



City of Culver City

Staff Report

File #: 18-0577, Version: 1

Item #: A-4.

CC - FOUR-FIFTHS VOTE REQUIREMENT: (1) Authorize an Increase in the Amount of \$1.6 million to the Previously Approved Working Capital Loan of \$1,765,000 for a Total Loan Amount of \$14,909,941 which includes a Previously Approved Construction Loan of \$11,544,941 from the General Fund to the Municipal Fiber Network Enterprise Fund; (2) Approve a Related Budget Amendment Appropriating \$1.6 million from the General Fund to the Municipal Fiber Network Enterprise Fund; (3) Waiver of Competitive Bidding and Approval of an Amendment to the Existing Materials Procurement Agreement with MOX Networks, LLC for the Purchase of Network Construction Materials in an Amount Not-To-Exceed an Additional \$300,000.

Meeting Date: December 11, 2017

Contact Person/Dept: Michele Williams/Information Technology Department

Phone Number: (310) 253-5950

Fiscal Impact: Yes No

General Fund: Yes No

Public Hearing: **Action Item:** **Attachments:**

Commission Action Required: Yes No **Date:**

Public Notification: (E-Mail) Meetings and Agendas - City Council (12/06/17); and MOX Networks, LLC (Jason Misicka, Director of Sales, on 12/01/17).

Department Approval: John M. Nachbar (11/30/17)

RECOMMENDATION

Staff recommends that the City Council:

1. Authorize an increase of \$1.6 million to the previously approved working capital/maintenance loan, from the General Fund to the Municipal Fiber Network Enterprise Fund, for a total loan of amount \$14,909,941 consisting of the following:

Previously Approved Construction Loan -	\$11,544,941
Previously Approved Working Capital Loan -	\$ 1,765,000
Requested Increase to Working Capital Loan	<u>\$ 1,600,000</u>
Total Loan Amount	\$14,909,941

2. Approve a related budget amendment appropriating \$1.6 million in the Municipal Fiber Network Enterprise Fund (requires four-fifths vote).
3. Waive competitive bidding requirements, pursuant Culver City Municipal Code (CCMC) Section 3.07.075.E.3, and approve an amendment to the existing Materials Procurement Agreement with MOX Networks, LLC (MOX) for the purchase of Network construction materials resulting in an increase of \$300,000 for a total not-to-exceed amount of \$3,295,610.

BACKGROUND

On November 9, 2015, the City Council took several actions related to the design, development, operation, and maintenance of the Municipal Fiber Network (Network). The Network would, among other things, provide the necessary infrastructure to facilitate the provision of high-speed Internet service to the City (for municipal purposes), to businesses in the target service areas, and to the Culver City Unified School District.

The Network is officially being marketed and branded as “Culver Connect”. It consists of four essential components: the redundant fiber backbone, fiber laterals that connect from the backbone to the service locations, local interconnection sites within Culver City (Network Hubs), and fiber connection to communication hubs located outside of Culver City (One Wilshire and El Segundo).

On June 27, 2016, the City Council awarded a construction contract to HP Communications as the lowest responsive and responsible bidder, for the construction of the Network backbone. On July 11, 2016, the City Council approved a budget amendment and a construction contract change order to support construction enhancements recommended by the City Manager. The design of the backbone includes approximately 21 route miles of fiber with 576-fiber strand count and two additional 2” conduit in areas of new construction. The additional conduit would be available for future growth if the City determined that there was a need for additional fiber in the future. Construction impacts and costs are greatly minimized when installing fiber where the conduit infrastructure exists. Construction of the Network backbone started on August 22, 2016.

The construction schedule for the backbone was estimated to be completed within about twelve months. The construction team has encountered delays, which are summarized below. However, while this has resulted in schedule delays the construction cost component for the backbone is projected to be completed within budget. Currently the construction effort for the Network backbone is about 95% complete.

