Summary Title: Google Fiber Update

Title: Receive Update Concerning City Response to Google Fiber City Checklist and Ongoing Negotiation of Google Fiber Hut License Agreement to Cover Potential Location of Google Network Hut Equipment Facilities on City-Owned Properties; Adopt a Resolution Prohibiting Disclosure of Certain Non-Public Utilities-Related Information Retained by the City that is Subject to California Public Records Act Exemptions

From: City Manager

Lead Department: IT Department

Recommendation

On February 19, 2014, Google announced it was considering the City of Palo Alto ("City") and thirty-three (33) other communities nationwide as potential candidates to study for future Fiber Network deployment. Google provided the City with a Google Fiber City Checklist ("Google Checklist" or, the "Checklist"), attached hereto as Exhibit B, which sets forth a series of extensive information requests and conditions from Google that must be satisfied by the City by May 1, 2014. In connection with the Google Checklist effort, Staff recommends that the City Council:

1. Receive an update concerning the City’s response to the Checklist.

2. Receive an update concerning the City’s ongoing negotiations with Google Fiber Company (also referred to as “Google” herein) of a Google Fiber Network Hut License Agreement, to cover the potential future location of Google “Network Hut” equipment facilities on city-owned properties, with specific site locations for such Network Hut(s) to be determined later. Descriptions of Google’s Network Huts are available in Exhibit C and Exhibit D attached to this Staff Report.

3. Adopt a Resolution (Exhibit A) prohibiting disclosure of certain non-public utilities-related information retained by the City that is subject to California Public Records Act exemptions.
Background
Over the last few years, gigabit-speed broadband service has moved from idea to reality, with dozens of communities evaluating strategies to entice third parties to build next-generation communication infrastructure, including all-fiber networks capable of delivering ultra high-speed broadband and other services to homes, businesses and anchor institutions such as schools. Consumers are increasingly interested in fast, reliable and reasonably priced access to broadband services. To that end, Google is currently contemplating offering high-speed Internet services to Palo Alto and thirty three (33) other cities to expand Google Fiber beyond Kansas City, Kansas, Kansas City Missouri, Austin, Texas and Provo, Utah.

According to Google, its Checklist is based on a collection of best practices and recommendations from the Fiber-to-the-Home Council Americas, the U.S. Conference of Mayors and Gig.U, a group of leading research universities, in partnership with their local communities, which are working toward accelerating the offering of ultra-high speed network services to their communities.

Deployment of fiber networks are large construction projects which benefit from advance planning and consideration of a number of local factors that could affect construction, such as topography (e.g., hills, flood zones), housing density and the condition of local infrastructure. As a result, the information and data the City supplies in the response to the Checklist has the potential to be helpful to Google Fiber as it studies new areas to build its networks, and to other providers that may be contemplating similar expansions.

Discussion
Status Update: The City’s Response to the Google Checklist

On February 19, 2014, Google announced its plans to start “early discussions with 34 cities in 9 metro areas around the United States to explore what it would take to bring a new fiber-optic network to their community.” Mountain View, Santa Clara, San Jose and Sunnyvale are among those California cities, in addition to Palo Alto, that are participating in the Google Checklist process. Since the Google announcement in February 2014, a cross-departmental team led by the City’s Chief Information Officer has been working to collect and review information and data responsive to the Google Checklist’s requests. The following departments have been actively engaged in the Google Checklist effort: City Manager, Administrative Services, City Attorney, Development Services, Information Technology, Public Works and Utilities. Staff now recommends that the City receive an update on the City’s progress in responding to the Google Checklist in advance of the May 1, 2014 deadline.

1 Google’s description of its 34-city Fiber effort is available at: https://fiber.google.com/newcities/
Google’s Proposal

The Google Checklist is an element of Google’s “two-part planning process.” Google will use the Checklist to determine if a community is fiber ready. At the same time, Google has indicated that it is undertaking its own study to evaluate costs, timelines and other factors associated with building a fiber optic network in the thirty-four (34) communities Google has selected. Cities must submit Checklist information by Google’s established May 1, 2014 deadline. Google will endeavor to notify communities whether they have been selected for a potential fiber build out by the end of 2014.

The Google Checklist Request

The Google Checklist requests that the City provide Google with the following categories of information and data, including explanations about how City processes might differ from Google’s preferred approach to construction, permitting and maintenance:

Category #1 – Provide information about existing infrastructure:
- Gather and submit all required data asset requests as outlined in Google’s comprehensive Data Request List (see Google Checklist Appendix 1A), which includes a wide range of public information (e.g. parcel numbers, addresses) and non-public information (e.g. underground utility routes).
- Identify which infrastructure and/or data is not owned, operated or controlled by the city.

Category #2 – Help ensure access to existing infrastructure (poles, conduits):
- Provide a description of any existing state laws, local ordinances, and/or commercial agreements that satisfy the attachment and use rights described by Google.
- Work with Google, as needed, to ensure that Google and other service providers have access to these rights.

Category #3 – Help make construction speedy and predictable:
- Review the Google Fiber Permitting, Construction, and Maintenance Proposal (see Google Checklist Appendix 3A) and identify where the city’s current practices differ from Google’s proposed approach.
- If the city’s current practices do differ from Google’s proposed approach, please explain why and outline ideas to accommodate a large network build with accelerated timelines.
- Upload the City’s existing permit application for our review.
- Identify any local, city or state-wide requirements that may impact a network build by reviewing and responding to Google’s list of Construction Constraints List (see Google Checklist Appendix 3B).
- Upload a final Network Hut License Agreement, as agreed upon between Google Fiber and the City. Google provided the City with its preferred form of Network
Hut License Agreement (see Google Checklist Appendix 3C). The terms of a the Network Hut License Agreement are currently under negotiation between the City and Google Fiber, and status of this item is discussed in greater detail below..

