TO: HONORABLE CHAIRMAN AND PLANNING COMMISSION

FROM: WARREN FRACE, COMMUNITY DEVELOPMENT DIRECTOR

SUBJECT: CONDITIONAL USE PERMIT 14-008 (VERIZON)

APN: 009-314-054

DATE: APRIL 14, 2015

Needs: For the Planning Commission to consider the applicant's request to construct a new

wireless communication facility for Verizon Wireless.

 CUP 14-008 proposes to construct a 65-foot tall cellular mono pole structure designed to simulate a eucalyptus tree on the site located at APN: 009-314-054, adjacent to the previously proposed location at 1770 Commerce Way. See attached Vicinity Map, Attachment 1.

- 2. The Planning Commission reviewed the CUP request at the previous location, at their meetings on January 13th and February 24th. At both meetings, concerns were raised from neighbors and the Commission related to height, aesthetics and the close proximity of the facility to the residences to the east. Ultimately at the February 24th meeting, it was indicated by the applicants that the facility could be moved to an adjacent site, also owned by Mr. Phillips.
- 3. The new proposed location is proposed to be located at the western edge of the site (rear), approximately 200-feet away from neighboring back yards of the single family residential homes located on Westfield Road, 185-feet away from the previous proposed site. See attached Site Plan, Attachment 2.

Analysis and Conclusions:

Facts:

An alternative location for the cellular facility is being proposed at an adjacent parcel (APN: 009-314-054), moving the cellular facility approximately 185 feet to the north and west of the previously proposed location at 1770 Commerce Way. This new location is about 100 feet further away from residential homes on Westfield Road than the previously proposed location.

The new location appears to be a better location, since it is further away from the residential properties and from the public street. The proposed height of the monopole will remain the same, at 65-feet tall. It will be up to the Planning Commission to discuss which eucalyptus design would be more appropriate, a single trunk design, or the multi-trunk version of the monopole.

Policy

Reference: Zoning Code, General Plan, Economic Strategy

Fiscal

Impact: None

Options: After consideration of any public testimony, the Planning Commission may consider

the following options:

a). Determine that the proposed location and 65-foot tall design is considered camouflaged and adopt the attached resolution granting approval of Conditional Use Permit 14-008, subject to standard and site specific conditions of approval.

- b). Determine that the proposed height and location of the cellular facility, would not be compatible with the neighborhood, and therefore not be consistent with the General Plan, and deny the application.
- c). Amend, modify or alter the above noted options.

Attachments:

- 1. Vicinity Map/Photo Simulations
- 2. Site Plan
- 3. Resolution approving CUP 14-008
- 4. Resolution denying CUP 14-008
- 5. Newspaper notice and mail affidavits



Community Deleganism Depl COMMERCE & SCOTT
PSL # 264545
1770 COMMERCE WAY
PASO ROBLES, CA 93446

Verizonwireless

PHOTOSIMULATION VIEWPOINTS

VICINITY MAP



Attachment 1

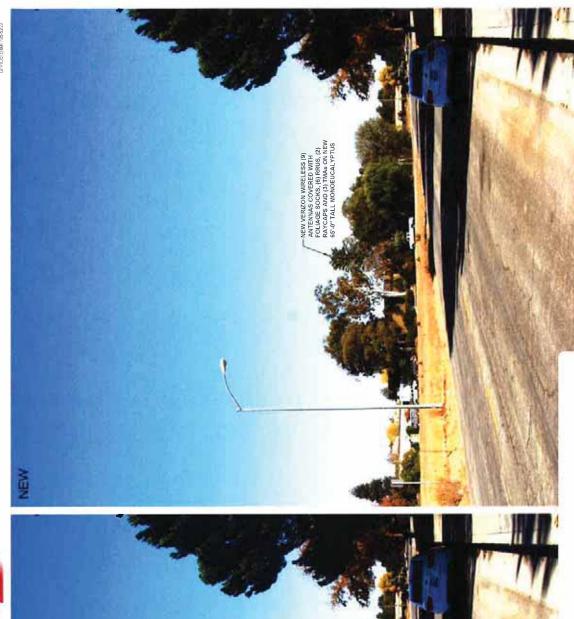
Vicinity Map/Photo Simulations CUP 14-008 1770 Commerce Way

(Pro Forms)

