

BOARD OF COUNTY COMMISSIONERS

DATE: January 15, 2013

AGENDA ITEM NO. 35

Consent Agenda ☐

Regular Agenda ☒

Public Hearing ☐

County Administrator's Signature

Subject:

Change Order No. 2013-3 – Phase 1 – IT Consulting Services – Maximo Upgrade
Contract No.: 101-0177-S (SS)

Department:

Business Technology Services / Purchasing

Staff Member Responsible:

Paul Alexander / Joe Lauro

Recommended Action:

I RECOMMEND THE BOARD OF COUNTY COMMISSIONERS (BOARD) APPROVE CHANGE ORDER NO. 2013-3 TO THE CONTRACT FOR CONSULTING SERVICES FOR THE MAXIMO UPGRADE – PHASE 1, WITH STARBOARD CONSULTING, LLC, (STARBOARD), LONGWOOD, FLORIDA.

IT IS FURTHER RECOMMENDED THE CHAIRMAN SIGN THE CHANGE ORDER AND THE CLERK ATTEST.

Summary Explanation/Background:

The IBM/Maximo maintenance and asset management system is a critical business system that has been leveraged by a number of Board Departments to enable operations and maintenance work activities throughout the County. As a result of the project's potential broad impact, the project is known as the Enterprise Asset Management (EAM) strategic initiative. The current Phase 1 contract with Starboard serves to identify the County's enterprise business requirements, evaluate Maximo's ability to meet those requirements, identify any gaps between business requirements and Maximo's capabilities, and develop an implementation plan for Maximo.

This Change Order is to add the identification of GIS (Geographic Information System) business requirements to the EAM Phase 1 project. The benefits of the addition of GIS to the EAM project are as follows:

- Alignment of the County's Enterprise GIS, EAM and Oracle Project Unified Solution (OPUS) strategic initiatives.
- Development of a consolidated Enterprise Asset Register that will support all stake holders.
- Improved ROI (return on investment) for Enterprise GIS, EAM and OPUS.
- Foundation for future Enterprise Employee Mobility services that will enable Pinellas County to optimize new mobile technologies.
- Catalyst for the development of EAM program and policies.

During the EAM requirements assessment, Starboard and County staff came to realize there were more advantages to combining asset related GIS requirements with EAM project requirements than there were to try to separate GIS requirements from EAM requirements. GIS and EAM are so closely intertwined with one another that the design and implementation of EAM is dependent upon integration with GIS and Mobile.

As the EAM project discovery progressed, the GIS project commenced. GIS has become established as a critical information management and decision support technology at all levels of the government. The ability to view asset data geographically is a fundamental best practice for asset management. Problematic assets such as pot holes in roads and leaking pipe joints underground become readily locatable through the use of GIS integrated with EAM. The County will be able to optimize limited resources by attaching a map of the asset to work orders in EAM.

Currently, much time is lost because crews cannot locate the assets. Adding GIS business requirements will deliver a combined EAM/GIS/Mobile strategy for the county. Starboard will have Environmental Systems Research Institute, Inc. (Esri) as a consultant to assist with this change order, as Esri are the experts for GIS.

Change Order No. 2013-3 will extend the Phase 1 completion date to April 19, 2013.

Previous actions regarding this contract in reverse chronological order are:

- October 2, 2012 – Change Order No. 2012-2, Approved by the County Administrator
- Change Order No. 2012-1 was dismissed and not issued
- October 11, 2011 – Final Negotiated Contract, Approved by the Board
- April 26, 2011 – Approval of the Ranking of Firms, Approved by the Board

Fiscal Impact/Cost/Revenue Summary:

Original Phase 1 Approved Total:	\$299,475.00
Not to Exceed Cost for Change Order No. 2013-3:	\$226,676.00
Revised Not to Exceed Total for Phase 1:	\$526,151.00

Funding is provided through BTS BCC Strategic Project Fund and Utilities Enterprise Project Fund

Exhibits/Attachments Attached:

1. Contract Review
2. Contract Amendment and Change Order No. 2013-3



**PURCHASING DEPARTMENT
CONTRACT REVIEW TRANSMITTAL**

CATS
NO.:

41378

PROJECT: Third Amendment – Phase 1 – IT Consulting Services – Maximo Upgrade

BID NUMBER: 101-0177-S (SS)

REQ. NUMBER:

TYPE: ☐ Purchase Contract

☒ Other: Third
Amendment

☐ Construction-Less than \$100,000

☐ One Time

In accordance with the policy guide for Contract Administration, the attached documents are submitted for review and comment.

