



**Draft for Planning Commission review
on October 22, 2012**

Council Date: November 13, 2012

SUBJECT: 2012-7112 Introduce an Ordinance to Amend Regulations for Telecommunication Facilities Located in Public Right of Way (Study Issue)

REPORT IN BRIEF

Using utility and City light poles for wireless telecommunication facilities (or cell sites) is an effective way for wireless carriers to provide service to hard-to-serve areas of Sunnyvale. This study considers options for how to review these applications (see Attachment A for study issue paper). Although Sunnyvale has not had a large number of requests for these facilities, other nearby cities have experienced significant interest in using this technology to provide service to residential areas of their cities.

In 2010, T-Mobile proposed using eight utility poles (known as joint poles, meaning joint usage by different utilities) to provide wireless coverage in residential areas of Sunnyvale. Since the Zoning Code does not clearly apply to poles in the public right-of-way (ROW), an encroachment permit from the Department of Public Works (DPW) was used. An encroachment permit is typically used for short-term public projects in the ROW and does not typically include public notification, rights to appeal, or discretion in applying design criteria or conditions of approval.

In order to provide better direction and guidance to carriers and the public, staff recommends adopting specific design criteria for any wireless site on a joint pole or light pole in Sunnyvale (see Attachment B for draft criteria). Staff also recommends amending the Zoning Code to require a planning permit for wireless facilities in the ROW. A staff-level Miscellaneous Plan Permit (MPP) would be required for the majority of projects using a joint or light pole. An MPP allows for discretion in applying design criteria, and would include public notice to surrounding neighbors. The MPP decision could be appealed to the Planning Commission or staff could make a determination that the request should be referred to the Planning Commission as a Use Permit. The Use Permit would be appealable to the City Council.

A Use Permit would be required in sensitive locations, such as historic resource areas, within 300 feet of a Heritage Landmark or Heritage Resource, or adjacent to a public park or public school. A Use Permit would also be required if the project does not meet the adopted design criteria or could have significant visual impacts.

BACKGROUND

The City adopted wireless telecommunications zoning regulations in 1999, with the focus on wireless projects on private property. Since that time, there has been rapid growth and revolutionary changes in the wireless telecommunications field, with the focus moving from providing adequate coverage for car phones, to relying on wireless phones for home service, to the exploding use of mobile devices and the concomitant desire for data service. With this growth and expansion, wireless carriers' needs have evolved from a focus for *coverage* to providing *capacity* to serve the growing numbers of mobile devices. Since a cell site serves a limited number of users at a time, the carriers need more sites closer to their users. This has resulted in having more, less tall cell sites, especially in residential areas.

Providing service to some parts of Sunnyvale, especially residential areas, is a particular challenge because of the lack of taller structures on which to locate their antennas and equipment. One option for providing wireless coverage in these hard-to-serve areas is to use light poles or utility poles for new wireless facilities. These facilities can be individual poles to serve a certain location or a broader solution known as DAS (distributed antenna system) where a large area is covered by a string of wireless facilities on utility poles.

T-Mobile was seeking individual joint poles to cover specific areas of Sunnyvale, but stopped working on the project when AT&T proposed a merger, and the facilities were never approved nor built.

EXISTING POLICY

GOAL CV-1: Achieve a community in which citizens and businesses are informed about local issues and City programs and services.

GOAL LT-2 Attractive Community: Preserve and enhance an attractive community, with a positive image and a sense of place, which consists of distinctive neighborhoods, pockets of interest, and human scale development.

Policy LT-4.1 Protect the integrity of the City's neighborhoods; whether residential, industrial or commercial.

Policy LT-4.2 Require new development to be compatible with the neighborhood, adjacent land uses, and the transportation system.

Policy LT-4.4 Preserve and enhance the high quality character of residential neighborhoods.

DISCUSSION

Much of Sunnyvale developed with large blocks of residential neighborhoods built around a public facility, such as a school or park, with neighborhood commercial uses on the perimeter (especially in south Sunnyvale). This development pattern makes it difficult for wireless carriers to serve the many residences in these large blocks because the Zoning Code prohibits wireless

facilities on sites with residential uses. Although the carriers have used public parks and churches for wireless facilities, these sites may not always provide the carriers with the coverage they need.

Wireless facilities can be found on taller buildings in commercial or industrial areas, on PG&E towers, on church steeples, on the roofs of buildings, or freestanding poles and towers built for their purposes. Wireless carriers are “vertical opportunists,” looking for tall structures on which to mount antennas, because objects such as buildings and trees can block the antenna’s signal. Given the difficulty in adding new tall structures, particularly in residential areas, carriers are increasingly looking at existing utility poles in the public right-of-way on which to add their antennas. These poles are often the tallest objects in a neighborhood (the zoning height limit for buildings is 30 feet in single-family zones; however most of the homes are not 30 feet tall). The majority of the residential areas in Sunnyvale have overhead utility lines, with the utility poles located either in a property’s backyard or in front in the public right-of-way.

A consortium known as the Joint Pole Association (JPA) owns the majority of these utility poles. PG&E, AT&T, Comcast, wireless carriers and other entities make up the Northern California Joint Pole Association (see Attachment C for their recent membership). Electric, telephone, and cable T.V. lines are typically found on joint poles (see Attachment D for a description of how joint poles are used).

When a wireless company uses a joint pole for a cell site, they prefer to mount their antennas above the top wires (typically electrical lines), with the radio equipment and utility boxes mounted below the lowest line (typically cable or telephone, see Attachment E). The radio equipment used at this type of site is known as a “microcell.” This type of equipment can usually handle fewer calls and cover a smaller area than a typical wireless facility (or macrocell); therefore, an installation on a joint pole has a more limited use. The design of a typical joint pole wireless facility needs to have all necessary equipment mounted on the side of the pole, including the microcells and a PG&E meter that allows use of the power from the electric lines on the pole. There is typically no ground equipment associated with these facilities (see Attachment E for pictures of different types of facilities).

The California Public Utility Commission (CPUC) has guidelines and rules for joint poles, and specifically for their use by wireless carriers. The CPUC does not treat commercial wireless providers as public utilities in the same sense as electric and landline telephone utilities in that local jurisdiction approval can be required for a wireless facility where it may not be required for a true utility. City-owned light poles can also be used for wireless facilities. The installation is generally the same on a light pole, but the City owns the pole (not the JPA) and

has independent authority to allow its use for telecommunication facilities as the owner.

Neither type of pole is set up to allow co-location of more than one carrier. This is because the equipment boxes are mounted on the pole below the lowest utility lines, and there are requirements to require climbing space for workers to climb the pole as well as possible structural issues due to weight on the pole.

Current Ordinance and Requirements

In general, the Zoning Code provides regulations for private properties, because the public realm is historically where City or utility projects are located. In cases where the right-of-way (ROW) is used, it is typically for temporary projects for which an encroachment permit is obtained. The City Zoning Code has been applied to private uses in the ROW, such as fences and dining tables along Murphy Avenue. This study addresses only utility poles located in the ROW.

Utility poles located in the rear yard of a residence are on land owned by the private property owner (in an easement) and the use of these poles for a wireless facility would be **prohibited** because wireless telecommunications facilities are prohibited on residentially used properties.