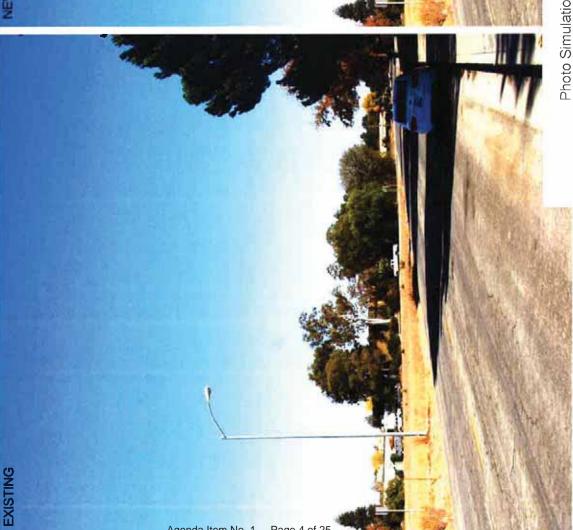












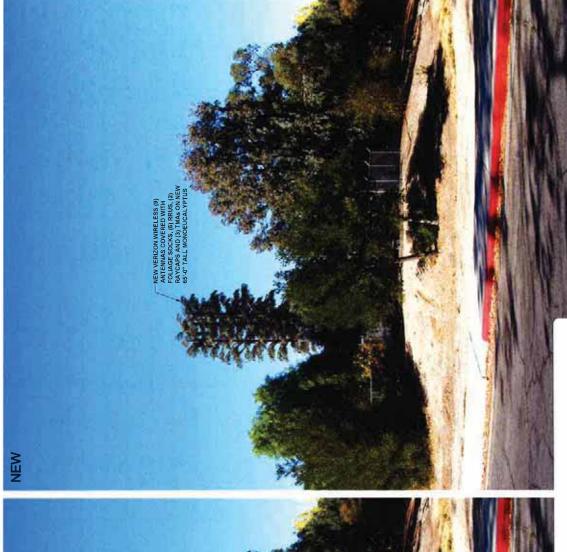
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PHOTOSIMULATION VIEW 1

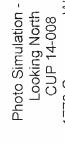








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PHOTOSIMULATION VIEW 2

EXISTING





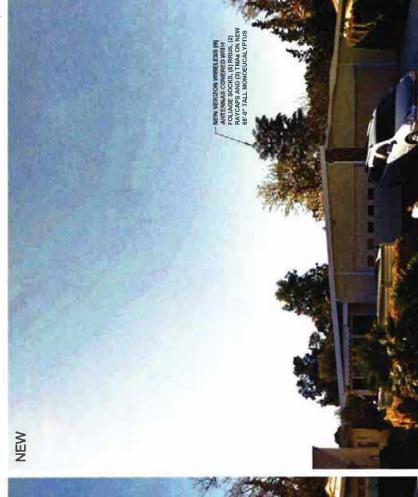
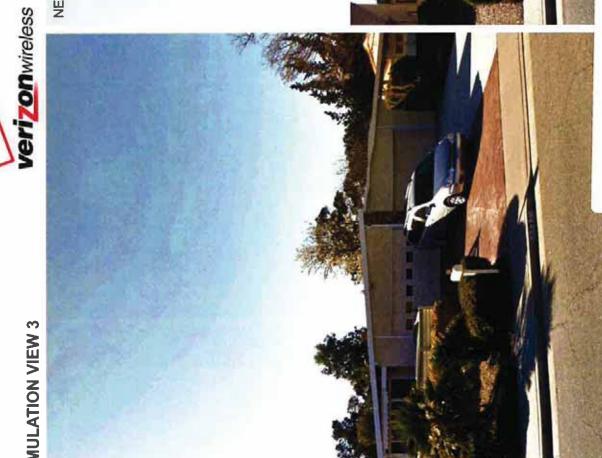


Photo Simulation - 3
Looking West
CUP 14-008
1770 Commerce Way
(Pro Forms)



