

## Planning Commission Staff Report

---

July 10, 2013  
Item 5.b.

**SUBJECT:** P11-0899

**APPLICANT:** AT&T

**PROPERTY OWNER:** County of Alameda

**PURPOSE:** Application for Design Review approval to install a wireless facility consisting of a 55-foot tall monopine and related wireless equipment

**GENERAL PLAN:** Industrial, Commercial & Offices – Retail/Highway/Service Commercial, Business and Professional Office; General and Limited Industrial

**ZONING:** None

**LOCATION:** Within the Transportation Corridor behind 2126 Rheem Drive and adjacent to the Iron Horse Trail.

**EXHIBITS:**

- A – Draft Conditions of Approval
- B – Site Plan, Floor Plan, and Elevations of the Proposed AT&T Wireless Facility; Photosimulations, Coverage Map, and Radio Frequency report by Hammett and Edison
- C – Peer Review Report by Telecom Law Firm, P.C.
- D – Location and Notification Maps

---

### BACKGROUND

AT&T Wireless wishes to construct a personal wireless facility within the right-of-way of the Alameda Transportation Corridor behind 2126 Rheem Drive which is adjacent to the Iron Horse Trail. Section 18.110.020 of the Pleasanton Municipal Code (PMC) (Personal Wireless Service Facility) requires all personal wireless service facilities be subject to design-review approval by the zoning administrator and requires all property owners within 600 feet of a property on which a personal wireless service facility is proposed to be notified of the application. The PMC also allows the zoning administrator to refer any personal wireless service application to the planning commission for review and action.

## SITE DESCRIPTION

The Iron Horse Trail is a multi-use regional trail which traverses numerous cities in the East Bay. This segment of the Iron Horse Trail in Pleasanton is 15 feet wide and is located in the middle of the 100-foot wide Alameda Transportation Corridor. The land uses along the trail between Santa Rita Road (east side of the Corridor) and Rheem Drive (west side of the Corridor) are office and industrial uses. Structures that may be seen along the east side of the trail within the transportation corridor include PG&E utility poles and a wireless facility for Sprint PCS, a 48-foot tall monopole, and an equipment enclosure for ground-mounted equipment and cabinets.



