ESCONDIDO
City of Choice

PLANNING COMMISSION

Agenda Item No.: G.2
Date: September 13, 2011

CASE NUMBER: PHG 11-0013

APPLICANT: AT&T

LOCATION: North of El Norte Parkway/Citrus Avenue, east of La Honda Drive, addressed as 2365 and 2355 E. Lincoln Avenue (APN 225-041-09 and -03).

TYPE OF PROJECT: Conditional Use Permit

PROJECT DESCRIPTION: A modification to a previously approved Conditional Use Permit (City File No. 2005-38-CUP) for AT&T to replace the existing wireless communication antenna panels located on an existing 35-foot-high simulated tree with eight new panel antennas.

STAFF RECOMMENDATION: Approval

GENERAL PLAN DESIGNATION/TIER: Suburban and Rural 1, East Grove Neighborhood, Tier 2A

ZONING: R-1-10 (Single-Family Residential, 10,000 SF min. lot size) within the Suburban area and RE-210 (Residential Estate, 210,000 SF min. lot size) within the Rural 1 area.

BACKGROUND/SUMMARY OF ISSUES:

A Conditional Use Permit was approved in 2005 for AT&T (formerly Cingular Wireless) to install an approximately 35'-high simulated tree with up to eight wireless communication panel antennas mounted onto the tree. Only four antennas panels have been installed on the existing tree. AT&T has submitted a request to modify the previous CUP to replace the four existing 4'-7"-high panel antennas with new 6'-4"-high panel antennas, and install an additional four new 6'-7"-high panel antennas on the tree for a total of eight panel antennas. In order to support the new antennas, eight small remote radio units (RUs), four tower mounted amplifier units (TMAs) and two surge protectors also would be installed on the antenna panel support poles and upper area of the tree trunk. The branches of the tree would be modified to provide better coverage of the antennas. The additional antennas are requested to support AT&T's new 4G network. Any additional electrical data racks, equipment cabinets and other related equipment would be placed within the existing equipment building.

LEGAL REQUIREMENTS: In 1996, the U.S. Congress added a section to the Communications Act of 1934 to promote the expansion of personal wireless communications service, adding section 332(c)(7). This section preserves local zoning authority over the "placement, construction, and modification" of wireless facilities, while imposing certain federal requirements. Specifically, Section 332(c)(7) requires that state or local government decisions regarding wireless service facilities must not: 1) unreasonably discriminate between one cellular provider and another; or 2) prohibit or have the effect of prohibiting the provision of personal wireless services; or 3) be founded on "the environmental effects of radio frequency (RF) emissions ***to the extent that such facilities comply*** with the FCC's regulations" (emphasis added).

In summary, once the Commission is satisfied the project's RF emissions are within the federal thresholds, then the review must be based on otherwise applicable local zoning criteria. A denial of a proposed facility must not run afoul of the federal restrictions set forth as 1), 2) and 3) above.

Staff has not identified any issues with this request.

REASONS FOR STAFF RECOMMENDATION:

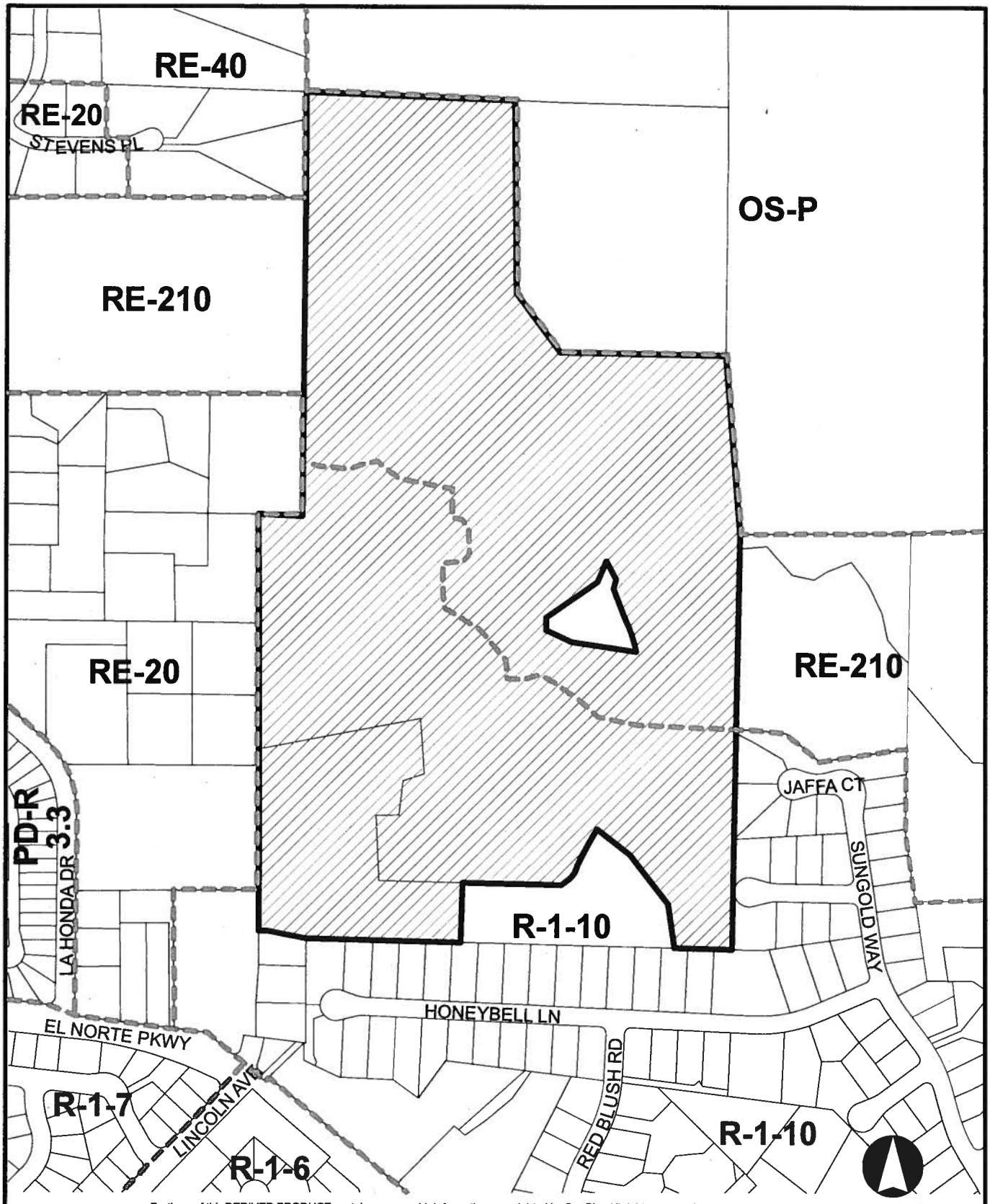
1. The proposed project would be consistent with the Communication Antennas Ordinance since the antenna panels would be located onto an existing simulated tree that was designed to accommodate wireless facilities and is a

stealthy design that blends in with the surrounding environment; the facility is located on a large agricultural site in a residential zone; the facility is in conformance with the height requirements for the residential zone; any additional support equipment would be placed within an existing building that is screened from public view; and the facility would be in conformance with FCC emission standards.

2. Staff feels the proposed facility would not result in potential health hazards to nearby residents since the Radio Frequency (RF) study prepared for the proposed project indicates the facility would be within maximum permissible exposure (MPE) limits and Federal Communication Commission (FCC) standards.

Respectfully submitted,

Jay Paul
Associate Planner



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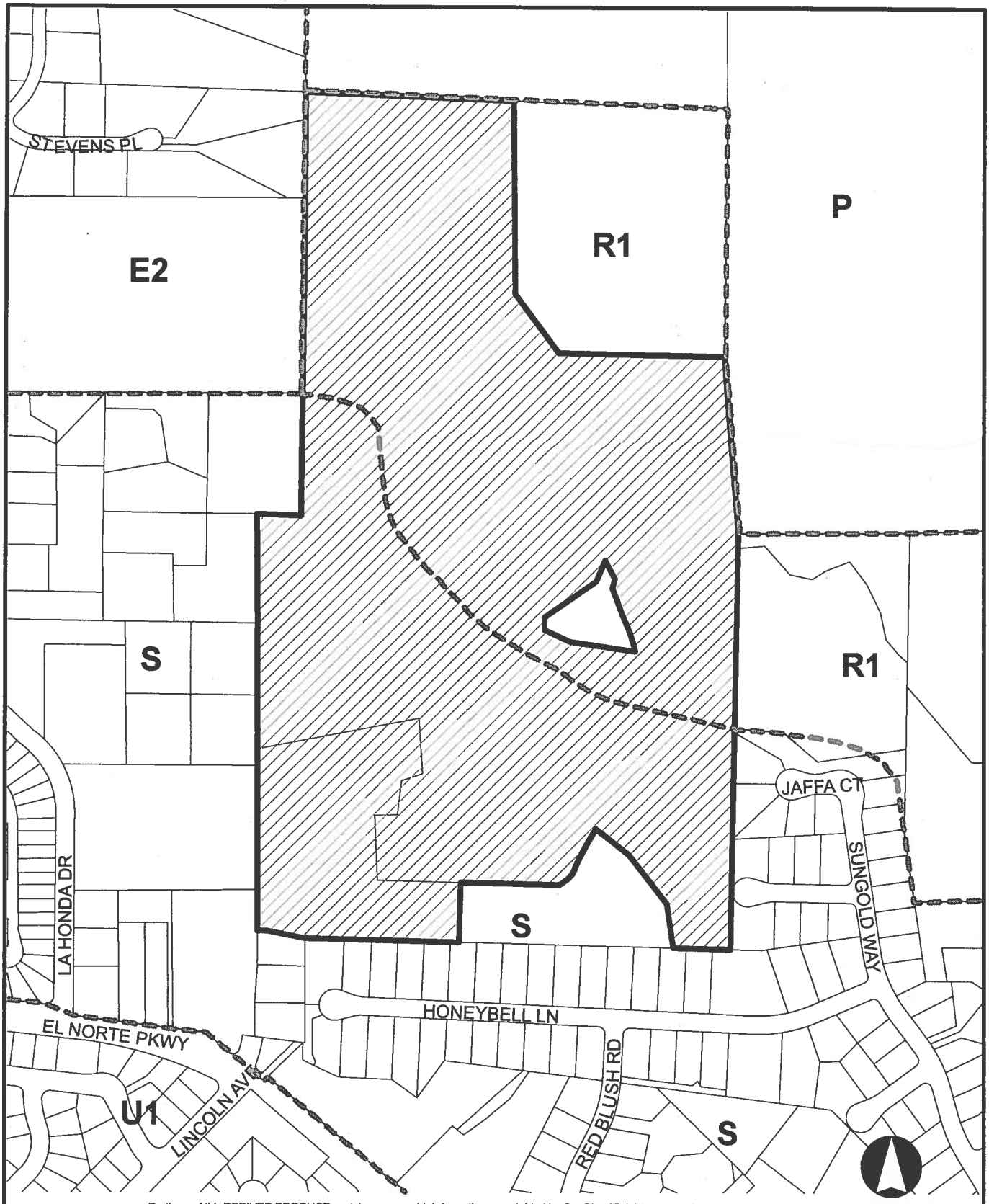
L
LOCATION/ZONING



