

DATE ISSUED: May 8, 2002

REPORT NO. 02-044

ATTENTION: Honorable Mayor and City Council
Docket of May 14, 2002

SUBJECT: License Agreement with CityNet Telecommunications, Inc.

REFERENCE: City Manager's Report No. 01-193, dated September 19, 2001

SUMMARY

Issue - What action should the City Council take regarding the installation of Broadband fiber optic telecommunication networks within the City's sewer and storm water collection systems?

Managers's Recommendation - Authorize the City Manager to enter into a License Agreement with CityNet Telecommunications, Inc. (CityNet) for the installation of fiber optic cable (FOC) within the City's sewer and storm water collection systems for the Downtown, Mission Valley, and Golden Triangle areas.

Fiscal Impact - CityNet will install and maintain the FOC network at its own expense. The City will incur administrative costs in implementing this License Agreement. Revenue generated and cost savings realized through this License Agreement are anticipated to cover City costs. CityNet will pay the City an initial access fee of \$50,000 within sixty days after the effective date of the License Agreement. The access fee will be credited against a License Fee of 5% of the gross revenue realized by CityNet from the operation of the network, each year the License Agreement is in effect. The License Fee is divided into a cash payment on a quarterly basis of 2.5 % of gross revenues and an equivalent 2.5% value in-kind services, such as cleaning, mapping, inspection, and free use/access to the fiber optic network by five City facilities.

BACKGROUND

CityNet Telecommunications, Inc. (CityNet) is a company that provides telecom carriers and network services provider customers with broadband fiber optic infrastructure. At the present time, most residential and commercial buildings still carry data between carriers via copper wires. This is called the "Last Mile" in telecommunications terms. The slower copper wires need to be replaced to achieve the high-speed broadband connection that a FOC can deliver. For example, it takes hours to transmit the average medical x-ray over copper wire, compared to only seconds over fiber. CityNet has proposed to enter into a License Agreement with the City of San Diego to utilize primarily the sewer system, and on occasion parts of the storm water system, to install an FOC network.

CityNet completed its first Last Mile installation in Albuquerque, New Mexico, in 2001. The City of Albuquerque is currently using the fibers granted to it under its agreement with CityNet. Additional Last Mile rings are now under construction in Indianapolis, Indiana, and Omaha Nebraska. CityNet has entered into License Agreements with the following cities: Fort Worth and Dallas, Texas; St. Paul, Minnesota; Mesa and Scottsdale, Arizona; Pittsburgh, Pennsylvania; and the San Antonio Water System. Internationally, CityNet has entered into License

Agreements with Vienna, Austria and a San Diego Sister City: Seville, Spain. CityNet is currently in negotiations with 25 other cities regarding the installation of Last Mile networks.

Another telecommunications company, Ca-Botics Fiber Systems (Ca-Botics), has approached City staff with a similar proposal to install fiberoptic cable in the City's sewer and storm water infrastructure. Ca-Botics installation method of drilling small clips to the inside surface of the pipe to anchor the fiberoptic cable to the crown area of the pipe will not be recommended by City staff at this time. City staff has requested that Ca-Botics submit test data on their installation method for all the types of sewer pipes in the City of San Diego for further evaluation and consideration. After this data is received and evaluated, City staff may ask City Council to modify the proposed Council Policy to permit penetration of the inner surface of pipes, depending on the age of the pipe and the pipe material.

DISCUSSION

At the Natural Resources and Culture (NR&C) Committee meeting of November 14, 2001, the Committee recommended approval of the proposed license agreement with CityNet Telecommunications with direction to the City Attorney and the City Manager to provide additional information and clarification in the following areas prior to presenting the issue to City Council:

1. Draft a Council Policy or ordinance (a) prohibiting installation of any device which penetrates the inner surface of the pipe and (b) restricts to a maximum percentage the allowable obstruction of sewer and storm water pipes.

