



Staff Report to the Zoning Administrator

Application Number: **10-0122**

Applicant: AT&T - Lisa Elliott
Owner: County of Santa Cruz
APN: None

Agenda Date: 12/3/10
Agenda Item #: 4
Time: After 10:00 a.m.

Project Description: Proposal to replace two existing flat panel antennas mounted on a utility pole and to install an above ground equipment cabinet at an existing micro-cell wireless communications facility. Requires an amendment to Coastal and Commercial Development Permit 03-0414.

Location: Property located within the County right of way of La Selva Drive, across the street from the intersection with Dan's Drive in La Selva Beach.

Supervisory District: 2nd District (District Supervisor: Ellen Pirie)

Permits Required: Coastal and Commercial Development Permit amendment

Staff Recommendation:

- Certification that the proposal is exempt from further Environmental Review under the California Environmental Quality Act.
- Approval of Application 10-0122, based on the attached findings and conditions.

Exhibits

- | | |
|---|---|
| A. Project plans | E. Location, Zoning and General Plan Maps |
| B. Findings | F. NIER Report |
| C. Conditions | G. Comments & Correspondence |
| D. Categorical Exemption (CEQA determination) | |

Parcel Information

Parcel Size:	N/A
Existing Land Use - Parcel:	Public right-of-way
Existing Land Use - Surrounding:	Highway One right-of-way, Residential neighborhood
Project Access:	La Selva Drive
Planning Area:	La Selva Beach
Land Use Designation:	R-M (Mountain Residential)

Zone District: SU (Special Use)
Supervisory District: 2 (District Supervisor: Ellen Pirie)
Within Coastal Zone: X Inside Outside
Appealable to Calif. Coastal Comm. X Yes No

Environmental Information

Geologic Hazards: N/A
Soils: N/A
Fire Hazard: N/A
Slopes: N/A
Env. Sen. Habitat: N/A
Grading: No grading proposed
Tree Removal: No trees proposed to be removed
Scenic: Highway One Scenic Corridor - existing micro cellular installation on utility pole, ground mounted box to be painted and screened by vegetation. No visual impact anticipated to scenic resources.
Drainage: N/A
Archeology: N/A

Services Information

Inside Urban/Rural Services Line: X Yes No
Water Supply: N/A
Sewage Disposal: N/A
Fire District: Aptos/La Selva Fire Protection District
Drainage District: None

History

Coastal and Commercial Development Permit 03-0414 authorized a utility pole mounted micro-cell wireless communication facility at the project site. The wireless communication facility was installed under Building Permit 139608 and has been in operation since 2006. This application is a proposal to modify the prior approval through the replacement of two of the existing antennas and the installation of a ground mounted utility box.

Project Setting

The existing wireless communications facility is located on an existing utility pole within the right-of-way of La Selva Drive on the south side of Highway One.

Zoning & General Plan Consistency

The project site is located within the public right-of-way of La Selva Drive within the SU (Special Use) zone district and within the (R-M) Mountain Residential General Plan designation. Wireless communications facilities are a restricted category of use within the SU zone district (for parcels with a residential General Plan designation), but micro cellular wireless

communications facilities on existing utility poles are allowed as an exception to the restricted areas prohibition. The inclusion of a ground mounted cabinet is allowed at a micro cellular wireless communication facility if the size does not exceed 100 cubic feet. The proposed cabinet is 95 cubic feet in size and complies with this requirement.

Local Coastal Program Consistency

The proposed modifications to the existing wireless communication facility are in conformance with the County's certified Local Coastal Program, in that the facility is located on an existing utility pole in a public right-of-way and the ground mounted cabinet will be camouflaged with an appropriate paint color and screened from view by existing and proposed vegetation. The project site is not located between the shoreline and the first public road and is not identified as a priority acquisition site in the County's Local Coastal Program. The proposed project will not interfere with public access to the beach, ocean, or other nearby body of water.

Design Review & Scenic Resources

The proposed modifications to the existing wireless communication facility comply with the requirements of the County Design Review Ordinance, and will not impact scenic resources such as the Highway One Scenic Corridor, in that the facility is located on an existing utility pole and the ground mounted cabinet will be camouflaged with an appropriate paint color and screened from view by existing and proposed vegetation. For these reasons, the improvements will blend with existing utilities infrastructure and surrounding landscaping to adequately mitigate any visual impact of the proposed development on surrounding land uses and the natural landscape.

Conclusion

As proposed and conditioned, the project is consistent with all applicable codes and policies of the Zoning Ordinance and General Plan/LCP. Please see Exhibit "B" ("Findings") for a complete listing of findings and evidence related to the above discussion.

Staff Recommendation

- Certification that the proposal is exempt from further Environmental Review under the California Environmental Quality Act.
- **APPROVAL** of Application Number **10-0122**, based on the attached findings and conditions.

Supplementary reports and information referred to in this report are on file and available for viewing at the Santa Cruz County Planning Department, and are hereby made a part of the administrative record for the proposed project.

The County Code and General Plan, as well as hearing agendas and additional information are available online at: www.co.santa-cruz.ca.us

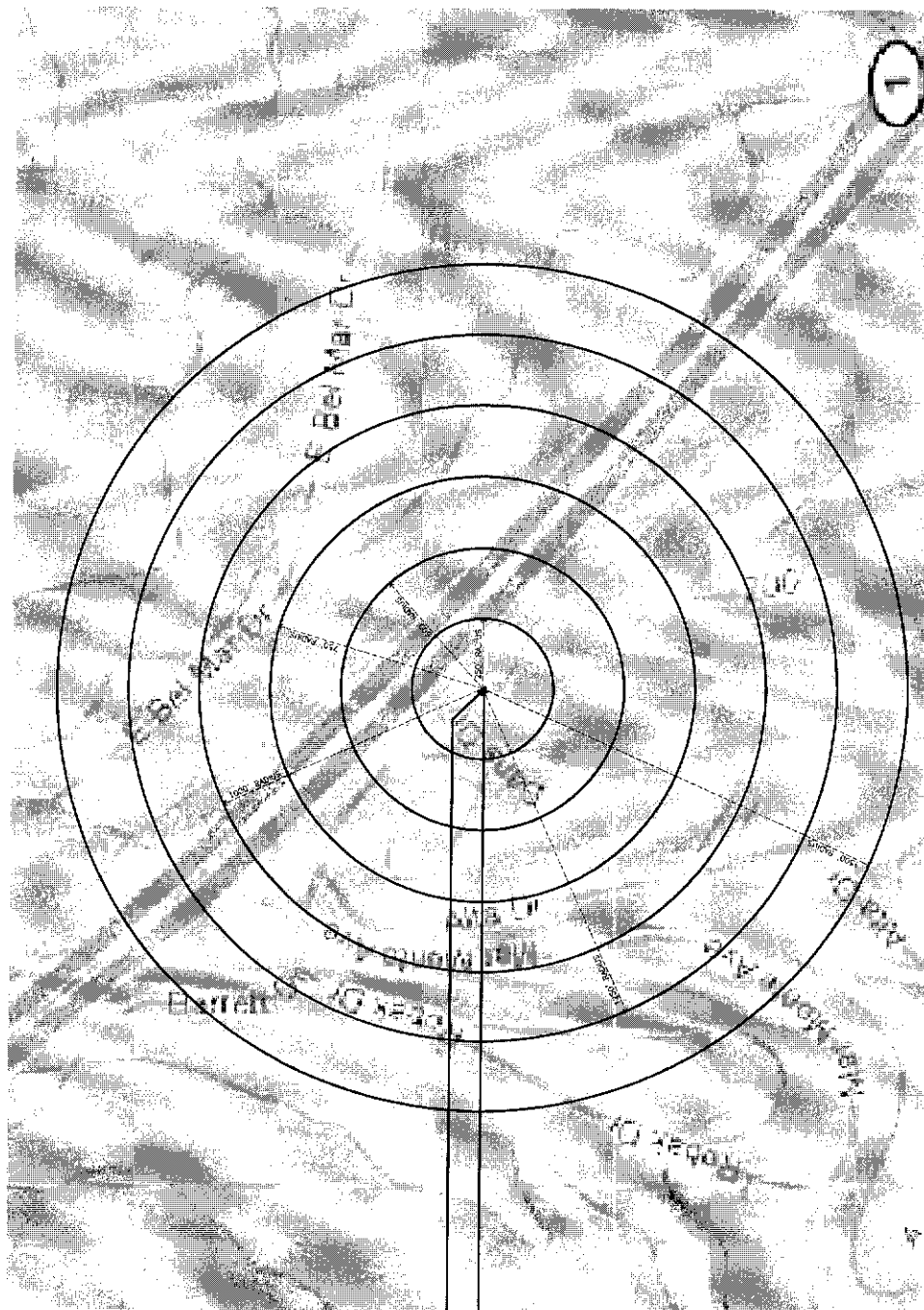
Application #: 10-0122
APN: None
Owner: County of Santa Cruz

Page 4

Report Prepared By: Randall Adams
Santa Cruz County Planning Department
701 Ocean Street, 4th Floor
Santa Cruz CA 95060
Phone Number: (831) 454-3218
E-mail: randall.adams@co.santa-cruz.ca.us

VICINITY TOPOGRAPHIC PLAN KEYNOTES

1. 60' TOWER ANTENNAS MOUNTED ON (1) WOOD POLE;
SEE SHEET P-5.
2. 150' TOWER ANTENNAS MOUNTED ON (1) CHAM LUM POLE;
SEE SHEET P-6.



VICINITY TOPOGRAPHIC MAP

SCALE:
1"=200'

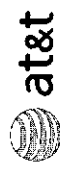
0 50' 100' 200'

1

JRA

Jeffrey Rowe & Associates, Inc.
Attn: Mr. Jeffrey Rowe
Attn: Mr. Jeffrey Rowe
Attn: Mr. Jeffrey Rowe
Attn: Mr. Jeffrey Rowe
Attn: Mr. Jeffrey Rowe

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4530 Redwood Drive
Fremont, California 94538

APPROVAL:

DATE: _____ BY: _____

DATE: _____ BY: _____

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DATE: _____ BY: _____

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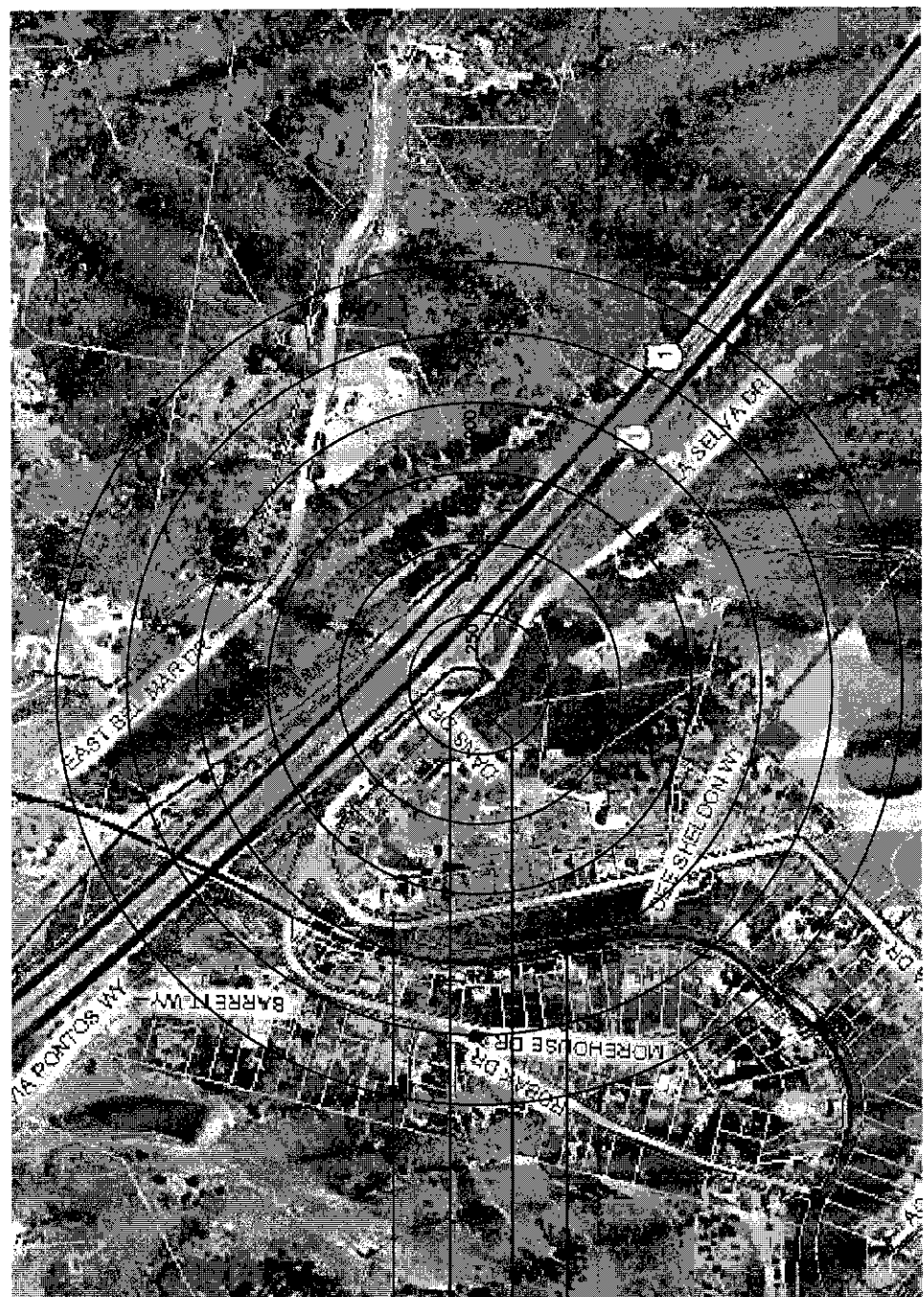
DATE: _____ BY: _____