City on Target to Complete its Response by May 1, 2014 Deadline

The City is on target to complete submission of all items requested under the Google Checklist by the May 1, 2014 deadline with the exception of the hut agreement. The hut agreement is currently in negotiation with Google and is targeted for a May 5 submission to City Council.

- **Public Information:** The City has submitted all public information Google has requested in response to Categories 1, 2 and 3 described above. These City responses to the Google Checklist are available on the City’s website as follows: http://www.cityofpaloalto.org/news/displaynews.asp?NewsID=2558&TargetID=268.

- **Confidential information.** Any confidential or proprietary information requested by Google will be provided under the terms of a NDA, following the City Council’s adoption of the resolution prohibiting release of such confidential information, in order to avoid waiver of such information’s exemptions under the California Public Records Act.

Status Update: Network Hut License Agreement Negotiations

Google’s fiber network design requires the placement an estimated one to two “network hut” structures at various locations throughout the City. Google has expressed a desire to locate its Network Huts on City-owned property. Google’s Network Huts are a 12' (wide) x 28' (length) x 10' (high) prefabricated concrete building that will contain the electronic equipment that provides Internet and cable TV services for customers. They must be located on sites that have at least 1400 square feet in area, which is an area required for vehicle access. Each fiber hut will have two air-conditioning units mounted to the side of the building, a back-up diesel generator and fiber-optic cable vaults. Google needs access to its Network Huts 24 hours a day, seven days a week. Photos and site drawings of Google’s proposed huts are attached to this Staff Report as Exhibit C and Exhibit D.

As part of the Google Checklist process, Google asked the City to (1) consider locating Google’s network huts on City-owned property; and (2) agree to Google’s preferred Network Hut License Agreement between the City and Google Fiber Company by the May 1, 2014 deadline. The Network Hut License Agreement is structured such that specific city-owned locations for Network Hut(s) will be determined later, along with applicable site specific terms and conditions.
The City is currently engaged with Google in the negotiation of a Network Hut License Agreement for Council consideration. Google’s preferred form Network Hut License Agreement (see Google Checklist Appendix 3C) lacks many of the standard terms, conditions and protections the City typically insists upon in its other contracts to best protect the City’s interests. Google has also requested that Cities provide it with a specific price and 20-year license term prior to City and Google’s potential agreement on a specific Network Hut site, which Google proposes that the parties determine later.

The City has held discussions with Google staff concerning the Network Hut License Agreement and staff has proposed changes to Google’s form Network Hut License Agreement in an attempt to harmonize it with those terms and conditions the City typically insists on to best protect City interests. At present, staff’s hope and intention is to receive feedback from Google and return to Council with a Network Hut License Agreement for Council consideration at the May 5, 2014 City Council meeting.

Prohibition Against Disclosure of Non-Public Utilities Information

The Google Checklist requests from the City a wide variety of non-public and proprietary City and utilities-related infrastructure information that the City considers protected against disclosure pursuant to exemptions to the California Public Records Act (California Government Code sections 6254 and 6255). Pursuant to section 6254.5 of the California Government Code, City disclosure of exempt information to one member of the public, even under a non-disclosure agreement (“NDA”), can result in waiver of the applicable Public Records Act exemption and require disclosure of that same information to any other person who requests a copy.

To avoid waiver of the California Public Records Act exemptions applicable to the non-public and proprietary City and utilities-related infrastructure data Google has requested under the terms of an NDA, section 6254.5 requires that the disclosure of such information: (1) not be required by law; and (2) that the disclosure be prohibited by formal action of an elected legislative body of the local agency which retains the writings.

Disclosure of the non-public City and utilities-related infrastructure information is not required by law, and staff recommends that the Council approve a resolution prohibiting disclosure of the following categories of information, except in accordance with the terms of the attached resolution, in order to avoid waiver of California Public Records Act exemptions when such information is provided to a member of the public under a NDA:

- Location of Utility Poles
- Location of Streetlights
- Detail of Utility Pole Wiring
- Underground Utility Routes
- Location of Sewer Manholes
- Location of Water Manholes
- Location of Utility Manholes
- Location of existing spare conduit for lease
- Location of existing dark fiber for lease
- Infrastructure Maintenance Plan
- Listing and locations of City-owned property for potential Network Hut sites

Consistent with and contingent upon the Council’s adoption of the attached resolution prohibiting disclosure of confidential and proprietary City and utilities-related infrastructure information, such information will only be available to Google in response to the Google Checklist under the auspices of a NDA.

**Timeline**

Google has requested that the City provide its complete response to the Google Checklist. From May 1, 2014, through the end of 2014, Google will review all city submissions and endeavor to determine which cities will be considered for deployment.

**Resource Impact**

None in conjunction with the approval of the agreement.

**Policy Implications**

**Relationship between Google Checklist Effort and other City Fiber Initiatives**

The City’s submission of a response to the Google Checklist does not represent a commitment, promise or guarantee with respect to the design or construction of a fiber network by Google or any other provider. Indeed, the City of Palo Alto continues to explore the possibility of extending its existing 41-mile fiber ring to include homes and to evaluate beneficial wireless options for the city.² As part of that evaluation, City staff has appointed a Citizen’s Advisory Committee to assist with the evaluation of the feasibility of building a city-wide, high-speed broadband fiber-to-the-premises network in Palo Alto. This effort is wholly unrelated to the City’s response to the Google Checklist. The CAC’s work has proceeded separately, and in parallel with staff’s activities related to completion of the City’s Google Checklist submission.