When T-Mobile approached the City about using joint poles in the ROW it was determined that the best approach was for the Department of Public Works (DPW) to issue an encroachment permit for each proposed site, with specific requirements for the permit (see Attachment F for a description of the requirements). DPW was the lead department, with support from the Planning Division and the Office of the City Attorney (OCA). As the City worked with T-Mobile on these projects, it became evident that the encroachment process had limitations. Encroachment permits do not have a formal noticing process and do not provide for an appeal process. Neighbors were frustrated by the process, and had no appeal rights should the permit have been issued. If the permit requirements were regulated by the Zoning Code, typical appeal procedures would apply and projects would be reviewed for compliance with design criteria.

Types of Wireless Telecommunications Found in the ROW

In general, there are two different types of wireless telecommunication facilities found in the ROW: Singular antenna sites, and distributed antennas systems (DAS). Singular antenna sites are those where a carrier sees a specific need in an area for which no other good option exists. In general, carriers prefer macro sites over micro because of the wider range of options allowed, including range, capacity and different types of antennas for the varying technologies used.

A DAS is a project by a carrier or a third party that installs the infrastructure for a subsequent carrier to use. These facilities tend to string sites together by using fiber optic lines from pole to pole, and are typically used to cover a wider area with a definable network of sites.

Other City Approaches

Technology using poles in the ROW has been used in many different communities throughout the country, and specifically in nearby cities. Palo Alto, Los Altos and Mountain View recently had requests to install DAS and/or individual sites on joint poles throughout their cities. Each city used a different approach in reviewing the project. Palo Alto, which owns the power poles, first approved the project in concept, and then required each carrier to obtain design review approval for each site. Mountain View treated the sites the same as any other wireless telecommunications facility, and required design review approval at a noticed public hearing. Both cities focused their review on the design of the site, specifically how the antennas were mounted on the poles. An example of a method of installation that was not approved in Mountain View is shown in Attachment E. Instead, Mountain View approved a design where the antennas are mounted inside a single fiberglass radome mounted on the top of the pole. Los Altos used the encroachment permit process, with the permit issued by Public Works.

Items to Consider

Wireless telecommunication facilities bring out a great deal of passion from members of the community. Some people that live closest to a facility do not want to have a cell site adjacent to them for the benefit of a larger area. Many people have concerns about the health impacts of the facilities, but the federal Telecommunications Act of 1996 prohibits communities from setting their own radio frequency (RF) emission standards. This restriction applies to joint pole sites as it would any other site. A city can require carriers to prepare an emissions study to prove the facility will not exceed federal standards. The City's main purview in reviewing telecommunications projects is for aesthetic and compatibility concerns.

Although there is often opposition to cell site applications, wireless users expect their device to work where and when they need them, and many people support having better coverage in their homes (known as "in-building" coverage). In Sunnyvale, that type of coverage may not be possible unless wireless facilities are allowed closer to the homes. Using existing utility poles for wireless facilities is a good alternative to a new monopole; however, under current rules, it is possible that a joint pole next to a sidewalk or park strip and immediately adjacent to a home can be used without public input, where a new freestanding pole at a public park would be required to meet setbacks, meet specific design criteria, and allow an appeal of any decision.

In considering using a joint pole as a wireless telecommunication site, there are a few items to consider:

- Due to CPUC rules governing safe distances from power lines, the antennas are required to have a six-foot clear zone from the top line to the bottom of the antenna. With a typical six-foot panel antenna, this results in a 12-foot extension from the top of the existing pole to the top of the antennas (which are typically 30-40 feet in height).
- Carriers want from three to six cabinets/boxes mounted on the pole. In some cases, this and/or the antennas may require the pole be replaced due to structural load concerns.
- Most power can be brought to the new pole-mounted meter directly from the power line on the pole, but if the existing power voltage is too high, a transformer may need to be added to the pole, which would result in additional pole clutter.
- Most telephone service (telco) can also be brought directly from the existing telephone lines on the pole, but there are cases where telco needs to be brought to the pole from a different pole. In a couple of the T-Mobile cases, they proposed to add a new power or telco overhead line across the back of the adjacent residential property to the joint pole. The adjacent property owner, in these cases, would not only have a cell site on the pole next to their home, but could also have an additional overhead line running across the back of their property.
- Finding an appropriate pole location is a balance between the carrier's RF coverage needs and the area in which it is located. Staff believes it best to not have the cell sites located immediately in front of a home, but is better along the street side yard of a corner lot. Also, it may be more appropriate for a chosen pole to be on more heavily travelled roads, rather than on quiet residential neighborhood streets.
- The carrier pays the JPA for use of the joint pole for a wireless site, and since no equipment would be on the ground, the City would not be compensated. It is possible for a carrier to use City light poles, for which compensation would be expected.
- The City's plan for undergrounding utilities should be considered whenever reviewing a joint pole application, since the long-term goal is to underground existing utility poles, especially along arterial roads.
- Wireless facilities require periodic service, which consists of a technician visiting the site to tune the antennas and perform service on the radio equipment.

Staff has identified the following objectives for review of telecommunications facilities in the ROW:

- Allow public input on any proposal;
- Provide clear direction to the carriers, public, decision-makers and staff about the process and standards used in review of an application;

- Create an efficient and understandable process, preferably one already in use;
- Prepare clear design and operational guideline criteria;
- Include the staff Project Review Committee (PRC) in any joint pole application in order to have input from all key divisions and departments (Building, DPW, Public Safety); and
- Regardless of permit type, an encroachment permit from DPW will be required for any construction in the public ROW (it would be an expanded encroachment review if no planning permit is required).

Criteria for Wireless Facilities on Joint Poles in the ROW

For any type of application used (zoning or encroachment), design criteria should be established for requested installation (See Attachment B for draft design criteria), including:

- Acceptable poles would be located along arterials or residential collectors.
- Poles in front of a home or across the street from the front of a home are not acceptable.
- Pole height should not be increased beyond the minimum to meet CPUC standards (resulting in a 12 foot extension of the pole), unless the specific site location is not easily visible from nearby residences; overall height should not exceed 60 feet.
- No new overhead lines shall not be added to serve the wireless facility,
- The number of equipment cabinets on a pole should be limited to three to minimize the visual impact to the surrounding area.
- Utility poles that are an active part of the City's underground utility program are not acceptable (but light poles in those areas can be considered).
- Carriers shall defend, indemnify, and hold harmless the City for its facility.

APPROACHES

There are two basic permit options that can be chosen to address permitting of these facilities: An encroachment permit or a zoning permit. These types of permits can be summarized as follows:

Encroachment Permit

If a Planning permit is not chosen as the permitting option, this type of telecommunications facility would require an encroachment permit from DPW (see Attachment F for process used in the past). Any work in the public ROW requires an encroachment permit, but if an encroachment permit was the preferred permitting option, a more extensive review would be necessary to include public notification and a limited level of design review.

Zoning Permit Options

Amend the Zoning Code: If a planning permit is chosen to review these types of projects, Title 19 should be amended to clearly apply to facilities in the ROW. Permit types could include either a Use Permit (UP) or a Miscellaneous Plan Permit (MPP). Both could include 300 foot noticing requirements, conditions of approval, and appeal options. A Use Permit would require a noticed public hearing. An MPP is a staff-level permit for which the decision can be appealed to the Planning Commission. This amendment would not allow a wireless telecommunications facility to be placed on a residential property that has a residential use (except for personal use, as specified in the Zoning Code). An encroachment permit would still be required for any work proposed in the ROW, but the permit would focus on traffic control and ensuring public facilities are protected during construction.