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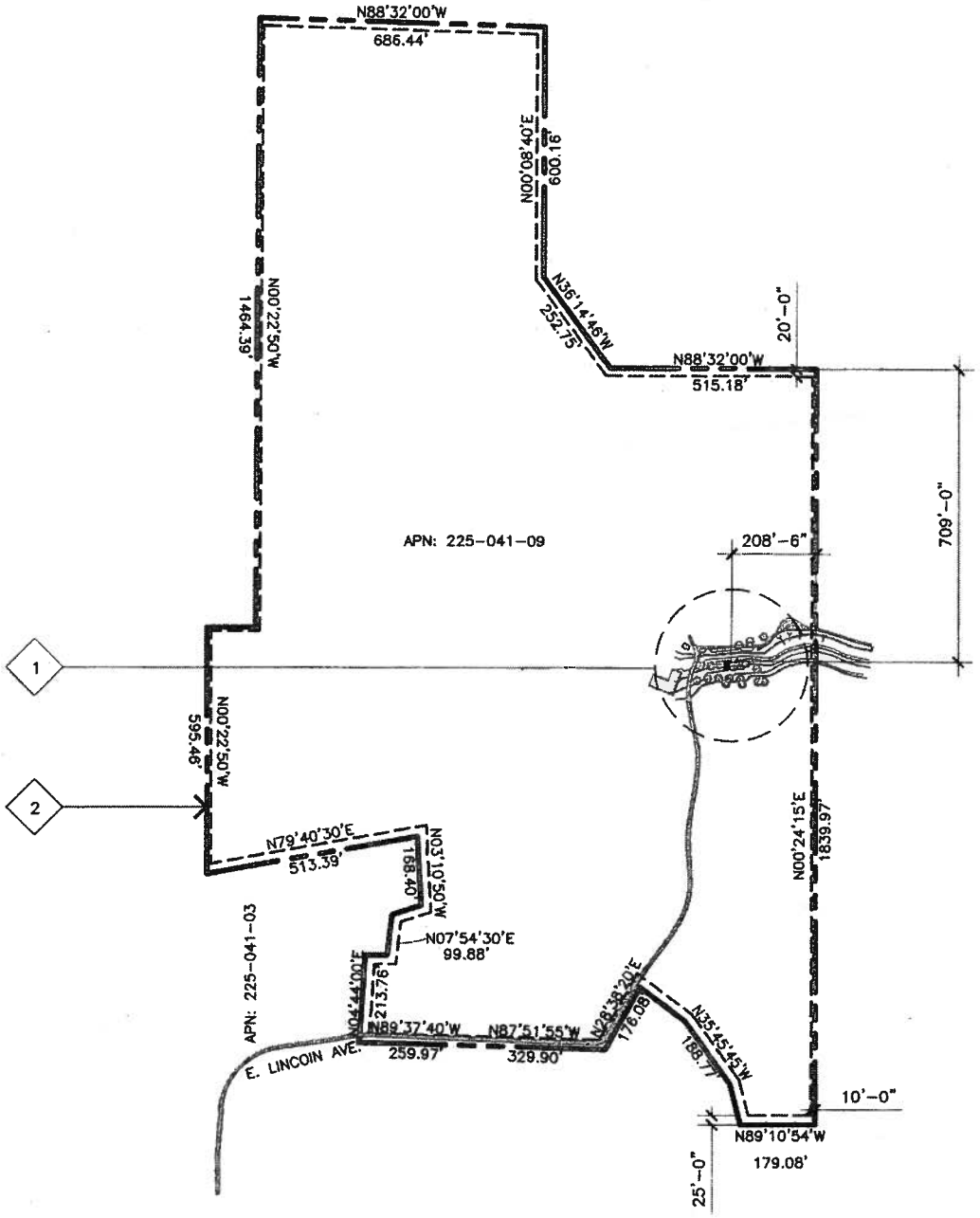
GP
GENERAL PLAN



SITE PLAN KEYNOTES

1. (E) AT&T LEASE AREA; SEE DETAIL 1/A-0.
2. (E) PROPERTY LINE; SEE SHEET C-1 AND C-2.

SITE PLAN

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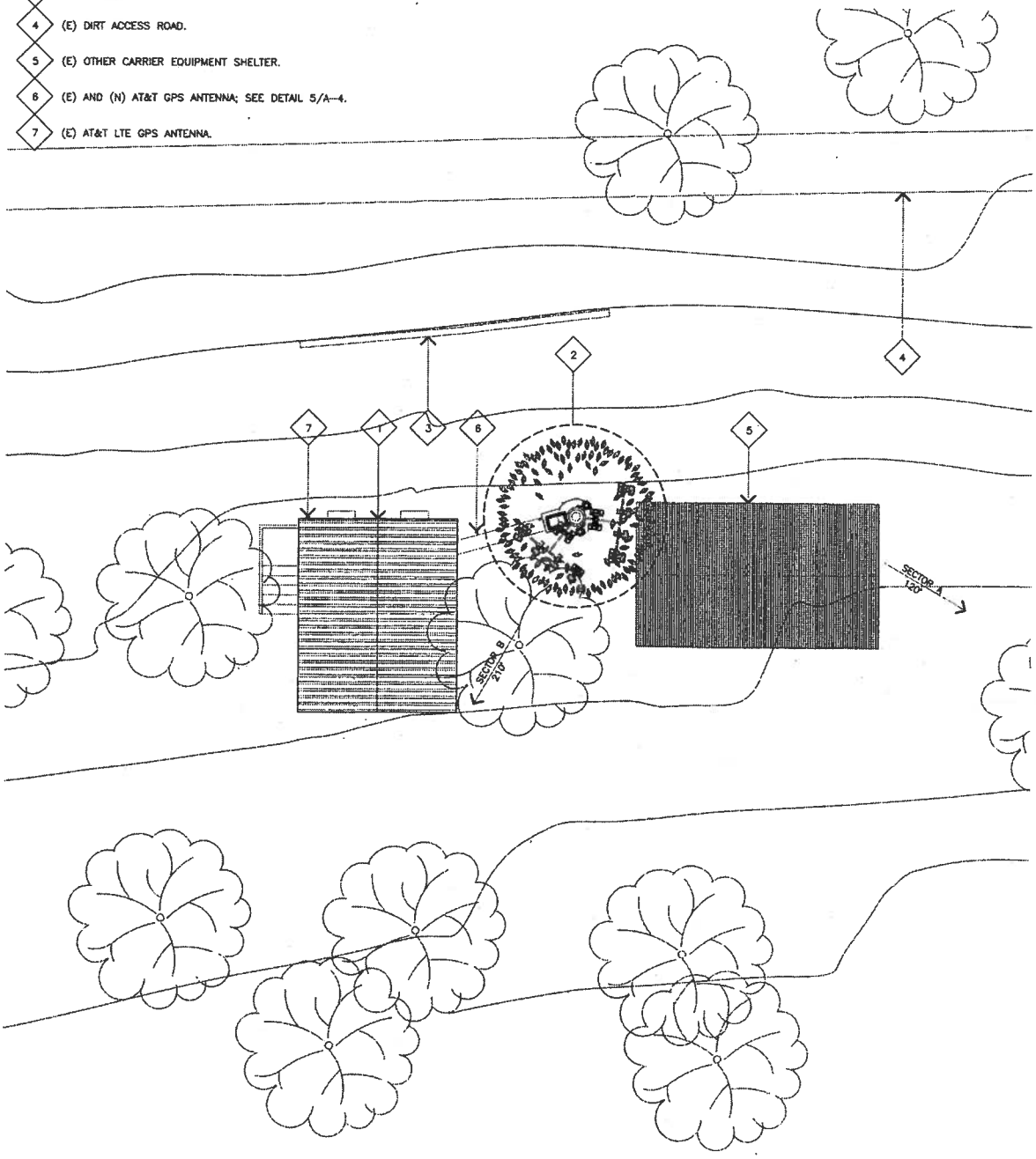
S

SITE PLAN

ENLARGED SITE PLAN KEYNOTES

1. (E) AT&T EQUIPMENT SHELTER; SEE SHEET A-1.
2. (N) AT&T LTE ANTENNAS MOUNTED TO (E) BROADLEAF MONOTREE TO REPLACE (E) AT&T ANTENNAS; SEE DETAIL 1/A-3.
3. (E) RETAINING WALL.
4. (E) DIRT ACCESS ROAD.
5. (E) OTHER CARRIER EQUIPMENT SHELTER.
6. (E) AND (N) AT&T GPS ANTENNA; SEE DETAIL 5/A-4.
7. (E) AT&T LTE GPS ANTENNA.



ENLARGED SITE PLAN

N

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S

SITE PLAN

ELEVATION KEYNOTES

1. (E) AT&T EQUIPMENT SHELTER.
2. (N) 6'-0" AT&T LTE ANTENNAS WITH ANTENNA SOCKS TO REPLACE (E) ANTENNAS MOUNTED ON (E) BROADLEAF MONOTREE.
3. (E) DIRT ACCESS ROAD.
4. (E) RETAINING WALL.
5. (N) AT&T RRU'S.
6. (N) AT&T DC SURGE SUPPRESSOR.

EAST ELEVATION

ELEVATION KEYNOTES

1. (E) AT&T EQUIPMENT SHELTER.
2. (N) 6'-0" AT&T LTE ANTENNAS WITH ANTENNA SOCKS TO REPLACE (E) ANTENNAS MOUNTED ON (E) BROADLEAF MONOTREE.
3. (N) AT&T RRU'S

WEST ELEVATION

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ELEVATIONS

NORTH ELEVATION

SOUTH ELEVATION

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ELEVATIONS

NOTE:
EXISTING BRANCHING TO BE REMOVED AND REPLACED WITH LONGER FULLER BRANCHING.

ANTENNA PLAN

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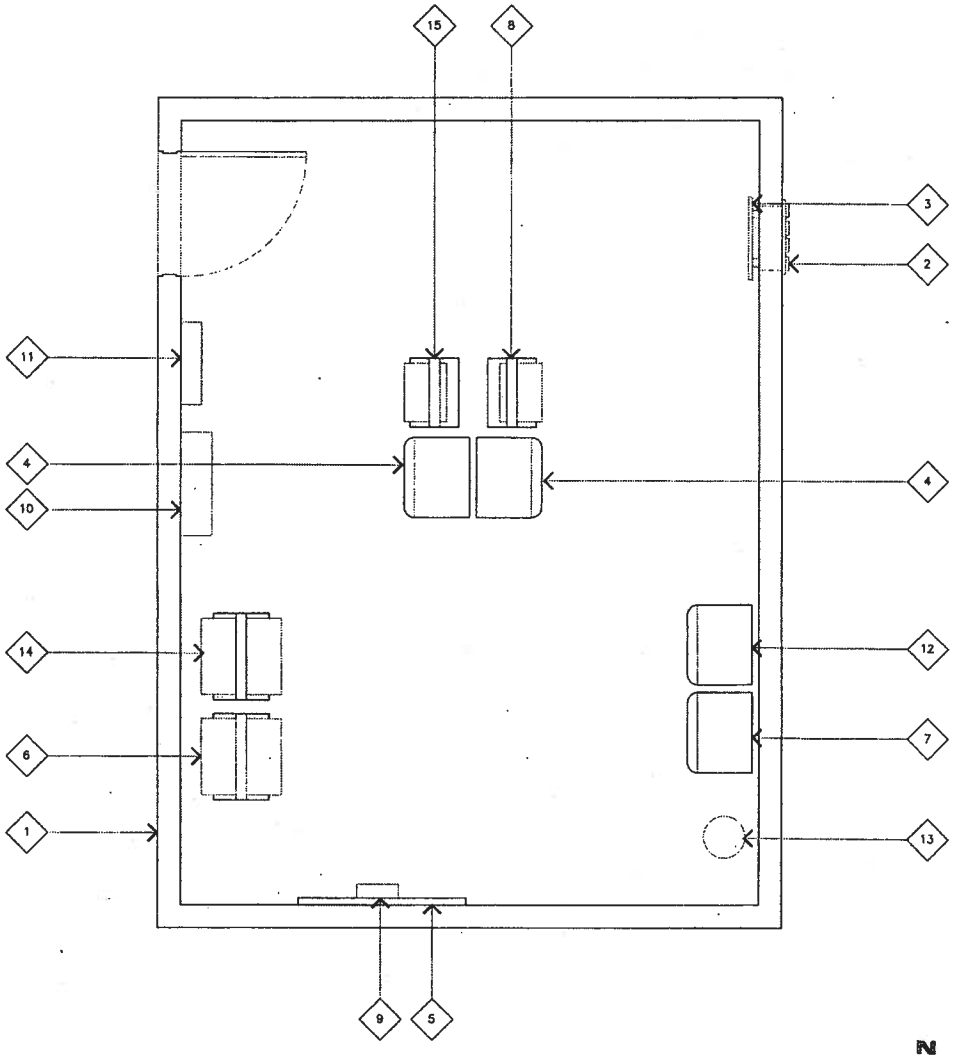
FLOOR PLAN

EQUIPMENT FLOOR PLAN KEYNOTES

1. (E) AT&T EQUIPMENT SHELTER.
2. (E) AT&T WAVEGUIDE ENTRY PORT WITH COAX FROM EQUIPMENT TO ANTENNAS.
3. (E) AT&T WALL MOUNTED MAIN GROUND BUS BAR (MGB).
4. (E) AT&T 2250 EQUIPMENT CABINET.
5. (E) AT&T TELCO BACKBOARD.
6. (E) AT&T 24VDC ARGUS RECTIFIER CABINET.
7. (E) AT&T 3206 UMTS CABINET.
8. (E) AT&T DATA RACK.
9. (E) AT&T EXTERNAL ALARM CABINET.
10. (E) AT&T MANUAL TRANSFER SWITCH.
11. (E) AT&T ELECTRICAL PANEL.
12. (E) AT&T 3206 UMTS EQUIPMENT CABIENT.
13. (E) AT&T FIRE SUPPRESSION TANK.
14. (E) 23" AT&T INDOOR 48VDC CONVERTER AND DISTRIBUTION RACK.
15. (E) 19" AT&T INDOOR DATA RACK WITH SURGE SUPPRESSOR.