DATE: _____ BY: _____

DATE: _____ BY: _____

VICINITY AERIAL

- 1. ELI (2) AT&T ANTENNAS W/IN 1/4 MI. (P) W/IN 1/4 MI.
- 2. SEE DETAIL A & B
- 3. (C) RIGHT-OF-WAY LINE
- 4. (E) WOODS AREA, ETC.
- 5. (F) HIGHWAY 119



SCALE: 1"=200'
0 50 100 200'

VICINITY AERIAL

JRA

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Proprietary, Confidential, Not for Release

APPROVALS	
DATE	DATE
DATE	DATE
DATE	DATE
DATE	DATE
DATE	DATE
DATE	DATE

AT&T UNITS OVERLAY
MAR MONTE DANCE DRIVE
CNUS237

LOCATION OF CONDUIT & CABLE DUCT
WINDMILL, DALLAS, TEXAS 75208

ISSUING DATES	
DATE	DESCRIPTION
06/11/98	ISSUE TO REVIEW (P-1-1)
06/17/98	ISSUE TO REVIEW (P-1-2)
06/17/98	ANTENNA POSITION (P-1-3)
07/01/98	ISSUE TO REVIEW (P-1-4)
07/01/98	ISSUE TO REVIEW (P-1-5)
07/01/98	ISSUE TO REVIEW (P-1-6)
07/01/98	ISSUE TO REVIEW (P-1-7)
07/01/98	ISSUE TO REVIEW (P-1-8)
07/01/98	ISSUE TO REVIEW (P-1-9)
07/01/98	ISSUE TO REVIEW (P-1-10)

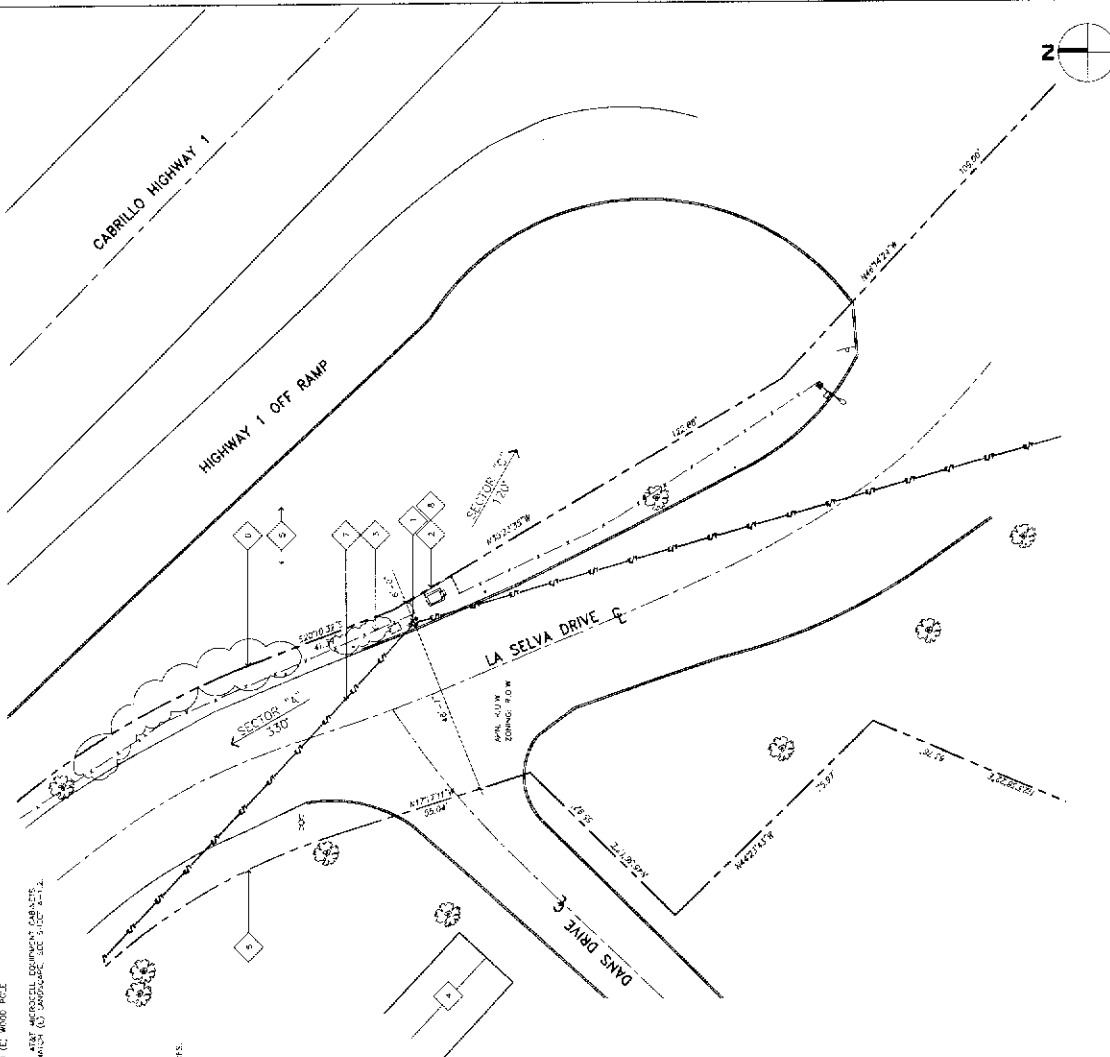
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CHECKED: JRA
DATE: 06/11/98

VICINITY AERIAL

T-4

SITE PLAN KEYNOTES

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SITE PLAN

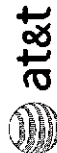
SCALE: 1/16" = 1' - 0"

2

GENERAL ANTENNA & CABLE NOTES	1
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Jeffrey Rome & Associates, Inc.
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 Arizona: (602) 298-5579
 California: (949) 760-3929
 Nevada: (702) 795-6289

PROPRIETARY INFORMATION

4432 KENNEDY DRIVE
MONTGOMERY, CALIF. 94506

APPROVAL		DATE
CHECKING		DATE
SUBSCRIPTION		DATE
DATE MODIFICATION		DATE
MINUTES APPROVAL		

PROJECT NAME	SITE NAME	SITE NUMBER
AT&T UMS OVERLAY	MAR MONTE DANS DRIVE	CN03237

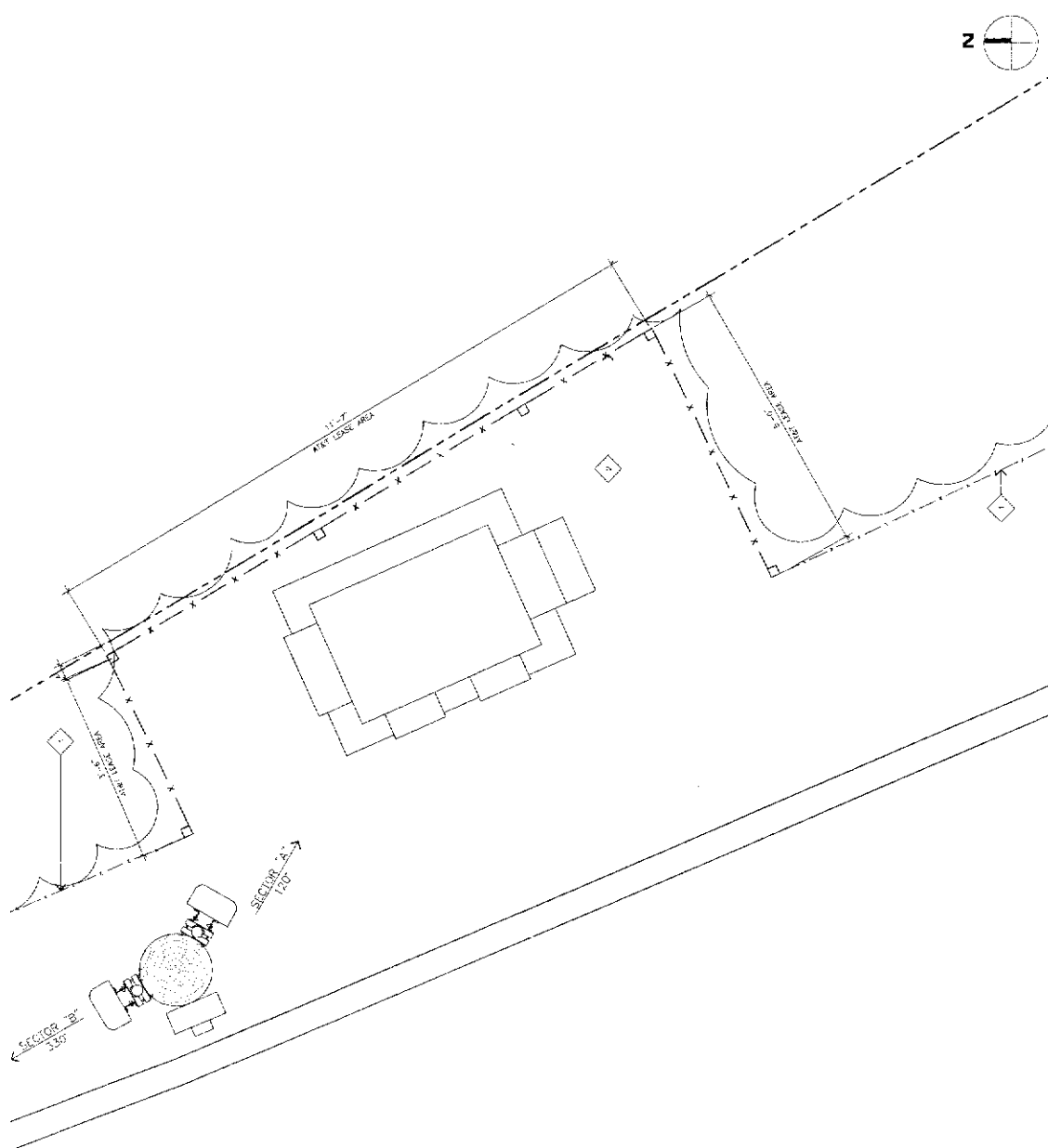
RIGHT OF SEVERAL & CLASS DRIVE

04/11/08	BGE CU REVIEW (P1-01)
05/19/00	95% CD REV/CW (P1-02)
06/17/08	ANTENNA REVISION (P1-03)
07/07/08	100% FINAL CO'S (P1-04)
08/04/08	90% CD REV/CW (P1-05)
09/02/00	100% FINAL CO'S (P1-06)
12/27/00	REVISION SURVEY (P1-07)
02/12/08	ADDITIONAL CHANGES (P1-08)

4111 100000

ENLARGED FENCING PLAN

A-1



SCALE: 1"=1'-0"

0.25' 5' 1'

1

ENLARGED FENCING PLAN

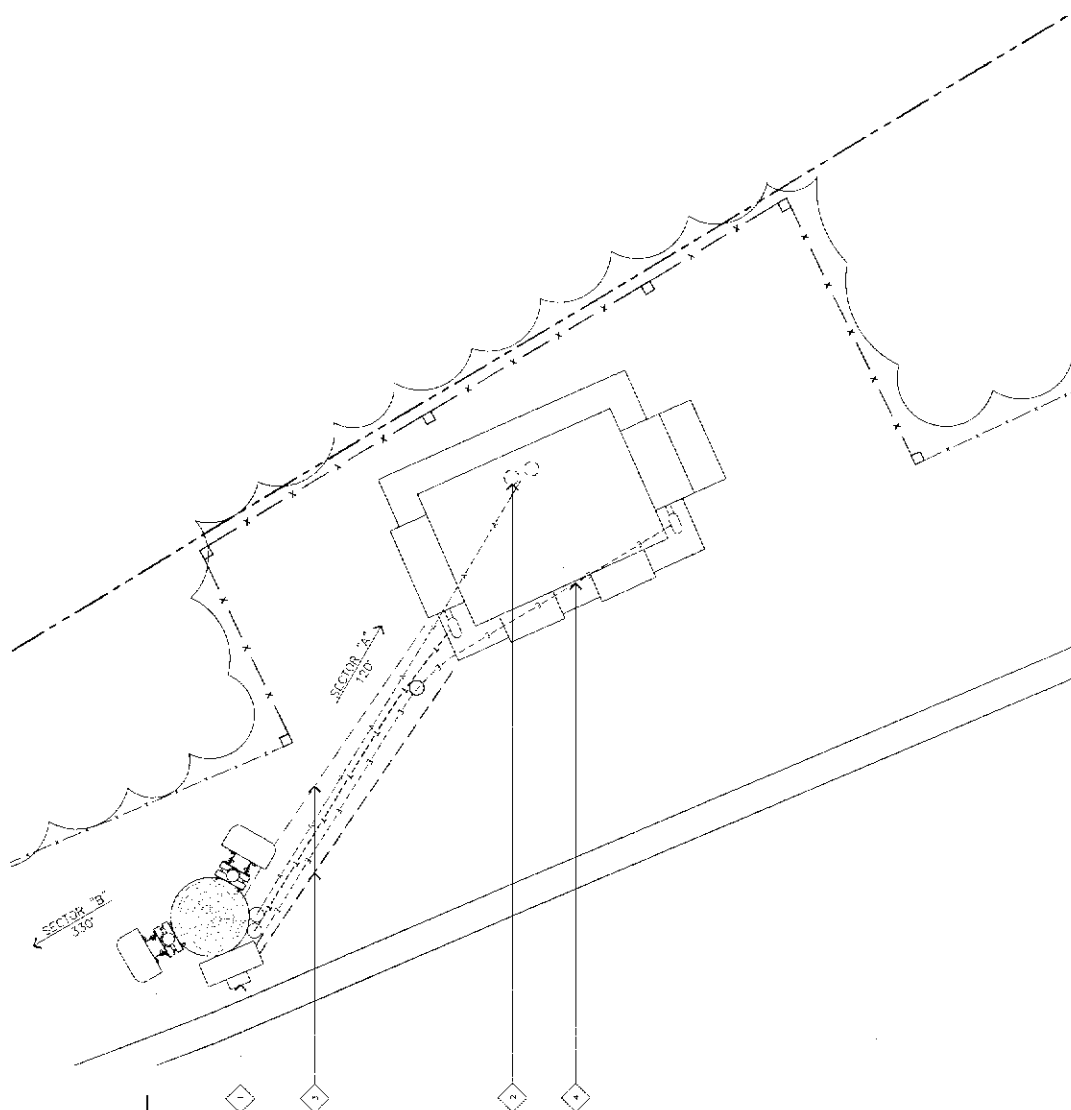
ENLARGED FENCING PLAN KEYNOTES

(N) BARBED WIRE FENCE, MOJAVE AG. REQUIRED FOR (N) CHAIR LOCK
LEAVE FENCE OUT

(N) BARBED WIRE FENCE IS MATCH (E) FENCE.

