



## Staff Report to the Zoning Administrator

Application Number: **07-0061**

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Applicant: Dayna Aguirre, Sutro Consulting  
for T-Mobile

Agenda Date: **July 20, 2007**

Owner: Borina Orchards LLC

Agenda Item #: **9**\_\_

APN's: 051-221-34

Time: After 10:00 a.m.

Project Description: Proposal to install a 60 foot tall cell tower disguised as a windmill with 6 flat panel antennas and four ground-mounted equipment cabinets.

Location: The property is located on the north side of Riverside Road (Highway 129) at the intersection of Lakeview Road at 215 Riverside Road. The proposed antenna location is about 1200 feet north of Riverside Road, adjacent to Lakeview Road.

Supervisory District: Fourth District (District Supervisor: Campos)

Permits Required: Commercial Development Permit

### Staff Recommendation:

- Approval of Application 07-0061, based on the attached findings and conditions.
- Certification that the proposal is exempt from further Environmental Review under the California Environmental Quality Act.

### Exhibits

- |   |                                       |
|---|---------------------------------------|
| A. Project plans                              | F. Zoning map, General Plan map       |
| B. Findings                                   | G. Visual Simulations                 |
| C. Conditions                                 | H. Applicant submittal package        |
| D. Categorical Exemption (CEQA determination) |                                       |
| E. Assessor's parcel map, Location map        | Topographic map & aerial maps on file |

## Parcel Information

Parcel Size: 9.2 acres  
Existing Land Use - Parcel: Agricultural service establishment  
Existing Land Use - Surrounding: Warehouse/cold storage to west, commercial agricultural lands to northwest, south, and east  
Project Access: Riverside Road and Lakeview Road  
Planning Area: Salsipuedes  
Land Use Designation: A (Agriculture)  
Zone District: A (Agriculture)  
Coastal Zone: ☐ Inside ☒ Outside  
Appealable to Calif. Coastal Comm ☐ Yes ☒ No

## Environmental Information

Geologic Hazards: Not mapped/no physical evidence on site  
Soils: Baywood Loamy Sand  
Fire Hazard: Not a mapped constraint  
Slopes: 0 -- 2 percent slopes  
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, but according to General Plan Policy 5.10.10, Highway 129 (Riverside Road) is designated a Scenic Highway  
Drainage: Existing drainage adequate  
Traffic: No significant impact  
Roads: Existing roads adequate  
Parks: N/A  
Archeology: Not mapped/no physical evidence on site

## Services Information

Urban/Rural Services Line: ☐ Inside ☒ Outside  
Water Supply: N/A  
Sewage Disposal: N/A  
Fire District: Pajaro Valley Fire Protection District  
Drainage District: Zone 7 Flood Control/Water Conservation District

## Project Setting

The property is developed with an agricultural service establishment consisting of several buildings for agricultural chemical, fruit, vegetable, flower and other agriculturally-related product storage, processing, and distribution. The proposed cell tower would be located at the northern end of the property, which is currently undeveloped. Commercial Agricultural (CA) land lies across Lakeview Road to the east and across Salsipuedes Creek to the west. Beyond the

CA land to the west, at about 650 feet distant from the proposed cell tower location is residential land in the City of Watsonville.

### **Zoning & General Plan Consistency**

The subject property is a 9.2 acres parcel, located in the A (Agriculture) zone district, a designation which allows commercial uses. The proposed wireless communications apparatus is an allowed use, with Level V approval, within the zone district and the project is consistent with the site's (AG) Agriculture General Plan designation.

### **Design Review**

The proposed "windmill" cellular antenna would be located in an agricultural area, where windmills for pumping water were once common. Although there are still a few such windmills extant in the area, typically they are part of a water tank house and, in any event, are not stand alone structures of the height proposed here (60 feet). The Urban Designer reviewed the project and suggested that if the "windmill" blades were tilted, or if real blades were used, the "windmill" design would be more acceptable. The Urban Designer also stated that he would not have an objection to a standard pole design at this location, in that the silhouette from Riverside Road, a County-designated scenic highway, would be minimal. If the proposed "windmill" is modified according to the Urban Designer's comment or if the "windmill" design is abandoned in favor of a standard pole, then the proposal would be consistent with the County Design Review Ordinance. The ground-mounted equipment would be surrounded by a six-foot high redwood fence and, at approximately 1200 feet from Highway 129, would be essentially invisible from that scenic highway.

### **Alternative Sites Analysis**

The applicant explored an opportunity to locate on an existing PG&E tower in the vicinity. However, that tower is located on CA zoned land, one of the prohibited zone districts for cellular towers so that option was not pursued further. There are no other existing facilities in the area, so collocation is not an alternative.

### **Radio Frequency Emissions**

A Radio Frequency (RF) report has been prepared for this project (Exhibit J). The Communications facilities on the project site at ground level will not exceed 0.13% of the applicable public exposure limit allowed by the Federal Communications Commission. The maximum calculated cumulative level at the second floor elevation of any nearby building, located at least 20 feet away, is 0.20% of the public exposure limit.

### **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

- e APPROVAL of Application Number **07-0061**, based on the attached findings and conditions.
- e Certification that the proposal is exempt from further Environmental Review under the California Environmental Quality Act.

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](http://www.co.santa-cruz.ca.us)

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Santa Cruz County Planning Department  
701 Ocean Street, 4th Floor  
Santa Cruz CA 95060  
Phone Number: (831) 454-3172  
E-mail: [pln950@co.santa-cruz.ca.us](mailto:pln950@co.santa-cruz.ca.us)



DBA

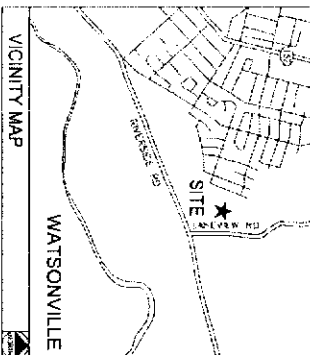
**T-Mobile**

1855 GATEWAY BLVD 9TH FLOOR  
CONCORD, CA. 94520

**SF25673**

# WESTERN FARM SERVICES

209 RIVERSIDE ROAD  
WATSONVILLE, CA 95077  
COUNTY OF SANTA CRUZ

[illegible]

### PROJECT DESCRIPTION

(3) SIX CABLES AND (1) BOW CABLE MOUNTED TO A NEW CONCRETE SLAB ON GRADE.

ANTENNA CORDAL TRANSMISSION CABLE FROM GTS TO AIRCRAFT.

POWER AND TELEPHONE SERVICE TO BE INSTALLED FROM EXISTING SOURCE.

## APPLICANT / LESSEE

1-MOBILE COMM. POINT COORDINATIONS  
1855 SAWYER BOULEVARD, 3RD FLOOR  
CONCORD, CA 94520

## LEASING MANAGER

FRANK CROWLEY  
(415) 341-5301  
3145 GEARY BLVD., #200  
SAN FRANCISCO, CA 94112  
DUBLIN, CA 94568

## CONSTRUCTION MANAGER

JO LAWRENCE  
SUITE CONSULTING, INC.  
(915) 956-0569

### PROPERTY INFORMATION

14711 DND  
ADDRESS:  
CAPL SPANQUE  
135 WESTRIDGE DR  
WATSONVILLE, CA 95070

## FIGURE 1. Schematic representation of the experimental design.

COMPANY TYPE  
CORPORATION

53

LOC. 17: 2.15N W  
A.P.N. 061-027-24-000

## PROJECT SUMMARY

REQUIREMENTS FOR HUMAN IDENTIFICATION: ISSUED BY ACP/CS  
NOT REQUIRED IN ACCORDANCE WITH  
CALIFORNIA STATE ADMINISTRATIVE CODE  
TITLE 24, SECTION 1058.5.4, EXCEPT FOR

Life Society College, Taipei

1. 2001 CALIFORNIA BUILDING CODE
2. BUILDING BUILDING CODE
3. BUILDING OFFICIALS AND CODE ADMINISTRATORS : BOOK

### CODE COMPLIANCE

9. CALIFORNIA ADMINISTRATIVE CODE.  
10. CITY/COUNTY ORDINANCES  
11. 1955 NTPA 72186 SAFETY CODE  
12. NTPA 17, SPRINGVILLE TOWN  
13. NTPA 24, SPRINGVILLE TOWN

## ARCHITECT

WHEEL WALK ARCHITECTURE  
222 SALTER STREET, SUITE 400  
SAN FRANCISCO, CA 94102  
CONTACT: JAMES YAKIMAK  
CONTACT NUMBER: (415) 350-0346

## PROJECT TEAM

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

SHEET OF SCHEMATA		REV
1	TITLE SHEET	2
A1	GENERAL SITE MAP	2
A2	BUILDING FOOTPRINT AREA PLAN	2
A3	ENLARGED SURVEYED LOT/LOT AREA/LOT DIMENSIONS	2
A4	CELESTIALS	2
Z1	TOPOGRAPHIC / AREA MAP	2
Z2	PROPERTY MAP / AERIAL PHOTO	2

**SHEET INDEX**

TITLE	SIGNATURE	DATE
LEARNING		
ATTENDING		
CO-INVESTIGATOR		
1. NAME, PM		
PR. DICKENS		
SIGNATURE BLOCK		

**DO NOT SCALE DRAWINGS**  
THESE DRAWINGS ARE PREPARED TO THE STANDARD OF 1/8"=1'-0" CONNECTIONS SHALL HAVE ALL PIPING AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB AND SHALL BE IDENTIFIED BY THE ARCHITECT/ENGINEER IN WRITING, OR ANY DISCREPANCY BETWEEN THE WORK ON VARIOUS ORDERS OR BE RESOLVED BY THE OWNER.

**Michael Weik Architecture**  
222 Sutter Street, Suite 400  
San Francisco, CA 94108  
tel: 415.839.9584  
fax: 415.362.8911



SF25673  
WESTERN FARM  
SERVICES  
209 RIVERSIDE ROAD  
WATSONVILLE, CA 95077

- 5 -

**EXHIBIT A**

(E) AGRICULTURAL LAND

0° AZ|MUTH

A.P.N 051-221-34-000

(E) CHAINLINK FENCE

LAKEVIEW ROAD (R.O.W.)

(E) AGRICULTURAL LAND

PROPOSED T-MOBILE  
PROJECT LOCATION

90° AZIMUTH

# OVERALL SITE PLAN

**A-1**

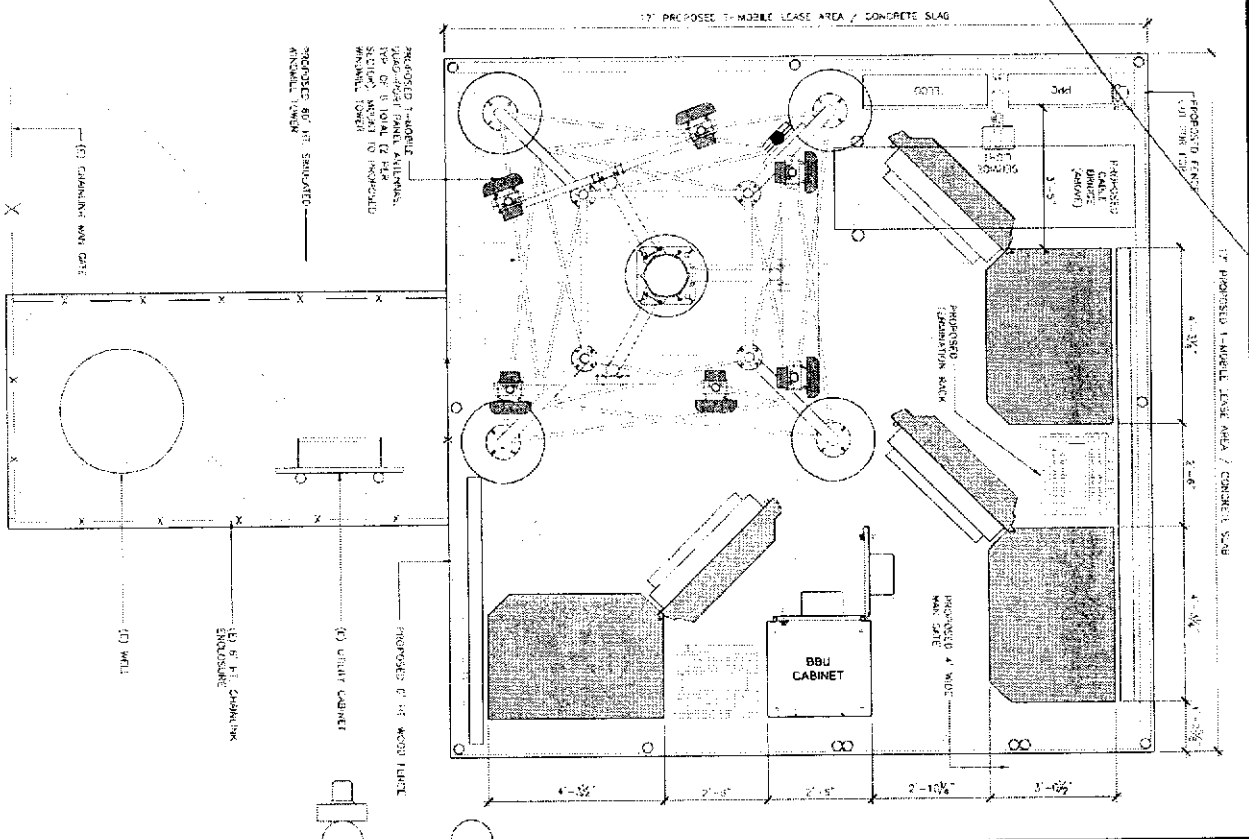
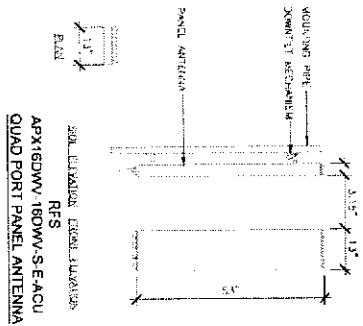
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209 RIVERSIDE ROAD  
WATSONVILLE. CA 95077

OMNIPONT  
TM T-Mobile

THE UNIVERSITY OF CHICAGO  
CHICAGO, ILL. 60637

Michael Wilk Architecture  
222 Sutter Street, Suite 400  
San Francisco, CA 94108  
tel: 415.839.8594  
fax: 415.362.8911





