation (Round 3)

3.2.3.3.5	Woolpert to Perform AMS Configuration in Development Environment (Round 3)
3.2.3.3.6	Woolpert to Document Business Cases for Potential Customizations (Round 3)
3.2.3.3.7	**Woolpert to Facilitate Remote Configuration Review Meetings With Client Technical Team**
3.2.3.3.7.1	Remote Review Meeting 1
3.2.3.3.7.2	Remote Review Meeting 2
3.2.3.3.7.3	Remote Review Meeting 3

Deliverables

- Round 1 Workshop Deliverables
  - Woolpert will facilitate Round 1 workshops for eight (8) configuration groups. Each workshop will be allocated twelve (12) hours of workshop time. Workshop time can be reallocated between the implementation groups, however, the total amount of workshop time will not exceed ninety six (96) hours.
  - Woolpert will perform up to four (4) follow-up remote meetings via WebEx for the Round 1 Workshops. Each meeting will be no longer than four (4) hours.
  - Woolpert will update the configuration documentation based on the outcome of the Round 1configuration workshops
  - Woolpert will perform system configuration in the County on-premise development environment based on the outcome of the Round 1 workshops
  - Woolpert will document business cases for potential customizations based on the outcome of the Round 1 workshops

- Round 2 Workshop Deliverables
  - Woolpert will facilitate Round 2 workshops for eight (8) configuration groups. Each workshop will be allocated eight (8) hours of workshop time. Workshop time can be reallocated between the implementation groups, however, the total amount of workshop time will not exceed sixty four (64) hours.
  - Woolpert will perform up to three (3) follow-up remote meetings via WebEx for the Round 2 Workshops. Each meeting will be no longer than four (4) hours.
  - Woolpert will update the configuration documentation based on the outcome of the Round 2 configuration workshops
  - Woolpert will perform system configuration in the County on-premise development environment based on the outcome of the Round 2 workshops
  - Woolpert will document business cases for potential customizations based on the outcome of the Round 2 workshops

- Round 3 Workshop Deliverables
  - Woolpert will facilitate Round 3 workshops for eight (8) configuration groups. Each workshop will be allocated eight (8) hours of workshop time. Workshop time can be reallocated between the implementation groups, however, the total amount of workshop time will not exceed sixty four (64) hours.
  - Woolpert will perform up to three (3) follow-up remote meetings via WebEx for the Round 3 Workshops. Each meeting will be no longer than four (4) hours.
  - Woolpert will update the configuration documentation based on the outcome of the Round 2 configuration workshops

o   Woolpert will perform system configuration in the County on-premise development environment based on the outcome of the Round 3 workshops

o   Woolpert will document business cases for potential customizations based on the outcome of the Round 3 workshops

Assumptions

- All work aside from the actual workshops will be performed remotely

- All Round 1 workshops will take place over the course of three (3) business weeks (Monday – Friday)

- All Round 2 workshops will take place over the course of two (2) business weeks (Monday – Friday)

- All Round 3 workshops will take place over the course of two (2) business weeks (Monday – Friday)

- Actual workshops will be administered onsite at County facilities

- County staff participating in the Configuration workshops will do so uninterrupted

- The geodatabase for the participating divisions will be complete before the starting of Round 1 of the Cityworks configuration workshops. This information is essential for Woolpert to configure Cityworks in a timely manner.

- A map service and geocoding service will be available for Woolpert to consume specific to the AMS divisions

County Responsibilities

- County to schedule the appropriate Department project team members such that they are available, without undue interruption, for the required number of days

- County will provide a conference room or training room with a projector. During Configuration Training, individual computers are not needed for the participants. The software functionality will be demonstrated from the instructor's computer.

- Workshop participants shall actively participate in workshop activities

- Workshop participants shall participate in the remote review meetings, as requested

- County Technical Team will provide Woolpert a map service and geocoding service for Woolpert to consume, specific to the AMS divisions

WBS Task 3.2.4: Cityworks Storeroom Configuration

Woolpert will facilitate the Core Cityworks Storeroom Software Configuration for each Department through a series of two (2) rounds of onsite configuration workshops. Each round of workshops will allow each of the configuration groups to define their system requirements such that the Woolpert implementation team can configure the Cityworks Storeroom solution to their needs. Also during this task, the Department implementation team members will collect or develop, and deliver to Woolpert, data that will be loaded into the Cityworks Storeroom solution. Each round of workshops will be followed by Woolpert building the Cityworks Storeroom Development environment by loading the supplied information and performing the necessary configuration to transform the out-of-the-box Cityworks Storeroom solution to one that meets the needs of the implementing groups.

Related Sub-Tasks

3.2.4	**Cityworks Storeroom Configuration**
3.2.4.1	**Round 1 Storeroom Configuration Workshops**
3.2.4.1.1	Woolpert to Prepare for Storeroom Configuration Workshops (First Round)
3.2.4.1.2	**Woolpert to Facilitate Storeroom Configuration Workshops (Round 1)**
3.2.4.1.2.1	PCR	Air Quality Storeroom Workshop 1 (ONSITE TASK)
3.2.4.1.2.2	PCR	Business Service Management Storeroom Workshop 1 (ONSITE TASK)
3.2.4.1.2.3	PCR	Parks / Other Storeroom Workshop 1 (ONSITE TASK)
3.2.4.1.2.4	PCR	Trades Storeroom Workshop 1 (ONSITE TASK)
3.2.4.1.2.5	REM	Bldg. D&C, FO, MP RP Storeroom Workshop 1 (ONSITE TASK)
3.2.4.1.2.6	REM	Detention Section Storeroom Workshop 1 (ONSITE TASK)
3.2.4.1.2.7	REM	Fleet Management Storeroom Workshop 1 (ONSITE TASK)
3.2.4.1.2.8	REM	NW, SE and STAR Center Storeroom Workshop 1 (ONSITE TASK)
3.2.4.1.3	Woolpert to Update Configuration Documentation (Round 1)
3.2.4.1.4	Woolpert to Perform Configuration in Development Environment
3.2.4.1.5	**Woolpert to Facilitate Remote Configuration Review Meetings With Client Technical Team**
3.2.4.1.5.1	Remote Review Meeting 1
3.2.4.1.5.2	Remote Review Meeting 2
3.2.4.2	**Round 2 Storeroom Configuration Workshops**
3.2.4.2.1	Woolpert to Prepare for Storeroom Configuration Workshops (Second Round)
3.2.4.2.2	**Woolpert to Facilitate Storeroom Configuration Workshops (Round 2)**
3.2.4.2.2.1	PCR	Air Quality Storeroom Workshop 1 (ONSITE TASK)
3.2.4.2.2.2	PCR	Business Service Management Storeroom Workshop 1 (ONSITE TASK)
3.2.4.2.2.3	PCR	Parks / Other Storeroom Workshop 1 (ONSITE TASK)
3.2.4.2.2.4	PCR	Trades Storeroom Workshop 1 (ONSITE TASK)
3.2.4.2.2.5	REM	Bldg. D&C, FO, MP RP Storeroom Workshop 1 (ONSITE TASK)
3.2.4.2.2.6	REM	Detention Section Storeroom Workshop 1 (ONSITE TASK)
3.2.4.2.2.7	REM	Fleet Management Storeroom Workshop 1 (ONSITE TASK)
3.2.4.2.2.8	REM	NW, SE and STAR Center Storeroom Workshop 1 (ONSITE TASK)
3.2.4.2.3	Woolpert to Update Configuration Documentation (Round 2)
3.2.4.2.4	Woolpert to Perform Configuration in Development Environment
3.2.4.2.5	**Woolpert to Facilitate Remote Configuration Review Meetings With Client Technical Team**
3.2.4.2.5.1	Remote Review Meeting 1
3.2.4.2.5.2	Remote Review Meeting 2

Deliverables

- Round 1 Workshop Deliverables:
  - Woolpert will facilitate Round 1 Storeroom Configuration workshops onsite for up to thirty two (32) hours. Eight (8) workshops are scheduled for four (4) hours each; however, the thirty two hours can be reallocated as necessary.
  - Woolpert will update the configuration documentation based on the outcome of the Round 1 configuration workshops
  - Woolpert will perform system configuration in the County on-premise development environment based on the outcome of the Round 1 workshops

- o   Woolpert will facilitate up to two (2) remote meetings to via WebEx for the Round 1 workshops. Each meeting will be no longer than two (2) hours.
- Round 2 Workshop Deliverables:
  - o   Woolpert will facilitate Round 2 Storeroom Configuration workshops onsite for up to thirty two (32) hours. Eight (8) workshops are scheduled for four (4) hours each; however, the thirty two hours can be reallocated as necessary.
  - o   Woolpert will update the configuration documentation based on the outcome of the Round 2 configuration workshops
  - o   Woolpert will perform system configuration in the County on-premise development environment based on the outcome of the Round 2 workshops
  - o   Woolpert will facilitate up to two (2) remote meetings to via WebEx for the Round 2 workshops. Each meeting will be no longer than two (2) hours.

Assumptions

- All work aside from the actual workshops will be performed remotely
- All Round 1 workshops will take place over the course of a single business week (Monday – Friday)
- All Round 2 workshops will take place over the course of a single business week (Monday – Friday)
- Actual workshops will be administered onsite at County facilities
- County staff participating in the Configuration workshops will do so uninterrupted

County Responsibilities

- County to schedule the appropriate Department project team members such that they are available, without undue interruption, for the required number of days
- County will provide a conference room or training room with a projector. Individual computers are not needed for the participants. The software functionality will be demonstrated from the instructor's computer.
- Workshop participants shall actively participate in workshop activities
- Workshop participants shall participate in the remote review meetings, as requested

WBS Task 3.2.5: Review and Approval of Updated System and Configuration Documentation

Woolpert will provide an updated system configuration document for review by the County. This document will represent everything that is configured within the database and must be approved before the final demonstration of the Cityworks AMS system can be performed. Woolpert will perform a thorough remote review of this document with the County implementation team. However, the document is long and complicated. If the County team does not take the time throughout the Phase to learn the document's sections and information, it will be very difficult for the County team to recommend with any degree of confidence the acceptance of the document. Hence, Woolpert strongly recommends that the County team immerse themselves in learning this document throughout this phase.

Related Sub-Tasks

3.2.5	**Review and Approval of Updated System and Configuration Documentation**
3.2.5.1	Woolpert to Submit Updated Configuration Documentation to County
3.2.5.2	County Technical Team to Review Updated Configuration and Documentation (COUNTY TASK)
3.2.5.3	Woolpert to Facilitate Remote Review Meeting with County Technical Team
3.2.5.4	Woolpert to Update Configuration Documentation per County Comments
3.2.5.5	Woolpert to Submit Updated Pre-Final Configuration Documentation to County

Deliverables

- Woolpert to submit updated configuration documentation to the County Project Manager
- Woolpert to facilitate a remote configuration documentation review meeting, up to four (4) hours in duration, with the County Implementation Team
- Woolpert will update the configuration documentation based on the outcome of the County review and re-submit the updated documentation to the County Project Manager

Assumptions

- County implementation team members will understand the documentation for its accuracy
- Configuration Document will be accepted by County before official Testing of the system can begin

County Responsibilities

- County Project Manager and Implementation team will review and provide feedback on the configuration document
- County Project Manager and technical team will participate in a remote configuration document review meeting
- The County Project Manager will approve and sign the configuration document

WBS Task 3.2.6: Provide Demonstrations of Core Cityworks AMS Configured Solution

After completion of the core AMS software configuration and approval of the updated configuration documentation, Woolpert will provide a series of onsite full AMS software demonstrations to the entire future user community and project stakeholders for the configured groups. Woolpert will provide the same demonstration up to three (3) times to accommodate the many County employee schedules. Each demonstration will be up to four (4) hours in duration in order to review the configuration in depth and answer any questions. Similar to the demonstrations in Implemen-

This task doubles as an opportunity for the County to evaluate the readiness of their workforce. Staff apprehension early in the project can be re-evaluated. New and continuing concerns can be at this point in the project as there is still time to ready the organization prior to Go-Live.

tation Planning phase, this task provides an opportunity for the County to assess the readiness of their staff. Should any apprehension or reluctance to adopt the new system become apparent, the County still has time to address those concerns and maximize staff readiness prior to Go-Live. After all of the software demonstrations, the Woolpert implementation team and Project Manager and the County Project Manager and stakeholders, will hold a wrap up meeting to discuss the plan to address the business use cases developed for requirements that could not be met with standard or advanced Cityworks configurations and for deployment activities.

Related Sub-Tasks

3.2.6	**Provide Cityworks AMS Software Demonstrations**
3.2.6.1	Woolpert to Prepare for On-Site Software Demonstrations
3.2.6.2	County to Prepare for On-Site Software Demonstrations (COUNTY TASK)
3.2.6.3	**Woolpert to Facilitate On-Site Software Demonstrations (ONSITE TASK)**
3.2.6.3.1	Facilitate Software Demonstration 1 (ONSITE TASK)
3.2.6.3.2	Facilitate Software Demonstration 2 (ONSITE TASK)
3.2.6.3.3	Facilitate Software Demonstration 3 (ONSITE TASK)
3.2.6.3.4	Software Demonstration Wrap-Up (ONSITE TASK)

Deliverables

- Woolpert will provide agendas for the onsite demonstrations
- Woolpert will provide three (3) onsite Cityworks AMS System solution demonstrations. Each demonstration will be up to four (4) hours in duration
- Woolpert to facilitate one (1) configuration wrap-up meeting for up to four (4) hours

Assumptions

- All demonstration preparation activities will be performed remotely
- County staff participating in the demonstrations will do so un-interrupted

County Responsibilities

- Secure an appropriate workshop facility
- Coordinate and schedule demonstration participants
- Coordinate and schedule a configuration wrap-up meeting

WBS Task 3.2.7: Phase 3 Track 2 Quality Control

Woolpert technical resources, not regularly involved with this implementation will perform independent quality review of the work processes and deliverable products in accordance with the Woolpert Total Quality Plan.

WBS Task 3.2.8: Phase 3 Track 2 Acceptance and Close

This is the Phase exit document that the County Project Manager signs indicating Woolpert has delivered the Phase 3 services in accordance with the Scope of Work and Project Plan.

WBS Task 3.3: System Design and Configuration Track 3 – Public Works

This task is the third of three System Design and Configuration Tracks. The divisions to be configured during this track are those in the PUBLIC WORKS department. For the purpose of scoping activities and pricing this effort, Woolpert has assumed that workshops will be organized into the following eight (8) groups as follows:

Department	Grouping
Public Works	Customer Service
Public Works	Construction Management Division
Public Works	Engineering Services
Public Works	Environmental Management
Public Works	Stormwater
Public Works	Vegetation
Public Works	Survey and Mapping Division
Public Works	Transportation

After the Implementation Planning phase is complete, the results of the Departmental Readiness task will yield more information about the implementing departments and divisions such that the order of the Design and Configuration Tracks and the resource groupings within each track can be reorganized and regrouped as appropriate.

WBS Task 3.3.1: Prepare Configuration Document

Woolpert will compile the asset management program data gathered and documented through the multiple on-site workshops and other related project meetings completed project-to-date (Departmental Readiness Assessment, Global Configuration Standards, etc.) and distill this information into an organized configuration document. This configuration documentation, consisting of standard Cityworks AMS system elements, as well as the customized details required to support the County's specific asset management program, will be used to guide the configuration of the Cityworks AMS system such that it is localized to the County's specific work tracking and asset management requirements.

Related Sub-Tasks

3.3.1	**Prepare Configuration Documentation**
3.3.1.1	Woolpert to Prepare Draft Configuration Documentation
3.3.1.2	Woolpert to Submit to Client PM for Review
3.3.1.3	Woolpert to Facilitate Remote Review Meeting with Client Technical Team

Deliverables

- Woolpert will develop a Cityworks AMS configuration document
- Woolpert will facilitate one (1) remote review meetings up to four (4) hours in duration each with the County Implementation Team to review the Cityworks AMS Configuration Document

Assumptions

- All tasks will be performed remotely

- County Implementation Team will attend and actively participate in the document review meeting

County Responsibilities

- Review the prepared Cityworks AMS Configuration Document prior to the review meeting
- Participate in the remote review meeting

WBS Task 3.3.2: Conduct Configuration Training for Core Team

Woolpert will facilitate two (2) onsite Configuration Training sessions for the purpose of providing the Department Implementation Team with the Cityworks AMS software knowledgebase needed to support the system design and implementation decisions. Configuration Training will be comprised of a two-day curriculum designed to cover all relative aspects of the Cityworks AMS configuration. Completion of the configuration training will ensure the Department project participants (those with implementation responsibilities) are provided with enough exposure to, and understanding of, the Cityworks AMS software work order and asset management functionality such that they are able to make smart and informed configuration decisions as they relate to the overall implementation objectives. The intent of the Configuration Training is not to provide the skills needed to maintain the daily operations of the system. This End-User Training is provided at a later date.

Configuration Training will be facilitated in a classroom environment (computer lab or training room) onsite at County facilities.

Related Sub-Tasks

3.3.2	**Conduct Configuration Training for Core Department Team**
3.3.2.1	Woolpert to Prepare Core Team Training Agenda
3.3.2.2	Woolpert to Submit Agenda to Client PM
3.3.2.3	Client PM to Prepare Site for Core Team Training (Client-Owned Task)
3.3.2.4	**Training for Core Departmental Team (ONSITE TASK)**
3.3.2.4.1	Woolpert to Provide Core Team Training - Class 1 (ONSITE TASK)
3.3.2.4.2	Woolpert to Provide Core Team Training - Class 1 (ONSITE TASK)

Deliverables

- Woolpert will develop a Configuration Training agenda and submit it to the County Project Manager
- Woolpert will conduct two (2) 2-day Configuration Training onsite workshops, each workshop to be conducted over to two (2) consecutive business days

Assumptions

- Training will be facilitated utilizing the newly installed on-premise Cityworks AMS software environment
- Workshops to be conducted over four (4) consecutive business days within a single business week (Monday – Friday)
- Ensure Woolpert access to the Cityworks AMS software environment installed on-premise to perform training

County Responsibilities

- County to review and accept agenda for training
- County to schedule the appropriate County project team members such that they are available, without undue interruption, for the required number of days
- County will provide a conference room or training room with a projector. During Configuration Training, individual computers are not needed for the participants. The software functionality will be demonstrated from the instructor's computer.

WBS Task 3.3.3: Core Cityworks AMS Solution

Woolpert will facilitate the Core Cityworks AMS Software Configuration for each Department through a series of three (3) rounds of onsite configuration workshops. Each round of workshops will allow each of the configuration groups to define their system requirements such that the Woolpert implementation team can configure the Cityworks solution to their needs. Also during this task, the Department implementation team members will collect or develop, and deliver to Woolpert, data that be loaded into the Cityworks solution. Each round of workshops will be followed by Woolpert building the Cityworks Development environment by loading the supplied information and performing the necessary configuration to transform the out-of-the-box Cityworks solution to one that meets the needs of the implementing groups. Each successive round of workshops will address the following topics at increasing level of detail:

> **Cityworks is a complex and powerful software product. But too often, it is implemented in a less than optimal manner and as a result does not deliver the desired results. Our three-round configuration process is a critical factor in capturing user requirements and refining workflows before testing begins. Not all implementation firms use this approach, but our long history shows that the extra time spent at this stage helps make the remainder of the project much smoother.**

- **Domains**. This is the security architecture that determines how employees, work orders and other asset maintenance management information can be shared across organization-al boundaries.
- **Employee Hierarchy**. Determines security protocols for each user of the system as well as practical grouping of employees for assignments to work orders, inspections, and service requests (e.g. crews).
- **Work Orders**. Templates for each of the type of maintenance activities that will be performed on each asset in the system
- **Tasks**. Individual work items associated with a work order. For example, a repair sewer main work order might have tasks for establish traffic control, utility locate, excavate, etc.
- **Materials Hierarchy**. Organization and rules for items that are used to repair assets. Examples of materials are things such as pipes and meters.
- **Equipment Hierarchy**. Organization and rules for items that are utilized to complete a work order but are not consumed. Examples are items such as backhoes, vehicles, vacuum trucks, etc.

- **Service Requests**. Templates for requests for service. Many times maintenance activities are initiated starting with a service request whose purpose is to determine if a work is necessary or not.
- **Inspections**. Templates for each type of periodic and ad-hoc asset inspection where detailed attributes need to be stored as individual data elements.
- **Reporting**. Current or future expected reports will be discussed and designed.
- **Projects**. Projects to be managed within the AMS software

At the end of the each round of workshops, there will be a set of action items for the Department Implementation Team members, such as compiling a list of employees, work crews, and contractors, as well as hard copies of work orders, reports, inspection forms, and other relevant data sets. Woolpert will prepare a detailed list of action items and submit them to the County Project Manager. Woolpert will conduct a number of WebEx-style remote meetings to perform tasks such as facilitating understanding of County action items or clarifying configuration requirements. After each round of workshops, Woolpert will work remotely to update the Configuration Document with the decisions made during the workshops, perform the necessary system configuration such that it meets the requirements defined in the workshop, and develop business use case documents for any requirements that cannot be satisfied by standard or advanced Cityworks configuration methods. Business use cases may define system customizations, custom software development, third-party solutions or other methods to satisfy County requirements. PLEASE NOTE that only the development of business use cases for requirements not supported by standard or advanced system configuration are included in this scope of services. Should any recommendations be accepted, Woolpert can prepare a scope of services and fee for their execution for the County's consideration.

At the end of the first round of configuration workshops and subsequent WebEx meetings, Woolpert expects to have gathered enough information to configure approximately 70% of the County's desired asset maintenance management functionality that can be satisfied with and advanced standard Cityworks configuration.

At the end of the second round workshops and subsequent WebEx meetings, Woolpert expects to have gathered enough information to configure approximately 85% of the Department's desired asset maintenance management functionality that can be satisfied with and advanced standard Cityworks configuration.

At the end of the third round of configuration and subsequent WebEx meetings, Woolpert expects to have gathered enough information to configure approximately 100% of the Department's desired asset maintenance management functionality that can be satisfied with and advanced standard Cityworks configuration.

Related Sub-Tasks

3.3.3	**Core Cityworks AMS Configuration**
3.3.3.1	**Round 1 AMS Configuration Workshops**
3.3.3.1.1	Woolpert to Prepare for AMS Configuration Workshops (First Round)
3.3.3.1.2	County to Prepare for AMS Workshops (First Round)
3.3.3.1.3	**Woolpert to Facilitate AMS Configuration Workshops (Round 1)**
3.3.3.1.3.1	Public Works	Customer Service AMS Configuration Workshop 1 (ONSITE TASK)
3.3.3.1.3.2	Public Works	Construction Management AMS Configuration Workshop 1 (ONSITE TASK)
3.3.3.1.3.3	Public Works	Engineering Services AMS Configuration Workshop 1 (ONSITE TASK)
3.3.3.1.3.4	Public Works	Environmental Mgmt. AMS Configuration Workshop 1 (ONSITE TASK)

3.3.3.1.3.5	Public Works	Stormwater AMS Configuration Workshop 1 (ONSITE TASK)
3.3.3.1.3.6	Public Works	Vegetation AMS Configuration Workshop 1 (ONSITE TASK)
3.3.3.1.3.7	Public Works	Survey and Mapping AMS Configuration Workshop 1 (ONSITE TASK)
3.3.3.1.3.8	Public Works	Transportation AMS Configuration Workshop 1 (ONSITE TASK)
3.3.3.1.4	Woolpert to Update AMS Configuration Documentation (Round 1)
3.3.3.1.5	Woolpert to Perform AMS Configuration in Development Environment (Round 1)
3.3.3.1.6	Woolpert to Document Business Cases for Potential Customizations (Round 1)
3.3.3.1.7	**Woolpert to Facilitate Remote Configuration Review Meetings With Client Technical Team**
3.3.3.1.7.1	Remote Review Meeting 1
3.3.3.1.7.2	Remote Review Meeting 2
3.3.3.1.7.3	Remote Review Meeting 3
3.3.3.1.7.4	Remote Review Meeting 4
3.3.3.2	**Round 2 AMS Configuration Workshops**
3.3.3.2.1	Woolpert to Prepare for AMS Configuration Workshops (Second Round)
3.3.3.2.2	County to Prepare for AMS Workshops (Second Round)
3.3.3.2.3	**Woolpert to Facilitate AMS Configuration Workshops (Round 2)**
3.3.3.2.3.1	Public Works	Customer Service AMS Configuration Workshop 2 (ONSITE TASK)
3.3.3.2.3.2	Public Works	Construction Management AMS Configuration Workshop 2 (ONSITE TASK)
3.3.3.2.3.3	Public Works	Engineering Services AMS Configuration Workshop 2 (ONSITE TASK)
3.3.3.2.3.4	Public Works	Environmental Mgmt. AMS Configuration Workshop 2 (ONSITE TASK)
3.3.3.2.3.5	Public Works	Stormwater AMS Configuration Workshop 2 (ONSITE TASK)
3.3.3.2.3.6	Public Works	Vegetation AMS Configuration Workshop 2 (ONSITE TASK)
3.3.3.2.3.7	Public Works	Survey and Mapping AMS Configuration Workshop 2 (ONSITE TASK)
3.3.3.2.3.8	Public Works	Transportation AMS Configuration Workshop 2 (ONSITE TASK)
3.3.3.2.4	Woolpert to Update AMS Configuration Documentation (Round 2)
3.3.3.2.5	Woolpert to Perform AMS Configuration in Development Environment (Round 2)
3.3.3.2.6	Woolpert to Document Business Cases for Potential Customizations (Round 2)
3.3.3.2.7	**Woolpert to Facilitate Remote Configuration Review Meetings With Client Technical Team**
3.3.3.2.7.1	Remote Review Meeting 1
3.3.3.2.7.2	Remote Review Meeting 2
3.3.3.2.7.3	Remote Review Meeting 3
3.3.3.3	**Round 3 AMS Configuration Workshops**
3.3.3.3.1	Woolpert to Prepare for AMS Configuration Workshops (Third Round)
3.3.3.3.2	County to Prepare for AMS Workshops (Third Round)
3.3.3.3.3	**Woolpert to Facilitate AMS Configuration Workshops (Round 3)**
3.3.3.3.3.1	Public Works	Customer Service AMS Configuration Workshop 3 (ONSITE TASK)
3.3.3.3.3.2	Public Works	Construction Management AMS Configuration Workshop 3 (ONSITE TASK)
3.3.3.3.3.3	Public Works	Engineering Services AMS Configuration Workshop 3 (ONSITE TASK)
3.3.3.3.3.4	Public Works	Environmental Mgmt. AMS Configuration Workshop 3 (ONSITE TASK)
3.3.3.3.3.5	Public Works	Stormwater AMS Configuration Workshop 3 (ONSITE TASK)
3.3.3.3.3.6	Public Works	Vegetation AMS Configuration Workshop 3 (ONSITE TASK)
3.3.3.3.3.7	Public Works	Survey and Mapping AMS Configuration Workshop 3 (ONSITE TASK)
3.3.3.3.3.8	Public Works	Transportation AMS Configuration Workshop 3 (ONSITE TASK)
3.3.3.3.4	Woolpert to Update AMS Configuration Documentation (Round 3)
3.3.3.3.5	Woolpert to Perform AMS Configuration in Development Environment (Round 3)
3.3.3.3.6	Woolpert to Document Business Cases for Potential Customizations (Round 3)
3.3.3.3.7	**Woolpert to Facilitate Remote Configuration Review Meetings With Client Technical Team**

3.3.3.3.7.1	Remote Review Meeting 1
3.3.3.3.7.2	Remote Review Meeting 2
3.3.3.3.7.3	Remote Review Meeting 2

Deliverables

- Round 1 Workshop Deliverables
  - Woolpert will facilitate Round 1 workshops for eight (8) configuration groups. Each workshop will be allocated twelve (12) hours of workshop time. Workshop time can be reallocated between the implementation groups, however, the total amount of workshop time will not exceed ninety six (96) hours.
  - Woolpert will perform up to four (4) follow-up remote meetings via WebEx for the Round 1 Workshops. Each meeting will be no longer than four (4) hours.
  - Woolpert will update the configuration documentation based on the outcome of the Round 1configuration workshops
  - Woolpert will perform system configuration in the County on-premise development environment based on the outcome of the Round 1 workshops
  - Woolpert will document business cases for potential customizations based on the outcome of the Round 1 workshops
- Round 2 Workshop Deliverables
  - Woolpert will facilitate Round 2 workshops for eight (8) configuration groups. Each workshop will be allocated eight (8) hours of workshop time. Workshop time can be reallocated between the implementation groups, however, the total amount of workshop time will not exceed sixty four (64) hours.
  - Woolpert will perform up to three (3) follow-up remote meetings via WebEx for the Round 2 Workshops. Each meeting will be no longer than four (4) hours.
  - Woolpert will update the configuration documentation based on the outcome of the Round 2 configuration workshops
  - Woolpert will perform system configuration in the County on-premise development environment based on the outcome of the Round 2 workshops
  - Woolpert will document business cases for potential customizations based on the outcome of the Round 2 workshops
- Round 3 Workshop Deliverables
  - Woolpert will facilitate Round 3 workshops for eight (8) configuration groups. Each workshop will be allocated eight (8) hours of workshop time. Workshop time can be reallocated between the implementation groups, however, the total amount of workshop time will not exceed sixty four (64) hours.
  - Woolpert will perform up to three (3) follow-up remote meetings via WebEx for the Round 3 Workshops. Each meeting will be no longer than four (4) hours.
  - Woolpert will update the configuration documentation based on the outcome of the Round 2 configuration workshops
  - Woolpert will perform system configuration in the County on-premise development environment based on the outcome of the Round 3 workshops
  - Woolpert will document business cases for potential customizations based on the outcome of the Round 3 workshops

Assumptions

- All work aside from the actual workshops will be performed remotely
- All Round 1 workshops will take place over the course of three (3) business weeks (Monday – Friday)
- All Round 2 workshops will take place over the course of two (2) business weeks (Monday – Friday)
- All Round 3 workshops will take place over the course of two (2) business weeks (Monday – Friday)
- Actual workshops will be administered onsite at County facilities
- County staff participating in the Configuration workshops will do so uninterrupted
- The geodatabase for the participating divisions will be complete before the starting of Round 1 of the Cityworks configuration workshops. This information is essential for Woolpert to configure Cityworks in a timely manner.
- A map service and geocoding service will be available for Woolpert to consume specific to the AMS divisions

County Responsibilities

- County to schedule the appropriate Department project team members such that they are available, without undue interruption, for the required number of days
- County will provide a conference room or training room with a projector. During Configuration Training, individual computers are not needed for the participants. The software functionality will be demonstrated from the instructor's computer.
- Workshop participants shall actively participate in workshop activities
- Workshop participants shall participate in the remote review meetings, as requested
- County Technical Team will provide Woolpert a map service and geocoding service for Woolpert to consume, specific to the AMS divisions

WBS Task 3.3.4: Cityworks Storeroom Configuration

Woolpert will facilitate the Core Cityworks Storeroom Software Configuration for each Department through a series of two (2) rounds of onsite configuration workshops. Each round of workshops will allow each of the configuration groups to define their system requirements such that the Woolpert implementation team can configure the Cityworks Storeroom solution to their needs. Also during this task, the Department implementation team members will collect or develop, and deliver to Woolpert, data that will be loaded into the Cityworks Storeroom solution. Each round of workshops will be followed by Woolpert building the Cityworks Storeroom Development environment by loading the supplied information and performing the necessary configuration to transform the out-of-the-box Cityworks Storeroom solution to one that meets the needs of the implementing groups.

Related Sub-Tasks

3.3.4	**Cityworks Storeroom Configuration**
3.3.4.1	**Round 1 Storeroom Configuration Workshops**
3.3.4.1.1	Woolpert to Prepare for Storeroom Configuration Workshops (First Round)
3.3.4.1.2	**Woolpert to Facilitate Storeroom Configuration Workshops (Round 1)**

3.3.4.1.2.1	Public Works	Customer Service Storeroom Workshop 1 (ONSITE TASK)
3.3.4.1.2.2	Public Works	Construction Management Storeroom Workshop 1 (ONSITE TASK)
3.3.4.1.2.3	Public Works	Engineering Services Storeroom Workshop 1 (ONSITE TASK)
3.3.4.1.2.4	Public Works	Environmental Mgmt. Storeroom Workshop 1 (ONSITE TASK)
3.3.4.1.2.5	Public Works	Stormwater Storeroom Workshop 1 (ONSITE TASK)
3.3.4.1.2.6	Public Works	Vegetation Storeroom Workshop 1 (ONSITE TASK)
3.3.4.1.2.7	Public Works	Survey and Mapping Storeroom Workshop 1 (ONSITE TASK)
3.3.4.1.2.8	Public Works	Transportation Storeroom Workshop 1 (ONSITE TASK)

3.3.4.1.3   Woolpert to Update Configuration Documentation (Round 1)

3.3.4.1.4   Woolpert to Perform Configuration in Development Environment

3.3.4.1.5   Woolpert to Facilitate Remote Configuration Review Meetings With Client Technical Team

3.3.4.1.5.1   Remote Review Meeting 1

3.3.4.1.5.2   Remote Review Meeting 2

3.3.4.2   Round 2 Storeroom Configuration Workshops

3.3.4.2.1   Woolpert to Prepare for Storeroom Configuration Workshops (Second Round)

3.3.4.2.2   Woolpert to Facilitate Storeroom Configuration Workshops (Round 2)

3.3.4.2.2.1	Public Works	Customer Service Storeroom Workshop 1 (ONSITE TASK)
3.3.4.2.2.2	Public Works	Construction Management Storeroom Workshop 1 (ONSITE TASK)
3.3.4.2.2.3	Public Works	Engineering Services Storeroom Workshop 1 (ONSITE TASK)
3.3.4.2.2.4	Public Works	Environmental Mgmt. Storeroom Workshop 1 (ONSITE TASK)
3.3.4.2.2.5	Public Works	Stormwater Storeroom Workshop 1 (ONSITE TASK)
3.3.4.2.2.6	Public Works	Vegetation Storeroom Workshop 1 (ONSITE TASK)
3.3.4.2.2.7	Public Works	Survey and Mapping Storeroom Workshop 1 (ONSITE TASK)
3.3.4.2.2.8	Public Works	Transportation Storeroom Workshop 1 (ONSITE TASK)

3.3.4.2.3   Woolpert to Update Configuration Documentation (Round 2)

3.3.4.2.4   Woolpert to Perform Configuration in Development Environment

Deliverables

- Round 1 Workshop Deliverables:
  - Woolpert will facilitate Round 1 Storeroom Configuration workshops onsite for up to thirty two (32) hours. Eight (8) workshops are scheduled for four (4) hours each; however, the thirty two hours can be reallocated as necessary.
  - Woolpert will update the configuration documentation based on the outcome of the Round 1 configuration workshops
  - Woolpert will perform system configuration in the County on-premise development environment based on the outcome of the Round 1 workshops
  - Woolpert will facilitate up to two (2) remote meetings to via WebEx for the Round 1 workshops. Each meeting will be no longer than two (2) hours.
- Round 2 Workshop Deliverables:
  - Woolpert will facilitate Round 2 Storeroom Configuration workshops onsite for up to thirty two (32) hours. Eight (8) workshops are scheduled for four (4) hours each; however, the thirty two hours can be reallocated as necessary.
  - Woolpert will update the configuration documentation based on the outcome of the Round 2 configuration workshops

- o Woolpert will perform system configuration in the County on-premise development environment based on the outcome of the Round 2 workshops
- o Woolpert will facilitate up to two (2) remote meetings to via WebEx for the Round 2 workshops. Each meeting will be no longer than two (2) hours.

Assumptions

- All work aside from the actual workshops will be performed remotely
- All Round 1 workshops will take place over the course of a single business week (Monday – Friday)
- All Round 2 workshops will take place over the course of a single business week (Monday – Friday)
- Actual workshops will be administered onsite at County facilities
- County staff participating in the Configuration workshops will do so uninterrupted

County Responsibilities

- County to schedule the appropriate Department project team members such that they are available, without undue interruption, for the required number of days
- County will provide a conference room or training room with a projector. Individual computers are not needed for the participants. The software functionality will be demonstrated from the instructor's computer.
- Workshop participants shall actively participate in workshop activities
- Workshop participants shall participate in the remote review meetings, as requested

WBS Task 3.3.5: Review and Approval of Updated System and Configuration Documentation

Woolpert will provide an updated system configuration document for review by the County. This document will represent everything that is configured within the database and must be approved before the final demonstration of the Cityworks AMS system can be performed. Woolpert will perform a thorough remote review of this document with the County implementation team. However, the document is long and complicated. If the County team does not take the time throughout the Phase to learn the document's sections and information, it will be very difficult for the County team to recommend with any degree of confidence the acceptance of the document. Hence, Woolpert strongly recommends that the County team immerse themselves in learning this document throughout this phase.

Related Sub-Tasks

3.3.5	**Review and Approval of Updated System and Configuration Documentation**
3.3.5.1	Woolpert to Submit Updated Configuration Documentation to County
3.3.5.2	County Technical Team to Review Updated Configuration and Documentation (COUNTY TASK)
3.3.5.3	Woolpert to Facilitate Remote Review Meeting with County Technical Team
3.3.5.4	Woolpert to Update Configuration Documentation per County Comments
3.3.5.5	Woolpert to Submit Updated Pre-Final Configuration Documentation to County

Deliverables

- Woolpert to submit updated configuration documentation to the County Project Manager
- Woolpert to facilitate a remote configuration documentation review meeting, up to four (4) hours in duration, with the County Implementation Team
- Woolpert will update the configuration documentation based on the outcome of the County review and re-submit the updated documentation to the County Project Manager

Assumptions

- County implementation team members will understand the documentation for its accuracy
- Configuration Document will be accepted by County before official Testing of the system can begin

County Responsibilities

- County Project Manager and Implementation team will review and provide feedback on the configuration document
- County Project Manager and technical team will participate in a remote configuration document review meeting
- The County Project Manager will approve and sign the configuration document

WBS Task 3.3.6: Provide Demonstrations of Core Cityworks AMS Configured Solution

After completion of the core AMS software configuration and approval of the updated configuration documentation, Woolpert will provide a series of onsite full AMS software demonstrations to the entire future user community and project stakeholders for the configured groups. Woolpert will provide the same demonstration up to three (3) times to accommodate the many County employee schedules. Each demonstration will be up to four (4) hours in duration in order to review the configuration

This task doubles as an opportunity for the County to evaluate the readiness of their workforce. Staff apprehension early in the project can be re-evaluated. New and continuing concerns can be at this point in the project as there is still time to ready the organization prior to Go-Live.

in depth and answer any questions. Similar to the demonstrations in Implementation Planning phase, this task provides an opportunity for the County to assess the readiness of their staff. Should any apprehension or reluctance to adopt the new system become apparent, the County still has time to address those concerns and maximize staff readiness prior to Go-Live. After all of the software demonstrations, the Woolpert implementation team and Project Manager and the County Project Manager and stakeholders, will hold a wrap up meeting to discuss the plan to address the business use cases developed for requirements that could not be met with standard or advanced Cityworks configurations and for deployment activities.

Related Sub-Tasks

3.3.6	**Provide Cityworks AMS Software Demonstrations**
3.3.6.1	Woolpert to Prepare for On-Site Software Demonstrations
3.3.6.2	County to Prepare for On-Site Software Demonstrations (COUNTY TASK)
3.3.6.3	**Woolpert to Facilitate On-Site Software Demonstrations (ONSITE TASK)**
3.3.6.3.1	Facilitate Software Demonstration 1 (ONSITE TASK)
3.3.6.3.2	Facilitate Software Demonstration 2 (ONSITE TASK)
3.3.6.3.3	Facilitate Software Demonstration 3 (ONSITE TASK)
3.3.6.3.4	Software Demonstration Wrap-Up (ONSITE TASK)

Deliverables

- Woolpert will provide agendas for the onsite demonstrations
- Woolpert will provide three (3) onsite Cityworks AMS System solution demonstrations. Each demonstration will be up to four (4) hours in duration
- Woolpert to facilitate one (1) configuration wrap-up meeting for up to four (4) hours

Assumptions

- All demonstration preparation activities will be performed remotely
- County staff participating in the demonstrations will do so un-interrupted

County Responsibilities

- Secure an appropriate workshop facility
- Coordinate and schedule demonstration participants
- Coordinate and schedule a configuration wrap-up meeting

WBS Task 3.3.7: Phase 3 Track 3 Quality Control

Woolpert technical resources, not regularly involved with this implementation will perform independent quality review of the work processes and deliverable products in accordance with the Woolpert Total Quality Plan.

WBS Task 3.3.8: Phase 3 Track 3 Acceptance and Close

This is the Phase exit document that the County Project Manager signs indicating Woolpert has delivered the Phase 3 services in accordance with the Scope of Work and Project Plan.

Phase 4 – Advanced Configuration and Functionality

While Phase 3 is focused on configuring the Core Cityworks asset management functionality that supports work / asset maintenance management activities, Phase 4 tasks are undertaken to define and develop a more robust enterprise Cityworks AMS solution. Many of the Phase 4 tasks are to perform evaluations, develop recommendations and produce scopes, schedules and fees for work that will result in the final enterprise Cityworks AMS solution.

Key Advanced Configuration and Functionality (Phase 4) Deliverables

- **Technical Memoranda Evaluating Legacy Data Conversions**
- **Custom Reports and Dashboards**
- **Software Requirements Specifications and Development Scopes and Fees for System Integrations**

The County has identifies seven (7) systems that contain legacy data deemed important enough to consider for migration. The County has also identified seven (7) existing County software solutions with which the new Cityworks AMS might need to interface. Included in this scope of services is the effort to evaluate the migration of the data from the legacy applications being retired and the effort to scope the integrations to the existing solutions. Until the necessary due diligence has been completed, it is not possible to scope the actual effort and fee to convert the legacy data (that which the analysis determines worthy of converting) and develop the system interfaces.

Custom reports and dashboard requirements will be defined and refined Planning and Configuration phases. Woolpert will develop report specifications based on information previously gathered and develop saved searches, dashboards, inboxes and custom reports as required to meet the County users' requirements.

Completion of Phase 4 tasks will result in the following:

1. An accepted plan regarding the migration of transactional data from legacy systems to the Cityworks AMS.

2. The development / configuration of custom reports and dashboards.

3. Fully developed requirements, scopes and fees for the development of enterprise level application and workflow integrations between various existing business applications and the Core Cityworks AMS software application.

WBS Task 4.1: Conduct Legacy Data Evaluation

The County has identified the following seven (7) solutions as containing data that may need to be migrated to the new Cityworks AMS.

Data	Current Environment	Legacy System
Work Management	Oracle 8i	Maximo 4.0.3
Work Management	Oracle 8i	Maximo 4.0.3 STAR CENTER

Data	Current Environment	Legacy System
Work Management	Oracle 10g	Maximo 6.0.2 REM/PCR
Fleet Management	Oracle 9i	M4/Maximus
Mosquito Control	Oracle 10g	VCMS
Work Management	Access DB	Traffic Copp
Work Management	Oracle 10g	Agile Assets

Woolpert will begin the analysis with a remote discussion with each of the seven (7) legacy systems' data managers and stakeholders. The discussion will be to set the expectations for this migration evaluation task and learn a little about the data to be converted. Woolpert will follow up those discussions with a request for information about each legacy dataset. Once the County has provided the requested information, Woolpert analysts can examine it for completeness and accuracy as well as evaluate its overall data structure as it relates to migrating into the Cityworks data structures. Woolpert will then facilitate onsite workshops to further evaluate the data with the County legacy data managers and users. Woolpert will author seven (7) Technical Memoranda, one evaluating the pros and cons of migrating the data from each legacy solution. Where appropriate, Woolpert may recommend alternate methods to historize legacy data such that it remains in an accessible, reportable format. Woolpert will facilitate a joint review of the Tech Memos and, where requested, develop a scope or services and fee to perform the agreed-upon data migration activities.

