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City of Mountlake Terrace

EAM Key Requirements and Pricing Estimates

Background

Founded in 1954, Mountlake Terrace has changed over the years from a small rural community into a metropolitan suburb. The residential community of Mountlake Terrace began with the speculative construction of homes for returning World War II veterans and their young families. Within ten years, the population grew to 5,000 and a group of civic-minded residents took steps to create a municipal government. The City of Mountlake Terrace was incorporated on November 29, 1954, under a Council-Manager form of government. Today, the city is home to over 25,000 people.

Departments that will likely utilize a new Enterprise Asset Management (EAM) solution include Public Works (Engineering, Sewer, Stormwater, Streets, Water), Recreation and Parks, Facilities, Emergency Management, Compliance, and Finance.

District Facts and Figures:

Population	25,198
Number of Employees	~165 FTE's
Geographic Size	4 square miles
Number of Assets Potentially Managed in the System	Over 60,000
Number of Storm Catch Basins and Manholes	Approximately 4,800
Number of Sewer Manholes and Clean Outs	Approximately 2,400
Miles of Water Pipe	Over 90 miles
Number of Hydrants	Over 900
Miles of Streets	Approximately 125 lane miles
Number of Signs	Approximately 3,500
Number of traffic signals and beacons	18 signals, 20 beacons
Number of City Public Parks	Approximately 15
Number of City Public Playgrounds / Play Structures / Restrooms	Approximately 20
Number of City Buildings	Approximately 12
Annual Operating Budget	Approximately $57 million
Current Financial System	Tyler EERP
Current HR/Payroll System	Tyler EERP
Current Utility Billing System	Tyler EERP
Current EAM System	Aktivov (not in use – no data import needed)
Water Meters/AMI	Mueller / SENTRYX

The City is replacing the current systems with an integrated enterprise solution that would encompass much, if not all of the functionality outlined in this document. The goals of this project are to:

- **Implement a modern, cloud-based EAM solution**
- **Utilize the latest technology and asset management best practices**
- **Utilize a single source of data as much as possible**
- **Enhance both internal and external access to data**
- **Improve internal processes**
- **Reduce/eliminate customizations, work arounds, manual processes, and off-system data**
- **Unify workflow and processes wherever possible**

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Vendor and Solution Information	Response
1. Contact Information	
Company Name, Website	
Contact Person: Name and Title	
Phone, Email	
2. Company Information	
Year Founded	
Public or Private	
Annual Revenue	
3. Vendor Information	
Total Employee Count	
Number of Employees Dedicated to Proposed Solution	
4. Proposed Solution	
Name of Proposed Solution	
Brief Solution History – Genealogy, Acquisitions, etc.	
5. Number of Customers on Proposed Solution	
Total Customers	
Number of Public Sector (City, County, District, etc.) Customers	
List 3-5 Customers similar to Mountlake Terrace	
Provide list of local area customers who have been using the proposed solution for at least 3 years	

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6. Implementation Model	
Direct or Implementation Partner	
Typical Implementation Duration	
7. Cloud Strategy	
Brief description of cloud deployment strategy: multi-tenant, single tenant, etc. (3 – 5 sentences)	
Describe upgrade process and level of customer involvement	
Was your product built from the ground up as a web application or ported to the web, and/or purchased from another company?	
What is your regular release cycle? How often are new features released to customers?	
8. Customer Support	
Describe customer support location(s), contact information, and hours of operation	
Please describe the different levels of support contracts/SLA Tiers.	
List the number of dedicated support staff for the software application.	
9. Product Enhancement Requests	
Describe the process for making product enhancement requests/future roadmap decisions.	
Do customers have a major voice in enhancement requests?	
Pricing Estimates	
1. Describe software license methodology (SaaS, perpetual license plus hosting fees, named vs. concurrent licensing, etc.) and metrics used to determine price.	