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Page

PHOTOSIMULATION VIEW 3

EXISTING



COMMERCE & SCOTT
PSL # 264545
1770 COMMERCE WAY
PASO ROBLES, CA 93446

Verizonwireless



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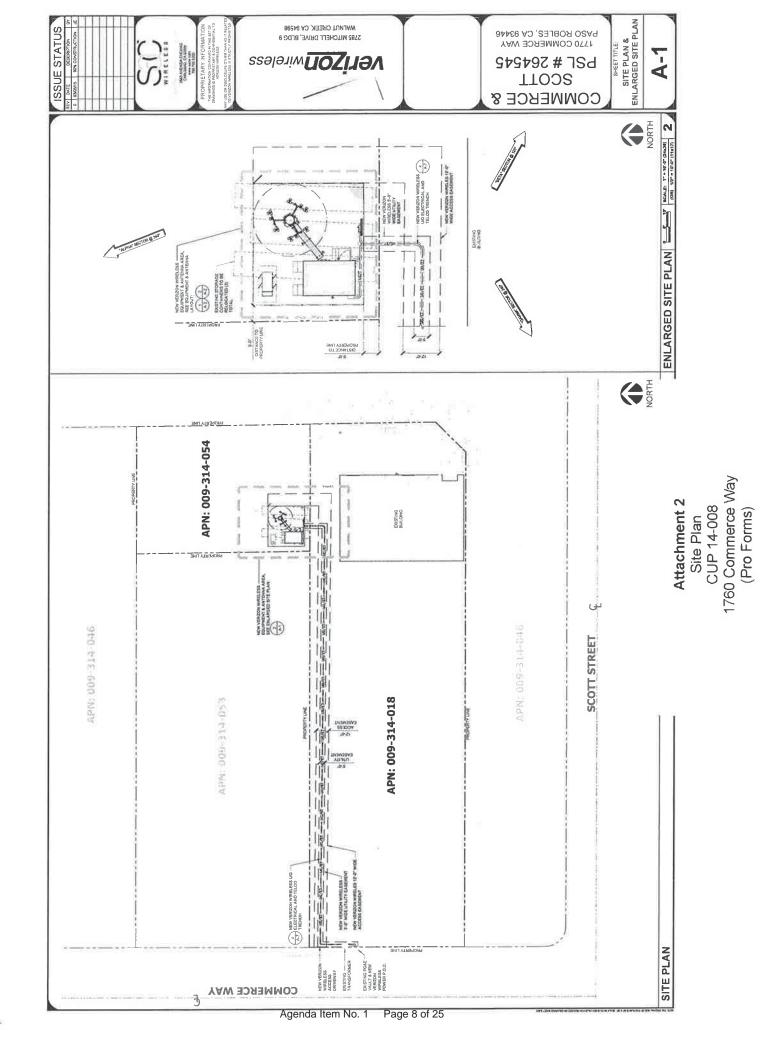
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PHOTOSIMULATION VIEW 4

EXISTING



Verizon Wireless • Proposed Base Station (Site No. 264545 "Commerce & Scott") 1770 Commerce Way • Paso Robles, California

Statement of Hammett & Edison, Inc., Consulting Engineers

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained on behalf of Verizon Wireless, a personal wireless telecommunications carrier, to evaluate the base station (Site No. 264545 "Commerce & Scott") proposed to be located at 1770 Commerce Way in Paso Robles, California, for compliance with appropriate guidelines limiting human exposure to radio frequency ("RF") electromagnetic fields.

Executive Summary

Verizon proposes to install directional panel antennas on a tall pole to be sited at 1770 Commerce Way in Paso Robles. The proposed operation will comply with the FCC guidelines limiting public exposure to RF energy.

Prevailing Exposure Standards

The U.S. Congress requires that the Federal Communications Commission ("FCC") evaluate its actions for possible significant impact on the environment. 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 FCC limit for exposures of unlimited duration to radio frequency energy for several personal wireless services are as follows:

Wireless Service	Frequency Band	Occupational Limit	Public Limit
Microwave (Point-to-Point)	5,000–80,000 MHz	5.00 mW/cm^2	$1.00 \mathrm{mW/cm^2}$
BRS (Broadband Radio)	2,600	5.00	1.00
WCS (Wireless Communication)	2,300	5.00	1.00
AWS (Advanced Wireless)	2,100	5.00	1.00
PCS (Personal Communication)	1,950	5.00	1.00
Cellular	870	2.90	0.58
SMR (Specialized Mobile Radio	855	2.85	0.57
700 MHz	700	2.40	0.48
[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. A small antenna for reception of GPS signals is also required, mounted with a clear view of the sky. Because of the short wavelength of the frequencies assigned by the FCC for wireless services, the

HAMMETT & EDISON, INC. CONSULTING ENGINEERS SAN FRANCISCO

Attachment 3
RF Report
CUP 14-008
Agenda Item No. 1
1770 Commerce Way
(Pro Forms)

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Verizon Wireless • Proposed Base Station (Site No. 264545 "Commerce & Scott") 1770 Commerce Way • Paso Robles, California

antennas require line-of-sight paths for their signals to propagate well and so are installed at some height above ground. The antennas are designed to concentrate their energy toward the horizon, with very little energy wasted toward the sky or the ground. 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 Verizon, including zoning drawings by SAC Wireless, LLC, dated March 13, 2014, it is proposed to install nine Andrew Model SBNH-1D6565B directional panel antennas on a new 60-foot pole, configured to resemble a eucalyptus tree, to be sited east of the commercial building located at 1770 Commerce Way in Paso Robles. The antennas would be mounted with up to 8° downtilt at an effective height of about 55 feet above ground and would be oriented in groups of three toward 120°T, 240°T, and 340°T. The maximum effective radiated power in any direction would be 11,950 watts, representing simultaneous operation at 3,930 watts for AWS, 4,310 watts for PCS, 2,310 watts for cellular, and 1,400 watts for 700 MHz service. There are reported no other wireless telecommunications base stations at the site or nearby.