Upon completion of review, complete Contract Review Transmittal and forward to next Review Authority listed. Please indicate suggested changes by revising, in RED, the appropriate section of the document reflecting the exact wording of the change.

RISK MANAGEMENT: Please enter required liability coverage on pages: Included with original

PRODUCT ONLY ☐

REVIEW SEQUENCE	REVIEW AUTHORITY	REVIEW DATE	REVIEW SIGNATURE	COMMENTS (Attach Separate page if necessary)	COMMENTS INCORPORATED
1.	<u>Purchasing Dept.</u> J. Lauro, Director C. Mancuso, Ass't. Director S. Steele, P.A.	12/17/12	(5) [Signature]		
2.	<u>Business Technology Services</u> Paul Alexander, Director Jim Russell [Signature] Greg Carro [Signature] Jan ice Magdziasz [Signature]	12/11/12	[Signature]		

Using Dept please provide below information:

☐ Yes, funding for this requisition is using grant Funding. ☐ No, funding for this requisition is not using grant Funding.

If grant funding is being used you must provide Purchasing with the exact clauses that need to be on attached document.

3. [Signature] 12-18	<u>Risk Management Director</u> Attn: Virginia E. Holscher (Check applicable box at right)	12/18/12	[Signature]	Insurance included in original agreement	HIGH RISK NOT HIGH RISK
4.	<u>BCC Finance</u> Attn: Cassandra Williams	12/19/12	CBW		
5.	<u>Legal</u> Attn: Michelle Wallace Dennis Long	12/19/12 12/21/12	MW D12	Agreement revised to clarify payment provisions	
6.	<u>Asst. County Administrator</u> Attn: M. Woodard	12/27/12	[Signature]	See comments / Questions	

RETURN ALL DOCUMENTS TO PURCHASING

Make all inquiries to: Sue Steele

at Extension 44776

In order to meet the following schedule, please return your requirements to Purchasing by: 12/20/12

TENTATIVE DATES

BCC Approval: 01/15/13

ENTERPRISE ASSET MANAGEMENT SYSTEM - CONTRACT NO:101-0177-S
CONTRACT AMENDMENT AND CHANGE ORDER NO. 2013-3

Section 1. General Information

Agency		
Pinellas County, a political subdivision of the State of Florida		
Project Sponsor	Phone	Email
Janice Magdziasz	(727)464-4445	JMagdziasz@pinellascounty.org
Consultant		
Starboard Consulting, LLC, a Florida corporation		
Program Manager	Phone	Email
Karen Buck	(407)622-6414	kbuck@starboard-consulting.com
Project Name		Contract Number
Phase 1 – IT Consulting Services – Maximo Upgrade		101-0177-S

Section 2. Affected Areas

<input checked="" type="checkbox"/> Project Schedule	<input checked="" type="checkbox"/> Project Scope	<input checked="" type="checkbox"/> Contract Amount
Software Licenses	<input checked="" type="checkbox"/> Professional Services	Interfaces

Section 3. Description of Change/Justification

Amend the SOW to add the following Phase 1 Services:

1. Asset Class Definition Workshops: Starboard and its subcontractor, Esri, will conduct a 1-day on-site workshop with the Functional Leadership to review the asset classifications with the users and determine the sources of data for upload or conversion during the implementation projects for EAMS and GIS as defined in Section 2.1 of Exhibit A attached hereto.
Staffing: Starboard's Program Manager and an Esri Consultant will be in attendance at this meeting.
Deliverable: Meeting Minutes from Asset Classification Review
2. Asset Creation and Modification Business Process Development: Starboard and its subcontractor, Esri, shall jointly conduct a 9 day workshop (2 successive weeks on-site) to document the existing business processes for asset creation and modification by the existing business units as well as to document the "to be" process to be followed when the systems are implemented as defined in Section 2.2 of Exhibit A attached hereto.
Deliverable: Asset Creation and Modification Business Process Visio Diagram
3. Mapping and Mobile Education Session: Starboard and its subcontractor, Esri, shall jointly conduct a 1-day on-site workshop with the Project Sponsors and Functional Leadership as defined in Section 2.3 of Exhibit A attached hereto.

Deliverable: Product Demonstrations

4. Mapping Requirements Gathering: Starboard and its subcontractor, Esri, will jointly conduct a 3-day workshop with the County Functional Leadership, Subject Matter Experts, and BTS representatives to review the mapping requirements for both the desktop and mobile versions of GIS and Maximo Spatial as defined in Section 2.4 of Exhibit A attached hereto.

Deliverable: Updated Functional Requirements Document

5. Prepare GIS Specific Sections of the EAMS Implementation Plan: Starboard, through its subcontractor Esri, will prepare the highlevel GIS Implementation/Strategic Plan section for the EAMS Implementation Plan deliverable as defined in Section 2.5 of Exhibit A attached hereto.

Deliverable: GIS Implementation/Strategic Plan section of the EAMS Implementation Plan

Starboard and its subcontractor, Esri, will jointly be responsible for overall management of the effort in this Change Order in coordination with the County Project Manager. Deliverables will be completed in accordance with the schedule attached hereto as Exhibit B. Payment for the Deliverables set out in 1 through 5 above will be made in accordance with Section 5 of the Agreement upon completion and acceptance pursuant to Section 7 of the Agreement. Payment for these Deliverables shall be due on the Final Milestone Payment Date as set out in Section 2.6 of the SOW. Travel costs are included in the Services Fee due for each task and are not priced separately.

Section 4. Detail of Change Order Terms

Change Item	Add ESRI GIS resources	
Change From	New	
Change To	1) Asset Class Definition Workshops	\$13,004
	2) Asset Creation and Modification Business Process Development	\$70,244
	3) Mapping and Mobile Education Session	\$35,664
	4) Mapping Requirements Gathering	\$36,104
	5) Prepare GIS Specific Sections of the EAMS Implementation Plan	\$21,600
	6) Review of EAMS Implementation Plan with County and Revisions Necessary to Produce the Final Deliverable	\$16,560
	7) Optional: 5 Additional Days of Business Process Definition for Starboard and Esri upon approval pursuant to Section 2.7 of the Agreement.	\$33,500
	Total:	Not to exceed \$226,676.00

Section 5. Impacts Summary

	Current Contract	Revised Contract with this Change Order
Scope	Starboard Asset Management Resources Only	Adds ESRI resources to plan a well integrated EAM/GIS system
Contract Fees	Original Contract Fees - \$299,475	\$299,475 Original Fee + \$226,676 Change Requested ----- \$526,151 Revised Total Fees
Schedule	Phase 1 Discovery Completion 5/15/2012	Phase 1 Discovery Completion - 4/19/2013
Other	N/A	

Section 6. Approvals

Approval of this Change Order shall constitute an amendment to the Contract and will be performed subject to all the same terms and conditions as contained in the Contract indicated above, as fully as if the same were repeated in this acceptance. The effective date of the Change Order shall be the date this Change Order is signed by the County. This adjustment to the Contract shall constitute a full and final settlement of any and all claims arising out of or related to the change set forth herein, including claims for impact and delay costs.