Related Sub-Tasks

4.1	**Conduct Legacy Data Evaluation**
4.1.1	Woolpert to Facilitate Discussion about Datasets
4.1.2	Woolpert to Create Tech Memo Detailing Data Request
4.1.3	County to Provide Legacy Datasets to Woolpert
4.1.4	**Woolpert to Perform Desktop Analysis of Legacy Datasets**
4.1.4.1	Maximo 4.0.3 - Work Management Legacy Data Desktop Analysis
4.1.4.2	Maximo 4.0.3 STAR CENTER - Work Management Legacy Data Desktop Analysis
4.1.4.3	Maximo 6.0.2 REM/PCR Legacy Data Desktop Analysis
4.1.4.4	M4/Maximus Fleet Management Legacy Data Desktop Analysis
4.1.4.5	VCMS Legacy Data Desktop Analysis
4.1.4.6	Traffic Copp Legacy Data Desktop Analysis
4.1.4.7	Agile Assets Legacy Data Desktop Analysis
4.1.5	**Woolpert to Facilitate Onsite Review of Legacy Datasets (ONSITE TASK)**
4.1.5.1	Maximo 4.0.3 - Work Management Legacy Data Onsite Review (ONSITE TASK)
4.1.5.2	Maximo 4.0.3 STAR CENTER - Work Management Legacy Data Onsite Review (ONSITE TASK)
4.1.5.3	Maximo 6.0.2 REM/PCR Legacy Data Onsite Review (ONSITE TASK)
4.1.5.4	M4/Maximus Fleet Management Legacy Data Onsite Review (ONSITE TASK)
4.1.5.5	VCMS Legacy Data Onsite Review (ONSITE TASK)
4.1.5.6	Traffic Copp Legacy Data Onsite Review (ONSITE TASK)
4.1.5.7	Agile Assets Legacy Data Onsite Review (ONSITE TASK)
4.1.6	**Technical Memo Recommendations for Legacy Data Conversions**
4.1.6.1	**Develop Tech Memo Recommendations for Legacy Data Conversion**
4.1.6.1.1	Maximo 4.0.3 - Work Management Develop Technical Memo Recommendations
4.1.6.1.2	Maximo 4.0.3 STAR CENTER - Work Management Develop Technical Memo Recommendations
4.1.6.1.3	Maximo 6.0.2 REM/PCR Develop Technical Memo Recommendations
4.1.6.1.4	M4/Maximus Fleet Management Develop Technical Memo Recommendations

4.1.6.1.5	VCMS Develop Technical Memo Recommendations
4.1.6.1.6	Traffic Copp Develop Technical Memo Recommendations
4.1.6.1.7	Agile Assets Develop Technical Memo Recommendations
4.1.6.2	**Review and Approve Tech Memo Recommendations for Legacy Data Conversion**
4.1.6.2.1	Woolpert to Submit Tech Memo Recommendations for Legacy Data Conversion
4.1.6.2.2	County Technical Team to Review Tech Memo Recommendations for Legacy Data Conversion (COUNTY TASK)
4.1.6.2.3	Woolpert to Facilitate Joint Review of Tech Memo Recommendations for Legacy Data Conversion with County
4.1.6.2.4	Woolpert to Modify Tech Memo Recommendations for Legacy Data Conversion
4.1.6.2.5	County to Accept Tech Memo Recommendations for Legacy Data Conversion (COUNTY TASK)
4.1.7	**Woolpert to Develop Data Conversion Specification, Scope and Fee Documents - TBD**
4.1.7.1	Develop Spec, Scope and Fee for Conversion of Legacy Dataset 1
4.1.7.2	Develop Spec, Scope and Fee for Conversion of Legacy Dataset 2
4.1.7.3	Develop Spec, Scope and Fee for Conversion of Legacy Dataset 3
4.1.7.4	Woolpert to Submit FINAL Data Migration Document, Scope and Fee to County

Deliverables

- Woolpert to facilitate up to seven (7) remote discussions, each up to one (1) hour in duration, with the managers and stakeholders of the legacy systems being evaluated

- Woolpert to develop a Request for Information for each of the legacy data systems and submit it to the County Project Manager

- Woolpert to perform a desktop evaluation of each legacy system

- Woolpert to facilitate seven (7) onsite workshops, each four (4) hours in duration, with the managers, stakeholders and key users of each legacy system

- Woolpert to develop seven (7) Tech Memos evaluating the effort to migrate the data from each legacy system and other options that might be available to properly maintain the history of the systems and submit the memos to the County Project Manager

- Woolpert to Facilitate a remote review with the County to review the Tech Memos for a duration of no more than four (4) hours

- Woolpert to modify the Tech Memos based on County feedback provided during the remote review session

Assumptions

- County Technical Team and business unit staff familiar with the legacy data and legacy data system will be available and attend each workshop

- Workshops will be grouped to occur over the course of consecutive business days within a single business week (Monday – Friday)

County Responsibilities

- County to participate in pre-RFI discussions

- County to thoroughly respond to request for information

- County to secure an appropriate meeting facility for the onsite workshops and to coordinate and schedule workshop participants

- Workshop participants shall actively participate in workshop activities without undue interruption

WBS Task 4.2: Custom Reports and Metrics

This task has been scope for each of the three (3) scoped system design and configuration tracks.

NOTE: Without knowing the full scope of the reports and metrics to be developed, this task cannot be priced as part of the fixed fee implementation task. Woolpert and the County have agreed to budget zero dollars ($0) for this task. Instead, Woolpert and the County have agreed to fund a phase called Owner-Directed Funds (ODF). The intent of the ODF is to allocate encumbered fees at the County's direction. Funds for the development of Reports and Metrics will be allocated, as appropriate, once this task begins. The structure of this task's delivery approach has been left in this document in anticipation of future funding.

WBS Task 4.2.1: Track 1 – Utilities and Solid Waste Report and Metric Development

County will provide to Woolpert a list of existing and desired reports that should be producible with the new Cityworks AM solution. County will prioritize the report list from most to least critical. Woolpert's implementation / report development team will subsequently deploy as many of the identified reports as possible within the allocated budget. Woolpert will deploy the reports and metrics via Cityworks Saved Queries, Cityworks Dashboards, Cityworks Inboxes or custom-developed Crystal Reports. The reports will be reviewed with the County staff through a series of in-process development reviews. Woolpert will incorporate requested changes into the reports. The reports will be tested as part of the overall User Acceptance Testing efforts. In addition to reporting, Woolpert will work with the County Technical Teams to ensure that they know how the reports, dashboards and metrics were created and can create similar items once the system is live an Woolpert is no longer engaged with the County.

Related Sub-Tasks

4.2.1	**Track 1: Utilities and Solid Waste Report / Metric Development**
4.2.1.1	**Develop Report / Metric Specifications**
4.2.1.1.1	County to Provide Woolpert a Prioritized List of Reports / Metrics (COUNTY TASK)
4.2.1.1.2	Woolpert to Review Reports Provided by County
4.2.1.1.3	Woolpert to Develop DRAFT Report and Metric Specification Document
4.2.1.1.4	Woolpert to Submit DRAFT Report and Metric Specification Document to County
4.2.1.1.5	Woolpert to Facilitate Onsite Review of Report and Metric Specification Document
4.2.1.1.7	Woolpert to Create FINAL Report and Metric Specification Document
4.2.1.1.8	Woolpert to Submit FINAL Report and Metric Specification Document
4.2.1.1.9	County to Accept FINAL Report and Metric Specification Document
4.2.1.2	**Develop Reports and Metrics**
4.2.1.2.1	Woolpert to Develop Custom Reports
4.2.1.2.2	**Woolpert to Facilitate In-Process Review Meetings with Client Technical Team**
4.2.1.2.2.1	In-Process Report Development Review Meeting #1
4.2.1.2.2.2	In-Process Report Development Review Meeting #2
4.2.1.2.2.3	In-Process Report Development Review Meeting #3
4.2.1.2.2.4	In-Process Report Development Review Meeting #4
4.2.1.2.2.5	In-Process Report Development Review Meeting #5
4.2.1.2.2.6	In-Process Report Development Review Meeting #6
4.2.1.2.2.7	In-Process Report Development Review Meeting #7

4.2.1.2.2.8	In-Process Report Development Review Meeting #8
4.2.1.2.2.9	In-Process Report Development Review Meeting #9
4.2.1.2.2.10	In-Process Report Development Review Meeting #10
4.2.1.2.3	Woolpert to Configure and Test Reports in Development Environment
4.2.1.2.4	County to Accept Reports and Metrics in Development Environment
4.2.1.2.5	Woolpert to Deploy Reports and Metrics to Production Environment

Deliverables

- TBD – no deliverables for this task are included in the fixed fee scope of services. Deliverables will be defined when appropriate during the project.

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Assumptions

- NA

County Responsibilities

- NA

WBS Task 4.2.2: Track 2 – PCR and REM Report and Metric Development

County will provide to Woolpert a list of existing and desired reports that should be producible with the new Cityworks AM solution. County will prioritize the report list from most to least critical. Woolpert's implementation / report development team will subsequently deploy as many of the identified reports as possible within the allocated budget. Woolpert will deploy the reports and metrics via Cityworks Saved Queries, Cityworks Dashboards, Cityworks Inboxes or custom-developed Crystal Reports. The reports will be reviewed with the County staff through a series of in-process development reviews. Woolpert will incorporate requested changes into the reports. The reports will be tested as part of the overall User Acceptance Testing efforts. In addition to reporting, Woolpert will work with the County Technical Teams to ensure that they know how the reports, dashboards and metrics were created and can create similar items once the system is live an Woolpert is no longer engaged with the County.

Related Sub-Tasks

4.2.2	**Track 2: PCR and REM Report / Metric Development**
4.2.2.1	**Develop Report / Metric Specifications**
4.2.2.1.1	County to Provide Woolpert a Prioritized List of Reports / Metrics (COUNTY TASK)
4.2.2.1.2	Woolpert to Review Reports Provided by County
4.2.2.1.3	Woolpert to Develop DRAFT Report and Metric Specification Document
4.2.2.1.4	Woolpert to Submit DRAFT Report and Metric Specification Document to County
4.2.2.1.5	Woolpert to Facilitate Onsite Review of Report and Metric Specification Document
4.2.2.1.7	Woolpert to Create FINAL Report and Metric Specification Document
4.2.2.1.8	Woolpert to Submit FINAL Report and Metric Specification Document
4.2.2.1.9	County to Accept FINAL Report and Metric Specification Document
4.2.2.2	**Develop Reports and Metrics**
4.2.2.2.1	Woolpert to Develop Custom Reports
4.2.2.2.2	**Woolpert to Facilitate In-Process Review Meetings with Client Technical Team**
4.2.2.2.2.1	In-Process Report Development Review Meeting #1

4.2.2.2.2.2	In-Process Report Development Review Meeting #2
4.2.2.2.2.3	In-Process Report Development Review Meeting #3
4.2.2.2.2.4	In-Process Report Development Review Meeting #4
4.2.2.2.2.5	In-Process Report Development Review Meeting #5
4.2.2.2.2.6	In-Process Report Development Review Meeting #6
4.2.2.2.2.7	In-Process Report Development Review Meeting #7
4.2.2.2.2.8	In-Process Report Development Review Meeting #8
4.2.2.2.2.9	In-Process Report Development Review Meeting #9
4.2.2.2.2.10	In-Process Report Development Review Meeting #10
4.2.2.2.3	Woolpert to Configure and Test Reports in Development Environment
4.2.2.2.4	County to Accept Reports and Metrics in Development Environment
4.2.2.2.5	Woolpert to Deploy Reports and Metrics to Production Environment

Deliverables

- TBD – no deliverables for this task are included in the fixed fee scope of services. Deliverables will be defined when appropriate during the project.

Assumptions

- NA

County Responsibilities

- NA

WBS Task 4.2.3: Track 3 – Public Works Report and Metric Development

County will provide to Woolpert a list of existing and desired reports that should be producible with the new Cityworks AM solution. County will prioritize the report list from most to least critical. Woolpert's implementation / report development team will subsequently deploy as many of the identified reports as possible within the allocated budget. Woolpert will deploy the reports and metrics via Cityworks Saved Queries, Cityworks Dashboards, Cityworks Inboxes or custom-developed Crystal Reports. The reports will be reviewed with the County staff through a series of in-process development reviews. Woolpert will incorporate requested changes into the reports. The reports will be tested as part of the overall User Acceptance Testing efforts. In addition to reporting, Woolpert will work with the County Technical Teams to ensure that they know how the reports, dashboards and metrics were created and can create similar items once the system is live an Woolpert is no longer engaged with the County.

Related Sub-Tasks

4.2.3	Track 3: Public Works Report / Metric Development
4.2.3.1	Develop Report / Metric Specifications
4.2.3.1.1	County to Provide Woolpert a Prioritized List of Reports / Metrics (COUNTY TASK)
4.2.3.1.2	Woolpert to Review Reports Provided by County
4.2.3.1.3	Woolpert to Develop DRAFT Report and Metric Specification Document
4.2.3.1.4	Woolpert to Submit DRAFT Report and Metric Specification Document to County
4.2.3.1.5	Woolpert to Facilitate Onsite Review of Report and Metric Specification Document
4.2.3.1.7	Woolpert to Create FINAL Report and Metric Specification Document
4.2.3.1.8	Woolpert to Submit FINAL Report and Metric Specification Document

4.2.3.1.9   County to Accept FINAL Report and Metric Specification Document
4.2.3.2   Develop Reports and Metrics
4.2.3.2.1   Woolpert to Develop Custom Reports
4.2.3.2.2   Woolpert to Facilitate In-Process Review Meetings with Client Technical Team
4.2.3.2.2.1   In-Process Report Development Review Meeting #1
4.2.3.2.2.2   In-Process Report Development Review Meeting #2
4.2.3.2.2.3   In-Process Report Development Review Meeting #3
4.2.3.2.2.4   In-Process Report Development Review Meeting #4
4.2.3.2.2.5   In-Process Report Development Review Meeting #5
4.2.3.2.2.6   In-Process Report Development Review Meeting #6
4.2.3.2.2.7   In-Process Report Development Review Meeting #7
4.2.3.2.2.8   In-Process Report Development Review Meeting #8
4.2.3.2.2.9   In-Process Report Development Review Meeting #9
4.2.3.2.2.10   In-Process Report Development Review Meeting #10
4.2.3.2.3   Woolpert to Configure and Test Reports in Development Environment
4.2.3.2.4   County to Accept Reports and Metrics in Development Environment
4.2.3.2.5   Woolpert to Deploy Reports and Metrics to Production Environment

Deliverables

- TBD – no deliverables for this task are included in the fixed fee scope of services. Deliverables will be defined when appropriate during the project.

Assumptions

- NA

County Responsibilities

- NA

WBS Task 4.3: Conduct System Integration Evaluation

The County has identified the following eight (8) solutions (target systems) as existing County solutions that may need to be integrated to the new Cityworks AMS.

Data	Current Environment	Current System
GIS	Oracle 10g SDO; Oracle 11g ST	Esri
ERP	Oracle 11g DB	Oracle eBusiness Suite R12.1.3
ERP	Oracle 11g DB	SAP (CIS – Customer Information System, Hosted Solution)
SCADA		Wonderware SCADA v3.5.001, DB v10.1.101
CCTV	Oracle 10g	Granite XP
Fleet Management	Oracle 10g	Fuel System
Pavement Inspection	Access DB	Micropaver
Customer Requests		SeeClickFix
*Mosquito Manage-		VCMS

Data	Current Environment	Current System
ment		

*NOTE: Depending on the outcome of the VCMS Mosquito Management System which will be conducted in WBS Task 2.3, another integration point to VCMS or a different mosquito management solution may be added to this task.

Woolpert has experience integrating a number of different solutions to Cityworks and offers the following cursory analyses:

GIS: Every Cityworks implementation requires integration with an Esri GIS. The GIS is the asset repository for Cityworks. Without this integration Work Orders cannot be tied to specific assets and the value of the work management data is essentially nil. The integration requires configuration within Cityworks such that the solution can view the maps and access the data in a controlled manner. Some datasets will be only viewable in Cityworks, others will allow editing of the records and still others will allow for new records to be created through the Cityworks interface. The 'integration options' are really 'configuration options'. They will be defined during the configuration workshops delivered in *Phase 3 – Core System Design and Configuration* and delivered without complex code development. No work will be scoped in this task to address the integration requirements to the Esri GIS.

Oracle eBusiness: Woolpert has integrated Cityworks with many different financial management and inventory control systems. Financial and inventory integrations can range in complexity. One key determining factor in the complexity is whether the County maintains an inventory balance sheet account for operations and maintenance (O&M) materials. If so, then the accuracy required for the balance sheet means that the integration must do certain things that are otherwise optional. This integration expedites O&M material replenishments and reduces duplicate-entry, but the core value is in the financial record-keeping. Further, integrating materials management at the Cityworks Work Order level provides the County with the ability to more effectively and proactively manage the work order planning and scheduling process, taking into account inventory levels and re-order points.

SAP Customer Information System: Woolpert has integrated Cityworks with many different Customer Information Systems (CIS). A Cityworks-CIS integration can be very simple or very complicated depending on the level of automation the County desires. When integrating a CIS with Cityworks, the GIS is usually involved as well, making integrations even more complex. Further complicating a CIS-Cityworks integration are meter management workflows that are required to track a meter as newly-purchased serialized inventory through to an in-service asset and finally as a retired asset, with all possibilities in between. Woolpert has found that our clients realize tremendous value from these integrations. And likewise, we derive significant satisfaction from delivering integrated solutions that simplify our clients' business processes. Communications are streamlined, duplicate-entry avoided and accuracy within the respective systems is increased.

SCADA: SCADA integrations with work management systems are becoming commonplace and can add value by improving record-keeping and asset analysis capabilities. But an important thing to keep in mind with SCADA solutions is that they, on their own, provide tremendous value if used properly. Organizations that do not harness their SCADA capabilities with SCADA-specific tools such as workflow engines and analytics modules are missing tools that are much more

valuable than the capabilities provided simply by integration to a work management solution. For organizations that are leveraging their SCADA solutions well, the next step in the evolution of their solution is to integrate with work management. There are several SCADA solutions, Mtelligence is one and GE Workflow is another that provides GUI-driven integration modules. With these modules, the integration is developed without complex developer coding. Also important to note is that with these modules the user can leverage the analysis capabilities within the SCADA system and send to Cityworks only actionable tasks. This is preferable to sending all SCADA data to Cityworks and requiring that system to make sense of it. Woolpert recommends that the County investigate Configurable Off-The-Shelf (COTS) SCADA Integration Modules prior to committing to a ground-up custom integration. If requested, Woolpert could facilitate demonstrations and participate in the evaluation of these modules.

CCTV: Cityworks includes the CCTV Interface for PACP module as part of their ELA licensing model. However, depending upon the CCTV solution in use by the County, there may be a more functional solution that can be implemented to integrate CCTV activities with Cityworks AMS. Most of the major CCTV vendors have implemented their solutions with Cityworks AMS, including GraniteXP using their own integration packages. We have found that many of these CCTV vendor-provided integration solutions provide a more automated integration methodology and greater overall functionality than the Cityworks-provided CCTV Interface for PACP. We will explore these requirements and the optimal CCTV integration solution with the County during the planning stages of our implementation

 Fuel System: Woolpert has integrated Cityworks with several fleet management solutions. Integrations with vehicle management solutions are fairly simple in that there is typically only a one-way flow of information. Typical in these integrations, the fleet solution sends information to Cityworks after each fueling and when corrective action is required. At the fueling data exchange, fleet solution sends the amount of fuel used as well as the odometer reading. The odometer reading will trigger usage-based preventive maintenance work orders within Cityworks. When the onboard diagnostics senses that work needs to be performed, the fleet solution can send information to Cityworks such that a corrective work order is created.

Micropaver: Cityworks includes an Interface for Micropaver as part of their ELA licensing model. The one-way interface is fairly simplistic but offers the level of data exchange that satisfy most pavement management organizations. The out-of-the-box interface gives an organization the ability to turn Micropaver maintenance and rehabilitation project recommendations into actionable Cityworks work orders.

SeeClickFix: Woolpert has integrated with several different web-based citizen service request intake portals. Typically, these portals only require one-way integration of data from the portal to the Cityworks solution where the request is managed to completion. However, depending on the County's use of SeeClickFix, a two-way data exchange may be required to communicate the status of the request back to the citizen-facing application.

Mosquito Management Software: This integration will not be required if Cityworks can provide the functionality that currently exists in VCMS. If Cityworks cannot provide this functionality, VCMS will be replaced and a new mosquito management software solution will be implemented to track these types of activities. As long as the new solution is open architected and allows for integrations either through APIs, web services or other technology, Woolpert expect to be able to develop an integration to the new system.

The following three solutions require no, or very limited, integration discovery effort:

- **GIS**. The interface between Cityworks and the GIS will be configured during *Phase 3: Core System Configuration and Design*. Cityworks does not integrate with the Esri GIS so much as it is configured to work in concert with it. Woolpert has not identified any integration discovery tasks with this solution.

- **CCTV**. Both Cityworks and GraniteXP offer out-of-the-box configurable modules to integrate these two systems. Discovery tasks for this interface will be limited to a single workshop where the team will define the appropriate integration module and identifying any County requirements that cannot be met with the selected solution. No integration document will be created with the scoped effort.

  Should neither out-of-the-box solutions be acceptable, Woolpert will design and scope a custom integration effort. The effort to deliver a custom integration between these solutions is not included in this scope of services.

- **MicroPAVER**. Cityworks offers an out-of-the-box configurable module to integrate these two systems. Discovery tasks for this interface will be limited to a single workshop where the team will define the integration requirements and identifying any County requirements cannot be met with that standard interface module. No integration document will be created with the scoped effort.

  Should the out-of-the-box solution not be acceptable, Woolpert will design and scope a custom integration effort. The effort to deliver a custom integration between these solutions is not included in this scope of services.

Woolpert will perform the following tasks to define the scope of the integration to the remaining five (5) legacy systems.

Woolpert will begin the analysis with a remote discussion with each of the remaining five (5) legacy systems' data managers and stakeholders. The discussion will be to set the expectations for this integration evaluation task and learn a little about the way the target systems are used, what type of data they store and how the County envisions the integrations. Woolpert will create potential integration data flow diagrams illustrating one or more (where appropriate) options for the integration. Woolpert will then facilitate onsite workshops to further evaluate the integrations with the County managers and users of the target systems. Woolpert will author five (5) Software Requirement Specification (SRS) documents, one for each target system integration. Each SRS document will provide:

- A vision for the application integration
- High-level system architecture diagrams
- Assumptions learned
- Data mapping tables
- Lists of functionality requirements and their priorities
- Detailed application workflows
- Detailed integration requirements – this section will further expand upon the functional and technical requirements
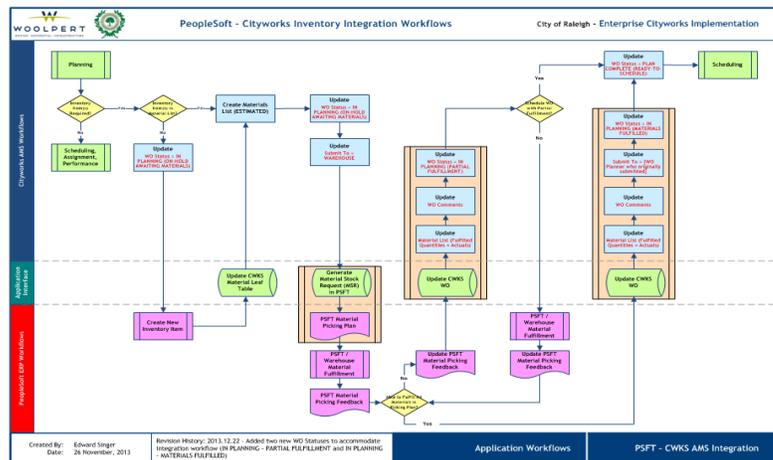
Figure 9 - Sample Application Integration Workflow Diagram

- Use case narratives (where applicable)

Once the draft SRS documents have been developed, Woolpert will submit them to the County Project Manager for review and comment. Woolpert will then facilitate a series of remote review meetings with the Technical Team members to discuss the findings of their reviews, address their comments, and make adjustments where necessary. Woolpert will then update the SRS documents, develop scopes, schedules and fees, and submit final versions to the County Project Manager.

Related Sub-Tasks

4.3	**Conduct System Integration Evaluation**
4.3.1	Woolpert to Facilitate Discussion about Datasets
4.3.2	Woolpert to Develop Potential Integration Data Flow Diagrams
4.3.3	Woolpert to Prep for Onsite Discussion about Integrations
4.3.4	**Woolpert to Facilitate Integration Discussions (ONSITE TASK)**
4.3.4.1	Oracle eBusiness Suite R12.1.3 Integration Discussion (ONSITE TASK)
4.3.4.2	SAP Integration Discussion (ONSITE TASK)
4.3.4.3	Wonderware SCADA v3.5.001 Integration Discussion (ONSITE TASK)
4.3.4.4	Granite XP Integration Discussion (ONSITE TASK)
4.3.4.5	Ward Fuel Integration Discussion (ONSITE TASK)
4.3.4.6	Micropaver Integration Discussion (ONSITE TASK)
4.3.4.7	SeeClickFix Integration Discussion (ONSITE TASK)
4.3.4.8	Mosquito Management System Integration Discussion (ONSITE TASK)
	Software Requirements Specifications (SRS) for System Integrations
4.3.5.1	**Develop SRS Documents**
4.3.5.1.1	Develop SRS for Oracle eBusiness Suite R12.1.3 Integration
4.3.5.1.2	Develop SRS for SAP Integration
4.3.5.1.3	Develop SRS for Wonderware SCADA v3.5.001 Integration
4.3.5.1.4	Develop SRS for Fuel System Integration
4.3.5.1.5	Develop SRS for SeeClickFix Integration
4.3.5.1.6	Develop SRS for Mosquito Management System Integration
4.3.5.2	**Review and Approve SRS Documents**
4.3.5.2.1	Woolpert to Submit DRAFT SRS Documents
4.3.5.2.2	County Technical Team to Review SRS Documents (COUNTY TASK)
4.3.5.2.3	Woolpert to Modify SRS Documents
4.3.5.2.4	Woolpert to Submit FINAL SRS Documents
4.3.5.2.5	Woolpert to Submit FINAL SRS Documents
4.3.5.2.6	County to Accept SRS Documents (COUNTY TASK)

Deliverables

- Woolpert to facilitate up to six (6) remote discussions, each up to two (2) hour in duration, with the managers and stakeholders of the legacy systems being evaluated
- Woolpert to develop potential data-flow diagrams for each system interface
- Woolpert to facilitate eight (8) onsite workshops with the managers, stakeholders and key users of each target system; workshops will be of the following durations:
  - Oracle eBusiness Suite .... Eight (8) hours
  - SAP (Hosted Solution) .... Eight (8) hours

- o Wonderware...Four (4) hours
- o Granite XP (No SRS will be developed)......................Four (4) hours
- o Fuel System ....Four (4) hours
- o Micropaver (No SRS will be developed) ....Four (4) hours
- o SeeClickFix ....Four (4) hours
- o Mosquito Management System ....Four (4) hours
- Woolpert to develop six (6) Integration SRS documents and submit them to the County Project Manager
- Woolpert to Facilitate remote reviews of the SRS documents with the County for no more than eighteen (18) hours; an average of three (3) hours per document
- Woolpert to modify the SRS documents based on County feedback provided during the remote review session

Assumptions

- County Technical Team and business unit staff familiar with the target system will be available and attend each workshop; where County relies on external contractors as subject matter experts, such as Vertex Group for SAP CIS, County will ensure that these external experts attend, are prepared for and actively participate in the workshops
- Workshops will be grouped to occur over the course of consecutive business days within a single business week (Monday – Friday)

County Responsibilities

- County to participate in pre-workshop discussions
- County to secure an appropriate meeting facility for the onsite workshops and to coordinate and schedule workshop participants
- Workshop participants shall actively participate in workshop activities without undue interruption
- County to review the SRS documents prior to the joint review
- County will accept the SRS document upon update after the remote review

WBS Task 4.4: Phase 4 Quality Control

Woolpert technical resources, not regularly involved with this implementation will perform independent quality review of the work processes and deliverable products in accordance with the Woolpert Total Quality Plan.

WBS Task 4.5: Phase 4 Acceptance and Close

This is the Phase 4 exit document that County signs indicating Woolpert has delivered the Phase 4 services in accordance with the Scope of Work. Additional project work not yet scoped, such as the actual data migrations and the development of system interfaces can begin once certain tasks within this phase are complete. Hence, those tasks will be signed-off and accepted by the County upon completion of the Task and not completion of the entire phase.

Phase 5 – Organizational Change Management

Woolpert will provide Organizational Change Management (OCM) to the County for the purpose of guiding the County executives, Operations and Maintenance leaders and end user community on their journey as the County moves from its current culture to one that puts total asset value at the forefront of its business decisions. Recognizing that the OCM effort on a project such as this is more than ensuring software adoption by end users, Woolpert has planned OCM activities in Phases that mirror the project Phases defined in the previous sections of this document. The OCM efforts will be grouped as follows Phases:

- **Foundation**: Activities will support the efforts in this scope of services identified in *Phase 2: Project Planning*.
- **Design**: Activities will support the efforts in this scope of services identified in *Phase 3: Core System Configuration and Design*.
- **Development**: Activities will support the efforts in this scope of services identified in *Phase 4: Advanced Configuration and Functionality*.
- **Implementation**: Activities will mirror the Software Deployment phase which will be defined in a separate scope of services
- **Embed**: will mirror the Extended Support phase which will be defined in a separate scope of services.

Each OCM Phase supports a technical phase. It is critical that the entire Asset Management Program development and Software Implementation project is initiated with absolute alignment among all county executives, department and divisional leaders. It is equally important that the implementing teams, which will consist of County resources 'in the trenches' of the change are also aligned with the program's vision. Therefore, Woolpert has weighted the OCM activities heavily on this initial scope of services.

WBS Task 5.1:   Foundation: OCM for Project Planning

The tasks in the Organizational Change Management Foundation phase will support the efforts in this scope of services identified in *Phase 2: Project Planning*. Woolpert believes that the efforts in this phase which will bring into focus the ultimate County visions for this project and ensure alignment among all participants is the more important part of Organizational Change Management. As such, our OCM team participation for this phase is greater than for any other phase in the project. The Woolpert OCM team will participate in the following onsite workshop activities:

WBS Task 5.1.1:   Kick-Off Meeting and Visioning Workshop

The Woolpert OCM team will attend the Kick-Off Meeting, have a break-out meeting during this onsite week to meet with the County OCM Manager and Communications Lead and be an integral part of the Visioning Workshop. During the Kick-Off Meeting, the OCM team will introduce to the County the OCM strategies and tools that will be employed on this project. When the Woolpert OCM team meets with the County OCM Manager and Communications Lead, they will define each participant's roles and responsibilities and provide them a deeper look into the OCM strategies and tools to be used throughout the project. At the Visioning Workshops, the OCM team will play a key role in defining the County's long-term vision for their AM Program and software implementation in terms of how it will affect their current workforce and business processes.

WBS Task 5.1.2:   ISO 55000 Workshop for Organization and People

The Woolpert OCM Team will attend the ISO 55000 workshop for Organizations and People. The workshops are scheduled to be conducted over several consecutive business days and will involve senior County leadership. The outcome of the workshops is to define the current state of the following subjects: Procurement and Supply Chain Management, Asset Management Leadership, Organizational Structure, Organizational Culture and Competence Management. During the course of defining the current state it is natural to ask questions such as, 'is this really what's best for our organization?' and 'how are other organizations doing this?' The Woolpert OCM team will be ready to offer insight into how many other organizations, both in the public and private sector, are structured and how those structures drive behavior.

The OCM Team will support the workshop from two major standpoints. First, Woolpert's OCM team members are experts on organizational design and a structure's impact on culture. Woolpert will be able to offer tangible insight into how the current management, leadership, structure and culture as related to Asset Management can support or hinder vision as defined by the County executives. Second, the OCM team will be charged with identifying change readiness challenges and fostering the County's culture shift to an AM-focused decision-making mindset. As such, they need to ensure the alignment throughout the organization, from the vision set by County executives and leadership, to these subjects within the AM program and on to the departments and divisions who will execute AM tasks. Being involved in these workshops will allow the OCM team to move the various levels within the organization into alignment throughout the project so that the culture shift occurs more slowly over time and does not unnecessarily impact the organization in a negative way.

WBS Task 5.1.3:   Support Departmental Readiness Workshops

The Woolpert OCM Team will support the Departmental Readiness Workshops. Readiness evaluations will be conducted as a series of workshops, one for each department each lasting a day and a half. All workshops will be conducted over two (2) business weeks. The OCM team will be onsite to support both of these workshop weeks.

During the readiness assessment workshop weeks, the Woolpert Analyst team will be focused on the data and technical readiness of the departments, but the Woolpert OCM team will bring another set of readiness criteria into focus, that of people and processes. Making the cultural change associated with the shift to an asset management focused approach to decision-making coupled with the physical change to a new software tool that will significantly alter how operations and maintenance personnel perform their jobs is going to make waves within the divisions that are directly affected and have ripple effects on the divisions that are not directly affected by this project. That the divisions' data can support these changes is only half the challenge. The County is asking over a thousand employees to buy into an enormous project that may have significant implication on how they do their jobs, if their position even exists after the project is complete.

The Woolpert OCM team will focus on people and process readiness and will support readiness activities by developing a Baseline Conditions document. The Baseline Conditions document will describe the existing roles and processes of the County personnel whose jobs may be affected by this project.

WBS Task 5.1.4:   Support Global Configuration Standards Workshops

The Woolpert OCM Team will support the Global Configuration Standards workshops, which will be led by the Woolpert Analyst team. These workshops will build a more complete picture of the County's upcoming change. The future conditions established in these workshops will be compared with the exist-

ing conditions documented in the Readiness Assessment workshops. The difference will be the potential impact for which the OCM team must ready the County.

Setting configuration standards require that common processes be established across divisions. Global standards will be developed during a series of workshops in which all participating and affected departments collaborate and establish, as much as is possible, a common way of doing similar tasks across all County departments. Global Configuration Standards workshops will be conducted over three (3) business weeks. The OCM team will be onsite to support only one (1) of these workshop weeks. The OCM team will be available to participate remotely via web meeting, as necessary, in the other workshops and will review the discovered processes and configurations from all workshops with the Analyst team.

The Woolpert OCM team will develop a list of future business processes that may affect personnel and how they perform their jobs. The final determination as to how County staff will be affected will be determined during the *Phase 3: Core System Design and Configuration* tasks when each division defines how their staff will operate within the future processes defined in these workshops. The OCM work in this task will define a set of roles that will likely experience significant change such that during the Phase 3 workshops the Woolpert and County teams are prepared to address the changes proactively.

WBS Task 5.1.5:   Ongoing OCM Foundation Support

The Woolpert OCM Team will support a number of change readiness and communications tasks that will be performed by onsite Woolpert and County personnel.

Foundation Phase OCM Deliverables

- Woolpert OCM team to participate in the Kick-Off Meeting and Visioning Workshop; all workshop activities to take place within a single business week, Monday – Friday. From these workshops:
  - Woolpert OCM team to document the project's Business Case; Business Case will be a section of the Vision Document.
  - Woolpert OCM team to document the Change and Communication Strategies.
- Woolpert OCM team to participate in the ISO 55000 workshop for Organization and People; all workshop activities to take place within a single business week, Monday – Friday.   OCM team to participate in the creation of the associated documentation.
- Woolpert OCM team to participate in the Departmental Readiness Workshops; all workshop activities to take place within two (2) business weeks, Monday – Friday.   From these workshops:
  - Woolpert OCM team to document the Current State of processes and employee roles.
- Woolpert OCM team to participate in one (1) onsite Global Configuration Standards workshop and support remotely the remaining workshops; all workshop activities to take place within over three (3) business weeks, Monday – Friday. From the workshops:
  - Woolpert OCM team will develop a list of future business processes that may affect personnel and how they perform their jobs
- Woolpert OCM team will develop the necessary questionnaires, surveys and assessment tools to collect information on a wide-scale, where the workshops, as defined in this scope of services, cannot collect enough far-reaching information. Woolpert OCM team will tailor workshops to focus on the necessary areas such that the workshops are productive and not repetitive.

Assumptions

- County project team is staffed with at least an OCM Manager and a Communications Lead
- County personnel will ensure that the necessary questionnaires, surveys and assessment tools are completed by County staff.

County Responsibilities

- County to participate in workshops
- County personnel will ensure that the necessary questionnaires, surveys and assessment tools are completed by County staff

WBS Task 5.2: Design: OCM for Core System Design and Configuration

The tasks in the Organizational Change Management Design phase will support the efforts in this scope of services identified in *Phase 3: Core System Design and Configuration*. The activities in Phase 3 are divided into three (3) configuration tracks. Each track includes one or more departments and multiple divisions and guides those groups through the configuration of their AMS solution. The Woolpert OCM team envisions heavier involvement in the first configuration track, and less involvement in the second and third tracks.   The expectation is that the implementation team, both Woolpert and County participants, will be more knowledgeable when it comes to identifying readiness opportunities. Also, any questionnaires, surveys, or assessment tools required to support the configuration tracks will be developed in the first track and re-used in subsequent tracks will few modifications.

The Woolpert OCM team will participate in the following onsite workshop activities:

WBS Task 5.2.1: Track 1 Core System Design and Configuration OCM Support

The Woolpert OCM team will participate in the Track 1 configuration workshops as follows:

- Round 1 | Onsite support for two (2) weeks; multiple OCM team resources
- Round 2 | Onsite support for one (1) week; remote support for one (1) week; one (1) OCM team resource
- Round 3 | Onsite support for one (1) week; remote support for one (1) week; one (1) OCM team resource

During the onsite activities, the OCM team will identify the key areas where change readiness should be addressed. Woolpert's experienced Change Agents will identify situations that require the team to address change proactively, such as where new work processes may affect job duties, or new responsibilities may require new skills.

The Woolpert OCM team will support the onsite Woolpert and County project resources as they flesh out the changes. As necessary, the team will develop questionnaires, surveys and / or assessments to poll an audience beyond those participating in the workshops to determine the extent of the effects of a change and to determine potential mitigation scenarios. Once quantified, the OCM team will develop an action plan to address the potential issues. The OCM team will manage the execution of the action plan, and the onsite Woolpert and County project team members will execute the action plan tasks.

WBS Task 5.2.2: Track 2 Core System Design and Configuration OCM Support

The Woolpert OCM team will participate in the Track 2 configuration workshops as follows:

- Round 1 | Onsite support for two (2) weeks; one (1) OCM team resource

Supporting the Track 2 configuration workshops will require less onsite time and less remote support by the OCM team than Track 1. During the onsite activities, the OCM team will identify the key areas where change readiness should be addressed. Woolpert's experienced Change Agents will identify situations that require the team to address change proactively, such as where new work processes may affect job duties, or new responsibilities may require new skills.

The Woolpert OCM team will support the onsite Woolpert and County project resources as they flesh out the changes. As necessary, the team will develop questionnaires, surveys and / or assessments to poll an audience beyond those participating in the workshops to determine the extent of the effects of a change and to determine potential mitigation scenarios. Once quantified, the OCM team will develop an action plan to address the potential issues. The OCM team will manage the execution of the action plan, and the onsite Woolpert and County project team members will execute the action plan tasks.

WBS Task 5.2.3: Track 3 Core System Design and Configuration OCM Support

By track 3, the expectation is that the County and Woolpert implementation team will have the tools and skills to provide their own OCM support to the implementing division. Design Phase OCM Deliverables

- Woolpert OCM team to develop the following documents for configuration track 1:
  - Change Network Charter: A Microsoft Word document that outlines the roles, responsibilities, process for work and reporting of Pinellas county resources chosen to support specific OCM activities. Document to align with the OCM strategy document
  - Change and Communication Plan: A Microsoft Excel or Word document detailing activities and milestones by phase of OCM activities including leadership alignment, stakeholder meetings, change readiness activities, communication activities, monitoring adoption activities
  - Stakeholder Plan: A Microsoft Word document that identifies all project Stakeholders, the effects the project may have on them, and their expected participation in the project
  - Knowledge Transfer Plan: A document that details who, how and what knowledge is transferred. Document to identify knowledge transfer accountabilities and sign-off criteria
  - OCM Dashboard: A dashboard that provides a summary view of the health of the OCM program using a red/yellow/green system. Providing visibility to areas that are working as desired (green) require attention (yellow) or are not working as desired (red).
- Woolpert will support County-led development of these documents for configuration track 2.
- Woolpert OCM team to participate in the configuration workshops as identified in the previous sections.

Assumptions

- No Woolpert support is scoped for the development of the OCM documents for configuration track 3
- County project team is staffed with at least an OCM Manager and a Communications Lead
- County personnel will ensure that the necessary questionnaires, surveys and assessment tools are completed by County staff.

County Responsibilities

- County to develop the OCM documents for configuration track 2 with the support of the Woolpert OCM team
- County to develop the OPCM documents for configuration track 3 without the support of the Woolpert OCM team
- County to participate in workshops
- County personnel will ensure that the necessary questionnaires, surveys and assessment tools are completed by County staff

WBS Task 5.3: Develop: OCM for Advanced Configuration and Functionality

No Woolpert OCM team support is scoped to support the Development phase.

Phase 6 – Owner-Directed Funds (ODF)

Tracked in this phase will be a contingency fund to be used for tasks as directed by the County. The funds in this phase will be encumbered by the Board of County Commissioners (BCC) at the onset of the project, but will not be consumed unless they are allocated to a newly scoped set of tasks. As the collective Woolpert-County project team identifies un-scoped tasks which require Woolpert participation, the County will request of Woolpert either a scope of work with a firm-fixed fee for a set of definable services or a scope of work with a rate table for ad-hoc or loosely-defined services. The scope of services will require formal approval by the County project leadership in order to begin the work, but the funding, should it be equal to or less than the amount of the ODF phase, will not require commission approval. As funds are allocated from this phase to newly scoped services, the amount available for subsequent un-scoped tasks will be reduced. Similarly, if the Woolpert-County team determines that any tasks included in the original fixed-fee scope are not required, Woolpert will remove them from the fixed-fee scope and allocate their funds to this ODF phase, effectively replenishing the reserve and making more funds available for other un-scoped tasks.

EXHIBIT B – PRICE PROPOSAL

Price Proposal

Fixed Scope / Fixed-Fee Services

Woolpert has developed a detailed scope of services document in Microsoft Word and a companion schedule of activities using Microsoft Project. The Microsoft Project schedule is a hierarchical breakdown of the project Phases into major task groupings and specific work activities. Microsoft Project allows us to assign hourly bill-rates to resources and resources to work activities for a set number of hours. The number of hours assigned to an activity for each resource multiplied by their bill-rate yields a cost for that activity. Microsoft Project aggregates activity costs throughout the project work breakdown structure (WBS) and presents a cost for each major task grouping and project phase. The following table presents those costs by each project phase and major task grouping.

The rates used in this fee schedule align with the rates in the General Services Administration (GSA) Federal Supply Service Contract Number GS-35F-0425P. Included in this firm fixed-fee schedule are all travel-related expenses for non-local resources to be onsite for the appropriate activities.

