

PURPOSE OF REQUEST

APC Towers, in conjunction with Verizon Wireless is requesting a Conditional Use Permit to install a Wireless Communication Facility (WCF). The proposed facility will provide wireless services, as required by Verizon Wireless' FCC license, to fill a significant "Gap in Service". This site is necessary to:

- Provide technological advancements to Rural area residents & commuters
- Maintain reliable service to a growing number of customers
- Provide 4G/LTE (high speed data) service to an area that is currently under served.
- Expand voice coverage to the area.
 - Verizon Wireless to replace an existing obsolete single sector site with a three sector site to provide better coverage to the area.
- Meet the challenges of the varying topography of the area.

DESCRIPTION OF PROPOSAL

APC Towers is proposing to develop a wireless communications facility within a parcel of land that is owned by Oak Tree Land & Cattle Company. The proposed WCF will be located on a 10 acre portion of Oak Tree's 178 acre cattle ranch that is zoned "Rural Homestead" (HR). The property is surrounded on the North, South, East & partly to the west by "Institutional Reserve"(IR) lands under the ownership of the United States of America; USFS & BLM. With some property to the West of the subject site, privately owned and zoned HR.

The majority of property in the area is undeveloped pasture land owned by the United States of America.

This location has been carefully selected to limit the visual impact to the area while accomplishing Verizon Wireless' and other carriers needs to provide a high quality and reliable service to their customers including: commuters, residents, businesses and *first responders*.

APC Towers is proposing to lease approximately 2500 square feet of land from Oak Tree Land & Cattle Company for the Wireless Communication Facility (WCF). The proposed site will be designed to accommodate multiple wireless carriers, with Verizon Wireless being the first of several carriers to utilize the location. The proposed WCF will consist of a new one-hundred thirty foot monopole (135'- top of antennas) with the initial installation of a twelve foot by twenty foot state approved prefabricated equipment shelter for Verizon Wireless' equipment, along with space for other carriers to collocate and install their equipment shelters. Initially the monopole will consist of twelve, eight foot antennas & a six foot microwave dish. The lease area will be enclosed by a six foot tall chain link fence, with parking and turn around space for field technicians. Utilities will run over head from the "right of way" (ROW) on existing utility poles to the property, then underground to the communication compound.

The tower and all equipment on the tower will be painted, or match a "Stone Mason Grey" color and have no reflective properties. This will help to blend the site into the horizon and limit impact of the site to the surround area.

This site is necessary to fill a "Gaps in Coverage" to the area and replace an existing obsolete Verizon Wireless site that is being decommissioned to comply with legal entitlements that run with the land. With inadequate coverage & services in the area, and the limited ability to provide reliable voice and data service to their customers, the proposed WCF at this location is greatly needed in order to provide services and operate in the public's interest.

Propagation Maps provided show the current signal coverage and the projected coverage. The areas in Yellow would signify the best possible coverage, allowing for In-building voice and data signal coverage, with Blue areas allowing

for outside voice and data, Red areas mainly providing outside voice only. Areas in White would have very little to no coverage at all.

The site at the proposed location greatly enhances the coverage to the area and fills the current gap in coverage that is predominant in the area and provides for the replacement of coverage to the area of the site to be decommissioned.

This site will not only assist area residents, but also aid commuters and first responders to maintain connectivity in their travels and handoff to adjacent sites, while maintaining clear and reliable voice & data signals.

According to ADOT's continuous counter station located along Hwy 83 just north of the Oak Tree Land & Cattle Ranch, traffic along Hwy 83 average 1,986 vehicles a day in 2014. A more precise current traffic breakdown is listed below:

ADOT VOLUME COUNT - Location 100897			
	Date	Int	Total
	Wed 8/26/2015	60	1,810
	Tue 8/25/2015	60	1,840
	Mon 8/24/2015	60	1,738
	Sun 8/23/2015	60	2,107
	Sat 8/22/2015	60	2,373
	Fri 8/21/2015	60	2,094
	Thu 8/20/2015	60	1,873
	Wed 8/19/2015	60	1,797
	Tue 8/18/2015	60	1,818
	Mon 8/17/2015	60	1,732

GREATERVILLE-SONOITA AREA SERVED

Weather you live in the "Greaterville – Sonoita" area or you're one of the many visitors that travel through the southern Arizona corridor the ability to connect with your wireless device is important for safety and enjoyment purposes.