## BTS CABINET / PANEL ANTENNA DETAILS

### 3 ENLARGED PLAN AT EQUIPMENT LOCATION

**A-3**

ENLARGED PLAN AT  
EQUIPMENT /  
ANTENNA LAYOUTS

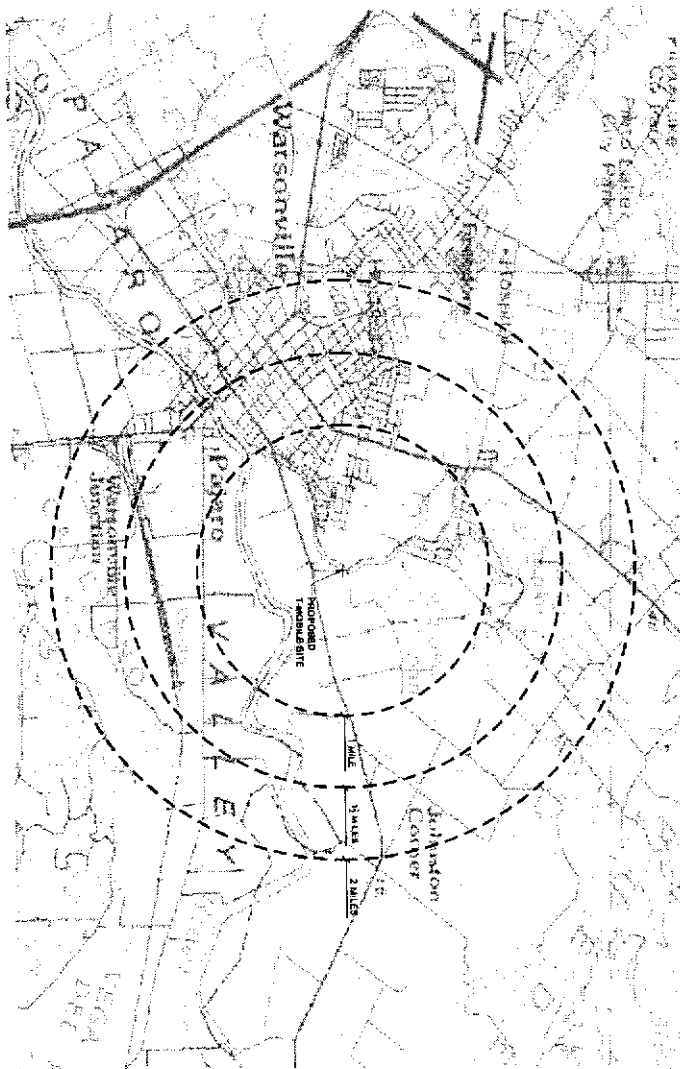
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OMNIPONT  
T-Mobile

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2222 Sutter Street, Suite 400  
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fax: 415.362.5911







1



**Z-1**

TOPOGRAPHIC/  
AREA MAP

NO.	DATE	BY	REVISION
1	12/15/07	JOHN T. BROWN	ISSUED FOR PERMITTING
2	12/15/07	JOHN T. BROWN	ISSUED FOR PERMITTING
3	12/15/07	JOHN T. BROWN	ISSUED FOR PERMITTING
4	12/15/07	JOHN T. BROWN	ISSUED FOR PERMITTING
5	12/15/07	JOHN T. BROWN	ISSUED FOR PERMITTING
6	12/15/07	JOHN T. BROWN	ISSUED FOR PERMITTING
7	12/15/07	JOHN T. BROWN	ISSUED FOR PERMITTING
8	12/15/07	JOHN T. BROWN	ISSUED FOR PERMITTING
9	12/15/07	JOHN T. BROWN	ISSUED FOR PERMITTING
10	12/15/07	JOHN T. BROWN	ISSUED FOR PERMITTING

PROJECT NO. 072573  
SHEET 1 OF 1  
DATE 12/15/07  
BY JOHN T. BROWN  
REVISION ISSUED FOR PERMITTING

**SF25673**  
**WESTERN FARM SERVICES**  
**209 RIVERSIDE ROAD**  
**WATSONVILLE, CA 95077**

OMNIPONT  
**T-Mobile**  
BY THE COMPANY OF  
SAN FRANCISCO, CA 94108

Matted with Protective  
222 Sutter Street, Suite 400  
San Francisco, CA 94108  
Tel: 415.839.9604  
Fax: 415.362.8911

PROXIMITY MAP/ AERIAL PHOTO

250° AZIMUTH

0° AZIMUTH

90° AZIMUTH



**Z-2**

PROXIMITY  
MAP/ AERIAL  
PHOTO

PROJECT NO.	923813
SHEET NO.	28
DATE OF	10/1/92
BY	WATSONVILLE
NO.	1/1/92
DATE	10/1/92
BY	WATSONVILLE
NO.	1/1/92
DATE	10/1/92
BY	WATSONVILLE
NO.	1/1/92
DATE	10/1/92
BY	WATSONVILLE

SF25673  
WESTERN FARM  
SERVICES  
209 RIVERSIDE ROAD  
WATSONVILLE, CA 95077

OMNIPONT  
T-Mobile  
1000 10TH AVENUE, SUITE 100  
CROFTON, CA 95030

Michael Wick Architecture  
222 Sutter Street, Suite 400  
San Francisco, CA 94108  
tel: 415 838 9994  
fax: 415 392 8911

## Wireless Communication Facility Use Permit Findings

- I. 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 proposed project has been designed to be camouflaged as a windmill and is located 1200 feet from the nearest scenic highway, Highway 129. Even so, the proposed windmill would be taller than any other structure in the immediate vicinity. The agricultural fields between the site and Highway 129 are essentially level and are currently used for low-growing row crops that are not tall enough to provide any screening. The landscape of the immediate area of the site includes deciduous and evergreen trees that are generally lower than the proposed tower. The background is composed of the Santa Cruz Mountains, several miles away. In order to make the proposed tower blend in as much as possible, it should be painted a neutral color. This will result in the tower being not readily noticeable from Highway 129.

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

This finding can be made in that the site is in the **A**, Agriculture, zone district, not one of the prohibited and/or restricted areas. **The** site is not located in the coastal zone. The proposed location is readily accessible for maintenance and requires **very** little land disturbance.

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 and that all zoning violation abatement costs, if any, have been paid.

This finding can be made, in that the proposed location of the wireless communication 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 A (Agriculture) zone district in that the primary use of the property will continue to be an agricultural service establishment that meets all current site standards for the zone district.

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

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

This finding can be made, in that the proposed wireless communications facility will be a maximum of 60 feet tall, which is too low to interfere with an aircraft in flight. The site is not within the airport clear **zone**.

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

This finding can be made, in that the maximum ambient RF levels at ground level for the proposed operation are calculated to be 0.2 percent at the second floor level and 0.13 percent at ground level of the most restrictive applicable limit. There is no existing facility in the area.

The applicant is required to obtain all necessary approvals from the California Public Utilities Commission and the Federal Communications Commission prior to construction.

## 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 agricultural and commercial uses and is not encumbered by physical constraints to development. Construction will comply with prevailing building technology, the Uniform Building Code, and the County Building ordinance to insure the optimum in safety and the conservation of energy and resources. **The** proposed wireless communications apparatus 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. Emissions from the tower are projected to be a maximum of 0.13% of the applicable public exposure limit allowed by the Federal Communications Commission. The maximum calculated cumulative level at the second floor elevation of any nearby building, located at least 20 feet away, is 0.20% of the public exposure limit.

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 wireless communications equipment and the conditions under which it would be operated or maintained will be consistent with all pertinent County ordinances and the purpose of the A (Agriculture) zone district in that the primary **use** of the property remains an agricultural service establishment with the wireless communications facility as an accessory use that meets all current site standards for the zone district.

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 **use** is a use that does not conflict with any adjacent agricultural activity as specified by Policy 5.14.1(b) for the Agriculture (AG) land use designation in the County General Plan .

**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 wireless communications facility will not require the use of public services such as water or sewer, but will require electric power and telephone connections, which are already available on site. The facility will require inspection by maintenance personnel at least once per month, and this level of traffic will not adversely impact existing roads and intersections in the surrounding area of Lakeview Road and Highway 129.

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.

Existing land uses in the vicinity include row crop agriculture and agricultural support. Structures include various agricultural storage and processing facilities and related offices of widely varying sizes with no consistent physical design. There are no other cellular towers in the immediate vicinity; the only similar structures are electrical and telephone poles, which are substantially shorter than the proposed windmill tower. Nevertheless, this finding can be made, in that the proposed cellular tower will not adversely affect the existing uses and because there is *no common* design of structures in the area with which to compare the proposed windmill tower.

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

This finding can be made, in that the ground-mounted proposed wireless communications equipment shall be screened with a six-foot tall solid wood fence that is of an appropriate scale and type of design that will enhance the aesthetic qualities of the surrounding properties and will not reduce or visually impact available open space in the surrounding area.

EXHIBIT B 1

## Conditions of Approval

Exhibit A: Project Plans, Sheets T-1, A-1 through A-4, and Z-1 and Z-2 by Michael Wilk Architecture, dated 1/16/07

- I. This permit authorizes the installation of a 60 foot tall wireless communications facility consisting of three (3) sectors, with two (2) antennas per sector, totaling six (6) antennas to be located at the top portion of the facility, and ground-mounted equipment in a 17 foot by 17 foot area surrounded by a six foot high solid redwood fence. 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
  - C. Submit proof that these conditions have been recorded in the official records of the County of Santa Cruz (Office of the County Recorder) within 30 days of the approval date on this permit.
- II. Applicant shall obtain approval from the California Public Utilities Commission and the Federal Communications Commission.
- III. Prior to issuance of a Building Permit the applicant/owner shall:
  - A. Submit Final Architectural Plans for review and approval by the Planning Department. The final plans shall **be** in substantial compliance with the plans marked Exhibit "A" on **file** with the Planning Department. The final plans shall include the following additional information:
    1. If the tower is a faux windmill, then **the** windmill tower shall be painted a neutral color in the light brown to light gray range, or another color approved **by** staff before painting, and the blades must either be tilted as a typical farm windmill is or a real windmill wheel with blades shall be **used**. The paint shall be maintained in good condition for the life of the structure and the structure shall be repainted as needed or within 30 days of notification to the owner by staff that the structure must be repainted to maintain its appearance.
    2. A standard monopole design is acceptable in this location. If a monopole design is **used**, then **the** tower shall be painted a neutral color in the **light** brown to light gray range, or another color approved by staff before painting. The paint shall be maintained in good condition for the life of



the structure and the structure shall be repainted as needed or within 30 days of notification to the owner by staff that **the** structure must be repainted to maintain its appearance.

3. Identify finish and color of exterior materials for Planning Department approval. One elevation shall indicate materials and colors as they were approved by this discretionary application. If specific materials and colors have not 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 1/2" x 11" format for Planning Department review and approval.
  4. Indicate on the building plans that any proposed lighting shall have a manual on/off switch or have an automatic timer, and that no continuous lighting will be used.
  5. Provide warning sign details in both English **and** Spanish languages. Include sign location, fence location, height, and materials for review and approval by the County.
- B. Meet all requirements of and pay any required Zone 7 drainage fees to the County Department of Public **Works**, Drainage.
- C. Meet all requirements and pay any applicable plan check fee of the Pajaro Valley Fire Protection District.
- IV. 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.
- V. Operational Conditions for the wireless antennas, monopole **and** equipment shelter
- A. In the event that future County inspections of the subject property disclose noncompliance with any Conditions of this approval or any violation of the County Code, the owner shall pay to the County the **full** cost of such County inspections, including any follow-up inspections and/or necessary enforcement actions, up to and including permit revocation.

- B. **The** applicant shall agree in writing that where future technological advances would allow for reduced visual impacts resulting from the proposed telecommunication facility, the applicant agrees to make those modifications which would allow for reduced visual impact as part **of** the normal replacement schedule. If, in the future, the facility is no longer needed, the applicant agrees to abandon the facility and be responsible for the removal of all permanent structures and the restoration of the site as needed to reestablish the area consistent with the character of the surrounding landscaping.
- C. Any modification in the type of equipment shall be reviewed by Planning Department staff. The County may deny or modify conditions at this time, or the Planning Director may refer it for public hearing before the Zoning Administrator
- D. Outdoor noise producing construction activities shall **only** take place on non-holiday weekdays between the hours of 8 a.m. and 6 p.m.
- E. All noise created by the new development shall be contained on the property. A maximum exterior noise level at the property line is **60 dB L<sub>dn</sub>**(day/night average noise level).
- F. Backup generators shall only be operated during power outages and for testing and maintenance purposes. Noise attenuation measures shall be included to reduce noise levels at the facility to a maximum exterior noise level of 60Ldn at the property line and a maximum interior noise level of 45 Ldn within nearby habitable structures.
- G. The applicant shall meet all requirements of County **Code** 13.10.664 pertaining to initial post-construction non-ionizing electromagnetic radiation (NIER) monitoring requirements. A report documenting **the** measurements and findings with respect to compliance with the established FCC **NIER** exposure standard shall be submitted to the Planning Director within ninety (90) days of commencement of operation.
- H. The antennas and ancillary equipment cabinet screening must be repainted and maintained as necessary to ensure the continued mitigation of the visual impact of the facility as integrated with the existing structure.
- I. **All** exterior lighting shall be manually operated and **used** only during night maintenance checks or in emergencies. The lighting **shall** be directed onto the lease site and away from adjacent properties. Building and security lighting shall be integrated into the building design.
- J. Transfer of ownership. In the event that the original permittee sells its interest in a wireless communication facility, the succeeding carrier shall assume all responsibility 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. A new contact name for the project shall be provided by the succeeding carrier to the Planning Department within thirty (30) days of transfer of interest of the facility.

- VI. As a condition of this development approval, the holder of this development approval ("Development Approval Holder"), is required to defend, indemnify, and hold harmless the COUNTY, its officers, employees, and agents, from and against any claim (including attorneys' fees), against the COUNTY, its officers, employees, and agents to attack, set aside, void, or annul this development approval of the COUNTY or any subsequent amendment of this development approval which is requested by the Development Approval Holder.
- A. COUNTY shall promptly notify the Development Approval Holder of any claim, action, or proceeding against which the COUNTY seeks to be defended, indemnified, **or** held harmless. COUNTY shall cooperate fully in such defense. If COUNTY fails to notify the Development Approval Holder within sixty (60) days of any such claim, action, or proceeding, or fails to cooperate fully in the defense thereof, the Development Approval Holder shall not thereafter be responsible to defend, indemnify, or hold harmless the COUNTY if such failure to notify **or** cooperate was significantly prejudicial to the Development Approval Holder.
- B. Nothing contained herein shall prohibit the COUNTY from participating in the defense of any claim, action, or proceeding if both of **the** following occur:
1. COUNTY bears its own attorney's **fees** and costs; and
  2. COUNTY defends the action in good faith.
- C. Settlement. The Development Approval Holder shall not be required to pay or perform any settlement unless such Development Approval Holder has approved the settlement. When representing the COUNTY, the Development Approval Holder 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.

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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 **unless you** obtain **the** required permits and commence construction.