There are three basic application options to review these applications with existing planning permit types:

1. Require a Use Permit for all applications;
2. Require an MPP for all applications; or
3. Require a blend of Use Permits and MPPs as shown below.

Staff suggests that an appropriate approach is a blend of MPPs and Use Permits.

Use Permit: Sites located or designed, as follows would require a Use Permit:

- Next to a park or public school site;
- In historic resource areas;
- Within 300 feet of a historic landmark resource; and
- Projects that do not meet the Criteria for Wireless Facilities on Poles in the ROW.

Miscellaneous Plan Permit: This staff-level permit could be required for the following:

- Other areas not defined above in Use Permit section; and
- Projects that meet the required design criteria.

If an MPP application is deemed to create a visual impact or is not in keeping with the character of the surrounding area, the permit could be elevated to the Planning Commission, as determined by the Community Development Director.

FISCAL IMPACT

There is no direct fiscal impact on the location of wireless facilities on joint poles. There would be a fiscal benefit if the facility were located on a City-owned pole, in which case a rental rate can be applied. Regardless of the location, a carrier would need to indemnify the City from damages or accidents due to the facility being located in the public ROW.

PUBLIC CONTACT

Public Contact was made through posting of the Planning Commission agenda on the City's official-notice bulletin board, on the City's Web site, and the availability of the agenda and report in the Office of the City Clerk. A public outreach meeting was held on September 12, 2012, at which a few people attended with specifying concerns about safety, commercial uses in residential neighborhoods and the desire to have better wireless coverage at their homes. Staff also met with industry representatives on September 19, 2012 in order to better understand their concerns and to learn more about the technology.

ALTERNATIVES

1. Adopt Design Guidelines for Wireless Facilities on Joint Poles in the Right-of-way (Attachment B).
2. Introduce an ordinance to amend the Zoning Code (Attachment G) to regulate telecommunication facilities located in the right-of-way with the following permit requirements:
 - a. Require a Use Permit for wireless applications on utility or light poles located in historic resource areas, within 300 feet of a historic landmark resource or adjacent to a park or school, with ability of staff to refer to Planning Commission as a Use Permit based on criteria defined in the Zoning Code.
 - b. Require a Miscellaneous Plan Permit for any other pole facility other than that described in 2.a.
3. Adopt an alternative with modifications desired by Council.
4. Maintain existing Encroachment Permit Process.

RECOMMENDATION

Staff recommends to City Council: Alternatives 1 and 2.

Wireless carriers serve the entire community, and their customers expect good and consistent coverage for their wireless devices. But carriers have a responsibility to the community to design the best possible facility for the area. There is no denying the value good wireless telecommunications coverage brings to a community, but the carrier also has a responsibility to the community to build a facility that meets the City's goals for design and compatibility. Using an existing taller structure to avoid adding new structures in a neighborhood is a value to the community.

By amending the ordinance to clearly include these uses in the Zoning Code and to require a planning permit, guidelines and conditions can be used, and the community would have an opportunity to make an appeal to the City decision-makers should there be a concern about the facility. Adopting clear, understandable policies and guidelines will assist the carriers, the public, staff and the decision-makers in considering a specific project.

Reviewed by:

Hanson Hom, Director, Community Development

Reviewed by: Trudi Ryan, Planning Officer

Prepared by: Andrew Miner, Principal Planner

Reviewed by:

Kent Steffens, Director, Public Works

Approved by:

Gary M. Luebbers

City Manager

Attachments

- A. Study Issue Paper
- B. Draft Criteria for Wireless Facilities on Joint Poles in the ROW
- C. Northern California Joint Pole Association membership
- D. Joint pole usage
- E. Pictures of types of joint pole facilities
- F. Existing encroachment process for joint pole usage
- G. Draft ordinance

2012 Council Study Issue

CDD 12-06 Regulations for Telecommunication Facilities Located in the Public Right of Way

Lead Department Community Development

History 1 year ago None 2 years ago None

1. What are the key elements of the issue? What precipitated it?

In Sunnyvale, wireless telecommunication carriers have used traditional methods of providing service to their customers: antennas mounted on free-standing structures (monopoles, fake trees, PG&E towers) or on commercial/industrial buildings. This has worked well for the majority of the city, but as more people use (and demand) wireless service from their home, the carriers try to find ways to provide service in residential areas. In many areas of Sunnyvale, finding an appropriate location for wireless facilities is difficult, and the most used method of providing coverage in residential areas has been the use of park sites.

Another option is being used more often, which is to use existing utility poles on which to place their antennas. The antennas are typically mounted above the top of the utility pole, with the other equipment on the pole below the lowest power line. These types of systems can be for individual stand-alone sites, or as part of a "distributed antenna system" (DAS). The advantage of using utility poles is that they already exist in a neighborhood. The disadvantage is that the poles are typically found in the public right-of-way, so only an encroachment permit from Public Works would be necessary and the proposed facilities would not be subject to zoning code requirements, public hearings, nor the right to appeal the decision. Also, the utility poles tend to be located immediately adjacent to homes.

The City currently has a "joint pole" agreement with T-Mobile, which details the encroachment permit process for placing equipment on a utility pole in the City right-of-way. The process includes requiring them to notify neighbors within 250 feet of the site. Planning participates in this review, offering input on aesthetic concerns and compatibility issues. During the recent review of a joint pole site in the City, several neighbors complained about the design and location of the facility. The concern was mentioned that a wireless facility in a park would require a Use Permit, along with a hearing and the right to appeal the decision, but locating a facility on a joint pole across the park could be done through an encroachment permit process.

This study would determine if wireless telecommunication facilities located on public right-of-way (which the zoning code does not cover currently) should be included in the zoning code or addressed through a separate ordinance. The study would determine standards for review, the type of permit necessary, public notification required, and appeal processes, should the code be changed.

2. How does this relate to the General Plan or existing City Policy?**GOAL CV-1**

Achieve a community in which citizens and businesses are informed about local issues and City programs and services.

GOAL LT-2 Attractive Community

Preserve and enhance an attractive community, with a positive image and a sense of place, that

New Study Issue

consists of distinctive neighborhoods, pockets of interest, and human scale development.

Policy LT-4.1 Protect the integrity of the City's neighborhoods; whether residential, industrial or commercial.

Policy LT-4.2 Require new development to be compatible with the neighborhood, adjacent land uses, and the transportation system.

Policy LT-4.4 Preserve and enhance the high quality character of residential neighborhoods.

3. Origin of issue

City Staff Planning

4. Staff effort required to conduct study Moderate

Briefly explain the level of staff effort required

Research of other cities' regulations and legal issues; public and industry outreach; preparation of reports; and, public hearings.