Construction Schedule Delays

- *Relocating one of the network hubs from Culver Studios to a City-owned structure (Cardiff Parking Garage)*
- *Redesign of the network backbone due to the Parcel B development*
- *Atypical rain season during the winter of 2016*
- *Manufacturer delays in procuring required equipment for the network hubs*
- *Delay in executing required agreements with Metro governing construction areas near the Expo Line.*

DISCUSSION

While the backbone is the integral component of the Network, it is unable to fully operate without fiber laterals. The fiber laterals are physical connections from the backbone to the location/building utilizing the Network. When the City Council approved the design, construction and operation of the Network on November 9, 2015, there was also a budget appropriation of \$1.5 million dollars specifically for the design and construction of laterals. This funding was approved to facilitate “jump-starting” the operation of the Network and to further stimulate economic development which is the goal of this effort. Staff has worked in consultation with MOX Networks to identify the city-funded laterals that would be rated as an ideal service location by Internet Service Providers (ISPs). Ideal service locations are typically defined as multi-tenant commercial buildings with high bandwidth requirements. Construction of the city-funded laterals is expected to begin in January 2018.

Revenue and Network Sustainability

In addition to the construction of the physical network, efforts have also been focused on identifying and engaging with potential customers. This includes Internet Service Providers (ISPs) and enterprise customers who are interested in licensing dark fiber. Staff is not in a position to estimate the revenue projections that may result from these preliminary discussions/negotiations with potential customers. However, staff plans to provide City Council with estimate revenue projections during the upcoming budget planning for fiscal year 2018-19.

The staff report of November 9, 2015, which requested Council approval to initiate this enterprise effort, detailed that once the Network was fully operational and after the third year of operation, it was estimated that revenues would then be sufficient to cover operational costs. Staff targets that the Network will be fully operational by spring 2018. In many ways, this project is akin to a start-up venture and will not be sustainable until a few years after the initial operation. During this period, it is expected that the operational costs will exceed revenues.

Network Operational Expenses

Staff is requesting an increase to the previously approved working capital loan to cover operational expenses estimated for the remainder of the fiscal year. It should be noted that while the network is not fully operational, there are associated costs with pre-operations, maintenance of the physical network, planning, and business development. The Network will be used by commercial customers and this demands reliability and quality control in order for the business model to be successful.

MOX Networks was selected as the vendor to provide pre-operational support, planning, business development, network monitoring and ongoing operations. Their services include the following:

- Operations - Support and manage the backbone construction, project planning, risk and mitigation planning, project/tracking reporting, weekly management and staff updates. Works in conjunction with assigned Culver City staff, contractors, and vendors throughout the build and future operations of the network. Administers and maintains fiber layout, and equipment design.
- Engineering - Supports the network and installation of new customers. Performs circuit design and coordinates installation, turn up, scheduled maintenance, and inventory of fiber infrastructure.

- Administration - Coordinates communication between the City as related to providing reports and billing analysis.
- Contract Management - Works with City’s legal team to establish, draft and review agreements and related documents.
- Geographical Information Services (GIS) - Maintains the electronic database related to managing inventory and tracks changes to the network (update splices, fiber in use, fiber attributes related to laterals).
- Operations Services - Provides Network Operations Center (NOC) resources dedicated to supporting the Network. Services include ticket management, alert notifications, network coordination, and issue resolution.
- Sales - Dedicated staff to work with potential customers establish requirements and bring customers to the point of sale with the City.
- Laterals Project Manager - Dedicated staff to specifically track lateral inventory management, and coordinate construction vendors and property owners for lateral deployments.

The following details estimate expenditures through June 2018.