Approval Date: 7/20/07

Effective Date: 8/01/07

Expiration Date: 8/01/09

Don Bussey  
Deputy Zoning Administrator

Steven Guiney AICP  
Project Planner

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

# CALIFORNIA ENVIRONMENTAL QUALITY ACT

## NOTICE OF EXEMPTION

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

Application Number: 07-0061

Assessor Parcel Number: 051-221-34

Project Location: 215 Riverside Road (Highway 129). Watsonville CA

**Project Description: Proposal to install wireless communications apparatus on a site developed with an agricultural service establishment**

**Person or Agency Proposing Project: Dayna Aguirre, Sutro Consulting for T-Mobile**

**Contact Phone Number: (925) 548-7671**

- 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 3 - New Construction or Conversion of Small Structures (Section 15303)

**F. Reasons why the project is exempt:**

Construction of a small structure

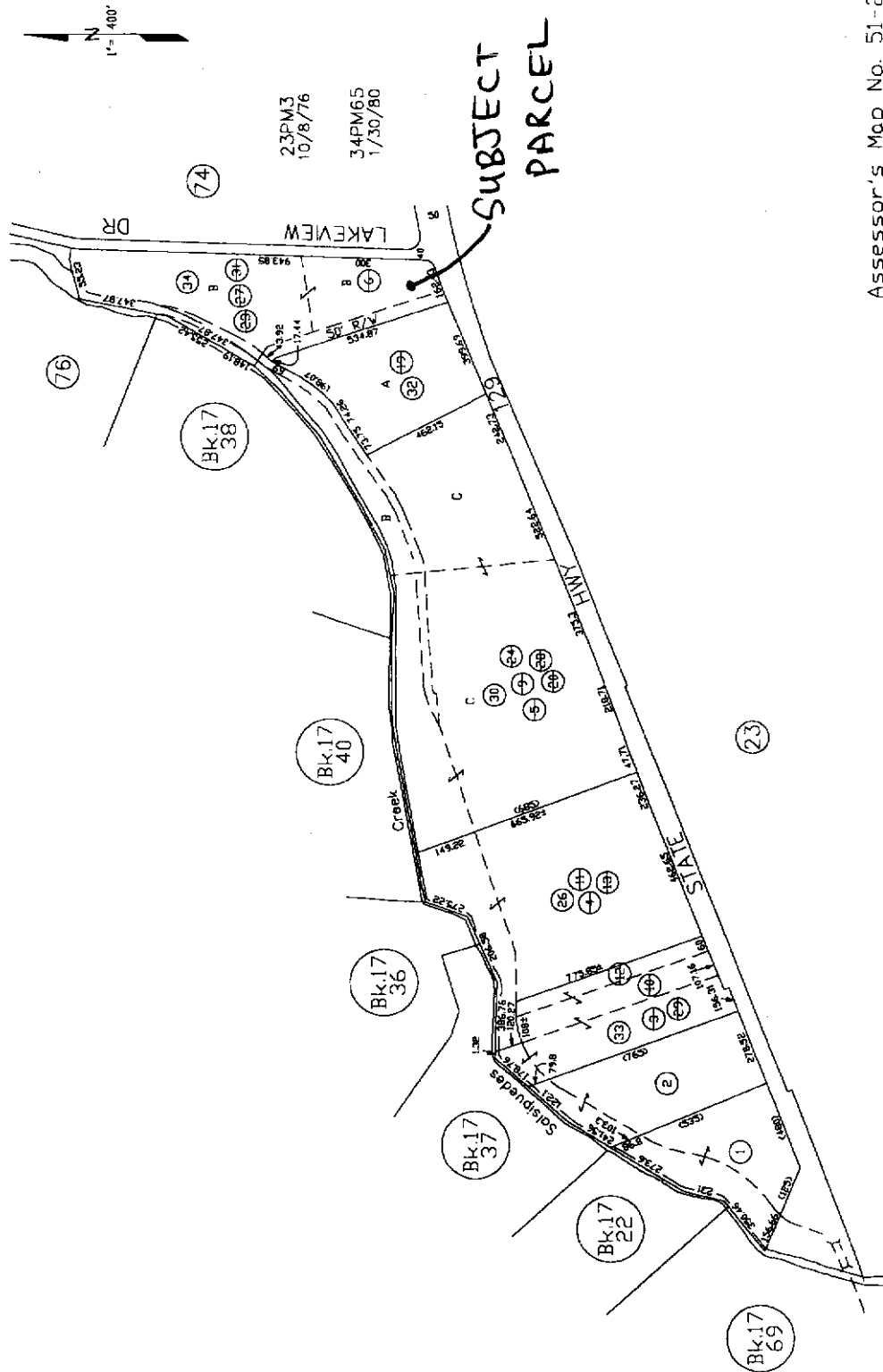
In addition, none of the conditions described in Section 15300.2 apply to this project



Steven Guiney AICP, Project Planner

Date: June 25, 2007

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.  
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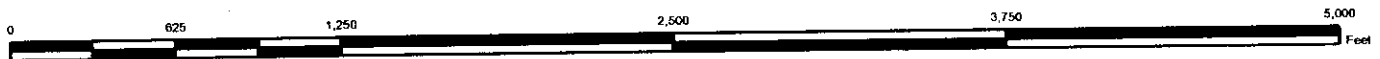
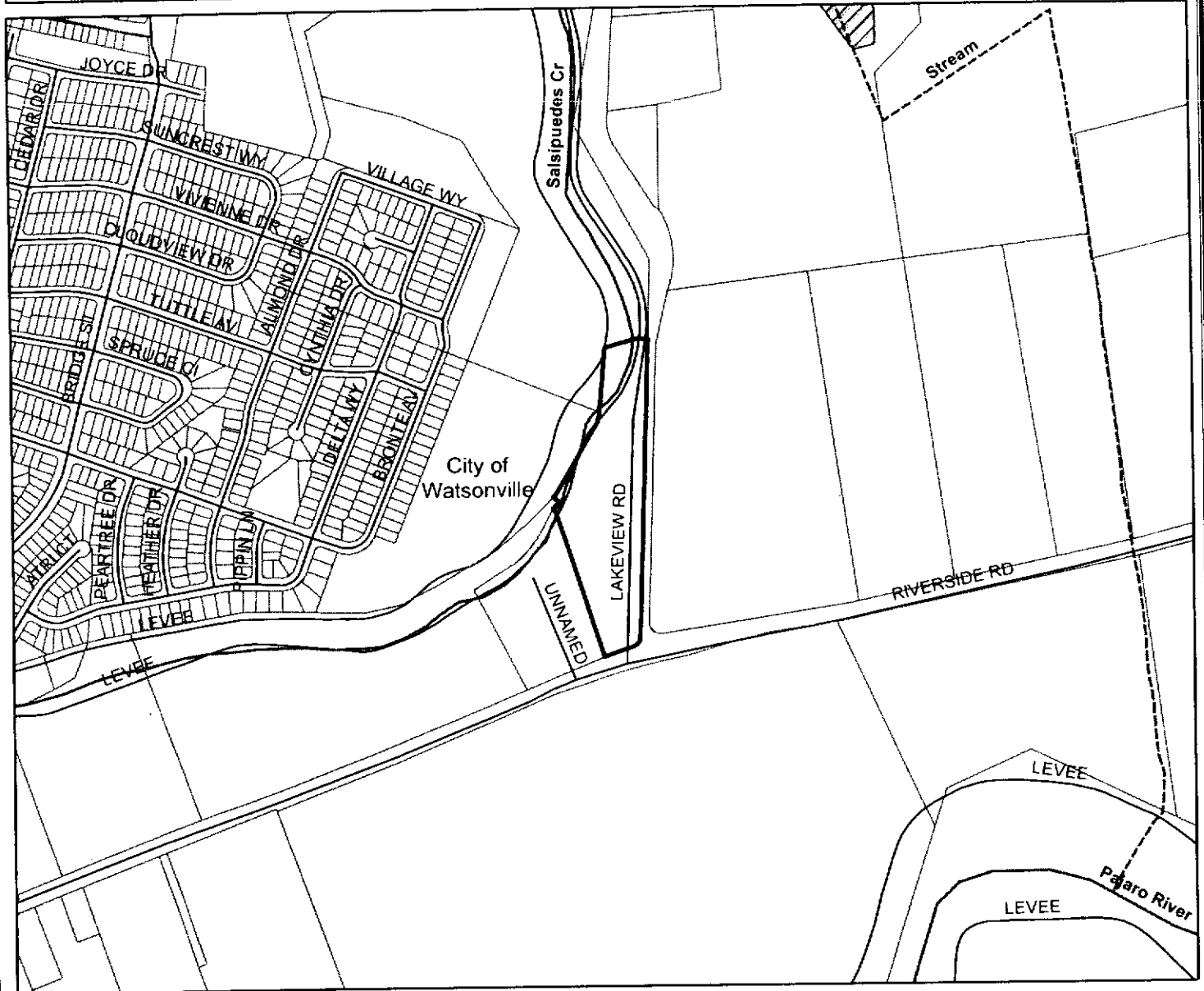
Assessor's Map No. 51-22  
 County of Santa Cruz, Calif.  
 June 2000

Note - Assessor's Parcel & Block  
 Numbers are shown in circles


NOT FOR CONSTRUCTION  
 6/29/00 KSA (Per. to Pg. 70)  
 6/7/01 rev (changed page refs.)

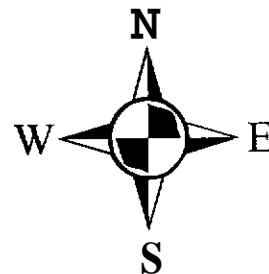


# Location Map



## Legend

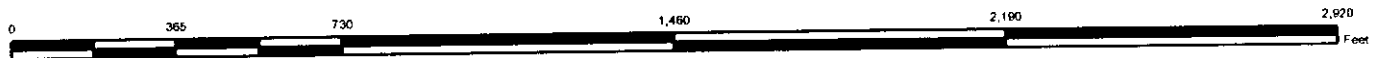
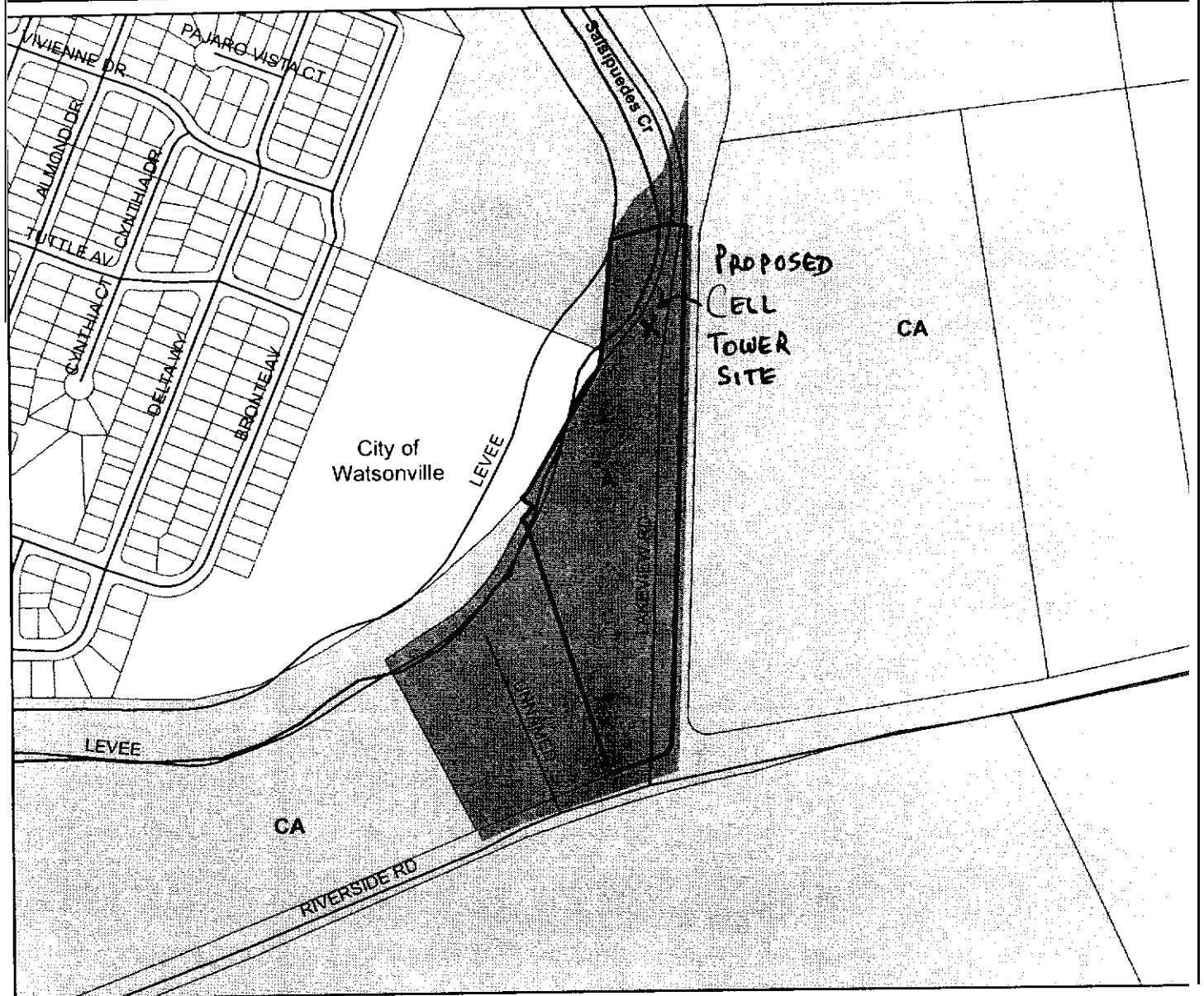
-  APN 051-221-34
-  Assessors Parcels
-  INTERMITTENT STREAM
-  LAKE
-  PERENNIAL STREAM
-  Streets










Map Created by  
County of Santa Cruz  
Planning Department  
February 2007

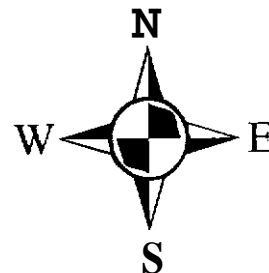


# Zoning Map



## Legend

-  APN 051-221-34
-  Assessors Parcels
-  PERENNIAL STREAM
-  Streets
-  AGRICULTURE (A)
-  AGRICULTURE COMMERCIAL (CA)
-  CITY PROPERTY

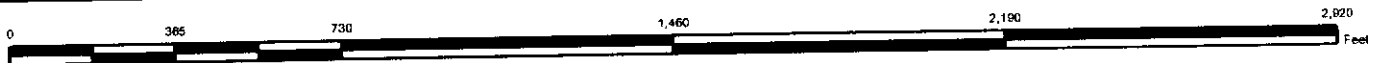
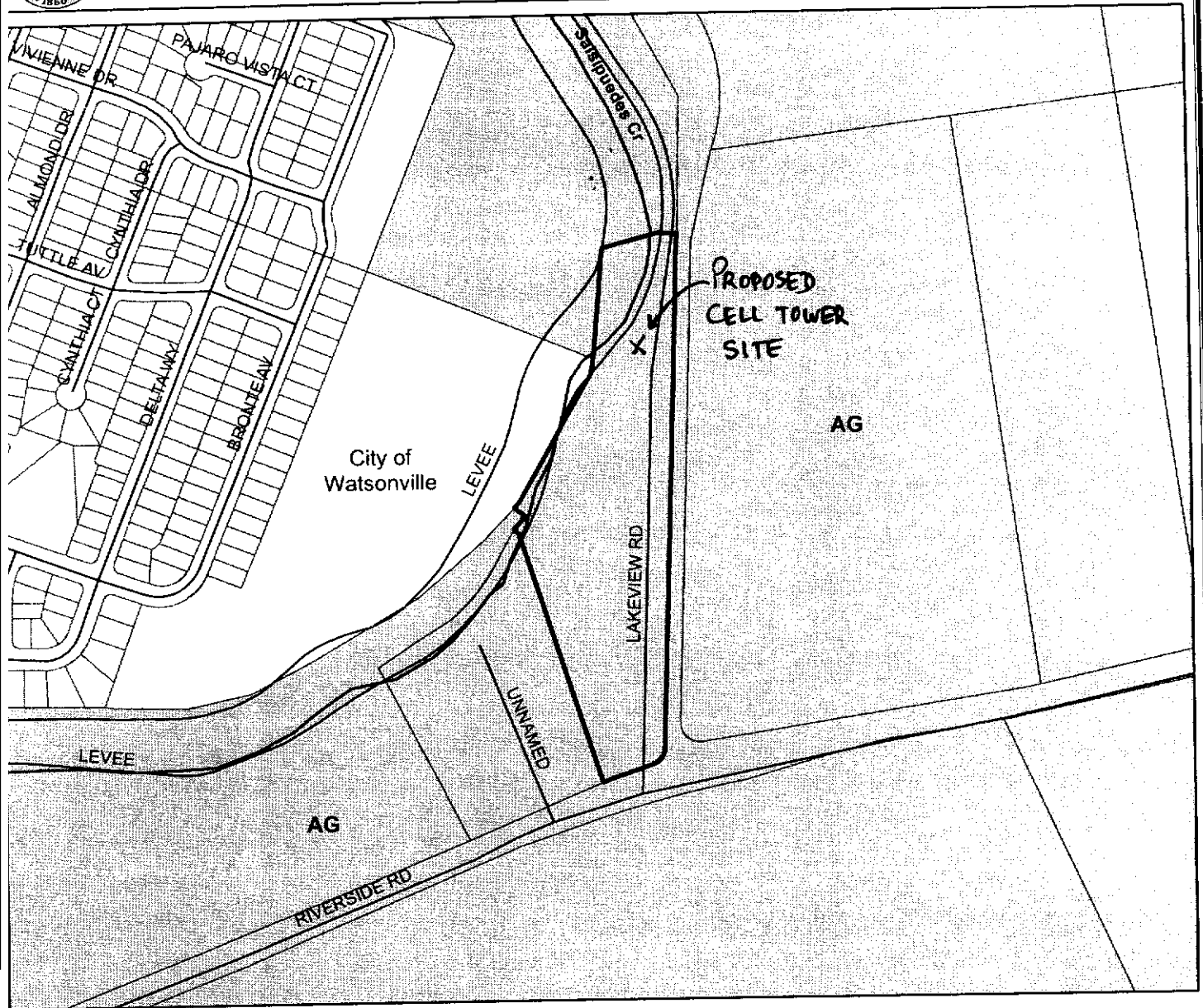


