COUNTY OF SAN MATEO
PLANNING AND BUILDING DEPARTMENT

DATE: April 6, 2017

TO: Zoning Hearing Officer

FROM: Planning Staff

SUBJECT: Consideration of a Use Permit Renewal pursuant to Sections 6500 and 6512.6 of the County Zoning Regulations, to allow for the continued operation of a wireless telecommunications facility, located at 7400 Stage Road in the unincorporated San Gregorio area of San Mateo County.

County File Number: PLN 2003-00487

PROPOSAL

The applicant, AT&T Wireless, proposes the continued operation of a wireless telecommunications facility which consists of six 10-foot tall antenna masts each with one antenna mounted to it and a 500 sq. ft. enclosed equipment area. The equipment area currently contains two equipment boxes, power and telco boxes mounted on an H-frame structure, and a transformer. The antennas are connected to the cabinets via underground cables.

The project also includes a minor modification to the existing facility to add one new pipe mount to each of the three sectors thereby connecting the poles. The project also includes relocating the existing antennas onto the new pipe mounts and adding a new antenna to each of the three sectors for a total of nine antennas. Three new remote radio units (RRUs) will also be added on to the new pipe mount. A new DC surge suppressor will be added to the top of one antenna mast per sector for a total of three. The total height will increase from 10.33 feet to 12.17 feet. Within the equipment enclosure two cabinets will be removed and replaced with three new equipment cabinets. All new cables connecting the antennas to the new equipment will be placed underground within the existing underground conduit.

RECOMMENDATION

Approve the Use Permit Renewal, County File Number PLN 2003-00487, by adopting the required findings and conditions of approval.

BACKGROUND

Report Prepared By: Angela Chavez, Project Planner, Telephone 650/599-7217

Applicant: Crown Castle for AT&T Wireless

Owner: Sara Armstrong

Location: 7400 Stage Road, San Gregorio

APN: 081-240-020

Size: 49.25 acres

Existing Zoning: Planned Agricultural Development (PAD)

General Plan Designation: Agriculture

Existing Land Use: Existing residence and agricultural uses including cattle grazing, and three existing wireless telecommunications facility

Flood Zone: FEMA Flood Zone X (Area of Minimal Flooding); Community Panel No. 060311 325C, effective date October 16, 2012.

Environmental Evaluation: Categorically exempt pursuant to Section 15301, Class 1: Continued Operation of an Existing Facility, and Section 15302, Class 2: Replacement or Reconstruction of an Existing Structure.

Setting: The parcel is located approximately 0.25 miles south of the intersection of La Honda Road (Highway 84) and Stage Road. Cabrillo Highway (Highway 1) is approximately 0.83 miles from the project site. The project parcel borders other agriculturally zoned parcels. The parcel is improved with a single-family dwelling, agricultural-related structures, and three existing cellular facilities. Agriculture on the parcel consists of dry grazing. Highway 84 is a County Scenic Corridor and Highway 1 is a State Scenic Corridor. The equipment enclosure and monopoles are not located on prime soils.

DISCUSSION

A. KEY ISSUES

1. Conformance with the General Plan

The project continues to comply with all applicable General Plan Policies, with specific discussion of the following:

Chapter 1 – Vegetative, Water, Fish and Wildlife Resources

Policy 1.24 (Protect Vegetative Resources) requires development to minimize the removal of vegetative resources and protect vegetation that

stabilizes slopes or reduces surface water runoff, erosion or sedimentation. The coaxial cables necessary to support the new equipment were previously installed during the initial site construction. The new pipe mounts will be mounted on the existing antenna masts which limits the ground disturbance to the property. The new cables connecting the mast mounted equipment to the equipment enclosure will require only minimal site disturbance for installation. However, staff has added conditions of approval to this project to include an erosion and sediment control plan for any site disturbance and requires reseeding/replanting of any disturbed soils with native grasses (Conditions 10-14) to ensure the vegetative state of the parcel is maintained.

Chapter 2 – Soil Resources

Policy 2.17 (Regulate Development to Minimize Soil Erosion and Sedimentation) requires the regulation of development to minimize soil erosion and sedimentation. At the present time, the 5-foot wide coaxial cable route from the proposed equipment structure to the antenna masts is covered with grasses. While the project disturbance is expected to be relatively minor, staff has added conditions requiring an erosion and sediment control plan and a revegetation plan in order to be consistent with the original conditions of approval.

Chapter 4 – Visual Quality

Policies 4.20 (Utility Structures) and 4.21 (Scenic Corridors) require minimizing the adverse impacts to visual quality by utility structures and discuss the protection and enhancement of the visual quality of scenic corridors by managing the location and appearance of structural development. The continued operation and modification of the facility limits the overall visual impacts as the development remains clustered and limits new areas of disturbance. The antenna masts are located approximately 0.25 miles from the intersection of Stage Road and Highway 84 (La Honda Road) County Scenic Corridor and approximately 0.83 miles from Highway 1 (Cabrillo Highway) State Scenic Corridor. The existing site is minimally visible given that: (1) the distance of each sector of antenna masts from the two roadways, (2) the visibility of the antennas is reduced because they are viewed against a backdrop of mature pine trees and Monterey cypress trees planted as part of the original approval, (3) partial screening as viewed from the roadways, and (4) the antenna masts and equipment are/will be painted a drab green.

Staff has determined that the project, as developed and conditioned, will have no significant impact on the scenic corridors.

Policy 4.24 (Location of Structures) discusses locating, siting and designing all structures and paved areas to carefully conform to the natural vegetation, landforms and topography. The continued operation of the facility in its current location ensures that the overall level of site disturbance will be minimal. No significant grading is required as the equipment infrastructure exists. The continued operation of the site ensures that there are only limited impacts to the natural vegetation and no alteration of the topography of the site.

2. Conformance with the Local Coastal Program

The existing facility was found to be compliant with all development criteria set forth by the Local Coastal Plan. The minor modifications proposed do not impact this initial determination and given the relatively minor nature of the modifications, issuance of a new Coastal Development Permit is not required.

3. Conformance with Zoning Regulations

The project site is located in the Planned Agricultural District (PAD) Zoning District. While the Planned Agricultural District does not specifically list cellular facilities as allowable uses, Section 6500 of the Zoning Regulations allows communications facilities in any zoning district upon issuance of a use permit, if the proposed project complies with the zoning regulations for that district. The existing facility was found to be compliant with all development criteria set forth by the County Zoning Regulations for the PAD District for non-agricultural development, as detailed below. The proposed modifications do not impact this initial determination and given the relatively minor nature of the modifications, issuance of a new PAD permit is not required.

	Required	**Existing / Proposed**
Front Yard	50 feet	> 5,000 feet/ No Change
Side Yards	20 feet	> 4,000 feet/ No Change
Rear Yard	20 feet	> 5,000 feet/ No Change
Maximum Height	36 feet	10.33' /12.17' (antenna mast/equipment)

4. Conformance with the Development Review Criteria

The continued operation of the site along with the minor modifications conform to all applicable Development Review Criteria listed in Chapter 20.A.2 of the San Mateo County Zoning Regulations, including the Environmental Quality Criteria, the Site Design Criteria, Utilities Criteria and Water Supply Criteria. Further discussion that substantiates the project's

compliance with the Development Review Criteria can be found in Section 1 (Conformance with the General Plan) of this report.

5. Compliance with Wireless Telecommunication Ordinance

Use permit renewals for existing facilities that were constructed prior to the effective date (January 9, 2009) of the Wireless Telecommunication Ordinance are subject to the provisions of Sections 6512 through 6512.5 of the County's Wireless Telecommunication Facilities Ordinance. The ordinance seeks to; (1) allow for the provision of wireless communications services adequate to serve the public's interest within the County; (2) require, to the maximum extent feasible, the co-location of wireless telecommunication facilities; (3) encourage and require to the maximum extent feasible the location of new wireless telecommunication facilities in areas where negative external impacts will be minimized; (4) protect and enhance public health, safety, and welfare; and (5) conform to applicable Federal and State laws. The applicant provided documentation at application submittal substantiating compliance with these requirements. The applicable sections of the ordinance are discussed below.

a. Development and Design Standards

Section 6512.2 of the Wireless Telecommunication Ordinance discusses location, minimizing visual impacts, maximum height, and future co-location of wireless facilities. The project site is located on a parcel zoned Planned Agricultural District (PAD) where existing Verizon, AT&T, and Sprint cellular facilities exist. Wireless tele-communication facilities are an allowed use within this zoning district with the issuance of a use permit. The continued operation of the site along with the minor modifications to the existing site are consistent with the objectives of the ordinance as they support the objective of co-location rather than the creation of an additional site elsewhere. Further, in 2012 Congress passed the Middle Class Tax Relief and Job Creation Act of 2012 (Tax Act) which included provisions regarding state or local government review of modifications to existing wireless towers or base stations. Specifically, Section 6409(a) of the Tax Act states that "a state or local government 'may not deny, and shall approve' any request for collocation, removal, or replacement of transmission equipment on an existing wireless tower or base station, provided this action does not substantially change the physical dimensions of the tower or base station" (Federal Communications Commission Public Notice DA 12-2047, January 25, 2013). The Federal Communications Commission (FCC) provided guidance on interpreting the provisions of Section 6409(a) and defines a "substantial change" if the following:

(1) The mounting of the proposed antenna on the tower would increase the existing height of the tower by more than 10%, or by the height of one additional antenna array with separation from the nearest existing antenna not to exceed twenty feet, whichever is greater, except that the mounting of the proposed antenna may exceed the size limits set forth in this paragraph if necessary to avoid interference with existing antennas; or

(2) the mounting of the proposed antenna would involve the installation of more than the standard number of new equipment cabinets for the technology involved, not to exceed four, or more than one new equipment shelter; or

(3) the mounting of the proposed antenna would involve adding an appurtenance to the body of the tower that would protrude from the edge of the tower more than twenty feet, or more than the width of the tower structure at the level of the appurtenance, whichever is greater, except that the mounting of the proposed antenna may exceed the size limits set forth in this paragraph if necessary to shelter the antenna from inclement weather or to connect the antenna to the tower via cable; or

(4) the mounting of the proposed antenna would involve excavation outside the current tower site, defined as the current boundaries of the leased or owned property surrounding the tower and any access or utility easements currently related to the site.

Finally, the FCC indicated that an application could be required by the relevant government entity for an administrative approval (i.e. ministerial approval). Given that the proposed height increase of 1.67 feet, placement of new panel mounts, addition of the three new panels, and removal and replacement of the equipment cabinets would comply with the above criteria, the proposed changes are considered minor in nature as the changes do not result in a substantial change, and therefore only a building permit is required to be obtained for the modifications.

b. <u>Performance Standards</u>

In compliance with Sections 6512.2 and 6512.5 of the Wireless Telecommunication Ordinance, the proposed carrier has provided proof of a valid Federal Communications Commission (FCC) license, provided maintenance plan details, and a ten-year buildout plan. The project parcel is currently leased by three of the four major carriers with only T-Mobile/MetroPCS not present on the site. Documentation

was submitted regarding attempts to contact other cellular carriers to determine whether there were plans to co-locate on the site or for expansion. T-Mobile/MetroPCS did not respond to said inquiry. Any future interest to either co-locate or modify existing sites would be processed under each carrier's respective individual permit. Any future co-location would need to pursue its own individual use permit and environmental documents, unless these requests are submitted concurrently and evaluated jointly. Otherwise, these shall not be considered a master plan site subject to administrative approval.

6. Conformance with Use Permit Findings

For the use permit renewal to be approved by the Zoning Hearing Officer, the following findings must be made:

a. *That the establishment, maintenance and/or conducting of the use will not, under the circumstances of the particular case, result in a significant adverse impact to coastal resources, or be detrimental to the public welfare or injurious to property or improvements in said neighborhood.*

The project will not result in any significant adverse impact to coastal resources as the site remains clustered and does not add any additional ground mounted equipment outside of the equipment enclosure thereby ensuring that no additional agricultural lands are disturbed. In utilizing the existing poles the proposed project also ensures that changes to the scenic views of the site will be minimal. Further, that the existing vegetation and long distance views will continue to limit the views of the facility. Lastly, there are no sensitive habitats present on the site.

As part of the renewal application, the applicant submitted an updated radio frequency (RF) field strength report. Staff reviewed this report to ensure that the RF emissions emanating from the site do not exceed the FCC's public exposure limits. When there are multiple existing and proposed facilities at a site, the report must include a cumulative emissions analysis of the proposed and existing facilities, as well as any other pending cellular communications facilities proposed for the site, assuming the applications for those projects have been deemed "complete" by Planning staff.

