Staff Report to the Zoning Administrator

Application Number: 06-0678

Applicant: Molly Kales, Sprint-Nextel
Owner: David Zollo
APN: 108-371-15

Agenda Date: March 21, 2008
Agenda Item No.: 1
Time: After 10:00 a.m.

Project Description: Proposal to co-locate six Sprint-Nextel panel antennas on an existing wireless communications facility, install an equipment cabinet in the existing lease area, and refurbish the existing monopine. Requires an Amendment to Commercial Development Permits 97-0269 and 02-0324 (Old APN 108-201-39).

Location: Property located on the east side of Amesti Road about 500 feet north through a gate to the end of Crow Avenue, at 100 Crow Avenue, Watsonville.

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

Permits Required: Commercial Development Permit

Staff Recommendation:

- Certification that the proposal is exempt from further Environmental Review under the California Environmental Quality Act.
- Approval of Application 06-0678, based on the attached findings and conditions.

Exhibits

A.	Project plans	F.	Zoning map
B.	Findings	G.	Photosimulations
C.	Conditions	H.	RF Report
D.	Categorical Exemption (CEQA determination)	I.	Comments & Correspondence
E.	Assessor's parcel map		

Parcel Information

Parcel Size:	491,201 square feet
Existing Land Use - Parcel:	Single Family Residential
Existing Land Use - Surrounding:	Single Family Residential/Agriculture/Orchard
Project Access:	Via an access easement over a private driveway off Crow Avenue.

Planning Area:	Eureka Canyon
Land Use Designation:	R-R (Rural Residential)
Zone District:	RA (Residential Agriculture)
Coastal Zone:	__ Inside X Outside
Appealable to Calif. Coastal Comm.	__ Yes X No

Environmental Information

Geologic Hazards:	Parcel located within a County and State Fault Zone Area.
Soils:	N/A
Fire Hazard:	Not a mapped constraint
Slopes:	N/A
Env. Sen. Habitat:	Not mapped/no physical evidence on site
Grading:	No grading proposed
Tree Removal:	No trees proposed to be removed
Scenic:	Amesti Road scenic viewshed
Drainage:	Existing drainage adequate
Archeology:	Mapped archeological site; reviewed in 1997 by Environmental Planning Staff; no further reports/reviews required.

Services Information

Urban/Rural Services Line:	__ Inside X Outside
Water Supply:	N/A
Sewage Disposal:	N/A
Fire District:	Santa Cruz County Fire (CDF)
Drainage District:	Zone 7 Flood Control District

History

This proposal is for an amendment to Commercial Development Permits 97-0269 and 02-0324 to co-locate an additional wireless communication facility on the top of an existing wood pole monopine.

The existing 110-foot tall monopole was approved under permit 97-0269 for Cellular One, to mount three antennas at the top of the monopole and one equipment cabinet under the pole on a concrete pad.

In 2003, a permit was issued (02-0324) for AT&T to co-locate an additional four antennas onto the existing monopole and to construct three equipment cabinets onto the existing concrete pad. Currently, the four AT&T antennas are the only antennas mounted on the pole. A follow-up Non-Ionizing Electromagnetic Radiation (NIER) Report was submitted for this site. The report was completed by Lexia Corporation and found that the maximum observed field at ground level is less than 0.01% of the limit for general public uncontrolled exposure.

Project Setting

The project site is located about 300 feet east of Amesti Road, a scenic road, and about 600 feet north of the terminus of Crow Avenue down a gated private driveway. There is a single family residence located on the subject parcel about 300 feet south of the existing facility and the City of Watsonville has a large water tank located on parcel 108-371-16 at the southern end of the property. There are large residential lots to the north, an existing residential neighborhood to the south and agriculture/orchards to the east and to the west across Amesti Road.

Zoning & General Plan Consistency

The subject property is a 491,201 square foot lot, located in the RA (Residential Agriculture) zone district, a designation which allows commercial uses. The proposed wireless communication facility is permitted use within the zone district and the project is consistent with the site's (R-R) Rural Residential General Plan designation.

Wireless Communication Facility

The project site is located within an allowed zone district for wireless communication facilities (per County Code sections 13.10.661(b) & (c)). Structure mounted wireless communications facilities are allowed within the RA (Residential Agriculture) zone district if they are designed in a manner that is the least visually obtrusive and that is compatible with the existing rural development. In addition, this permit would co-locate the proposed facility with the existing AT&T and Cellular One wireless communication facilities approved by permits 97-0269 and 02-0324, which is encouraged where it is the least visually obtrusive option.

The proposed wireless communication facility will consist of mounting 3 sectors of 2 panel antennas (6 total) each measuring 48"H x 12"W x 7"D, on the existing 100-foot tall monopine. The proposed antennas will be located below the existing antennas at about 80-feet above ground level. There will also be one new equipment cabinet (13'3"L x 7'6"W x 8'H) located on the ground about 10-feet 6-inches from the existing propane tank. The proposed ground equipment will be located behind a 6-foot high chain link fence which will provide adequate security. The project includes improvements to the existing monopine to enhance the visual quality of the "tree" and further screen the antennas from view off site. Visual simulations have been submitted and it has been determined that the new antennas and equipment cabinets will not be visible from Amesti Road.

The applicant has submitted a study by Hammett and Edison, Inc., consulting engineers, which indicates that a maximum calculated cumulative level at ground for the simultaneous operation of both carriers is 0.72% of the public exposure limit and the maximum calculated cumulative level at the second floor elevation of any nearby building would be 0.92% of the public exposure limit set by the Federal Communications Commission. The report notes that these estimates are worst case assumptions. The RF emissions of the proposed wireless communications facility comply with the FCC standards.

Amesti Road Scenic View Shed

The project site is located within the Amesti Road Scenic viewshed. The site of the proposed wireless communications facility is adequately screened from Amesti Road by the use of camouflage techniques. The proposed wireless communication facility will be located on an existing monopine and will be camouflaged by proposed improvements that include fake tree branches, bark material and green and brown paint to match surrounding foliage. As conditioned, the proposed new equipment will not result in a visual impact to the scenic resource.

Alternative Site Analysis

An alternative site analysis was not required for the current project in that locating the proposed facility at the project site will not create additional ground disturbance. This significantly reduces environmental impacts in that the creation of additional road grading, electrical utilities, and an additional tower would create unnecessary additional impacts to the environment and/or scenic resources that are located on the surrounding parcels.

Conclusion

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

Staff Recommendation

- Certification that the proposal is exempt from further Environmental Review under the California Environmental Quality Act.
- **APPROVAL** of Application Number **06-0678,** based on the attached findings and conditions.

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

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

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Wireless Communication Facility Use Permit Findings

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

This finding can be made, in that the proposed wireless communication facility will be located on an existing monopole camouflaged as a pine tree. The subject property for the proposed project is located within the Amesti Road scenic corridor. The proposed project complies with General Plan Policy 5.10.3 (Protection of Public Vistas), in that no views of the beach, ocean, or other significant vistas can be viewed past or across the subject property, as the property is on the inland side of the scenic corridor with no significant public vista available beyond the subject property. The existing public views from Amesti Road, a scenic road, will be improved as a result of this project.

An alternative sites analysis was not required for the proposed project, due to the fact the proposed wireless communication facility will be located within an allowed zone district (per sections 13.10.661(b) & (c) of the County Code) and will be co-located with a previously approved wireless communication facility. The currently proposed site is the least visually and environmentally intrusive place in the near surrounding area.

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

This finding can be made, in that there is an existing monopine and wireless communications facility on the project site with an associated road and infrastructure for utilities as well as the proposed improvements to the monopine that will eliminate any visual impacts to the Amesti Road scenic viewshed; therefore, the currently proposed project site is the environmentally superior site for this project. The addition of a new wireless communications facility along the Amesti Road may result in a more visually intrusive project and possibly cause additional impact to the natural resources in the surrounding areas.

An alternative sites analysis was not required for the proposed project, due to the fact the proposed wireless communication facility will be located within an allowed zone district (per sections 13.10.661(b) & (c) of the County Code) and will be co-located with a previously approved wireless communication facility. The currently proposed site is the least visually and environmentally intrusive place in the near surrounding area.

