

**CITY COUNCIL COMMUNICATION 98-059
FEBRUARY 16, 1998 AGENDA**

SUBJECT:

**BID FOR NETWORK UPGRADE
(#G98-169)**

SUBMITTED BY:

**MICHAEL ARMSTRONG
INFORMATION TECHNOLOGY DIRECTOR**

SYNOPSIS –

The Final Report of the Data Management and Communications Committee established upgrading the City' s data communications network as a short-term goal. Acquisition of the equipment specified in Bid #G98-169 will allow Information Technology to proceed with the development of a high-speed, fiber-based data communications network.

FISCAL IMPACT –

\$196,009 net (\$260,194– the total amount of the low bid– less \$45,000 manufacturer' s rebate and \$19,185 reimbursement from Polk County) from the Capital Improvements Program (CIP) Budget, Index Code #346049.

RECOMMENDATION –

Acceptance of bid in amounts proposed by low bidder.

BACKGROUND –

The City' s data communications network is becoming increasingly congested, segmented in a fashion not yet conducive to new applications, and occasionally unreliable as levels of use increase. These problems mean the network needs to be upgraded to support advanced applications, such as the pending Finance/Human Resources system, client access to GIS (Geographic Information Systems) data, and general Internet access. This type of upgrade was envisioned and recommended in the Final Report cited above. The recommended equipment will alleviate these problems and will allow Information Technology to proceed with deployment of these advanced systems. The facilities that are affected by this upgrade include City Hall,

Armory, Police Headquarters, Public Works, and the Public Library. Equipment required to connect Polk County offices to the backbone was included in the bid. Polk County will reimburse the City for the cost (\$19,185) of the equipment required to complete that connection.

The City's present network connects key facilities at relatively low speeds from 1.54 MBPS (millions of bits per second) to 10 MBPS. ATM (Asynchronous Transfer Mode) was selected as our new backbone transport protocol to provide an immediate increase in the speed of connections among the facilities in the network's downtown core and to provide an efficient means to increase speeds substantially in the future. The new backbone will run at 622 MBPS initially and can be upgraded to as much as 2.4 GBPS (billions of bits per second) as our need for additional bandwidth increases.

ATM provides not only high speed, but is also the only transport protocol designed to permit transmission of data, voice, and video on the same fiber network. The network will provide only data transport initially. However, we hope to be able to transport voice and video on the network, as the required transmission equipment becomes affordable.

The design of a data network is largely determined by the design of the connectivity equipment. Information Technology staff spent several months (with various equipment manufacturers) refining the design of the network. After receiving design proposals and cost estimates from three firms, one design was selected based on a number of factors including ease of management, support capabilities, performance, and price. Specifications for the selected equipment were prepared, and bids were accepted for the proposed equipment.

All bids for the equipment were substantially higher than the manufacturer's estimate. Investigations conducted by Information Technology and the Purchasing Division revealed the manufacturer had provided erroneous pricing information to all bidding suppliers, and that the information provided to all vendors was identical. The manufacturer agreed to provide a direct pass-through reduction or rebate of \$45,000 to the City. This did not result in a change in the low bidder, since the rebate would be identical for all bidders. The low bidder has agreed to credit the amount of the rebate against the invoice for the equipment. Supporting documentation for this price reduction is attached.

Attachments