The RF report submitted for the proposed project analyzed the cumulative emissions resulting from the all existing cellular facilities along with the proposed modifications of this proposal. The maximum RF level for the site is 511% of the general population maximum permissible exposure limit when within one foot in front of the antennas. When at a distance of seven feet from the antennas the general population maximum exposure drops to 100% and when located 30 feet from the antennas the general population maximum exposure drops to 8.5%. The report notes that as the distance

from the antennas increases, the exposure levels decrease. However, given the high rate of exposure when in close proximity to the antennas the report includes requirements for informational/cautionary signage to be posted in and within the vicinity of the sectors and equipment enclosures warning of the proposed risks of RF exposure. Further, the report includes antenna shut down protocol to be implemented in the event that anyone needs access to or is in the vicinity of the antennas. The implementation of safety measures ensure that the facility will meet the requirements of the Federal Communications Commission (FCC). The project site is located on privately owned land and is not easily accessible to the general public. Therefore, with the proper implementation of the recommendations of the RF report and given the limited public access to the site there is no potential impact to the general public. The recommendations detailed in the RF report have also been included as Conditions of Approval in Attachment A.

b. *That this personal telecommunications facility is necessary for the public health, safety, convenience or welfare of the community.*

The continued use including the minor modifications of this site will allow increased clarity, range, and capacity of the applicant's existing cellular network and will enhance services for the public. Continuous cellular coverage is important not only in completing the act of day-to-day business and conversations, but also provides important assistance in emergency situations. By utilizing this site, missed or "dropped" calls will be reduced and seamless coverage will be possible between areas to the north and south of this site for residents, commuters, and emergency responders.

7. Compliance with Conditions of Last Approval

Indicated below are the conditions of approval from the last use permit approval letter, dated May 2, 2005. Following each condition is staff's analysis of condition compliance and whether a particular condition should be retained or modified.

Current Planning

1. **This approval applies only to the proposal, documents and plans described in this report and submitted to and approved by the Planning Commission. Minor revisions or modifications to these projects may be made subject to the review and approval of the Planning Director.**

Compliance with Condition? Yes.

Recommend to Retain Condition? Yes, but modified to read as follows:

"This approval applies only to the proposal as described in this report and materials approved by the Zoning Hearing Officer on April 6, 2017. Minor modifications to the project may be approved by the Community Development Director if they are consistent with the intent of an in substantial conformance with this approval."

2. **These permits shall be valid for one year, in which time the applicant shall be issued a building permit. Any extension of these permits shall require submittal of an application for permit extension at least 30 days prior to the permit's expiration.**

   Compliance with Condition? Yes.

   Recommend to Retain Condition? Yes, but modified. While the applicant did obtain a building permit within one year of the original permit issuance, modifications proposed also require that a building permit be issued. The modified condition will read as follows:

   "The applicant shall comply with all requirements of the Building Inspection Section at the building permit stage. The applicant shall obtain a building permit and finalize said permit accordingly."

3. **The use permit shall be valid for a period of five years. The applicant shall apply for renewal of the use permit and pay applicable renewal fees six months prior to expiration. There shall be administrative reviews for compliance with conditions of approval of this use permit in April 2006 and April 2010.**

   Compliance with Condition? Partial compliance. The administrative review in April 2006 was completed successfully. No administrative review took place in April 2010. However, the permit was only valid until May 2010. The application to renew the permit was submitted on June 14, 2010. A subsequent review by referral agencies resulted in comments from County Fire noting that the access road was not being properly maintained and continued consideration of the permit halted until the repairs were conducted. Those repairs have since been completed.

   Recommend to Retain Condition? Yes, but modified as follows:

   "This use permit shall be valid for ten years following the date of final approval. The applicant shall file for a renewal of this permit six months prior to expiration with the County Planning and Building Department, if continuation of this use is desired."

4. **Any change in use shall require an amendment to the use permit. Amendment to this use permit requires an application for amendment, payment of applicable fees, and consideration at a public hearing.**

   Compliance with Condition? Yes, the applicant has previously consulted the Planning and Building Department when modifications to the facility have been explored.

   Recommend to Retain Condition? Yes, in order to ensure continued compliance with approvals this condition remains necessary. However, the condition should be slightly modified to read: "Any modifications to this cellular facility, other than those approved in accordance with Condition number one shall require a use permit amendment. The applicant shall submit all necessary plans and documents, including all required submittal fees prior to any modifications."

5. **The applicant shall receive and maintain approval from the FCC and the CPUC concerning the operation of the project at this site. Upon receipt of each of these approvals, the applicant shall supply the Planning Division with proof of these approvals. If these approvals are ever revoked, the applicant shall inform the Planning Division of the revocation.**

   Compliance with Condition? Yes.

   Recommend to Retain Condition? Yes.

6. **The applicant shall apply for and be issued a building permit prior to the start of construction and develop in accordance with the approved plans as well as install all structures to current building codes.**

   Compliance with Condition? Yes.

   Recommend to Retain Condition? No, this is addressed in Condition number two above.

7. **All new utility lines to the proposed project shall be installed underground, unless waived by the Planning Administrator.**

   Compliance with Condition? Yes.

Recommend to Retain Condition? Yes, but modified as follows: All new utility lines to the project site shall be installed underground, unless waived by the Community Development Director.

8. **A building inspector will check the approved colors in the field prior to a final on the building permit.**

   Compliance with Condition? Yes.

   Recommend to Retain Condition? No. This is repetitive considering condition 16, below.

9. **Prior to the issuance of a building permit, the applicant shall submit to the Planning Division for review and approval an erosion and drainage control plan which shows how the transport and discharge of soil and pollutants from the project site will be minimized. The goal is to prevent sediment and other pollutants from leaving the project site and to protect all exposed earth surfaces from erosive forces. Said plan shall adhere to the San Mateo Countywide Stormwater Pollution Prevention Program "General Construction and Site Supervision Guidelines," including:**

   a. Stabilizing all denuded areas and maintaining erosion control measures continuously between October 15 and April 15.

   b. Removing spoils promptly, and avoiding stockpiling of fill materials when rain is forecast. If rain threatens, stockpiled soils and other materials shall be covered with a tarp or other waterproof material.

   c. Storing, handling, and disposing of construction materials and wastes so as to avoid their entry to a local storm drain system or water body.

   d. Avoiding cleaning, fueling or maintaining vehicles on-site, except in an area designated to contain and treat runoff.

      The approved erosion and drainage control plan shall be implemented prior to the commencement of construction.

   Compliance with Condition? Yes.

   Recommend to Retain Condition? Yes. While ground disturbance is expected to be minor the condition remains necessary in order to ensure that the applicant is aware of the best management practices

contained in the County's Stormwater Pollution Prevention Program. However it should be modified to reflect the current standard language of the condition as follows:

"Prior to the issuance of a building permit, the applicant shall submit to the Current Planning Section for review and approval a drainage plan which shows how the transport and discharge of soil and pollutants from and within the project site shall be minimized. The plan shall be designed to minimize potential sources of sediment, control the amount of runoff and its ability to carry sediment by diverting incoming flows and impeding internally generated flows, and retain sediment that is picked up on the project site through the use of sediment-capturing devices. The plan shall also limit application, generation, and migration of toxic substances, ensure the proper storage and disposal of toxic materials, and apply nutrients at rates necessary to establish and maintain vegetation without causing significant nutrient runoff to surface waters. Said plan shall adhere to the San Mateo Countywide Stormwater Pollution Prevention Program "General Construction and Site Supervision Guidelines," including:

(a) Sequence construction to install sediment-capturing devices first, followed by runoff control measures and runoff conveyances. No construction activities shall begin until after all proposed measures are in place.

(b) Minimize the area of bare soil exposed at one time (phased grading).

(c) Clear only areas essential for construction.

(d) Within five days of clearing or inactivity in construction, stabilize are soils through either non-vegetative BMPs, such as mulching, or vegetative erosion control methods, such as seeding. Vegetative erosion control shall be established within two weeks of seeding/planting.

(e) Construction entrances shall be stabilized immediately after grading and frequently maintained to prevent erosion and control dust.

(f) Control wind-born dust through the installation of wind barriers such as hay bales and/or sprinkling.

(g) Soil and/or other construction-related material stockpiled on-site shall be placed at a minimum of 200 feet from all wetlands and

drain courses. Stockpiled soils shall be covered with tarps at all times of the year.

(h) Intercept runoff above disturbed slopes and convey it to a permanent channel or storm drains by using earth dikes, perimeter dikes or swales, or diversions. Use check dams where appropriate.

(i) Provide protection for runoff conveyance outlets by reducing flow velocity and dissipating flow energy.

(j) Install storm drain inlet protection that traps sediment before it enters any adjacent storm sewer systems. This barrier shall consist of filter fabric, straw bales, gravel, or sand bags.

(k) Install sediment traps/basins at outlets of diversions, channels, slope drains, or other runoff conveyances that discharge sediment-laden water. Sediment traps/basins shall be cleaned out when 50% full (by volume).

(l) Use silt fence and/or vegetated filter strips to trap sediment contained in sheet flow. The maximum drainage area to the fence should be 0.5 acre or less per 100 feet of fence. Silt fences shall be inspected regularly and sediment removed when it reaches 1/3 the fence height. Vegetated filter strips should have relatively flat slopes and be vegetated with erosion-resistant species.

(m) Throughout the construction period, the applicant shall conduct regular inspections of the condition and operational status of all structural best management practices required by the approved erosion control plan."

10. **The applicant shall construct and install all equipment and structures in conformance with the Uniform Building Code for earthquake areas. The project building plans will be subject to the review and requirements of the County Geotechnical Review Section.**

Compliance with Condition? Yes.

Recommend to Retain Condition? Yes, but modified to read as follows:

The applicant shall conform to all Building Inspection Section and Geotechnical Section requirements at the building permit stage of the project.

11. **The underground cable for the antennas shall utilize the existing disturbed area on the face of the project hillside. The Cingular Wireless cable shall parallel the existing Sprint cable, up to the Sprint antennas, at which point the cable shall split to the approved antenna locations. In no case shall any additional coastal scrub brush be removed. Prior to the issuance of the building permit for this project, the applicant shall flag the proposed cable run and coordinate a site inspection by the Planning Division to confirm that no additional vegetation shall be removed.**

    Compliance with Condition? Yes. At the time of project construction the underground cable run was installed and the area revegetated.

    Recommend to Retain Condition? No.

12. **Access to the proposed antenna locations shall utilize either the footpath which loops north from the equipment pad area up the hill to the antenna site or the disturbed cable run area. No additional vegetation shall be removed to provide access to the antenna site.**

    Compliance with Condition? Yes.

    Recommend to Retain Condition? No. Access to the project site has been established. No additional or revised access is required.

13. **Only minimal vegetation shall be removed to accommodate the construction of the antenna pedestals. Prior to the issuance of a building permit for this project, the applicant shall flag all brush that must be removed at the antenna locations to accommodate construction of the pedestals. The applicant shall coordinate a site visit with Planning staff to confirm what vegetation must be removed for the construction of the antenna pedestals.**

    Compliance with Condition? Yes.

    Recommend to Retain Condition? No. No new pedestals are proposed to be installed as part of this project.

14. **Prior to the issuance of a building permit for this project, the applicant shall submit for review and approval by the Planning**

Division a revegetation plan for all areas disturbed by this project, including the area of the coaxial cable run. Said plan shall:

a. Establish success criteria for each location. These criteria shall be based upon percent survival and coverage. The goal is to achieve the approved success criteria within three years from the completion of construction activities. The plan shall include annual goals to help determine progress towards meeting the overall success criteria.

b. Said plan shall outline species to be used, their percentage at each location, and the source of the plant material.

c. Said plan shall also include installation and maintenance of irrigation systems, as necessary.

d. The applicant shall replace in a timely manner, all plant material that does not survive. The applicant shall maintain all planting and irrigation systems until the approved success criteria have been met.

e. The applicant shall submit to the County annual reports outlining the progress made towards achieving the approved success criteria. These progress reports shall outline what steps, if any, are necessary during the following growing season to help ensure that the success criteria are met by the end of the three-year period. Failure by the applicant to implement these steps will result in revocation of the use permit for this cellular facility and immediate removal of all equipment.

f. The applicant shall pay the current Planning review fee for landscape plans at time of submittal and prior to the issuance of the building permit.

g. This plan shall be implemented by the applicant and confirmed by Planning staff, prior to the issuance of the electrical tag for this facility, by the Building Inspection Section.

Compliance with Condition? Yes.

Recommend to Retain Condition? No, the site has been revegetated and is established. The current project does not involve any significant disturbance to the site and reseeding is required as an erosion control measure (Condition 7 of Attachment A of this report). Therefore, this condition is no longer required.

