Staff Report to the Zoning Administrator

Application Number: 08-0256

Applicant: James Cosgrove
Owner: Camille and Timothy Washovich
APN: 040-271-62

Agenda Date: 2/06/08
Agenda Item #: 3
Time: After 10:00 a.m.

Project Description: Proposal to recognize a 48 foot monopole with antenna, three panel antennas installed on the deck supports of an existing single family dwelling, existing equipment building with exterior air conditioning unit, installation of one new antenna on the monopole, and the reuse and conversion of one existing GSM antenna for use as a UMTS antenna on the existing deck support. The project requires a Development Permit.

Location: The property is located on the west side of Skyward Drive (685 Skyward Drive), within the Aptos Planning Area.

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

Permits Required: Development Permit
Technical Reviews: None

Staff Recommendation:

- Certification that the proposal is exempt from further Environmental Review under the California Environmental Quality Act.
- Approval of Application 08-0256, based on the attached findings and conditions.

Exhibits

A.	Project plans	F.	Zoning map/General Plan map
B.	Findings	G.	Existing Site Photos
C.	Conditions	H.	NIER Report, dated May 30, 2008
D.	Categorical Exemption (CEQA determination)	I.	Alternative Site Analysis Material
E.	Location and Assessor's parcel map	J.	Comments & Correspondence

Parcel Information

Parcel Size:	2.9 acres (EMIS Estimate)
Existing Land Use - Parcel:	Residential
Existing Land Use - Surrounding:	Residential

Project Access:	Skyward Drive, 40 foot right-of-way access
Planning Area:	Aptos
Land Use Designation:	RR (Rural Residential)
Zone District:	RA (Residential Agriculture)
Coastal Zone:	__ Inside _x_ Outside
Appealable to Calif. Coastal Comm.	__ Yes _x_ No

Environmental Information

Geologic Hazards:	Not mapped/no physical evidence on site, though area elsewhere on the site is identified on the Cooper Clark Landslide map. Environmental Planning staff had no comments or concerns regarding this application.
Soils:	N/A
Fire Hazard:	Not a mapped constraint
Slopes:	N/A
Env. Sen. Habitat:	Not mapped/no physical evidence on site
Grading:	No grading proposed
Tree Removal:	No trees proposed to be removed
Scenic:	Not a mapped resource
Drainage:	Existing drainage adequate
Archeology:	Not mapped/no physical evidence on site

Services Information

Urban/Rural Services Line:	__ Inside _x_ Outside
Water Supply:	Well
Sewage Disposal:	Septic
Fire District:	Aptos La Selva Fire Protection District
Drainage District:	N/A, Natural

History

Application 98-0031 recognized a 48 foot monopole with an antenna, a generator, and a 250 gallon propane tank, three panel antennas installed on a single-family dwelling deck support, and an equipment storage building as part of an existing un-permitted cellular transmission facility. The facility has operated ever since approval of the use permit, though a building permit was never issued and the use permit was not exercised and does not have a valid use permit to operate today.

Project Setting

The project site is approximately 2.9 acres in size with access via a 40' right-of-way that travels through the center of the parcel and services 4 additional parcels. The site slopes steeply from the north to the south and is forested with oak, fir, and redwoods.

The cell facility consists of three panel antennas that are attached to the exterior of the house on

the deck supports, as shown on the project plans and attached photo, Exhibit G. The equipment shelter is comprised of an approximately 220 square foot enclosed equipment building, approximately 23'4" in length by 9 wide by 11'6" feet in height and is surrounded on three sides by a four (4) foot high retaining wall. This facility does not currently include a propane tank or generator as originally conceived. The equipment cabinets and a generator receptacle are located within the structure and an exterior air conditioning unit is attached to the building. The 48 foot monopole is located adjacent to the equipment shelter. The equipment shelter, monopole, and house antennas are located approximately 130 feet from the nearest residential dwelling.

Project Proposal

The current application seeks to recognize the existing facility. The applicant proposes to add one new 5.5 inch by 10.3 inch by 54 inch (4.5 feet) antenna below the existing antenna on the monopole, one UMTS equipment cabinet within the equipment building, and to reuse one of the existing GSM antennas on the dwelling deck support as a UMTS antenna. The facility also shows a generator receptacle, though plans do not include a generator.

Zoning & General Plan Consistency

Cell Facility on a Residentially Zoned Parcel

Pursuant to County Code Section 13.10.661(c), parcels zoned Residential Agriculture are subject to the "Restricted Area" requirements. These code sections, 13.10.661(c) (3) and 13.10.661 (d), discourage non-collocated facilities, with exception that non co-located facilities are permitted within this zone district provided that an alternative analysis is submitted pursuant to County Code Section 13.10.662(c).

Alternatives Analysis

An alternative site analysis is a document that provides an evaluation of a number of cell sites with the intent of demonstrating that the proposed cell site provides more superior cell coverage than other sites and also most limits site visibility to surrounding properties and minimizes visual impacts. This site is unique in that it is an existing site currently operated by AT&T and was previously approved under Permit 98-0031, but not fully exercised because the building permit was not issued by the Planning Department. The applicant provided a rationale for this location within this context noting that this site was originally selected because it provides superior coverage and would leave a gap in the coverage if another site is required to be developed today . Site coverage mapping information and an email, attached as Exhibit I, are provided and serve as the alternatives site analysis that support this location selection. Mapping information show coverage provided for this carrier at this location. Staff concurs with the applicant with regard to site selection based on the information provided and does not recommend additional evaluation of other sites. Furthermore, another site would only be recommended by staff if the selected site would result in significant visual impacts to surrounding properties or to a sensitive scenic corridor or other impacts associated with the site that could not be mitigated. This site is not visible to any scenic corridor or to surrounding properties given the existing mature trees between properties.

Noise Considerations

Staff was contacted by a neighbor in a phone call following neighborhood noticing. In particular, the neighbor complained of noise related to this site during the night. Staff visited the site again and noted the existing air conditioning unit attached to the exterior of the equipment building and listened to the AC unit during operation. This AC unit requires additional noise evaluation, but in the absence of a noise study, it is recommended that this unit be removed from this facility. Furthermore, the project is conditioned to prohibit a generator and the proposed generator receptacle from this site to avoid these same noise issues. This will ensure that batteries are provided as the means of back-up for this facility during power outages.

Radiofrequency (RF) Exposure

An RF report, as required by the Wireless Communications Ordinance, is attached as Exhibit H. This report evaluates the existing facility (post construction levels) and evaluates projected emission levels (pre-construction). The existing and proposed levels are within FCC prescribed limits as shown on Table 2 of the report. The maximum level does not exceed 36% of the most restrictive public limit at ground level. The maximum exposure on nearby buildings is projected to be approximately .75 percent of the most restrictive limit established by the Federal Communications Commission.

Section 47 USC 332(c)(7)(iv) of the Telecommunications Act of 1996 prohibits jurisdictions from regulating the placement, construction, or modification of Wireless Communications Facilities based on the environmental effects of RF emissions if these emissions comply with FCC standards.

Setbacks

The following setbacks apply to this property based on the Residential Agriculture zone district.

	Front	Side	Interior Right-of-Way	Rear
Required	40'	20'	20'	20'
Proposed	220'	North Side-80', South Side- 160'	60' from road edge, 45' from r/w edge	350'

The improvements comply with all required setbacks. The existing pole and equipment building are also located in proximity to an interior right-of-way and are subject to the 20 foot street side yard setback. The existing improvements are setback approximately 60 feet back from the edge of the roadway and approximately 45 feet from the right-of-way.

Design Review

The proposed facility will comply with the requirements of the County Design Review Ordinance, in that the equipment building and monopole are screened from adjacent residential properties by existing vegetation as noted in the site photos provided and attached as Exhibit G.

No visual mitigations are necessary for the proposed site. Please see attached Design Review, Exhibit J.

Environmental Review

Environmental review is not required for the proposed development. A CEQA exemption form is attached as Exhibit D for staff signature and filing with the Clerk of the Board following approval.

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 **08-0256,** 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

Report Prepared By: Sheila McDaniel
Santa Cruz County Planning Department
701 Ocean Street, 4th Floor
Santa Cruz CA 95060
Phone Number: (831) 454-3439
E-mail: sheila.mcdaniel@co.santa-cruz.ca.us

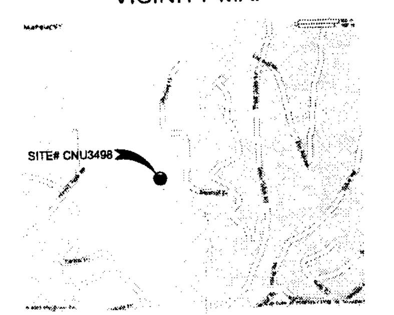
CNU3498/JACKSON OVERLAY
685 SKYWARD DRIVE
APTOS, CALIFORNIA 95003

SPECIAL INSPECTIONS

1 CONCRETE
2 BOLTS INSTALLED IN CONCRETE
3 CONCRETE MOMENT-RESISTING SPACE FRAME
4 REINFORCING STEEL AND PRESTRESSING STEEL
5.1 ALL STRUCTURAL WELDING
5.2 WELD TESTING DUCTILE MOMENT-RESISTING STEEL FRAME
5.3 WELDING REINFORCING STEEL
6 HIGH-STRENGTH BOLTING
7 STRUCTURAL MASONRY
8 REINFORCED GYPSUM CONCRETE
9 INSULATING CONCRETE FILL
10 SPRAY-APPLIED FIREPROOFING
11 DEEP FOUNDATIONS (PILING, DRILLED & CAISSONS)
12 SHOTCRETE
13.1 VERIFY SOIL CONDITIONS ARE SUBSTANTIALLY IN CONFORMANCE WITH THE SOIL INVESTIGATION REPORT
13.2 VERIFY THAT FOUNDATION EXCAVATIONS EXTEND TO PROPER DEPTH AND BEARING STRATA
13.3 PROVIDE SOIL COMPACTION TEST RESULTS, DEPTH OF FILL, RELATIVE DENSITY, BEARING VALUES
13.4 PROVIDE SOIL EXPANSION TEST RESULTS, EXPANSION INDEX, RECOMMENDATIONS FOR FOUNDATIONS, ON-GRADE FLOOR SLAB DESIGN FOR EACH BUILDING SITE
14 SMOKE CONTROL SYSTEM
15 SPECIAL CASES (DESCRIBE)
16 OFF-SITE FABRICATION OF BUILDING COMPONENTS
17 OTHER SPECIAL INSPECTIONS AS REQUIRED BY DESIGNER

NO.	DESCRIPTION OF TYPE OF INSPECTION REQUIRED, LOCATION, REMARKS.

VICINITY MAP



CITY OF APTOS

CONSULTANT TEAM

CLIENTS REPRESENTATIVE:

BLACK DOT WIRELESS
320 COMMERCE
IRVINE, CALIFORNIA 92602
PHONE: (949) 502-3800
FAX: (949) 271-7940

SITE ACQUISITION:
JAMES COSGROVE
PHONE: (415)-233-3636

CONSTRUCTION MANAGER:
MIKE BESECKER (ERICSSON)
PHONE: (408) 240-1122

ARCHITECT:

JEFFREY ROME & ASSOCIATES
3 SAN JOAQUIN PLAZA
SUITE: 135
NEWPORT BEACH, CALIFORNIA 92660
PHONE: (949) 760-3929
CELLULAR: (760) 777-2956
FAX: (949) 760-3931
CONTACT: ALEX FIGUEROA

DEVELOPMENT SUMMARY

APPLICANT:	AT&T MOBILITY 4420 ROSEWOOD DRIVE PLEASANTON, CALIFORNIA 94588
OWNER:	JORGE A. LOVATO JR. SITE CONTACT: JORGE A. LOVATO JR. 685 SKYWARD DRIVE APTOS, CALIFORNIA 95003 PHONE: (408) 778-2001
TOWER OWNER:	N/A
OTHER ON-SITE TELECOM FACILITIES:	NO
PROJECT ADDRESS:	685 SKYWARD DRIVE APTOS, CALIFORNIA 95003
ASSESSORS PARCEL NUMBER:	040-271-62
LATITUDE:	36.96570
LONGITUDE:	-121.88900
LAT/LONG TYPE:	NAD-83
EXISTING ZONING:	TBD
PROPOSED PROJECT AREA:	NO INCREASE IN S.F.
EXISTING TYPE OF CONSTRUCTION:	TYPE V-B
PROPOSED TYPE OF CONSTRUCTION:	TYPE V-B
EXISTING OCCUPANCY:	U-2
PROPOSED OCCUPANCY:	U-2
JURISDICTION:	SANTA CRUZ COUNTY

PROJECT DESCRIPTION

AT&T MOBILITY PROPOSES TO CONSTRUCT, OPERATE AND MAINTAIN AN UNMANNED WIRELESS COMMUNICATIONS FACILITY. THIS FACILITY WILL CONSIST OF THE FOLLOWING:

- INSTALL (1) (N) INDOOR EQUIPMENT CABINET WITHIN AN (E) SHELTER.
- INSTALL (1) (N) ANTENNA ON AN (E) WOOD POLE FOR UMTS.
- REUSE (1) (E) ANTENNA ON AN (E) ROOF DECK FOR UMTS.

SHEET INDEX

T-1 TITLE SHEET
T-2 SPECIFICATIONS AND NOTES

A-0 SITE PLAN
A-1 ENLARGED SITE PLAN
A-2 ELEVATIONS
A-3 EQUIPMENT DETAILS
A-4 ANTENNA DETAILS
A-5 ANTENNA SPECS

RF-1 RF-SITE DESIGN
RF-2 RF-SITE DESIGN
RF-3 RF-SITE DESIGN
RF-4 RF-SITE DESIGN
RF-5 RF-SITE DESIGN

C-1 SITE SURVEY (NOT AVAILABLE AT THIS TIME)

APPLICABLE CODES

ALL WORK SHALL COMPLY WITH THE FOLLOWING APPLICABLE CODES:

2007 CALIFORNIA BUILDING CODE AND LOCAL AMENDMENTS
2007 CALIFORNIA MECHANICAL CODE AND LOCAL AMENDMENTS
2007 NATIONAL ELECTRIC CODE AND LOCAL AMENDMENTS
2007 UNIFORM PLUMBING CODE AND LOCAL AMENDMENTS

IN THE EVENT OF CONFLICT, THE MOST RESTRICTIVE CODE SHALL PREVAIL

ACCESSIBILITY DISCLAIMER

THIS PROJECT IS AN UNOCCUPIED WIRELESS PCS TELECOMMUNICATIONS FACILITY AND IS EXEMPT FROM DISABLED ACCESS REQUIREMENTS.

SCALE

THE DRAWING SCALES SHOWN IN THIS SET REPRESENT THE CORRECT SCALE ONLY WHEN THESE DRAWINGS ARE PRINTED IN A 24"X36" FORMAT. IF THIS DRAWING SET IS NOT 24"X36", THIS SET IS NOT TO SCALE.

JRA
Jeffrey Rome & Associates, Inc.
Arizona • California • Nevada
Arizona: (602) 296-5679
California: (949) 760-3929
Nevada: (702) 795-0058

LICENSED ARCHITECT · JEFFREY L. ROME · C-026676 · EXP. FEB. 28 2009 · STATE OF CALIFORNIA

at&t
4430 Rosewood Drive
Pleasanton, California 94588

APPROVALS

R.F.	DATE
ZONING	DATE
CONSTRUCTION	DATE
SITE ACQUISITION	DATE
OWNER APPROVAL	DATE

PROJECT NAME
AT&T UMTS OVERLAY
SITE NAME
JACKSON OVERLAY
SITE NUMBER
CNU3498
685 SKYWARD DRIVE
APTOS, CALIFORNIA 95003

DRAWING DATES
04/24/08 90% CD REVIEW (P1-B1)
05/22/08 100% FINAL CD's (P1-B2)

A.P.N: 040-271-62

SHEET TITLE
TITLE SHEET

T-1

JRA PROJECT NUMBER: 081032

EXHIBIT A

GENERAL SPECIFICATIONS

1. THE LATEST EDITION OF THE AMERICAN INSTITUTE OF ARCHITECTS DOCUMENT A201 "GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION" ARE INCLUDED IN THESE SPECIFICATIONS AS IF COMPLETELY REPRODUCED HEREIN.

2. THIS FACILITY IS AN UNOCCUPIED PCS TELECOMMUNICATIONS SITE AND IS EXEMPT FROM DISABLED ACCESS REQUIREMENTS.

3. PRIOR TO THE SUBMISSION OF BIDS, THE CONTRACTORS PARTICIPATING SHALL VISIT THE JOB SITE AND FAMILIARIZE THEMSELVES WITH ALL FIELD CONDITIONS AFFECTING THE PROPOSED PROJECT INCLUDING DEMOLITION, ELECTRICAL, MECHANICAL AND STRUCTURAL INSTALLATIONS, AS WELL AS WITH THE CONSTRUCTION AND CONTRACT DOCUMENTS AND SHALL CONFIRM THAT THE PROJECT CAN BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. SHOULD ANY ERRORS, OMISSION, OR DISCREPANCIES BE FOUND, THE GENERAL CONTRACTOR SHALL IMMEDIATELY NOTIFY AT&T MOBILITY CONSTRUCTION MANAGER AND THE ARCHITECT IN WRITING. IN THE EVENT OF DISCREPANCIES THE CONTRACTOR SHALL INCLUDE THE MORE COSTLY OR EXTENSIVE WORK IN THE BID, UNLESS SPECIFICALLY DIRECTED OTHERWISE. IF A DISCREPANCY EXISTS AND THE PROJECT MANAGER AND ARCHITECT ARE NOT NOTIFIED, THE GENERAL CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ALL COSTS INCURRED TO REPAIR OR CORRECT ALL PROBLEMS THAT RESULT.

4. DRAWINGS SHALL NOT BE SCALED. THESE DRAWINGS ARE INTENDED TO BE DIAGRAMMATIC ONLY. FIGURED DIMENSIONS HAVE PRECEDENCE OVER DRAWING SCALE AND DETAIL DRAWINGS HAVE PRECEDENCE OVER SMALL SCALE DRAWINGS. CONTRACTOR SHALL CHECK ACCURACY OF ALL DIMENSIONS IN THE FIELD. UNLESS SPECIFICALLY NOTED, DO NOT FABRICATE ANY MATERIALS, OR BEGIN ANY CONSTRUCTION UNTIL THE ACCURACY OF DRAWING DIMENSIONS HAS BEEN VERIFIED AGAINST ACTUAL FIELD DIMENSIONS.

5. THE CONTRACTOR SHALL INCLUDE IN HIS OR HER BID ALL MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE THE WORK AS INDICATED OR IMPLIED BY THESE DRAWINGS.

6. CONTRACTOR SHALL NOTIFY THE AT&T MOBILITY CONSTRUCTION MANAGER, THE PROPERTY OWNER AND THE ARCHITECT IF ANY DETAILS ARE CONSIDERED IMPRACTICAL, UNSUITABLE, UNSAFE, NOT WATERPROOF, OR NOT WITHIN CUSTOMARY TRADE PRACTICE. IF WORK IS PERFORMED, IT WILL BE ASSUMED THAT THERE IS NO OBJECTION TO ANY DETAIL. DETAILS ARE INTENDED TO SHOW THE END RESULT OF THE DESIGN. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT JOB CONDITIONS, AND SHALL BE INCLUDED AS PART OF THE WORK.

7. EXISTING ELEVATIONS AND LOCATIONS TO BE JOINED SHALL BE VERIFIED BY THE CONTRACTOR BEFORE CONSTRUCTION. IF THEY DIFFER FROM THOSE SHOWN ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE AT&T MOBILITY CONSTRUCTION MANAGER AND THE ARCHITECT SO THAT MODIFICATIONS CAN BE MADE BEFORE PROCEEDING WITH THE WORK.

8. THE CONTRACTOR SHALL VERIFY ALL TELEPHONE & RADIO EQUIPMENT LAYOUTS, SPECIFICATIONS, PERFORMANCE, INSTALLATION AND FINAL LOCATIONS WITH AT&T MOBILITY CONSTRUCTION MANAGER PRIOR TO BEGINNING WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING HIS WORK WITH ERICSSON RADIO SYSTEMS.

9. ALL SYMBOLS & ABBREVIATIONS USED ON THE DRAWINGS ARE CONSIDERED CONSTRUCTION STANDARDS. IF THE CONTRACTOR HAS QUESTIONS REGARDING THEIR EXACT MEANING, THE AT&T MOBILITY CONSTRUCTION MANAGER AND THE ARCHITECT SHALL BE NOTIFIED FOR CLARIFICATION BEFORE THE CONTRACTOR PROCEEDS WITH THE WORK.

10. THE CONTRACTOR SHALL OBTAIN AND PAY FOR PERMITS, LICENSES AND INSPECTIONS NECESSARY FOR PERFORMANCE OF THE WORK AND INCLUDE THOSE IN THE COST OF THE WORK TO AT&T MOBILITY.

11. THE CONTRACTOR SHALL PROVIDE CONTINUOUS SUPERVISION WHILE ANY SUBCONTRACTORS OR WORKMEN ARE IN THE SITE AND SHALL SUPERVISE AND DIRECT ALL WORK, USING HIS BEST SKILL AND ATTENTION. HE SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, PROCEDURES AND SEQUENCES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.

12. WORKMANSHIP THROUGHOUT SHALL BE OF THE BEST QUALITY OF THE TRADE INVOLVED, AND SHALL MEET OR EXCEED THE FOLLOWING MINIMUM REFERENCE STANDARDS FOR QUALITY AND PROFESSIONAL CONSTRUCTION PRACTICE:

    NRCA — NATIONAL ROOFING CONTRACTORS ASSOCIATION, O'HARE INTERNATIONAL CENTER, 10255 W. HIGGINS ROAD, SUITE 600, ROSEMONT, IL 60018

    SMACNA — SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION, 4201 LAFAYETTE CENTER DRIVE, CHATILLY, VA 22021-1209

    IILP — INTERNATIONAL INSTITUTE FOR LATH AND PLASTER, 820 TRANSFER ROAD, ST. PAUL, MN 55114-1406

13. INSTALL ALL EQUIPMENT AND MATERIALS PER THE LATEST EDITION OF THE MANUFACTURER'S INSTALLATION SPECIFICATIONS UNLESS SPECIFICALLY OTHERWISE INDICATED, OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.

14. THE CONTRACTOR SHALL VERIFY, COORDINATE, AND PROVIDE ALL NECESSARY BLOCKING, BACKING, FRAMING, HANGARS OR OTHER SUPPORTS FOR ALL ITEMS REQUIRING THE SAME.

15. THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL GIVE ALL NOTICES AND SHALL COMPLY WITH ALL APPLICABLE LOCAL CODES, REGULATIONS, LAWS AND ORDINANCES AS WELL AS STATE DEPARTMENT OF INDUSTRIAL REGULATIONS AND DIVISION OF INDUSTRIAL SAFETY (OSHA) REQUIREMENTS.

16. THE CONTRACTOR SHALL PROTECT THE PROPERTY OWNERS, AND AT&T MOBILITY PROPERTY FROM DAMAGE WHICH MAY OCCUR DURING CONSTRUCTION. ANY DAMAGE TO NEW AND EXISTING FINISHES, CONSTRUCTION, STRUCTURE, LANDSCAPING, CURBS, STAIRS, OR EQUIPMENT, ETC. SHALL BE IMMEDIATELY REPAIRED OR REPLACED TO THE SATISFACTION OF AT&T MOBILITY, AND THE PROPERTY OWNER'S REPRESENTATIVE, AT THE EXPENSE OF THE CONTRACTOR.

17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR, AND SHALL REPLACE OR REMEDY, ANY FAULTY, IMPROPER, OR INFERIOR MATERIALS OR WORKMANSHIP OR ANY DAMAGE WHICH SHALL APPEAR WITHIN ONE YEAR AFTER THE COMPLETION AND ACCEPTANCE OF THE WORK BY AT&T MOBILITY UNDER THIS CONTRACT.

18. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO LOCATE ALL EXISTING UTILITIES, OR CONTACT AN OUTSIDE AGENCY TO LOCATE ALL EXISTING UTILITIES, WHETHER SHOWN HEREIN OR NOT, AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR SHALL BEAR ALL EXPENSES FOR THE REPAIR OR REPLACEMENT OF UTILITIES OR OTHER PROPERTY DAMAGED IN CONJUNCTION WITH THE EXECUTION OF WORK.

19. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE SECURITY OF THE PROJECT SITE WHILE THE JOB IS IN PROGRESS AND UNTIL THE JOB IS COMPLETED AND ACCEPTED BY AT&T MOBILITY.

20. THE CONTRACTOR SHALL PROVIDE TEMPORARY WATER, POWER AND TOILET FACILITIES AS REQUIRED BY THE PROPERTY OWNER, AT&T MOBILITY, AND THE CITY OR GOVERNING AGENCY.

21. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR REDLINING THE CONSTRUCTION DOCUMENTS TO ILLUSTRATE THE AS-BUILT CONDITION OF THE SITE. THIS SHALL BE DONE AFTER THE SITE HAS BEEN AWARDED FINAL INSPECTION BY THE RESPONSIBLE BUILDING AGENCY. ONE SET OF REDLINED DRAWINGS SHALL BE PROVIDED TO THE AT&T MOBILITY CONSTRUCTION MANAGER.

22. THE LATEST EDITION OF ALL PERMITTED AND APPROVED PLANS PERTAINING TO THIS PROJECT SHALL BE KEPT IN A PLAN BOX AND SHALL NOT BE USED BY WORKERS. ALL CONSTRUCTION SETS SHALL REFLECT THE SAME INFORMATION. THE CONTRACTOR SHALL ALSO MAINTAIN IN GOOD CONDITION, ONE COMPLETE SET OF PLANS WITH ALL REVISIONS, ADDENDA AND CHANGE ORDERS ON THE PREMISES AT ALL TIMES. THESE ARE TO BE UNDER THE CARE OF THE JOB SUPERINTENDENT.

23. THE CONTRACTOR SHALL REMOVE ALL RUBBISH AND WASTE MATERIALS ON A DAILEY BASIS, EXCEPT FOR THAT SPECIFIED AS REMAINING THE PROPERTY OF THE BUILDING OR PROPERTY OWNER AND SHALL EXERCISE STRICT CONTROL OVER JOB CLEANING THROUGHOUT CONSTRUCTION, INCLUDING FINAL CLEAN-UP UPON COMPLETION OF WORK. ALL AREAS ARE TO BE LEFT IN A BROOM CLEAN CONDITION AT THE END OF EACH DAY AND VACUUM CLEAN CONDITION, FREE FROM PAINT SPOTS, DUST OR SMUDGES OF ANY NATURE AT COMPLETION OF WORK.

24. THE GENERAL CONTRACTOR MUST PERFORM WORK DURING PROPERTY OWNER'S PREFERRED HOURS TO AVOID DISRUPTION OF NORMAL ACTIVITY.

25. ALL EXPOSED METAL SHALL BE HOT-DIPPED GALVANIZED.

26. SEAL ALL PENETRATIONS THROUGH FIRE-RATED AREAS WITH U.L. LISTED OR FIRE MARSHALL APPROVED MATERIALS IF AND WHERE APPLICABLE TO THIS FACILITY AND PROJECT SITE.

27. PROVIDE A PORTABLE FIRE EXTINGUISHER WITH A RATING OF NOT LESS THAN 2-A OR 2-A10BC WITHIN 75 FEET TRAVEL DISTANCE TO ALL PORTIONS OF THE PROJECT AREA CONSTRUCTION.

28. ELECTRICAL POWER SYSTEM SHALL BE GROUNDED PER NEC ARTICLES 250 AND 810.

29. ALL NEW OPENINGS IN THE EXTERIOR ENVELOPE OF CONDITIONED SPACES SUCH AS AT WALL AND ROOF PENETRATIONS SHALL BE CAULKED OR SEALED TO LIMIT INFILTRATION OF AIR AND MOISTURE.

30. UPON COMPLETION OF CONSTRUCTION, AT&T MOBILITY CONSTRUCTION MANAGER SHALL CONDUCT A WALK-THRU WITH PROPERTY OWNER OR REPRESENTATIVE OF PROPERTY OWNER.

31. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL SYSTEM EQUIPMENT IN A CLEAN WORKING ORDER UNTIL ACCEPTANCE OF THE PROJECT BY AT&T MOBILITY.

32. INSTALL ALL EQUIPMENT AND MATERIALS PER THE LATEST EDITION OF THE MANUFACTURER'S INSTALLATION SPECIFICATIONS UNLESS SPECIFICALLY OTHERWISE INDICATED, OR WHERE LOCAL CODES OR REGULATION TAKE PRECEDENCE.

ROOFING & WATERPROOFING NOTES

1. CONTRACTOR SHALL CONTACT BUILDING OWNER TO DETERMINE IF ROOF IS UNDER WARRANTY. CONTRACTOR SHALL GUARANTEE THAT ANY AND ALL NEW ROOFING WORK MEETS THE SPECIFICATION OF ANY EXISTING ROOFING WARRANTIES SUCH THAT THE WARRANTY IS NOT MADE INVALID AS A RESULT OF THIS WORK. IF IT IS DETERMINED THAT THE ARCHITECT'S DETAILING IS INADEQUATE OR IMPROPER OR IF ANY OTHER DISCREPANCY IS FOUND, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT AND THE AT&T MOBILITY PROJECT MANAGER IN WRITING. ULTIMATELY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH THE ORIGINAL ROOF MANUFACTIRER'S SPECIFICATIONS.

2. CONTRACTOR SHALL USE METHODS AND MATERIALS SIMILIAR AND COMPATIBLE WITH EXISTING MATERIALS & CONDITIONS FOR ROOF PATCHING, NEW PENETRATIONS, ETC.

3. THE CONTRACTOR SHALL PROPERLY SEAL ALL NEW ROOF & BUILDING ENVELOPE PENETRATIONS SUCH THAT THE INTEGRITY OF THE ORIGINAL BUILDING ASSEMBLY AND ALL APPLICABLE WARRANTIES ARE MAINTAINED.

