

CITY COUNCIL STUDY SESSION MINUTES

January 19, 2010

The City Council of the City of Norman, Cleveland County, State of Oklahoma, met in Study Session in the Municipal Building Conference Room at 5:40 p.m. on the 19th day of January, 2010, and notice and agenda of the meeting were posted in the Municipal Building at 201 West Gray and the Norman Public Library at 225 North Webster 48 hours prior to the beginning of the meeting.

PRESENT: Councilmembers Atkins, Butler, Cubberley, Dillingham, Ezzell, Griffith, Kovach, Quinn, Mayor Rosenthal

ABSENT: None

DISCUSSION REGARDING THE CITY'S FIBER OPTIC NETWORK AND TRAFFIC CONTROL IMPROVEMENT PROJECTS.

Ms. Kari Madden, Network Manager, provided an overview of the City Fiber Project and said the project was a collaboration between Information Systems and Traffic Control Divisions. The original fiber project was to connect six remote facilities back to the main campus. Those six locations include the North Base operations including the Emergency Operations Center (EOC), Fire Station No. 7, Fleet Management, Traffic Control, Line Maintenance, and Sanitation; Street Maintenance Facility; Fire Station No. 4; Special Operations Facility; Fire Station No. 3; and the Animal Welfare Facility. She said the primary cost of this type of project is constructing the infrastructure and by working with the Traffic Division, they were able to utilize existing traffic conduits and capitalize on significant cost savings while simultaneously upgrading the traffic control infrastructure.

Ms. Madden said the Traffic Control Division was able to obtain Federal stimulus funds to upgrade the signals along 24th Avenue West from Robinson Street to Lindsey Street to fiber. Additionally, she said the University of Oklahoma agreed to allow the City to run fiber through their existing conduit at One Partners Place, where the City's existing internet service provider, OneNet of Oklahoma, has their main network facilities. Utilizing the existing conduit will save the City monthly circuit/internet costs and allow the City to increase its internet bandwidth with OneNet, significantly improving connection speeds for all City of Norman internet users.

Ms. Madden said the Fiber Optic Network Project was developed to address insufficient bandwidth to remote locations; the inability to access critical data applications remotely; recurring monthly fees associated with data circuits; no infrastructure for failover redundancy of critical applications to the EOC; and no infrastructure on which to leverage future network technologies. She said staff determined the best solution to address the deficiencies was to install fiber optic cable as the transport medium. She said fiber optic cable is constructed of glass and data is transmitted using light spectrum providing a high bandwidth capacity, which would afford secure and reliable connections. She added technology advancement is dependant upon high speed data connections to serve data such as video, images, and voice.

Ms. Madden said the fiber project will allow the Public Works and Utilities Departments to have real time access to current street and utility infrastructure maps and documents, new construction documentation, and work order status, which is currently not available without traveling to the main campus. The public safety areas will be better able to access data and input records from remote locations ensuring personnel have the most up-to-date information when responding to accidents. The total project costs were \$1.53 million; \$741,000 was funded from the Capital Fund and accounts for approximately 25 miles of the 30 mile project and \$791,000 was funding by Federal stimulus funds and accounts for approximately five miles of the total project. She said since there was no infrastructure in place along 24th Avenue, the cost per foot was higher along that segment at \$30 per foot, but the cost per foot for the remaining 25 miles of the project was \$6 per foot.

Mr. David Riesland, Assistant Traffic Engineer, highlighted the signalization portion of the fiber project. He said the City maintains over 120 traffic signals and the growing population results in increased traffic and

increased traffic brings increased congestion and delay. The 2009 Community Survey ranked traffic flow as the second highest area to focus on over the next two years.

Mr. Riesland said the first fiber optic system was installed on Tecumseh Road between 36th Avenue N.W. and Flood, five signals total. He said fiber optic technology opens up new areas in terms of how the City manages its traffic signals. The fiber optic system utilizes a camera mounted to the signal mast that senses an approaching vehicle. The camera also allows staff to see the intersection and analyze traffic moving from one corridor to another. Mr. Reiland demonstrated the program for Council through his laptop and said it improves management of incidents and special events and provides the ability to receive alerts as events happen enabling shorter response times thereby reducing motorist exposure to disrupted signal operations.

Councilmember Kovach said there are pros and cons to networking signals as they are designed to move more cars on the arterials, in that if you're on a side street the wait times can be longer and asked if this system will have any affect on that. Mr. Reiland said it does not change that aspect but staff is finding through some of the retiming efforts, particularly on Highway 9, you can set the timing to move traffic along the arterial and give some additional time to the side streets without impacting traffic on the arterial.

Councilmember Kovach asked what was done with the copper removed from the old signalization infrastructure and Ms. Madden said it is currently stock piled but will be recycled.

Councilmember Ezzell asked if the video footage on the traffic cameras was archived to be used for other purposes and Mr. Reiland said no. The cameras only have video surveillance capabilities and do not record data.

Mayor Rosenthal asked if there were projects planned to extend the fiber to the Water and Wastewater Treatment Plants. Ms. Madden said staff has prepared capital projects for several other City facilities as well as signalization projects and the Wastewater Treatment Plant is one of the locations. She said staff can also prepare cost estimates to extend fiber to the Water Treatment Plant to be included in the Capital Improvements Budget for Council's review.

Councilmember Atkins asked if fiber optic would be available at Fire Station No. 9 on Alameda when it's constructed and Ms. Madden replied yes.

Councilmember Dillingham said she appreciated staff's efforts with this project and it is helpful for Council to know about future projects for budgeting purposes and Ms. Madden said staff could make that happen.

Mayor Rosenthal said commended staff for the cost savings with this project.

Items submitted for the record

1. PowerPoint presentation entitled, "City Fiber Optic Network and Traffic Control Management Projects dated January 19, 2010

The meeting adjourned at 6:35 p.m.

ATTEST:

City Clerk

Mayor