15. **Noise levels produced by proposed construction activities shall not exceed the 80-dBA level at any one moment. Construction activities shall be limited to the hours from 7:00 a.m. to 6:00 p.m., Monday through Friday, and 9:00 a.m. to 5:00 p.m. on Saturday. Construction operations shall be prohibited on Sunday and any national holiday.**

    Compliance with Condition? Yes.

    Recommend to Retain Condition? Yes, but modified as follows to adhere to the current noise ordinance language.

    Noise sources associated with demolition, construction, repair, remodeling, or grading of any real property shall be limited to the hours from 7:00 a.m. to 6:00 p.m. weekdays and 9:00 a.m. to 5:00 p.m. Saturdays. Said activities are prohibited on Sundays, Thanksgiving, and Christmas (San Mateo Ordinance Code Section 4.88.360).

16. **The applicant shall paint the antennas and their support structures a light olive drab color. This color will help blend the structures into the surrounding brush and grass areas. The applicant shall construct a black-vinyl coated chain link fence with wood slats (painted olive drab) around the equipment area. The approved colors and fence materials shall be confirmed, via photographs submitted by the applicant, or by a site visit by Planning staff, prior to the Building Inspection Section's final approval of the project building and/or electrical permits.**

    Compliance with Condition? Yes.

    Recommend to Retain Condition? Yes.

B. COMPLIANCE WITH THE WILLIAMSON ACT

The subject parcel is currently under a Williamson Act Agricultural Preserve Contract (County File #AP66-50; approved in 1966). The State Department of Conservation, which is responsible for implementation of the Williamson Act, has determined that cellular facilities are compatible with the Williamson Act and its legislative provisions, and thus with the terms of this parcel's particular contract.

C. ENVIRONMENTAL REVIEW

The proposed renewal is categorically exempt from the California Environmental Quality Act (CEQA) under Section 15301, Class 1: Continued Operation of an

Existing Facility, and Section 15302, Class 2: Replacement or Reconstruction of an Existing Structure.

D. REVIEWING AGENCIES

Building Inspection Section
CAL-Fire
Department of Public Works

ATTACHMENTS

A. Recommended Findings and Conditions of Approval
B. Vicinity Map and Location Map
C. Site Plan
D. Antenna/ Equipment Layout
E. Elevations
F. RF Report
G. Photo Simulations

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Attachment A

County of San Mateo
Planning and Building Department

RECOMMENDED FINDINGS AND CONDITIONS OF APPROVAL

Permit or Project File Number: PLN 2003-00487 Hearing Date: April 6, 2017

Prepared By: Angela Chavez, Project Planner For Adoption By: Zoning Hearing Officer

RECOMMENDED FINDINGS

For the Environmental Review, Find:

1. That the proposed renewal is categorically exempt from environmental review pursuant to the California Environmental Quality Act (CEQA), Section 15301, Class 1: Continued Operation of an Existing Facility, and Section 15302, Class 2: Replacement or Reconstruction of an Existing Structure.

For the Use Permit, Find:

2. That the establishment, maintenance, and conducting of the proposed use will not, under the circumstances of the particular case, result in a significant adverse impact to coastal resources, or be detrimental to the public welfare or injurious to property or improvements in said neighborhood. The radio frequency (RF) report concludes that the operation of all existing and proposed wireless facilities will meet emission criteria as required by the Federal Communications Commission. No coastal resources including scenic views, existing agriculture, or sensitive habitats will be affected by the project.

3. That the use is necessary for the public health, safety, convenience, or welfare. This facility contributes to an enhanced wireless network for increased clarity, range, and system capacity, and therefore is a benefit to both public and private users. The wireless network is considered necessary for public health, safety, convenience, and welfare.

RECOMMENDED CONDITIONS OF APPROVAL

Current Planning Section

1. This approval applies only to the proposal as described in this report and materials approved by the Zoning Hearing Officer on April 6, 2017. Minor

modifications to the project may be approved by the Community Development Director if they are consistent with the intent of an in substantial conformance with this approval.

2. The applicant shall comply with all requirements of the Building Inspection Section at the building permit stage. The applicant shall obtain a building permit and finalize said permit accordingly

3. This use permit shall be valid for ten years following the date of final approval. The applicant shall file for a renewal of this permit six months prior to expiration with the County Planning and Building Department, if continuation of this use is desired.

4. Any modifications to this cellular facility, other than those approved in accordance with Condition number one shall require a use permit amendment. The applicant shall submit all necessary plans and documents, including all required submittal fees prior to any modifications.

5. The applicant shall receive and maintain approval from the FCC and the CPUC concerning the operation of the project at this site. Upon receipt of each of these approvals, the applicant shall supply the Current Planning Section with proof of these approvals. If these approvals are ever revoked, the applicant shall inform the Current Planning Section of the revocation.

6. All new utility lines to the project site shall be installed underground, unless waived by the Community Development Director.

7. Prior to the issuance of a building permit, the applicant shall submit to the Current Planning Section for review and approval a drainage plan which shows how the transport and discharge of soil and pollutants from and within the project site shall be minimized. The plan shall be designed to minimize potential sources of sediment, control the amount of runoff and its ability to carry sediment by diverting incoming flows and impeding internally generated flows, and retain sediment that is picked up on the project site through the use of sediment-capturing devices. The plan shall also limit application, generation, and migration of toxic substances, ensure the proper storage and disposal of toxic materials, and apply nutrients at rates necessary to establish and maintain vegetation without causing significant nutrient runoff to surface waters. Said plan shall adhere to the San Mateo Countywide Stormwater Pollution Prevention Program “General Construction and Site Supervision Guidelines,” including:

    a. Sequence construction to install sediment-capturing devices first, followed by runoff control measures and runoff conveyances. No construction activities shall begin until after all proposed measures are in place.

    b. Minimize the area of bare soil exposed at one time (phased grading).

c. Clear only areas essential for construction.

d. Within five days of clearing or inactivity in construction, stabilize bare soils through either non-vegetative BMPs, such as mulching, or vegetative erosion control methods, such as seeding. Vegetative erosion control shall be established within two weeks of seeding/planting.

e. Construction entrances shall be stabilized immediately after grading and frequently maintained to prevent erosion and control dust.

f. Control wind-born dust through the installation of wind barriers such as hay bales and/or sprinkling.

g. Soil and/or other construction-related material stockpiled on-site shall be placed a minimum of 200 feet from all wetlands and drain courses. Stockpiled soils shall be covered with tarps at all times of the year.

h. Intercept runoff above disturbed slopes and convey it to a permanent channel or storm drains by using earth dikes, perimeter dikes or swales, or diversions. Use check dams where appropriate.

i. Provide protection for runoff conveyance outlets by reducing flow velocity and dissipating flow energy.

j. Install storm drain inlet protection that traps sediment before it enters any adjacent storm sewer systems. This barrier shall consist of filter fabric, straw bales, gravel, or sand bags.

k. Install sediment traps/basins at outlets of diversions, channels, slope drains, or other runoff conveyances that discharge sediment-laden water. Sediment traps/basins shall be cleaned out when 50% full (by volume).

l. Use silt fence and/or vegetated filter strips to trap sediment contained in sheet flow. The maximum drainage area to the fence should be 0.5 acre or less per 100 feet of fence. Silt fences shall be inspected regularly and sediment removed when it reaches 1/3 the fence height. Vegetated filter strips should have relatively flat slopes and be vegetated with erosion-resistant species.

m. Throughout the construction period, the applicant shall conduct regular inspections of the condition and operational status of all structural best management practices required by the approved erosion control plan.

8. The applicant shall conform to all Building Inspection Section and Geotechnical Section requirements at the building permit stage of the project.

9. Noise sources associated with demolition, construction, repair, remodeling, or grading of any real property shall be limited to the hours from 7:00 a.m. to 6:00 p.m. weekdays and 9:00 a.m. to 5:00 p.m. Saturdays. Said activities are prohibited on Sundays, Thanksgiving, and Christmas (San Mateo Ordinance Code Section 4.88.360).

10. The applicant shall paint the antennas and their support structures a light olive drab color. This color will help blend the structures into the surrounding brush and grass areas. The applicant shall construct a black-vinyl coated chain link fence with wood slats (painted olive drab) around the equipment area. The approved colors and fence materials shall be confirmed, via photographs submitted by the applicant, or by a site visit by Planning staff, prior to the Building Inspection Section's final approval of the project building and/or electrical permits.

11. AT&T shall adhere to the Lockout/Tagout procedures in the event of anyone who needs access at or in the vicinity of transmitting AT&T antennas. Contact AT&T when accessing the area near the transmitting antennas. The following situations require contacting an AT&T representative:

    a. Maintenance work being performed near transmitting antennas

       Whenever anyone is working within close proximity to the transmitting antenna(s), the antenna sector, multiple sectors, or entire cell site may need to be shut down to ensure compliance with the applicable Federal Communications Commission (FCC) Maximum Public Exposure (MPE) limit. This work may include but is not limited to structural repairs, painting or non-RF equipment services by AT&T personnel/contractors or the owner of a tower, water tank, rooftop, or other low-centerline sites. The particular method of energy control will depend on the scope of the work (e.g. duration, impact to the antenna or transmission cabling, etc.) and potential for RF levels to exceed the FCC MPE limits for General Population/Uncontrolled environments.

    b. AT&T Employees and Contractors

       AT&T Employees and contractors performing work on AT&T cell sites must be trained in RF awareness and must exercise control over their exposure to ensure compliance with the FCC MPE limit for Occupational/Controlled Environments ("Occupational MPE Limit").

       The rule of staying at least three feet from antennas is no longer always adequate to prevent exposure above the Occupational MPE Limit. That general rule was applied early in the development of cellular when omni-directional antennas were primarily used and later when wide-beamwidth antennas were used. That application was then appropriate for the Occupational exposure category. However, the current prevalence of

antennas with 60- and 70- degree horizontal half power beamwidths at urban and suburban GSM and UMTS/HSDPA sites raises some question about the continued reliability of the three foot rule. Antennas with low bottom-tip heights and total input powers around 70-80w can produce exposure levels exceeding the Occupational MPE limits at four feet, and these levels can be augmented by emissions of co-located operators. Therefore, AT&T employees and contractors should apply the above general work procedures and use an RF personal monitor to assess exposure levels with the work vicinity.

c. Other Incidental Workers

All other incidental workers who are not trained in RF safety are considered general public and subject to the FCC MPE limits for General Populations/Uncontrolled Environments. In such instance, the M-RFSC (primary contact) or R-RFSC (secondary contact) must refer to the Mobility RF site survey plan to assess the potential RF exposure levels associated with the antenna system. If capable of exceeding the FCC General Population/ Uncontrolled MPE limit, then local sector/site shutdown is necessary. The FE/FT must also follow the local shutdown procedure and use their RF personal monitor as a screening tool for verification, as necessary.

12. The applicant shall install and main the notification and cautionary signs as detailed in the exposure report dated October 18, 2016.