- (F) FIFTEEN AFTER MOUNTED ON (F) WOOD PIGE

A MINIMUM DEPTH FOR ELECTRICAL POWER MUST BE 42" BELOW FINISHED GRADE
MINIMUM DEPTH FOR FLOOD MUST BE 36" BELOW FINISHED GRADE



SCALE: 1"=10'


1

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THE BATHING - AT JOHNS IS AN INTERESTING EXPERIENCE. THE WATER IS HOT (100°F) AND THE BATHING IS DONE IN A HOT TUB. THE BATHING IS DONE IN A HOT TUB. THE BATHING IS DONE IN A HOT TUB.



4430 Reservoir Drive
Bloomington, California 92406
(619) 377-1000

STRENGTH

	DATE	
R.F.	_____	
	DATE	
FURNISHING	_____	
	DATE	
CONSTRUCTION	_____	
	DATE	
ELECT ACQUISITION	_____	
	DATE	
OWNER APPROVAL	_____	

1790:507 10/11/2011

AT&T UMS OVERLAY
SITE NAME
MAR MONTE DANS DRIVE

516 21612-12

33613337
SIF RUGHER

NORTH OF JELVA DRIVE & DAVIS DRIVE
 WATSONVILLE, CALIFORNIA 95076

SAVING CATS

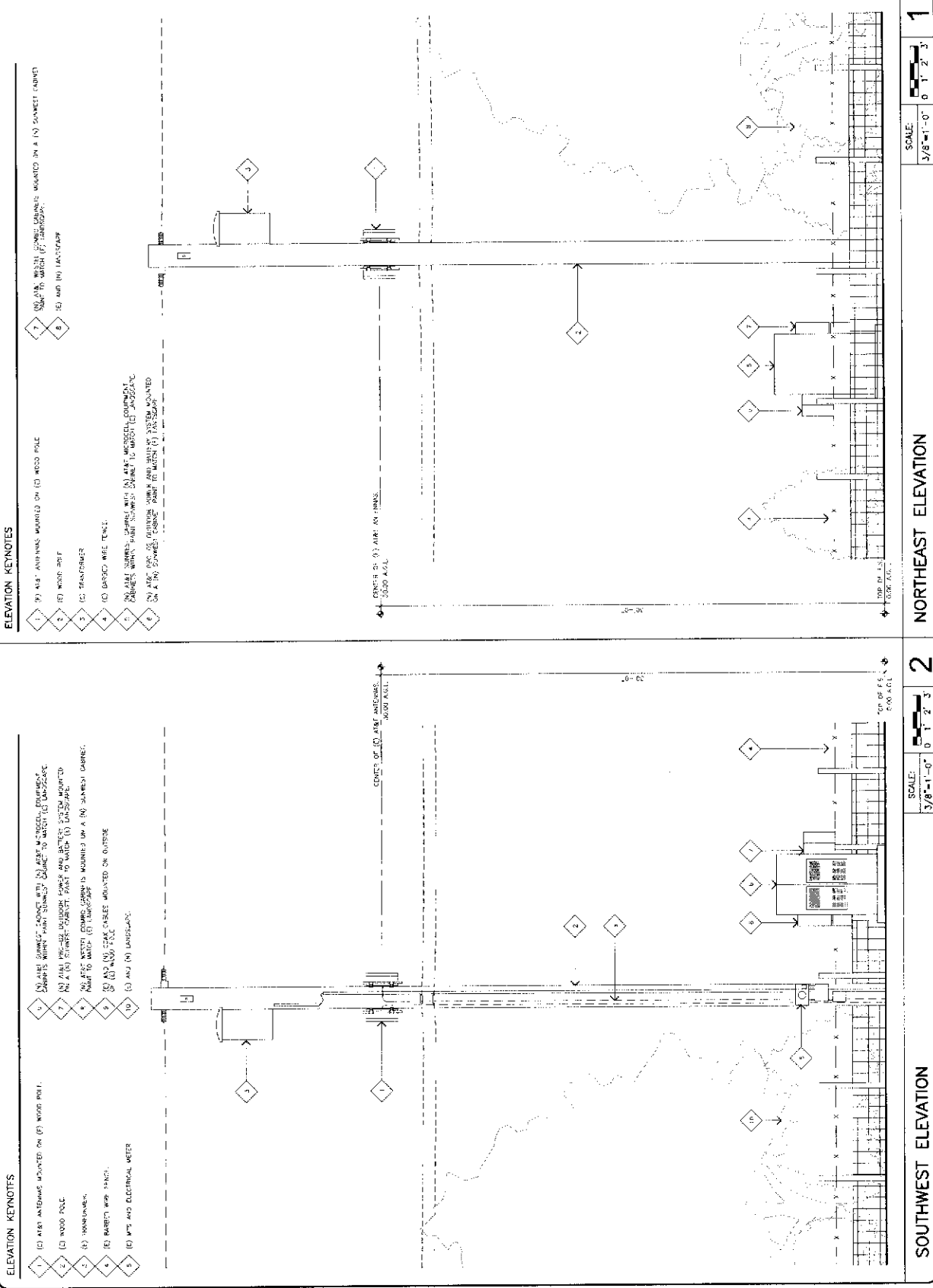
90% CD REVISION (P ⁺ R1)	10/11/08
90% CD REVISION (P ⁺ R2)	10/11/08
ANTENNA REVISION (P1 R3)	10/11/08
100% FINAL CD (P ⁺ R4)	10/11/08
50% CD REVISION (P ⁺ R5)	10/11/08
100% FINAL CD (P ⁺ R6)	10/11/08
REVISION SUMMARY (P1-R7)	10/11/08
ADDITIONAL COMMENTS (P ⁺ R8)	10/11/08
QUEST COMMENTS (P ⁺ R9)	10/11/08

911

AUGUST 1995

ENLARGED UTILITY PLAN

A-1.1



RRU 22 XX40 Remote Radio Unit for WCDMA RBS



The RRU 22 XX40 2 carrier 40 W Remote Radio Unit provides 1 carrier and 20 W nominal output power for 2 carriers and 20 W nominal output power. The antenna, which is designed to be located close to the antenna, contains the radio specific HW for each carrier. The rest of the base station (control, base band, switching and the interface parts) is contained in the Main Unit. After optical fiber cable connects each RRU to the RBS.

The RRU 22 is designed for both standing and flying and fixed base station networks. It supports the use of AGC/TMA between the RRU and the antenna. It is one complete unit containing all radio functionality. The RRU 22 is powered with either -48 VDC or -60 VDC and supports Remote Electrical Tilt (RET) of the antenna.

The RRU 22 can be wall or pole mounted requiring no floor space.

The optical interface is based on the Common Public Radio Interface (CPRI). It has connections for AC or DC power, two antenna jumpers for RX diversity and optical link towards the Main Unit. All connections are located at the bottom of the unit.

The RRU 22 XX40 provides an appealing solution for sites with limitations in one of the following: space, floor load, access, power supply and cooling equipment.



RRU SPECIFICATIONS

A Family of RRU22

Ericsson provides a family of RRUs with support for six different frequency bands and nominal output power up to 40 W.

It is possible to mix different RRU types with different output power to the same Main Unit. Dual band configurations are also supported by connecting RRU's for different frequency bands to the same Main Unit.

The RRU's contain most of the radio processing hardware. The main parts of the RRU are the:

- Filter Unit
- TRX Unit
- Power Amplifier

RRU Naming Nomenclature

The Ericsson RRU's are named in the following way: RRU AB CDE

Where:

- A = Number of carriers DL
- B = Number of carriers UL
- C = Frequency band (all part of the band)
- D = The suffix is used, when necessary, to describe the partial frequency band in accordance with the 3GPP standard
- E = Output power (W)

Versions and supported Frequency Bands	
RRU22 2140	3GPP Band I: RX: 1920 - 1980 TX: 2140 - 2170 MHz
RRU22 1940	3GPP Band II: RX: 1850 - 1910 TX: 1930 - 1980 MHz
RRU22 1840	3GPP Band V: RX: 824 - 849 TX: 869 - 894 MHz
RRU22 0840	3GPP Band VII: RX: 880 - 915 TX: 925 - 960 MHz
RRU22 2140	3GPP Band IV: RX: 1710 - 1755 TX: 2110 - 2155 MHz
Output Power	
40.0 W (46.0 dBm) nominal	
45.7 W (46.6 dBm) max	
Receiver sensitivity (typical)	
-128.5 dBm (3GPP Band I, IV)	
-121.3 dBm (3GPP Band II, V)	
-121.0 dBm (3GPP Band VII)	
Cabinet dimensions	
Height x Width x Depth	
(without sun shield)	
514 x 394 x 175 mm (20.2 x 15.5 x 6.9 in)	
Height x Width x Depth	
(with sun shield and mounting brackets)	
571 x 395 x 265 mm (22.4 x 15.4 x 10.4 in)	
Volume (without sun shield)	
33 liters	
Weight	
without sun shield	
24 kg (52.9 lb)	
with sun shield	
27 kg (59.5 lb)	
Normal Operating Conditions	
Temperature	
-25°C to +55°C (plus 1120 W and solar radiation)	
External interfaces	
Power supply	
-48 VDC or 100-250 VAC	
Interface towards Main Unit	
CPRI	
Power consumption:	
typical 230 W, max 310 W	
Mounting type	
Wall, Pole	
Maximum distances	
Main Unit - RRU	
15 m	
Acoustic Noise	
A-weighted LWA (at +20°C)	
<50 dBA	
A-weighted LWA (at +55°C)	
<51 dBA	

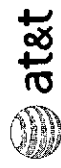
* with REC

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San Francisco: (415) 774-1100
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4410 Boulevard Point
Fremont, California 94538

APPROVALS

R.T. DATE

ZONING DATE

CONSTRUCTION DATE

SITE ACQUISITION DATE

OWNER APPROVAL DATE

PROJECT NAME

AT&T UNITS OVERLAY

MAR MONTE DANCE DRIVE

CNU3237

NORTH OF MAIN DRIVE & CANG DRIVE

WILSONVILLE, CALIFORNIA 97150

OWNER DATE

DATE

DATE

DATE

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DATE

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DATE

DATE

DATE

DATE

DATE

DATE

DATE

A-3.3

RRU SPECIFICATIONS

SHEET TITLE

SCALE: NONE

1

JRA
Jeffrey Davis & Associates, Inc.
Professional Surveyors
10000 Wilshire Blvd., Suite 1000
Beverly Hills, CA 90210
Tel: (310) 206-1000
Fax: (310) 206-1001

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CONVEYANCE
CALVADA SURVEYING, INC.
4430 Rockwood Drive
Van Nuys, California 91411
Tel: (818) 708-1000
Fax: (818) 708-1001



4430 Rockwood Drive
Van Nuys, California 91411
Tel: (818) 708-1000
Fax: (818) 708-1001

APPROVALS	DATE
_____ N.E.	_____ DATE
_____ SAC AND TOLSON	_____ DATE
_____ DETECTIVE	_____ DATE
_____ AIR	_____ DATE
_____ UNCLAS APPROVAL	_____ DATE

