

**EL DORADO COUNTY DEVELOPMENT SERVICES
ZONING ADMINISTRATOR
STAFF REPORT**



Agenda of: December 16, 2009
Item No.: 4.a.
Staff: Aaron Mount

SPECIAL USE PERMIT- REVISION

FILE NUMBER: S64-0012-R/Telecommunications Facility Mt. Aukum

AGENT: Complete Wireless Consulting, Mark Lobaugh

APPLICANT: Verizon Wireless

REQUEST: Revision to Special Use Permit S64-0012 to allow the addition of six (6) new wireless antennas and the removal of four (4) existing omni antennas on an existing building mounted tower.

LOCATION: On the south side of Tower Road, one half mile north east of the intersection with Mt Aukum Road (County Route E16) in the Mt Aukum Area, Supervisorial District II (Exhibit A).

APN: 046-081-22 (Exhibit B)

ACREAGE: 1.02 acres

GENERAL PLAN: Agricultural Lands-Agricultural District (AL-A) (Exhibit C)

ZONING: Residential Agricultural-Twenty Acres (RA-20) (Exhibit D)

ENVIRONMENTAL DOCUMENT: Categorically Exempt pursuant to Section 15301 of the CEQA Guidelines

RECOMMENDATION: Staff recommends the Zoning Administrator take the following actions:

1. Find the project is Exempt from CEQA pursuant to Section 15301 of the CEQA Guidelines (New Construction or Conversion of Small Structures); and
2. Approve revision to Special Use Permit S64-0012-R based on the findings in Attachment 2 and subject to the conditions in Attachment 1.

BACKGROUND: Special Use Permit S64-0012 was approved by the Planning Commission on March 31, 1964 to allow an addition to the existing building for radio beam site and for general service administration personnel for computers. The existing Verizon infrastructure was approved under building permit #111286 on March 25, 1998. Building permit #111286 allowed the installation of three antennas on an existing lattice tower on the building and associated cellular electrical inside the existing building. The building permit for the existing Verizon generator appears to have expired prior to finaling, however the project would be conditioned to complete any outstanding permits prior to finaling of the permit associated with this application.

The existing structure was originally a manned communications facility. The transcontinental microwave radio network of the Western Union Telegraph Company included three major hubs, called "Junction Offices", near Romney, WV, Berwick, KS, and Mount Aukum, California. Located far from cities likely to be targeted in a Soviet nuclear attack, these facilities handled communications for both private and government customers. The Junction Offices served the Automatic Digital Network (AUTODIN), an important defense communications network. They also housed mainframe computer systems for the General Services Administration's Advanced Record System, a text-message system serving the civilian agencies of the federal government.

The proposed Special Use Permit would add two (2) additional antennas beyond the previous building permit approval and is subject to a revision approved by the Zoning Administrator.

Approval of S64-0012 was subject to one condition of approval. The condition has been included in Attachment 1 of the Staff Report. Additions have been indicated as underline items. Fulfilled or no longer applicable conditions have been indicated as ~~strikethrough items~~.

STAFF ANALYSIS

Project Description: Verizon is requesting a minor revision to the Special Use Permit to remove four (4) existing omni antennas and install six (6) new antennas on the existing 29.7 foot lattice structure on the existing building. The new antennas would not exceed the height of the existing antennas. Any new equipment would be located within the existing building. The proposed revision would not increase the height of the existing lattice structure or enlarge the lease area within the existing structure. The existing structure does not exceed the 45 foot height limit of the RA-20 zone district.

Site Description: The wireless facility structure is located on an agricultural parcel located directly adjacent to Tower Road which connects to Mt. Aukum Road (County Route E16). The site is located at approximately 2,600 feet above mean sea level. The site contains a fairly large structure that was previously a manned communications facility. The wireless facility is currently in operation with multiple wireless antennas and associated ground mounted equipment contained within the existing structure. The lattice structure containing the telecommunication antennas projects 29.7 feet above the top of the existing building for the total building height of 42.8 feet. The project site contains a total of 15 antennas on the existing structure.