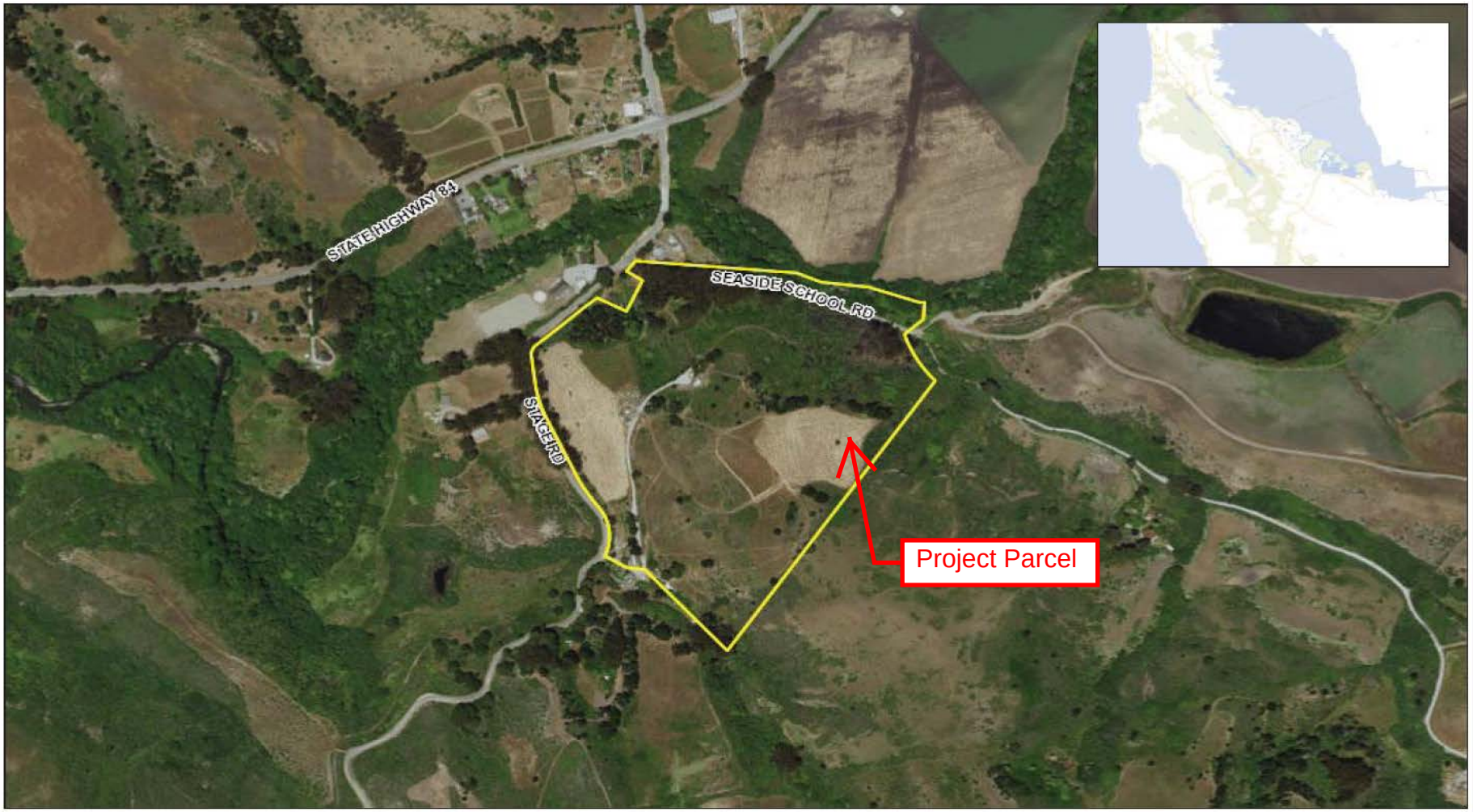
County Fire Authority

13. The applicant shall comply with all County Fire Authority (CAL-Fire) requirements at the building permit stage of the project.

ACC:aow – ACCBB0093_WAU.DOCX

San Mateo County

7400 Stage Road, San Gregorio



0.28 0 0.14 0.28 Miles

WGS_1984_Web_Mercator_Auxiliary_Sphere

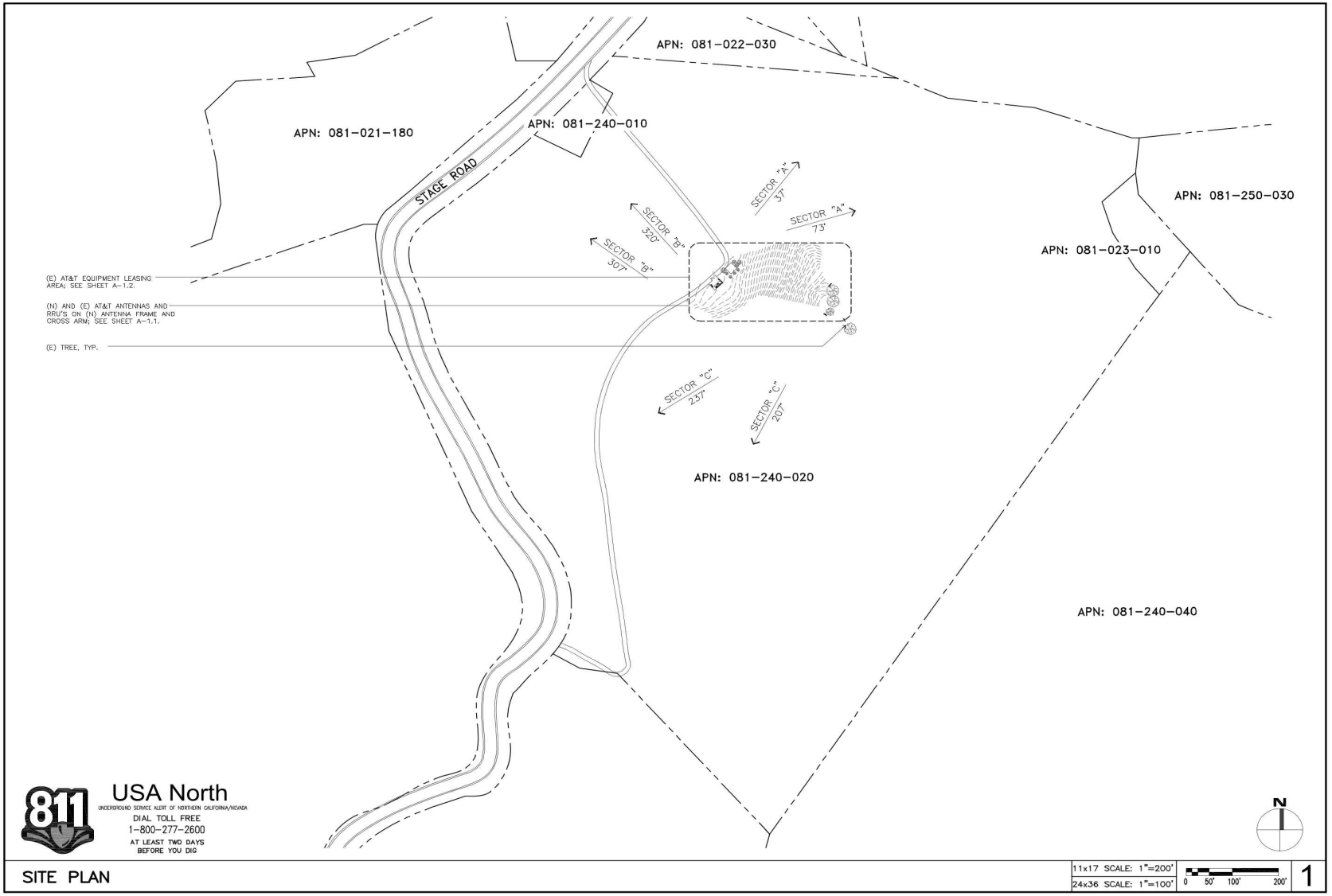
1: 9,027

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.
THIS MAP IS NOT TO BE USED FOR NAVIGATION

San Mateo County Zoning Hearing Officer Meeting

Owner/Applicant: **Armstrong/Crown Castle** Attachment: **B**

File Numbers: **PLN2003-00487**



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San Ramon, California 94583

Vendor:
Jeffrey Rome | ASSOCIATES
architecture | telecommunications
131 Innovation Drive, Suite 100
Irvine, California 92617
tel: 949.760.3929 | fax 949.760.3931

CROWN CASTLE
4301 Hacienda Drive, Suite 410
Pleasanton, California 94588

IN ASSOCIATION WITH
MasTec Network Solutions

AT&T Site ID:
CCL05485

AT&T SITE NO:	CCL05485
JRA PROJECT NO:	160511
DRAWN BY:	SW
CHECKED BY:	MW

REV	DATE	DESCRIPTION
C	01/23/17	PC COMMENTS
B	12/01/16	100% CD'S
A	07/22/16	90% CD'S

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7400 STAGE ROAD
SAN GREGORIO, CALIFORNIA
94074

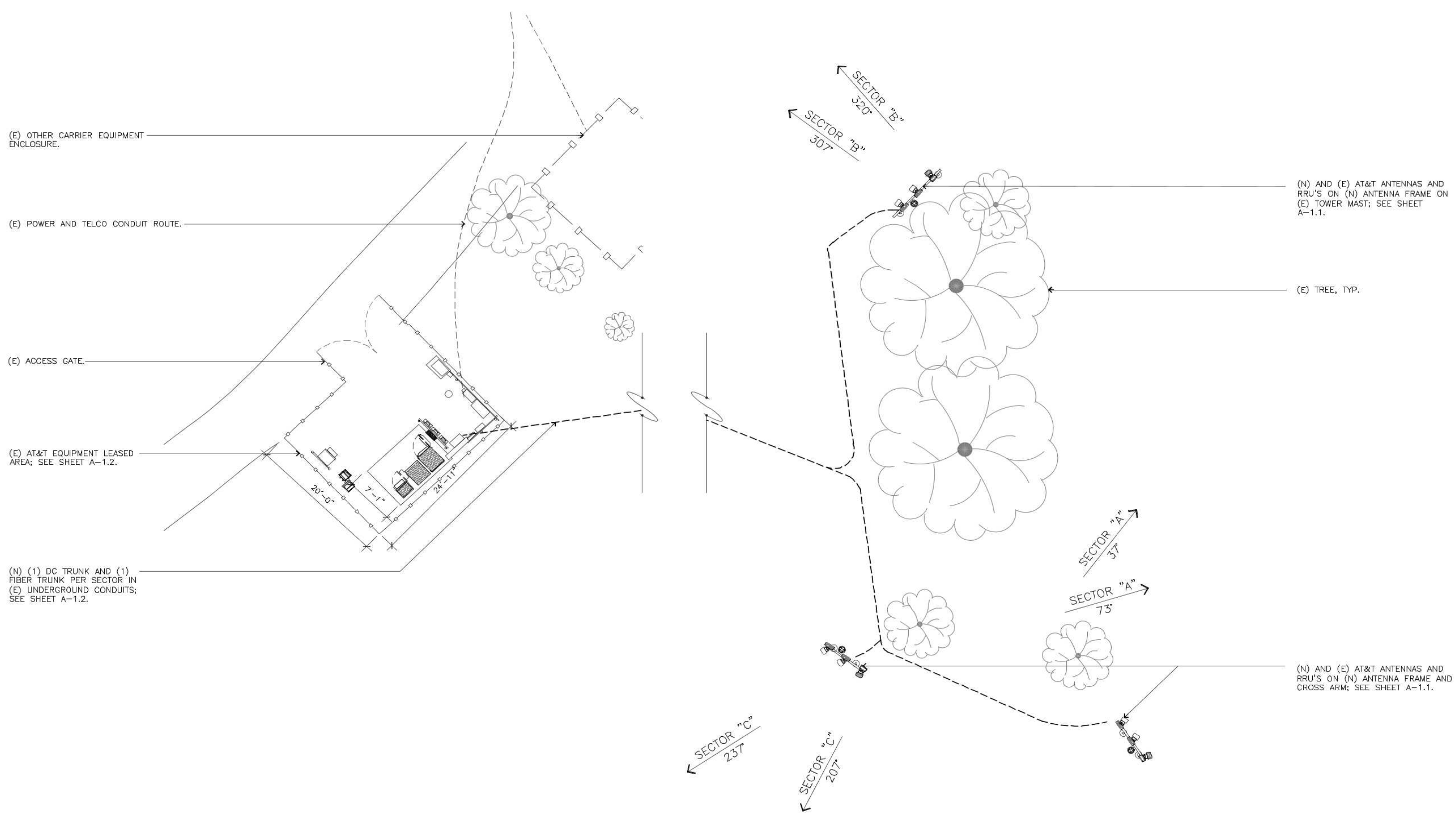
SHEET TITLE:
SITE PLAN

SHEET NUMBER:
A-0

San Mateo County Zoning Hearing Officer Meeting

Owner/Applicant: **Armstrong/Crown Castle** Attachment: **C**

File Numbers: **PLN2003-00487**



811 USA North
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA/NEVADA
DIAL TOLL FREE
1-800-277-2600
AT LEAST TWO DAYS BEFORE YOU DIG

NOTE: REPLACE EXISTING STEEL FENCE AROUND ANTENNAS WITH NEW WOOD FENCING; SEE DETAIL 6/A-3 AND ELEVATION SHEETS (VERIFY EXACT LOCATIONS).

