



Staff Report to the Zoning Administrator

Application Number: **06-0701**

Applicant: Evan Shepherd Reiff for Peacock Associates

Agenda Date: August 3, 2007

Owner: Ledyard Properties

Agenda Item # **3**

APN: 026-311-65

Time: After 10:00 a.m.

Project Description: Proposal to construct a new wireless communications facility on a site with a cold storage building and an operations building. Includes three equipment cabinets on a new concrete slab, three antennas within a 50-foot tall "flagpole" monopole with power and telco services to the equipment, and a GPS antenna.

Location: Property located on the west side of 17th Avenue approximately 450 feet south of the intersection with Brommer Street, at 1053 17th Avenue.

Supervisory District: First District (District Supervisor: Janet K. Beautz)

Permits Required: Commercial Development Permit and a waiver of the requirement that the tower be set back **300'** from residentially zoned parcels, to approximately 140 feet to the residentially zoned property and approximately 380 feet to the nearest residence.

Staff Recommendation:

- Certification that the proposal is exempt from further Environmental Review under the California Environmental Quality Act.
- Approval of Application 06-0701, based on the attached findings and conditions.

Exhibits

- | | |
|---|--|
| A. Project plans | F. Location, Zoning and General Plan |
| B. Findings | Maps |
| C. Conditions | G. NELR Study by Hammet & Edison |
| D. Categorical Exemption (CEQA determination) | H. Aerial Photos and photo-simulations |
| E. Assessor's parcel map | I. Comments & Correspondence |

Parcel Information

Parcel Size: 2.5 acres
Existing Land Use - Parcel: Warehouse

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

Existing Land Use - Surrounding: Warehouse & light industry
Project Access: 17" Avenue & Kinsley Street
Planning Area: Live Oak
Land Use Designation: C-S (Service Commercial)
Zone District: C-4 (Commercial Service) and M-1 (Light Industrial)
Coastal Zone: ☐ Inside ☒ Outside

Environmental Information

Geologic Hazards: Not mapped/no physical evidence on site
Soils: Soils report not required
Fire Hazard: Not a mapped constraint
Slopes: No slopes over 30% at project site or access roads
Env. Sen. Habitat: Not mapped/no physical evidence on site
Grading: No grading proposed
Tree Removal: No trees proposed to be removed
Scenic: Not a mapped resource
Drainage: Existing drainage adequate
Archeology: Not mapped/no physical evidence on site

Services Information

Urban/Rural Services Line: ☒ Inside ☐ Outside
Water Supply: None required
Sewage Disposal: None required
Fire District: Central Fire Protection
Drainage District: Zone 5 – no additional impervious area

History

The project site is one parcel that is a part of the Ledyard food services campus. The subject parcel includes a cold storage building and a plant operations building. The current cold storage building was originally constructed in 1977 (permit 50707) as a one-story warehouse and was remodeled in 1982 (permit 72652) for its current purpose. The operations building was originally permitted in 1978 (78-1687-PD) as a storage and office building. What had been two parcels have been combined into one to consolidate the Ledyard operations. Another application, 05-0439, is currently in process to establish a Master Occupancy Program (MOP) for the three parcels that make up the campus. The requested permit will not affect the MOP as the proposed use is appurtenant and accessory to the main storage, warehouse and shipping use, and accessory structures and uses will be allowed under the MOP.

Project Setting

The project site is a 2.5-acre parcel located approximately 575 feet west from 17" Avenue. Surrounding uses in the immediate vicinity include other warehouse and storage facilities,

manufacturing, auto repair, a landscape maintenance business, offices, and a mini-storage. Further to the north and west are single-family dwellings and there is a rail line, Shoreline Middle School, the Simpkins Swim Center and Schwan Lake Park to the south and southwest. There is a variety of zoning designations in the area that reflect the different uses. Zoning and General Plan maps are included as Exhibit F.

The monopole and equipment cabinets are proposed to be located between the cold storage building and the operations building, in an area that is currently paved, where equipment will be screened by the existing buildings and fencing.

Proposed Project

The applicant proposed to install an unmanned telecommunications facility within a lease area of approximately 125 square feet with a concrete pad (approximately 96 square feet) on an existing paved area. The proposed equipment would consist of three, 56-inch antennas inside a 50-foot flagpole monopole, three associated equipment cabinets, two power/telco boxes and a GPS antenna. The equipment cabinets and telco boxes will be ground-mounted on the concrete pad and the GPS antenna will be mounted to the warehouse building. Because the existing area is currently paved, no trees or vegetation are proposed to be removed and no grading is necessary.

Zoning Issues

The property is an approximately 2.5 acre parcel, with a “split” zoning of Commercial Service (C-4) and Light Industrial (M-1), and a Service Commercial (C-S) General Plan designation (see Exhibit F). The proposed wireless communication facility is an allowed use in the C-4 and M-1 zone districts, as neither of those designations are considered to be “prohibited” or “restricted” per County Code Section 13.10.661(b) and (c).

County Code Section 13.10.661(g) requires co-location when technically feasible. There is an existing Sprint/Nextel monopole approximately 650 feet southeast of the proposed facility, on Assessor’s Parcel Number (APN) 026-311-57. However, the design of this monopole precludes additional co-locations as the conditions of approval require all antennas to be maintained within a “Radome” structure and not mounted to the exterior of the pole. While there is additional capacity on this monopole, it will only accommodate three additional antennas within an extension of the “Radome” structure which are intended to provide added capacity to Sprint/Nextel if needed in the future.

The proposed facility meets all site standards for the C-4 zone district as it would be located a minimum of 94-feet from the nearest property line. The maximum height allowed for a free-standing tower in the C-4 zone district would be 85-feet (reference Planning Department Policy/Ordinance Interpretation WCF-01) and the proposed height is 50-feet.

County Code Section 13.10.663(a)(9) requires that the base of any new freestanding telecommunications tower be set back a minimum of 300-feet from residentially zoned parcels to minimize visual impacts that may result from a tower structure. This requirement may be waived by the decision making body, however, if it is determined that the tower will not be readily visible from neighboring residential structures or that service could not be provided to a

significant area without construction of the tower. The proposed project is unique in that the area where it is proposed to be located is within 300-feet of two residentially zoned (RM-6) parcels, the closest one of which is located approximately 140 feet away and contains a service commercial use (026-311-13). The other parcel does contain a single-family dwelling (026-311-12) and that dwelling is located approximately 380-feet from the base of the proposed tower See Exhibit F). The project is also unique in that the "tower" has been camouflaged and all antennas are completely contained within a flagpole/monopole. A flagpole such as the one proposed could be installed on the subject parcel with, at most, a minor administrative permit for which the fee would be waived. Flagpoles displaying the American flag are commonly found in large service commercial or industrial developments and will appear to be part of a common built environment. So, while the flagpole will be visible it will not be perceived as a freestanding tower and the wireless communication facility, consisting of antennas and equipment cabinets and other ancillary equipment, will not itself be visible.

Alternative Site Analysis

An alternatives analysis was not required for this proposal as the parcel is not within a restricted or prohibited zone district. The applicant, did, however, identify several possible alternative locations that would have potentially allowed a building-mounted or co-located facility, either of which is preferable to a monopole that is not a "stealth" installation. Other parcels identified included the Central Fire Protection District station at 930-17th Avenue, with no interest in leasing; Brommer Street Storage at 1300 Brommer Street, the owners of which were only interested in a short term lease; Paradise Landscape at 1358 Brommer Street, where Code Compliance issues prevent the location of a wireless communication facility; a light industrial complex at 992 17th Avenue, the owners of which were not interested in a lease; and the Sprint/Nextel facility discussed above. The proposed facility is intended to serve the businesses and residences in the area surrounding Brommer Street and 17th Avenue, to the yacht harbor. Because the other nearby sites and one potential co-location were found not to be viable, this site was chosen as it is not in a restricted or prohibited area and the tower base could be located a minimum of 300-feet from all but one small portion of residentially zoned properties.

Visual Impacts/Design Review

Although the proposed flagpole/monopole will be visible from the surrounding area, it is located in an area that is not a designated visual resource area. The base of the proposed monopole is located more than 300-feet from all but one small portion of residentially zoned area to reduce visual impacts to surrounding residences. Please refer to the section above (Zoning Issues) for a discussion about the 300-foot separation requirement. Additionally, the structure has been designed such that the three antennas are internally mounted and are not visible, and the proposal utilizes a stealth-type design that mimics structures normally found in the built environment where the facility is located. Flagpoles displaying the American flag are commonly found in large service commercial or industrial developments and will appear to be part of a common built environment. The support facilities will be located between two existing buildings on site and will not be visible off-site.

To reduce any potential visual impacts, conditions of approval have been included to eliminate 24-hour lighting, such that the flag will be lowered and raised daily, and to limit the size of the

flag to the smallest possible given the size and height of the pole.

To ensure that this project's long-term visual impact is minimized, several conditions of approval are proposed including allowing only manual lighting, requiring that the pole be maintained in good condition throughout its life (including painting as needed), and maintaining the flag in good condition

Radio Frequency (RF) Exposure

The applicant has submitted a study by Hammett and Edison, Inc. consulting engineers that describes the proposed installation and the maximum RF exposure levels for surrounding land uses. The applicant proposes to install three Jaybeam Wireless directional panel PCS antennas inside the top of the flagpole/monopole. The antennas would be mounted at an effective height of about 47 feet above ground and would be oriented at 120° spacing to provide service in all directions. The maximum effective radiated power in any direction would be 1,890 watts, representing six channels operating simultaneously at 315 watts each.

The maximum ambient RF exposure anywhere on the ground, for the proposed Metro PCS operation alone, will be **0.31%** of the applicable public exposure limit established by the Federal Communications Commission (FCC). The maximum calculated cumulative level on the ground for the simultaneous operation of both carriers (including the Sprint/Nextel facility to the southeast) would be 0.39% of the public exposure limit. The maximum calculated cumulative level on the second floor elevation of any nearby building would be 0.63% of the public exposure limit, and the maximum calculated cumulative level at the second-floor elevation of Shoreline Middle School would be 0.25% of the public exposure limit. According to the study findings, the projected exposure limits include "worst-case" assumptions and are expected to overstate actual power density levels.