According to Chief DeWolf the Sonoita-Elgin Fire District protects about 1,375 structures in a 350 square- mile area and along highway 83 north of the Pima County line there are over 100 structures. No matter the number of full-time residents, there is still a need and a requirement to properly serve this rural area with up-to-date wireless technology. As noted by Chief Wilson of the Pima County Sheriff office, "From a general public safety standpoint, cell phone coverage in rural, heavily traveled areas is always beneficial as it may be the only option for contacting police or fire service officials for assistance."

The area has natural sites and yearly activities that bring in tourists whom also need access to up-to-date wireless technology. Sites like the Coronado National Forest and La Cienegas, to activities at Empire Ranch (the annual roundup draws 2,000 visitors) the Annual Labor Day Rodeo and local wineries bring in visitors with a need for the technology from a safety and enjoyment perspective.

The proposed WCF is being placed in a location outside of any scenic easement in pasture land that is at an elevation twenty-one feet (21') lower than Highway 83 in an effort to lessen the visual aspect of the site to the surrounding area & still maintain the coverage objectives to provide service to the area and close gaps in coverage.

Using the elevation of the highway as a basis point for coverage and visibility; the net height of the monopole, above highway grade, would be calculated at only 109 feet. With the proposed site at the lower elevation meeting the challenges to provide service to an area with a wide range of elevation changes, the requested height of 130 feet is necessary to meet coverage demands, provide reliable service, back haul connectivity into the area and allow adequate space for future wireless carriers to utilize the communication facility, thus avoiding the additional expansion of wireless facilities in the area.

The RF emissions from this site will be well within the FCC guidelines for a wireless communications facility.

HOURS OF OPERATION/CIRCULATION SYSTEM

The site will operate twenty four hours a day, seven days a week, but is an unmanned facility with no personnel or regular hours of operation. This development will not increase traffic. The ingress and egress to the site is provided from Highway 83 east to the facility on an existing unpaved road. Current plan is to grade and add gravel to the road.

NOISE, LIGHT, NUISANCES AND OTHER ENVIRONMENTAL CONSIDERATIONS

The proposed wireless communications facility will not use any water or generate any wastewater or solid waste. There will be a motion detecting exterior light outside the equipment door. The proposed facility will not generate any noxious odors, sounds glare or vibrations affecting existing uses or surrounding areas. The site is unmanned with no loading or unloading of supplies or materials storage. The only noise generated will be the operation of standard cooling unit fans and infrequent use of a backup generator. While the generator is running it will produce sound within the range of 70dBA. The generator will run during a loss of local utility power to maintain wireless service in the area. Otherwise, the generator will cycle an average of twice per month as part of maintenance.

The site will be connected to and monitored by a central switching center.

ALTERNATIVE SITE REVIEW

Every effort was made to find a site that complies with the Pima County's Code. The "Search Area" took into consideration the area around and adjacent to the intersection of Hwy 83 and Hwy 62. In the past, Verizon Wireless was unable to receive permission to locate a WCF on property west of HWY 83 along Hwy 62, so that area was remove from consideration.

In discussions with County Staff, if a site was still needed in the area to provide coverage, it was best to look to the east side of Hwy 83, away from residential areas.

With the majority of property on the east side of Hwy 83 owned by the Federal Government and other areas restricted by conservation easements, the clear choice was to locate the proposed WCF on unrestricted fee land at the proposed location.

The proposed site maintains the greatest separation from residential areas while avoiding areas designated under conservations easements to maintain open and scenic corridors. The owners of Oak Tree have meet with the holders of the Land Trust easements on their property & the major land owner in the area to review the proposed WCF with them and discussed the decision to allow a WCF on Oak Tree land.