Study Results

For a person anywhere at ground, the maximum RF exposure level due to the proposed Verizon operation is calculated to be 0.015 mW/cm², which is 2.8% of the applicable public exposure limit. The maximum calculated level at any nearby building* is 8.4% of the public exposure limit. The maximum calculated level at the second-floor elevation of any nearby residence† is 4.3% 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 from the proposed operation.

^{*} Located at least 25 feet away, based on photographs from Google Maps.

[†] Located at least 120 feet away, based on photographs from Google Maps.

Verizon Wireless • Proposed Base Station (Site No. 264545 "Commerce & Scott") 1770 Commerce Way • Paso Robles, California

No Recommended Mitigation Measures

Due to their mounting locations, the Verizon antennas would not be accessible to the general public, and so no mitigation measures are necessary to comply with the FCC public exposure guidelines. It is presumed that Verizon will, as an FCC licensee, take adequate steps to ensure that its employees or contractors receive appropriate training and comply with FCC occupational exposure guidelines whenever work is required near the antennas themselves.

Conclusion

Based on the information and analysis above, it is the undersigned's professional opinion that operation of the base station proposed by Verizon Wireless at 1770 Commerce Way in Paso Robles, California, will comply with the prevailing standards for limiting public exposure to radio frequency energy and, therefore, will not for this reason cause a significant impact on the environment. The highest calculated level in publicly accessible areas is much less than the prevailing standards allow for exposures of unlimited duration. This finding is consistent with measurements of actual exposure conditions taken at other operating base stations.

Authorship

The undersigned author of this statement is a qualified Professional Engineer, holding California Registration No. E-18063, which expires on June 30, 2015. This work has been carried out 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.

August 6, 2014

No. E-18063
Exp.6-30-2015

STATE OF CALIFORNIA

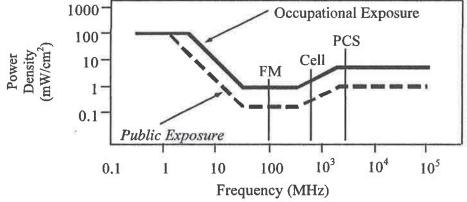
Rajat Mathur, P.E. 707/996-5200

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 ("NCRP"). Separate limits apply for occupational and public exposure conditions, with the latter limits generally five times more restrictive. The more recent standard, developed by the Institute of Electrical and Electronics Engineers and approved as American National Standard ANSI/IEEE C95.1-2006, "Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz," includes similar limits. 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:

<u>Frequency</u>	Electro	magnetic F	ields (f is fr	equency of	emission in	MHz)
Applicable Range (MHz)	Field S	ctric trength /m)	Field S	netic strength /m)	Power	t Far-Field Density //cm²)
0.3 - 1.34	614	614	1.63	1.63	100	100
1.34 - 3.0	614	823.8/f	1.63	2.19/f	100	$180/f^2$
3.0 - 30	1842/ f	823.8/f	4.89/f	2.19/f	900/ f ²	$180/f^2$
30 - 300	61.4	27.5	0.163	0.0729	1.0	0.2
300 - 1,500	3.54√f	$1.59\sqrt{f}$	$\sqrt{f}/106$	$\sqrt{f/238}$	f/300	f/1500
1,500 - 100,000	137	61.4	0.364	0.163	5.0	1.0



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



HAMMETT & EDISON, INC. CONSULTING ENGINEERS SAN FRANCISCO

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
$$S = \frac{180}{\theta_{BW}} \times \frac{0.1 \times P_{net}}{\pi \times D \times h}$$
, 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

Pnet = 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.



RESOLUTION NO: _____

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF EL PASO DE ROBLES TO APPROVE CONDITIONAL USE PERMIT 14-008 (VERIZON – 1770 COMMERCE)

APN: 009-314-054

WHEREAS, Table 21.16.200 of the City of El Paso de Robles Zoning Code requires approval of a Conditional Use Permit for transmission and receiving stations in the PM (Planned Industrial) zoning district; and

WHEREAS, the facility would be located at 1770 Commerce Way, on the adjacent parcel located just north of the existing industrial building; and

WHEREAS, the facility would consist of a new 65-foot tall cellular mono pole structure designed to simulate a eucalyptus tree; and

WHEREAS, the equipment associated with the cellular facility would consist of ground mounted equipment that would be located within a fenced in area adjacent to the facility; and

WHEREAS, this application is Categorically Exempt from environmental review per Section 15303 of the State's Guidelines to Implement CEQA; and

WHEREAS, a public hearing was conducted by the Planning Commission on April 14, 2015, to consider the facts as presented in the staff report prepared for this project, and to accept public testimony regarding this conditional use permit request; and

WHEREAS, since the mono-pole would be designed to be a eucalyptus tree 65-feet in height which would adequately blend in with the adjacent trees, the facility would be considered camouflaged, therefore, the project would be consistent with Land Use Element Policy 2B, relating to visual identity, including utility infrastructure; and

WHEREAS, based upon the facts and analysis presented in the staff report and public testimony received and subject to the conditions of approval listed below, the Planning Commission finds that the establishment, maintenance and operation for the requested use and building would be consistent with the General Plan and not be detrimental to the health, safety, morals, comfort, convenience and general welfare of the persons residing or working in the neighborhood of such proposed use, or be injurious or detrimental to property and improvements in the neighborhood or to the general welfare of the City.