Description	Cost
Services provided by MOX Networks	\$669,725
Metro Dark Fiber (Long-haul fiber connection to One Wilshire and Equinix)	\$69,000
One Wilshire Colocation Services (Rack/Space/Power)	\$14,250
Equinix Colocation Services (Rack/Space/Power)	\$15,250
**Maintenance Contract for Fiber Asset Locating	\$316,250
Contingency - Fiber Cut Restoration Budget	\$76,000
One-time Expenditure: Audit and incorporation of existing Culver City Fiber Assets into the Network Operations	\$140,000
One-time Expenditure: Relocation of North Network Hub (from Culver Studios to Cardiff Parking Garage) and Network Hub Change Orders	\$300,000
Total Estimate of Expenditures	\$1,600,000

****Maintenance Contract for Fiber Asset Locating**

The contract for this service is budgeted based on a quotation from HP Communications. This service involves responding in a timely manner to underground service alerts to locate and mark the city’s fiber infrastructure. Staff will be exploring options to reduce this cost by potentially performing this service by in-house staff.

Relocation of Network Hub

The operation of the Network requires local interconnection sites (network hubs) within the City. The initial design of the Network identified three network hub locations (NantWorks, Culver Studios, and Fire Station #3). These locations will be used to host the electronics and network devices that enable the Network to operate. Additionally, Internet Service Providers (ISPs) that ultimately begin providing Internet service within the City would also need to install networking devices at one or more of these identified locations.

It was determined that rather than locating one of the hubs at Culver Studios, a more suitable long-term location would be a city-owned structure at the Cardiff Parking Garage. While this relocation is much better for the City in the long-term, it does impact the construction budget. Significant enhancements will be required to prepare and convert the identified area (previously the trash room) into a carrier-class telecom room appropriate for networking devices. As a result of these changes, staff is requesting an amendment to the Materials Procurement Agreement increasing the contract by \$300,000.

On May 9, 2016, the City Council waived formal bidding requirements and approved the Materials Procurement Agreement with MOX to purchase fiber and related construction materials. At that time, it was determined that MOX had access to distribution channels that supply fiber and construction materials at very competitive pricing. Staff conducted an informal bid to compare pricing from MOX and found that their pricing was significantly lower. MOX has also been able to provide the required materials within a timeframe that aligns with the construction project schedule.

Based on the above facts, staff is recommending that the City Council waive formal bidding requirements for the purchase of network construction materials pursuant to CCMC 3.07.075.E.3 since compliance with the formal bidding requirements would be contrary to the best interest of the City and impractical, as it would likely result in higher materials costs and potentially a delay to the Network project. Staff further recommends that the City Council approve an amendment to the Materials Procurement Agreement with MOX for a contract increase of \$300,000 for a total contract value not-to-exceed \$3,295,610

FISCAL ANALYSIS

Working Capital Loan

It is recommended that the previously approved maintenance/working capital loan of \$1,765,000 be increased by \$1.6 million provided from the General Fund to provide working capital for pre-operations, operations, maintenance, and planning and business development costs to assist with sustaining the Network during this initial ramp-up period.

Loan terms would be as follows:

Principal: Up to \$ 3,365,000

Interest: Simple annual interest equal to the average Local Agency Investment Fund (LAIF) rate of return from June through May

Terms: Twenty-year term. Principal and interest due and payable each June, with first payment due in June 2018. Should adequate revenues not be available to make a payment, the City Council may

approve full or partial payment deferral and make other modification to the terms as deemed appropriate.

It is anticipated that the Working Capital Loan would be fully repaid from revenues generated from the Network.

ATTACHMENTS

None.

MOTION

That the City Council:

1. Authorize an increase of \$1.6 million to the previously approved working capital loan of \$1,765,000 from the General Fund Reserve (Unassigned Fund Balance) to the Municipal Fiber Network Enterprise Fund under the terms contained in this staff report;
2. Approve a budget amendment to appropriate \$1.6 million into the Municipal Fiber Network Enterprise Fund (motion requires four-fifths vote);
3. Waive Competitive Bidding requirements, pursuant to CCMC Section 3.07.075.E.3, and Amend the Materials Procurement Agreement with MOX Networks, LLC for the Purchase of Network Construction Materials increasing the contract value by \$300,000 for a total not-to-exceed amount of \$3,295,610;
4. Authorize the City Attorney to review/prepare the necessary documents; and,
5. Authorize the City Manager to execute such documents on behalf of the City.