Due to the mounting location, in the interior of a flagpole/monopole approximately 47 feet off the ground, the antennas are not accessible to the general public and no mitigation measures are needed to comply with FCC guidelines. No access within two feet directly in front of the antennas themselves, such as might occur during maintenance activities, should be allowed while the site is in operation. Explanatory warning signs are required to be posted on the pole below the antennas, such that the signs are readily visible from any angle of approach to persons who might be conducting maintenance, to meet FCC-adopted guidelines.

Section 47 USC 322(c)(7)(iv) of the Telecommunications Act of 1996 forbids jurisdictions from regulating the placement, construction, or modification of Wireless Communications Facilities based on the environmental effects of RF emissions if these emissions comply with FCC standards. The RF emissions of the proposed facility, and the cumulative emissions of the facility and the nearby facility to the southeast, comply with FCC standards.

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.

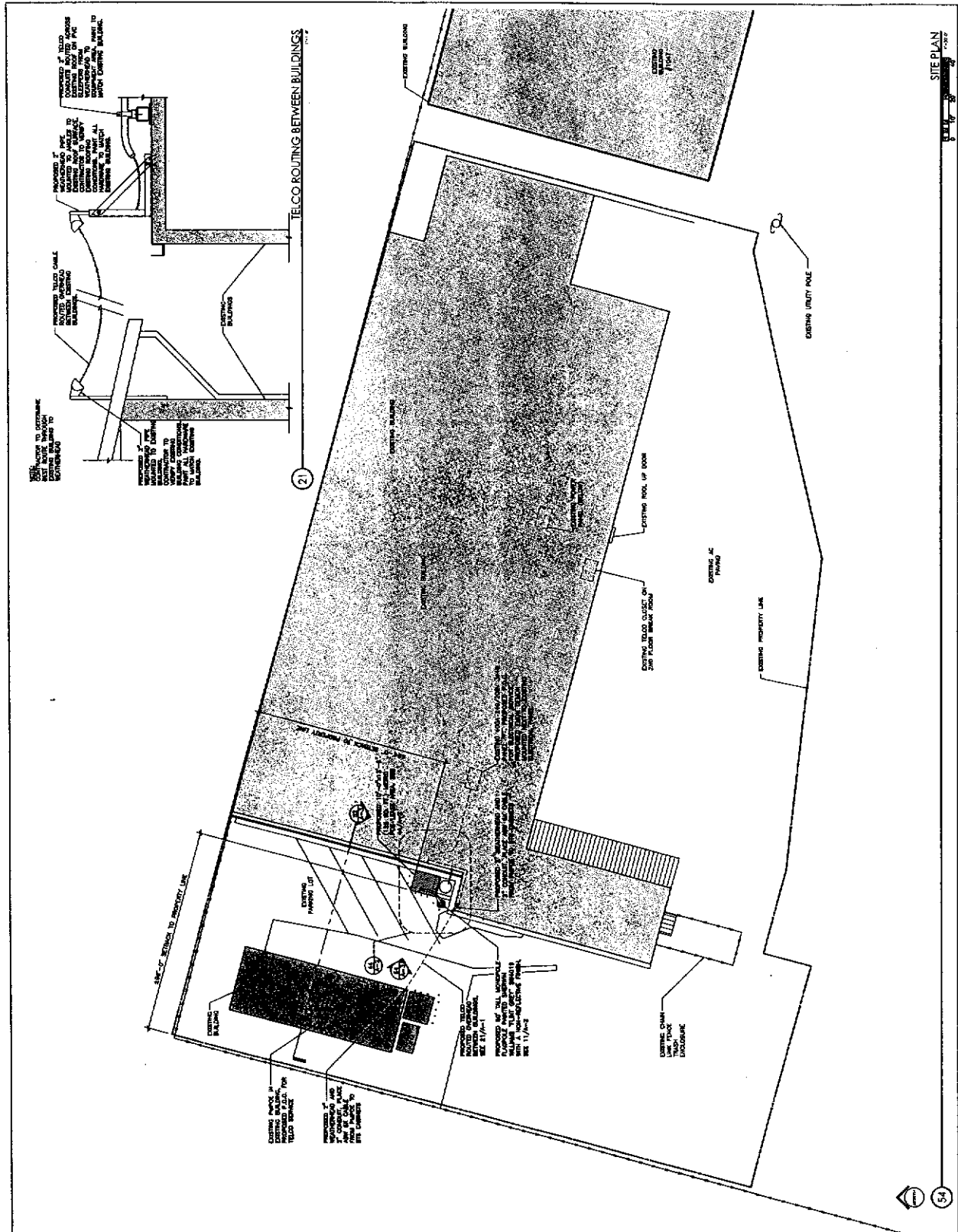
Staff Recommendation

- Certification that the proposal is exempt from further Environmental Review under the California Environmental Quality Act.
- APPROVAL of Application Number **06-0701**, **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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ARCHITECT:

CONSULTANT:

7435

REV.	DATE	DESCRIPTION	BY
1	11/17/06	ISSUED FOR NEW ZONING	JAN
2	11/22/06	ISSUED FOR NEW ZONING	JAN

DRAWN BY:	CHE:	APV:
JWP	JWP	

CURRENT ISSUE DATE: 11/30/06

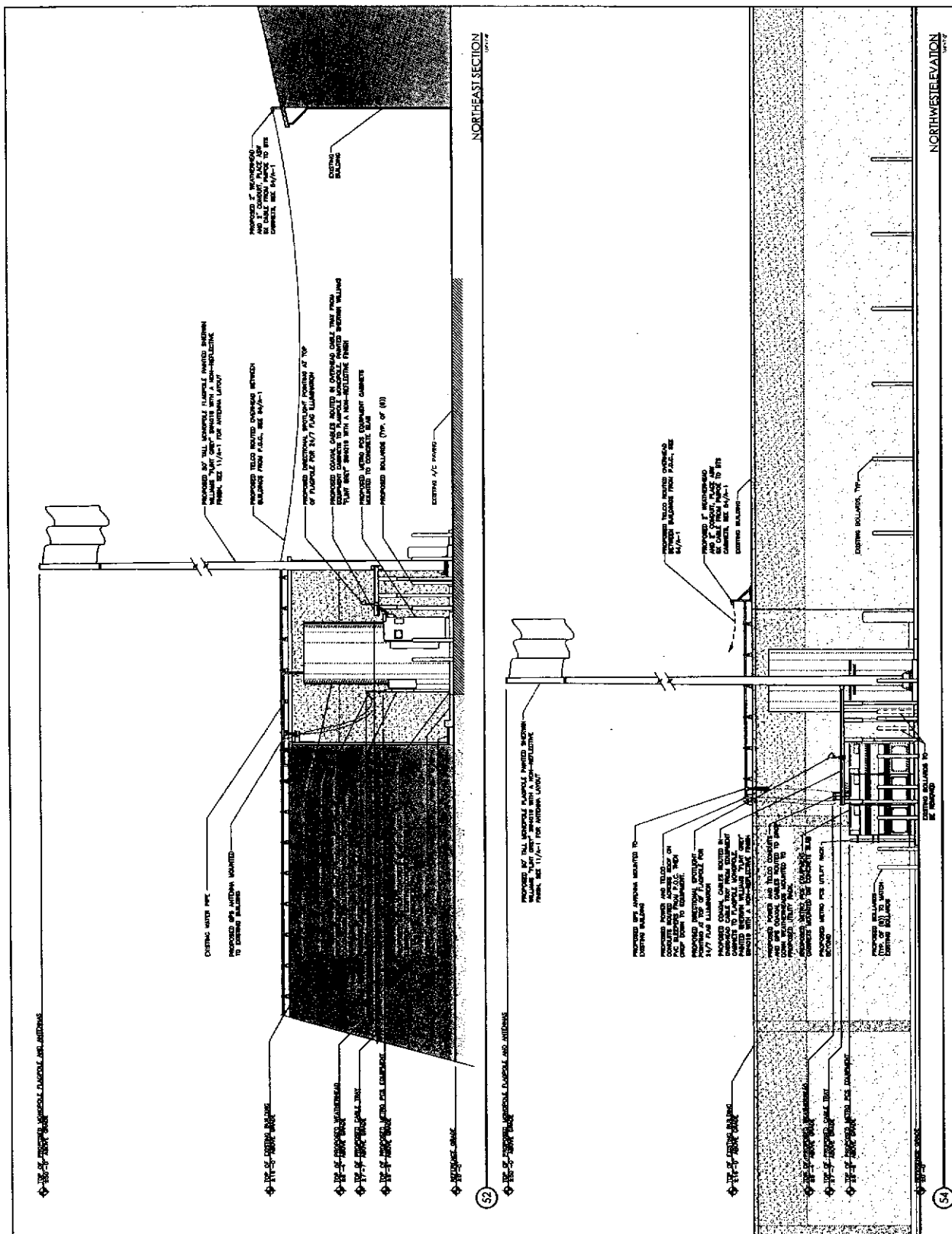
ISSUED FOR:

LEDYARD PROPERTIES
SF16711-D
1053 17TH AVE.
SANTA CRUZ, CA 95062
APN NO. 026-311-65
COUNTY OF SANTA CRUZ

SHEET TITLE: ELEVATIONS

SHEET NUMBER: **A-3** REVISION:

877-2118





CONSULTANT:

SEAL:

REV.	DATE	DESCRIPTION	BY
	11/27/84	ISSUED FOR PMS 224444	JWP
	11/28/84	ISSUED FOR 1006 2044-03	JWP

DRAWN BY:	CHK:	APV:
JNW	SH	

CURRENT ISSUE DATE: 11/30/06

100% ZD's

PROJECT INFORMATION:
LEDYARD PROPERTIES
SP16711-D
1053 17TH AVE.
SANTA CRUZ, CA 95082
APN NO. 078-311-65
COUNTY OF SANTA CRUZ

SHEET TITLE:
TOPOGRAPHIC/AREA
MAP

SHEET NUMBER: **Z-1** REVISION:

035-44A

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 facility would be located in an area that is not a designated visual resource area. The base of the proposed monopole is located more than 300 feet from all but one small portion of residentially zoned area to reduce visual impacts to surrounding residences. Additionally, the structure has been designed such that the three antennas are internally mounted and are not visible, and the proposal utilizes a stealth-type design that mimics structures normally found in the built environment where the facility is located. The support facilities will be located between two existing buildings and will not be visible off-site.