DEVELOPMENT SCHEDULE

The overall development of the site will take place as soon as possible, with construction taking approximately 60 days to complete, with the bulk of the work being accomplished in the first 4 weeks. The work will take place during regular business hours and will require the use of a crane & standard grading equipment. During this time there may be multiple vehicles and laborers performing the work.

After the completion of construction, the site will only require general maintenance (once or twice a month), with limited site visits by field technicians.

SUMMARY

The applicant believes that the characteristics of the site are appropriate and compatible with the proposed use of a wireless communication facility at this location, and will provide a service to the public. The issuance of a Conditional Use Permit approving the proposed installation of a Wireless Communication Facility will not alter the nature of the area in any manner that substantially limits, impairs or precludes the use of surrounding properties for their primary use or uses listed for their respective zoning districts.



APC Towers

Updated CUP Supplement Narrative

APPLICATION FOR CONDITIONAL USE PERMIT
Case # P21-15-015

SUPPLEMENTAL INFORMATION REQUIRED FOR COMMUNICATION TOWER
REQUESTS – Revised September 1, 2015

The Federal Telecommunications Act of 1996 requires local governments to address certain issues relating to the placement, construction and modification of wireless communication facilities, including cell towers, when reviewing conditional use permit requests. Hence, applicants must provide information on each of the following items as a part of their conditional use permit application.

1. Height & color of tower.

The proposed Wireless communication Facility (WCF) will consist of a 135' monopole tower inside of a 2,500 square foot fenced compound. The tower & attachments will be a "Stone Mason-grayish" color and have no reflective qualities.

2. Certification that tower will comply with all FAA, FCC and other applicable regulations.

The tower and its use will comply with all FAA, FCC and other applicable regulations.

3. Possibilities of camouflage.

The proposed monopole is not considered camouflaged. Due to the required height of the tower to meet the coverage objectives of the area and no discernible vertical structures to blend into the landscape with and camouflage the site, it was determined that a simple monopole, designed and painted a non reflective color would be the best choice for the area.

4. Service coverage. (Is there an existing gap in coverage that presently impedes regular or emergency telephone service? If so, how will that gap be improved by the proposed tower or utility pole replacement? Provide propagation maps showing coverage gap before and after tower placement.)

The selection of this location will allow Verizon Wireless & other carriers to provide enhanced wireless service to an area that has significant gaps in coverage for area residents, commuters, government agencies and emergency services. Included with this submittal are propagation maps which show the "significant gap" in coverage that Verizon Wireless has in area, and will continue to have if the proposed site is not built.

SUPPLEMENTAL INFORMATION:

The proposed site is not only necessary to provide the rural area residents, commuters and emergency services with a more reliable voice service, but improve the download and unloading of data at speeds comparable to services provided in metropolitan areas.

Proposed site will also fill the expanded coverage "Gap" created when an existing site to the Northwest is decommissioned to meet the legal entitlements that run with the land that it's on.

5. Alternative sites explored. (Describe the alternate sites considered, including utility pole replacements, and explain in detail the reasons for their rejection. Be specific and thorough.)

Alternative locations have been explored by Verizon Wireless (West of Hwy 83, West on Hwy 62) but the location was controversial & could not get the required approvals. In further discussions with Pima County staff our direction was shifted and our search area moved to the east side of Hwy 83 away from residential areas. The only residents on the east side of the HWY near the proposed site would be the Ranch House on Oak Tree Land & Cattle's property.

Existing utility poles in the area would not provide the necessary height to meet the coverage objectives, and in most cases were prohibited from being used as communication sites, as the poles are on lands subject to conservation/scenic easement restrictions.

The proposed location allows the greatest amount of separation from existing residential homes, and is largely surrounded by pasture land owned by the United States of America; USFS & BLM.

