



CITY OF  
**PALO  
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## City Council Staff Report

**From: City Manager**

**Report Type: CONSENT CALENDAR**

**Lead Department: Utilities**

**Meeting Date: October 7, 2024**

Report #:2407-3227

### **TITLE**

Approval of Dark Fiber License Agreement No. S24189080 with Adobe Creek Networks to Build and License Dark Fiber in the Foothills, and Approval of a Fiscal Year 2025 Budget Amendment in the Fiber Fund; CEQA Status – Exempt under CEQA Guidelines Section 15301 and 15303.

### **RECOMMENDATION**

Staff recommends that the City Council:

1. Approve and authorize the City Manager or their designee to execute the 10-year Dark Fiber License Agreement (Please see Attachment A) with Adobe Creek Networks with a new effective date starting 10/7/2024
2. Amend the Fiscal Year 2025 Budget Appropriation for the Fiber Fund (requires a 2/3 vote) by:
  - a. Increasing the Fiber Fund Revenue by \$184,898; and
  - b. Increasing the Fiber Optic System Rebuild CIP (FO-16000) by \$184,898.

### **EXECUTIVE SUMMARY**

Adobe Creek Networks (ACN) is a non-profit founded in 2022 to provide fiber broadband internet to Upper Page Mill Road in Palo Alto, and adjacent areas. To best meet the needs of the public and the City, ACN and City are proposing a public-private partnership to be implemented through a Dark Fiber License Agreement. ACN will execute a dark fiber project “DFP” #1140 to lease dark fiber optic cables from the City of Palo Alto under this agreement, reaching unserved fiber internet residents in the foothills area.

ACN will fund \$184,898 of the City’s Fiber Optic System Rebuild Capital Improvement Project (CIP) (FO-16000), which includes extending the City’s fiber backbone to the Foothills. The \$184,898 was calculated based on the standard dark fiber project rates for construction material, labor, and administrative overhead costs. While construction is underway and for the 10 years of the agreement, ACN will receive a monthly bill reduction of \$1,185 to the monthly dark fiber licensing fee, decreasing the fee from \$4,982 to \$3,797. The total bill reduction received by ACN over this 10-year term shall not exceed \$142,200 for the material costs invested by ACN for assets in the public-right-of-way that will be owned by the City at the end of construction.

## **BACKGROUND**

In 2023, as part of the City's [wildfire mitigation plan](#)<sup>1</sup>, the City began coordinating the existing Foothills Rebuild CIP (EL-21001) and Fiber Optics Network System Rebuild CIP (FO-16000) to strengthen critical City infrastructure between Dahl Reservoir to Montebello Reservoir in the foothills area and to serve critical water, advanced metering infrastructure, and emergency preparedness facilities. Existing fiber would be undergrounded alongside sections of electric, increasing the fiber capacity for existing facilities and becoming more future resilient.

Coordinating these two projects presented a unique opportunity to extend the City's dark fiber backbone network. Fiber connections are limited to areas within reach of the dark fiber backbone and it is often cost-prohibitive to extend the network and build miles of fiber infrastructure along major transit corridors (the "middle mile") and local streets (the "last mile"). By coordinating the Foothills Rebuild and Fiber Rebuild, it became more feasible to increase fiber capacity and expand the City's dark fiber backbone in a cost-effective way.

In the same year, the City and ACN executed a Dark Fiber License Agreement on the City's standard template that serves mostly commercial businesses and has a standard 10-year term (see Attachment A. Dark Fiber License Agreement Packet with City's template language). These License Agreements allow the Licensees (here, ACN) to execute multiple Dark Fiber Projects (DFPs) to connect various service locations (e.g., homes or businesses) via "drops" on the City's dark fiber optical backbone network. The Licensees remain responsible for securing the internet service provider (ISP) and any equipment to provide fiber broadband internet services at the service locations.

With the coordination between the City's existing CIPs resulting in an anticipated expanded commercial dark fiber backbone presence, it became possible for ACN to offer fiber broadband internet service for up to 25 residents in the foothills area, by ACN leasing over 12 miles of the City's newly extended dark fiber (see Exhibit B in Attachment A. Dark Fiber License Agreement Packet), and then ACN building the "last mile" fiber infrastructure to reach the residents. To help facilitate the City's foothills fiber expansion work, ACN will fund \$184,898 of the Fiber Optics Network System Rebuild CIP (FO-16000) and pre-pay \$142,200 which will be reimbursed by the City over a 10-year period on the monthly recurring licensing fee (see Fiscal/Resource Impact section of this report). The Adobe Creek Networks Dark Fiber License Agreement No. S24189080 will be amended to extend the term and add Dark Fiber Project # 1140 (see Attachment B. Proposal for 12.15 miles of backbone; seven drops; and one 48 fiber strand custom cable). DFP #1140 will have a start date of 10/7/24, and the entire agreement will be in effect through 10/6/33.