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² For a more detailed description of the City’s fiber initiatives, unrelated to the Google Checklist Effort, see, e.g. Council Staff Report ID # 3914 (June 24, 2013); Staff Report ID # 4080 (September 17, 2013); Staff Report ID # 4203 (October 28, 2013); and Finance Committee Staff Report ID # 2097 (November 15, 2011).
Network Hut License Agreement as Potential Template for other Providers

As noted above, staff is continuing to negotiate with Google regarding the Network Hut License Agreement. If the City and Google reach agreement and Council approves a Network Hut Agreement, other providers could insist that the City offer them similar or identical provisions for their projects. Following San Antonio’s approval of a network hut license with Google, AT&T secured a similar agreement with San Antonio in under a month.³ AT&T just announced its intent to expand its own gigabit product in the Bay Area, though the current expansion does not appear to include Palo Alto at this time.⁴

Scope of Google Fiber Service

In 2000, the City’s Utilities Department (CPAU) began to license “dark fiber” for commercial purposes. CPAU’s fiber system has high market share and brand awareness among commercial enterprises and other organizations that need the quantity and quality of bandwidth provided by direct fiber optic connections. CPAU currently licenses dark fiber service connections to approximately ninety (90) commercial customers. Google has represented that its primary focus in connection with the Google Checklist is the expansion of fiber to residential customers. Additional details concerning whether Google has plans to expand beyond residential to commercial customers such as those currently served by CPAU’s fiber system will likely emerge in more detail if Google elects to proceed with an effort to bring fiber to Palo Alto.

Environmental Review

Provision of data in response to the Google checklist, and adoption of a resolution prohibiting disclosure of non-public utilities-related data do not meet the California Environmental Quality Act’s (CEQA) definition of a “project” under California Public Resources Code §21065, thus no environmental review is required.

Negotiations between the City and Google of a Network Hut License Agreement is exempt from the California Environmental Quality Act (CEQA) under Title 14 of the California Code of Registration Section 15061 (b)(3) because it simply establishes boilerplate license terms. Once a particular site or sites are identified, staff will do additional analysis to determine whether further environmental review is required.

EXHIBIT A: Resolution Prohibiting Disclosure of Proprietary and Confidential City and Utilities-Related Information
EXHIBIT B: Google Checklist

EXHIBIT C: Photos of Google Network Hut
EXHIBIT D: Drawings of Google Network Hut

Attachments:
- Exhibit C - Drawings of Google Network Hut (DOCX)
- Exhibit D - Photos of Google Network Hut (DOCX)
- Exhibit B - Google Fiber Checklist v2 (PDF)
- Resolution Prohibiting Disclosure of Proprietary and Confidential City and Utilities-Related Information (DOCX)
Exhibit D

Google anticipates leasing city property to install one to two Network Huts to house its equipment. The huts are 9’ H x 28’ W x 12’ D and need to allow 24/7 access by Google. Including access around the hut, the footprint for each hut and enclosure is approximately 1,400 square feet. An example from Kansas City can be seen below. The City can require screening.

![Fiber Network Hut](image1)

There are two sizes of fiber cabinets, depending on the number of homes served. The small (288 port) cabinet pictured below is 32” H x 16” W x 16” D and the large (567 port) cabinet is 32” H x 33” W x 16” D. The cabinets would be placed in the public right of way near the residences being served. The cabinets do not contain fans or motors and are therefore quiet. Google has indicated that the cabinets can be painted different colors if desired.

![Small Fiber Cabinet](image2)
Google Fiber
City Checklist

Updated February, 2014

Google fiber
Let's get up to speed.

Over the last few years, gigabit Internet has moved from idea to reality, with dozens of communities working hard to build networks with speeds up to 100 times faster than what most of us live with today. People are hungrier than ever for faster Internet, and as a result, cities across America are making speed a priority. Over the next few months, we'll be working with your city, and 33 others, to explore the possibility of building one of these high speed networks in your community.

This checklist document is written specifically for the cities we're currently working with. But the items on this checklist are a collection of best practices recommended by the Fiber to the Home Council, the Gig U report and the U.S. Conference of Mayors and can help any fiber provider or city that's thinking of building a new network.

These are such big jobs that advance planning goes a long way toward helping us stick to schedules and minimize disruption for residents. While your city works on completing these items, we're going to work on a detailed study of local factors that could affect construction, like topography (e.g., hills, flood zones), housing density and the condition of local infrastructure.

Additionally, we will spend time talking with you during this process about how city leaders can get residents ready for Google Fiber, particularly those who don't currently use the Internet or have it at home. We want to help make sure that everyone in the community can take advantage of this opportunity.
Google Fiber is also exploring the possibility of deploying Wi-Fi in future Google Fiber cities. Requirements related to Wi-Fi are not included in this checklist, but we will be discussing our Wi-Fi plans and related requirements with your city as we move forward with your city during this planning process.

We are excited about the possibility of bringing Google Fiber to your city and look forward to working with you over the next few months.
Key Dates

Feb. 24th - Feb. 28th
Cities meet with Google to review the checklist in detail.

Feb. 24th - May 1st
Cities review and respond to tasks and requirements on the checklist.

Google and cities will hold regular calls to discuss progress and questions.

Google begins detailed studies in cities.

May 1st, Midnight PT
Deadline for cities to respond to items on the checklist.

May - End of 2014
Google evaluates completion of the items on the city checklist and completes the detailed study.

This process will take some time, but we hope to have updates on which cities will get Fiber by the end of the year.
Fiber Ready Checklist

Building a new network is complex, and we will work with your city to make it quicker, more efficient, and less disruptive to your community.

There are three core items on our fiber ready checklist.

- **Provide information about existing infrastructure:** We're asking your city to provide accurate information about local infrastructure like utility poles, conduit and existing water, gas and electricity lines so we'd know where to efficiently place every foot of fiber.
- **Help ensure access to existing infrastructure:** We're asking your city to help ensure that we, and other providers, can access and lease existing infrastructure. It would be wasteful and disruptive to put up duplicate utility poles or to dig up streets unnecessarily, when we could use existing poles or conduit.
- **Help make construction speedy and predictable:** We're asking your city to make sure you have efficient and predictable permit and construction processes appropriate for a project as large as a Google Fiber network build.

These three items are based on guidelines from the Fiber to the Home Council and the U.S. Conference of Mayors and clear a path for anyone willing to build a fiber network. We are not asking for any special treatment, tax incentives, or subsidies.