4. IF IT DEEMED NECESSARY TO REMOVE EXISTING FINISHES AND/OR MATERIALS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECONSTRUCTING FINISHES AND MATERIALS TO LIKE-NEW CONDITION. CONTRACTOR SHALL MAINTAIN THE ORIGINAL COLORS, TEXTURES & FINISHES UNLESS SPECIFICALLY NOTED TO THE CONTRARY OR APPROVED BY THE AT&T MOBILITY CONSTRUCTION MANAGER IN ADVANCE.

5. AT THE AT&T MOBILITY CONSTRUCTION MANAGER'S DIRECTION, THE CONTRACTOR SHALL PROVIDE ROOFTOP WALKPADS TO ALL NEW EQUIPMENT INCLUDING ANTENNAS AND BTS UNITS AND ALONG COAX CABLE ROUTING. ON CONVENTIONAL ROOFING, THE WALK PADS SHALL BE "DUCK BOARDS" AS MANUFACTURED BY APC OR EQUAL. ON SPECIAL ROOFING SYSTEMS SUCH AS SINGLE MEMBRANE ROOFS WILL REQUIRE A SPECIFIC PRODUCT AS NOTED ON PLANS OR AS REQUIRED BY NOTES 1 & 2 ABOVE.

PENETRATION AT FIRE RATED ASSEMBLIES

1. AT THE AT&T MOBILITY PROJECT MANAGER'S DIRECTION, THE CONTRACTOR SHALL PROVIDE "HILTI" HIGH PERFORMANCE FIRESTOP SYSTEM #FS601 AT ALL FIRE RATED PENETRATIONS INSTALLED PER MANUFACTURER'S LATEST INSTALLATION SPECIFICATIONS.

2. ALL PENETRATIONS THROUGH FIRE RATED ASSEMBLIES SHALL BE CONSTRUCTED SO AS TO MAINTAIN AN EQUAL OR GREATER FIRE RATING.

PAINTING NOTES & SPECIFICATIONS

A. GENERAL

1. ALL PAINT PRODUCT LINES SHALL BE SHERWIN WILLIAMS UNLESS SPECIFICALLY NOTED OTHERWISE.
2. CONTRACTOR SHALL PREPARE ALL SURFACES AND APPLY ALL FINISHES PER LATEST EDITION OF MANUFACTURER'S SPECIFICATIONS.
3. COMPLY WITH MANUFACTURER'S WRITTEN INSTRUCTIONS REGARDING SUFFICIENT DRYING TIME BETWEEN COATS WITH PROVISIONS AS RECOMMENDED BY MANUFACTURER FOR EXISTING WEATHER CONDITIONS.
4. FINISH COLOR AND TEXTURE OF ALL PAINTED SURFACES SHALL MATCH EXISTING ADJACENT SURFACES UNLESS OTHERWISE NOTED.
5. ALL PAINT MATERIAL DATA SHEETS SHALL BE PROVIDED TO THE AT&T MOBILITY CONSTRUCTION MANAGER.
6. PREPARE PREVIOUSLY PAINTED SURFACE BY LIGHT SANDING WITH 400 GRIT SANDPAPER AND NON-HYDROCARBON WASH. PREPARE GALVANIZED SURFACES BY ACID ETCH OR SOLVENT CLEANING IN ACCORDANCE WITH SSPC-SP1.
7. FURNISH DROP CLOTHES, SHIELDS, MASKING AND PROTECTIVE METHODS TO PREVENT SPRAY OR DROPPINGS FROM DAMAGING ADJACENT SURFACES AND FACILITIES.
8. APPLY PAINT BY AIRLESS SPRAY, SANDING LIGHTLY BETWEEN EACH SUCCEEDING ENAMEL COAT ON FLAT SURFACES. APPLY MATERIAL TO ACHIEVE A COATING NO THINNER THAN THE DRY FILM THICKNESS INDICATED.
9. APPLY BLOCK FILTER TO CONCRETE BLOCK CONSTRUCTION AT A RATE TO ENSURE COMPLETE COVERAGE WITH PORES COMPLETELY FILLED.
10. CONTRACTOR SHALL CORRECT RUNS, SAGS, MISSES AND OTHER DEFECTS INCLUDING INADEQUATE COVERAGE AS DIRECTED BY THE AT&T MOBILITY CONSTRUCTION MANAGER. REPAINT AS NECESSARY TO ACHIEVE SURFACES WHICH ARE SMOOTH, EVENLY COATED WITH UNIFORM SHEEN AND FREE FROM BLEMISHES.

B. PAINTING SCOPE

1. PAINT THE FOLLOWING MATERIALS AND SYSTEMS CHECKED BELOW WITH THE COATING SYSTEM INDICATED.

PAINTING SCOPE

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]				
[illegible]				
[illegible]				
[illegible]				
[illegible]				
[illegible]				
[illegible]				
[illegible]				

C. COATING SYSTEM SPECIFICATIONS

1. DTM ACRYLIC COATING (SERIES B66) BY SHERWIN WILLIAMS CO. 1MIL DFT PER COAT APPLIED IN TWO COATS OVER DTM BONDING PRIMER (B66A50).
2. 100% ACRYLIC, LATEX COATING EQUIVALENT TO A-100 (SERIES A-82) BY SHERWIN WILLIAMS CO. 1 MIL DFT PER COAT APPLIED IN TWO COATS OVER SPECIFIED PRIMER.

PAINT & PRIMER

D. ANTENNAS
PRIMER – KEM AQUA E61-W525
TOPCOAT – COROTHANE II B65W200/B60V22

BTS CABINET
PRIMER – KEM AQUA E61-W525
TOPCOAT – COROTHANE II B65W200/B60V22

COAXIAL JUMPER CABLES
PRIMER – AS REQUIRED FOR ADHESION. APPLYS ONE COAT OF KEM AQUA WATER REDUCIBLE PRIMER E61W25 REDUCED 25%
TOPCOAT – 2 COATS COROTHANE II POLYURETHANE B65W200/B60V2

RAW STEEL
PRIMER – KEM BOND HS B50WZ4, DMT ACRYLIC PRIMER
TOPCOAT – 2 COATS COROTHANE II POLYURETHANE B65W200/B60V2

GALVANIZED METAL
ACID ETCH WITH COMMERCIAL ETCH OR VINEGAR PRIMER COAT AND FINISH COAT (GALVITE HIGH SOLIDS OR DTM PRIMER/FINISH)

STAINLESS STEEL
PRIMER – DTM WASH PRIMER, B71Y1
TOPCOAT – 2 COATS COROTHANE II POLYURETHANE B65W200/B60V2

PRE-PRIMED STEEL
TOUCH UP ANY RUST OR UN-PRIMED STEEL WITH KEM BOND HS, S50WZ4

ALUMINUM & COPPER
PRIMER – DTM WASH PRIMER, B71Y1
TOPCOAT – 2 COATS COROTHANE II POLYURETHANE B65W200/B60V2

CONCRETE MASONRY
PRIMER – PRO MAR EXTERIOR BLOCK FILLER
TOPCOAT – 2 COATS A-100 LATEX HOUSE & TRIM, SHEEN TO MATCH

CONCRETE STUCCO(EXISTING)
2 COATS A-100 LATEX HOUSE & TRIM, SHEEN TO MATCH

STUCCO
PRIMER – PRO MAR MASONRY CONDITONER B-46-W21000
TOPCOAT – SUPERPAINT A-80 SERIES A-89 SATIN A-84 GLOSS

WOOD
PRIMER – A-100 EXTERIOR ALKYD WOOOD PRIMER Y-24W20
TOPCOAT – 2 COATS A-100 LATEX HOUSE & TRIM SHEEN TO MATCH ADJACENT SURFACES

GLU-LAM BEAMS
PRIMER – A-100 EXTERIOR ALKYD WOOD PRIMER Y-24W20 TWO COATS SHOP APPLIED PER GLU-LAM MANUFACTURER'S SPECIFICATIONS
TOPCOAT – SUPERPAINT A-80 SERIES A-89 SATIN A-84 GLOSS TWO COATS SHOP OR FIELD APPLIED AT CONTRACTOR'S OPTION

FIELD CUTS/DAMAGE(PRIOR TO PRIME & PAINT)
FIRST & SECOND COAT – CUPRINOL CLEAR WOOD PRESERVATIVE #156-0356
ALL PENETRATIONS INTO FINISHED GLU-LAMS SHALL BE CAULKED WITH "SIKAFLEX" SEALANT

STEEL TOUCH UP
STEEL THAT HAS BEEN WELDED, CUT OR SCRATCHED IN THE FIELD SHALL BE TOUCHED UP WITH COLD GALVANIZED PAINT

STRUCTURAL SPECIFICATIONS

A. GENERAL

PRECEDENCE: UNLESS OTHERWISE SHOWN OR SPECIFIED, THE FOLLOWING GENERAL NOTES SHALL APPLY. INFORMATION ON THESE DRAWINGS SHALL HAVE THE FOLLOWING PRECEDENCE.

A. ALL DIMENSIONS TO TAKE PRECEDENCE OVER SCALE SHOWN ON PLANS, SECTIONS AND DETAILS.
B. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS.
C. MATERIAL NOTES AND SPECIFICATIONS ON THE DRAWINGS SHALL TAKE PRECEDENCE OVER THE SPECIFICATIONS.

2. OTHER TRADES: SEE THE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS NOT SHOWN.
3. GENERAL DETAILS AND NOTES ON THESE SHEETS SHALL APPLY UNLESS SPECIFICALLY SHOWN OR NOTED OTHERWISE. CONSTRUCTION DETAILS NOT FULLY SHOWN OR NOTED SHALL BE SIMILAR TO DETAILS SHOWN FOR SIMILAR CONDITIONS.
4. SHORING: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL ALL TEMPORARY BRACING AND SHORING TO INSURE THE SAFETY OF THE WORK UNTIL IT IS IN IT'S COMPLETED FORM. THIS INCLUDES UNDERPINNING EXISTING FOOTINGS WHERE APPLICABLE.
5. SAFETY: THESE STRUCTURAL DRAWINGS REPRESENT THE FINISHED STRUCTURE. UNLESS OTHERWISE INDICATED, THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION.
6. WATERPROOFING: WATERPROOFING AND DRAINAGE, DETAILS AND SPECIFICATIONS, ALTHOUGH SOMETIMES SHOWN ON STRUCTURAL DRAWING ARE OF GENERAL INFORMATION PURPOSES ONLY. WATERPROOFING AND DRAINAGE ARE SOLELY THE DESIGN RESPONSIBILITY OF THE ARCHITECT.

B. STEEL

1. ALL STRUCTURAL STEEL SECTIONS AND WELDED PLATE MEMBERS SHALL CONFORM TO ASTM A-36 AND BE FABRICATED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE AISC.
2. ALL BOLTS SHALL CONFORM TO ASTM A-307 UNLESS OTHERWISE NOTED ON PLANS. HIGH STRENGTH BOLTS SHALL CONFORM TO ASTM A-325
3. STEEL PIPE COLUMNS SHALL BE GRADE "B" CONFORMING TO ASTM A53.
4. STEEL TUBING SHALL BE GRADE "B" CONFORMING TO ASTM A500.
5. ALL WELDING SHALL BE DONE BY THE SHIELDED ARC METHOD. ALL WELDERS SHALL BE PROPERLY QUALIFIED AND BE PRE-APPROVED. SURPLUS METAL SHALL BE DRESSED OFF TO SMOOTH, EVEN SURFACES WHERE WELDS ARE NOT EXPOSED TO VIEW. ALL WELDING SHALL COMPLY WITH THE LATEST A.W.S. SPECIFICATIONS.
6. THE FOLLOWING WELDING EQUIPMENT MUST BE USED:
   A. 250 AMP WELDERS.
   B. ROD OVENS.
   C. GRINDERS.
7. NO BUZZ BOXES SHALL BE USED.
8. ALL STRUCTURAL STEEL SHALL MILL CERTIFICATION. MILL CERTIFICATION SHALL BE KEPT ON THE JOB SITE FOR EXAMINATION BY THE DESIGN ENGINEER AND THE CITY INSPECTOR.
9. ALL HIGH STRENGTH BOLTS SHALL HAVE MILL CERTIFICATION. MILL CERTIFICATION SHALL BE KEPT ON THE JOB SITE FOR EXAMINATION BY THE INSPECTOR.
10. STEEL THAT HAD BEEN WELDED, CUT OR SCRATCHED IN THE FIELD SHALL BE TOUCHED UP WITH COLD GALVANIZING PAINT.
11. WELDING INDICATED IN THESE DRAWINGS IS DESIGNED FOR ONE HALF OF ALLOWABLE CODE STRESSES UNLESS SPECIFICALL NOTED "FULL STRESS" AT END OF WELD SYMBOL.

C. CONCRETE

1. STRENGTH: CONCRETE FOR THE PROJECT SHALL HAVE THE FOLLOWING ULTIMATE COMPRESSIVE STRENGTH AT AGE OF 28 DAYS:

LOCATION	STRENGTH	WT.	SLUMP	ADMIXTURE
A. SLAB&FOOTING	3000psi	150pcf	4"	NONE

2. INSPECTION: CONCRETE WITH SPECIFIED STRENGTH GREATER THAN 2500psi SHALL BE CONTINUOUSLY INSPECTED DURING PLACEMENT BY A DEPUTY INSPECTOR EMPLOYED BY A TESTING LABORATORY APPROVED BY THE BUILDING DEPT.
3. REBAR GRADES: REINFORCING STEEL SHALL BE CLEAN PREFORMED BARS CONFORMING TO ASTM A615 AS FOLLOWS:
   #4 & SMALLER BARS..........GRADE 40
   #5 & LARGER BARS..........GRADE 60
   ALL BARS AT CAISSON FOOTING...GRADE 60
4. CEMENT: FOUNDATIONS & SLABS: TYPE V, LOW ALKALI, CONFORMING TO ASTM C-150. PIER/CAISSON FOOTINGS: TYPE V, LOW ALKALI, CONFORMING TO ASTM C-150.
5. AGGREGATE: USED IN THE CONCRETE SHALL CONFORM TO ASTM C-33. USE ONLY AGGREGATES KNOWN NOT TO CAUSE EXCESSIVE SHRINKAGE. THE MAXIMUM SIZE AGGREGATE IN CONCRETE WORK SHALL BE THE FOLLOWING:
   A. FOUNDATIONS & SLABS 9" OR LESS: 3/4" GRAVEL
   B. PIER/CAISSON FOOTING: 1" GRAVEL
6. WATER: SHALL BE CLEAN AND FREE FROM DELETERIOUS AMOUNT OF ACIDS, ALKALIS, ORGANIC MATERIALS AND SHALL BE SUITABLE FOR HUMAN CONSUMPTION.
7. MIXING: PREPARATION OF CONCRETE SHALL CONFORM TO ASTM C-94. NO MORE THAN 90 MINUTES SHALL ELAPSE BETWEEN CONCRETE BATCHING AND CONCRETE PLACEMENT UNLESS APPROVED BY A TESTING AGENCY.
8. SEGREGATION OF AGGREGATES: CONCRETE SHALL NOT BE FLOPPED THROUGH REINFORCING STEEL (AS IN WALLS, COLUMNS, CAISSON, AND DROP CAPITALS) SO AS TO CAUSE SEGREAGTION OF AGGREGATES. USE HOPPERS, CHUTES, TRUNKS OR PUMP HOSE SO THAT THE FREE UNCONFINED FALL OF CONCRETE SHALL NOT EXCEED 5 FT.
9. SPLICES OF REINFORCING STEEL SHALL BE LAPPED A MINIMUM OF 30 DIAMETERS AND SECURELY WIRED TOGETHER. SPLICES OF ADJACENT REINFORCING BARS SHALL BE STAGGERED WHEREVER POSSIBLE.
10. REAR CLEARANCE: MINIMUM COVERAGE FOR JOISTS, BEAMS, GIRDERS AND COLUMNS SHALL BE TO FACE OF STIRRUPS OR TIES. UNLESS OTHERWISE NOTED, CONCRETE COVERAGE FOR REINFORCING BARS TO FACE OF BAR SHALL BE AS FOLLOWS:

A. CONCRETE IN CONTACT WITH EARTH, UNFORMED	3"
B. CONCRETE IN CONTACT WITH EARTH, FORMED	2"
C. WALL, EXTERIOR FACE	1-1/2"
D. WALL, INTERIOR FACE	1"
E. STRUCTURAL SLABS	3/4"
F. JOISTS	3/4"
G. BEAMS, GIRDERS & COLUMNS	1-1/2"

11. PENETRATIONS: NO SLEEVES OR CHASES SHALL BE PLACED IN BEAMS, SLABS, WALLS AND COLUMNS, EXCEPT THOSE SHOWN ON THE PLANS. CONTRACTOR SHALL OBTAIN PRIOR APPROVAL FOR INSTALLATIONS OF ANY ADDITIONAL SLEEVES OR CHASES. ALL PLUMBING, ELECTRICAL AND MECHANICAL OPENINGS SHALL BE SLEEVES. CORING IS NOT ALLOWED UNLESS PRIOR APPROVAL IS OBTAINED FROM THE STRUCTURAL ENGINEER.
12. EMBEDDED ITEMS: CONDUIT PLACED IN A CONCRETE SLAB SHALL NOT HAVE AN OUTSIDE DIAMETER GREATER THAN 1/4 THE THICKNESS OF THE SLAB. CONDUIT SHALL NOT BE EMBBEDED IN A SLAB THAT IS LESS THAN 3-1/2" THICK, UNLESS SLAB IS LOCALLY THICKENED. MINIMUM CLEAR DISTANCE BETWEEN COUNDUITS SHALL BE SIX INCHES.
13. ANCHORING: ALL ANCHOR BOLTS, REINFORCING STEEL, DOWELS, INSERTS, ETC.,SHALL BE WELL SECURED IN POSITION PRIOR TO PLACING CONCRETE. NO REPOSITIONING DURING CONCRETE POUR IS ALLOWED.
14. CURING: SLABS SHALL BE SPRAYED WITH A CURING COMPOUND IMMEDIATELY AFTER FINISHING. CURING COMPOUNDS USED ON CONCRETE WHERE TILE OR FLOOR COVERING IS TO BE BONDED TO THE CONCRETE SURFACE SHALL BE APPROVED BY THE TILE OR FLOOR COVERING MANUFACTURER. KEEP SLAB WET FOR 7 DAY MINIMUM PERIOD.
15. CONSOLIDATION: ALL CONCRETE SHALL BE VIBRATED AS IT IS BEING PLACED WITH ELECTRICALLY OPERATED VIBRATING EQUIPMENT.

D. TIMBER

1. ALL FRAMING LUMBER FOR 4X AND LARGER BEAMS SHALL BE NO. 1 GRADE DOUGLAS FIR., S4S, UNLESS NOTED OTHERWISE ON THE DRAWINGS.
2. ALL FRAMING LUMBER FOR 2X RAFTERS AND JOISTS SHALL BE NO.2 GRADE DOUGLAS FIR, S4S, UNLESS NOTED OTHERWISE ON DRAWINGS
3. STRIPPING, BLOCKING, BACKING AND OTHER NON-STRUCTURAL LUMBER SHALL BE NO. 2 OR STD & BTR GRADE DOUGLAS FIR, S4S. 2X4 STUD WALLS SHALL BE D.F. STANDARD & BTR.
4. ALL BEAMS, JOISTS AND RAFTERS SHALL BE INSTALLED WITH CROWN SIDE UP.
5. ROOF PLYWOOD SHALL MATCH EXISTING PLYWOOD SHEATHING WITH A SPAN INDEX RATIO 32/16. EDGE NAIL WITH8d AT 6" O.C. UNLESS NOTED OTHERWISE ON PLANS. FGIELD NAIL WITH 8d AT 12" O.C.
6. PLYWOOD SHEETS SHALL BE LAID WITH THE FACE GRAIN PERPINDICULAR TO SUPPORTS AND WITH THE EDGES STAGGERED, UNLESS NOTED OTHERWISE ON THE PLANS.
7. PLYWOOD SHALL BE GRADE MARKED BY DFPA, TECO, OR PTL AND SHALL CONFORM TO PS 1-83.
8. THE MAXIMUM MOISTURE CONTENT OF ALL LUMBER SHALL NOT EXCEED 24% AT THE TIME OF INSTALLATION.
9. MINIMUM NAILING SHALL COMPLY WITH TABLE 23-1-q OF BUILDING CODE. ALL NAILS SHALL BE COMMON WIRE NAILS.
10. ALL BOLTS SHALL HAVE STANDARD CUT WASHERS UNDER HEADS AND/OR NUTS WHERE IN CONTACT WITH WOOD.
11. LAG BOLTS SHALL BE SCREWED INTO PLACE, NOT DRIVEN. LAG BOLTS SHALL BE INSTALLED IN PRE-DRILLED HOLES WITH A DIAMETER EQUAL TO 75% DIAMETER OF BOLT.
12. CONNECTORS: ALL SHEET METAL FRAMING CONNECTORS SHOWN IN THE PLANS SHALL BE STRONG CONNECTORS AS MANUFACTURED BY THE SAMSON COMPANY. SUBSTITUTIONS MAY BE MADE WHEN APPROVED BY THE STRUCTURAL ENGINEER.
13. ALL LUMBER EXPOSED TO WEATHER OR IN CONTACT WITH MASONRY OR CONCRETE SHALL BE WOLMANIZED PRESSURE TREATED LUMBER OR A NATURALLY DECAY RESISTANT LUMBER SUCH AS REDWOOD OR CEDAR.
14. ALASKAN YELLOW CEDAR GLUE-LAMINATED BEAMS
   A. LUMBER SPECIES: ALASKAN YELLOW CEDAR (A.C.) CONFORMING TO 20F-V12
   B. STRENGTH PROPERTIES:
      Fb BOTTOM FIBER BENDING STRESS 2000psi MIN.
      Fb TOP FIBER BENDING STRESS 1000psi MIN.
      Fv SHEAR STRESS 190psi MIN.
      Fc COMPRESSION STRESS PERPENDICULAR TO GRAIN 560psi MIN.
      E MODULUS ELASTICITY 1400ksi MIN.
   C. CAMBER TO RADIUS OF 1800' U.O.N.
   D. ALL GLB'S SHALL BE FABRICATED WITH EXTERIOR GLUE.
   E. MANUFACTURE OF GLB'S SHALL CONFORM TO THE UBC.
   F. GLU-LAM MATERIAL SHALL BE IN ACCORDANCE WITH ANSI/AITC A190.1 AND ASTM D3737.

JRA
Jeffrey Roma & Associates, Inc.
Arizona • California • Nevada
Arizona: (602) 296-5879
California: (949) 760-3929
Nevada: (702) 785-0098

at&t
4430 Rosewood Drive
Pleasanton, California 94588

APPROVALS

R.F.	DATE
ZONING	DATE
CONSTRUCTION	DATE
SITE ACQUISITION	DATE
OWNER APPROVAL	DATE

PROJECT NAME
AT&T UMTS OVERLAY
SITE NAME
JACKSON OVERLAY
SITE NUMBER
CNU3498
685 SKYWARD DRIVE
APTOS, CALIFORNIA 95003

DRAWING DATES

04/24/08	90% CD REVIEW (P1-B1)
05/22/08	100% FINAL CD's (P1-B2)

A.P.N: 040-271-62

SHEET TITLE
SPECIFICATIONS AND NOTES

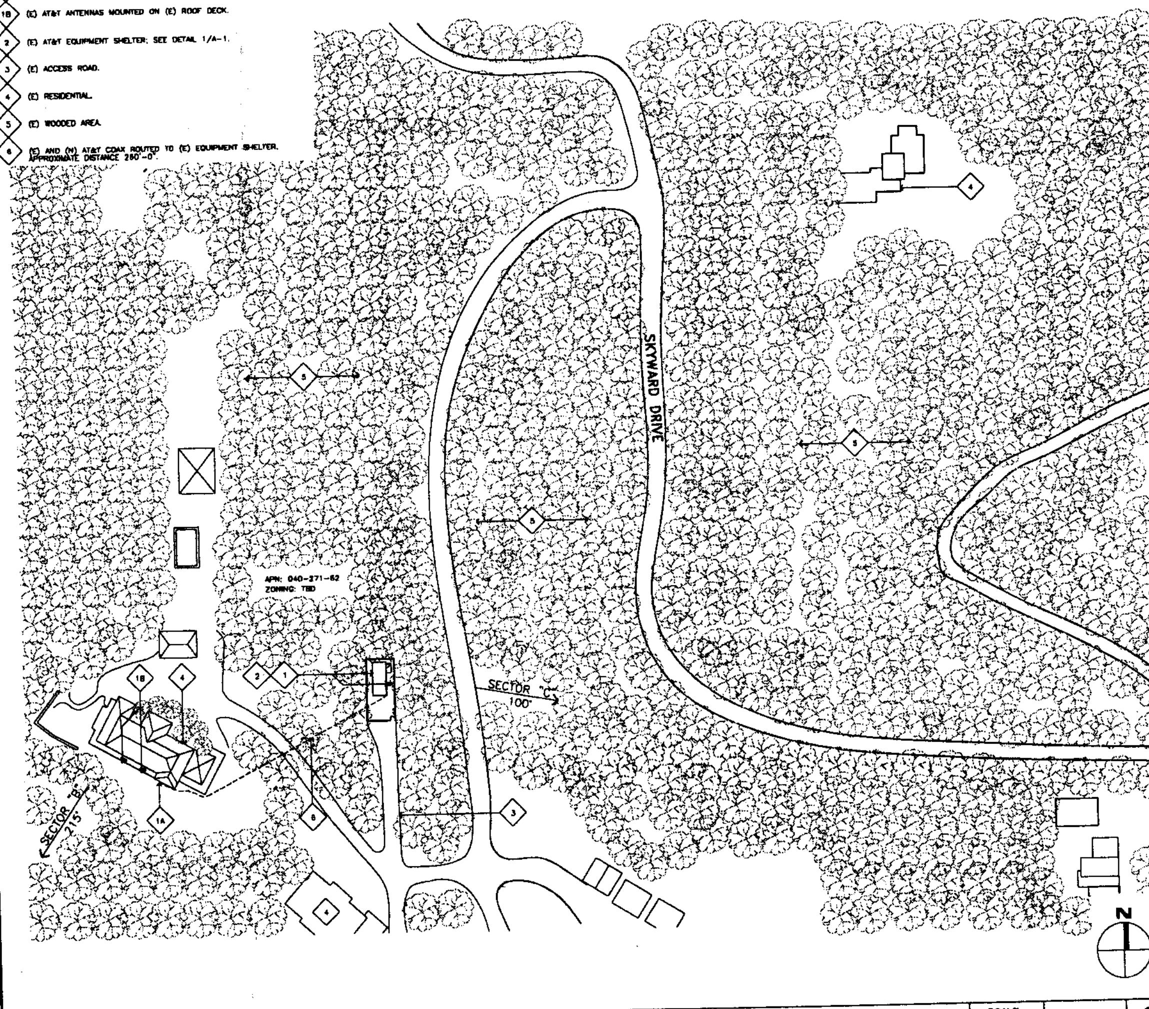
T-2

JRA PROJECT NUMBER: 081032

EXHIBIT A

SITE PLAN KEYNOTES

1. (N) (1) AT&T ANTENNA MOUNTED BELOW (E) ANTENNA MOUNTED ON (E) WOOD POLE; SEE DETAIL 2/A-1.
1A. (E) (1) AT&T ANTENNA MOUNTED ON (E) ROOF DECK TO BE REUSED FOR UMTS; SEE DETAIL 2/A-1.
1B. (E) AT&T ANTENNAS MOUNTED ON (E) ROOF DECK.
2. (E) AT&T EQUIPMENT SHELTER; SEE DETAIL 1/A-1.
3. (E) ACCESS ROAD.
4. (E) RESIDENTIAL.
5. (E) WOODED AREA.
6. (E) AND (N) AT&T COAX ROUTED TO (E) EQUIPMENT SHELTER. APPROXIMATE DISTANCE 260'-0".



SCALE: 1"=40' | 0 20' 40'

2 SITE PLAN

1. CONTRACTOR TO PROVIDE ALL LABOR TO INSTALL COAX, RETS AND ANTENNAS AS SPECIFIED ON SHEETS RF-1 THROUGH RF-5.
2. ERICSSON TO PROVIDE ALL COAX, CONNECTORS, ANCILLARY EQUIPMENT (INCLUDING WEATHER STRIPPING, GROUND KITS, ETC.).
3. CONTRACTOR TO COLOR CODE ALL COAX. COLORED BANDS OF TAPE ON COAX IDENTIFY SECTOR, FREQUENCY, TECHNOLOGY, AND TRANSMIT GROUP AS FOLLOWS ON ALL COAX MODIFIED OR INSTALLED ONLY.