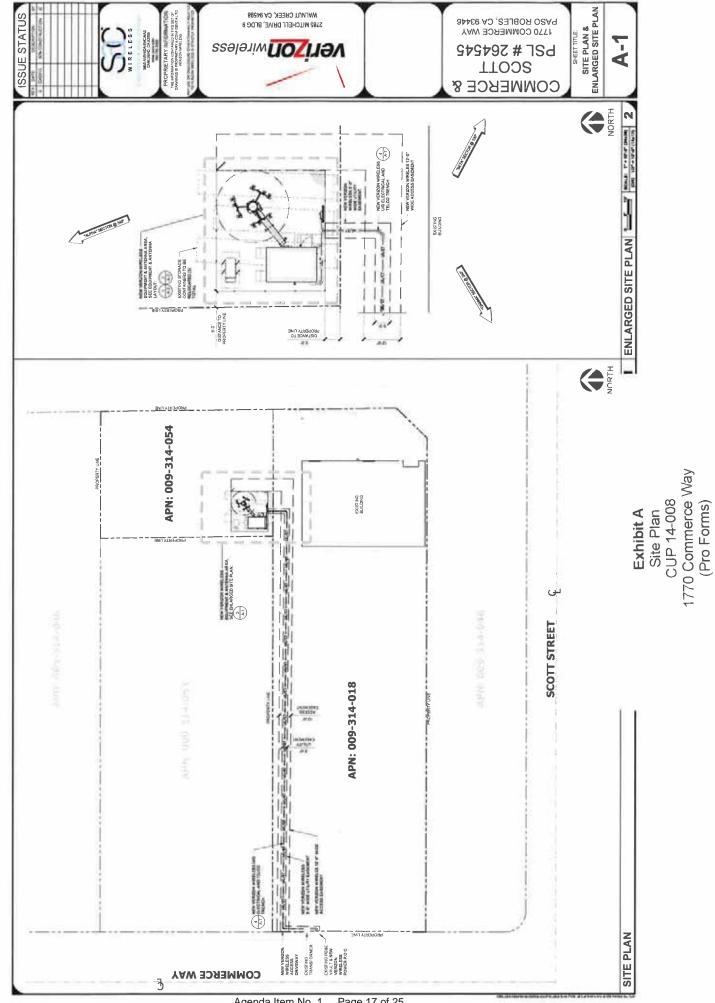
NOW, THEREFORE, BE IT RESOLVED, that the Planning Commission of the City of El Paso de Robles does hereby approve Conditional Use Permit 14-008 subject to the following conditions:

1. The project shall be constructed so as to substantially conform with the following listed exhibits and conditions established by this resolution:

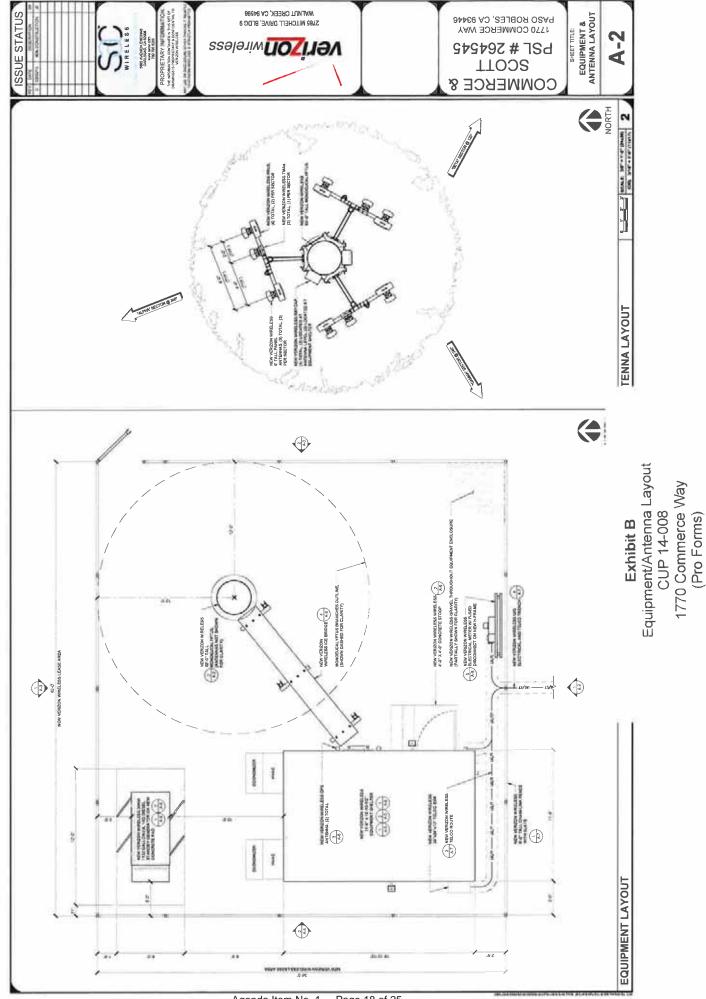
EXHIBIT	DESCRIPTION .
Α	Site Plan
В	Equipment/Antenna Layout
С	Elevations (North & East)
D	Elevations (South & West)
E	Photo Rendering of Mono-Pole (color and materials)