**Item #1 — Provide information about existing infrastructure**

As we work through our detailed studies and network design, detailed infrastructure data helps us understand where we can safely and efficiently place the fiber.

We ask that your city:

- gather and submit all required data asset requests as outlined in the Data Request List (Appendix 1A);
- identify which infrastructure and/or data is not owned, operated or controlled by the city.
Item #2 — Help ensure access to existing infrastructure.

Fiber providers need to string fiber along utility poles or bury it underground in protective tubing called “conduit.” It doesn’t make sense for each provider to install duplicate poles, or to dig up streets multiple times where conduit already exists. So, we’re asking for your help to ensure that providers have access to existing infrastructure. This makes the process faster, more efficient, more cost effective and significantly less disruptive.

We would like to see clear, predictable rules and reasonable terms for all providers to attach fiber to any utility poles that are within the public right of way. Providers of broadband Internet services, including IPTV, should have access to existing utility poles, city-owned ducts and conduit, on nondiscriminatory terms, in exchange for reasonable payment. Ideally, these terms would be at least equivalent to the rights made available to traditional cable operators and telephone companies per the FCC’s current rules.

These rights may already be covered by state law, local ordinances or other agreements with infrastructure owners. If we cannot secure such rights, we may rely on the city to provide these rights locally.

To complete this item, we ask that your city:

- provide a description of any existing state laws, local ordinances, and/or commercial agreements that satisfy the attachment and use rights described above;
- work with us, as needed, to ensure that Google and other service providers have access to these rights.
Item #3 — Help make construction speedy and predictable

The items we outline in this section will help ensure that the construction process is predictable, fast, and as minimally disruptive for your city as possible.

We'd like to discuss how your city's existing permitting and construction process aligns with the scope and pace of the construction of a Google Fiber network. With agreed upon processes and timelines, we can keep construction schedules predictable and moving along quickly while minimizing the burden on the city.

For permitting and construction, we ask that your city:
- review the Google Fiber Permitting, Construction, and Maintenance Plan (Appendix 3A) and identify if your city's current practices differ;
- if your city's current practices do differ, please explain why and outline ideas to accommodate a large network build with accelerated timelines;
- upload your existing permit application for our review;
- identify any local, city or state-wide requirements that may impact the pace of a network build (Construction Constraints List - Appendix 3B).

Another important part of network design is determining where to place Google Fiber network huts. City-owned sites generally make sense as hut locations because they are zoned appropriately and dispersed throughout the city.

We would like to complete a Hut License agreement between Google Fiber and your city. Please review the Google Fiber model Hut License (Appendix 3C) and let us know if it will work for your city. Alternatively, please provide us with a form of agreement that contains similar rights so we can discuss in more detail.

We will sign the Hut License Agreement and work together to identify locations for huts during the network design process.

By the checklist deadline, we ask that your city:
- upload the final Hut License, as agreed upon between Google Fiber and the city.
Fiber Ready Checklist

Item #1 — Provide information about existing infrastructure

☐ Gather and submit all required data asset requests as outlined in the Data Request List (Appendix 1A).

☐ Identify which infrastructure and/or data is not owned, operated or controlled by the city.

Item #2 — Help ensure access to existing infrastructure

☐ Provide a description of any existing state laws, local ordinances, and/or commercial agreements that satisfy the attachment and use rights described.

☐ Work with us, as needed, to ensure that Google and other service providers have access to these rights.

Item #3 — Make construction speedy and predictable

☐ Review the Google Fiber Permitting, Construction, and Maintenance Plan (Appendix 3A) and identify where your city's current practices differ.

☐ If your city's current practices do differ, please explain why and outline ideas to accommodate a large network build with accelerated timelines.

☐ Upload your existing permit application for our review.

☐ Identify any local, city or state-wide requirements that may impact a network build by reviewing and responding to the list of Construction Constraints List (Appendix 3B).

☐ Upload the final Hut License, as agreed upon between Google Fiber and the city.
Additional Resources

Google Resources

Google Fiber - Network Overview
http://googlefiberblog.blogspot.com/2013/10/behind-scenes-with-google-fiber-how-we.html
This Google Fiber blogpost gives a behind-the-scenes look at how we actually build Google Fiber including a basic network overview.

Google Fiber Website - City Expansion FAQs
http://google.com/fiber/newcities
Our website includes a set of FAQs about this checklist and process.

Third Party Resources

CTC Technology & Energy’s Gigabit Communities
This white paper reviews and suggests strategies for bringing broadband to a community, including discussion of the checklist items outlined.

The Fiber to the Home Council community broadband toolkit
http://www.ftthcouncil.org/communitytoolkit
The Fiber to the Home Council has aggregated a range of resources in their community broadband toolkit.

The Fiber to the Home Council white paper on facilitating access to infrastructure
http://www.ftthcouncil.org/p/cm/ld/fid=47&tid=79&sid=1249
The FTTH Council has outlined their perspective in this short white paper: “State/Local Govt Role in Facilitating Access to Poles, Ducts, and Conduits in Public Rights of Way.”

US Conference of Mayors
Last year, the US Conference of Mayors passed a set of resolutions supporting increasing broadband access.
Gig.U Strategies for a Gigabit
Gig.U is working with a number of communities on gigabit networks and summarizes a number of key strategies.

Sunlight Foundation Open Data Guidelines
http://sunlightfoundation.com/opendataguidelines/
The Sunlight Foundation lists some suggestions that may be of use as you think through data updating and potential open data initiatives.

KC Digital Drive Playbook
http://www.kcdigitaldrive.com
In anticipation of Google Fiber coming to Kansas City, MO and Kansas City, KS, the cities created a ‘playbook’ for making the most of this opportunity.

Government Resources

Federal Communications Commission (FCC) documentation
http://www.ecfr.gov/ (CFR Title 47, Chapter 1, Subchapter C, Part 76, Subpart J)
The FCC has set up rules regarding equipment attachment. While the federal laws were not drafted with today’s broadband providers in mind, they are a good model of how to determine reasonable terms and clear schedules for pole attachment process.