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2. Annual Subscription (Assume 60 named users)	
• Year 1	
• Year 2	
• Year 3	
• Year 4	
• Year 5	
3. Implementation Estimate: Include design, configuration, training, travel expenses, installation, data conversion, integration, reports, etc.	
4. Other: Indicate any 3rd party software and associated costs for modules and requirements in scope, or other charges such as storage limits/additional costs for attachments, e.g., CAD drawings and photographs, etc.	
5. Total Year One Cost	
6. Total Five-Year Cost	

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EAM Key Requirements and Pricing Estimates

	Functionality	Response
R	**1.** Asset Management	
R	**2.** Work Requests	
R	**3.** Reactive Work Management	
R	**4.** Preventive Maintenance	
R	**5.** Inventory Management	
R	**6.** GIS	
R	**7.** Finance	
R	**8.** Reporting	
	Technology	
R	**9.** Cloud based EAM solution.	
R	**10.** Cloud hosting provider (Amazon AWS, Microsoft Azure, etc.).	
R	**11.** Year the Cloud based solution was first offered.	
R	**12.** List browsers supported (prefer Chrome, Edge, Safari).	
R	**13.** Documented disaster recovery/business continuity plans (which accounts for prolonged period with no internet access).	
I	**14.** What are your system uptime statistics for the last 12 months?	
R	**15.** Are there scheduled maintenance windows that will lead to system down time?	
N	**16.** How do you notify customers of an outage, including notifications?	
R	**17.** Single Sign On: On-premises MS Active Directory compatible.	
R	**18.** Multi-factor authentication support (currently using DUO).	
R	**19.** User and role-based security that is granular to both	

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	Functionality	Response
	the menu and field level.	
R	**20.** Briefly describe your cybersecurity strategy. How do you safeguard customer's data?	
I	**21.** Data encryption in transit and/or at rest.	
I	**22.** End user configurable menus and screens.	
R	**23.** User defined fields fully searchable and included in all reporting functionality.	
R	**24.** Office 365 integration - Outlook, Word, Excel.	
R	**25.** Mobile functionality: specify if applications and/or HTML5 are supported.	
R	**26.** Mobile devices: Store and forward if loss of connectivity.	
R	**27.** List mobile device compatibility (iOS, Android). Agnostic preferred.	
R	**28.** Describe integration experience with ESRI ArcGIS Online (both one way and bi-directional).	
N	**29.** Are you an ESRI Business Partner? If so, what is your Partner level?	
N	**30.** Support for GPS/AVL technology.	
R	**31.** List integration tools/technology to support interfaces to other systems (e.g., API's, web services).	
	32. Indicate experience and approach regarding potential integrations with the applications listed below:	
R	▪ Tyler Munis EERP (ERP and Utility Billing)	
R	▪ Esri ArcGIS Online (GIS)	
I	▪ Mueller / SENTRYX (AMI)	
N	▪ AutoCAD (CAD)	
N	▪ Rockwell (SCADA)	

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	Functionality	Response
N	▪ CentralSquare TRAKiT (Permitting/Inspections)	
N	▪ Eptura (Fleet Management)	
N	▪ DASH by DaySmart (Parks and Rec Scheduling)	
I	▪ CUES CCTV (Pipe inspection)	
I	▪ Tokay (Backflow Management)	
	General Requirements	
I	**33.** Configurable role-based dashboards with key metrics, to-do's, KPI's, drill to details, etc.	
R	**34.** System wide rules-based workflow routing for approvals and notifications.	
I	**35.** End user configurable workflows.	
R	**36.** Workflow delegation capabilities.	
R	**37.** Mandatory input fields and masks to validate data entry (WO's, etc.) by user/group.	
R	**38.** Drill down to source transactions from screens, queries, reports and dashboards.	
R	**39.** Attach documents and images to transactions (charts, maps, drawings, as-builts, PDF, etc.).	
R	**40.** Audit trail with date, time, user stamp and before and after values; reportable audit history.	
I	**41.** Describe available online training and support tools.	
I	**42.** Product user groups (regional, online, etc.).	
N	**43.** Available annual user conference with training.	
N	**44.** Configurable landing page/view by user or group profile.	
I	**45.** Unlimited note fields.	
N	**46.** Context-sensitive help.	
R	**47.** Asset tag/barcode support throughout the system (e.g., equipment, inventory, assets, etc.).	