Map Created by  
County of Santa Cruz  
Planning Department  
February 2007

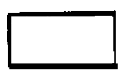
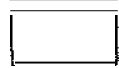
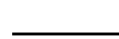

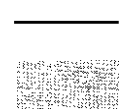


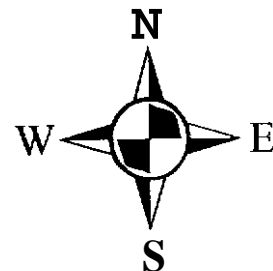


# General Plan Designation Map



## Legend

-  APN 051-221-34
-  Assessors Parcels
-  PERENNIAL STREAM
-  Streets
-  Agriculture (AG)



Map Created by  
County of Santa Cruz  
Planning Department  
February 2007

EXHIBIT F

## Existing

**T-Mobile**

**SF25673**

**Western  
Farm Services**

209 Riverside Road  
Watsonville, CA 95077

## Proposed

proposed faux windmill

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## Existing



**T-Mobile**

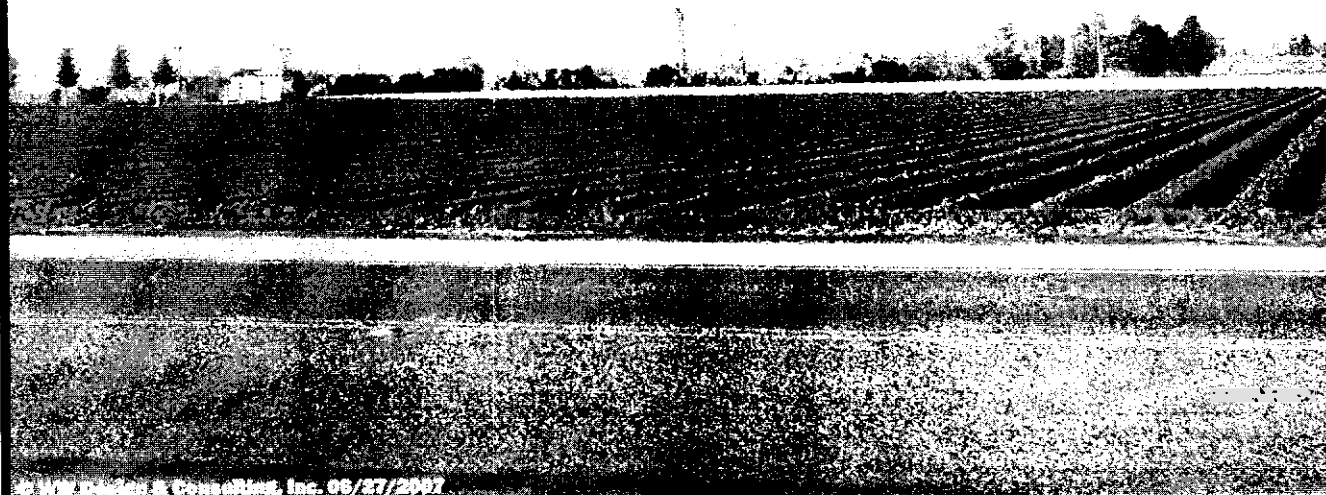
**SF25673**

**Western  
Farm Services**

209 Riverside Road  
Watsonville, CA 95077

## Proposed

proposed faux windmill



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6 February 2006

County of Santa Cruz  
Planning Department  
701 Ocean Street, 4th Floor  
Santa Cruz, CA 95060

**RE: T-Mobile Proposed Wireless Telecommunications Facility**  
**SF25673:Western Farm Services**  
**215 Riverside Road, Watsonville, CA 95076**  
**APN: 051-221-34**

Dear Planning Department,

T-Mobile is submitting the following materials in accordance with the County of Santa Cruz's submittal requirements for a Wireless Use Permit (*IAW 13.10.662*):

- **Land Use Development Applications with Submittal Fees**  
LORI form/Discretionary Permit Application with fee schedule  
Letter of Authorization from Properly Owner  
Check in the amount of \$7230.45
- **Project Description**  
Justification  
Safety & Compliance  
T-Mobile Company Information
- **Application Requirements and Findings**
- **Title Report**  
Legal Description  
County Assessor's Map  
Site Location Map
- **Photo Simulations**  
Methodology  
Four color copy sets
- **Electromagnetic Frequency Report**  
*Generated by Hammett & Edison, Inc*
- **Cabinet Noise Study**  
*Generated by Lucent Technologies*
- **CPUC Letter of Authorization**
- **FCC Letter of Authorization**

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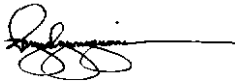
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- **Map of Proposed Facilities within County of Santa Cruz**  
Confidential List of Proposed Network Sites
- **Site Development Plans and Elevations**
  - . Twelve (12) full sized plan sets 24" x 36"
  - Two (2) reduced plan sets 8 ½" x 11"

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Please contact me **should** you require anything further. I can be reached via **email** at [daguirre@sutroconsulting.com](mailto:daguirre@sutroconsulting.com) or by mobile at 925.548.7671. Thank you for your assistance.

Sincerely,



Dayna L. Aguirre, Planning Consultant  
sutro consulting, llc  
**Authorized agent for T-Mobile**

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## **SF25673: Western Farm Services**

Address: **215** Riverside Drive, Watsonville, **CA 95076**

Zone: Commercial

**APN:** 051-221-34

### Project Description

T-mobile is proposing to construct, operate and maintain a wireless telecommunications facility within an open area at the Western Farm Services. The facility will be designed as a windmill to integrate with the existing rural surroundings. The proposed facility will consist of three (3) sectors, with two (2) antennas per sector, totaling six (6) antennas. The proposed antennas will be located at the top portion of the windmill tower. The Base Transceiver Station (BTS) equipment cabinets will be placed at the base of the windmill within a fenced area on a concrete slab.

The location and configuration of the proposed antennas have been selected to achieve the functional requirements for T-mobile Radio Frequency Engineers. This location has been coordinated and approved by the property owner to avoid impacting the functionality, use and the aesthetics of the property. The development of this portion of the network will allow its customers seamless access to a nationwide network of services, providing an additional communication infrastructure to the community.

Wireless systems are expanded or introduced in a given area to improve service to customers. There are several reasons to add a new facility. It may extend the coverage to new areas, increase the capacity of the system within the current service area, or improve quality. Some wireless facilities accomplish all three improvements.

This location was also selected because of its position relative to existing sites, providing favorable site geometry for federally mandated E911 location accuracy requirements and efficient frequency reuse. Since 40 percent of 911 calls are from mobile phones, effective site geometry within the overall network is needed to achieve accurate location information of mobile users, through triangulation with active wireless facilities.

### Coverage:

Coverage can be defined as having a certain minimum level of signal strength in a particular area. T-Mobile's target is to provide -76dBm of signal strength to our customers' areas across the network. This level of service guarantees reliable signal strength inside buildings to provide excellent voice quality in residential neighborhoods and commercial areas. In today's competitive marketplace, T-Mobile requires high quality coverage to be competitive and to fulfill our responsibilities under our FCC license, and comply with CPUC mandates.

### Capacity:

Capacity is the number of calls that can be handled by a particular wireless facility. When we make phone calls, our mobile phones communicate with a nearby antenna site that can handle a limited number of calls. It then connects to land based phone lines. When a particular site is handling a sufficient number of calls, the available RF channels assigned to that site are at maximum capacity. When this occurs, the wireless phone user will hear a busy signal on his/her phone. For T-Mobile's specific GSM technology, typical sites with 3 antennas can

handle a maximum of approximately 150 calls at any given time. The call traffic at the facility is continually monitored and analyzed so that overloading of sites is prevented. The objective for a capacity site is to handle increased call volume rather than expand a coverage area.

## Justification

Since their introduction, wireless telecommunications systems have proven to be an invaluable communications tool in the event of emergencies (traffic accidents, fires, etc.) and natural disasters (earthquakes, floods, etc.) where normal land line communications are often disrupted, overlooked, or inaccessible during and after an event has occurred. This service and similar technology are utilized by numerous governmental and quasi-governmental agencies that provide emergency service. Wireless telecommunications systems, including cellular telephones, have also proven to be invaluable tools in business communications and everyday personal use. In this sense, wireless telecommunications system networks are desirable in the interest of public convenience, health, safety and welfare, and thus are proper in relation to the development community.

Unlike other land uses, which can be spatially determined through the General Plan the location of wireless telecommunication facilities is based on technical requirements which include service area, geographical elevations, alignment with surrounding sites and customer demand components. Placement within the urban geography is dependent on these requirements. Consequently, wireless telecommunication facilities have been located adjacent to and within all major land use categories including residential, commercial, industrial, open space, etc. proving to be compatible in all locations.

## Safety and Compliance

The proposed facility will not be detrimental to the character of development, as it will be un-staffed, having no impact on circulation systems. Furthermore, it will generate no noise, odor, smoke or any other adverse impacts to adjacent land uses. T-Mobile technology does not interfere with any other forms of private or public communications systems. In addition, the proposed wireless telecommunications facility will operate in full compliance with all local, state and federal regulations including the Telecommunications Act of 1996.

After construction of the facility, the site will be serviced once a month, during a routine scheduled maintenance window by a service technician. The site is un-staffed and is a self-monitored facility. There will be no impact on parking or traffic in the area as a result of maintenance.

## T-Mobile Company Information

Based in Bellevue, Washington, the U.S. operations of T-Mobile International AG & Co. K.G., consists of T-Mobile USA, Inc. (formerly Voice Stream Wireless) and Powertel, Inc. (together "T-Mobile"). T-Mobile is one of the fastest growing nationwide wireless service providers, offering all digital voice, messaging and high-speed wireless data services to more than 20 million customers in the United States. A cornerstone of T-Mobile's strong consumer appeal has been its Get More® business strategy to provide customers with the best overall value in their wireless service so they can enjoy the benefits of mobile communications to Get More From

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Life®. T-Mobile has more than 24,000 employees across the country dedicated to delivering on its Get More® promise to provide customers with more minutes, more features and more service. The T-Mobile global brand name made its debut in the United States in July 2002, choosing California and Nevada as the first markets in the country to launch its wireless voice and data services. Here in the Bay Area, T-Mobile has purchased and taken control of the former PacBell Wireless/ Cingular System on January 5, 2005.

T-Mobile holds a license in the California Market as follows: 1950.2-1964.8, 1965.2-1969.8 MHz and 1870.2-1884.8, 1885.2-1889.8 MHz.

T-Mobile offers consumers and business customers the most advanced mobile communications services available today, including voice, text messaging, and high-speed wireless data services. T-Mobile operates an all-digital, national wireless network based exclusively on GSM technology.

## Enhanced Messaging Services - SMS, Instant Messaging & MMS

T-Mobile offers its customers a variety of options for using Short Messaging Service (SMS) or text messaging and Multimedia Messaging Service (MMS).

SMS: Every T-Mobile customer, regardless of device or rate plan, can send text messages via their handset to friends and family, no matter which wireless service provider they use. In addition, customers and their colleagues can use the Internet to send and receive text messages between wireless phones, devices and personal computers.

IM: T-Mobile customers can use Yahoo! ® Messenger, MSN® Messenger and AOL® Instant Messenger Software to interact with millions of instant messaging users worldwide.

MMS: T-Mobile has upgraded its entire national network to provide MMS services. MMS enables customers to complement their text messages with sound, animation and melodies to send to e-mail addresses and compatible handsets. As part of this rich visual communications offering, T-Mobile offers handsets that let customers take a picture and send it to any e-mail address or other MMS-capable phone and then talk about it — all from a single device. Additionally, MMS enables customers to send short video clips to e-mail or other MMS-capable phones, giving T-Mobile customers a whole new way to communicate.

## 2.5G GPRS High Speed Wireless Data

T-Mobile leverages its national, standards-based GSM network to provide customers with the latest in mobile communications including wireless data access through its T-Mobile Internet service. This allows customers to remotely access the Internet; get their corporate and personal e-mail; keep contacts and calendar information updated on the go; and get popular games, news and information services such as sports scores, stock quotes, horoscopes and games delivered automatically or on demand to their wireless handset or device.

T-Mobile HotSpot<sup>SM</sup> - Wi-Fi (802.11 b) Wireless Broadband Internet Service



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T-Mobile complements its existing national GSM/GPRS wireless voice and high-speed data network by providing Wi-Fi (802.11b) wireless broadband Internet access in more than 5,000 convenient public locations in the United States where people already go when they're away from their home or office. By combining the benefits of these networks, T-Mobile offers customers coverage where they want it and speed when they need it. T-Mobile is uniquely able to provide a comprehensive wireless service offering that meets customers' needs for wireless connectivity. Backed by T-1 circuits, T-Mobile HotSpot service is reliable and fast enough to accommodate a broad spectrum of applications from checking e-mail to multimedia videoconferencing.

## **T-Mobile Site Selection/Co-location**

In an effort **to** minimize the number of new facilities in an area, T-Mobile is always looking for opportunities to co-locate on an existing building, utility poles or existing wireless structures. For this particular site, T-Mobile explored an opportunity to co-locate on an existing PG&E tower. However, the zoning designation for that particular area is CA-Commercial Agriculture, which prohibits telecommunication facilities. Therefore, T-Mobile found the next viable location zoned A-Agriculture. T-mobile views the proposed facility as a good opportunity for future carriers **to** locate. Equipment will be placed under the tower and screen with a redwood fence.

## COUNTY OF SANTA CRUZ APPLICATION SUBMITTAL REQUIREMENT CHECKLIST FOR WIRELESS COMMUNICATION FACILITIES

### I. Submittal Information:

1. Applicant:  
T-Mobile  
Scott Dunham, Development Manager  
1855 Gateway Blvd., 9th Floor  
Concord, CA 94520
2. Applicant's Agent:  
Dayna L. Aguirre  
sutro consulting, llc  
4166 Clarinbridge Circle  
Dublin, CA 94568  
[daquirre@sutroconsulting.com](mailto:daquirre@sutroconsulting.com)  
925.548.7671
3. Owner:  
Borina Orchards, LLC  
Attention: Carl Sprague  
155 Westridge Drive  
Watsonville, CA 95076  
831-722.7609
4. **Address/APN/Latitude** and Longitude for Proposed Site:  
215 Riverside Drive, Watsonville, CA 95076  
APN: 051-221-34  
  
Latitude 36.920645 Longitude 121.731591
5. Description of applicant service provider's existing and proposed network:  
T-Mobile is continuing to expand their network in Santa Cruz County. All existing and proposed sites are detailed on the attached maps required by 13.10.662
6. Description of services that the applicant intends to offer:  
T-Mobile offers consumers and business customers the most advanced mobile communications services available today, including voice, text messaging and high-speed wireless data services. T-mobile operates an all-digital, national wireless network based exclusively on GSM technology.