EXHIBIT B

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

This finding can be made, in that the existing wireless communication facility is in compliance with the RA (Residential Agriculture) zone district and Rural Residential (R-R) General Plan designation, in which it is located. The existing and proposed uses, as designed, are compatible with the zone district and General Plan designation.

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 located on an existing 100' tall monopine and this elevation is too low to interfere with an aircraft in flight.

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 cumulative RF exposure level for simultaneous operation of both the existing and proposed carriers is 0.72% of the public exposure limit. The maximum calculated level at the second floor elevation of any nearby building is 0.92% of the public exposure limit. These estimates are "worst-case" assumptions.

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

Not Applicable

Development Permit Findings

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

This finding can be made, in that the maximum cumulative RF exposure level for simultaneous operation of both the existing and proposed carriers is 0.72% of the public exposure limit. The maximum calculated level at the second floor elevation of any nearby building is 0.92% of the public exposure limit. These estimates are "worst-case" assumptions.

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

The project will not be materially injurious to properties or improvements in the vicinity in that the project will be on an existing monopole camouflaged as a pine tree; therefore there will be no visual impact to surrounding properties.

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 wireless communication facility will be located within an allowed zone district for the construction of co-located wireless communications facilities. The project site is located within the RA (Residential Agriculture) zone district which is not a prohibited or restricted zone district (per sections 13.10.661(b) & (c) of the County Code).

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 wireless communication facility will be built in the least visually and environmentally intrusive manner due to the location on top of an existing monopine where an existing wireless communication facility already exists.

The subject property for the proposed project is located within the Amesti Road viewshed. The proposed camouflage improvements to the existing monopole will provide enough screening to the proposed wireless communication facility to result in no visual impact to the scenic view shed as a result of this project. The proposed project complies with General Plan Policy 5.10.3 (Protection of Public Vistas), in that no views of the beach, ocean, or other significant vistas can be viewed past or across the subject property, as the property is on the inland side of the scenic corridor with no significant public vista available beyond the subject property. The existing

public views from Amesti Road will be improved as a result of this project.

The existing wireless communications facility is consistent with the uses specified for the Rural Residential (R-R) 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 project will not require the use of public services such as water or sewer, but will require electric power and telephone connections. The facility will require inspection by maintenance personnel at least once per month and this will not result in increasing traffic to unacceptable levels in the vicinity.

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

This finding can be made, in that the proposed facility will be co-located on top of an existing monopole and will be compatible with the existing rural residential development on the subject property and surrounding area.

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 proposed facility will be co-located on top of an existing monopine and will be camouflaged from view to reduce potential visual impacts to the surrounding neighborhood.

Conditions of Approval

Exhibit A: Project Plans entitled "Sprint, Corralitos, CA-2930-A", prepared by Larry Strobel, 7 sheets, dated 11/28/06.

I. This permit amends Commercial Development Permits 97-0269 and 02-0324 to construct a third wireless communications facility on top of an existing monopole as depicted on the approved Exhibit "A" for this permit. Prior to exercising any rights granted by this permit including, without limitation, any construction or site disturbance, the applicant/owner shall:

A. Sign, date, and return to the Planning Department one copy of the approval to indicate acceptance and agreement with the conditions thereof.

B. Obtain a Building Permit from the Santa Cruz County Building Official.

C. Obtain an Encroachment Permit from the Department of Public Works for all off-site work performed in the County road right-of-way, if required.

D. To ensure that the storage of hazardous materials on the site does not result in adverse environmental impacts, the applicant shall submit a Hazardous Materials Management Plan for review and approval by the County Department of Environmental Health Services.

II. The applicant shall obtain approval from the California Public Utilities Commission and the Federal Communications Commission to install and operate this facility.

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

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

B. Submit final architectural plans for review and approval by the Planning Department. The final plans shall be in substantial compliance with the plans marked Exhibit "A" on file with the Planning Department. Any changes from the approved Exhibit "A" for this development permit on the plans submitted for the Building Permit must be clearly called out and labeled by standard architectural methods to indicate such changes. Any changes that are not properly called out and labeled will not be authorized by any Building Permit that is issued for the proposed development. The final plans shall include the following additional information:

1. All antennas and telecommunications equipment shall be located behind the existing chain link fence and shall be located no higher than 80-feet measured from ground level to the center of the proposed antennas.

2. The accurate location of a recorded access easement from Crow Avenue to

EXHIBIT C

the wireless communications facility.

3. All new electric and telecommunications lines shall be placed underground.

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

C. To mitigate visual impacts of the antenna on Amesti Road, the camouflage material on the pole will be improved and increased to more realistically disguise it as a pine tree. The pole shall be improved with tree branches, bark material and natural paint colors to accurately resemble the monopine shown in the submitted photosimulations (Exhibit "G").

D. Submit four copies of the approved Discretionary Permit with the Conditions of Approval attached. The Conditions of Approval shall be recorded prior to submittal, if applicable.

E. Meet all requirements and pay any applicable plan check fee of the 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.

C. Pursuant to Sections 16.40.040 and 16.42.100 of the County Code, if at any time during site preparation, excavation, or other ground disturbance associated with this development, any artifact or other evidence of an historic archaeological resource or a Native American cultural site is discovered, the responsible persons shall immediately cease and desist from all further site excavation and notify the Sheriff-Coroner if the discovery contains human remains, or the Planning Director if the discovery contains no human remains. The procedures established in Sections 16.40.040 and 16.42.100, shall be observed.

V. Operational Conditions

A. NIER Report: A report documenting Non-Ionizing Electromagnetic Radiation at the facility site shall be submitted within ninety (90) days after the commencement of normal operations, or within ninety (90) days after any major modification to power output of the facility.

EXHIBIT C

B. Additional Facilities: A Planning Department review that includes a public hearing shall be required for any future co-location at this wireless communications facility.

C. Equipment Modifications: Any modification in the type of equipment shall be reviewed and acted on by the Planning Department staff. The County may deny or modify the conditions at this time, or the Planning Director may refer it for public hearing before the Zoning Administrator.

D. Camouflage: The camouflage materials shall be permanently maintained and replacement materials and/or paint shall be applied as necessary to maintain the camouflage of the facility.

E. Noise: All noise generated from the approved use shall comply with the requirements of the General Plan.

F. Lighting: All site, building, security and landscape lighting shall be directed away from the scenic corridor and adjacent properties. Light sources shall not be visible from adjacent properties. Light sources can be shielded by landscaping, structure, fixture design or other physical means. Building and security lighting shall be integrated into the building design.

G. Maintenance & Signage: No person shall come within 12-feet of the antennas while the site is in operation. Explanatory warning signs shall be placed at the site access locations and on the monopine such that the signs are clearly visible from any angle of approach to persons who may need to work within that distance.

H. Future Technologies: If future technological advances would allow for reduced visual impacts resulting from the proposed telecommunication facility, the applicant agrees through accepting the terms of this permit to make those modifications which would allow for reduced visual impact of the proposed facility as part of the normal replacement schedule. If, in the future, the facility is no longer needed, the 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 re-establish the area consistent with the character of the surrounding vegetation.

I. Future Studies: If, as a result of future scientific studies and alterations of industry-wide standards resulting from those studies, substantial evidence is presented to Santa Cruz County that radio frequency transmissions may pose a hazard to human health and/or safety, the Santa Cruz County Planning Department shall set a public hearing and in its sole discretion, may revoke or modify the conditions of this permit.

J. Noncompliance: 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

EXHIBIT C

such County inspections, including any follow-up inspections and/or necessary enforcement actions, up to and including permit revocation.

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, it officers, employees, and agents to attack, set aside, void, or annul this development approval of the COUNTY or any subsequent amendment of this development approval which is requested by the Development Approval Holder.

A. COUNTY shall promptly notify the Development Approval Holder of any claim, action, or proceeding against which the COUNTY seeks to be defended, indemnified, or held harmless. COUNTY shall cooperate fully in such defense. If COUNTY fails to notify the Development Approval Holder within sixty (60) days of any such claim, action, or proceeding, or fails to cooperate fully in the defense thereof, the Development Approval Holder shall not thereafter be responsible to defend, indemnify, or hold harmless the COUNTY if such failure to notify or cooperate was significantly prejudicial to the Development Approval Holder.