Adjacent Land Uses:

	Zoning	General Plan	Land Use/Improvements
Site	RA-20	AL	Commercial/Communications Facility
North	AE	AL	Agricultural/Vineyard and Winery
South	AE	AL	Agricultural/Vineyard and Winery
East	AE	AL	Agricultural/Vineyard and Winery
West	AE	AL	Agricultural/Vineyard and Winery

The wireless cellular facility is surrounded on all sides by an agricultural parcel in a Williamson Act Contract which contains vineyards and a winery. The existing communications facility is 600 feet above Mt. Aukum Road on the top of Mount Aukum. The proposed revision would expand the facility and allow the installation of six new antennas. The revision would not substantially alter the existing facility or result in new uses which would be inconsistent with the surrounding land uses. Due to the lack of visual impact that additional antennas would have at this site it has been recommended that future collocations would only require buildings permits after review by Planning Services to ensure the existing height would not be exceeded and that no new significant visual impacts would be created.

General Plan: The project site is designated Agricultural Lands (AL) on the El Dorado County General Plan Map. **General Plan Policy 5.6.1.4** of the General Plan requires approval of a Special Use Permit for wireless telecommunication facilities in residential areas. The site is adjacent to residential parcels with a Rural Residential (RR) land use designation. The aesthetic and compatibility issues of the wireless facility are addressed within review of this Special Use Permit application. The proposed revision would remove four new antennas panels. The revision would not substantially expand the facility nor result in additional impacts to the surrounding land uses. Therefore, staff finds that the project as conditioned would be consistent with the General Plan.

Zoning: Wireless facilities are permitted within the Residential Agricultural-Twenty Acres (RA-20) Zone District, pursuant to Section 17.14.210(D) of the County Code. Co-locations onto existing facilities are regulated by Section 17.14.210(D) 4 of the County Code. A co-location may be approved through a minor use permit by the Zoning Administrator provided the co-location meets the following requirements:

- a. *New antennae shall be located at or below the topmost existing antenna array, either on the same pole or a replacement pole at the same height and within the approved lease area;*

The new antennas and panels would be located at or below the same height of the existing antennas. No increase in height of the existing lattice structure or expansion of the lease area would occur as part of this revision.

- b. *New antennae shall not extend out horizontally from the pole more than the existing widest projection. Use of designs similar to existing antenna array are encouraged;*

The proposed revision would allow for the expansion of the facility resulting in the installation of six (6) new antennas and removal of four (4) existing omni antennas. The new antennas would be painted to match the existing antennas. The new antennas and relocation would not extend beyond the existing horizontal projection of the existing antennas.

- c. *All equipment shelters, cabinets, or other ancillary structures shall be located within the building being utilized for the communication facility, or designed to blend with surrounding architecture, or on the ground screened from public view;*

No additional exterior equipment cabinets would be proposed as part of this revision.

- d. *The antennae and pole or tower shall be designed to match the existing facility, natural features or vegetation of the site;*

As discussed above, the revision would be conditioned to require the new antennas and antenna's mounts be designed to match the existing antennas on-site.

- e. *Additional antenna arrays added above the existing approved antenna array or that requires the tower height to be increased shall be considered a new tower and shall be subject to the provisions of subsection (D) (5), below.*

No expansion or increase in height would occur as part of the revision.

Development Standards: Section 17.14.210 E through J of the County Code requires that all wireless communication facilities meet certain criteria. Below is an analysis of these standards.

- E. **Visual:** The proposed project would remove four (4) existing omni antennas and install six (6) new antennas. The antennas would be installed on new antenna array mounts. As shown on the submitted visual simulations, the new antennas and antenna mounts would be design to match the existing lattice structure on the existing building. The photo-simulation would be used during the plan check permit process to ensure that the project adequately reflects approval of the Zoning Administrator and as part of the exhibits approved with the application. Photo-simulations of the wireless facility are included as Exhibit G.

F. Development Standards:

1. **Screening:** The existing facility is 600 feet above Mt. Aukum Road on the top of Mount Aukum. As shown on the submitted visual simulation, Exhibit G, the new antennas and replacement antennas would not create a significant negative visual impact to the surrounding area. The project has been conditioned to require that all colors match the existing facility.
2. **Setbacks:** The wireless facility was determined to comply with the setback requirements of the RA-20 Zone District. The facility was sited to maintain a minimum setback of 30 feet from all property lines. No alteration to the existing lattice structure on the existing building would occur that would be inconsistent with the RA-20 Development Standards. The proposed equipment shelter would be located within the existing building and would meet the setback requirements of the RA-20 Zone District.
3. **Maintenance:** The site is required to be maintained at all times. Conditions of Approval have been included which would require the applicant to maintain the wireless facility, fencing and associated landscaping. Any unused equipment would be required to be removed from the site.

