



Council Communication

Office of the City Manager

Date

October 22, 2007

Agenda Item No. 34A

Roll Call No. 07-

Communication No. 07-646

Submitted by: Mike Matthes, Interim IT Director

AGENDA HEADING:

Approving bids from Vital Support Systems for replacement Storage Area Network (SAN), (7 bids mailed, 2 received).

SYNOPSIS:

Recommend approval of HP EVA 6100 for replacement Storage Area Network (SAN). This project replaces the current SAN, which has reached the end of its useful life in a production environment due to frequent technical issues. Installation of the latest security patches, fixes and antivirus software is not possible. This replacement also adds a second SAN for the purpose of disaster recovery. Included in this procurement is the replacement of SAN attached servers for Exchange (email), file servers, and backup recovery systems, which store or backup data on the shared storage array.

FISCAL IMPACT:

Amount: \$499,536.96

Funding Source: Capital Improvement Program for Fiscal Years 2007-08/2012-13, Municipal Improvements, Enhanced City-wide Information and Communications Systems, BLD060 CP034IFT990000, page 10.

ADDITIONAL INFORMATION:

The City's current storage solution (the "SAN") has reached the end of its useful life. It can no longer be expanded and periodically becomes filled, necessitating manual file deletions to create sufficient space for the City to continue to conduct day-to-day business. Additionally, a SAN is made up of disk drives that have been spinning at a high rate since the current SAN was purchased in 2001. The current SAN is wearing out necessitating relatively frequent replacement of parts/drives. Currently, no backup SAN exists. This creates a situation where in the event of a failure, recovery could take days or weeks. Having a backup SAN will reduce the recovery period to minutes.

The new SAN has been designed to solve all of these shortcomings. It will be much larger (three times more storage), it will contain new drives (requiring far less maintenance/replacement parts), and it will provide a backup SAN (to enable nearly instantaneous disaster recovery). It will provide better file recovery due to periodic snapshots taken to allow recovery of files without necessitating going back to the last backup.

The backup of the data on the new SAN will be done without impacting staff as it will use different paths and be much faster. The current backup cycles often run during the day even though backups are started at 6 PM. Many full backups running on the weekends are taking 38 to 44 hours.

The new SAN uses virtualization for file management and is much more efficient in its use of storage; this will allow for future growth. It also fits into the long-range plan of eliminating storage on individual servers and moving to shared storage on the SAN, Server Virtualization, and Thin Client for the desktop.

This is the normal replacement cycle for a SAN.

PREVIOUS COUNCIL ACTION(S): NONE

BOARD/COMMISSION ACTION(S): NONE

ANTICIPATED ACTIONS AND FUTURE COMMITMENTS: NONE