SECTOR "A"						
TDMA	RX 1	TX 1	RX 2	TX 2		
	1 WHITE	1 ORANGE	1 WHITE	1 GREEN		
GSM 1900	TX 1/RX 1	TX 2/RX 2	TX 3/RX 3	TX 4 /RX 4	TX 5	TX 6
	2 BROWN	2 ORANGE	2BRWN/1RED	2ORG/1RED	2BRWN/2RED	2ORG/2RED
GSM 850	TX 1/RX 1	TX 2/RX 2	TX 3/RX 3	TX 4/RX 4	TX 5	TX 6
	3 BROWN	3 ORANGE	3BRWN/1RED	3ORG/1RED	3BRWN/2RED	3ORG/2RED
UMTS 1900	TX 1/RX 1		TX 2/RX 2			
	4 BROWN		4 ORANGE			
UMTS 850	TX 1/RX 1		TX 2/RX 2			
	5 BROWN		5 ORANGE			

SECTOR "B"						
TDMA	RX 1	TX 1	RX 2	TX 2		
	1 RED	1 ORANGE	1 RED	1 GREEN		
GSM 1900	TX 1/RX 1	TX 2/RX 3	TX 3/RX 3	TX 4/RX 4	TX 5	TX 6
	2 YELLOW	2 BLUE	2YEL/1RED	2BLUE/1RED	2YEL/2RED	2BLUE/2RED
GSM 850	TX 1/RX 1	TX 2/RX 2	TX 3/RX 3	TX 4/RX 4	TX 5	TX 6
	3 YELLOW	3 BLUE	3YEL/1RED	3BLUE/1RED	3YEL/2RED	3BLUE/2RED
UMTS 1900	TX 1/RX 1		TX 2/RX 2			
	4 YELLOW		4 BLUE			
UMTS 850	TX 1/RX 1		TX 2/RX 2			
	5 YELLOW		5 BLUE			

SECTOR "C"						
TDMA	RX 1	TX 1	RX 2	TX 2		
	1 YELLOW	1 ORANGE	1 YELLOW	1 GREEN		
GSM 1900	TX 1/RX 1	TX 2/RX 2	TX 3/RX 3	TX 4	TX 5	TX 6
	2 VIOLET	2 WHITE	2VIO/1RED	2WHT/1RED	2VIO/2RED	2WHT/2RED
GSM 850	TX 1/RX 1	TX 2/RX 2	TX 2/RX 2	TX 4	TX 5	TX 6
	3 VIOLET	3 WHITE	3VIO/1RED	3WHT/1RED	3VIO/2RED	3WHT/2RED
UMTS 1900	TX 1/RX 1		TX 2/RX 2			
	4 VIOLET		4 WHITE			
UMTS 850	TX 1/RX 1		TX 2/RX 2			
	5 VIOLET		5 WHITE			

4. WHEN ANTENNA LINES ARE DIPLEXED, THE COLOR CODE OF THE HIGHEST FREQUENCY PREVAILS (I.E. UMTS DIPLEXED WITH TDMA SHOULD HAVE COLOR 4 BANDS).
5. ALL ANTENNAS AND ANTENNA CABLE SHALL BE FURNISHED BY ERICSSON INC. AND INSTALLED BY ANTENNA INSTALLATION CONTRACTOR.
6. PRIOR TO PLACEMENT OF ANTENNA POLE MOUNTS, THE CONTRACTOR SHALL VERIFY THAT THE AZIMUTH AND DIMENSIONS SHOWN ON THE PLANS MATCH ACTUAL FIELD CONDITIONS. ALLOWABLE TOLERANCE: HORIZONTAL ALIGNMENT = ±5°; VERTICAL ALIGNMENT = ±1°.
7. ANTENNA INSTALLATION CONTRACTOR SHALL PROVIDE ALL CONDUIT, CABLE TRAY, GROUNDS, ETC. FOR COMPLETE INSTALLATION OF ANTENNAS AND CABLES SHOWN AND INTENDED AS REQUIRED FOR A COMPLETE OPERATING SYSTEM IN ACCORDANCE WITH ERICSSON INC. STANDARDS.
8. IN NO CASE SHALL THERE BE ANY MORE THAN TWO (2) 90° TURNS (OR EQUIVALENT) IN ANY CONTINUOUS LENGTH OF CONDUIT BETWEEN PULL BOXES OR SIMILAR FEATURES.
9. ANTENNA CONDUIT SHALL ONLY INCLUDE FACTORY-MADE LARGE RADIUS SWEEPS AT ALL CHANGES IN DIRECTION. SWEEP RADIUS SHALL BE 18" MINIMUM ABOVE GROUND AND 36" MINIMUM BELOW GROUND.
10. CONDUIT SHALL BE 3"Ø MINIMUM. ALL UNDERGROUND CONDUIT SHALL BE SCHEDULE 40 PVC. ALL EXPOSED CONDUIT ABOVE GRADE LEVEL SHALL BE IMC OR RIGID GALVANIZED. ALL EXPOSED CONDUIT PROTECTED IN A BUILDING OR ON A ROOF SHALL BE EMT OR UV STABILIZED PAINTED SCHEDULE 80 PVC.
11. IN HIGH TRAFFIC AREAS OR WHERE SUSCEPTIBLE TO DAMAGE CONTRACTOR SHALL PROVIDE FORMED 14 GA. GALVANIZED SHEET METAL COVER OVER COAXIAL CABLE ROUTES. WHERE CABLE IS RUN ON THE WALL, ATTACH UNISTRUT TO WALL AND COVER WITH 14 GA. GALVANIZED FORMED SHEET METAL COVER OR MATERIAL AS DIRECTED BY ERICSSON INC. CONSTRUCTION MANAGER.
12. VERIFY ROUTE AND LENGTH OF CABLE PRIOR TO CUTTING. ADJUST INDICATED ROUTE AS REQUIRED TO CLEAR (E) EQUIPMENT AT FACILITIES.
13. MAXIMUM LENGTH OF 7/8" COAX CABLE SHALL BE 140'-0". MAXIMUM LENGTH OF 1-1/4" COAX CABLE SHALL BE 190'-0". MAXIMUM LENGTH OF 1-5/8" COAX CABLE SHALL BE 235'-0".
14. VERIFY MODEL NUMBERS OF ANTENNAS WITH ERICSSON INC. SERVICES.
15. THE CONTRACTOR SHALL PROVIDE TESTING OF ANTENNAS AND SHALL PROVIDE DOCUMENTATION TO THE ERICSSON INC. PROJECT MANAGER.
16. GENERAL CONTRACTOR TO VERIFY ALL TORQUE TOLERANCES PER THE MANUFACTURERS SPECIFICATIONS AND RECOMMENDATIONS.

1 GENERAL ANTENNA & CABLE NOTES

JRA
Jeffrey Roma & Associates, Inc.
Arizona • California • Nevada
Arizona: (602) 296-8879
California: (949) 780-9929
Nevada: (702) 795-0059

LICENSED ARCHITECT · C-... · STATE OF CALIFORNIA

at&t
4430 Rosewood Drive
Pleasanton, California 94588

APPROVALS

R.F.	DATE
ZONING	DATE
CONSTRUCTION	DATE
SITE ACQUISITION	DATE
OWNER APPROVAL	DATE

PROJECT NAME
AT&T UMTS OVERLAY
SITE NAME
JACKSON OVERLAY
SITE NUMBER
CNU3498
885 SKYWARD DRIVE
APTOS, CALIFORNIA 95003

DRAWING DATES
04/24/08 90% CD REVIEW (P1-B1)
05/22/08 100% FINAL CD's (P1-B2)

A.P.N: 040-271-62

SHEET TITLE
SITE PLAN

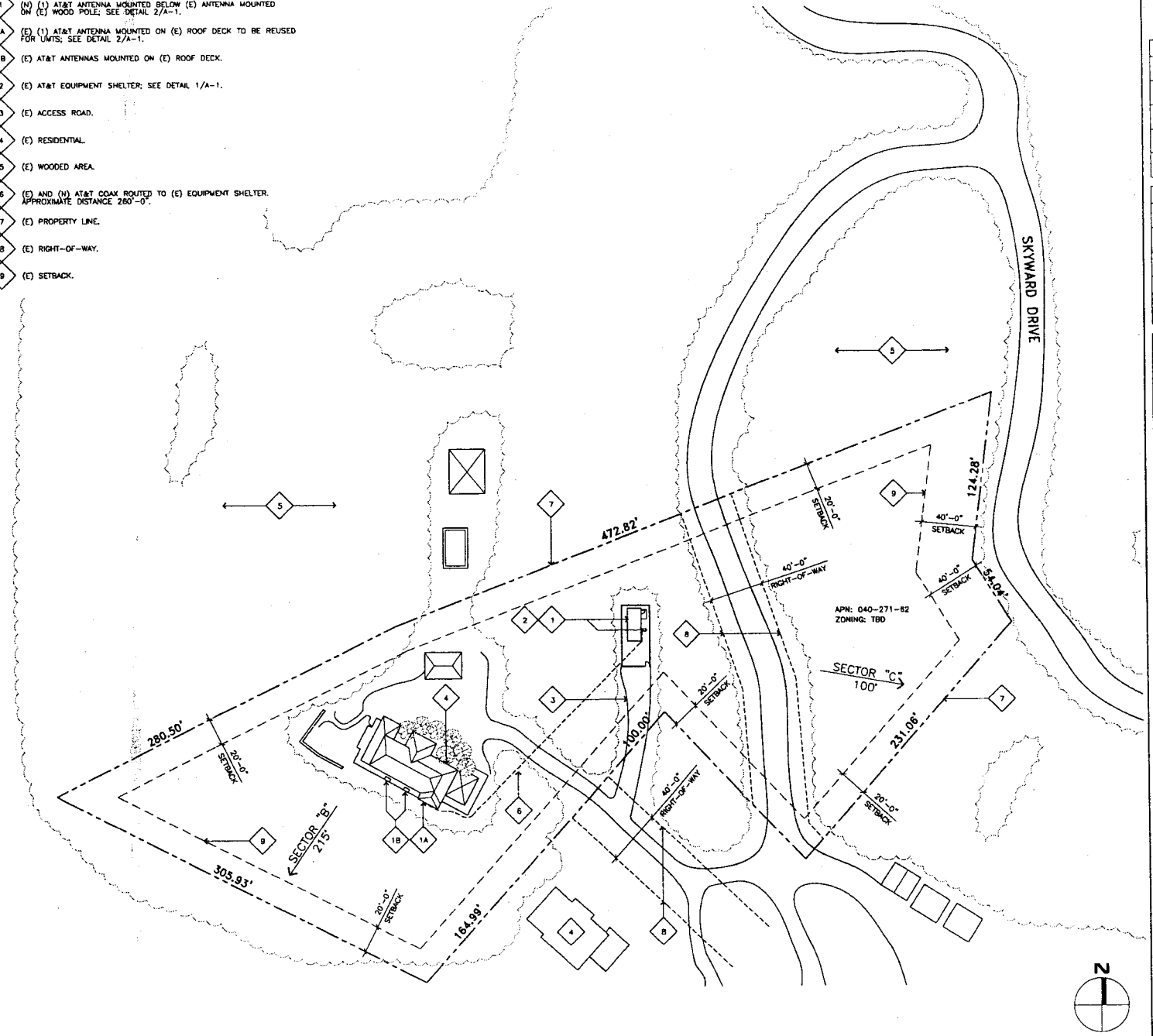
A-0

JRA PROJECT NUMBER: 081032

EXHIBIT A

SITE PLAN KEYNOTES

1. (N) (1) AT&T ANTENNA MOUNTED BELOW (E) ANTENNA MOUNTED ON (E) WOOD POLE; SEE DETAIL 2/A-1.
1A. (E) (1) AT&T ANTENNA MOUNTED ON (E) ROOF DECK TO BE REUSED FOR UMTS; SEE DETAIL 2/A-1.
1B. (E) AT&T ANTENNAS MOUNTED ON (E) ROOF DECK.
2. (E) AT&T EQUIPMENT SHELTER; SEE DETAIL 1/A-1.
3. (E) ACCESS ROAD.
4. (E) RESIDENTIAL.
5. (E) WOODED AREA.
6. (E) AND (N) AT&T COAX ROUTED TO (E) EQUIPMENT SHELTER. APPROXIMATE DISTANCE 260'-0".
7. (E) PROPERTY LINE.
8. (E) RIGHT-OF-WAY.
9. (E) SETBACK.



1. CONTRACTOR TO PROVIDE ALL LABOR TO INSTALL COAX, RI SPECIFIED ON SHEETS RF-1 THROUGH RF-5.
2. ERICSSON TO PROVIDE ALL COAX, CONNECTORS, ANCILLARY WEATHER STRIPPING, GROUND KITS, ETC.).
3. CONTRACTOR TO COLOR CODE ALL COAX. COLORED BANDS IDENTIFY SECTOR, FREQUENCY, TECHNOLOGY, AND TRANSMI ALL COAX MODIFIED OR INSTALLED ONLY.

SECTOR "A"				
TDMA	RX 1	TX 1	RX 2	TX
	1 WHITE	1 ORANGE	1 WHITE	1 GI
GSM 1900	TX 1/RX 1	TX 2/RX 2	TX 3/RX 3	TX 4 /
	2 BROWN	2 ORANGE	2BRWN/1RED	2ORG/
GSM 850	TX 1/RX 1	TX 2/RX 2	TX 3/RX 3	TX 4/
	3 BROWN	3 ORANGE	3BRWN/1RED	3ORG/
UMTS 1900	TX 1/RX 1		TX 2/RX 2	
	4 BROWN		4 ORANGE	
UMTS 850	TX 1/RX 1		TX 2/RX 2	
	5 BROWN		5 ORANGE	

SECTOR "B"				
TDMA	RX 1	TX 1	RX 2	TX
	1 RED	1 ORANGE	1 RED	1 GRI
GSM 1900	TX 1/RX 1	TX 2/RX 3	TX 3/RX 3	TX 4/
	2 YELLOW	2 BLUE	2YEL/1RED	2BLUE/
GSM 850	TX 1/RX 1	TX 2/RX 2	TX 3/RX 3	TX 4/
	3 YELLOW	3 BLUE	3YEL/1RED	3BLUE/
UMTS 1900	TX 1/RX 1		TX 2/RX 2	
	4 YELLOW		4 BLUE	
UMTS 850	TX 1/RX 1		TX 2/RX 2	
	5 YELLOW		5 BLUE	

SECTOR "C"				
TDMA	RX 1	TX 1	RX 2	TX
	1 YELLOW	1 ORANGE	1 YELLOW	1 GR
GSM 1900	TX 1/RX 1	TX 2/RX 2	TX 3/RX 3	TX
	2 VIOLET	2 WHITE	2VIO/1RED	2WHT/
GSM 850	TX 1/RX 1	TX 2/RX 2	TX 2/RX 2	TX
	3 VIOLET	3 WHITE	3VIO/1RED	3WHT/
UMTS 1900	TX 1/RX 1		TX 2/RX 2	
	4 VIOLET		4 WHITE	
UMTS 850	TX 1/RX 1		TX 2/RX 2	
	5 VIOLET		5 WHITE	

4. WHEN ANTENNA LINES ARE DIPLEXED, THE COLOR CODE O PREVAILS (I.E. UMTS DIPLEXED WITH TDMA SHOULD HAVE
5. ALL ANTENNAS AND ANTENNA CABLE SHALL BE FURNISHED INSTALLED BY ANTENNA INSTALLATION CONTRACTOR.
6. PRIOR TO PLACEMENT OF ANTENNA POLE MOUNTS, THE CO THE AZIMUTH AND DIMENSIONS SHOWN ON THE PLANS MA ALLOWABLE TOLERANCE: HORIZONTAL ALIGNMENT = ±5'; VE
7. ANTENNA INSTALLATION CONTRACTOR SHALL PROVIDE ALL GROUNDS, ETC. FOR COMPLETE INSTALLATION OF ANTENNAS INTENDED AS REQUIRED FOR A COMPLETE OPERATING SYST ERICSSON INC. STANDARDS.
8. IN NO CASE SHALL THERE BE ANY MORE THAN TWO (2) 9 ANY CONTINUOUS LENGTH OF CONDUIT BETWEEN PULL BO
9. ANTENNA CONDUIT SHALL ONLY INCLUDE FACTORY-MADE L ALL CHANGES IN DIRECTION. SWEEP RADIUS SHALL BE 18 AND 36" MINIMUM BELOW GROUND.
10. CONDUIT SHALL BE 3"ø MINIMUM. ALL UNDERGROUND CON 40 PVC. ALL EXPOSED CONDUIT ABOVE GRADE LEVEL SHA GALVANIZED. ALL EXPOSED CONDUIT PROTECTED IN A BUR BE EMT OR UV STABILIZED PAINTED SCHEDULE 80 PVC.
11. IN HIGH TRAFFIC AREAS OR WHERE SUSCEPTIBLE TO DAMA PROVIDE FORMED 14 GA. GALVANIZED SHEET METAL COVER ROUTES. WHERE CABLE IS RUN ON THE WALL, ATTACH UN WITH 14 GA. GALVANIZED FORMED SHEET METAL COVER O ERICSSON INC. CONSTRUCTION MANAGER.
12. VERIFY ROUTE AND LENGTH OF CABLE PRIOR TO CUTTING. AS REQUIRED TO CLEAR (E) EQUIPMENT AT FACILITIES.
13. MAXIMUM LENGTH OF 7/8" COAX CABLE SHALL BE 140'-(1-1/4" COAX CABLE SHALL BE 190'-0". MAXIMUM LENGT SHALL BE 235'-0".
14. VERIFY MODEL NUMBERS OF ANTENNAS WITH ERICSSON IN
15. THE CONTRACTOR SHALL PROVIDE TESTING OF ANTENNAS DOCUMENTATION TO THE ERICSSON INC. PROJECT MANAGE
16. GENERAL CONTRACTOR TO VERIFY ALL TORQUE TOLERANCE SPECIFICATIONS AND RECOMMENDATIONS.

SITE PLAN

SCALE: 1"=40'

0 20' 40'

2

GENERAL ANTENNA & CAB

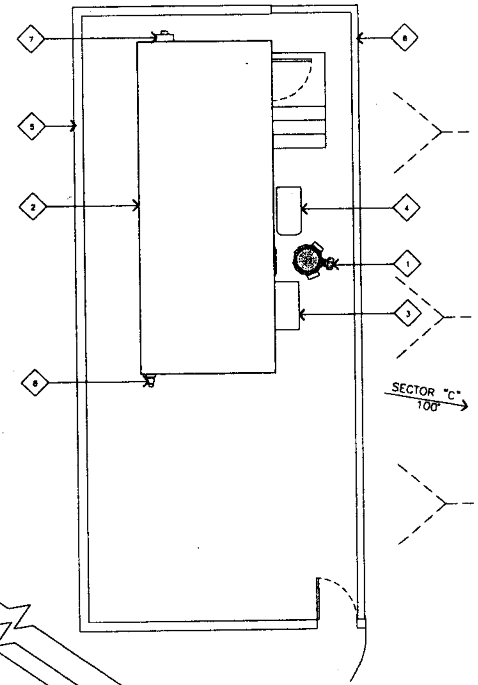
EXHIBIT A

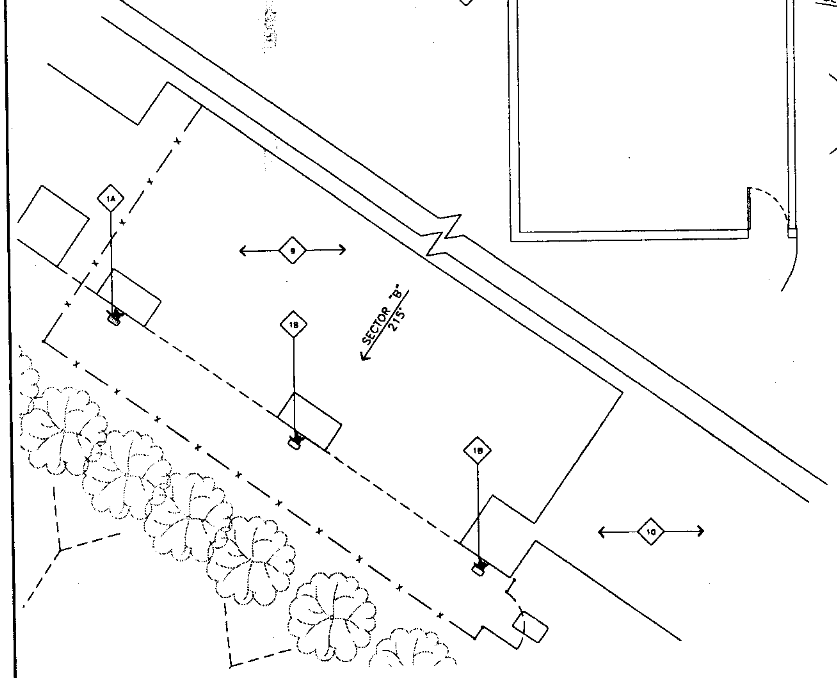
EXISTING COMPOUND PLAN KEYNOTES

1. (N) (1) AT&T ANTENNA MOUNTED BELOW (E) ANTENNA MOUNTED ON (E) WOOD POLE; SEE DETAIL 2/A-4.
1A. (E) (1) AT&T ANTENNA MOUNTED ON (E) ROOF DECK TO BE REUSED FOR UMTS; SEE DETAIL 2/A-4.
1B. (E) AT&T ANTENNA MOUNTED ON (E) ROOF DECK.
2. (E) AT&T EQUIPMENT SHELTER; SEE DETAIL 1/A-1.
3. (E) WALL MOUNTED MECHANICAL UNIT.
4. (E) CONDENSING UNIT.
5. (E) RETAINING WALL.
6. (E) CONCRETE CURB.
7. (E) AT&T ELECTRICAL METER.
8. (E) AT&T GENERATOR RECEPTACLE.
9. (E) ROOF DECK.
10. (E) BUILDING.

EXISTING COMPOUND PLAN GENERAL NOTES

A. (E) AT&T ANTENNA ABOVE NOT SHOWN FOR CLARITY.



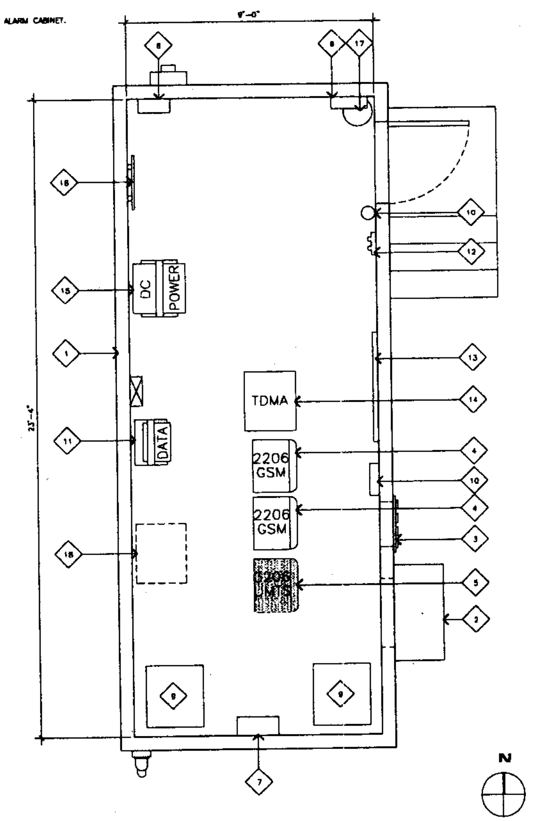


EXISTING COMPOUND PLAN

SCALE: 1/4"=1'-0" 0 2' 4' 2

EXISTING INTERIOR SHELTER LAYOUT KEYNOTES

1. (E) AT&T 10'-0" X 24'-4" EQUIPMENT SHELTER.
2. (E) AT&T EXTERIOR MOUNTED AC UNIT.
3. (E) AT&T WAVEGUIDE ENTRY PORTS.
4. (E) ERICSSON GSM EQUIPMENT CABINETS.
5. (N) ERICSSON 3206 UMTS CABINET. ANCHOR TO FLOOR PER DETAIL 3/A-3.
6. (E) AT&T FIRE ALARM PANEL.
7. (E) AT&T BATTERY DISCONNECT.
8. (E) AT&T ELECTRICAL PANEL.
9. (E) AT&T BATTERY RACK.
10. (E) EXTERNAL ALARM CABINET.
11. (E) DATA RACK. BRING (N) T-1'S AS REQUIRED TO DATA RACK FROM (E) DMARC AND LAND AT DSX. INSTALL DSX IF NOT IN PLACE. RUN (2) CAT5E CABLES FROM DSX TO (N) UMTS CABINET. AT&T TO ORDER (N) T-1'S TO (E) DEMARC.
12. (E) AT&T EYE WASH STATION.
13. (E) TELCO BACKBOARD.
14. (E) AT&T TDMA CABINET.
15. (E) DC POWER CABINET.
16. (E) AT&T MAIN GROUND BUSS BAR (MGB).
17. (E) AT&T HALON SPHERE.
18. (E) AT&T TDMA TO BE REMOVED.



EXISTING INTERIOR SHELTER LAYOUT

SCALE: 1/2"=1'-0" 0 1' 2' 1

JRA

Jeffrey Romo & Associates, Inc.

Arizona • California • Nevada

Arizona: (602) 296-8579
California: (949) 780-3929
Nevada: (702) 795-0059

PROPRIETARY INFORMATION

THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO AT&T MOBILITY IS STRICTLY PROHIBITED.

at&t

4430 Rosewood Drive
Pleasanton, California 94588

APPROVALS

R.F.	DATE
ZONING	DATE
CONSTRUCTION	DATE
SITE ACQUISITION	DATE
OWNER APPROVAL	DATE

PROJECT NAME
AT&T UMTS OVERLAY
SITE NAME
JACKSON OVERLAY
SITE NUMBER
CNU3498
585 SKYWARD DRIVE
APTOS, CALIFORNIA 95003

DRAWING DATES

04/24/08 90% CD REVIEW (P1-B1)
05/22/08 100% FINAL CD's (P1-B2)

A.P.N: 040-271-62

SHEET TITLE

COMPOUND & SHELTER SKETCH

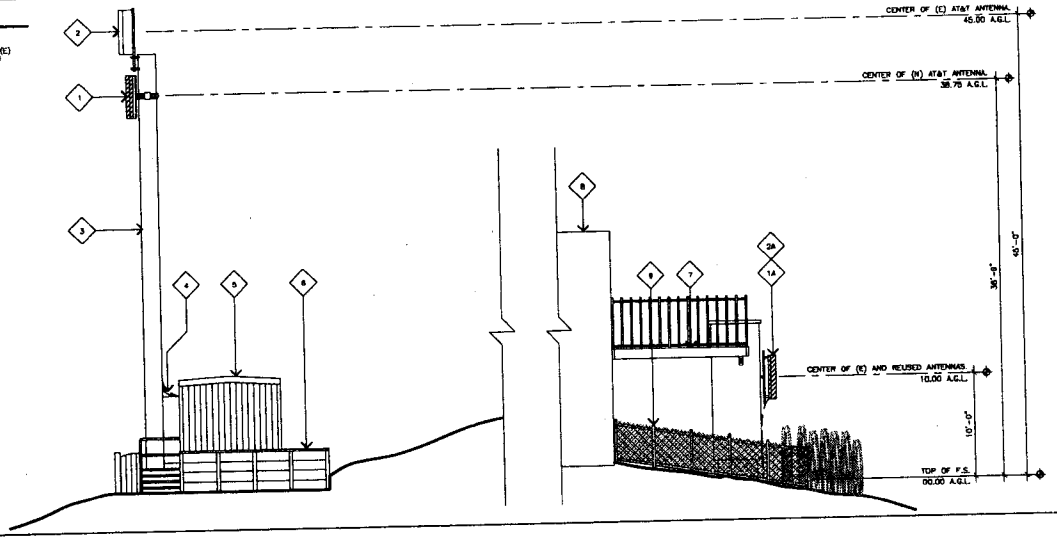
A-1

JRA PROJECT NUMBER: 081032

EXHIBIT A

ELEVATION KEYNOTES

1. (N) (1) AT&T 51.6" X 10.3" X 5.5" ANTENNA MOUNTED BELOW (E) ANTENNA MOUNTED ON (E) WOOD POLE. LOWER (N) ANTENNA TO OBTAIN REQUIRED DISTANCE BETWEEN (E) AND (N) ANTENNAS.
1A. (E) (1) AT&T ANTENNA MOUNTED ON (E) ROOF DECK TO BE REUSED FOR UMTS.
2. (E) AT&T ANTENNA MOUNTED ON (E) WOOD POLE.
2A. (E) AT&T ANTENNA MOUNTED ON (E) ROOF DECK, BEYOND.
3. (E) WOOD POLE.
4. (E) AND (N) AT&T COAX ROUTED UP OUTSIDE (E) WOOD POLE.
5. (E) AT&T EQUIPMENT SHELTER; SEE DETAIL 1/A-1.
6. (E) RETAINING WALL.
7. (E) ROOF DECK.
8. (E) BUILDING.
9. (E) 6'-0" HIGH CHAIN LINK FENCE.



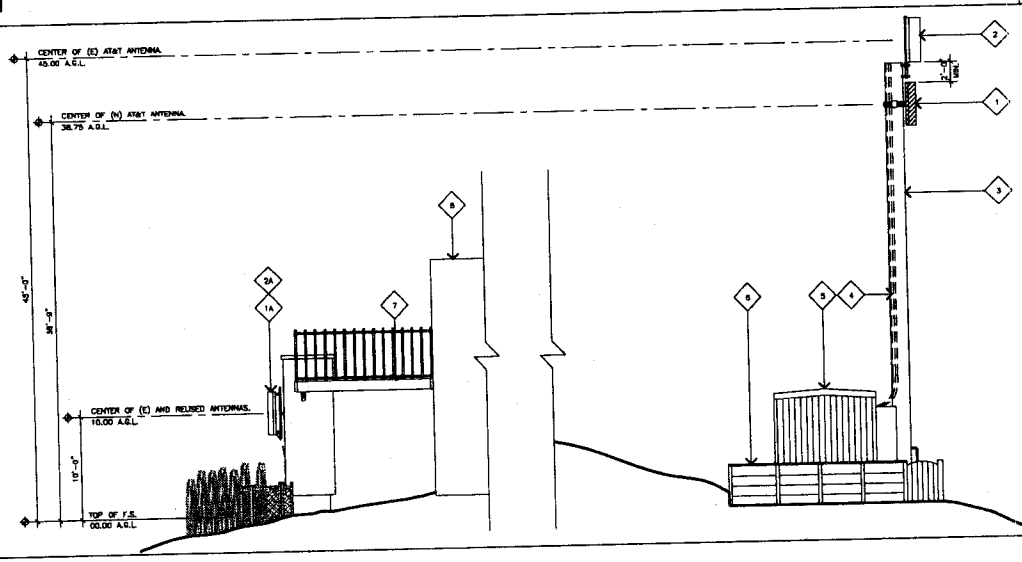
NORTH/NORTHWEST ELEVATION

SCALE: 3/16"=1'-0" 0 3' 6'

2

ELEVATION KEYNOTES

1. (N) (1) AT&T 51.6" X 10.3" X 5.5" ANTENNA MOUNTED BELOW (E) ANTENNA MOUNTED ON (E) WOOD POLE. LOWER (N) ANTENNA TO OBTAIN REQUIRED DISTANCE BETWEEN (E) AND (N) ANTENNAS.
1A. (E) (1) AT&T ANTENNA MOUNTED ON (E) ROOF DECK TO BE REUSED FOR UMTS, BEYOND.
2. (E) AT&T ANTENNA MOUNTED ON (E) WOOD POLE.
2A. (E) AT&T ANTENNA MOUNTED ON (E) ROOF DECK.
3. (E) WOOD POLE.
4. (E) AND (N) AT&T COAX ROUTED UP OUTSIDE (E) WOOD POLE.
5. (E) AT&T EQUIPMENT SHELTER; SEE DETAIL 1/A-1.
6. (E) RETAINING WALL.
7. (E) ROOF DECK.
8. (E) BUILDING.