Federal Communications Commission’s National Broadband Plan
http://www.broadband.gov/plan/
In its National Broadband Plan, the FCC estimated that the expense of obtaining infrastructure permits and leasing pole attachments and rights-of-way can total 20% of the entire cost of a fiber-optic network.

FCC’s Broadband Acceleration Initiative
https://www.fcc.gov/encyclopedia/broadband-acceleration
The FCC has an ongoing Broadband Acceleration Initiative that is considering a range of reforms at the national level.
Appendix

Item #1 -- Provide information about existing infrastructure
   1A: Google Fiber's Data Request List

Item #2 -- Help ensure access to existing infrastructure
   2A: Examples of Existing Municipal Ordinances

Item #3 -- Make construction speedy and predictable
   3A: Google Fiber Permitting, Construction, and Maintenance Plan
   3B: Construction Constraints List
   3C: Google Fiber's Model Hut License Agreement
Appendix 1A

Google Fiber Data Request List

Network Design & Fiber Route Planning

The data outlined below helps us determine how to most efficiently design our network and where our fiber routes would go. This data also helps us identify any areas that may require special consideration during our planning or construction process.

Addresses
- **Feature Type:** geospatial point; shapefile (.shp) or geodatabase (.gdb)
- **Attributes Needed:**
  - Physical Address (i.e. Street Name, Street Suffix/PREFIX, Street #, Unit # (if applicable) Zip Code, City Name)
  - include multi-dwelling unit data with individual unit numbers where possible
- **Address Type:**
  - (i.e. Apartment, Duplex, Triplex, Quadplex, Condo, Large Commercial Unit, Small Business Unit, Office Building, Restaurant, Single Family Unit, Church, Government, Vacant)

Streets
- **Feature Type:** geospatially correct polyline; shapefile (.shp) or geodatabase (.gdb)
- **Attributes Needed:**
  - Street Name

Right of Way and Easements
- **Feature Type:** polygon; shapefile (.shp) or geodatabase (.gdb)
- **Attributes Needed:**
  - Geo-reference
  - Type of Right of Way or Easement
City Boundaries

- Feature Type: polygon; shapefile (.shp) or geodatabase (.gdb)
- Attributes Needed:
  - Jurisdiction name

Parcels or Lot Lines

- Feature Type: polygon; shapefile (.shp) or geodatabase (.gdb)
- Attributes Needed:
  - Physical Address
  - Parcel Type (i.e. government, school, park, etc)
  - Easements (i.e. water, sewer, power, communications, etc)
  - Rights of Way

Poles: city owned, operated or controlled

- Feature Type: point; shapefile (.shp) or geodatabase (.gdb)
- Attributes Needed:
  - Pole function (i.e. communications and/or utility)
  - Pole type (i.e. wood, concrete, steel, etc - or decorative)
  - Pole height and class
  - Pole ID
  - Operating entity (i.e. traffic, water, power department, etc)

Streetlights

- Feature Type: point; shapefile (.shp) or geodatabase (.gdb)
- Attributes Needed:
  - Owner
  - Pole height
  - Pole ID
  - Photocell: indicate y/n
  - Bank-switched: indicate y/n

Overhead Strand (Guys and Anchors): city owned, operated or controlled

- Feature Type: polyline; shapefile (.shp) or geodatabase (.gdb)
- Attributes Needed:
  - Type (i.e: primary, secondary, service, etc)
Existing Underground Utility Routes
- **Feature Type:** polyline; shapefile (.shp) or geodatabase (.gdb)
- **Attributes Needed:**
  - Type (i.e. primary, secondary, service, water, gas, other as available)

Manholes
- **Feature Type:** point; shapefile (.shp) or geodatabase (.gdb)
- **Attributes Needed:**
  - Type (i.e. sewer, water, utility)
  - Depth
  - Size
  - Operating entity (i.e. traffic, water, power department, etc)

Pavement Condition Index Score by Street (ASTM D6433)
- **Feature Type:** shapefile (.shp) or geodatabase (.gdb)
- **Attributes Needed**
  - City criteria for road repair in appropriate format
  - Score by street OR streets with scores that trigger extensive restoration

Zoning
- **Feature Type:** polygon; shapefile (.shp) or geodatabase (.gdb)
- **Attributes Needed:**
  - Zoning type
  - Type description

Building Footprint
- **Feature Type:** polygon; shapefile (.shp) or geodatabase (.gdb)
- **Attributes Needed:**
  - Physical Address

Minimize Disruption

The data below helps us minimize disruption during our construction process, as we would like to avoid unnecessary digging. Where possible, we will lease existing spare conduit or dark fiber and also try to coordinate with known construction projects. We
ask for potential hut sites to explore options ideally suited for minimal impact on the community.

Existing Spare Conduit Available for Lease
- **Feature Type:** polyline; shapefile (.shp) or geodatabase (.gdb)
- **Attributes Needed:**
  - Location of existing conduit, preferably geospatially accurate data
  - Size and number

Existing Dark Fiber Available for Lease
- **Feature Type:** polyline; shapefile (.shp) or geodatabase (.gdb)
- **Attributes Needed:**
  - Type (i.e. 288ct, 144ct, etc)
  - Fiber quality tests

Infrastructure Maintenance Plan (road and power)
- **Feature Type:** shapefile (.shp) or geodatabase (.gdb)
- **Attributes Needed:**
  - Street maintenance locations with extents and schedule
  - Pole maintenance areas and schedule

Potential Hut Site Locations by Address
- **Feature Type:** point; shapefile (.shp) or geodatabase (.gdb)
- **Attributes Needed:**
  - Type (i.e. fire station, police station, city property, substation, library, school, pump station, water tank, etc)
  - *Note: we would need space to set a 12'x30' precast one-story aggregation non-occupied building with surrounding space; approximate total 1400 sq ft.*
Appendix 2A
Examples of Existing Municipal Ordinances

Here are a few examples of local ordinances that have helped ensure access to existing infrastructure for all providers.