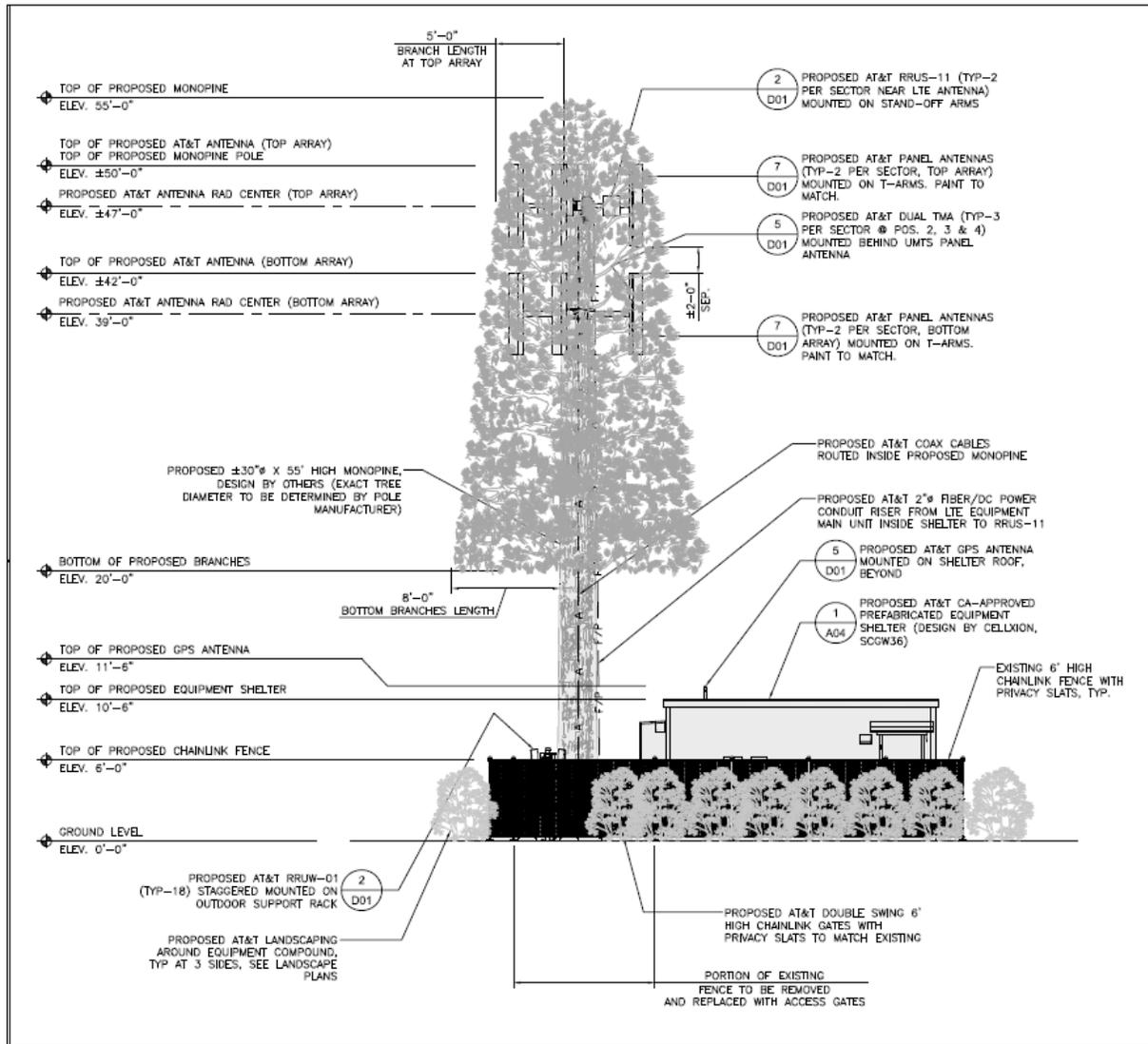
Location Map

## PROJECT DESCRIPTION

The proposed AT&T wireless facility consists of the following equipment which will be located within a 20'-0" by 35'-0" lease area:

- a 55'-0" tall monopine (faux pine tree);
- twelve 6'-0" tall panel antennas to be mounted on the monopine;
- 18 Remote Radio Units (RRUs) located in the equipment area;
- Four Surge Protector Dome Units (one unit will be mounted and hidden in the monopine; the other three units will be ground mounted.);
- A 10'-6" tall prefabricated equipment shelter (20'-0" x 11'-5");
- A GPS antenna mounted on the roof of the equipment shelter;
- A 6'-0" high chain-link fence with privacy slats at the perimeter of the lease area; and,

■ Landscaping to screen the lease area.



## ANALYSIS

### Legal Background/Federal Law

The Telecommunications Act of 1996 provides that local governments: (a) shall not unreasonably discriminate among providers of functionally equivalent services (i.e., favor one wireless carrier over another); (b) shall not prohibit or have the effect of prohibiting the provisions of personal wireless services (e.g., cannot prevent a wireless carrier from closing a significant gap in service coverage); and (c) shall not regulate the placement and construction of personal wireless service facilities on the basis of the environmental effects of radio frequency (RF) emissions to the extent that such facilities comply with the FCC's regulations concerning such emissions (47 USC 332(c)). The effect of this federal law is to enable personal wireless service providers to establish networks for their services and to preclude

local governments from regulating the potential health impacts of wireless facilities. While local governments may not establish or regulate RF emissions standards, they may review those applications to ensure compliance with the RF standards set by the FCC (Govt. Code section 65850.6(f)) and they may take aesthetics into consideration when reviewing an application.

In 2009, the FCC adopted what is commonly referred to as the “shot clock” rule to encourage expansion of the wireless network. The rule says that local governments have to either approve or deny an application for the construction of a *new* wireless facility within 150 days and must approve or deny a request to collocate a wireless facility within 90 days. If the local agency fails to comply with these deadlines, wireless applicants are authorized to file a lawsuit within 30 days of the shotclock having run.