G. Radio Frequency (RF) Requirements: Section 17.14.210(G) of the County Code requires that the applicant submit a report of the electromagnetic radiation generated by the facility operating at full strength and maximum electric and magnetic field strengths at the edge of the facility site, as regulated by the Federal Communication Commission (FCC).

Verizon has submitted a report indicating that the maximum power density at ground level operations would be 5.6 microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$), or 1.0 percent of the applicable public limit. The report validates the figures based on the FCC regulations for measurements identifying quantitative standards for human exposure limits based on radio frequency emissions.

- H. Availability:** Section 17.14.210(H) of the County Code requires that all existing communication facilities be available to other carriers as long as structural or technological obstacles do not exist. The project has been conditioned to allow for continued opportunities for co-location on this facility. Future co-locations would require approval of a building permit after review by Planning Services to ensure there would not be an increase in height or impacts to visual resources.
- I. Unused Facilities:** Section 17.14.210(I) of the County Code requires that all obsolete or unused communication facilities be removed within six months after the use of that facility has ceased or the facility has been abandoned. Conditions of Approval would be included which would require removal of obsolete equipment prior to finaling of building permits.

J. Other Permit Requirements: Section 17.14.210(J) of the County Code states certain notification requirements for projects located within 1,000 feet of a school or in subdivisions governed by CC&Rs. The project area is not located within 1,000 feet of a school or is governed by CC&R's which would require additional notification.

Conclusion: After review of the submitted project plans, including site plan, elevations, and visual simulations, it has been determined that the proposed Special Use Permit Revision meets the standards contained in Section 17.14.210.E through J of the County Code.

Agency and Public Comments: Planning staff spoke to the adjacent winery and they did not have any concerns with the project. New issues may arise as a result of the public notice of the hearing which will be discussed at that time.

ENVIRONMENTAL REVIEW: The Telecommunications Act of 1996 became effective on February 8, 1996. This act preserves the authority of the State or local government over decisions regarding the placement, construction, and modifications of personal wireless services, subject to two limitations. Section 704(7) B (iii) requires any denials to be in writing and supported by "substantial evidence." Section 704(7) B (iv) prohibits denial on the basis of radio frequency emissions if those emissions are compliant with Federal regulations.

The American National Standards Institute and the Institute of Electrical and Electronics Engineers (IEEE) have published a standard called ANSI/IRRR C95.1-1992, which until recently set recommended maximum power density levels for radio frequency (RF) energy originating from communications sites and other sources. The Federal Communications Commission (FCC) has also produced its own guidelines, which are more stringent and supersede the ANSI standard. The FCC rules categorically exclude certain transmitting facilities from routine evaluations for compliance with the RF emission guidelines if it can be determined that it is unlikely to cause workers or the general public to become exposed to emission that exceed the guidelines. The following table represents the FCC limits for both occupational and general population exposures to different radio frequencies:

Frequency Range (F) (MHz)	Occupational Exposure (mW/cm ²)	General Public Exposure (mW/cm ²)
0.3-1.34	100	100
1.34-3.0	100	180/F ²
3.0—30	900/F ²	180/F ²
30-300	1.0	0.2
300-1,500	F/300	F/1,500
1,500-100,000	5.0	1.0

Based on the submitted RF study, the maximum public RF exposure from the site with all channels on antennas operating at full capacity would be 1.5 percent of the general public safety standard established by the ANSI and the FCC. Therefore, the risk of release of hazardous materials or emissions to the public is remote.

This project has been found to be Categorical Exempt from the requirements of CEQA pursuant to Section 15301 of the CEQA Guidelines which states that minor alterations to existing structures

would not be subject to the CEQA Guidelines. A \$50.00 administrative processing fee is required by the County Recorder to file the Notice of Exemption.