PINELLAS COUNTY, by
its Board of County Commissioners

Starboard Consulting

By: _____

Date: _____

ATTEST:

Deputy Clerk

By: Karen A. Buck

Name: Karen A. Buck

Title: Executive Director

Date: 12-27-12

APPROVED AS TO FORM
OFFICE OF THE COUNTY ATTORNEY

By: [Signature]

Project Name: Maximo Implementation Discovery **Customer Name:** Pinellas County
Prepared by: Melissa Ekmark **Date:** 11/16/12

1. Brief Description of Change

Pinellas County (hereinafter the "County") has embarked on a major Enterprise technology initiative to streamline its business systems and workflows in order to maximize value provided to its citizens and reduce operating costs. Pinellas County has identified three strategic technology platforms to assist them in meeting these goals. These platforms are (1) Oracle BI, (2) IBM Maximo, and (3) Esri ArcGIS. A key consideration in the selection of these technology platforms was the capabilities that they provided out-of-the-box. Pinellas County is confident that the core capabilities of these technology platforms will assist them in meeting their goals and objectives of efficiently and effectively serving the citizens of Pinellas County.

Earlier this year, Pinellas County hired Starboard Consulting to conduct a visioning and discovery study to assist them with implementation of the IBM Maximo technology platform for Enterprise Asset Management (EAM). As that effort got underway, it became clear that Enterprise GIS (eGIS) was a key component to their EAM strategy. Pinellas County believes that adding eGIS to its current EAM visioning and implementation planning efforts with Starboard Consulting will promote internal cooperation and gain project efficiencies.

Benefits include:

- Consolidating planning for EAM and GIS rollout projects for Department of Environment and Infrastructure, Real Estate Management, Parks and Conservation Resources, and Fleet into a single effort
- Positioning Pinellas County to effectively manage the complex interdependency of the EAM and eGIS projects.
- Allowing the development of EAM and eGIS deliverables through a unified view rather than separately.
- Providing a single unified project team for EAM's use of eGIS.

Esri Professional Services was asked to assist in this effort. The proposed scope of work presented in this document contains a list of tasks, identified by Starboard Consulting and Esri that are required to meet Pinellas County's objectives of adding eGIS to its EAM visioning effort. The tasks include a series of workshops and meetings designed to identify EAM and eGIS capabilities needed to support business processes, as well as, to familiarize users on the use of ArcGIS, Esri's Commercial Off-The-Shelf (COTS) software technology.

This Change Order defines the scope of the joint requirements gathering, business process development, and planning efforts.

2. Scope Tasks

2.1 Asset Class Definition Workshops

As part of the existing scope, Starboard met with the Functional Leads to define the asset classifications and sub-classifications that will be used as the basis for hierarchy standards and asset registry nomenclature for the enterprise system. The asset classification is a fundamental aspect of the EAMS for effective asset management and also sets the standard for the feature classes that must exist within the GIS data model and the attribution that must be available in one or both systems for asset management.

The results of the workshop were documented in the Functional Requirements document. It was noted in the workshop and in the Functional Requirements document that there are a number of outstanding questions still to be answered as well as additional reviews to be performed to finalize the classification and attribution list as an enterprise standard for both the EAMS and GIS. These reviews were to be completed as "homework assignments" for the functional leadership.

Once the Functional Lead team has completed their review and finalization of the asset classification list, Starboard and Esri will conduct a **1-day on-site workshop** with the Functional Leadership to review the asset classifications with the users and determine the sources of data for upload or conversion during the implementation projects for EAMS and GIS.

Staffing

Starboard's Program Manager and an Esri Consultant will be in attendance at this meeting.

Assumption

The County shall be responsible for scheduling and communication of all workshop sessions with the user community.

The County shall send the current GIS data models for the various business units to the Starboard/Esri team for their review for recommendations to include in the asset classification standard as well as the GIS data model at least ten days in advance of the scheduled workshop.

Please note that the asset classification workshop will be a review of the asset classifications and sub-classifications only and will not include the definition of all of the attributes to be captured for each classification nor is it intended to be a complete data modeling effort for the GIS implementation. The attribution will be completed by the Functional Leadership in iterative workshops to be facilitated by the County but does not need to be complete until Phase 2 for both the EAMS and GIS project implementations. The completion of the asset attribution definition will be a dependency for both the load of the new asset classifications into the Maximo 7.5 development environment as well as the data modeling effort as part of the E-GIS implementation.