- 2. This Conditional Use Permit (CUP) authorizes the construction of a 65-foot tall wireless communication mono-pole designed to simulate a eucalyptus tree, at 1770 Commerce Way (APN: 009-314-054) in a manner described in attached exhibits.
- 3. This project approval shall expire on April 14, 2017, unless a building permit is issued for the project, or unless a time extension request is filed with the Community Development Department prior to expiration.
- 4. Future requests to co-locate additional antennas on this mono-pole facility may be reviewed by the Development Review Committee (DRC). The DRC's approval of the additional antennas would be based on the antennas not increasing the height or width of the existing facility being substantially compliant with Exhibits A-D of this resolution.
- 5. The site shall be developed and maintained in accordance with the approved plans and unless specifically provided for through the Conditional Use Permit process shall not waive compliance with any sections of the Zoning Code, all other applicable regulations.
- 6. Prior to occupancy, all conditions of approval shall be completed to the satisfaction of the City Engineer and Community Developer Director or his designee.
- 7. Any site specific condition imposed by the Planning Commission in approving this project may be modified or eliminated, or new conditions may be added, provided that the Planning Commission shall first conduct a public hearing in the same manner as required for the approval of this project. No such modification shall be made unless the Commission finds that such modification is necessary to protect the public interest and/or neighboring properties, or, in the case of deletion of an existing condition, that such action is necessary to permit reasonable operation and use for this approval.

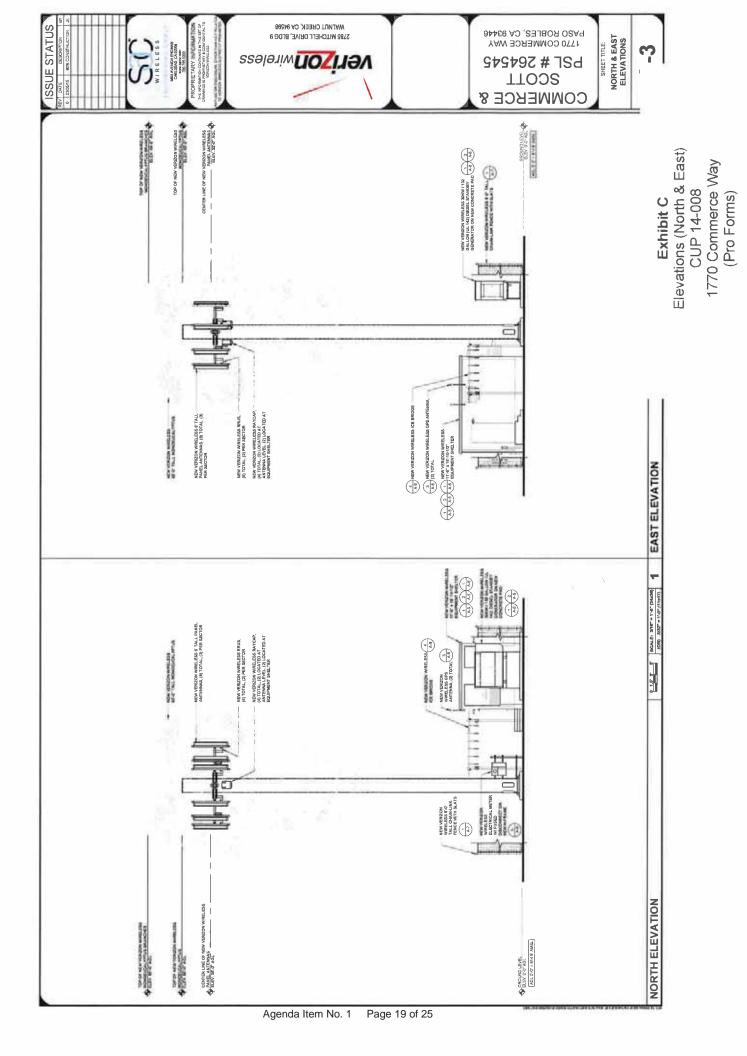
WARREN FRACE, SECRETARY OF THE PLA	ANNING COMMISSION
ATTEST:	
	CHAIRMAN, VINCE VANDERLIP
ABSTAIN:	
ABSENT:	
NOES:	
AYES:	
PASSED AND ADOPTED THIS 14th day of A	<u>pril</u> , 2015 by the following Roll Call Vote