SOUTH/SOUTHWEST ELEVATION

SCALE: 3/16"=1'-0" 0 3' 6'

1

JRA
Jeffrey Roma & Associates, Inc.
Arizona • California • Nevada
Arizona: (602) 296-8878
California: (949) 790-3929
Nevada: (702) 795-0039

LICENSED ARCHITECT JEFFREY C. ROMA C-42878 REN. 08.31.09 STATE OF CALIFORNIA

at&t

4430 Rosewood Drive
Pleasanton, California 94588

APPROVALS

R.F.	DATE
ZONING	DATE
CONSTRUCTION	DATE
SITE ACQUISITION	DATE
OWNER APPROVAL	DATE

PROJECT NAME
AT&T UMTS OVERLAY

SITE NAME
JACKSON OVERLAY

SITE NUMBER
CNU3498

685 SKYWARD DRIVE
APTOS, CALIFORNIA 95003

DRAWING DATES

04/24/08	90% CD REVIEW (P1-B1)
05/22/08	100% FINAL CD's (P1-B2)

A.P.N: 040-271-62

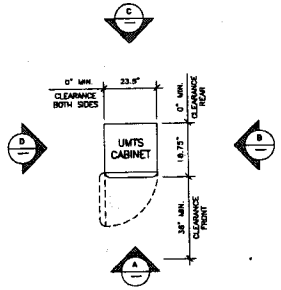
SHEET TITLE

NORTH AND SOUTH ELEVATIONS

A-2

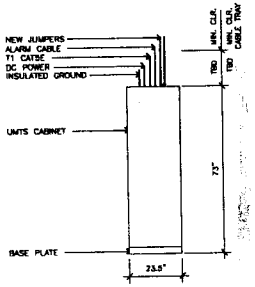
JRA PROJECT NUMBER: 061033

EXHIBIT A

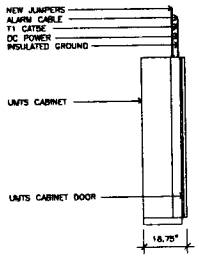


INDOOR UMTS SPECIFICATIONS

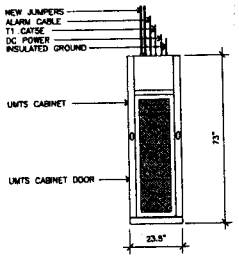
WEIGHT:	587 LBS. MAX.
A/C REQUIRED:	NO AC REQUIRED.
D/C REQUIRED:	TBD 150 AMP BREAKERS
DC PEAK LOAD:	TBD WATTS OR TBD AMPS
HEAT DISSIPATION:	TBD WATTS MAX. OR TBD BTUH
BATTERIES:	NONE



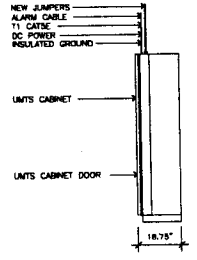
ELEVATION C – BACKSIDE VIEW



ELEVATION D – SIDEVIEW

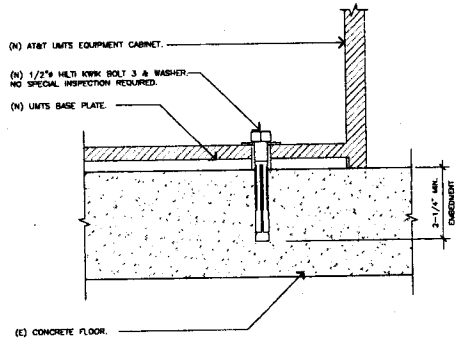


ELEVATION A – FRONT SIDE VIEW

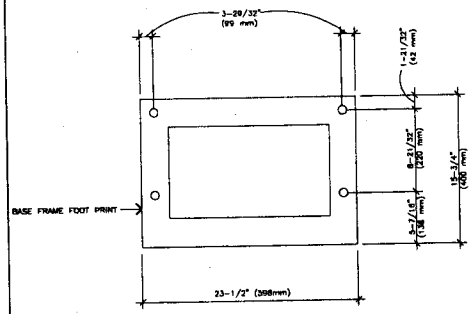


ELEVATION B – SIDEVIEW

UMTS INDOOR CABINET 3206 | SCALE: NONE | 4



EQUIPMENT ANCHORAGE | SCALE: NONE | 3



BASE FRAME DETAIL | SCALE: NONE | 2

EQUIPMENT FLOOR PLAN GENERAL NOTES

A. CONTRACTOR TO PROVIDE ALL COAX CABLE AND JUMPERS WHERE REQUIRED AND CONNECT TO (N) UMTS CABINET.

B. CONTRACTOR TO RUN ALL CABLES AND LINES OVERHEAD IN (E) CABLE LADDER. ATTACH TO LADDER AND DROP DOWN TO (N) UMTS CABINET. (E) LADDER NOT SHOWN FOR CLARITY OF PLAN VIEW.

C. CONTRACTOR TO PICK-UP AND DELIVER CABINET TO SITE INSIDE EQUIPMENT ROOM.

D. CONTRACTOR TO USE BASE PLATE AS TEMPLATE FOR DRILLING (N) ANCHOR HOLES IN FLOOR. NOTE THAT REAR OF PLATE HAS RAISED RIM AND PILL REQUIRE LONGER EXPANSION ANCHORS TO MAINTAIN THE SAME EMBEDMENT AS THE FRONT.

E. AT&T TO ORDER AND TEST ALL (N) T-1'S. RF TO DETERMINE HOW MANY (N) T-1'S REQUIRED. CONTRACTOR TO PULL (N) T-1'S FROM (E) DMARC TO DSX PANEL.

F. CONTRACTOR TO CONNECT TO (N) UMTS CABINET GROUNDING CABLES AND INTEGRATE INTO THE (E) NETWORK. UPON COMPLETION OF INTEGRATION CONTRACTOR SHALL OPTIMIZE THE (N) EQUIPMENT.

G. (N) AND OR (E) LINES CONNECTING TO UMTS CABINET ARE SHOWN DIAGRAMMATICALLY. CONTRACTOR TO RUN LINES IN CABLE LADDER NOT SHOWN FOR CLARITY.

GENERAL NOTES | SCALE: NONE | 1

JRA
Jeffrey Rema & Associates, Inc.
Arizona • California • Nevada
Arizona: (602) 296-8879
California: (949) 780-3929
Nevada: (702) 795-0259

LICENSED ARCHITECT JEFFREY T. REMA C-22876 STATE OF CALIFORNIA

at&t
4430 Rosewood Drive
Pleasanton, California 94588

APPROVALS

R.F.	DATE
ZONING	DATE
CONSTRUCTION	DATE
SITE ACQUISITION	DATE
OWNER APPROVAL	DATE

PROJECT NAME
AT&T UMTS OVERLAY
SITE NAME
JACKSON OVERLAY
SITE NUMBER
CNU3498
685 SKYWARD DRIVE
APTOS, CALIFORNIA 95003

DRAWING DATES
04/24/08 90% CD REVIEW (P1-81)
09/22/08 100% FINAL CD's (P1-82)

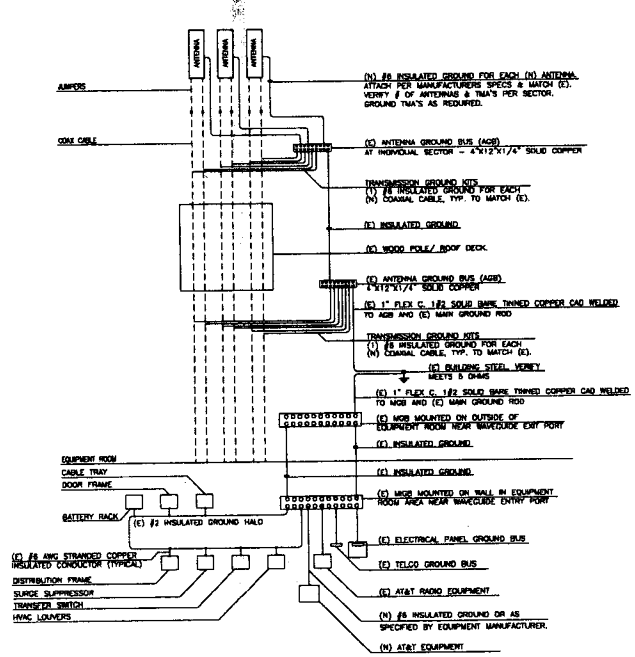
A.P.N: 040-271-62

SHEET TITLE
EQUIPMENT DETAILS

A-3

JRA PROJECT NUMBER: 061033

EXHIBIT A



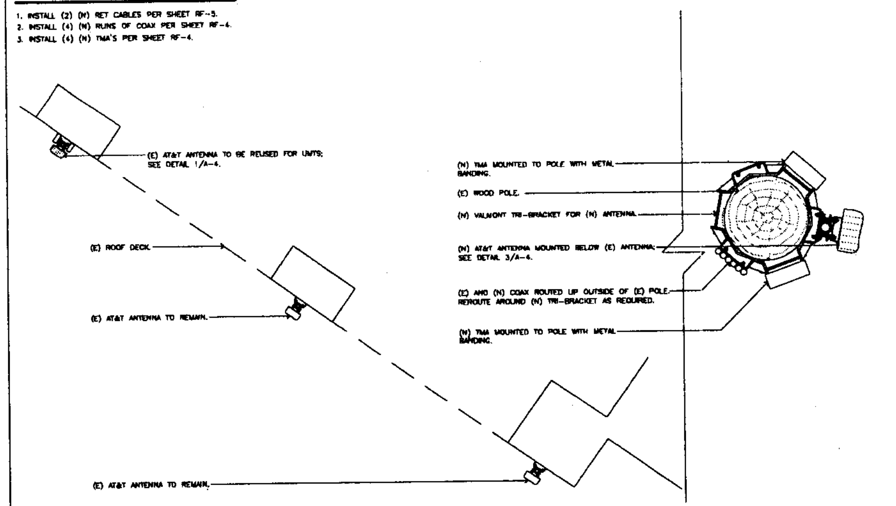
GENERAL NOTES:

1. SPLICE GROUND CONNECTIONS.
2. FOLLOW COAXIAL CABLE MANUFACTURES RECOMMENDATIONS (TYPICAL)
3. ALL INSULATED GROUND WIRES TO BE STRANDED, AWG WIRE UNLESS NOTED OTHERWISE.
4. THIS IS TYPICAL FOR ONE SECTOR OF ANTENNAS. SEE PLANS FOR NUMBER OF SECTORS.

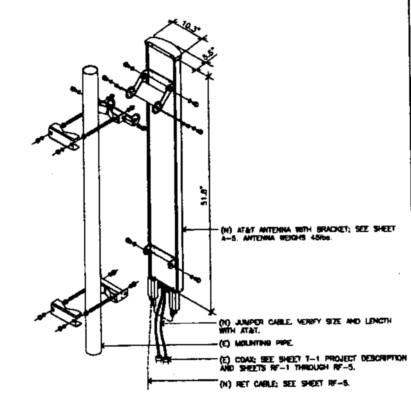
COAX & GROUNDING SYSTEM SCHEMATIC — SCALE: NONE — 4

NOTES:

1. INSTALL (2) (N) RET CABLES PER SHEET RF-5.
2. INSTALL (4) (N) RUNS OF COAX PER SHEET RF-4.
3. INSTALL (4) (N) TMA'S PER SHEET RF-4.



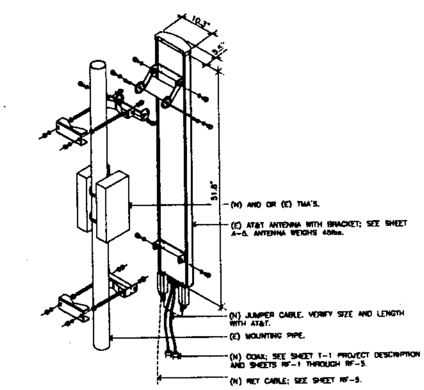
ANTENNA PLAN — SCALE: NONE — 2



NOTES:

1. SEE ANTENNA MANUFACTURER SPECS. FOR COMPLETE ANTENNA AND BRACKET SPECIFICATIONS.

ANTENNA MOUNT — SCALE: NONE — 3



NOTES:

1. SEE ANTENNA MANUFACTURER SPECS. FOR COMPLETE ANTENNA AND BRACKET SPECIFICATIONS.

ANTENNA MOUNT WITH TMA'S — SCALE: NONE — 1

JRA
Jeffrey Rome & Associates, Inc.
Arizona • California • Nevada
Arizona: (602) 296-5579
California: (949) 790-3929
Nevada: (702) 795-0036

PROPRIETARY INFORMATION

THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO AT&T MOBILITY IS STRICTLY PROHIBITED.

at&t
4430 Rosewood Drive
Pleasanton, California 94588

APPROVALS

R.F.	DATE
ZONING	DATE
CONSTRUCTION	DATE
SITE ACQUISITION	DATE
OWNER APPROVAL	DATE

PROJECT NAME
AT&T UMTS OVERLAY
SITE NAME
JACKSON OVERLAY
SITE NUMBER
CNU3498
685 SKYWARD DRIVE
APTOS, CALIFORNIA 95003

DRAWING DATES
04/24/08 90% CD REVIEW (P1-B1)
05/22/08 100% FINAL CD's (P1-B2)

A.P.N: 040-271-62

SHEET TITLE
ANTENNA DETAILS

A-4

JRA PROJECT NUMBER: 081032

EXHIBIT A

KATHREIN SCALA DIVISION

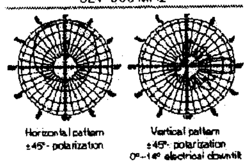
742 264

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.
- Remote control ready.
- Various gain, beamwidth and downtilt ranges.
- AISG compatible.
- High strength pultruded fiberglass radome.

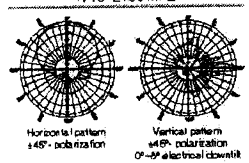
824–960 MHz



Horizontal pattern ±45°-polarization

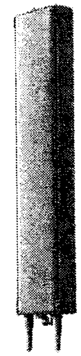
Vertical pattern ±45°-polarization 0°–14° electrical downtilt

1710–2180 MHz



Horizontal pattern ±45°-polarization

Vertical pattern ±45°-polarization 0°–8° electrical downtilt



General specifications:

Frequency range		824–960 MHz 1710–2180 MHz
Impedance		50 ohms
VSWR		<1.5:1
Intermodulation (2x20W)		IM3: -150 dBc
Polarization		+45° and -45°
Connector		4 x 7/16 DIN female
Isolation	intrasystem intersystem	>30 dB >50 dB (824–960 // 1710–2180 MHz)
Weight		36.4 lb (16.5 kg)
Dimensions		51.8 x 10.3 x 5.5 inches (1316 x 262 x 139 mm)
Equivalent flat plate area		4.13 ft² (0.384 m²)
Wind survival rating*		120 mph (200 kph) sustained 150 mph (240 kph) in a 3 second burst
Shipping dimensions		64 x 11.9 x 7.6 inches (1626 x 302 x 192 mm)
Shipping weight		45 lb (20.4 kg)
Mounting		Fixed mount options are available for 2 to 4.6 inch (50 to 115 mm) OD masts.

See reverse for order information.

Specifications:	824–894 MHz	870–960 MHz	1710–1880 MHz	1850–1990 MHz	1920–2180 MHz
Gain	14 dBi	14 dBi	16.5 dBi	16.8 dBi	17 dBi
Front-to-back ratio	>28 dB (co-polar)	>26 dB (co-polar)	>25 dB (co-polar)	>25 dB (co-polar)	>25 dB (co-polar)
Maximum input power per input / total power	400 watts (at 50°C) / 600 watts (at 50°C)	400 watts (at 50°C)	250 watts (at 50°C)	250 watts (at 50°C) 500 watts (at 50°C)	250 watts (at 50°C)
+45° and -45° polarization horizontal beamwidth	68° (half-power)	65° (half-power)	65° (half-power)	65° (half-power)	63° (half-power)
+45° and -45° polarization vertical beamwidth	16° (half-power)	14.5° (half-power)	7.8° (half-power)	7.3° (half-power)	6.8° (half-power)
Electrical downtilt continuously adjustable	0°–14°	0°–14°	0°–8°	0°–8°	0°–8°
Sidelobe suppression for first sidelobe above horizon	0° 7° 14° T 14 14 13 dB	0° 7° 14° T 14 14 13 dB	0° 4° 8° T 14 14 14 dB	0° 4° 8° T 16 16 16 dB	0° 4° 8° T 15 16 15 dB
Cross polar ratio Main direction 0° / Sector ±60°	20 dB (typical) >10 dB	20 dB (typical) >10 dB	16 dB (typical) >10 dB	16 dB (typical) >10 dB	20 dB (typical) >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.

RoHS Lead-free

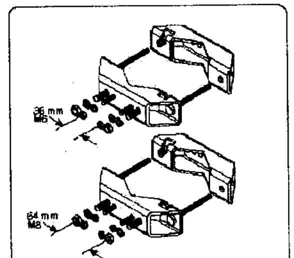
10633-J 936.2700/b

Kathrein Inc., Scala Division Post Office Box 4580 Medford, OR 97501 (USA) Phone: (541) 779-6500 Fax: (541) 779-3991
Email: communications@kathrein.com Internet: www.kathrein-scala.com

KATHREIN SCALA DIVISION

742 264

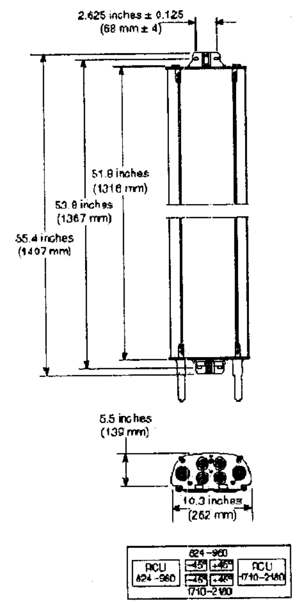
65° Dualband Directional Antenna



2 x 738 646 Mounting Kit

Mounting Options:

Model	Description
2 x 738 646	Mounting Kit for 2 to 4.6 inch (60 to 116 mm) OD mast.
742 033	Three-panel Sector Mounting Kit (120 deg. ea.) for 4.5 inch (114.3 mm mm) OD steel mast.
742 034	Three-panel Sector Mounting Kit (120 deg. ea.) for 5.5 inch (139.7 mm mm) OD steel mast.
737 978	Tilt Mount Kit 0–16 Degrees downtilt angle.



Order Information:

Model	Description
742 264	Antenna with 7/16 DIN connectors

All specifications are subject to change without notice. The latest specifications are available at www.kathrein-scala.com.

Kathrein Inc., Scala Division Post Office Box 4580 Medford, OR 97501 (USA) Phone: (541) 779-6500 Fax: (541) 779-3991
Email: communications@kathrein.com Internet: www.kathrein-scala.com

ANTENNA SPECS

1

JRA

Jeffrey Rome & Associates, Inc.
Arizona • California • Nevada
Arizona: (602) 296-5579
California: (949) 760-3929
Nevada: (702) 795-0039

PROPRIETARY INFORMATION

THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO AT&T MOBILITY IS STRICTLY PROHIBITED.

at&t

4430 Rosewood Drive
Pleasanton, California 94588

APPROVALS

R.F.	DATE
ZONING	DATE
CONSTRUCTION	DATE
SITE ACQUISITION	DATE
OWNER APPROVAL	DATE

PROJECT NAME
AT&T UMTS OVERLAY
SITE NAME
JACKSON OVERLAY
SITE NUMBER
CNU3498
885 SKYWARD DRIVE
APTOS, CALIFORNIA 95003

DRAWING DATES
04/24/08 90% CD REVIEW (P1-B1)
05/22/08 100% FINAL CD's (P1-B2)

A.P.N: 040-271-62

SHEET TITLE

ANTENNA SPECS

A-5

JRA PROJECT NUMBER: 081032

EXHIBIT A

Cingular RF-Site Design Form

SITE INFORMATION

* Market	SAN FRANCISCO	Date	February 27, 2008
* Site Name	JACKSON OVERLAY - D106	Revision Level	3.2
* Market Type	Dual Band 850/1900 MHz	RF Engineer	Dominik Hamera
* UMTS Site ID	CNU3498	Contact Number	925 227 5332
* GSM Site ID	SF1460	Company	A T & T
* USID	42604	Completion Date	
* Structure Type	BLDG / MONOPOLE	* Source of Existing Configuration Data	1460_v12.0 PSD76 Complex Growth and Redline RFDS
* Shelter Type		* Project Type	Ericsson UMTS Overlay
* Latitude (decimal) NAD83	36.98670	* Technology	UMTS
* Longitude (decimal) NAD83	-121.88900	* Frequency Band	850
* Street Address	885 SKYWARD DRIVE	Approved By	Sinan Akkaya
* County	SANTA CRUZ		
* City	APTOS * State CA		
* Zip Code	95003		

BTS SITE CONFIGURATION

EXISTING Configuration		PLANNED Configuration	
BTS #1		BTS #1	
* BTS Vendor	Nortel	BTS Vendor	Ericsson
* BTS Technology	TDMA	BTS Technology	UMTS
* Frequency Band	850	Frequency Band	850
* BTS Model	Indoor	BTS Model	3206 Indoor
* Number of Cabinets	1	Number of Cabinets	1
* Number of Sectors	2	Number of Sectors	2
BTS #2		BTS #2	
* BTS Vendor	Ericsson	BTS Vendor	Ericsson
* BTS Technology	GSM	BTS Technology	GSM
* Frequency Band	850	Frequency Band	850
* BTS Model	2206	BTS Model	2206
* Number of Cabinets	1	Number of Cabinets	1
* Number of Sectors	2	Number of Sectors	2
BTS #3		BTS #3	
* BTS Vendor	Ericsson	BTS Vendor	Ericsson
* BTS Technology	GSM	BTS Technology	GSM
* Frequency Band	1900	Frequency Band	1900
* BTS Model	2206	BTS Model	2206
* Number of Cabinets	1	Number of Cabinets	1
* Number of Sectors	2	Number of Sectors	2

CELL SECTOR INFORMATION

External Amplifier

EXISTING Configuration	Sector A	Sector B	Sector C	PLANNED Configuration	Sector A	Sector B	Sector C
BAND				BAND			
* Manufacturer				Manufacturer			
* Part Number				Part Number			
* Amplifier Count				Amplifier Count			
BAND				BAND			
* Manufacturer				Manufacturer			
* Part Number				Part Number			
* Amplifier Count				Amplifier Count			

Antenna System

Antenna Type 1 UMTS	Sector A	Sector B	Sector C	Antenna Type 1 UMTS	Sector A	Sector B	Sector C
* Radiation Height				Radiation Height		10 ft	45 ft
* Azimuth				Azimuth		215°	100°
* Antenna Model				Antenna Model		742-264 AP14/17-890/1940/065D/ADT/XXXP	742-264 AP14/17-890/1940/065D/ADT/XXXP
* Quantity				Quantity		1	1
* Type				Type		DBDP	DBDP
* Manufacturer				Manufacturer		Kathrein	Kathrein
* Dimensions				Dimensions		51" x 10.3" x 5.5"	51" x 10.3" x 5.5"
* Horizontal Beamwidth				Horizontal Beamwidth		65°	65°
* Vertical Beamwidth				Vertical Beamwidth		16/7.3	16/7.3
* Gain				Gain		14/17	14/17
* 850 ports				850 Ports		2	2
* 1900 ports				1900 Ports		2	2
* 850/1900 ports				850/1900 Ports		0	0
850 Downtilt Elec.				850 Downtilt Elec.		TBD	TBD
1900 Downtilt Elec.				1900 Downtilt Elec.		TBD	TBD
850/1900 downtilt Elec.				850/1900 downtilt Elec.			
* Downtilt (Mechanical)				Downtilt (Mechanical)		TBD	TBD
* Mast Head Amplifier				* Mast Head Amplifier		Yes	Yes
* MHA Bandwidth				* MHA Bandwidth			
# of MHAs				# of MHAs		2	2
MHA Vendor/Model				MHA Vendor/Model		1900: KRY 112 71/3	1900: KRY 112 71/3
# of BIAS-T				# of BIAS-T		2	2
Bias-T Vendor/Model				Bias-T Vendor/Model			
# of PDU				# of PDU			
PDU Vendor/Model				PDU Vendor/Model			
# of RET				# of RET		2	2
RET Vendor/Model				RET Vendor/Model		Kathrein 860.10025	Kathrein 860.10025
# of RCS-splitters(RET)				# of RCS-splitters(RET)		0	0
# of RC Top Jumpers				# of RC Top Jumpers		1	1
# of RC Bottom Jumpers				# of RC Bottom Jumpers		0	0
# of RC Feeder Cables				# of RC Feeder Cables		1	1
RC Feeder Cable Model				RC Feeder Cable Model		860-100xx	860-100xx
# of CCU's (RET) / Model				# of CCU's (RET) / Model		1/860.10006	

Antenna Type 2 GSM	Sector A	Sector B	Sector C	Antenna Type 2 GSM	Sector A	Sector B	Sector C
* Radiation Height		10 ft	45 ft	Radiation Height		10 ft	45 ft
* Azimuth		215°	100°	Azimuth		215°	100°
* Antenna Model		742-264 AP14/17-890/1940/065D/ADT/XXXP	OBXLH-6565A-VTM	Antenna Model		742-264 AP14/17-890/1940/065D/ADT/XXXP	OBXLH-6565A-VTM
* Quantity		2	1	Quantity		2	1
* Type		DBDP	DBDP	Type		DBDP	DBDP
* Manufacturer		Kathrein	Decibel	Manufacturer		Kathrein	Decibel
* Dimensions		51" x 10.3" x 5.5"	52 x 22.9 x 11	Dimensions		51" x 10.3" x 5.5"	52 x 22.9 x 11
* Horizontal Beamwidth		65°	65°	Horizontal Beamwidth		65°	65°
* Vertical Beamwidth		16/7.3	16/6	Vertical Beamwidth		16/7.3	16/6
* Gain		14/17	11.9/14.9	Gain		14/17	11.9/14.9
* 850 ports		2	4	850 Ports		2	4
* 1900 ports		2	4	1900 Ports		2	4
* 850/1900 ports		0	0	850/1900 Ports		0	0
850 Downtilt Elec.		0	0	850 Downtilt Elec.		0°	0°
1900 Downtilt Elec.		0	0	1900 Downtilt Elec.		0°	0°
850/1900 downtilt Elec.				850/1900 downtilt Elec.			
* Downtilt (Mechanical)		0°	0°	Downtilt (Mechanical)		0°	0°
* Mast Head Amplifier		Yes	Yes	* Mast Head Amplifier		Yes	Yes
* MHA Bandwidth		Narrowband	Narrowband	* MHA Bandwidth		Narrowband	Narrowband
# of MHAs		2	2	# of MHAs		2	2
MHA Vendor/Model				MHA Vendor/Model			
# of BIAS-T		2	2	# of BIAS-T		2	2
Bias-T Vendor/Model				Bias-T Vendor/Model			
# of PDU				# of PDU			
PDU Vendor/Model				PDU Vendor/Model			
# of RET				# of RET			
RET Vendor/Model				RET Vendor/Model			
# of RCS-splitters(RET)				# of RCS-splitters(RET)			
# of RC Top Jumpers				# of RC Top Jumpers			
# of RC Bottom Jumpers				# of RC Bottom Jumpers			
# of RC Feeder Cables				# of RC Feeder Cables			
RC Feeder Cable Model				RC Feeder Cable Model			
# of CCU's (RET) / Model				# of CCU's (RET) / Model			

RF-SITE DESIGN

1

JRA

Jeffrey Romo & Associates, Inc.
Arizona • California • Nevada
Arizona: (602) 296-5679
California: (949) 760-3929
Nevada: (702) 795-0059

PROPRIETARY INFORMATION

THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO AT&T MOBILITY IS STRICTLY PROHIBITED.