In addition, the Functional Leadership agreed that the failure hierarchy standard would align with the asset classifications for the capture of problem, cause, and remedy for root cause analysis during work performance. The failure hierarchy review and finalization will be the sole responsibility of the Functional Leadership to complete as a "homework assignment" that must be completed prior to Phase 2 of the EAMS implementation project.

Deliverable:

- Meeting Minutes from Asset Classification Review
- Pinellas County to Provide the Final Asset Classification List with Data Sources Identified

2.2 Asset Creation and Modification Business Process Development

Immediately following the Asset Classification 1 day review workshop, Starboard and Esri shall jointly conduct a **9 day workshop** (2 successive weeks on-site) to document the existing business processes for asset creation and modification by the existing business units as well as to document the "to be" process to be followed when the systems are implemented. The discussion will also include a definition of the organizational roles and responsibilities within the new business process for designers, GIS editors, the Maximo crews and technicians, and any other personnel involved in creating or modifying asset information as part of their work processes.

Starboard and Esri have included an optional **5 days of workshops** (1 successive week on-site) if the planned days are not sufficient to document the "to be" processes.

The workshops shall include a definition of business processing for:

- CAD and other County design processing to define new asset planning and design.
- CAD to GIS to define how under construction assets will be integrated and displayed.
- GIS to Maximo to define how under construction and new assets will be integrated and created.
- Maximo to GIS to define how removals, replacements, and installs will be captured and communicated.
- Field Mobility to Maximo and/or GIS to define the changes that will be allowed from the field including redlines, attribution updates, etc.

For capitalized and construction projects, complementary workflows will need to be defined for Project estimating and work order creation and management including:

- Design Estimate to OPUS and Maximo for Project Creation and Work Estimation and Planning.
- Maximo to Project Management toolset to define how work completion and costing will be captured and communicated.
- Construction Contractor Data Capture Processing to define the expectations of data to be provided by contractors during project performance and completion and which enterprise systems will need to upload this data.

The process to create new projects in OPUS and have that data flow to Maximo is already included within the scope of the Maximo Discovery phase and thus has been purposefully omitted from this section even though it is a necessary business process to be defined for capital and construction project management.

Staffing

Starboard's Program Manager and an Esri Consultant will be in attendance at each on-site workshop.

Assumptions

The County shall be responsible for scheduling and communication of all workshop sessions with the user community.

The County shall provide their existing business process documents at least two weeks prior to the beginning of the workshops to allow sufficient time for review and understanding.

Pinellas County shall finalize their asset classification standard prior to this workshop session so that the design can take into account the full scope of assets to be managed and integrated between GIS and Maximo. The asset class list is critical in determining the level of modifications needed to the Esri LGIM as well as assist in determining the level of integration needed between Maximo maintained datasets and ArcGIS datasets.

Deliverables

- Asset Creation and Modification Business Process Visio Diagram

2.3 Mapping and Mobile Education Session

Starboard and Esri shall jointly conduct a **1-day on-site workshop** with the Project Sponsors and Functional Leadership. This overview, conducted using technology demonstrations using demonstration datasets that depict common business functions and workflows using out of the box capabilities will prepare the team members for participation in application configuration and integration design workshops.

The overview will include:

- Review of GIS Off the Shelf Capabilities for ArcGIS for Desktop
 - Local Government Information Model
 - Geometric Network
 - Tracing
 - Redlining
 - Linear Asset Management (Dynamic Segmentation)
- Review of GIS Off the Shelf Capabilities for ArcGIS for Server
 - GIS Web Services
 - Image Services
 - Web Mapping Applications

- ArcGIS for Mobile
 - ArcGIS for Smartphones and Tablets
 - ArcGIS for Windows Mobile

Staffing

The staff attending the session will include Starboard's Program Manager and GIS Architect as well as a Solution Engineer and Consultant from Esri.