EQUIPMENT FLOOR PLAN

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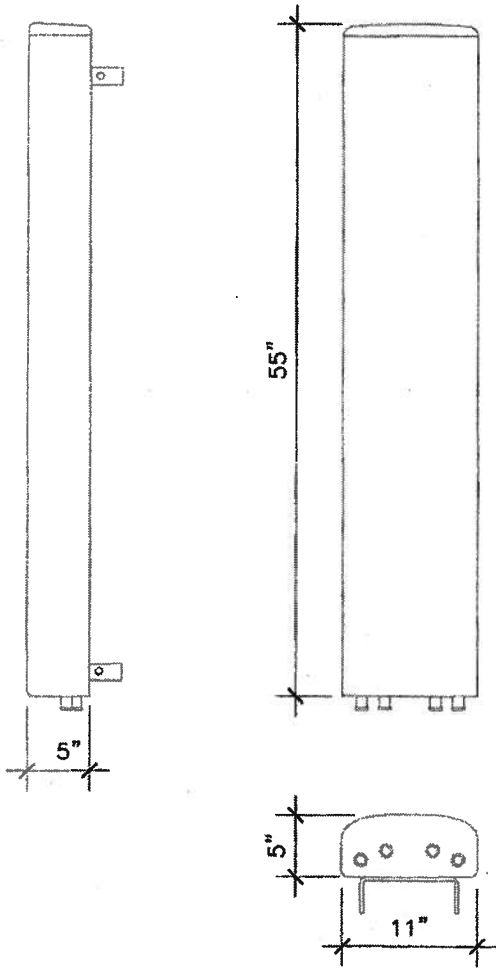
FLOOR PLAN

ANTENNA COLOR:	LIGHT GREY
DIMENSIONS, HxWxD:	408x280x125mm (4'7"x11"x5")
WEIGHT, WITH PRE-MOUNTED BRACKETS:	35 lbs
WIND LOAD, FRONTAL/LATERAL/REAR SIDE 42 m/s, Cd=1.0 (N):	435
CONNECTOR:	(4) 7/16 DIN FEMALE



(E) ANTENNA SPECIFICATION

PER RFDS DATED 12/08/09

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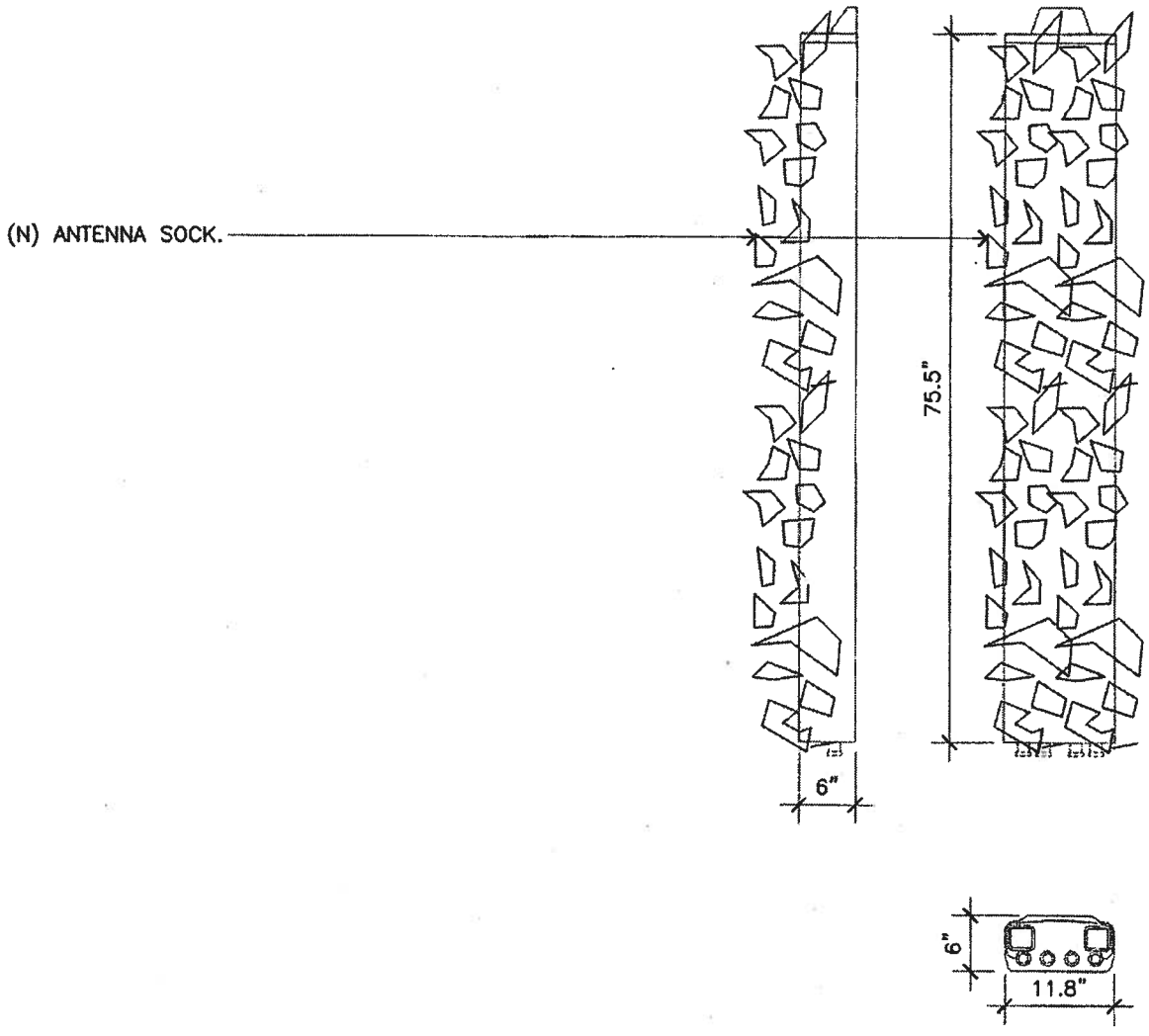
DETAILS

ANTENNA MATERIAL:	GRP
ANTENNA COLOR:	LIGHT GREY
DIMENSIONS, HxWxD:	1918x300x152mm (75.5"X11.8"x6")
WEIGHT:	51.8 lbs
WIND LOAD, FRONTAL/LATERAL/REAR 221 lbf/81 lbf/ 230 lbf	
CONNECTOR:	7/16 DIN FEMALE



(N) ANTENNA SPECIFICATION

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DETAILS

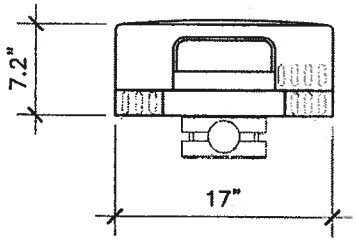
RRU COLOR: LIGHT GRAY

DIMENSIONS, HxWxD: (17"x17.8"x7.2")

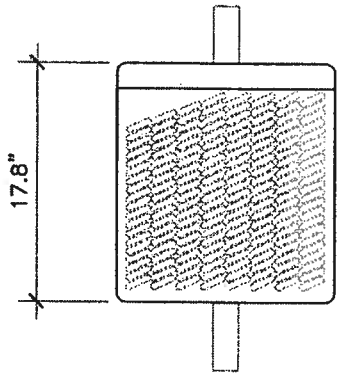
WEIGHT, WITH PRE-MOUNTED BRACKETS: 55 lbs

WIND LOAD, FRONTAL/LATERAL/REAR
SIDE 149.8 mph, Cd=1: N/A lbs

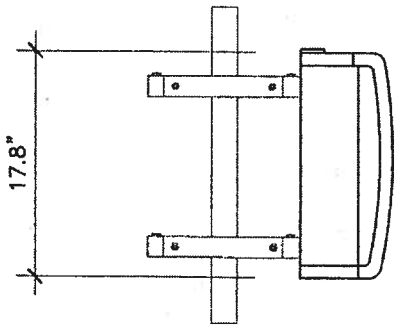
CONNECTOR: (4) 1/2 DIN FEMALE



TOP VIEW



FRONT VIEW



SIDE VIEW

RRU CABINET

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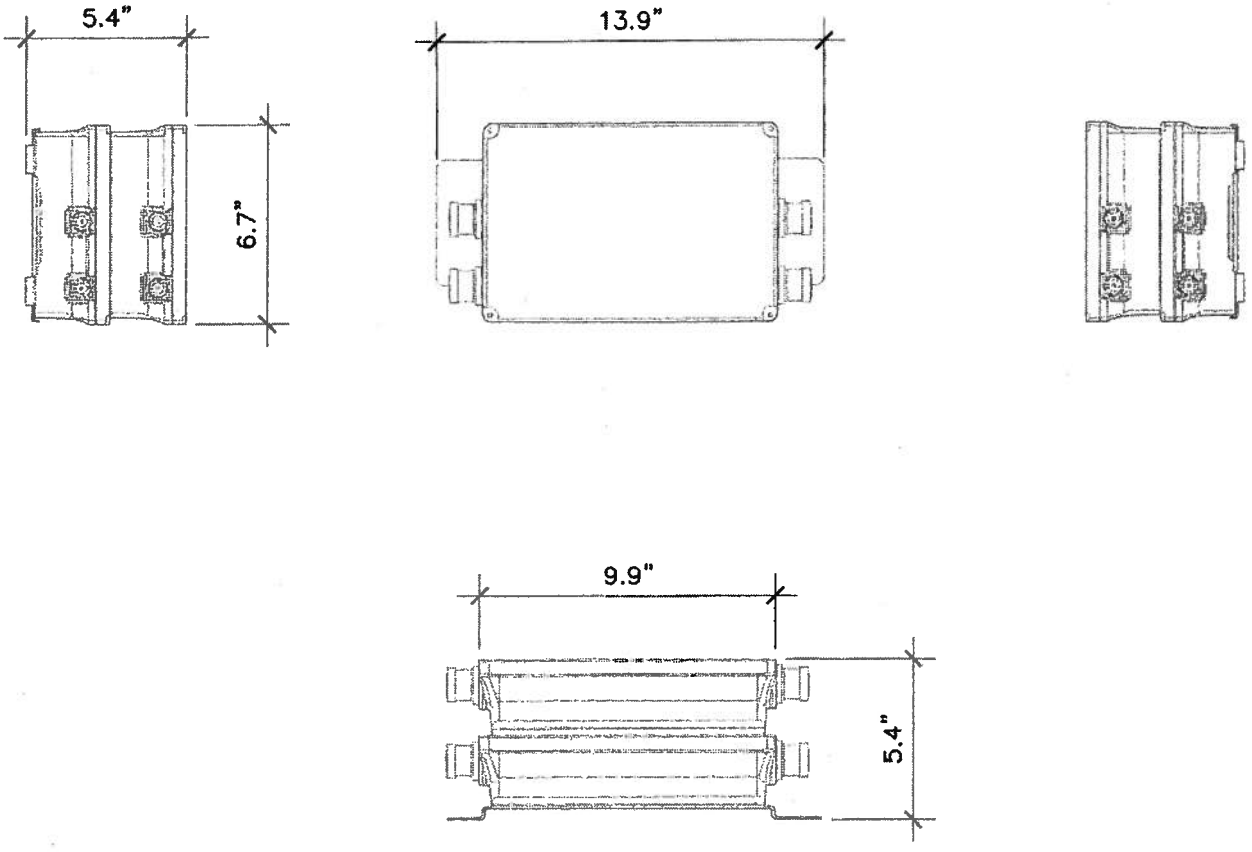
DETAILS



DUAL BAND TMA

PROPOSED PROJECT
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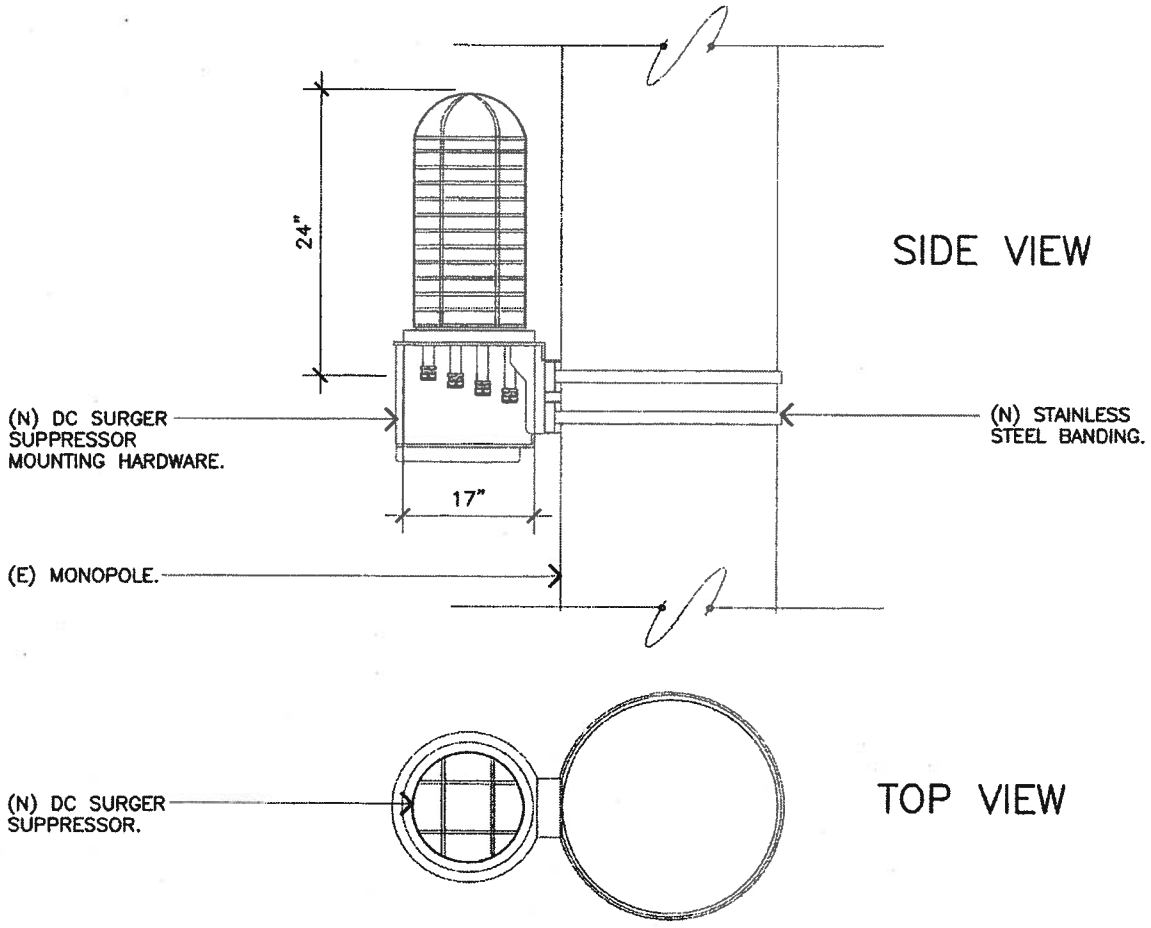
DETAILS