PROJECT NAME
MAR MONTE DARS DRIVE
PROJECT NUMBER
CNU3237

REPORT OF JEFFREY DAVIS & ASSOCIATES, INC.
TO THE CALIFORNIA HIGHWAY PATROL
SANTA CRUZ COUNTY

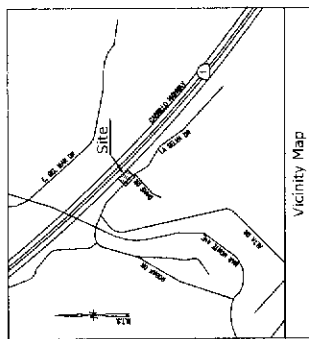
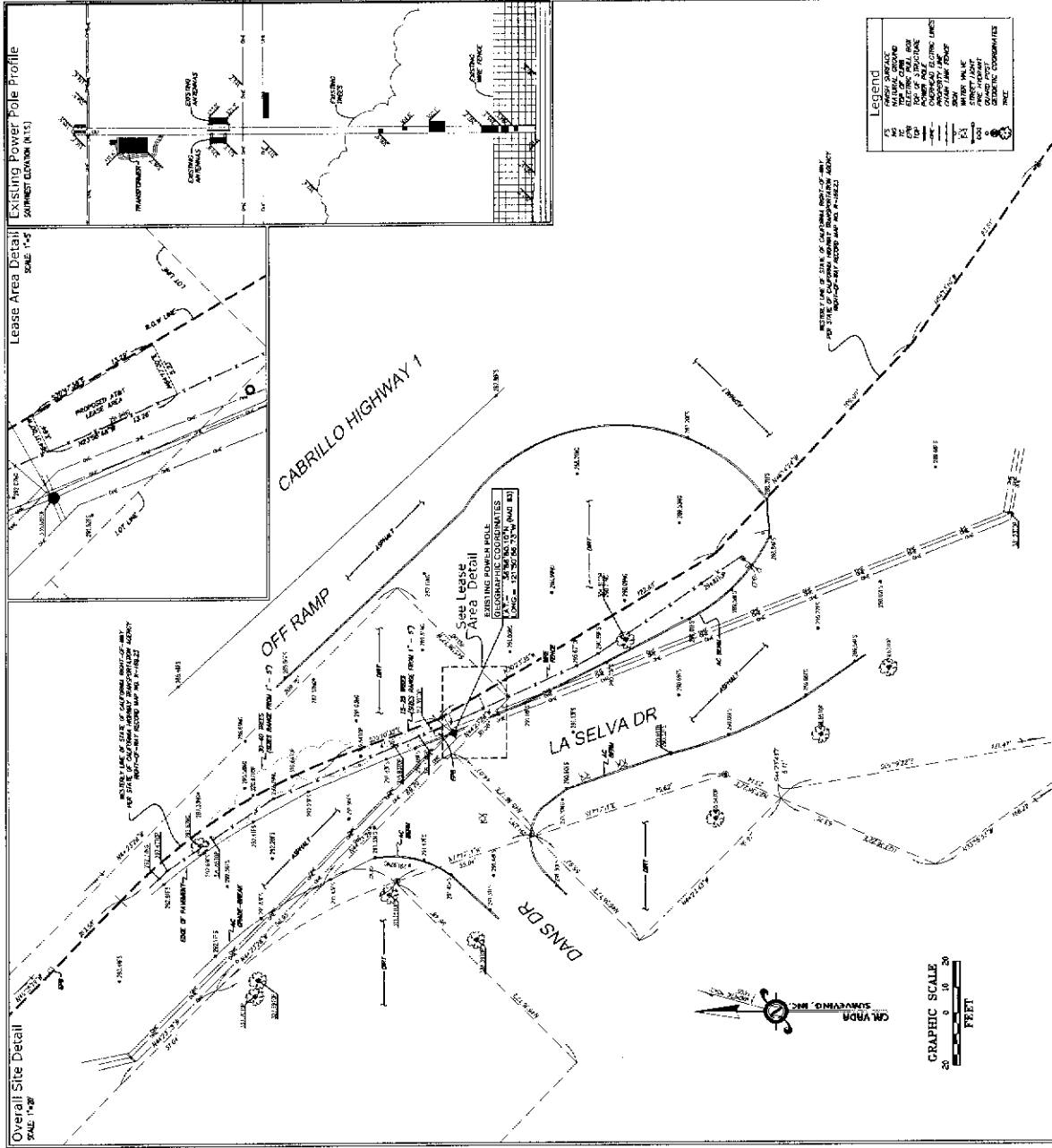
DATE	DESCRIPTION
12/10/99	REVISION
12/10/99	FINAL CASE ACCT

DATE	DESCRIPTION
12/10/99	REVISION
12/10/99	FINAL CASE ACCT

TOPOGRAPHIC SURVEY

C-1

SHEET 1 OF 1



Title Report
NOT APPLICABLE (PART OF THIS SURVEY)

Legal Description
NOT APPLICABLE (PART OF THIS SURVEY)

Assessor's Parcel No.
NOT APPLICABLE (PART OF THIS SURVEY)

Easements
NOT APPLICABLE (PART OF THIS SURVEY)

Lease Area
AS SHOWN

Geographic Coordinates
NAD 83 DATA LATITUDE: 34° 36' 30.00" N LONGITUDE: 121° 00' 00.00" W
ELEVATION: 200.00 FEET ABOVE SEA LEVEL

Basis of Bearings
THE BEARINGS SHOWN HEREON ARE BASED UPON THE STATE PLANE COORDINATE SYSTEM OF 1983
(NAD 83 CALIFORNIA ZONE 10)

Bench Mark
THE BENCHMARK IS BASED UPON THE NAD 83 DATUM "NAD83"
ELEVATION: 100.00 FEET (TYPICAL)

Date of Survey
NOVEMBER 10, 1999

Wireless Communication Facility Use Permit Findings

1. The development of the proposed wireless communications facility as conditioned will not significantly affect any designated visual resources, environmentally sensitive habitat resources (as defined in the Santa Cruz County General Plan/LCP Sections 5.1, 5.10, and 8.6.6.), and/or other significant County resources, including agricultural, open space, and community character resources; or there are no other environmentally equivalent and/or superior and technically feasible alternatives to the proposed wireless communications facility as conditioned (including alternative locations and/or designs) with less visual and/or other resource impacts and the proposed facility has been modified by condition and/or project design to minimize and mitigate its visual and other resource impacts.

This finding can be made, in that the existing micro cellular wireless communication facility is co-located on a utility pole to reduce visibility of the site and the footprint of the facility. The installation of a ground mounted cabinet will not impact visual or sensitive habitat resources in that the cabinet will be painted and screened by existing and proposed vegetation and the project is not located in an identified biotic resource area.

2. The site is adequate for the development of the proposed wireless communications facility and, for sites located in one of the prohibited and/or restricted areas set forth in Sections 13.10.661(b) and 13.10.661 (c), that the applicant has demonstrated that there are not environmentally equivalent or superior and technically feasible: (1) alternative sites outside the prohibited and restricted areas; and/or (2) alternative designs for the proposed facility as conditioned.

This finding can be made, in that the existing co-located micro cellular wireless communications facility is allowed as an exception to the restricted areas prohibition without the requirement of further alternatives analysis.

3. The subject property upon which the wireless communications facility is to be built is in compliance with all rules and regulations pertaining to zoning uses, subdivisions and any other applicable provisions of this title (County Code 13.10.660) and that all zoning violation abatement costs, if any, have been paid.

This finding can be made, in that the project site is located within a public right-of-way which is used for the purpose of public access and utilities infrastructure.

No zoning violation abatement fees are applicable to the subject property.

4. The proposed wireless communication facility as conditioned will not create a hazard for aircraft in flight.

This finding can be made, in that the existing wireless communications facility is located on an existing utility pole, which is approximately 44 feet in height, and this elevation is too low to interfere with an aircraft in flight.

Application #: 10-0122
APN: None
Owner: County of Santa Cruz

5. The proposed wireless communication facility as conditioned is in compliance with all FCC and California PUC standards and requirements.

This finding can be made, in that the maximum ambient RF levels at ground level due to the existing wireless communications facilities and the proposed operation are calculated to be 4.8 percent of the most restrictive applicable limit.

6. For wireless communication facilities in the coastal zone, the proposed wireless communication facility as conditioned is consistent with the all applicable requirements of the Local Coastal Program.

This finding can be made, in that the proposed modifications to the wireless communication facility are designed and located in a manner that will minimize potential impacts to scenic and biotic resources, and that the construction of the proposed facility will not impede access to the beach or other recreational resources.

Coastal Development Permit Findings

1. That the project is a use allowed in one of the basic zone districts, other than the Special Use (SU) district, listed in section 13.10.170(d) as consistent with the General Plan and Local Coastal Program LUP designation.

This finding can be made, in that the existing co-located micro cellular wireless communications facility is allowed as an exception to the restricted areas prohibition without the requirement of further alternatives analysis. The project site is located within the SU (Special Use) zone district with a residential General Plan land use designation.

2. That the project does not conflict with any existing easement or development restrictions such as public access, utility, or open space easements.

This finding can be made, in that the proposal does not conflict with any existing easement or development restriction such as public access, utility, or open space easements in that the project is designed and coordinated to occupy space adjacent to existing utilities infrastructure.

3. That the project is consistent with the design criteria and special use standards and conditions of this chapter pursuant to section 13.20.130 et seq.

This finding can be made, in that the existing micro cellular wireless communication facility is co-located on a utility pole to reduce visibility of the site and the footprint of the facility. The installation of a ground mounted cabinet will not impact visual resources, in that the cabinet will be painted and screened by existing and proposed vegetation.

4. That the project conforms with the public access, recreation, and visitor-serving policies, standards and maps of the General Plan and Local Coastal Program land use plan, specifically Chapter 2: figure 2.5 and Chapter 7, and, as to any development between and nearest public road and the sea or the shoreline of any body of water located within the coastal zone, such development is in conformity with the public access and public recreation policies of Chapter 3 of the Coastal Act commencing with section 30200.

This finding can be made, in that the project site is not located between the shoreline and the first public road and the improvements are located on an existing utility pole and within a public right-of-way. Consequently, the wireless communications facility will not interfere with public access to the beach, ocean, or any nearby body of water. Further, the project site is not identified as a priority acquisition site in the County Local Coastal Program.

5. That the proposed development is in conformity with the certified local coastal program.

This finding can be made, in that the proposed modifications to the wireless communication facility are designed and located in a manner that will minimize potential impacts to scenic and biotic resources, and that the construction of the proposed facility will not impede access to the beach or other recreational resources.

Development Permit Findings

1. That the proposed location of the project and the conditions under which it would be operated or maintained will not be detrimental to the health, safety, or welfare of persons residing or working in the neighborhood or the general public, and will not result in inefficient or wasteful use of energy, and will not be materially injurious to properties or improvements in the vicinity.

This finding can be made, in that the maximum ambient RF levels at ground level due to the wireless communications facility are calculated to be 4.8 percent of the most restrictive applicable limit.

The proposed project will not result in inefficient or wasteful use of energy, in that the most recent and efficient technology available to provide wireless communication services will be required as a condition of this permit. Upgrades to more efficient and effective technologies will be required to occur as new technologies are developed.

The project will not be materially injurious to properties or improvements in the vicinity in that the facility is co-located on an existing utility pole and the ground mounted cabinet will be camouflaged and screened from view to minimize potential visual impacts.

2. That the proposed location of the project and the conditions under which it would be operated or maintained will be consistent with all pertinent County ordinances and the purpose of the zone district in which the site is located.

This finding can be made, in that the existing co-located micro cellular wireless communications facility is allowed as an exception to the restricted areas prohibition without the requirement of further alternatives analysis. The project site is located within the SU (Special Use) zone district with a residential General Plan land use designation.

3. That the proposed use is consistent with all elements of the County General Plan and with any specific plan which has been adopted for the area.

This finding can be made, in that the existing micro cellular wireless communication facility is co-located on a utility pole to reduce visibility of the site and the footprint of the facility. The installation of a ground mounted cabinet will not impact visual or sensitive habitat resources in that the cabinet will be painted and screened by existing and proposed vegetation and the project is not located in an identified biotic resource area.

The subject property for the proposed project is located within the Highway One scenic corridor. The proposed project complies with General Plan Policy 5.10.3 (Protection of Public Vistas), in that the use of such co-located micro cellular wireless communication facilities minimizes the visual and environmental impacts associated with the construction of wireless communication facilities due to the small size of the proposed facilities and the presence of an existing pole and utilities infrastructure. The existing public views from the scenic highway will remain relatively unchanged as a result of this project.

Application #: 10-0122
APN: None
Owner: County of Santa Cruz

The property is located in the Mountain Residential (R-M) land use designation, which is implemented by and consistent with the SU (Special Use) zone district of the project site.

A specific plan has not been adopted for this portion of the County.

4. That the proposed use will not overload utilities and will not generate more than the acceptable level of traffic on the streets in the vicinity.

The project will not require the use of public services such as water or sewer, but will require electric power and telephone connections. The facility will require inspection by maintenance personnel at least once per month and this will not result in increasing traffic to unacceptable levels in the vicinity.

5. That the proposed project will complement and harmonize with the existing and proposed land uses in the vicinity and will be compatible with the physical design aspects, land use intensities, and dwelling unit densities of the neighborhood.

This finding can be made, in that the existing facility is co-located on a utility pole and the ground mounted cabinet will be camouflaged and screened from view by existing and proposed landscaping. This proposed design will adequately mitigate any potential visual impacts to the surrounding neighborhood.

6. The proposed development project is consistent with the Design Standards and Guidelines (sections 13.11.070 through 13.11.076), and any other applicable requirements of this chapter.

This finding can be made, in that the existing micro cellular wireless communication facility is co-located on a utility pole to reduce visibility of the site and the footprint of the facility. The installation of a ground mounted cabinet will not impact visual resources, in that the cabinet will be painted and screened by existing and proposed vegetation.

Conditions of Approval

Exhibit A: Project Plans, entitled, "AT&T UMTS Overlay - Mar Monte/Dans Drive", 20 sheets, prepared by Jeffrey Rome & Associates, revised 7/12/10.