County Code Section 13.10.663(a)(9) requires that the base of any new freestanding telecommunication tower be set back a minimum of 300-feet from residentially zoned parcels to minimize visual impacts that may result from a tower structure. This requirement may be waived by the decision making body, however, if it is determined that the tower will not be readily visible from neighboring residential structures or that service could not be provided to a significant area without construction of the tower. The proposed project is unique in that the area where it is proposed to be located is within 300-feet of two residentially zoned (RM-6) parcels, the closest one of which is located approximately 140 feet away and contains a service commercial use (026-311-13). The other parcel does contain a single-family dwelling (026-311-12) and that dwelling is located approximately 380-feet from the base of the proposed tower. The project is also unique in that the "tower" has been camouflaged and all antennas are completely contained within a flagpole/monopole. A flagpole such as the one proposed could be installed on the subject parcel with, at most, a minor administrative permit for which the fee would be waived. Flagpoles displaying the American flag are commonly found in large service commercial or industrial developments and will appear to be part of a common built environment. *So*, while the flagpole will be visible it will not be perceived as a freestanding tower and the wireless communication facility, consisting of antennas and equipment cabinets and other ancillary equipment, will not itself be visible,

To reduce any potential visual impacts, conditions of approval have been included to eliminate 24-hour lighting, such that the flag will be lowered and raised daily, and to limit the size of the flag to the smallest possible given the size and height of the pole.

To ensure that this project's long-term visual impact is minimized, several conditions of approval are proposed including allowing only manual lighting, requiring that the pole be

maintained in good condition throughout it's life (including painting as needed), and maintaining the flag in good condition.

An alternatives analysis was not required for this proposal as the parcel is not within a restricted or prohibited zone district. The applicant, did, however, identify several possible alternative locations that would have potentially allowed a building-mounted or co-located facility, either of which is preferable to a monopole that is not a "stealth" installation. Other parcels identified included the Central Fire Protection District station at 930-17th Avenue, with no interest in leasing; Brommer Street Storage at 1300 Brommer Street, the owners of which were only interested in a short term lease; Paradise Landscape at 1358 Brommer Street, where Code Compliance issues prevent the location of a wireless communication facility; a light industrial complex at 992 17th Avenue, the owners of which were not interested in a lease; and the Sprint/Nextel facility discussed above. Because the other nearby sites and one potential co-location were found not to be viable, this site was chosen as it is not in a restricted or prohibited area and the tower base could be located a minimum of 300-feet from all but one small portion of residentially zoned properties.

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 proposed facility meets all site standards for the C-4 zone district as it would be located a minimum of 94-feet from the nearest property line. The maximum height allowed for a free-standing tower in the C-4 zone district would be 85-feet (reference Planning Department Policy/Ordinance Interpretation WCF-01) and the proposed height is 50-feet. Because the existing area is currently paved, no trees or vegetation are proposed to be removed and no grading is necessary. The proposed site is not located on one of the prohibited and/or restricted areas set forth in Sections 13.10.661(b) and 13.10.661 (c), so an alternatives analysis was not required.

The applicant, did, however, identify five possible alternative locations that would have potentially allowed a building-mounted or co-located facility, either of which is preferable to a monopole that is not a "stealth" installation. For a variety of reasons (see finding above) none of those sites proved to be viable. Because the other nearby sites and one potential co-location were found not to be viable, this site was chosen as it is not in a restricted or prohibited area and the tower base could be located a minimum of all but one small portion of residentially zoned area.

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 commercial use of the subject property is in compliance with the requirements of the zone district and General Plan designation, in which it is

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located. Another application, OS-0439, is currently in process to establish a Master Occupancy Program (MOP) for the three parcels that make up the campus. The requested permit will not affect the MOP as the proposed use is appurtenant and accessory to the main storage, warehouse and shipping use, and accessory structures and uses will be allowed as part of the MOP.

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

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 a flagpole/monopole, which will be approximately 50-feet in height, 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 ambient RF exposure anywhere on the ground, for the proposed Metro PCS operation alone, will be 0.31% of the applicable public exposure limit established by the Federal Communications Commission (FCC). The maximum calculated cumulative level on the ground for the simultaneous operation of both carriers (including the Sprint/Nextel facility to the southeast) would be 0.39% of the public exposure limit. The maximum calculated cumulative level on the second floor elevation of any nearby building would be 0.63% of the public exposure limit, and the maximum calculated cumulative level at the second-floor elevation of Shoreline Middle School would be 0.25% of the public exposure limit. According to the study findings, the projected exposure limits include "worst-case" assumptions and are expected to overstate actual power density levels.

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

This finding *can* be made, in that the proposed project site is not located within the coastal zone

Development Permit Findings

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

This finding can be made, as the proposed wireless facility and associated equipment will be required to comply with all applicable building and electrical codes, and the standards of the California Public Utilities Commission (PUC) and the Federal Communications Commission (FCC). The maximum ambient RF exposure anywhere on the ground, for the proposed Metro PCS operation alone, will be 0.31% of the applicable public exposure limit established by the Federal Communications Commission (FCC). The maximum calculated cumulative level on the ground for the simultaneous operation of both carriers (including the Sprint/Nextel facility to the southeast) would be 0.39% of the public exposure limit. The maximum calculated cumulative level on the second floor elevation of any nearby building would be 0.63% of the public exposure limit, and the maximum calculated cumulative level at the second-floor elevation of Shoreline Middle School would be 0.25% of the public exposure limit.

Condition of Approval IV.H. requires that the most recent and efficient technology will be used and 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 structure has been designed such that the three antennas are internally mounted and are not visible, and the proposal utilizes a stealth-type design that mimics structures normally found in the built environment where the facility is located. Flagpoles displaying the American flag are commonly found in large service commercial or industrial developments and will appear to be part of a common built environment. The support facilities will be located between two existing buildings on site and will not be visible off-site.

To reduce any potential visual impacts, conditions of approval have been included to eliminate 24-hour lighting, such that the flag will be lowered and raised daily, and to limit the size of the flag to the smallest possible given the size and height of the pole. To ensure that this project's long-term visual impact is minimized, several conditions of approval are proposed including allowing only manual lighting, requiring that the pole be maintained in good condition throughout its life (including painting as needed), and maintaining the flag in good condition.

Noise levels produced by the associated equipment are less than that of a residential air conditioning unit, and will be less than those currently generated by the refrigeration compressors on site.

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 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 C-4 (Commercial Service) zone district in that the primary use of the property will remain a warehouse and storage facility and the wireless communications facility, that meets all current site standards for the zone district, will be an accessory and ancillary use. The proposed wireless communication facility is an allowed use in the C-4 and M-1 zone districts, **as** neither of those designations are considered to be "prohibited" or "restricted" per County Code Section 13.10.661(b) and (c), and complies with all applicable provisions of the County's Wireless Communications Facility Ordinance (Sections 13.10.660 through 13.10.668) as the proposal utilizes a stealth-type design that mimics structures normally found in the built environment where the facility is located. The support facilities will be located between two existing buildings and will not be visible off-site.

County Code Section 13.10.663(a)(9) requires that the base of any new freestanding telecommunications tower be set back a minimum of 300-feet from residentially zoned parcels to minimize visual impacts that may result from a tower structure. This requirement may be waived by the decision making body, however, if it is determined that the tower will not be readily visible from neighboring residential structures or that service could not be provided to a significant area without construction of the tower. The proposed project is unique in that the area where it is proposed to be located is within 300-feet of two residentially zoned (RM-6) parcels, the closest one of which is located approximately 140 feet away and contains a service commercial use (026-311-13). The other parcel does contain a single-family dwelling (026-311-12) and that dwelling is located approximately 380-feet from the base of the proposed tower. The project is also unique in that the "tower" has been camouflaged and all antennas are completely contained within a flagpole/monopole. A flagpole such as the one proposed could be installed on the subject parcel with, at most, a minor administrative permit for which the fee would be waived. Flagpoles displaying the American flag are commonly found in large service commercial or industrial developments and will appear to be part of a common built environment. **So**, while the flagpole will be visible it will not be perceived **as** a freestanding tower and the wireless communication facility, consisting of antennas and equipment cabinets and other ancillary equipment, will not itself be visible,

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 commercial use is consistent with the use and density requirements specified for the Service Commercial (C-S) land use designation in the County General Plan. The proposed facility will not adversely impact the light, solar opportunities, air and/of open space available to other structures or properties since the proposed flagpole/monopole meets all setbacks and site standards for the C-4 zone district as specified in Objective 8.1.3 of the General Plan. The proposed development is a conditionally allowed use in the C-4 and M-1 zone districts.

The proposed wireless communications facility will not adversely impact the light, solar opportunities, air, and/or open space available to other structures or properties, and meets all current site, design, and development standards for the zone district as specified in Policy 8.5.2

(Commercial Compatibility with *Other* Uses), in that the wireless communications facility has been reviewed by the County's Urban Designer and found to be in compliance with the Site, Architectural and Design Review Ordinance.

The proposed wireless communications facility will not be improperly proportioned to the parcel size or the character of the neighborhood **as** specified in General Plan Policy 8.6.1 (Maintaining a Relationship Between Structure and Parcel Sizes), in that the proposed wireless communications facility will comply with the site standards for the C-4 zone district (including setbacks and height) and will result in a structure consistent with a design that could be approved on any other commercial parcel that meets the criteria of the County's Wireless Communications Facility Ordinance.

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 is to be constructed on an existing developed lot. The construction of the flagpole monopole and the associated equipment will not overload utilities since no water or sewer service will be used and adequate electricity is available to the site. The project will not generate traffic on the streets in the vicinity in that the facilities are planned for unattended operation. Maintenance personnel will visit the site once per month to ensure that equipment is operating within regulated guidelines and the safety, efficiency and general traffic movement in the area will be unaffected. Parking for maintenance is provided on site. All access to the proposed facility will be provided on existing public streets and driveways.