Project Summary	$5,047,551.94
PHASE 1: PROJECT MANAGEMENT	**$1,345,782.72**
WBS TASK 1.1: Project Charter and Kick-Off Meeting	**$61,161.08**
WBS TASK 1.2: Ongoing Project Management	**$1,284,621.64**
PHASE 2: IMPLEMENTATION PLANNING	**$652,775.82**
WBS TASK 2.1: ISO 55000 Framework and Content	**$267,304.67**
WBS TASK 2.2: Departmental Readiness Assessment	**$125,683.22**
WBS TASK 2.3: Existing Systems Evaluations	**$29,702.14**
WBS TASK 2.4: Global Configuration Standards	**$162,579.52**
WBS TASK 2.5: Install and Test Cityworks Software	**$23,817.72**
WBS TAKS 2.6: Cityworks Software Demonstrations	**$13,124.80**
WBS TASK 2.7: Phase 2 Quality Control	**$30,563.75**
PHASE 3: SYSTEM DESIGN AND CONFIGURATION	**$1,514,920.14**
WBS TASK 3.1: Track 1 – Utilities and Solid Waste	**$496,376.37**
WBS TASK 3.1.1: Prepare Configuration Document	$14,126.16
WBS TASK 3.1.2: Conduct Configuration Training for Core Team	$21,876.80
WBS TASK 3.1.3: Core Cityworks AMS Configuration	$344,811.07
WBS TASK 3.1.4: Cityworks Storeroom Configuration	$61,414.70
WBS TASK 3.1.5: Review and Approval of Configuration and Documentation	$10,453.72
WBS TASK 3.1.6: Provide Cityworks AMS Software Demonstrations	$23,811.04
WBS TASK 3.1.7: Track 1 Quality Control	$19,882.88
WBS TASK 3.2: Track 2 – PCR and REM	**$504,192.89**
WBS TASK 3.2.1: Prepare Configuration Document	$14,479.16
WBS TASK 3.2.2: Conduct Configuration Training for Core Team	$22,343.52
WBS TASK 3.2.3: Core Cityworks AMS Configuration	$348,177.77
WBS TASK 3.2.4: Cityworks Storeroom Configuration	$64,878.08
WBS TASK 3.2.5: Review and Approval of Configuration and Documentation	$10,453.72
WBS TASK 3.2.6: Provide Cityworks AMS Software Demonstrations	$23,811.04
WBS TASK 3.2.7: Track 2 Quality Control	$20,049.60

WBS TASK 3.3: Track 3 – Public Works	**$514,350.89**
WBS TASK 3.3.1: Prepare Configuration Document	$14,479.16
WBS TASK 3.3.2: Conduct Configuration Training for Core Team	$22,343.52
WBS TASK 3.3.3: Core Cityworks AMS Configuration	$355,700.79
WBS TASK 3.3.4: Cityworks Storeroom Configuration...	$66,340.64
WBS TASK 3.3.5: Review and Approval of Configuration and Documentation	$10,715.12
WBS TASK 3.3.6: Provide Cityworks AMS Software Demonstrations	$24,326.86
WBS TASK 3.3.7: Track 3 Quality Control..	$20,444.80
PHASE 4: ADVANCED CONFIGURATION AND FUNCTIONALITY	**$241,445.57**
WBS TASK 4.1: Conduct Legacy Data Evaluation	**$63,974.61**
WBS TASK 4.2: Custom Reports and Metrics..	**$0.00**
WBS TASK 4.3: Conduct System Integration Evaluation	**$147,735.81**
WBS TASK 4.4: Phase 4 Quality Control	**$29,735.16**
PHASE 5: ORGANIZATIONAL CHANGE MANAGEMENT..	**$542,627.68**
WBS TASK 5.1: Foundation: OCM for Project Planning	**$300,245.52**
WBS TASK 5.2: Design: OCM for System Design	**$242,382.16**
PHASE 6: OWNER-DIRECTED FUNDS	**$750,000.00**
WBS TASK 6.1: Development: OCM	**$750,000.00**

Ad-Hoc / Time and Material Services

Woolpert's rate schedule for non-scoped implementation services will be scoped and priced following the General Services Administration (GSA) Federal Supply Service Contract Number GS-35F-0425P; rates are listed in the following table. County may request that ad-hoc services be scoped and priced as fixed-fee work including all labor efforts and travel expenses, or, that ad-hoc services be estimated and billed on an actual time and material basis. If services will be billed as time and material, Woolpert will invoice hourly effort per the GSA fee schedule and travel expenses at actual value.

AUTHORIZED GSA SCHEDULE CONTRACT PRICING					
GS-35F-0425P					
	4/7/16-4/6/17	4/7/17-4/6/18	4/7/18-4/6/19		
Labor Category	GSA Price	GSA Price	GSA Price	County Price	Qty
Program Manager	$244.51	$250.62	$256.89		
Project Manager	$206.16	$211.31	$216.59		
Group Manager	$218.18	$223.63	$229.22		
Sr. Tech Specialist	$218.18	$223.63	$229.22		
System Analyst	$201.63	$206.67	$211.84		
Sr. DB Dev/Programmer	$218.18	$223.63	$229.22		
DB Dev/Programmer	$195.60	$200.49	$205.50		
Jr. DB Dev/Programmer	$182.07	$186.62	$191.29		
Technical Specialist	$124.90	$128.02	$131.22		
Sr. Technical Writer	$135.41	$138.80	$142.27		
Technical Writer	$127.15	$130.33	$133.59		
Clerical	$69.22	$70.95	$72.72		

EXHIBIT C – PROJECT SCHEDULE

PINELLAS COUNTY EAM IMPLEMENTATION PROJECT
Resources Summary

	Resource Name	Cost	Type	Group	Initials	Std. Rate	Work
	Type: Work	**$4,085,866.94**	**Work**				**19,745.8 hrs**
1	Program Manager (AM Program)	$353,527.33	Work	Woolpert	Schwabe	$244.51/hr	1,427.4 hrs
2	Project Manager	$876,041.45	Work	Woolpert	Teasley	$206.16/hr	4,193.9 hrs
3	Sr. Tech Specialist #1 (Analyst-5/6)	$797,050.28	Work	Woolpert	Lead CWKS Analyst 1	$218.18/hr	3,585.5 hrs
4	System Analyst #1 (T-3/4)	$569,942.28	Work	Woolpert	Lead Analyst 1	$201.63/hr	2,746 hrs
5	Sr. Tech Specialist #2 (Analyst-5/6)	$88,644.99	Work	Woolpert	Lead CWKS Analyst 2	$218.18/hr	400 hrs
6	System Ananlyst #2 (T-3/4)	$0.00	Work	Woolpert	CWKS Analyst 2	$201.63/hr	0 hrs
7	Sr. Tech Specialist #3 (Analyst-5/6)	$88,644.99	Work	Woolpert	Lead CWKS Analyst 3	$218.18/hr	400 hrs
8	System Ananlyst #3 (T-3/4)	$0.00	Work	Woolpert	CWKS Analyst 3	$201.63/hr	0 hrs
9	Sr. DB Dev/Programmer #1 (T-5/6)	$152,073.26	Work	Woolpert	Lead Developer	$218.18/hr	691 hrs
10	DB Dev/Programmer (T-3/4)	$0.00	Work	Woolpert	Developer 1	$195.60/hr	0 hrs
11	Clerical	$32,050.14	Work	Woolpert	Lickert	$69.22/hr	456 hrs
12	Program Manager (OCM-Resource 1)	$163,723.28	Work	Dragonfly	Dragonfly 1	$244.51/hr	664 hrs
13	Senior Technical Writer (Deputy Project Manager)	$347,358.04	Work	Woolpert	Munro	$135.41/hr	2,528 hrs
14	Sr. Tech Specialist (Engineer / SME)	$37,090.60	Work	Woolpert	Sr. Engineer	$218.18/hr	170 hrs
15	System Analyst #2 (Engineer / SME)	$32,260.80	Work	Woolpert	Engineer	$201.63/hr	160 hrs
16	Program Manager (OCM Resource 2)	$313,681.12	Work	Dragonfly	Dragonfly 2	$244.51/hr	1,276 hrs
17	Program Manager (OCM Resource 3)	$43,033.76	Work	Woolpert	Kouns	$244.51/hr	176 hrs
18	Travel - Program Manager (AM Program)	$21,713.68	Work		T	$244.51/hr	88 hrs
19	Travel - Project Manager	$67,090.88	Work		T-PM	$206.16/hr	320 hrs
20	Travel - Sr. Tech Specialist #1 (Analyst-5/6)	$76,677.20	Work		T-SSA1	$218.18/hr	344 hrs
21	Travel - System Analyst #1 (T-3/4)	$14,922.64	Work		T-SA1	$201.63/hr	72 hrs
22	Travel - Senior System Ananlyst #2 (T-3/4)	$1,745.44	Work		T-SSA2	$218.18/hr	8 hrs
23	Travel - System Ananlyst #2 (T-3/4)	$0.00	Work		T-SA2	$201.63/hr	0 hrs
24	Travel - Senior System Ananlyst #3 (T-3/4)	$0.00	Work		T	$218.18/hr	0 hrs
25	Travel - System Ananlyst #3 (T-3/4)	$0.00	Work		T	$201.63/hr	0 hrs
26	Travel - Sr. DB Dev/Programmer #1 (T-5/6)	$5,236.32	Work		T	$218.18/hr	24 hrs
27	Travel - Sr. Tech Specialist (Engineer / SME)	$1,745.44	Work		T	$218.18/hr	8 hrs
28	Travel - System Analyst #2 (Engineer / SME)	$1,613.04	Work		T	$201.63/hr	8 hrs
	Type: Material	**$211,685.00**	**Material**				
	_Airfare	$65,000.00	Material	Travel	Air	$500.00	130
	_Car Rental	$13,550.00	Material	Travel	RentCar	$50.00	271
	_Meals	$32,100.00	Material	Travel	Meal	$60.00	535
	_Hotel	$93,625.00	Material	Travel	Hotel	$175.00	535
	_Miles	$7,410.00	Material	Travel	Miles	$0.57	13,000

TOTAL $4,297,551.94

Data Source - MPP 05-17-2016 (R09)

AUTHORIZED GSA SCHEDULE CONTRACT PRICING
GS-35F-0425P

Labor Category	4/7/16-4/6/17 GSA Price	4/7/17-4/6/18 GSA Price	4/7/18-4/6/19 GSA Price
Program Manager	$244.51	$250.62	$256.89
Project Manager	$206.16	$211.31	$216.59
Group Manager	$218.18	$223.63	$229.22
Sr. Tech Specialist	$218.18	$223.63	$229.22
System Analyst	$201.63	$206.67	$211.84
Sr. DB Dev/Programmer	$218.18	$223.63	$229.22
DB Dev/Programmer	$195.60	$200.49	$205.50
Jr. DB Dev/Programmer	$182.07	$186.62	$191.29
Technical Specialist	$124.90	$128.02	$131.22
Sr. Technical Writer	$135.41	$138.80	$142.27
Technical Writer	$127.15	$130.33	$133.59
Clerical	$69.22	$70.95	$72.72

***Escalation Rate = 2.5% per year

ID	WBS	Task Name	Cost	Baseline Cost	Duration	Work	Start	Finish
0	0	**Pinellas County EAM Implementation_2016-05-17_R09**	**$5,047,551.94**	**$4,693,124.77**	**662 days**	**19,745.8 hrs**	**Thu 2/18/16**	**Fri 8/31/18**
1	1	**PHASE 1: Project Management**	**$1,345,782.72**	**$1,293,802.72**	**640 days**	**7,358 hrs**	**Thu 2/18/16**	**Wed 8/1/18**
2	1.1	**Project Charter and Kick-Off Meeting**	**$61,161.08**	**$45,952.76**	**23.5 days**	**238 hrs**	**Mon 5/2/16**	**Thu 6/2/16**
3	1.1.1	**Project Charter Development**	**$7,958.66**	**$7,958.66**	**17 days**	**36 hrs**	**Mon 5/2/16**	**Tue 5/24/16**
4	1.1.1.1	Woolpert to Create DRAFT Project Charter	$5,254.64	$5,254.64	1 day	24 hrs	Mon 5/2/16	Mon 5/2/16
5	1.1.1.2	Woolpert to Submit DRAFT Project Charter to County	$0.00	$0.00	0 days	0 hrs	Mon 5/2/16	Mon 5/2/16
6	1.1.1.3	County PM to Review DRAFT Project Charter	$0.00	$0.00	5 days	0 hrs	Tue 5/3/16	Mon 5/9/16
7	1.1.1.4	Woolpert and County to Jointly Review Project Charter	$901.34	$901.34	1 day	4 hrs	Tue 5/10/16	Tue 5/10/16
8	1.1.1.5	Woolpert to Create FINAL Project Charter	$1,802.68	$1,802.68	5 days	8 hrs	Wed 5/11/16	Tue 5/17/16
9	1.1.1.6	Woolpert to Submit FINAL Project Charter	$0.00	$0.00	0 days	0 hrs	Tue 5/17/16	Tue 5/17/16
10	1.1.1.7	County to Accept FINAL Project Charter	$0.00	$0.00	0 days	0 hrs	Tue 5/24/16	Tue 5/24/16
11	1.1.2	**Project Kick-Off Meeting**	**$53,202.42**	**$37,994.10**	**13.38 days**	**202 hrs**	**Mon 5/16/16**	**Thu 6/2/16**
12	1.1.2.1	**Kick-Off Meeting Preparation**	**$3,116.34**	**$3,116.34**	**9 days**	**14 hrs**	**Mon 5/16/16**	**Fri 5/27/16**
13	1.1.2.1.1	Woolpert to Develop DRAFT Agenda and Presentation for Kick-Off Meeting	$1,802.68	$1,802.68	2 days	8 hrs	Mon 5/16/16	Wed 5/18/16
14	1.1.2.1.2	Woolpert to Submit DRAFT Agenda and Presentation to County	$0.00	$0.00	0 days	0 hrs	Wed 5/18/16	Wed 5/18/16
15	1.1.2.1.3	County to Review Agenda and Presentation and Provide Feedback	$0.00	$0.00	3 days	0 hrs	Wed 5/18/16	Mon 5/23/16
16	1.1.2.1.4	Woolpert to Create FINAL Agenda and Presentation	$412.32	$412.32	2 days	2 hrs	Mon 5/23/16	Wed 5/25/16
17	1.1.2.1.5	Woolpert to Prepare for Kick-Off Meeting	$901.34	$901.34	1 day	4 hrs	Wed 5/25/16	Thu 5/26/16
18	1.1.2.1.6	County to Prepare for Kick-Off Meeting	$0.00	$0.00	1 day	0 hrs	Thu 5/26/16	Fri 5/27/16
19	1.1.2.2	**Kick-Off Meeting**	**$50,086.08**	**$34,877.76**	**4.5 days**	**188 hrs**	**Fri 5/27/16**	**Thu 6/2/16**
20	1.1.2.2.1	Woolpert to Prep for Project Kick-Off	$8,179.52	$8,179.52	1 day	40 hrs	Fri 5/27/16	Mon 5/30/16
21	1.1.2.2.2	**Woolpert to Facilitate Kick-Off Meeting (ONSITE TASK)**	**$4,089.76**	**$4,089.76**	**0.5 days**	**20 hrs**	**Mon 5/30/16**	**Mon 5/30/16**
22	1.1.2.2.2.1	Project Charter Review (ONSITE TASK)	$1,022.44	$1,022.44	1 hr	5 hrs	Mon 5/30/16	Mon 5/30/16
23	1.1.2.2.2.2	Project Scope Review (ONSITE TASK)	$1,022.44	$1,022.44	1 hr	5 hrs	Mon 5/30/16	Mon 5/30/16
24	1.1.2.2.2.3	Project Deliverables Review (ONSITE TASK)	$1,022.44	$1,022.44	1 hr	5 hrs	Mon 5/30/16	Mon 5/30/16
25	1.1.2.2.2.4	Project Participant Roles and Responsibilities (ONSITE TASK)	$1,022.44	$1,022.44	1 hr	5 hrs	Mon 5/30/16	Mon 5/30/16
26	1.1.2.2.3	**Travel for Kick-Off Meeting**	**$11,304.24**	**$11,304.24**	**2 days**	**32 hrs**	**Fri 5/27/16**	**Mon 5/30/16**
27	1.1.2.2.3.1	Travel for Kick-Off Meeting	$11,304.24	$11,304.24	2 days	32 hrs	Fri 5/27/16	Mon 5/30/16
28	1.1.2.2.4	**Woolpert to Department Familiarization Meetings (ONSITE TASK)**	**$26,512.56**	**$0.00**	**3 days**	**96 hrs**	**Mon 5/30/16**	**Thu 6/2/16**
29	1.1.2.2.4.1	Parks and Conservation Resources Group 1	$1,879.38	$0.00	0.25 days	8 hrs	Mon 5/30/16	Mon 5/30/16
30	1.1.2.2.4.2	Parks and Conservation Resources Group 2	$1,879.38	$0.00	0.25 days	8 hrs	Mon 5/30/16	Mon 5/30/16
31	1.1.2.2.4.3	Public Works Group 1	$1,879.38	$0.00	0.25 days	8 hrs	Tue 5/31/16	Tue 5/31/16
32	1.1.2.2.4.4	Public Works Group 2	$1,879.38	$0.00	0.25 days	8 hrs	Tue 5/31/16	Tue 5/31/16
33	1.1.2.2.4.5	Public Works Group 3	$1,879.38	$0.00	0.25 days	8 hrs	Tue 5/31/16	Tue 5/31/16
34	1.1.2.2.4.6	Real Estate Management Group 1	$1,879.38	$0.00	0.25 days	8 hrs	Tue 5/31/16	Tue 5/31/16
35	1.1.2.2.4.7	Real Estate Management Group 2	$1,879.38	$0.00	0.25 days	8 hrs	Tue 5/31/16	Tue 5/31/16
36	1.1.2.2.4.8	Solid Waste	$1,879.38	$0.00	0.25 days	8 hrs	Wed 6/1/16	Wed 6/1/16
37	1.1.2.2.4.9	Solid Waste	$1,879.38	$0.00	0.25 days	8 hrs	Wed 6/1/16	Wed 6/1/16
38	1.1.2.2.4.10	Utilities Group 1	$1,879.38	$0.00	0.25 days	8 hrs	Wed 6/1/16	Wed 6/1/16
39	1.1.2.2.4.11	Utilities Group 2	$1,879.38	$0.00	0.25 days	8 hrs	Thu 6/2/16	Thu 6/2/16
40	1.1.2.2.4.12	Utilities Group 3	$1,879.38	$0.00	0.25 days	8 hrs	Thu 6/2/16	Thu 6/2/16
41	1.1.2.2.4.13	**Travel for Department Familiarization Meetings**	**$3,960.00**	**$0.00**	**3 days**	**0 hrs**	**Mon 5/30/16**	**Thu 6/2/16**
42	1.1.2.2.4.13.1	Travel for Department Familiarization Meetings	$3,960.00	$0.00	3 days	0 hrs	Mon 5/30/16	Thu 6/2/16
43	1.2	**Ongoing Project Management**	**$1,284,621.64**	**$1,247,849.96**	**640 days**	**7,120 hrs**	**Thu 2/18/16**	**Wed 8/1/18**
44	1.2.1	**Project Administration Tasks**	**$2,203.04**	**$2,203.04**	**1 day**	**16 hrs**	**Fri 5/6/16**	**Fri 5/6/16**
45	1.2.1.1	Woolpert to Set Up Internal Systems	$2,203.04	$2,203.04	1 day	16 hrs	Fri 5/6/16	Fri 5/6/16
46	1.2.2	**Periodic Project Management Tasks (Estimate 100 weeks)**	**$1,245,639.72**	**$1,245,646.92**	**530 days**	**6,944 hrs**	**Fri 5/6/16**	**Thu 5/17/18**
47	1.2.2.1	Monthly Project Schedule Coordination	$693,443.21	$690,906.57	530 days	4,000 hrs	Fri 5/6/16	Thu 5/17/18
48	1.2.2.2	Bi-Weekly Project Status Meetings with County	$265,917.03	$267,399.14	530 days	1,400 hrs	Fri 5/6/16	Thu 5/17/18
49	1.2.2.3	Weekly Woolpert Internal Resource Coordination Meetings	$266,264.20	$267,399.14	481 days	1,400 hrs	Tue 7/12/16	Tue 5/15/18
50	1.2.2.4	Monthly Invoicing	$20,015.28	$19,942.08	530 days	144 hrs	Fri 5/6/16	Thu 5/17/18
51	1.2.3	**Man-Power Assessments**	**$36,778.88**	**$0.00**	**640 days**	**160 hrs**	**Thu 2/18/16**	**Wed 8/1/18**
52	1.2.3.1	Initial Man-Power Assessment	$3,605.36	$0.00	1 day	16 hrs	Thu 2/18/16	Thu 2/18/16

ID	WBS	Task Name	Cost	Baseline Cost	Duration	Work	Start	Finish
53	1.2.3.2	**Quarterly Man-Power Assessment**	**$33,173.52**	**$0.00**	**523 days**	**144 hrs**	**Mon 8/1/16**	**Wed 8/1/18**
54	1.2.3.2.1	Quarterly Man-Power Assessment 1	$3,605.36	$0.00	1 day	16 hrs	Mon 8/1/16	Mon 8/1/16
55	1.2.3.2.2	Quarterly Man-Power Assessment 2	$3,605.36	$0.00	1 day	16 hrs	Tue 11/1/16	Tue 11/1/16
56	1.2.3.2.3	Quarterly Man-Power Assessment 3	$3,605.36	$0.00	1 day	16 hrs	Wed 2/1/17	Wed 2/1/17
57	1.2.3.2.4	Quarterly Man-Power Assessment 4	$3,695.44	$0.00	1 day	16 hrs	Mon 5/1/17	Mon 5/1/17
58	1.2.3.2.5	Quarterly Man-Power Assessment 5	$3,695.44	$0.00	1 day	16 hrs	Tue 8/1/17	Tue 8/1/17
59	1.2.3.2.6	Quarterly Man-Power Assessment 6	$3,695.44	$0.00	1 day	16 hrs	Wed 11/1/17	Wed 11/1/17
60	1.2.3.2.7	Quarterly Man-Power Assessment 7	$3,695.44	$0.00	1 day	16 hrs	Thu 2/1/18	Thu 2/1/18
61	1.2.3.2.8	Quarterly Man-Power Assessment 8	$3,787.84	$0.00	1 day	16 hrs	Tue 5/1/18	Tue 5/1/18
62	1.2.3.2.9	Quarterly Man-Power Assessment 9	$3,787.84	$0.00	1 day	16 hrs	Wed 8/1/18	Wed 8/1/18
63	2	**PHASE 2: Implementation Planning**	**$652,775.82**	**$607,957.04**	**190 days**	**2,778.3 hrs**	**Mon 5/16/16**	**Fri 2/3/17**
64	2.1	**ISO 55000 Framework and Content**	**$267,304.67**	**$319,433.31**	**79.5 days**	**1,137.3 hrs**	**Mon 5/16/16**	**Fri 9/2/16**
65	2.1.1	**ISO 55000 Framework Development**	**$45,411.73**	**$44,850.05**	**34 days**	**216.8 hrs**	**Mon 5/16/16**	**Fri 7/1/16**
66	2.1.1.1	**ISO 55000 Framework Development Workshops Agenda and Presentation**	**$12,629.63**	**$12,200.11**	**13 days**	**76.8 hrs**	**Mon 5/16/16**	**Thu 6/2/16**
67	2.1.1.1.1	Woolpert to Develop DRAFT Agenda and Presentation	$9,923.10	$9,592.70	5 days	60 hrs	Mon 5/16/16	Mon 5/23/16
68	2.1.1.1.2	Woolpert to Submit DRAFT Agenda and Presentation to County	$0.00	$0.00	0 days	0 hrs	Mon 5/23/16	Mon 5/23/16
69	2.1.1.1.3	County to Review DRAFT Agenda and Presentation (COUNTY TASK)	$0.00	$0.00	5 days	0 hrs	Mon 5/23/16	Mon 5/30/16
70	2.1.1.1.4	County to Provide Feedback on DRAFT Agenda and Presentation (COUNTY TAS	$0.00	$0.00	0 days	0 hrs	Mon 5/30/16	Mon 5/30/16
71	2.1.1.1.5	Woolpert to Incorporate County Feedback	$2,706.53	$2,607.41	3 days	16.8 hrs	Mon 5/30/16	Thu 6/2/16
72	2.1.1.1.6	Woolpert to Submit FINAL Agenda and Presentation	$0.00	$0.00	0 days	0 hrs	Thu 6/2/16	Thu 6/2/16
73	2.1.1.2	**ISO 55000 Framework Development Workshops**	**$16,194.10**	**$16,194.10**	**10 days**	**60 hrs**	**Thu 5/26/16**	**Thu 6/9/16**
74	2.1.1.2.1	Woolpert to Prep for Workshops	$901.34	$901.34	1 day	4 hrs	Thu 5/26/16	Fri 5/27/16
75	2.1.1.2.2	County to Prep Facility for Workshops (COUNTY TASK)	$0.00	$0.00	1 day	0 hrs	Thu 5/26/16	Fri 5/27/16
76	2.1.1.2.3	**Woolpert to Conduct Workshops (ONSITE TASK)**	**$15,292.76**	**$15,292.76**	**3 days**	**56 hrs**	**Mon 6/6/16**	**Thu 6/9/16**
77	2.1.1.2.3.1	Strategy and Planning Subjects (5) (ONSITE TASK)	$1,126.68	$1,126.68	2.5 hrs	5 hrs	Mon 6/6/16	Mon 6/6/16
78	2.1.1.2.3.2	Asset Management Decision-Making Subjects (5) (ONSITE TASK)	$1,126.68	$1,126.68	2.5 hrs	5 hrs	Mon 6/6/16	Tue 6/7/16
79	2.1.1.2.3.3	Life-Cycle Activities Subjects (11) (ONSITE TASK)	$2,478.69	$2,478.69	5.5 hrs	11 hrs	Tue 6/7/16	Tue 6/7/16
80	2.1.1.2.3.4	Organization and People Subjects (5) (ONSITE TASK)	$1,126.68	$1,126.68	2.5 hrs	5 hrs	Tue 6/7/16	Wed 6/8/16
81	2.1.1.2.3.5	Organization and People Subjects (5) (ONSITE TASK)	$1,126.68	$1,126.68	2.5 hrs	5 hrs	Wed 6/8/16	Wed 6/8/16
82	2.1.1.2.3.6	Risk and Review Subjects (9) (ONSITE TASK)	$2,028.02	$2,028.02	4.5 hrs	9 hrs	Wed 6/8/16	Wed 6/8/16
83	2.1.1.2.3.7	**Travel for ISO 55000 Framework Development Workshops**	**$6,279.36**	**$6,279.36**	**3 days**	**16 hrs**	**Mon 6/6/16**	**Thu 6/9/16**
84	2.1.1.2.3.7.1	Travel for ISO 55000 Framework Development Workshops	$6,279.36	$6,279.36	3 days	16 hrs	Mon 6/6/16	Thu 6/9/16
85	2.1.1.3	**ISO 55000 Framework Development**	**$16,588.00**	**$16,455.84**	**11 days**	**80 hrs**	**Thu 6/9/16**	**Fri 6/24/16**
86	2.1.1.3.1	Woolpert to Document Workshops in a DRAFT Technical Memorandum	$9,377.28	$9,245.12	2 days	48 hrs	Thu 6/9/16	Mon 6/13/16
87	2.1.1.3.2	Woolpert to Submit DRAFT Tech Memo to County	$0.00	$0.00	0 days	0 hrs	Mon 6/13/16	Mon 6/13/16
88	2.1.1.3.3	County to Review DRAFT Tech Memo	$0.00	$0.00	5 days	0 hrs	Mon 6/13/16	Mon 6/20/16
89	2.1.1.3.4	Woolpert and County to Jointly Review DRAFT Tech Memo	$1,802.68	$1,802.68	1 day	8 hrs	Mon 6/20/16	Tue 6/21/16
90	2.1.1.3.5	Woolpert to Update Tech Memo	$5,408.04	$5,408.04	3 days	24 hrs	Tue 6/21/16	Fri 6/24/16
91	2.1.1.3.6	Woolpert to Submit FINAL Tech Memo	$0.00	$0.00	0 days	0 hrs	Fri 6/24/16	Fri 6/24/16
92	2.1.1.4	County to Accept ISO 55000 Framework Development Task (COUNTY TASK)	$0.00	$0.00	0 days	0 hrs	Fri 7/1/16	Fri 7/1/16
93	2.1.2	**ISO 55000 Content Development**	**$221,892.94**	**$274,583.26**	**45.5 days**	**920.5 hrs**	**Fri 7/1/16**	**Fri 9/2/16**
94	2.1.2.1	**Strategy and Planning: Asset Management Policy**	**$13,811.62**	**$13,811.62**	**16.25 days**	**52 hrs**	**Fri 7/1/16**	**Mon 7/25/16**
95	2.1.2.1.1	Woolpert to Perform Peer Organization Research	$3,912.16	$3,912.16	2 days	16 hrs	Fri 7/1/16	Tue 7/5/16
96	2.1.2.1.2	Woolpert to Prep for Asset Management Policy Workshop	$901.34	$901.34	0.25 days	4 hrs	Tue 7/5/16	Tue 7/5/16
97	2.1.2.1.3	**Asset Management Policy Workshop**	**$1,802.68**	**$1,802.68**	**0.5 days**	**8 hrs**	**Mon 7/11/16**	**Mon 7/11/16**
98	2.1.2.1.3.1	Woolpert to Facilitate Asset Management Policy Workshop	$1,802.68	$1,802.68	0.5 days	8 hrs	Mon 7/11/16	Mon 7/11/16
99	2.1.2.1.4	**Travel for Asset Management Policy Workshop**	**$5,239.36**	**$5,239.36**	**1 day**	**16 hrs**	**Mon 7/11/16**	**Tue 7/12/16**
100	2.1.2.1.4.1	Travel for Asset Management Policy Workshop	$5,239.36	$5,239.36	1 day	16 hrs	Mon 7/11/16	Tue 7/12/16
101	2.1.2.1.5	Woolpert to Document Asset Management Policy	$1,956.08	$1,956.08	1 day	8 hrs	Fri 7/15/16	Mon 7/18/16
102	2.1.2.1.6	Woolpert to Submit Asset Management Policy Document to County	$0.00	$0.00	0 days	0 hrs	Mon 7/18/16	Mon 7/18/16
103	2.1.2.1.7	County to Accept Asset Management Policy Document	$0.00	$0.00	0 days	0 hrs	Mon 7/25/16	Mon 7/25/16
104	2.1.2.2	**Strategy and Planning: Asset Management Strategy and Objectives**	**$53,793.62**	**$61,570.06**	**22 days**	**222 hrs**	**Fri 7/1/16**	**Tue 8/2/16**
105	2.1.2.2.1	Woolpert to Prep for Asset Management Strategy and Objectives Workshop	$7,210.72	$7,210.72	2 days	32 hrs	Fri 7/1/16	Tue 7/5/16

ID	WBS	Task Name	Cost	Baseline Cost	Duration	Work	Start	Finish
106	**2.1.2.2.2**	**Woolpert to Facilitate Asset Management Strategy and Objectives Workshop**	$16,714.10	**$18,516.78**	**3.25 days**	**60 hrs**	**Mon 7/11/16**	**Thu 7/14/16**
107	2.1.2.2.2.1	Overview Workshop Asset Management Strategy and Objectives (ONSITE T/	$901.34	$901.34	0.25 days	4 hrs	Mon 7/11/16	Mon 7/11/16
108	2.1.2.2.2.2	PCR Workshop Asset Management Strategy and Objectives (ONSITE TASK)	$1,802.68	$1,802.68	0.5 days	8 hrs	Tue 7/12/16	Tue 7/12/16
109	2.1.2.2.2.3	Public Works Workshop Asset Management Strategy and Objectives (ONSIT	$1,802.68	$1,802.68	0.5 days	8 hrs	Tue 7/12/16	Tue 7/12/16
110	2.1.2.2.2.4	REM Workshop Asset Management Strategy and Objectives (ONSITE TASK)	$1,802.68	$1,802.68	0.5 days	8 hrs	Wed 7/13/16	Wed 7/13/16
111	2.1.2.2.2.5	Solid Waste Workshop Asset Management Strategy and Objectives (ONSITE	$1,802.68	$1,802.68	0.5 days	8 hrs	Wed 7/13/16	Wed 7/13/16
112	2.1.2.2.2.6	Utilities Workshop Asset Management Strategy and Objectives (ONSITE TAS	$1,802.68	$1,802.68	0.5 days	8 hrs	Thu 7/14/16	Thu 7/14/16
113	**2.1.2.2.2.7**	**Travel for Asset Management Strategy and Objectives Workshop**	**$6,799.36**	**$6,799.36**	**3.25 days**	**16 hrs**	**Mon 7/11/16**	**Thu 7/14/16**
114	2.1.2.2.2.7.1	Travel for Asset Management Strategy and Objectives Workshop	$6,799.36	$6,799.36	3.25 days	16 hrs	Mon 7/11/16	Thu 7/14/16
115	**2.1.2.2.3**	**Woolpert to Develop DRAFT Asset Management Strategy and Planning Docu**	$22,917.00	**$27,500.40**	**3.5 days**	**100 hrs**	**Mon 7/18/16**	**Thu 7/21/16**
116	2.1.2.2.3.1	PCR Document Asset Management Strategy and Objectives	$4,583.40	$4,583.40	1.5 days	20 hrs	Mon 7/18/16	Tue 7/19/16
117	2.1.2.2.3.2	Public Works Document Asset Management Strategy and Objectives	$4,583.40	$4,583.40	1.5 days	20 hrs	Tue 7/19/16	Wed 7/20/16
118	2.1.2.2.3.3	REM Document Asset Management Strategy and Objectives	$4,583.40	$4,583.40	1.5 days	20 hrs	Tue 7/19/16	Wed 7/20/16
119	2.1.2.2.3.4	Solid Waste Document Asset Management Strategy and Objectives	$4,583.40	$4,583.40	1.5 days	20 hrs	Wed 7/20/16	Thu 7/21/16
120	2.1.2.2.3.5	Utilities Document Asset Management Strategy and Objectives	$4,583.40	$4,583.40	1.5 days	20 hrs	Wed 7/20/16	Thu 7/21/16
121	**2.1.2.2.4**	**Woolpert to Facilitate Joint Review of Asset Management Strategy and Plann**	**$6,951.80**	**$8,342.16**	**2.5 days**	**30 hrs**	**Fri 7/22/16**	**Tue 7/26/16**
122	2.1.2.2.4.1	Joint Review of PCR Document Asset Management Strategy and Objectives	$1,390.36	$1,390.36	0.5 days	6 hrs	Fri 7/22/16	Fri 7/22/16
123	2.1.2.2.4.2	Joint Review of Public Works Document Asset Management Strategy and Ol	$1,390.36	$1,390.36	0.5 days	6 hrs	Fri 7/22/16	Fri 7/22/16
124	2.1.2.2.4.3	Joint Review of REM Document Asset Management Strategy and Objectives	$1,390.36	$1,390.36	0.5 days	6 hrs	Fri 7/22/16	Fri 7/22/16
125	2.1.2.2.4.4	Joint Review of Solid Waste Document Asset Management Strategy and Ob	$1,390.36	$1,390.36	0.5 days	6 hrs	Mon 7/25/16	Mon 7/25/16
126	2.1.2.2.4.5	Joint Review of Utilities Document Asset Management Strategy and Objecti	$1,390.36	$1,390.36	0.5 days	6 hrs	Tue 7/26/16	Tue 7/26/16
127	2.1.2.2.5	Woolpert to Submit FINAL Asset Management Strategy and Objectives Docum	$0.00	$0.00	0 days	0 hrs	Tue 7/26/16	Tue 7/26/16
128	2.1.2.2.6	County to Accept Asset Management Strategy and Planning Documents (COU!	$0.00	$0.00	0 days	0 hrs	Tue 8/2/16	Tue 8/2/16
129	**2.1.2.3**	**Strategy and Planning: Demand Analysis Strategy**	**$22,076.42**	**$66,229.26**	**33.5 days**	**82 hrs**	**Fri 7/1/16**	**Wed 8/17/16**
130	2.1.2.3.1	Woolpert to Prep for Asset Management Demand Analysis Strategy Workshop	$0.00	$0.00	1 day	0 hrs	Fri 7/1/16	Mon 7/4/16
131	**2.1.2.3.2**	**Woolpert to Facilitate Asset Management Demand Analysis Strategy Worksh**	**$10,816.08**	**$32,448.24**	**11 days**	**48 hrs**	**Fri 7/15/16**	**Mon 8/1/16**
132	2.1.2.3.2.1	DA Strategy Workshop 1 | Water Production and Distribution (ONSITE TASK	$1,352.01	$1,352.01	4 hrs	6 hrs	Fri 7/15/16	Fri 7/15/16
133	2.1.2.3.2.2	DA Strategy Workshop 2 | Wastewater Collection and Treatment (ONSITE T	$1,352.01	$1,352.01	4 hrs	6 hrs	Fri 7/15/16	Fri 7/15/16
134	2.1.2.3.2.3	DA Strategy Workshop 3 | PCR (ONSITE TASK)	$1,352.01	$1,352.01	4 hrs	6 hrs	Mon 7/18/16	Mon 7/18/16
135	2.1.2.3.2.4	DA Strategy Workshop 4 | Stormwater (ONSITE TASK)	$1,352.01	$1,352.01	4 hrs	6 hrs	Mon 7/18/16	Mon 7/18/16
136	2.1.2.3.2.5	DA Strategy Workshop 5 | Solid Waste and Recycling (ONSITE TASK)	$1,352.01	$1,352.01	4 hrs	6 hrs	Tue 7/19/16	Tue 7/19/16
137	2.1.2.3.2.6	DA Strategy Workshop 6 | Facilities (ONSITE TASK)	$1,352.01	$1,352.01	4 hrs	6 hrs	Tue 7/19/16	Tue 7/19/16
138	2.1.2.3.2.7	DA Strategy Workshop 7 | Fleet (ONSITE TASK)	$1,352.01	$1,352.01	4 hrs	6 hrs	Wed 7/20/16	Wed 7/20/16
139	2.1.2.3.2.8	DA Strategy Workshop 8 | Transportation (ONSITE TASK)	$1,352.01	$1,352.01	4 hrs	6 hrs	Wed 7/20/16	Wed 7/20/16
140	2.1.2.3.2.9	DELETED PCR | Trades Demand Analysis Strategy Workshop (ONSITE TASK)	$0.00	$1,352.01	0 hrs	0 hrs	Thu 7/21/16	Thu 7/21/16
141	2.1.2.3.2.10	DELETED REM | Building D&C, FO, MP, Real Property Demand Analysis Strat	$0.00	$1,352.01	0 hrs	0 hrs	Fri 7/29/16	Fri 7/29/16
142	2.1.2.3.2.11	DELETED REM | Detention Section Demand Analysis Strategy Workshop (O!	$0.00	$1,352.01	0 hrs	0 hrs	Fri 7/29/16	Fri 7/29/16
143	2.1.2.3.2.12	DELETED REM | Fleet Management Demand Analysis Strategy Workshop (O	$0.00	$1,352.01	0 hrs	0 hrs	Fri 7/29/16	Fri 7/29/16
144	2.1.2.3.2.13	DELETED REM | NW and SE Sections Demand Analysis Strategy Workshop ((	$0.00	$1,352.01	0 hrs	0 hrs	Fri 7/29/16	Fri 7/29/16
145	2.1.2.3.2.14	DELETED REM | STAR Center Facility Demand Analysis Strategy Workshop ((	$0.00	$1,352.01	0 hrs	0 hrs	Fri 7/29/16	Fri 7/29/16
146	2.1.2.3.2.15	DELETED Public Works | Customer Service Demand Analysis Strategy Works	$0.00	$1,352.01	0 hrs	0 hrs	Fri 7/29/16	Fri 7/29/16
147	2.1.2.3.2.16	DELETED Public Works | Construction Management Demand Analysis Strate	$0.00	$1,352.01	0 hrs	0 hrs	Fri 7/29/16	Fri 7/29/16
148	2.1.2.3.2.17	DELETED Public Works | Engineering Services Demand Analysis Strategy Wc	$0.00	$1,352.01	0 hrs	0 hrs	Mon 8/1/16	Mon 8/1/16
149	2.1.2.3.2.18	DELETED Public Works | Environmental Management Demand Analysis Stra	$0.00	$1,352.01	0 hrs	0 hrs	Mon 8/1/16	Mon 8/1/16
150	2.1.2.3.2.19	DELETED Public Works | Stormwater and Vegetation Demand Analysis Strat	$0.00	$1,352.01	0 hrs	0 hrs	Mon 8/1/16	Mon 8/1/16
151	2.1.2.3.2.20	DELETED Public Works | Survey and Mapping Division Demand Analysis Stra	$0.00	$1,352.01	0 hrs	0 hrs	Mon 8/1/16	Mon 8/1/16
152	2.1.2.3.2.21	DELETED Public Works | Transportation Demand Analysis Strategy Worksho	$0.00	$1,352.01	0 hrs	0 hrs	Mon 8/1/16	Mon 8/1/16
153	2.1.2.3.2.22	DELETED Solid Waste | Landfill and Solid Waste Operations Demand Analysi	$0.00	$1,352.01	0 hrs	0 hrs	Mon 8/1/16	Mon 8/1/16
154	2.1.2.3.2.23	DELETED Solid Waste | Recycling and System Management Demand Analysi	$0.00	$1,352.01	0 hrs	0 hrs	Mon 8/1/16	Mon 8/1/16
155	2.1.2.3.2.24	DELETED Solid Waste | Waste to Energy (Admin) Demand Analysis Strategy	$0.00	$1,352.01	0 hrs	0 hrs	Mon 8/1/16	Mon 8/1/16
156	**2.1.2.3.3**	**Travel for Asset Management Demand Analysis Strategy Workshops**	**$7,319.36**	**$21,958.08**	**11 days**	**16 hrs**	**Fri 7/15/16**	**Mon 8/1/16**
157	2.1.2.3.3.1	Travel for Asset Management Demand Analysis Strategy Workshops - Week	$7,319.36	$7,319.36	5 days	16 hrs	Fri 7/15/16	Fri 7/22/16
158	2.1.2.3.3.2	Travel for Asset Management Demand Analysis Strategy Workshops - Week	$0.00	$7,319.36	0 days	0 hrs	Fri 7/29/16	Fri 7/29/16