- I. This permit authorizes modifications to an existing wireless communications facility as indicated on the approved Exhibit "A" for this permit and as modified by these conditions. This approval amends Coastal and Commercial Development Permit 03-0414 and all required conditions of approval for that permit are hereby incorporated into these conditions of approval by reference. This approval does not confer legal status on any existing structure(s) or existing use(s) on the subject property that are not specifically authorized by this permit. Prior to exercising any rights granted by this permit including, without limitation, any construction or site disturbance, the applicant/owner shall:
 - A. Sign, date, and return to the Planning Department one copy of the approval to indicate acceptance and agreement with the conditions thereof.
 - B. Obtain a Building Permit from the Santa Cruz County Building Official.
 1. Any outstanding balance due to the Planning Department must be paid prior to making a Building Permit application. Applications for Building Permits will not be accepted or processed while there is an outstanding balance due.
 - C. Obtain an Encroachment Permit from the Department of Public Works for all work performed in the County road right-of-way.
 - D. Submit proof that these conditions have been recorded in the official records of the County of Santa Cruz (Office of the County Recorder) within 30 days from the effective date of this permit.
- II. Prior to issuance of a Building Permit the applicant/owner shall:
 - A. Submit final architectural plans for review and approval by the Planning Department. The final plans shall be in substantial compliance with the plans marked Exhibit "A" on file with the Planning Department. Any changes from the approved Exhibit "A" for this development permit on the plans submitted for the Building Permit must be clearly called out and labeled by standard architectural methods to indicate such changes. Any changes that are not properly called out and labeled will not be authorized by any Building Permit that is issued for the proposed development. The final plans shall include the following additional information:
 1. One elevation shall indicate materials and colors as they were approved by this Discretionary Application. The applicant shall supply a color and material sheet in 8 1/2" x 11" format for Planning Department review and approval.

- a. The proposed equipment cabinet shall be camouflaged by painting the exterior of the cabinet a single shade of brown, green, or tan color to blend with the surrounding natural landscape.
 - b. Antennas shall be painted to match the color of the existing utility pole.
 2. Grading, drainage, and erosion control plans.
 3. Landscape plan including the following:
 - a. Native and drought tolerant landscape plantings, consistent with the surrounding natural vegetation, to screen the proposed equipment cabinet from view.
 - b. Methods proposed to protect the existing oak trees adjacent to the utility pole.
 4. Details showing compliance with fire department requirements.
 - B. Submit four copies of the approved Discretionary Permit with the Conditions of Approval attached. The Conditions of Approval shall be recorded prior to submittal, if applicable.
 - C. Meet all requirements of the County Department of Public Works, Stormwater Management.
 - D. Meet all requirements and pay any applicable plan check fee of the Aptos/La Selva Fire Protection District.
- III. All construction shall be performed according to the approved plans for the Building Permit. Prior to final building inspection, the applicant/owner must meet the following conditions:
- A. All site improvements shown on the final approved Building Permit plans shall be installed.
 - B. All inspections required by the building permit shall be completed to the satisfaction of the County Building Official.
 - C. Pursuant to Sections 16.40.040 and 16.42.100 of the County Code, if at any time during site preparation, excavation, or other ground disturbance associated with this development, any artifact or other evidence of an historic archaeological resource or a Native American cultural site is discovered, the responsible persons shall immediately cease and desist from all further site excavation and notify the Sheriff-Coroner if the discovery contains human remains, or the Planning Director

if the discovery contains no human remains. The procedures established in Sections 16.40.040 and 16.42.100, shall be observed.

IV. Operational Conditions

- A. The exterior finish and materials of the wireless communication facility must be maintained on an annual basis to continue to blend with the existing utilities infrastructure. Additional paint and/or replacement materials shall be installed as necessary to blend the wireless communication facility with the existing utilities infrastructure.
- B. All landscaping planted on the project site for screening purposes must be maintained in perpetuity. Additional plantings and/or replacement plantings shall be installed as necessary if any of the screening vegetation dies, is removed, or otherwise does not provide adequate screening of the proposed improvements.
- C. The operator of the wireless communication facility must submit within 90 days of commencement of normal operations (or within 90 days of any major modification of power output of the facility) a written report to the Santa Cruz County Planning Department documenting the measurements and findings with respect to compliance with the established Federal Communications Commission (FCC) Non-Ionizing Electromagnetic Radiation (NEIR) exposure standard. The wireless communication facility must remain in continued compliance with the NEIR standard established by the FCC at all times. Failure to submit required reports or to remain in continued compliance with the NEIR standard established by the FCC will be a violation of the terms of this permit.
- D. The use of temporary generators to power the wireless communication facility are not allowed.
- E. If, in the future, the pole based utilities are relocated underground at this location, the operator of the wireless communication facility must abandon the facility and be responsible for the removal of all permanent structures and the restoration of the site as needed to re-establish the area consistent with the character of the surrounding natural landscape.
- F. If, as a result of future scientific studies and alterations of industry-wide standards resulting from those studies, substantial evidence is presented to Santa Cruz County that radio frequency transmissions may pose a hazard to human health and/or safety, the Santa Cruz County Planning Department shall set a public hearing and in its sole discretion, may revoke or modify the conditions of this permit.
- G. If future technological advances would allow for reduced visual impacts resulting from the proposed telecommunication facility, the operator of the wireless communication facility must make those modifications which would allow for reduced visual impact of the proposed facility as part of the normal replacement

schedule. If, in the future, the facility is no longer needed, the operator of the wireless communication facility must abandon the facility and be responsible for the removal of all permanent structures and the restoration of the site as needed to re-establish the area consistent with the character of the surrounding natural landscape.

- H. Any modification in the type of equipment shall be reviewed and acted on by the Planning Department staff. The County may deny or modify the conditions at this time, or the Planning Director may refer it for public hearing before the Zoning Administrator.
 - I. A Planning Department review that includes a public hearing shall be required for any future co-location at this wireless communications facility.
 - J. In the event that future County inspections of the subject property disclose noncompliance with any Conditions of this approval or any violation of the County Code, the owner shall pay to the County the full cost of such County inspections, including any follow-up inspections and/or necessary enforcement actions, up to and including permit revocation.
- V. As a condition of this development approval, the holder of this development approval ("Development Approval Holder"), is required to defend, indemnify, and hold harmless the COUNTY, its officers, employees, and agents, from and against any claim (including attorneys' fees), against the COUNTY, its officers, employees, and agents to attack, set aside, void, or annul this development approval of the COUNTY or any subsequent amendment of this development approval which is requested by the Development Approval Holder.
- A. COUNTY shall promptly notify the Development Approval Holder of any claim, action, or proceeding against which the COUNTY seeks to be defended, indemnified, or held harmless. COUNTY shall cooperate fully in such defense. If COUNTY fails to notify the Development Approval Holder within sixty (60) days of any such claim, action, or proceeding, or fails to cooperate fully in the defense thereof, the Development Approval Holder shall not thereafter be responsible to defend, indemnify, or hold harmless the COUNTY if such failure to notify or cooperate was significantly prejudicial to the Development Approval Holder.
 - B. Nothing contained herein shall prohibit the COUNTY from participating in the defense of any claim, action, or proceeding if both of the following occur:
 - 1. COUNTY bears its own attorney's fees and costs; and
 - 2. COUNTY defends the action in good faith.
 - C. Settlement. The Development Approval Holder shall not be required to pay or perform any settlement unless such Development Approval Holder has approved the settlement. When representing the County, the Development Approval Holder

Application #: 10-0122
APN: None
Owner: County of Santa Cruz

shall not enter into any stipulation or settlement modifying or affecting the interpretation or validity of any of the terms or conditions of the development approval without the prior written consent of the County.

- D. Successors Bound. "Development Approval Holder" shall include the applicant and the successor(s) in interest, transferee(s), and assign(s) of the applicant.

Minor variations to this permit which do not affect the overall concept or density may be approved by the Planning Director at the request of the applicant or staff in accordance with Chapter 18.10 of the County Code.

Please note: This permit expires three years from the effective date listed below unless a building permit (or permits) is obtained for the primary structure described in the development permit (does not include demolition, temporary power pole or other site preparation permits, or accessory structures unless these are the primary subject of the development permit). Failure to exercise the building permit and to complete all of the construction under the building permit, resulting in the expiration of the building permit, will void the development permit, unless there are special circumstances as determined by the Planning Director.

Approval Date: _____

Effective Date: _____

Expiration Date: _____

Steven Guiney
Deputy Zoning Administrator

Randall Adams
Project Planner

Appeals: Any property owner, or other person aggrieved, or any other person whose interests are adversely affected by any act or determination of the Zoning Administrator, may appeal the act or determination to the Planning Commission in accordance with chapter 18.10 of the Santa Cruz County Code.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

NOTICE OF EXEMPTION

The Santa Cruz County Planning Department has reviewed the project described below and has determined that it is exempt from the provisions of CEQA as specified in Sections 15061 - 15332 of CEQA for the reason(s) which have been specified in this document.

Application Number: 10-0122

Assessor Parcel Number: None

Project Location: No Situs (La Selva Drive right of way)

Project Description: Proposal to replace existing antennas and install a ground mounted utility box.

Person or Agency Proposing Project: AT&T - Lisa Elliott

Contact Phone Number: (209) 605-2736

- A. ☐ The proposed activity is not a project under CEQA Guidelines Section 15378.
B. ☐ The proposed activity is not subject to CEQA as specified under CEQA Guidelines Section 15060 (c).
C. ☐ **Ministerial Project** involving only the use of fixed standards or objective measurements without personal judgment.
D. ☐ **Statutory Exemption** other than a Ministerial Project (CEQA Guidelines Section 15260 to 15285).

Specify type:

E. ☒ **Categorical Exemption**

Specify type: Class 1 - Existing Facilities (Section 15301)

F. Reasons why the project is exempt:

Minor improvements at an existing wireless communications facility.

In addition, none of the conditions described in Section 15300.2 apply to this project.

Randall Adams, Project Planner

Date: _____

FOR TAX PURPOSES ONLY

THE LANDS IN THIS MAP ARE OWNED BY THE COUNTY OF SANTA CRUZ, CALIFORNIA. THE LANDS ARE SHOWN FOR TAX PURPOSES ONLY. THE LANDS ARE NOT TO BE USED FOR ANY OTHER PURPOSE.

BK 45
07

BK 45
06

BK 45
07

51PM66
10/10/1991

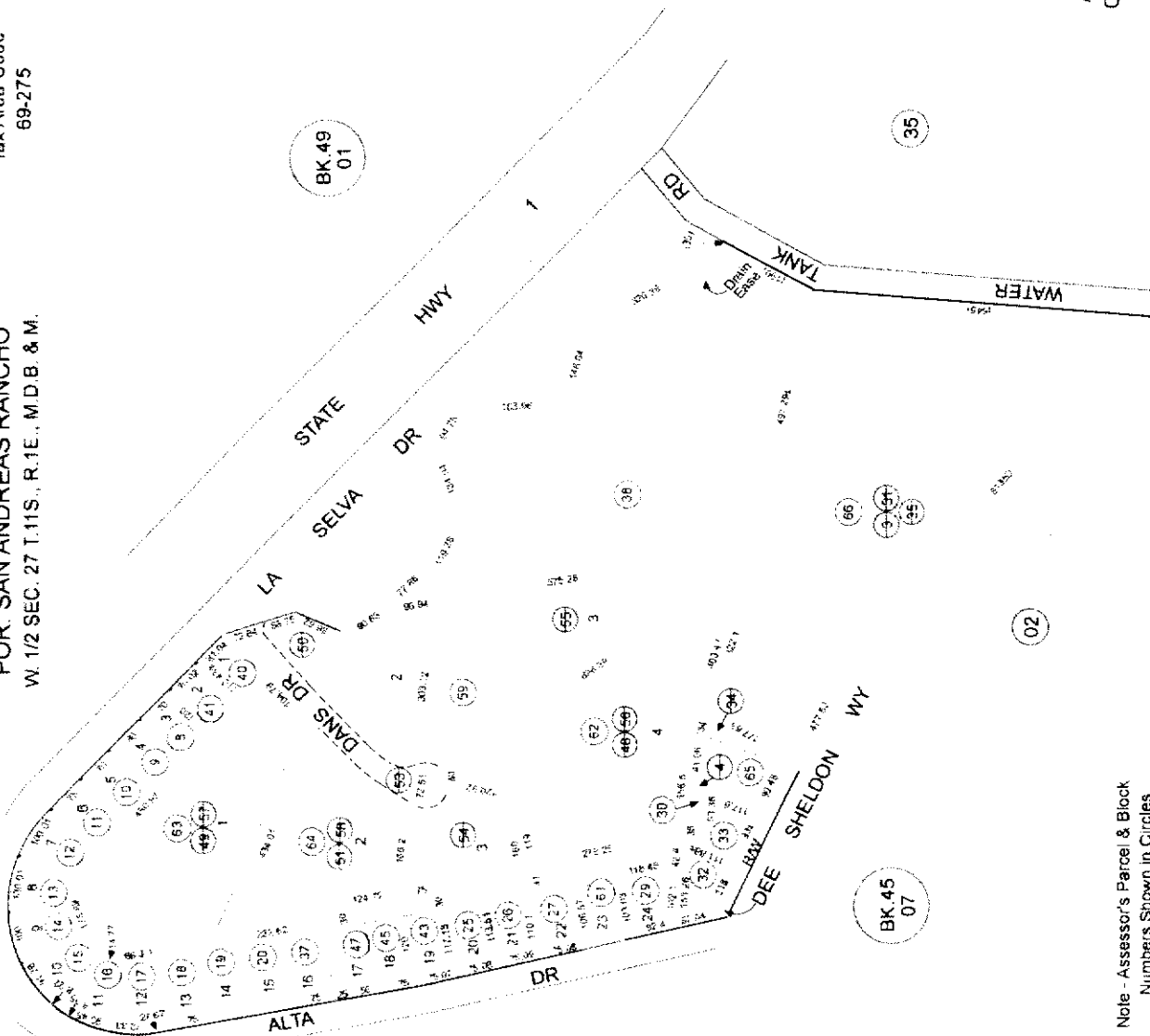
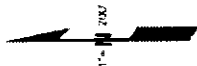
28PM14
7/25/1945

RIS LANDS IN
SAN ANDREAS RANCHO
33MB18 2/8/1955

POR. SAN ANDREAS RANCHO
W. 1/2 SEC. 27 T. 11S., R. 1E., M.D.B. & M.