### **Section 18.110 of the Pleasanton Municipal Code (Wireless Ordinance)**

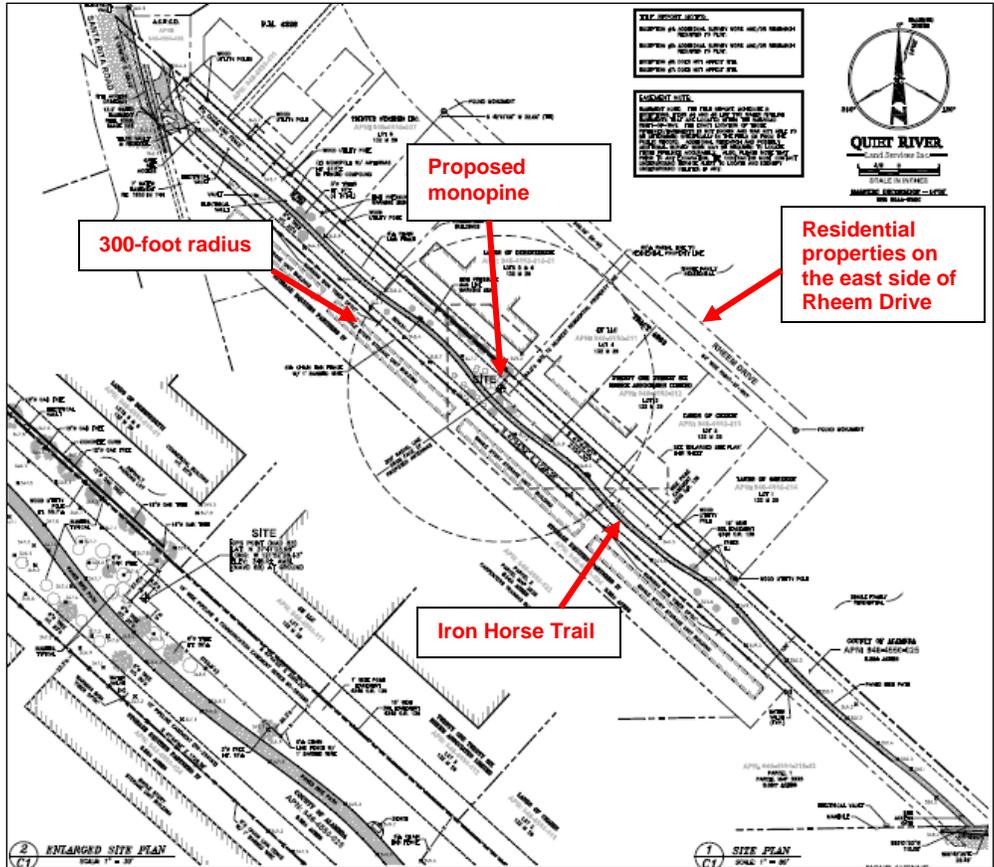
In 1998, the City Council adopted the Personal Wireless Service Facilities ordinance (PMC section 18.110). The ordinance allows the installation of wireless facilities once the applicant has provided the required radio frequency emission report prepared by a licensed engineer, has demonstrated that there is a coverage gap in the target area, and that the proposed wireless facility meets the ordinance’s locational requirements. In addition, the ordinance requires wireless facilities to mitigate visual impacts by using stealth techniques and requires collocation of the wireless facility if it is structurally and technically feasible.

#### Radio Frequency Emission Report

A radio frequency emission report was prepared by Hammett & Edison, Inc., Consulting Engineers, to evaluate the proposal’s compliance with FCC regulations limiting human exposure to radio frequency emission. The report concluded that the proposed facility will comply with the FCC guidelines concerning limiting public exposure to radio frequency emission. A copy of the report is attached in Exhibit B.

#### Location Requirements

Per §18.110.050 of the PMC, no personal wireless service facility shall be located within three hundred feet (300’) from any residences, residentially or agriculturally zoned property, schools, parks, childcare centers, or senior care/assisted living facilities. Here, the nearest residential property line is 364 feet from the center of the monopine. Further, trails such as the Iron Horse Trail, are not designated as parks within Pleasanton’s General Plan. In sum, this application meets all of the locational requirements of the City’s ordinance. Please see the surveyed radius map on the following page.



Stealth Techniques

All personal wireless service facilities are required to visually blend with the environment and not be readily apparent, or “stealth”. The proposed panel antennas would be mounted onto faux tree branches and be covered by faux pine needles. The faux tree would be similar to a conifer tree where the tree trunk narrows as its height increases. Likewise, the foliage on the tree tapers; however, the tree branches would always extend beyond the face of the panel antennas so that the panel antennas would not be readily visible. The applicant has provided a faux tree sample which shows the colors and details of the leaves and bark. (The sample is available upon request and staff will bring it to the meeting.) Please see photo-simulations on the following page of the proposed facility taken from the Iron Horse Trail and Rheem Drive (from the residential side).



Photo-simulation of the faux tree at Iron Horse Trail (looking north)



Photo-simulation of the faux tree viewed from the Iron Horse Trail (looking south)



Photo-simulation of the faux tree viewed from Rheem Drive



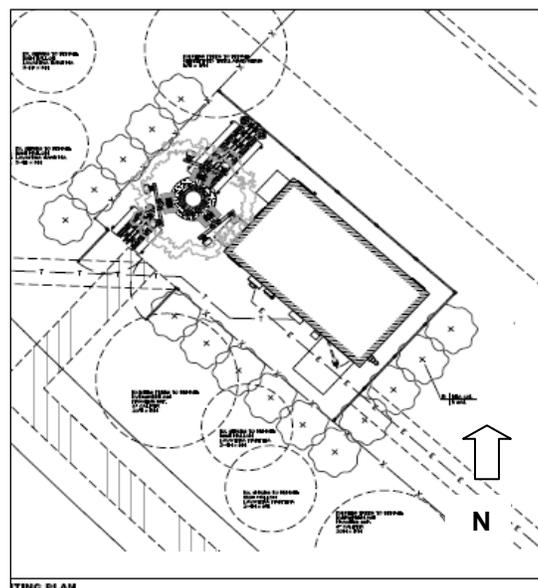
Photo-simulation of the faux tree viewed from Rheem Drive

## Collocation

As mentioned above, Sprint PCS has an existing wireless facility located within the transportation corridor. Sprint's monopole has a diameter of 16'-6", which, as stated by the applicant, is not large enough to accommodate the number and size of panel antennas required by AT&T.