ID	WBS	Task Name	Cost	Baseline Cost	Duration	Work	Start	Finish
159	2.1.2.3.3.3	Travel for Asset Management Demand Analysis Strategy Workshops - Week	$0.00	$7,319.36	0 days	0 hrs	Mon 8/1/16	Mon 8/1/16
160	2.1.2.3.4	Woolpert to Develop DRAFT Demand Analysis Strategy Tech Memos	$2,627.32	$7,881.96	1 day	12 hrs	Mon 8/1/16	Tue 8/2/16
161	2.1.2.3.5	Woolpert to Submit DRAFT Demand Analysis Strategy Tech Memos to County	$0.00	$0.00	1 day	0 hrs	Tue 8/2/16	Wed 8/3/16
162	2.1.2.3.6	County to Review Demand Analysis Strategy Tech Memos and Provide Feedba	$0.00	$0.00	5 days	0 hrs	Wed 8/3/16	Wed 8/10/16
163	2.1.2.3.7	Woolpert to Modify Demand Analysis Strategy Tech Memos	$1,313.66	$3,940.98	0.5 days	6 hrs	Wed 8/10/16	Wed 8/10/16
164	2.1.2.3.8	Woolpert to Submit FINAL Demand Analysis Strategy Tech Memos to County	$0.00	$0.00	0 days	0 hrs	Wed 8/10/16	Wed 8/10/16
165	2.1.2.3.9	County to Accept Demand Analysis Strategy Tech Memos	$0.00	$0.00	0 days	0 hrs	Wed 8/17/16	Wed 8/17/16
166	**2.1.2.4**	**Strategy and Planning: Asset Specific Plans**	**$83,951.84**	**$84,712.88**	**45.5 days**	**364.5 hrs**	**Fri 7/1/16**	**Fri 9/2/16**
167	**2.1.2.4.1**	**Develop Asset Specific Plan for ONE SINGLE ASSET CLASS**	**$83,951.84**	**$84,712.88**	**45.5 days**	**364.5 hrs**	**Fri 7/1/16**	**Fri 9/2/16**
168	**2.1.2.4.1.1**	**Request for Information**	**$6,716.96**	**$6,789.44**	**15 days**	**32 hrs**	**Fri 7/1/16**	**Fri 7/22/16**
169	2.1.2.4.1.1.1	Woolpert to Develop Request for Information	$1,745.44	$1,745.44	1 day	8 hrs	Fri 7/1/16	Mon 7/4/16
170	2.1.2.4.1.1.2	Woolpert to Submit Request for Information	$0.00	$0.00	0 days	0 hrs	Mon 7/4/16	Mon 7/4/16
171	2.1.2.4.1.1.3	County to Collect Information (COUNTY TASK)	$0.00	$0.00	10 days	0 hrs	Mon 7/4/16	Mon 7/18/16
172	2.1.2.4.1.1.4	County to Submit Information to Woolpert (COUNTY TASK)	$0.00	$0.00	0 days	0 hrs	Mon 7/18/16	Mon 7/18/16
173	2.1.2.4.1.1.5	Woolpert to Perform Desktop Audit of Information	$4,971.52	$5,044.00	4 days	24 hrs	Mon 7/18/16	Fri 7/22/16
174	**2.1.2.4.1.2**	**Asset Specific Plan Workshop Round 1**	**$25,786.52**	**$25,985.84**	**13 days**	**105 hrs**	**Tue 7/19/16**	**Fri 8/5/16**
175	2.1.2.4.1.2.1	Woolpert to Develop Agenda for Asset Specific Plan Workshop	$1,745.44	$1,745.44	1 day	8 hrs	Tue 7/19/16	Wed 7/20/16
176	2.1.2.4.1.2.2	Woolpert to Submit Asset Specific Plan Agenda to County	$0.00	$0.00	1 day	0 hrs	Wed 7/20/16	Thu 7/21/16
177	2.1.2.4.1.2.3	Woolpert to Prepare for Asset Specific Plan Workshop	$0.00	$0.00	1 day	0 hrs	Thu 7/21/16	Fri 7/22/16
178	2.1.2.4.1.2.4	County to Prepare for Asset Specific Plan Workshop (COUNTY TASK)	$0.00	$0.00	1 day	0 hrs	Thu 7/21/16	Fri 7/22/16
179	**2.1.2.4.1.2.5**	**Asset Specific Plan Workshop 1 (ONSITE TASK)**	**$16,968.60**	**$17,131.68**	**4.5 days**	**81 hrs**	**Fri 7/29/16**	**Thu 8/4/16**
180	2.1.2.4.1.2.5.1	ASP Workshop 1: Technical Standards and Legislation (ONSITE TASK)	$942.70	$951.76	0.25 days	4.5 hrs	Fri 7/29/16	Fri 7/29/16
181	2.1.2.4.1.2.5.2	ASP Workshop 1: Asset Creation and Acquisition (ONSITE TASK)	$942.70	$951.76	0.25 days	4.5 hrs	Fri 7/29/16	Fri 7/29/16
182	2.1.2.4.1.2.5.3	ASP Workshop 1: Systems Engineering (ONSITE TASK)	$1,885.40	$1,903.52	0.5 days	9 hrs	Mon 8/1/16	Mon 8/1/16
183	2.1.2.4.1.2.5.4	ASP Workshop 1: Configuration Management (ONSITE TASK)	$1,885.40	$1,903.52	0.5 days	9 hrs	Mon 8/1/16	Mon 8/1/16
184	2.1.2.4.1.2.5.5	ASP Workshop 1: Maintenance Delivery (ONSITE TASK)	$1,885.40	$1,903.52	0.5 days	9 hrs	Tue 8/2/16	Tue 8/2/16
185	2.1.2.4.1.2.5.6	ASP Workshop 1: Reliability Engineering (ONSITE TASK)	$1,885.40	$1,903.52	0.5 days	9 hrs	Tue 8/2/16	Tue 8/2/16
186	2.1.2.4.1.2.5.7	ASP Workshop 1: Asset Operations (ONSITE TASK)	$1,885.40	$1,903.52	0.5 days	9 hrs	Wed 8/3/16	Wed 8/3/16
187	2.1.2.4.1.2.5.8	ASP Workshop 1: Resource Management (ONSITE TASK)	$942.70	$951.76	0.25 days	4.5 hrs	Wed 8/3/16	Wed 8/3/16
188	2.1.2.4.1.2.5.9	ASP Workshop 1: Shutdown and Outage Management (ONSITE TASK)	$1,885.40	$1,903.52	0.5 days	9 hrs	Wed 8/3/16	Thu 8/4/16
189	2.1.2.4.1.2.5.1	ASP Workshop 1: Fault and Incident Management (ONSITE TASK)	$1,885.40	$1,903.52	0.5 days	9 hrs	Thu 8/4/16	Thu 8/4/16
190	2.1.2.4.1.2.5.1	ASP Workshop 1: Asset Decommissioning and Disposal (ONSITE TASK)	$942.70	$951.76	0.25 days	4.5 hrs	Thu 8/4/16	Thu 8/4/16
191	**2.1.2.4.1.2.6**	**Travel for ASP Workshop 1**	**$7,072.48**	**$7,108.72**	**5 days**	**16 hrs**	**Fri 7/29/16**	**Fri 8/5/16**
192	2.1.2.4.1.2.6.1	Travel for ASP Workshop 1	$7,072.48	$7,108.72	5 days	16 hrs	Fri 7/29/16	Fri 8/5/16
193	**2.1.2.4.1.3**	**Asset Specific Plan DRAFT Document**	**$16,792.40**	**$16,973.60**	**11 days**	**80 hrs**	**Fri 8/5/16**	**Fri 8/19/16**
194	2.1.2.4.1.3.1	Woolpert to Develop DRAFT ASP Document	$16,792.40	$16,973.60	5 days	80 hrs	Fri 8/5/16	Thu 8/11/16
195	2.1.2.4.1.3.2	Woolpert to Submit DRAFT ASP Document	$0.00	$0.00	1 day	0 hrs	Fri 8/12/16	Fri 8/12/16
196	2.1.2.4.1.3.3	County to Review DRAFT ASP Document (COUNTY TASK)	$0.00	$0.00	5 days	0 hrs	Mon 8/15/16	Fri 8/19/16
197	**2.1.2.4.1.4**	**Asset Specific Plan Workshop Round 2**	**$26,259.76**	**$26,477.20**	**12.25 days**	**107.5 hrs**	**Wed 8/17/16**	**Fri 9/2/16**
198	2.1.2.4.1.4.1	Woolpert to Develop Agenda for Asset Specific Plan Workshop	$436.36	$436.36	0.25 days	2 hrs	Wed 8/17/16	Thu 8/18/16
199	2.1.2.4.1.4.2	Woolpert to Submit Asset Specific Plan Agenda to County	$0.00	$0.00	0 days	0 hrs	Thu 8/18/16	Thu 8/18/16
200	2.1.2.4.1.4.3	Woolpert to Prepare for Asset Specific Plan Workshop	$839.62	$848.68	1 day	4 hrs	Thu 8/18/16	Thu 8/18/16
201	2.1.2.4.1.4.4	County to Prepare for Asset Specific Plan Workshop (COUNTY TASK)	$0.00	$0.00	1 day	0 hrs	Fri 8/19/16	Fri 8/19/16
202	**2.1.2.4.1.4.5**	**Asset Specific Plan Workshop 1 (ONSITE TASK)**	**$17,911.30**	**$18,083.44**	**4.75 days**	**85.5 hrs**	**Mon 8/29/16**	**Fri 9/2/16**
203	2.1.2.4.1.4.5.1	ASP Workshop 1: Technical Standards and Legislation (ONSITE TASK)	$942.70	$951.76	0.25 days	4.5 hrs	Mon 8/29/16	Mon 8/29/16
204	2.1.2.4.1.4.5.2	ASP Workshop 1: Asset Creation and Acquisition (ONSITE TASK)	$942.70	$951.76	0.25 days	4.5 hrs	Mon 8/29/16	Mon 8/29/16
205	2.1.2.4.1.4.5.3	ASP Workshop 1: Systems Engineering (ONSITE TASK)	$1,885.40	$1,903.52	0.5 days	9 hrs	Mon 8/29/16	Mon 8/29/16
206	2.1.2.4.1.4.5.4	ASP Workshop 1: Configuration Management (ONSITE TASK)	$1,885.40	$1,903.52	0.5 days	9 hrs	Tue 8/30/16	Tue 8/30/16
207	2.1.2.4.1.4.5.5	ASP Workshop 1: Maintenance Delivery (ONSITE TASK)	$1,885.40	$1,903.52	0.5 days	9 hrs	Tue 8/30/16	Tue 8/30/16
208	2.1.2.4.1.4.5.6	ASP Workshop 1: Reliability Engineering (ONSITE TASK)	$1,885.40	$1,903.52	0.5 days	9 hrs	Wed 8/31/16	Wed 8/31/16
209	2.1.2.4.1.4.5.7	ASP Workshop 1: Asset Operations (ONSITE TASK)	$1,885.40	$1,903.52	0.5 days	9 hrs	Wed 8/31/16	Wed 8/31/16
210	2.1.2.4.1.4.5.8	ASP Workshop 1: Resource Management (ONSITE TASK)	$1,885.40	$1,903.52	0.5 days	9 hrs	Thu 9/1/16	Thu 9/1/16
211	2.1.2.4.1.4.5.9	ASP Workshop 1: Shutdown and Outage Management (ONSITE TASK)	$1,885.40	$1,903.52	0.5 days	9 hrs	Thu 9/1/16	Thu 9/1/16

ID	WBS	Task Name	Cost	Baseline Cost	Duration	Work	Start	Finish
212	2.1.2.4.1.4.5.1	ASP Workshop 1: Fault and Incident Management (ONSITE TASK)	$1,885.40	$1,903.52	0.5 days	9 hrs	Fri 9/2/16	Fri 9/2/16
213	2.1.2.4.1.4.5.1	ASP Workshop 1: Asset Decommissioning and Disposal (ONSITE TASK)	$942.70	$951.76	0.25 days	4.5 hrs	Fri 9/2/16	Fri 9/2/16
214	**2.1.2.4.1.4.6**	**Travel for ASP Workshop 1**	**$7,072.48**	**$7,108.72**	**5 days**	**16 hrs**	**Mon 8/29/16**	**Fri 9/2/16**
215	2.1.2.4.1.4.6.1	Travel for ASP Workshop 1	$7,072.48	$7,108.72	5 days	16 hrs	Mon 8/29/16	Fri 9/2/16
216	**2.1.2.4.1.5**	**Asset Specific Plan FINAL Document**	**$8,396.20**	**$8,486.80**	**7.5 days**	**40 hrs**	**Fri 7/1/16**	**Tue 7/12/16**
217	2.1.2.4.1.5.1	Woolpert to Develop FINAL ASP Document	$8,396.20	$8,486.80	2.5 days	40 hrs	Fri 7/1/16	Tue 7/5/16
218	2.1.2.4.1.5.2	Woolpert to Submit FINAL ASP Document	$0.00	$0.00	0 days	0 hrs	Tue 7/5/16	Tue 7/5/16
219	2.1.2.4.1.5.3	County to Review and Accept FINAL ASP Document (COUNTY TASK)	$0.00	$0.00	0 days	0 hrs	Tue 7/12/16	Tue 7/12/16
220	**2.1.2.5**	**Asset Information: All Subjects**	**$23,228.38**	**$23,228.38**	**19 days**	**96 hrs**	**Mon 8/1/16**	**Fri 8/26/16**
221	2.1.2.5.1	Woolpert to Develop DRAFT Asset Information Analysis and Recommendation	$10,701.60	$10,701.60	2 days	48 hrs	Mon 8/1/16	Wed 8/3/16
222	2.1.2.5.2	Woolpert to Submit DRAFT Asset Information Analysis and Recommendation	$0.00	$0.00	0 days	0 hrs	Wed 8/3/16	Wed 8/3/16
223	2.1.2.5.3	Woolpert to Prep for Asset Information Document Review	$901.34	$901.34	1 day	4 hrs	Wed 8/3/16	Thu 8/4/16
224	2.1.2.5.4	County to Prep for Asset Information Document Review (COUNTY TASK)	$0.00	$0.00	3 days	0 hrs	Wed 8/3/16	Mon 8/8/16
225	**2.1.2.5.5**	**Asset Information Document Review (ONSITE TASK)**	**$3,605.36**	**$3,605.36**	**1 day**	**16 hrs**	**Wed 8/17/16**	**Thu 8/18/16**
226	2.1.2.5.5.1	Asset Information Strategy Review (ONSITE TASK)	$901.34	$901.34	0.25 days	4 hrs	Wed 8/17/16	Wed 8/17/16
227	2.1.2.5.5.2	Asset Information Standards Review (ONSITE TASK)	$901.34	$901.34	0.25 days	4 hrs	Wed 8/17/16	Wed 8/17/16
228	2.1.2.5.5.3	Asset Information Systems Review (ONSITE TASK)	$901.34	$901.34	0.25 days	4 hrs	Wed 8/17/16	Wed 8/17/16
229	2.1.2.5.5.4	Data and Information Management Review (ONSITE TASK)	$901.34	$901.34	0.25 days	4 hrs	Thu 8/18/16	Thu 8/18/16
230	**2.1.2.5.6**	**Travel for Asset Management Policy Workshop**	**$5,239.36**	**$5,239.36**	**1 day**	**16 hrs**	**Wed 8/17/16**	**Thu 8/18/16**
231	2.1.2.5.6.1	Travel for Asset Management Policy Workshop	$5,239.36	$5,239.36	1 day	16 hrs	Wed 8/17/16	Thu 8/18/16
232	2.1.2.5.7	Woolpert to Update Asset Information Analysis and Recommendation Docum	$2,780.72	$2,780.72	1 day	12 hrs	Thu 8/18/16	Fri 8/19/16
233	2.1.2.5.8	Woolpert to Submit FINAL Asset Information Analysis and Recommendation D	$0.00	$0.00	0 days	0 hrs	Fri 8/19/16	Fri 8/19/16
234	2.1.2.5.9	County to Accept Asset Information Analysis and Recommendations Documen	$0.00	$0.00	0 days	0 hrs	Fri 8/26/16	Fri 8/26/16
235	**2.1.2.6**	**Organization and People: All Subjects**	**$25,031.06**	**$25,031.06**	**19.5 days**	**104 hrs**	**Tue 8/2/16**	**Mon 8/29/16**
236	2.1.2.6.1	Woolpert to Develop DRAFT Tech Memo of Organization and People Subjects	$10,701.60	$10,701.60	2 days	48 hrs	Tue 8/2/16	Thu 8/4/16
237	2.1.2.6.2	Woolpert to Submit DRAFT Tech Memo of Organization and People Subjects	$0.00	$0.00	0 days	0 hrs	Thu 8/4/16	Thu 8/4/16
238	2.1.2.6.3	Woolpert to Prep for Organization and People Workshop	$901.34	$901.34	1 day	4 hrs	Thu 8/4/16	Fri 8/5/16
239	2.1.2.6.4	County to Prep for Organization and People Workshop (COUNTY TASK)	$0.00	$0.00	3 days	0 hrs	Thu 8/4/16	Tue 8/9/16
240	**2.1.2.6.5**	**Organization and People Workshop (ONSITE TASK)**	**$5,408.04**	**$5,408.04**	**1.5 days**	**24 hrs**	**Thu 8/18/16**	**Fri 8/19/16**
241	2.1.2.6.5.1	Procurement and Supply Chain Management Workshop (ONSITE TASK)	$1,802.68	$1,802.68	0.5 days	8 hrs	Thu 8/18/16	Thu 8/18/16
242	2.1.2.6.5.2	Asset Management Leadership Workshop (ONSITE TASK)	$901.34	$901.34	0.25 days	4 hrs	Fri 8/19/16	Fri 8/19/16
243	2.1.2.6.5.3	Organizational Structure Workshop (ONSITE TASK)	$901.34	$901.34	0.25 days	4 hrs	Fri 8/19/16	Fri 8/19/16
244	2.1.2.6.5.4	Organizational Culture Workshop (ONSITE TASK)	$901.34	$901.34	0.25 days	4 hrs	Fri 8/19/16	Fri 8/19/16
245	2.1.2.6.5.5	Competence Management Workshop (ONSITE TASK)	$901.34	$901.34	0.25 days	4 hrs	Fri 8/19/16	Fri 8/19/16
246	**2.1.2.6.6**	**Travel for Asset Management Policy Workshop**	**$5,239.36**	**$5,239.36**	**1 day**	**16 hrs**	**Thu 8/18/16**	**Fri 8/19/16**
247	2.1.2.6.6.1	Travel for Asset Management Policy Workshop	$5,239.36	$5,239.36	1 day	16 hrs	Thu 8/18/16	Fri 8/19/16
248	2.1.2.6.7	Woolpert to Update Tech Memo of Organization and People Subjects	$2,780.72	$2,780.72	1 day	12 hrs	Mon 8/22/16	Mon 8/22/16
249	2.1.2.6.8	Woolpert to Submit FINAL Tech Memo of Organization and People Subjects	$0.00	$0.00	0 days	0 hrs	Mon 8/22/16	Mon 8/22/16
250	2.1.2.6.9	County to Accept Organization and People Tech Memo (COUNTY TASK)	$0.00	$0.00	0 days	0 hrs	Mon 8/29/16	Mon 8/29/16
251	**2.2**	**Departmental Readiness Assessments**	**$125,683.22**	**$127,380.58**	**69.5 days**	**540 hrs**	**Thu 7/21/16**	**Wed 10/26/16**
252	**2.2.1**	**Readiness Assessment Agendas and Presentations**	**$4,765.62**	**$4,765.62**	**12 days**	**22 hrs**	**Mon 8/1/16**	**Tue 8/16/16**
253	2.2.1.1	Woolpert to Develop DRAFT Agenda and Presentation	$3,451.96	$3,451.96	5 days	16 hrs	Mon 8/1/16	Mon 8/8/16
254	2.2.1.2	Woolpert to Submit DRAFT Agenda and Presentation to County	$0.00	$0.00	0 days	0 hrs	Mon 8/8/16	Mon 8/8/16
255	2.2.1.3	County to Review DRAFT Agenda and Presentation (COUNTY TASK)	$0.00	$0.00	5 days	0 hrs	Mon 8/8/16	Fri 8/12/16
256	2.2.1.4	County to Provide Feedback on DRAFT Agenda and Presentation (COUNTY TASK)	$0.00	$0.00	0 days	0 hrs	Fri 8/12/16	Fri 8/12/16
257	2.2.1.5	Woolpert to Incorporate County Feedback	$1,313.66	$1,313.66	2 days	6 hrs	Mon 8/15/16	Tue 8/16/16
258	2.2.1.6	Woolpert to Submit FINAL Agenda and Presentation	$0.00	$0.00	0 days	0 hrs	Tue 8/16/16	Tue 8/16/16
259	**2.2.2**	**Departmental Readiness Assessments**	**$70,509.44**	**$70,509.44**	**41.5 days**	**294 hrs**	**Thu 7/21/16**	**Fri 9/16/16**
260	**2.2.2.1**	**Readiness Assessment Preparation**	**$25,739.52**	**$25,739.52**	**27 days**	**118 hrs**	**Thu 7/21/16**	**Fri 8/26/16**
261	2.2.2.1.1	Woolpert to Prepare Request for Information	$824.64	$824.64	2 days	4 hrs	Thu 7/21/16	Mon 7/25/16
262	2.2.2.1.2	Woolpert to Submit RFI to County	$0.00	$0.00	0 days	0 hrs	Mon 7/25/16	Mon 7/25/16
263	2.2.2.1.3	County to Gather Data and Submit to Woolpert (COUNTY TASK)	$0.00	$0.00	15 days	0 hrs	Mon 7/25/16	Fri 8/12/16
264	2.2.2.1.4	Woolpert to Perform Desktop Audit of Collected Information	$24,066.20	$24,066.20	10 days	110 hrs	Mon 8/15/16	Fri 8/26/16

ID	WBS	Task Name	Cost	Baseline Cost	Duration	Work	Start	Finish
265	2.2.2.1.5	Woolpert to Prepare for Onsite Readiness Assessment Workshops	$848.68	$848.68	1 day	4 hrs	Thu 8/18/16	Fri 8/19/16
266	2.2.2.1.6	County to Prep Facility for Workshops (COUNTY TASK)	$0.00	$0.00	1 day	0 hrs	Thu 8/18/16	Fri 8/19/16
267	**2.2.2.2**	**Readiness Assessment Workshops**	**$44,769.92**	**$44,769.92**	**14.5 days**	**176 hrs**	**Mon 8/29/16**	**Fri 9/16/16**
268	**2.2.2.2.1**	**Woolpert to Conduct Readiness Assessment Workshops (ONSITE TASK)**	**$30,552.48**	**$30,552.48**	**14.5 days**	**144 hrs**	**Mon 8/29/16**	**Fri 9/16/16**
269	2.2.2.2.1.1	Parks and Conservation - 4 Divisions (ONSITE TASK)	$5,092.08	$5,092.08	1.5 days	24 hrs	Mon 8/29/16	Tue 8/30/16
270	2.2.2.2.1.2	Public Works Department - 4 Divisions (ONSITE TASK)	$5,092.08	$5,092.08	1.5 days	24 hrs	Tue 8/30/16	Wed 8/31/16
271	2.2.2.2.1.3	Public Works Department - 3 Divisions (ONSITE TASK)	$5,092.08	$5,092.08	1.5 days	24 hrs	Thu 9/1/16	Fri 9/2/16
272	2.2.2.2.1.4	Real Estate Management - 5 Divisions (ONSITE TASK)	$5,092.08	$5,092.08	1.5 days	24 hrs	Mon 9/12/16	Tue 9/13/16
273	2.2.2.2.1.5	Solid Waste Department - 3 Divisions (ONSITE TASK)	$5,092.08	$5,092.08	1.5 days	24 hrs	Tue 9/13/16	Wed 9/14/16
274	2.2.2.2.1.6	Utilities Department - 5 Divisions (ONSITE TASK)	$5,092.08	$5,092.08	1.5 days	24 hrs	Thu 9/15/16	Fri 9/16/16
275	**2.2.2.2.2**	**Travel for Readiness Assessment Workshops**	**$14,217.44**	**$14,217.44**	**14.5 days**	**32 hrs**	**Mon 8/29/16**	**Fri 9/16/16**
276	2.2.2.2.2.1	Travel for Readiness Assessment Workshops - Week 1	$7,108.72	$7,108.72	4.5 days	16 hrs	Mon 8/29/16	Fri 9/2/16
277	2.2.2.2.2.2	Travel for Readiness Assessment Workshops - Week 2	$7,108.72	$7,108.72	4.5 days	16 hrs	Mon 9/12/16	Fri 9/16/16
278	**2.2.3**	**Readiness Assessment Documentation**	**$50,408.16**	**$52,105.52**	**39.5 days**	**224 hrs**	**Thu 9/1/16**	**Wed 10/26/16**
279	**2.2.3.1**	**DRAFT Readiness Assessments Documentation**	**$25,460.40**	**$25,460.40**	**26.5 days**	**120 hrs**	**Thu 9/1/16**	**Fri 10/7/16**
280	2.2.3.1.1	Woolpert to Develop DRAFT Readiness Assessment for PCR	$5,092.08	$4,243.40	5 days	24 hrs	Thu 9/1/16	Wed 9/7/16
281	2.2.3.1.2	Woolpert to Develop DRAFT Readiness Assessment for Public Works	$5,092.08	$4,243.40	5 days	24 hrs	Fri 9/2/16	Fri 9/9/16
282	2.2.3.1.3	Woolpert to Develop DRAFT Readiness Assessment for REM	$5,092.08	$4,243.40	5 days	24 hrs	Tue 9/13/16	Tue 9/20/16
283	2.2.3.1.4	Woolpert to Develop DRAFT Readiness Assessment for Solid Waste	$5,092.08	$4,243.40	5 days	24 hrs	Thu 9/15/16	Wed 9/21/16
284	2.2.3.1.5	Woolpert to Develop DRAFT Readiness Assessment for Utilities	$5,092.08	$4,243.40	5 days	24 hrs	Fri 9/16/16	Fri 9/23/16
285	2.2.3.1.6	Woolpert to Submit DRAFT Readiness Assessment Documents to County	$0.00	$0.00	0 days	0 hrs	Fri 9/23/16	Fri 9/23/16
286	2.2.3.1.7	County to Review DRAFT Readiness Assessment Documents (COUNTY TASK)	$0.00	$0.00	10 days	0 hrs	Fri 9/23/16	Fri 10/7/16
287	**2.2.3.2**	**Joint Review of Readiness Assessment Documents**	**$16,460.96**	**$16,460.96**	**2 days**	**64 hrs**	**Mon 10/10/16**	**Wed 10/12/16**
288	**2.2.3.2.1**	**Woolpert to Facilitate Joint Reviews of Readiness Assessment Documents (C**	**$10,701.60**	**$10,701.60**	**2 days**	**48 hrs**	**Mon 10/10/16**	**Wed 10/12/16**
289	2.2.3.2.1.1	Parks and Conservation - 4 Divisions (ONSITE TASK)	$1,337.70	$1,337.70	0.25 days	6 hrs	Mon 10/10/16	Mon 10/10/16
290	2.2.3.2.1.2	Public Works Department - 4 Divisions (ONSITE TASK)	$1,337.70	$1,337.70	0.25 days	6 hrs	Mon 10/10/16	Mon 10/10/16
291	2.2.3.2.1.3	Public Works Department - 3 Divisions (ONSITE TASK)	$1,337.70	$1,337.70	0.25 days	6 hrs	Tue 10/11/16	Tue 10/11/16
292	2.2.3.2.1.4	Real Estate Management - 5 Divisions (ONSITE TASK)	$1,337.70	$1,337.70	0.25 days	6 hrs	Tue 10/11/16	Tue 10/11/16
293	2.2.3.2.1.5	Solid Waste Department - 3 Divisions (ONSITE TASK)	$1,337.70	$1,337.70	0.25 days	6 hrs	Tue 10/11/16	Tue 10/11/16
294	2.2.3.2.1.6	Utilities Department - 5 Divisions (ONSITE TASK)	$1,337.70	$1,337.70	0.25 days	6 hrs	Tue 10/11/16	Tue 10/11/16
295	2.2.3.2.1.7	Review of Implementation Tracks (ONSITE TASK)	$2,675.40	$2,675.40	0.5 days	12 hrs	Wed 10/12/16	Wed 10/12/16
296	**2.2.3.2.2**	**Travel for Joint Review of Readiness Assessments**	**$5,759.36**	**$5,759.36**	**2 days**	**16 hrs**	**Mon 10/10/16**	**Wed 10/12/16**
297	2.2.3.2.2.1	Travel for Joint Review of Readiness Assessments	$5,759.36	$5,759.36	2 days	16 hrs	Mon 10/10/16	Wed 10/12/16
298	**2.2.3.3**	**FINAL Readiness Assessments Documentation**	**$8,486.80**	**$10,184.16**	**5 days**	**40 hrs**	**Wed 10/12/16**	**Wed 10/19/16**
299	2.2.3.3.1	Woolpert to Create FINAL Readiness Assessment for PCR	$1,697.36	$1,697.36	1 day	8 hrs	Wed 10/12/16	Thu 10/13/16
300	2.2.3.3.2	Woolpert to Create FINAL Readiness Assessment for Public Works	$1,697.36	$1,697.36	1 day	8 hrs	Thu 10/13/16	Fri 10/14/16
301	2.2.3.3.3	Woolpert to Create FINAL Readiness Assessment for REM	$1,697.36	$1,697.36	1 day	8 hrs	Fri 10/14/16	Mon 10/17/16
302	2.2.3.3.4	Woolpert to Create FINAL Readiness Assessment for Solid Waste	$1,697.36	$1,697.36	1 day	8 hrs	Mon 10/17/16	Tue 10/18/16
303	2.2.3.3.5	Woolpert to Create FINAL Readiness Assessment for Utilities	$1,697.36	$1,697.36	1 day	8 hrs	Tue 10/18/16	Wed 10/19/16
304	2.2.3.3.6	Woolpert to Submit FINAL Readiness Assessment Documents to County	$0.00	$0.00	0 days	0 hrs	Wed 10/19/16	Wed 10/19/16
305	**2.2.3.4**	**Readiness Assessment County Acceptance (COUNTY TASK)**	**$0.00**	**$0.00**	**0 days**	**0 hrs**	**Wed 10/26/16**	**Wed 10/26/16**
306	2.2.3.4.1	County to Accept FINAL Readiness Assessment for PCR (COUNTY TASK)	$0.00	$0.00	0 days	0 hrs	Wed 10/26/16	Wed 10/26/16
307	2.2.3.4.2	County to Accept FINAL Readiness Assessment for Public Works (COUNTY TAS	$0.00	$0.00	0 days	0 hrs	Wed 10/26/16	Wed 10/26/16
308	2.2.3.4.3	County to Accept FINAL Readiness Assessment for REM (COUNTY TASK)	$0.00	$0.00	0 days	0 hrs	Wed 10/26/16	Wed 10/26/16
309	2.2.3.4.4	County to Accept FINAL Readiness Assessment for Solid Waste (COUNTY TASK	$0.00	$0.00	0 days	0 hrs	Wed 10/26/16	Wed 10/26/16
310	2.2.3.4.5	County to Accept FINAL Readiness Assessment for Utilities (COUNTY TASK)	$0.00	$0.00	0 days	0 hrs	Wed 10/26/16	Wed 10/26/16
311	2.2.3.4.6	County Acceptance of Readiness Assessment Task (COUNTY TASK)	$0.00	$0.00	0 days	0 hrs	Wed 10/26/16	Wed 10/26/16
312	**2.3**	**Existing Systems Evaluations**	**$29,702.14**	**$0.00**	**20.25 days**	**128 hrs**	**Wed 10/5/16**	**Wed 11/2/16**
313	2.3.1	Woolpert to Prep for Existing System Evaluation Workshops	$815.58	$0.00	0.25 days	4 hrs	Wed 10/5/16	Wed 10/5/16
314	**2.3.2**	**Woolpert to Facilitate Evaluation of Existing Systems**	**$12,858.16**	**$0.00**	**2 days**	**48 hrs**	**Wed 10/12/16**	**Fri 10/14/16**
315	2.3.2.1	Oracle Inventory Management System Evaluation	$3,394.72	$0.00	1 day	16 hrs	Wed 10/12/16	Thu 10/13/16
316	2.3.2.2	VCMS Mosquito Control Evaluation	$3,394.72	$0.00	1 day	16 hrs	Thu 10/13/16	Fri 10/14/16
317	**2.3.2.3**	**Travel for Existing System Evaluation**	**$6,068.72**	**$0.00**	**2 days**	**16 hrs**	**Wed 10/12/16**	**Fri 10/14/16**

ID	WBS	Task Name	Cost	Baseline Cost	Duration	Work	Start	Finish
318	2.3.2.3.1	Travel for Existing System Evaluation	$6,068.72	$0.00	2 days	16 hrs	Wed 10/12/16	Fri 10/14/16
319	**2.3.3**	**Woolpert to Document Existing System Evaluations**	**$9,238.96**	**$0.00**	**4 days**	**44 hrs**	**Thu 10/13/16**	**Wed 10/19/16**
320	2.3.3.1	Oracle Inventory Management Technical Memorandum	$4,971.52	$0.00	2 days	24 hrs	Thu 10/13/16	Mon 10/17/16
321	2.3.3.2	VCMS Technical Memorandum	$4,267.44	$0.00	3 days	20 hrs	Fri 10/14/16	Wed 10/19/16
322	2.3.3.3	Woolpert to Submit Existing System Evaluation Technical Memoranda	$0.00	$0.00	0 days	0 hrs	Wed 10/19/16	Wed 10/19/16
323	**2.3.4**	**Review and Acceptance of Existing System Evaluation Technical Memoranda**	**$6,789.44**	**$0.00**	**10 days**	**32 hrs**	**Wed 10/19/16**	**Wed 11/2/16**
324	2.3.4.1	County to Review Existing System Evaluation Technical Memoranda (COUNTY TA	$0.00	$0.00	5 days	0 hrs	Wed 10/19/16	Wed 10/26/16
325	2.3.4.2	Woolpert to Facilitate Joint Review of Oracle Inventory System Technical Memor	$1,697.36	$0.00	0.5 days	8 hrs	Wed 10/26/16	Wed 10/26/16
326	2.3.4.3	Woolpert to Facilitate Joint Review of VCMS System Technical Memoranda	$1,697.36	$0.00	0.5 days	8 hrs	Thu 10/27/16	Thu 10/27/16
327	2.3.4.4	Woolpert to Update Existing System Technical Memoranda	$3,394.72	$0.00	3 days	16 hrs	Thu 10/27/16	Tue 11/1/16
328	2.3.4.5	Woolpert to Submit FINAL Existing System Technical Memoranda	$0.00	$0.00	0 days	0 hrs	Tue 11/1/16	Tue 11/1/16
329	2.3.4.6	County to Accept FINAL Existing System Technical Memoranda (COUNTY TASK)	$0.00	$0.00	1 day	0 hrs	Tue 11/1/16	Wed 11/2/16
330	**2.4**	**Global Configuration Standards**	**$162,579.52**	**$111,091.28**	**68.5 days**	**686 hrs**	**Tue 10/25/16**	**Fri 1/27/17**
331	**2.4.1**	**Round 1 Global Configuration Standards Workshops**	**$93,477.48**	**$66,884.68**	**39 days**	**394 hrs**	**Tue 10/25/16**	**Fri 12/16/16**
332	2.4.1.1	Woolpert to Prepare for Global Configuration Standards Workshops	$848.68	$848.68	1 day	4 hrs	Tue 10/25/16	Tue 10/25/16
333	2.4.1.2	County to Prepare for Global Configuration Standards Workshops (COUNTY TASK	$0.00	$0.00	1 day	0 hrs	Tue 10/25/16	Tue 10/25/16
334	**2.4.1.3**	**Woolpert to Facilitate Global Configuration Standards Workshops (ONSITE TAS**	**$40,736.64**	**$27,157.76**	**13.5 days**	**192 hrs**	**Tue 11/1/16**	**Fri 11/18/16**
335	2.4.1.3.1	Work Order Lifecycle and Statuses (ONSITE TASK)	$1,697.36	$1,697.36	0.5 days	8 hrs	Tue 11/1/16	Tue 11/1/16
336	2.4.1.3.2	Work Initiation (ONSITE TASK)	$1,697.36	$1,697.36	0.5 days	8 hrs	Wed 11/2/16	Wed 11/2/16
337	2.4.1.3.3	First Responder / Emergency Work (ONSITE TASK)	$1,697.36	$1,697.36	0.5 days	8 hrs	Wed 11/2/16	Wed 11/2/16
338	2.4.1.3.4	Work Order Screening (ONSITE TASK)	$1,697.36	$1,697.36	0.5 days	8 hrs	Thu 11/3/16	Thu 11/3/16
339	2.4.1.3.5	Work Order Planning (ONSITE TASK)	$1,697.36	$1,697.36	0.5 days	8 hrs	Thu 11/3/16	Thu 11/3/16
340	2.4.1.3.6	Work Scheduling (ONSITE TASK)	$1,697.36	$1,697.36	0.5 days	8 hrs	Fri 11/4/16	Fri 11/4/16
341	2.4.1.3.7	Work Assignment (ONSITE TASK)	$1,697.36	$1,697.36	0.5 days	8 hrs	Fri 11/4/16	Fri 11/4/16
342	2.4.1.3.8	Work Performance and Work Order Completion (ONSITE TASK)	$1,697.36	$1,697.36	0.5 days	8 hrs	Mon 11/7/16	Mon 11/7/16
343	2.4.1.3.9	Work Order Review and QAQC (ONSITE TASK)	$1,697.36	$1,697.36	0.5 days	8 hrs	Tue 11/8/16	Tue 11/8/16
344	2.4.1.3.10	Asset Record Maintenance (ONSITE TASK)	$1,697.36	$1,697.36	0.5 days	8 hrs	Tue 11/8/16	Tue 11/8/16
345	2.4.1.3.11	Preventive Maintenance Schedule Maintenance (ONSITE TASK)	$1,697.36	$1,697.36	0.5 days	8 hrs	Wed 11/9/16	Wed 11/9/16
346	2.4.1.3.12	Fleet Inspections (ONSITE TASK)	$1,697.36	$1,697.36	0.5 days	8 hrs	Wed 11/9/16	Wed 11/9/16
347	2.4.1.3.13	Inventory Procurement - Requisitions, Purchase Orders and Receipts (ONSITE	$1,697.36	$1,697.36	0.5 days	8 hrs	Thu 11/10/16	Thu 11/10/16
348	2.4.1.3.14	Labor and Equipment Contracting (ONSITE TASK)	$1,697.36	$1,697.36	0.5 days	8 hrs	Thu 11/10/16	Thu 11/10/16
349	2.4.1.3.15	Work Order Fault Coding Strategy (ONSITE TASK)	$1,697.36	$1,697.36	0.5 days	8 hrs	Fri 11/11/16	Fri 11/11/16
350	2.4.1.3.16	Equipment, Labor and Reporting Strategy (ONSITE TASK)	$1,697.36	$1,697.36	0.5 days	8 hrs	Fri 11/11/16	Fri 11/11/16
351	2.4.1.3.17	FEMA Emergency Response (ONSITE TASK)	$1,697.36	$0.00	0.5 days	8 hrs	Tue 11/15/16	Tue 11/15/16
352	2.4.1.3.18	Projects (ONSITE TASK)	$1,697.36	$0.00	0.5 days	8 hrs	Tue 11/15/16	Tue 11/15/16
353	2.4.1.3.19	Accounting (ONSITE TASK)	$3,394.72	$0.00	1 day	16 hrs	Wed 11/16/16	Wed 11/16/16
354	2.4.1.3.20	GIS Data Maintenance (ONSITE TASK)	$6,789.44	$0.00	2 days	32 hrs	Thu 11/17/16	Fri 11/18/16
355	**2.4.1.4**	**Travel for Business Process Review Workshops**	**$19,766.16**	**$13,177.44**	**13.5 days**	**48 hrs**	**Tue 11/1/16**	**Fri 11/18/16**
356	2.4.1.4.1	Travel for Global Configuration Standards Workshops - Week 1	$6,588.72	$6,588.72	4 days	16 hrs	Tue 11/1/16	Mon 11/7/16
357	2.4.1.4.2	Travel for Global Configuration Standards Workshops - Week 2	$6,588.72	$6,588.72	4 days	16 hrs	Tue 11/8/16	Fri 11/11/16
358	2.4.1.4.3	Travel for Global Configuration Standards Workshops - Week 3	$6,588.72	$0.00	1 day	16 hrs	Tue 11/15/16	Fri 11/18/16
359	2.4.1.5	Woolpert to Create DRAFT Standards Document	$32,126.00	$25,700.80	10 days	150 hrs	Mon 11/21/16	Fri 12/2/16
360	2.4.1.6	Woolpert to Submit Standards Document to County	$0.00	$0.00	0 days	0 hrs	Fri 12/2/16	Fri 12/2/16
361	2.4.1.7	County to Review Standards Document	$0.00	$0.00	10 days	0 hrs	Mon 12/5/16	Fri 12/16/16
362	**2.4.2**	**Round 2 Global Configuration Standards Workshops**	**$69,102.04**	**$44,206.60**	**35.5 days**	**292 hrs**	**Fri 12/9/16**	**Fri 1/27/17**
363	2.4.2.1	Woolpert to Prepare for Global Configuration Standards Workshops	$848.68	$848.68	1 day	4 hrs	Fri 12/9/16	Mon 12/12/16
364	2.4.2.2	County to Prepare for Global Configuration Standards Workshops	$0.00	$0.00	1 day	0 hrs	Fri 12/9/16	Mon 12/12/16
365	**2.4.2.3**	**Woolpert to Facilitate Global Configuration Standards Workshops**	**$42,552.56**	**$24,082.32**	**8.5 days**	**168 hrs**	**Tue 12/20/16**	**Fri 12/30/16**
366	2.4.2.3.1	Work Order Lifecycle and Statuses (ONSITE TASK)	$848.68	$848.68	0.25 days	4 hrs	Tue 12/20/16	Tue 12/20/16
367	2.4.2.3.2	Work Initiation (ONSITE TASK)	$848.68	$848.68	0.25 days	4 hrs	Tue 12/20/16	Tue 12/20/16
368	2.4.2.3.3	First Responder / Emergency Work (ONSITE TASK)	$848.68	$848.68	0.25 days	4 hrs	Tue 12/20/16	Tue 12/20/16
369	2.4.2.3.4	Work Order Screening (ONSITE TASK)	$848.68	$848.68	0.25 days	4 hrs	Tue 12/20/16	Tue 12/20/16
370	2.4.2.3.5	Work Order Planning (ONSITE TASK)	$848.68	$848.68	0.25 days	4 hrs	Wed 12/21/16	Wed 12/21/16