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, as the proposed facility will consist of internally mounted antennas inside a flagpole monopole similar to those commonly found in large service commercial or industrial developments and will appear to be part of a common built environment. Equipment will be screened from public view by existing buildings and fences. Noise levels are less than that of a residential air conditioning unit, and will be less than those currently generated by the refrigeration compressors on site.

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 wireless communications facility has been designed such that the three antennas are internally mounted and are not visible, and the proposal utilizes a stealth-type design that mimics structures normally found in the built environment where the facility is located. Flagpoles displaying the **American** flag are commonly found in large service commercial or industrial developments and will appear to be part of a common built

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environment. The support facilities will be located between two existing buildings on site and will not be visible off-site.

To reduce any potential visual impacts, conditions of approval have been included to eliminate 24-hour lighting, such that the flag will be lowered and raised daily, and to limit the size of the flag to the smallest possible given the size and height of the pole. To ensure that this project's long-term visual impact is minimized, several conditions of approval are proposed including allowing only manual lighting, requiring that the pole be maintained in good condition throughout its life (including painting as needed), and maintaining the flag in good condition.

Conditions of Approval

Exhibit A: Project plans prepared by Omni Design Group, 8 sheet, dated 11/30/06

- I. This permit authorizes the construction of a new wireless communications facility including three, 56-inch antennas inside a 50-foot flagpole monopole, three associated equipment cabinets, two power/telco boxes and a GPS antenna. 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. The applicant shall obtain approval from the California Public Utilities Commission and the Federal Communications Commission to install and operate this facility.
- II. Prior to issuance of a Building Permit the applicant/owner shall:
 - A. Submit proof that these conditions have been recorded in the official records of the County of Santa Cruz (Office of the County Recorder).
 - B. Submit final architectural plans for review and approval by the Planning Department. The final plans shall be in substantial compliance with the plans marked Exhibit "A" on file with the Planning Department. Any changes from the approved Exhibit "A" for this development permit on the plans submitted for the Building Permit must be clearly called out and labeled by standard architectural methods to indicate such changes. Any changes that are not properly called out and labeled will not be authorized by any Building Permit that is issued for the proposed development. The final plans shall include the following additional information:
 1. Identify color and finish of exterior materials for Planning Department approval. All colors and materials must be non-reflective and blend with the existing infrastructure and/or provide camouflage. All roof-mounted equipment must be painted to match the existing buildings. All color boards must be no larger than 8.5"w x 11"h x 1/16"
 2. Identify the height and material of fencing surrounding the lease area for Planning Department approval.
 3. Identify the size of the flag proposed to be flown from the flagpole. The flag shall not be so large as to create visual impacts. The size of the flag and the relationship to the size of the flagpole shall be reviewed and approved by the County's Urban Designer.

4. All antennas shall be located within the flagpole/monopole. No exterior antennas are permitted.
 5. All new electric and telecommunications lines shall be placed underground, with the exception of one overhead telco cable routed overhead between existing buildings.
 6. Details showing compliance with fire department requirements.
 7. A lighting plan. All lighting must be manual and must not be visible from neighboring properties. No 24-hour lighting is permitted for the flag. The flag must be raised and lowered daily.
- C. 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, if required.
- D. To guarantee that the flagpole/monopole remains in good visual condition and to ensure the continued provision of mitigation of the visual impact of the wireless communications facility, the applicant shall submit a maintenance program prior to building permit issuance which includes the following:
1. A signed contract for maintenance with the company that provides the exterior paint, for annual visual inspection and follow up repair, painting, and resurfacing as necessary.
 2. A signed contract for maintenance of the flag that includes raising and lowering the flag daily and as required for weather conditions, and replacement of the flag as needed.
- E. 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.
- F. Obtain an Environmental Health Clearance for this project from the County Department of Environmental Health Services.
- G. Meet all requirements and pay any applicable plan check fee of the Central Fire Protection District.
- H. Submit proof of approval from the Federal Aviation Administration (FAA) for the proposed tower. Any modifications to the tower required by the FAA, such as required lights or painting, may require an amendment to this permit.
- III. All construction shall be performed according to the approved plans for the Building Permit. Prior to final building inspection, the applicant/owner must meet the following conditions:

- A. All site improvements shown on the final approved Building Permit plans shall be installed.
- B. All inspections required by the building permit shall be completed to the satisfaction of the County Building Official.
- C. The Hazardous Materials Management Plan, if required, shall be approved by the County Department of Environmental Health Services.
- D. Pursuant to Sections 16.40.040 and 16.42.100 of the County Code, if at any time during site preparation, excavation, or other ground disturbance associated with this development, any artifact or other evidence of an historic archaeological resource or a Native American cultural site is discovered, the responsible persons shall immediately cease and desist from all further site excavation and notify the Sheriff-Coroner if the discovery contains human remains, or the Planning Director if the discovery contains no human remains. The procedures established in Sections 16.40.040 and 16.42.100, shall be observed.

IV. Operational Conditions

- A. 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 exterior **finish** and materials of the wireless communication facility must be maintained on an annual basis to continue to blend with the existing utilities infrastructure. Additional paint and/or replacement materials shall be installed as necessary to blend the wireless communication facility with the existing utilities infrastructure.
- C. The flag shall be maintained and replaced as necessary. It shall be raised and lowered daily and as required by weather conditions. No 24-hour lighting is allowed.
- D. The operator of the wireless communication facility must submit within 90 days of commencement **of** normal operations (or within 90 days of any major modification of power output **of** the facility) a written report to the Santa Cruz County Planning Department documenting the measurements and findings with respect to compliance with the established Federal Communications Commission (FCC) Non-Ionizing Electromagnetic Radiation (**NEIR**) exposure standard. The wireless communication facility must remain in continued compliance with the NEIR standard established by the FCC at all times. Failure to submit required reports or to remain in continued compliance with the NEIR standard established by the FCC will be a violation of the terms of this permit.

- E. All noise generated from the approved use shall comply with the standards of the County General Plan and shall not exceed the existing noise level on the site.
- F. If, in the future, the pole based utilities are relocated underground at this location, the operator of the wireless communication facility must abandon the facility and be responsible for the removal of all permanent structures and the restoration of the site as needed to re-establish the area consistent with the character of the surrounding development.
- G.** 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.
- H. If future technological advances would allow for reduced visual impacts resulting from the proposed telecommunication facility, the operator of the wireless communication facility must make those modifications which would allow for reduced visual impact of the proposed facility as part of the normal replacement schedule. If, in the future, the facility is no longer needed, the operator of the wireless communication facility must abandon the facility and be responsible for the removal of all permanent structures and the restoration **of** the site as needed to re-establish the area consistent with the character of the surrounding natural landscape.
- I. 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.
- J. **A** Planning Department review that includes a public hearing shall be required for any future co-location at this wireless communications facility.
- K. The access road shall be permanently maintained to allow access to emergency vehicles at all times. Any obstruction of the access road, as a result of neglect or lack of maintenance, will be in violation of the conditions of this permit.
- L. The equipment cabinet area must be locked at all times except when authorized personnel are present. The antennas must not be accessible to the public.
- M. All site, building, security and landscape lighting shall be directed onto the lease site and away from adjacent properties. Light sources shall not be visible from adjacent properties. Building and security lighting shall be integrated into the building design and shall be operated with a manual on/off switch. The site shall be unlit except when authorized personnel are present at night.

- N. No person shall come within 2-feet of the antennas when the site is in operation. The NEIR hazard zone shall be posted with bilingual NEIR hazard warning signage, such that the signs are clearly visible from any angle of approach to persons who may need to work within that distance, including the roof of the nearby buildings on site. The signs shall indicate the facility operator and a 24-hour emergency contact who is authorized by the applicant to act on behalf of the applicant regarding an emergency situation.
- V. As a condition of this development approval, the holder of this development approval ("Development Approval Holder"), is required to defend, indemnify, and hold harmless the COUNTY, its officers, employees, and agents, from and against any claim (including attorneys' fees), against the COUNTY, its officers, employees, and agents to attack, set aside, void, or annul this development approval of the COUNTY or any subsequent amendment of this development approval which is requested by the Development Approval Holder.
 - A. COUNTY shall promptly notify the Development Approval Holder of any claim, action, or proceeding against which the COUNTY seeks to be defended, indemnified, or held harmless. COUNTY shall cooperate fully in such defense. If COUNTY fails to notify the Development Approval Holder within sixty (60) days of any such claim, action, or proceeding, or fails to cooperate fully in the defense thereof, the Development Approval Holder shall not thereafter be responsible to defend, indemnify, or hold harmless the COUNTY if such failure to notify or cooperate was significantly prejudicial to the Development Approval Holder.
 - B. Nothing contained herein shall prohibit the COUNTY from participating in the defense of any claim, action, or proceeding if both of the following occur:
 - 1. COUNTY bears its own attorney's fees and costs; and
 - 2. COUNTY defends the action in good faith.
 - C. Settlement. The Development Approval Holder shall not be required to pay or perform any settlement unless such Development Approval Holder has approved the settlement. **When** representing the County, the Development Approval Holder 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.
 - E. Within 30 days of the issuance of this development approval, the Development Approval Holder shall record in the office of the Santa Cruz County Recorder an agreement which incorporates the provisions of this condition, or this development approval shall become null and void.

Application #: 06-0701
APN: 026-311-65
Owner: Ledyard properties

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 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

Cathy Graves
Project Planner

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: 06-0701

Assessor Parcel Number: 026-311-65

Project Location: 1053 17th Avenue, Santa Cruz

Project Description: Proposal to construct a wireless communications facility

Person or Agency Proposing Project: Evan Shepheard Reiff for Peacock Associates

Contact Phone Number: (510) 420-5701

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

Specify type:

E. ☒ **Categorical Exemption**

Specify type: Class 3 - New Construction of Small Structures (Section 15303)

F. Reasons why the project is exempt:

Proposal to construct wireless communications facility **and** site improvements at an existing commercial development in an area designated for service commercial uses.