SURGE SUPPRESSOR COLOR:	LIGHT GRAY
DIMENSIONS, HxWxD:	(10"ø x24")
WEIGHT, WITH PRE-MOUNTED BRACKETS:	32.8 lbs
WIND LOAD, FRONTAL/LATERAL/REAR SIDE 149.8 mph, Cd=1:	N/A lbs
CONNECTOR:	(4) 1/2 DIN FEMALE



DC SURGE SUPPRESSOR

PROPOSED PROJECT
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DETAILS

ANALYSIS

A. LAND USE COMPATIBILITY/SURROUNDING ZONING

NORTH: RE-210 and OS-P zoning (Residential Estate, 210,000 SF min. lot size, and Open Space-Public) / The subject site is surrounded by the Henry Ranch avocado orchards on all sides. The topography of the site generally slopes and drains from north to south, and is steep. A paved and gravel access road is located along the northern boundary of the proposed antennas. The Dixon Lake recreation open-space areas are located immediately north and northeast of the ranch. The Vista Irrigation Flume (which is an above-ground concrete structure) is located immediately north of the project site, and runs across the property from east to west.

SOUTH: RE-210 (Residential Estate, 210,000 SF min. lot size) / The Henry Ranch avocado orchards are located immediately south of the project site. The packing operations are located further south on the flatter portions of the site. Area of native vegetation are located southeast of the project site. Residential homes are located further southeast of the proposed antennas (approximately 1,000+ feet to the southeast) at a significantly lower elevation.

EAST: RE-210 zoning (Residential Estate, 210,000 SF min. lot size) / Open space areas and underdeveloped and large vacant parcels are located east of the project site. The Vista Irrigation Flume continues east of the project site along a gravel access road, which is gated at the eastern boundary of the Henry Ranch property. Vegetation east of the project site consists of scattered avocado trees and a large area of native vegetation on sloping topography. A Verizon wireless communication facility is located immediately east of the AT&T site along the flume/grove road. The Verizon facility consisting of five, 15-foot-high pole-mounted antennas with the antenna panels clad with a faux foliage (broadleaf style leafs).

WEST: RE-210 zoning (Residential Estate, 20,000 SF min. lot size) / A dense grouping of avocado trees is located west of the project site. A single-story, single-family residential home is located approximately 160 feet southwest of the nearest antenna and 140 feet from the proposed equipment building. The home is owned by Henry Ranch. The existing avocado trees would block views of the antennas and equipment enclosure from views from the house and further views from the west.

B. AVAILABILITY OF PUBLIC SERVICES

1. Effect on Police Service -- The Police Department expressed no concern regarding the proposed project and their ability to serve the site.

2. Effect on Fire Service -- The Fire Department indicated that adequate services can be provided to the site and the proposed project would not impact levels of service.

3. Traffic – The Engineering Department indicated the project would not have any impacts to existing traffic or circulation within the area.

4. Utilities – Water and sewer is available from existing mains in the adjoining streets or easements. The Engineering Department indicated the project would not result in a significant impact to public services or utilities.

5. Drainage – The Engineering Department has determined the project would not materially degrade the levels of service of the existing drainage facilities.

C. ENVIRONMENTAL STATUS

1. The proposal is exempt from the requirements of the California Environmental Quality Act in conformance with CEQA Section 15301, "Existing Facilities," and a Statement of Exemption was prepared for the proposed project. In staff's opinion, the request does not have the potential for causing a significant effect on the environment due to the relatively small size of the facility and the proposed development would be located within an existing avocado grove.

The subject area does not contain any sensitive vegetation, nor would the project encroach into native vegetation areas.

2. In staff's opinion, no significant issues remain unresolved through compliance with code requirements and the recommended conditions of approval.

3. The project will have a de minimis impact on fish and wildlife resources as no sensitive or protected habitat occurs within the project area or will be impacted by the proposed development.

D. GENERAL PLAN ANALYSIS:

General Plan – The requested Conditional Use Permit is consistent with the Suburban and Rural II designation of the General Plan since wireless facilities are allowed when they are in conformance with the Communication Antennas Ordinance, underling zoning requirements, and are compatible with the surrounding properties and built environment. The project is in substantial compliance with any relevant General Plan criteria and underlying RE-210 zone standards, and also is in conformance with the Personal Wireless Service Facilities Guidelines as discussed in the analysis section below and project findings.

E. PROJECT ANALYSIS

Whether the Proposed Wireless Facility is in Conformance with the Communication Antennas Ordinance and Wireless Service Facilities Guidelines.

The existing AT&T facility consists of eight antenna panels mounted to an approximately 35-foot-high pole designed to resemble a broad leaf tree. The existing facility is situated at the edge of a grove road adjacent to an existing Verizon Wireless facility. The existing antennas are mounted onto the faux tree at a height of approximately 27' to peak over the existing avocado trees that are situated at a lower elevation on the southern facing hillside. The new antennas would be mounted at a slightly higher position on the tree (approx. 30'-6") to provide appropriate signal coverage. The existing branches on the tree would be modified or replaced to screen the new antennas and provide the appropriate scale and height above the antennas. The additional radio units, TMAs and surge protectors would be painted green and brown to match the blend in with the tree. The backdrop of existing avocado trees located at a higher elevation helps to blend the panels into the surrounding environment.

As conditioned, the project would be consistent with the Communication Antennas Ordinance since it incorporates a stealthy design which would not result in any adverse visual impacts. The facility is located on a large agricultural site that provides the appropriate context for the simulated tree to blend in with the surrounding avocado grove. The facility conforms to the height requirements of the underlying RE-210 zone and appropriate setbacks are provided from any adjacent residences. The project also would be in conformance with FCC emission standards. The Design Review Board approved the proposed project (vote 6-0) on August 11, 2011. The Board did not raise any issues regarding the design or location.

Operation of the facility would generate electromagnetic emissions (RF radiation). A RF study was prepared for the project Telenet, to determine whether the proposed communication facility complies with the FCC Rules and Regulations for RF emissions for "General Public" classifications. The study concluded the project site would be compliant with FCC rules and regulations. The proposed AT&T upgrade is predicted to contribute approximately 9.7% maximum permissible exposure (MPE) based on theoretical modeling. The maximum cumulative level for all facilities is calculated at approximately 66.1% of MPE (AT&T at 9.7% plus existing Verizon at 59.4%). The Verizon figures were obtained from a separate previous study prepared by Dr. Jerrold Bushberg for the existing Verizon wireless facility. The Telenet compliance determination is based on General Public MPE levels due to predicted MPE, RF signage placement, and the level of access to the antennas at the site. Appropriate signage is required to be posted at access areas to the antennas and equipment providing warning/safety notice since the facility would contribute more than 5% of the MPE for the site. A copy of the study has been attached with this report.

SUPPLEMENT TO STAFF REPORT/DETAILS OF REQUEST

A. PHYSICAL CHARACTERISTICS

The project site is developed with an active avocado grove and commercial avocado packing and shipping operation. A paved road (varies in width from 8 feet to 16 feet) provides access to the existing home on the site and upper portions of the orchards. Unpaved roads provide access throughout the orchard and to the proposed wireless site. Chain-link gates and fencing restrict access to the Henry Ranch property from public access. A Tentative Subdivision Map (TR 920) for 98 single-family residential lots on the ranch property was approved by the City Council on December 13, 2006. The map has not yet been recorded. Proposed lot sizes range from approximately 10,000 SF to 28.80 acres. Three estate/agricultural lots are proposed ranging in size from 4.87 acres to 28.80 acres (Lot 26, 27 and 98). A portion of the existing avocado grove would be retained on the three estate/agricultural sized lots, and the existing adobe single-family residence would remain on a 28.80-acre lot (Lot 98). The existing AT&T and Verizon wireless facility would be located on proposed Lot 98.

B. SUPPLEMENTAL DETAILS OF REQUEST

1.	Property Size:	60+ acres (lease area for building 16' x 20') 16-foot-wide access easement from upper access road to antennas and new easement road to equipment building
2.	Antenna Height:	
	Existing:	32' – 35' top of branches, approx. 27' top of antennas
	Proposed:	Approx. 35' to top of branches, 30'-6" feet to top of new antennas. Tree branches may be allowed to project above the 35' height limit of the residential zone.
3.	Material/Color:	Antenna panels painted green to blend with tree leaves and covered in faux leaves (socks). Radio Units, TMAs and Surge Protectors painted either green or brown to match tree leaves and exterior bark colors.
4.	Antennas:	
	Existing:	8 panel antennas, approx. 4'-7" in height
	Proposed:	8 panel antennas, approx. 6'-4" in height
5.	Radio Units and Surge Protectors:	8 Remote Radio Units (RUs) 17.8" H x 17.8" W x 7.2" D 2 Surge Protectors 24" tall x 17" circumference 4 Dual Band Tower Mounted Amplifier Units (TMAs) 13.9" H x 6.7" W x 5.4" D mounted behind the panel antennas
5.	Equipment:	Equipment consists of data equipment cabinets, battery racks, wireless meter and telco enclosure-panel boards located within a twelve-foot-high, 16' x 20' masonry equipment enclosure. Decorative block (slump block or tan colored CMU block) used for enclosure with metal roof painted green. The facility would sits on a steal frame and concrete piers/wall to extending over the sloping topography. Air conditioning units are mounted outside on northern elevation of building.
6.	Generator:	Generator pad and electrical hook-up for portable 20 kW -30 kW diesel standby generator.
7.	Hours of Operation Wireless Facility:	24 hours, unmanned
8.	Landscaping:	Combination of trees and shrubs around the equipment enclosure and antennas, with irrigation.

EXHIBIT "A"

FINDINGS OF FACT
PHG 11-0013

Conditional Use Permit

1. General Plan Residential Policy B2.1 (page II-17) states that residential neighborhoods shall be protected from the encroachment of incompatible activities which may have a negative impact on the residential living environment. Granting this Conditional Use Permit to modify the existing AT&T personal wireless communication facility on the subject property would not conflict with this policy and would be based on sound principles of land use since the use is in response to services required by the community and the facility would enhance communication services in the city without posing a health threat to the surrounding area. The facility would incorporate a stealthy type of design in conformance with the Communication Antennas Ordinance, which would minimize potential visual impacts from adjacent views. The ground equipment would be located within an existing masonry enclosure area, which would eliminate any potential visual and noise impacts to adjacent residents. The proposed facility would not result in a substantial alteration of the present or planned land use since the project site is developed an active avocado grove, and the proposed antennas and equipment enclosure area would not adversely affect the current operation of the grove, nor any future uses of the site in conformance with the underlying residential General Plan land-use category or zoning. The facility also would not result in a potential health hazard to nearby residents since the facility would be within MPE (maximum permissible exposure) limits as indicated in the radio frequency analysis prepared for the project. The proposed facility would be in compliance with the City's Wireless Facility Guidelines, as discussed in the Planning Commission staff report.

2. The proposed personal wireless communication facility would be located within the Suburban and Rural II General Plan land-use designations. Personal wireless communication facilities are permitted within these residential zones pursuant to approval of a Conditional Use Permit (CUP). The proposed facility would not result in a substantial alteration of the present or planned land use since the new antennas and any support equipment would be placed in an existing avocado grove to blend in with the existing environment The proposal would not cause deterioration of bordering land uses since the facility incorporates a stealthy type of design that would fit into the context of the avocado grove, and the associated equipment would be appropriately screened from surrounding views. The height of the proposed panels would be in conformance with the maximum height requirements for principle structures located within the RE-210 zone and compatible with the height of surrounding vegetation.