B. Nothing contained herein shall prohibit the COUNTY from participating in the defense of any claim, action, or proceeding if both of the following occur:

1. COUNTY bears its own attorney's fees and costs; and

2. COUNTY defends the action in good faith.

C. Settlement. The Development Approval Holder shall not be required to pay or perform any settlement unless such Development Approval Holder has approved the settlement. When representing the County, the Development Approval Holder shall not enter into any stipulation or settlement modifying or affecting the interpretation or validity of any of the terms or conditions of the development approval without the prior written consent of the County.

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

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

EXHIBIT C

Please note: This permit expires two years from the effective date on the expiration date listed below unless you obtain the required permits and commence construction.

Approval Date: _____

Effective Date: _____

Expiration Date: _____

Don Bussey Deputy Zoning Administrator	Samantha Haschert Project Planner

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

EXHIBIT C

CALIFORNIA ENVIRONMENTAL QUALITY ACT
NOTICE OF EXEMPTION

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

Application Number: 06-0678
Assessor Parcel Number: 108-371-15
Project Location: 100 Crow Avenue

Project Description: Proposal to co-locate a wireless communication facility on an existing monopine.

Person or Agency Proposing Project: Molly Kales, Sprint-Nextel

Contact Phone Number: (925) 362-9676

A. _____ The proposed activity is not a project under CEQA Guidelines Section 15378.

B. _____ The proposed activity is not subject to CEQA as specified under CEQA Guidelines Section 15060 (c).

C. _____ **Ministerial Project** involving only the use of fixed standards or objective measurements without personal judgment.

D. _____ **Statutory Exemption** other than a Ministerial Project (CEQA Guidelines Section 15260 to 15285).

Specify type:

E. __X__ **Categorical Exemption**

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

F. Reasons why the project is exempt:

Proposal to co-locate a wireless communication facility in an area appropriate for wireless communication facilities.

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

_____ Date:_____

Samantha Haschert, Project Planner

EXHIBIT D

FOR TAX PURPOSES ONLY

RANCHO DE LOS CORRALITOS
POR. SECS. 12 & 13, R.1E., &
POR. SECS. 7 & 18, R.2E., T.11S., M.D.B. & M.

Tax Area Code
69-262

108-37

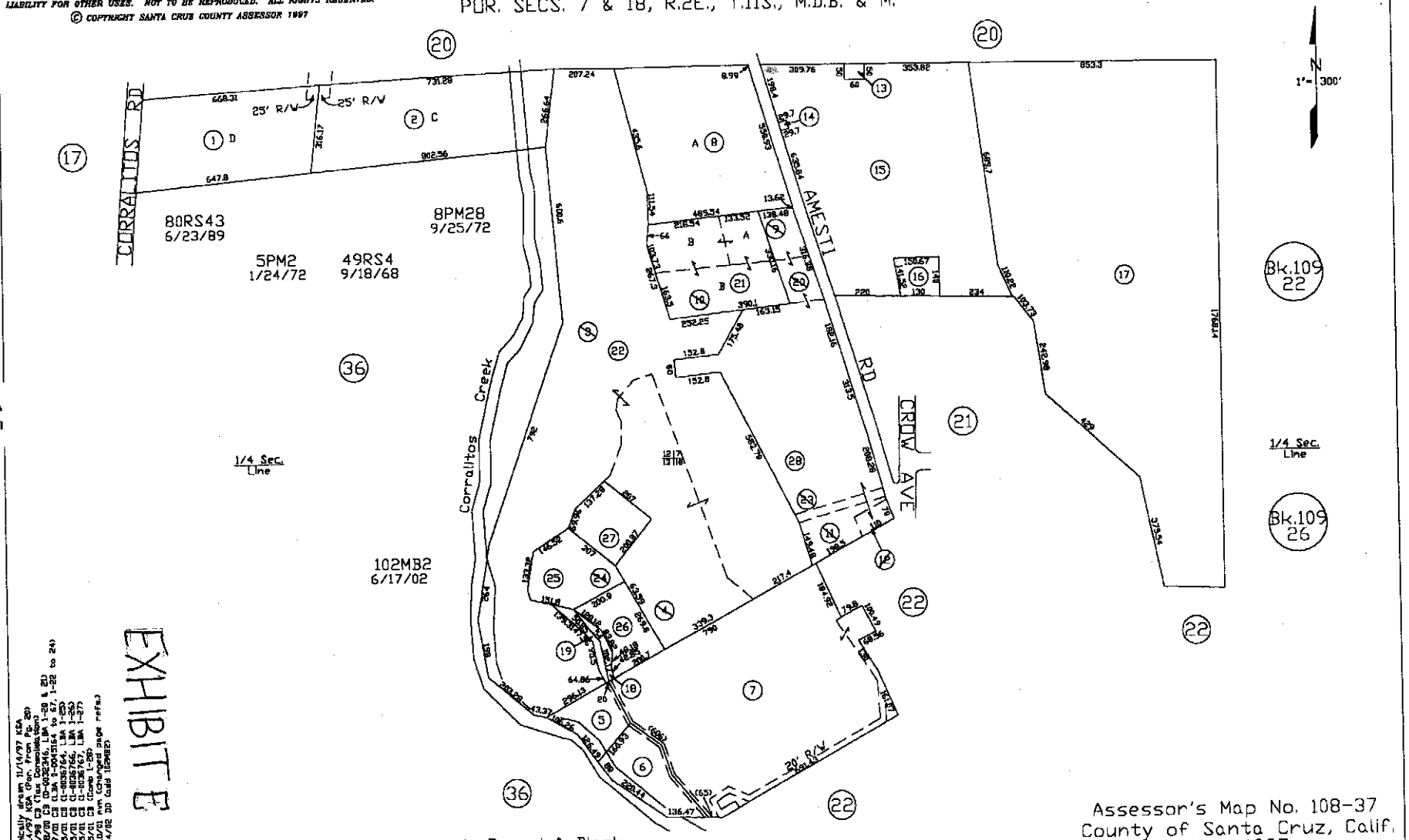
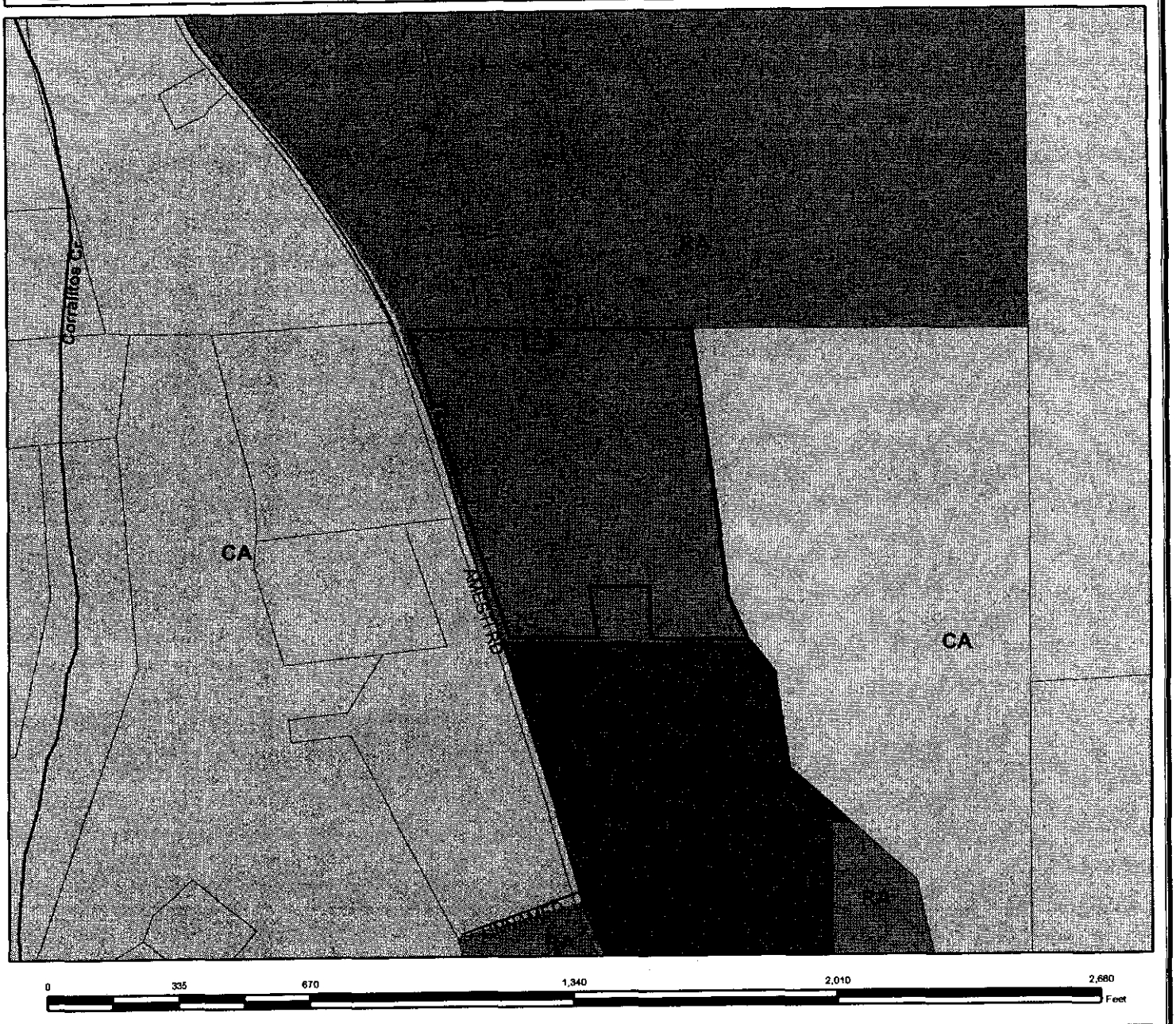