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

Cathy Graves, Project Planner

Date: _____

Electronically Redrawn 7/22/96 rw
 Rev 11/15/99 CB (9-0039714 & 15, LBA 1-63 & 64)
 Rev 3/19/03 mvm (parcel 61 accepted to ad)
 Rev 3/1/05 mvm (4-0090122, comb. 1-65)
 Rev. 10/29/05 mid (sl. removed)

FOR TAX PURPOSES ONLY

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POR. OF S.E. 1/4 SEC. 17,
 T.11S, R.1W, M.D.B. & M.

76RS25
 12/22/88

Tax Area Code
 82-040

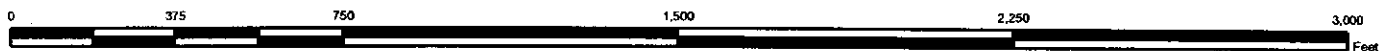
26-31

Note - Assessor's Parcel & Block







Assessor's Map No. 26-31
 County of Santa Cruz, Calif.

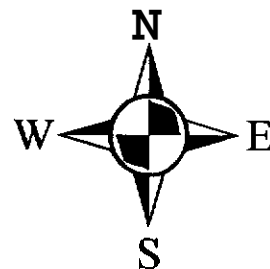


Location Map



Legend

-  APN 026-311-65
-  Assessors Parcels
-  Streets
-  INTERMITTENT STREAM
-  PERENNIAL STREAM
-  Railroads



Map Created by
County of Santa Cruz
Planning Department
December 2006

RA

SU

380'

140'

C-4

C-1

BRICKER ST

KINGLEY ST

EDGEMONT

200'

Legend

Parcel (Assessor) 0

Zone Text [DETAILED]

**Santa Cruz County
Boundary**

6in. Pixel

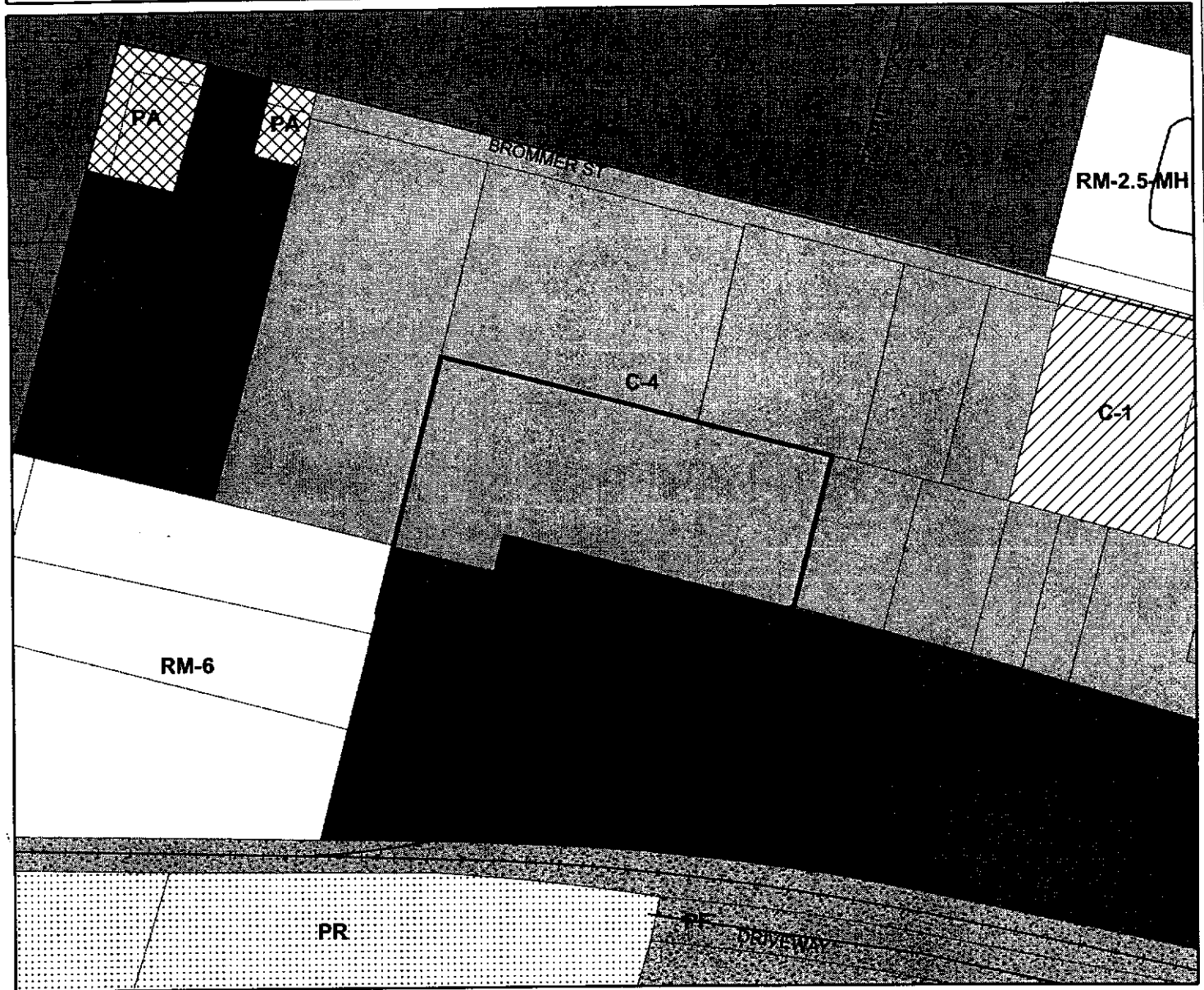
Relief Map (10 Meter)

- 31 -

EXHIBIT F

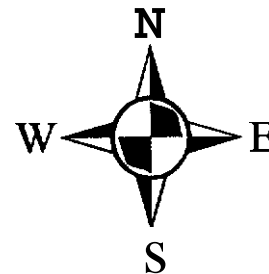


Zoning Map



Legend

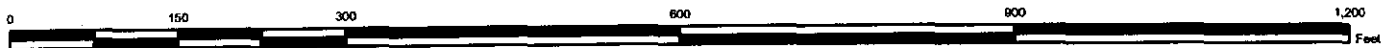
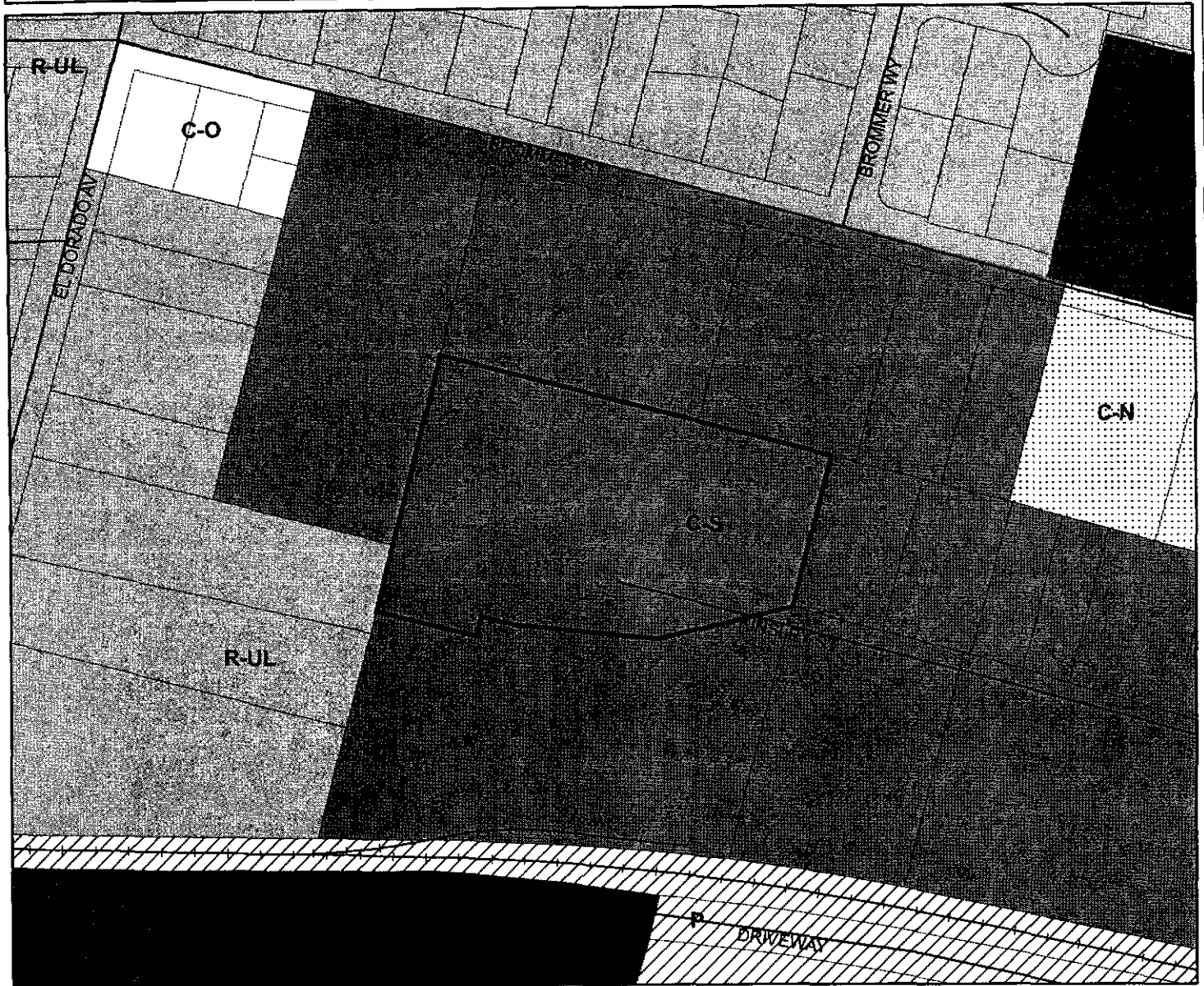
- APN 026-311-65
- Assessors Parcels
- Streets
- Railroads
- COMMERCIAL SERVICE (C-4)
- RESIDENTIAL-SINGLE FAMILY (R-1)
- LIGHT INDUSTRIAL (M-1)
- SPECIAL USE (SU)
- RESIDENTIAL-MULTIFAMILY (RM)
- COMMERCIAL-PRO OFFICE (PA)
- COMMERCIAL-NEIGHBORHOOD (C-1)
- PUBLIC FACILITY (PF)