Enhanced Messaging Services - SMS, Instant Messaging & MMS

T-Mobile offers its customers a variety of options for using Short Messaging Service (SMS) or text messaging and Multimedia Messaging Service (MMS).

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**SMS:** Every T-Mobile customer, regardless of device or rate plan, can send text messages via their handset to friends and family, no matter which wireless service provider they use. In addition, customers and their colleagues can use the Internet to send and receive text messages between wireless phones, devices and personal computers.

**IM:** T-Mobile customers can use Yahoo!® Messenger, MSN® Messenger and AOL® Instant Messenger Software to interact with millions of instant messaging users worldwide.

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7. Information **Sufficient** to determine applicant has applied for and/or received certificate of authority required by the CPUC.  
See attached documentation
8. Information **sufficient** to determine application has applied for and/or received certificate of authority required by the FCC.  
See attached documentation
9. Compliance with FCC's non-ionizing electromagnetic radiation (NIER) standards  
*See* attached electromagnetic radiation report by Hammett and Edison.
10. A plan for safety/security, with regard to electromagnetic radiation

See attached Electromagnetic Radiation Report by Hamrnett and Edison.

11. Visual Impact Analysis

See attached Photo simulations

12. Required Maps

See attached maps included in required plans. Plan count submitted:

12 sets – 24x36

2 sets – 8 ½ x 11 sets

13. Required Plans, Elevations and Cross Section

Required Plans, elevations and cross sections included in plans. Plan count submitted:

12 sets – **24x36**

2 sets – 8 ½ x 11 sets

14. Co-Location

This proposal is not a co-location as the only feasible location **was** a PG&E tower zoned CA-Commercial Agriculture, which prohibits telecommunication facilities.

15. For Major Modifications or Facility Replacement

N/A, this proposal does not involve a major modification

## WIRELESS USE PERMIT FINDINGS

Pursuant to 13.10.665, in order to grant any Commercial Development Permit for a wireless communication facility, the approving body shall make the required development findings (Section **18.10.230**), and the required coastal development permit findings if the coastal zone (Section 13.20.110) as well as the following:

- a. The development of the proposed wireless communications facility as conditioned will not significantly affect any designated visual resources, environmentally sensitive habitat, and/or other significant County resources, environmentally sensitive habitat, and/or other significant County resources, including agricultural, open space, and community character resources.

The proposed telecommunications facility will not affect any designated visual resources as the area is not designated as such, it is a windmill structure that will integrate with the rural/industrial area with only three equipment cabinets on a 289-foot concrete **slab** concealed within a 6' high redwood fence. The proposed area is not a designated environmentally sensitive area.

- b. That the site is adequate for the development of the proposed wireless facility. The proposed site is adequate for the development of the proposed facility as it is an open area with agriculture-type facilities nearby integrating the proposed windmill facility. The proposed windmill is compatible with existing land uses and meets all FCC guidelines for health and safety.

- c. That the subject property is in compliance with all rules and regulations pertaining to zoning uses.

All uses have received appropriate zoning approvals and/or exemptions. No red tags are noted in the County records.

- d. That the proposed wireless facility as conditioned will not create a hazard for aircraft in flight.

The proposed facility will only reach a height of sixty feet (60) and will not be located within a flight path.

- e. That the proposed wireless communication facility as conditioned is in compliance with all FCC and CPUC standards and requirements.

See attached letters of authorization from the FCC and CPUC

- f. This project is not located in the coastal zone.

## GENERAL USE PERMIT FINDINGS

1. That the proposed location of the project will not be detrimental to the health, safety, or welfare of persons residing 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.

The proposed facility will be un-staffed and accordingly, there will be no impact to the existing traffic patterns nor will there be any traffic hazards or nuisances generated. Maintenance personnel will visit the site once per month to ensure the equipment is operating within regulated guidelines, and thus, the safety, efficiency, and general traffic movement in the area will be unaffected by the proposed facility. Parking for monthly maintenance is provided on-site. All access to the proposed facility is provided by existing public streets on site circulation.

The only noise generated by the proposed facility will be similar to that of a standard air conditioning unit with an average 50 decibels at 5'. Furthermore, the proposed facility will not generate any vibrations, particulate matter, odor, or any type of waste materials. See attached noise study by Lucent Technologies dated 1/24/00.

See attached letter of authorization from the FCC. To ensure that the T-Mobile facility is operated in compliance with FCC regulations, an operations technician makes monthly visits to the site and makes any necessary adjustments and/or repairs.

Standard FCC approved signage shall be installed on the equipment area on the existing tower. T-Mobile shall notify the County of Santa Cruz if there is a change in ownership. T-Mobile shall notify the County of Santa Cruz if there is a change in ownership of this facility within 30 days and within the timeframe, will change signage to reflect new ownership. The facility has been reviewed by an independent engineering firm generally recognized as "expert" in this field and is shown to have cumulative RF emissions no more than 0.20% of

allowable emissions as determined by the FCC. Should the County require post operation testing and certification of the facility, T-Mobile will comply. See NIER RF Exposure Report by Hammett and Edison.

To ensure the operation of this facility without interruption in the event of a natural disaster the facility is designed with the following:

- a. Equipment cabinets are constructed of non-flammable materials.
- b. Cabinet openings are sealed and shall protect the equipment from windblown embers and fire as engineered in accordance with UBC.
- c. Antenna support materials are metal and a plastic-like polymer and are fire-resistant and termite-proof in accordance with UBC.
- d. The structural supports for equipment and antennas are engineered to withstand earthquakes for this area in accordance with UBC.
- e. In the event of a power outage, back-up batteries will provide 2-3 hours of continual operation. If necessary, a generator can be brought on site to provide additional back-up power until power is restored.
- f. All building permits will be applied for and shall be reviewed by the fire department.
- g. All reports, certifications and verifications shall be prepared and maintained as to be readily available for public examination and review at T-mobile offices located at: 1855 Gateway Boulevard, 9<sup>th</sup> floor, Concord, CA 94520 and shall be submitted to the County upon request.

2. That the proposed location of the project is consistent with all County Ordinances and the purpose of the zone district in which the site is located.

The proposed site meets all ordinances and is consistent with the A (Agriculture) zone in which it is located as T-Mobile is regulated by the CPUC and has a mandate to provide wireless communications to the public in those areas in which it is licensed.

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.

The proposed facility is consistent with the elements of the County General Plan providing a service to the community residing and working within the area of Watsonville.

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

The proposed facility utilizes a 200 amp service for its equipment. There is neither water nor sewer required or used. The proposed facility will be un-staffed, and accordingly, there will be no impact to the existing traffic patterns nor will there be any traffic hazards or nuisances generated. Maintenance personnel will visit the site once per month to ensure that equipment is operating within regulated guidelines, and thus, the safety, efficiency and general traffic movement in the area will be unaffected by the proposed facility. Parking for monthly maintenance is provided on-site. All access to the proposed facility is provided by existing public streets and on-site circulation.

- **Title Report**  
Legal Description  
Assessor's Parcel Map  
Property Map



## First American Title Insurance Company

135 Main Street, Suite 1200  
San Francisco, CA 94105

Ryan Crowley  
Sutro Consulting--Site Acquisition Team  
1011 23rd Street, Suite 3  
San Francisco, CA 94107-3472  
Phone: (415)902-4165

Escrow Officer: Stella Au  
Phone: (415)837-2291

Owner: Broina Orchards, LLC

Property: 215 Riverside Road, Watsonville, CA

### PRELIMINARY REPORT

In response to the above referenced application for a policy of title insurance, this company hereby reports that it is prepared to issue, or cause to be issued, as of the date hereof, a Policy or Policies of Title Insurance describing the land and the estate or interest therein hereinafter set forth, insuring against loss which may be sustained by reason of any defect, lien or encumbrance not shown or referred to as an Exception below or not excluded from coverage pursuant to the printed Schedules, Conditions and Stipulations of said Policy forms.

The printed Exceptions and Exclusions from the coverage of said Policy or Policies are set forth in Exhibit A attached. Copies of the policy forms should be read. They are available from the office which issued this report.

**Please read the exceptions shown or referred to below and the exceptions and exclusions set forth in Exhibit A of this report carefully. The exceptions and exclusions are meant to provide you with notice of matters which are not covered under the terms of the title insurance policy and should be carefully considered.**

**It is important to note that this preliminary report is not a written representation as to the condition of the land and may not list all liens, defects, and encumbrances affecting title to the land.**

This report (and any supplements or amendments hereto) is issued solely for the purpose of facilitating the issuance of a policy of title insurance and no liability is assumed hereby. If it is desired that liability be assumed prior to the issuance of a policy of title insurance, a Binder or Commitment should be requested.

*First American Title Insurance Company*



Dated as of November 17, 2006 at 7:30 AM.

The form of Policy of title insurance contemplated by this report is:

To Be Determined

A specific request should be made if another form or additional coverage is desired.

Title to said estate or interest at the date hereof is vested in:

Borina Orchards, LLC, a California limited liability company

The estate or interest in the land hereinafter described or referred to covered by this Report is:

Fee Simple

The Land referred to herein is described as follows:

(See attached Legal Description)

At the date hereof exceptions to coverage in addition to the printed Exceptions and Exclusions in said policy form would be as follows:

1. General and special taxes and assessments for the fiscal year 2006-2007.

First Installment:	\$5,096.89, DUE
Penalty:	\$0.00
Second Installment:	\$5,096.89, PAYABLE
Penalty:	\$0.00
Tax Rate Area:	69-258
A. P. No.:	051-221-34
2. The lien of supplemental taxes, if any, assessed pursuant to Chapter 35 commencing with Section 75 of the California Revenue and Taxation Code.
3. Assessment liens, if applicable, collected with the general and special taxes.
4. Additional matters, if any, relating to waterways and boundaries issues, to be determined by a review by the Company's underwriting staff.
5. An easement for a road and incidental purposes, recorded October 27, 1887 in Book 57 of Deeds, Page 373.

In Favor of:	Talman Chittenden
Affects:	a portion of Parcel One

*First American Title Insurance Company*

6. Covenant and Agreement as contained in that certain Grant Deed from Helen Dubendorf to Carl L. Silliman and Recorded February 15, 1949 in Volume 707 at Page 247, Official Records, Santa Cruz County.  
Affects Parcel Two.

7. An easement for present travelled roads or rights of way, draining water and sewage and incidental purposes, recorded February 15, 1949 as Book 707, Page 247 of Official Records.  
In Favor of: Helen Dubendorf  
Affects: a portion of Parcel Two

8. An easement for a perpetual easement and right of way for a creek channel and a levee, for the purpose of flood control and incidental purposes, recorded February 1, 1950 as Book 756, Page 540 of Official Records.  
In Favor of: The County of Santa Cruz, a Body Politic  
Affects: The Northerly portion of premises

A reservation of water and water rights contained in such document.

Said Document also contains the following recital, to wit:

The Grantors reserve the right to pump and utilize water from the Corralitos Creek for their own use and to remove sand, gravel, trees and any other material and/or substance from the above tract of land; except, however, for the protection of the Creek channel, levee and all appurtenant works thereto, from damage and/or obstructions, the methods used in and the location of such pumping and removal operations, shall be subject to approval in writing by the County of Santa Cruz.

9. An easement for road and utility purposes and incidental purposes, recorded October 21, 1976 as Book 2677, Page 232 of Official Records.  
In Favor of: Riverside Strawberry Coolers, Inc., a Texas corporation  
Affects: The Southwesterly 50 feet

Said Document also recites:

Reserving from said right of way the exclusive use of an existing well and appurtenances located within said right of way, also reserving the right to replace or construct improvements to said well and water system

10. A waiver of any claims for damages by reason of the location, construction, landscaping or maintenance of a contiguous freeway, highway, roadway or transit facility as contained in the document recorded December 26, 1985 as Book 3924, Page 56 of Official Records.
11. The terms and provisions contained in the document entitled "Maintenance Agreement" recorded August 11, 1986 as Book 4019, Page 339 of Official Records.
12. A Statement of Acknowledgement regarding the issuance of a county building permit in an area determined by the County of Santa Cruz to be subject to agricultural-residential use conflicts, executed by Borina Orchards, recorded June 8, 1989, in Book 4515, Page 559, Official Records of Santa Cruz County.

*First American Title Insurance Company*

13. The terms and provisions contained in the document entitled "Declaration Regarding the Issuance of a Development Permit in an Area Subject to Geologic Hazards" recorded June 20, 1989 as **Book** 4520, Page 837 of Official Records.
14. An easement for poles, wires, cables, fixtures and appurtenances and incidental purposes, recorded July 31, 1989 as **Book** 4540, Page 57 of Official Records.  
In Favor of: Pacific Gas and Electric Company, a California corporation  
Affects: A portion of the land
15. The terms and provisions contained in the document entitled "Drainage Facilities Agreement" recorded March 14, 1990 as Book ~~4644~~, Page 21 of Official Records.
16. The terms and provisions contained in the document entitled "Statement of Acknowledgment" recorded May 6, 1996 as **Book** 5841, Page 263 of Official Records.
17. The terms and provisions contained in the document entitled "Declaration Regarding the Issuance of a Development Permit in an Area Subject to Geologic Hazards" recorded May 30, 1996 as Instrument No. 29992 in ~~Book~~/Volume 5852, Page 861 of Official Records.
18. Rights of parties in possession.

*First American Title Insurance Company*

### INFORMATIONAL NOTES

1. According to the latest available equalized assessment roll in the office of the county tax assessor, there is located on the land a(n) Commercial Structure known as 215 Riverside Road, Watsonville, California.

2. According to the public records, there has been no conveyance of the land within a period of twenty four months prior to the date of this report, except as follows:

A document recorded October 12, 2005 as Instrument No. 2005-0071985 of Official Records.

From: Borina Orchards, a Corporation

To: Borina Orchards, LLC, a California limited liability company

3. This preliminary ~~report/commitment~~ was prepared based upon an application for a policy of title insurance that identified land by street address or assessor's parcel number only. It is the responsibility of the applicant to determine whether the land referred to herein is in fact the land that is to be described in the policy or policies to be issued.

4. Should this report be used to facilitate your transaction, we must be provided with the following prior to the issuance of the policy:

A. WITH RESPECT TO A CORPORATION:

- a. A certificate of good standing of recent date issued by the Secretary of State of the corporation's state of domicile.
- b. A certificate copy of a resolution of the Board of Directors authorizing the contemplated transaction and designating which corporate officers shall have the power to execute on behalf of the corporation.
- c. Requirements which the Company may impose following its review of the above material and other information which the Company may require.