5. Multiple Year Project? No Planned Completion Year 2012

6. Expected participation involved in the study issue process?

Does Council need to approve a work plan? No

Does this issue require review by a Board/Commission? Yes

If so, which? Planning Commission

Is a Council Study Session anticipated? No

7. Briefly explain if a budget modification will be required to study this issue

Amount of budget modification required

Explanation

8. Briefly explain potential costs of implementing study results, note estimated capital and operating costs, as well as estimated revenue/savings, include dollar amounts

Are there costs of implementation? No

Explanation

9. Staff Recommendation

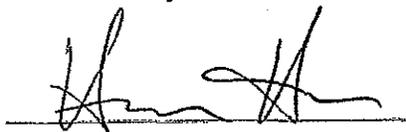
Staff Recommendation Support

If 'Support', 'Drop' or 'Defer', explain

Although the zoning code does not typically include projects in the public right-of-way, the placement of wireless telecommunications facilities is a unique situation. These "joint pole" applications propose a facility similar to those located on private property, but which are not

currently subject to the same review process. This study would clarify the City's intent about review process and requirements for these facilities. It is likely the City will have more of these types of applications, and it would be prudent to have deliberated and have clear direction on how best to process and review the proposals, and what type of public input is desired.

Reviewed by



Department Director

9/30/11
Date

Approved by



City Manager

10-3-11
Date

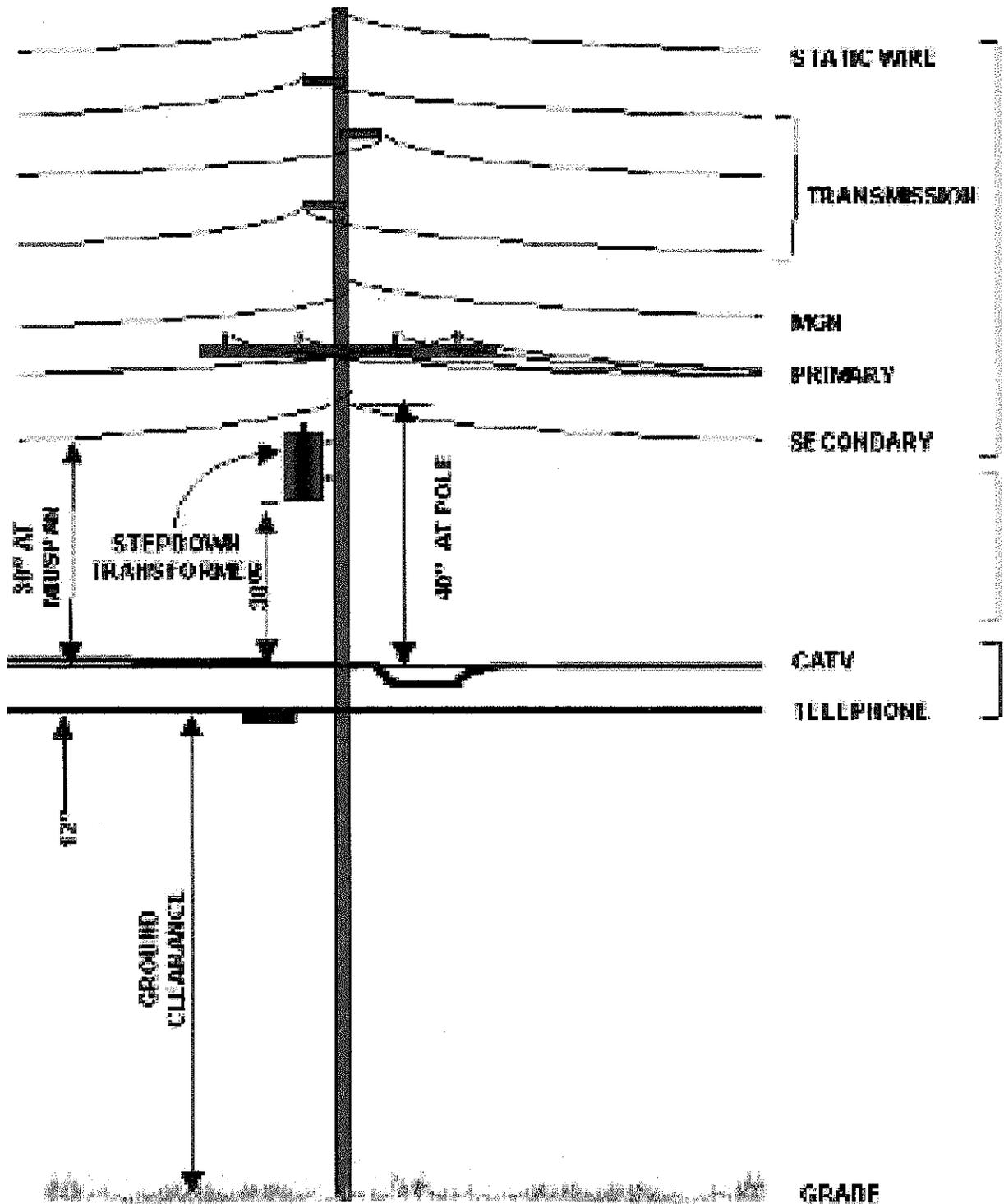
Draft Criteria for Wireless Facilities on Joint Poles and Light Poles in the Public Right-of-Way

For any type of application (zoning or encroachment), the following design criteria shall apply to any type of requested installation:

- Poles used for the wireless facility located in single-family residential zoning districts should not be in front of a single-family home nor across the street from the front of a single-family home;
- All poles and attached equipment shall be restricted to a maximum height of sixty-five feet when located adjacent to single-family residential zoning districts;
- Pole height should not be increased beyond the minimum to meet CPUC standards (Which would typically result in a 12 foot extension of the pole), unless the specific site location is not easily visible from nearby residences;
- No new overhead lines shall be added serve the wireless facility;
- Limit the number of equipment cabinets on a pole to three to minimize the visual impact to the surrounding area;
- Do not use utility poles planned for undergrounding by the City (but light poles in those areas can be considered);
- Ground-mounted equipment can be considered in locations that do not have residences immediately adjacent to the pole;
- Shall defend, indemnify, and hold harmless the CITY and its agents, officers, and employees ("indemnified parties") from any claim, action, or proceeding against the CITY or indemnified parties to attack, set aside, void, or annul the Project or any prior or subsequent related development approvals or Project condition imposed by the CITY or as a result of the CITY granting any permits for the Project, or to impose liability against the City or indemnified parties resulting from the grant of any permits for the Project, which claim, action or proceeding is brought within the time period provided by law, including any claim for private attorney general fees claimed by or awarded to any party against the CITY.