## Landscape/Irrigation Plan

The proposed landscape plan shows that shrubs would be planted to screen the chain-link fence. As proposed, the applicant would plant 15, five-gallon size Rhamnus Californica "Eve Case" (Coffee Berry) along the perimeter of the chain-link fence. In addition, 5 series stream bubbler sprinkler heads would be installed. Staff has added a condition requiring sprinkler heads to be directed away from the trail.



Proposed Landscape Plan

## **Neighborhood Meeting**

In response to the City's notice of AT&T's application, staff received a call from Mr. James Yudelson, a resident of Alexander Court, who expressed concerns regarding the aesthetics of the proposed facility and questioned the necessity of such a facility.

On May 23, 2013, staff noticed and then held a neighborhood meeting regarding the proposal. Six residents attended the meeting. Issues discussed at the meeting included the existing coverage gap in the area and the design of the faux tree.

## Peer Review

Following that meeting, staff retained Jonathan Kramer, Esq. of Telecom Law Firm, P.C. to “peer review” AT&T’s application to determine whether a significant gap in coverage exists, whether the radio frequency emission report is correct, whether the proposed facility could be improved aesthetically, and any other issues that may be relevant to the application. Mr. Kramer concluded that based on the coverage maps dated May 28, 2013, there is a gap in coverage for AT&T’s wireless customers. Mr. Kramer reviewed the proposed design and recommended that the following details be incorporated into the design. A copy of the report is attached as Exhibit C:

- Panel antennas must be located within the tree canopy. Thus, it is recommended that there be a minimum of 12” of branches extending past all panel antennas and antenna-related equipment at each level of the monopine.
- Panel antennas must be treated to be camouflaged. Thus, it is recommended that all antenna panels, antenna-related equipment, and mounts at each level be painted green(s) and brown(s) to match the tree.
- Panel antennas must be covered with pine-needle sockets
- Tree dimensional bark cladding is required on all portions of the tree trunk and branches.
- Tree trunk and branches must be painted brown.
- Tree branches need to start at 12’ or 13’ level to avoid a bottle-brush appearance.
- The number of braches per foot should generally be 3.5 branches per vertical foot between the starting height and the top. Therefore, a schedule of proposed braches should be included in the plans listing the minimum branch length, mounting height, and angular orientation from true north.
- All cables should be run only inside the tree trunk.

Staff had a follow-up discussion with Mr. Yudelson regarding FCC requirements and design specifics as recommended by Mr. Kramer. Mr. Yudelson appreciated staff’s follow-up and responses, and did not have further questions.

## PUBLIC NOTICE

Notices regarding the proposed wireless design review application, the neighborhood meeting, and this public hearing were mailed to the surrounding property owners as required by the municipal code. A map showing the noticing area is attached to this report. The public notice was also published in *The Valley Times*. No one has contacted staff regarding the proposed wireless facility as of the date the staff report was prepared.

## ENVIRONMENTAL ASSESSMENT

This project is categorically exempt from environmental review pursuant to California Environmental Quality Act Guidelines, Section 15303, New Construction or Conversion of Small Structures. Therefore, no environmental document accompanies this report.

## **CONCLUSION**

The proposed wireless facility meets the requirements of the ordinance. The subject site is an appropriate location for the proposed installation. With the operation of the wireless facility, the wireless coverage in the area will be improved.

## **STAFF RECOMMENDATION**

Staff recommends that the Planning Commission approve Case P11-0899 subject to the conditions listed in Exhibit A.

Staff Planner: Jenny Soo; 925.931.5615, or email: [jsoo@cityofpleasantonca.gov](mailto:jsoo@cityofpleasantonca.gov)

## **Exhibit A**

### **Draft Conditions of Approval**

#### **P11-0899 (AT&T) Iron Horse Trail**

1. The installation of the wireless facility including 12, six-foot tall panel antennas mounted to a 55-foot tall faux monopine and related equipment cabinets shall be constructed and maintained substantially as shown on the plans and photo simulations, Exhibit B, dated "February 7, 2013" and "January 30, 2013," Coverage Map "Received May 28, 2013," on file with the Planning Division, except as modified by these conditions. Minor changes to the project may be allowed subject to prior approval by the Director of Community Development if found to be in substantial conformance with the approved exhibits.
2. The personal wireless service facility shall adhere to the regulations contained in Chapter 18.110, (Personal Wireless Service Facilities) of the Pleasanton Municipal Code.
3. All conditions of approval for this case shall be written by the project developer on all building permit plan check sets submitted for review and approval. These conditions of approval shall be on, at all times, all construction plans kept on the project site. It is the responsibility of the applicant to ensure that the project contractor is aware of, and abides by, all conditions of approval. Prior approval from the Planning Division must be received before any changes are constituted in design of the wireless facility.
4. The construction plans submitted for issuance of building permit shall clearly show the following:
  - Panel antennas and antenna-related equipment shall be located within the tree canopy. There shall be a minimum of 12" of branches extending past all panel antennas and antenna-related equipment at each level of the monopine.
  - Panel antennas and antenna-related equipment shall be camouflaged. All antenna panels, antenna-related equipment, and mounts at each level shall be painted green(s) and brown(s) to match the tree. Paint colors (manufacture and lot number) shall be included in the construction plans.
  - Panel antennas, antenna-related equipment, and mounts at each level shall be covered with pine-needle sockets.
  - Three dimensional bark cladding shall be required on all portions of the tree trunk and branches.