3. The visual impacts related to the proposed personal wireless communication facility are not considered significant since a stealthy type design would be used to blend in with the existing avocado grove. The design and location of the proposed modifications to the existing facility would be in compliance with the City's Wireless Facility Guidelines, as discussed in the Planning Commission staff report. The City's Design Review Board recommended approval of the project design on August 11, 2011.

4. The proposed personal wireless communication facility would not be hazardous to the health of nearby residents since the radio frequency (FR) analysis prepared for the project concluded the maximum operation levels of radiation for the facility would be within the MPE (Maximum Permissible Exposure) limit established by FCC requirements.

5. The proposal is exempt from the requirements of the California Environmental Quality Act in conformance with CEQA Section 15301, "Existing Facilities," and a Statement of Exemption was prepared for the proposed project. In staff's opinion, the request does not have the potential for causing a significant effect on the environment due to the relatively small size of the facility and the proposed development would be located within an existing avocado grove. The project will have a de minimis impact on fish and wildlife resources as no sensitive or protected habitat occurs within the project area or will be impacted by the proposed development.

6. The proposed Conditional Use Permit has been considered in relationship to its effect on the community, and the request would be in compliance with the General Plan Policies and the Wireless Facility Guidelines, and would not result in a negative impact to the adjacent neighborhood for the reasons stated above and detailed in the Planning Commission staff report and radio frequency analysis.

EXHIBIT "B"

CONDITIONS OF APPROVAL
PHG 11-0013

General

1. All construction shall comply with all applicable requirements of the Escondido Zoning Code and requirements of the Planning Department, Director of Building, and the Fire Chief.

2. The legal description attached to the application has been provided by the applicant and neither the City of Escondido nor any of its employees assume responsibility for the accuracy of said legal description.

3. Prior to or concurrent with the issuance of building permits, the appropriate development fees and Citywide Facility fees shall be paid in accordance with the prevailing fee schedule in effect at the time of building permit issuance, to the satisfaction of the Director of Community Development.

4. All exterior lighting shall conform to the requirements of Article 1072, Outdoor Lighting (Ordinance No. 86-75).

5. The facility shall be subject to all relevant conditions of approval and requirements of Conditional Use Permit No. 2005-38-CUP, unless specifically modified by this use permit.

6. As proposed, the design, color and materials of the proposed facilities shall be in accordance with the Design Review Board recommendations, staff report, exhibits and the project's Details of Request, including the following to the satisfaction of the Planning Division:

    a. RF transparent type covers (socks) shall be installed on all the antenna panels with appropriate branch and leaves to match the color and design of the surrounding avocado grove. A sufficient number of leaves/branches of sufficient length shall be incorporate into the tree to provide appropriate visual screening, and include additional or fuller branches to make the top of the tree appear fuller. The leaves/branches shall be installed to provide sufficient depth/relief to the antennas. A typical drawing shall be provided with the building plans indicating the design and number of leaves/branches attached to the antenna, and how they will be attached to provide the appropriate depth/relief.

    b. The support poles, brackets and other support equipment shall be painted a dark olive drab green to blend in with the surrounding grove trees.

7. All required landscaping shall be permanently maintained in a flourishing manner. All irrigation shall be maintained in fully operational condition.

8. AT&T Wireless, or any subsequent operator/lease holder of the wireless facility, agrees to investigate any complaints related to possible interference with electronic equipment in the surrounding area to determine the cause of the interference. Any interference shall be resolved in a timely manner to the satisfaction of the Director of Community Development. If the facility is determined to be the cause of the electronic interference, AT&T shall solve the problem in a timely manner to the satisfaction of the complainant and the Director of Community Development. In addition, any interference with public safety communications shall be corrected immediately, to the satisfaction of the City of Escondido.

9. All project generated noise shall conform to the City's Noise Ordinance (Ordinance 90-08).

10. If requested by the City of Escondido, AT&T, or any subsequent operator/lease holder of the facilities shall permit co-location of other wireless providers on its facility (subject to City of Escondido Approval) if it can be demonstrated that there would be no adverse effect on the existing facilities/operations.

11. AT&T shall coordinate with the City of Escondido to select a qualified, independent third party consultant to conduct an actual power density measurements of the facility within 90 days after installation and under full operation of the

facility. The results of the study shall be submitted to the Director of Community Development so that the theoretical power density study can be compared to the actual output.

12. AT&T or any subsequent operator/lease holder of the wireless facility shall be responsible for all maintenance of the facility, including the antennas and supporting equipment to ensure the condition of the facility does not appear weathered.

13. All communication facilities on the site shall be promptly removed upon non use of the facilities, to the satisfaction of the Planning Division and Building Department.

14. Any permanent, temporary or stand-by emergency generators must be in conformance with the City's Ordinance and regulations regarding electric generating facilities.

15. All new utilities and utility runs shall be underground.

16. No additional antennas or expansion of this facility shall be permitted without a modification of the Conditional Use Permit and a public hearing before the Planning Commission. Minor changes within the approved size and design parameters may be permitted by the Community Development Director after review by the Design Review Board.

17. A sign conforming to ANSI C95.2 color, symbol and content, and other markings as appropriate, should be placed close to the antennas with appropriate contact information in order to alert maintenance or other workers approaching the antennas to the presence of RF transmissions and to take precautions to avoid exposures in excess of FCC limits. The requirement for the appropriate signage/notice shall be indicated on the building plans.

18. The Conditional Use Permit shall be null and void if not utilized within twelve months of the effective date of approval.

19. This item may be referred back to the Planning Commission upon recommendation of the Director of Community Development for review and possible revocation or modification of the Conditional Use Permit upon receipt of nuisance complaints regarding the facility or non-compliance with the Conditions of Approval.

CITY OF ESCONDIDO
PLANNING DIVISION
201 NORTH BROADWAY
ESCONDIDO, CA 92025-2798
(760) 839-4671

Notice of Exemption

To: San Diego County Recorder's Office
Attn: Linda Kesian
P.O. Box 121750
San Diego, CA 92112-1750

From: City of Escondido
201 North Broadway
Escondido, CA 92025

Project Title/Case No.: PHG 11-0013

Project Location - Specific: North of El Norte Parkway/Citrus Avenue, east of La Honda Drive, addressed as 2365 and 2355 E. Lincoln Avenue (APN 225-041-09 and -03).

Project Location - City: Escondido, **Project Location - County**: San Diego

Description of Project: A modification to a previously approved Conditional Use Permit (City File No. 2005-38-CUP) for AT&T to replace the existing wireless communication antenna panels located on an existing, approximately 35-foot-high simulated tree with eight new panel antennas, and other support radio type equipment.

Name of Public Agency Approving Project: City of Escondido

Name of Person or Agency Carrying Out Project:

Name AT&T (rep. Darrell Daugherty, Plancom Inc.) Telephone (760) 715-8703

Address 302 State Place, Escondido, CA 92029

☒ Private entity ☐ School district ☐ Local public agency ☐ State agency ☐ Other special district

Exempt Status: Categorical Exemption. Section 15301 "Existing Facilities."

Reasons why project is exempt:

1. The project only involves a modification to a previously approved Conditional Use Permit (2005-38-CUP) to remove the existing eight panel antennas and replace them with eight new, 6'-4" tall panel antennas mounted onto an existing simulated tree. The new panels would be placed slightly higher on the existing tree, and new branches would be added.
2. The site is in an area where all public services and facilities are available to allow for the proposed use.
3. The site is within an area that currently is developed as an avocado grove and related structures/infrastructure. The proposed development/lease area is not in an area that is environmentally sensitive and the project would not have any direct impacts to any sensitive or protected resources since there are no resources located on the site.
4. The proposed facility would not be hazardous to the health of nearby residents or the general public since the facility would be within maximum permissible exposure (MPE) limits and Federal Communication Commission (FCC) standards.

Lead Agency Contact Person: Jay Paul, Planning Division Area Code/Telephone/Extension (760) 839-4537

Signature: _____ August 29, 2011
Jay Paul, Associate Planner Date

☒ Signed by Lead Agency Date received for filing at OPR: N/A

Electromagnetic Energy ("EME")
Site Compliance Report

Prepared for

at&t

Site Information

US ID:	79779
Site Name:	HENRY AVOCADO
Address:	2355 EAST LINCOLN AVENUE, ESCONDIDO, CA, 92026

Report Date: April 04, 2011
CASPR#: 3601003057

M-RFSC: Hector Manmano
Site Type: Monotree

AT&T

US ID: 79779- Site Name: HENRY AVOCADO
Electromagnetic Energy ("EME")
Measurement and Site Compliance Report

2355 EAST LINCOLN AVENUE, ESCONDIDO, CA, 92026

TABLE OF CONTENT

1 Summary

1.1 Introduction

AT&T has installed RF transmitting antennas at the following location (the "wireless telecommunications facility"):

Street Address: 2355 EAST LINCOLN AVENUE, ESCONDIDO, CA, 92026

US ID: 79779

Latitude / Longitude: 33.15558/ -117.05008

Telnet, Inc performed an RF computational analysis of the RF environment surrounding the facilities installed by AT&T at this location. The facility is located on a Monotree.

AT&T is licensed by the Federal Communications Commission ("FCC") to provide wireless communications services. As required by the FCC, wireless system operators perform an assessment of the potential human exposure to radio frequency emissions emanating from transmitting antennas at the site.

Antenna specifications presented herein are based on direct evidence from information from the site manager or building manager, information from the licensees, educated estimates by the field technician or a combination of some or all of these sources.

1.2 Statement of Compliance

A site is considered in compliance with FCC regulations if there are areas that exceed the FCC exposure limits and there are no RF hazard mitigation measures in place. Any carrier which has an installation that contributes more than 5% of the applicable MPE must participate in mitigating these RF hazards. Per AT&T's corporate policy, the FCC's general population limits are applicable to all rooftop sites, regardless of the level of access control. As presented in the sections below, based on worst-case predictive modeling, the worst-case emitted power density may exceed the FCC's general public limit.

1.3 Safety Recommendations & Site Compliance Actions

Since AT&T contributes more than 5% of the MPE, should this site be non-compliant for any reason, all other operators who contribute greater than 5 % would all be liable to bring the site into compliance.

Areas that require that action in order to meet AT&T corporate policy are listed below. No action means the location is compliant with AT&T policy. The RF hazard mitigation proposed for installation at this site complies with AT&T's RF exposure policy and therefore complies with FCC and OSHA requirements

Site Access Locations

Mount green Information 1 sign and a Yellow Caution Sign at the base of the tower

Alpha Sector Location

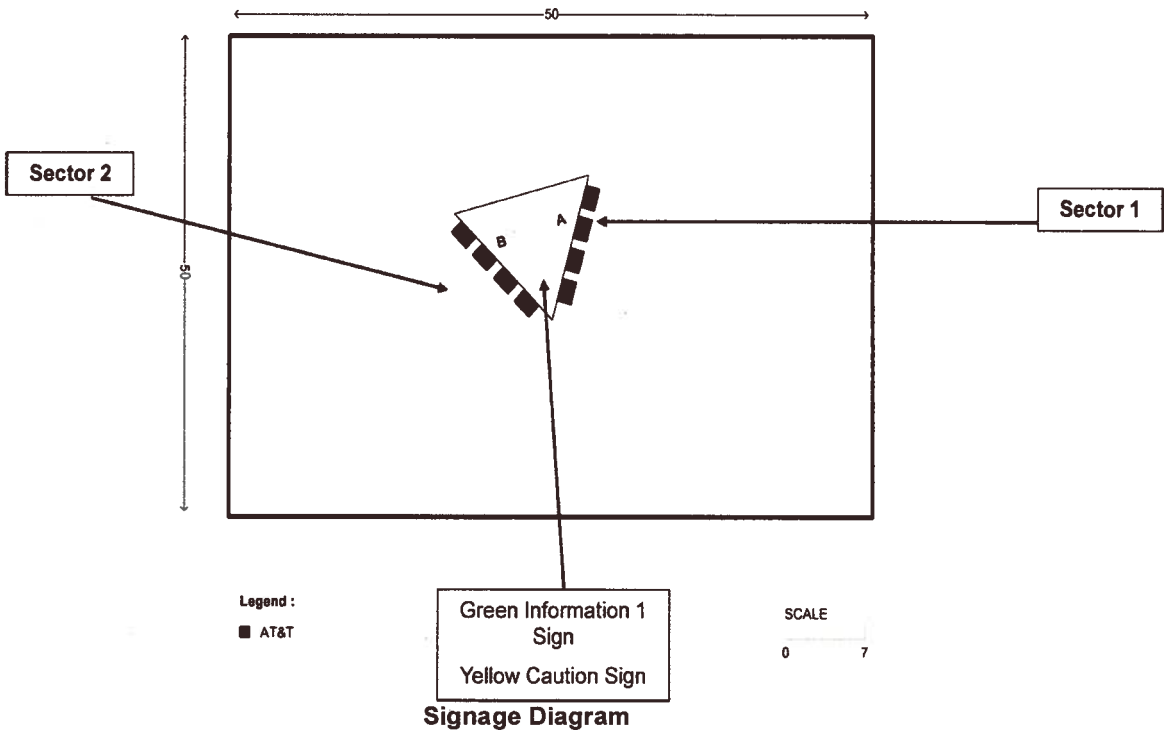
No Action Required

Beta Sector Location

No Action Required

Gamma Sector Location

N/A



Signage Diagram

1.3.1 Lockout/Tagout Procedures for Antenna, Transmission Line and Power Amplifier Maintenance

Whenever anyone is working on an antenna, transmission line, high power amplifier (HPA), or multi-channel power amplifier (MCPA), the transmitter (power amplifier) MUST be turned off. This can be accomplished either locally by flipping a circuit breaker(s) or remotely by command from the NMC/NOC.