LICENSED ARCHITECT JEFFREY L. ROME C-020876 EXP. FEB. 28, 2009 STATE OF CALIFORNIA

at&t

4430 Rosewood Drive
Pleasanton, California 94588

APPROVALS

R.F.	DATE
ZONING	DATE
CONSTRUCTION	DATE
SITE ACQUISITION	DATE
OWNER APPROVAL	DATE

PROJECT NAME
AT&T UMTS OVERLAY
SITE NAME
JACKSON OVERLAY
SITE NUMBER
CNU3498
885 SKYWARD DRIVE
APTOS, CALIFORNIA 95003

DRAWING DATES
04/24/08 90% CD REVIEW (P1-B1)
05/22/08 100% FINAL CD's (P1-B2)

A.P.N: 040-271-62

SHEET TITLE
RF-SITE DESIGN

RF-1

JRA PROJECT NUMBER: 081032

EXHIBIT A

Antenna Type 3 -TDMA			
Radiation Height	10 ft	45 ft	
Azimuth	215 °	100 °	
Antenna Model	742-264 AP14/17-890/1940/065D/ADT/XXP	QBXLH-6565A-VTM	
Quantity	1	1	
Type	DBDP	QBDF	
Manufacturer	Kathrein	Decibel	
Dimensions	51" x 10.3" x 5.5"	52 x 22.9 x 11	
Horizontal Beamwidth	65 °	65 °	
Vertical Beamwidth	16/7.3	16/6	
Gain	14/17	11.9/14.9	
850 ports	2	4	
1900 ports	2	4	
850/1900 ports	0	0	
850 Downtilt Elec.	9	4	
1900 Downtilt Elec	0	0	
850/1900 downtilt Elec.			
Downtilt (Mechanical)	0 °	0 °	
Mast Head Amplifier			
MHA Bandwidth			
# of MHAs			
MHA Vendor/Model			
# of BIAS-T			
Bias-T Vendor/Model			
# of PDU			
PDU Vendor/Model			
# of RET			
RET Vendor/Model			
# of RCS-splitters(RET)			
# of RC Top Jumpers			
# of RC Bottom Jumpers			
# of RC Feeder Cables			
RC Feeder Cable Model			
# of CCU's (RET) / Model			

Antenna Type 3 TDMA			
Radiation Height			
Azimuth			
Antenna Model		Decomissioned	Decomissioned
Quantity			
Type			
Manufacturer			
Dimensions			
Horizontal Beamwidth			
Vertical Beamwidth			
Gain			
850 Ports			
1900 Ports			
850/1900 Ports			
850 Downtilt Elec.			
1900 Downtilt Elec			
850/1900 downtilt Elec.			
Downtilt (Mechanical)			
Mast Head Amplifier			
MHA Bandwidth			
# of MHAs			
MHA Vendor/Model			
# of BIAS-T			
Bias-T Vendor/Model			
# of PDU			
PDU Vendor/Model			
# of RET			
RET Vendor/Model			
# of RCS-splitters(RET)			
# of RC Top Jumpers			
# of RC Bottom Jumpers			
# of RC Feeder Cables			
RC Feeder Cable Model			
# of CCU's (RET) / Model			

TX Radio Count	Combiner Type	Antenna Share	Antenna Ports	Power Amplifier	Input	Feedline	Length	Feedline Loss	Output	TMA	Antenna Type	Antenna #
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

RF-SITE DESIGN

1

JRA
Jeffrey Roma & Associates, Inc.
Arizona • California • Nevada
Arizona: (602) 298-5879
California: (949) 760-3929
Nevada: (702) 795-0096

PROPRIETARY INFORMATION
THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO AT&T MOBILITY IS STRICTLY PROHIBITED.

at&t
4430 Rosewood Drive
Pleasanton, California 94588

APPROVALS

R.F.	DATE
ZONING	DATE
CONSTRUCTION	DATE
SITE ACQUISITION	DATE
OWNER APPROVAL	DATE

PROJECT NAME
AT&T UMTS OVERLAY
SITE NAME
JACKSON OVERLAY
SITE NUMBER
CNU3498
885 SKYWARD DRIVE
APTOS, CALIFORNIA 95003

DRAWING DATES
04/24/08 90% CD REVIEW (P1-B1)
05/22/08 100% FINAL CD's (P1-B2)

A.P.N: 040-271-62

SHEET TITLE
RF-SITE DESIGN

RF-2

JRA PROJECT NUMBER: 081022

EXHIBIT A

COMMENTS AND CHANGE HISTORY	
Sector A	N/A
Sector B	Reuse existing 4-port antenna at antenna POS.1 for UMTS. Ensure at least 4ft. horizontal separation between antennas. Do not change existing tilt configuration on active GSM antennas if it is different than RFDS. Redline tilt section of GSM in RFDS. Reuse existing TDMA lines and spare coax for UMTS at antenna POS.1. Add 2 new lines for UMTS 1900. Add 2 TMAs UMTS1900 lines to antenna POS.1. Remove TDMA cabinet. Install UMTS 850 Cabinet. Connect UMTS850 cabinet to the UMTS lines and then to antenna at POS.1. Install RET as shown in RET section. Install RET on the UMTS antenna. And Install CAT5 from UMTS nodeB to the CCU. Connect CCU to Node B with CAT.5 cable for IP connection.
Sector C	Add 4-port antenna at antenna POS.2 for UMTS. Ensure at least 2ft. vertical separation between antennas. Do not change existing tilt configuration on active GSM antennas if it is different than RFDS. Redline tilt section of GSM in RFDS. Reuse existing TDMA lines for UMTS850 at antenna POS.2. Add 2 new lines for UMTS1900. Add 2 TMAs UMTS1900 lines to antenna POS.2. Remove TDMA cabinet. Install UMTS 850 Cabinet. Connect UMTS850 cabinet to the UMTS lines and then to antenna at POS.2. Install RET as shown in RET section. Install RET on the UMTS antenna. And Install CAT5 from UMTS nodeB to the CCU. Connect CCU to Node B with CAT.5 cable for IP connection.
Revision History	Rev.3.1 UMTS850 Overlay Rev 3.3:Temp with using existing coax using existing antenna no 2nd carrier(UMTS850_PERM_OPEN_012908 & UMTS850_TEMP_OPEN_012908)

RF-SITE DESIGN

1

JRA
Jeffrey Roma & Associates, Inc.
Arizona • California • Nevada
Arizona: (602) 296-5875
California: (949) 760-3929
Nevada: (702) 795-0056

PROPRIETARY INFORMATION
THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO AT&T MOBILITY IS STRICTLY PROHIBITED.

at&t
4430 Rosewood Drive
Pleasanton, California 94588

APPROVALS
R.F. DATE
ZONING DATE
CONSTRUCTION DATE
SITE ACQUISITION DATE
OWNER APPROVAL DATE

PROJECT NAME
AT&T UMTS OVERLAY
SITE NAME
JACKSON OVERLAY
SITE NUMBER
CNU3498
885 SKYWARD DRIVE
APTOS, CALIFORNIA 95003

DRAWING DATES
04/24/08 90% CD REVIEW (P1-B1)
05/22/08 100% FINAL CD's (P1-B2)

A.P.N: 040-271-62

SHEET TITLE
RF-SITE DESIGN

RF-3

JRA PROJECT NUMBER: 081033

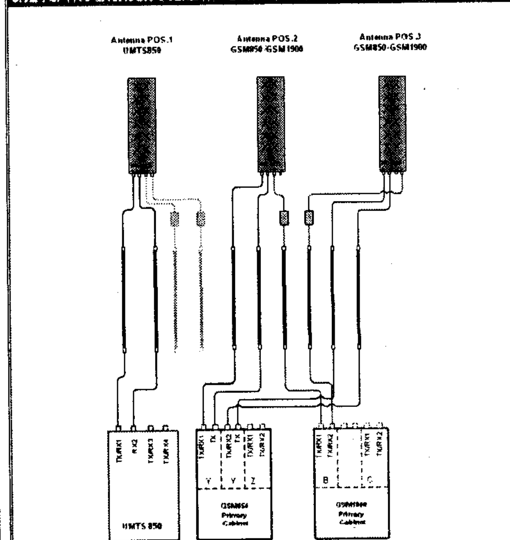
EXHIBIT A

SECTOR A

Not applicable

SECTOR B

SITE : SF1460 JACKSON OVERLAY - D106 RFDS Version : v3.1 01/29/08

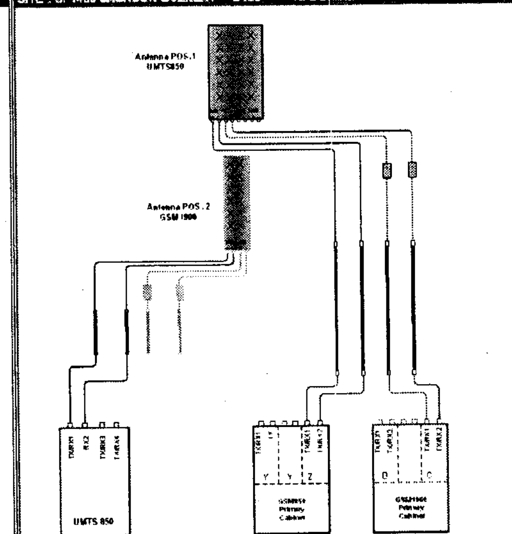


RF Comments

Reuse existing 4-port antenna at antenna POS.1 for UMTS. Ensure at least 4ft. horizontal separation between antennas. Do not change existing tilt configuration on active GSM antennas if it is different than RFDS. Redline tilt section of GSM in RFDS. Reuse existing TDMA lines and spare coax for UMTS at antenna POS.1.
Add 2 new lines for UMTS 1900. Add 2 TMAs UMTS1900 lines to antenna POS.1.
Remove TDMA cabinet. Install UMTS 850 Cabinet. Connect UMTS850 cabinet to the UMTS lines and then to antenna at POS.1. Install RET as shown in RET section. Install RET on the UMTS antenna. And install CAT5 from UMTS nodeB to the CCU.
Connect CCU to Node B with CAT-5 cable for IP connection.

SECTOR C

SITE : SF1460 JACKSON OVERLAY - D106 RFDS Version : v3.1 01/29/08



RF Comments

Add 1-port antenna at antenna POS.2 for UMTS. Ensure at least 2ft. vertical separation between antennas. Do not change existing tilt configuration on active GSM antennas if it is different than RFDS. Redline tilt section of GSM in RFDS. Reuse existing TDMA lines for UMTS850 at antenna POS.2.
Add 2 new lines for UMTS1900. Add 2 TMAs UMTS1900 lines to antenna POS.2.
Remove TDMA cabinet. Install UMTS 850 Cabinet. Connect UMTS850 cabinet to the UMTS lines and then to antenna at POS.2. Install RET as shown in RET section. Install RET on the UMTS antenna. And install CAT5 from UMTS nodeB to the CCU.
Connect CCU to Node B with CAT-5 cable for IP connection.

RF-SITE DESIGN | 1

JRA
Jeffrey Roma & Associates, Inc.
Arizona • California • Nevada
Arizona: (602) 296-5879
California: (949) 790-3929
Nevada: (702) 795-0050

PROPRIETARY INFORMATION
THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO AT&T MOBILITY IS STRICTLY PROHIBITED.

at&t
4430 Rosewood Drive
Pleasanton, California 94588

APPROVALS

R.F.	DATE
ZONING	DATE
CONSTRUCTION	DATE
SITE ACQUISITION	DATE
OWNER APPROVAL	DATE

PROJECT NAME
AT&T UMTS OVERLAY
SITE NAME
JACKSON OVERLAY
SITE NUMBER
CNU3498
885 SKYWARD DRIVE
APTOS, CALIFORNIA 95003

DRAWING DATES
04/24/08 90% CD REVIEW (P1-B1)
05/22/08 100% FINAL CD's (P1-B2)

A.P.N: 040-271-62

SHEET TITLE
RF-SITE DESIGN

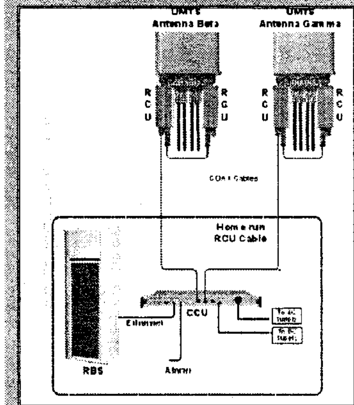
RF-4

JRA PROJECT NUMBER: 081022

EXHIBIT A

Site Name: JACKSON OVERLAY - D106
Site Number: CNU3498

REMOTE ELECTRICAL TILT CONFIGURATION



COMPONENTS

BLOCK DIAGRAM

RCU ASSIGNMENT

SECTOR 1	ANTENNA POSITION	Band	RET MANUFACTURER	RET MODEL	IP ADDRESS ASSIGNMENT	ELECTRICAL TILT SETTINGS	RCU Serial #
	ANTENNA 1	1900	N/A	N/A	N/A	N/A	
	ANTENNA 1	850	N/A	N/A	N/A	N/A	
	ANTENNA 2	1900	N/A	N/A	N/A	N/A	
	ANTENNA 2	850	N/A	N/A	N/A	N/A	
	ANTENNA 3	1900	N/A	N/A	N/A	N/A	
	ANTENNA 3	850	N/A	N/A	N/A	N/A	
	ANTENNA 4	1900	N/A	N/A	N/A	N/A	
	ANTENNA 4	850	N/A	N/A	N/A	N/A	
SECTOR 2				RET MODEL	IP ADDRESS		
UMTS	ANTENNA 1	1900	Kathrein 860-10025	Kathrein [illegible]	TBD	TBD	
UMTS	ANTENNA 1	850	Kathrein 860-10025	Kathrein [illegible]	TBD	TBD	
	ANTENNA 2	1900	N/A	N/A	N/A	N/A	
	ANTENNA 2	850	N/A	N/A	N/A	N/A	
	ANTENNA 3	1900	N/A	N/A	N/A	N/A	
	ANTENNA 3	850	N/A	N/A	N/A	N/A	
	ANTENNA 4	1900	N/A	N/A	N/A	N/A	
	ANTENNA 4	850	N/A	N/A	N/A	N/A	
SECTOR 3				RET MODEL	IP ADDRESS		
	ANTENNA 1	1900	N/A	N/A	N/A	N/A	
	ANTENNA 1	850	N/A	N/A	N/A	N/A	
UMTS	ANTENNA 2	1900	Kathrein 860-10025	Kathrein [illegible]	TBD	TBD	
UMTS	ANTENNA 2	850	Kathrein 860-10025	Kathrein [illegible]	TBD	TBD	
	ANTENNA 3	1900	N/A	N/A	N/A	N/A	
	ANTENNA 3	850	N/A	N/A	N/A	N/A	
	ANTENNA 4	1900	N/A	N/A	N/A	N/A	
	ANTENNA 4	850	N/A	N/A	N/A	N/A	

RF-SITE DESIGN

1

JRA
Jeffrey Romo & Associates, Inc.
Arizona • California • Nevada
Arizona: (602) 296-8879
California: (949) 780-3929
Nevada: (702) 785-0059

PROPRIETARY INFORMATION

THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO AT&T MOBILITY IS STRICTLY PROHIBITED.

at&t
4430 Rosewood Drive
Pleasanton, California 94588

APPROVALS

R.F.	DATE
ZONING	DATE
CONSTRUCTION	DATE
SITE ACQUISITION	DATE
OWNER APPROVAL	DATE

PROJECT NAME
AT&T UMTS OVERLAY
SITE NAME
JACKSON OVERLAY
SITE NUMBER
CNU3498
665 SKYWARD DRIVE
APTOS, CALIFORNIA 95003

DRAWING DATES
04/24/08 90% CD REVIEW (P1-B1)
05/22/08 100% FINAL CD's (P1-B2)

A.P.N: 040-271-62

SHEET TITLE
RF-SITE DESIGN

RF-5

EXHIBIT A

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 project will not be visible from any designated visual resource or surrounding residentially zoned property. The monopole and equipment building are shrouded in trees. The deck antennas are also not visible to any scenic corridor due to the location on a steep hill and are a significant distance from any visual resource. The antennas are incorporated into the design of the deck supports and painted to match the dwelling, which blend them into the dwelling and limit visibility from surrounding dwellings.

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 pursuant to County Code Section 13.10.662(c), facilities located within the restricted zone districts are required to provide an alternatives site analysis. Ordinarily, when a new site is selected an alterative site analysis would evaluate other alternative sites where equal or superior cell coverage can be provided and a determination by staff can be completed to confirm that the selected site limits site visibility and minimizes visual impacts. This site is unique in that it is an existing site currently operated by AT&T previously approved, but not fully exercised (a building permit was not issued by the Department). The applicant provided a rationale for this location within that context noting that that this site was originally selected because it provides superior coverage and would leave a gap in the coverage if another site had been selected. Site coverage mapping information and an email response to the site analysis requirement is provided and serves as the alternatives site analysis, included in the findings by reference, that support this location selection. Staff concurs with the applicant with regard to site selection based on the information provided. Staff also finds that this site is ideal in terms of limiting visual impacts to surrounding properties and sensitive scenic receptors. Another site would only be recommended by staff if the selected site will result in significant visual impacts to surrounding properties or to a sensitive scenic corridor. This site is not visible to any scenic corridor or to surrounding properties given the existing mature trees between properties. Additional alternative site analysis is not necessary at this time for these reasons.

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 existing residential and commercial use of the subject property is in compliance with the requirements of the zone district and General Plan designation, in which it is located. It should be noted that the subject application was determined to be "complete" prior to adoption of the recently revised wireless communication facilities. The Board of Supervisors excluded complete applications from current wireless facility regulations. However, the proposed project complies with both the previous ordinance and recently adopted ordinance language. It should be noted that the ordinance amends standards addressing co-located facilities and location of facilities within close proximity to schools. The proposed project is considered a new wireless facility and not a co-located facility.

The subject parcel is zoned RA (Residential Agriculature), an identified "Restricted Zone District." New wireless transmission facilities are allowed uses within the restricted zone district pursuant to County Code Section 13.10.661, where it can be determined that the facility will "eliminate or substantially reduce one or more significant gaps in the applicant carrier's network; and there are no viable, technically feasible, and environmentally equivalent or superior alternatives outside the prohibited and restricted areas.. that would eliminate or substantially reduce said significant gaps." The applicant had originally located this cell facility at this location, and received approval, because it would eliminate a gap in their network. And pursuant to this code section, the proposed site also minimizes visual intrusion to surrounding properties and to scenic corridors because it is not visible to surrounding properties or to any scenic corridor. Furthermore, the project will be brought into compliance with issuance of this use permit and issuance of a building permit for the facility.

No zoning violation abatement fees are applicable to the subject property even though this site is currently operating without a permit.

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 proposed antennas will be located below the aircraft travel path.

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 radio frequency exposure levels were evaluated based on the power densities resulting from the operation of the existing as well as the proposed antennae array. The analysis was conducted by TRK Engineering. The result shown on Exhibit H, indicate that the maximum ambient RF levels at ground level due to the existing wireless communications facilities and the proposed operation are calculated to be 36 % percent of the most restrictive applicable limit and the maximum exposure on nearby buildings is .76% of the most restrictive applicable limit worst case.

6. For wireless communication facilities in the coastal zone, the proposed wireless

communication facility as conditioned is consistent with the applicable requirements of the Local Coastal Program.

The proposed project site is not located within the coastal zone.

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 project is located in an area designated for Wireless uses and is not encumbered by physical constraints to development. Construction will comply with prevailing building technology, the California Building Code, and the County Building ordinance to insure the optimum in safety and the conservation of energy and resources. The proposed wireless use will not deprive adjacent properties or the neighborhood of light, air, or open space, in that the structure meets all current setbacks that ensure access to light, air, and open space in the neighborhood. However, an air conditioning unit located on the outside of the equipment building intermittently turns on to cool the inside temperature. Staff was contacted by neighboring property owner that complained of noise from this site disrupting their sleep during the night. This unit turned on during the staff site visit and although the noise level is low, it seems appropriate that noise generation be limited so that the quiet character of the residential zone district can be maintained. Thus, the project is conditioned to eliminate this air conditioning unit from the building prior to issuance of a building permit. Other suitable design alternatives may be provided in the building plans such as the creation of air vents, or other design that allows for air circulation to occur without noise generation. Changes to the design will not affect the visibility of the facility to neighboring properties and does not require additional approval. The project is also conditioned to prohibit generators from the site to avoid the same noise issues.

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 proposed location of the cell facility and the conditions under which it would be operated or maintained will be consistent with all pertinent County ordinances and the purpose of the RA (Residential Agriculture) zone district in that the primary use of the property will be one residential dwelling.

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 proposed cell facility is consistent with the use and density requirements specified for the RR (Rural Residential) land use designation in the County General Plan.

The proposed cell facility will not adversely impact the light, solar opportunities, air, and/or open space available to other structures or properties, and meets all current site and development standards for the zone district as specified in Policy 8.1.3 (Residential Site and Development Standards Ordinance), in that the cell facility will not adversely shade adjacent properties.

The proposed cell facility will not be improperly proportioned to the parcel size or the character of the neighborhood as specified in General Plan Policy 8.6.1 (Maintaining a Relationship Between Structure and Parcel Sizes), in that the proposed cell facility will comply with the site standards for the Residential Agriculture zone district (including, lot coverage, floor area ratio, height, setbacks, and number of stories) and will result in a structure consistent with a design that could be approved on any similarly sized lot in the vicinity. In addition, the monopole and other antennas are not visible from surrounding properties, which comply with General Plan and Zoning Ordinance policies limiting visual impacts.

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.

This finding can be made, in that the proposed facility will not generate additional traffic except that necessary to add the proposed antenna and service the facility, or adversely impact existing roads and intersections in the surrounding area. However, the project has been conditioned to require the property owner to enter into the road maintenance association, if they have not already done so, to cover the share of road improvement costs associated with the dwelling and wireless facility.

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 proposed cell facility is currently situated among existing trees, which screen the structures (pole and building) from view. This existing facility is only visible once you are on the subject property adjacent to the development because the property slopes up a steep hill from the property line to the location of the development. 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.

Conditions of Approval

Development Permit No. 08-0256
Property Owner: Camille and Timothy Washovich
Assessor's Parcel No.: 040-271-62

Exhibit A: Project plans prepared by Jeffrey Rome and Associates, dated 5/22/08

I. This permit recognizes a 48 foot monopole with antenna, three panel antennas installed on a single family dwelling, existing equipment building, installation of one new equipment cabinet, one antenna, and the reuse and conversion of one existing GSM antenna for use as a UMTS antenna located on the existing deck support. 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. The applicant shall remove the air conditioning unit from the existing equipment facility. The applicant shall obtain any necessary building permits for said work including a demolition permit, as needed.

II. Prior to issuance of a Building Permit the applicant/owner shall:

A. Submit proof that these conditions have been recorded in the official records of the County of Santa Cruz (Office of the County Recorder).

B. 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

EXHIBIT C

been approved with this Discretionary Application, in addition to showing the materials and colors on the elevation, the applicant shall supply a color and material board in 8 ½" x 11" format for Planning Department review and approval

2. Grading, drainage, and erosion control plans.

3. The building plans must include a roof plan and a surveyed contour map of the ground surface, superimposed and extended to allow height measurement of all features. Spot elevations shall be provided at points on the structure that have the greatest difference between ground surface and the highest portion of the structure above. This requirement is in addition to the standard requirement of detailed elevations and cross-sections and the topography of the project site which clearly depict the total height of the proposed structure. Maximum height is 28-feet.

4. Details showing compliance with fire department requirements, including all requirements of the Urban Wildland Intermix Code, if applicable.

5. Building plans shall eliminate the generator receptacle from the building plans to ensure that a generator is prohibited from this site.

C. 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.

D. Obtain an Environmental Health Clearance for this project from the County Department of Environmental Health Services.

E. Meet all requirements and pay any applicable plan check fee of the Aptos La Selva Fire Protection District.

F. Submit 3 copies of a soils report prepared and stamped by a licensed Geotechnical Engineer for review and approval.

G. Submit a written statement signed by an authorized representative of the school district in which the project is located confirming payment in full of all applicable developer fees and other requirements lawfully imposed by the school district.

H. Submit evidence that the property owner has joined the Skyward Road maintenance association.

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 wireless communication facility may not be connected to a power source or operated until a final inspection and clearance from the Santa Cruz County Planning Department has been received.

B. The use of temporary generators to power the wireless communication facility are not allowed.

C. All noise generated from the approved use shall be contained on the property.

D. 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.

E. Any existing vegetative screening of the project site and facilities must be maintained throughout the duration of the approved use. Tree removals or excessive pruning which reduce the visual screening of the project site are not allowed. If visual screening is reduced due to natural causes, replacement trees will be required which provide adequate visual screening of the project site and facilities.

F. 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.

G. 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.

H. 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.

I. 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.

J. Any modification in the type of equipment shall be reviewed and acted on by the Planning Department staff. The County may deny the modification or amend the approved conditions at that time, or the Planning Director may refer it for public hearing before the Zoning Administrator.

K. The access road shall be permanently maintained to allow access to emergency vehicles at all times. Any obstruction of the access road, as a result of neglect or lack of maintenance, will be in violation of the conditions of this permit.

L. The equipment cabinet area must be locked at all times except when authorized personnel are present. The antennas must not be accessible to the public.

M. All site, building, security and landscape lighting shall be directed onto the lease site and away from adjacent properties. Light sources shall not be visible from adjacent properties. Building and security lighting shall be integrated into the building design and shall be operated with a manual on/off switch. The site shall be unlit except when authorized personnel are present at night.

N. Transfer of Ownership: In the event that the original permittee sells its interest in the permitted wireless communications facility, the succeeding carrier shall assume all responsibilities concerning the project and shall be held responsible to the County for maintaining consistency with all project conditions of approval,

including proof of liability insurance. Within 30-days of a transfer of ownership, the succeeding carrier shall provide a new contact name to the Planning Department.

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, it 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 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 two 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: _____

Don Bussey	Sheila McDaniel
Deputy Zoning Administrator	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.

EXHIBIT C

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: 08-0256
Assessor Parcel Number: 040-271-62
Project Location: 685 Skyward Drive, Aptos, CA 95003

Project Description: Recognize a 48 foot monopole with antenna, generator, propane tank for an existing facility that includes 3 antennas on a single family dwelling, 1 new cabinet, 1 antenna, and reuse 1 existing antenna on deck support.

Person or Agency Proposing Project: James Cosgrove

Contact Phone Number: (415) 233-3838

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. __X__ **Categorical Exemption**

Specify type: Class 1 - Existing Facilities (Section 15301)
Class 3- New Small Structures

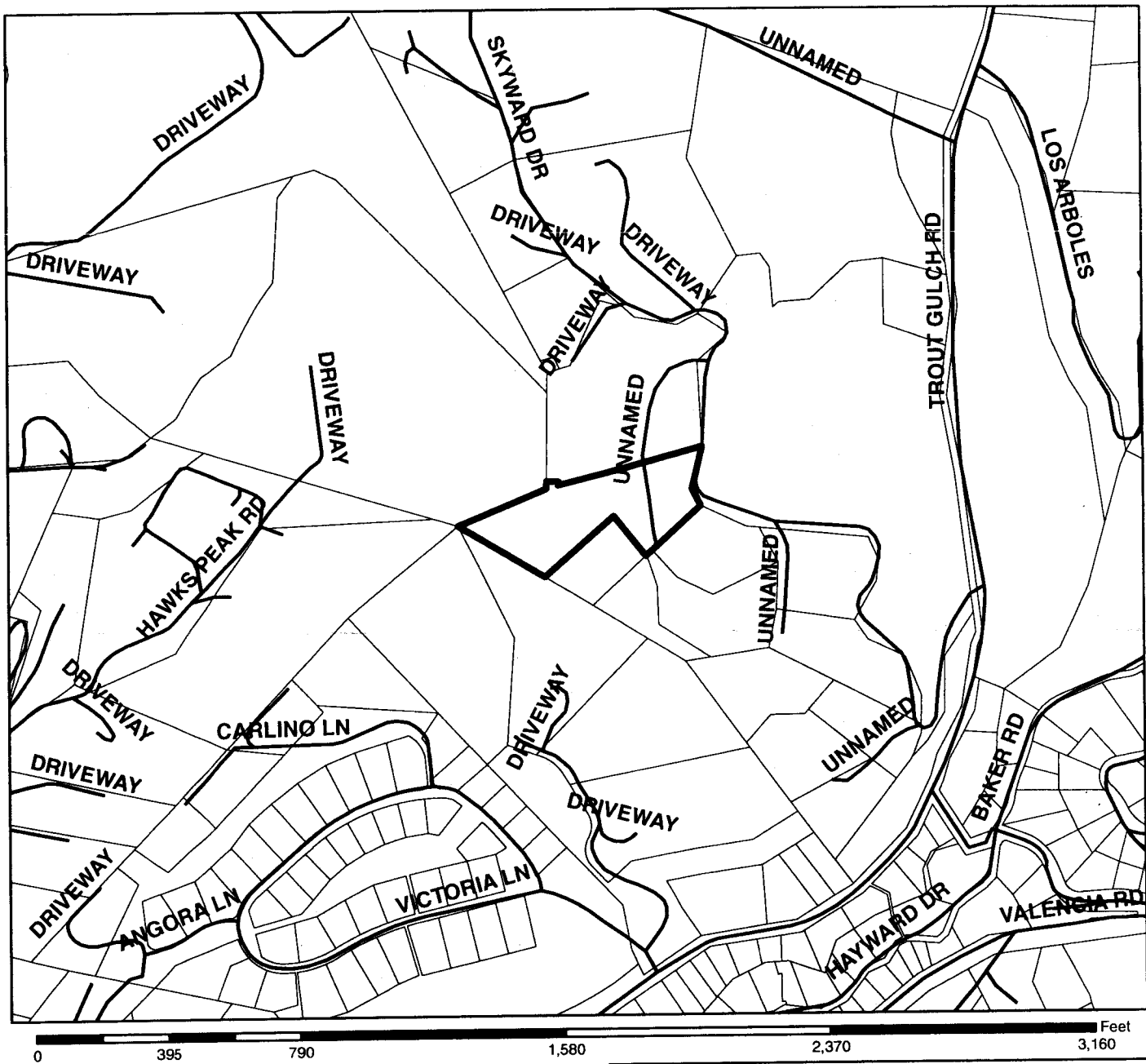
F. Reasons why the project is exempt:

Proposal to recognize an existing wireless communication facilities and make minor modifications to the structure and use.
In addition, none of the conditions described in Section 15300.2 apply to this project.