B. WITH RESPECT TO A CALIFORNIA LIMITED PARTNERSHIP:

- a. A certified copy of the certificate of limited partnership (form LP-1) and any amendments thereto (form LP-2) to be recorded in the public records;
- b. A full copy of the partnership agreement and any amendments;
- c. Satisfactory evidence of the consent of a majority in interest of the limited partners to the contemplated transaction;

*First American Title Insurance Company*

- d. Requirements which the Company may impose following its review of the above material and other information which the Company may require.
- C. WITH RESPECT TO A FOREIGN LIMITED PARTNERSHIP:
- a. A certified copy of the application for registration, foreign limited partnership (form LP-5) and any amendments thereto (form LP-6) to be recorded in the public records;
  - b. A full copy of the partnership agreement and any amendment;
  - c. Satisfactory evidence of the consent of a majority in interest of the limited partners to the contemplated transaction;
  - d. Requirements which the Company may impose following its review of the above material and other information which the Company may require.
- D. WITH RESPECT TO A GENERAL PARTNERSHIP:
- a. A certified copy of a statement of partnership authority pursuant to Section 16303 of the California Corporation Code (form GP-1), executed by at least two partners, and a certified copy of any amendments to such statement (form GP-7), to be recorded in the public records;
  - b. A full copy of the partnership agreement and any amendments;
  - c. Requirements which the Company may impose following its review of the above material required herein and other information which the Company may require.
- E. WITH RESPECT TO A LIMITED LIABILITY COMPANY:
- a. A copy of its operating agreement and any amendments thereto;
  - b. If it is a California limited liability company, a certified copy of its articles of organization (LLC-1) and any certificate of correction (LLC-11), certificate of amendment (LLC-2), or restatement of articles of organization (LLC-10) to be recorded in the public records;
  - c. If it is a foreign limited liability company, a certified copy of its application for registration (LLC-5) to be recorded in the public records;
  - d. With respect to any deed, deed of trust, lease, subordination agreement or other document or instrument executed by such limited liability company and presented for recordation by the Company or upon which the Company is asked to rely, such document or instrument must be executed in accordance with one of the following, as appropriate:
    - (i) If the limited liability company properly operates through officers appointed or elected pursuant to the terms of a written operating agreement, such documents must be executed by at least two duly elected or appointed officers, as follows: the chairman of the board, the president or any vice president, and any secretary, assistant secretary, the chief financial officer or any assistant treasurer;

*First American Title Insurance Company*

EXHIBIT 1

(ii) If the limited liability company properly operates through a manager or managers identified in the articles of organization and/or duly elected pursuant to the terms of a ~~written~~ operating agreement, such document must be executed by at least ~~two~~ such managers or by one manager if the limited liability company properly operates with the existence of only one manager.

- e. Requirements which the Company may impose following ~~its~~ review of the above material and other information which the Company may require.

F. WITH RESPECT TO A TRUST:

- a. A certification pursuant to Section 18500.5 of the California Probate Code in a form satisfactory to the Company.
- b. Copies of those excerpts from the original trust documents and amendments thereto which designate the trustee and confer upon the trustee the power to act in the pending transaction.
- c. Other requirements which the Company may impose following its review of the material require herein and other information which the Company may require.

G. WITH RESPECT TO INDIVIDUALS:

- a. A statement of information.

The map attached, if any, may or may not be a survey of the land depicted hereon. First American Title Insurance Company expressly disclaims any liability for loss or damage which may result from reliance on this map except to the extent coverage for such loss or damage is expressly provided by the terms and provisions of the title insurance policy, if any, to which this map is attached.

*First American Title Insurance Company*

## LEGAL DESCRIPTION

Real property in **the** unincorporated area of **the** County of Santa Cruz, State of California, described as follows:

## PARCEL ONE:

BEING PARCEL B AS THE SAME IS SHOWN UPON THAT CERTAIN MAP ENTITLED, "PARCEL MAP OF LANDS OF BORINA ORCHARDS", RECORDED JANUARY 30, 1980, IN VOLUME 34 OF PARCEL MAPS, PAGE 65, SANTA CRUZ COUNTY RECORDS.

EXCEPTING THEREFROM THE LANDS DESCRIBED IN THAT FINAL ORDER OF CONDEMNATION, OUT OF THE SUPERIOR COURT OF THE STATE OF CALIFORNIA FOR THE COUNTY OF SANTA CRUZ, CASE NO. 93597 AND RECORDED AUGUST 4, 1989, IN BOOK 4542, PAGE 761, AND RECORDED JANUARY 19, 1990, IN BOOK 4619, PAGE 364, OFFICIAL RECORDS OF SANTA CRUZ COUNTY.

## PARCEL TWO:

SITUATE IN RANCHO DE LOS CORRALITOS AND BEING A PORTION OF PARCEL C (REMAINDER), AS SHOWN ON THE MAP ENTITLED "PARCEL MAP OF LANDS OF BORINA ORCHARDS", RECORDED IN VOLUME 34 OF PARCEL MAPS, AT PAGE 65, SANTA CRUZ COUNTY RECORDS AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE MOST EASTERN CORNER OF THE ABOVE MENTIONED PARCEL C, ON THE NORTHWESTERN BOUNDARY OF RIVERSIDE DRIVE, FROM WHICH THE MOST SOUTHERN CORNER OF PARCEL B, AS SHOWN ON ABOVE MENTIONED MAP, BEARS SOUTH 20° 13' 30" EAST 7.89 FEET DISTANT; THENCE FROM SAID POINT OF BEGINNING, ALONG SAID NORTHWESTERN BOUNDARY OF RIVERSIDE DRIVE

- (1) SOUTH 66° 50' 30" WEST 50.01 FEET; THENCE LEAVING SAID NORTHWESTERN BOUNDARY OF RIVERSIDE DRIVE, ALONG THE SOUTHWESTERN BOUNDARY OF SAID PARCEL C
- (2) NORTH 20° 13' 30" WEST 534.87 FEET; THENCE
- (3) NORTH 48° 13' WEST 17.44 FEET TO AN ANGLE POINT IN THE BOUNDARY OF SAID PARCEL C; THENCE LEAVING THE SAID BOUNDARY OF PARCEL C, CONTINUING ALONG THE PROLONGATION OF THE LAST COURSE
- (4) NORTH 48° 13' WEST 64.08 FEET TO THE NORTHWESTERN BOUNDARY OF SAID PARCEL C; THENCE ALONG THE NORTHWESTERN AND NORTHEASTERN BOUNDARIES OF SAID PARCEL C THE FOLLOWING COURSES:
- (5) NORTH 31° 45' EAST 31.01 FEET;
- (6) NORTH 38° 25' EAST 19.45 FEET;
- (7) SOUTH 48° 13' EAST 100.50 FEET; AND
- (8) SOUTH 20° 13' 30" EAST 544.77 FEET TO THE POINT OF BEGINNING.

EXCEPTING THEREFROM THE FOLLOWING DESCRIBED PARCEL OF LAND:

COMMENCING AT THE INTERSECTION OF THE WESTERLY LINE OF THE STRIP OF LAND SHOWN AS "RIGHT OF WAY FIFTY FEET WIDE" ON THE MAP FILED IN BOOK 23 OF PARCEL MAPS, AT PAGE 3, SANTA CRUZ COUNTY RECORDS, WITH THE NORTHERLY LINE OF THE EXISTING STATE HIGHWAY KNOWN AS RIVERSIDE DRIVE; THENCE ALONG SAID WESTERLY

*First American Title Insurance Company*

LINE

(A) NORTH 19° 28' 35" WEST 17.50 FEET; THENCE FROM A TANGENT THAT BEARS NORTH 70° 23' 26" EAST ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 3,350.00 FEET THROUGH AN ANGLE OF 0° 51' 19"

(B) AN ARC LENGTH OF 50.01 FEET TO THE EASTERLY LINE OF SAID STRIP; THENCE ALONG SAID LAST LINE,

(C) SOUTH 19° 28' 35" EAST 14.68 FEET TO SAID NORTHERLY LINE OF RIVERSIDE DRIVE; THENCE ALONG SAID LAST LINE

(D) SOUTH 67° 35' 29" WEST 50.07 FEET TO THE POINT OF COMMENCEMENT.

EXCEPTING THEREFROM THE LANDS DESCRIBED IN THAT FINAL ORDER OF CONDEMNATION, OUT OF THE SUPERIOR COURT OF THE STATE OF CALIFORNIA FOR THE COUNTY OF SANTA CRUZ, CASE NO. 93597 AND RECORDED AUGUST 4, 1989, IN BOOK 4542, PAGE 761, AND RECORDED JANUARY 19, 1990, IN BOOK 4619, PAGE 364, OFFICIAL RECORDS OF SANTA CRUZ COUNTY.

APN: 051-221-34

*First American Title Insurance Company*

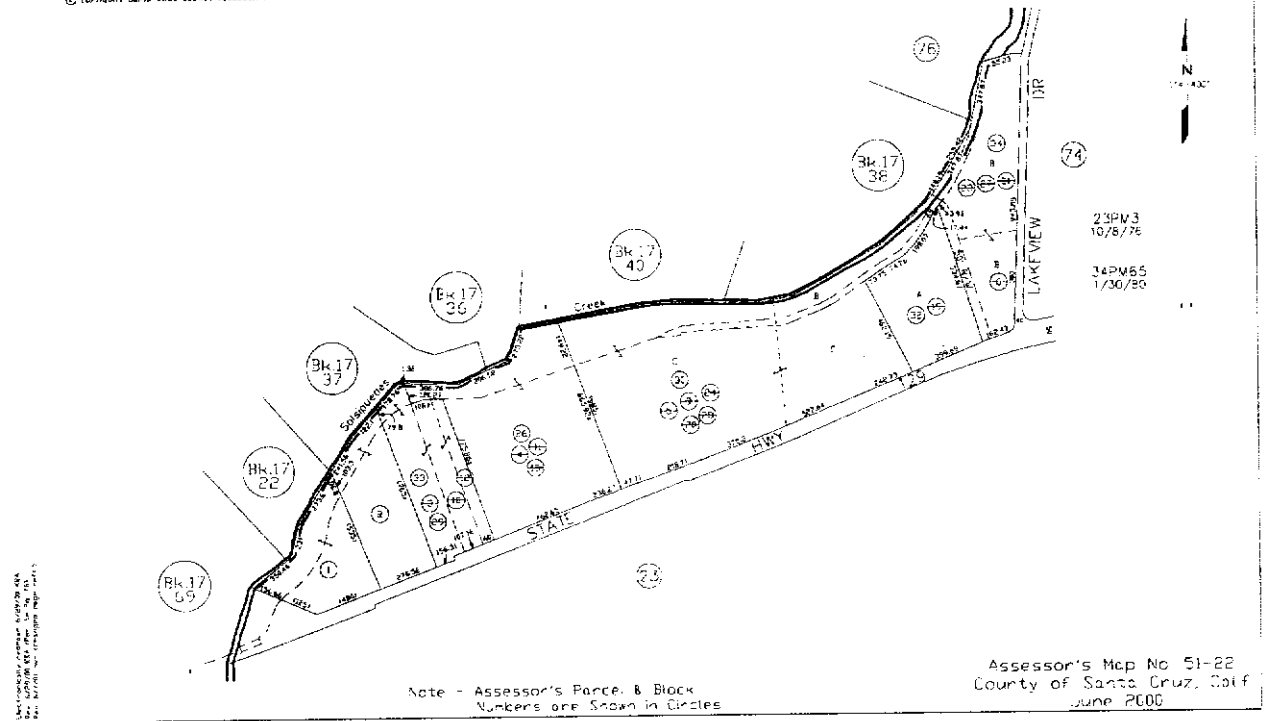


## • Assessor's Parcel Map

FOR TAX PURPOSES ONLY  
THE ASSessor MAKES NO GUARANTEE AS TO MAP ACCURACY FOR ANY PURPOSES AND  
LIABILITY FOR OTHER USES. MAY BE REPRODUCED FOR ANY PURPOSE.  
© COPYRIGHT 2000 SANTA CRUZ COUNTY ASSESSOR'S OFFICE

PER SALSIPIJEDES RANCH  
SEC 3, T32S, R2E, M3B & 4

Tax Area Code 51-22  
69-258



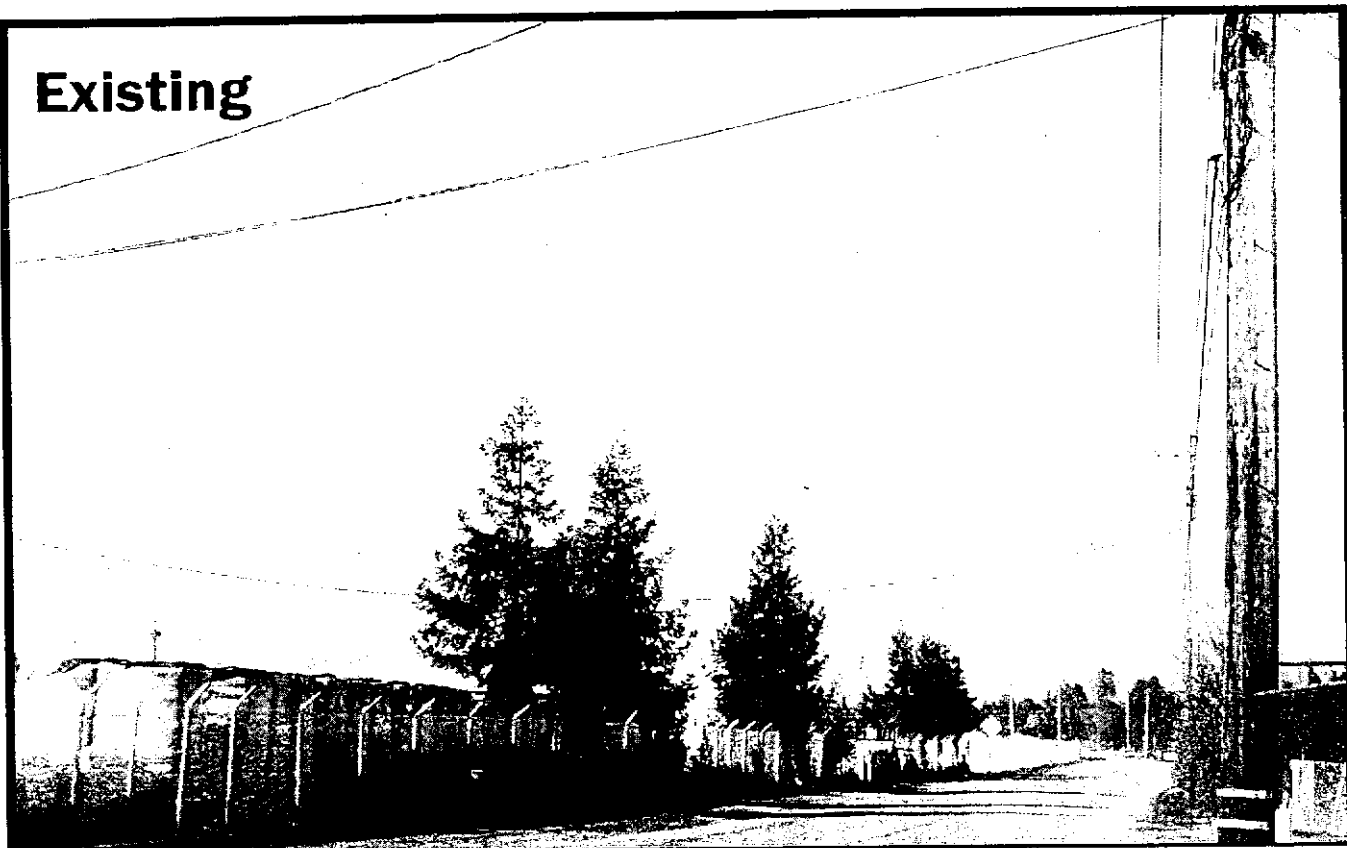
- **Photo Simulations**

## **Methodology:**

Photo simulations were created using advanced computer rendering techniques aided by actual site measurements as well as zoning drawings to ensure proper scaling and accuracy.