Assumptions

The County shall be responsible for scheduling and communication of all workshop sessions with the user community. Starboard and Esri will provide technology demonstrations using laptops connecting to servers and data sources over the internet. Demonstration datasets will be generic data sets used to demonstrate typical workflows designed to communicate the capabilities of COTS technology.

Deliverables

- Product Demonstrations

2.4 Mapping Requirements Gathering

Immediately following the Mapping and Mobile Education Session, Starboard and Esri will jointly conduct a **3-day workshop** with the County Functional Leadership, Subject Matter Experts, and BTS representatives to review the mapping requirements for both the desktop and mobile versions of GIS and Maximo Spatial. The first workshop session will include a review of the requirements that have already been captured within the Maximo Functional Requirements document as well as the highlighted outstanding decision points for GIS.

The remainder of the workshop discussions will include a demonstration of the existing mapping functionality within the legacy systems to determine what configurations need to be preserved and the documentation of any other requirements not previously discussed.

The end result of the workshops will be an updated Maximo Functional Requirements document that defines what will be built within the GIS implementation project in support of the Maximo EAMS which will become the baseline for the design and development activities included in the implementation phase of the E-GIS project. The requirements will indicate whether it will be fulfilled by the out of the box functionality or whether a configuration or customization is required as well as an overall estimated work effort for scoping.

Staffing

The staff attending the session will include Starboard's Program Manager and GIS Architect as well as a Solution Engineer and Consultant from Esri.

Assumption

Pinellas County will arrange demonstrations within the three day workshop schedule of the existing mapping functionality for Utilities, Public Works, Permitting, and any other groups currently using digital maps.

Deliverable

- Updated Functional Requirements Document

2.5 Prepare GIS Specific Sections of the EAMS Implementation Plan

Upon the completion of business process documentation and GIS requirements workshops, Esri will prepare the high-level GIS Implementation/Strategic Plan section for the EAMS Implementation Plan deliverable. The high-level GIS Implementation/Strategic Plan will emphasize the following:

- Current state of existing systems
- Existing data and conversion requirements
- GIS business and user needs identified in the meetings and workshops
- Recommendations for GIS related applications based on the stated immediate and long term GIS implementation goals with respect to the EAM system
- A phased approach based on identified priorities, departmental initiatives, and available resources with dependencies for the EAMS implementation.
- Identification of data, workflows, and application needs that need to be in place to coincide with the implementation plan.
- Personnel and Organizational Requirements
- System support recommendations based on existing support staff and user community
- Staff training requirements

Staffing

Starboard's Program Manager and an Esri Consultant will be on-site for 2 days to review the Implementation Plan with County personnel after the plan has been drafted for

Deliverable:

- GIS Implementation/Strategic Plan section of the EAMS Implementation Plan

2.6 Project Management

Starboard and Esri will jointly be responsible for overall management of the effort within this change order in conjunction with the County Project Manager to:

- Manage the consulting human resources for the project
- Preparing Meeting Minutes, Status Reports, and Change Orders
- Managing the Project Schedule
- Invoicing based on task completion
- Coordinate Knowledge Transfer

3. Cost Estimate

Starboard and Esri will bill the County for time and expenses monthly as incurred limited by the not to exceed amount for the scope of the change order. The cost estimate is for the total effort to complete the task including workshop preparation, on-site facilitation of the workshops, and then development of the draft deliverables for review and approval by County staff.

The estimated costs for the Starboard and Esri Project Manager have been included within each functional task and are not priced separately.

Travel costs are included in the cost estimate for each task and are not priced separately.