Lee County, FL:
“To enhance the public convenience and to minimize the placement of poles and wire holding structures within public ways, the franchisee shall enter into agreements for the joint or common use of poles or other wire holding structures where poles or other wire holding structures already exist for the use in serving the county or serving the public convenience. Where reasonable terms and conditions cannot be negotiated with the owners of such poles and wire holding structures, the franchisee shall demonstrate the unreasonableness of the negotiations and terms, to the county administrator's satisfaction, and request waiver of this provision.” Ch. 20, § 22-70.13(h) (1)

Anacortes, WA:
“A franchisee erecting or maintaining poles shall allow anyone constructing under the authority of this chapter and the city, joint use of its poles upon payment of a reasonable proportion of the cost of such poles installed and shall obey any order issued by the city's director of public works relative to the joint use of poles.” Title 5, Ch. 5.44, § 5.44.190(D)

Norfolk, VA:
“The director of public works shall have the right to designate a pole for the joint use of the owner of such pole and other proprietors of lines, and to assign to each such joint user a certain section thereof on such terms as may be agreed upon. In the event of failure to reach such agreement, such director shall have the right to determine such terms, and to revoke the permit for such pole, unless such determination is accepted by the owner or proprietor thereof.” Ch. 42, § 42-92(a)
Mobile, AL
“It shall be the duty of the city electrician to so direct the placing, stringing and
attaching of wires upon poles erected in the streets and alleys of the city that the
same shall cause as little obstruction, either to travel in the streets or to the use
and enjoyment of private property, as possible, and to compel the joint use of poles
wherever practicable. In case the joint users of any such pole are unable to agree on
such joint use or the rental to be paid the owner of such pole for such use, the city
electrician shall fix such rate, which shall be binding upon the parties and companies
interested; provided, that either party may appeal from the decision of the city
electrician as to such joint use or the amount of rental to be paid for the use of such
pole for the privilege of attaching wires thereto, to the city council.” Ch. 19, § 19-37

Port Townsend, WA
“A franchisee erecting or maintaining poles shall allow anyone constructing under the
authority of this master ordinance and the city, joint use of its poles upon payment
of a reasonable proportion of the cost of such poles installed and shall obey any
order issued by the public works director relative to the joint use of poles.” Ch. 5.14, §
5.14.120(D)
Appendix 3A

Google Fiber Permitting, Construction, and Maintenance Plan

This document details the ideal permit application, construction, and maintenance processes for Google Fiber. We've found that this approach to permitting and construction works well for a network build of this size.

As part of the checklist, we ask that your city review each of these items. In cases where your city has different processes and requirements from those outlined, please provide detailed notes on what the city's existing requirements or process are, so our engineering teams can work collaboratively to create a process that will work at scale.

Permitting Process

Google Fiber's Process and Standards:

- We plan to submit all permit application material to you electronically.
- For underground construction, we plan on submitting plan view only.
- All responses, including approvals, should be sent back to Google Fiber electronically.
- Permit applications will include the applicable area and the duration of at least one hundred and eighty (180) days to complete the proposed installation.
- We would like the applicable area to be as large as possible, ideally covering the entire city. If not, the applicable area should be a minimum of either:
  - twenty-thousand (20,000) households
  - three-hundred (300) route miles of underground installation.
- We are looking for a response within ten (10) days of submitting the permit application.
- If a permit application is not approved, we need to receive a detailed list of alterations needed to get the permit approved.
- The city should provide Permit Application communication through a single point of contact.
For Discussion:
- Do your city’s process or standards differ from what is outlined? If so, please provide detailed notes on your alternative requirements or process.
- Do you have any ideas or suggestions to improve efficiency, speed and predictability of the permitting process with your city?

Uploads Requested:
- Please upload a standard form of permit application document that Google Fiber will be expected to use.
- Please upload your city’s standard Conditions of Permit Approval.

Construction Process

Google Fiber’s Process and Standards:
- The preferred installation method may be shown on the plan view of the permit, but will be determined by field conditions at the time of construction.
- Google Fiber will implement the city’s standard traffic control plan at the time of installation of the Google Fiber network.
- The underground construction methods may include but are not limited to micro-trench, plow, open trench, directional bore and pneumatic bore.
- Twenty-four inch (24") horizontal separation from existing facilities will be maintained during installation, except where existing obstructions, underground congestion, or other reasons necessitate a lesser separation.
- Twelve inch (12") vertical separation from existing facilities will be maintained during installation, except where existing obstructions, underground congestion, or other reasons necessitate a lesser separation.
- Twenty-four (24") depth below existing grade will be maintained during installation, except where existing obstructions, underground congestion, or other reasons necessitate a shallower depth.
- When an open trench is utilized for construction in concrete or asphalt, a T-Cut method will be utilized for restoration, except where this method is not practicable.
- A single, full sidewalk panel will be replaced when any portion of a sidewalk panel is impacted, except by potholing.
- Pothole restoration will be limited to the circular area directly impacted by potholing activity, including in sidewalk areas.
• We plan to maintain an as-built description of changes required during the course of installation due to conditions on the ground. For proprietary reasons, Google Fiber will provide a PDF version of the plan view as-builts of the underground installation when required.

For Discussion:
• Do your city’s process or standards differ from what is outlined? If so, please provide detailed notes on your alternative requirements or process.
• Is there anything else we should know about your city as far as installation of infrastructure goes?

Uploads Requested:
• Please upload your standard traffic control plan.
• Please upload other applicable specifications, for example those regarding:
  • Utility System Engineering Design Manual
  • Utility System Construction Standards
  • Line-clearing and Tree-Trimming Service
  • Arborist requirements for working around trees
• Please upload building code specifications. This is helpful as we plan for multiple dwelling unit designs. Specifications requested:
  • Fire Safety
  • Electrical/Telecommunications Wiring
  • Grounding
  • Utilities

Maintenance

Google Fiber’s Process and Standards:
• For Google Fiber maintenance work activities, Google Fiber will provide forty-eight (48) hours’ electronic notice to the Right-of-Way Operator’s maintenance department before commencing planned work.
• Service wire to the home (drops) installation will be considered a maintenance activity.
For Discussion:
- Do your city's process or standards differ from what is outlined? If so, please provide detailed notes on your alternative requirements or process.