2010 Northern California Joint Pole Association Membership

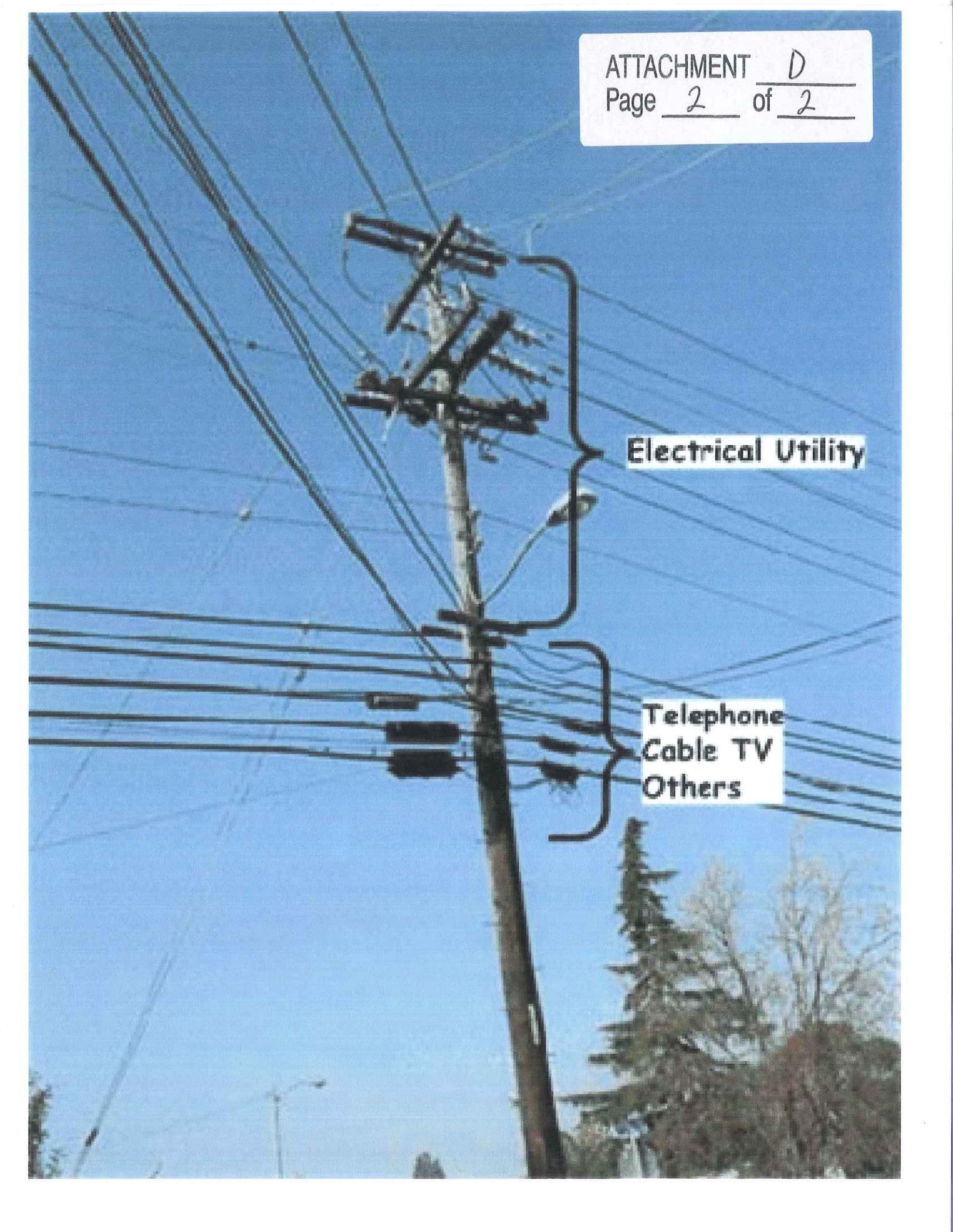
American Tower Outdoor DAS, LLLC
AT&T CA (SBC, PacBell)
AT&T Wireless
Alameda Power & Telecom
Calaveras Telephone Company
City & County of San Francisco
City of Gridley
City of Lodi
City of Lompoc
City of Roseville/Roseville Electric
City of Shasta Lake
ClearLinx
Comcast Corp.
Crown Castle Solutions
Digital West
East Bay Municipal Utility District
Frontier, A Citizens Communications Co.
Geysers Power Company, LLC
Global Valley (Evans Tele)
Happy Valley Telephone Company
Lassen Municipal Utility District
MCI Metro
MCI Telecommunications Inc.
Mpower/TelePacific Communications
Merced Irrigation District
Metro PCS
Modesto Irrigation District
New Path Networks
NextG Networks of CA
PG&E
Sacramento Municipal Utility District
Sierra Telephone Company
Siskiyou Telephone Company
Sprint/Nextel
Sure West Telephone (Roseville Telephone)
T-Mobile
Trinity Public Utility District
Turlock Irrigation District
Ubiquitel PCS
Verizon California Inc. (GTE of California)
Verizon Wireless
Volcano Telephone Company
Wave Broadband/Astound (RCN of California)
Western States Teleport Corporation



SUPPLY SPACE

NEUTRAL SPACE

COMMUNICATIONS SPACE



Electrical Utility

**Telephone
Cable TV
Others**

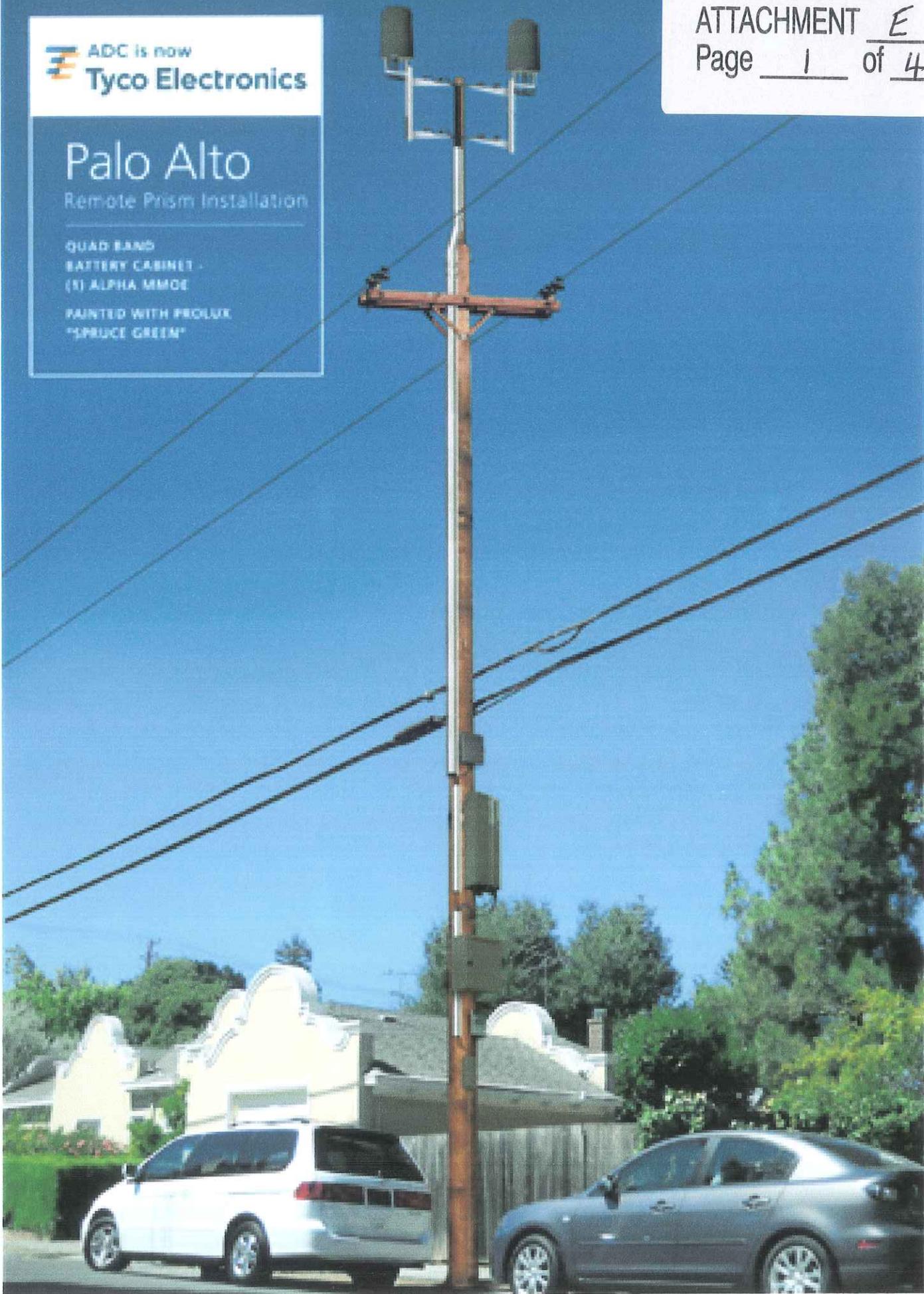
ADC is now
Tyco Electronics

Palo Alto

Remote Prism Installation

QUAD BAND
BATTERY CABINET -
(1) ALPHA MMCE
PAINTED WITH PROLUX
"SPRUCE GREEN"