ENLARGED SITE PLAN

11x17 SCALE: 1/16"=1'-0"
24x36 SCALE: 1/8"=1'-0"
0 4' 8' 16'
1

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jra Jeffrey Rome | ASSOCIATES
architecture | telecommunications
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SHEET TITLE:
ENLARGED SITE PLAN

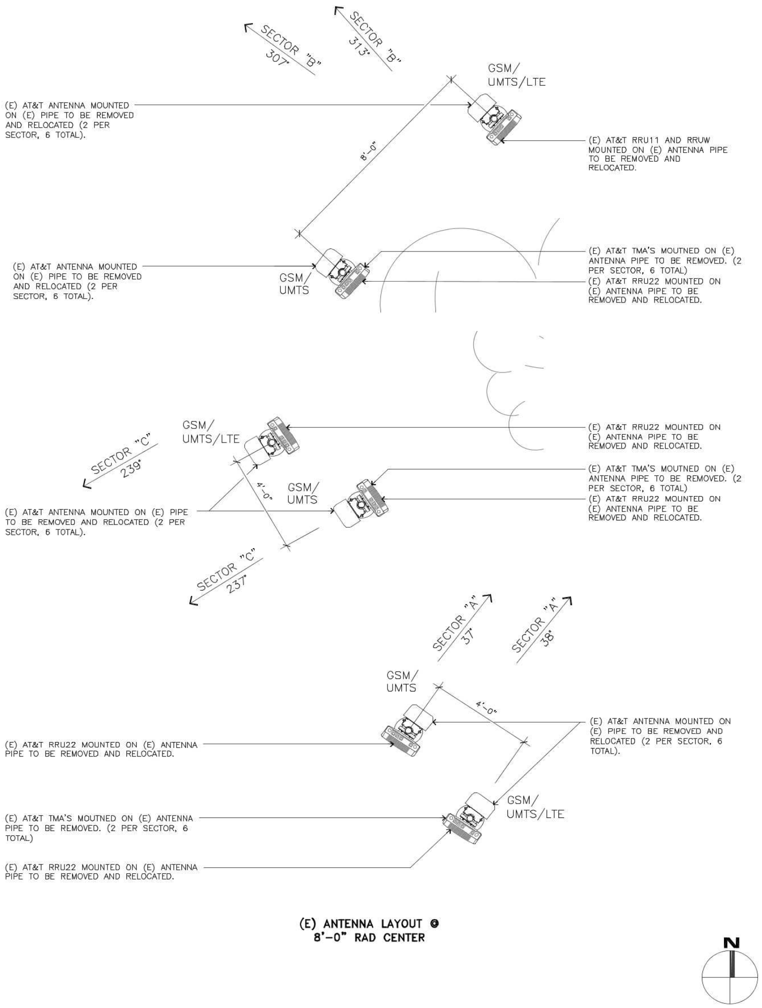
SHEET NUMBER:
A-1

San Mateo County Zoning Hearing Officer Meeting

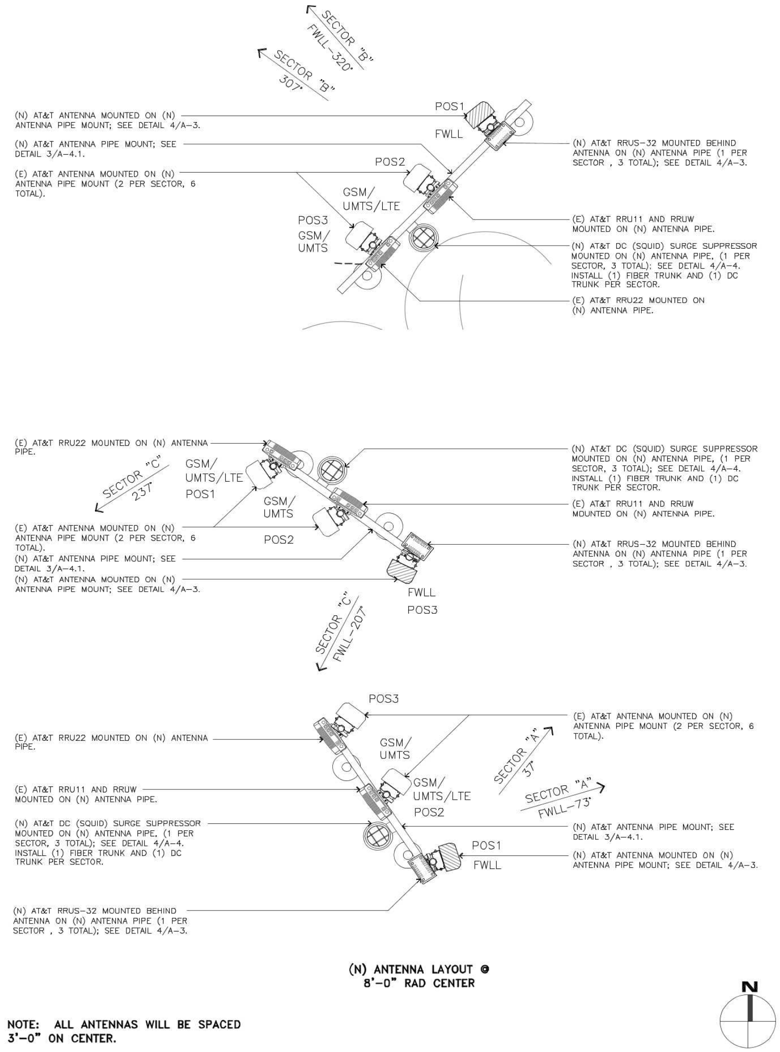
Owner/Applicant: **Armstrong/Crown Castle**

Attachment: **C**

File Numbers: **PLN2003-00487**



EXISTING ANTENNA PLAN | 11X17 SCALE: 1/4"=1'-0" | 24X36 SCALE: 1/2"=1'-0" | 0 1' 2' 4' | 3



NOTE: ALL ANTENNAS WILL BE SPACED 3'-0" ON CENTER.

PROPOSED ANTENNA PLAN | 11X17 SCALE: 1/4"=1'-0" | 24X36 SCALE: 1/2"=1'-0" | 0 1' 2' 4' | 1

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AT&T SITE NO:	CCL05485
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DRAWN BY:	SW
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REV	DATE	DESCRIPTION
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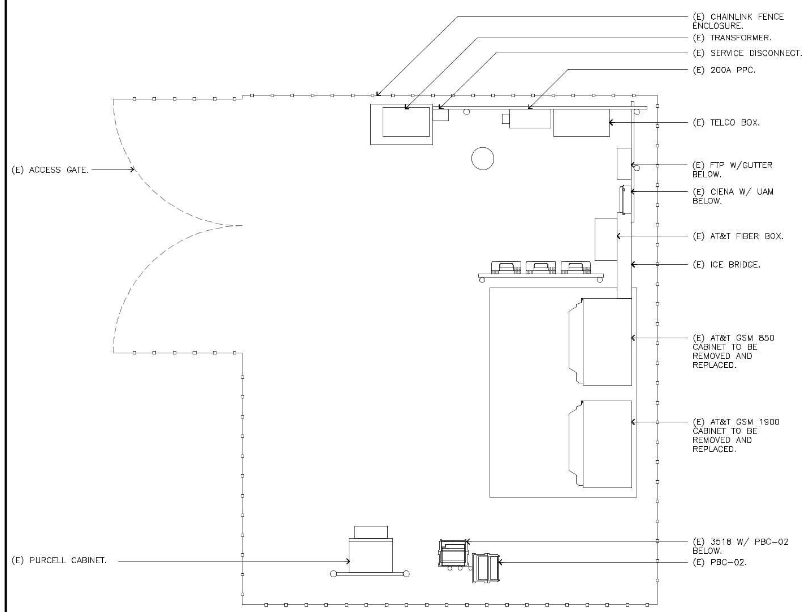
SHEET TITLE:
EXISTING AND PROPOSED ANTENNA PLAN

SHEET NUMBER:
A-1.1

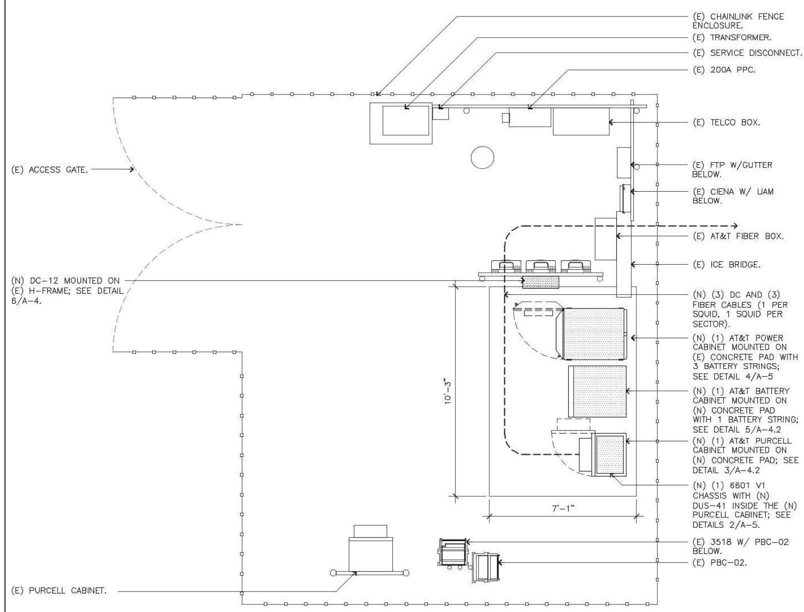
San Mateo County Zoning Hearing Officer Meeting

Owner/Applicant: **Armstrong/Crown Castle** Attachment: **D**

File Numbers: **PLN2003-00487**



EXISTING EQUIPMENT PLAN	11x17 SCALE: 3/16"=1'-0" 24x36 SCALE: 3/8"=1'-0"	0 1' 2' 3' 6'	2



PROPOSED EQUIPMENT PLAN	11x17 SCALE: 3/16"=1'-0" 24x36 SCALE: 3/8"=1'-0"	0 1' 2' 3' 6'	1

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Network Solutions

AT&T Site ID:
CCL05485

AT&T SITE NO:	CCL05485
JRA PROJECT NO:	160511
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REV	DATE	DESCRIPTION
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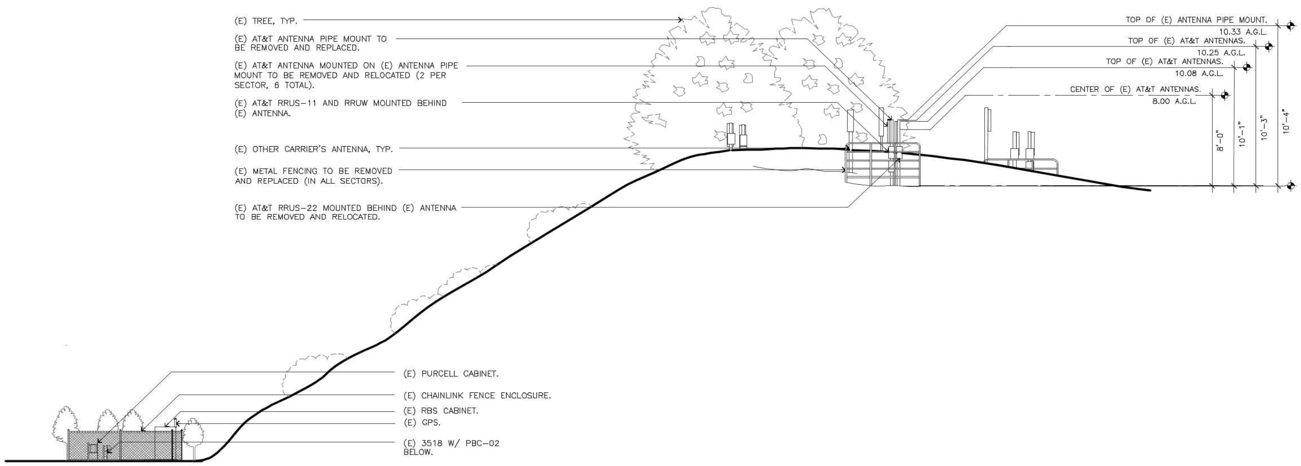
SHEET TITLE:
EXISTING AND PROPOSED EQUIPMENT PLAN

SHEET NUMBER:
A-1.2

San Mateo County Zoning Hearing Officer Meeting

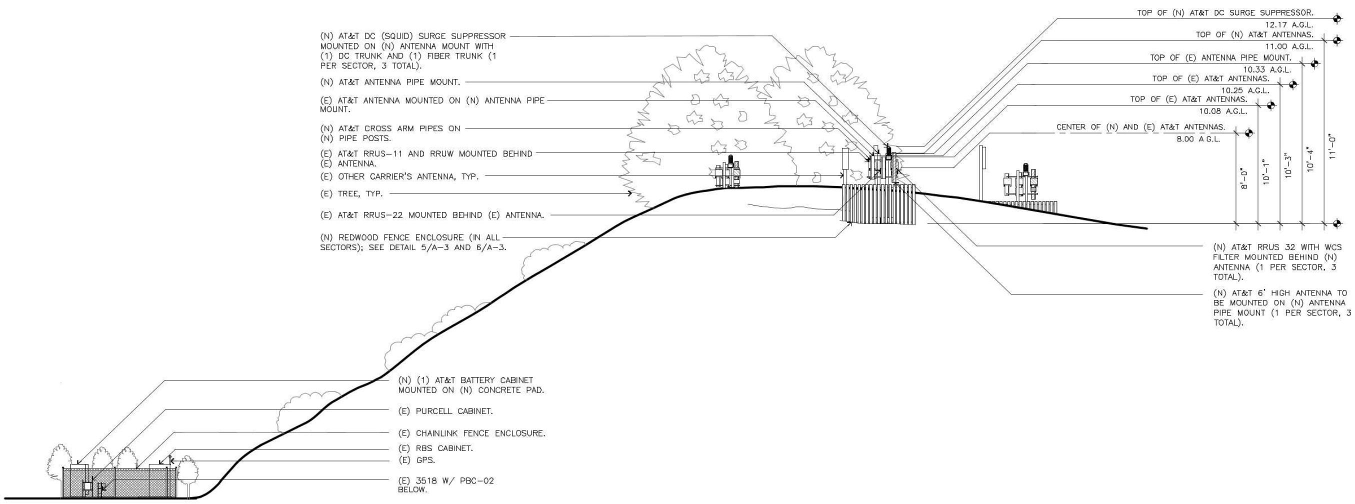
Owner/Applicant: **Armstrong/Crown Castle** Attachment: **D**