EXHIBIT E

Note - Assessor's Parcel & Block Numbers Shown in Circles.

Assessor's Map No. 108-37
County of Santa Cruz, Calif.
Nov. 1997

Zoning Map



Legend

- APN 108-371-15
- Assessors Parcels
- Streets
- PERENNIAL STREAM
- AGRICULTURE RESIDENTIAL (RA)
- RESIDENTIAL-SINGLE FAMILY (R-1)
- AGRICULTURE COMMERCIAL (CA)

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W E
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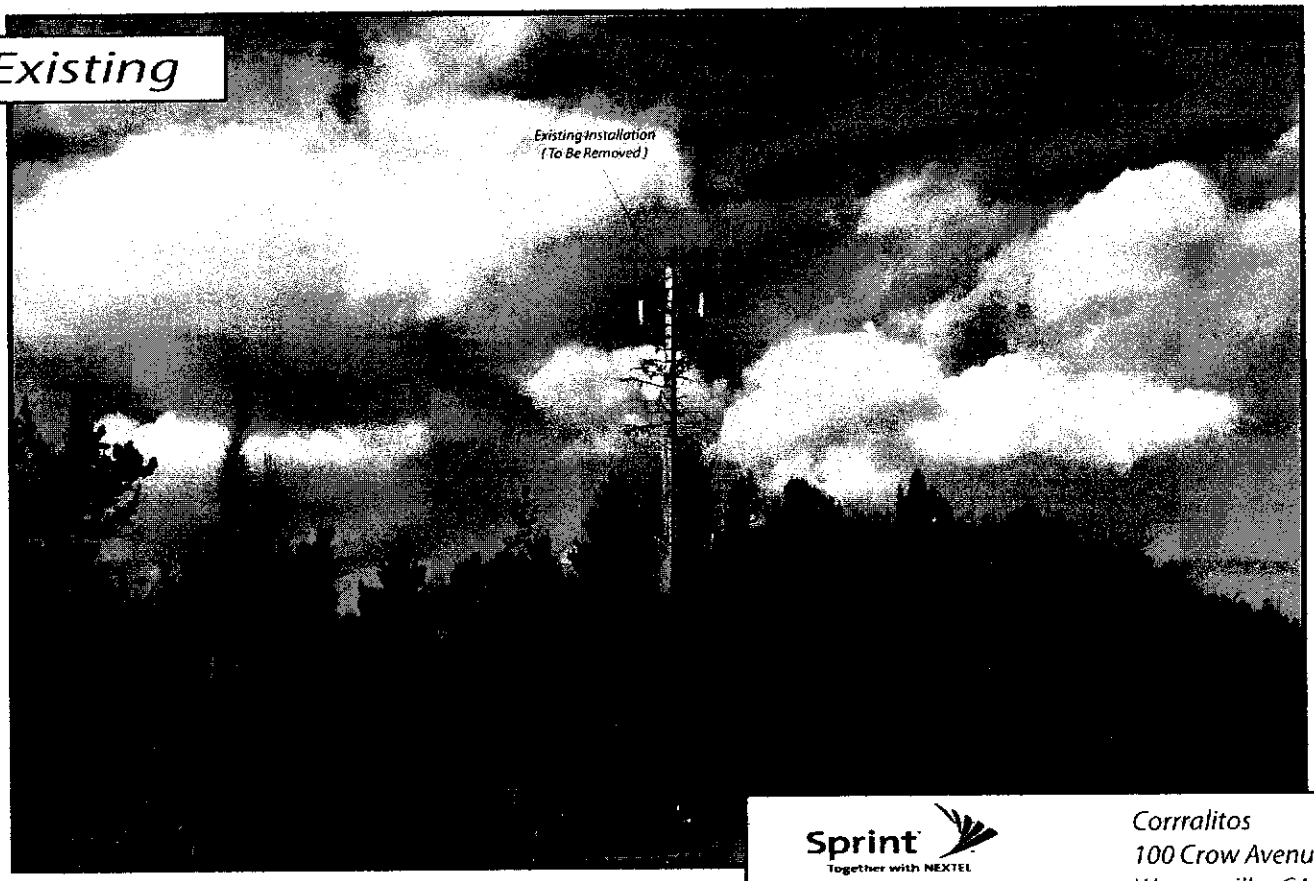
Map Created by
County of Santa Cruz
Planning Department
December 2006