ID	WBS	Task Name	Cost	Baseline Cost	Duration	Work	Start	Finish
371	2.4.2.3.6	Work Scheduling (ONSITE TASK)	$848.68	$848.68	0.25 days	4 hrs	Wed 12/21/16	Wed 12/21/16
372	2.4.2.3.7	Work Assignment (ONSITE TASK)	$848.68	$848.68	0.25 days	4 hrs	Wed 12/21/16	Wed 12/21/16
373	2.4.2.3.8	Work Performance and Work Order Completion (ONSITE TASK)	$848.68	$848.68	0.25 days	4 hrs	Wed 12/21/16	Wed 12/21/16
374	2.4.2.3.9	Work Order Review and QAQC (ONSITE TASK)	$848.68	$848.68	0.25 days	4 hrs	Thu 12/22/16	Thu 12/22/16
375	2.4.2.3.10	Asset Record Maintenance (ONSITE TASK)	$848.68	$848.68	0.25 days	4 hrs	Thu 12/22/16	Thu 12/22/16
376	2.4.2.3.11	Preventive Maintenance Schedule Maintenance (ONSITE TASK)	$848.68	$848.68	0.25 days	4 hrs	Thu 12/22/16	Thu 12/22/16
377	2.4.2.3.12	Fleet Inspections (ONSITE TASK)	$848.68	$848.68	0.25 days	4 hrs	Thu 12/22/16	Thu 12/22/16
378	2.4.2.3.13	Inventory Procurement - Requisitions, Purchase Orders and Receipts (ONSITE T	$3,394.72	$3,394.72	1 day	16 hrs	Fri 12/23/16	Fri 12/23/16
379	2.4.2.3.14	Labor and Equipment Contracting (ONSITE TASK)	$848.68	$848.68	0.25 days	4 hrs	Mon 12/26/16	Mon 12/26/16
380	2.4.2.3.15	Work Order Fault Coding Strategy (ONSITE TASK)	$848.68	$848.68	0.25 days	4 hrs	Mon 12/26/16	Mon 12/26/16
381	2.4.2.3.16	Equipment, Labor and Reporting Strategy (ONSITE TASK)	$1,697.36	$1,697.36	0.5 days	8 hrs	Mon 12/26/16	Mon 12/26/16
382	2.4.2.3.17	FEMA Emergency Response (ONSITE TASK)	$848.68	$0.00	0.25 days	4 hrs	Tue 12/27/16	Tue 12/27/16
383	2.4.2.3.18	Projects (ONSITE TASK)	$848.68	$0.00	0.25 days	4 hrs	Tue 12/27/16	Tue 12/27/16
384	2.4.2.3.19	Accounting (ONSITE TASK)	$3,394.72	$0.00	1 day	16 hrs	Tue 12/27/16	Wed 12/28/16
385	2.4.2.3.20	GIS Data Maintenance (ONSITE TASK)	$6,789.44	$0.00	2 days	32 hrs	Wed 12/28/16	Fri 12/30/16
386	**2.4.2.3.21**	**Travel for Global Configuration Standards Workshops**	**$13,697.44**	**$7,108.72**	**8.5 days**	**32 hrs**	**Tue 12/20/16**	**Fri 12/30/16**
387	2.4.2.3.21.1	Travel for Global Configuration Standards Workshops - Week 1	$7,108.72	$7,108.72	4 days	16 hrs	Tue 12/20/16	Fri 12/23/16
388	2.4.2.3.21.2	Travel for Global Configuration Standards Workshops - Week 2	$6,588.72	$0.00	1 day	16 hrs	Mon 12/26/16	Fri 12/30/16
389	2.4.2.4	Woolpert to Create FINAL Standards Documents	$25,700.80	$19,275.60	10 days	120 hrs	Fri 12/30/16	Fri 1/13/17
390	2.4.2.5	Woolpert to Submit Global Configuration Standards Document to County	$0.00	$0.00	0 days	0 hrs	Fri 1/13/17	Fri 1/13/17
391	2.4.2.6	County to Review Standards Document (COUNTY TASK)	$0.00	$0.00	10 days	0 hrs	Fri 1/13/17	Fri 1/27/17
392	2.4.2.7	County to Accept Standards Document (COUNTY TASK)	$0.00	$0.00	0 days	0 hrs	Fri 1/27/17	Fri 1/27/17
393	**2.5**	**Install and Test Cityworks in County Sandbox Environment**	**$23,817.72**	**$6,363.32**	**65 days**	**104 hrs**	**Wed 10/26/16**	**Tue 1/24/17**
394	**2.5.1**	**IT Hardware Installation**	**$17,454.40**	**$0.00**	**56.5 days**	**80 hrs**	**Wed 10/26/16**	**Thu 1/12/17**
395	2.5.1.1	County to Create As-Is IT Hardware Diagrams (COUNTY TASK)	$0.00	$0.00	3 days	0 hrs	Wed 10/26/16	Mon 10/31/16
396	2.5.1.2	County to Submit As-Is IT Hardware Diagrams to Woolpert (COUNTY TASK)	$0.00	$0.00	0 days	0 hrs	Mon 10/31/16	Mon 10/31/16
397	2.5.1.3	Woolpert to Facilitate IT Hardware Discussion with County	$1,745.44	$0.00	0.5 days	8 hrs	Fri 11/4/16	Fri 11/4/16
398	2.5.1.4	Woolpert to Develop Network Infrastructure Diagrams	$3,490.88	$0.00	3 days	16 hrs	Fri 11/4/16	Wed 11/9/16
399	2.5.1.5	Woolpert to Submit To-Be IT Hardware Diagrams to County	$0.00	$0.00	0 days	0 hrs	Wed 11/9/16	Wed 11/9/16
400	2.5.1.6	Woolpert to Facilitate Review of To-Be IT Hardware Diagrams with County	$1,745.44	$0.00	0.5 days	8 hrs	Wed 11/16/16	Wed 11/16/16
401	2.5.1.7	County to Procure and Install IT Hardware (COUNTY TASK)	$0.00	$0.00	40 days	0 hrs	Thu 11/17/16	Wed 1/11/17
402	2.5.1.8	Woolpert to Support IT Hardware Installation	$8,727.20	$0.00	40 days	40 hrs	Thu 11/17/16	Wed 1/11/17
403	2.5.1.9	Woolpert to Facilitate Review of the Installed IT Hardware Environment	$1,745.44	$0.00	0.5 days	8 hrs	Thu 1/12/17	Thu 1/12/17
404	**2.5.2**	**Cityworks Software Installation**	**$6,363.32**	**$0.00**	**2 days**	**24 hrs**	**Mon 1/23/17**	**Tue 1/24/17**
405	2.5.2.1	Woolpert to Install and Configure Cityworks AMS Software in a Sandbox Environ	$872.72	$872.72	0.5 days	4 hrs	Mon 1/23/17	Mon 1/23/17
406	2.5.2.2	Woolpert to Test Installation and Configuration and Modify as Required	$872.72	$872.72	0.5 days	4 hrs	Mon 1/23/17	Mon 1/23/17
407	2.5.2.3	Woolpert to Replicate Initial Sandbox Configuration to Other Environments	$872.72	$872.72	0.5 days	4 hrs	Tue 1/24/17	Tue 1/24/17
408	2.5.2.4	Woolpert to Provide Core Cityworks AMS Software Administration Training to Co	$872.72	$872.72	0.5 days	4 hrs	Tue 1/24/17	Tue 1/24/17
409	**2.5.2.5**	**Travel for Software Installation**	**$2,872.44**	**$2,872.44**	**2 days**	**8 hrs**	**Mon 1/23/17**	**Tue 1/24/17**
410	2.5.2.5.1	Travel for Software Installation	$2,872.44	$2,872.44	2 days	8 hrs	Mon 1/23/17	Tue 1/24/17
411	**2.6**	**Cityworks Software Demonstrations**	**$13,124.80**	**$13,124.80**	**10 days**	**58 hrs**	**Mon 1/16/17**	**Fri 1/27/17**
412	2.6.1	Woolpert to Prepare Software Demonstration Agenda	$436.36	$436.36	1 day	2 hrs	Mon 1/16/17	Tue 1/17/17
413	2.6.2	Woolpert to Submit Agenda to County	$0.00	$0.00	0 days	0 hrs	Tue 1/17/17	Tue 1/17/17
414	2.6.3	County to Prepare Site for Software Demonstrations (COUNTY TASK)	$0.00	$0.00	1 day	0 hrs	Mon 1/16/17	Tue 1/17/17
415	2.6.4	Woolpert to Provide Software Demonstrations (ONSITE TASK)	$10,184.16	$10,184.16	3 days	48 hrs	Wed 1/25/17	Fri 1/27/17
416	**2.6.5**	**Travel for Software Demonstrations**	**$2,504.28**	**$2,504.28**	**3 days**	**8 hrs**	**Wed 1/25/17**	**Fri 1/27/17**
417	2.6.5.1	Travel for Software Demonstrations	$2,504.28	$2,504.28	3 days	8 hrs	Wed 1/25/17	Fri 1/27/17
418	2.7	Phase 2 Quality Control	$30,563.75	$30,563.75	190 days	125 hrs	Mon 5/16/16	Fri 2/3/17
419	2.8	Phase 2 Close Out and Acceptance	$0.00	$0.00	0 days	0 hrs	Fri 1/27/17	Fri 1/27/17
420	**3**	**PHASE 3: Core System Design and Configuration**	**$1,514,920.14**	**$1,307,010.12**	**414 days**	**6,473 hrs**	**Mon 1/30/17**	**Thu 8/30/18**
421	**3.1**	**Track 1: Utilities and Solid Waste**	**$496,376.37**	**$428,888.83**	**134 days**	**2,147 hrs**	**Mon 1/30/17**	**Thu 8/3/17**
422	**3.1.1**	**Prepare Configuration Documentation**	**$14,126.16**	**$14,307.36**	**6.5 days**	**68 hrs**	**Mon 1/30/17**	**Tue 2/7/17**
423	3.1.1.1	Woolpert to Prepare Draft Configuration Documentation	$12,428.80	$12,610.00	5 days	60 hrs	Mon 1/30/17	Fri 2/3/17

ID	WBS	Task Name	Cost	Baseline Cost	Duration	Work	Start	Finish
424	3.1.1.2	Woolpert to Submit to Client PM for Review	$0.00	$0.00	0 days	0 hrs	Fri 2/3/17	Fri 2/3/17
425	3.1.1.3	Woolpert to Facilitate Remote Review Meeting with Client Technical Team	$1,697.36	$1,697.36	0.5 days	8 hrs	Tue 2/7/17	Tue 2/7/17
426	3.1.2	**Conduct Configuration Training for Core Team**	**$21,876.80**	**$21,913.04**	**10 days**	**88 hrs**	**Fri 2/3/17**	**Fri 2/17/17**
427	3.1.2.1	Woolpert to Prepare Core Team Training Agenda	$1,745.44	$1,745.44	2 days	8 hrs	Fri 2/3/17	Tue 2/7/17
428	3.1.2.2	Woolpert to Submit Agenda to Client PM	$0.00	$0.00	0 days	0 hrs	Tue 2/7/17	Tue 2/7/17
429	3.1.2.3	Client PM to Prepare Site for Core Team Training (Client-Owned Task)	$0.00	$0.00	2 days	0 hrs	Thu 2/9/17	Mon 2/13/17
430	3.1.2.4	**Training for Core Team (ONSITE TASK)**	**$13,578.88**	**$13,578.88**	**4 days**	**64 hrs**	**Mon 2/13/17**	**Fri 2/17/17**
431	3.1.2.4.1	Woolpert to Provide Core Team Training - Class 1 (ONSITE TASK)	$6,789.44	$6,789.44	2 days	32 hrs	Mon 2/13/17	Wed 2/15/17
432	3.1.2.4.2	Woolpert to Provide Core Team Training - Class 1 (ONSITE TASK)	$6,789.44	$6,789.44	2 days	32 hrs	Wed 2/15/17	Fri 2/17/17
433	3.1.2.5	**Travel for Configuration Training**	**$6,552.48**	**$6,588.72**	**4 days**	**16 hrs**	**Mon 2/13/17**	**Fri 2/17/17**
434	3.1.2.5.1	Travel for Configuration Training	$6,552.48	$6,588.72	4 days	16 hrs	Mon 2/13/17	Fri 2/17/17
435	3.1.3	**Core Cityworks AMS Configuration**	**$344,811.07**	**$343,534.52**	**88.5 days**	**1,515 hrs**	**Mon 2/27/17**	**Thu 6/29/17**
436	3.1.3.1	**Round 1 AMS Configuration Workshops**	**$164,028.19**	**$165,234.60**	**34 days**	**731 hrs**	**Mon 2/27/17**	**Fri 4/14/17**
437	3.1.3.1.1	Woolpert to Prepare for AMS Configuration Workshops (First Round)	$848.68	$848.68	1 day	4 hrs	Mon 2/27/17	Tue 2/28/17
438	3.1.3.1.2	County to Prepare for AMS Workshops (First Round)	$0.00	$0.00	1 day	0 hrs	Mon 2/27/17	Tue 2/28/17
439	3.1.3.1.3	**Woolpert to Facilitate AMS Configuration Workshops (Round 1)**	**$50,905.80**	**$51,395.04**	**19 days**	**243 hrs**	**Mon 3/6/17**	**Thu 3/30/17**
440	3.1.3.1.3.1	Utilities | Customer, Field Services AMS Configuration Workshop 1 (ONSITE	$5,656.20	$5,710.56	1.5 days	27 hrs	Mon 3/6/17	Tue 3/7/17
441	3.1.3.1.3.2	Utilities | Engineering AMS Configuration Workshop 1 (ONSITE TASK)	$5,656.20	$5,710.56	1.5 days	27 hrs	Tue 3/7/17	Wed 3/8/17
442	3.1.3.1.3.3	Utilities | Maintenance AMS Configuration Workshop 1 (ONSITE TASK)	$5,656.20	$5,710.56	1.5 days	27 hrs	Thu 3/9/17	Fri 3/10/17
443	3.1.3.1.3.4	Utilities | Plant Operations AMS Configuration Workshop 1 (ONSITE TASK)	$7,541.60	$7,614.08	2 days	36 hrs	Mon 3/20/17	Tue 3/21/17
444	3.1.3.1.3.5	Utilities | Water Quality AMS Configuration Workshop 1 (ONSITE TASK)	$5,656.20	$5,710.56	1.5 days	27 hrs	Wed 3/22/17	Thu 3/23/17
445	3.1.3.1.3.6	Solid Waste | Landfill and Solid Waste Operations AMS Configuration Work:	$5,656.20	$5,710.56	1.5 days	27 hrs	Thu 3/23/17	Fri 3/24/17
446	3.1.3.1.3.7	Solid Waste | Recycling and System Management AMS Configuration Work:	$7,541.60	$7,614.08	2 days	36 hrs	Mon 3/27/17	Tue 3/28/17
447	3.1.3.1.3.8	Solid Waste | Waste to Energy (Admin) AMS Configuration Workshop 1 (ON	$7,541.60	$7,614.08	2 days	36 hrs	Wed 3/29/17	Thu 3/30/17
448	3.1.3.1.4	**Travel for Round 1 AMS Configuration Workshops**	**$21,326.16**	**$21,326.16**	**19 days**	**48 hrs**	**Mon 3/6/17**	**Thu 3/30/17**
449	3.1.3.1.4.1	Travel for Round 1 AMS Configuration Workshops	$7,108.72	$7,108.72	4.5 days	16 hrs	Mon 3/6/17	Fri 3/10/17
450	3.1.3.1.4.2	Travel for Round 1 AMS Configuration Workshops	$7,108.72	$7,108.72	5 days	16 hrs	Mon 3/20/17	Fri 3/24/17
451	3.1.3.1.4.3	Travel for Round 1 AMS Configuration Workshops	$7,108.72	$7,108.72	4 days	16 hrs	Mon 3/27/17	Thu 3/30/17
452	3.1.3.1.5	Woolpert to Update AMS Configuration Documentation (Round 1)	$29,593.75	$29,975.52	25 days	144 hrs	Fri 3/10/17	Fri 4/14/17
453	3.1.3.1.6	Woolpert to Perform AMS Configuration in Development Environment (Round	$37,491.40	$37,830.00	25 days	180 hrs	Fri 3/10/17	Fri 4/14/17
454	3.1.3.1.7	Woolpert to Document Business Cases for Potential Customizations (Round 1)	$13,846.88	$13,771.20	25 days	64 hrs	Fri 3/10/17	Fri 4/14/17
455	3.1.3.1.8	**Woolpert to Facilitate Remote Configuration Review Meetings With Client T**	**$10,015.52**	**$10,088.00**	**14.5 days**	**48 hrs**	**Wed 3/15/17**	**Tue 4/4/17**
456	3.1.3.1.8.1	Remote Review Meeting 1	$2,503.88	$2,522.00	0.5 days	12 hrs	Wed 3/15/17	Wed 3/15/17
457	3.1.3.1.8.2	Remote Review Meeting 2	$2,503.88	$2,522.00	0.5 days	12 hrs	Tue 3/21/17	Tue 3/21/17
458	3.1.3.1.8.3	Remote Review Meeting 3	$2,503.88	$2,522.00	0.5 days	12 hrs	Tue 3/28/17	Tue 3/28/17
459	3.1.3.1.8.4	Remote Review Meeting 4	$2,503.88	$2,522.00	0.5 days	12 hrs	Tue 4/4/17	Tue 4/4/17
460	3.1.3.2	**Round 2 AMS Configuration Workshops**	**$83,574.48**	**$82,408.60**	**31 days**	**360 hrs**	**Thu 4/13/17**	**Thu 5/25/17**
461	3.1.3.2.1	Woolpert to Prepare for AMS Configuration Workshops (Second Round)	$860.60	$848.68	1 day	4 hrs	Thu 4/13/17	Fri 4/14/17
462	3.1.3.2.2	County to Prepare for AMS Workshops (Second Round)	$0.00	$0.00	1 day	0 hrs	Thu 4/13/17	Fri 4/14/17
463	3.1.3.2.3	**Woolpert to Facilitate AMS Configuration Workshops (Round 2)**	**$44,267.20**	**$43,633.76**	**9 days**	**176 hrs**	**Mon 4/24/17**	**Thu 5/4/17**
464	3.1.3.2.3.1	Utilities | Customer, Field Services AMS Configuration Workshop 2 (ONSITE	$3,865.02	$3,807.04	1 day	18 hrs	Mon 4/24/17	Mon 4/24/17
465	3.1.3.2.3.2	Utilities | Engineering AMS Configuration Workshop 2 (ONSITE TASK)	$3,865.02	$3,807.04	1 day	18 hrs	Tue 4/25/17	Tue 4/25/17
466	3.1.3.2.3.3	Utilities | Maintenance AMS Configuration Workshop 2 (ONSITE TASK)	$3,865.02	$3,807.04	1 day	18 hrs	Wed 4/26/17	Wed 4/26/17
467	3.1.3.2.3.4	Utilities | Plant Operations AMS Configuration Workshop 2 (ONSITE TASK)	$3,865.02	$3,807.04	1 day	18 hrs	Thu 4/27/17	Thu 4/27/17
468	3.1.3.2.3.5	Utilities | Water Quality AMS Configuration Workshop 2 (ONSITE TASK)	$3,865.02	$3,807.04	1 day	18 hrs	Mon 5/1/17	Mon 5/1/17
469	3.1.3.2.3.6	Solid Waste | Landfill and Solid Waste Operations AMS Configuration Work:	$3,865.02	$3,807.04	1 day	18 hrs	Tue 5/2/17	Tue 5/2/17
470	3.1.3.2.3.7	Solid Waste | Recycling and System Management AMS Configuration Work:	$3,865.02	$3,807.04	1 day	18 hrs	Wed 5/3/17	Wed 5/3/17
471	3.1.3.2.3.8	Solid Waste | Waste to Energy (Admin) AMS Configuration Workshop 2 (ON	$3,865.02	$3,807.04	1 day	18 hrs	Thu 5/4/17	Thu 5/4/17
472	3.1.3.2.3.9	**Travel for Round 2 AMS Configuration Workshops**	**$13,347.04**	**$13,177.44**	**9 days**	**32 hrs**	**Mon 4/24/17**	**Thu 5/4/17**
473	3.1.3.2.3.9.1	Travel for Round 2 AMS Configuration Workshops	$6,673.52	$6,588.72	4 days	16 hrs	Mon 4/24/17	Thu 4/27/17
474	3.1.3.2.3.9.2	Travel for Round 2 AMS Configuration Workshops	$6,673.52	$6,588.72	4 days	16 hrs	Mon 5/1/17	Thu 5/4/17
475	3.1.3.2.4	Woolpert to Update AMS Configuration Documentation (Round 2)	$11,844.88	$11,737.28	15 days	56 hrs	Fri 5/5/17	Thu 5/25/17
476	3.1.3.2.5	Woolpert to Perform AMS Configuration in Development Environment (Round	$11,844.88	$11,737.28	15 days	56 hrs	Fri 5/5/17	Thu 5/25/17

ID	WBS	Task Name	Cost	Baseline Cost	Duration	Work	Start	Finish
477	3.1.3.2.6	Woolpert to Document Business Cases for Potential Customizations (Round 2)	$7,057.60	$6,885.60	15 days	32 hrs	Fri 5/5/17	Thu 5/25/17
478	**3.1.3.2.7**	**Woolpert to Facilitate Remote Configuration Review Meetings With Client T(**	**$7,699.32**	**$7,566.00**	**9.5 days**	**36 hrs**	**Wed 5/10/17**	**Tue 5/23/17**
479	3.1.3.2.7.1	Remote Review Meeting 1	$2,566.44	$2,522.00	0.5 days	12 hrs	Wed 5/10/17	Wed 5/10/17
480	3.1.3.2.7.2	Remote Review Meeting 2	$2,566.44	$2,522.00	0.5 days	12 hrs	Tue 5/16/17	Tue 5/16/17
481	3.1.3.2.7.3	Remote Review Meeting 3	$2,566.44	$2,522.00	0.5 days	12 hrs	Tue 5/23/17	Tue 5/23/17
482	**3.1.3.3**	**Round 3 AMS Configuration Workshops**	**$97,208.40**	**$95,891.32**	**31 days**	**424 hrs**	**Thu 5/18/17**	**Thu 6/29/17**
483	3.1.3.3.1	Woolpert to Prepare for AMS Configuration Workshops (Third Round)	$860.60	$848.68	1 day	4 hrs	Thu 5/18/17	Fri 5/19/17
484	3.1.3.3.2	County to Prepare for AMS Workshops (Third Round)	$0.00	$0.00	1 day	0 hrs	Thu 5/18/17	Fri 5/19/17
485	**3.1.3.3.3**	**Woolpert to Facilitate AMS Configuration Workshops (Round 3)**	**$44,267.20**	**$43,633.76**	**9 days**	**176 hrs**	**Mon 5/29/17**	**Thu 6/8/17**
486	3.1.3.3.3.1	Utilities | Customer, Field Services AMS Configuration Workshop 3 (ONSITE	$3,865.02	$3,807.04	1 day	18 hrs	Mon 5/29/17	Mon 5/29/17
487	3.1.3.3.3.2	Utilities | Engineering AMS Configuration Workshop 3 (ONSITE TASK)	$3,865.02	$3,807.04	1 day	18 hrs	Tue 5/30/17	Tue 5/30/17
488	3.1.3.3.3.3	Utilities | Maintenance AMS Configuration Workshop 3 (ONSITE TASK)	$3,865.02	$3,807.04	1 day	18 hrs	Wed 5/31/17	Wed 5/31/17
489	3.1.3.3.3.4	Utilities | Plant Operations AMS Configuration Workshop 3 (ONSITE TASK)	$3,865.02	$3,807.04	1 day	18 hrs	Thu 6/1/17	Thu 6/1/17
490	3.1.3.3.3.5	Utilities | Water Quality AMS Configuration Workshop 3 (ONSITE TASK)	$3,865.02	$3,807.04	1 day	18 hrs	Mon 6/5/17	Mon 6/5/17
491	3.1.3.3.3.6	Solid Waste | Landfill and Solid Waste Operations AMS Configuration Work	$3,865.02	$3,807.04	1 day	18 hrs	Tue 6/6/17	Tue 6/6/17
492	3.1.3.3.3.7	Solid Waste | Recycling and System Management AMS Configuration Work	$3,865.02	$3,807.04	1 day	18 hrs	Wed 6/7/17	Wed 6/7/17
493	3.1.3.3.3.8	Solid Waste | Waste to Energy (Admin) AMS Configuration Workshop 3 (ON	$3,865.02	$3,807.04	1 day	18 hrs	Thu 6/8/17	Thu 6/8/17
494	**3.1.3.3.3.9**	**Travel for Round 3 AMS Configuration Workshops**	**$13,347.04**	**$13,177.44**	**9 days**	**32 hrs**	**Mon 5/29/17**	**Thu 6/8/17**
495	3.1.3.3.3.9.1	Travel for Round 3 AMS Configuration Workshops - Week 1	$6,673.52	$6,588.72	4 days	16 hrs	Mon 5/29/17	Thu 6/1/17
496	3.1.3.3.3.9.2	Travel for Round 3 AMS Configuration Workshops - Week 2	$6,673.52	$6,588.72	4 days	16 hrs	Mon 6/5/17	Thu 6/8/17
497	3.1.3.3.4	Woolpert to Update AMS Configuration Documentation (Round 3)	$11,844.88	$11,737.28	15 days	56 hrs	Fri 6/9/17	Thu 6/29/17
498	3.1.3.3.5	Woolpert to Perform AMS Configuration in Development Environment (Round	$25,478.80	$25,220.00	15 days	120 hrs	Fri 6/9/17	Thu 6/29/17
499	3.1.3.3.6	Woolpert to Document Business Cases for Potential Customizations (Round 3)	$7,057.60	$6,885.60	15 days	32 hrs	Fri 6/9/17	Thu 6/29/17
500	**3.1.3.3.7**	**Woolpert to Facilitate Remote Configuration Review Meetings With Client T(**	**$7,699.32**	**$7,566.00**	**9.5 days**	**36 hrs**	**Wed 6/14/17**	**Tue 6/27/17**
501	3.1.3.3.7.1	Remote Review Meeting 1	$2,566.44	$2,522.00	0.5 days	12 hrs	Wed 6/14/17	Wed 6/14/17
502	3.1.3.3.7.2	Remote Review Meeting 2	$2,566.44	$2,522.00	0.5 days	12 hrs	Tue 6/20/17	Tue 6/20/17
503	3.1.3.3.7.3	Remote Review Meeting 3	$2,566.44	$2,522.00	0.5 days	12 hrs	Tue 6/27/17	Tue 6/27/17
504	**3.1.4**	**Cityworks Storeroom Configuration**	**$61,414.70**	**$0.00**	**37 days**	**256 hrs**	**Wed 4/5/17**	**Fri 5/26/17**
505	**3.1.4.1**	**Round 1 Storeroom Configuration Workshops**	**$32,418.06**	**$0.00**	**13 days**	**136 hrs**	**Wed 4/5/17**	**Mon 4/24/17**
506	3.1.4.1.1	Woolpert to Prepare for Storeroom Configuration Workshops (First Round)	$839.62	$0.00	0.25 days	4 hrs	Wed 4/5/17	Thu 4/6/17
507	**3.1.4.1.2**	**Woolpert to Facilitate Storeroom Configuration Workshops (Round 1)**	**$18,684.80**	**$0.00**	**4 days**	**72 hrs**	**Mon 4/10/17**	**Thu 4/13/17**
508	3.1.4.1.2.1	Utilities | Customer, Field Services Storeroom Workshop 1 (ONSITE TASK)	$1,721.20	$0.00	0.5 days	8 hrs	Mon 4/10/17	Mon 4/10/17
509	3.1.4.1.2.2	Utilities | Maintenance, Operations and Engineering Storeroom Workshop	$3,442.40	$0.00	1 day	16 hrs	Mon 4/10/17	Tue 4/11/17
510	3.1.4.1.2.3	Utilities | Water Quality Storeroom Workshop 1 (ONSITE TASK)	$1,721.20	$0.00	0.5 days	8 hrs	Tue 4/11/17	Tue 4/11/17
511	3.1.4.1.2.4	Solid Waste | Landfill and Solid Waste Operations Storeroom Workshop 1 (	$1,721.20	$0.00	0.5 days	8 hrs	Wed 4/12/17	Wed 4/12/17
512	3.1.4.1.2.5	Solid Waste | Recycling and System Management Storeroom Workshop 1 (	$1,721.20	$0.00	0.5 days	8 hrs	Wed 4/12/17	Wed 4/12/17
513	3.1.4.1.2.6	Solid Waste | Waste to Energy (Admin) Storeroom Workshop 1 (ONSITE TA!	$1,721.20	$0.00	0.5 days	8 hrs	Thu 4/13/17	Thu 4/13/17
514	**3.1.4.1.2.7**	**Travel for Round 1 Storeroom Configuration Workshops**	**$6,636.40**	**$0.00**	**4 days**	**16 hrs**	**Mon 4/10/17**	**Thu 4/13/17**
515	3.1.4.1.2.7.1	Travel for Round 1 Storeroom Configuration Workshops	$6,636.40	$0.00	4 days	16 hrs	Mon 4/10/17	Thu 4/13/17
516	3.1.4.1.3	Woolpert to Update Configuration Documentation (Round 1)	$5,163.60	$0.00	3 days	24 hrs	Thu 4/13/17	Tue 4/18/17
517	3.1.4.1.4	Woolpert to Perform Configuration in Development Environment	$5,163.60	$0.00	3 days	24 hrs	Tue 4/18/17	Fri 4/21/17
518	**3.1.4.1.5**	**Woolpert to Facilitate Remote Configuration Review Meetings With Client T(**	**$2,566.44**	**$0.00**	**2.25 days**	**12 hrs**	**Thu 4/20/17**	**Mon 4/24/17**
519	3.1.4.1.5.1	Remote Review Meeting 1	$1,283.22	$0.00	0.25 days	6 hrs	Thu 4/20/17	Thu 4/20/17
520	3.1.4.1.5.2	Remote Review Meeting 2	$1,283.22	$0.00	0.25 days	6 hrs	Mon 4/24/17	Mon 4/24/17
521	**3.1.4.2**	**Round 2 Storeroom Configuration Workshops**	**$28,996.64**	**$0.00**	**12 days**	**120 hrs**	**Wed 5/10/17**	**Fri 5/26/17**
522	3.1.4.2.1	Woolpert to Prepare for Storeroom Configuration Workshops (Second Round)	$860.60	$0.00	0.25 days	4 hrs	Wed 5/10/17	Thu 5/11/17
523	**3.1.4.2.2**	**Woolpert to Facilitate Storeroom Configuration Workshops (Round 2)**	**$18,684.80**	**$0.00**	**3.5 days**	**72 hrs**	**Mon 5/15/17**	**Thu 5/18/17**
524	3.1.4.2.2.1	Utilities | Customer, Field Services Storeroom Workshop 1 (ONSITE TASK)	$1,721.20	$0.00	0.5 days	8 hrs	Mon 5/15/17	Mon 5/15/17
525	3.1.4.2.2.2	Utilities | Maintenance, Operations and Engineering Storeroom Workshop	$3,442.40	$0.00	1 day	16 hrs	Mon 5/15/17	Tue 5/16/17
526	3.1.4.2.2.3	Utilities | Water Quality Storeroom Workshop 1 (ONSITE TASK)	$1,721.20	$0.00	0.5 days	8 hrs	Tue 5/16/17	Tue 5/16/17
527	3.1.4.2.2.4	Solid Waste | Landfill and Solid Waste Operations Storeroom Workshop 1 (	$1,721.20	$0.00	0.5 days	8 hrs	Wed 5/17/17	Wed 5/17/17
528	3.1.4.2.2.5	Solid Waste | Recycling and System Management Storeroom Workshop 1 (	$1,721.20	$0.00	0.5 days	8 hrs	Wed 5/17/17	Wed 5/17/17
529	3.1.4.2.2.6	Solid Waste | Waste to Energy (Admin) Storeroom Workshop 1 (ONSITE TA!	$1,721.20	$0.00	0.5 days	**8 hrs**	Thu 5/18/17	Thu 5/18/17

ID	WBS	Task Name	Cost	Baseline Cost	Duration	Work	Start	Finish
530	3.1.4.2.2.7	Travel for Round 2 Storeroom Configuration Workshops	$6,636.40	$0.00	3.5 days	16 hrs	Mon 5/15/17	Thu 5/18/17
531	3.1.4.2.2.7.1	Travel for Round 2 Storeroom Configuration Workshops	$6,636.40	$0.00	3.5 days	16 hrs	Mon 5/15/17	Thu 5/18/17
532	3.1.4.2.3	Woolpert to Update Configuration Documentation (Round 2)	$3,442.40	$0.00	2 days	16 hrs	Thu 5/18/17	Mon 5/22/17
533	3.1.4.2.4	Woolpert to Perform Configuration in Development Environment	$3,442.40	$0.00	2 days	16 hrs	Mon 5/22/17	Wed 5/24/17
534	3.1.4.2.5	Woolpert to Facilitate Remote Configuration Review Meetings With Client Te	$2,566.44	$0.00	2.25 days	12 hrs	Wed 5/24/17	Fri 5/26/17
535	3.1.4.2.5.1	Remote Review Meeting 1	$1,283.22	$0.00	0.25 days	6 hrs	Wed 5/24/17	Wed 5/24/17
536	3.1.4.2.5.2	Remote Review Meeting 2	$1,283.22	$0.00	0.25 days	6 hrs	Fri 5/26/17	Fri 5/26/17
537	3.1.5	Review and Approval of Updated System and Configuration Documentation	$10,453.72	$10,546.52	17.5 days	48 hrs	Thu 6/29/17	Tue 7/25/17
538	3.1.5.1	Woolpert to Submit Updated Configuration Documentation to County	$0.00	$0.00	0 days	0 hrs	Thu 6/29/17	Thu 6/29/17
539	3.1.5.2	County Technical Team to Review Updated Configuration and Documentation (C	$0.00	$0.00	10 days	0 hrs	Fri 6/30/17	Thu 7/13/17
540	3.1.5.3	Woolpert to Facilitate Remote Review Meeting with County Technical Team	$3,568.92	$3,587.48	0.5 days	16 hrs	Fri 7/14/17	Fri 7/14/17
541	3.1.5.4	Woolpert to Update Configuration Documentation per County Comments	$6,884.80	$6,959.04	2 days	32 hrs	Fri 7/14/17	Tue 7/18/17
542	3.1.5.5	Woolpert to Submit Updated Pre-Final Configuration Documentation to County	$0.00	$0.00	0 days	0 hrs	Tue 7/18/17	Tue 7/18/17
543	3.1.5.6	County to Accept Pre-Final Configuraiton Document	$0.00	$0.00	0 days	0 hrs	Tue 7/25/17	Tue 7/25/17
544	3.1.6	Provide Cityworks AMS Software Demonstrations	$23,811.04	$23,885.28	8 days	92 hrs	Mon 7/24/17	Thu 8/3/17
545	3.1.6.1	Woolpert to Prepare for On-Site Software Demonstrations	$869.88	$869.88	1 day	4 hrs	Mon 7/24/17	Tue 7/25/17
546	3.1.6.2	County to Prepare for On-Site Software Demonstrations (COUNTY TASK)	$0.00	$0.00	1 day	0 hrs	Mon 7/24/17	Tue 7/25/17
547	3.1.6.3	Woolpert to Facilitate On-Site Software Demonstrations (ONSITE TASK)	$22,941.16	$23,015.40	2 days	88 hrs	Tue 8/1/17	Thu 8/3/17
548	3.1.6.3.1	Facilitate Software Demonstration 1 (ONSITE TASK)	$3,568.92	$3,587.48	0.5 days	16 hrs	Tue 8/1/17	Tue 8/1/17
549	3.1.6.3.2	Facilitate Software Demonstration 2 (ONSITE TASK)	$3,568.92	$3,587.48	0.5 days	16 hrs	Wed 8/2/17	Wed 8/2/17
550	3.1.6.3.3	Facilitate Software Demonstration 3 (ONSITE TASK)	$3,568.92	$3,587.48	0.5 days	16 hrs	Wed 8/2/17	Wed 8/2/17
551	3.1.6.3.4	Software Demonstration Wrap-Up (ONSITE TASK)	$3,568.92	$3,587.48	0.5 days	16 hrs	Thu 8/3/17	Thu 8/3/17
552	3.1.6.3.5	Travel for Final Software Demonstrations	$8,665.48	$8,665.48	2 days	24 hrs	Tue 8/1/17	Thu 8/3/17
553	3.1.6.3.5.1	Travel for Final Software Demonstrations	$8,665.48	$8,665.48	2 days	24 hrs	Tue 8/1/17	Thu 8/3/17
554	3.1.7	Phase 3: Track 1 Quality Control	$19,882.88	$14,702.11	129 days	80 hrs	Mon 2/6/17	Thu 8/3/17
555	3.1.8	Phase 3: Track 1 Acceptance and Close	$0.00	$0.00	0 days	0 hrs	Wed 8/2/17	Wed 8/2/17
556	3.2	Track 2: PCR and REM	$504,192.89	$438,032.97	130 days	2,163 hrs	Thu 8/17/17	Wed 2/14/18
557	3.2.1	Prepare Configuration Documentation	$14,479.16	$14,664.76	6.5 days	68 hrs	Thu 8/17/17	Fri 8/25/17
558	3.2.1.1	Woolpert to Prepare Draft Configuration Documentation	$12,739.40	$12,925.00	5 days	60 hrs	Thu 8/17/17	Wed 8/23/17
559	3.2.1.2	Woolpert to Submit to Client PM for Review	$0.00	$0.00	0 days	0 hrs	Wed 8/23/17	Wed 8/23/17
560	3.2.1.3	Woolpert to Facilitate Remote Review Meeting with Client Technical Team	$1,739.76	$1,739.76	0.5 days	8 hrs	Fri 8/25/17	Fri 8/25/17
561	3.2.2	Conduct Configuration Training for Core Team	$22,343.52	$22,380.64	10 days	88 hrs	Fri 8/25/17	Fri 9/8/17
562	3.2.2.1	Woolpert to Prepare Core Team Training Agenda	$1,789.04	$1,789.04	2 days	8 hrs	Fri 8/25/17	Tue 8/29/17
563	3.2.2.2	Woolpert to Submit Agenda to Client PM	$0.00	$0.00	0 days	0 hrs	Tue 8/29/17	Tue 8/29/17
564	3.2.2.3	Client PM to Prepare Site for Core Team Training (Client-Owned Task)	$0.00	$0.00	2 days	0 hrs	Thu 8/31/17	Mon 9/4/17
565	3.2.2.4	Training for Core Team (ONSITE TASK)	$20,554.48	$20,591.60	4 days	80 hrs	Mon 9/4/17	Fri 9/8/17
566	3.2.2.4.1	Woolpert to Provide Core Team Training - Class 1 (ONSITE TASK)	$6,959.04	$6,959.04	2 days	32 hrs	Mon 9/4/17	Wed 9/6/17
567	3.2.2.4.2	Woolpert to Provide Core Team Training - Class 1 (ONSITE TASK)	$6,959.04	$6,959.04	2 days	32 hrs	Wed 9/6/17	Fri 9/8/17
568	3.2.2.4.3	Travel for Configuration Training	$6,636.40	$6,673.52	4 days	16 hrs	Mon 9/4/17	Fri 9/8/17
569	3.2.2.4.3.1	Travel for Configuration Training	$6,636.40	$6,673.52	4 days	16 hrs	Mon 9/4/17	Fri 9/8/17
570	3.2.3	Core Cityworks AMS Configuration	$348,177.77	$351,518.57	88 days	1,515 hrs	Tue 9/12/17	Thu 1/11/18
571	3.2.3.1	Round 1 AMS Configuration Workshops	$167,394.89	$169,083.85	34 days	731 hrs	Tue 9/12/17	Fri 10/27/17
572	3.2.3.1.1	Woolpert to Prepare for AMS Configuration Workshops (First Round)	$869.88	$869.88	1 day	4 hrs	Tue 9/12/17	Tue 9/12/17
573	3.2.3.1.2	County to Prepare for AMS Workshops (First Round)	$0.00	$0.00	1 day	0 hrs	Thu 9/14/17	Fri 9/15/17
574	3.2.3.1.3	Woolpert to Facilitate AMS Configuration Workshops (Round 1)	$73,758.33	$74,259.45	18.5 days	291 hrs	Mon 9/18/17	Thu 10/12/17
575	3.2.3.1.3.1	PCR	Air Quality AMS Configuration Workshop 1 (ONSITE TASK)	$5,797.53	$5,853.21	1.5 days	27 hrs	Mon 9/18/17	Tue 9/19/17
576	3.2.3.1.3.2	PCR	Business Service Management AMS Configuration Workshop 1 (ONSI	$5,797.53	$5,853.21	1.5 days	27 hrs	Wed 9/20/17	Thu 9/21/17
577	3.2.3.1.3.3	PCR	Parks / Other AMS Configuration Workshop 1 (ONSITE TASK)	$5,797.53	$5,853.21	1.5 days	27 hrs	Thu 9/21/17	Fri 9/22/17
578	3.2.3.1.3.4	PCR	Trades AMS Configuration Workshop 1 (ONSITE TASK)	$7,730.04	$7,804.28	2 days	36 hrs	Mon 10/2/17	Tue 10/3/17
579	3.2.3.1.3.5	REM	Bldg. D&C, FO, MP RP AMS Configuration Workshop 1 (ONSITE TASK)	$5,797.53	$5,853.21	1.5 days	27 hrs	Wed 10/4/17	Thu 10/5/17
580	3.2.3.1.3.6	REM	Detention Section AMS Configuration Workshop 1 (ONSITE TASK)	$5,797.53	$5,853.21	1.5 days	27 hrs	Thu 10/5/17	Fri 10/6/17
581	3.2.3.1.3.7	REM	Fleet Management AMS Configuration Workshop 1 (ONSITE TASK)	$7,730.04	$7,804.28	2 days	36 hrs	Mon 10/9/17	Tue 10/10/17
582	3.2.3.1.3.8	REM	NW, SE and STAR Center AMS Configuration Workshop 1 (ONSITE TA	$7,730.04	$7,804.28	2 days	36 hrs	Wed 10/11/17	Thu 10/12/17