SUPPORT INFORMATION

Attachments to Staff Report:

Attachment 1	Conditions of Approval
Attachment 2	Findings
Exhibit A	Location Map
Exhibit B	Assessor's Parcel Map
Exhibit C	General Plan Land Use Map
Exhibit D	Zoning Map
Exhibit E1-7	Project Plans
Exhibit F1-3.....	Photo Simulations
Exhibit G	S64-0012 Site Plan
Exhibit H	Airphoto of Project Site

ATTACHMENT 1

CONDITIONS OF APPROVAL

Special Use Permit Revision
S64-0012-R/Telecommunications Facility- Mt Aukum/Verizon
Zoning Administrator/ December 16, 2009

PROJECT DESCRIPTION

1. This Special Use Permit Revision is based upon and limited to compliance with the project description, the Staff Report exhibits marked Exhibits E through F and conditions of approval set forth below. Any deviations from the project description, exhibits, or conditions must be reviewed and approved by the County for conformity with this approval. Deviations may require approved changes to the permit and/or further environmental review. Deviations without the above described approval will constitute a violation of permit approval.

Special Use Permit S64-0012 allows the following:

Addition to existing building for radio beam site and for general service administration personnel for computers.

This revision to Special Use Permit S96-0004-R allows the following:

The removal of four (4) omni antennas and the installation of six (6) new panel antennas. The new mounts shall be painted to match the existing lattice structure and existing building and shall not exceed the height of the existing mounts. The new panels shall match the color of the existing panels and shall not exceed the height of the existing panels. Any new equipment shall be contained in the existing building.

No increase in height of the 29.7 foot lattice structure shall be authorized by this permit revision.

The grading, development, use, and maintenance of the property, the size, shape, arrangement, and location of structures, parking areas and landscape areas, and the protection and preservation of resources shall conform to the project description above and the hearing exhibits and conditions of approval below. The property and any portions thereof shall be sold, leased or financed in compliance with this project description and the approved hearing exhibits and conditions of approval hereto. All plans must be submitted for review and approval and shall be implemented as approved by the County.

Planning Services

- ~~1. Layout in conformity with approved site plan.~~

2. The applicant shall assume full responsibility for resolving television reception interference cause by the operation of this facility. The applicant shall take corrective action within 30 days of the receipt of any written complaint.
3. The applicant shall obtain a building permit from the El Dorado County Building Services. Any outstanding building permits shall be finalized prior to finaling of building permits associated with this application.
4. Existing tree coverage that functions as screening shall be maintained and/or replaced to prevent greater visual exposure to the tower.
5. All improvements associated with the facility, including equipment shelters, towers, antennas, fencing, and landscape shall be properly maintained in good visual repair, at all times. All facility RF antennas shall be painted with non-reflective paint and maintained to blend with the color of the building.
6. All unused and obsolete communications equipment shall be removed from the project parcel prior to finaling of any building permits.
7. Co-locations may be administratively approved on the telecommunications building subject to review and approval by the Development Services Director. The co-locations shall be consistent with design of the communications facility as described in permit S64-0012 or as referenced in Condition 1 of this permit. Expansions to the exterior of the building or additional antennas mounted on the telecommunications building that increase the height shall be subject to review and approval by the Development Services Director. Should the Director find that exterior modifications or antennas may create a visual impact; the Director shall refer the project to the Zoning Administrator for review and approval.
8. Due to the ever-changing technology of wireless communication systems, this special use permit shall be reviewed by the County Development Services Department every five years. At each five-year review, the permit holder shall provide the Development Services Department with a status report on the then current use of the subject site and related equipment. Development Services shall review the status and present that report to the approving authority with a recommendation whether to:
 - a. Allow the facility to continue to operate under all applicable conditions; or
 - b. Hold a public hearing to determine whether to modify the conditions of approval in order to reduce identified adverse impacts; or initiate proceedings to revoke the special use permit, requiring the facility's removal if it is no longer an integral part of the wireless communications system.

By operation of this condition, it is the intent of County to reserve the right to modify or add new conditions, consistent with the language specified above. The failure of the County to conduct or complete a five-year review in a timely fashion shall not invalidate the Special Use Permit. The applicant shall pay a fee determined by the Development Services Director to cover the cost of processing a five-year review on a time and materials basis.