EXHIBIT F

Existing



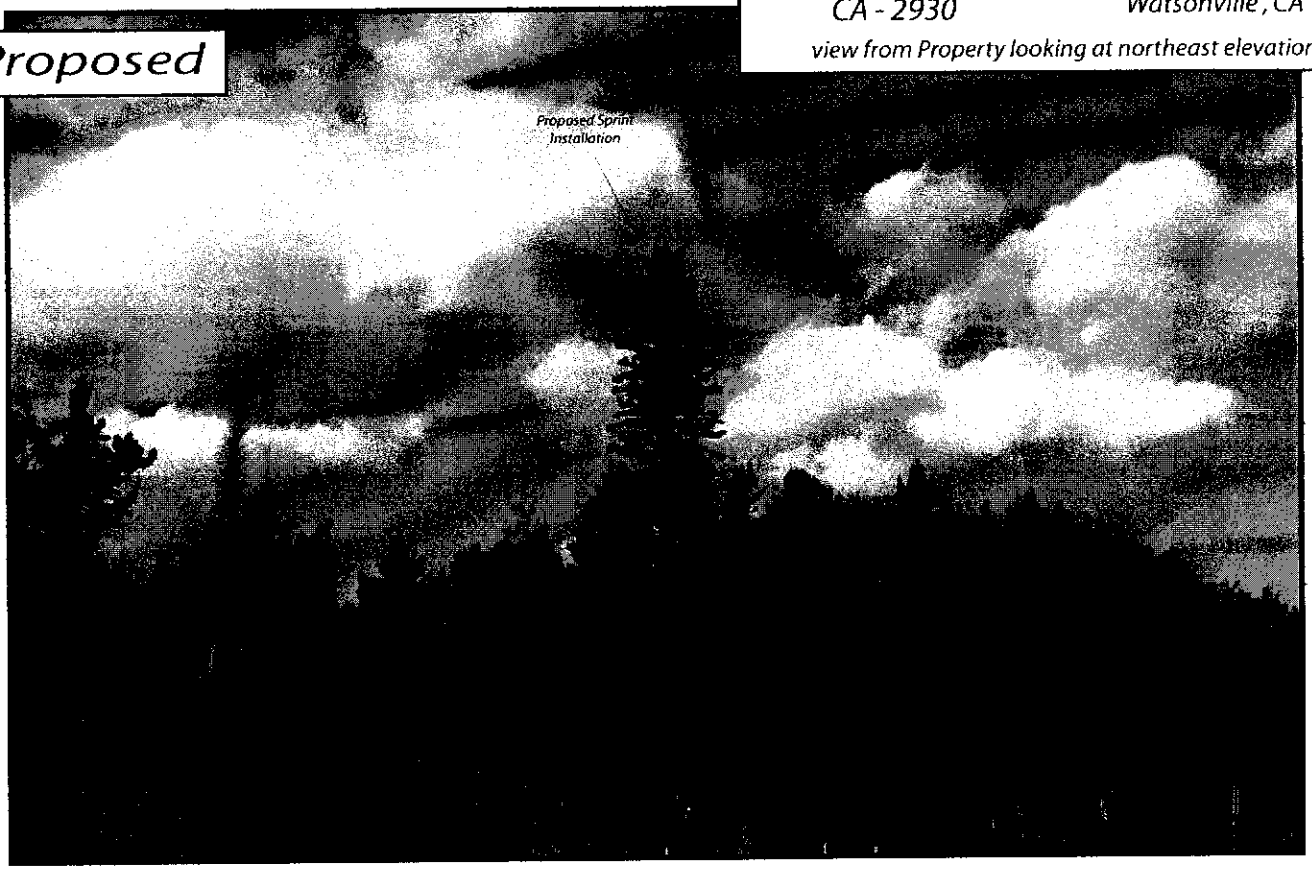
Sprint
Together with NEXTEL

CA - 2930

Corrralitos
100 Crow Avenue
Watsonville , CA

view from Property looking at northeast elevation

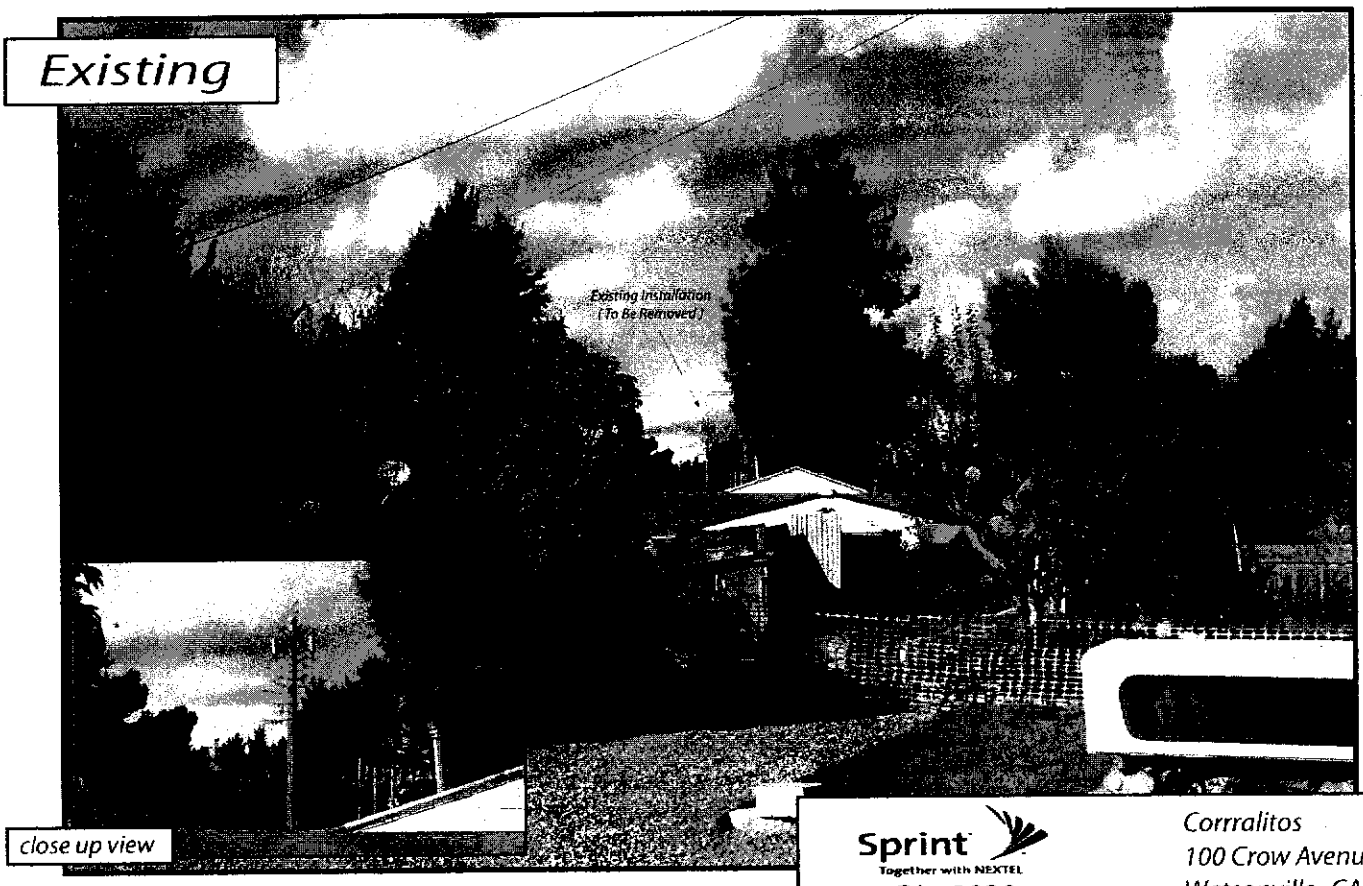
Proposed



AdvanceSim
Photo Simulation Solutions
Contact (925) 207-6607

EXHIBIT G

Existing



close up view

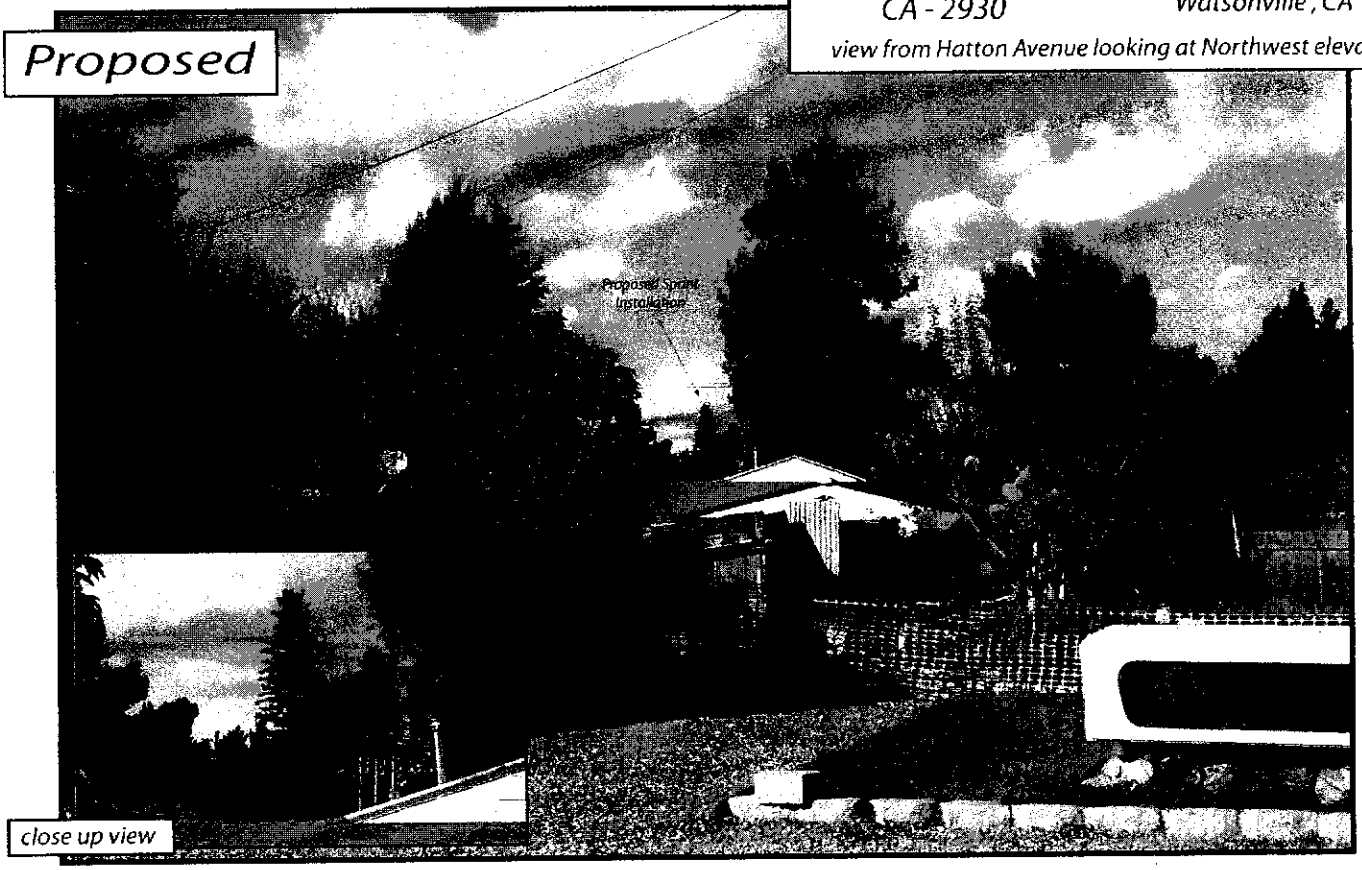
Sprint
Together with NEXTEL

CA - 2930

Corrralitos
100 Crow Avenue
Watsonville , CA

view from Hatton Avenue looking at Northwest elevation

Proposed



close up view

AdvanceSim
Photo Simulation Solutions
Contact (925) 207-5007

EXHIBIT G

Existing

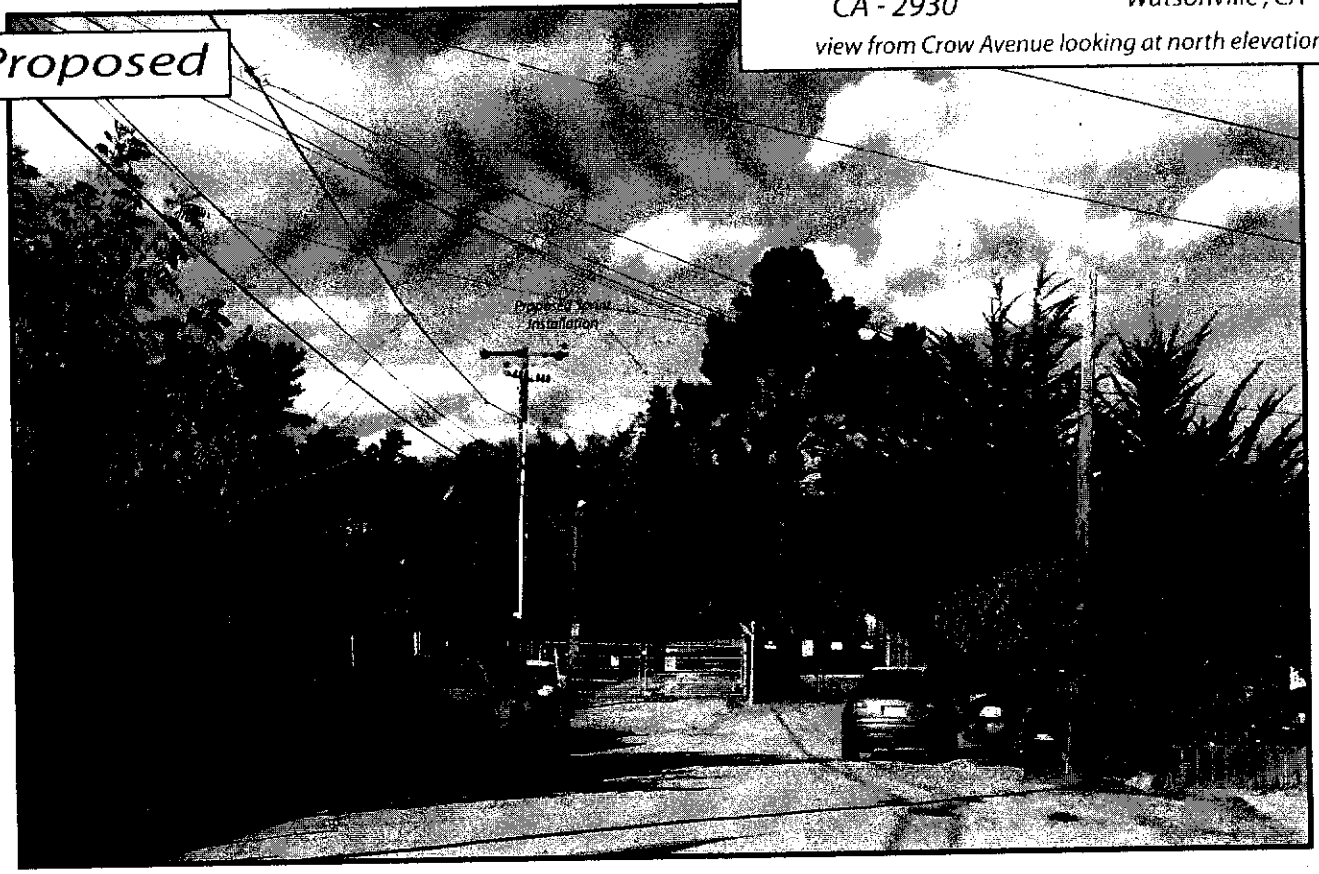
Sprint
Together with NEXTEL

CA - 2930

Corrralitos
100 Crow Avenue
Watsonville , CA

view from Crow Avenue looking at north elevation

Proposed



AdvanceSim
Photo Simulation Solutions

EXHIBIT G

06-0678

Sprint Nextel • Proposed Base Station (Site No. CA-2930A)
100 Crow Avenue • Watsonville, California

Statement of Hammett & Edison, Inc., Consulting Engineers

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained on behalf of Sprint Nextel, a personal wireless telecommunications carrier, to evaluate the base station (Site No. CA-2930A) proposed to be located at 100 Crow Avenue 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 C95.1-2005, "Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz," includes similar 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:

Personal Wireless Service	Approx. Frequency	Occupational Limit	Public Limit
Personal Communication ("PCS")	1,950 MHz	5.00 mW/cm^2	1.00 mW/cm^2
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

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 at greater distances 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 Sprint Nextel, including zoning drawings by L.D. Strobel Co., Inc., dated October 19, 2006, it is proposed to mount six EMS Model RR9011-05DBL directional antennas on an existing 100-foot wood pole, configured to resemble a pine tree, sited near 100 Crow Avenue in Watsonville. The antennas would be mounted at an effective height of about 80 feet above ground and would be oriented in pairs toward 40°T, 160°T, and 280°T, to provide service in all directions. The maximum effective radiated power in any direction would be 1,000 watts, representing the simultaneous operation of ten SMR channels at 100 watts each; there are no operations at PCS frequencies proposed at this site.

Presently installed higher on the same pole are similar antennas for use by Cingular Wireless, another wireless communications carrier. For the limited purposes of this study, it is assumed that Cingular has installed Kathrein Model AP14/17-880/1940/065D directional dualband antennas with 2° downtilt at an effective height of about 91 feet above ground and operates with a maximum effective radiated power in any direction of 3,000 watts, representing simultaneous operation at 1,500 watts each for PCS and for cellular service.