ID	WBS	Task Name	Cost	Baseline Cost	Duration	Work	Start	Finish
583	3.2.3.1.3.9	**Travel for Round 1 AMS Configuration Workshops**	**$21,580.56**	**$21,580.56**	**18.5 days**	**48 hrs**	**Mon 9/18/17**	**Thu 10/12/17**
584	3.2.3.1.3.9.1	Travel for Round 1 AMS Configuration Workshops	$7,193.52	$7,193.52	4.5 days	16 hrs	Mon 9/18/17	Fri 9/22/17
585	3.2.3.1.3.9.2	Travel for Round 1 AMS Configuration Workshops	$7,193.52	$7,193.52	5 days	16 hrs	Mon 10/2/17	Fri 10/6/17
586	3.2.3.1.3.9.3	Travel for Round 1 AMS Configuration Workshops	$7,193.52	$7,193.52	4 days	16 hrs	Mon 10/9/17	Thu 10/12/17
587	3.2.3.1.4	Woolpert to Update AMS Configuration Documentation (Round 1)	$30,167.52	$30,724.32	25 days	144 hrs	Mon 9/25/17	Fri 10/27/17
588	3.2.3.1.5	Woolpert to Perform AMS Configuration in Development Environment (Round	$38,218.20	$38,775.00	25 days	180 hrs	Mon 9/25/17	Fri 10/27/17
589	3.2.3.1.6	Woolpert to Document Business Cases for Potential Customizations (Round 1)	$14,115.20	$14,115.20	25 days	64 hrs	Mon 9/25/17	Fri 10/27/17
590	3.2.3.1.7	**Woolpert to Facilitate Remote Configuration Review Meetings With Client T**	**$10,265.76**	**$10,340.00**	**14.5 days**	**48 hrs**	**Thu 9/28/17**	**Wed 10/18/17**
591	3.2.3.1.7.1	Remote Review Meeting 1	$2,566.44	$2,585.00	0.5 days	12 hrs	Thu 9/28/17	Thu 9/28/17
592	3.2.3.1.7.2	Remote Review Meeting 2	$2,566.44	$2,585.00	0.5 days	12 hrs	Wed 10/4/17	Wed 10/4/17
593	3.2.3.1.7.3	Remote Review Meeting 3	$2,566.44	$2,585.00	0.5 days	12 hrs	Wed 10/11/17	Wed 10/11/17
594	3.2.3.1.7.4	Remote Review Meeting 4	$2,566.44	$2,585.00	0.5 days	12 hrs	Wed 10/18/17	Wed 10/18/17
595	3.2.3.2	**Round 2 AMS Configuration Workshops**	**$83,574.48**	**$84,307.60**	**31 days**	**360 hrs**	**Thu 10/26/17**	**Thu 12/7/17**
596	3.2.3.2.1	Woolpert to Prepare for AMS Configuration Workshops (Second Round)	$860.60	$869.88	1 day	4 hrs	Thu 10/26/17	Fri 10/27/17
597	3.2.3.2.2	County to Prepare for AMS Workshops (Second Round)	$0.00	$0.00	1 day	0 hrs	Thu 10/26/17	Fri 10/27/17
598	3.2.3.2.3	**Woolpert to Facilitate AMS Configuration Workshops (Round 2)**	**$44,267.20**	**$44,564.16**	**9 days**	**176 hrs**	**Mon 11/6/17**	**Thu 11/16/17**
599	3.2.3.2.3.1	PCR | Air Quality AMS Configuration Workshop 2 (ONSITE TASK)	$3,865.02	$3,902.14	1 day	18 hrs	Mon 11/6/17	Mon 11/6/17
600	3.2.3.2.3.2	PCR | Business Service Management AMS Configuration Workshop 2 (ONSI	$3,865.02	$3,902.14	1 day	18 hrs	Tue 11/7/17	Tue 11/7/17
601	3.2.3.2.3.3	PCR | Parks / Other AMS Configuration Workshop 2 (ONSITE TASK)	$3,865.02	$3,902.14	1 day	18 hrs	Wed 11/8/17	Wed 11/8/17
602	3.2.3.2.3.4	PCR | Trades AMS Configuration Workshop 2 (ONSITE TASK)	$3,865.02	$3,902.14	1 day	18 hrs	Thu 11/9/17	Thu 11/9/17
603	3.2.3.2.3.5	REM | Bldg. D&C, FO, MP RP AMS Configuration Workshop 2 (ONSITE TASK)	$3,865.02	$3,902.14	1 day	18 hrs	Mon 11/13/17	Mon 11/13/17
604	3.2.3.2.3.6	REM | Detention Section AMS Configuration Workshop 2 (ONSITE TASK)	$3,865.02	$3,902.14	1 day	18 hrs	Tue 11/14/17	Tue 11/14/17
605	3.2.3.2.3.7	REM | Fleet Management AMS Configuration Workshop 2 (ONSITE TASK)	$3,865.02	$3,902.14	1 day	18 hrs	Wed 11/15/17	Wed 11/15/17
606	3.2.3.2.3.8	REM | NW, SE and STAR Center AMS Configuration Workshop 2 (ONSITE TA	$3,865.02	$3,902.14	1 day	18 hrs	Thu 11/16/17	Thu 11/16/17
607	3.2.3.2.3.9	**Travel for Round 2 AMS Configuration Workshops**	**$13,347.04**	**$13,347.04**	**9 days**	**32 hrs**	**Mon 11/6/17**	**Thu 11/16/17**
608	3.2.3.2.3.9.1	Travel for Round 2 AMS Configuration Workshops	$6,673.52	$6,673.52	4 days	16 hrs	Mon 11/6/17	Thu 11/9/17
609	3.2.3.2.3.9.2	Travel for Round 2 AMS Configuration Workshops	$6,673.52	$6,673.52	4 days	16 hrs	Mon 11/13/17	Thu 11/16/17
610	3.2.3.2.4	Woolpert to Update AMS Configuration Documentation (Round 2)	$11,844.88	$12,030.48	15 days	56 hrs	Fri 11/17/17	Thu 12/7/17
611	3.2.3.2.5	Woolpert to Perform AMS Configuration in Development Environment (Round	$11,844.88	$12,030.48	15 days	56 hrs	Fri 11/17/17	Thu 12/7/17
612	3.2.3.2.6	Woolpert to Document Business Cases for Potential Customizations (Round 2)	$7,057.60	$7,057.60	15 days	32 hrs	Fri 11/17/17	Thu 12/7/17
613	3.2.3.2.7	**Woolpert to Facilitate Remote Configuration Review Meetings With Client T**	**$7,699.32**	**$7,755.00**	**9.5 days**	**36 hrs**	**Wed 11/22/17**	**Tue 12/5/17**
614	3.2.3.2.7.1	Remote Review Meeting 1	$2,566.44	$2,585.00	0.5 days	12 hrs	Wed 11/22/17	Wed 11/22/17
615	3.2.3.2.7.2	Remote Review Meeting 2	$2,566.44	$2,585.00	0.5 days	12 hrs	Tue 11/28/17	Tue 11/28/17
616	3.2.3.2.7.3	Remote Review Meeting 3	$2,566.44	$2,585.00	0.5 days	12 hrs	Tue 12/5/17	Tue 12/5/17
617	3.2.3.3	**Round 3 AMS Configuration Workshops**	**$97,208.40**	**$98,127.12**	**31 days**	**424 hrs**	**Thu 11/30/17**	**Thu 1/11/18**
618	3.2.3.3.1	Woolpert to Prepare for AMS Configuration Workshops (Third Round)	$860.60	$869.88	1 day	4 hrs	Thu 11/30/17	Fri 12/1/17
619	3.2.3.3.2	County to Prepare for AMS Workshops (Third Round)	$0.00	$0.00	1 day	0 hrs	Thu 11/30/17	Fri 12/1/17
620	3.2.3.3.3	**Woolpert to Facilitate AMS Configuration Workshops (Round 3)**	**$44,267.20**	**$44,564.16**	**9 days**	**176 hrs**	**Mon 12/11/17**	**Thu 12/21/17**
621	3.2.3.3.3.1	PCR | Air Quality AMS Configuration Workshop 3 (ONSITE TASK)	$3,865.02	$3,902.14	1 day	18 hrs	Mon 12/11/17	Mon 12/11/17
622	3.2.3.3.3.2	PCR | Business Service Management AMS Configuration Workshop 3 (ONSI	$3,865.02	$3,902.14	1 day	18 hrs	Tue 12/12/17	Tue 12/12/17
623	3.2.3.3.3.3	PCR | Parks / Other AMS Configuration Workshop 3 (ONSITE TASK)	$3,865.02	$3,902.14	1 day	18 hrs	Wed 12/13/17	Wed 12/13/17
624	3.2.3.3.3.4	PCR | Trades AMS Configuration Workshop 3 (ONSITE TASK)	$3,865.02	$3,902.14	1 day	18 hrs	Thu 12/14/17	Thu 12/14/17
625	3.2.3.3.3.5	REM | Bldg. D&C, FO, MP RP AMS Configuration Workshop 3 (ONSITE TASK)	$3,865.02	$3,902.14	1 day	18 hrs	Mon 12/18/17	Mon 12/18/17
626	3.2.3.3.3.6	REM | Detention Section AMS Configuration Workshop 3 (ONSITE TASK)	$3,865.02	$3,902.14	1 day	18 hrs	Tue 12/19/17	Tue 12/19/17
627	3.2.3.3.3.7	REM | Fleet Management AMS Configuration Workshop 3 (ONSITE TASK)	$3,865.02	$3,902.14	1 day	18 hrs	Wed 12/20/17	Wed 12/20/17
628	3.2.3.3.3.8	REM | NW, SE and STAR Center AMS Configuration Workshop 3 (ONSITE TA	$3,865.02	$3,902.14	1 day	18 hrs	Thu 12/21/17	Thu 12/21/17
629	3.2.3.3.3.9	**Travel for Round 3 AMS Configuration Workshops**	**$13,347.04**	**$13,347.04**	**9 days**	**32 hrs**	**Mon 12/11/17**	**Thu 12/21/17**
630	3.2.3.3.3.9.1	Travel for Round 3 AMS Configuration Workshops - Week 1	$6,673.52	$6,673.52	4 days	16 hrs	Mon 12/11/17	Thu 12/14/17
631	3.2.3.3.3.9.2	Travel for Round 3 AMS Configuration Workshops - Week 2	$6,673.52	$6,673.52	4 days	16 hrs	Mon 12/18/17	Thu 12/21/17
632	3.2.3.3.4	Woolpert to Update AMS Configuration Documentation (Round 3)	$11,844.88	$12,030.48	15 days	56 hrs	Fri 12/22/17	Thu 1/11/18
633	3.2.3.3.5	Woolpert to Perform AMS Configuration in Development Environment (Round	$25,478.80	$25,850.00	15 days	120 hrs	Fri 12/22/17	Thu 1/11/18
634	3.2.3.3.6	Woolpert to Document Business Cases for Potential Customizations (Round 3)	$7,057.60	$7,057.60	15 days	32 hrs	Fri 12/22/17	Thu 1/11/18
635	3.2.3.3.7	**Woolpert to Facilitate Remote Configuration Review Meetings With Client T**	**$7,699.32**	**$7,755.00**	**9.5 days**	**36 hrs**	**Wed 12/27/17**	**Tue 1/9/18**

ID	WBS	Task Name	Cost	Baseline Cost	Duration	Work	Start	Finish
636	3.2.3.3.7.1	Remote Review Meeting 1	$2,566.44	$2,585.00	0.5 days	12 hrs	Wed 12/27/17	Wed 12/27/17
637	3.2.3.3.7.2	Remote Review Meeting 2	$2,566.44	$2,585.00	0.5 days	12 hrs	Tue 1/2/18	Tue 1/2/18
638	3.2.3.3.7.3	Remote Review Meeting 3	$2,566.44	$2,585.00	0.5 days	12 hrs	Tue 1/9/18	Tue 1/9/18
639	**3.2.4**	**Cityworks Storeroom Configuration**	**$64,878.08**	**$0.00**	**64.25 days**	**272 hrs**	**Tue 9/12/17**	**Mon 12/11/17**
640	**3.2.4.1**	**Round 1 Storeroom Configuration Workshops**	**$34,160.24**	**$0.00**	**37.75 days**	**144 hrs**	**Tue 9/12/17**	**Thu 11/2/17**
641	3.2.4.1.1	Woolpert to Prepare for Storeroom Configuration Workshops (First Round)	$860.60	$0.00	0.25 days	4 hrs	Mon 10/16/17	Tue 10/17/17
642	**3.2.4.1.2**	**Woolpert to Facilitate Storeroom Configuration Workshops (Round 1)**	**$20,406.00**	**$0.00**	**33 days**	**80 hrs**	**Tue 9/12/17**	**Thu 10/26/17**
643	3.2.4.1.2.1	PCR | Air Quality Storeroom Workshop 1 (ONSITE TASK)	$1,721.20	$0.00	0.5 days	8 hrs	Mon 10/23/17	Mon 10/23/17
644	3.2.4.1.2.2	PCR | Business Service Management Storeroom Workshop 1 (ONSITE TASK)	$1,721.20	$0.00	0.5 days	8 hrs	Mon 10/23/17	Mon 10/23/17
645	3.2.4.1.2.3	PCR | Parks / Other Storeroom Workshop 1 (ONSITE TASK)	$1,721.20	$0.00	0.5 days	8 hrs	Tue 10/24/17	Tue 10/24/17
646	3.2.4.1.2.4	PCR | Trades Storeroom Workshop 1 (ONSITE TASK)	$1,721.20	$0.00	0.5 days	8 hrs	Tue 9/12/17	Tue 9/12/17
647	3.2.4.1.2.5	REM | Bldg. D&C, FO, MP RP Storeroom Workshop 1 (ONSITE TASK)	$1,721.20	$0.00	0.5 days	8 hrs	Tue 9/12/17	Tue 9/12/17
648	3.2.4.1.2.6	REM | Detention Section Storeroom Workshop 1 (ONSITE TASK)	$1,721.20	$0.00	0.5 days	8 hrs	Tue 9/12/17	Tue 9/12/17
649	3.2.4.1.2.7	REM | Fleet Management Storeroom Workshop 1 (ONSITE TASK)	$1,721.20	$0.00	0.5 days	8 hrs	Tue 9/12/17	Tue 9/12/17
650	3.2.4.1.2.8	REM | NW, SE and STAR Center Storeroom Workshop 1 (ONSITE TASK)	$1,721.20	$0.00	0.5 days	8 hrs	Tue 9/12/17	Tue 9/12/17
651	**3.2.4.1.2.9**	**Travel for Round 1 Storeroom Configuration Workshops**	**$6,636.40**	**$0.00**	**4 days**	**16 hrs**	**Mon 10/23/17**	**Thu 10/26/17**
652	3.2.4.1.2.9.1	Travel for Round 1 Storeroom Configuration Workshops	$6,636.40	$0.00	4 days	16 hrs	Mon 10/23/17	Thu 10/26/17
653	3.2.4.1.3	Woolpert to Update Configuration Documentation (Round 1)	$5,163.60	$0.00	3 days	24 hrs	Tue 10/24/17	Fri 10/27/17
654	3.2.4.1.4	Woolpert to Perform Configuration in Development Environment	$5,163.60	$0.00	3 days	24 hrs	Fri 10/27/17	Wed 11/1/17
655	**3.2.4.1.5**	**Woolpert to Facilitate Remote Configuration Review Meetings With Client T(**	**$2,566.44**	**$0.00**	**2.25 days**	**12 hrs**	**Tue 10/31/17**	**Thu 11/2/17**
656	3.2.4.1.5.1	Remote Review Meeting 1	$1,283.22	$0.00	0.25 days	6 hrs	Tue 10/31/17	Tue 10/31/17
657	3.2.4.1.5.2	Remote Review Meeting 2	$1,283.22	$0.00	0.25 days	6 hrs	Thu 11/2/17	Thu 11/2/17
658	**3.2.4.2**	**Round 2 Storeroom Configuration Workshops**	**$30,717.84**	**$0.00**	**12 days**	**128 hrs**	**Thu 11/23/17**	**Mon 12/11/17**
659	3.2.4.2.1	Woolpert to Prepare for Storeroom Configuration Workshops (Second Round)	$860.60	$0.00	0.25 days	4 hrs	Thu 11/23/17	Thu 11/23/17
660	**3.2.4.2.2**	**Woolpert to Facilitate Storeroom Configuration Workshops (Round 2)**	**$20,406.00**	**$0.00**	**4 days**	**80 hrs**	**Mon 11/27/17**	**Thu 11/30/17**
661	3.2.4.2.2.1	PCR | Air Quality Storeroom Workshop 1 (ONSITE TASK)	$1,721.20	$0.00	0.5 days	8 hrs	Mon 11/27/17	Mon 11/27/17
662	3.2.4.2.2.2	PCR | Business Service Management Storeroom Workshop 1 (ONSITE TASK)	$1,721.20	$0.00	0.5 days	8 hrs	Mon 11/27/17	Mon 11/27/17
663	3.2.4.2.2.3	PCR | Parks / Other Storeroom Workshop 1 (ONSITE TASK)	$1,721.20	$0.00	0.5 days	8 hrs	Tue 11/28/17	Tue 11/28/17
664	3.2.4.2.2.4	PCR | Trades Storeroom Workshop 1 (ONSITE TASK)	$1,721.20	$0.00	0.5 days	8 hrs	Tue 11/28/17	Tue 11/28/17
665	3.2.4.2.2.5	REM | Bldg. D&C, FO, MP RP Storeroom Workshop 1 (ONSITE TASK)	$1,721.20	$0.00	0.5 days	8 hrs	Wed 11/29/17	Wed 11/29/17
666	3.2.4.2.2.6	REM | Detention Section Storeroom Workshop 1 (ONSITE TASK)	$1,721.20	$0.00	0.5 days	8 hrs	Wed 11/29/17	Wed 11/29/17
667	3.2.4.2.2.7	REM | Fleet Management Storeroom Workshop 1 (ONSITE TASK)	$1,721.20	$0.00	0.5 days	8 hrs	Thu 11/30/17	Thu 11/30/17
668	3.2.4.2.2.8	REM | NW, SE and STAR Center Storeroom Workshop 1 (ONSITE TASK)	$1,721.20	$0.00	0.5 days	8 hrs	Thu 11/30/17	Thu 11/30/17
669	**3.2.4.2.2.9**	**Travel for Round 2 Storeroom Configuration Workshops**	**$6,636.40**	**$0.00**	**4 days**	**16 hrs**	**Mon 11/27/17**	**Thu 11/30/17**
670	3.2.4.2.2.9.1	Travel for Round 2 Storeroom Configuration Workshops	$6,636.40	$0.00	4 days	16 hrs	Mon 11/27/17	Thu 11/30/17
671	3.2.4.2.3	Woolpert to Update Configuration Documentation (Round 2)	$3,442.40	$0.00	2 days	16 hrs	Fri 12/1/17	Mon 12/4/17
672	3.2.4.2.4	Woolpert to Perform Configuration in Development Environment	$3,442.40	$0.00	2 days	16 hrs	Tue 12/5/17	Wed 12/6/17
673	**3.2.4.2.5**	**Woolpert to Facilitate Remote Configuration Review Meetings With Client T(**	**$2,566.44**	**$0.00**	**2.25 days**	**12 hrs**	**Thu 12/7/17**	**Mon 12/11/17**
674	3.2.4.2.5.1	Remote Review Meeting 1	$1,283.22	$0.00	0.25 days	6 hrs	Thu 12/7/17	Thu 12/7/17
675	3.2.4.2.5.2	Remote Review Meeting 2	$1,283.22	$0.00	0.25 days	6 hrs	Mon 12/11/17	Mon 12/11/17
676	**3.2.5**	**Review and Approval of Updated System and Configuration Documentation**	**$10,453.72**	**$10,546.52**	**17.5 days**	**48 hrs**	**Thu 1/11/18**	**Tue 2/6/18**
677	3.2.5.1	Woolpert to Submit Updated Configuration Documentation to County	$0.00	$0.00	0 days	0 hrs	Thu 1/11/18	Thu 1/11/18
678	3.2.5.2	Coounty Technical Team to Review Updated Configuration and Documentation (	$0.00	$0.00	10 days	0 hrs	Fri 1/12/18	Thu 1/25/18
679	3.2.5.3	Woolpert to Facilitate Remote Review Meeting with County Technical Team	$3,568.92	$3,587.48	0.5 days	16 hrs	Fri 1/26/18	Fri 1/26/18
680	3.2.5.4	Woolpert to Update Configuration Documentation per County Comments	$6,884.80	$6,959.04	2 days	32 hrs	Fri 1/26/18	Tue 1/30/18
681	3.2.5.5	Woolpert to Submit Updated Pre-Final Configuration Documentation to County	$0.00	$0.00	0 days	0 hrs	Tue 1/30/18	Tue 1/30/18
682	3.2.5.6	County to Accept Pre-Final Configuraiton Document	$0.00	$0.00	0 days	0 hrs	Tue 2/6/18	Tue 2/6/18
683	**3.2.6**	**Provide Cityworks AMS Software Demonstrations**	**$23,811.04**	**$23,885.28**	**8 days**	**92 hrs**	**Fri 2/2/18**	**Wed 2/14/18**
684	3.2.6.1	Woolpert to Prepare for On-Site Software Demonstrations	$869.88	$869.88	1 day	4 hrs	Fri 2/2/18	Mon 2/5/18
685	3.2.6.2	County to Prepare for On-Site Software Demonstrations (COUNTY TASK)	$0.00	$0.00	1 day	0 hrs	Fri 2/2/18	Mon 2/5/18
686	**3.2.6.3**	**Woolpert to Facilitate On-Site Software Demonstrations (ONSITE TASK)**	**$22,941.16**	**$23,015.40**	**2 days**	**88 hrs**	**Mon 2/12/18**	**Wed 2/14/18**
687	3.2.6.3.1	Facilitate Software Demonstration 1 (ONSITE TASK)	$3,568.92	$3,587.48	0.5 days	16 hrs	Mon 2/12/18	Mon 2/12/18
688	3.2.6.3.2	Facilitate Software Demonstration 2 (ONSITE TASK)	$3,568.92	$3,587.48	0.5 days	16 hrs	Tue 2/13/18	Tue 2/13/18

ID	WBS	Task Name	Cost	Baseline Cost	Duration	Work	Start	Finish
689	3.2.6.3.3	Facilitate Software Demonstration 3 (ONSITE TASK)	$3,568.92	$3,587.48	0.5 days	16 hrs	Tue 2/13/18	Tue 2/13/18
690	3.2.6.3.4	Software Demonstration Wrap-Up (ONSITE TASK)	$3,568.92	$3,587.48	0.5 days	16 hrs	Wed 2/14/18	Wed 2/14/18
691	**3.2.6.3.5**	**Travel for Final Software Demonstrations**	**$8,665.48**	**$8,665.48**	**2 days**	**24 hrs**	**Mon 2/12/18**	**Wed 2/14/18**
692	3.2.6.3.5.1	Travel for Final Software Demonstrations	$8,665.48	$8,665.48	2 days	24 hrs	Mon 2/12/18	Wed 2/14/18
693	3.2.7	Phase 3: Track 2 Quality Control	$20,049.60	$15,037.20	130 days	80 hrs	Thu 8/17/17	Wed 2/14/18
694	3.2.8	Phase 3: Track 2 Acceptance and Close	$0.00	$0.00	0 days	0 hrs	Tue 2/13/18	Tue 2/13/18
695	**3.3**	**Track 3: Public Works**	**$514,350.89**	**$440,088.32**	**132 days**	**2,163 hrs**	**Wed 2/28/18**	**Thu 8/30/18**
696	**3.3.1**	**Prepare Configuration Documentation**	**$14,479.16**	**$14,664.76**	**6.5 days**	**68 hrs**	**Wed 2/28/18**	**Thu 3/8/18**
697	3.3.1.1	Woolpert to Prepare Draft Configuration Documentation	$12,739.40	$12,925.00	5 days	60 hrs	Wed 2/28/18	Tue 3/6/18
698	3.3.1.2	Woolpert to Submit to Client PM for Review	$0.00	$0.00	0 days	0 hrs	Tue 3/6/18	Tue 3/6/18
699	3.3.1.3	Woolpert to Facilitate Remote Review Meeting with Client Technical Team	$1,739.76	$1,739.76	0.5 days	8 hrs	Thu 3/8/18	Thu 3/8/18
700	**3.3.2**	**Conduct Configuration Training for Core Team**	**$22,343.52**	**$22,380.64**	**10 days**	**88 hrs**	**Fri 3/9/18**	**Thu 3/22/18**
701	3.3.2.1	Woolpert to Prepare Core Team Training Agenda	$1,789.04	$1,789.04	2 days	8 hrs	Fri 3/9/18	Tue 3/13/18
702	3.3.2.2	Woolpert to Submit Agenda to Client PM	$0.00	$0.00	0 days	0 hrs	Tue 3/13/18	Tue 3/13/18
703	3.3.2.3	Client PM to Prepare Site for Core Team Training (Client-Owned Task)	$0.00	$0.00	2 days	0 hrs	Thu 3/15/18	Mon 3/19/18
704	**3.3.2.4**	**Training for Core Team (ONSITE TASK)**	**$20,554.48**	**$20,591.60**	**4 days**	**80 hrs**	**Mon 3/19/18**	**Thu 3/22/18**
705	3.3.2.4.1	Woolpert to Provide Core Team Training - Class 1 (ONSITE TASK)	$6,959.04	$6,959.04	2 days	32 hrs	Mon 3/19/18	Tue 3/20/18
706	3.3.2.4.2	Woolpert to Provide Core Team Training - Class 1 (ONSITE TASK)	$6,959.04	$6,959.04	2 days	32 hrs	Wed 3/21/18	Thu 3/22/18
707	**3.3.2.4.3**	**Travel for Configuration Training**	**$6,636.40**	**$6,673.52**	**4 days**	**16 hrs**	**Mon 3/19/18**	**Thu 3/22/18**
708	3.3.2.4.3.1	Travel for Configuration Training	$6,636.40	$6,673.52	4 days	16 hrs	Mon 3/19/18	Thu 3/22/18
709	**3.3.3**	**Core Cityworks AMS Configuration**	**$355,700.79**	**$352,685.67**	**91 days**	**1,515 hrs**	**Thu 3/22/18**	**Thu 7/26/18**
710	**3.3.3.1**	**Round 1 AMS Configuration Workshops**	**$170,717.11**	**$169,083.85**	**36.5 days**	**731 hrs**	**Thu 3/22/18**	**Fri 5/11/18**
711	3.3.3.1.1	Woolpert to Prepare for AMS Configuration Workshops (First Round)	$869.88	$869.88	1 day	4 hrs	Thu 3/22/18	Fri 3/23/18
712	3.3.3.1.2	County to Prepare for AMS Workshops (First Round)	$0.00	$0.00	1 day	0 hrs	Thu 3/29/18	Fri 3/30/18
713	**3.3.3.1.3**	**Woolpert to Facilitate AMS Configuration Workshops (Round 1)**	**$74,802.01**	**$74,259.45**	**19 days**	**291 hrs**	**Mon 4/2/18**	**Thu 4/26/18**
714	3.3.3.1.3.1	Public Works | Customer Service AMS Configuration Workshop 1 (ONSITE T	$5,797.53	$5,853.21	1.5 days	27 hrs	Mon 4/2/18	Tue 4/3/18
715	3.3.3.1.3.2	Public Works | Construction Management AMS Configuration Workshop 1 (	$5,797.53	$5,853.21	1.5 days	27 hrs	Tue 4/3/18	Wed 4/4/18
716	3.3.3.1.3.3	Public Works | Engineering Services AMS Configuration Workshop 1 (ONSIT	$5,797.53	$5,853.21	1.5 days	27 hrs	Thu 4/5/18	Fri 4/6/18
717	3.3.3.1.3.4	Public Works | Environmental Mgmt AMS Configuration Workshop 1 (ONSI	$7,923.32	$7,804.28	2 days	36 hrs	Mon 4/16/18	Tue 4/17/18
718	3.3.3.1.3.5	Public Works | Stormwater AMS Configuration Workshop 1 (ONSITE TASK)	$5,942.49	$5,853.21	1.5 days	27 hrs	Wed 4/18/18	Thu 4/19/18
719	3.3.3.1.3.6	Public Works | Vegetation AMS Configuration Workshop 1 (ONSITE TASK)	$5,942.49	$5,853.21	1.5 days	27 hrs	Thu 4/19/18	Fri 4/20/18
720	3.3.3.1.3.7	Public Works | Survey and Mapping AMS Configuration Workshop 1 (ONSIT	$7,923.32	$7,804.28	2 days	36 hrs	Mon 4/23/18	Tue 4/24/18
721	3.3.3.1.3.8	Public Works | Transportation AMS Configuration Workshop 1 (ONSITE TAS	$7,923.32	$7,804.28	2 days	36 hrs	Wed 4/25/18	Thu 4/26/18
722	**3.3.3.1.3.9**	**Travel for Round 1 AMS Configuration Workshops**	**$21,754.48**	**$21,580.56**	**19 days**	**48 hrs**	**Mon 4/2/18**	**Thu 4/26/18**
723	3.3.3.1.3.9.1	Travel for Round 1 AMS Configuration Workshops	$7,193.52	$7,193.52	4.5 days	16 hrs	Mon 4/2/18	Fri 4/6/18
724	3.3.3.1.3.9.2	Travel for Round 1 AMS Configuration Workshops	$7,280.48	$7,193.52	5 days	16 hrs	Mon 4/16/18	Fri 4/20/18
725	3.3.3.1.3.9.3	Travel for Round 1 AMS Configuration Workshops	$7,280.48	$7,193.52	4 days	16 hrs	Mon 4/23/18	Thu 4/26/18
726	3.3.3.1.4	Woolpert to Update AMS Configuration Documentation (Round 1)	$30,906.99	$30,724.32	25 days	144 hrs	Fri 4/6/18	Fri 5/11/18
727	3.3.3.1.5	Woolpert to Perform AMS Configuration in Development Environment (Round	$39,154.88	$38,775.00	25 days	180 hrs	Fri 4/6/18	Fri 5/11/18
728	3.3.3.1.6	Woolpert to Document Business Cases for Potential Customizations (Round 1)	$14,460.94	$14,115.20	25 days	64 hrs	Fri 4/6/18	Fri 5/11/18
729	**3.3.3.1.7**	**Woolpert to Facilitate Remote Configuration Review Meetings With Client T**	**$10,522.40**	**$10,340.00**	**14.5 days**	**48 hrs**	**Wed 4/11/18**	**Tue 5/1/18**
730	3.3.3.1.7.1	Remote Review Meeting 1	$2,630.60	$2,585.00	0.5 days	12 hrs	Wed 4/11/18	Wed 4/11/18
731	3.3.3.1.7.2	Remote Review Meeting 2	$2,630.60	$2,585.00	0.5 days	12 hrs	Tue 4/17/18	Tue 4/17/18
732	3.3.3.1.7.3	Remote Review Meeting 3	$2,630.60	$2,585.00	0.5 days	12 hrs	Tue 4/24/18	Tue 4/24/18
733	3.3.3.1.7.4	Remote Review Meeting 4	$2,630.60	$2,585.00	0.5 days	12 hrs	Tue 5/1/18	Tue 5/1/18
734	**3.3.3.2**	**Round 2 AMS Configuration Workshops**	**$85,504.40**	**$84,307.60**	**31 days**	**360 hrs**	**Thu 5/10/18**	**Thu 6/21/18**
735	3.3.3.2.1	Woolpert to Prepare for AMS Configuration Workshops (Second Round)	$882.12	$869.88	1 day	4 hrs	Thu 5/10/18	Fri 5/11/18
736	3.3.3.2.2	County to Prepare for AMS Workshops (Second Round)	$0.00	$0.00	1 day	0 hrs	Thu 5/10/18	Fri 5/11/18
737	**3.3.3.2.3**	**Woolpert to Facilitate AMS Configuration Workshops (Round 2)**	**$45,214.24**	**$44,564.16**	**9 days**	**176 hrs**	**Mon 5/21/18**	**Thu 5/31/18**
738	3.3.3.2.3.1	Public Works | Customer Service AMS Configuration Workshop 2 (ONSITE T	$3,961.66	$3,902.14	1 day	18 hrs	Mon 5/21/18	Mon 5/21/18
739	3.3.3.2.3.2	Public Works | Construction Management AMS Configuration Workshop 2 (	$3,961.66	$3,902.14	1 day	18 hrs	Tue 5/22/18	Tue 5/22/18
740	3.3.3.2.3.3	Public Works | Engineering Services AMS Configuration Workshop 2 (ONSIT	$3,961.66	$3,902.14	1 day	18 hrs	Wed 5/23/18	Wed 5/23/18
741	3.3.3.2.3.4	Public Works | Environmental Mgmt AMS Configuration Workshop 2 (ONSI	$3,961.66	$3,902.14	1 day	18 hrs	Thu 5/24/18	Thu 5/24/18

ID	WBS	Task Name	Cost	Baseline Cost	Duration	Work	Start	Finish
742	3.3.3.2.3.5	Public Works | Stormwater AMS Configuration Workshop 2 (ONSITE TASK)	$3,961.66	$3,902.14	1 day	18 hrs	Mon 5/28/18	Mon 5/28/18
743	3.3.3.2.3.6	Public Works | Vegetation AMS Configuration Workshop 2 (ONSITE TASK)	$3,961.66	$3,902.14	1 day	18 hrs	Tue 5/29/18	Tue 5/29/18
744	3.3.3.2.3.7	Public Works | Survey and Mapping AMS Configuration Workshop 2 (ONSIT	$3,961.66	$3,902.14	1 day	18 hrs	Wed 5/30/18	Wed 5/30/18
745	3.3.3.2.3.8	Public Works | Transportation AMS Configuration Workshop 2 (ONSITE TAS	$3,961.66	$3,902.14	1 day	18 hrs	Thu 5/31/18	Thu 5/31/18
746	**3.3.3.2.3.9**	**Travel for Round 2 AMS Configuration Workshops**	**$13,520.96**	**$13,347.04**	**9 days**	**32 hrs**	**Mon 5/21/18**	**Thu 5/31/18**
747	3.3.3.2.3.9.1	Travel for Round 2 AMS Configuration Workshops	$6,760.48	$6,673.52	4 days	16 hrs	Mon 5/21/18	Thu 5/24/18
748	3.3.3.2.3.9.2	Travel for Round 2 AMS Configuration Workshops	$6,760.48	$6,673.52	4 days	16 hrs	Mon 5/28/18	Thu 5/31/18
749	3.3.3.2.4	Woolpert to Update AMS Configuration Documentation (Round 2)	$12,141.12	$12,030.48	15 days	56 hrs	Fri 6/1/18	Thu 6/21/18
750	3.3.3.2.5	Woolpert to Perform AMS Configuration in Development Environment (Round	$12,141.12	$12,030.48	15 days	56 hrs	Fri 6/1/18	Thu 6/21/18
751	3.3.3.2.6	Woolpert to Document Business Cases for Potential Customizations (Round 2)	$7,234.00	$7,057.60	15 days	32 hrs	Fri 6/1/18	Thu 6/21/18
752	**3.3.3.2.7**	**Woolpert to Facilitate Remote Configuration Review Meetings With Client T**	**$7,891.80**	**$7,755.00**	**9.5 days**	**36 hrs**	**Wed 6/6/18**	**Tue 6/19/18**
753	3.3.3.2.7.1	Remote Review Meeting 1	$2,630.60	$2,585.00	0.5 days	12 hrs	Wed 6/6/18	Wed 6/6/18
754	3.3.3.2.7.2	Remote Review Meeting 2	$2,630.60	$2,585.00	0.5 days	12 hrs	Tue 6/12/18	Tue 6/12/18
755	3.3.3.2.7.3	Remote Review Meeting 3	$2,630.60	$2,585.00	0.5 days	12 hrs	Tue 6/19/18	Tue 6/19/18
756	**3.3.3.3**	**Round 3 AMS Configuration Workshops**	**$99,479.28**	**$99,294.22**	**31 days**	**424 hrs**	**Thu 6/14/18**	**Thu 7/26/18**
757	3.3.3.3.1	Woolpert to Prepare for AMS Configuration Workshops (Third Round)	$882.12	$869.88	1 day	4 hrs	Thu 6/14/18	Fri 6/15/18
758	3.3.3.3.2	County to Prepare for AMS Workshops (Third Round)	$0.00	$0.00	1 day	0 hrs	Thu 6/14/18	Fri 6/15/18
759	**3.3.3.3.3**	**Woolpert to Facilitate AMS Configuration Workshops (Round 3)**	**$45,214.24**	**$44,564.16**	**9 days**	**176 hrs**	**Mon 6/25/18**	**Thu 7/5/18**
760	3.3.3.3.3.1	Public Works | Customer Service AMS Configuration Workshop 3 (ONSITE T	$3,961.66	$3,902.14	1 day	18 hrs	Mon 6/25/18	Mon 6/25/18
761	3.3.3.3.3.2	Public Works | Construction Management AMS Configuration Workshop 3 (	$3,961.66	$3,902.14	1 day	18 hrs	Tue 6/26/18	Tue 6/26/18
762	3.3.3.3.3.3	Public Works | Engineering Services AMS Configuration Workshop 3 (ONSIT	$3,961.66	$3,902.14	1 day	18 hrs	Wed 6/27/18	Wed 6/27/18
763	3.3.3.3.3.4	Public Works | Environmental Mgmt AMS Configuration Workshop 3 (ONSI	$3,961.66	$3,902.14	1 day	18 hrs	Thu 6/28/18	Thu 6/28/18
764	3.3.3.3.3.5	Public Works | Stormwater AMS Configuration Workshop 3 (ONSITE TASK)	$3,961.66	$3,902.14	1 day	18 hrs	Mon 7/2/18	Mon 7/2/18
765	3.3.3.3.3.6	Public Works | Vegetation AMS Configuration Workshop 3 (ONSITE TASK)	$3,961.66	$3,902.14	1 day	18 hrs	Tue 7/3/18	Tue 7/3/18
766	3.3.3.3.3.7	Public Works | Survey and Mapping AMS Configuration Workshop 3 (ONSIT	$3,961.66	$3,902.14	1 day	18 hrs	Wed 7/4/18	Wed 7/4/18
767	3.3.3.3.3.8	Public Works | Transportation AMS Configuration Workshop 3 (ONSITE TAS	$3,961.66	$3,902.14	1 day	18 hrs	Thu 7/5/18	Thu 7/5/18
768	**3.3.3.3.3.9**	**Travel for Round 3 AMS Configuration Workshops**	**$13,520.96**	**$13,347.04**	**9 days**	**32 hrs**	**Mon 6/25/18**	**Thu 7/5/18**
769	3.3.3.3.3.9.1	Travel for Round 3 AMS Configuration Workshops - Week 1	$6,760.48	$6,673.52	4 days	16 hrs	Mon 6/25/18	Thu 6/28/18
770	3.3.3.3.3.9.2	Travel for Round 3 AMS Configuration Workshops - Week 2	$6,760.48	$6,673.52	4 days	16 hrs	Mon 7/2/18	Thu 7/5/18
771	3.3.3.3.4	Woolpert to Update AMS Configuration Documentation (Round 3)	$12,141.12	$12,291.03	15 days	56 hrs	Fri 7/6/18	Thu 7/26/18
772	3.3.3.3.5	Woolpert to Perform AMS Configuration in Development Environment (Round	$26,116.00	$26,409.87	15 days	120 hrs	Fri 7/6/18	Thu 7/26/18
773	3.3.3.3.6	Woolpert to Document Business Cases for Potential Customizations (Round 3)	$7,234.00	$7,210.48	15 days	32 hrs	Fri 7/6/18	Thu 7/26/18
774	**3.3.3.3.7**	**Woolpert to Facilitate Remote Configuration Review Meetings With Client T**	**$7,891.80**	**$7,948.80**	**9.5 days**	**36 hrs**	**Wed 7/11/18**	**Tue 7/24/18**
775	3.3.3.3.7.1	Remote Review Meeting 1	$2,630.60	$2,649.60	0.5 days	12 hrs	Wed 7/11/18	Wed 7/11/18
776	3.3.3.3.7.2	Remote Review Meeting 2	$2,630.60	$2,649.60	0.5 days	12 hrs	Tue 7/17/18	Tue 7/17/18
777	3.3.3.3.7.3	Remote Review Meeting 2	$2,630.60	$2,649.60	0.5 days	12 hrs	Tue 7/24/18	Tue 7/24/18
778	**3.3.4**	**Cityworks Storeroom Configuration**	**$66,340.64**	**$0.00**	**37 days**	**272 hrs**	**Thu 5/3/18**	**Mon 6/25/18**
779	**3.3.4.1**	**Round 1 Storeroom Configuration Workshops**	**$34,934.56**	**$0.00**	**13 days**	**144 hrs**	**Thu 5/3/18**	**Tue 5/22/18**
780	3.3.4.1.1	Woolpert to Prepare for Storeroom Configuration Workshops (First Round)	$882.12	$0.00	0.25 days	4 hrs	Thu 5/3/18	Thu 5/3/18
781	**3.3.4.1.2**	**Woolpert to Facilitate Storeroom Configuration Workshops (Round 1)**	**$20,836.40**	**$0.00**	**4 days**	**80 hrs**	**Mon 5/7/18**	**Thu 5/10/18**
782	3.3.4.1.2.1	Public Works | Customer Service Storeroom Workshop 1 (ONSITE TASK)	$1,764.24	$0.00	0.5 days	8 hrs	Mon 5/7/18	Mon 5/7/18
783	3.3.4.1.2.2	Public Works | Construction Management Storeroom Workshop 1 (ONSITE	$1,764.24	$0.00	0.5 days	8 hrs	Mon 5/7/18	Mon 5/7/18
784	3.3.4.1.2.3	Public Works | Engineering Services Storeroom Workshop 1 (ONSITE TASK)	$1,764.24	$0.00	0.5 days	8 hrs	Tue 5/8/18	Tue 5/8/18
785	3.3.4.1.2.4	Public Works | Environmental Mgmt Storeroom Workshop 1 (ONSITE TASK)	$1,764.24	$0.00	0.5 days	8 hrs	Tue 5/8/18	Tue 5/8/18
786	3.3.4.1.2.5	Public Works | Stormwater Storeroom Workshop 1 (ONSITE TASK)	$1,764.24	$0.00	0.5 days	8 hrs	Wed 5/9/18	Wed 5/9/18
787	3.3.4.1.2.6	Public Works | Vegetation Storeroom Workshop 1 (ONSITE TASK)	$1,764.24	$0.00	0.5 days	8 hrs	Wed 5/9/18	Wed 5/9/18
788	3.3.4.1.2.7	Public Works | Survey and Mapping Storeroom Workshop 2 (ONSITE TASK)	$1,764.24	$0.00	0.5 days	8 hrs	Thu 5/10/18	Thu 5/10/18
789	3.3.4.1.2.8	Public Works | Transportation Storeroom Workshop 1 (ONSITE TASK)	$1,764.24	$0.00	0.5 days	8 hrs	Thu 5/10/18	Thu 5/10/18
790	**3.3.4.1.2.9**	**Travel for Round 1 Storeroom Configuration Workshops**	**$6,722.48**	**$0.00**	**4 days**	**16 hrs**	**Mon 5/7/18**	**Thu 5/10/18**
791	3.3.4.1.2.9.1	Travel for Round 1 Storeroom Configuration Workshops	$6,722.48	$0.00	4 days	16 hrs	Mon 5/7/18	Thu 5/10/18
792	3.3.4.1.3	Woolpert to Update Configuration Documentation (Round 1)	$5,292.72	$0.00	3 days	24 hrs	Fri 5/11/18	Tue 5/15/18
793	3.3.4.1.4	Woolpert to Perform Configuration in Development Environment	$5,292.72	$0.00	3 days	24 hrs	Wed 5/16/18	Fri 5/18/18
794	**3.3.4.1.5**	**Woolpert to Facilitate Remote Configuration Review Meetings With Client T**	**$2,630.60**	**$0.00**	**2.25 days**	**12 hrs**	**Fri 5/18/18**	**Tue 5/22/18**