- Tree trunk and branches must be painted brown.
- Tree branches shall start at 12' or 13' level to avoid a bottle-brush appearance.
- The number of braches per foot shall be 3.5 branches per vertical foot between the starting height and the top. A schedule of proposed braches shall be provided to include the minimum branch length, mounting height, and angular orientation from true north.
- All cables should be run only inside the tree trunk.

The above design details are subject to review and approval by the Director of Community Development prior to issuance of building permit.

5. The equipment shelter, chain-link fence and slats shall be painted forest green.
6. The sprinkler heads providing irrigation to the shrubs at the wireless facility shall be directed away from the adjoining Iron Horse Trail.
7. Prior to building permit issuance, AT&T Wireless shall enter into an agreement with the City, approved by the City Attorney, which guarantees that all landscaping and open space areas included in this project will be maintained at all times in a manner consistent with the approved landscape plan for this development. Said agreement shall run with the land for the duration of the existence of the wireless facility located on the subject property.
5. Final detailed panel antenna drawings shall be included in the plans submitted for the issuance of a building permit. Said detailed drawings shall be consistent with the approved detailed drawings plus any conditions of approval, and shall be detailed in terms of dimensions.
6. Prior to operating the antennas, the applicant shall install all signage required by the Federal Communications Commission.
7. Prior to the issuance of a building permit, the applicant shall submit to the Building and Safety Division a report from a structural engineer, licensed by the State of California, stating that the proposal would be structurally sound. No building permit shall be issued until the Chief Building Official reviews and approves the structural report.
8. Prior to the issuance of a building permit, the property owner or authorized agent for the project shall provide a financial guarantee to the Building and Safety Division for the removal of the facility in the event that the use is abandoned, or its approval terminated. The financial guarantee shall be 10% of the cost of constructing the facility and shall be submitted in cash or as a bond. If submitted as a bond, the bond shall be valid for a minimum of eleven (11) years from the date of building permit issuance. Prior to the issuance of a building permit, the property owner or the authorized agent for the project

shall also sign an interest waiver for the financial guarantee. In the event that the entire facility is removed from the site, the property owner or authorized agent for the project may request a refund of the financial guarantee. All refund requests shall be made through the Planning Division.

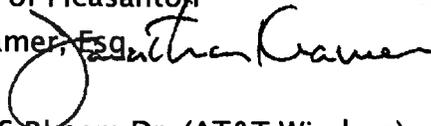
9. The mounting equipment used to support the antennas shall be fire resistant, termite proof, and subject to all requirements of the Uniform Building Code.
10. The personal wireless service facility shall be reviewed and approved by the Livermore-Pleasanton Fire Department and the Building and Safety Division prior to the installation of the personal wireless service facility. All required City permits must be obtained prior to the installation of the personal wireless service facility.
11. Within 45 days of initial operation, AT&T Wireless shall submit to the Planning Division a written certification by an electrical engineer licensed by the State of California that the personal wireless service facility, including the actual radio frequency emission of the facility, is in compliance with the application submitted, all conditions imposed, and all provisions of Chapter 18.110 (Personal Wireless Service Facilities).
12. AT&T Wireless shall hire a qualified electrical engineer licensed by the State of California, and approved by the Zoning Administrator to measure the actual radio frequency emission of the personal wireless service facility and determine if it meets the Federal Communications Commission's standards. A report of all calculations, required measurements, and the engineering's findings, with respect to compliance with radio frequency standards shall be submitted to the Planning Division within 2-3 years of the date of approval for this case and every 3 years after.
13. As specified in Chapter 18.110 (Personal Wireless Service Facilities), approval of the personal wireless service facility in this case, Case P11-0899 is valid for a maximum of ten years from the date of approval, until July 26, 2023. After ten years, the applicant must reapply for approval to continue operation.
14. To the extent permitted by law, the project applicant shall defend (with counsel reasonably acceptable to the City), indemnify and hold harmless the City, its City Council, its officers, boards, commissions, employees and agents from and against any claim, action, or proceeding brought by a third party against the indemnified parties and the applicant to attack, set aside, or void the approval of the project or any permit authorized hereby for the project, including (without limitation) reimbursing the City its attorneys fees and costs incurred in defense of the litigation. The City may, in its sole discretion, elect to defend any such action with attorneys of its choice.