Study Results

For a person anywhere at ground, the maximum ambient RF exposure level due to the proposed Sprint Nextel operation by itself is calculated to be 0.0028 mW/cm^2, which is 0.49% of the applicable public exposure limit. The maximum calculated cumulative level at ground for the simultaneous operation of both carriers is 0.72% of the public limit; the maximum calculated cumulative level at the second-floor

elevation of any nearby building would be 0.92% 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

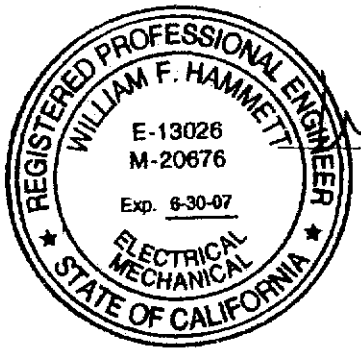
Due to their mounting locations, the Sprint Nextel antennas are not accessible to the general public, and so no mitigation measures are necessary to comply with the FCC public exposure guidelines. It is presumed that Sprint Nextel and Cingular will, as FCC licensees, take adequate steps to ensure that their employees or 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 Sprint Nextel at 100 Crow Avenue 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-13026 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.



William F. Hammett, P.E.

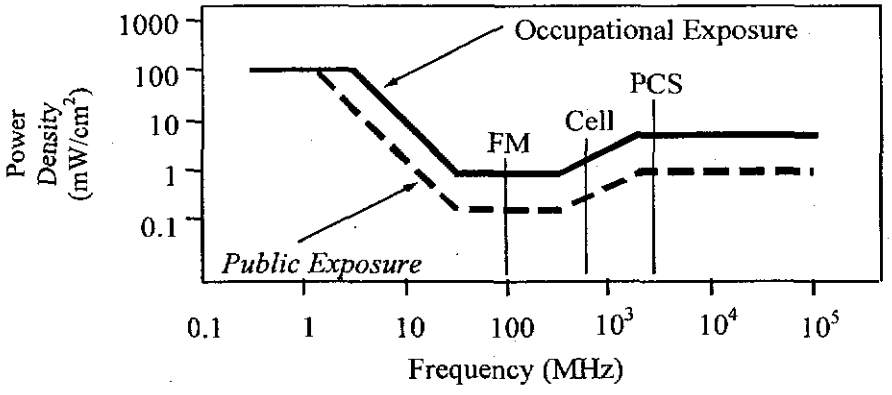
December 13, 2006

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	Electromagnetic Fields (f is frequency of emission in MHz)					
Applicable Range (MHz)	Electric Field Strength (V/m)		Magnetic Field Strength (A/m)		Equivalent Far-Field Power Density (mW/cm^2)	
0.3 – 1.34	614	*614*	1.63	*1.63*	100	*100*
1.34 – 3.0	614	*823.8/f*	1.63	*2.19/f*	100	*180/f^2*
3.0 – 30	1842/f	*823.8/f*	4.89/f	*2.19/f*	900/f^2	*180/f^2*
30 – 300	61.4	*27.5*	0.163	*0.0729*	1.0	*0.2*
300 – 1,500	$3.54\sqrt{f}$	*$1.59\sqrt{f}$*	$\sqrt{f}/106$	*$\sqrt{f}/238$*	f/300	*f/1500*
1,500 – 100,000	137	*61.4*	0.364	*0.163*	5.0	*1.0*



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.

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, size, 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
λ = 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:

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

where θ_{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:

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

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.

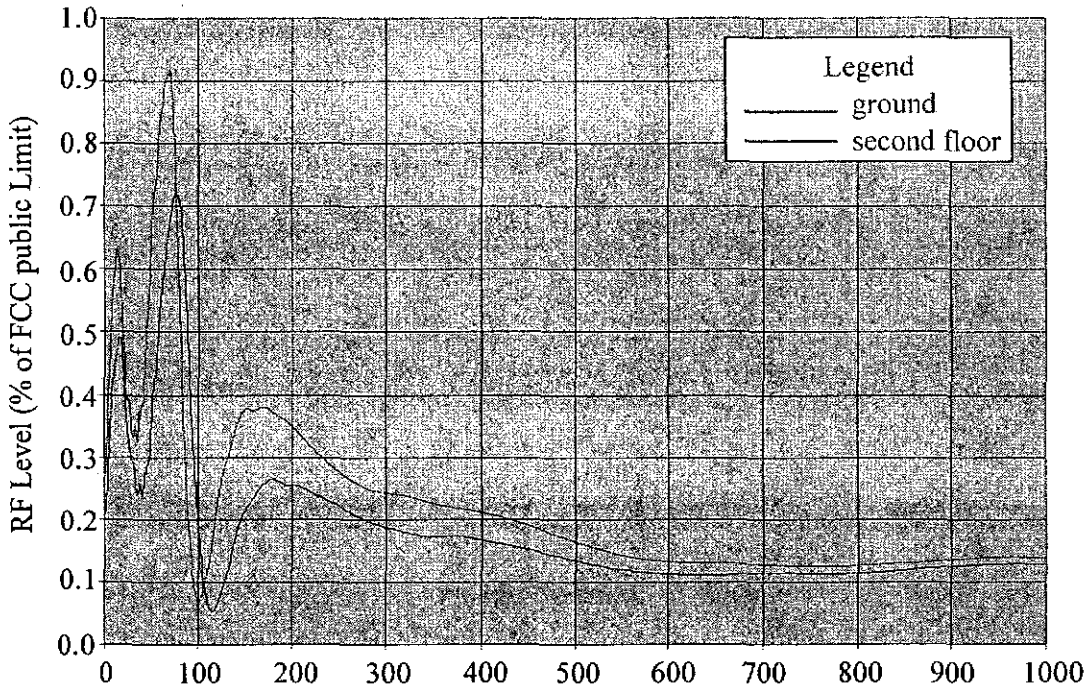
The factor of 2.56 accounts for the increase in power density due to ground reflection, assuming a reflection coefficient of 1.6 (1.6 x 1.6 = 2.56). The factor of 1.64 is the gain of a half-wave dipole relative to an isotropic radiator. The factor of 100 in the numerator converts to the desired units 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.

Sprint Nextel • Proposed Base Station (Site No. CA-2930A)
100 Crow Avenue • Watsonville, California

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

"Compliance with the FCC's non-ionizing electromagnetic radiation (NIER) 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 NIER calculations specifying NIER levels in the area surrounding the proposed facility. Calculations shall be made of expected NIER exposure levels during peak operation periods at a range of distances from fifty (50) to one thousand (1,000) feet, taking into account cumulative NIER exposure levels from the proposed source in combination with all other existing NIER 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 NIER transmission source associated with the proposed wireless communication facility, consistent with the NIER standards of the FCC, or any potential future superceding standards."

Calculated Cumulative NIER Exposure Levels during Peak Operation Periods



RF level (% limit)

Distance (feet)	50	100	200	300	500	750	1,000
ground	0.37%	0.20%	0.25%	0.19%	0.13%	0.11%	0.13%
second floor	0.65%	0.070%	0.36%	0.24%	0.16%	0.12%	0.14%

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) - 1000 watts

Effective Sprint Nextel antenna height above ground - 80 feet

Other sources nearby - Cingular Wireless

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 a tall pole

Sprint Nextel • Proposed Base Station (Site No. CA-2930A)
100 Crow Avenue • Watsonville, California

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

Aerial photo from Terraserver, Inc.

Legend
blank - less than 0.30% of FCC public limit (*i.e.*, more than 330 times below)
▒ - 0.30% and above near ground level (highest level is 0.72%)
▒ - 0.30% and above at 2nd floor level (highest level is 0.92%)

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.