ID	WBS	Task Name	Cost	Baseline Cost	Duration	Work	Start	Finish
795	3.3.4.1.5.1	Remote Review Meeting 1	$1,315.30	$0.00	0.25 days	6 hrs	Fri 5/18/18	Fri 5/18/18
796	3.3.4.1.5.2	Remote Review Meeting 2	$1,315.30	$0.00	0.25 days	6 hrs	Tue 5/22/18	Tue 5/22/18
797	**3.3.4.2**	**Round 2 Storeroom Configuration Workshops**	**$31,406.08**	**$0.00**	**12 days**	**128 hrs**	**Thu 6/7/18**	**Mon 6/25/18**
798	3.3.4.2.1	Woolpert to Prepare for Storeroom Configuration Workshops (Second Round)	$882.12	$0.00	0.25 days	4 hrs	Thu 6/7/18	Thu 6/7/18
799	**3.3.4.2.2**	**Woolpert to Facilitate Storeroom Configuration Workshops (Round 2)**	**$20,836.40**	**$0.00**	**4 days**	**80 hrs**	**Mon 6/11/18**	**Thu 6/14/18**
800	3.3.4.2.2.1	Public Works	Customer Service Storeroom Workshop 1 (ONSITE TASK)	$1,764.24	$0.00	0.5 days	8 hrs	Mon 6/11/18	Mon 6/11/18
801	3.3.4.2.2.2	Public Works	Construction Management Storeroom Workshop 1 (ONSITE	$1,764.24	$0.00	0.5 days	8 hrs	Mon 6/11/18	Mon 6/11/18
802	3.3.4.2.2.3	Public Works	Engineering Services Storeroom Workshop 1 (ONSITE TASK)	$1,764.24	$0.00	0.5 days	8 hrs	Tue 6/12/18	Tue 6/12/18
803	3.3.4.2.2.4	Public Works	Environmental Mgmt Storeroom Workshop 1 (ONSITE TASK)	$1,764.24	$0.00	0.5 days	8 hrs	Tue 6/12/18	Tue 6/12/18
804	3.3.4.2.2.5	Public Works	Stormwater Storeroom Workshop 1 (ONSITE TASK)	$1,764.24	$0.00	0.5 days	8 hrs	Wed 6/13/18	Wed 6/13/18
805	3.3.4.2.2.6	Public Works	Vegetation Storeroom Workshop 1 (ONSITE TASK)	$1,764.24	$0.00	0.5 days	8 hrs	Wed 6/13/18	Wed 6/13/18
806	3.3.4.2.2.7	Public Works	Survey and Mapping Storeroom Workshop 1 (ONSITE TASK)	$1,764.24	$0.00	0.5 days	8 hrs	Thu 6/14/18	Thu 6/14/18
807	3.3.4.2.2.8	Public Works	Transportation Storeroom Workshop 1 (ONSITE TASK)	$1,764.24	$0.00	0.5 days	8 hrs	Thu 6/14/18	Thu 6/14/18
808	**3.3.4.2.2.9**	**Travel for Round 2 Storeroom Configuration Workshops**	**$6,722.48**	**$0.00**	**4 days**	**16 hrs**	**Mon 6/11/18**	**Thu 6/14/18**
809	3.3.4.2.2.9.1	Travel for Round 2 Storeroom Configuration Workshops	$6,722.48	$0.00	4 days	16 hrs	Mon 6/11/18	Thu 6/14/18
810	3.3.4.2.3	Woolpert to Update Configuration Documentation (Round 2)	$3,528.48	$0.00	2 days	16 hrs	Fri 6/15/18	Mon 6/18/18
811	3.3.4.2.4	Woolpert to Perform Configuration in Development Environment	$3,528.48	$0.00	2 days	16 hrs	Tue 6/19/18	Wed 6/20/18
812	**3.3.4.2.5**	**Woolpert to Facilitate Remote Configuration Review Meetings With Client T(**	**$2,630.60**	**$0.00**	**2.25 days**	**12 hrs**	**Thu 6/21/18**	**Mon 6/25/18**
813	3.3.4.2.5.1	Remote Review Meeting 1	$1,315.30	$0.00	0.25 days	6 hrs	Thu 6/21/18	Thu 6/21/18
814	3.3.4.2.5.2	Remote Review Meeting 2	$1,315.30	$0.00	0.25 days	6 hrs	Mon 6/25/18	Mon 6/25/18
815	**3.3.5**	**Review and Approval of Updated System and Configuration Documentation**	**$10,715.12**	**$10,810.12**	**19.5 days**	**48 hrs**	**Thu 7/26/18**	**Thu 8/23/18**
816	3.3.5.1	Woolpert to Submit Updated Configuration Documentation to County	$0.00	$0.00	0 days	0 hrs	Thu 7/26/18	Thu 7/26/18
817	3.3.5.2	County Technical Team to Review Updated Configuration and Documentation (C	$0.00	$0.00	10 days	0 hrs	Fri 7/27/18	Thu 8/9/18
818	3.3.5.3	Woolpert to Facilitate Remote Review Meeting with County Technical Team	$3,658.16	$3,677.16	0.5 days	16 hrs	Fri 8/10/18	Fri 8/10/18
819	3.3.5.4	Woolpert to Update Configuration Documentation per County Comments	$0.00	$0.00	2 days	0 hrs	Fri 8/10/18	Tue 8/14/18
820	3.3.5.5	Woolpert to Submit Updated Pre-Final Configuration Documentation to County	$7,056.96	$7,132.96	2 days	32 hrs	Tue 8/14/18	Thu 8/16/18
821	3.3.5.6	County to Accept Pre-Final Configuraiton Document	$0.00	$0.00	0 days	0 hrs	Thu 8/23/18	Thu 8/23/18
822	**3.3.6**	**Provide Cityworks AMS Software Demonstrations**	**$24,326.86**	**$24,402.86**	**8 days**	**92 hrs**	**Mon 8/20/18**	**Thu 8/30/18**
823	3.3.6.1	Woolpert to Prepare for On-Site Software Demonstrations	$891.62	$891.62	1 day	4 hrs	Mon 8/20/18	Tue 8/21/18
824	3.3.6.2	County to Prepare for On-Site Software Demonstrations (COUNTY TASK)	$0.00	$0.00	1 day	0 hrs	Mon 8/20/18	Tue 8/21/18
825	**3.3.6.3**	**Woolpert to Facilitate On-Site Software Demonstrations (ONSITE TASK)**	**$23,435.24**	**$23,511.24**	**2 days**	**88 hrs**	**Tue 8/28/18**	**Thu 8/30/18**
826	3.3.6.3.1	Facilitate Software Demonstration 1 (ONSITE TASK)	$3,658.16	$3,677.16	0.5 days	16 hrs	Tue 8/28/18	Tue 8/28/18
827	3.3.6.3.2	Facilitate Software Demonstration 2 (ONSITE TASK)	$3,658.16	$3,677.16	0.5 days	16 hrs	Wed 8/29/18	Wed 8/29/18
828	3.3.6.3.3	Facilitate Software Demonstration 3 (ONSITE TASK)	$3,658.16	$3,677.16	0.5 days	16 hrs	Wed 8/29/18	Wed 8/29/18
829	3.3.6.3.4	Software Demonstration Wrap-Up (ONSITE TASK)	$3,658.16	$3,677.16	0.5 days	16 hrs	Thu 8/30/18	Thu 8/30/18
830	**3.3.6.3.5**	**Travel for Final Software Demonstrations**	**$8,802.60**	**$8,802.60**	**2 days**	**24 hrs**	**Tue 8/28/18**	**Thu 8/30/18**
831	3.3.6.3.5.1	Travel for Final Software Demonstrations	$8,802.60	$8,802.60	2 days	24 hrs	Tue 8/28/18	Thu 8/30/18
832	3.3.7	Phase 3: Track 3 Quality Control	$20,444.80	$15,144.27	132 days	80 hrs	Wed 2/28/18	Thu 8/30/18
833	3.3.8	Phase 3: Track 3 Acceptance and Close	$0.00	$0.00	0 days	0 hrs	Wed 8/29/18	Wed 8/29/18
834	**4**	**PHASE 4: Advanced Configuration and Functionality**	**$241,445.57**	**$771,098.37**	**428 days**	**1,068.5 hrs**	**Wed 1/11/17**	**Fri 8/31/18**
835	**4.1**	**Conduct Legacy Data Evaluation**	**$63,974.61**	**$63,974.61**	**27.75 days**	**281.5 hrs**	**Mon 1/30/17**	**Wed 3/8/17**
836	4.1.1	Woolpert to Facilitate Discussion about Datasets	$4,497.64	$4,497.64	0.88 days	21 hrs	Mon 1/30/17	Mon 1/30/17
837	4.1.2	Woolpert to Create Tech Memo Detailing Data Request	$2,290.89	$2,290.89	0.88 days	10.5 hrs	Mon 1/30/17	Tue 1/31/17
838	4.1.3	County to Provide Legacy Datasets to Woolpert	$0.00	$0.00	5 days	0 hrs	Tue 1/31/17	Tue 2/7/17
839	**4.1.4**	**Woolpert to Perform Desktop Analysis of Legacy Datasets**	**$15,104.32**	**$15,104.32**	**3.5 days**	**70 hrs**	**Tue 2/7/17**	**Mon 2/13/17**
840	4.1.4.1	Maximo 4.0.3 - Work Management Legacy Data Desktop Analysis	$2,157.76	$2,157.76	0.5 days	10 hrs	Tue 2/7/17	Wed 2/8/17
841	4.1.4.2	Maximo 4.0.3 STAR CENTER - Work Management Legacy Data Desktop Analysis	$2,157.76	$2,157.76	0.5 days	10 hrs	Wed 2/8/17	Wed 2/8/17
842	4.1.4.3	Maximo 6.0.2 REM/PCR Legacy Data Desktop Analysis	$2,157.76	$2,157.76	0.5 days	10 hrs	Wed 2/8/17	Thu 2/9/17
843	4.1.4.4	M4/Maximus Fleet Management Legacy Data Desktop Analysis	$2,157.76	$2,157.76	0.5 days	10 hrs	Thu 2/9/17	Thu 2/9/17
844	4.1.4.5	VCMS Legacy Data Desktop Analysis	$2,157.76	$2,157.76	0.5 days	10 hrs	Thu 2/9/17	Fri 2/10/17
845	4.1.4.6	Traffic Copp Legacy Data Desktop Analysis	$2,157.76	$2,157.76	0.5 days	10 hrs	Fri 2/10/17	Fri 2/10/17
846	4.1.4.7	Agile Assets Legacy Data Desktop Analysis	$2,157.76	$2,157.76	0.5 days	10 hrs	Fri 2/10/17	Mon 2/13/17
847	**4.1.5**	**Woolpert to Facilitate Onsite Review of Legacy Datasets (ONSITE TASK)**	**$21,789.20**	**$21,789.20**	**4.5 days**	**86 hrs**	**Mon 2/13/17**	**Fri 2/17/17**

ID	WBS	Task Name	Cost	Baseline Cost	Duration	Work	Start	Finish
848	4.1.5.1	Maximo 4.0.3 - Work Management Legacy Data Onsite Review (ONSITE TASK)	$2,157.76	$2,157.76	0.5 days	10 hrs	Mon 2/13/17	Mon 2/13/17
849	4.1.5.2	Maximo 4.0.3 STAR CENTER - Work Management Legacy Data Onsite Review (ON	$2,157.76	$2,157.76	0.5 days	10 hrs	Mon 2/13/17	Tue 2/14/17
850	4.1.5.3	Maximo 6.0.2 REM/PCR Legacy Data Onsite Review (ONSITE TASK)	$2,157.76	$2,157.76	0.5 days	10 hrs	Tue 2/14/17	Tue 2/14/17
851	4.1.5.4	M4/Maximus Fleet Management Legacy Data Onsite Review (ONSITE TASK)	$2,157.76	$2,157.76	0.5 days	10 hrs	Tue 2/14/17	Wed 2/15/17
852	4.1.5.5	VCMS Legacy Data Onsite Review (ONSITE TASK)	$2,157.76	$2,157.76	0.5 days	10 hrs	Wed 2/15/17	Wed 2/15/17
853	4.1.5.6	Traffic Copp Legacy Data Onsite Review (ONSITE TASK)	$2,157.76	$2,157.76	1 day	10 hrs	Wed 2/15/17	Thu 2/16/17
854	4.1.5.7	Agile Assets Legacy Data Onsite Review (ONSITE TASK)	$2,157.76	$2,157.76	1 day	10 hrs	Thu 2/16/17	Fri 2/17/17
855	4.1.5.8	**Travel for Legacy Data Migration Analysis Workshops**	**$6,684.88**	**$6,684.88**	**4 days**	**16 hrs**	**Mon 2/13/17**	**Fri 2/17/17**
856	4.1.5.8.1	Travel for Legacy Data Migration Analysis Workshops - Week 1	$6,684.88	$6,684.88	4 days	16 hrs	Mon 2/13/17	Fri 2/17/17
857	4.1.6	**Technical Memo Recommendations for Legacy Data Conversions**	**$20,292.56**	**$20,292.56**	**16 days**	**94 hrs**	**Mon 2/13/17**	**Tue 3/7/17**
858	4.1.6.1	**Develop Tech Memo Recommendations for Legacy Data Conversion**	**$15,104.32**	**$15,104.32**	**4.5 days**	**70 hrs**	**Mon 2/13/17**	**Mon 2/20/17**
859	4.1.6.1.1	Maximo 4.0.3 - Work Management Develop Technical Memo Recommendatio	$2,157.76	$2,157.76	0.5 days	10 hrs	Mon 2/13/17	Tue 2/14/17
860	4.1.6.1.2	Maximo 4.0.3 STAR CENTER - Work Management Develop Technical Memo Re	$2,157.76	$2,157.76	0.5 days	10 hrs	Tue 2/14/17	Tue 2/14/17
861	4.1.6.1.3	Maximo 6.0.2 REM/PCR Develop Technical Memo Recommendations	$2,157.76	$2,157.76	0.5 days	10 hrs	Tue 2/14/17	Wed 2/15/17
862	4.1.6.1.4	M4/Maximus Fleet Management Develop Technical Memo Recommendations	$2,157.76	$2,157.76	0.5 days	10 hrs	Wed 2/15/17	Wed 2/15/17
863	4.1.6.1.5	VCMS Develop Technical Memo Recommendations	$2,157.76	$2,157.76	0.5 days	10 hrs	Wed 2/15/17	Thu 2/16/17
864	4.1.6.1.6	Traffic Copp Develop Technical Memo Recommendations	$2,157.76	$2,157.76	0.5 days	10 hrs	Thu 2/16/17	Fri 2/17/17
865	4.1.6.1.7	Agile Assets Develop Technical Memo Recommendations	$2,157.76	$2,157.76	0.5 days	10 hrs	Fri 2/17/17	Mon 2/20/17
866	4.1.6.2	**Review and Approve Tech Memo Recommendations for Legacy Data Conversio**	**$5,188.24**	**$5,188.24**	**11.5 days**	**24 hrs**	**Mon 2/20/17**	**Tue 3/7/17**
867	4.1.6.2.1	Woolpert to Submit Tech Memo Recommendations for Legacy Data Conversic	$0.00	$0.00	0 days	0 hrs	Mon 2/20/17	Mon 2/20/17
868	4.1.6.2.2	County Technical Team to Review Tech Memo Recommendations for Legacy C	$0.00	$0.00	5 days	0 hrs	Mon 2/20/17	Mon 2/27/17
869	4.1.6.2.3	Woolpert to Facilitate Joint Review of Tech Memo Recommendations for Lega	$2,570.08	$2,570.08	0.5 days	12 hrs	Mon 2/27/17	Mon 2/27/17
870	4.1.6.2.4	Woolpert to Modify Tech Memo Recommendations for Legacy Data Conversic	$2,618.16	$2,618.16	1 day	12 hrs	Mon 2/27/17	Tue 2/28/17
871	4.1.6.2.5	County to Accept Tech Memo Recommnedations for Legacy Data Conversion (	$0.00	$0.00	0 days	0 hrs	Tue 3/7/17	Tue 3/7/17
872	4.1.7	**Woolpert to Develop Data Conversion Specification, Scope and Fee Documents - 1**	**$0.00**	**$0.00**	**1 day**	**0 hrs**	**Tue 3/7/17**	**Wed 3/8/17**
873	4.1.7.1	Develop Spec, Scope and Fee for Conversion of Legacy Dataset 1	$0.00	$0.00	1 day	0 hrs	Tue 3/7/17	Wed 3/8/17
874	4.1.7.2	Develop Spec, Scope and Fee for Conversion of Legacy Dataset 2	$0.00	$0.00	1 day	0 hrs	Tue 3/7/17	Wed 3/8/17
875	4.1.7.3	Develop Spec, Scope and Fee for Conversion of Legacy Dataset 3	$0.00	$0.00	1 day	0 hrs	Tue 3/7/17	Wed 3/8/17
876	4.1.7.4	Woolpert to Submit FINAL Data Migration Document, Scope and Fee to County	$0.00	$0.00	0 days	0 hrs	Tue 3/7/17	Tue 3/7/17
877	4.2	**Custom Reports and Metrics**	**$0.00**	**$544,418.09**	**360.5 days**	**0 hrs**	**Fri 4/14/17**	**Fri 8/31/18**
878	4.2.1	**Track 1: Utilities and Solid Waste Report / Metric Development**	**$0.00**	**$178,816.32**	**80.5 days**	**0 hrs**	**Fri 4/14/17**	**Fri 8/4/17**
879	4.2.1.1	**Develop Report / Metric Specifications**	**$0.00**	**$61,158.48**	**24.5 days**	**0 hrs**	**Fri 4/14/17**	**Thu 5/18/17**
880	4.2.1.1.1	County to Provide Woolpert a Prioritized List of Reports / Metrics (COUNTY TA	$0.00	$0.00	1 day	0 hrs	Fri 4/14/17	Mon 4/17/17
881	4.2.1.1.2	Woolpert to Review Reports Provided by County	$0.00	$0.00	12.5 days	0 hrs	Mon 4/17/17	Wed 5/3/17
882	4.2.1.1.3	Woolpert to Develop DRAFT Report and Metric Specification Document	$0.00	$21,217.00	1 day	0 hrs	Thu 5/4/17	Thu 5/4/17
883	4.2.1.1.4	Woolpert to Submit DRAFT Report and Metric Specification Document to Cour	$0.00	$0.00	0 days	0 hrs	Thu 5/4/17	Thu 5/4/17
884	4.2.1.1.5	Woolpert to Facilitate Onsite Review of Report and Metric Specification Docur	$0.00	$21,577.60	0 days	0 hrs	Thu 5/4/17	Thu 5/4/17
885	4.2.1.1.6	**Travel for Report and Metric Specification Document Review**	**$0.00**	**$7,454.88**	**10 days**	**0 hrs**	**Fri 5/5/17**	**Thu 5/18/17**
886	4.2.1.1.6.1	Travel for Legacy Data Migration Analysis Workshops - Week 1	$0.00	$3,727.44	5 days	0 hrs	Fri 5/5/17	Thu 5/11/17
887	4.2.1.1.6.2	Travel for Legacy Data Migration Analysis Workshops - Week 2	$0.00	$3,727.44	5 days	0 hrs	Fri 5/12/17	Thu 5/18/17
888	4.2.1.1.7	Woolpert to Create FINAL Report and Metric Specification Document	$0.00	$10,909.00	0 days	0 hrs	Thu 5/4/17	Thu 5/4/17
889	4.2.1.1.8	Woolpert to Submit FINAL Report and Metric Specification Document	$0.00	$0.00	1 day	0 hrs	Fri 5/5/17	Fri 5/5/17
890	4.2.1.1.9	County to Accept FINAL Report and Metric Specification Document	$0.00	$0.00	0 days	0 hrs	Fri 5/12/17	Fri 5/12/17
891	4.2.1.2	**Develop Reports and Metrics**	**$0.00**	**$117,657.84**	**60 days**	**0 hrs**	**Mon 5/15/17**	**Fri 8/4/17**
892	4.2.1.2.1	Woolpert to Develop Custom Reports	$0.00	$86,044.60	50 days	0 hrs	Mon 5/15/17	Fri 7/21/17
893	4.2.1.2.2	**Woolpert to Facilitate In-Process Review Meetings with Client Technical Tea**	**$0.00**	**$25,598.00**	**45.5 days**	**0 hrs**	**Thu 5/18/17**	**Thu 7/20/17**
894	4.2.1.2.2.1	In-Process Report Development Review Meeting #1	$0.00	$2,522.00	0.5 days	0 hrs	Thu 5/18/17	Thu 5/18/17
895	4.2.1.2.2.2	In-Process Report Development Review Meeting #2	$0.00	$2,522.00	0.5 days	0 hrs	Thu 5/25/17	Thu 5/25/17
896	4.2.1.2.2.3	In-Process Report Development Review Meeting #3	$0.00	$2,522.00	0.5 days	0 hrs	Thu 6/1/17	Thu 6/1/17
897	4.2.1.2.2.4	In-Process Report Development Review Meeting #4	$0.00	$2,522.00	0.5 days	0 hrs	Thu 6/8/17	Thu 6/8/17
898	4.2.1.2.2.5	In-Process Report Development Review Meeting #5	$0.00	$2,585.00	0.5 days	0 hrs	Thu 6/15/17	Thu 6/15/17
899	4.2.1.2.2.6	In-Process Report Development Review Meeting #6	$0.00	$2,585.00	0.5 days	0 hrs	Thu 6/22/17	Thu 6/22/17
900	4.2.1.2.2.7	In-Process Report Development Review Meeting #7	$0.00	$2,585.00	0.5 days	0 hrs	Thu 6/29/17	Thu 6/29/17

ID	WBS	Task Name	Cost	Baseline Cost	Duration	Work	Start	Finish
901	4.2.1.2.2.8	In-Process Report Development Review Meeting #8	$0.00	$2,585.00	0.5 days	0 hrs	Thu 7/6/17	Thu 7/6/17
902	4.2.1.2.2.9	In-Process Report Development Review Meeting #9	$0.00	$2,585.00	0.5 days	0 hrs	Thu 7/13/17	Thu 7/13/17
903	4.2.1.2.2.10	In-Process Report Development Review Meeting #10	$0.00	$2,585.00	0.5 days	0 hrs	Thu 7/20/17	Thu 7/20/17
904	4.2.1.2.3	Woolpert to Configure and Test Reports in Development Environment	$0.00	$6,015.24	5 days	0 hrs	Mon 7/24/17	Fri 7/28/17
905	4.2.1.2.4	County to Accept Reports and Metrics in Development Environment	$0.00	$0.00	0 days	0 hrs	Fri 8/4/17	Fri 8/4/17
906	**4.2.2**	**Track 2: PCR and REM Report / Metric Development**	**$0.00**	**$181,440.42**	**80.5 days**	**0 hrs**	**Mon 10/30/17**	**Mon 2/19/18**
907	**4.2.2.1**	**Develop Report / Metric Specifications**	**$0.00**	**$62,587.18**	**24.5 days**	**0 hrs**	**Mon 10/30/17**	**Fri 12/1/17**
908	4.2.2.1.1	County to Provide Woolpert a Prioritized List of Reports / Metrics (COUNTY TA	$0.00	$0.00	1 day	0 hrs	Mon 10/30/17	Mon 10/30/17
909	4.2.2.1.2	Woolpert to Review Reports Provided by County	$0.00	$0.00	12.5 days	0 hrs	Tue 10/31/17	Thu 11/16/17
910	4.2.2.1.3	Woolpert to Develop DRAFT Report and Metric Specification Document	$0.00	$21,747.00	1 day	0 hrs	Thu 11/16/17	Fri 11/17/17
911	4.2.2.1.4	Woolpert to Submit DRAFT Report and Metric Specification Document to Cou	$0.00	$0.00	0 days	0 hrs	Fri 11/17/17	Fri 11/17/17
912	4.2.2.1.5	Woolpert to Facilitate Onsite Review of Report and Metric Specification Docur	$0.00	$22,116.60	0 days	0 hrs	Fri 11/17/17	Fri 11/17/17
913	**4.2.2.1.6**	**Travel for Report and Metric Specification Document Review**	**$0.00**	**$7,542.08**	**10 days**	**0 hrs**	**Fri 11/17/17**	**Fri 12/1/17**
914	4.2.2.1.6.1	Travel for Legacy Data Migration Analysis Workshops - Week 1	$0.00	$3,771.04	5 days	0 hrs	Fri 11/17/17	Fri 11/24/17
915	4.2.2.1.6.2	Travel for Legacy Data Migration Analysis Workshops - Week 2	$0.00	$3,771.04	5 days	0 hrs	Fri 11/24/17	Fri 12/1/17
916	4.2.2.1.7	Woolpert to Create FINAL Report and Metric Specification Document	$0.00	$11,181.50	0 days	0 hrs	Fri 11/17/17	Fri 11/17/17
917	4.2.2.1.8	Woolpert to Submit FINAL Report and Metric Specification Document	$0.00	$0.00	1 day	0 hrs	Fri 11/17/17	Mon 11/20/17
918	4.2.2.1.9	County to Accept FINAL Report and Metric Specification Document	$0.00	$0.00	0 days	0 hrs	Mon 11/27/17	Mon 11/27/17
919	**4.2.2.2**	**Develop Reports and Metrics**	**$0.00**	**$118,853.24**	**60 days**	**0 hrs**	**Mon 11/27/17**	**Mon 2/19/18**
920	4.2.2.2.1	Woolpert to Develop Custom Reports	$0.00	$86,988.00	50 days	0 hrs	Mon 11/27/17	Mon 2/5/18
921	**4.2.2.2.2**	**Woolpert to Facilitate In-Process Review Meetings with Client Technical Tea**	**$0.00**	**$25,850.00**	**45.5 days**	**0 hrs**	**Thu 11/30/17**	**Thu 2/1/18**
922	4.2.2.2.2.1	In-Process Report Development Review Meeting #1	$0.00	$2,585.00	0.5 days	0 hrs	Thu 11/30/17	Thu 11/30/17
923	4.2.2.2.2.2	In-Process Report Development Review Meeting #2	$0.00	$2,585.00	0.5 days	0 hrs	Thu 12/7/17	Thu 12/7/17
924	4.2.2.2.2.3	In-Process Report Development Review Meeting #3	$0.00	$2,585.00	0.5 days	0 hrs	Thu 12/14/17	Thu 12/14/17
925	4.2.2.2.2.4	In-Process Report Development Review Meeting #4	$0.00	$2,585.00	0.5 days	0 hrs	Thu 12/21/17	Thu 12/21/17
926	4.2.2.2.2.5	In-Process Report Development Review Meeting #5	$0.00	$2,585.00	0.5 days	0 hrs	Thu 12/28/17	Thu 12/28/17
927	4.2.2.2.2.6	In-Process Report Development Review Meeting #6	$0.00	$2,585.00	0.5 days	0 hrs	Thu 1/4/18	Thu 1/4/18
928	4.2.2.2.2.7	In-Process Report Development Review Meeting #7	$0.00	$2,585.00	0.5 days	0 hrs	Thu 1/11/18	Thu 1/11/18
929	4.2.2.2.2.8	In-Process Report Development Review Meeting #8	$0.00	$2,585.00	0.5 days	0 hrs	Thu 1/18/18	Thu 1/18/18
930	4.2.2.2.2.9	In-Process Report Development Review Meeting #9	$0.00	$2,585.00	0.5 days	0 hrs	Thu 1/25/18	Thu 1/25/18
931	4.2.2.2.2.10	In-Process Report Development Review Meeting #10	$0.00	$2,585.00	0.5 days	0 hrs	Thu 2/1/18	Thu 2/1/18
932	4.2.2.2.3	Woolpert to Configure and Test Reports in Development Environment	$0.00	$6,015.24	5 days	0 hrs	Mon 2/5/18	Mon 2/12/18
933	4.2.2.2.4	County to Accept Reports and Metrics in Development Environment	$0.00	$0.00	0 days	0 hrs	Mon 2/19/18	Mon 2/19/18
934	**4.2.3**	**Track 3: Public Works Report / Metric Development**	**$0.00**	**$184,161.35**	**80.5 days**	**0 hrs**	**Fri 5/11/18**	**Fri 8/31/18**
935	**4.2.3.1**	**Develop Report / Metric Specifications**	**$0.00**	**$62,587.18**	**24.5 days**	**0 hrs**	**Fri 5/11/18**	**Thu 6/14/18**
936	4.2.3.1.1	County to Provide Woolpert a Prioritized List of Reports / Metrics (COUNTY TA	$0.00	$0.00	1 day	0 hrs	Fri 5/11/18	Mon 5/14/18
937	4.2.3.1.2	Woolpert to Review Reports Provided by County	$0.00	$0.00	12.5 days	0 hrs	Mon 5/14/18	Wed 5/30/18
938	4.2.3.1.3	Woolpert to Develop DRAFT Report and Metric Specification Document	$0.00	$21,747.00	1 day	0 hrs	Thu 5/31/18	Thu 5/31/18
939	4.2.3.1.4	Woolpert to Submit DRAFT Report and Metric Specification Document to Cou	$0.00	$0.00	0 days	0 hrs	Thu 5/31/18	Thu 5/31/18
940	4.2.3.1.5	Woolpert to Facilitate Onsite Review of Report and Metric Specification Docur	$0.00	$22,116.60	0 days	0 hrs	Thu 5/31/18	Thu 5/31/18
941	**4.2.3.1.6**	**Travel for Report and Metric Specification Document Review**	**$0.00**	**$7,542.08**	**10 days**	**0 hrs**	**Fri 6/1/18**	**Thu 6/14/18**
942	4.2.3.1.6.1	Travel for Legacy Data Migration Analysis Workshops - Week 1	$0.00	$3,771.04	5 days	0 hrs	Fri 6/1/18	Thu 6/7/18
943	4.2.3.1.6.2	Travel for Legacy Data Migration Analysis Workshops - Week 2	$0.00	$3,771.04	5 days	0 hrs	Fri 6/8/18	Thu 6/14/18
944	4.2.3.1.7	Woolpert to Create FINAL Report and Metric Specification Document	$0.00	$11,181.50	0 days	0 hrs	Thu 5/31/18	Thu 5/31/18
945	4.2.3.1.8	Woolpert to Submit FINAL Report and Metric Specification Document	$0.00	$0.00	1 day	0 hrs	Fri 6/1/18	Fri 6/1/18
946	4.2.3.1.9	County to Accept FINAL Report and Metric Specification Document	$0.00	$0.00	0 days	0 hrs	Fri 6/8/18	Fri 6/8/18
947	**4.2.3.2**	**Develop Reports and Metrics**	**$0.00**	**$121,574.17**	**60 days**	**0 hrs**	**Mon 6/11/18**	**Fri 8/31/18**
948	4.2.3.2.1	Woolpert to Develop Custom Reports	$0.00	$88,977.21	50 days	0 hrs	Mon 6/11/18	Fri 8/17/18
949	**4.2.3.2.2**	**Woolpert to Facilitate In-Process Review Meetings with Client Technical Tea**	**$0.00**	**$26,431.40**	**45.5 days**	**0 hrs**	**Thu 6/14/18**	**Thu 8/16/18**
950	4.2.3.2.2.1	In-Process Report Development Review Meeting #1	$0.00	$2,585.00	0.5 days	0 hrs	Thu 6/14/18	Thu 6/14/18
951	4.2.3.2.2.2	In-Process Report Development Review Meeting #2	$0.00	$2,649.60	0.5 days	0 hrs	Thu 6/21/18	Thu 6/21/18
952	4.2.3.2.2.3	In-Process Report Development Review Meeting #3	$0.00	$2,649.60	0.5 days	0 hrs	Thu 6/28/18	Thu 6/28/18
953	4.2.3.2.2.4	In-Process Report Development Review Meeting #4	$0.00	$2,649.60	0.5 days	0 hrs	Thu 7/5/18	Thu 7/5/18

ID	WBS	Task Name	Cost	Baseline Cost	Duration	Work	Start	Finish
954	4.2.3.2.2.5	In-Process Report Development Review Meeting #5	$0.00	$2,649.60	0.5 days	0 hrs	Thu 7/12/18	Thu 7/12/18
955	4.2.3.2.2.6	In-Process Report Development Review Meeting #6	$0.00	$2,649.60	0.5 days	0 hrs	Thu 7/19/18	Thu 7/19/18
956	4.2.3.2.2.7	In-Process Report Development Review Meeting #7	$0.00	$2,649.60	0.5 days	0 hrs	Thu 7/26/18	Thu 7/26/18
957	4.2.3.2.2.8	In-Process Report Development Review Meeting #8	$0.00	$2,649.60	0.5 days	0 hrs	Thu 8/2/18	Thu 8/2/18
958	4.2.3.2.2.9	In-Process Report Development Review Meeting #9	$0.00	$2,649.60	0.5 days	0 hrs	Thu 8/9/18	Thu 8/9/18
959	4.2.3.2.2.10	In-Process Report Development Review Meeting #10	$0.00	$2,649.60	0.5 days	0 hrs	Thu 8/16/18	Thu 8/16/18
960	4.2.3.2.3	Woolpert to Configure and Test Reports in Development Environment	$0.00	$6,165.56	5 days	0 hrs	Mon 8/20/18	Fri 8/24/18
961	4.2.3.2.4	County to Accept Reports and Metrics in Development Environment	$0.00	$0.00	0 days	0 hrs	Fri 8/31/18	Fri 8/31/18
962	**4.3**	**Conduct System Integration Evaluation**	**$147,735.81**	**$133,227.68**	**56.25 days**	**667 hrs**	**Mon 1/30/17**	**Tue 4/18/17**
963	4.3.1	Woolpert to Facilitate Discussion about Datasets	$7,710.24	$6,425.20	1.5 days	36 hrs	Mon 1/30/17	Tue 1/31/17
964	4.3.2	Woolpert to Develop Potential Integration Data Flow Diagrams	$11,939.80	$11,939.80	5 days	55 hrs	Mon 1/30/17	Fri 2/3/17
965	4.3.3	Woolpert to Prep for Onsite Discussion about Integrations	$1,285.04	$1,285.04	5 days	6 hrs	Mon 1/30/17	Fri 2/3/17
966	**4.3.4**	**Woolpert to Facilitate Integration Discussions (ONSITE TASK)**	**$27,957.84**	**$25,800.08**	**5 days**	**112 hrs**	**Wed 2/8/17**	**Tue 2/14/17**
967	4.3.4.1	Oracle eBusiness Suite R12.1.3 Integration Discussion (ONSITE TASK)	$3,903.20	$3,903.20	1 day	18 hrs	Wed 2/8/17	Wed 2/8/17
968	4.3.4.2	SAP Integration Discussion (ONSITE TASK)	$3,903.20	$3,903.20	1 day	18 hrs	Thu 2/9/17	Thu 2/9/17
969	4.3.4.3	Wonderware SCADA v3.5.001 Integration Discussion (ONSITE TASK)	$2,157.76	$2,157.76	0.5 days	10 hrs	Fri 2/10/17	Fri 2/10/17
970	4.3.4.4	Granite XP Integration Discussion (ONSITE TASK)	$2,157.76	$2,157.76	0.5 days	10 hrs	Fri 2/10/17	Fri 2/10/17
971	4.3.4.5	Fuel System Integration Discussion (ONSITE TASK)	$2,157.76	$2,157.76	0.5 days	10 hrs	Mon 2/13/17	Mon 2/13/17
972	4.3.4.6	Micropaver Integration Discussion (ONSITE TASK)	$2,157.76	$2,157.76	0.5 days	10 hrs	Mon 2/13/17	Mon 2/13/17
973	4.3.4.7	SeeClickFix Integration Discussion (ONSITE TASK)	$2,157.76	$2,157.76	0.5 days	10 hrs	Tue 2/14/17	Tue 2/14/17
974	4.3.4.8	Mosquito Management System Integration Discussion (ONSITE TASK)	$2,157.76	$0.00	0.5 days	10 hrs	Tue 2/14/17	Tue 2/14/17
975	**4.3.4.9**	**Travel for Integration Scoping Workshops**	**$7,204.88**	**$7,204.88**	**5 days**	**16 hrs**	**Wed 2/8/17**	**Tue 2/14/17**
976	4.3.4.9.1	Travel for System Integration Evaluation Workshops - Week 1	$7,204.88	$7,204.88	5 days	16 hrs	Wed 2/8/17	Tue 2/14/17
977	**4.3.5**	**Software Requirements Specifications (SRS) for System Integrations**	**$98,842.89**	**$87,777.56**	**43.25 days**	**458 hrs**	**Wed 2/15/17**	**Mon 4/17/17**
978	**4.3.5.1**	**Develop SRS Documents**	**$68,127.52**	**$59,908.80**	**22 days**	**316 hrs**	**Wed 2/15/17**	**Thu 3/16/17**
979	4.3.5.1.1	Develop SRS for Oracle eBusiness Suite R12.1.3 Integration	$18,038.64	$18,038.64	12.25 days	84 hrs	Wed 2/15/17	Fri 3/3/17
980	4.3.5.1.2	Develop SRS for SAP Integration	$18,038.64	$18,038.64	10 days	84 hrs	Fri 2/17/17	Thu 3/2/17
981	4.3.5.1.3	Develop SRS for Wonderware SCADA v3.5.001 Integration	$9,091.44	$9,091.44	6 days	42 hrs	Tue 2/21/17	Wed 3/1/17
982	4.3.5.1.4	Develop SRS for Fuel System Integration	$6,521.36	$6,521.36	5 days	30 hrs	Tue 2/28/17	Tue 3/7/17
983	4.3.5.1.5	Develop SRS for SeeClickFix Integration	$8,218.72	$8,218.72	6 days	38 hrs	Tue 3/7/17	Wed 3/15/17
984	4.3.5.1.6	Develop SRS for Mosquito Management System Integration	$8,218.72	$0.00	6 days	38 hrs	Thu 3/9/17	Thu 3/16/17
985	**4.3.5.2**	**Review and Approve SRS Documents**	**$30,715.37**	**$27,868.76**	**22.75 days**	**142 hrs**	**Wed 3/15/17**	**Mon 4/17/17**
986	4.3.5.2.1	Woolpert to Submit DRAFT SRS Documents	$0.00	$0.00	0 days	0 hrs	Wed 3/15/17	Wed 3/15/17
987	4.3.5.2.2	County Technical Team to Review SRS Documents (COUNTY TASK)	$0.00	$0.00	5 days	0 hrs	Wed 3/15/17	Wed 3/22/17
988	4.3.5.2.3	Woolpert to Facilitate Review of SRS Documents	$11,565.36	$9,637.80	2.25 days	54 hrs	Wed 3/22/17	Fri 3/24/17
989	4.3.5.2.4	Woolpert to Modify SRS Documents	$19,150.01	$18,230.96	10.5 days	88 hrs	Fri 3/24/17	Mon 4/10/17
990	4.3.5.2.5	Woolpert to Submit FINAL SRS Documents	$0.00	$0.00	0 days	0 hrs	Mon 4/10/17	Mon 4/10/17
991	4.3.5.2.6	County to Accept SRS Documents (COUNTY TASK)	$0.00	$0.00	0 days	0 hrs	Mon 4/17/17	Mon 4/17/17
992	**4.3.6**	**Woolpert to Develop Integrations - TBD**	**$0.00**	**$0.00**	**1 day**	**0 hrs**	**Mon 4/17/17**	**Tue 4/18/17**
993	4.3.6.1	Develop Integration 1	$0.00	$0.00	1 day	0 hrs	Mon 4/17/17	Tue 4/18/17
994	4.3.6.2	Develop Integration 2	$0.00	$0.00	1 day	0 hrs	Mon 4/17/17	Tue 4/18/17
995	4.3.6.3	Develop Integration 3	$0.00	$0.00	1 day	0 hrs	Mon 4/17/17	Tue 4/18/17
996	4.4	Phase 4 Quality Control	$29,735.16	$29,477.99	134 days	120 hrs	Wed 1/11/17	Mon 7/17/17
997	4.5	Phase 4 Acceptance and Close	$0.00	$0.00	1 day	0 hrs	Tue 7/18/17	Tue 7/18/17
998	**5**	**PHASE 5: Organizational Change Management**	**$542,627.68**	**$713,256.52**	**566 days**	**2,068 hrs**	**Thu 4/28/16**	**Thu 6/28/18**
999	**5.1**	**Foundation: OCM For Project Planning**	**$300,245.52**	**$319,582.24**	**171 days**	**1,152 hrs**	**Fri 5/13/16**	**Fri 1/6/17**
1000	**5.1.1**	**Support Kick-Off Meeting and Visioning Workshops**	**$58,260.16**	**$58,260.16**	**13 days**	**216 hrs**	**Thu 5/19/16**	**Mon 6/6/16**
1001	5.1.1.1	Prep for Kick-Off Meeting and Visioning Workshops	$11,736.48	$11,736.48	2 days	48 hrs	Thu 5/19/16	Mon 5/23/16
1002	5.1.1.2	Participate in Kick-Off Meetings and Visioning Workshops	$23,472.96	$23,472.96	4 days	96 hrs	Mon 5/30/16	Thu 6/2/16
1003	5.1.1.3	Travel for Kick-off Meeting and Visioning Workshops	$11,314.24	$11,314.24	1 day	24 hrs	Mon 5/30/16	Thu 6/2/16
1004	5.1.1.4	Follow Up Work from Kick-Off Meeting and Visioning Workshop	$11,736.48	$11,736.48	2 days	48 hrs	Fri 6/3/16	Mon 6/6/16
1005	**5.1.2**	**Support ISO 55000 Organization and People Workshops**	**$38,923.44**	**$38,923.44**	**11 days**	**144 hrs**	**Tue 8/9/16**	**Wed 8/24/16**
1006	5.1.2.1	Prep for ISO 55000 Organization and People Workshops	$7,824.32	$7,824.32	2 days	32 hrs	Tue 8/9/16	Thu 8/11/16