Uploads Requested:
Please upload documents setting out your standard maintenance notice requirements and any other relevant documents regarding maintenance process or timing.
Appendix 3B
Construction Constraints List

We’d like your help in identifying and determining ways to address any possible local, city or state-wide rules or regulations that would slow or otherwise impact construction. Please review and respond to the questions listed below.

Are there any rules or regulations regarding when work can be performed throughout the year?

Please upload your tree-trimming regulations and outline any other information relevant to tree-trimming.

Are there historical site regulations?

Are there landscaping requirements for new structures?

Are there any underground construction requirements beyond NESC standards?

Are there any other environmental factors?

Anything else that may impede or slow construction within your city?
Appendix 3C
Google Fiber's Model Hut License Agreement
NETWORK HUT LICENSE AGREEMENT

This Equipment Housing License Agreement ("Agreement") is entered into by the municipal entity ("City") and the Google Fiber company ("Licensee") identified on the signature page of this Agreement. City and Licensee agree to the terms and conditions set forth below.

1. **Purpose.** Licensee needs rights to occupy and use various real property sites that may be owned by the City. The sites will be used for the purpose of constructing structures that will house network equipment and fiber that are part of Licensee's fiber optic network ("Network Hut"). The construction of each Network Hut will be based on the specifications described in Exhibit A to this Agreement, which may be amended by Licensee.

2. **Location of Sites for Network Huts.** Licensee will identify and propose to the City the location of various City owned sites. Licensee and City will work together to agree upon each site to be used for each Network Hut. When Licensee and City agree upon specific sites, the parties will complete and sign the form attached as Exhibit B to this Agreement ("Site Terms") for each site ("Network Hut Site"). The Site Terms include a legal description of the Network Hut Site, the fees to be paid for use of the site and any other special terms or requirements applicable to the Network Hut Site. Licensee's occupancy and use of each Network Hut Site will be subject to this Agreement, including the terms set forth in the applicable Site Terms.

3. **Licensee Rights and Obligations.** City grants to Licensee the right to access, enter, occupy and use each Network Hut Site at any time for the purpose of constructing, operating and maintaining each Network Hut. City grants these rights solely to the extent it has such rights, title and interest in to the Network Hut Site, without any express or implied warranties. Licensee will obtain all applicable licenses, permits and other authorizations required to construct, operate and maintain the Network Hut and offer Licensee's services. Licensee will construct the Network Hut in accordance with all applicable laws and permitting requirements. Licensee will use and maintain the Network Hut Site in accordance with all applicable laws and reasonable requirements and will keep the site secure (based on applicable standards) and reasonably free from debris, litter and graffiti.

4. **Effective Date and Term.** This Agreement is effective on the last date it has been signed by both parties ("Effective Date"). The initial term of the Agreement is twenty (20) years from the Effective Date. Following the initial term, this Agreement shall renew for successive two (2) year periods unless City provides Licensee with written notice that it does wish to renew the Agreement. City must provide such written notice at least ninety (90) days prior to any renewal date of the Agreement.

5. **Termination of Agreement or Site Terms.** Licensee may terminate this Agreement or the Site Terms for a specific Network Hut Site at any time with thirty (30) days written notice to the City. City may terminate this Agreement in the event of a material breach of this Agreement by Licensee and Licensee fails to cure the breach within sixty (60) days of receipt of notice from City. City may also terminate the Site Terms for a Network Hut Site by providing a minimum of one hundred eighty (180) days written notice to Licensee if the City determines that the applicable Network Hut Site is needed for a compelling public purpose. Following such written notice, City agrees to use its best efforts to find an alternative City owned site that Licensee may use as a replacement. Upon any termination or expiration of this Agreement, in whole or in relation to a particular Network Hut Site, Licensee will vacate premises and return site to its
original condition other than removal of any concrete foundations.

6. **Fees and Costs.** Licensee agrees to pay to City the fees set forth in the Site Terms for each Network Hut Site. The fees shall be paid on an annual basis for each Network Hut Site. Licensee shall be responsible for all its costs associated with construction, operation and maintenance of the Network Hut and Network Hut Site. Payments shall be delivered by Licensee within forty-five (45) days of the payment due date agreed upon by the parties.

7. **Indemnification.** Licensee will defend and indemnify City, its officers, elected representatives, and employees from any claims and liabilities related to any third party claim for property damage, personal injury or death to the extent caused by Licensee or its contractors. Licensee will have the right to control the defense of any such claim. If, in City's reasonable judgment, a conflict exists between the interests of City and Licensee in such a claim, City may retain its own counsel whose reasonable fees will be paid by Licensee.

8. **Limitation of Liability.** NEITHER PARTY WILL BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL, EXEMPLARY OR PUNITIVE DAMAGES IN CONNECTION WITH THIS AGREEMENT. THE PARTIES ACKNOWLEDGE THAT THIS LIMITATION SHALL BE SUBJECT TO AND MAY BE LIMITED BY APPLICABLE STATE LAW.

9. **Insurance.** Licensee will carry and maintain general liability, workers compensation and other customary types of insurance applicable to the use of Network Hut Sites. The insurance coverage amounts shall be reasonably adequate based on the use of the Network Hut Sites and shall be issued by insurers duly qualified to offer and bind coverage within the state where the Network Hut Site is located.

10. **Notice.** All notices related to this Agreement will be in writing and sent to the address set forth in each signature block to this Agreement. Notices are effective (a) when delivered in person, (b) upon confirmation of a receipt when transmitted by facsimile transmission or by electronic mail, (c) upon receipt after dispatch by registered or certified mail, postage prepaid, (d) on the next business day if transmitted by overnight courier (with confirmation of delivery), or (e) three (3) days after the date of mailing, whichever is earlier.