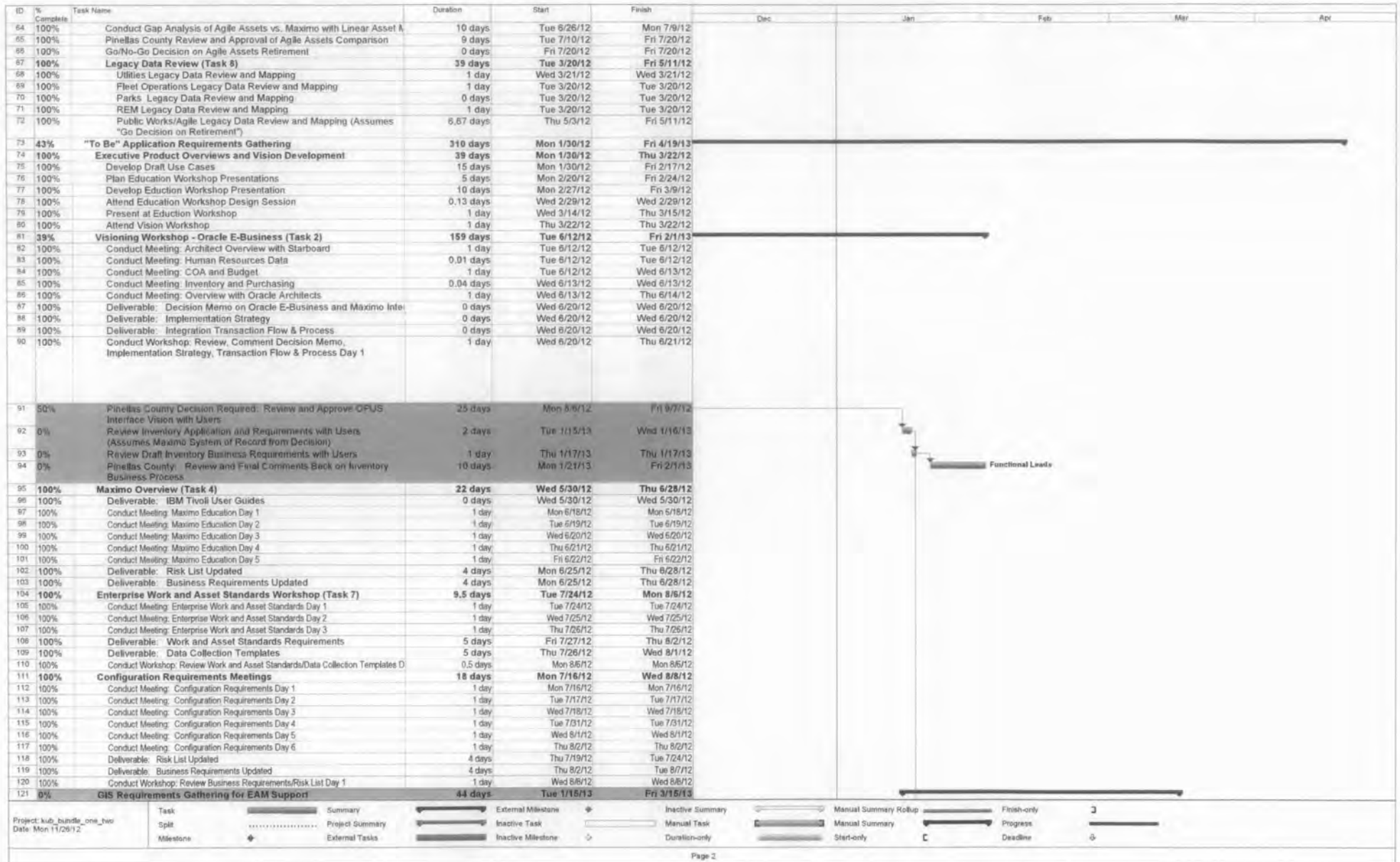
Task	Task Description	On-Site	Cost Estimate
1	Asset Class Definition Workshops	Yes	\$13,004
2	Asset Creation and Modification Business Process Development	Yes	\$70,244
3	Mapping and Mobile Education Session	Yes	\$35,664