ID	WBS	Task Name	Cost	Baseline Cost	Duration	Work	Start	Finish
1007	5.1.2.2	Participate in ISO 55000 Organization and People Workshops	$15,648.64	$15,648.64	4 days	64 hrs	Thu 8/18/16	Wed 8/24/16
1008	5.1.2.3	Travel for ISO 55000 Organization and People Workshops	$7,626.16	$7,626.16	4 days	16 hrs	Thu 8/18/16	Wed 8/24/16
1009	5.1.2.4	Follow Up Work from ISO 55000 Organization and People Workshops	$7,824.32	$7,824.32	2 days	32 hrs	Mon 8/22/16	Tue 8/23/16
1010	**5.1.3**	**Support Departmental Readiness Workshops**	**$66,110.40**	**$66,110.40**	**21 days**	**240 hrs**	**Fri 8/19/16**	**Fri 9/16/16**
1011	**5.1.3.1**	**Support Departmental Readiness Workshop Week 1**	**$33,055.20**	**$33,055.20**	**11 days**	**120 hrs**	**Fri 8/19/16**	**Fri 9/2/16**
1012	5.1.3.1.1	Prep for Departmental Readiness Workshop Week 1	$5,868.24	$5,868.24	1 day	24 hrs	Fri 8/19/16	Mon 8/22/16
1013	5.1.3.1.2	Participate in Departmental Readiness Workshop Week 1	$15,648.64	$15,648.64	4 days	64 hrs	Mon 8/29/16	Thu 9/1/16
1014	5.1.3.1.3	Travel for Departmental Readiness Workshop Week 1	$7,626.16	$7,626.16	4 days	16 hrs	Mon 8/29/16	Thu 9/1/16
1015	5.1.3.1.4	Follow Up Work from Departmental Readiness Workshop Week 1	$3,912.16	$3,912.16	1 day	16 hrs	Fri 9/2/16	Fri 9/2/16
1016	**5.1.3.2**	**Support Departmental Readiness Workshop Week 2**	**$33,055.20**	**$33,055.20**	**11 days**	**120 hrs**	**Fri 9/2/16**	**Fri 9/16/16**
1017	5.1.3.2.1	Prep for Departmental Readiness Workshop Week 2	$5,868.24	$5,868.24	1 day	24 hrs	Fri 9/2/16	Mon 9/5/16
1018	5.1.3.2.2	Participate in Departmental Readiness Workshop Week 2	$15,648.64	$15,648.64	4 days	64 hrs	Mon 9/12/16	Thu 9/15/16
1019	5.1.3.2.3	Travel for Departmental Readiness Workshop Week 2	$7,626.16	$7,626.16	4 days	16 hrs	Mon 9/12/16	Thu 9/15/16
1020	5.1.3.2.4	Follow Up Work from Departmental Readiness Workshop Week 2	$3,912.16	$3,912.16	1 day	16 hrs	Fri 9/16/16	Fri 9/16/16
1021	**5.1.4**	**Support Global Configuration Standards Workshop**	**$19,586.72**	**$38,923.44**	**13 days**	**72 hrs**	**Fri 10/21/16**	**Wed 11/9/16**
1022	5.1.4.1	Prep for Global Configuration Standards Workshop	$3,912.16	$7,824.32	2 days	16 hrs	Fri 10/21/16	Tue 10/25/16
1023	5.1.4.2	Participate in Global Configuration Standards Workshop	$7,824.32	$15,648.64	4 days	32 hrs	Tue 11/1/16	Mon 11/7/16
1024	5.1.4.3	Travel for Global Configuration Standards Workshop	$3,938.08	$7,626.16	1 day	8 hrs	Tue 11/1/16	Wed 11/2/16
1025	5.1.4.4	Follow Up Work from Global Configuration Standards Workshop	$3,912.16	$7,824.32	2 days	16 hrs	Mon 11/7/16	Wed 11/9/16
1026	**5.1.5**	**Ongoing OCM Foundation Support**	**$117,364.80**	**$117,364.80**	**171 days**	**480 hrs**	**Fri 5/13/16**	**Fri 1/6/17**
1027	5.1.5.1	Ongoing OCM Foundation Support 1	$3,912.16	$3,912.16	1 day	16 hrs	Fri 5/13/16	Fri 5/13/16
1028	5.1.5.2	Ongoing OCM Foundation Support 2	$3,912.16	$3,912.16	1 day	16 hrs	Fri 5/20/16	Fri 5/20/16
1029	5.1.5.3	Ongoing OCM Foundation Support 3	$0.00	$0.00	0 days	0 hrs	Fri 5/27/16	Fri 5/27/16
1030	5.1.5.4	Ongoing OCM Foundation Support 4	$3,912.16	$3,912.16	1 day	16 hrs	Fri 6/3/16	Fri 6/3/16
1031	5.1.5.5	Ongoing OCM Foundation Support 5	$3,912.16	$3,912.16	1 day	16 hrs	Fri 6/10/16	Fri 6/10/16
1032	5.1.5.6	Ongoing OCM Foundation Support 6	$3,912.16	$3,912.16	1 day	16 hrs	Fri 6/17/16	Fri 6/17/16
1033	5.1.5.7	Ongoing OCM Foundation Support 7	$3,912.16	$3,912.16	1 day	16 hrs	Fri 6/24/16	Fri 6/24/16
1034	5.1.5.8	Ongoing OCM Foundation Support 8	$3,912.16	$3,912.16	1 day	16 hrs	Fri 7/1/16	Fri 7/1/16
1035	5.1.5.9	Ongoing OCM Foundation Support 9	$3,912.16	$3,912.16	1 day	16 hrs	Fri 7/8/16	Fri 7/8/16
1036	5.1.5.10	Ongoing OCM Foundation Support 10	$3,912.16	$3,912.16	1 day	16 hrs	Fri 7/15/16	Fri 7/15/16
1037	5.1.5.11	Ongoing OCM Foundation Support 11	$3,912.16	$3,912.16	1 day	16 hrs	Fri 7/22/16	Fri 7/22/16
1038	5.1.5.12	Ongoing OCM Foundation Support 12	$3,912.16	$3,912.16	1 day	16 hrs	Fri 7/29/16	Fri 7/29/16
1039	5.1.5.13	Ongoing OCM Foundation Support 13	$3,912.16	$3,912.16	1 day	16 hrs	Fri 8/5/16	Fri 8/5/16
1040	5.1.5.14	Ongoing OCM Foundation Support 14	$0.00	$0.00	0 days	0 hrs	Fri 8/12/16	Fri 8/12/16
1041	5.1.5.15	Ongoing OCM Foundation Support 15	$3,912.16	$3,912.16	1 day	16 hrs	Fri 8/19/16	Fri 8/19/16
1042	5.1.5.16	Ongoing OCM Foundation Support 16	$0.00	$0.00	0 days	0 hrs	Fri 8/26/16	Fri 8/26/16
1043	5.1.5.17	Ongoing OCM Foundation Support 17	$3,912.16	$3,912.16	1 day	16 hrs	Fri 9/2/16	Fri 9/2/16
1044	5.1.5.18	Ongoing OCM Foundation Support 18	$0.00	$0.00	0 days	0 hrs	Fri 9/9/16	Fri 9/9/16
1045	5.1.5.19	Ongoing OCM Foundation Support 19	$3,912.16	$3,912.16	1 day	16 hrs	Fri 9/16/16	Fri 9/16/16
1046	5.1.5.20	Ongoing OCM Foundation Support 20	$3,912.16	$3,912.16	1 day	16 hrs	Fri 9/23/16	Fri 9/23/16
1047	5.1.5.21	Ongoing OCM Foundation Support 21	$3,912.16	$3,912.16	1 day	16 hrs	Fri 9/30/16	Fri 9/30/16
1048	5.1.5.22	Ongoing OCM Foundation Support 22	$3,912.16	$3,912.16	1 day	16 hrs	Fri 10/7/16	Fri 10/7/16
1049	5.1.5.23	Ongoing OCM Foundation Support 23	$3,912.16	$3,912.16	1 day	16 hrs	Fri 10/14/16	Fri 10/14/16
1050	5.1.5.24	Ongoing OCM Foundation Support 24	$3,912.16	$3,912.16	1 day	16 hrs	Fri 10/21/16	Fri 10/21/16
1051	5.1.5.25	Ongoing OCM Foundation Support 25	$0.00	$0.00	0 days	0 hrs	Fri 10/28/16	Fri 10/28/16
1052	5.1.5.26	Ongoing OCM Foundation Support 26	$3,912.16	$3,912.16	1 day	16 hrs	Fri 11/4/16	Fri 11/4/16
1053	5.1.5.27	Ongoing OCM Foundation Support 27	$3,912.16	$3,912.16	1 day	16 hrs	Fri 11/11/16	Fri 11/11/16
1054	5.1.5.28	Ongoing OCM Foundation Support 28	$3,912.16	$3,912.16	1 day	16 hrs	Fri 11/18/16	Fri 11/18/16
1055	5.1.5.29	Ongoing OCM Foundation Support 29	$3,912.16	$3,912.16	1 day	16 hrs	Fri 11/25/16	Fri 11/25/16
1056	5.1.5.30	Ongoing OCM Foundation Support 30	$3,912.16	$3,912.16	1 day	16 hrs	Fri 12/2/16	Fri 12/2/16
1057	5.1.5.31	Ongoing OCM Foundation Support 31	$3,912.16	$3,912.16	1 day	16 hrs	Fri 12/9/16	Fri 12/9/16
1058	5.1.5.32	Ongoing OCM Foundation Support 32	$3,912.16	$3,912.16	1 day	16 hrs	Fri 12/16/16	Fri 12/16/16
1059	5.1.5.33	Ongoing OCM Foundation Support 33	$3,912.16	$3,912.16	1 day	16 hrs	Fri 12/23/16	Fri 12/23/16

ID	WBS	Task Name	Cost	Baseline Cost	Duration	Work	Start	Finish
1060	5.1.5.34	Ongoing OCM Foundation Support 34	$3,912.16	$3,912.16	1 day	16 hrs	Fri 12/30/16	Fri 12/30/16
1061	5.1.5.35	Ongoing OCM Foundation Support 35	$3,912.16	$3,912.16	1 day	16 hrs	Fri 1/6/17	Fri 1/6/17
1062	5.2	**Design: OCM for System Design and Configuration**	**$242,382.16**	**$366,256.76**	**566 days**	**916 hrs**	**Thu 4/28/16**	**Thu 6/28/18**
1063	5.2.1	**Track 1 Core System Design and Configuration OCM Support**	**$173,256.96**	**$171,888.32**	**303 days**	**656 hrs**	**Thu 4/28/16**	**Mon 6/26/17**
1064	5.2.1.1	**OCM Support Track 1 Round 1 Config Workshop Week 1**	**$38,923.44**	**$38,923.44**	**13 days**	**144 hrs**	**Thu 2/23/17**	**Mon 3/13/17**
1065	5.2.1.1.1	Prep for Track 1 Round 1 Config Workshop Week 1	$7,824.32	$7,824.32	2 days	32 hrs	Thu 2/23/17	Mon 2/27/17
1066	5.2.1.1.2	Participate in Track 1 Round 1 Config Workshop Week 1	$15,648.64	$15,648.64	4 days	64 hrs	Mon 3/6/17	Thu 3/9/17
1067	5.2.1.1.3	Travel for Track 1 Round 1 Config Workshop Week 1	$7,626.16	$7,626.16	1 day	16 hrs	Mon 3/6/17	Thu 3/9/17
1068	5.2.1.1.4	Follow Up Work from Track 1 Round 1 Config Workshop Week 1	$7,824.32	$7,824.32	2 days	32 hrs	Fri 3/10/17	Mon 3/13/17
1069	5.2.1.2	**OCM Support Track 1 Round 1 Config Workshop Week 2**	**$38,923.44**	**$38,923.44**	**238 days**	**144 hrs**	**Thu 4/28/16**	**Mon 3/27/17**
1070	5.2.1.2.1	Prep for Track 1 Round 1 Config Workshop Week 2	$7,824.32	$7,824.32	2 days	32 hrs	Thu 4/28/16	Fri 4/29/16
1071	5.2.1.2.2	Participate in Track 1 Round 1 Config Workshop Week 2	$15,648.64	$15,648.64	4 days	64 hrs	Mon 3/20/17	Thu 3/23/17
1072	5.2.1.2.3	Travel for Track 1 Round 1 Config Workshop Week 2	$7,626.16	$7,626.16	1 day	16 hrs	Mon 3/20/17	Thu 3/23/17
1073	5.2.1.2.4	Follow Up Work from Track 1 Round 1 Config Workshop Week 2	$7,824.32	$7,824.32	2 days	32 hrs	Fri 3/24/17	Mon 3/27/17
1074	5.2.1.3	**OCM Support Track 1 Round 2 Config Workshop Week 1**	**$23,938.80**	**$23,498.88**	**263 days**	**88 hrs**	**Thu 4/28/16**	**Mon 5/1/17**
1075	5.2.1.3.1	Prep for Track 1 Round 2 Config Workshop Week 1	$3,912.16	$3,912.16	2 days	16 hrs	Thu 4/28/16	Fri 4/29/16
1076	5.2.1.3.2	Participate in Track 1 Round 2 Config Workshop Week 1	$8,019.84	$7,824.32	4 days	32 hrs	Mon 4/24/17	Thu 4/27/17
1077	5.2.1.3.3	Travel for Track 1 Round 2 Config Workshop Week 1	$3,986.96	$3,938.08	1 day	8 hrs	Mon 4/24/17	Thu 4/27/17
1078	5.2.1.3.4	Follow Up Work from Track 1 Round 2 Config Workshop Week 1	$8,019.84	$7,824.32	2 days	32 hrs	Fri 4/28/17	Mon 5/1/17
1079	5.2.1.4	**OCM Support Track 1 Round 3 Config Workshop Week 1**	**$23,938.80**	**$23,498.88**	**288 days**	**88 hrs**	**Thu 4/28/16**	**Mon 6/5/17**
1080	5.2.1.4.1	Prep for Track 1 Round 3 Config Workshop Week 1	$3,912.16	$3,912.16	2 days	16 hrs	Thu 4/28/16	Fri 4/29/16
1081	5.2.1.4.2	Participate in Track 3 Round 1 Config Workshop Week 1	$8,019.84	$7,824.32	4 days	32 hrs	Mon 5/29/17	Thu 6/1/17
1082	5.2.1.4.3	Travel for Track 1 Round 3 Config Workshop Week 1	$3,986.96	$3,938.08	1 day	8 hrs	Mon 5/29/17	Thu 6/1/17
1083	5.2.1.4.4	Follow Up Work from Track 3 Round 1 Config Workshop Week 1	$8,019.84	$7,824.32	2 days	32 hrs	Fri 6/2/17	Mon 6/5/17
1084	5.2.1.5	**Ongoing OCM Design Support for Track 1 Configuration**	**$47,532.48**	**$47,043.68**	**116 days**	**192 hrs**	**Mon 1/16/17**	**Mon 6/26/17**
1085	5.2.1.5.1	Ongoing OCM Design Support for Track 1 Configuration 1	$1,956.08	$1,956.08	1 day	8 hrs	Mon 1/16/17	Mon 1/16/17
1086	5.2.1.5.2	Ongoing OCM Design Support for Track 1 Configuration 2	$1,956.08	$1,956.08	1 day	8 hrs	Mon 1/23/17	Mon 1/23/17
1087	5.2.1.5.3	Ongoing OCM Design Support for Track 1 Configuration 3	$1,956.08	$1,956.08	1 day	8 hrs	Mon 1/30/17	Mon 1/30/17
1088	5.2.1.5.4	Ongoing OCM Design Support for Track 1 Configuration 4	$1,956.08	$1,956.08	1 day	8 hrs	Mon 2/6/17	Mon 2/6/17
1089	5.2.1.5.5	Ongoing OCM Design Support for Track 1 Configuration 5	$1,956.08	$1,956.08	1 day	8 hrs	Mon 2/13/17	Mon 2/13/17
1090	5.2.1.5.6	Ongoing OCM Design Support for Track 1 Configuration 6	$1,956.08	$1,956.08	1 day	8 hrs	Mon 2/20/17	Mon 2/20/17
1091	5.2.1.5.7	Ongoing OCM Design Support for Track 1 Configuration 7	$1,956.08	$1,956.08	1 day	8 hrs	Mon 2/27/17	Mon 2/27/17
1092	5.2.1.5.8	Ongoing OCM Design Support for Track 1 Configuration 8	$1,956.08	$1,956.08	1 day	8 hrs	Mon 3/6/17	Mon 3/6/17
1093	5.2.1.5.9	Ongoing OCM Design Support for Track 1 Configuration 9	$1,956.08	$1,956.08	1 day	8 hrs	Mon 3/13/17	Mon 3/13/17
1094	5.2.1.5.10	Ongoing OCM Design Support for Track 1 Configuration 10	$1,956.08	$1,956.08	1 day	8 hrs	Mon 3/20/17	Mon 3/20/17
1095	5.2.1.5.11	Ongoing OCM Design Support for Track 1 Configuration 11	$1,956.08	$1,956.08	1 day	8 hrs	Mon 3/27/17	Mon 3/27/17
1096	5.2.1.5.12	Ongoing OCM Design Support for Track 1 Configuration 12	$1,956.08	$1,956.08	1 day	8 hrs	Mon 4/3/17	Mon 4/3/17
1097	5.2.1.5.13	Ongoing OCM Design Support for Track 1 Configuration 13	$2,004.96	$1,956.08	1 day	8 hrs	Mon 4/10/17	Mon 4/10/17
1098	5.2.1.5.14	Ongoing OCM Design Support for Track 1 Configuration 14	$2,004.96	$1,956.08	1 day	8 hrs	Mon 4/17/17	Mon 4/17/17
1099	5.2.1.5.15	Ongoing OCM Design Support for Track 1 Configuration 15	$2,004.96	$1,956.08	1 day	8 hrs	Mon 4/24/17	Mon 4/24/17
1100	5.2.1.5.16	Ongoing OCM Design Support for Track 1 Configuration 16	$2,004.96	$1,956.08	1 day	8 hrs	Mon 5/1/17	Mon 5/1/17
1101	5.2.1.5.17	Ongoing OCM Design Support for Track 1 Configuration 17	$2,004.96	$1,956.08	1 day	8 hrs	Mon 5/8/17	Mon 5/8/17
1102	5.2.1.5.18	Ongoing OCM Design Support for Track 1 Configuration 18	$2,004.96	$1,956.08	1 day	8 hrs	Mon 5/15/17	Mon 5/15/17
1103	5.2.1.5.19	Ongoing OCM Design Support for Track 1 Configuration 19	$2,004.96	$1,956.08	1 day	8 hrs	Mon 5/22/17	Mon 5/22/17
1104	5.2.1.5.20	Ongoing OCM Design Support for Track 1 Configuration 20	$2,004.96	$1,956.08	1 day	8 hrs	Mon 5/29/17	Mon 5/29/17
1105	5.2.1.5.21	Ongoing OCM Design Support for Track 1 Configuration 21	$2,004.96	$1,956.08	1 day	8 hrs	Mon 6/5/17	Mon 6/5/17
1106	5.2.1.5.22	Ongoing OCM Design Support for Track 1 Configuration 22	$2,004.96	$1,956.08	1 day	8 hrs	Mon 6/12/17	Mon 6/12/17
1107	5.2.1.5.23	Ongoing OCM Design Support for Track 1 Configuration 23	$2,004.96	$2,004.96	1 day	8 hrs	Mon 6/19/17	Mon 6/19/17
1108	5.2.1.5.24	Ongoing OCM Design Support for Track 1 Configuration 24	$2,004.96	$2,004.96	1 day	8 hrs	Mon 6/26/17	Mon 6/26/17
1109	5.2.2	**Track 2 Core System Design and Configuration OCM Support**	**$69,125.20**	**$113,188.40**	**121 days**	**260 hrs**	**Mon 7/10/17**	**Mon 12/25/17**
1110	5.2.2.1	**OCM Support Track 2 Round 1 Config Workshop Week 1**	**$22,031.60**	**$22,031.60**	**13 days**	**80 hrs**	**Thu 9/7/17**	**Tue 9/26/17**
1111	5.2.2.1.1	Prep for Track 2 Round 1 Config Workshop Week 1	$4,009.92	$4,009.92	2 days	16 hrs	Thu 9/7/17	Mon 9/11/17
1112	5.2.2.1.2	Participate in Track 2 Round 1 Config Workshop Week 1	$8,019.84	$8,019.84	4 days	32 hrs	Mon 9/18/17	Fri 9/22/17

ID	WBS	Task Name	Cost	Baseline Cost	Duration	Work	Start	Finish
1113	5.2.2.1.3	Travel for Track 2 Round 1 Config Workshop Week 1	$3,986.96	$3,986.96	1 day	8 hrs	Mon 9/18/17	Fri 9/22/17
1114	5.2.2.1.4	Follow Up Work from Track 2 Round 1 Config Workshop Week 1	$6,014.88	$6,014.88	2 days	24 hrs	Fri 9/22/17	Tue 9/26/17
1115	5.2.2.2	OCM Support Track 2 Round 1 Config Workshop Week 2	$22,031.60	$22,031.60	13 days	80 hrs	Thu 9/21/17	Mon 10/9/17
1116	5.2.2.2.1	Prep for Track 2 Round 1 Config Workshop Week 2	$4,009.92	$4,009.92	2 days	16 hrs	Thu 9/21/17	Mon 9/25/17
1117	5.2.2.2.2	Participate in Track 2 Round 1 Config Workshop Week 2	$8,019.84	$8,019.84	4 days	32 hrs	Mon 10/2/17	Thu 10/5/17
1118	5.2.2.2.3	Travel for Track 2 Round 1 Config Workshop Week 2	$3,986.96	$3,986.96	1 day	8 hrs	Mon 10/2/17	Thu 10/5/17
1119	5.2.2.2.4	Follow Up Work from Track 2 Round 1 Config Workshop Week 2	$6,014.88	$6,014.88	2 days	24 hrs	Fri 10/6/17	Mon 10/9/17
1120	5.2.2.3	OCM Support Track 2 Round 2 Config Workshop Week 1	$0.00	$22,031.60	13 days	0 hrs	Thu 10/26/17	Mon 11/13/17
1121	5.2.2.3.1	Prep for Track 2 Round 2 Config Workshop Week 1	$0.00	$4,009.92	2 days	0 hrs	Thu 10/26/17	Mon 10/30/17
1122	5.2.2.3.2	Participate in Track 2 Round 2 Config Workshop Week 1	$0.00	$8,019.84	4 days	0 hrs	Mon 11/6/17	Thu 11/9/17
1123	5.2.2.3.3	Travel for Track 2 Round 2 Config Workshop Week 1	$0.00	$3,986.96	1 day	0 hrs	Mon 11/6/17	Mon 11/6/17
1124	5.2.2.3.4	Follow Up Work from Track 2 Round 2 Config Workshop Week 1	$0.00	$6,014.88	2 days	0 hrs	Fri 11/10/17	Mon 11/13/17
1125	5.2.2.4	OCM Support Track 2 Round 3 Config Workshop Week 1	$0.00	$22,031.60	13 days	0 hrs	Thu 11/30/17	Mon 12/18/17
1126	5.2.2.4.1	Prep for Track 2 Round 3 Config Workshop Week 1	$0.00	$4,009.92	2 days	0 hrs	Thu 11/30/17	Mon 12/4/17
1127	5.2.2.4.2	Participate in Track 3 Round 1 Config Workshop Week 1	$0.00	$8,019.84	4 days	0 hrs	Mon 12/11/17	Thu 12/14/17
1128	5.2.2.4.3	Travel for Track 3 Round 1 Config Workshop Week 1	$0.00	$3,986.96	1 day	0 hrs	Mon 12/11/17	Mon 12/11/17
1129	5.2.2.4.4	Follow Up Work from Track 3 Round 1 Config Workshop Week 1	$0.00	$6,014.88	2 days	0 hrs	Fri 12/15/17	Mon 12/18/17
1130	5.2.2.5	Ongoing OCM Design Support for Track 2 Configuration	$25,062.00	$25,062.00	121 days	100 hrs	Mon 7/10/17	Mon 12/25/17
1131	5.2.2.5.1	Ongoing OCM Design Support for Track 2 Configuration 1	$1,002.48	$1,002.48	1 day	4 hrs	Mon 7/10/17	Mon 7/10/17
1132	5.2.2.5.2	Ongoing OCM Design Support for Track 2 Configuration 2	$1,002.48	$1,002.48	1 day	4 hrs	Mon 7/17/17	Mon 7/17/17
1133	5.2.2.5.3	Ongoing OCM Design Support for Track 2 Configuration 3	$1,002.48	$1,002.48	1 day	4 hrs	Mon 7/24/17	Mon 7/24/17
1134	5.2.2.5.4	Ongoing OCM Design Support for Track 2 Configuration 4	$1,002.48	$1,002.48	1 day	4 hrs	Mon 7/31/17	Mon 7/31/17
1135	5.2.2.5.5	Ongoing OCM Design Support for Track 2 Configuration 5	$1,002.48	$1,002.48	1 day	4 hrs	Mon 8/7/17	Mon 8/7/17
1136	5.2.2.5.6	Ongoing OCM Design Support for Track 2 Configuration 6	$1,002.48	$1,002.48	1 day	4 hrs	Mon 8/14/17	Mon 8/14/17
1137	5.2.2.5.7	Ongoing OCM Design Support for Track 2 Configuration 7	$1,002.48	$1,002.48	1 day	4 hrs	Mon 8/21/17	Mon 8/21/17
1138	5.2.2.5.8	Ongoing OCM Design Support for Track 2 Configuration 8	$1,002.48	$1,002.48	1 day	4 hrs	Mon 8/28/17	Mon 8/28/17
1139	5.2.2.5.9	Ongoing OCM Design Support for Track 2 Configuration 9	$1,002.48	$1,002.48	1 day	4 hrs	Mon 9/4/17	Mon 9/4/17
1140	5.2.2.5.10	Ongoing OCM Design Support for Track 2 Configuration 10	$1,002.48	$1,002.48	1 day	4 hrs	Mon 9/11/17	Mon 9/11/17
1141	5.2.2.5.11	Ongoing OCM Design Support for Track 2 Configuration 11	$1,002.48	$1,002.48	1 day	4 hrs	Mon 9/18/17	Mon 9/18/17
1142	5.2.2.5.12	Ongoing OCM Design Support for Track 2 Configuration 12	$1,002.48	$1,002.48	1 day	4 hrs	Mon 9/25/17	Mon 9/25/17
1143	5.2.2.5.13	Ongoing OCM Design Support for Track 2 Configuration 13	$1,002.48	$1,002.48	1 day	4 hrs	Mon 10/2/17	Mon 10/2/17
1144	5.2.2.5.14	Ongoing OCM Design Support for Track 2 Configuration 14	$1,002.48	$1,002.48	1 day	4 hrs	Mon 10/9/17	Mon 10/9/17
1145	5.2.2.5.15	Ongoing OCM Design Support for Track 2 Configuration 15	$1,002.48	$1,002.48	1 day	4 hrs	Mon 10/16/17	Mon 10/16/17
1146	5.2.2.5.16	Ongoing OCM Design Support for Track 2 Configuration 16	$1,002.48	$1,002.48	1 day	4 hrs	Mon 10/23/17	Mon 10/23/17
1147	5.2.2.5.17	Ongoing OCM Design Support for Track 2 Configuration 17	$1,002.48	$1,002.48	1 day	4 hrs	Mon 10/30/17	Mon 10/30/17
1148	5.2.2.5.18	Ongoing OCM Design Support for Track 2 Configuration 18	$1,002.48	$1,002.48	1 day	4 hrs	Mon 11/6/17	Mon 11/6/17
1149	5.2.2.5.19	Ongoing OCM Design Support for Track 2 Configuration 19	$1,002.48	$1,002.48	1 day	4 hrs	Mon 11/13/17	Mon 11/13/17
1150	5.2.2.5.20	Ongoing OCM Design Support for Track 2 Configuration 20	$1,002.48	$1,002.48	1 day	4 hrs	Mon 11/20/17	Mon 11/20/17
1151	5.2.2.5.21	Ongoing OCM Design Support for Track 2 Configuration 21	$1,002.48	$1,002.48	1 day	4 hrs	Mon 11/27/17	Mon 11/27/17
1152	5.2.2.5.22	Ongoing OCM Design Support for Track 2 Configuration 22	$1,002.48	$1,002.48	1 day	4 hrs	Mon 12/4/17	Mon 12/4/17
1153	5.2.2.5.23	Ongoing OCM Design Support for Track 2 Configuration 23	$1,002.48	$1,002.48	1 day	4 hrs	Mon 12/11/17	Mon 12/11/17
1154	5.2.2.5.24	Ongoing OCM Design Support for Track 2 Configuration 24	$1,002.48	$1,002.48	1 day	4 hrs	Mon 12/18/17	Mon 12/18/17
1155	5.2.2.5.25	Ongoing OCM Design Support for Track 2 Configuration 25	$1,002.48	$1,002.48	1 day	4 hrs	Mon 12/25/17	Mon 12/25/17
1156	5.2.3	Track 3 Core System Design and Configuration OCM Support	$0.00	$81,180.04	124 days	0 hrs	Mon 1/8/18	Thu 6/28/18
1157	5.2.3.1	OCM Support Track 3 Round 1 Config Workshop Week 1	$0.00	$22,031.60	13 days	0 hrs	Thu 3/22/18	Mon 4/9/18
1158	5.2.3.1.1	Prep for Track 3 Round 1 Config Workshop Week 1	$0.00	$4,009.92	2 days	0 hrs	Thu 3/22/18	Mon 3/26/18
1159	5.2.3.1.2	Participate in Track 3 Round 1 Config Workshop Week 1	$0.00	$8,019.84	4 days	0 hrs	Mon 4/2/18	Thu 4/5/18
1160	5.2.3.1.3	Travel for Track 3 Round 1 Config Workshop Week 1	$0.00	$3,986.96	1 day	0 hrs	Mon 4/2/18	Mon 4/2/18
1161	5.2.3.1.4	Follow Up Work from Track 3 Round 1 Config Workshop Week 1	$0.00	$6,014.88	2 days	0 hrs	Fri 4/6/18	Mon 4/9/18
1162	5.2.3.2	OCM Support Track 3 Round 1 Config Workshop Week 2	$0.00	$22,031.60	13 days	0 hrs	Thu 4/5/18	Mon 4/23/18
1163	5.2.3.2.1	Prep for Track 3 Round 1 Config Workshop Week 2	$0.00	$4,009.92	2 days	0 hrs	Thu 4/5/18	Mon 4/9/18
1164	5.2.3.2.2	Participate in Track 3 Round 1 Config Workshop Week 2	$0.00	$8,019.84	4 days	0 hrs	Mon 4/16/18	Thu 4/19/18
1165	5.2.3.2.3	Travel for Track 3 Round 1 Config Workshop Week 2	$0.00	$3,986.96	1 day	0 hrs	Mon 4/16/18	Mon 4/16/18

ID	WBS	Task Name	Cost	Baseline Cost	Duration	Work	Start	Finish
1166	5.2.3.2.4	Follow Up Work from Track 3 Round 1 Config Workshop Week 2	$0.00	$6,014.88	2 days	0 hrs	Fri 4/20/18	Mon 4/23/18
1167	**5.2.3.3**	**OCM Support Track 3 Round 2 Config Workshop Week 1**	**$0.00**	**$12,029.76**	**10 days**	**0 hrs**	**Fri 5/11/18**	**Thu 5/24/18**
1168	5.2.3.3.1	Prep for Track 3 Round 2 Config Workshop Week 1	$0.00	$2,004.96	1 day	0 hrs	Fri 5/11/18	Mon 5/14/18
1169	5.2.3.3.2	Remote Support for Track 3 Round 2 Config Workshop Week 1	$0.00	$4,009.92	2 days	0 hrs	Mon 5/21/18	Tue 5/22/18
1170	5.2.3.3.3	Follow Up Work from Track 3 Round 2 Config Workshop Week 1	$0.00	$6,014.88	2 days	0 hrs	Wed 5/23/18	Thu 5/24/18
1171	**5.2.3.4**	**OCM Support Track 3 Round 3 Config Workshop Week 1**	**$0.00**	**$12,029.76**	**10 days**	**0 hrs**	**Fri 6/15/18**	**Thu 6/28/18**
1172	5.2.3.4.1	Prep for Track 3 Round 3 Config Workshop Week 1	$0.00	$2,004.96	1 day	0 hrs	Fri 6/15/18	Mon 6/18/18
1173	5.2.3.4.2	Remote Support for Track 3 Round 1 Config Workshop Week 1	$0.00	$4,009.92	2 days	0 hrs	Mon 6/25/18	Tue 6/26/18
1174	5.2.3.4.3	Follow Up Work from Track 3 Round 1 Config Workshop Week 1	$0.00	$6,014.88	2 days	0 hrs	Wed 6/27/18	Thu 6/28/18
1175	**5.2.3.5**	**Ongoing OCM Design Support for Track 3 Configuration**	**$0.00**	**$13,057.32**	**121 days**	**0 hrs**	**Mon 1/8/18**	**Mon 6/25/18**
1176	5.2.3.5.1	Ongoing OCM Design Support for Track 3 Configuration 1	$0.00	$1,002.48	1 day	0 hrs	Mon 1/8/18	Mon 1/8/18
1177	5.2.3.5.2	Ongoing OCM Design Support for Track 3 Configuration 2	$0.00	$1,002.48	1 day	0 hrs	Mon 1/22/18	Mon 1/22/18
1178	5.2.3.5.3	Ongoing OCM Design Support for Track 3 Configuration 3	$0.00	$1,002.48	1 day	0 hrs	Mon 2/5/18	Mon 2/5/18
1179	5.2.3.5.4	Ongoing OCM Design Support for Track 3 Configuration 4	$0.00	$1,002.48	1 day	0 hrs	Mon 2/19/18	Mon 2/19/18
1180	5.2.3.5.5	Ongoing OCM Design Support for Track 3 Configuration 5	$0.00	$1,002.48	1 day	0 hrs	Mon 3/5/18	Mon 3/5/18
1181	5.2.3.5.6	Ongoing OCM Design Support for Track 3 Configuration 6	$0.00	$1,002.48	1 day	0 hrs	Mon 3/19/18	Mon 3/19/18
1182	5.2.3.5.7	Ongoing OCM Design Support for Track 3 Configuration 7	$0.00	$1,002.48	1 day	0 hrs	Mon 4/2/18	Mon 4/2/18
1183	5.2.3.5.8	Ongoing OCM Design Support for Track 3 Configuration 8	$0.00	$1,002.48	1 day	0 hrs	Mon 4/16/18	Mon 4/16/18
1184	5.2.3.5.9	Ongoing OCM Design Support for Track 3 Configuration 9	$0.00	$1,002.48	1 day	0 hrs	Mon 4/30/18	Mon 4/30/18
1185	5.2.3.5.10	Ongoing OCM Design Support for Track 3 Configuration 10	$0.00	$1,002.48	1 day	0 hrs	Mon 5/14/18	Mon 5/14/18
1186	5.2.3.5.11	Ongoing OCM Design Support for Track 3 Configuration 11	$0.00	$1,002.48	1 day	0 hrs	Mon 5/28/18	Mon 5/28/18
1187	5.2.3.5.12	Ongoing OCM Design Support for Track 3 Configuration 12	$0.00	$1,002.48	1 day	0 hrs	Mon 6/11/18	Mon 6/11/18
1188	5.2.3.5.13	Ongoing OCM Design Support for Track 3 Configuration 13	$0.00	$1,027.56	1 day	0 hrs	Mon 6/25/18	Mon 6/25/18
1189	**5.3**	**Development: OCM Support for Advanced Configuration and Functionality**	**$0.00**	**$27,417.52**	**13 days**	**0 hrs**	**Tue 5/22/18**	**Thu 6/7/18**
1190	**5.3.1**	**OCM Support Integration Discovery Workshop**	**$0.00**	**$27,417.52**	**13 days**	**0 hrs**	**Tue 5/22/18**	**Thu 6/7/18**
1191	5.3.1.1	Prep for Integration Discovery Workshop	$0.00	$7,390.88	2 days	0 hrs	Tue 5/22/18	Thu 5/24/18
1192	5.3.1.2	Participate in Integration Discovery Workshop	$0.00	$8,019.84	4 days	0 hrs	Thu 5/31/18	Tue 6/5/18
1193	5.3.1.3	Travel for Integration Discovery Workshop	$0.00	$3,986.96	1 day	0 hrs	Thu 5/31/18	Thu 5/31/18
1194	5.3.1.4	Follow Up Work from Integration Discovery Workshop	$0.00	$8,019.84	2 days	0 hrs	Wed 6/6/18	Thu 6/7/18
1195	**6**	**PHASE 6: Owner-Directed Funds**	**$750,000.00**	**$0.00**	**1 day**	**0 hrs**	**Thu 2/18/16**	**Thu 2/18/16**
1196	6.1	ODF - To Be Used as Authorized by County	$750,000.00	$0.00	1 day	0 hrs	Thu 2/18/16	Thu 2/18/16

EXHIBIT D - INSURANCE REQUIREMENTS

The Contracted vendor shall obtain and maintain at all times during its performance of the Agreement, insurance of the types and in the amounts set forth. For projects with a Completed Operations exposure, Contractor shall maintain coverage and provide evidence of insurance for two (2) years beyond final acceptance. All insurance policies shall be from responsible companies duly authorized to do business in the State of Florida and have an AM Best rating of A- VIII or better. Within ten (10) calendar days after contractor receipt of notice of award, the Contractor shall provide the County with properly executed Certificates of Insurance to evidence compliance with the insurance requirements of the agreement. The Certificate(s) of Insurance shall be signed by authorized representatives of the insurance companies shown on the Certificate(s). A copy of required endorsement(s) referenced in paragraph three (3) for Additional Insured shall be attached to the certificate(s).

No work shall commence at any project site unless and until the required Certificate(s) of Insurance are received and approved by the County. Approval by the County of any Certificate of Insurance does not constitute verification by the County that the insurance requirements have been satisfied or that the insurance policy shown on the Certificate of Insurance is in compliance with the requirements of the Agreement. County reserves the right to require a certified copy of the entire insurance policy, including endorsements, at any time during the RFP and/or contract period.

All policies providing liability coverage(s), other than professional liability and worker's compensation policies obtained by the Contractor to meet the requirements of the Agreement shall include by definition or otherwise be endorsed to include Pinellas County Board of County Commissioners as an Additional Insured.

If any insurance provided pursuant to the Agreement expires prior to the completion of the Work, renewal Certificates of Insurance and endorsements shall be furnished by the Contractor to the County prior to the expiration date.

Contracted vendor shall also notify County within twenty-four (24) hours after receipt, of any notices of expiration, cancellation, nonrenewal or adverse material change in coverage received by said Contractor from its insurer. Notice shall be given by certified mail to: Pinellas County Purchasing Department, 400 S. Ft. Harrison Avenue, 6th Floor, Clearwater, Florida 33756; and nothing contained herein shall absolve Contractor of this requirement to provide notice.

Should the Contractor, at any time, not maintain the insurance coverages required herein, the County may terminate the Agreement, or at its sole discretion may purchase such coverages necessary for the protection of the County and charge the Contractor for such purchase. The County shall be under no obligation to purchase such insurance, nor shall it be responsible for the coverages purchased or the insurance company or companies used. The decision of the County to purchase such insurance shall in no way be construed to be a waiver of any of its rights under the Agreement.

Each insurance policy shall include the following terms and/or conditions in the policy:

(1) Companies issuing the insurance policy, or policies, shall have no recourse against County for payment of premiums or assessments for any deductibles which all are at the sole responsibility and risk of Contractor.

(2) The term "County" or "Pinellas County" shall include all Authorities, Boards, Bureaus, Commissions, Divisions, Departments and Constitutional offices of County and individual members, employees thereof in their official capacities, and/or while acting on behalf of Pinellas County.

(3) The policy clause "Other Insurance" shall not apply to any insurance coverage currently held by County or any such future coverage, or to County's Self-Insured Retentions of whatever nature.

(4) All policies shall be written on a primary, non-contributory basis as respects Contractor's operations.

(5) Any certificate of insurance evidencing coverage provided by a leasing company for either workers compensation or commercial general liability shall have a list of covered employees certified by the leasing company attached to the certificate of insurance. The County shall have the right, but not the obligation to determine that the contractor

is only using employees named on such list to perform work for the County. Should employees not named be utilized by contractor, the County, at its option may stop work without penalty to the county until proof of coverage or removal of the employee by the contractor occurs, or alternatively find the contractor to be in default and take such other protective measures as necessary.

(6) Insurance policies, other than Professional Liability or except as prohibited by law, shall include waivers of subrogation in favor of Pinellas County.

The insurance requirements for this Agreement, which shall remain in effect throughout its duration and for two (2) years beyond final acceptance for projects with a Completed Operations exposure, are as follows:

(A) <u>Workers' Compensation Insurance</u>

Limit	Florida Statutory
Employers Liability Limits	
Per Employee	$ 500,000
Per Employee Disease	$ 500,000
Policy Limit Disease	$ 500,000

(B) <u>Commercial General Liability Insurance</u> including, but not limited to, Independent Contractor, Contractual Liability Premises/Operations, Products/Completed Operation and Personal Injury.

Limits

General Aggregate	$ 1,000,000
Products/Completed Operations Aggregate	$ 1,000,000
Personal Injury and Advertising Injury	$ 1,000,000
Each Occurrence	$ 2,000,000

(C) <u>Business Automobile or Trucker's/Garage Liability Insurance</u> covering owned, hired and non-owned vehicles. Coverage shall be on an "occurrence" basis, such insurance to include coverage for loading and unloading hazards, unless Contractor can show that this coverage exists under the Commercial General Liability policy.

Limit

Per Accident	$ 1,000,000

(D) <u>Excess or Umbrella Liability Insurance</u> excess of the primary coverage required , in paragraphs (A), (B), and (C) above:

Limits

General Aggregate	$ 4,000,000
Each Occurrence	$ 4,000,000

EXHIBIT D - INSURANCE REQUIREMENTS

(E) <u>Cyber Risk Liability (Network Security/Privacy Liability) Insurance</u> including cloud computing and mobile devices, for protection of private or confidential information whether electronic or non-electronic, network security and privacy; privacy against liability for system attacks, digital asset loss, denial or loss of service, introduction, implantation or spread of malicious software code, security breach, unauthorized access and use; including regulatory action expenses; and notification and credit monitoring expenses Breach Response/Event Management Expense coverage with at least minimum limits as follows:

Limits

Cyber Risk Liability Combined Single Limit $3,000,000
Breach Response/Event Management Limit $1,000,000

If Claims-Made Coverage is provided, policy must remain in place for a period no less than 12 months after the contract/completion date of this contract.

For acceptance of Cyber Risk Liability coverage included within another policy required herein, a statement notifying the certificate holder must be included on the certificate of insurance and the total amount of said coverage per occurrence must be greater than or equal to the amount of Cyber Risk Liability and other coverage combined.

(F) <u>Property Insurance -</u> Contractor will be responsible for all damage to its own property, equipment and/or materials.

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EXHIBIT E – PAYMENT / INVOICES

SUPPLIER shall submit invoices for payment due as provided herein with such documentation as required by Pinellas County and all payments shall be made in accordance with the requirements of Section 218.70 *et. seq,* Florida Statutes, "The Local Government Prompt Payment Act." Invoices shall be submitted to the address below unless instructed otherwise on the purchase order, or if no purchase order, by the ordering department:

> Finance Division Accounts Payable
> Pinellas County Board of County Commissioners
> P. O. Box 2438
> Clearwater, FL 33757

Each invoice shall include, at a minimum, the Supplier's name, contact information and the standard purchase order number. In order to expedite payment, it is recommended the Supplier also include the information shown in below. The County may dispute any payments invoiced by SUPPLIER in accordance with the County's Dispute Resolution Process for Invoiced Payments, established in accordance with Section 218.76, Florida Statutes, and any such disputes shall be resolved in accordance with the County's Dispute Resolution Process.

INVOICE INFORMATION:

Supplier Information provided on the PO	Company name, mailing address, phone number, contact name and email address as
Remit To	Billing address to which you are requesting payment be sent
Invoice Date	Creation date of the invoice
Invoice Number	Company tracking number
Shipping Address	Address where goods and/or services were delivered
Ordering Department	Name of ordering department, including name and phone number of contact person
PO Number	Standard purchase order number
Ship Date	Date the goods/services were sent/provided
Quantity	Quantity of goods or services billed
Description	Description of services or goods delivered
Unit Price	Unit price for the quantity of goods/services delivered
Line Total	Amount due by line item
Invoice Total	Sum of all of the line totals for the invoice

Pinellas County offers a credit card payment process (ePayables) through Bank of America. Pinellas County does not charge vendors to participate in the program; however, there may be a charge by the company that processes your credit card transactions. For more information please visit Pinellas County purchasing website at www.pinellascounty.org/purchase.

EXHIBIT F - DISPUTE RESOLUTION FOR MATTERS OF INVOICE PAYMENTS:

Payment of invoices for work performed for Pinellas County Board of County Commissioners (County) is made, by standard, in arrears in accordance with Section 218.70, et. seq., Florida Statutes, the Local Government Prompt Payment Act.

If a dispute should arise as a result of non-payment of a payment request or invoice the following Dispute Resolution process shall apply:

A. Pinellas County shall notify a vendor in writing within ten (10) days after receipt of an improper invoice, that the invoice is improper. The notice should indicate what steps the vendor should undertake to correct the invoice and resubmit a proper invoice to the County. The steps taken by the vendor shall be that of initially contacting the requesting department to validate their invoice and receive a sign off from that entity that would indicate that the invoice in question is in keeping with the terms and conditions of the agreement. Once sign off is obtained, the vendor should then resubmit the invoice as a "Corrected Invoice" to the requesting department which will initiate the payment timeline.

    1) Requesting department for this purpose is defined as the County department for whom the work is performed.

    2) Proper invoice for this purpose is defined as an invoice submitted for work performed that meets prior agreed upon terms or conditions to the satisfaction of Pinellas County.

B. Should a dispute result between the vendor and the County about payment of a payment request or an invoice then the vendor should submit their dissatisfaction in writing to the Requesting Department. Each Requesting Department shall assign a representative who shall act as a "Dispute Manager" to resolve the issue at departmental level.

C. The Dispute Manager shall first initiate procedures to investigate the dispute and document the steps taken to resolve the issue in accordance with section 218.76 Florida Statutes. Such procedures shall be commenced no later than forty-five (45) days after the date on which the payment request or invoice was received by Pinellas County, and shall not extend beyond sixty (60) days after the date on which the payment request or invoice was received by Pinellas County.

D. The Dispute Manager should investigate and ascertain that the work, for which the payment request or invoice has been submitted, was performed to Pinellas County's satisfaction and duly accepted by the Proper Authority. Proper Authority for this purpose is defined as the Pinellas County representative who is designated as the approving authority for the work performed in the contractual document. The Dispute Manager shall perform the required investigation and arrive at a solution before or at the sixty (60) days timeframe for resolution of the dispute, per section 218.76, Florida Statutes. The County Administrator or his or her designee shall be the final arbiter in resolving the issue before it becomes a legal matter. The County Administrator or his or her designee will issue their decision in writing.

E. Pinellas County Dispute Resolution Procedures shall not be subject to Chapter 120 of the Florida Statutes. The procedures shall also, per section 218.76, Florida Statutes, not be intended as an administrative proceeding which would prohibit a court from ruling again on any action resulting from the dispute.

F. Should the dispute be resolved in the County's favor interest charges begin to accrue fifteen (15) days after the final decision made by the County. Should the dispute be resolved in the vendor's favor the County shall pay interest as of the original date the payment was due.

G. For any legal action to recover any fees due because of the application of sections 218.70 et. seq., Florida Statutes, an award shall be made to cover court costs and reasonable attorney fees, including those fees incurred as a result of an appeal, to the prevailing party If it is found that the non-prevailing party held back any payment that was the reason for the dispute without having any reasonable lawful basis or fact to dispute the prevailing party's claim to those amounts.