The person initiating or requesting the transmitter shutdown is the ONLY person authorized to restore the transmitter to service. This person is responsible for making sure that ALL work has been completed, that ALL cables have been properly reconnected, and that EVERYONE is clear of the work area before the transmitter is reactivated. Generally, this person is considered to be the one actually performing the work. In the case of a contractor working at an active site, the FE/Technician may initiate the request on behalf of the contractor.

1.3.2 Lockout/Tagout Procedure, Local Shutdown

After securing permission to shut the transmitter down, the Field Engineer (FE)/Field Technician (FT) will turn off the circuit breaker and verify that the correct transmitter was deactivated. The FE/FT will then place a locking device(s) over the circuit breaker(s) to prevent accidental activation by an unauthorized person and place a TAG on, or in the immediate vicinity of, the circuit breaker(s). The tag should state "Do Not Operate." At the NMC/NOC the same note, including date and time and location, must be entered in the computer or a tag must be placed on the monitor frame in such a manner that the console operator will be made aware that the transmitter can not be activated without permission from the person who initiated the maintenance request.

The FE/FT will turn the key(s) over to the person performing the work. Upon completion of the work, this person performing the task will return the key(s). As a precautionary measure, prior to reactivating the transmitter, the FE/FT MUST verify, to the extent possible, that all connections have been made and that the work area is clear of personnel.

1.3.3 Lockout/Tagout Procedure, Remote Shutdown

After requesting the NMC/NOC to shut the transmitter down, the FE/FT will verify that the correct transmitter was deactivated. The FE/FT will then place a TAG on or in the immediate vicinity of transmitter. The tag should state "Do Not Operate." At the NMC/NOC the same note, including date/time, must be entered in the computer or a tag must be placed on the monitor frame in such a manner that the console operator will be made aware that the transmitter can not be activated unless the following conditions are met: 1) The tag has been removed by the person performing the work; and 2) Permission is provided by the person who initiated the maintenance request.

Upon completion of the work, the person performing the task will remove the tag and notify the FE/FT that the work is completed. As a precautionary measure, prior to requesting reactivation of the transmitter, the FE/FT MUST verify, to the extent possible, that all connections have been made and that the work area is clear of personnel.

Note: Even though normal procedures call for a remote shutdown, if it is possible to turn off the circuit breaker without causing a software reload or other similar problems the FE/FT should follow the local shut down procedure.

1.4 Site Drawing

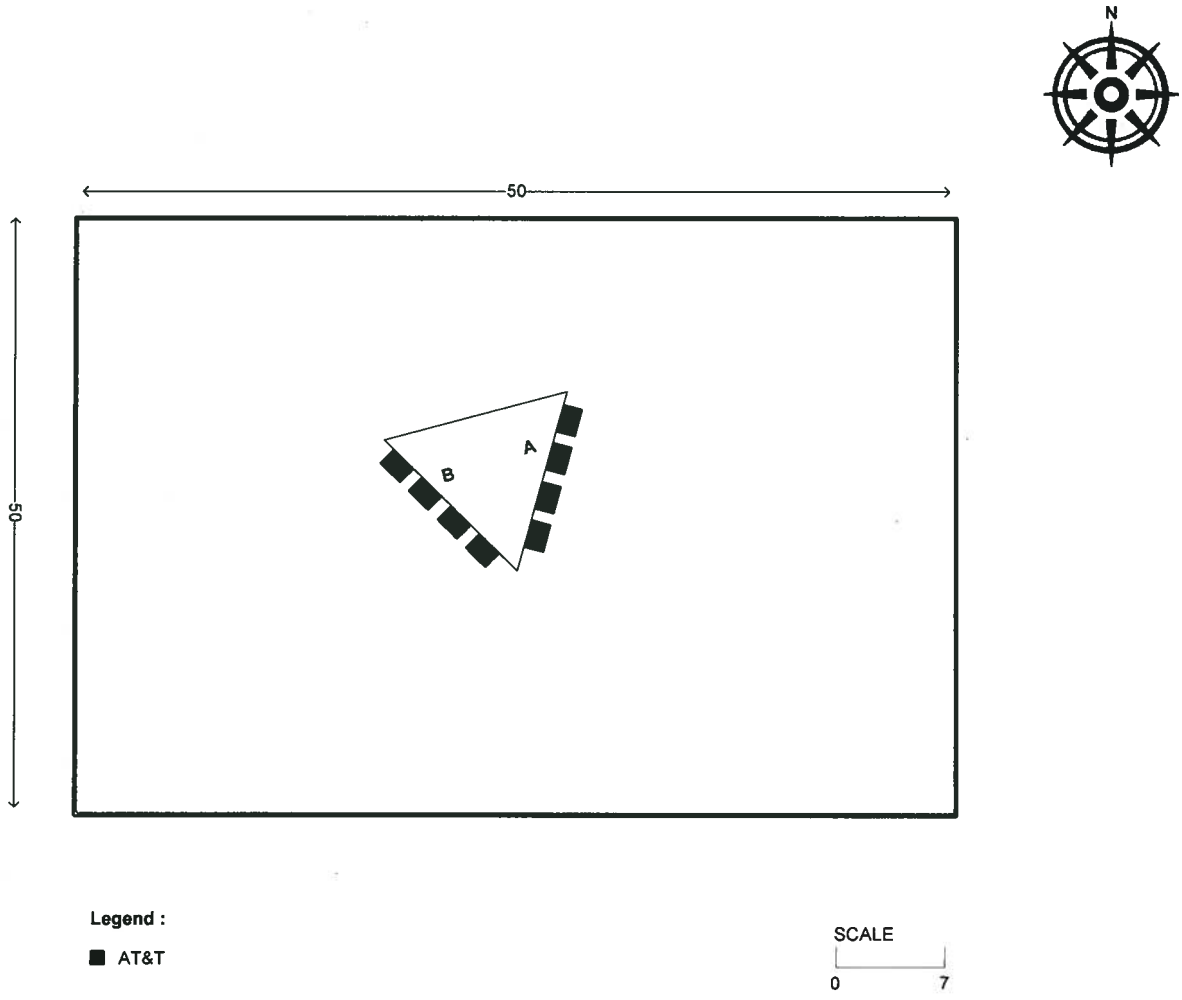


Figure 1
Entire Rooftop

1.5 RF Modeling

The modeling calculations assume that the antennas are operating at 100% capacity; that all antenna channels are transmitting simultaneously and that the radio transmitters are operating at full power. Obstructions (trees, buildings etc) that would normally attenuate the signal are not taken into account. As a result, the predicted signal levels are more conservative (higher) than the actual signal levels will be from the measurement conclusions.