Photosimulation of the proposed telecommunication facility as seen looking north along Lakeview Road

# Existing



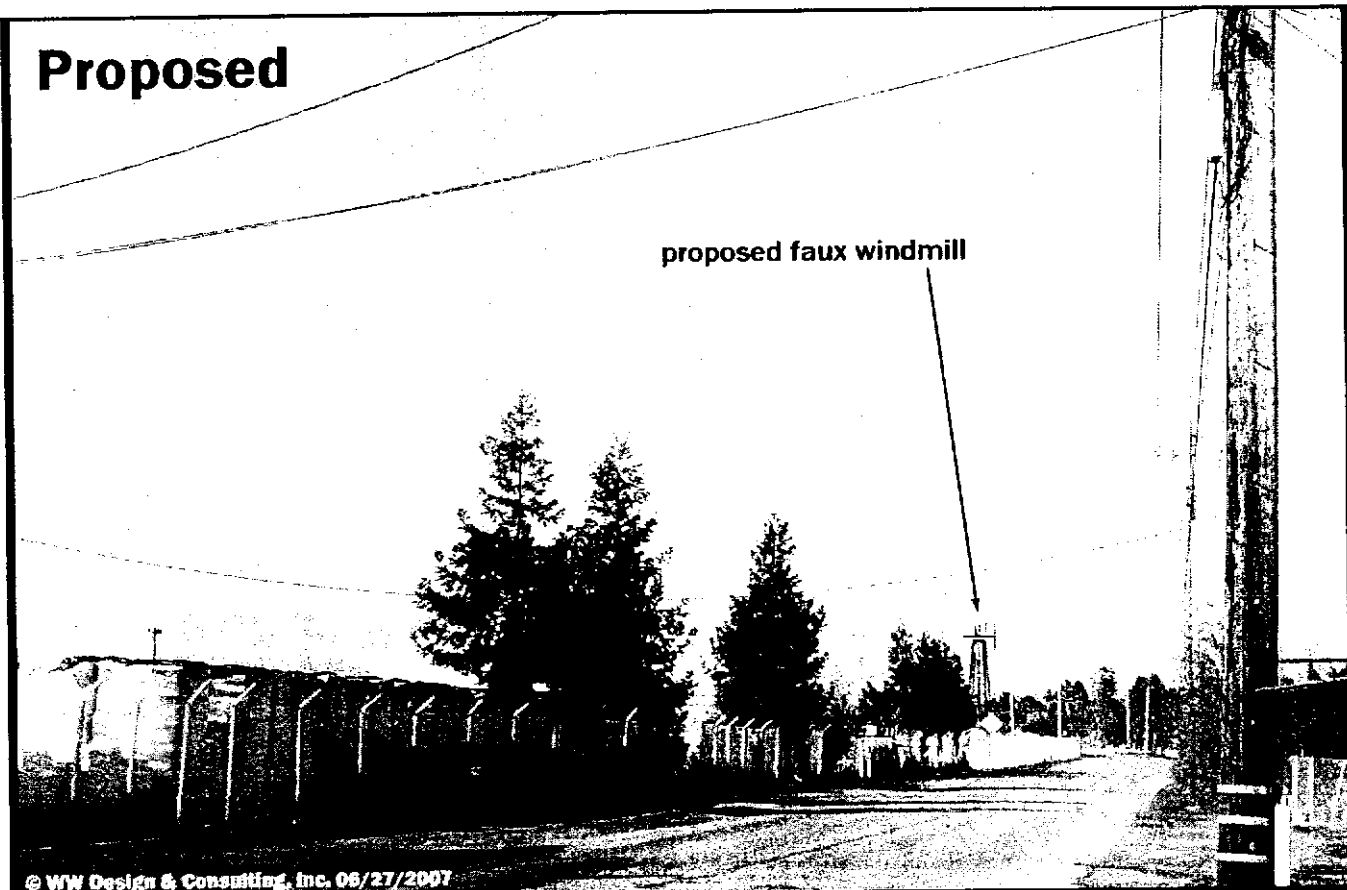
**T-Mobile**

**SF25673**

**Western  
Farm Services**

**209 Riverside Road  
Watsonville, CA 95077**

# Proposed



proposed faux windmill

© WW Design & Consulting, Inc. 06/27/2007

## Existing



**T-Mobile**

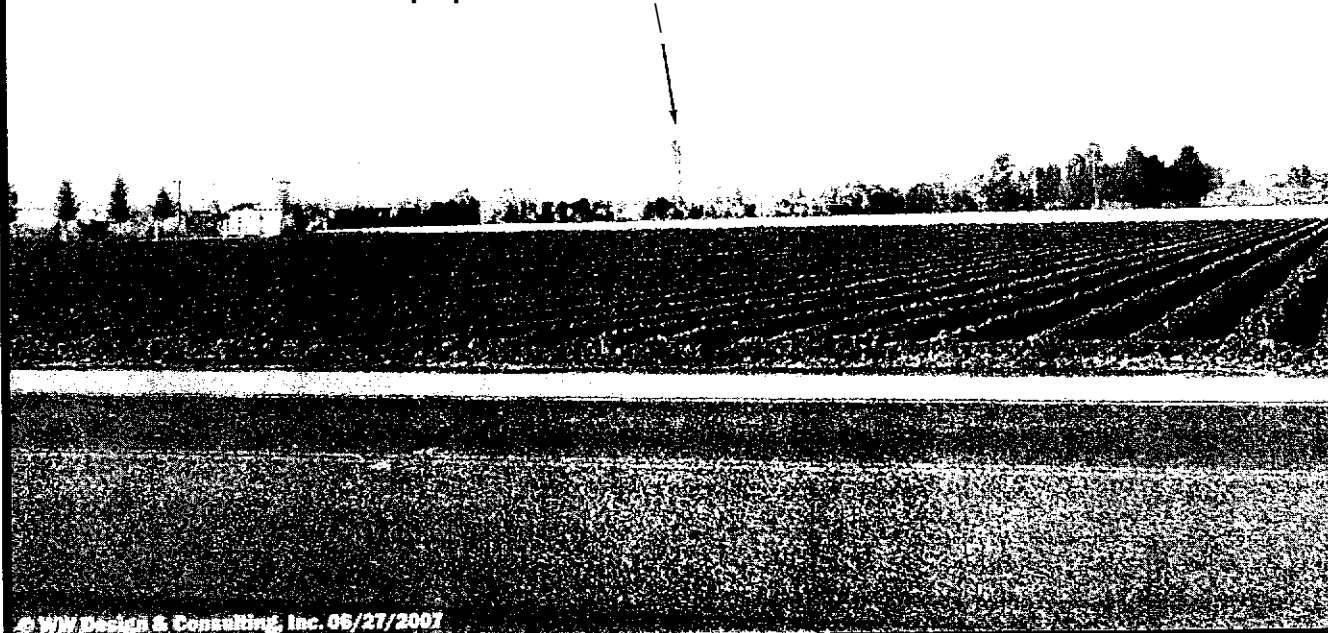
**SF25673**

**Western  
Farm Services**

209 Riverside Road  
Watsonville, CA 95077

## Proposed

proposed faux windmill



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- **NIER Radio Frequency Emissions Study**  
Generated by **Hammett & Edison, Inc.**, Consulting Engineers

**T-Mobile • Proposed Base Station (Site No. SF25673)  
209 Riverside Road • Watsonville. California**

**Statement of Hammett & Edison, Inc., Consulting Engineers**

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained on behalf of T-Mobile, a personal wireless telecommunications carrier, to evaluate the base station (Site No. SF25673) proposed to be located at 209 Riverside Road in Watsonville, California, for compliance with appropriate guidelines limiting human exposure to radio frequency ("RF") electromagnetic fields.

**Prevailing Exposure Standards**

The **U.S.** Congress requires that the Federal Communications Commission ("FCC") evaluate its actions for possible significant impact on the environment. In Docket 93-62, effective October 15, 1997, the FCC adopted the human exposure limits for **field** strength and power density recommended in Report No. 86, "Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields," published in 1986 by the Congressionally chartered National Council on Radiation Protection and Measurements ("NCRP"). Separate limits apply for occupational and public exposure conditions, with the latter limits generally five times more restrictive. The more recent Institute of Electrical and Electronics Engineers ("IEEE") Standard C95.1-1999, "Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz," includes nearly identical exposure limits. A summary of the FCC's exposure limits is shown in Figure 1. These limits apply for continuous exposures and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health.

The most restrictive limit for exposures of unlimited duration to radio frequency energy for several personal wireless services are as follows:

<u>Personal Wireless Service</u>	<u>Approx. Frequency</u>	<u>Occupational Limit</u>	<u>Public Limit</u>
Personal Communication ("PCS")	1,950MHz	5.00 mW/cm <sup>2</sup>	1.00 mW/cm <sup>2</sup>
Cellular Telephone	870	2.90	0.58
Specialized Mobile Radio	855	2.85	0.57
[most restrictive frequency range]	30-300	1.00	0.20

**General Facility Requirements**

Base stations typically consist of two distinct parts: the electronic transceivers (also called "radios" or "channels") that are connected to the traditional wired telephone lines, and the passive antennas that send the wireless signals created by the radios out to be received by individual subscriber units. The transceivers are often located at ground level and are connected to the antennas by coaxial cables about 1 inch thick. Because of the short wavelength of the frequencies assigned by the FCC for wireless services, the antennas require line-of-sight paths for their signals to propagate well and so are installed at some height above ground. The antennas are designed to concentrate their energy toward



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TM25673595.1  
Page 1 of 3

**T-Mobile • Proposed Base Station (Site No. SF25673)  
209 Riverside Road • Watsonville, California**

the horizon, with very little energy wasted toward the sky or the ground. Along with the low power of such facilities, this means that it is generally not possible for exposure conditions to approach the maximum permissible exposure limits without being physically very near the antennas.

**Computer Modeling Method**

The FCC provides direction for determining compliance in its Office of Engineering and Technology Bulletin No. 65, "Evaluating Compliance with FCC-Specified Guidelines for Human Exposure to Radio Frequency Radiation," dated August 1997. Figure 2 attached describes the calculation methodologies, reflecting the facts that a directional antenna's radiation pattern is not **fully** formed at locations very close by (the "near-field" effect) and that the power level from an energy source decreases with the square of the distance from it (the "inverse square law"). The conservative nature of this method for evaluating exposure conditions has been verified by numerous field tests.

**Site and Facility Description**

Based upon information provided by T-Mobile, including drawings by Michael Wilk Architecture, dated December 6, 2006, it is proposed to mount six RFS Model APA16DWV-16DWV directional panel antennas on a 60-foot lattice tower, configured to resemble a windmill, **to** be located at 209 Riverside Road in Watsonville. The antennas would be mounted with 2° downtilt at an effective height of about 58 feet above ground and would be oriented in pairs toward 90°T, 230°T, and 350°T. The maximum effective radiated power in any direction would be 2,400 watts, representing six channels operating simultaneously at 400 watts each. There are no reported other wireless communications base stations installed nearby.

**Study Results**

For a person anywhere at ground, the maximum ambient RF exposure level due to the proposed T-Mobile operation is calculated to be 0.0013 mW/cm<sup>2</sup>, which is 0.13% of the applicable public exposure limit. The maximum calculated level at the second-floor elevation of any nearby building would be 0.20% of the public exposure limit. It should be noted that these results include several "worst-case" assumptions and therefore are expected to overstate actual power density levels. Figure 3 attached provides the specific data required under Santa Cruz County Code Section 13.10.659(g)(2)(ix), for reporting the analysis of RF exposure conditions.

**No Recommended Mitigation Measures**

Due to their mounting location, the T-Mobile antennas would not be accessible to the general public, and **so** no mitigation measures are necessary to comply with the FCC public exposure guidelines. It is presumed that T-Mobile will, as an FCC licensee, **take** adequate steps to ensure that its employees or



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TM25673595.1  
Page 2 of 3

**T-Mobile • Proposed Base Station (Site No. SF25673)  
209 Riverside Road • Watsonville, California**

contractors comply with FCC occupational exposure guidelines whenever work is required near the antennas themselves.

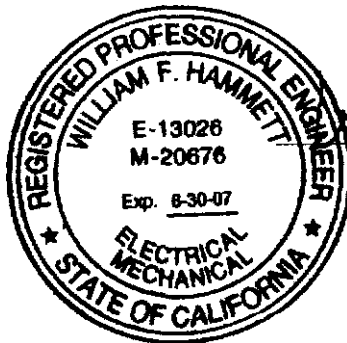
**Conclusion**

Based on the information and analysis above, it is the undersigned's professional opinion that the base station proposed by T-Mobile at 209 Riverside Road in Watsonville, California, will comply with the prevailing standards for limiting public exposure to radio frequency energy and, therefore, will not for this reason cause a significant impact on the environment. The highest calculated level in publicly accessible areas is much less than the prevailing standards allow for exposures of unlimited duration. This finding is consistent with measurements of actual exposure conditions taken at other operating base stations.

**Authorship**

The undersigned author of this statement is a qualified Professional Engineer, holding California Registration Nos. E-I3026 and M-20676, which expire on June 30, 2007. This work has been carried out by him or under his direction, and all statements are true and correct of his own knowledge except, where noted, when data has been supplied by others, which data he believes to be correct.

February 2, 2007



*William F. Hammett*  
William F. Hammett, P.E.



**HAMMETT & EDJSON, INC.**  
CONSULTING ENGINEERS  
SAN FRANCISCO

TM25673595.1  
Page 3 of 3

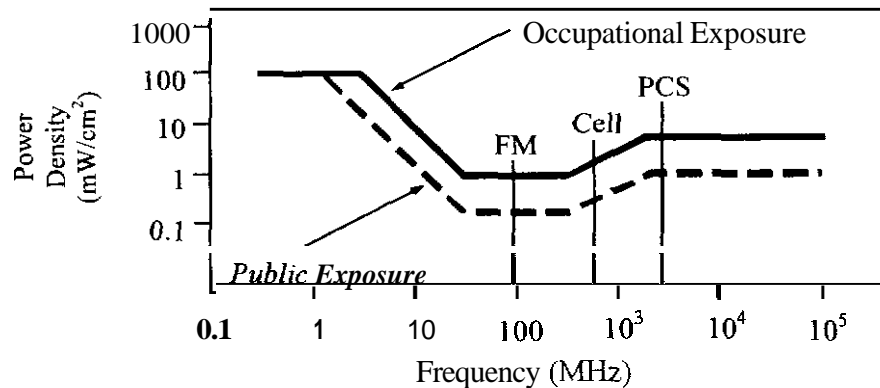


## FCC Radio Frequency Protection Guide

The U.S. Congress required (1996 Telecom Act) the Federal Communications Commission ("FCC") to adopt a nationwide human exposure standard to ensure that its licensees do not, cumulatively, have a significant impact on the environment. The FCC adopted the limits from Report No. 86, "Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields," published in 1986 by the Congressionally chartered National Council on Radiation Protection and Measurements, which are similar to the more recent Institute of Electrical and Electronics Engineers Standard C95.1-2005, "Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz." These limits apply for continuous exposures from all sources and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health.