{end}

Memorandum

JUN 28 2013

CITY OF PLEASANTON  
PLANNING DIVISION

To: Jenny Soo, City of Pleasanton  
 From: Jonathan L. Kramer, Esq.   
 Date: June 27, 2013  
 RE: P11-0899 2126 Rheem Dr. (AT&T Wireless)

At the direction of the City of Pleasanton ("City"), I have reviewed AT&T Mobility's ("AT&T") application materials to install a new wireless telecommunications facility at 2126 Rheem Drive.

The City has asked that I evaluate the proposed radio frequency elements and emissions from AT&T's proposed project, and to assess whether there are ways and means to make it less intrusive to the public.

*Project Description*

AT&T proposes to install a new unattended wireless telecommunications facility consisting generally of the following major elements and systems:

1. Within a prefabricated equipment building, AT&T will install indoor equipment cabinets and equipment racks. The cabinets and racks will contain the telecommunications base station equipment. The prefabricated equipment building will be enclosed by a new 6' tall chain link fence. A GPS antenna will be mounted to the roof of the prefabricated building.
2. Also within the fenced area near ground level AT&T will mount 18 remote radio units ("RRUs") which are essentially radio transmitters and receivers, as well as 3 DC power surge protectors to protect the RRUs.
3. Within the fenced area AT&T will install a new 55' tall monopine. Six panel antennas are to be installed on the monopine centered at the 47' level, and 6 more panel antennas are to be installed at

Telecom  
Law Firm. PC

Telecommunications Technology  
and Legal Counsel for  
Government Agencies  
and Private Institutions

www.TelecomLawFirm.com

Main Office:  
Kramer@TelecomLawFirm.com  
CA Tel +1 (310) 312-9900  
NM Tel +1 (505) 428-9900  
Fax +1 (310) 473-5900

Suite 306  
2001 S. Barrington Avenue  
Los Angeles, California  
90025-5379

Jenny Soo  
2126 Rheem Drive  
P11-0899 (AT&T Mobility)  
June 27, 2013  
Page 2 of 7

the 39' level. Six RRUs will be installed adjacent to the 6 antennas at the 47' level.

4. Fiber optic and DC power cables run within an externally-mounted 2" conduit on the trunk of the monopine will connect the antennas at the 47' level to the equipment cabinets and racks, while coaxial cables within the monopine will connect the antennas at the 39' level to the ground-mounted RRUs, equipment cabinets and racks.
5. This site will be interconnected to AT&T's mobile telephone switching center using a fiber optic cable connected to the AT&T Wireline telephone service pedestal located to the north of Sutter Gate Avenue, approximately 850 feet from the fenced equipment enclosure. AT&T will secure site electrical power via a new underground run from an existing PG&E transformer at a route distance of about 160' southeast of the fenced equipment enclosure.

#### ***RF Safety Considerations***

The FCC completely occupies the field as to setting RF safety standards in the United States. The City is not permitted to set its own standards regardless of whether higher, lower, or even the same as the FCC's standards. The Commission does, however, permit the City to determine whether a proposed wireless project meets the requirements of the FCC rules found at 47 CFR § 1.1307 et seq. (the "FCC rules") as explained and supplemented by the FCC Office of Engineering and Technology Bulletin 65 ("OET 65") RF safety directives.

Under the FCC rules, certain types of wireless projects are deemed to be "categorically excluded," thus not subject to further RF evalu-

Jenny Soo  
2126 Rheem Drive  
P11-0899 (AT&T Mobility)  
June 27, 2013  
Page 3 of 7

ation under the rules due to identified factors including: whether the antenna supporting structure is not a building or shared to perform some other function, and the lowest portion of the transmitting antenna is at least 10 meters above ground.

The proposed project does qualify for categorical exclusion under the FCC rules because the antennas are all above 10 meters in height above ground. Accordingly, this site has demonstrated planned compliance with the FCC rules as to radio frequency emissions safety, and there is no basis for the City to deny the project based on the radio frequency emissions that will occur at this site.

#### ***Design Comments***

The main camouflage element of this project is the use of a monopine. The plans note that the top branches will be 5' in length, while the bottom branches will be 8' feet in length, and that all of the antennas will be within the canopy of the branches. (Sheet A04, Panel 2).

Enclosing the panel antennas within the canopy is desirable, and none should be permitted by design or construction to extend so as to protrude beyond the branch canopy. Failure to insist on a requirement to extend the branches past the antennas can result in the type of design shown in Figure 1, below.