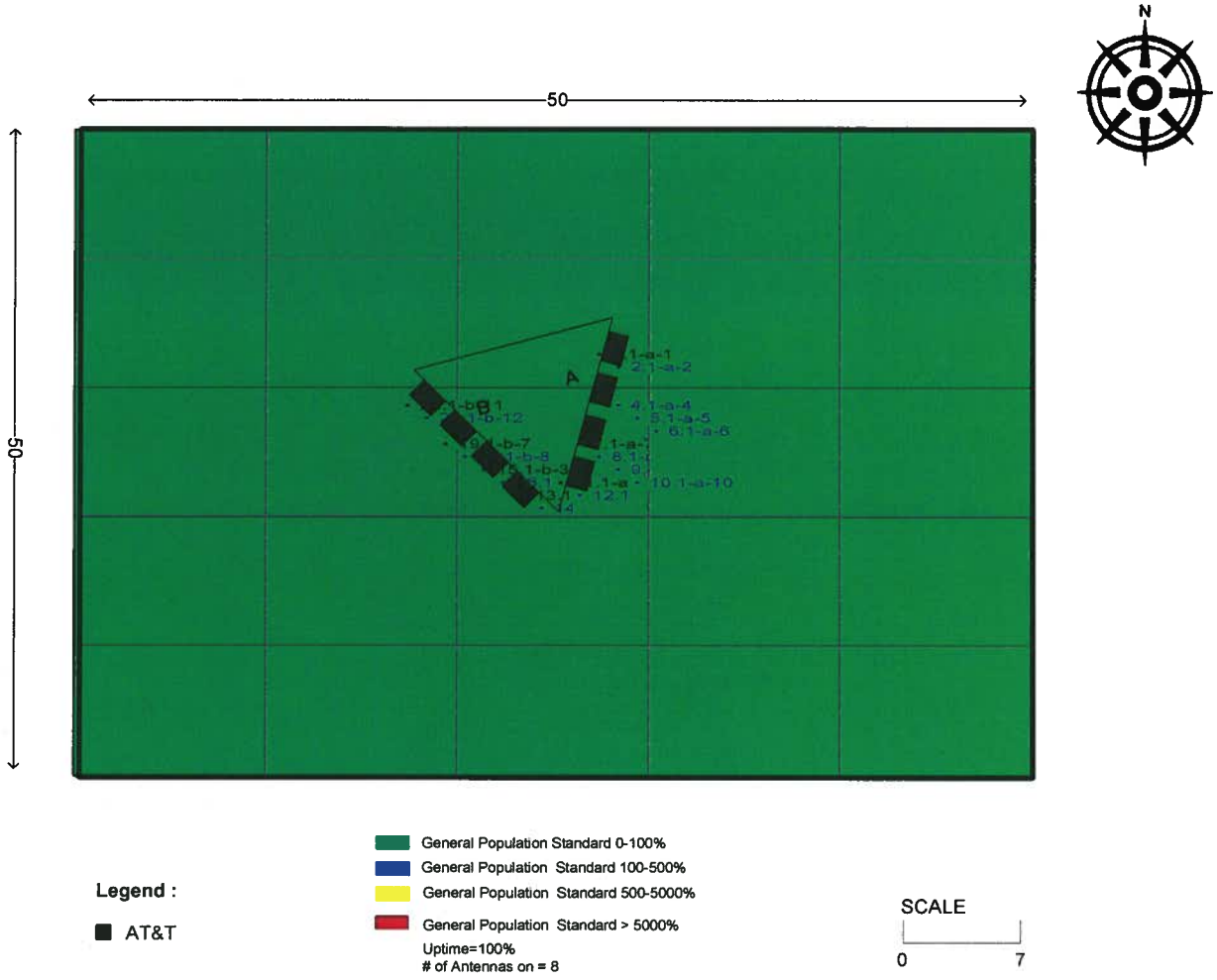


Figure 2
Percent of FCC General Population Exposure Limit

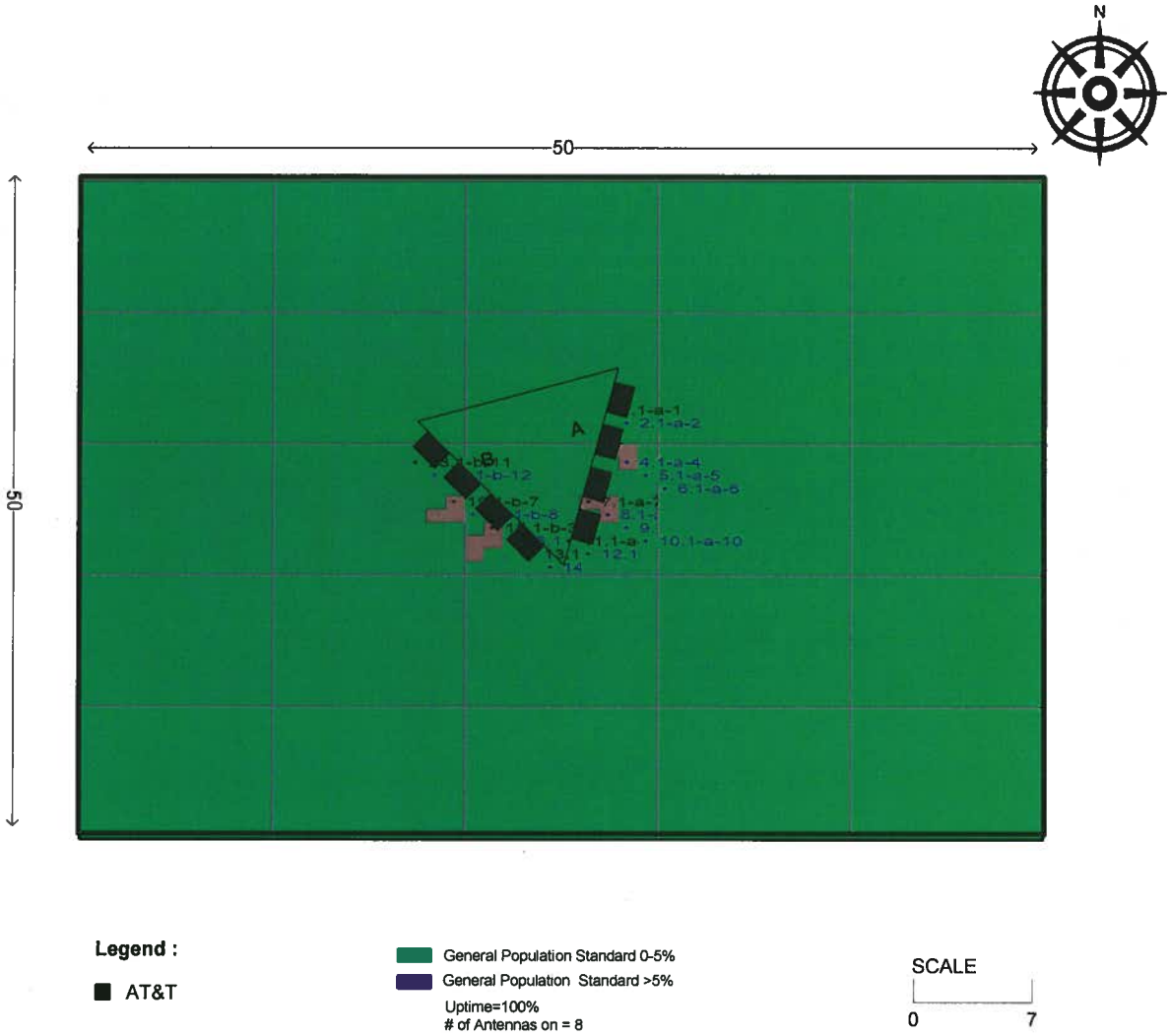


Figure 3
5% FCC Gneral Population Exposure Limit

2 Antenna Inventory

The Antenna Inventory shows all transmitting antennas on the site (see Table 1). This inventory was verified on site and was used by Telnet to perform software modeling of RF emissions . The inventory coincides with the site diagrams on this report, identifying each antennas location at the site.

For other carriers at the site, the use of "Generic" as an antenna model, or " Unknown" for an operator means the information with regard to the carrier, their FCC license and / or antenna information was not available nor could it be secured while on site. Equipment, antenna models and nominal transmit power were used for modeling, based on past experience with radio service providers.

Relevant administrative and compliance–related information about the antenna site rooftop area is summarized in the table below :

Collocation Status	Not Collocated
Area Classification	General Population

Antenna Number	Oper-ator	Type	TX Freq (MHz)	ERP (Watts)	Gain (dBd)	Model	Azi-muth (deg.)	Length (ft)	Horizontal Beam-width (Deg.)	X	Y	Z	Radio Count
1-a-1	AT&T	Panel	LTE 700	250	13.15	Kathrein 80010765	120	6.3	68	28	33	24	1
1-a-2	AT&T	Panel	LTE 700	250	13.15	Kathrein 80010765	120	6.3	68	28	33	24	1
1-a-3	AT&T	Panel	GSM 850	500	13.65	Kathrein 80010765	120	6.3	65	27.5	30	24	4
1-a-4	AT&T	Panel	GSM 850	500	13.65	Kathrein 80010765	120	6.3	65	27.5	30	24	4
1-a-5	AT&T	Panel	GSM 1900	500	16.35	Kathrein 80010765	120	6.3	62	27.5	30	24	4
1-a-6	AT&T	Panel	GSM 1900	500	16.35	Kathrein 80010765	120	6.3	62	27.5	30	24	4
1-a-7	AT&T	Panel	UMTS 850	500	13.65	Kathrein 80010765	120	6.3	65	27	26	24	2
1-a-8	AT&T	Panel	UMTS 850	500	13.65	Kathrein 80010765	120	6.3	65	27	26	24	2
1-a-9	AT&T	Panel	UMTS 1900	500	16.35	Kathrein 80010765	120	6.3	62	27	26	24	2
1-a-10	AT&T	Panel	UMTS 1900	500	16.35	Kathrein 80010765	120	6.3	62	27	26	24	2
1-a-11	AT&T	Panel	LTE 700	250	13.15	Kathrein 80010765	120	6.3	68	26	23	24	1
1-a-12	AT&T	Panel	LTE 700	250	13.15	Kathrein 80010765	120	6.3	68	26	23	24	1
1-b-1	AT&T	Panel	LTE 700	250	13.15	Kathrein 80010765	210	6.3	68	24	22	24	1
1-b-2	AT&T	Panel	LTE 700	250	13.15	Kathrein 80010765	210	6.3	68	24	22	24	1
1-b-3	AT&T	Panel	GSM 850	500	13.65	Kathrein 80010765	210	6.3	65	22	24	24	4
1-b-4	AT&T	Panel	GSM 850	500	13.65	Kathrein 80010765	210	6.3	65	22	24	24	4
1-b-5	AT&T	Panel	GSM 1900	500	16.35	Kathrein 80010765	210	6.3	62	22	24	24	4
1-b-6	AT&T	Panel	GSM 1900	500	16.35	Kathrein 80010765	210	6.3	62	22	24	24	4
1-b-7	AT&T	Panel	UMTS 850	500	13.65	Kathrein 80010765	210	6.3	65	20	26	24	2
1-b-8	AT&T	Panel	UMTS 850	500	13.65	Kathrein 80010765	210	6.3	65	20	26	24	2
1-b-9	AT&T	Panel	UMTS 1900	500	16.35	Kathrein 80010765	210	6.3	62	20	26	24	2
1-b-10	AT&T	Panel	UMTS 1900	500	16.35	Kathrein 80010765	210	6.3	62	20	26	24	2
1-b-11	AT&T	Panel	LTE 700	250	13.15	Kathrein 80010765	210	6.3	68	18	29	24	1
1-b-12	AT&T	Panel	LTE 700	250	13.15	Kathrein 80010765	210	6.3	68	18	29	24	1

Table 1
Antenna Inventory

3 Modeling Summary and Assumptions

3.1.1 General Model Assumptions

In this report, it is assumed that all antennas are operating at full power at all times. Software modeling was performed for all transmitting antennas located on the site. Telnet, Inc has further assumed a 100% duty cycle and maximum radiated power.

The site has been modeled with these assumptions to show the maximum RF energy density. Telnet Inc believes this to be a worst case analysis, based on best available data.

If at any time power density measurements were to be made, Telnet Inc believes the real time measurements would indicate levels below those shown in this report. By modeling in this way, we have conservatively shown exclusion areas (areas not to be entered without a personal RF monitor, carriers reducing power or performing real time measurements to show real time exposure levels).

3.1.2 Use of Generic Antennas

For the purposes of this report, the use of 'Generic' as an antenna model, or 'Unknown' for a wireless carrier, means that the information about the carrier, their FCC license and/ or antenna information was not provided and could not be obtained while on site. In the event of unknown information, Telnet will use our industry specific knowledge of equipment, antenna models and transmit power to model the site. If more specific information can be obtained for the unknown measurement criteria, remodeling of the site is recommended. If no information is available regarding the transmitting service associated with an unidentified antenna, using the antenna manufacturer's published data regarding the antenna's physical characteristics makes more conservative assumptions.

3.1.3 Statistical Summary

Statistical Summary		
%MPE	SQ. FT	%SQ. FT.
	2500	100.00 % of total ROOF Area
0-100	2500	100.00 % of Selected Area
101-500	0	0.00 % of Selected Area
501-5000	0	0.00 % of Selected Area
> 5000	0	0.00 % of Selected Area
Roof Area	2500	sq. ft.
Max %MPE	9.7	%
Min %MPE	0.1	%
Using Near/Far Spatial Avg Model With FCC 1997 Public Standard		

Table 2 Percent of FCC General Population Exposure Limit

Statistical Summary		
%MPE	SQ. FT	%SQ. FT.
	2500	100.00 % of total ROOF Area
0-5	2487	99.48 % of Selected Area
6-500	13	0.52 % of Selected Area
501-5000	0	0.00 % of Selected Area
> 5000	0	0.00 % of Selected Area
Roof Area	2500	sq. ft.
Max %MPE	9.7	%
Min %MPE	0.1	%
Using Near/Far Spatial Avg Model With FCC 1997 Public Standard		

Table 3 Percent of FCC General Population Exposure Limit

4 Analysis and Computation

Based on emission patterns of the antennas at this location most of the energy emitted is spread towards the horizon. This assumes the antennas have a zero downtilt. If a mechanical downtilt other then zero is applied to the antennas then the maximum energy emitted will need to be calculated using the information below.

The following formulas can be used for calculating the power density.

Power density is calculated by dividing the surface area of the sphere or the unit area normal to the direction of the propagation. This information is usually shown in units of microwatts per square centimeter (uW/cm2), milliwatt per square centimeters (mW/cm2), or watts per square meter (W/m2).

4.1 Analysis

$$S = \frac{(P \times KFact)}{(2\pi Rh)}$$

where

S = power density (mW/cm^2)

P = total power input to the antenna (mW)

K = antenna correction factor / numeric factor for antenna discrimination

R = straight line distance of the antenna from a 6 ft. human (cm)

h = distance between the roof level and the bottom of the antenna (cm) o r the vertical distance from the tip of the antenna to the roof level where a 6 ft. human being is assumed standing directly from the antenna (also equal to R at 0)

MPE% = Calculated exposure level, as a percentage of the FCC MPE limit for continuous exposure of the general population

5 FCC Limits for MPE

The FCC guidelines for human exposure to RF electromagnetic fields were derived from the recommendations of two expert organizations, the National Council on Radiation Protection and Measurements ("NCRP") and the Institute of Electrical and Electronics Engineers ("IEEE"). The exposure guidelines are based on thresholds for known adverse effects and they incorporate appropriate margin of safety. The federal health and safety agencies such as: the Environmental Protection Agency ("EPA"), the Food and Drug Administration ("FDA"), the National Institute on Occupational Safety and Health ("NIOSH") and the Occupational Safety and Health Administration ("OSHA") have also been actively involved in monitoring and investigating issues related to RF exposure.

The FCC's MPE limits are based on exposure limits over a wide range of frequencies recommended by the NCRP and the exposure limits developed by the IEEE and adopted by the American National Standards Institute ("ANSI") to replace the 1982 ANSI guidelines. The limits for localized absorption are based on the recommendations of both the ANSI/IEEE and the NCRP. The potential hazard associated with the RF electromagnetic fields is discussed in OET Bulletin No. 56 "Questions and Answers about the Biological Effects and Potential Hazards of RF Electromagnetic Fields". This document can be obtained on the FCC website at http://www.fcc.gov.

Sections 7.1, 7.2 and 7.3 represent the FCC limits for both occupational and general population exposures to different radio frequencies:

5.1 (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
30-300	61.4	0.163	1.0	6
300-1500	--	--	f/300	6
1500-100,000	--	--	5	6

5.2 (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

NOTE 1: ***Occupational/controlled*** limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

NOTE 2: ***General population/uncontrolled*** exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or can not exercise control over their exposure.