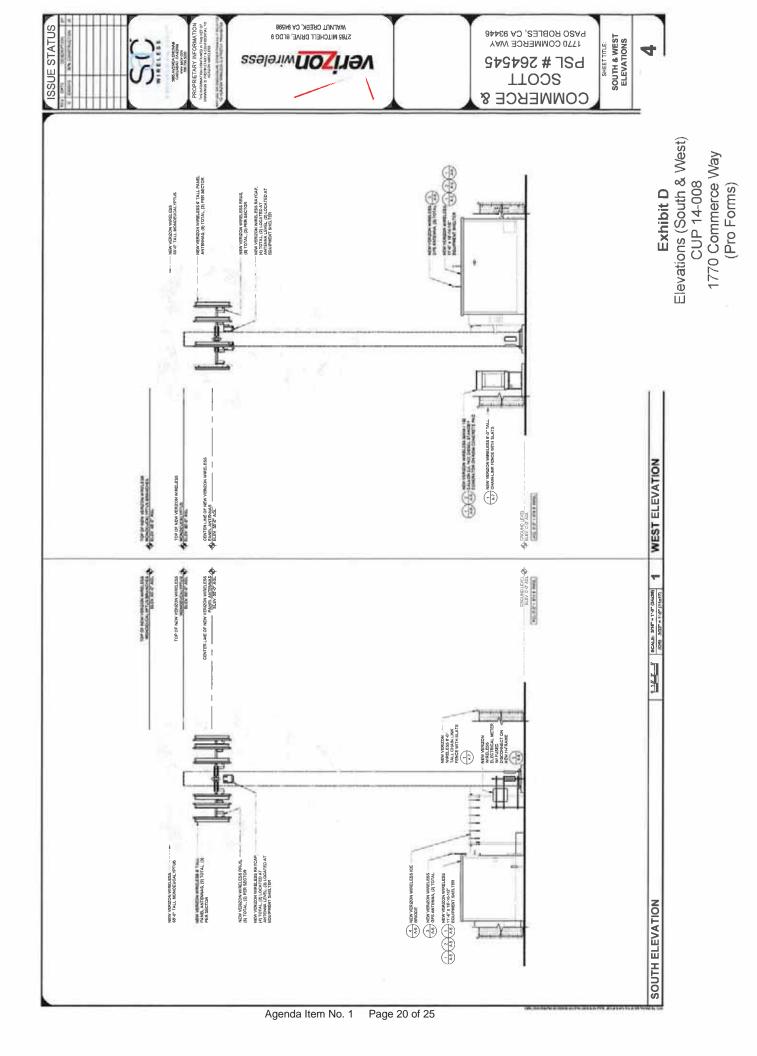


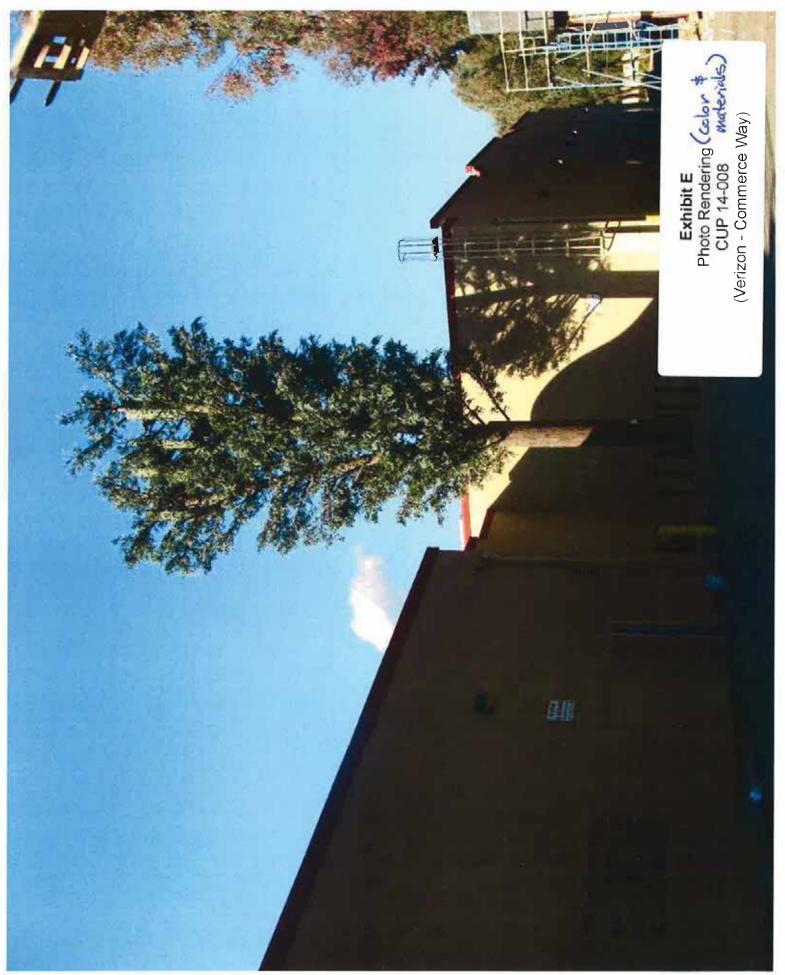
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RESOLUTION NO: _____