<Balance of page intentionally left blank>

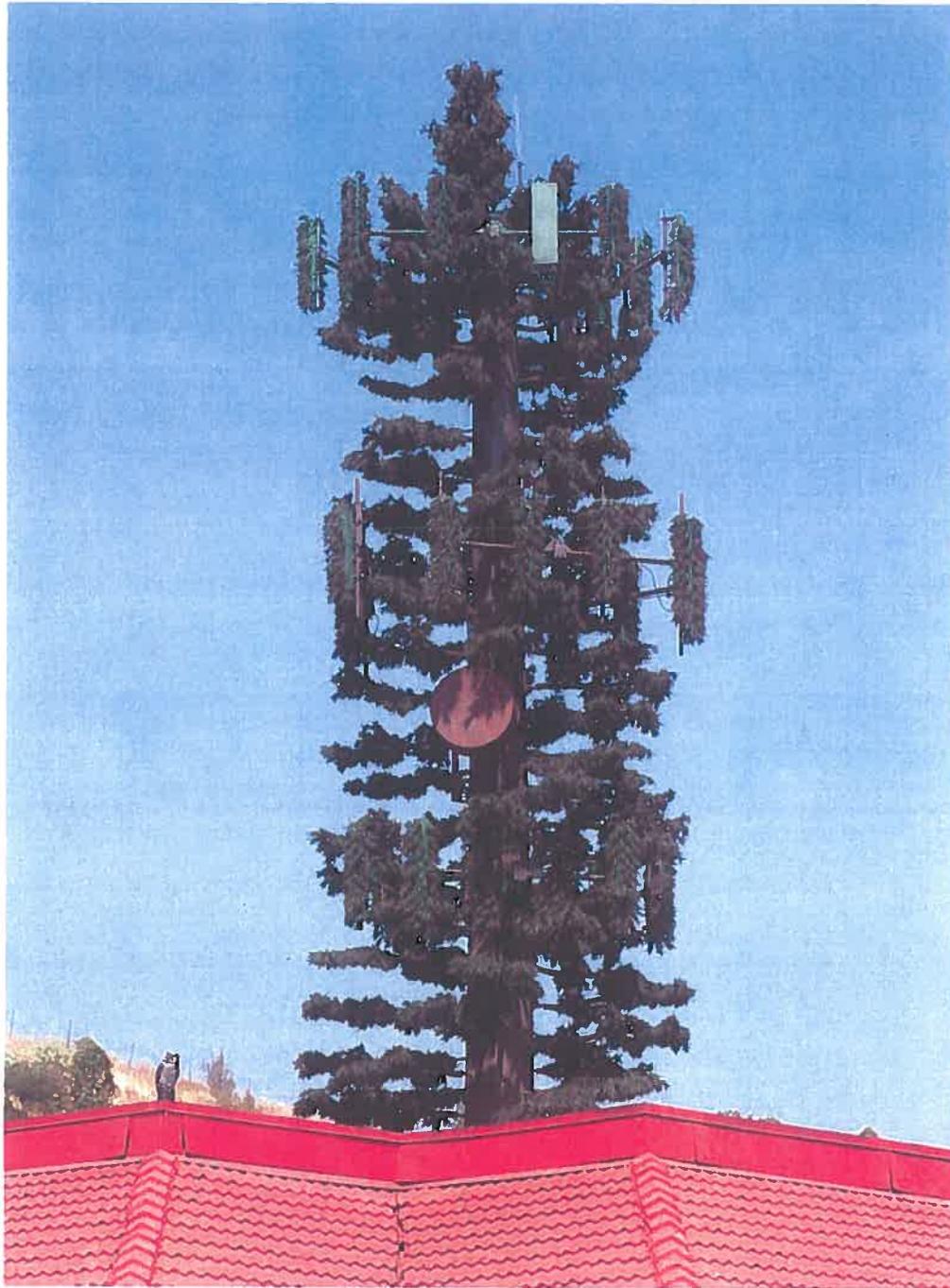


Figure 1: Example of antennas extending beyond the branches  
(photo by J. Kramer)

I recommend that there be a minimum 12" of branches extending past all panel antennas and antenna-related equipment (such as the antenna actuators, RRUs and DC surge protectors) at each level of the monopine.

Presently, AT&T shows that it will use painted mounts to hold the panel antennas, but the antennas are not shown to be treated to be camouflaged. I recommend that all antenna panels, all equipment mounted at the antenna levels (antenna actuators, cables, RRUs, DC surge protectors, etc., and the mounts upon which those equipment are attached be painted greens and browns in a camouflage patterns to blend with the monopine tree design. Moreover, AT&T should include pine-needle sock covers for all panel antennas. In Figure 1, the one panel antenna that is neither camouflage-painted nor equipped with a pine-needle sock cover is quite visible.

Another significant element of proper monopine camouflage design is the requirement for three dimensional bark cladding on all portions of the trunk and branches.

Figure 2, below, illustrates the visual discontinuity and heightened sun reflections from the flat surfaces that lack three dimensional bark cladding.