_____ Date: _____
Sheila McDaniel, Project Planner

EXHIBIT D

Location Map



LEGEND

- APN: 040-271-62
- Assessors Parcels
- Streets

N
W E
S

Map Created by
County of Santa Cruz
Planning Department
June 2008

EXHIBIT E

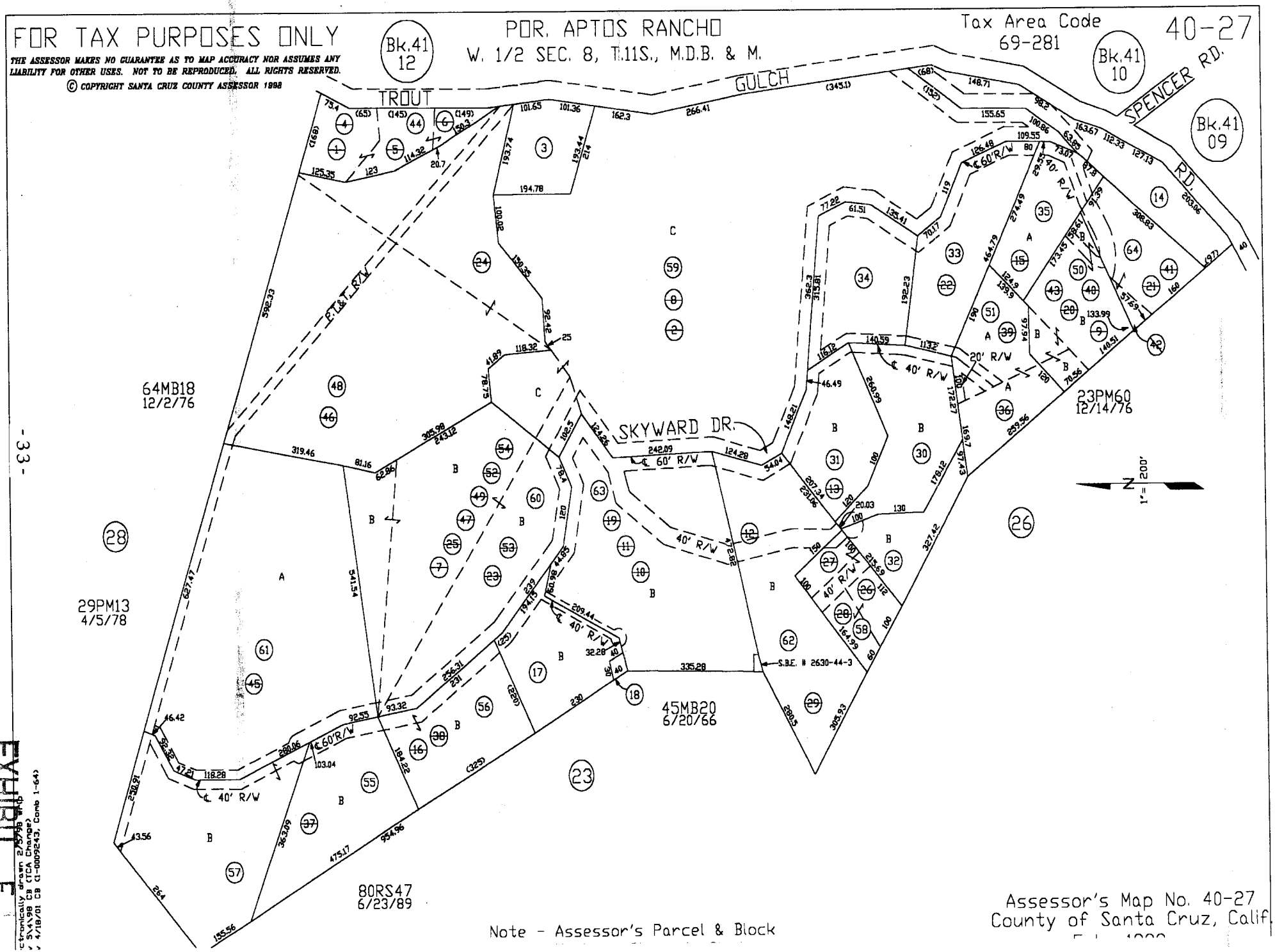
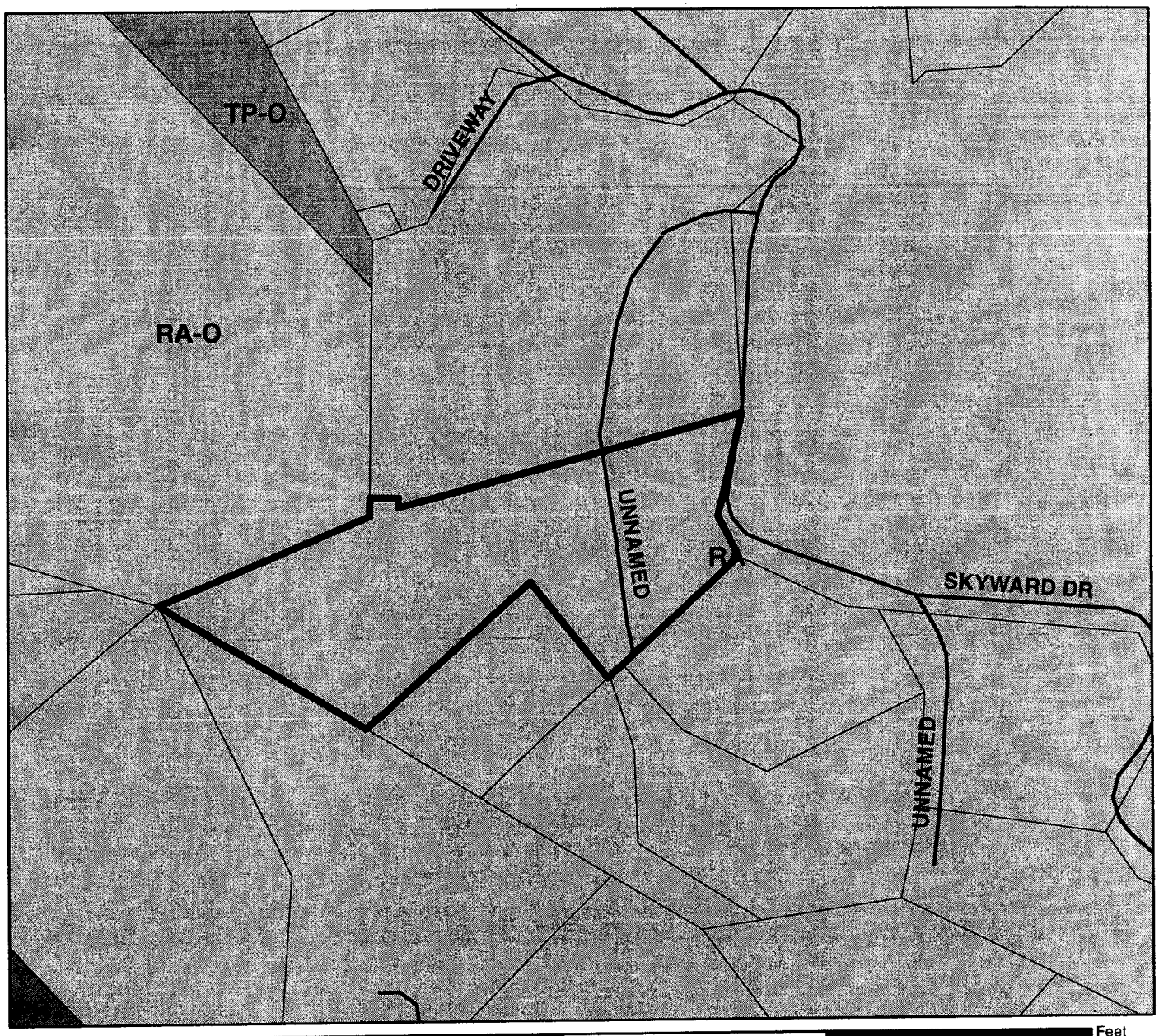

FOR TAX PURPOSES ONLY
THE ASSESSOR MAKES NO GUARANTEE AS TO MAP ACCURACY NOR ASSUMES ANY LIABILITY FOR OTHER USES. NOT TO BE REPRODUCED. ALL RIGHTS RESERVED.
© COPYRIGHT SANTA CRUZ COUNTY ASSESSOR 1998
Bk.41 12
POR. APTOS RANCHO
W. 1/2 SEC. 8, T.11S., M.D.B. & M.
Tax Area Code 69-281
40-27
Bk.41 10
Bk.41 09
TROUT GULCH
SPENCER RD.
SKYWARD DR.
64MB18 12/2/76
29PM13 4/5/78
80RS47 6/23/89
45MB20 6/20/66
23PM60 12/14/76
S.B.E. # 2630-44-3
Note - Assessor's Parcel & Block
Assessor's Map No. 40-27
County of Santa Cruz, Calif.

EXHIBIT E

Zoning Map



0 165 330 660 990 1,320 Feet

LEGEND

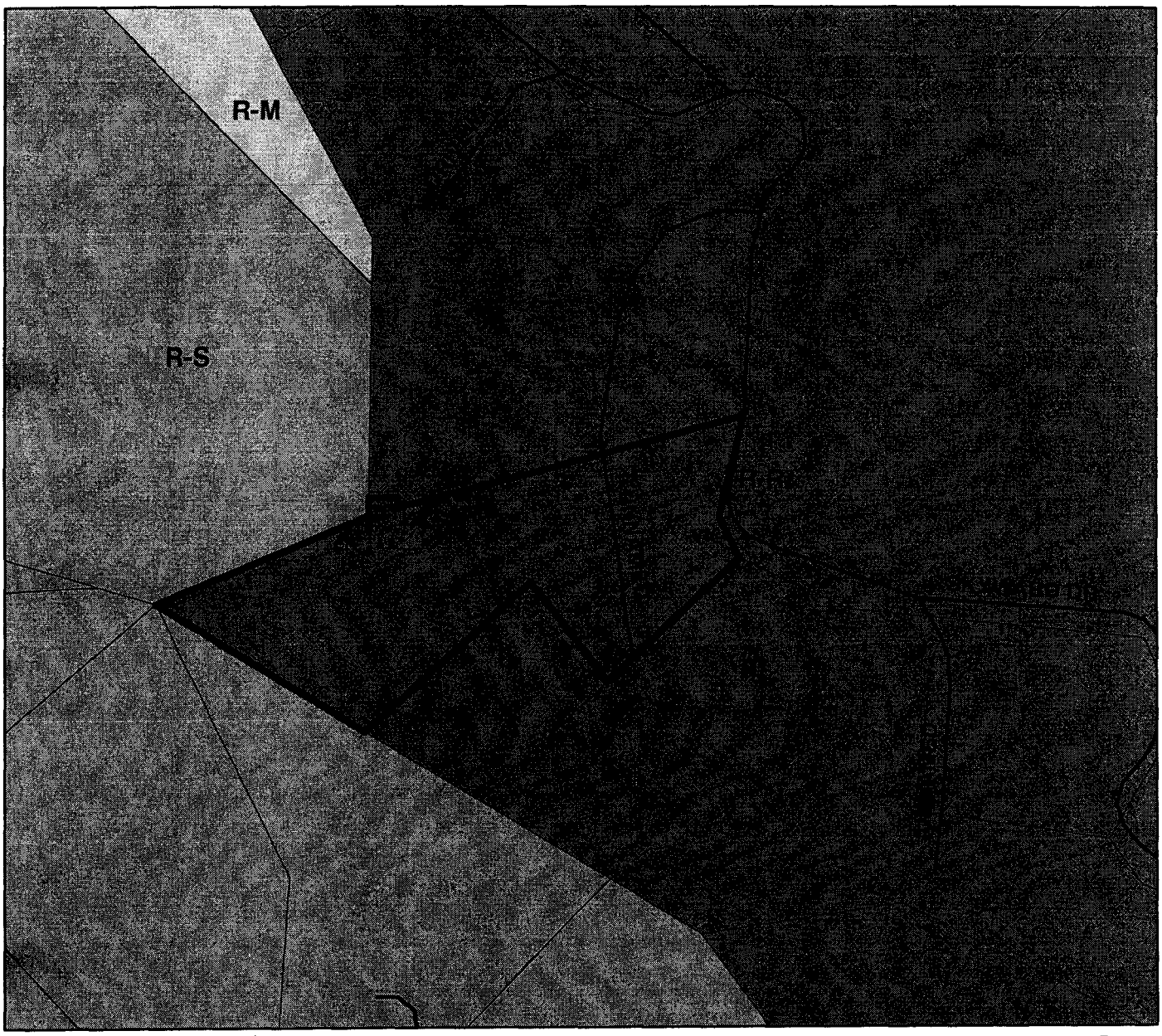
- APN: 040-271-62
- Assessors Parcels
- Streets
- AGRICULTURE RESIDENTIAL
- TIMBER PRODUCTION
- PARK

N
W E
S

Map Created by
County of Santa Cruz
Planning Department
June 2008

EXHIBIT F

General Plan Designation Map



0 165 330 660 990 1,320 Feet

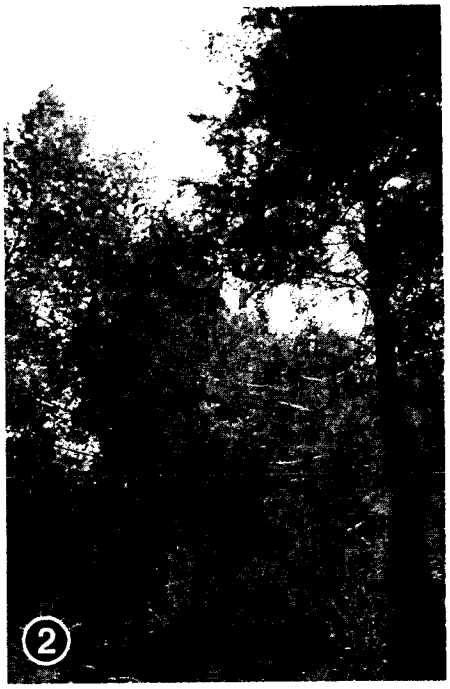
LEGEND

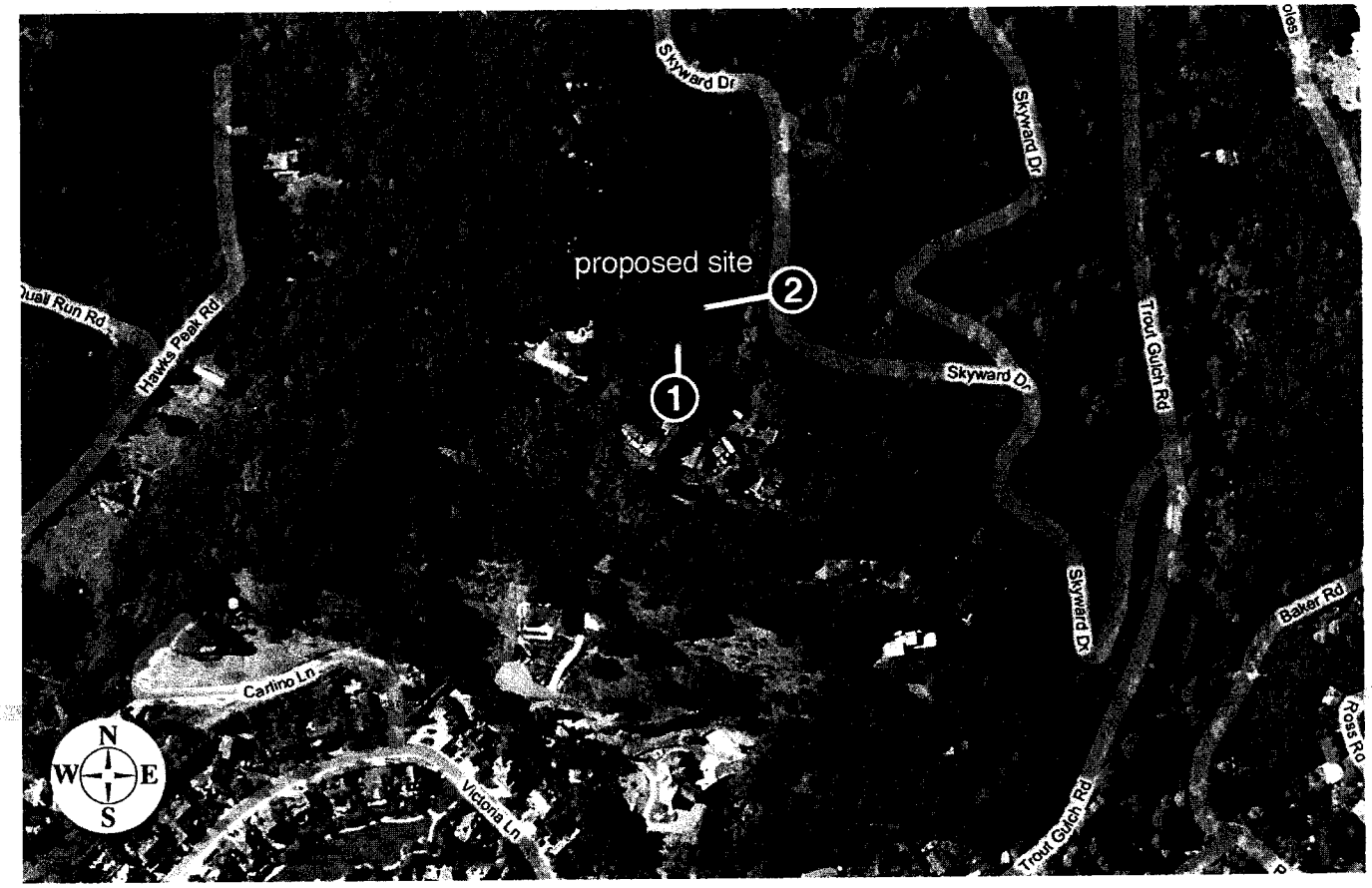
- APN: 040-271-62
- Assessors Parcels
- Streets
- Residential-Rural
- Residential-Mountain
- Residential-Suburban

N
W E
S

Map Created by
County of Santa Cruz
Planning Department
June 2008

EXHIBIT F





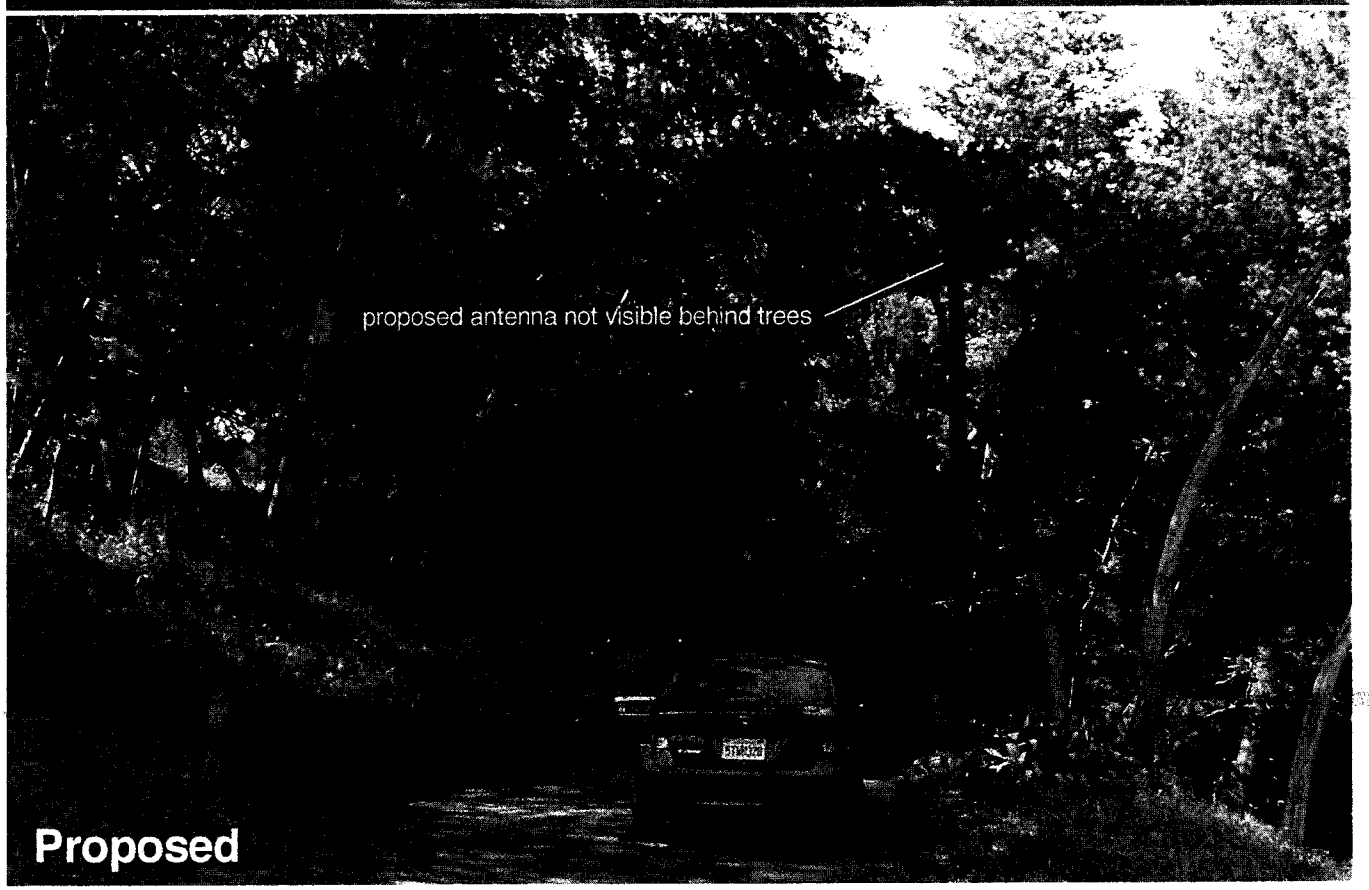
at&t **Jackson Overlay** **Site # CNU3498** **Aerial Map**

685 Skyward Drive
Aptos, CA 95003

5/14/08

Applied Imagination 510 914-0500

EXHIBIT G



at&t

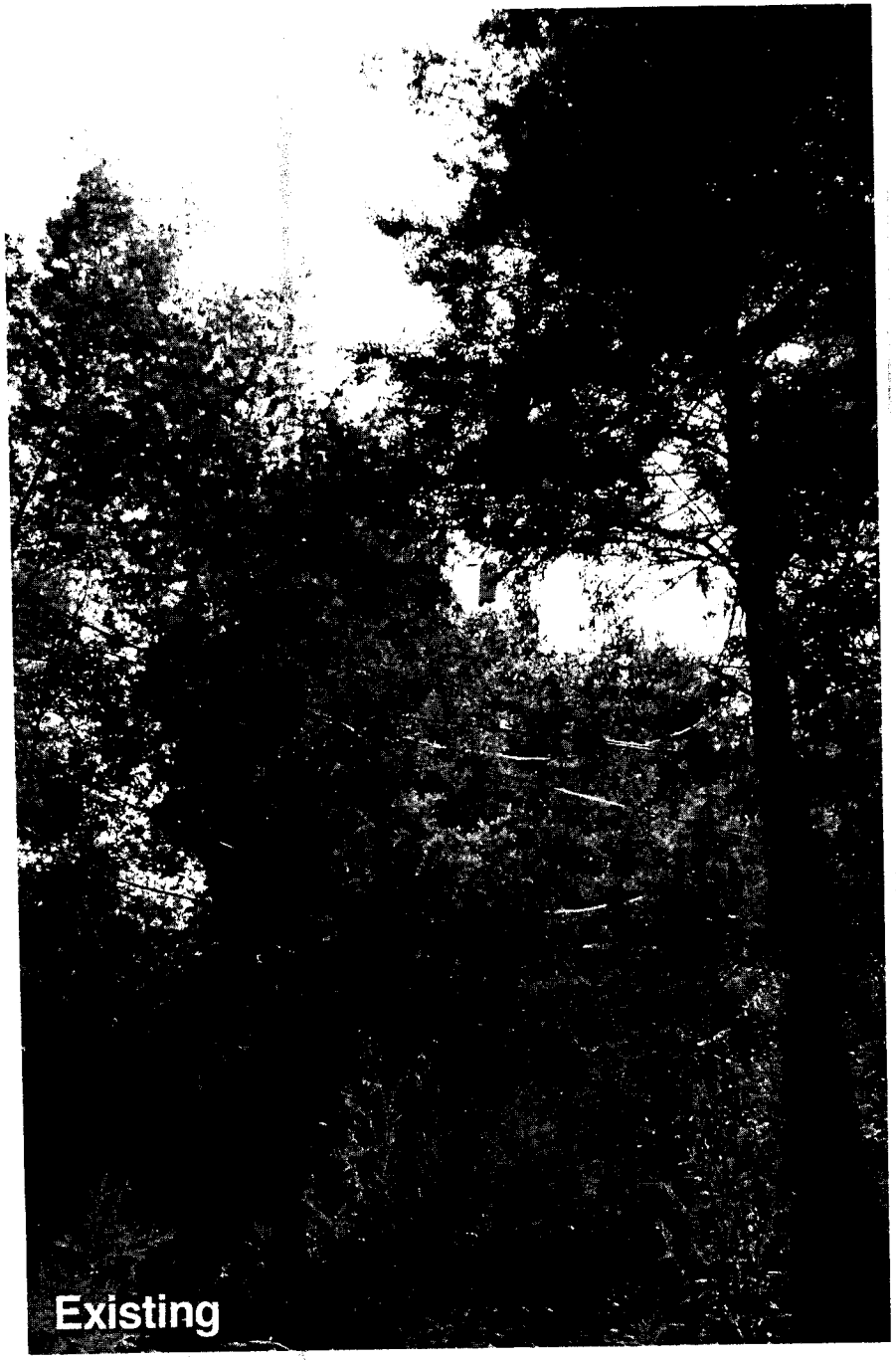
Jackson Overlay **Site # CNU3498** **Looking North from Site**