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF EL PASO DE ROBLES TO DENY CONDITIONAL USE PERMIT 14-008 (VERIZON – 1770 COMMERCE)

APN: 009-314-008

WHEREAS, Table 21.16.200 of the City of El Paso de Robles Zoning Code requires approval of a Conditional Use Permit for transmission and receiving stations in the PM (Planned Industrial) zoning district; and

WHEREAS, the facility would be located at 1770 Commerce Way, just north of the existing industrial building located at the rear of the site; and

WHEREAS, the facility would consist of a new 65-foot tall cellular mono pole structure designed to simulate a eucalyptus tree; and

WHEREAS, the equipment associated with the cellular facility would consist of ground mounted equipment that would be located within a fenced in area adjacent to the facility; and

WHEREAS, this application is Categorically Exempt from environmental review per Section 15303 of the State's Guidelines to Implement the California Environmental Quality Act (CEQA); and

WHEREAS, a public hearing was conducted by the Planning Commission on April 14, 2015, to consider the facts as presented in the staff report prepared for this project, and to accept public testimony regarding this conditional use permit request; and

WHEREAS, based on the facts and analysis presented in the staff report and the attachments thereto, and public testimony received, the Planning Commission finds that based on the height and location of the proposed cellular facility, it would not be considered compatible with the neighborhood, and therefore it would not be consistent with General Plan Policy LU-2D, which requires development to "strive to maintain and create livable, vibrant neighborhoods and districts with coordinated site design, architecture, and amenities".

NOW, THEREFORE, BE IT RESOLVED, that the Planning Commission of the City of El Paso de Robles does hereby find the proposed use inconsistent with the requirements of the General Plan and, deny Conditional Use Permit 14-008.

WARREN FRACE, SECRETARY OF THE PLA	NNING COMMISSION
ATTEST:	CHAIRMAN, VINCE VANDERLIP
ABSTAIN:	
ABSENT:	
NOES:	
AYES:	
PASSED AND ADOPTED THIS 14th day of Apr	il, 2015 by the following Roll Call Vote:

AFFIDAVIT

OF MAIL NOTICES

PLANNING COMMISSION/CITY COUNCIL PROJECT NOTICING

I, <u>Amanda Ross</u>, employee of the City of El Paso de Robles, California, do hereby certify that the mail notices have been processed as required for CUP 14-008 to request the establishment of a cellular facility located at 1770 Commerce Way on this the 3rd day of April, 2015.

City of El Paso de Robles Community Development Department Planning Division

Amanda Poss



3825 South Higuera • Post Office Box 112 • San Luis Obispo, California 93406-0112 • (805) 781-7800

In The Superior Court of The State of California In and for the County of San Luis Obispo AFFIDAVIT OF PUBLICATION

AD # 1657804 CITY OF PASO ROBLES

STATE OF CALIFORNIA

SS.

County of San Luis Obispo

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen and not interested in the above entitled matter; I am now, and at all times embraced in the publication herein mentioned was, the principal clerk of the printers and publishers of THE TRIBUNE, a newspaper of general Circulation, printed and published daily at the City of San Luis Obispo in the above named county and state; that notice at which the annexed clippings is a true copy, was published in the above-named newspaper and not in any supplement thereof – on the following dates to wit: APRIL 3, 2015 that said newspaper was duly and regularly ascertained and established a newspaper of general circulation by Decree entered in the Superior Court of San Luis Obispo County, State of California, on June 9, 1952, Case #19139 under the Government Code of the State of California.

I certify (or declare) under the penalty of perjury that the foregoing is true and correct.

(Signature of Principal Clerk)
DATED: APRIL 3, 2015

AD COST: \$146.90