<Balance of page intentionally left blank>

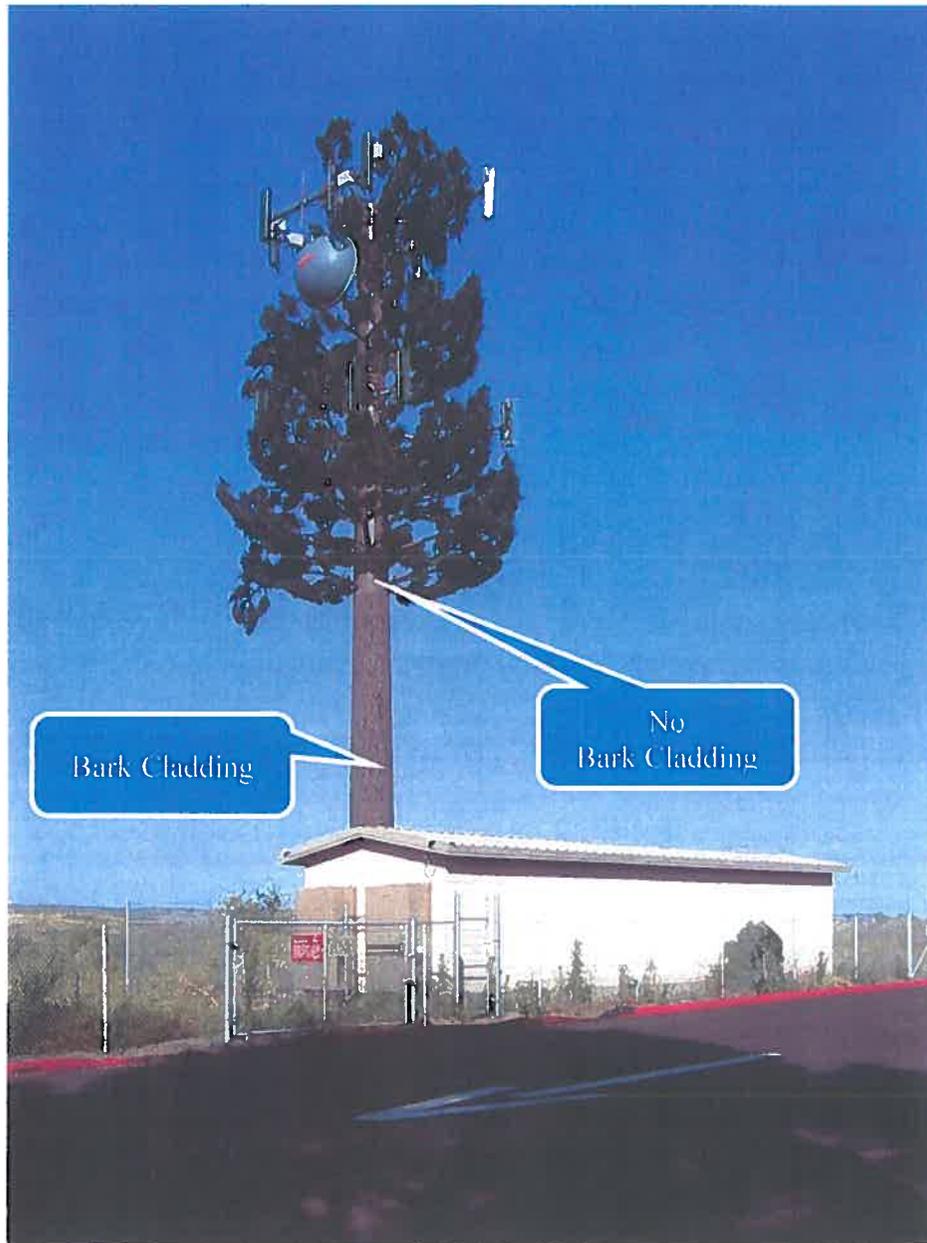


Figure 2: Partial bark cladding (Photo by J. Kramer).

The planned design does not show that the monopine will use bark cladding from top to bottom and on all branches. I recommend that full length bark cladding be a City requirement.

Jenny Soo  
2126 Rheem Drive  
P11-0899 (AT&T Mobility)  
June 27, 2013  
Page 7 of 7

The number of branches per foot is not shown in the design plans. Generally 3.5 branches per vertical foot between the starting height and the top is the minimum that should be approved by the City.

Note that the project plans show the branches to start at 20 feet above ground level. This will result in a bottle-brush effect that can be eliminated by starting the branches at the 12' or 13' level. A schedule of proposed branches should be included in the plans to be approved, including at a minimum the branch length, mounting height, and angular orientation from true north.

The plans show that AT&T proposes to install an external 2" conduit running vertically along the length of the monopine trunk for transport of fiber and DC power cables to the top level of antennas and RRUs. This visual discontinuity should be avoided. All cables, regardless of whether coaxial, DC, fiber, or grounding should be run only inside the trunk of the proposed monopine.

### ***Conclusion***

The proposed design of the monopine, as set out by AT&T, is not the least intrusive means for it to provide its services.

Adoption of the recommendations in this memo will substantially improve the design and materially reduce the visual impact of the proposed monopine on the community.

/jlk

P11-0899, AT&T

City of Pleasanton

GIS

Department

2126 Rheem Drive

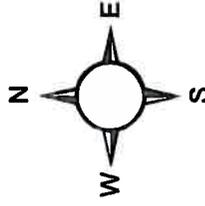


EXHIBIT D

Printed 6/26/2013