File Numbers: **PLN2003-00487**



EXISTING SOUTHWEST ELEVATION

11x17 SCALE: 3/64"=1'-0"
24x36 SCALE: 3/32"=1'-0"
0 3' 6' 12' 24'
1



PROPOSED SOUTHWEST ELEVATION

11x17 SCALE: 3/64"=1'-0"
24x36 SCALE: 3/32"=1'-0"
0 3' 6' 12' 24'
1

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Pleasanton, California 94588

IN ASSOCIATION WITH
MasTec Network Solutions

AT&T Site ID:
CCL05485

AT&T SITE NO:	CCL05485
JRA PROJECT NO:	160511
DRAWN BY:	SW
CHECKED BY:	MW

REV	DATE	DESCRIPTION
C	01/23/17	PC COMMENTS
B	12/01/16	100% CD'S
A	07/22/16	90% CD'S

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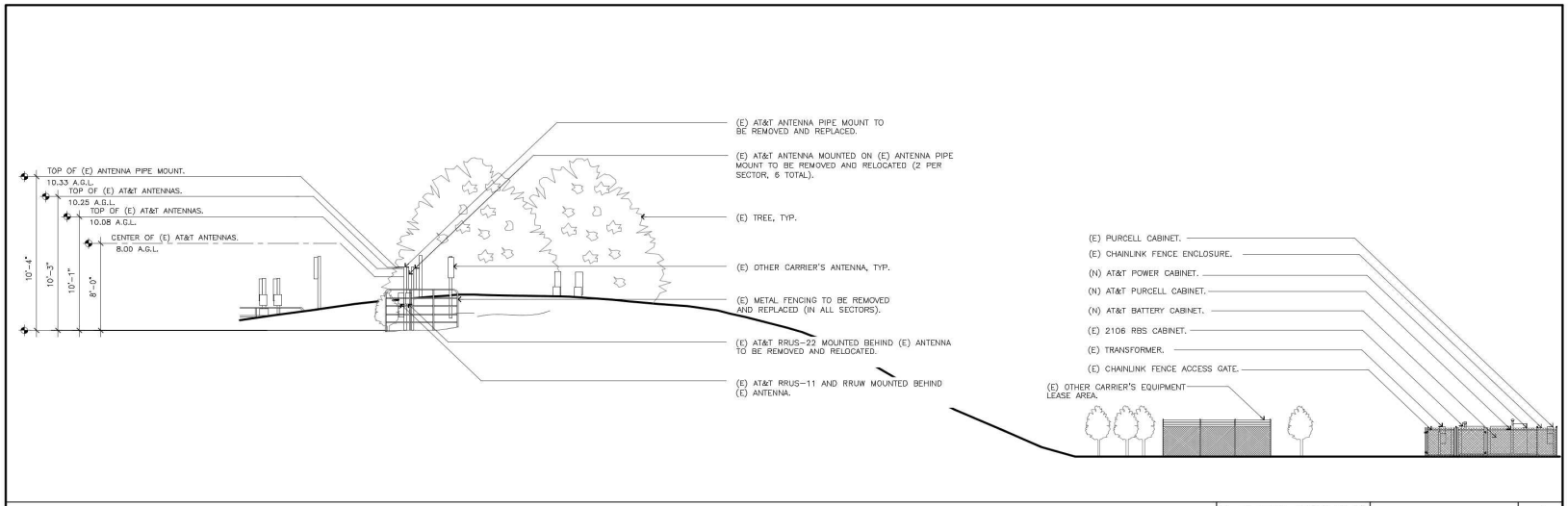
SHEET TITLE:
EXISTING AND PROPOSED ELEVATION

SHEET NUMBER:
A-2

San Mateo County Zoning Hearing Officer Meeting

Owner/Applicant: **Armstrong/Crown Castle** Attachment: **E**

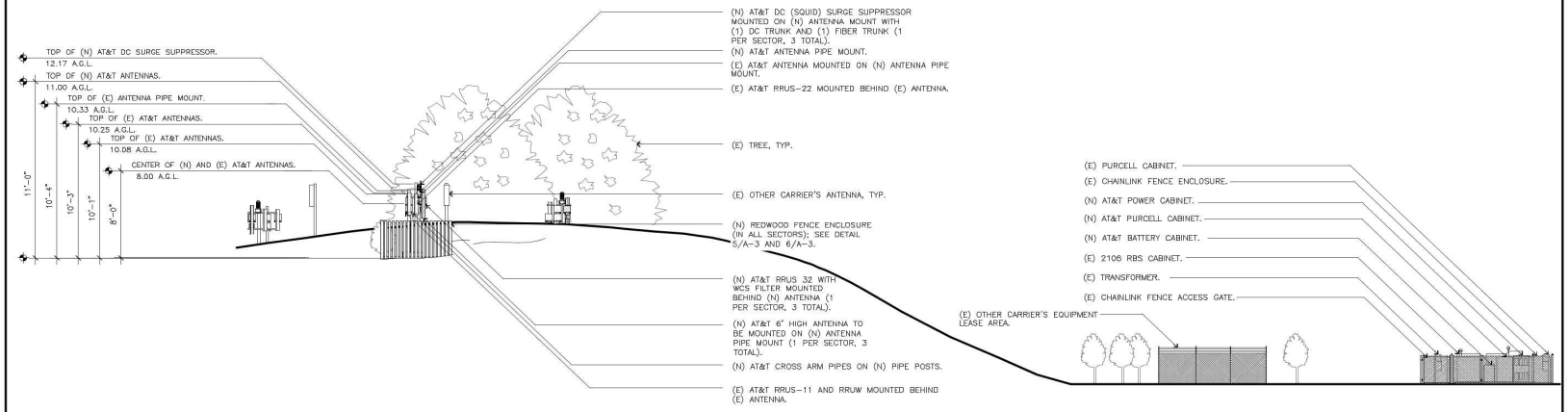
File Numbers: **PLN2003-00487**



EXISTING NORTHWEST ELEVATION

11x17 SCALE: 3/64"=1'-0"
24x36 SCALE: 3/32"=1'-0"
0 3' 6' 12' 24'

1



PROPOSED NORTHWEST ELEVATION

11x17 SCALE: 3/64"=1'-0"
24x36 SCALE: 3/32"=1'-0"
0 3' 6' 12' 24'

1

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AT&T Site ID:
CCL05485

AT&T SITE NO:	CCL05485
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94074

SHEET TITLE:
EXISTING AND PROPOSED ELEVATION

SHEET NUMBER:
A-2.1

San Mateo County Zoning Hearing Officer Meeting

Owner/Applicant: **Armstrong/Crown Castle**

Attachment: **E**

File Numbers: **PLN2003-00487**

ATTACHMENT: F

ELECTROMAGNETIC ENERGY (EME) EXPOSURE REPORT

Site Name:	**Hwy 84 - Stage Rd**
Site ID:	**CCL05485**
USID:	**44901**
FA Location:	**10101367**
Site Type:	**Monopole**
Location:	**7400 Stage Road** **SAN GREGORIO, CA 94074**
Latitude (NAD83):	**37.3234694**
Longitude (NAD83):	**-122.3851378**
Report Completed:	**October 18, 2016**
AT&T M-RFSC	**Casey Chan**

Prepared By:

OSC ENGINEERING

Prepared for: AT&T Mobility
c/o Caldwell Compliance, Inc.
6900 Koll Center Parkway.
Ste. 401
Pleasanton, CA 94566

Site Overview and Description

- The antennas are mounted on a monopole
- The site consists of three (3) sectors with a total of nine (9) antennas
- There are no separate structures within forty (40) feet of the transmitting antennas
- The site is co-located with Unknown antenna

	Sector A	Sector B	Sector G
Azimuth	73° / 37° / 37°	320° / 307° / 307°	237° / 237° / 207°
Number of antennas	3	3	3
Bottom tip of antenna above ground (ft.)	5 / 5.7 / 5.8	5 / 5.7 / 5.8	5.7 / 5.8 / 5
Technology	GSM / UMTS / LTE	GSM / UMTS / LTE	GSM / UMTS / LTE
Antenna Make and Model	Quintel QS6656-3 Kathrein 800-10764 Kathrein 742-264	Quintel QS6656-3 Kathrein 800-10764 Kathrein 742-264	Quintel QS6656-3 Kathrein 800-10764 Kathrein 742-264

Site Compliance Status (FCC & AT&T Guidelines)	Compliant with recommendations

Compliance Notes

Occupational Safety & Compliance Engineering (OSC Engineering) has been contracted by Caldwell Compliance, Inc. to conduct an RF (radio frequency) computer simulated analysis. The Federal Communications Commission (FCC) has set limits on RF energy exposed to humans on a wireless cell site in order to ensure safety. The FCC has also mandated that all RF wireless sites must be in compliance with the FCC limits and a compliance check should be performed annually to ensure site compliance.

This report is an in depth analysis summarizing the results of the RF modeling provided to us by AT&T and in relation to relevant FCC RF compliance standards. A reanalysis is recommended upon the site going on air.

OSC Engineering uses the FCC OET-65 as well as AT&T Standards to make recommendations based on results and information gathered from drawings and Radio Frequency Data Sheets.

For this report, OSC Engineering utilized Roofview® software for the theoretical analysis of the AT&T Cellular Facility.

A site-specific compliance plan is recommended for each transmitting site. This report serves as a single piece of the overall compliance plan.

Information utilized for this report: RFDS: SAN-FRANCISCO-SACRAMENTO_SAN-FRANCISCO_CNU5485_2016-Fixed-Wireless-Local-Loop_FWLL-1C_ss369u_3701A05C5S_10101367_44901_01-06-2016_Final-Approved_v2.00 - Copy
DWGs: CCL05485_HWY 84-STAGE ROAD_LTE WLL_90S_REV A_LH-promoted to ATT for init...

For the purpose of theoretical simulation, OSC Engineering models antennas as if they are operating at full power (100% capacity). This assumption yields more conservative (higher) results. On-site measurements may yield different results, as antennas do not always operate at full capacity. To the right is a result diagram of the site in question. The diagram is a color-coded map per ND-00059 levels, which coincide with FCC MPE Limits. Any exposure resulting in a level higher than 100% exceeds the Limits and requires further action, such as barriers. A level exceeding 100% does not make a site out of compliance. All results are given in General Population percentages even when a site may be considered Occupational.

Compliance Results of the Proposed Site (theoretical simulation)

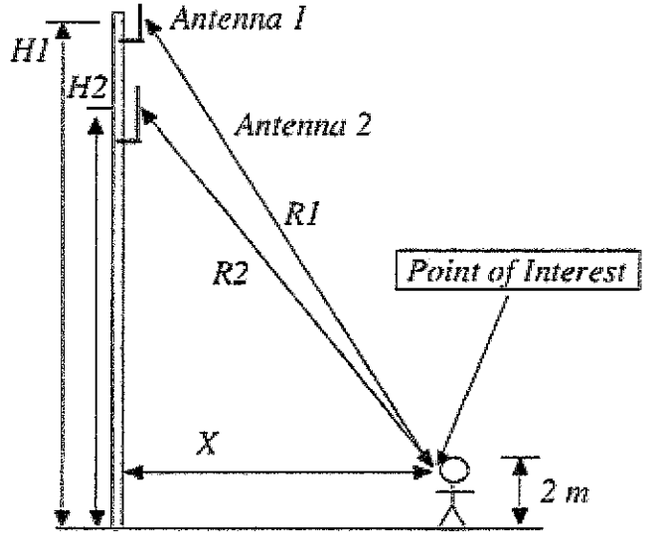
Max RF Exposure Level simulated (AT&T antennas @ ground):
511.2 % FCC General Population MPE Limit

Max RF Exposure Level simulated (cumulative ground):
511.3 % FCC General Population MPE Limit

FCC Regulations and Guidelines from OET 65

When considering the contributions to field strength or power density from other RF sources, care should be taken to ensure that such variables as reflection and re-radiation are considered. In cases involving very complex sites predictions of RF fields may not be possible, and a measurement survey may be necessary The process for determining compliance for other situations can be similarly accomplished using the techniques described in this section and in Supplement A to this bulletin that deals with radio and television broadcast operations. However, as mentioned above, at very complex sites measurements may be necessary.