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<sup>1</sup> Wildfire Mitigation Plan <https://www.cityofpaloalto.org/files/assets/public/v/1/utilities/safety-information/cpau-wildfire-mitigation-plan-2024-update.pdf>

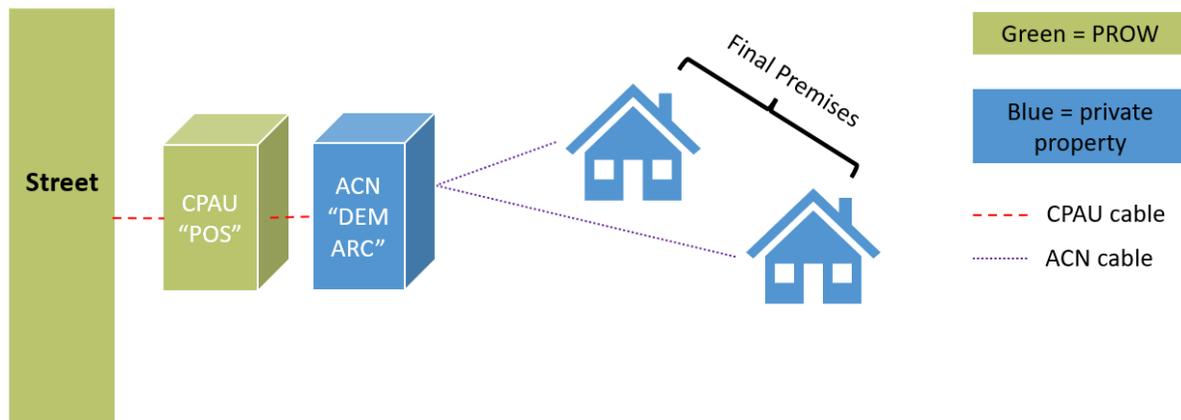
## ANALYSIS

### Summary of responsibilities

Under the City’s Dark Fiber License Agreements, and in accordance with the City of Palo Alto Utilities Rules and Regulations, the City is responsible for maintaining the dark fiber backbone infrastructure from the data center, Equinix, up to a demarcation point (DEMARC), and Licensees are responsible from the DEMARC to the service premises as indicated in the final As-Builts (aka blueprints) furnished by the City. The Licensee is responsible for providing an updated Network Diagram (with fiber assignments, DEMARC, Points of Service “POS” clearly documented). Only the City is authorized to access and maintain the dark fiber backbone.

For DFP #1140, the Points of Service will be CPAU communication boxes installed in the public-right-of-way, and the Demarcation Points will be the Licensee's communication boxes installed on private property (see figure 1 below). Both the POS and DEMARC will be indicated in the As-Builts. All structural work outside the public-right-of-way on non-City property, and substructure installed from the POS to the DEMARC points, will be the sole responsibility of the Licensee. CPAU will furnish the drop cable from the POS to the DEMARC and be responsible for the installation and maintenance of the drop cable.

*Figure 1. Example diagram of POS, DEMARC, Final premise (residents). Green indicates public-right-of-way “PROW.” Not to scale.*



ACN will be responsible for managing communications with their end users and troubleshooting their fiber broadband internet services. However, ACN may submit service requests to the City to help test connectivity between the DEMARCs, provided the City has an updated Network Diagram from ACN reflecting the fiber assignments, DEMARC points, and service locations.

### **FISCAL/RESOURCE IMPACT**

Staff recommends increasing the Fiscal Year 2025 CIP FO-16000 revenues and expenses in the amount of \$184,898 to reflect ACN’s funding contribution and construction costs. In exchange,

for ACN's prepayment, the monthly dark fiber licensing fee of \$4,982 will be reduced to \$3,797 over the 10 years of this Agreement.

### **STAKEHOLDER ENGAGEMENT**

This project is located in the Palo Alto foothills area. ACN independently began developing a plan to bring fiber broadband internet to unserved residents in the foothills and in 2022 engaged the City to initiate a dark fiber project. City staff held discussions with ACN beginning 2023 informing them of the City's electric underground conversion and dark fiber expansion projects. By coordinating the needs of all three projects, the City, ACN, and residents will benefit from new fiber capacity and resiliency in the unserved foothills area.

### **ENVIRONMENTAL REVIEW**

The leasing of dark fiber to the Licensee is not subject to the California Environmental Quality Act (CEQA) as existing fiber facilities are exempt from review under Title 14 of the California Code of Regulations Section 15301 and any new City fiber facilities are "small facilities" exempt from review under Section 15303.

### **ATTACHMENTS**

Attachment A: Dark Fiber License Agreement with Adobe Creek Networks (Agreement and Exhibits A-F)

### **APPROVED BY:**

Dean Batchelor, Director of Utilities

Staff: Alexandra Harris, Telecom Program Manager