ATTACHMENT E
Page 1 of 4



Existing



Proposed



Proposed T-Mobile Antennas

view from Sequoia Drive looking northwest at site

Existing



Proposed



view from Reed Avenue looking east at site

Existing



view from Reed Avenue looking southeast at site

SF14171 Pole Cap Reed
977 Reed Avenue, Sunnyvale, CA

Proposed



ATTACHMENT
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CITY OF SUNNYVALE
Public Works Department/Engineering Division
Location Guidelines and Public Notification Associated with
Wireless Telecommunications Provider Use Of Utility Pole In City Right-of-Way
(With or Without Modifications To Existing Pole)

Location and Public Notification Guidelines and Procedures

1. Wireless Telecommunications Provider (WTP) shall submit preliminary site plans and project descriptions to Department of Public Works/Engineering Division (DPW). Plans shall include:
 - a. Project location and descriptions
 - b. Site plan showing properties within 250 feet of proposed pole location.
 - c. Height of the pole, antenna and its associated equipment
 - d. Antenna details
 - e. Photo-simulations of proposed pole and equipment.
2. Upon complete submittal, DPW and Department of Community Development/Planning Division (CDD) shall review plans and DPW shall provide consolidated comments to WTP within 21 calendar days. DPW may schedule a site visit to take place within those 21 days with CDD and WTP to review and discuss the location and possible options.
3. If preliminary approval given for location and design (including equipment appearance and size, height and compatibility) WTP shall enter into an Encroachment Agreement with the city and commence and complete public outreach process:
 - a. WTP shall mail out letters to the residents and property owners adjacent to the cell antenna location. Additionally, WTP shall mail out letters to the residents and property owners within 250 feet of the wireless facility pole extension on the same street.
 - b. The letter shall include the following:
 - i. Description of scope of work
 - ii. Plan sheet showing the location of the pole and related equipment.
 - (i) A photo simulation of the proposed pole extension.
 - c. The notification letter shall state that property owners have 20 calendar days from the date of notification to send questions and concerns directly to WTP to a contact phone number and/or address provided by WTP on the notification letter.
 - d. WTP shall maintain copies of the notification letters and proof of mailing in WTP file for each proposed cell antenna location.
 - e. If responses are received from any of the residents or property owners, WTP shall work directly with the resident or property owner to address their concern and notify DPW in writing of the outcome. If WTP is unable to resolve any concern, the DPW shall:
 - (1) Contact the resident or property owner to understand the issues and concerns. (What action, if any, is DPW to take?)
 - (2) Address requests other than health concerns by requesting WTP to

- evaluate possible modification or relocation of the cell antenna.
- i. If WTP can modify the site design and/or locate a replacement site, it shall submit new drawings showing the modification or proposed new location.(if new location, then public notification process for new site must be followed).
 - ii. If WTP can not modify the cell antenna or locate a suitable replacement site, it shall provide the DPW a written evaluation of the possible modifications or replacement site and why they were not feasible.
 - iii. DPW shall determine, with assistance of City Attorney, if applicable state or federal law requires approval of encroachment permit, or if permit shall be denied.
 - iv. WTP shall send a letter to the resident or property owner objecting to the cell antenna demonstrating the effort made in trying to modify the cell antenna or identify replacement sites and the reasons why such modifications or replacement sites were determined by WTP to not be feasible.
4. When location, height and design are final, WTP shall submit two (2) sets of the completed construction drawings on 11" by 17" size plans.
 - a.WTP shall include PG&E proposed service point based on field verification by PG&E and WTP personnel.
 - b.Research shall be performed by WTP to include the following information:
 - i.Existing PG&E service and other existing utility facilities.
 - ii.Conduit routing/pull box location.
 5. DPW reviews the encroachment permit application. Minor comments shall be shown as red-lined on plans.
 6. If comments are major, plans are returned to WTP for resubmission to address comments and incorporate requested changes.
 7. WTP submit two (2) sets of final plans to the City in an 11" by 17" size with signatures from professional engineers (civil and electrical) for final review/approval by DPW.
 8. DPW Issues Encroachment Permit with conditions of approval.

Permit Fees:

Wireless Telecommunications Provider shall pay for the actual permit review and inspection service fees according to the City Fee Schedule at the time of the payment for each encroachment permit application with additional hourly fees billed if the permit review process requires extended or non-standard review.

CITY OF SUNNYVALE
Public Works Department/Engineering Division
Encroachment Permit Application Requirements
Associated with Wireless Telecommunications Provider Use Of Utility Pole In City
Right-of-Way (With or Without Modifications To Existing Pole)

The following requirements shall be met prior to issuance of a Public Works encroachment permit associated with a Wireless Telecommunications Provider :

1. Permittee submit two (2) sets of traffic control plans (per 2006 California Manual of Uniform Traffic Control Devices), where applicable and needed depending upon location and hours of operation) for DPW approval.
2. Contractor provides Certificate of Insurance with general liability insurance or proof of self-insurance of single coverage of **\$1,000,000.00 minimum**. Said policy shall name **the City of Sunnyvale as an additional insured** (A separate endorsement sheet is required with the insurance policy, and **the location and job description** must be included on the policy).
3. Contractor has a **Class A General Engineering license**. The following licenses are acceptable for the scope of work as described. All other class licenses will only be issued a permit upon approval by the Assistant City Engineer.

C7 Low Voltage System Contractor may install, service and maintain all types of communication and low voltage systems which are energy limited and do not exceed 91 volts. These systems include, but are not limited to telephone systems, sound systems, cable television systems, closed-circuit video systems, satellite dish antennas, instrumentation and temperature controls, and low voltage landscape lighting.

C10 Electrical Contractor may place, install, erect or connect any electrical wires, fixtures, appliances, apparatus, raceways, conduits, solar photovoltaic cells or any part thereof, which generate, transmit, transform or utilize electrical energy in any form or for any purpose.

C8 Concrete Contractor may form, pour, place, finish and install specified mass, pavement, flat and other concrete work; and places and sets screeds for pavements or flatwork.

C12 Earthwork and Paving Contractors may dig, move, and place material forming the surface of the earth, other than water, in such a manner that a cut, fill, excavation, grade, trench, backfill, or tunnel (if incidental thereto) can be executed, including the use of explosives for these purposes. This classification includes the mixing, fabricating and placing of paving and any other surfacing materials, perform grading work.

C27 Landscaping Contractors may construct, maintain, repair, install, or subcontract the development of landscape systems and facilities for public and private gardens and other areas which are designed to aesthetically, architecturally, horticulturally, or functionally improve the grounds within or surrounding a structure or a tract or plot of land. In connection **Wireless Telecommunications Provider** therewith, a landscape contractor prepares and grades plots and areas of land for the installation of any architectural, horticultural and decorative treatment or arrangement.