Tax Area Code
69-275

46-01

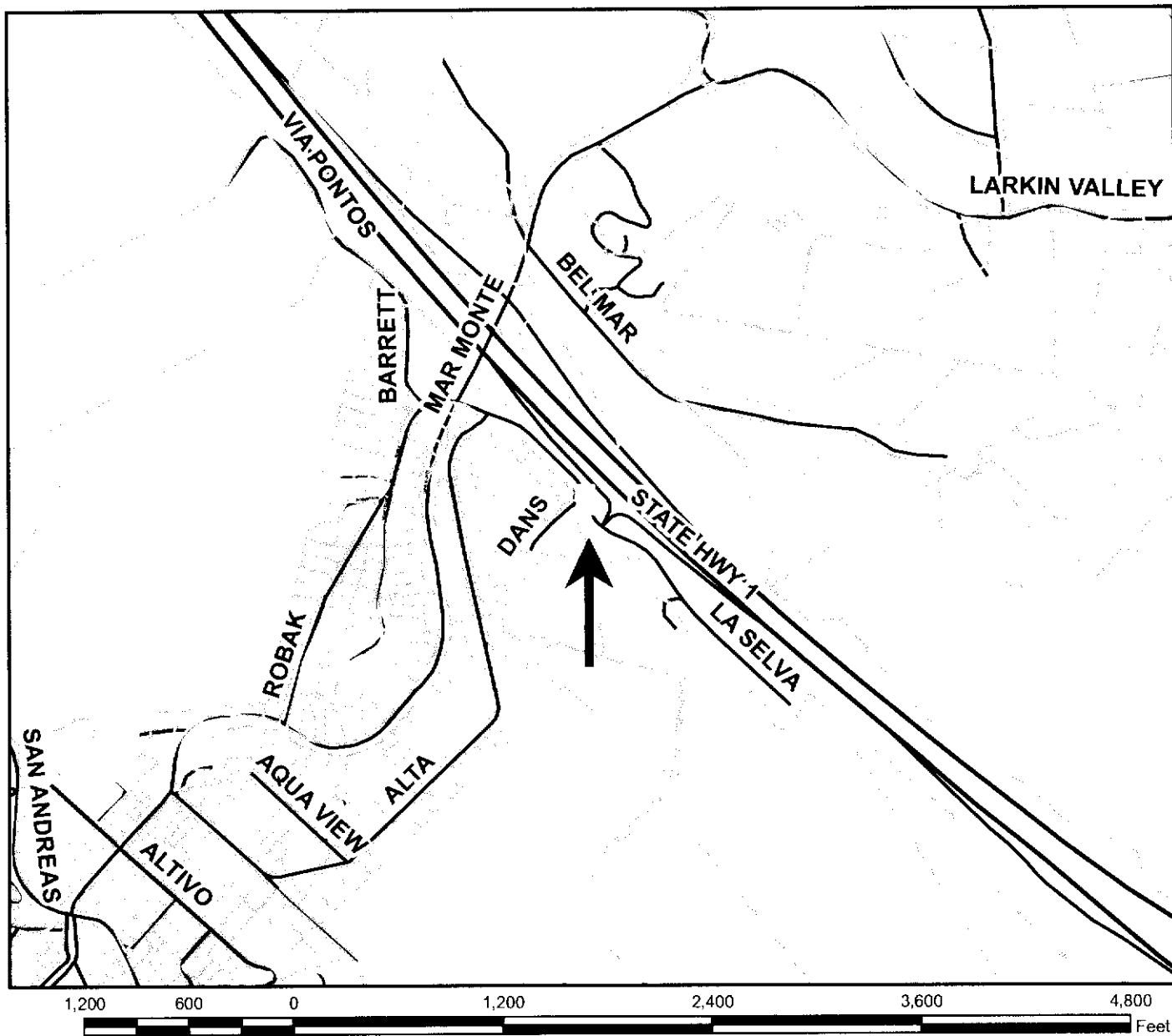


Assessor's Map No. 46-01
County of Santa Cruz, Calif
Jan. 1997

Electronically drawn 1/23/97 KSA
Rev 9/2/99 CB (8/20/04/04 & 5 LBA - 43 & 64)
Rev 9/2/99 (TCA CONSOLIDATION) TM
Rev 12/27/04 (TCA (Add LA Selva Dr))
Rev 10/26/06 CB (6/20/03/03: 1-65 & 66)
Rev 6/23/08 CB (Ching Dee Sheldon from Dr to WY)
Rev 12/30/08 CB (Added Lands Dr)

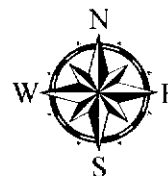


Location Map



LEGEND

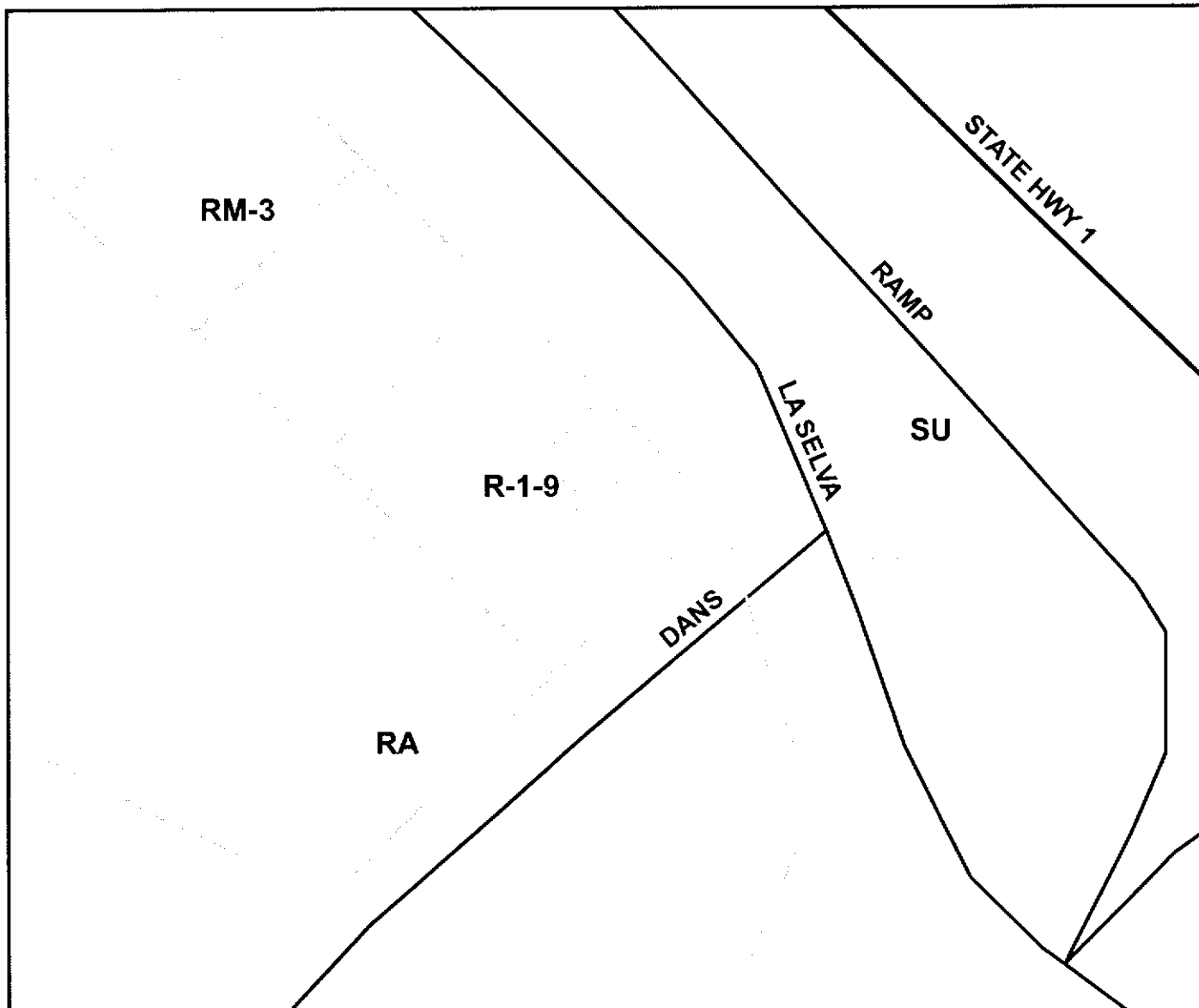
- Subject Property
- Assessors Parcels
- Streets
- State Highways



Map Created by
County of Santa Cruz
Planning Department
April 2010

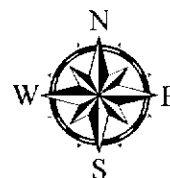


Zoning Map



LEGEND

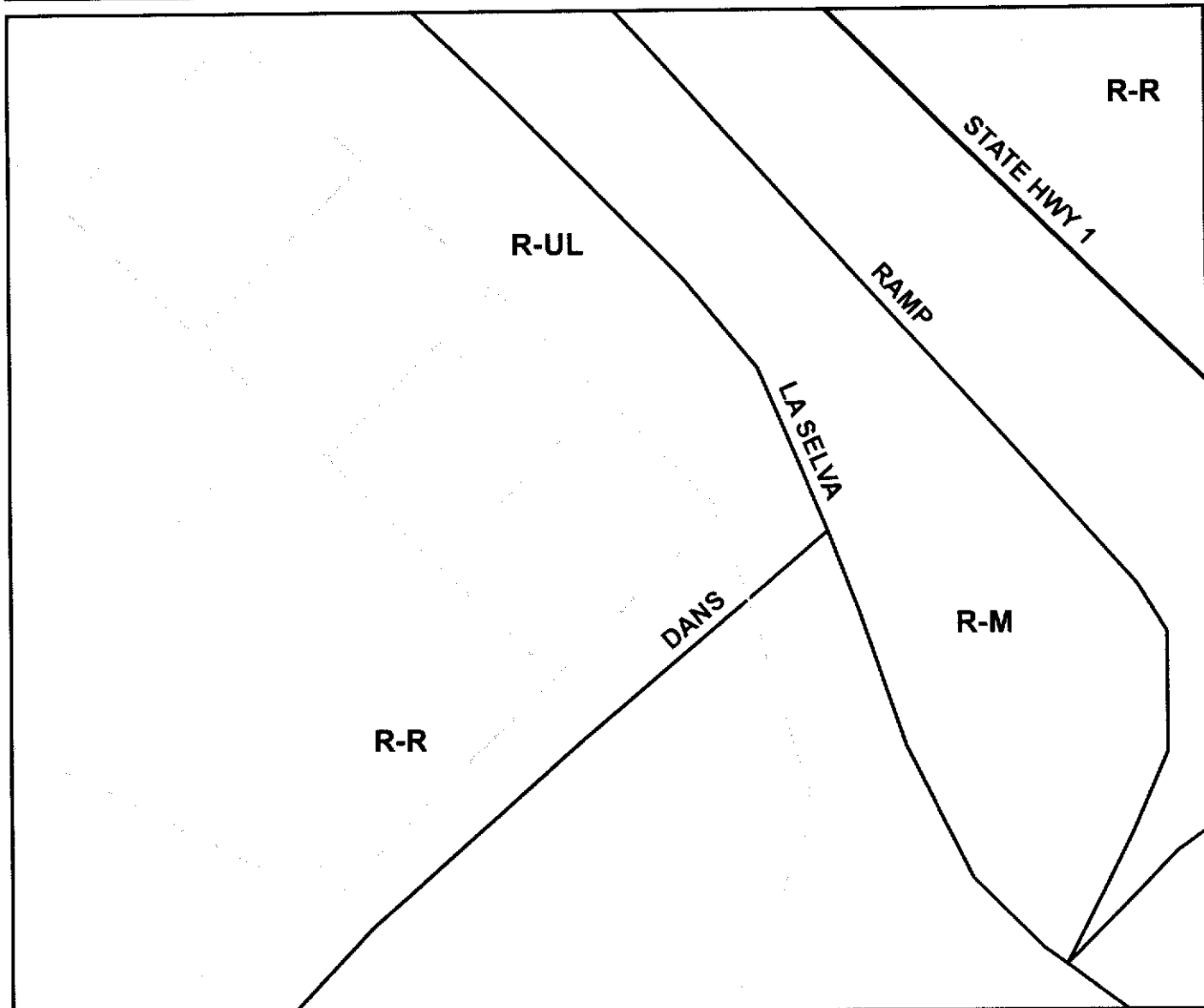
- Subject Property
- Assessors Parcels
- Streets
- State Highways
- SPECIAL USE
- RESIDENTIAL-MULTI FAMILY
- RESIDENTIAL-SINGLE FAMILY
- AGRICULTURE RESIDENTIAL



Map Created by
County of Santa Cruz
Planning Department
April 2010

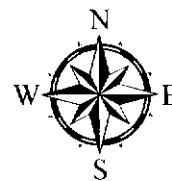


General Plan Designation Map

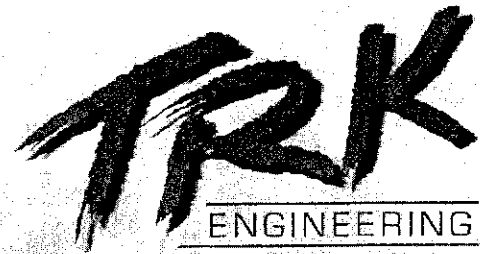


LEGEND

- Subject Property
- Assessors Parcels
- Streets
- State Highways
- Residential-Mountain
- Residential - Urban Low Density
- Residential-Rural



Map Created by
County of Santa Cruz
Planning Department
April 2010



**FEDERAL COMMUNICATIONS COMMISSION (FCC)
COMPLIANCE STUDY ON
NON-IONIZING ELECTROMAGNETIC RADIATION (NIEER)
EXPOSURE**

Prepared for:



**CNU3237
MAR MONTE DANS DRIVE
NORTH OF SELVA DRIVE & DANS DRIVE
WATSONVILLE,
CA 95076**

SEPTEMBER 23/09, REV. 1

SITE DESCRIPTION:

Carrier:	AT&T
Address:	North of Selva Drive & Dans Drive, Watsonville, CA 95076
Type of Service:	850 MHz GSM, UMTS (<i>Broadband PCS</i>)
Sectors:	330°, 120°
Antenna Type:	Kathrein 742 226
Number of Antennas:	2 (1 per sector)
Maximum Power:	500 W (<i>Maximum ERP per technology per sector</i>)
Antenna Height:	30'± (<i>Radiation center AGL</i>)

Table 1. AT&T RF summary

AT&T is proposing to deploy new UMTS services in addition to the existing GSM services at its own wireless communications facility at the above described location (Figure 1). The existing antennas will be replaced with two new Kathrein panel antennas at 30' above ground level. One new outdoor equipment cabinet will be installed on a concrete pad within the existing fenced compound. Access to the facility is restricted to authorized personnel only.