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Planning Department
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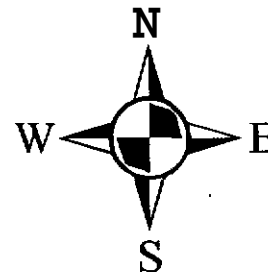


General Plan Designation Map



Legend

- APN 026-311-65
- Assessors Parcels
- Streets
- Railroads
- Commercial-Service (C-S)
- Residential- Urban Low Density (R-UL)
- Residential- Urban High Density (R-UH)
- Parks and Recreation (O-R)
- Commercial-Neighborhood (C-N)
- Public Facilities (P)
- Commercial-Office (C-O)



Map Created by
County of Santa Cruz
Planning Department
December 2006



HAMMETT & EDISON, INC.
CONSULTING ENGINEERS
 RADIO AND TELEVISION

WILLIAM F. HAMMETT, P.E.
 DANE E. ERICKSEN, P.E.
 STANLEY SALEK, P.E.
 ROBERT D. WELLER, P.E.
 MARK D. NEUMANN, P.E.
 ROBERT P. SMITH, JR.
 RAJAT MATHUR, P.E.
 S. WESTON LANE
 ROBERT L. HAMMETT, P.E.
 1920-2002
 EDWARD EDISON, P.E.

BY E-MAIL ESREIFF@PEACOCKASSOCIATES.COM

July 16, 2007

Mr. Evan Shepherd Reiff
 Planning and Zoning Manager
 Peacock Associates
 5900 Hollis Street R1
 Emeryville, California 94608

Dear Evan:

As you requested, this letter provides updated supplemental follow-up information to our report, dated July 10, 2007, of RF exposure conditions near the MetroPCS base station (Site No. SF1671 ID) proposed to be located on a new 50-foot pole to be installed at 1053 17th Avenue in Santa Cruz, California. County Supervisor Jan Beautz raises a concern in her memo, dated May 16, 2007, about levels in the second-floor classrooms at Shoreline Middle School, about 1,000 feet away.

The Supervisor notes correctly from Figure 3A that the calculated second-floor level at 1,000 feet (0.10%) is almost the same as the ground-floor level at 50 feet (0.1%). It is important to note several additional things from that figure and its companion Figure 3B:

- a) both levels are hundreds of times below the FCC limit, so a similar pole located 50 feet from a classroom would easily comply with the FCC's exposure limits (that is, by hundreds of times);
- b) the levels shown in Figure 3A are those along the 1,000-foot arrow shown in Figure 3B that passes through the existing Sprint Nextel base station, located about 650 feet away;
- c) therefore, the indicated levels at 1,000 feet are mostly due to that station, not the proposed MetroPCS station; and
- d) in any case, calculated second-floor levels at 1,000 feet are less than twice the ground-floor levels at that same distance, and inside the classrooms on either floor, the levels would be lower and therefore likely to be even more comparable.

Both figures revised from the earlier memo on this topic, dated June 12, 2007.

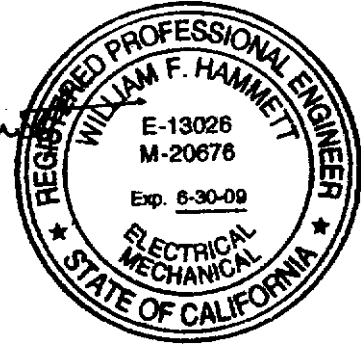
e-mail: bhammett@h-e.com
 US Mail: Box 280068 • San Francisco, California 94128
 Delivery: 470 Third Street West • Sonoma, California 95476
 Telephone: 707/996-5200 San Francisco • 707/996-5280 Facsimile • 202/396-5200 D.C.

Mr. Evan Shepherd Reiff, page 2
July 16, 2007

I trust that this information addresses the questions raised. We appreciate the opportunity to be of service and would welcome any further questions on this material.

Sincerely yours,

Bill Hammett



**MetroPCS • Proposed Base Station (Site No. SF16711D)
1053 17th Avenue • Santa Cruz, California**

Statement of Hammett & Edison, Inc., Consulting Engineers

The ~~firm~~ of Hammett & Edison, Inc., Consulting Engineers, has been retained on behalf of MetroPCS, a personal wireless telecommunications carrier, to evaluate the base station (Site No. SF16711D) proposed to be located at 1053 17th Avenue in Santa Cruz, 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 (“NCRF”). 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:

<u>Personal Wireless Service</u>	<u>Approx. Frequency</u>	<u>Occupational Limit</u>	<u>Public Limit</u>
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



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SAN FRANCISCO

MP16711595.2
Page 1 of 4

**MetroPCS • Proposed Base Station (Site No. SF16711D)
1053 17th Avenue • Santa Cruz, 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 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 Metro, including zoning drawings by Omni Design Group, Inc., dated November 30, 2006, it is proposed to mount three Jaybeam Wireless Model W3X72-14-a010 directional panel PCS antennas inside the top of a new 50-foot flag pole to be installed adjacent to the commercial building located at 1053 17th Avenue in Santa Cruz. The antennas would be mounted at an effective height of about 47 feet above ground and would be oriented at 120° spacing, to provide service in all directions. The maximum effective radiated power in any direction would be 1,890 watts, representing six channels operating simultaneously at 315 watts each.

Presently located some 650 feet to the southeast are similar antennas for use by Sprint Nextel, another wireless telecommunications carrier. Sprint Nextel reports that it is using six EMS Model RR9017 directional panel PCS antennas mounted on a pole at effective heights of about 42 and 48 feet above ground, operating with a maximum effective radiated power in any direction of 2,400 watts.

There are reported no other wireless base stations or other sources of RF energy close enough and powerful enough to affect the condition of compliance with prevailing exposure standards in areas near the proposed site.

Study Results

For a person anywhere at ground, the maximum ambient RF exposure level due to the proposed Metro operation by itself is calculated to be 0.0031 mW/cm², which is 0.31% of the applicable public exposure limit. The maximum calculated cumulative level at ground for the simultaneous operation of both carriers is 0.39% of the public limit. The maximum calculated cumulative level on the second-



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MP16711595.2
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**MetroPCS • Proposed Base Station (Site No. SF16711D)
1053 17th Avenue • Santa Cruz, California**

floor elevation of any nearby building would be 0.63% of the public exposure limit; the maximum calculated cumulative level at the second-floor elevation of the nearby school is 0.25% 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.

Recommended Mitigation Measures

Due to their mounting location, **the** MetroPCS antennas are not accessible to the general public and so no mitigation measures **are** necessary to comply with the FCC public exposure guidelines. To prevent occupational exposures in excess of the FCC guidelines, no access within 2 feet directly in front of the Metro antennas themselves, such as might occur during maintenance activities on the flag or pole, should be allowed while **the** site is in operation, unless other measures can be demonstrated to ensure that occupational protection requirements are met. Posting explanatory warning signs^{*} at the antennas and/or on the pole below the antennas, such that the signs would be readily visible from any angle of approach to persons who might need to work within that distance, would be sufficient to meet FCC-adopted guidelines.

Conclusion

Based on the information and analysis above, it is the undersigned’s professional opinion that the base station proposed by MetroPCS at 1053 17th Avenue in Santa Cruz, 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. Posting of explanatory signs is recommended to establish compliance with occupational exposure limitations.

^{*} Warning signs should comply with OET-65 color, symbol, and content conventions. Contact information should be provided (e.g., a telephone number) to arrange for access to restricted areas. The selection of language(s) is not an engineering matter, and guidance from the landlord, local zoning or health authority, or appropriate professionals may be required.

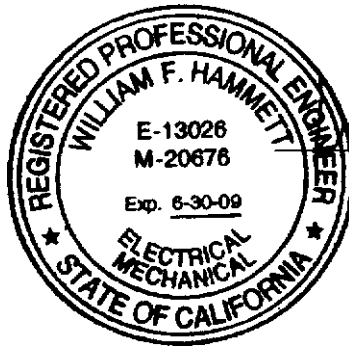


**MetroPCS • Proposed Base Station (Site No. SF16711D)
1053 17th Avenue • Santa Cruz, California**

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, 2009. 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.

July 10, 2007



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



HAMMETT & EDISON, INC.
CONSULTING ENGINEERS
SAN FRANCISCO

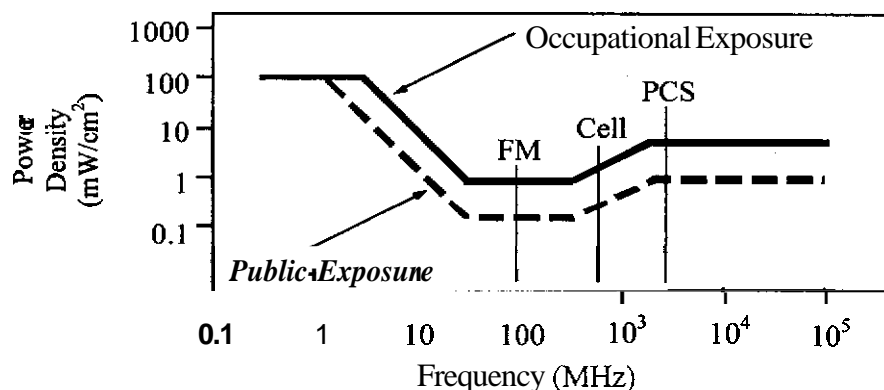
MP16711595.2
Page 4 of 4

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 ²)	
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/f²</i>
3.0– 30	1842/f	<i>823.8/f</i>	4.891f	<i>2.19/f</i>	900/f ²	<i>180/f²</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, 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 base stations, as well as dish (aperture) antennas, typically used for microwave links. The antenna patterns are not fully formed in the near field at these antennas, and the FCC Office of Engineering and Technology Bulletin No. 65 (August 1997) gives suitable formulas for calculating power density within such zones.