C31 Construction Zone Traffic Control Contractor may prepare or remove lane closures, flagging, or traffic diversions, utilizing portable devices, such as cones, delineators, barricades, sign stands, flashing beacons, flashing arrow trailers, and changeable message signs, on roadways, including, but not limited to, public streets, highways, or any public conveyance.

4. Contractor provides proof of worker's compensation coverage
5. Contractor has a valid city business license
6. Approval from other agencies (Caltrans, Santa Clara County Valley Water District, etc.) may be needed as part of the permit process; however, if it is determined after filing of the permit that such approval is required, such approval may supplement the permit application and the permit shall not need to be refiled.

NOTE: All work is to be in conformance with Section 13.08 of the City of Sunnyvale Municipal Code (Right of Way Encroachments) and latest version of the City of Sunnyvale Standard Specifications and Details. It is the Contractor/Permittee's responsibility to become familiar with those terms, conditions, and rules prior to commencement of work.

1. By signing the permit application, Permittee agrees to provide a public information telephone number to City for referral of any inquiries that may arise regarding permitted improvements.
2. By signing the permit application, Permittee agrees to operate, repair and maintain at Permittee's sole expense the cabinet(s), conduit, pad, and other structural items shown on the plans as part of the permit application for the life of such improvements. Permittee shall restore landscaping to conditions prior to or better than beginning of work. After installation, Permittee shall not be responsible for maintenance of any vegetation or landscaping
3. By signing the permit application, Permittee acknowledges that the decision of the City Engineer shall be final as to whether any material or workmanship reasonably meets the applicable standards, specifications, plans and grades.
4. By signing the permit application, Permittee acknowledges that permit issuance shall not release Permittee from the responsibility for or the correction of any errors, omissions or other mistakes that may be contained in the permit application.
5. By signing the permit application, Permittee understands and acknowledges that, pursuant to and in accordance with all applicable state and federal laws and regulations, City may request that Permittee remove or relocate any improvement items whenever City determines that the removal or relocation is needed: (1) to facilitate or accommodate the construction, completion, repair, relocation or maintenance of a City project, (2) because the improvement items interfere with or adversely affects proper operation of other City facilities, or (3) to protect or preserve the public health or safety.
6. By signing the permit application, Permittee acknowledges and agrees that Permittee bears all risk of loss or damage of its equipment and material installed in City's public right-of-way or public utility easement area except to the extent said loss or damage was caused by the negligent acts or omissions of City, its employees or agents.
7. By signing the permit application, Permittee agrees promptly remove graffiti from any above-ground cabinet installed pursuant to this permit within a commercially reasonable period. In addition to having its maintenance personnel monitor such equipment as they are performing work in

neighborhoods, Permittee shall provide the City with a means to notify Permittee of graffiti and request removal of same, which Permittee shall respond to in a commercially reasonable time.

8. By signing the permit application, Permittee agrees to comply with all federal, state and city laws, statutes, ordinances, rules and regulations and the orders and decrees of any courts or administrative bodies or tribunals in any manner affecting the performance of the permit conditions. This condition does not limit Permittee's right to pursue any or all available legal remedies to challenge the validity or legality of any such laws, statutes, ordinances, rules, regulations, orders, or decrees.
9. Permittee agrees to indemnify, defend, and hold harmless City, its officers, agents, and employees, attorneys, consultants, or independent contractors from and against any liability for damages and for any liability or claims resulting from tangible property damage or bodily injury (including accidental death), to the extent proximately caused by Permittee's construction, operation, or maintenance of the equipment installed pursuant to this permit, provided that City shall give Permittee written notice of its obligation to indemnify within ten (10) days of receipt of a claim or action. City agrees to cooperate with Permittee to assist in the defense against any such action. Notwithstanding the foregoing, Permittee shall not indemnify City for any damages, liability, or claims resulting from the negligence or willful misconduct of City, its officers, agents, employees, attorneys, consultants, independent contractors or third parties.
10. By signing the permit application, Permittee agrees to self-insurance as specified in Exhibit A and shall provide proof of such self-insurance to meet the requirements of the City.

ORDINANCE NO. _____

**AN ORDINANCE OF THE CITY COUNCIL OF THE CITY
OF SUNNYVALE TO AMEND CERTAIN SECTIONS OF
THE SUNNYVALE MUNICIPAL CODE RELATING TO
WIRELESS TELECOMMUNICATIONS FACILITIES**

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF SUNNYVALE DOES
ORDAIN AS FOLLOWS:

SECTION 1. SECTION AMENDED. Section 19.54.030 of Chapter 19.54 (Wireless
Telecommunication Facilities) of Title 19 (Zoning) of the Sunnyvale Municipal Code is hereby
amended to read as follows:

19.54.030. General requirements.

The following general requirements apply at all times to all wireless
telecommunications facilities located on private or public property in all zoning
districts:

(a) – (c) [Text unchanged.]

~~(d) At least ten feet of horizontal clearance must be maintained between
any part of the antenna and any power lines unless the antenna is installed to be an
integral part of a utility tower or facility;~~

(e) – (g) [Text unchanged.]

SECTION 2. SECTION AMENDED. Section 19.54.040 of Chapter 19.54 (Wireless
Telecommunication Facilities) of Title 19 (Zoning) of the Sunnyvale Municipal Code is hereby
amended to read as follows:

19.54.040. Design requirements.

In addition to all other requirements set forth in this chapter, all wireless
telecommunication facilities shall meet the following design requirements:

(a) – (f) [Text unchanged.]

(g) Satellite dish or parabolic antennas shall be situated as close to the
ground as possible on private property to reduce visual impact without
compromising their function. No such antenna shall be located in any front yard,
nor in a corner side yard unless the antenna is screened from pedestrian-level
view. No such antenna exceeding thirty-nine inches in diameter shall be located
within a required setback unless approved through a miscellaneous plan permit
upon a showing that no reasonable alternative location is available.

(h) – (k) [Text unchanged.]

(l) In order of preference, ancillary support equipment for facilities shall
be located either within a building, in a rear yard or on a screened roof top area.
Support equipment pads, cabinets, shelters and buildings require architectural,
landscape, color, or other camouflage treatment for minimal visual impact.
Ancillary support equipment in the public right-of-way shall be located on a pole.

(m) – (o) [Text unchanged.]

(p) Freestanding facilities, including towers, lattice towers, and
monopoles, shall be restricted to a maximum height of sixty-five feet when

located adjacent to residentially zoned properties. New Facilities on private property shall be setback at a ratio of two horizontal feet for every one foot in height. The facilities located on private property shall not be readily visible to the nearest residentially zoned property.

(q) [Text unchanged.]

(r) Except as approved by use permit, no component of any facility shall be located within required front or side yard setbacks, except for facilities mounted on poles in the public right-of-way, or facilities and related equipment not readily visible mounted on existing or new structures already allowed by the Municipal Code. No facility component shall be located so that it straddles a property line.

(s) [Text unchanged.]