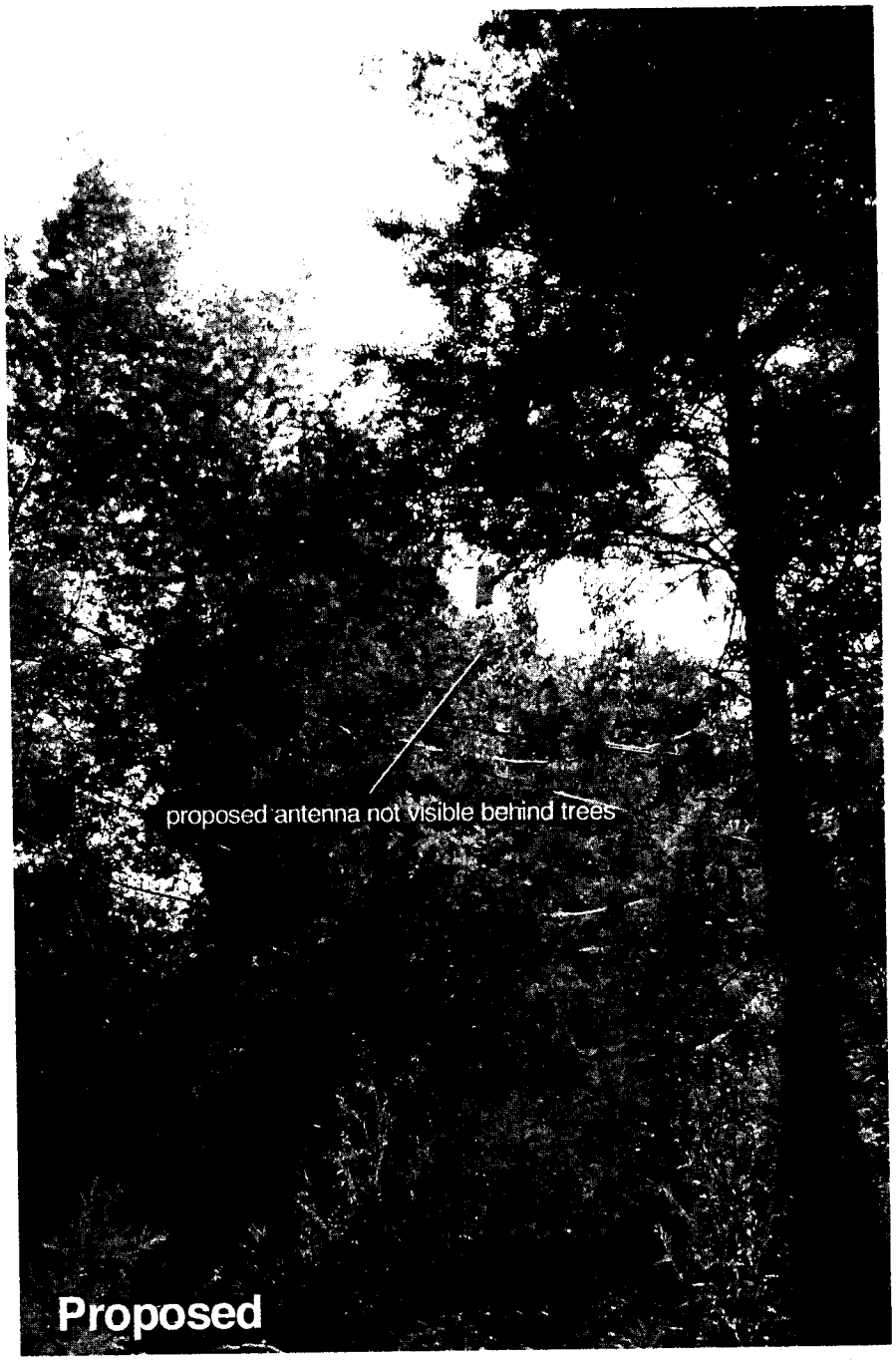
685 Skyward Drive
Aptos, CA 95003

5/14/08

Applied Imagination 510 914-0500

EXHIBIT G





at&t

Jackson Overlay **Site # CNU3498**

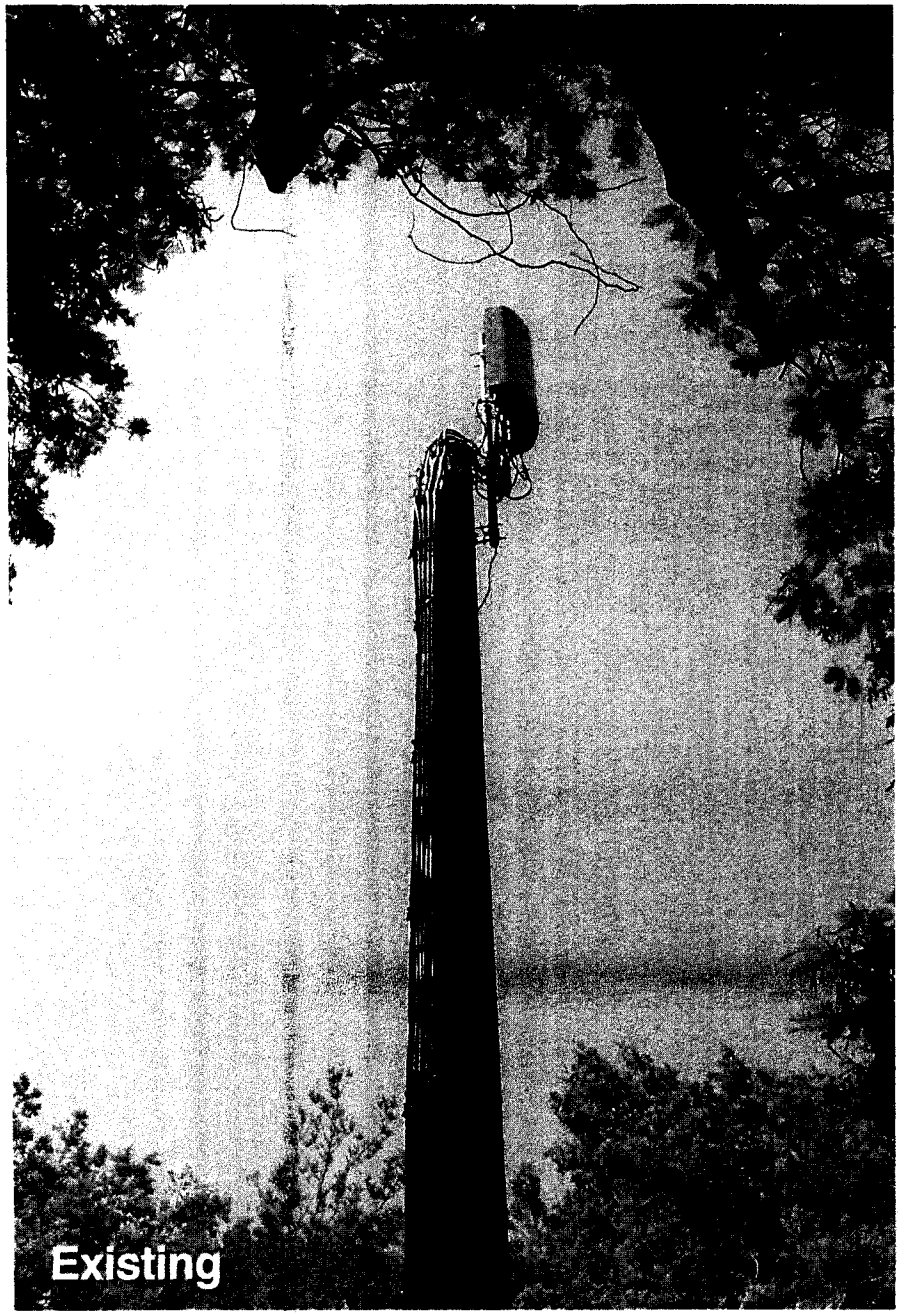
685 Skyward Drive
Aptos, CA 95003

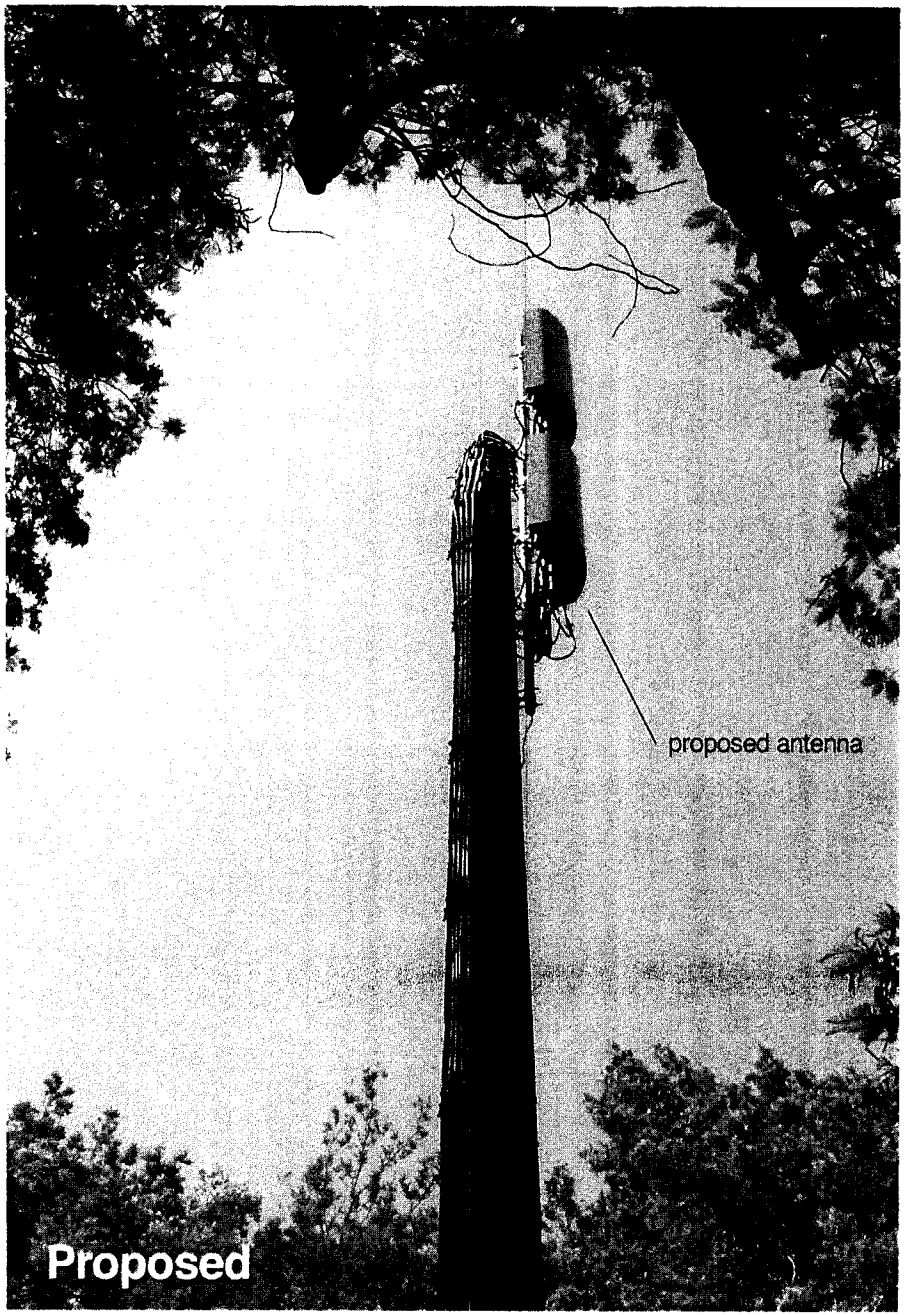
Looking West from Skyward Drive

5/14/08

Applied Imagination 510 914-0500

EXHIBIT G





at&t

Jackson Overlay **Site # CNU3498**

685 Skyward Drive
Aptos, CA 95003

5/14/08

Looking North

Applied Imagination 510 914-0500

EXHIBIT G

EXHIBIT G

TRK ENGINEERING

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

Prepared for:

at&t

CNU3498
JACKSON OVERLAY
685 SKYWARD DRIVE
APTOS, CA
95003

MAY 30/08, REV. 0

EXHIBIT H

SITE DESCRIPTION:

Carrier:	AT&T
Address:	685 Skyward Drive, Aptos, CA 95003
Type of Service:	1. UMTS, 2. GSM *(1900 MHz and 850 MHz Broadband PCS)*
Sectors:	2 (215°, 100°)
Antenna Type:	Kathrein 742 264, Decibel QBXLH-6565A-VTM
Number of Antennas:	sector B (3), sector C (2)
Maximum Power:	500 W *(Maximum ERP per technology per sector)*
Antenna Height:	10'±, 38.75'±, 45'± *(Radiation center AGL)*

Table 1. AT&T RF summary

AT&T is proposing to deploy new UMTS in addition to the existing GSM services at its wireless communication facility located at the above address (Figure 1). Sector C consists of a 40' wood pole with two directional antennas inside a compound surrounded by retaining wall. Sector B is located 160' away on a building roof deck with three directional antennas. The building is surrounded by 4' high chain link fence and gates. One new indoor equipment cabinet will be installed inside the existing shelter. Access to the facilities is restricted to authorized personnel.

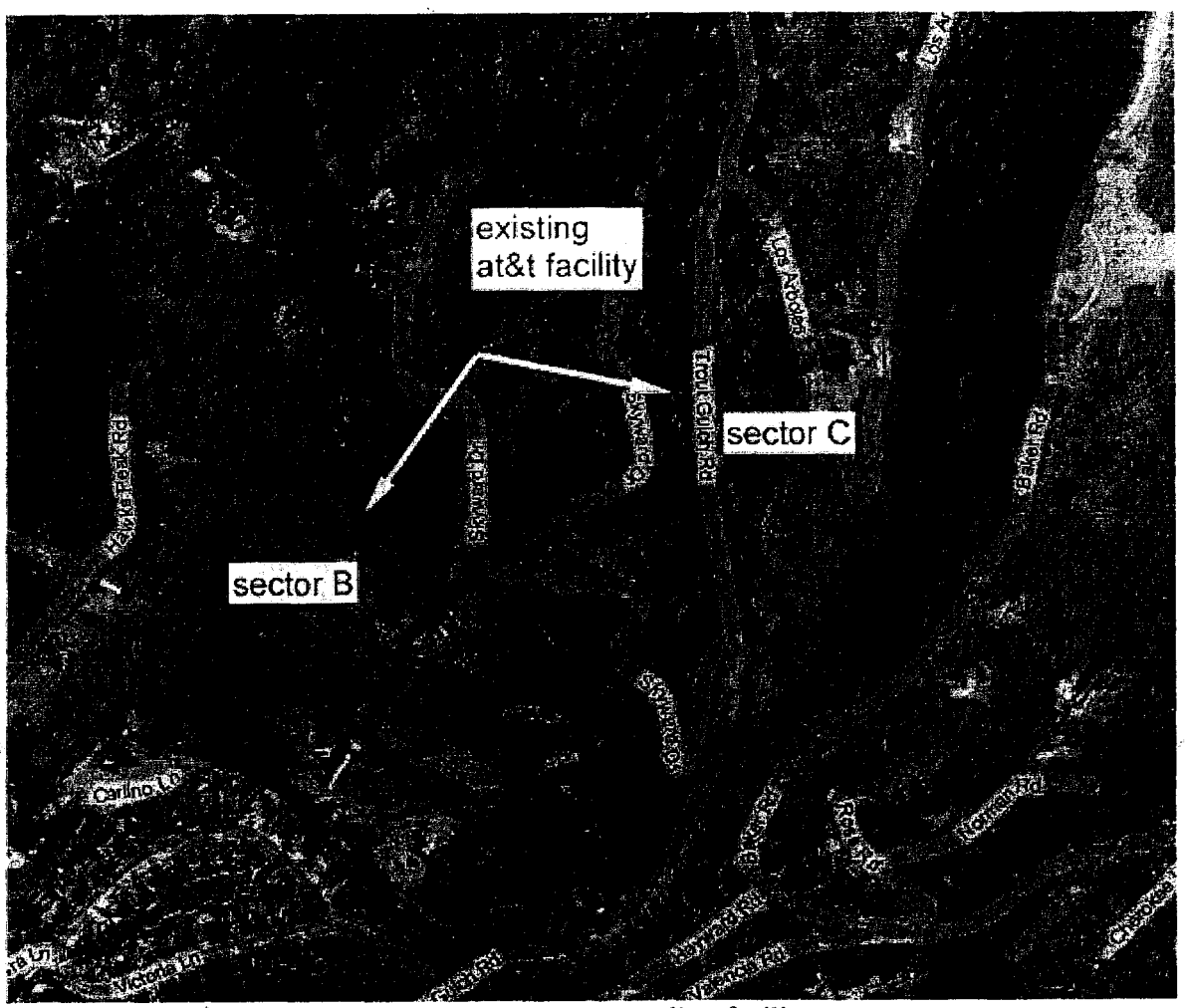


Figure 1. Area surrounding facility

EXHIBIT H

PROTOCOL:

This study, and the calculations performed therein, is based on OET Bulletin 65[1] 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:

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

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 7' from the roof deck. 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 %
GSM 850	500 W	-12 dB (0.0631)	2.4	88.6388	15.2826
GSM 1900	500 W	-20 dB (0.0100)	2.4	28.0503	2.8050
UMTS 850	500 W	-12 dB (0.0631)	2.4	88.6388	15.2826
UMTS 1900	500 W	-20 dB (0.0100)	2.4	28.0503	2.8050
Total					36.1752

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

The Maximum Permissible Exposure (MPE) limit for 1900 MHz PCS facility for general population/uncontrolled exposure is 1000 $\mu W/cm^2$, and 580 $\mu W/cm^2$ for 850 MHz facility[2]. At this location, the power density from the facility is calculated to be 36.2% 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.

EXHIBIT H

Scenario 2: *Maximum Exposure on nearby buildings*

In the surrounding areas, there are low density residential houses. The RF exposure levels on the nearby buildings are 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. The maximum exposure is found to be on the rooftop of the nearest building to the facility. The calculations for this location are summarized in Table 3. The highest exposure location is found to be approximately 360' from the sector B antennas. The maximum power density is calculated to be 0.76% of the MPE limit.

Service	Max. ERP	F^2	R (m)	S ($\mu W/cm^2$) (from eq. 1)	MPE %
GSM 850	500 W	0 dB (1.0000)	109.8	1.3865	0.2390
GSM 1900	500 W	0 dB (1.0000)	109.8	1.3865	0.1386
UMTS 850	500 W	0 dB (1.0000)	109.8	1.3865	0.2390
UMTS 1900	500 W	0 dB (1.0000)	109.8	1.3865	0.1386
Total					0.7552

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

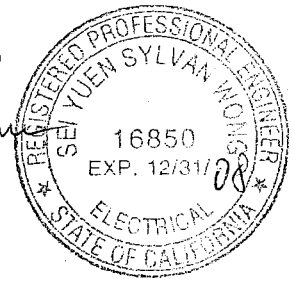
Conclusion:

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 36.2% of the MPE limit. There will be less RF exposure at other locations near or away from the compound. Therefore, the proposed modifications to 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, 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.



May 30, 2008

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

EXHIBIT H

APPENDIX A

FCC'S MAXIMUM PERMISSIBLE EXPOSURE (MPE) LIMIT:

Equation 10 from Bulletin 65 is reproduced here as equation 1:

$$S = \frac{33.4 F^2 ERP}{R^2}$$

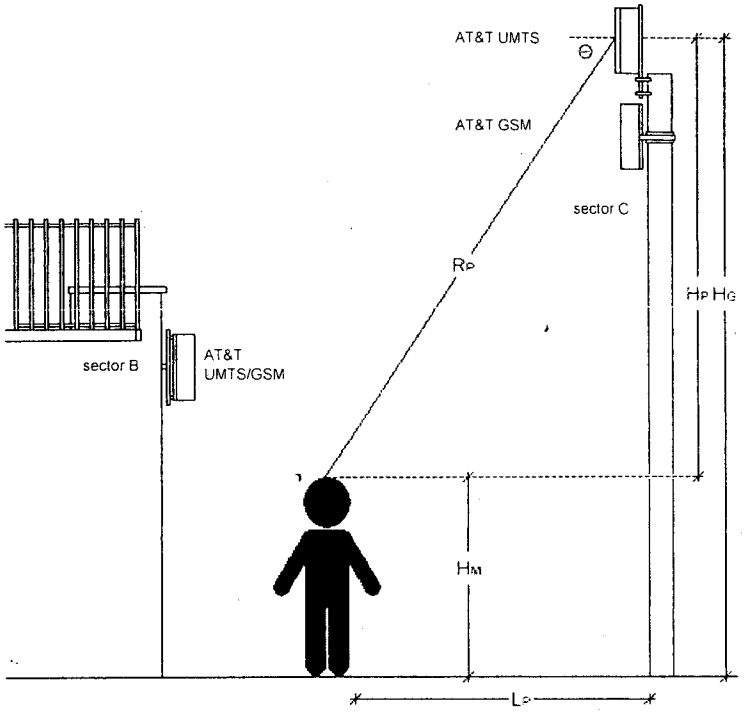
Where:

S = Power density [$\mu W/cm^2$]
ERP = Effective radiated power [W]
R = Distance [m]
F = Relative field factor
$L_P = H_P \times \tan^{-1}(\Theta)$

$R_P = \sqrt{H_P^2 + L_P^2}$

Relative Field Factor at Θ

$F^2 = 10^{\frac{F^2}{10}}$ (in term of power density)



Scenario 1: Standing Near The Facility

The highest exposure location at ground from the antenna

person's height (H_M) = 6 ft

Sector C

At Θ = 75 °, the exposure location at ground from the monopole L_P = 9 ft

Service Provider	Height H_G, ft	Height H_P, ft	Max. ERP	Angle Θ	F^2	R_P(m)	S (μW/cm2)	MPE%
AT&T GSM 850	38.75	32.75	500.0	Θ = 75 °	-22 dB (0.0063)	10.3	0.9840	0.1697
AT&T GSM 1900	38.75	32.75	500.0	Θ = 75 °	-15 dB (0.0316)	10.3	4.9359	0.4936
AT&T UMTS 850	45.00	39.00	500.0	Θ = 77 °	-30 dB (0.0010)	12.2	0.1124	0.0194
AT&T UMTS 1900	45.00	39.00	500.0	Θ = 77 °	-28 dB (0.0016)	12.2	0.1798	0.0180
						Total		0.7007

At Θ = 45 °, the exposure location at ground from the monopole L_P = 33 ft

Service Provider	Height H_G, ft	Height H_P, ft	Max. ERP	Angle Θ	F^2	R_P(m)	S (μW/cm2)	MPE%
AT&T GSM 850	38.75	32.75	500.0	Θ = 45 °	-12 dB (0.0631)	14.1	5.2854	0.9113
AT&T GSM 1900	38.75	32.75	500.0	Θ = 45 °	-15 dB (0.0316)	14.1	2.6469	0.2647
AT&T UMTS 850	45.00	39.00	500.0	Θ = 50 °	-18 dB (0.0158)	15.5	1.0940	0.1886
AT&T UMTS 1900	45.00	39.00	500.0	Θ = 50 °	-24 dB (0.0040)	15.5	0.2770	0.0277
						Total		1.3923

At Θ = 30 °, the exposure location at ground from the monopole L_P = 57 ft

Service Provider	Height H_G, ft	Height H_P, ft	Max. ERP	Angle Θ	F^2	R_P(m)	S (μW/cm2)	MPE%
AT&T GSM 850	38.75	32.75	500.0	Θ = 30 °	-15 dB (0.0316)	20.0	1.3233	0.2282
AT&T GSM 1900	38.75	32.75	500.0	Θ = 30 °	-20 dB (0.0100)	20.0	0.4188	0.0419
AT&T UMTS 850	45.00	39.00	500.0	Θ = 35 °	-20 dB (0.0100)	21.0	0.3790	0.0653
AT&T UMTS 1900	45.00	39.00	500.0	Θ = 35 °	-16 dB (0.0251)	21.0	0.9514	0.0951
						Total		0.4305

At Θ = 10 °, the exposure location at ground from the monopole L_P = 186 ft

Service Provider	Height H_G, ft	Height H_P, ft	Max. ERP	Angle Θ	F^2	R_P(m)	S (μW/cm2)	MPE%
AT&T GSM 850	38.75	32.75	500.0	Θ = 10 °	-5 dB (0.3162)	57.5	1.5971	0.2754
AT&T GSM 1900	38.75	32.75	500.0	Θ = 10 °	-14 dB (0.0398)	57.5	0.2010	0.0201
AT&T UMTS 850	45.00	39.00	500.0	Θ = 12 °	-5 dB (0.3162)	57.9	1.5773	0.2719
AT&T UMTS 1900	45.00	39.00	500.0	Θ = 12 °	-14 dB (0.0398)	57.9	0.1985	0.0199
						Total		0.5873

EXHIBIT H

Sector B

Within in facility compound

At Θ = 75 ° , the exposure location at ground from the roof deck L_P = 1 ft

Service Provider	Height H_G, ft	Height H_P, ft	Max. ERP	Angle Θ	F^2	R_P(m)	S (μW/cm2)	MPE%
AT&T GSM 850	10.00	4.00	500.0	Θ = 75 °	-22 dB (0.0063)	1.3	66.2698	2.2852
AT&T GSM 1900	10.00	4.00	500.0	Θ = 75 °	-15 dB (0.0316)	1.3	332.4011	6.6480
AT&T UMTS 850	10.00	4.00	500.0	Θ = 75 °	-22 dB (0.0063)	1.3	66.2698	2.2852
AT&T UMTS 1900	10.00	4.00	500.0	Θ = 75 °	-15 dB (0.0316)	1.3	332.4011	6.6480
						Total		17.8664

Within in facility compound

At Θ = 60 ° , the exposure location at ground from the roof deck L_P = 2 ft

Service Provider	Height H_G, ft	Height H_P, ft	Max. ERP	Angle Θ	F^2	R_P(m)	S (μW/cm2)	MPE%
AT&T GSM 850	10.00	4.00	500.0	Θ = 60 °	-22 dB (0.0063)	1.4	52.9199	1.8248
AT&T GSM 1900	10.00	4.00	500.0	Θ = 60 °	-20 dB (0.0100)	1.4	83.9998	1.6800
AT&T UMTS 850	10.00	4.00	500.0	Θ = 60 °	-22 dB (0.0063)	1.4	52.9199	1.8248
AT&T UMTS 1900	10.00	4.00	500.0	Θ = 60 °	-20 dB (0.0100)	1.4	83.9998	1.6800
						Total		7.0096

Within in facility compound

At Θ = 45 ° , the exposure location at ground from the roof deck L_P = 4 ft

Service Provider	Height H_G, ft	Height H_P, ft	Max. ERP	Angle Θ	F^2	R_P(m)	S (μW/cm2)	MPE%
AT&T GSM 850	10.00	4.00	500.0	Θ = 45 °	-12 dB (0.0631)	1.7	356.1959	12.2826
AT&T GSM 1900	10.00	4.00	500.0	Θ = 45 °	-15 dB (0.0316)	1.7	178.3802	3.5676
AT&T UMTS 850	10.00	4.00	500.0	Θ = 45 °	-12 dB (0.0631)	1.7	356.1959	12.2826
AT&T UMTS 1900	10.00	4.00	500.0	Θ = 45 °	-15 dB (0.0316)	1.7	178.3802	3.5676
						Total		31.7004

At Θ = 30 ° , the exposure location at ground from the roof deck L_P = 7 ft

Service Provider	Height H_G, ft	Height H_P, ft	Max. ERP	Angle Θ	F^2	R_P(m)	S (μW/cm2)	MPE%
AT&T GSM 850	10.00	4.00	500.0	Θ = 30 °	-15 dB (0.0316)	2.4	88.6388	15.2826
AT&T GSM 1900	10.00	4.00	500.0	Θ = 30 °	-20 dB (0.0100)	2.4	28.0503	2.8050
AT&T UMTS 850	10.00	4.00	500.0	Θ = 30 °	-15 dB (0.0316)	2.4	88.6388	15.2826
AT&T UMTS 1900	10.00	4.00	500.0	Θ = 30 °	-20 dB (0.0100)	2.4	28.0503	2.8050
						Total		36.1752

At Θ = 15 ° , the exposure location at ground from the roof deck L_P = 15 ft

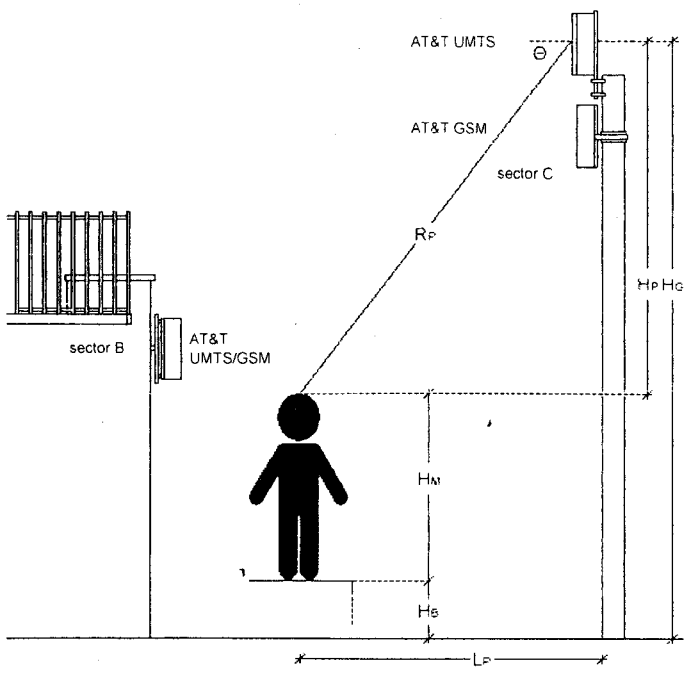
Service Provider	Height H_G, ft	Height H_P, ft	Max. ERP	Angle Θ	F^2	R_P(m)	S (μW/cm2)	MPE%
AT&T GSM 850	10.00	4.00	500.0	Θ = 15 °	-10 dB (0.1000)	4.7	75.2791	12.9792
AT&T GSM 1900	10.00	4.00	500.0	Θ = 15 °	-14 dB (0.0398)	4.7	29.9611	2.9961
AT&T UMTS 850	10.00	4.00	500.0	Θ = 15 °	-10 dB (0.1000)	4.7	75.2791	12.9792
AT&T UMTS 1900	10.00	4.00	500.0	Θ = 15 °	-14 dB (0.0398)	4.7	29.9611	2.9961
						Total		31.9506

At Θ = 5 ° , the exposure location at ground from the roof deck. L_P = 46 ft

Service Provider	Height H_G, ft	Height H_P, ft	Max. ERP	Angle Θ	F^2	R_P(m)	S (μW/cm2)	MPE%
AT&T GSM 850	10.00	4.00	500.0	Θ = 5 °	0 dB (1.0000)	14.0	85.3259	14.7114
AT&T GSM 1900	10.00	4.00	500.0	Θ = 5 °	-3 dB (0.5012)	14.0	42.7654	4.2765
AT&T UMTS 850	10.00	4.00	500.0	Θ = 5 °	0 dB (1.0000)	14.0	85.3259	14.7114
AT&T UMTS 1900	10.00	4.00	500.0	Θ = 5 °	-3 dB (0.5012)	14.0	42.7654	4.2765
						Total		37.9758

EXHIBIT H

Scenario 2: Nearby Buildings/ Rooftops



Relative Field Factor at Θ

$F^2 = 10^{\frac{F^2}{10}}$ (in term of power density)

$R_P = \sqrt{H_P^2 + L_P^2}$

$\Theta = \arctan(H_P/L_P)$

person's height (H_M) = 6 ft

Residential building within Sector B

H_B= 4 ft (360 ft from the roof deck)

Service Provider	Height H_G, ft	Height H_P, ft	Max. ERP	Angle Θ	F^2	R_P(m)	S (μW/cm2)	MPE%
GSM 850	10.00	0.00	500.0	Θ = 0 °	0 dB (1.0000)	109.8	1.3865	0.2390
GSM 1900	10.00	0.00	500.0	Θ = 0 °	0 dB (1.0000)	109.8	1.3865	0.1386
UMTS 850	10.00	0.00	500.0	Θ = 0 °	0 dB (1.0000)	109.8	1.3865	0.2390
UMTS 1900	10.00	0.00	500.0	Θ = 0 °	0 dB (1.0000)	109.8	1.3865	0.1386
						Total		0.7552

Residential building within Sector B

H_B= 4 ft (630 ft from the roof deck)

Service Provider	Height H_G, ft	Height H_P, ft	Max. ERP	Angle Θ	F^2	R_P(m)	S (μW/cm2)	MPE%
GSM 850	10.00	0.00	500.0	Θ = 0 °	0 dB (1.0000)	192.1	0.4527	0.0780
GSM 1900	10.00	0.00	500.0	Θ = 0 °	0 dB (1.0000)	192.1	0.4527	0.0453
UMTS 850	10.00	0.00	500.0	Θ = 0 °	0 dB (1.0000)	192.1	0.4527	0.0780
UMTS 1900	10.00	0.00	500.0	Θ = 0 °	0 dB (1.0000)	192.1	0.4527	0.0453
						Total		0.2466

Residential building within Sector C

H_B= 16 ft (400 ft from the monopole)

Service Provider	Height H_G, ft	Height H_P, ft	Max. ERP	Angle Θ	F^2	R_P(m)	S (μW/cm2)	MPE%
GSM 850	38.75	16.75	500.0	Θ = 2 °	0 dB (1.0000)	122.1	1.1209	0.1933
GSM 1900	38.75	16.75	500.0	Θ = 2 °	0 dB (1.0000)	122.1	1.1209	0.1121
UMTS 850	45.00	23.00	500.0	Θ = 3 °	0 dB (1.0000)	122.2	1.1192	0.1930
UMTS 1900	45.00	23.00	500.0	Θ = 3 °	0 dB (1.0000)	122.2	1.1192	0.1119
						Total		0.6103

Residential building within Sector C

H_B= 16 ft (680 ft from the monopole)

Service Provider	Height H_G, ft	Height H_P, ft	Max. ERP	Angle Θ	F^2	R_P(m)	S (μW/cm2)	MPE%
GSM 850	38.75	16.75	500.0	Θ = 1 °	0 dB (1.0000)	207.4	0.3883	0.0670
GSM 1900	38.75	16.75	500.0	Θ = 1 °	0 dB (1.0000)	207.4	0.3883	0.0388
UMTS 850	45.00	23.00	500.0	Θ = 2 °	0 dB (1.0000)	207.4	0.3881	0.0669
UMTS 1900	45.00	23.00	500.0	Θ = 2 °	0 dB (1.0000)	207.4	0.3881	0.0388
						Total		0.2115

EXHIBIT H

KATHREIN
SCALA DIVISION

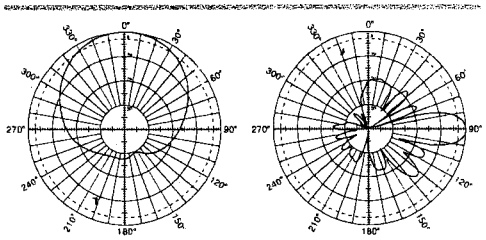
AP14/17-880/1940/065D/ADT/XXP **742-264**

65° Multiband 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.
- Remote control ready.
- Various gain, beamwidth and downtilt ranges.
- AISG compatible.
- High strength pultruded fiberglass radome.