For a panel or whip antenna, power density $S = \frac{180}{\theta_{BW}} \times \frac{0.1 \times P_{net}}{\pi \times D^2 \times h}$, in mW/cm²,

and for an aperture antenna, maximum power density $S_{max} = \frac{0.1 \times 16 \times \eta \times P_{net}}{\pi \times h^2}$, in mW/cm²,

where θ_{BW} = half-power beamwidth of the antenna, in degrees, and

P_{net} = net power input to the antenna, in watts,

D = distance from antenna, in meters,

h = aperture height of the antenna, in meters, and

η = aperture efficiency (unitless, typically 0.5-0.8).

The factor of 0.1 in the numerators converts to the desired units of power density.

Far Field.

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

power density $S = \frac{2.56 \times 1.64 \times 100 \times RFF^2 \times ERP}{4 \times \pi \times D^2}$, in mW/cm²,

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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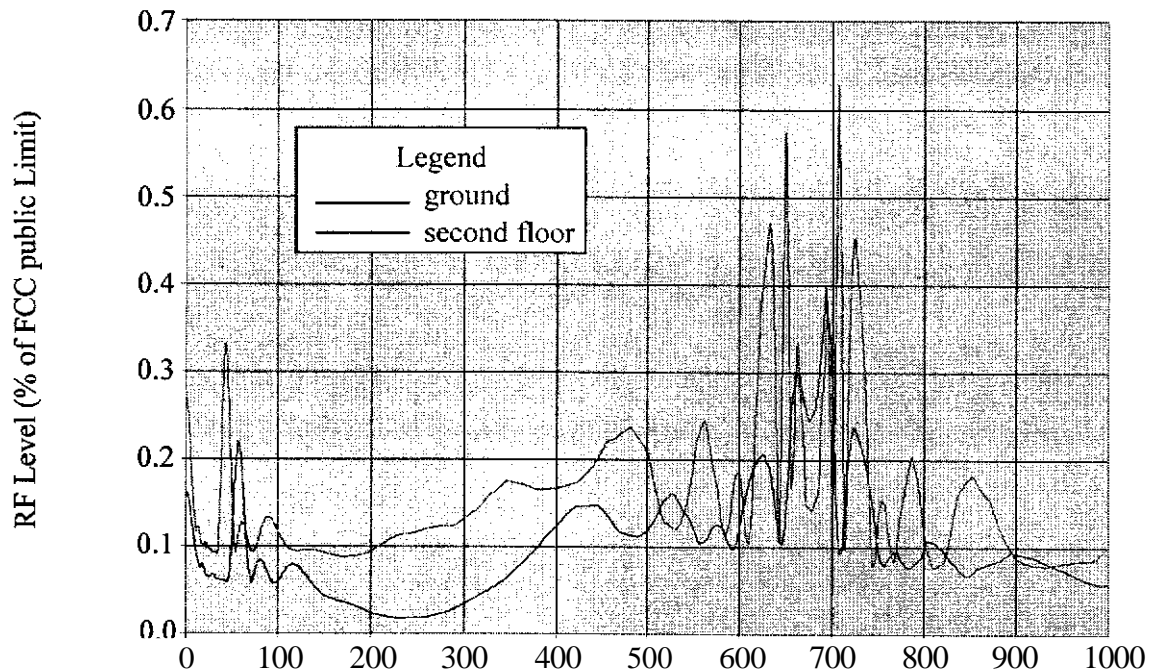
Methodology
Figure 2

**MetroPCS • Proposed Base Station (Site No. SF16711D)
1053 17th Avenue • Santa Cruz, 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



RF level (% limit)	Distance (feet) in direction of maximum level						
Distance (feet)	50	100	200	300	500	750	1,000
ground	0.11%	0.058%	0.023%	0.035%	0.12%	0.091%	0.057%
second floor	0.16%	0.12%	0.098%	0.13%	0.21%	0.14%	0.10%

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) - 1,890 watts

Effective MetroPCS antenna height above ground - 47 feet

Other sources nearby - Sprint Nextel located at about 650 feet away

Other sources within one mile - Radio Stations KSCO and KOMY located about 0.71 miles away. No other base stations or other sources close enough to affect compliance.

Plan for restricting public access - Antennas are mounted on a tall flag pole



HAMMETT & EDISON, INC.
CONSULTING ENGINEERS
SAN FRANCISCO

MP16711595.2
Figure 3A

MetroPCS • Proposed Base Station (Site No. SF16711D)
1053 17th Avenue • Santa Cruz, California

Calculated NIER Exposure Levels
Within 1,000 Feet of Proposed Site
Including Sprint Nextel PCS



Legend	
blank	- less than 0.3% of FCC public limit (<i>i.e.</i> , more than 330 times below)
	- 0.30% and above near ground level (highest level is 0.39%)
	- 0.30% and above at 2nd floor level (highest level is 0.63%)

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.

metroPCS
 METRO PCS, INC.
 1580 MARINA VILLAGE PARKWAY
 4TH FLOOR
 FARMERS, CA 94001
 PHONE: 916.555.3410
 FAX: 916.555.3410

ARCHITECT
OMINI
 1580 MARINA VILLAGE PARKWAY
 4TH FLOOR
 FARMERS, CA 94001
 PHONE: 916.555.3410
 FAX: 916.555.3410

CONSULTANT:

SEAL:

REV.	DATE	DESCRIPTION	BY
1	11/17/04	REVISION FOR 003 DOWD	JAP
2	11/08/04	REVISION FOR 003 DOWD	JAP
3	02/12/05	REVISION FOR 003 DOWD	JAP

DESIGNED BY	CHECKED BY	APPROVED BY
JAP	JAP	JAP

CURRENT ISSUE DATE: 03/13/07

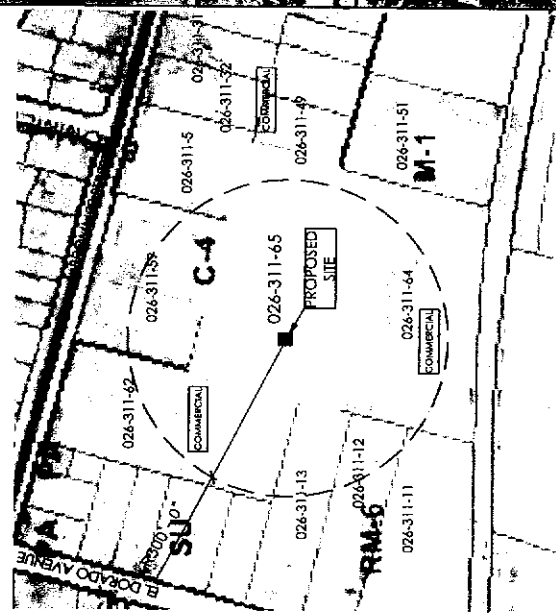
SOURCE: 100% ZD's

PROJECT INFORMATION:
LEVIYARD PROPERTIES
SP16711-D
 1033 17TH AVE
 SAN FRANCISCO, CA 94102
 APN NO. 026-311-055
 COUNTY OF SANTA CRUZ

SHEET TITLE:
 PROXIMITY MAP /
 AERIAL PHOTO (300')

SHEET NUMBER:
Z-3

855-444



PROXIMITY MAP/AERIAL PHOTO WITH CLEAR PICTURE (300' RADIUS)
 PROXIMITY MAP/AERIAL PHOTO WITH BOUNDARY (300' RADIUS)
 SCALE: 1" = 300'

Site Location - The site was located by using the street address, plotted on MapQuest and confirmed by the GoogleEarth.

Viewpoint Selection - The site is located behind a large warehouse, back off of the nearby roads. Photographs were taken from the streets to the northeast, east and west. These viewpoints are considered the most representative public viewpoints.

Scale - The proposed flagpole will be located between buildings, and placed approximately midway between previous proposed site locations. Therefore, the scale pole placement from the previous surveys were used to place the correct scale for the new location in the photographs. Height scale was achieved in the previous surveys by placing a 40 ft scale pole with red balloons at 30 ft and 40 ft. The scale pole provides extremely accurate scale and placement, as the top balloon will perfectly represent the top of the flagpole. Both previous locations were photographed with the scale pole and balloons. The new location was established by setting the midpoint average off the photographs.

The dimensions and placement information were provided by 90% Zoning Drawings, supplied by the project applicant and prepared by Omni Design Group.

Equipment Information - The images were taken with a Canon 1Ds Mark II Professional Digital camera with a 1:1 conversion ratio using standard lenses. GPS equipment: Garmin GPSMAP 60CSx. Distance measured with Bushnell 1000 digital laser range finder. All image manipulation is done using Adobe Photoshop on Apple MacPro Intel workstations.

