Memorandum



DATE December 10, 2021

To Honorable Members of the Transportation and Infrastructure Committee and the Government Performance and Financial Management Committee

SUBJECT Enterprise Work Order Asset Management System (EWAMS) Progress and Next Steps

EWAMS is a phased program to introduce industry best practices and standard technology to manage the City's capital assets, maintenance activities, and supporting inventories of parts and tools. EWAMS includes asset and work management, performance management, cost analysis, and multiple interfaces.

Phase 1 is complete. This phase included development of vertical infrastructure hierarchies for DWU plants, pumping stations, and City buildings. These hierarchies are a structure for tracking installed locations of individual assets, which are replaced over time as the equipment wears out. Work orders for plants, pump stations, and buildings are now tied not only to specific assets but also to the systems and processes the assets support. The City tracks costs of systems and processes over the life of the plant or building in addition to tracking the costs of individual pieces of equipment. The system tracks nearly 30,000 unique vertical facilities, processes, and systems in the hierarchies. DWU and Building Services also track more than 35,000 maintainable assets, each of which has been classified and documented according to standards adopted in Phase 1. Phase 1 also defined standards for managing maintenance activities. Enterprise software was installed and configured to support these standards. Phase 1 divisions went live with the new processes and technology beginning in 2019.

Phase 2 is underway. This phase expands the program to DWU Distribution, Wastewater Collection (WWC), and Water Quality divisions, as well as the Public Works and Transportation departments. Phase 2 established City standards for managing horizontal (field) asset data in GIS and synchronizing GIS with the work management system. This includes millions of pipes, streets, sidewalks, signs, and traffic control asset records. The GIS / Maximo interface is now live and millions of new assets are being added to the system to support field maintenance activities. An interface to the automated traffic management system is also complete. Interfaces to the financial, billing, and 311 systems are in development. DWU Distribution and WWC teams are preparing to go live with the EWAMS technology after the interfaces are completed. In 2022, Transportation and Public Works will start adding their GIS layers to the system, and DWU's stormwater pipes will be added. EWAMS performance management dashboards will also be expanded to the Phase 2 departments.

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Phase 3 will expand EWAMS to DWU Meter Services and other departments and divisions with customer contact and related assets. This phase will include upgrades and integration with technologies that support customer service and related maintenance activities, billing activities, and customer contacts. Phase 3 includes ongoing training and support of City asset managers, maintenance staff, and system administrators. Phase 3 will also introduce new asset rehabilitation and replacement planning in addition to budgeting processes and reports. Phase 3 is estimated to begin in January 2022.

If you have additional questions, please contact Bill Zielinski, Chief Information Officer, at 214-671-5318 or Terry Lowery, Director of Dallas Water Utilities, at 214-670-3143.

M. Elizabeth Reich

Chief Financial Officer

c: T.C. Broadnax, City Manager Chris Caso, City Attorney Mark Swann, City Auditor Bilierae Johnson, City Secretary Preston Robinson, Administrative Judge Kimberly Bizor Tolbert, Chief of Staff to the City Manager Majed A. Al-Ghafry, P.E. Assistant City Manager

> Jon Fortune, Assistant City Manager Joey Zapata, Assistant City Manager Dr. Eric A. Johnson, Chief of Economic Development and Neighborhood Services M. Elizabeth (Liz) Cedillo-Pereira, Chief of Equity and Inclusion **Directors and Assistant Directors**