11. **General Provisions.** This Agreement is governed by the laws of the state where the Network Huts are located. City will make the entirety of the rights set forth in this Agreement available to other network-based providers of internet access and multichannel video programming services in a non-discriminatory manner, including access to the City's infrastructure, poles, conduits, assets and rights of way to the extent set forth in this Agreement, on rates, terms and conditions that are as favorable as those the City provides to Licensee for the same access; recognizing that the equivalent consideration afforded by other service providers may be different than what Licensee is obligated to provide under this Agreement. Neither party will be liable for failure or delay in performance to the extent caused by circumstances beyond its reasonable control. This Agreement may not be assigned by Licensee without the consent of City except for assignments to Licensee's affiliates or in connection with a merger, acquisition, sale of network assets or similar transactions. This Agreement sets out all terms agreed between the parties and supersedes all previous or contemporaneous agreements between the parties relating to its subject matter. This Agreement, including any exhibits, constitutes the entire Agreement between the parties related to this subject matter, and any change to its terms must be in writing and signed by the parties. The parties may execute this Agreement in counterparts, including
facsimile, PDF, and other electronic copies, which taken together will constitute one instrument. Each party to this Agreement agrees to: (a) use electronic signatures; and (b) be subject to the provisions of the U.S. E-SIGN Act (i.e., the Electronic Signatures in Global and National Commerce Act (ESIGN, Pub.L. 106-229, 14 Stat. 464, enacted June 30, 2000, 15 U.S.C. ch.96).

LICENSEE: ____________________________

(City)

(Name)

(Title)

Address: 1600 Amphitheatre Parkway

Mountain View, CA 94043

Date:

CITY: ____________________________

( Authorized Signature)

(Name)

(Title)

Address:

Date:

Exhibit D - Network Hut License Agreement (V2).docx
Form Subject to Updates and Changes Prior to Signature
EXHIBIT B
NETWORK HUT SITE TERMS

1. Legal Description of Network Hut Site Location (describe below or attach legal description).

2. Annual Fees:

3. Other terms or requirements applicable to Network Hut Site.

LICENSEE: ____________________________

CITY: ____________________________

(Authorized Signature) ____________________________

(Authorized Signature) ____________________________

(Name) ____________________________

(Name) ____________________________

(Title) ____________________________

(Title) ____________________________

Address: 1600 Amphitheatre Parkway
Mountain View, CA 94043

Date: ____________________________

Address: ____________________________

Date: ____________________________
Resolution No. _____
Resolution of the Council of the City of Palo Alto Prohibiting Disclosure of Certain Confidential and Proprietary City and Utilities-Related Information and Data

RECITALS

A. The City is the only municipally-owned utility in California that operates its own utilities including electric, fiber optic, natural gas, water and wastewater service.

B. The City also provides other important public services, including administration and operation of the Regional Water Quality Control Plant, and construction and maintenance of public facilities, streets, sidewalks and storm drains.

C. The City, in providing vital utility and other important City services, has the need to acquire, compile and maintain confidential and proprietary information in various electronic and paper formats, which include, but are not limited to the following types of information (collectively, the “Confidential Information”):

1. Location of Utility Poles
2. Location of Streetlights
3. Detail of Utility Pole Wiring
4. Underground Utility Routes
5. Location of Sewer Manholes
6. Location of Water Manholes
7. Location of Utility Manholes
8. Location of existing spare conduit for lease
9. Location of existing dark fiber for lease
10. Infrastructure Maintenance Plans
11. Utility Customer Data
12. Listings and locations of certain City-owned property

D. The City has received requests from the public for Confidential Information.

E. The California Public Records Act (Cal. Govt. Code § 6250, et seq.) declares that access to information concerning the conduct of the people’s business is a fundamental and necessary right of every person in the state.

F. Notwithstanding the intent of the California Public Records Act, the Act also exempts numerous types of information from public disclosure, including utility customer data (Cal. Govt. Code § 6254.16) and any information where, based on the particular facts of the case, the public interest served by not disclosing the record clearly outweighs the public interest served by disclosure of the record (Cal. Govt. Code § 6255).
G. Disclosure of certain specific Confidential Information related to utilities could create a risk of harm to utility facilities, City employees and the public, without providing significant additional insight into the operations of the City, and therefore should be avoided.

H. Certain Confidential Information is of a commercial sensitive nature, which, if revealed, could place the City at an unfair disadvantage.

I. Such Confidential Information is not general public knowledge and is proprietary and/or confidential.

The Council of the City of Palo Alto RESOLVES as follows:

SECTION 1. Disclosure of Confidential Information is not required by law, and disclosure of such Confidential Information retained by the City is prohibited.

SECTION 2. Disclosure of Confidential Information may only be made by the City on the condition that a Receiving Party demonstrate a legitimate business or research purpose and agree in writing to protect the confidentiality of the Confidential Information.

SECTION 3. This prohibition applies to all Confidential Information currently in the possession of the City or that the City acquires in the future.

SECTION 4. If any of provision of this Resolution or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications of this Resolution that can be given effect without the invalid provision or application, and to this end, the provisions of this Resolution are severable.

SECTION 5. This Resolution shall be effective retroactive to the date the City first acquired the item of Confidential Information to which it is applicable.
SECTION 6. Adoption of a resolution prohibiting disclosure of Confidential Information does not meet the California Environmental Quality Act’s (CEQA) definition of a “project” under California Public Resources Code §21065, thus no environmental review is required.

INTRODUCED AND PASSED:

AYES:

NOES:

ABSENT:

ABSTENTIONS:

ATTEST:

________________________________________  ______________________________________
City Clerk  Mayor

APPROVED AS TO FORM:

________________________________________  ______________________________________
Senior Deputy City Attorney  City Manager

________________________________________  ______________________________________
Director of Utilities  Director of Administrative Services