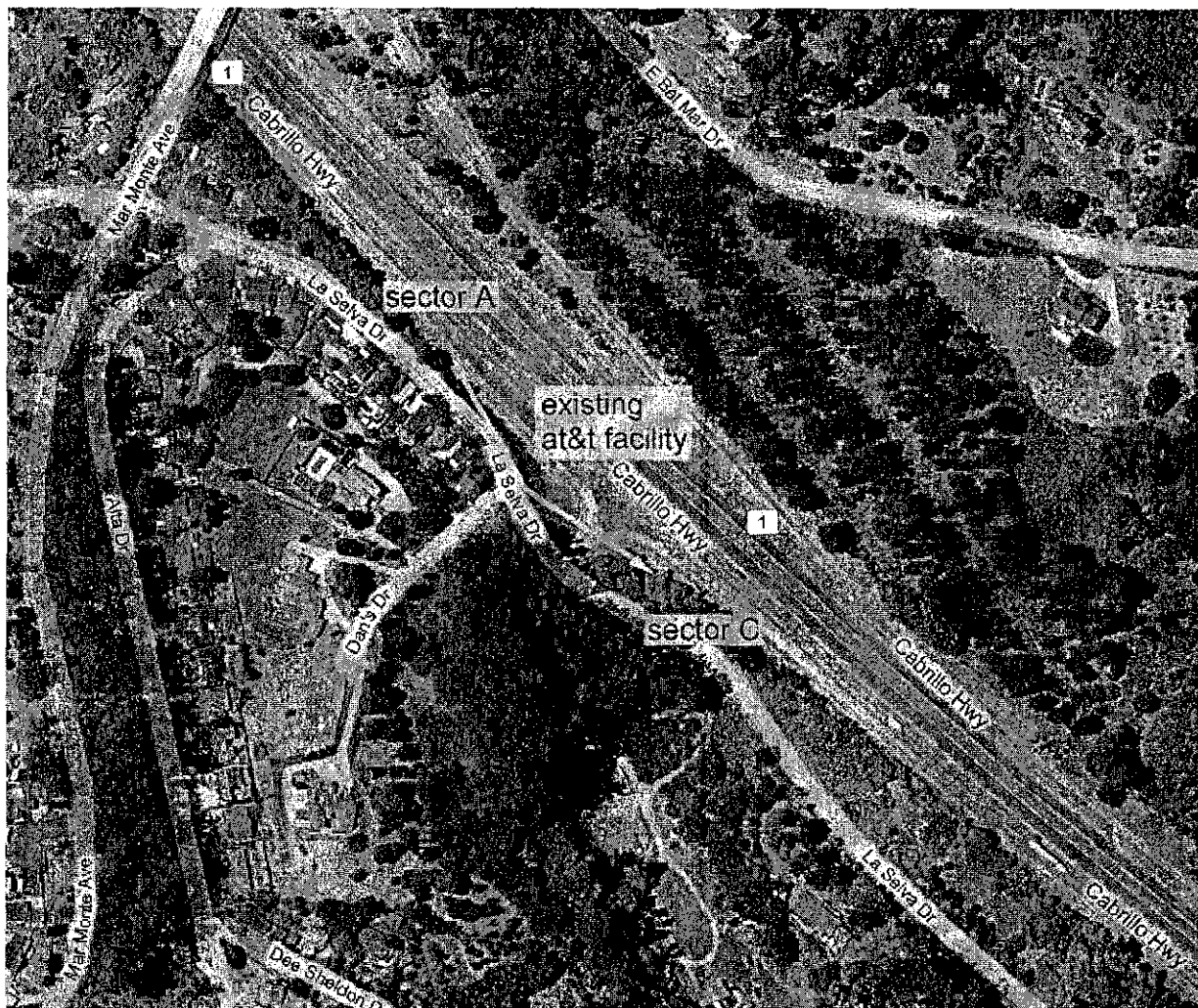


Figure 1. Area surrounding facility

PROTOCOL:

This study, and the calculations performed therein, is based on OET Bulletin 65¹ which adopts ANSI C95.1-1992 and NCRP standards. In particular, equation 10 from section 2 of the guideline is used as a model (in conjunction with known antenna radiation patterns) for calculating the power density at different points of interest. This information will be used to judge the RF exposure level incident upon the general population, and any employee present in the area. It should be noted that ground reflection of RF waves has been taken into account.

FCC'S MAXIMUM PERMISSIBLE EXPOSURE (MPE) LIMIT:

In order to evaluate the RF exposure level, the power densities at different locations of interest have been examined. Equation 10 from Bulletin 65 is reproduced here as equation 1:

$$S = \frac{33.4 F^2 ERP}{R^2} \quad (1)$$

Where: S = Power density [$\mu W/cm^2$]
 ERP = Effective radiated power [W]
 R = Distance [m]
 F = Relative field factor (relative numeric gain)

Scenario 1: Maximum Exposure near facility

The RF exposure level for a six-foot tall person standing near the AT&T facility is analyzed. For the worst-case scenario, we assume that the facility will radiate the maximum number of channels for all the technologies at the same time, with each channel at its maximum power level. Please refer to scenario 1 in appendix A for the complete geometry and analysis. The highest exposure location is found to be approximately 136' from the wood pole. The calculations of the maximum cumulative RF power densities are shown in Table 2.

Service	Max. ERP	F ²	R (m)	S ($\mu W/cm^2$) (from eq. 1)	MPE %
850 MHz GSM	500 W	-1 dB (0.7943)	42.1	7.4699	1.2879
850 MHz UMTS	500 W	-1 dB (0.7943)	42.1	7.4699	1.2879
Total					2.5758

Table 2. Worst-case predicted power density values for scenario 1.

The Maximum Permissible Exposure (MPE) limit for 850 MHz PCS facility for general population/uncontrolled exposure is $580 \mu W/cm^2$. At this location, the power density from the facility is calculated to be 2.58% of the MPE limit.

¹ Cleveland, Robert F, et al. Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields. OET Bulletin 65, Edition 97-01, August 1997.

² Ibid., page 67.

Scenario 2: Maximum Exposure on nearby buildings

There is low density residential housing in the surrounding area. The RF exposure level on the rooftop of the nearest building is evaluated. Please refer to scenario 2 in appendix A for the complete geometry and analysis. Again, we assume all antennas are transmitting with maximum power level at the same time. Also, the building is assumed to be within the main beam path of the antennas. The calculations for this location are summarized in Table 3. The maximum power density is calculated to be 4.80% of the MPE limit.

Service	Max. ERP	F ²	R (m)	S (μW/cm ²) (from eq. 1)	MPE %
850 MHz GSM	500 W	-3 dB (0.5012)	24.5	13.9304	2.4018
850 MHz UMTS	500 W	-3 dB (0.5012)	24.5	13.9304	2.4018
Total					4.8036

Table 3. Worst-case predicted power density values for scenario 2.

Conclusion:

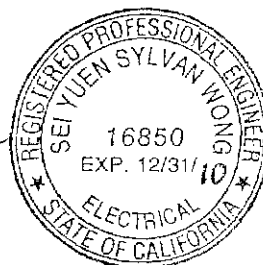
There is a relatively low level of RF energy directed either above or below the horizontal plane of the antennas. Under "worst-case" conditions, the calculations shown above predict that the maximum possible RF exposure is 4.80% of the MPE limit. There will be less RF exposure at other locations near or away from the compound. Therefore, the proposed modification to the AT&T wireless communications facility will comply with the general population/uncontrolled limit.

FCC COMPLIANCE:

Only trained persons will be permitted to access the facility and the antennas. They will be made fully aware of the potential for RF exposure and can choose to exercise control over their exposure that is within the occupational/controlled limits which is 5 times higher than the uncontrolled limits.

The general population/uncontrolled exposure near the facility, including persons on the ground level, in nearby open areas, the highway and inside or on existing nearby buildings will have RF exposure much lower than the "worst-case" scenario, which is only a small percentage of the MPE limit.

Sei Yuen Sylvan Wong

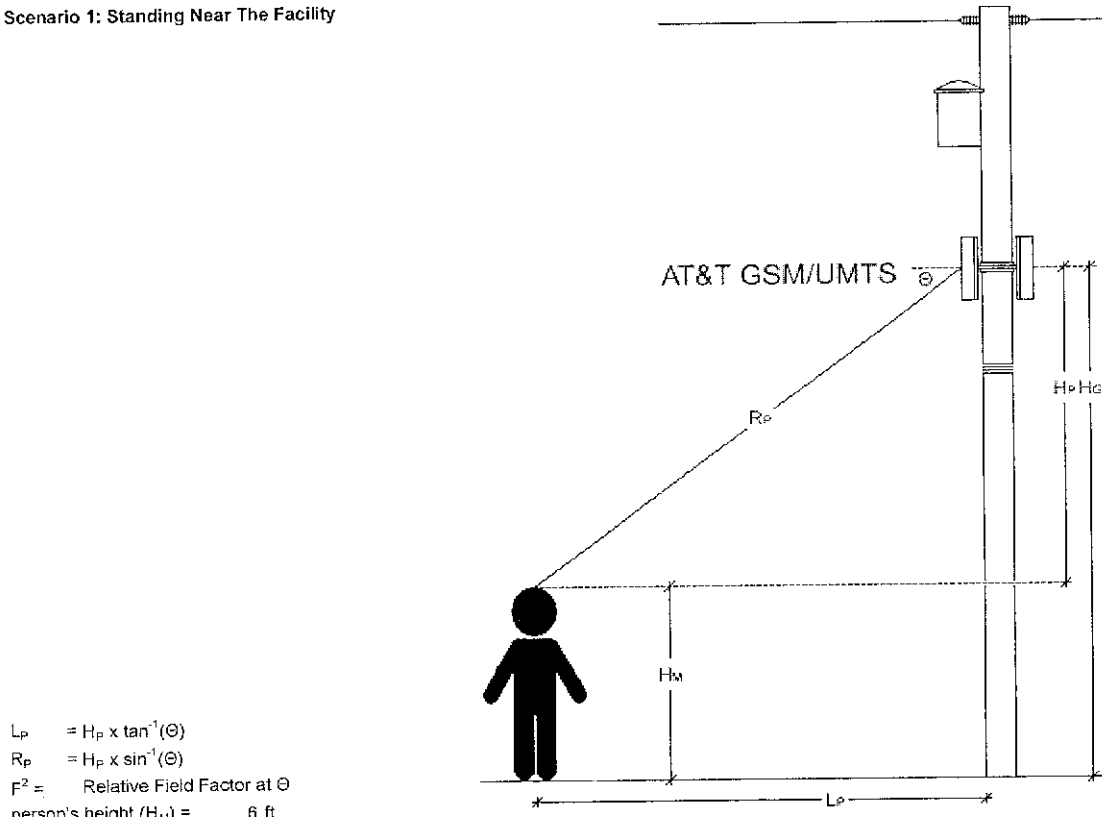


September 23, 2009

Sei Yuen Sylvan Wong, PE
California PE Reg. No. E 16850

APPENDIX A

Scenario 1: Standing Near The Facility



At $\theta = 75^\circ$, the exposure location at ground from the wood pole $L_p = 6$ ft

Service Provider	Height H_G , ft	Height H_p , ft	Max. ERP	Angle θ	F^2	R_p (m)	S ($\mu\text{W}/\text{cm}^2$)	MPE%
AT&T 850 MHz GSM	30.00	24.00	500.0	$\theta = 75^\circ$	-21 dB (0.0079)	7.6	2.2962	0.3959
AT&T 850 MHz UMTS	30.00	24.00	500.0	$\theta = 75^\circ$	-21 dB (0.0079)	7.6	2.2962	0.3959
Total								0.7918