5.3 Controlled and Uncontrolled Exposure Limits

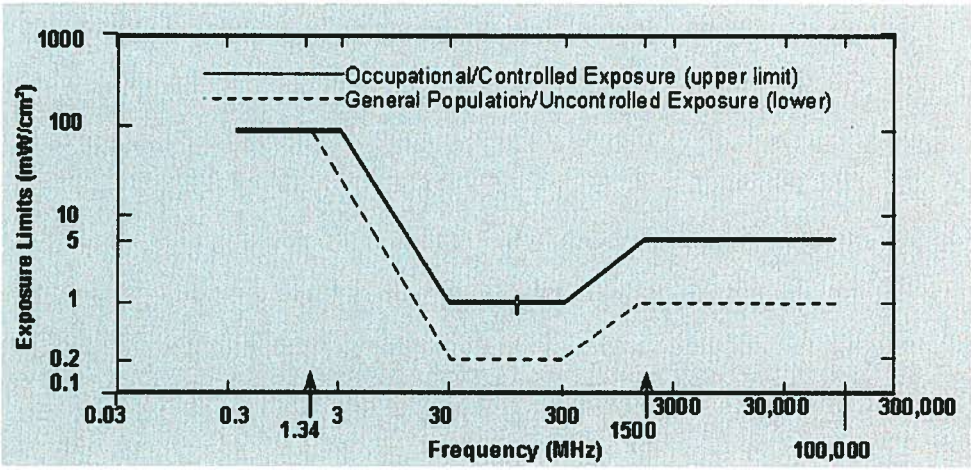


Figure 4

6 FCC Standard Certification

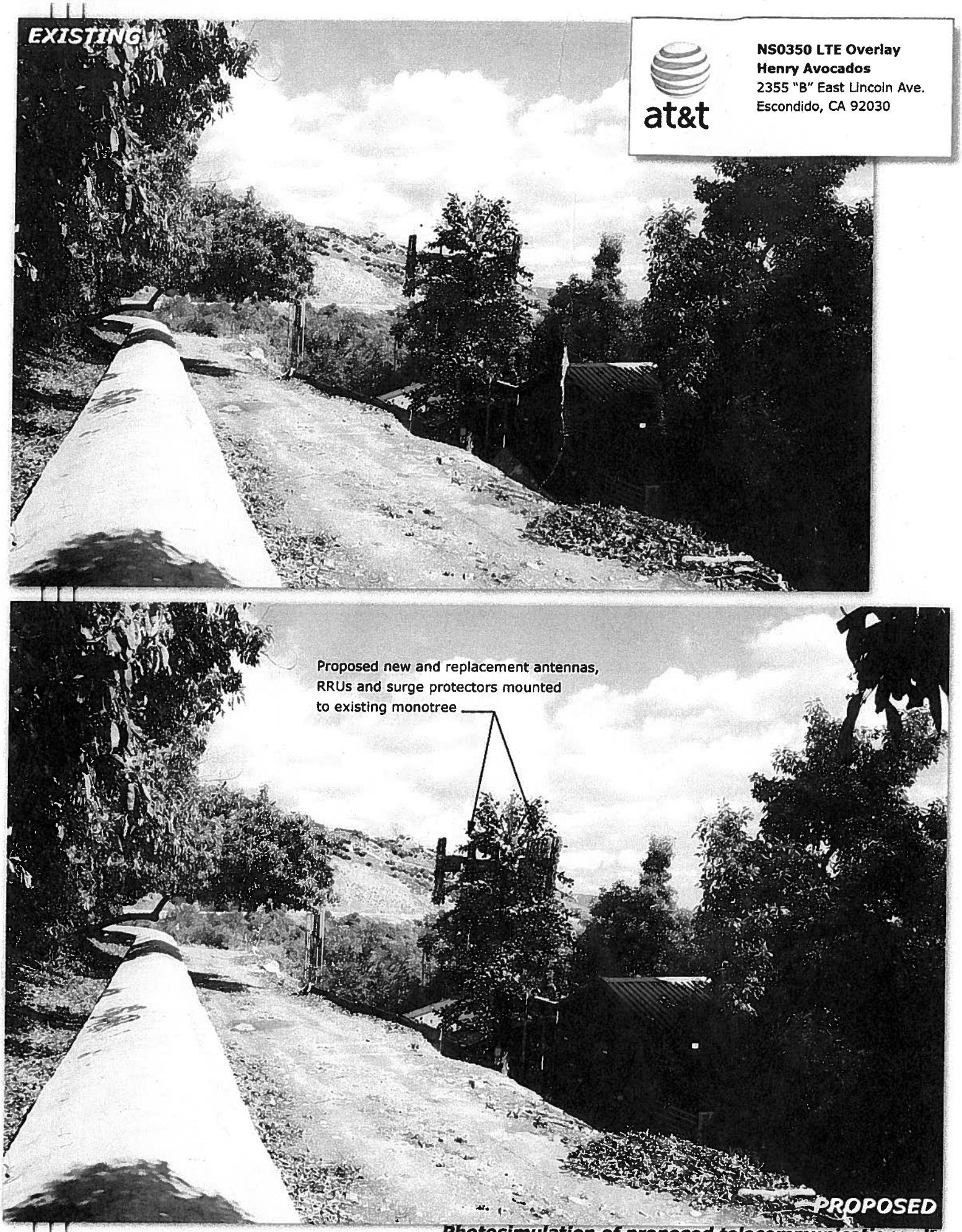
This report certifies that the site HENRY AVOCADO– 79779 is in compliance with the FCC rules and regulations under FCC OET Bulletin 65. Signage is recommended at the site as presented in Section 1.3.

Prepared by:
Ammro Hussein — Date: 04/04/11
RF Engineer
Telnet Inc.

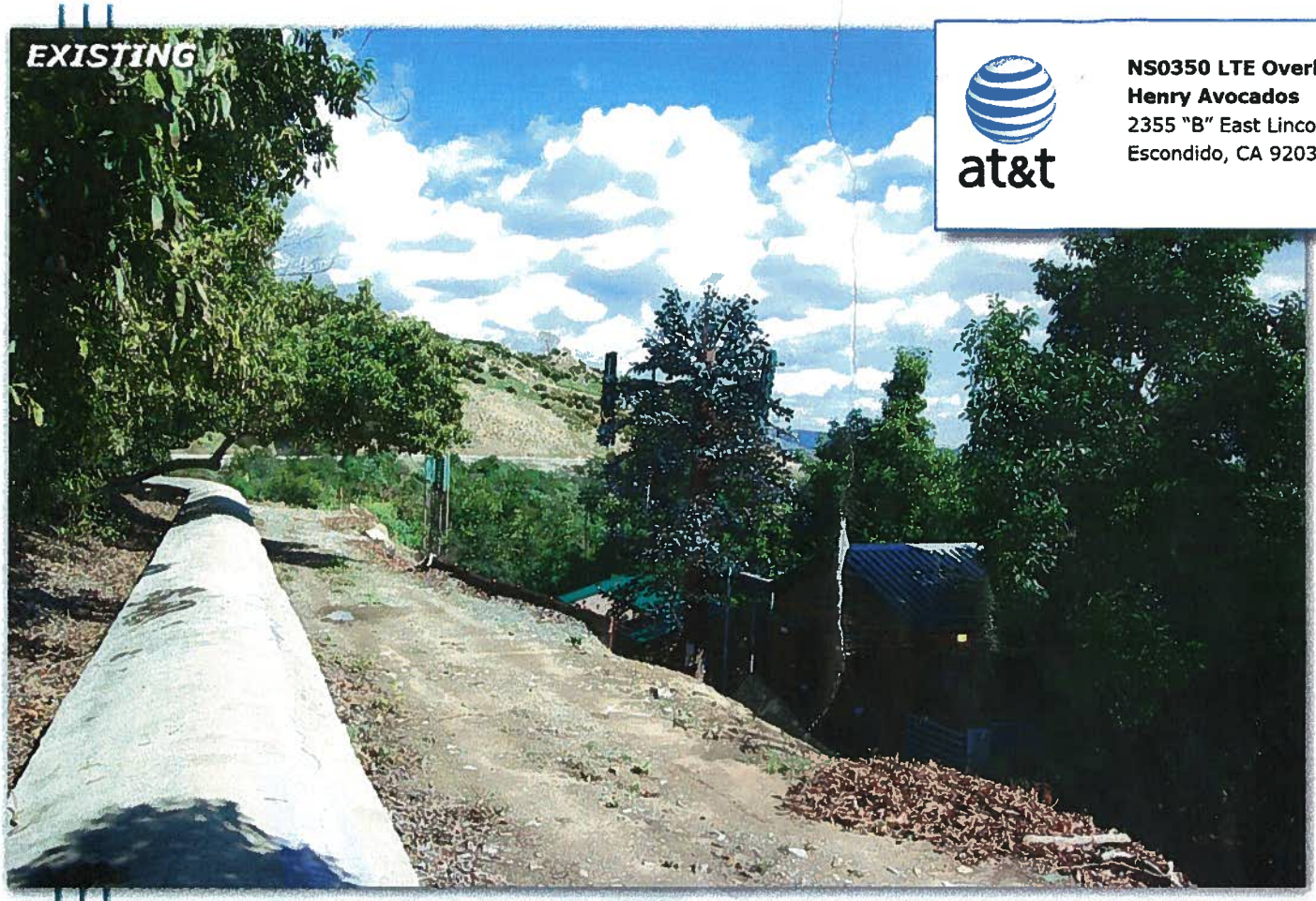
Reviewed by:
Boris Lublinsky — Date: 04/04/11
Project Manager, EMF Specialist
Telnet Inc.

7 Glossary of Terms

1. *Electromagnetic Field (energy density)* – the electromagnetic energy contained in an infinitesimal volume divided by that volume.
2. *Exposure* – Exposure occurs whenever and wherever a person is subjected to electric, magnetic or electromagnetic fields other than those originating from physiological processes in the body and other natural phenomena.
3. *General Population / Uncontrolled Exposure* – applies to human exposure to RF fields when the general public is 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 always fall under this category when exposure is not employment-related.
4. *Maximum Permissible Exposure (MPE)* – the rms and peak electric and magnetic field strength, their squares, or the plane-wave equivalent power densities associated with these fields to which a person may be exposed without harmful effect and with an acceptable safety factor.
5. *Occupational / Controlled Exposure* – applies to human exposure to RF fields when 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/controlled limits.
6. *Power Density (S)* – Power per unit area normal to the direction of propagation, usually expressed in units of watts per square meter (W/m^2) or, for convenience, units such as milliwatts per square centimeter (mW/cm^2) or microwatts per square centimeter ($\mu W/cm^2$).
7. *Ionization* – a process by which electrons are stripped from atoms and molecules. This process can produce molecular changes that can lead to damage in biological tissue, includes effect on DNA, the genetic material. This process requires interaction with high levels of electromagnetic energy.
8. *Non-Ionizing radiation* – a type of emission that is not great enough to cause ionization of atom and molecules. "RF and Microwave Emissions" are low-level energy which are not capable of ionization.

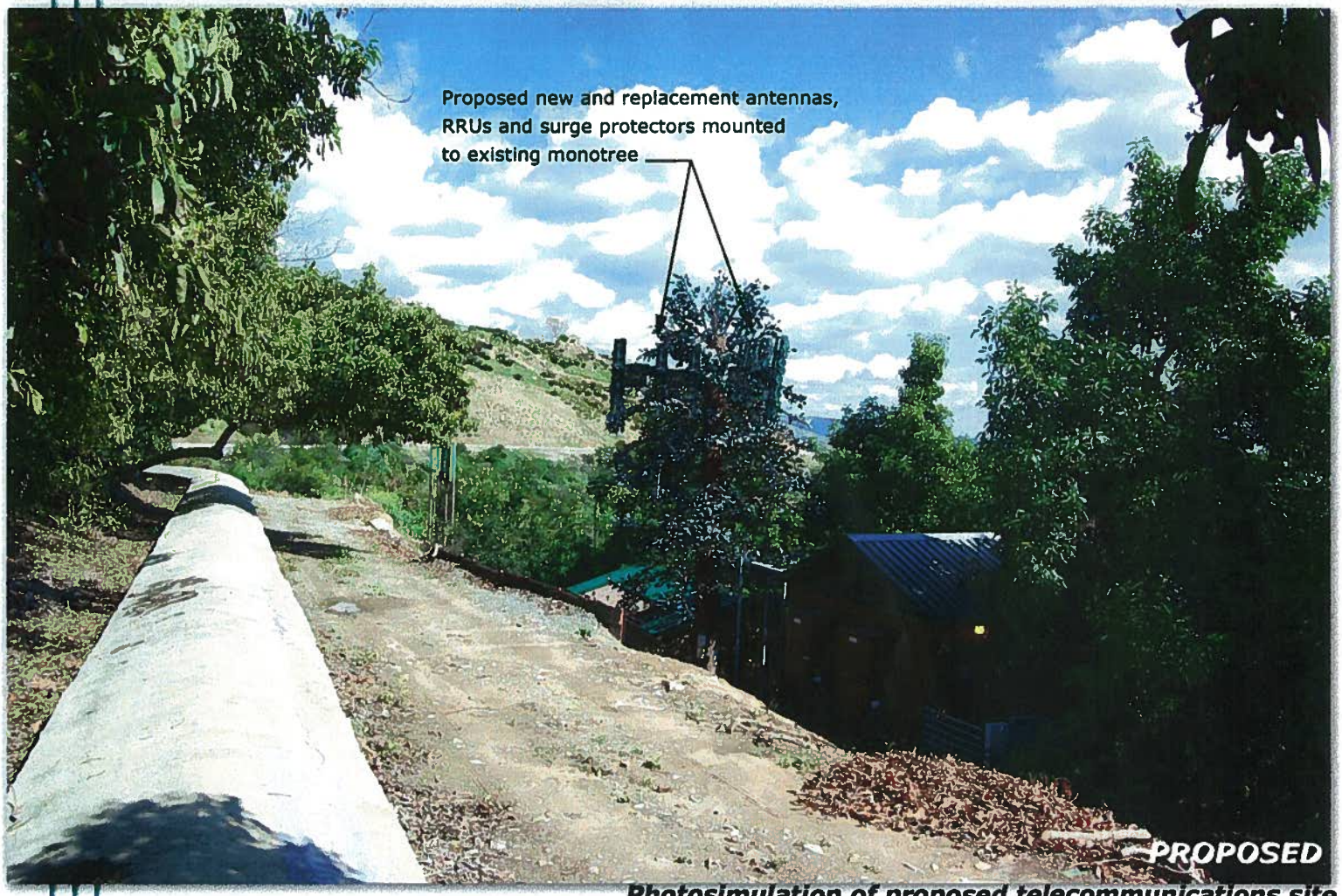


Photosimulation of proposed telecommunications site



at&t

NS0350 LTE Overlay
Henry Avocados
2355 "B" East Lincoln Ave.
Escondido, CA 92030



Photosimulation of proposed telecommunications site