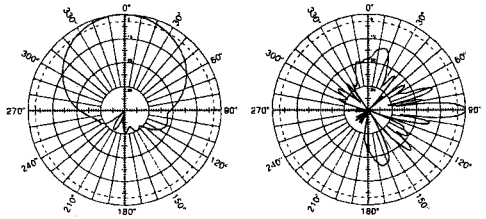
824–960 MHz



Horizontal pattern
±45°- polarization

Vertical pattern
±45°- polarization
0°–14° electrical downtilt

1710–2170 MHz



Horizontal pattern
±45°- polarization

Vertical pattern
±45°- polarization
0°–8° electrical downtilt

General specifications:

Frequency range	824–960 MHz 1710–2170 MHz
Impedance	50 ohms
VSWR	<1.5:1
Intermodulation (2x20w)	IM3: -150 dBc
Polarization	+45° and -45°
Connector	4 x 7/16 DIN female
Isolation intrasystem intersystem	>30 dB >50 dB (824–960 // 1710–2170 MHz)
Weight	36.4 lb (16.5 kg)
Dimensions	51.8 x 10.3 x 5.5 inches (1316 x 262 x 139 mm)
Equivalent flat plate area	4.13 ft² (0.384 m²)
Wind survival rating*	120 mph (200 kph)
Shipping dimensions	64 x 12 x 8 inches (1626 x 305 x 203 mm)
Shipping weight	45 lb (20.4 kg)
Mounting	Fixed mount options are available for 2 to 4.6 inch (50 to 115 mm) OD masts.

See reverse for order information.

Specifications:	**824–894 MHz**	**870–960 MHz**	**1710–1880 MHz**	**1850–1990 MHz**	**1920–2170 MHz**
Gain	12 dBd/14 dBi	12 dBd/14 dBi	14.5 dBd/16.5 dBi	14.8 dBd/16.8 dBi	15 dBd/17 dBi
Front-to-back ratio	>26 dB (co-polar)	>26 dB (co-polar)	>25 dB (co-polar)	>25 dB (co-polar)	>25 dB (co-polar)
Maximum input power	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 horizontal beamwidth	68° (half-power)	65° (half-power)	65° (half-power)	65° (half-power)	63° (half-power)
+45° and -45° polarization vertical beamwidth	16° (half-power)	14.5° (half-power)	7.8° (half-power)	7.3° (half-power)	6.8° (half-power)
Electrical downtilt continuously adjustable	0°–14°	0°–14°	0°–8°	0°–8°	0°–8°
Sidelobe suppression for first sidelobe above horizon	0° 7° 14° T 14 14 13 dB	0° 7° 14° T 14 14 13 dB	0° 4° 8° T 14 14 14 dB	0° 4° 8° T 16 16 15 dB	0° 4° 8° T 15 16 15 dB
Cross polar ratio Main direction 0° Sector ±60°	 20 dB (typical) >10 dB	 20 dB (typical) >10 dB	 16 dB (typical) >10 dB	 18 dB (typical) >10 dB	 20 dB (typical) >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.

10633-F
936.209/i

Kathrein Inc., Scala Division Post Office Box 4580 Medford, OR 97501 (USA) Phone: (541) 779-6500 Fax: (541) 779-3991
Email: communications@kathrein.com Internet: www.kathrein-scala.com

EXHIBIT H

Product Specifications

QBXLH-6565A-VTM

DualPol® Dual Band Quad Antenna, 824–960 MHz and 1710–2180 MHz, 65° horizontal beamwidth, RET compatible variable electrical tilt

- Four DualPol® antennas under one radome
- Interleaved dipole technology providing for attractive, low wind load mechanical package
- Each antenna is independently capable of field adjustable electrical tilt
- Fully compatible with Andrew remote electrical tilt system

CHARACTERISTICS

General Specifications

Antenna Type	DualPol® dual band, quad
Brand	DualPol® | Teletilt®
Operating Frequency Band	1710 – 2180 MHz | 824 – 960 MHz

Electrical Specifications

Frequency Band, MHz	824–896	870–960	1710–1880	1850–1990	1920–2180
Beamwidth, Horizontal, degrees	66	60	60	60	60
Gain, dBd	11.9	11.9	14.4	14.7	14.9
Gain, dBi	14.0	14.0	16.5	16.8	17.0
Beamwidth, Vertical, degrees	16.0	15.0	7.1	6.5	6.0
Beam Tilt, degrees	0–15	0–15	0–8	0–8	0–8
Upper Sidelobe Suppression (USLS), typical, dB	15	15	15	15	15
Front-to-Back Ratio at 180°, dB	28	25	25	27	25
Isolation, dB	30	30	30	30	30
VSWR	1.5:1	1.5:1	1.5:1	1.5:1	1.5:1
3rd Order IMD at 2 x 20 W, dBc	-150	-150	-150	-150	-150
Input Power, maximum, watts	250	250	250	250	250
Polarization	±45°	±45°	±45°	±45°	±45°
Impedance	50	50	50	50	50
Lightning Protection	dc Ground	dc Ground	dc Ground	dc Ground	dc Ground

From North America, toll free
Telephone: 1-800-255-1479
Fax: 1-800-349-5444

Outside North America
Telephone: +1-708-873-2307
Fax: +1-779-435-8579

EXHIBIT H

Product Specifications

Mechanical Specifications

Color	Off white
Connector Interface	7-16 DIN Female
Connector Location	Bottom
Connector Quantity	8
Wind Area, maximum	0.2 m² | 2.5 ft²
Wind Loading, maximum	622.8 N @ 100 mph | 140.0 lbf @ 100 mph
Wind Speed, maximum	201.2 km/h | 125.0 mph

Dimensions

Depth	279.4 mm | 11.0 in
Length	1320.8 mm | 52.0 in
Width	581.7 mm | 22.9 in
Net Weight	33.3 kg | 73.5 lb

Remote Electrical Tilt (RET) Information

Model with Factory Installed Actuator	QBXLH-6565A-R2M
RET System	Teletilt®

Regulatory Compliance/Certifications

Agency
RoHS 2002/95/EC
China RoHS SJ/T 11364-2006

Classification
Compliant by Exemption
Logo 2

Included Products

DB5083
Downtilt Mounting Kit for 4.5 in (114.3 mm) OD round members

DB380
Pipe Mounting Kit for 4.5 in (114.3 mm) OD round members

From North America, toll free
Telephone: 1-800-255-1479
Fax: 1-800-349-5444

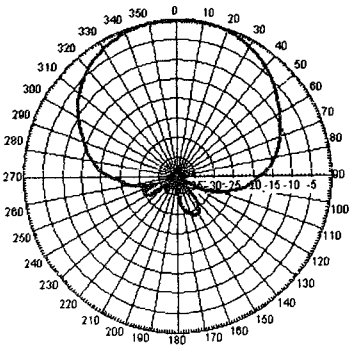
Outside North America
Telephone: +1-708-873-2307
Fax: +1-779-435-8579

EXHIBIT H

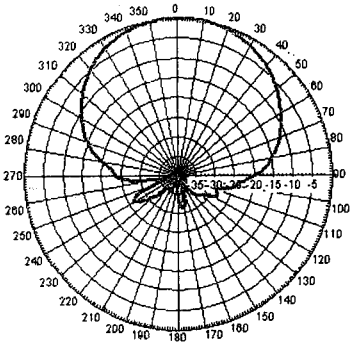
Product Specifications

ANDREW
A CommScope Company

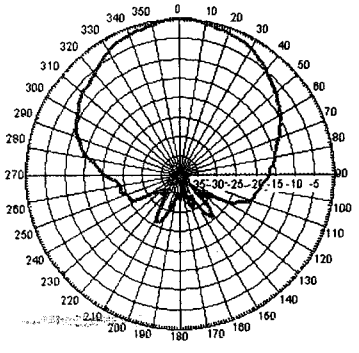
Horizontal Pattern



Freq: 850 MHz, Tilt: 0

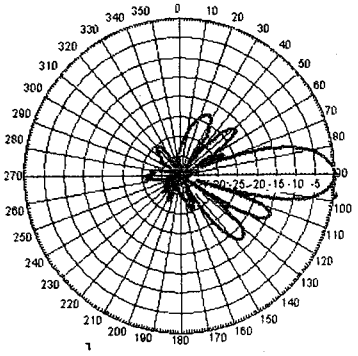


Freq: 940 MHz, Tilt: 0

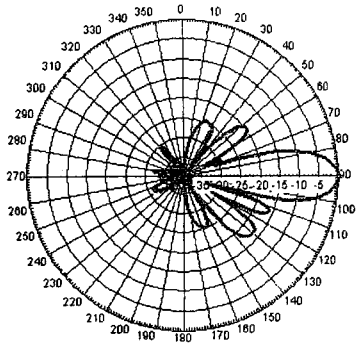


Freq: 1785 MHz, Tilt: 0

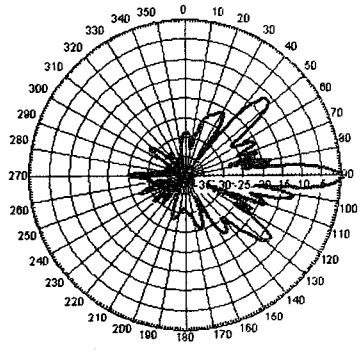
Vertical Pattern



Freq: 850 MHz, Tilt: 0



Freq: 940 MHz, Tilt: 0



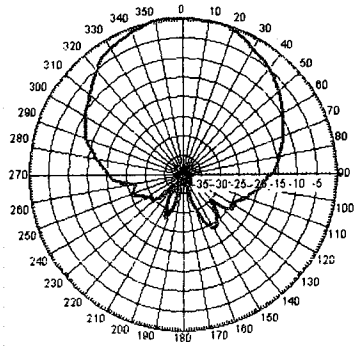
Freq: 1785 MHz, Tilt: 0

From North America, toll free
Telephone: 1-800-255-1479
Fax: 1-800-349-5444

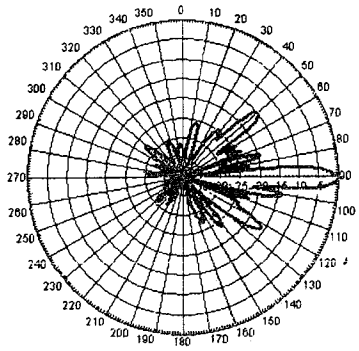
Outside North America
Telephone: +1-708-873-2307
Fax: +1-779-435-8579

EXHIBIT H

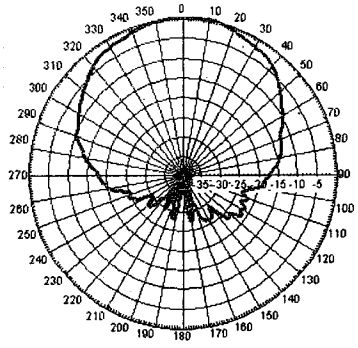
Product Specifications



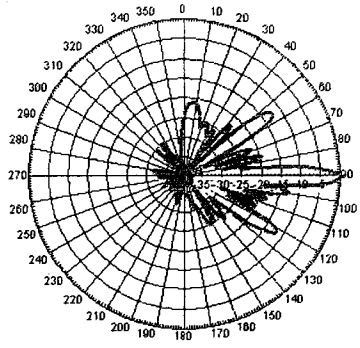
Freq: 1920 MHz, Tilt: 0



Freq: 1920 MHz, Tilt: 0



Freq: 2110 MHz, Tilt: 0

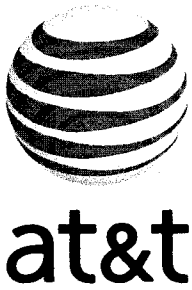


Freq: 2110 MHz, Tilt: 0

From North America, toll free
Telephone: 1-800-255-1479
Fax: 1-800-349-5444

Outside North America
Telephone: +1-708-873-2307
Fax: +1-779-435-8579

EXHIBIT H



James Cosgrove
Site Planning and Acquisition
56 Bay Road
Fairfax, CA 94930

Tel: 415 233 3838

10/01/08

Re: App # 08-0256

Dear Shelia

I am providing the following information and documents in order to deem my application complete:

Alternative Site Analysis and Coverage Objective:
Included are propagation maps for before and after this site is on air. The coverage objective for this site is between HWY 1, from Soquel Drive to Freedom. Based upon the position of the hillsides, the elevation of the existing site, willingness at the time of the land owner to work with us on a design, this site was considered ideal for obtaining the highest percent of the proposed coverage area.

I am also including a photo of the Cell Site. You and I previously discussed, that based upon the steepness of the hillside, it is difficult to obtain photos from the front of the home.

Thank you,

Jim Cosgrove

jamestcosgrove@comcast.net
Tel: 415 233 3838

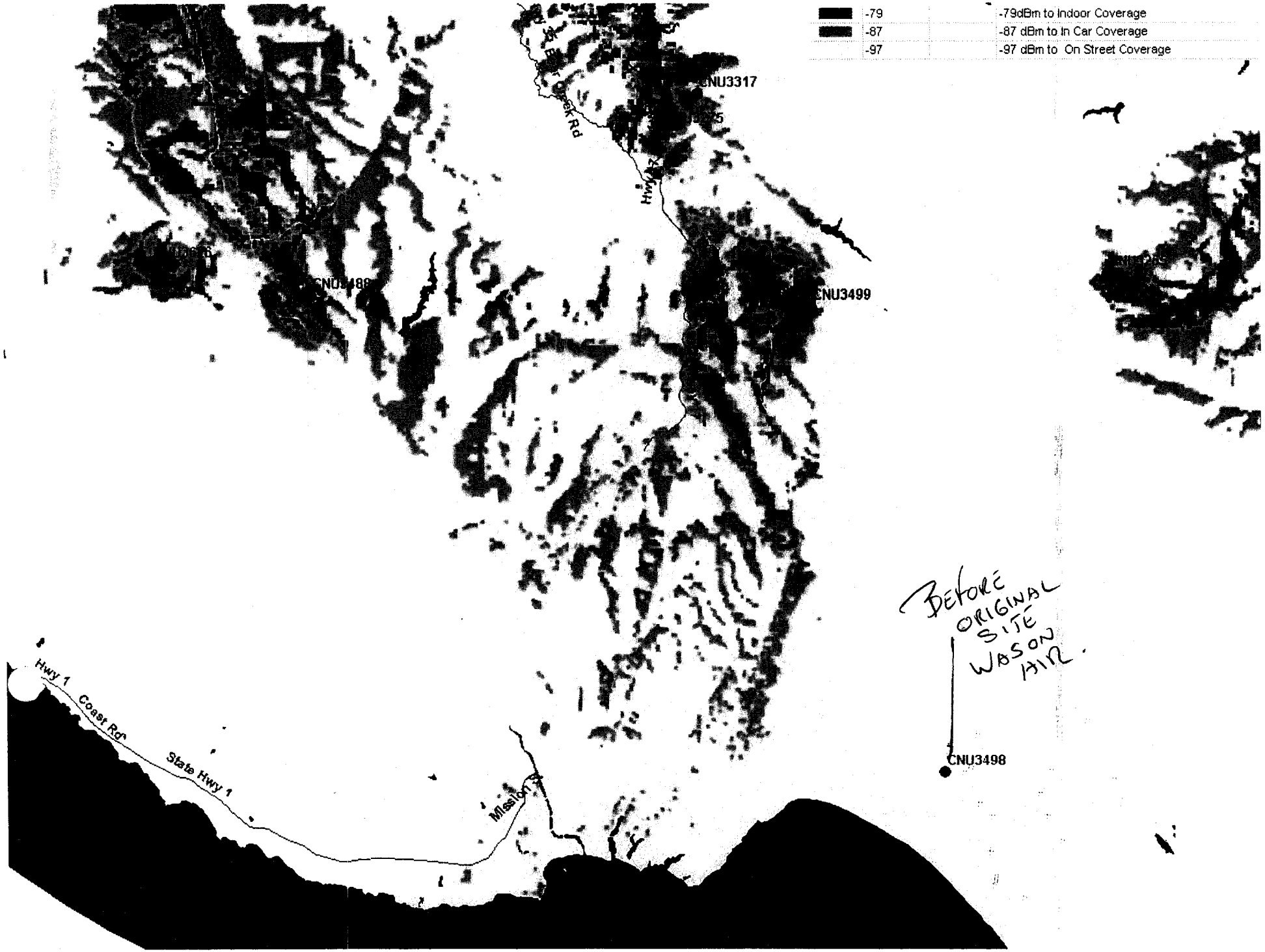
EXHIBIT I

AFTER.

AFTER ORIGINAL SITE WAS ON AIR.

EXHIBIT

Before.



Before original site Wason Air.

EXHIBIT I

Sheila McDaniel

From: JAMES COSGROVE [jamestcosgrove@comcast.net]
Sent: Wednesday, July 30, 2008 3:40 PM
To: Sheila McDaniel
Cc: Tony Poletti; Chris Moller XX; Lisa Elliott; Sean Carpenter; Alex Figueroa
Subject: Application 08-0256 (3498), Alternative Site Analysis letter for application

Hello Shelia:

Thank you for your help the other day with supplying all the contact information about obtaining the B.P.

I'm sending this email for application 08-0256, addressing item Number 1 on the incomplete application form; A B.P. was not obtained for construction of the original site. Because of the time that has passed, the C.U.P. has now expired, and the code has recently changed. This code change is forcing us to perform an Alternative Site Analysis (A.S.A.).

We are asking that you recognize the existing structure at this location and that AT&T files a B.P. to fully meet Building Code Standards and not perform an A.S.A. for the following reasons:
A.S.A's are historically performed on new build sites within a given search ring, where there are several choices of different candidates to decide from in that area we want to cover, i.e. PG&E lattice towers, water tanks or open land. We decided on this site because of the high probability of it passing Planning and the strategic coverage it provides in contributing to our fully messed network that we have in Santa Cruz. As I'm sure you are aware, a fully meshed network is nothing more than a series of strategically placed, over lapping Search Rings, that allow people to move around long distances receiving and sending calls, including 911 without disruption.
Although County Code has changed and now requires an A.S.A . This A.S.A. will not provide any useful data in justifying the cell site placement, unless Planning is considering that we remove the site and consider another location within the search ring. This would inevitably leave a gap in the meshed network. Locating equipment on an adjacent cell site (AT&T's or another carriers) would leave a gap in this search ring. Otherwise we would not have decided on that site to begin with. I understand that codes do change and that our C.U.P. fell out of compliance, by allegedly not submitting a B.P., however we are asking for another way to resolve this issue, such as realizing a mistake might of occurred and to remedy the situation by now getting the site up to building standards as originally proposed.

Can you please present this to your manager for review and if needed I would like to set up a call to discuss this with you both.

Photo - I am sending you the only photo we were able to take of the antennas on this site because of the fenced in area and the cliffside in front of the antenna deck.
Drawings - I am sending you a soft copy of the drawings we submitted so you can have an 8.5' x 11'. Please let me know if you would like me to mail you a hard copy.

Thank you again for all your help on this site.

James T. Cosgrove

EXHIBIT J

56 Bay Road
Fairfax CA, 94930
Office: 415.456.2970
Cell: 415.233.3838
Email: jamestcosgrove@comcast.net

EXHIBIT I

COUNTY OF SANTA CRUZ | Planning Department

INTEROFFICE MEMO

APPLICATION NO: 08-0256

Date: July 1, 2008

To: Sheila McDaniel, Project Planner

From: Larry Kasparowitz, Urban Designer

Re: Cellular antennae at Skyward Drive, Aptos

COMPLETENESS ITEMS

- *None*

COMPLIANCE ISSUES

Design Review Authority

13.10.663 General development performance standards for wireless communication facilities.

Evaluation Criteria	Meets criteria In code(✔)	Does not meet criteria (✔)	Urban Designer's Evaluation
SITE LOCATION			
Visual character of site			
Site location and development of wireless communications facilities shall preserve the visual character, native vegetation and aesthetic values of the parcel on which such facilities are proposed, the surrounding parcels and road right-of-ways, and the surrounding land uses to the greatest extent that is technically feasible, and shall minimize visual impacts on surrounding land and land uses to the greatest extent feasible	✔		
Facilities shall be integrated to the maximum extent feasible to the existing characteristics of the site, and every effort shall be made to avoid, or minimize to the maximum extent feasible, visibility of a wireless communication facility within significant public viewsheds.	✔		
Utilization of camouflaging and/or stealth techniques shall be encouraged where appropriate.	✔		
Support facilities shall be integrated to the existing characteristics of the site, so as to	✔		

EXHIBIT J

minimize visual impact.			
Colocation			
Co-location is generally encouraged in situations where it is the least visually obtrusive option, such as when increasing the height/bulk of an existing tower would result in less visual impact than constructing a new separate tower in a nearby location.	✔		
Site Disturbance			
Disturbance of existing topography and on-site vegetation shall be minimized, unless such disturbance would substantially reduce the visual impacts of the facility.	✔		
All proposed wireless communication facilities shall comply with the policies of the County General Plan/Local Coastal Plan and all applicable development standards for the zoning district in which the facility is to be located, particularly policies for protection of visual resources (i.e., General Plan/LCP Section 5.10). Public vistas from scenic roads, as designated in General Plan Section 5.10.10, shall be afforded the highest level of protection.	✔		

Evaluation Criteria	**Meets criteria In code (✔)**	**Does not meet criteria (✔)**	**Urban Designer's Evaluation**
DESIGN REVIEW CRITERIA			
Non-flammable Materials			
All wireless communication facilities shall be constructed of non-flammable material, unless specifically approved and conditioned by the County to be otherwise (e.g., when a wooden structure may be necessary to minimize visual impact).	✔		
Tower Type			
All telecommunication towers shall be self-supporting monopoles except where satisfactory evidence is submitted to the appropriate decision-making body that a non-monopole (such as a guyed or lattice tower) is required or environmentally superior.	✔		
All guy wires must be sheathed for their entire length with a plastic or other suitable covering.	✔		

EXHIBIT J

Support Facilities			
Any support facilities not placed underground shall be located and designed to minimize their visibility and, if appropriate, disguise their purpose to make them less prominent. These structures should be no taller than twelve (12) feet in height, and shall be designed to blend with existing architecture and/or the natural surroundings in the area or shall be screened from sight by mature landscaping.	✔		

Exterior Finish			
All support facilities, poles, towers, antenna supports, antennas, and other components of communication facilities shall be of a color approved by the decision making body.	✔		
Components of a wireless communication facility which will be viewed against soils, trees, or grasslands, shall be of a color or colors consistent with these landscapes.	✔		
Visual Impact Mitigation			
Co-location of a new wireless communication facility onto an existing telecommunication tower shall generally be favored over construction of a new tower.	✔		
Owners/operators of wireless communication towers/facilities are required to maintain the appearance of the tower/facility, as approved, throughout its operational life.	✔		
Lighting			
Except for as provided for under Section 13.l0.663(a)(5), all wireless communication facilities shall be unlit except when authorized personnel are present at night.	✔		
Roads and Parking			
All wireless communication facilities shall be served by the minimum sized roads and parking areas feasible.	✔		
Vegetation Protection and Facility Screening			
In addition to stealth structural designs, vegetative screening may be necessary to minimize wireless communication facility visibility within public viewsheds.	✔		

All applications shall provide detailed landscape/vegetation plans specifying the non-invasive native plant species to be used, including identification of sources to be used to supply seeds and/or plants for the project.	✔		
Any such landscape/vegetation plan shall be prepared by a qualified botanist experienced with the types of plants associated with the facility area. For purposes of this section, "mature landscaping" shall mean trees, shrubs or other vegetation of a size that will provide the appropriate level of visual screening immediately upon installation.	✔		
All nursery stock, construction materials and machinery, and personnel shall be free of soil, seeds, insects, or microorganisms that could pose a hazard to the native species or the natural biological processes of the areas surrounding the site (e.g., Argentine ants or microorganisms causing Sudden Oak Death or Pine Pitch Canker Disease).	✔		
Underground lines shall be routed outside of plant drip lines to avoid damage to tree and large shrub root systems to the maximum extent feasible.	✔		

PERMIT CONDITIONS / ADDITIONAL INFORMATION

- ***none***

EXHIBIT J

COUNTY OF SANTA CRUZ
DISCRETIONARY APPLICATION COMMENTS

Project Planner: Sheila Mcdaniel
Application No.: 08-0256
APN: 040-271-62

Date: January 8, 2009
Time: 16:25:28
Page: 1

Environmental Planning Completeness Comments

========= REVIEW ON JULY 21, 2008 BY ROBERT S LOVELAND =========
NO COMMENT

Environmental Planning Miscellaneous Comments

========= REVIEW ON JULY 21, 2008 BY ROBERT S LOVELAND =========

Conditions of Approval:

1. Submit a soils report (3 copies) completed by a California licensed geotechnical engineer for review and approval.

NOTE TO PLANNER: The mapped resource for this area was not detected within the project areas.

Dpw Road Engineering Completeness Comments

LATEST COMMENTS HAVE **NOT YET** BEEN SENT TO PLANNER FOR THIS AGENCY

========= REVIEW ON JUNE 30, 2008 BY ANWARBEG MIRZA =========
NO COMMENT

Dpw Road Engineering Miscellaneous Comments

LATEST COMMENTS HAVE **NOT YET** BEEN SENT TO PLANNER FOR THIS AGENCY

========= REVIEW ON JUNE 30, 2008 BY ANWARBEG MIRZA =========
NO COMMENT

Aptos-La Selva Beach Fire Prot Dist Completeness C

LATEST COMMENTS HAVE **NOT YET** BEEN SENT TO PLANNER FOR THIS AGENCY

========= REVIEW ON AUGUST 20, 2008 BY ERIN K STOW =========
DEPARTMENT NAME:Aptos/La Selva Fire Dept. APPROVED

Aptos-La Selva Beach Fire Prot Dist Miscellaneous

LATEST COMMENTS HAVE **NOT YET** BEEN SENT TO PLANNER FOR THIS AGENCY

========= REVIEW ON AUGUST 20, 2008 BY ERIN K STOW =========
NO COMMENT

EXHIBIT J

Aptos/La Selva Fire Protection District
6934 Soquel Drive • Aptos, CA 95003
Phone # 831-685-6690 • Fax # 831-685-6699

August 19, 2008

Planning Department
County of Santa Cruz
Attention: Sheila McDaniel
701 Ocean Street
Santa Cruz, CA 95060

Subject: APN: 40-271-62 / Appl #08-0256
685 Skyward Drive

Dear Ms. McDaniel:

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,

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

Cc: Timothy & Camille Washowich
685 Skyward Drive
Aptos, CA 95003

Cc: James Cosgrove
56 Bay Road
Fairfax, CA 94930

EXHIBIT J

Aptos/La Selva Fire Protection District

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

DISCRETIONARY APPLICATION FEE

PLAN REVIEW:

DATE: 8/19/2008 APN: 040-271-62 APPL: 08-0256

PROJECT ADDRESS: 685 Skyward Drive Aptos, CA 95003

PROJECT NAME: Washowich Monopoloe

SFD [ ] SFR [ ] MFD [ ] COR [ ] COM [ ]

OWNER: Timothy & Camille Washowich TELEPHONE:

OWNER ADDRESS: 685 Skyward Drive

SPRINKLERED: Yes [ ] No [X]

RATE: $50 X 1 HOURS = FEE: $50.00

TOTAL DUE: **$50.00**

Fire Dept. Use Only

DATE PAID: **INITIALS:**

EXHIBIT J

Sheila McDaniel

From: Warren Eraut [erautlaw@yahoo.com]
Sent: Tuesday, December 02, 2008 10:08 AM
To: Sheila McDaniel
Subject: Permit #08-256

Dear Mrs. McDaniel: This email concerns the pending application for installation of a 40 foot tower, a new (and probably louder) generator, and associated "improvements" to the current use of the transmitting tower at 685 Skyward Drive, Aptos. The easement for use of the property was granted to the applicant's predecessors in interest by Kip Jackson quite some years ago. The predecessor users of the property, along with the current users, contribute nothing to the maintenance of the road association despite consistent and regular access to the facility. The predecessors in interests absolutely refused to contribute to the road association. The current facility generates an irritating noise at night - Irene and I have spent many a night listening to the equipment emit the irritating noise. The proposed "improvement" of a larger generator will bring with it more noise pollution. The current tower is hidden; the new one will be an eye-sore and will probably affect resale home values since one will now have to disclose the presence of the tower. The equipment that will be required for the installation of the "improvements" will involve a significant imposition on the neighborhood as various cranes, and other construction equipment try to access this site. The only available parking for the equipment will, of course, be our driveway. I tried to find a means by which to formally object via the County web-site; I was not able to do so. Please let me know if I need to file a formal objection by use of some required form. Otherwise, we would like to be "on record" as formally objecting to this expanded use of the facility. The one on site is bad enough. Thank you. Warren E. Eraut (645 Skyward Drive, Aptos (work:688-4569)

EXHIBIT J

Sheila McDaniel

From: Sheila McDaniel
Sent: Tuesday, December 02, 2008 1:19 PM
To: 'Jim Brownson'
Subject: RE: Proposed Development on Skyward Drive

You are welcome to make an appointment with me and take a look at the plans. Essentially the project proposal is to recognize the existing facility because the facility was previously approved, but the applicant did not obtain a building permit for the facility.

-----Original Message-----
From: Jim Brownson [mailto:jimbrownson@earthlink.net]
Sent: Friday, November 28, 2008 2:38 PM
To: Sheila McDaniel
Subject: Proposed Development on Skyward Drive

Greetings Sheila,

I am the Skyward Drive Road Association President. A number of neighbors have asked me about the proposed development for an AT&T cell tower on Skyward Drive. I told the that I would attempt to get more information.

How can we find out more about this proposal ?

Sincerely, Jim Brownson 684-1963

EXHIBIT J

Standards Ordinance), in that the cell facility will not adversely shade adjacent properties.

The proposed cell facility will not be improperly proportioned to the parcel size or the character of the neighborhood as specified in General Plan Policy 8.6.1 (Maintaining a Relationship Between Structure and Parcel Sizes), in that the proposed cell facility will comply with the site standards for the Residential Agriculture zone district (including, lot coverage, floor area ratio, height, setbacks, and number of stories) and will result in a structure consistent with a design that could be approved on any similarly sized lot in the vicinity. In addition, the monopole and other antennas are not visible from surrounding properties, which comply with General Plan and Zoning Ordinance policies limiting visual impacts.

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.

This finding can be made, in that the proposed facility will not generate additional traffic except that necessary to add the proposed antenna and service the facility, or adversely impact existing roads and intersections in the surrounding area. However, the project has been conditioned to require the property owner to enter into the road maintenance association, if they have not already done so, to cover the share of road improvement costs associated with the dwelling and wireless facility.

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 proposed cell facility is currently situated among existing trees, which screen the structures (pole and building) from view. This existing facility is only visible once you are on the subject property adjacent to the development because the property slopes up a steep hill from the property line to the location of the development. 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.