At $\theta = 60^\circ$, the exposure location at ground from the wood pole $L_p = 14$ ft

Service Provider	Height H_G , ft	Height H_p , ft	Max. ERP	Angle θ	F^2	R_p (m)	S ($\mu\text{W}/\text{cm}^2$)	MPE%
AT&T 850 MHz GSM	30.00	24.00	500.0	$\theta = 60^\circ$	-15 dB (0.0316)	8.5	7.3908	1.2743
AT&T 850 MHz UMTS	30.00	24.00	500.0	$\theta = 60^\circ$	-15 dB (0.0316)	8.5	7.3908	1.2743
Total								2.5486

At $\theta = 45^\circ$, the exposure location at ground from the wood pole $L_p = 24$ ft

Service Provider	Height H_G , ft	Height H_p , ft	Max. ERP	Angle θ	F^2	R_p (m)	S ($\mu\text{W}/\text{cm}^2$)	MPE%
AT&T 850 MHz GSM	30.00	24.00	500.0	$\theta = 45^\circ$	-18 dB (0.0158)	10.4	2.4632	0.4247
AT&T 850 MHz UMTS	30.00	24.00	500.0	$\theta = 45^\circ$	-18 dB (0.0158)	10.4	2.4632	0.4247
Total								0.8494

At $\theta = 30^\circ$, the exposure location at ground from the wood pole $L_p = 42$ ft

Service Provider	Height H_G , ft	Height H_p , ft	Max. ERP	Angle θ	F^2	R_p (m)	S ($\mu\text{W}/\text{cm}^2$)	MPE%
AT&T 850 MHz GSM	30.00	24.00	500.0	$\theta = 30^\circ$	-14 dB (0.0398)	14.6	3.1054	0.5354
AT&T 850 MHz UMTS	30.00	24.00	500.0	$\theta = 30^\circ$	-14 dB (0.0398)	14.6	3.1054	0.5354
Total								1.0708

At $\theta = 10^\circ$, the exposure location at ground from the wood pole $L_p = 136$ ft

Service Provider	Height H_G , ft	Height H_p , ft	Max. ERP	Angle θ	F^2	R_p (m)	S ($\mu\text{W}/\text{cm}^2$)	MPE%
AT&T 850 MHz GSM	30.00	24.00	500.0	$\theta = 10^\circ$	-1 dB (0.7943)	42.1	7.4699	1.2879
AT&T 850 MHz UMTS	30.00	24.00	500.0	$\theta = 10^\circ$	-1 dB (0.7943)	42.1	7.4699	1.2879
Total								2.5758

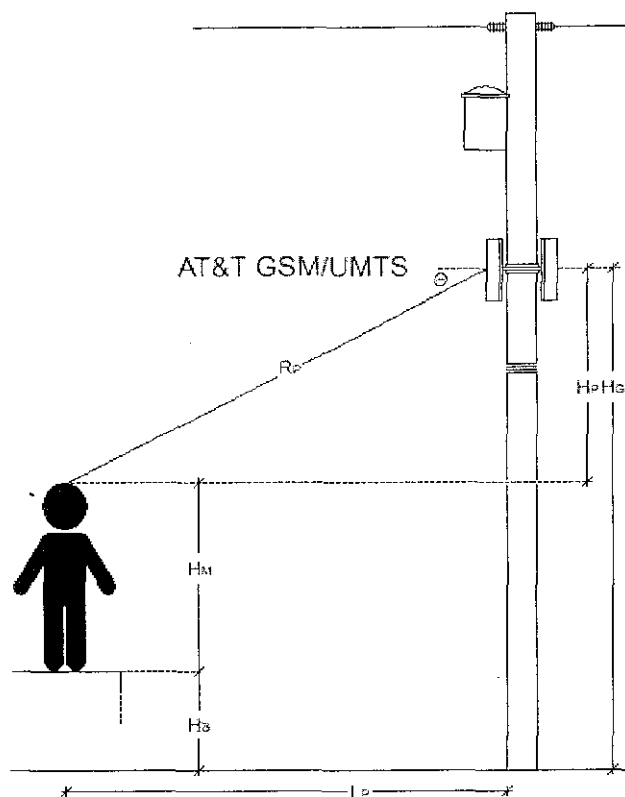
Scenario 2: Nearby Buildings/ Rooftops

$$L_p = H_p \times \tan^{-1}(\Theta)$$

$$R_o = H_p \times \sin^{-1}(\Theta)$$

$$F^2 = \text{Relative Field Factor at } \Theta$$

person's height (H_u) = 6 ft



Nearest residential building within Sector A

$H_B = 16$ ft (80 ft from the wood pole)

Service Provider	Height H_G , ft	Height H_p , ft	Max. ERP	Angle Θ	F^2	$R_p(m)$	$S (\mu W/cm^2)$	MPE%
AT&T 850 MHz GSM	30.00	8.00	500.0	$\Theta = 6^\circ$	-3 dB (0.5012)	24.5	13.9304	2.4018
AT&T 850 MHz UMTS	30.00	8.00	500.0	$\Theta = 6^\circ$	-3 dB (0.5012)	24.5	13.9304	2.4018
Total								4.8036

65° Dualband Directional Antenna

Kathrein's dual band antennas are ready for 3G applications, covering all existing wireless bands as well as all spectrum under consideration for future systems, AMPS, PCS and 3G/UMTS. These cross-polarized antennas offer diversity operation in the same space as a conventional 800 MHz antenna, and are mountable on our compact sector brackets.

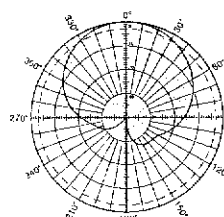
- Wide band operation.
- Exceptional intermodulation characteristics.
- High strength pultruded fiberglass radome.

General specifications:

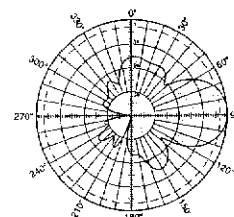
Frequency range	806–960 MHz 1710–2170 MHz
VSWR	<1.5:1
Impedance	50 ohms
Intermodulation (2x20w)	IM3: <150 dBc
Polarization	+45° and -45°
Connector	4 x 7-16 DIN female
Isolation intrasystem	>30 dB
intersystem	>45 dB (806–960 // 1710–2170 MHz)
Weight	16.5 lb (7.5 kg)
Dimensions	22.8 x 10.3 x 5.5 inches (579 x 262 x 139 mm)
Equivalent flat plate area	1.73 ft² (0.161 m²)
Wind survival rating*	120 mph (200 kph)
Shipping dimensions	29 x 11.9 x 7.6 inches (736 x 302 x 192 mm)
Shipping weight	21 lb (9.5 kg)
Mounting	Fixed mount options are available for 2 to 4.6 inch (50 to 115 mm) OD masts. Panel may be inverted.

See reverse for order information.

806–960 MHz

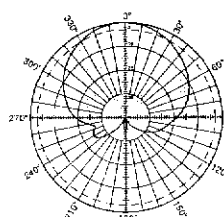


Horizontal pattern
±45°-polarization

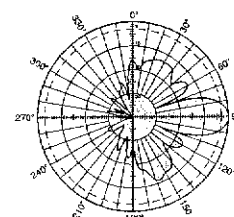


Vertical pattern
±45°-polarization

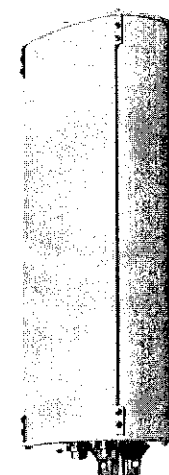
1710–2170 MHz



Horizontal pattern
±45°-polarization



Vertical pattern
±45°-polarization



Specifications:	806–866 MHz	824–894 MHz	880–960 MHz	1710–1880 MHz	1850–1990 MHz	1920–2170 MHz
Gain	11.1 dBi	11.4 dBi	11.8 dBi	12.8 dBi	13.3 dBi	13.6 dBi
Front-to-back ratio						
co-polar	>23 dB	>23 dB	>25 dB	>25 dB	>25 dB	>25 dB
total power (180° ± 30°)	>20 dB	>20 dB	>22 dB	>22 dB	>22 dB	>22 dB
Maximum power per input	250 watts (at 50°C)	250 watts (at 50°C)	250 watts (at 50°C)	200 watts (at 50°C)	200 watts (at 50°C)	200 watts (at 50°C)
+45° and -45° polarization	67° (half-power)	66° (half-power)	64° (half-power)	66° (half-power)	60° (half-power)	60° (half-power)
horizontal beamwidth						
+45° and -45° polarization	34° (half-power)	33° (half-power)	30° (half-power)	20° (half-power)	18° (half-power)	17.5° (half-power)
vertical beamwidth						
Cross polar ratio						
Main direction	0°	25 dB (typical)	25 dB (typical)	25 dB (typical)	16 dB (typical)	18 dB (typical)
Sector	±60°	>10 dB	>10 dB	>10 dB	>10 dB	>10 dB

* Mechanical design is based on environmental conditions as stipulated in EIA-222-F (June 1996) and/or ETS 300 019-1-4 which include the static mechanical load imposed on an antenna by wind at maximum velocity. See the Engineering Section of the catalog for further details.



10715-D
936.2949/a



C O U N T Y O F S A N T A C R U Z
Discretionary Application Comments

Project Planner: Randall Adams
Application No.: 10-0122
APN: NO_APN_SPEC

Date: October 19, 2010
Time: 16:14:42
Page: 1

Environmental Planning Completeness Comments

===== REVIEW ON APRIL 29, 2010 BY ROBERT S LOVELAND =====
NO COMMENT

Environmental Planning Miscellaneous Comments

===== REVIEW ON APRIL 29, 2010 BY ROBERT S LOVELAND =====
NO COMMENT

Dpw Drainage Completeness Comments

LATEST COMMENTS HAVE **NOT YET** BEEN SENT TO PLANNER FOR THIS AGENCY
===== REVIEW ON APRIL 30, 2010 BY GERARDO VARGAS =====

Dpw Drainage Miscellaneous Comments

LATEST COMMENTS HAVE **NOT YET** BEEN SENT TO PLANNER FOR THIS AGENCY
===== REVIEW ON APRIL 30, 2010 BY GERARDO VARGAS =====
No comment

Dpw Driveway/Encroachment Completeness Comments

===== REVIEW ON MAY 7, 2010 BY DAVID GARIBOTTI =====
Please indicate with specificity the proposed use of the new equipment and cabinet.

Dpw Driveway/Encroachment Miscellaneous Comments

===== REVIEW ON MAY 7, 2010 BY DAVID GARIBOTTI =====
Note on plans "AT&T shall cut vegetation back to back of curb from the southern intersection with the highway off ramp to the northern limits of the project, and shall be maintained year round to improve sight distance." ===== UPDATED ON MAY 7, 2010 BY DAVID GARIBOTTI =====
Note on plans "AT&T shall cut down vegetation from back of curb to the fence line. This shall extend from the highway off ramp intersection to the northern limits of the project. To improve and maintain sight distance this shall be repeated whenever the vegetation reaches a height of 30 inches.

Dpw Road Engineering Completeness Comments

===== REVIEW ON APRIL 27, 2010 BY RODOLFO N RIVAS =====
NO COMMENT

Dpw Road Engineering Miscellaneous Comments

Discretionary Comments - Continued

Project Planner: Randall Adams
Application No.: 10-0122
APN: NO_APN_SPEC

Date: October 19, 2010
Time: 16:14:42
Page: 2

===== REVIEW ON APRIL 27, 2010 BY RODOLFO N RIVAS =====

Please be aware that an encroachment permit will be required for construction work within the County Right of Way.

Aptos-La Selva Beach Fire Prot Dist Completeness C

===== REVIEW ON APRIL 21, 2010 BY ERIN K STOW =====

DEPARTMENT NAME:Aptos/La Selva Fire approved

Aptos-La Selva Beach Fire Prot Dist Miscellaneous

===== REVIEW ON APRIL 21, 2010 BY ERIN K STOW =====

NO COMMENT

INTEROFFICE MEMO

APPLICATION NO: 10-0122

Date: May 5, 2010

From: Larry Kasparowitz, Urban Designer

Re: Equipment additions to a cell site at Dans Drive, Aptos

No comments.



Aptos/La Selva Fire Protection District

6934 Soquel Drive • Aptos, CA 95003
Phone # 831-685-6690 • Fax # 831-685-6699

April 21, 2010

Planning Department
County of Santa Cruz
Attention: Randall Adams
701 Ocean Street
Santa Cruz, CA 95060

Subject: APN: none / Appl #10-0122

Dear Mr. Adams:

Aptos/La Selva Fire Department has reviewed the plans for the above cited project and has no objections as presented.

A plan review fee of **\$50.00** is due and payable to the Aptos/La Selva Fire Department **PRIOR TO APPROVAL** of building application. **Reminder:** the enclosed Permit/Service Fees form must be submitted to the Aptos/La Selva Fire Department at time of payment.

- Any other requirements will be addressed in the Building Permit phase.
- Plan check is based upon plans submitted to this office. Any changes or alterations shall be re-submitted for review prior to construction.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jim Dias', with a large, sweeping flourish extending upwards and to the right.

Jim Dias, Fire Marshal
Fire Prevention Division
Aptos/La Selva Fire Protection District

Cc: County of Santa Cruz – Department of Public Works
701 Ocean Street
Santa Cruz, CA 95060

Cc: Lisa Elliott
17180 Sycamore Avenue
Patterson, CA 95363