9. Prior to commencement of any use authorized by this permit, the applicant shall provide a written description, together with appropriate documentation, showing conformance of the project with each condition imposed as part of the project approval. The applicant shall also schedule an inspection by Planning Services for verification of compliance with applicable conditions of approval. The operator shall pay Planning Services for the time spent reviewing the site on a time and materials basis. All future development plans shall include this condition on the submitted plans.
10. The operator (lessee) and property owner (lessor) are responsible for complying with all conditions of approval contained in this Special Use Permit. Any zoning violations concerning the installation, operation, and/or abandonment of the facility are the responsibility of the owner and the operator.
11. All Development Services fees for processing this application shall be paid in full prior to issuance of a Building Permit.
12. In the event of any legal action instituted by a third party challenging the validity of any provision of this approval, the applicant and landowner agrees to be responsible for the costs of defending such suit and shall hold County harmless from any legal fees or costs County may incur as a result of such action.

The applicant and land owner shall defend, indemnify, and hold harmless El Dorado County and its agents, officers, and employees from any claim, action, or proceeding against El Dorado County or its agents, officers, or employees to attack, set aside, void, or annul an approval of El Dorado County concerning a Special Use Permit.

The County shall notify the applicant/owner of any claim, action, or proceeding and County will cooperate fully in the defense.

Pioneer Fire Protection District:

13. The project shall meet all Pioneer Fire Code requirements.
14. Address numbers shall be placed in such a position to be plainly visible and legible from the road fronting the property. Numbers shall be four (4) inches tall, contrast with their background, and be positioned so that the bottom of the numbers is a minimum of:

Eight (8) inches above final grade for residences less than 2,999-foot elevation
Twelve (12) inches above final grade between 3,000 and 3,999-foot elevation
Eighteen (18) inches above final grade greater than 4,000-foot elevation
15. Vehicle parking and material storage during construction shall not restrict or obstruct streets, roads, and/or access/egress to any structure. A minimum twelve (12) feet travel lane for emergency vehicle access shall be maintained clear and obstructed at all times including during construction.

16. An approved access roadway per the Pioneer Fire Code shall be installed prior to any combustible construction on the site. The road shall be a minimum of twenty (20) feet in width and capable of supporting an imposed load of at least 75,000 pounds. The road must be an all weather surface maintained free, clear, and unobstructed at all times. In the Pioneer Fire Protection District, grades shall not exceed seven percent; however, 10 percent may be permitted on straight sections. Roadway grades greater than 12 percent shall be chip-sealed, paved, or have a concrete surface above 3,000 feet of elevation. Dead-end access roadways exceeding 150 feet in length shall be provided with an approved turn-around. Gates on access roadways shall have a key safe (Knox box) installed for emergency vehicle access, and egress/access shall not be impeded by vegetation, topography, and/or snow. District approval for any roadways and gates shall be granted before ground disturbance.
17. An approved access driveway per the Pioneer Fire Code shall be installed prior to any combustible construction on the site. Each driveway shall serve no more than two (2) buildings. The drive shall be a minimum of twelve (12) feet in width and capable of supporting an imposed load of at least 75,000 pounds. The driveway must be an all weather surface maintained free, clear, and unobstructed at all times. In the Pioneer Fire Protection District, grades shall not exceed 16 percent; however, 20 percent may be permitted on straight sections. Driveway grades greater than 20 percent shall be chip-sealed, paved, or have a concrete surface above 3,000 feet of elevation. Dead-end access roadways exceeding 150 feet in length shall be provided with an approved turn-around. Gates on access driveways shall have a key safe (Knox box) installed for emergency vehicle access, and egress/access shall not be impeded by vegetation, topography, and/or snow. District approval for any roadways and gates shall be granted before ground disturbance.
18. State Public Resource Code 4291, commonly referred to as the 100 feet and 30 feet minimum fuel reduction, egress/access standard, water supply, and/or fire safe regulations shall be required on this project before combustible construction begins.
19. If a monitored fire detection system is installed or exists, it shall meet NFPA 72. An approved key box (Knox box) shall be installed, with the appropriate keys, for emergency fire department access in a location approved by the Fire District.
20. If the project structure exceeds the maximum square footage allowed per the Pioneer Fire Code, but the existing municipal fire hydrant system satisfies fire flow requirements, no additional water supplies are required.
21. The project structure exceeds the maximum square footage allowed per Pioneer Fire District; an approved fire protection water supply shall be readily available to the building prior to combustible construction.