The recommended Council Policy is attached for City Council consideration. Paragraph B of the policy prohibits penetrating the inner surface of the pipe, except in manholes where junction boxes may be necessary to run wires to buildings. Paragraph C limits the reduction in flow capacity to no more than 2%. Because the City Sewer Design Guidelines provide for sewers to be designed for 50% full on pipe sizes up to 15 inches in diameter and 75% full on greater sizes, it has been determined that a 2% reduction will not have a significant effect on the hydraulics capability of the sewer system.

2. Evaluate the effect of the "common carrier" status of CityNet and the relationship to the Telecommunications Act.

CityNet is not a common carrier for purposes of the proposed License Agreement. The Telecommunications Act provides that "A telecommunications carrier shall be treated as a common carrier under this Act only to the extent that it is engaged in providing telecommunication services . . ." 47 U.S.C. 153(44) (emphasis added). CityNet is prohibited from providing telecommunication services both by the proposed License Agreement and by its Certificate of Public Convenience and Necessity (CPCN) granted by the Public Utilities Commission. Therefore, the Telecommunications Act does not apply.

3. Provide the City Council with a cost benefit analysis and clarification on annual cumulative savings gained by the City.

The proposed License Agreement provides for quarterly cash payments of 2.5% of gross revenues realized by CityNet from the operation of the network, each year the License Agreement is in effect. Based on market information provided by CityNet, the total anticipated revenue to the City over the maximum 24 year life of the Agreement is \$500,000 per ring. CityNet is currently proposing three rings (Downtown, Mission Valley, Golden Triangle), so the

total cash payment benefit is projected to be \$1,500,000. Because subscribers are expected to pay CityNet up-front for long term service, it is expected that the majority of the revenue will be realized in the early years of the License Agreement.

Projected Benefit: \$1,500,000

The Metropolitan Wastewater Department (MWWD) has been planning a fiber optic connection from Sewer Pump Station #64 to the North City Water Reclamation Plant. This connection would allow the high speed connection to the system and unmanned operation of the pump station. MWWD has been attempting for two years without success to find another entity to equally share the estimated \$1,500,000 cost. MWWD could achieve the connection using CityNet's proposed Golden Triangle ring, reducing the City's cost of construction from \$750,000 to \$240,000.

Projected Benefit: \$510,000

The proposed License Agreement provides for in-kind services equivalent to at least 2.5% of gross revenues realized by CityNet from the operation of the network, each year the License Agreement is in effect. Services include cleaning, mapping, inspection, and free use of dark fiber and City connections. CityNet will designate four pairs of dark fiber in the Golden Triangle area for MWWD to connect to Sewer Pump Station #64, and two pairs of dark fiber downtown. CityNet will also provide connections to City buildings in both the downtown and Golden Triangle areas, for a total of ten City buildings. If the cumulative value of services provided is less than 2.5% of gross revenues, CityNet will make up the difference with a cash payment.

Projected Benefit: \$1,500,000

The primary cost to the City will be the cost of staff time necessary to coordinate with CityNet during the life of the agreement. CityNet will be responsible for paying for all necessary permits, including the staff time to process the permit. After discussions with another City where CityNet just completed initial construction, it is estimated that a mid level engineer staff position will be required half time to coordinate the CityNet Contract during the initial installation period, which is expected to take five years. After that, it is estimated this effort could be reduced to quarter time. The estimated cost of this effort is as follows:

Assume agreement is for 24 years, and an engineer's salary at \$90. per hour including overhead time for five years = \$90. X 2,080 hrs. per year X 5 years 2 = \$ 468,000.
time for nineteen years = \$90. X 2,080 hrs. per year X 19 years 4 = \$ 889,200.
Total = \$1,357,200.

Projected Cost: \$1,357,200

There are additional intangible benefits that will be realized by allowing CityNet to install fiber optic cables in the sewer and storm water systems that are difficult to estimate in value:

CityNet will perform periodic inspections of the sewer and storm water pipes. CityNet's inspection schedule can be coordinated to complement the City's inspection schedules, allowing for "another pair of eyes and ears" in the sewer and storm water systems.