In the simple example shown in the below diagram, it is desired to determine the power density at a given location **X** meters from the base of a tower on which are mounted two antennas. One antenna is a CMRS antenna with several channels, and the other is an FM broadcast antenna. The system parameters that must be known are the total ERP for each antenna and the operating frequencies (to determine which MPE limits apply). The heights above ground level for each antenna, **H1** and **H2**, must be known in order to calculate the distances, **R1** and **R2**, from the antennas to the point of interest. [1]



[1] OET Bulletin 65, Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields, Page 37- 38

Computer Simulation Analysis

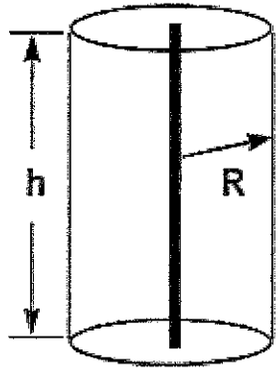
The Federal Communications Commission (FCC) governs the telecommunications services, facilities, and devices used by the public, industrial and state organizations in the United States.

"RoofView® is a software analysis tool for evaluating radiofrequency (RF) field levels at roof-top telecommunications sites produced by vertical collinear antennas of the type commonly used in the cellular, paging, PCS, ESMR and conventional two-way radio communications services."[2]

"RF near-field levels are computed from selected antennas by applying a cylindrical model that takes into account the antenna's aperture height, mounting height above the roof, azimuthal beam width for directional antennas and the location of the antennas on the roof Resulting, spatially averaged power densities are expressed as a percentage of a user selectable exposure limit depending on frequency. The entire roof is composed of one-square-foot pixels and RF fields are computed for each of these pixels for each selected antenna."[3]

Computer simulations produced for clients are simulated with "Uptime = 100%". This means that all transmitters associated with an antenna are considered to be "on". [4]

RoofView® uses a near-field method of computing the field based on assuming that the total input power delivered to the antenna, at its input terminal, is distributed over an imaginary cylindrical surface surrounding the antenna. The height of the cylinder is equal to the aperture height of the antenna while the radius is simply the distance from the antenna at which the field power density is to be computed. Within the aperture of the antenna, this approximation is quite accurate but as the antenna is elevated above the region of interest, the model output must be corrected for mounting height. [5]



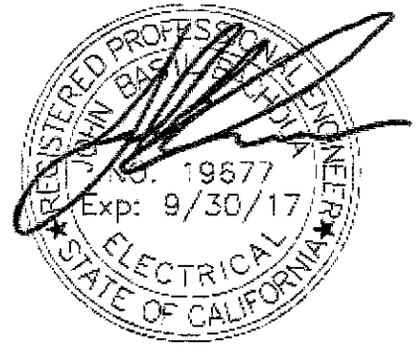
$$S = \frac{P}{2\pi Rh}$$

[2] Roofview User Guide 4.15, Page 7, Richard A Tell Associates
[3] Roofview User Guide 4.15, Page 7, Richard A Tell Associates
[4] Roofview User Guide 4.15, Page 10, Richard A Tell Associates
[5] Roofview User Guide 4.15, Page 45, Richard A Tell Associates

Certification

The undersigned is a Professional Engineer, holding a California Registration No. 19677

Reviewed and approved by:



John B. Bachoua, PE

Date: October 18, 2016

The engineering and design of all related structures as well as the impact of the antennas on the structural integrity of the design are specifically excluded from this report's scope of work. This report's scope of work is limited to an evaluation of the Electromagnetic Energy (EME) RF emissions field generated by the antennas listed in this report. When client and others have supplied data, it is assumed to be correct.

FCC MPE Limits (from OET-65)

OSC Engineering uses the FCC's and clients' guidelines to model the computer simulation. Explained in detail in Office of Engineering & Technology, Bulletin No. 65 ("OET-65") "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Radiation".

Occupational/controlled[6] exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general population/uncontrolled limits (see below), as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means. As discussed later, the occupational/controlled exposure limits also apply to amateur radio operators and members of their immediate household.

General population/uncontrolled[7] exposure limits apply to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general public would always be considered under this category when exposure is not employment-related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

[6] OET-65 "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields pg. 9.
[7] OET-65 "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields pg. 9.

Limits for Maximum Permissible Exposure (MPE)[8]

"The FCC Exposure limits are based on data showing that the human body absorbs RF energy at some frequencies more efficiently than at others. The most restrictive limits occur in the frequency range of 30-300MHz where whole-body absorption of RF energy by human beings is most efficient. At other frequencies whole-body absorption is less efficient, and, consequently, the MPE limits are less restrictive."[9]

(A) Limits for Occupational/Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm^2)	Averaging Time $\|E\|^2$, $\|H\|^2$ or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	($900/f^2$)*	6
32-300	61.4	0.163	1.0	6
300-1500	--	--	f/300	6
1500-100,000	--	--	5	6

(B) Limits for General Population /Uncontrolled Exposure

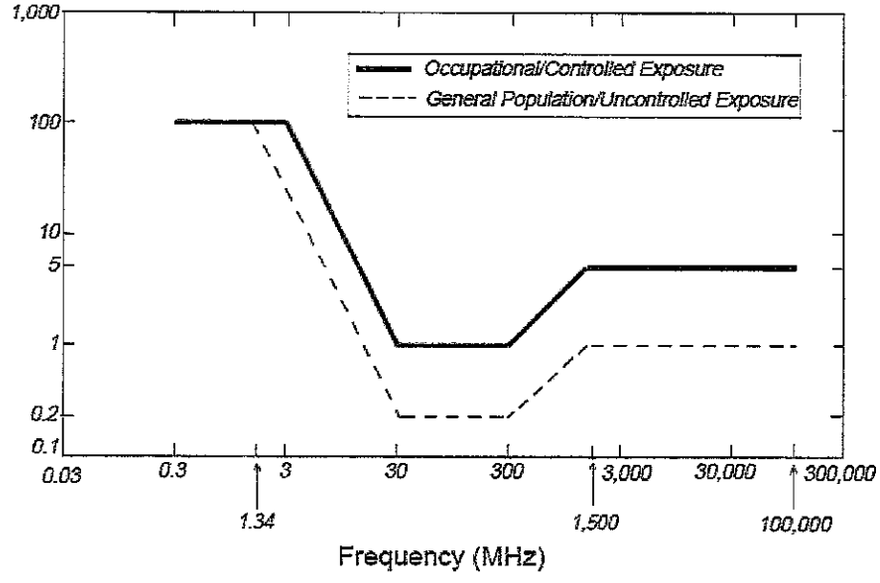
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm^2)	Averaging Time $\|E\|^2$, $\|H\|^2$ or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	($180/f^2$)*	30
30-300	27.5	0.073	0.2	30
300-1500	--	--	f/1500	30
1500-100,000	--	--	1.0	30

f= Frequency in MHz *Plane-wave equivalent power density

[8] OET-65 "FCC Guidelines Table 1 pg. 72.
[9] OET-65 "FCC Guidelines for Evaluating Exposure to RF Emissions", pg. 8

Limits for Maximum Permissible Exposure (MPE) continued[10]

Figure 1. FCC Limits for Maximum Permissible Exposure (MPE)



"MPE Limits are defined in terms of power density (units of milliwatts per centimeter squared: mW/cm^2), electric field strength (units of volts per meter: V/m) and magnetic field strength (units of amperes per meter: A/m). In the far-field of a transmitting antenna, where the electric field vector (E), the magnetic field vector (H), and the direction of propagation can be considered to be all mutually orthogonal ("[plane-wave" conditions], these quantities are related by the following equation:

$$S = \frac{E^2}{3770} = 37.7H^2$$

where: S = power density (mW/cm^2)
E = electric field strength (V/m)
H = magnetic field strength (A/m)

[10] OET-65 "FCC Guidelines Table 1 pg. 72.

Limitations

OSC Engineering completed this evaluation analysis based on information and data provided by the client. The data provided by the client is assumed to be accurate. Estimates of the unknown, standard, and additional transmitting sites are noted and based on FCC regulation and client requirements. These are estimated to the best of our professional knowledge. This report is completed by OSC Engineering to determine whether the wireless communications facility complies with the Federal Communications Commission (FCC) Radio Frequency (RF) Safety Guidelines. The Office of Engineering and Technology (OET-65) *Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Radiation* has been prepared to provide assistance in determining whether proposed or existing transmitting facilities, operations or devices comply with limits for human exposure to radiofrequency (RF) fields adopted by the Federal Communications Commission (FCC)[11]. As each site is getting upgraded and changed, this report will become obsolete as this report is based on current information per the client, per the date of the report. Use of this document will not hold OSC Engineering Inc. nor it's employees liable legally or otherwise. This report shall not be used as a determination as to what is safe or unsafe on a given site. All workers or other people accessing any transmitting site should have proper EME awareness training. This includes, but is not limited to, obeying posted signage, keeping a minimum distance from antennas, watching EME awareness videos and formal classroom training.

[11] OET-65 "FCC Guidelines for Evaluating Exposure to RF Emissions", pg. 1

AT&T Antenna Shut-Down Protocol

AT&T provides Lockout/Tagout (LOTO) procedures in Section 9.4[12] (9.4.1- 9.4.9) in the ND-00059. These procedures are to be followed in the event of anyone who needs access at or in the vicinity of transmitting AT&T antennas. Contact AT&T when accessing the rooftop near the transmitting antennas. Below is information regarding when to contact an AT&T representative.

9.4.7 Maintenance work being performed near transmitting antennas

Whenever anyone is working within close proximity to the transmitting antenna(s), the antenna sector, multiple sectors, or entire cell site may need to be shut down to ensure compliance with the applicable FCC MPE limit. This work may include but is not limited to structural repairs, painting or non-RF equipment services by AT&T personnel/contractors or the owner of a tower, water tank, rooftop, or other low-centerline sites. The particular method of energy control will depend on the scope of work (e.g., duration, impact to the antenna or transmission cabling, etc.) and potential for RF levels to exceed the FCC MPE limits for General Population/Uncontrolled environments

9.4.8 AT&T Employees and Contractors

AT&T employees and contractors performing work on AT&T cell sites must be trained in RF awareness and must exercise control over their exposure to ensure compliance with the FCC MPE limit for Occupational/Controlled Environments ("Occupational MPE Limit").

The rule of staying at least 3 feet from antennas is no longer always adequate to prevent exposure above the Occupational MPE Limit. That general rule was applied early in the development of cellular when omni-directional antennas were primarily used and later when wide-beamwidth antennas were used. That application was then appropriate for the Occupational exposure category. However, the current prevalence of antennas with 60- and 70- degree horizontal half-power beamwidths at urban and suburban GSM and UMTS/HSDPA sites raises some question about the continued reliability of the 3-foot rule. Antennas with low bottom-tip heights and total input powers around 70-80 W can produce exposure levels exceeding the Occupational MPE Limits at 4 feet, and these levels can be augmented by emissions of co-located operators. Therefore, AT&T employees and contractors should apply the above general work procedures and use an RF personal monitor to assess exposure levels within the work vicinity.

9.4.9 Other Incidental Workers

All other incidental workers who are not trained in RF safety are considered general public and subject to the FCC MPE limits for General Population/Uncontrolled Environments. In such instance, the M-RFSC (primary contact) or R-RFSC (secondary contact) must refer to the Mobility RF site survey plan to assess the potential RF exposure levels associated with the antenna system. If capable of exceeding the FCC General Population/Uncontrolled MPE limit, then local sector/site shutdown is necessary. The FE/FT must also follow the local shutdown procedure and use their RF personal monitor as a screening tool for verification, as necessary.

[12] ND-00059_Rev_5.1 "Lockout/Tagout (LOTO) Procedures" Page 45.

