




Midpeninsula Regional
Open Space District

Memorandum

DATE: October 11, 2017

MEMO TO: MROSD Board of Directors

THROUGH: Steve Abbors, General Manager 

FROM: Garrett Dunwoody, Information Systems and Technology (IST) Manager

SUBJECT: Work Order and Asset Management System

BACKGROUND

The Land and Facilities Department is responsible for maintaining the District property, including a wide variety of facilities, across its 63,000 acres. Assets include roads, trails, fencing, water infrastructure, culverts, vehicles/heavy equipment, and commercial/residential buildings. For better asset management, the Midpeninsula Regional Open Space District is seeking to acquire a Work Order and Asset Management System with accompanying implementation and configuration services. A Work Order and Asset Management System will help consolidate business process and allow for data/report access to inform decisions and best practices for managing District assets.

This project budget of \$172,000 is included in the FY2017-18 Action Plan and Budget.

DISCUSSION

The District is seeking the professional support of a consultant to implement and configure a Work Order and Asset Management System. A Request for Qualifications and Proposals was released on August 21, 2017 with bids due on September 18, 2017. Consultants were asked to address the following needs:

- Consolidate the work order and asset management practices into a single system of record
- Improve the life cycle management of infrastructure assets
- Increase data access across the agency
- Support mobile device access and provide work queues to field staff
- Allow for mobile asset data collection using industry standard mobile devices
- Allow for real-time integration with Enterprise GIS by leveraging ArcGIS Server infrastructure
- Be compatible with American with Disabilities Act (ADA) compliance asset data entry and/or integration with an industry-standard ADA compliance asset database

The end-user for this product suite are the members of the Land and Facilities Department. Users of the systems will include managers, supervisors, leads, and field staff. Expected end users could be as many as 60. All District staff should be able to open a work order as they discover issues that the Land and Facilities Department will need to address.

Integration with Existing Technology Investments

The District has made considerable technology investments over the last eighteen months, including investments in Enterprise GIS and mobile connectivity. The Work Order and Asset Management Project will be building on these investments. The work order systems that the District is looking to acquire include strong integration with the District's Enterprise GIS. This will allow staff to have a clear picture of the type and location of a particular asset on a web based map. Additionally, the project will focus on solutions that make this information mobile. The mobile approach will leverage existing investment in mobile connectivity, such as ranger and field supervisor laptops and tablets, and allow field staff access to work orders or allow for updating asset information from the field. In return, this data will then synchronize back to a centralized system. The approach of 'build once - share many times' is how IST will continue to build on the District's investments in technology.

PROJECT SCOPE

Below is a synopsis of the phases of implementation for the Work Order and Asset Management System.

Phase 1: Requirements and Design

Establish a clear understanding of the current conditions of the District's existing business processes and workflows for managing assets and generating work orders.

Tasks: Data Inventory, Business Requirements, Systems Design

Phase 2: Project Planning and Timelines

From the observations made in Phase 1, develop a recommended implementation plan.

Tasks: Testing Plan, Project Timelines, and Resources

Phase 3: System Build and Configuration

Focus on data build-out/conversion, application configuration, as well as on-site consultant configuration and testing of the Work Order and Asset Management System.

Tasks: System Build, Data Migration/Integration, Application Configuration

Phase 4: System Testing and QA/QC

Ensure the system meets performance targets and that all aspects of the database and application build are properly configured.

Tasks: Testing Scripts, Mobile/Field Testing, User Acceptance Testing (UAT)

Phase 5: Final System Delivery

System delivery and "go live." As the system moves to a production system, conduct onsite trainings for the user groups and provide final system documentation.

Tasks: Final Systems Documentation, Training Sessions, Go Live

NEXT STEPS

IST and the Land and Facilities Department has a tentative date for an award of contract by the Board of Directors of November 8, 2017. The Board will receive additional information on the project as part of this upcoming Board report.