Fire District approval shall be obtained prior to installation of fire protection water supplies and inspection of installation by the Fire Prevention officer or an appointee prior to backfill is required. Inspections must be scheduled at least 96 hours in advance.

22. An approved automatic fire sprinkler system shall be installed throughout the building per the Pioneer Fire Code and the requirements of NFPA 13. Residential fire sprinkler systems shall be annually tested and maintained per NFPA requirements. An approved Fire District connection, fire sprinkler flow bell, and key safe (Knox box) shall be installed in an approved location visible to approaching firefighters and the entire system shall be supervised by an approved alarm system. Two (2) sets of sprinkler system plans shall be submitted to the pioneer Fire Protection District for approval and a permit is required prior to installation of any fire alarm system equipment. Inspection of fire detection systems by the Fire Prevention Officer or an appointee are required and must be scheduled at least 96 hours in advance.
23. An approved monitored fire sprinkler alarm system shall be installed per Pioneer Fire Code and the requirements of NFPA 72. Two (2) sets of alarm system plans shall be submitted to Pioneer Fire Protection District for approval and a permit is required prior to installation of any fire alarm system equipment. Inspections of fire detection systems by the Fire Prevention Officer or an appointee are required and must be scheduled at least 96 hours in advance.
24. An approved fire detection system shall be installed per Pioneer Fire Code and the requirements of NFPA 72. Two (2) sets of alarm system plans shall be submitted to Pioneer Fire Protection District for approval and a permit is required prior to installation of any fire alarm systems. Inspections of fire detection systems by the Fire Prevention Officer or an appointee are required and must be scheduled at least 96 hours in advance.
25. An approved key box (Knox box), with the appropriate keys, shall be installed for emergency Fire District access in a location approved by the Fire Chief.
26. Inspections of Fire District permit required installations must be scheduled at least 96 hours in advance.
27. An 8-1/2 by 11-inch color coded site map of this project shall be provided to the Fire District. This site map shall show the locations of gas shutoffs, power shutoffs, fire sprinkler riser rooms, fire department connections, alarm panels or keypads, key safes (Knox boxes), access doors and windows, stairways, and any additional Fire District requirements.
28. Final inspections of all Fire District required installations by the Fire Prevention Officer or an appointee are required, and must be scheduled at least 96 hours in advance.

ATTACHMENT 2 **FINDINGS**

Special Use Permit Revision
S64-0012-R/Telecommunication Facility – Mt Aukum/Verizon
Zoning Administrator/ December 16, 2009

1.0 CEQA FINDINGS

- 1.1 The proposed revision would be Categorically Exempt from CEQA pursuant to Section 15301 of the CEQA Guidelines which exempts minor alterations to existing structures from further environmental review.
- 1.2 The documents and other materials which constitute the record of proceedings upon which this decision is based are in the custody of the Development Services Department, Planning Services, at 2850 Fairlane Court, Placerville, CA.

2.0 SPECIAL USE PERMIT FINDINGS

2.1 The issuance of the permit is consistent with the General Plan;

The proposed use is consistent with the policies in the El Dorado County General Plan, as discussed in the General Plan section of this staff report. General Plan Policy 5.6.1.4 requires approval of a Special Use Permit for wireless facilities to address potential health, safety and welfare impacts to the adjoining properties. The proposed revision would add additional antennas and equipment to the existing facility. The RF report for the proposed antennas additions determined that the maximum emissions would not exceed 7.25 percent of the federally established thresholds.

2.2 The proposed use would not be detrimental to the public health, safety and welfare, or injurious to the neighborhood;

The proposed use would not create hazards that would be considered detrimental to the public health, safety, and welfare, or injurious to the neighborhood based on the data and conclusions contained in the staff report. The existing facility has been adequately screened from view through its location and natural vegetation. The proposed addition would result in 1.5 percent of the maximum RF emissions established by federal thresholds.

2.3 The proposed use is specifically permitted by special use permit pursuant to this Title.

Section 17.14.210 of the County Code authorizes cellular facilities through issuance of a Special Use Permit. The existing facilities expansion was permitted under S64-0012. The proposed modification to the wireless facility would require a revision to the initial application. No expansion or alteration of use would occur as part of the revision that would be inconsistent with the County Code.