An economic development tool to recruit and maintain business opportunities in the city.

To the extent that carriers lease and use the fiber deployed by CityNet, there will be less trenching of the streets and less disruption of traffic.

4. Estimate the savings realized by companies using the City's sewer and storm water systems instead of open trenching.

The following is based on the City's estimates of installation costs. The actual cost will vary from company to company and with the particular route selected.

Cost to install fiber by trenching: \$65 per linear foot
Cost to install fiber in sewers: \$25 per linear foot

Total length of all three rings: 102,600 linear feet
Available pipe in all three rings: 80,748 linear feet
Trenching needed for all three rings: 21,852 linear feet

Total cost of all three rings using trenching only: \$6,669,000 (102,600x\$65)
Total cost of all three rings using sewers and trenching:
sewers 80,748x\$25 = \$2,018,700
trenching 21,852x\$65 = \$1,420,380
total \$3,439,080

Estimated savings using sewers over trenching only for all three rings is: \$3,229,920

5. Provide the City Council assurance that the City retains full ability to televise wastewater pipes.

The City's ability to televise its sewer pipes will not be compromised by CityNet's installation of fiber optic cable, since the maximum intrusion to the pipe is 5/8 of an inch, and the TV camera robots can negotiate 6-inch pipes and can negotiate obstacles several inches high and/or wide.

6. Ensure that any revenues gained through the storm drain system remain within the storm drain funds to benefit the system.

The proposed City Council Resolution provides that revenue realized through CityNet's use of the storm water system will be directed to the benefit of the Transportation Department.

7. Provide the City Council a comparison review of existing CityNet agreements with other cities, including compensation received.

All the agreements between CityNet and other cities set compensation at 2.50% of the gross revenue realized by CityNet from the deployment in those cities, plus certain in-kind goods and services. To date, CityNet has entered into agreements with the following cities on terms as shown below.

City	Cash	In-Kind Goods and Services	
	Fee: % of Gross Revenues	Building Hook-Ups	Fiber to City
1. Omaha	2.50 %	none	none
2. Albuquerque	2.50 %	5 per ring	2 pair per ring
3. Indianapolis	2.50 %	none	none
4. St. Paul	2.50 %	none	none
5. Pittsburgh	2.50 %	5 per ring	2 pair
6. Fort Worth	2.50 %	specific fiber build	2 pair
7. Dallas	2.50 %	13 buildings total	2 pair
8. Scottsdale	2.50 %	5 per ring	2 pair
9. Mesa	2.50 %	none	6 pair
10. San Diego (proposed)	2.50 %	5	6 pair + 2.50 % in services.

In each agreement, CityNet agrees to regularly clean and inspect the sewers it occupies. The schedules vary based upon the specific needs for each pipe segment. The proposed License Agreement with the City of San Diego is the only agreement that specifically provides for payment of at least 5% of gross revenues (in cash, goods, and services).

RECOMMENDATIONS

It is recommended that the City proceed with the CityNet License Agreement at this time to provide additional revenue and to make available broadband telecommunications services to over 100 major buildings in the City of San Diego.

ALTERNATIVE

1. Do not proceed with the License Agreement at this time. This is not recommended because the City would not realize the benefits outlined above.

Respectfully submitted,

Scott Tulloch
Director
Metropolitan Wastewater Director

Approved: Richard Mendes
Utilities General Manger

MENDES/TULLOCH/AKS/JMM:oc

Attachment: Draft Council Policy Number 600-44

CITY OF SAN DIEGO, CALIFORNIA COUNCIL POLICY		
SUBJECT PLACEMENT OF WIRE COMMUNICATIONS IN SEWER AND STORM WATER PIPES	POLICY NUMBER	600-44
	EFFECTIVE DATE	01/__/2002