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	Functionality	Response
R	**48.** Customer definable and changeable forms, letters and notifications (e.g., condition assessments, inspections, etc.).	
I	**49.** Allow contractors and tenants as system users with limited roles/permissions, e.g. submit work/service requests.	
I	**50.** Assign configurable default SLA's (response times) based on problem type, asset, severity, etc.	
I	**51.** Voice to text capabilities e.g., for contaminated environments.	
R	**52.** Discuss the strategic use of AI technology in the system, both now and on the product roadmap.	
	Asset Management	
R	**53.** Asset master record that supports unlimited user defined attributes, asset attributes, and file attachments.	
R	**54.** Support both vertical and horizontal assets, including segmentation.	
R	**55.** Define asset location by GIS coordinates.	
I	**56.** Configurable popup notifications if there is an open work order on an asset when asset record is viewed.	
R	**57.** Ability to track nested assets and parent/child relationships.	
R	**58.** Briefly describe your best practices for the asset creation process, e.g., create asset and numbers in GIS, then push to EAM, or create asset and numbers in EAM, then push to GIS, or both.	
R	**59.** Preserve all asset history when an asset is inactivated.	
R	**60.** Access as-built diagrams, image files, etc. from the field using tablets, smartphones, etc.	
R	**61.** Condition assessments/tracking with actual useful life, customer-defined conditions, etc.	

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	Functionality	Response
R	**62.** Ability to create surveys/inspections and attach results to permanent asset record.	
I	**63.** Asset lifecycle management functionality: analyze lifecycle and lifecycle costs of asset, types of assets, asset productivity, risk assessment, and categories of assets in compliance with utility asset management standards.	
R	**64.** Predictive analysis for asset useful life and lifecycle maintenance.	
	Work Requests	
R	**65.** Describe any work request/intake functionality in the solution.	
I	**66.** Web-based portal for citizens, contractors, employees and lessees to submit online requests for service (may not be tied to a specific asset).	
I	**67.** Email intake for citizens and employees to submit requests for service.	
R	**68.** Alerts for possible duplicate work requests.	
R	**69.** Configurable requestor notifications based on work request status, e.g., received, work order created, dispatched, closed, etc.	
	Reactive Work Management	
R	**70.** Allow work orders to be opened and closed with or without assets associated to them.	
R	**71.** Track materials issued to a work order; interface to inventory module for automated adjustments to inventory levels.	
R	**72.** Track and accumulate multiple time entries from one or many technicians onto a single work order.	
R	**73.** User (organizational) definable work order problem types and subtypes.	
R	**74.** Support for billable and non-billable work orders.	

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	Functionality	Response
R	**75.** Connect follow-up or subordinate work orders to a primary or original work order (parent/child).	
R	**76.** Track and correlate excessive repairs in reactive work orders.	
R	**77.** Track time, materials, equipment, trucks, tools, etc. assigned to work order.	
I	**78.** Prioritize a work order with escalation process and approvals.	
R	**79.** Crew scheduling with calendar views.	
I	**80.** Notify user upon work order creation that a similar work order for the same asset already exists.	
I	**81.** Conditional drop-down menus for a given problem type and subtype.	
R	**82.** Configure roles and permissions by department or work group to assign. Assets/problem types/activities available by user or role via permissions, e.g., Recreation and Parks users see only their assets and not all City assets.	
R	**83.** Ability to attach pictures, permits, as-built documentation, etc. to the work order.	
R	**84.** Assign standard or actual loaded hourly rates for staff time allocated to a work order.	
R	**85.** Generate a work order that tracks maintenance performed by individual staff or a work team on multiple assets and locations (e.g. facilities staff).	
R	**86.** Generate a single work order that includes multiple tasks or activities.	
R	**87.** Ability to use an existing work order as a template for a new work order.	
R	**88.** Open, complete, close, or update a work order in the field using a mobile device.	
I	**89.** Ability to categorize and enter work orders that represent work done for a calamitous event, e.g.	