SECTION 3. TABLE AMENDED. Table 19.54.080 of Chapter 19.54 (Wireless Telecommunication Facilities) of Title 19 (Zoning) of the Sunnyvale Municipal Code is hereby amended to read as follows:

**Table 19.54.080
Telecommunications Facilities Permits**

Zoning Districts	Exemptions	Miscellaneous Plan Permits	Minor Use Permits	Major Use Permits
Residential, Public Facilities, Commercial and Office R-0, R-1, R-1.5 R-1.7, R-2, R-3, R-4, R-5, RMH C-1 C-2 C-3 C-4 O PF DSP LSP	For all properties: (1) DBS, MMDS or TVBS antennas, provided that: (a) Antenna has diameter of 39" or less. (b) Antenna is mounted on mast less than 12' high. (c) Antenna is not located in a historic district or on a historic building. (d) To the extent feasible, the	For properties with residential uses: Receive-only parabolic dishes or antenna > 39" in diameter. For properties with nonresidential uses: (1) Ground mounted antenna up to 15' high and 6" in diameter. (2) Façade mounted antenna not readily visible and no projection more than 18" from façade. (3) Roof mounted antenna or antennas mounted on an existing electrical transmission tower that are not	For properties with nonresidential uses: (1) Façade mounted antennas extending above structure ridgeline or projecting more than 18" from building façade. (2) Roof mounted antennas or antennas mounted on an existing electrical transmission tower which extend up to 15' above the structure ridgeline. (3) Any facility or equipment	For properties with nonresidential uses: (1) Satellite earth stations. (2) New freestanding facilities including monopoles, lattice towers and other towers up to a maximum of 65' in height. (3) Any facility located in the required side or front yard setbacks. Such facilities must meet design standards. (4) Facilities not otherwise enumerated.

Zoning Districts	Exemptions	Miscellaneous Plan Permits	Minor Use Permits	Major Use Permits
	<p>antenna location is not readily visible from public right-of-way.</p> <p>(e) Amateur radio antennas not exceeding maximum building height limits of zoning district by 25'.</p>	<p>readily visible and do not extend above the structure ridgeline.</p>	<p>which, when installed, would result in 2 or more telecommunications facilities at the same property.</p>	
<p>Industrial MS M3 MP-TOD MP-C MP-I</p>	<p>Same as for Residential and Public Facilities</p>	<p>(1) Receive-only parabolic dishes or antennas greater than 39" in diameter.</p> <p>(2) Ground mounted antennas not exceeding 15' in height and 6" in diameter.</p> <p>(3) Façade mounted antennas extending above the structure ridgeline or projecting more than 18" from the building façade.</p> <p>(4) Roof mounted antennas or antennas mounted on an existing electrical transmission tower extending up to 15' above the structure</p>	<p>(1) Roof mounted antennas or antennas mounted on an existing electrical transmission tower extending more than 15' above the structure ridgeline.</p> <p>(2) Monopoles, lattice towers or other towers > 65' but < 90' high, and located more than 1,000' from the right-of-way of a freeway, expressway or arterial street.</p>	<p>(1) Satellite earth stations.</p> <p>(2) Monopoles, lattice towers or other towers > 65' but < 90' high, which is located less than 1,000' from the right-of-way of a freeway, expressway or arterial street.</p> <p>(3) Monopoles, lattice towers or other towers > 90' high.</p> <p>(4) Facilities or equipment located in the front or side yard setbacks of properties not in residential use.</p> <p>(5) Freestanding facilities include towers, lattice</p>

Zoning Districts	Exemptions	Miscellaneous Plan Permits	Minor Use Permits	Major Use Permits
		ridgeline. (5) Any facility or equipment which, when installed, would result in 2 or more telecommunications facilities at the same property. (6) Monopoles, lattice towers or other towers up to 65', if located more than 1,000' from the right-of-way of a freeway, expressway or arterial street. (7) Antennas mounted on an existing electrical transmission tower.		towers and monopoles which will be located within 1,000' of another freestanding facility. (6) Facilities not otherwise enumerated.
<u>Public Right-of-Way</u>	None	<u>Any facility meeting the design criteria for wireless facilities on joint poles or light poles and located more than 300 feet from the property line of a public park, public school or heritage resource or landmark. If the Director determines that the facility creates a visual impact or is not in keeping with the character of the</u>		<u>Any facility not meeting the design criteria for wireless facilities on joint poles or light poles or located within 300 feet of a public park, public school or heritage resource or landmark.</u>

Zoning Districts	Exemptions	Miscellaneous Plan Permits	Minor Use Permits	Major Use Permits
		<u>surrounding area, the Director may refer the permit to the planning commission.</u>		

SECTION 4. SECTION AMENDED. Section 19.54.040 of Chapter 19.54 (Wireless Telecommunication Facilities) of Title 19 (Zoning) of the Sunnyvale Municipal Code is hereby deleted in its entirety.

~~19.54.160. Public property and public right-of-way.~~

~~— (a) The city manager or the manager’s designee may establish terms and conditions under which any public property or facility or public right-of-way may be made available by lease or franchise as a location for a wireless telecommunication facility.~~

~~— (b) No wireless telecommunication facility shall be constructed in or upon a public property or facility owned by the city, unless the telecommunication provider seeking to operate the facility has obtained a lease from the city, authorizing the provider to occupy the property or facility. The lease terms shall include the standard set forth in this chapter.~~

~~— (c) No wireless telecommunication facility shall be constructed in a public right-of-way unless the telecommunication provider seeking to operate the facility has obtained a franchise and any applicable encroachment permit. The franchise terms shall include the standards set forth in this chapter.~~

~~— (d) The telecommunications provider shall indemnify and hold harmless the city and its officers and employees from any and all liability for damage proximately resulting from any operations of the provider under its lease or franchise.~~

~~— (e) The telecommunications provider shall pay to the city on demand the cost of all repairs to public property made necessary by or proximately resulting from any operations of the provider under its lease or franchise.~~

SECTION 5. EXEMPTION FROM CEQA. The City Council finds, pursuant to Title 14 of the California Code of Regulations, Section 15061(b)(3), that this ordinance is exempt from the requirements of the California Environmental Quality Act (CEQA) in that it is not a Project which has the potential for causing a significant effect on the environment.

SECTION 6. CONSTITUTIONALITY; SEVERABILITY. If any section, subsection, sentence, clause or phrase of this ordinance is for any reason held to be invalid, such decision or decisions shall not affect the validity of the remaining portions of this ordinance. The City Council hereby declares that it would have passed this ordinance, and each section, subsection, sentence, clause and phrase thereof irrespective of the fact that any one or more sections, subsections, sentences, clauses or phrases be declared invalid.

SECTION 7. EFFECTIVE DATE. This ordinance shall be in full force and effect thirty (30) days from and after the date of its adoption.

SECTION 8. POSTING AND PUBLICATION. The City Clerk is directed to cause copies of this ordinance to be posted in three (3) prominent places in the City of Sunnyvale and to cause publication once in The Sun, the official publication of legal notices of the City of Sunnyvale, of a notice setting forth the date of adoption, the title of this ordinance, and a list of places where copies of this ordinance are posted, within fifteen (15) days after adoption of this ordinance.

Introduced at a regular meeting of the City Council held on _____, 2012, and adopted as an ordinance of the City of Sunnyvale at a regular meeting of the City Council held on _____, 2012, by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

ATTEST:

APPROVED:

City Clerk
Date of Attestation: _____

Mayor

SEAL

APPROVED AS TO FORM AND LEGALITY:

Michael D. Martello, Interim City Attorney