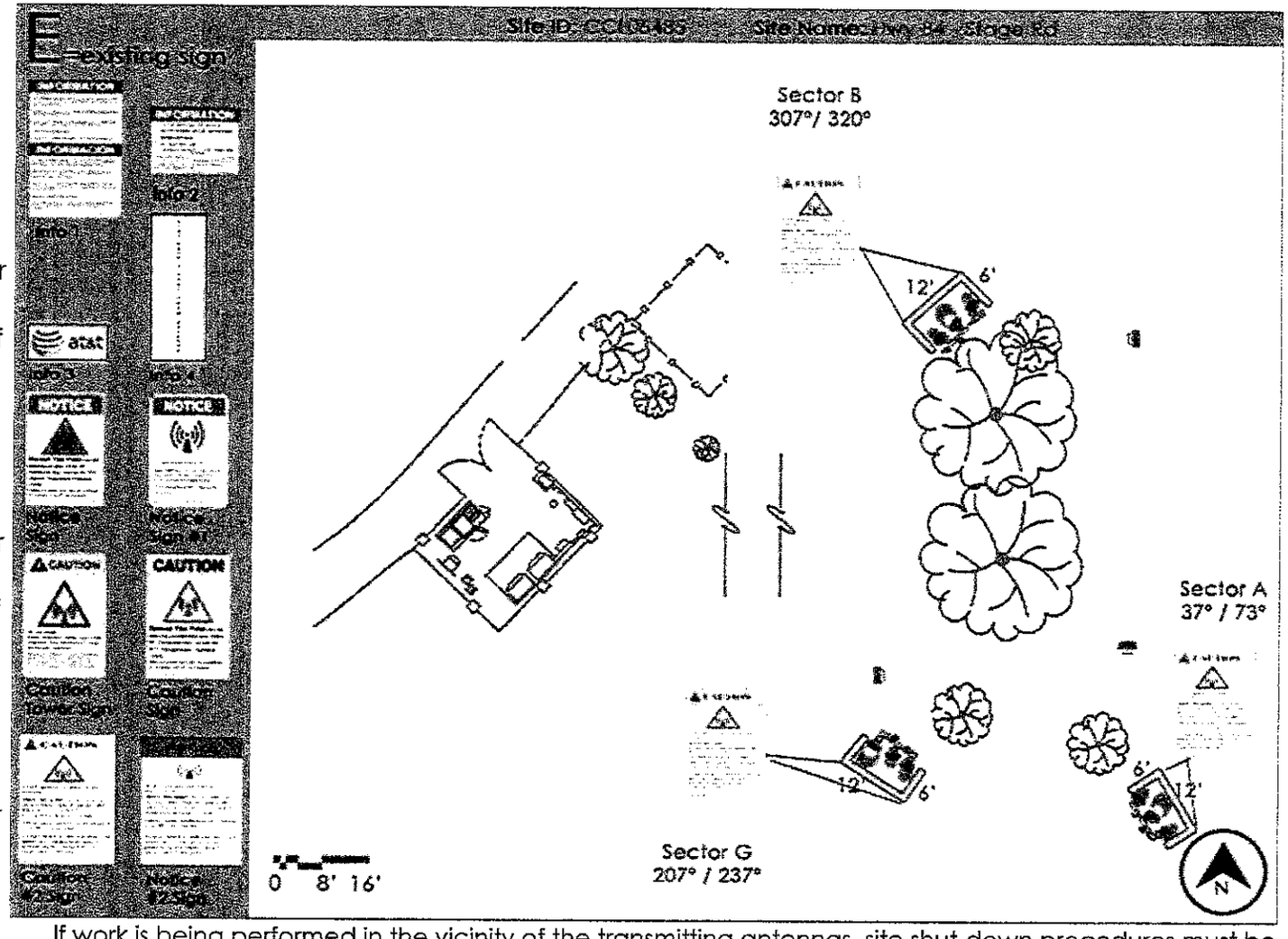
RECOMMENDATIONS

- **Access Point**
  Information 1 Sign @ all access point(s) (to be posted)

- **AT&T Sector A**
  To be installed: a 6' X 12' wide physical barrier with Caution #2 sign on all approaching sides of physical barrier

- **AT&T Sector B**
  To be installed: a 6' X 12' wide physical barrier with Caution #2 sign on all approaching sides of physical barrier

- **AT&T Sector G**
  To be installed: a 6' X 12' wide physical barrier with Caution #2 sign on all approaching sides of physical barrier



If work is being performed in the vicinity of the transmitting antennas, site shut-down procedures must be followed. See page entitled AT&T Antenna Shut-down protocol for further information.

OSC Engineering
Craig Van Dyke
President
9450 Mira Mesa Blvd
Ste 309
San Diego, CA 92126
Craig@OSCengineering.com
858.436.4120

To: Angela Chavez
City of San Gregorio

This letter is in response to an email inquiring about the EME Report dated October 16, 2016. OSC Engineering prepared this report using the most conservative values based on the maximum capabilities of the equipment specified in the AT&T provided documents. These values do not reflect what AT&T is actually transmitting at a given time, rather the maximum theoretically possible for the site design.

511% GP (General Population) MPE (Maximum Permissible Exposure) Limit: This value reflects the area immediately (within 1 foot) in front of antennas #1 at Sector A, #2 at Sector B and #1 at Sector G.

As the distance from the antennas increase, the exposure values decrease.

At 7 feet away from the antennas the GP maximum exposure drops below 100%.

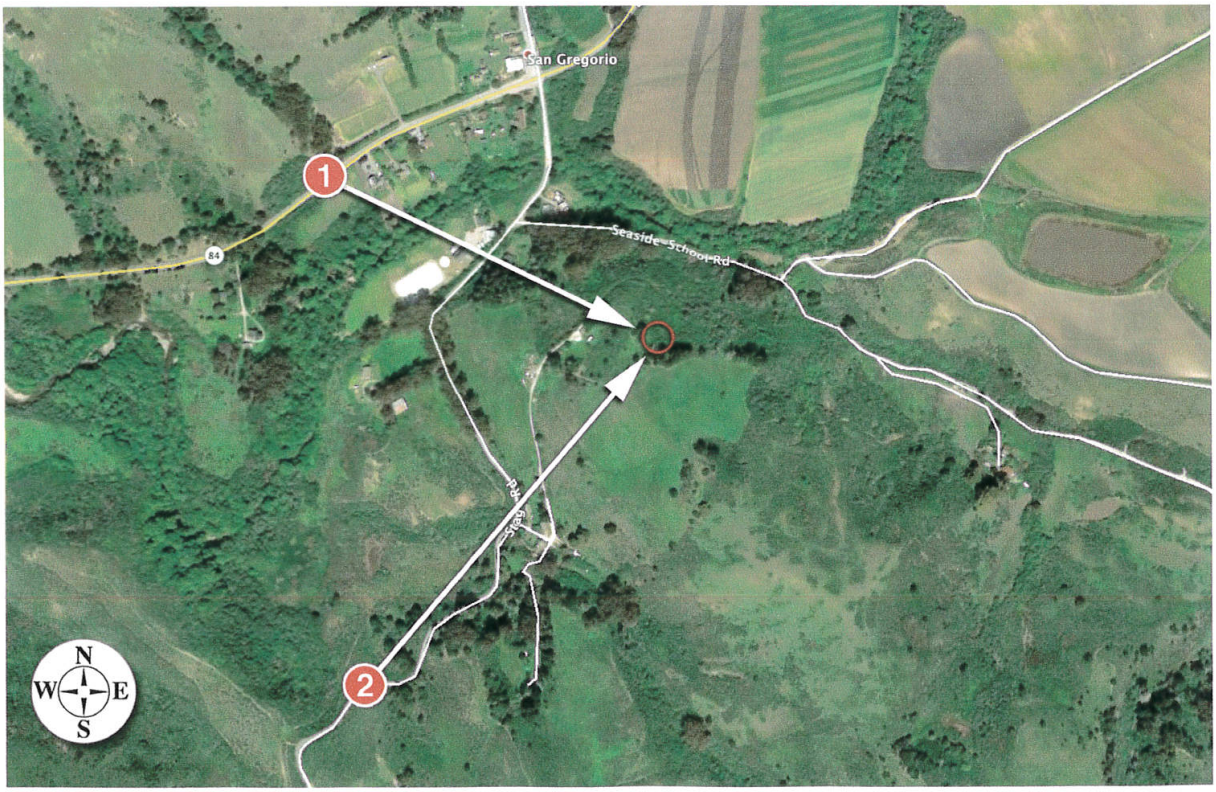
At 30 feet in front of each sector the GP maximum exposure drops to 8.5%.

At the nearest residence the GP maximum exposure value is 1.5%.

I am unsure where the 58% value that is being compared to the 511% value is coming from. We would need more information to address this query.

Sincerely,

Craig Van Dyke
21 March 2017



CROWN CASTLE

11/30/16

Hwy 84 - Stage Road Site # 856645

7400 Stage Road
San Gregorio, CA

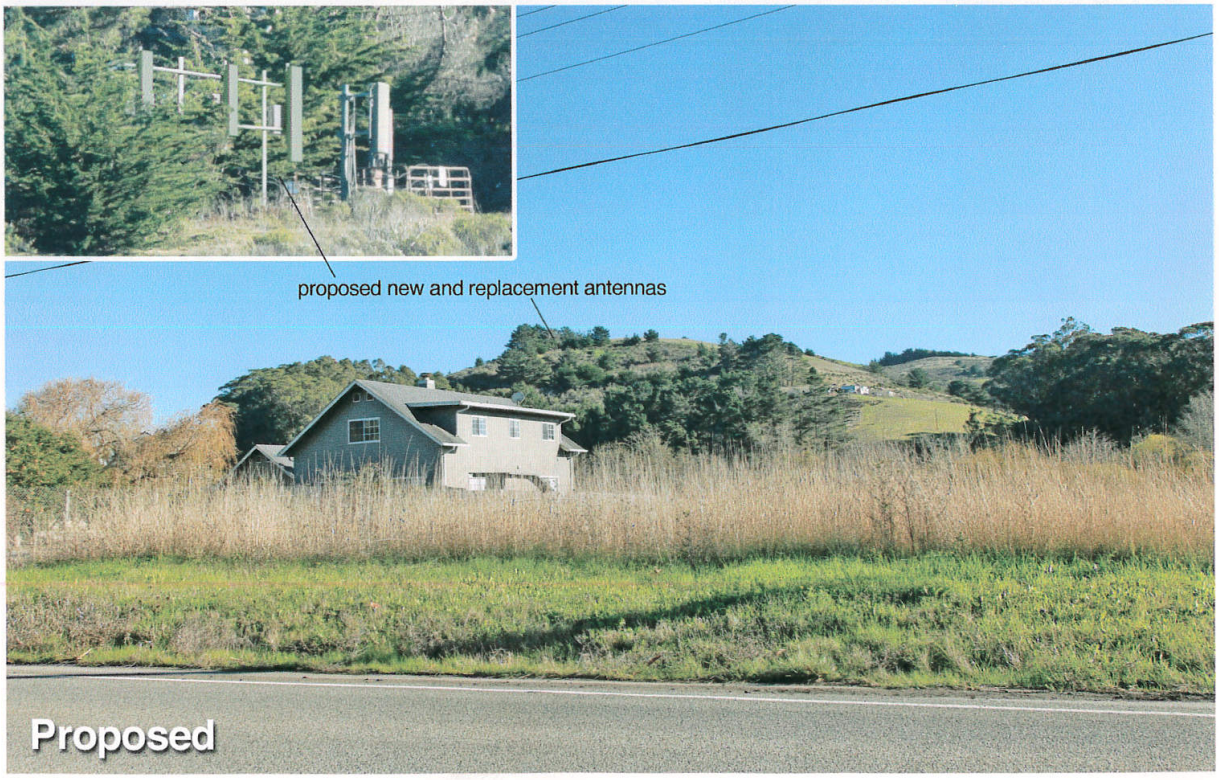
Aerial Map

Applied Imagination 510 914-0500

San Mateo County Zoning Hearing Officer Meeting

Owner/Applicant: **Armstrong/Crown Castle** Attachment: **G**

File Numbers: **PLN2003-00487**



CROWN CASTLE

11/30/16

Hwy 84 - Stage Road **Site # 856645**

7400 Stage Road
San Gregorio, CA

Looking Southeast from Hwy 84

View #1

Applied Imagination 510 914-0500

San Mateo County Zoning Hearing Officer Meeting

Owner/Applicant: **Armstrong/Crown Castle** Attachment: **G**

File Numbers: **PLN2003-00487**

CROWN CASTLE

11/30/16

Hwy 84 - Stage Road **Site # 856645**

7400 Stage Road
San Gregorio, CA

Looking Northeast from Stage Road

View #2

Applied Imagination 510 914-0500

San Mateo County Zoning Hearing Officer Meeting

Owner/Applicant: **Armstrong/Crown Castle** Attachment: **G**

File Numbers: **PLN2003-00487**