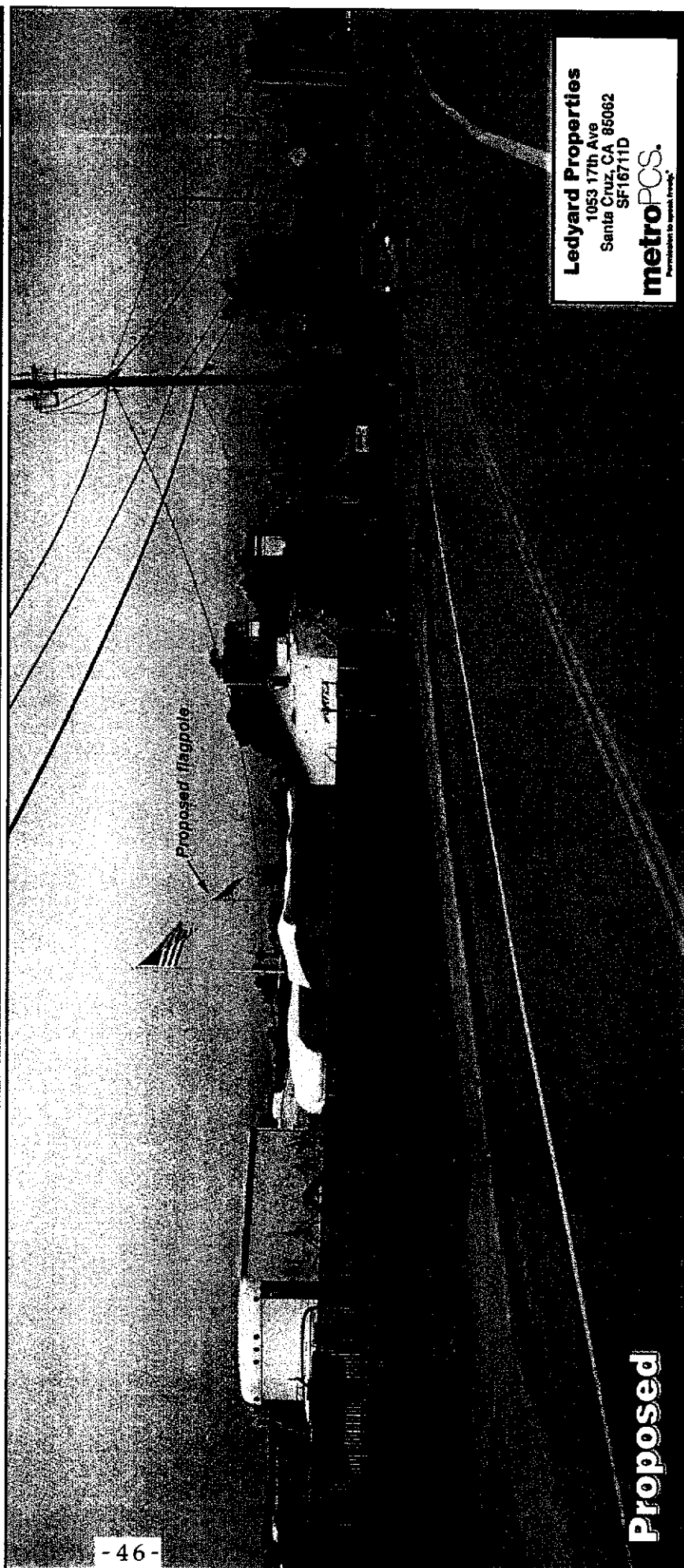
Ledyard Properties
1053 17th Ave
Santa Cruz, CA 95062
SF16711D

metroPCS
Power to your world.



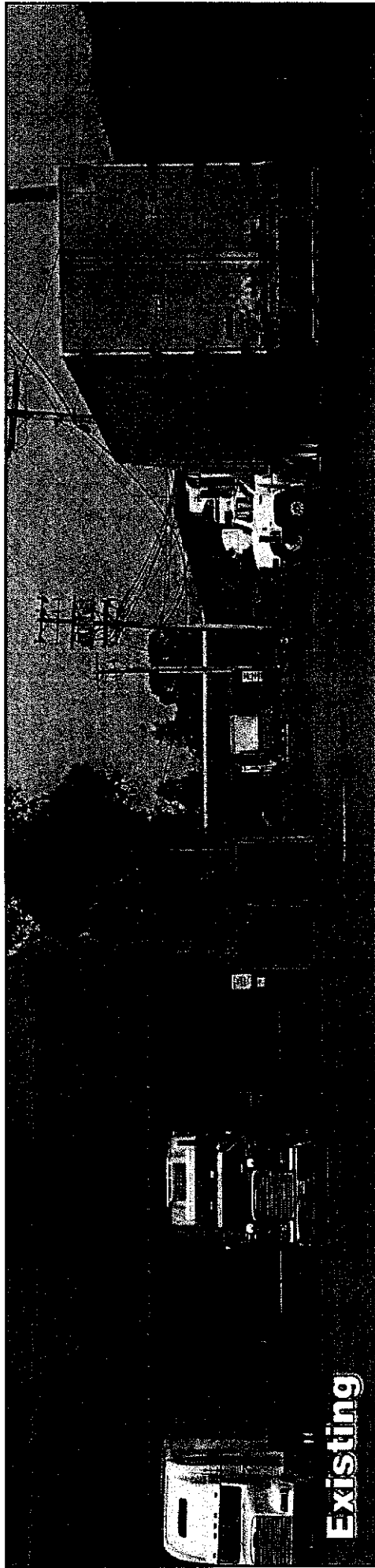
Aerial Photo

Photosimulation of view looking west-southwest along Brommer Street.



Ledyard Properties
1053 17th Ave
Santa Cruz, CA 95062
SF16711D
metroPCS.
Permitted to speak freely

Photosimulation of view looking west-northwest from 17th Ave.



- 47 -

Ledyard Properties
1053 17th Ave
Santa Cruz, CA 95062
SF-16711D
metroPCS.
Powered by Sprint Nextel

Proposed

Photomontage of view looking east from W Dorado Ave.

Existing

Ledyard Properties
1053 17th Ave
Santa Cruz, CA 85062
SF16711D

metroPCS.
Permission to speak freely.

Proposed flagpole

Proposed

FFIC MEMO

APPLICATION N O 06-0701 (second routing)

Date: May 16, 2007

To: Cathy Graves, Project Planner

From: Larry Kasparowitz, Urban Designer

Re: Design Review for new cellular antennae at Ledyard. 1053 17th Avenue, Santa Cruz

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
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.	✓		
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.	✓		

Wireless communication facilities proposed for visually			N/A
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.			NIA
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.			NIA
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.	✓		
No portion of a wireless communication facility shall extend onto or impede access to a publicly used beach.	✓		
Power and telecommunication lines servicing wireless	✓		
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			
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.	✓		

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).			
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Evaluation Criteria	Meets criteria In code (✓)	Does not meet criteria (✓)	Urban Designer's Evaluation
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.	✓		
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.			N/A

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.			N/A
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			N/A
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			N/A
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
possible so as to minimize visual impact.			
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.	✓		

Roads and Parking			
All wireless communication facilities shall be served by the minimum <i>sized</i> 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 pods , 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 overwintering 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

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



**CENTRAL
FIRE PROTECTION DISTRICT**
of Santa Cruz County
Fire Prevention Division

930 17th Avenue, Santa Cruz, CA 95062
phone (831)479-6843 fax (831)479-6847

Date: December 19,2006
To: Ledyard Properties
Applicant: Evan Shepherd Reiff
Fmm Tom Wiley
Subject: 06-0701
Address 1053 17th Ave.
APN: 026-311-65
OCC: 1808
Permit: 20060385

We have reviewed plans for the above subject project. District requirements appear to have been met

The job copies of the building and fire systems plans and permits must be on-site during inspections,

Submit a check in the amount of \$100.00 for this particular plan check, made payable to Central Fire Protection District. A \$35.00 **Late Fee** may be added to your plan check fees if payment is not received within 30 days of the date of this Discretionary Letter. INVOICE MAILED TO APPLICANT. Please contact the Fire Prevention Secretary at (831) 479-6843 for total fees due for your project.

If you should have any questions regarding the plan check comments, please call me at (831) 479-6843 and leave a message, or email me at tomw@centralfd.com. All other questions may be directed to Fire Prevention at (831)479-6843.

CC: File & County

As a condition of submittal of these plans, the submitter, designer and installer certify that these plans and details comply with applicable Specifications, Standards, Codes and Ordinances, agree that they are solely responsible for compliance with applicable Specifications, Standards, Codes and Ordinances, and further agree to correct any deficiencies noted by this review, subsequent review, inspection or other source. Further, the submitter, designer, and installer agrees to hold harmless from any and all alleged claims to have arisen from any compliance deficiencies, without prejudice, the reviewer and the Central FPD of Santa Cruz County.
1808-121906

Cathy Graves

From: Paul Rodrigues
Sent: Wednesday, May 09, 2007 11:10 AM
To: Cathy Graves
CC: Melissa Allen; Betsey Lynbsrg
Subject: 06-0701

Cathy,

As you know Melissa Allen our Planner is still out of the **office** this week and so we're unable to provide our typical formal RDA comments.

I have reviewed the additional material submitted for application 06-0701, the proposed **MetroPCS/** Flag Pole on the Ledyard properties. It appears that the applicant has responded to most of the concerns expressed by the RDA in previous **comments** - deleting the night lighting of the flag, undergrounding of the overhead wires etc.

We would defer to the planning department as to a determination whether the required distance from potential residential development is appropriate.

We have only one further comment and that is that the size of the proposed flag appears rather large for this height and size pole. There appears to be nothing in the applicant's citation of the US Code which defines what size flag is to be used for this particular installation. In looking at the flag pole in front of the County Courts building, it appears that the height of that pole is about 50-60 feet and the flag is about 5'-6'x **7'-8'**. The applicant's proposed flag size - **8'x12'** seems quite large and may appear out of proportion to the height of the pole. We would suggest that a **smaller flag** be used.

We hope that you find these suggestions useful, please let me know if you have any questions. Thank you for the opportunity to comment on these plans.

Paul Rodrigues
RDA Project **Manager**
x2386

COUNTY OF SANTA CRUZ

Inter-Office Correspondence

DATE: May 16,2007

TO: Tom Bums, Planning Director
Cathy Graves, Planner

FROM: Supervisor Jan Beautz



RE: Comments on Application 06-0701, Wireless facility, 1053 17th Ave, AFN 026-311-65
Second Routing

This application is for a 50 foot tall wireless communication facility in the area of 17th Ave and Brommer St. Please take the following comments into consideration in your review of this application.

Antennas **of** this type intentionally focus their energy horizontally. Figure 3B shows that within the 1,000 ft radius of the antenna lies both the Simpkins public swimming pool and a portion of Shoreline Middle School. This is of particular concern in this case because Shoreline Middle School has both first and second story classrooms. **As** a result, these second story classrooms will be subjected to substantially more electromagnetic radiation than they would be at ground level. In fact, a review of Figure 3A shows that Shoreline's second story classrooms, at 1,000 feet from the antenna, will actually receive approximately the same radiation as if they were located just 50 feet from the antenna at ground level. It is unlikely that a facility of this-type would be allowed were it to be proposed for just 50 feet from a ground level classroom.

How will the above issue be addressed?