COUNTY OF SANTA CRUZ | Planning Department

INTEROFFICE MEMO

APPLICATION NO: 06-0678

Date: December 14, 2006

To: Joan Van der Hoeven, Project Planner

From: Larry Kasparowitz, Urban Designer

Re: Design Review for collocated cellular antennae at 100 Crow Avenue, Watsonville

GENERAL PLAN / ZONING CODE ISSUES

Design Review Authority

13.10.663 General development performance standards for wireless communication facilities.

Evaluation Criteria	Meets criteria In code (✔)	Does not meet criteria (✔)	Urban Designer's Evaluation
SITE LOCATION			
Visual character of site			
Site location and development of wireless communications facilities shall preserve the visual character, native vegetation and aesthetic values of the parcel on which such facilities are proposed, the surrounding parcels and road right-of-ways, and the surrounding land uses to the greatest extent that is technically feasible, and shall minimize visual impacts on surrounding land and land uses to the greatest extent feasible	✔		
Facilities shall be integrated to the maximum extent feasible to the existing characteristics of the site, and every effort shall be made to avoid, or minimize to the maximum extent feasible, visibility of a wireless communication facility within significant public viewsheds.	✔		
Utilization of camouflaging and/or stealth techniques shall be encouraged where appropriate.	✔		
Support facilities shall be integrated to the existing characteristics of the site, so as to minimize visual impact.	✔		
Colocation			
Co-location is generally encouraged in situations where it is the least visually obtrusive option, such as when increasing the height/bulk of an existing tower would result in less visual impact than constructing a new separate tower in a nearby location.	✔		

EXHIBIT I

Ridgeline Visual Impacts			
Wireless communication facilities proposed for visually prominent ridgeline, hillside or hilltop locations shall be sited and designed to be as visually unobtrusive as possible. Consistent with General Plan/LCP Policy 8.6.6, wireless communication facilities should be sited so the top of the proposed tower/facility is below any ridgeline when viewed from public roads in the vicinity.	✔		
If the tower must extend above a ridgeline the applicant must camouflage the tower by utilizing stealth techniques and hiding it among surrounding vegetation.	✔		
Site Disturbance			
Disturbance of existing topography and on-site vegetation shall be minimized, unless such disturbance would substantially reduce the visual impacts of the facility.			**N/A**
Coastal Zone Considerations			
New wireless communication facilities in any portion of the Coastal Zone shall be consistent with applicable policies of the County Local Coastal Program (LCP) and the California Coastal Act.			**N/A**
No portion of a wireless communication facility shall extend onto or impede access to a publicly used beach.			**N/A**
Power and telecommunication lines servicing wireless communication facilities in the Coastal Zone shall be required to be placed underground.			**N/A**
Consistency with Other Regulations			
All proposed wireless communication facilities shall comply with the policies of the County General Plan/Local Coastal Plan and all applicable development standards for the zoning district in which the facility is to be located, particularly policies for protection of visual resources (i.e., General Plan/LCP Section 5.10). Public vistas from scenic roads, as designated in General Plan Section 5.10.10, shall be afforded the highest level of protection.	✔		
Visual Impacts to Neighboring Parcels			
To minimize visual impacts to surrounding residential uses, the base of any new freestanding telecommunications tower shall be set back from any residentially zoned parcel a distance equal to five times the height of the tower, or a minimum of three hundred (300) feet, whichever is greater.			**N/A**

EXHIBIT

This requirement may be waived by the decision making body if the applicant can prove that the tower will not be readily visible from neighboring residential structures, or if the applicant can prove that a significant area proposed to be served would otherwise not be provided personal wireless services by the subject carrier, including proving that there are no viable, technically feasible, environmentally equivalent or superior alternative sites outside the prohibited and restricted areas designated in Section 13.10.661(b) and 13.10.661(c).	✔		

Evaluation Criteria	Meets criteria In code (✔)	Does not meet criteria (✔)	Urban Designer's Evaluation
DESIGN REVIEW CRITERIA			
Non-flammable Materials			
All wireless communication facilities shall be constructed of non-flammable material, unless specifically approved and conditioned by the County to be otherwise (e.g., when a wooden structure may be necessary to minimize visual impact).	✔		
Tower Type			
All telecommunication towers shall be self-supporting monopoles except where satisfactory evidence is submitted to the appropriate decision-making body that a non-monopole (such as a guyed or lattice tower) is required or environmentally superior.	✔		
All guy wires must be sheathed for their entire length with a plastic or other suitable covering.			**N/A**
Support Facilities			
The County strongly encourages all support facilities, such as equipment shelters, to be placed in underground vaults, so as to minimize visual impacts.			**N/A**
Any support facilities not placed underground shall be located and designed to minimize their visibility and, if appropriate, disguise their purpose to make them less prominent. These structures should be no taller than twelve (12) feet in height, and shall be designed to blend with existing architecture and/or the natural surroundings in the area or shall be screened from sight by mature landscaping.			**N/A**
Exterior Finish			
All support facilities, poles, towers, antenna supports, antennas, and other components of communication facilities shall be of a color approved by the decision making body.	✔		
Components of a wireless communication facility which will be viewed against soils, trees, or grasslands, shall be of a color or colors consistent with these landscapes.	✔		

EXHIBIT T

page 3

All proposed stealth tree poles (e.g., "monopines") must use bark screening that approximates natural bark for the entire height and circumference of the monopole visible to the public, as technically feasible.	✔		
Visual Impact Mitigation			
Special design of wireless communication facilities may be required to mitigate potentially significant adverse visual impacts, including appropriate camouflaging or utilization of stealth techniques.	✔		
Use of less visually obtrusive design alternatives, such as "microcell" facility-types that can be mounted upon existing utility poles, is encouraged.			**N/A**
Telecommunication towers designed to look like trees (e.g., "monopines") may be favored on wooded sites with existing similar looking trees where they can be designed to adequately blend with and/or mimic the existing trees. In other cases, stealth-type structures that mimic structures typically found in the built environment where the facility is located may be appropriate (e.g., small scale water towers, barns, and other typical farm-related structures on or near agricultural areas).	✔		
Rooftop or other building mounted antennas designed to blend in with the building's existing architecture shall be encouraged.			**N/A**
Co-location of a new wireless communication facility onto an existing telecommunication tower shall generally be favored over construction of a new tower.	✔		
Owners/operators of wireless communication towers/facilities are required to maintain the appearance of the tower/facility, as approved, throughout its operational life.	✔		
Public vistas from scenic roads, as designated in General Plan/LCP Section 5.10.10, shall be afforded the highest level of protection.	✔		**N/A**
Height			
All towers shall be designed to be the shortest height possible so as to minimize visual impact.			**N/A**
Any applications for towers of a height more than the allowed height for structures in the zoning district must include a written justification proving the need for a tower of that height and the absence of viable alternatives that would have less visual impact, and shall, in addition to any other required findings and/or requirements, require a variance approval pursuant to County Code Section 13.10.230.			**N/A**
Lighting			
Except for as provided for under Section 13.10.663 (a)(5), all wireless communication facilities shall be unlit except when authorized personnel are present at night.	✔		

EXHIBIT F

Roads and Parking			
All wireless communication facilities shall be served by the minimum sized roads and parking areas feasible.	✔		
Vegetation Protection and Facility Screening			
In addition to stealth structural designs, vegetative screening may be necessary to minimize wireless communication facility visibility within public viewsheds.			**N/A**
All new vegetation to be used for screening shall be compatible with existing surrounding vegetation.			**N/A**
Vegetation used for screening purposes shall be capable of providing the required screening upon completion of the permitted facility (i.e., an applicant cannot rely on the expected future screening capabilities of the vegetation at maturity to provide the required immediate screening).			**N/A**
All telecommunications facilities to be located in areas of extensive natural vegetation shall be installed in such a manner so as to maintain the existing native vegetation. Where necessary, appropriate mature landscaping can be used to screen the facility. However, so as to not pose an invasive or genetic contamination threat to local gene pools, all vegetation proposed and/or required to be planted that is associated with a wireless communication facility shall be non-invasive species native to Santa Cruz County, and specifically native to the project location.			**N/A**
Non-native and/or invasive species shall be prohibited (such as any species listed on the California Exotic Pest Plant Council "Pest Plant List" in the categories entitled 'A', 'B', or 'Red Alert'). Cultivars of native plants that may cause genetic pollution (such as all manzanita, oak, monkey flower, poppy, lupine, paintbrush and ceanothus species) shall be prohibited in these relatively pristine areas.			**N/A**
All wireless communication facility approvals in such areas shall be conditioned for the removal of non-native invasive plants (e.g., iceplant) in the area disturbed by the facility and replanting with appropriate non-invasive native species capable of providing similar or better vegetated screening and/or visual enhancement of the facility unless the decision making body determines that such removal and replanting would be more environmentally damaging than leaving the existing non-native and/or invasive species in place (e.g., a eucalyptus grove that provides over wintering habitat for Monarch butterflies may be better left alone).			**N/A**
All applications shall provide detailed landscape/vegetation plans specifying the non-invasive native plant species to be used, including identification of sources to be used to supply seeds and/or plants for the project.			**N/A**

EXHIBIT I
page 5