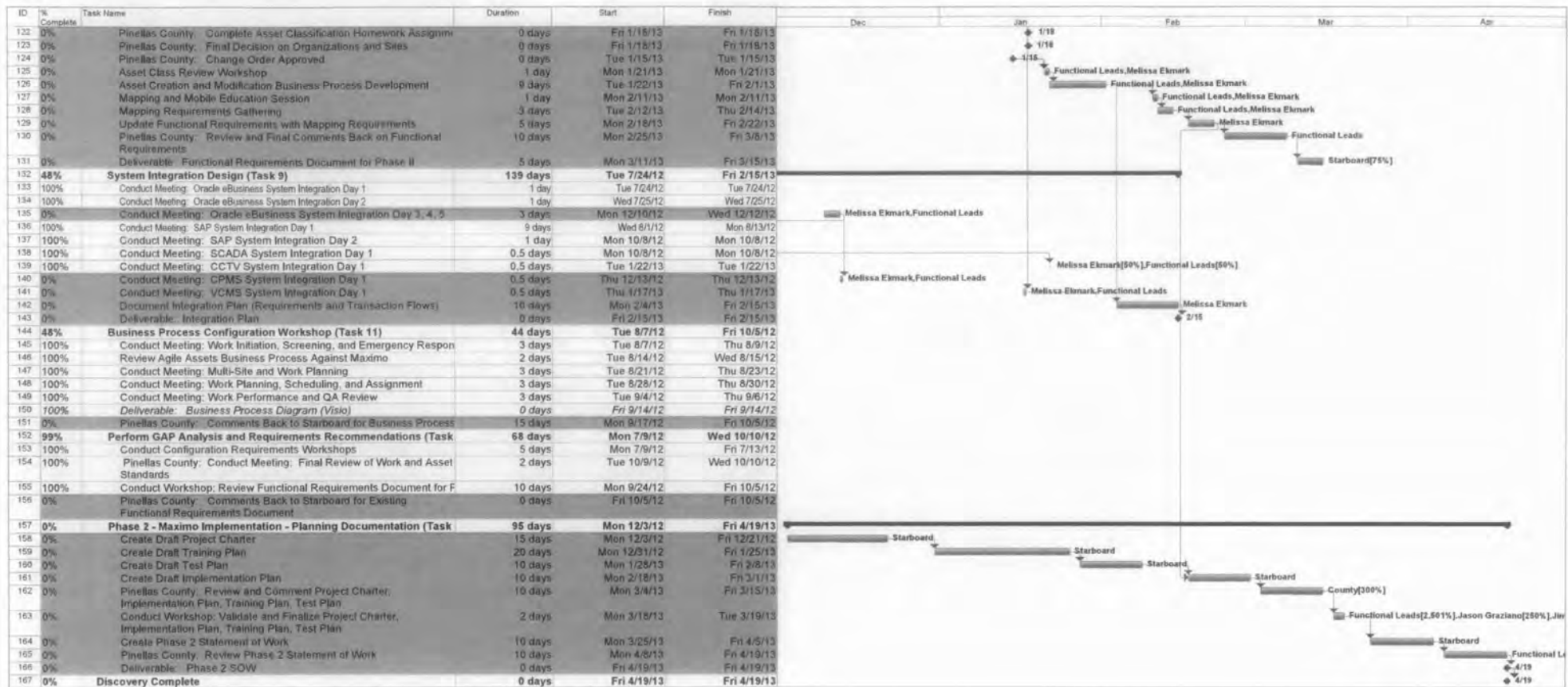
Project Change Request

#3

Task	Task Description	On-Site	Cost Estimate
4	Mapping Requirements Gathering	Yes	\$36,104
5	Prepare GIS Specific Sections of the EAMS Implementation Plan	Yes	\$21,600
6	Review of EAMS Implementation Plan with County and Revisions Necessary to Produce the Final Deliverable	2 Day Review with County	\$16,560
Total Not to Exceed Amount of Effort			\$193,176
Optional: 5 Additional Days of Business Process Definition for Starboard and Esri			\$33,500







Project: kub_bundle_one_two
Date: Mon 11/26/12

Task	Summary	External Milestone	Inactive Summary	Manual Summary Rollup	Finish-only
Split	Project Summary	Inactive Task	Manual Task	Manual Summary	Progress
Milestone	External Tasks	Inactive Milestone	Duration-only	Start-only	Deadline