	Functionality	Response
	FEMA.	
I	**90.** Ability for leads to view activities and status of each crew and work order.	
R	**91.** Provide percent complete of delineated program, e.g., measuring progress of street sweeping for a given street/area, catch basins cleaned, etc.	
N	**92.** Support a method to track real time work order progress display via map.	
	Preventive Maintenance	
R	**93.** Support preventive maintenance (PM) recurring work orders.	
R	**94.** Automatically generate recurring PM work order based on schedule defined by user, work order type, or asset type.	
R	**95.** Create maintenance schedule based on user defined measurements and/or fields, e.g., hours, dates, class type, time interval, etc.	
R	**96.** Support for PM procedures based on asset type and activity, whether stored in system or referenced by URL online.	
I	**97.** Adjust PM schedule for an asset based on actual PM completion date.	
R	**98.** Create multiple custom inspection forms with user-defined fields.	
N	**99.** Manage contractors used for inspections and other activities, e.g. elevators.	
I	**100.** FOG (Fats/Oil/Grease) inspection management.	
E	**101.** Discuss any fleet management functionality inherent in the system.	
I	**102.** Track critical PM's to ensure completion, including notifications, aging lists, status changes, etc.	
	Inventory Management	

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	Functionality	Response
R	**103.** Discuss overall capabilities in the system for inventory management, and if standard within the system or if an add-on or 3rd party solution.	
R	**104.** Support multiple inventory locations/warehouses for supplies, parts, and equipment/assets.	
N	**105.** Manage bin locations, min/max reorder quantities and re-order lead times that trigger suggested purchase requisitions.	
N	**106.** Tools inventory management, check in/check out, etc.	
I	**107.** Wildcard search parts lookup.	
R	**108.** Annual Physical inventory count functionality.	
	GIS	
R	**109.** Embedded GIS viewer within the application (that is compatible with the ESRI ArcGIS Online) with ability to generate a work order from an asset in GIS map.	
R	**110.** Map viewer support for performing basic geographic-related tasks such as: a. Calculating measurements for length and area, b. Determining relationships between assets, work orders, service requests, etc. to other GIS features.	
I	**111.** Display on a map the location and status of selected work order(s). Examples of selection sets include all work orders for today, since a certain date, of a certain type or types, etc.	
R	**112.** Asset number assignment (using the City's existing unique asset numbering) linked to GIS.	
R	**113.** Display user-configurable map views, e.g., the ability to have different map layers visible based on preference, display scale, and/or work role.	
R	**114.** Group assets within a category and area in GIS to help schedule and coordinate preventative maintenance activities.	

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	Functionality	Response
E	**115.** Support for linear/location referencing.	
	Finance	
R	**116.** Capital improvement tracking to the asset.	
I	**117.** Link asset in EAM to finance fixed asset number in ERP system.	
R	**118.** Identify labor on work orders via GL account code or cost center.	
I	**119.** Allocate direct labor and material costs from a work order to separate departments, funds, and funding sources for shared projects, cross-billing, chargebacks, etc.	
N	**120.** Integration with Tyler accounts receivable for invoice creation and distribution (chargebacks).	
R	**121.** Functionality to assist in building budgets and forecasts for all maintenance activities.	
R	**122.** Track cost by department, asset, etc.	
R	**123.** Support chargebacks for work orders to the various departments and external entities, including labor, parts, equipment.	
I	**124.** Briefly discuss support of budgetary/forecasting functions in solution, including tracking of budget to actuals, and generation of asset replacement reserves.	
R	**125.** Describe functionality available to support utility rate studies.	
	Reporting	
R	**126.** List available reporting tools (end user query, standard reports, report writer, business intelligence).	
R	**127.** User level security flows through to queries and reports.	
I	**128.** User definable executive dashboard components.	

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	Functionality	Response
R	**129.** Drill down to source transactions from reports.	
R	**130.** Support regulatory reporting – including water quality, etc.	
R	**131.** Explain how we could use the system reporting to mitigate lawsuits due to lack of maintenance.	
I	**132.** Graphical visualization of data (graphs, charts, etc.).	
I	**133.** Compliance reporting, develop risk profiles, status of agreements, permits, etc. pertaining to the condition of assets.	
R	**134.** Discuss functionality to support both internal and external audit reporting.	
R	**135.** Describe data output formats (e.g., XML, Excel, CSV, etc.).	