As shown in the table and chart below, separate limits apply for occupational and public exposure conditions, with the latter limits (in *italics* and/or dashed) up to five times more restrictive:

Frequency Applicable Range (MHz)	Electromagnetic Fields (f is frequency of emission in MHz)					
	Electric Field Strength (V/m)		Magnetic Field Strength (A/m)		Equivalent Far-Field Power Density (mW/cm <sup>2</sup> )	
0.3 – 1.34	614	<i>614</i>	1.63	<i>1.63</i>	100	<i>100</i>
1.34 – 3.0	614	<i>823.8/f</i>	1.63	<i>2.19/f</i>	100	<i>180/f<sup>2</sup></i>
3.0 – 30	18421f	<i>823.8/f</i>	4.89/f	<i>2.19/f</i>	900/f <sup>2</sup>	<i>180/f<sup>2</sup></i>
30 – 300	61.4	<i>27.5</i>	0.163	<i>0.0729</i>	1.0	<i>0.2</i>
300 – 1,500	3.54√f	<i>1.59√f</i>	√f/106	<i>√f/238</i>	f/300	<i>f/1500</i>
1,500 – 100,000	137	<i>61.4</i>	0.364	<i>0.163</i>	5.0	<i>1.0</i>



Higher levels are allowed for short periods of time, such that total exposure levels averaged over six or thirty minutes, for occupational or public settings, respectively, do not exceed the limits, and higher levels also are allowed for exposures to small areas, such that the spatially averaged levels do not exceed the limits. However, neither of these allowances is incorporated in the conservative calculation formulas in the FCC Office of Engineering and Technology Bulletin No. 65 (August 1997) for projecting field levels. Hammett & Edison has built those formulas into a proprietary program that calculates, at each location on an arbitrary rectangular grid, the total expected power density from any number of individual radio sources. The program allows for the description of buildings and uneven terrain, if required to obtain more accurate projections.



**HAMMETT & EDISON, INC.**  
CONSULTING ENGINEERS  
SAN FRANCISCO

FCC Guidelines  
Figure 1

## RFR.CALC™ Calculation Methodology

### Assessment by Calculation of Compliance with FCC Exposure Guidelines

The U.S. Congress required (1996 Telecom Act) the Federal Communications Commission ("FCC") to adopt a nationwide human exposure standard to ensure that its licensees do not, cumulatively, have a significant impact on the environment. The maximum permissible exposure limits adopted by the FCC (see Figure 1) apply for continuous exposures from all sources and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, sex, or health. Higher levels are allowed for short periods of time, such that total exposure levels averaged over six or thirty minutes, for occupational or public settings, respectively, do not exceed the limits.

#### Near Field.

Prediction methods have been developed for the near field zone of panel (directional) and whip (omnidirectional) antennas, typical at wireless telecommunications cell sites. The near field zone is defined by the distance, D, from an antenna beyond which the manufacturer's published, far field antenna patterns will be fully formed; the near field may exist for increasing D until some or all of three conditions have been met:

$$1) D > \frac{2h^2}{\lambda} \qquad 2) D > 5h \qquad 3) D > 1.6\lambda$$

where h = aperture height of the antenna, in meters, and  
 $\lambda$  = wavelength of the transmitted signal, in meters.

The FCC Office of Engineering and Technology Bulletin No. 65 (August 1997) gives this formula for calculating power density in the near field zone about an individual RF source:

$$\text{power density } S = \frac{180}{\theta_{BW}} \times \frac{0.1 \times P_{net}}{\pi \times D \times h}, \text{ in mW/cm}^2,$$

where  $\theta_{BW}$  = half-power beamwidth of antenna, in degrees, and  
 $P_{net}$  = net power input to the antenna, in watts.

The factor of 0.1 in the numerator converts to the desired units of power density. This formula has been built into a proprietary program that calculates distances to FCC public and occupational limits.

#### Far Field.

OET-65 gives this formula for calculating power density in the far field of an individual RF source:

$$\text{power density } S = \frac{2.56 \times 1.64 \times 100 \times RFF^2 \times ERP}{4 \times \pi \times D^2}, \text{ in mW/cm}^2,$$

where ERP = total ERP (all polarizations), in kilowatts,  
RFF = relative field factor at the direction to the actual point of calculation, and  
D = distance from the center of radiation to the point of calculation, in meters.

The factor of 2.56 accounts for the increase in power density due to ground reflection, assuming a reflection coefficient of 1.6 ( $1.6 \times 1.6 = 2.56$ ). The factor of 1.64 is the gain of a half-wave dipole relative to an isotropic radiator. The factor of 100 in the numerator converts to the desired units of power density. This formula has been built into a proprietary program that calculates, at each location on an arbitrary rectangular grid, the total expected power density from any number of individual radiation sources. The program also allows for the description of uneven terrain in the vicinity; to obtain more accurate projections.



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Methodology  
Figure 2

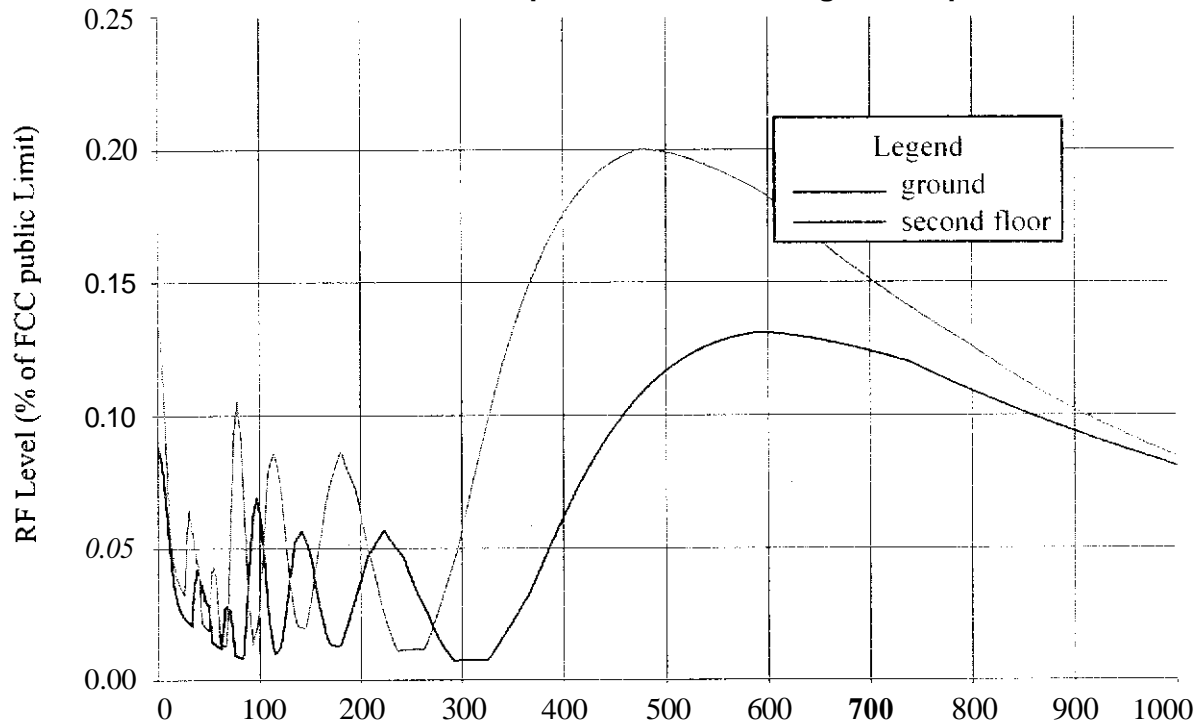
EXHIBIT H

**T-Mobile • Proposed Base Station (Site No. SF25673)  
209 Riverside Road • Watsonville, California**

**Compliance with Santa Cruz County Code §13.10.659(g)(2)(ix)**

"Compliance with the FCC's non-ionizing electromagnetic radiation (NIE) standards or other applicable standards shall be demonstrated for any new wireless communication facility through **submission**, at the time of application for the necessary **permit** or entitlement: of NIE calculations specifying NIE levels in the area **surrounding** the proposed facility. Calculations shall be made of expected NIE exposure levels during peak operation periods at a range of distances from **fifty (50)** to one thousand (**1,000**) feet, taking into account cumulative NIE exposure levels from the proposed source in combination with all other existing NIE transmission sources within a one-mile radius. This should also include a plan to ensure that the public would be kept at a safe distance from any NIE transmission source associated with the proposed wireless communication facility, consistent with the NIE standards of the FCC, or any potential future superceding standards."

**Calculated Cumulative NIE Exposure Levels during Peak Operation Periods**



Distance (feet) in direction of maximum level							
RF level (% limit)	50	100	200	300	500	750	1,000
Distance (feet)							
ground	0.27%	0.063%	0.038%	0.0075%	0.12%	0.12%	0.081%
second floor	0.018%	0.031%	0.063%	0.059%	0.20%	0.14%	0.085%

Calculated using formulas in FCC Office of Engineering Technology Bulletin No. 65 (1997).  
considering terrain variations within 1,000 feet of site.

**Maximum effective radiated power (peak operation) - 2,400 watts**

**Effective T-Mobile antenna height above ground - 58 feet**

**Other sources nearby - None**

**Other sources within one mile - No AM, FM, or TV broadcast stations  
No two-way stations close enough to affect compliance**

**Plan for restricting public access - Antennas are mounted on tall lattice tower**



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

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Figure 3A

T-Mobile • Proposed Base Station (Site No. SF25673)  
209 Riverside Road • Watsonville, California

Calculated NIER Exposure Levels  
Within 1,000 Feet of Proposed Site



Legend

- blank** - less than 0.10% of FCC public limit (*i.e.*, more than 1,000 times below)
-  - 0.10% and above near ground level (highest level is 0.13%)
-  - 0.10% and above at 2nd floor level (highest level is 0.20%)

Calculated using formulas in FCC Office of Engineering Technology Bulletin No. 65 (1997), considering terrain variations within 1,000 feet of site. See text for further information.



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Figure 3B

- **Noise Study**

## Acoustic Dispersion

The cabinet noise dispersion for an RBS 2106 with Combined Climate Unit is shown in the two figures below. The figures show the noise dispersion generated by a free-standing cabinet and by a cabinet mounted against a wall.

Note: The acoustic noise dispersion values for a free-standing cabinet and a cabinet installed against a wall were tested according to the ISO 9614-2 standard. Deviations from these values can be experienced due to the nature of materials in the environment where the cabinet is installed. Objects near the cabinet can reflect or absorb sound and thus affect acoustic dispersion.

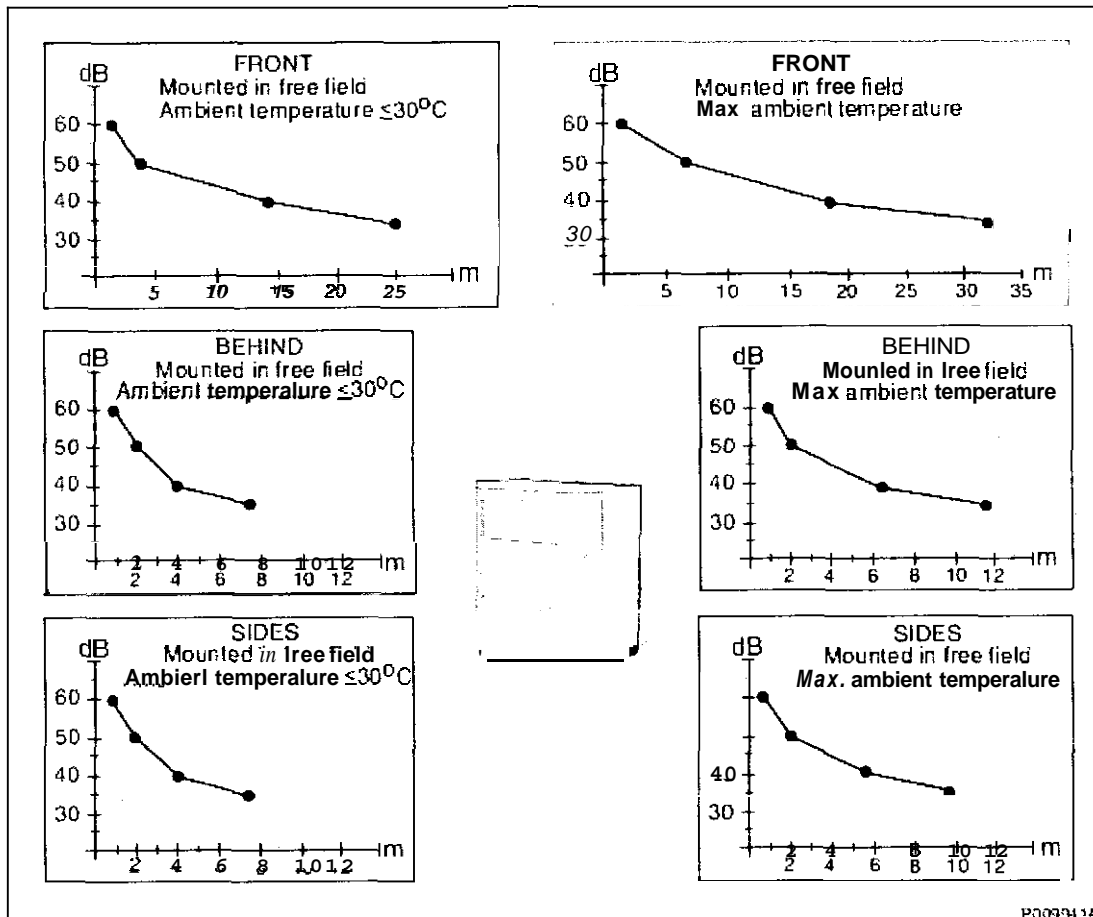


Figure 6 Acoustic Dispersion for a Free-standing RBS 2106 with Combined Climate Unit

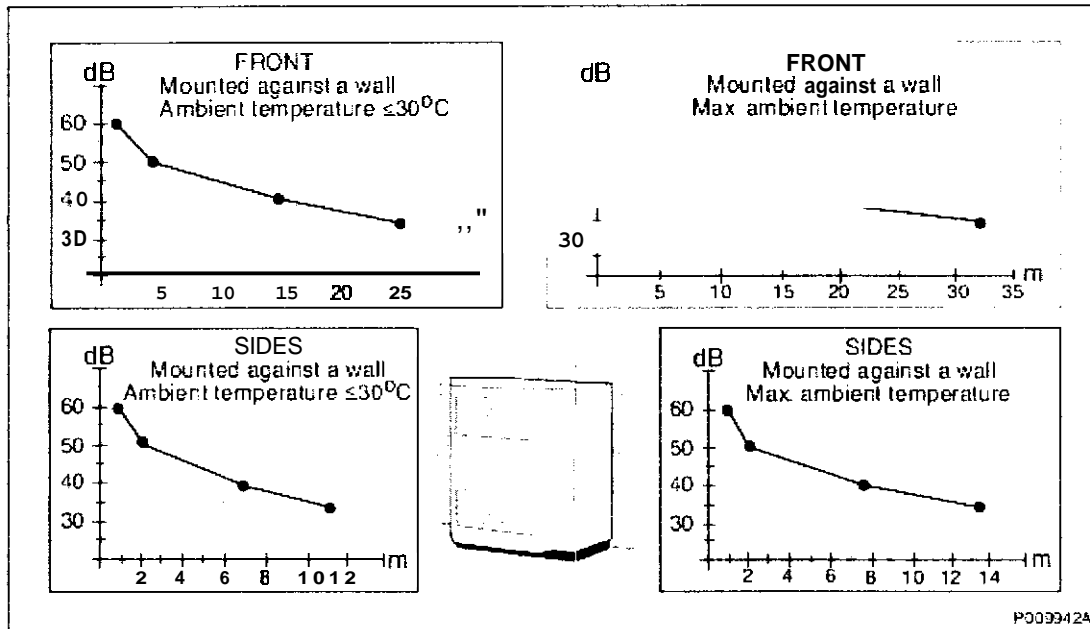


Figure 7 Acoustic Dispersion for a Wall-mounted RBS 2106 with Combined Climate Unit