SUPPLEMENTAL INFORMATION:

As discussed above, alternative sites were considered, but the overwhelming physical nature and location on the Oak Tree Land & Cattle Ranch made it the best possible choice for the proposed communication facility. The location is away from residential neighborhoods, 700 feet east of Hwy 83, behind any scenic corridor, and with 178 acres of deeded land, combined with US Forest Service grazing permits, Oak Tree has its own built-in buffer zone from surrounding properties. The location also provides access to the necessary infrastructure to accommodate the operation of a communication facility.

6. Possibilities for co-location on an existing tower or utility pole replacement. (Provide information, including a map, on the existing towers in the coverage area and list the reasons why each co-location or pole replacement is not feasible. Include distance to nearest existing communication towers and utility poles that were considered. In detail describe why co-location was not possible. Provide coverage maps of alternate co-location or utility replacement options. Be specific and thorough.)

A review of the area showed no existing vertical structures in the area that could be utilized to meet the coverage objectives and fill the gap in coverage.

An existing windmill on top of a hill behind the Ranch House, on the subject property was considered, but as a central focal point to the Ranch, an increase in the height & size of the windmill to meet coverage & collocation objectives, would have created a larger visual impact to the area than the proposed WCF located in an adjoining pasture down the hill.

7. Possibilities for more, shorter towers.

Due to multiple variations in the topography and limited infrastructure to support WCF's, in the rural area, the "more shorter towers", concept would not allow carriers to meet coverage objectives of the area without the initial installation of a taller tower that would provide backhaul connectivity to an existing site. In this case, an existing communication facility on top of Red Mountain, 20 miles away.

Also, additional shorter towers would need to encroach into residential neighborhoods and still be tall enough to meet coverage objectives and provide a line of sight to connect with other towers for backhaul connectivity in order for the site to provide the latest enhanced wireless services.

The subject site is designed to meet the needs of the area, provide service, and close the "gaps" in

coverage that currently exists.

SUPPLEMENTAL INFORMATION:

Verizon Wireless currently utilizes an old obsolete Alltel site to service a small portion of the Greaterville area. That site is 1 ½ miles to the Northwest from the proposed Box Canyon location. The site has limited voice and data capacity, operates a single sector to the north, has no ability to be upgraded & provide connectivity for the current technology and, due to legal issues, is scheduled for decommissioning by June 2016.

The changing topography of the area, the lack of adequate infrastructure to support today's wireless technology combined with the requirement to avoid residential neighborhoods make it very difficult to do multiple sites, especially when the proposed site at the requested height will resolve the vast majority of coverage issues in the area and provide more reliable service and up to date wireless technology to an underserved rural area of Pima County.

8. Provisions for tower removal.

Current agreement with Oak Tree Land & Cattle Company will span over thirty years, and provide for the proper removal of the site at the end of the agreement.

9. Possibilities of tower serving as a co-location site for other wireless providers.

Proposed WCF has been designed to serve as a collocation site and was planned for at least two other carriers.

SUPPLEMENTAL INFORMATION:

The location of the proposed 130' monopole is away from the residential neighborhoods, located over 700 feet east of Highway 83, at an elevation 21 feet below street level. The requested height of the tower allows Verizon Wireless to meet their coverage objectives to close "Gaps" in their service, and allow adequate space for future wireless carriers to utilize the communication facility, thus avoiding additional expansion of wireless facilities in the area.

10. Government contracts with the wireless provider.

Yes.

SUPPLEMENTAL INFORMATION:

Includes, but not limited to the following agencies-

- Sonoita-Elgin Fire District & EMT- phones
- Pima County Sheriff's Office- phones & mobile data
- Rincon Fire District – Phones & mobile data
- DPS- Phones & mobile data
- BLM
- US Fish & Wildlife
- Custom & Boarder Protection
- US Forest Service



APC Towers

Verizon RF Objectives



Verizon RF Objectives

- Avoid coverage gap when existing site is decommissioned
- Improve voice and data coverage to existing areas
- Expand voice and data coverage to surrounding areas
- Eliminate coverage gaps to the South to improve Public Safety use

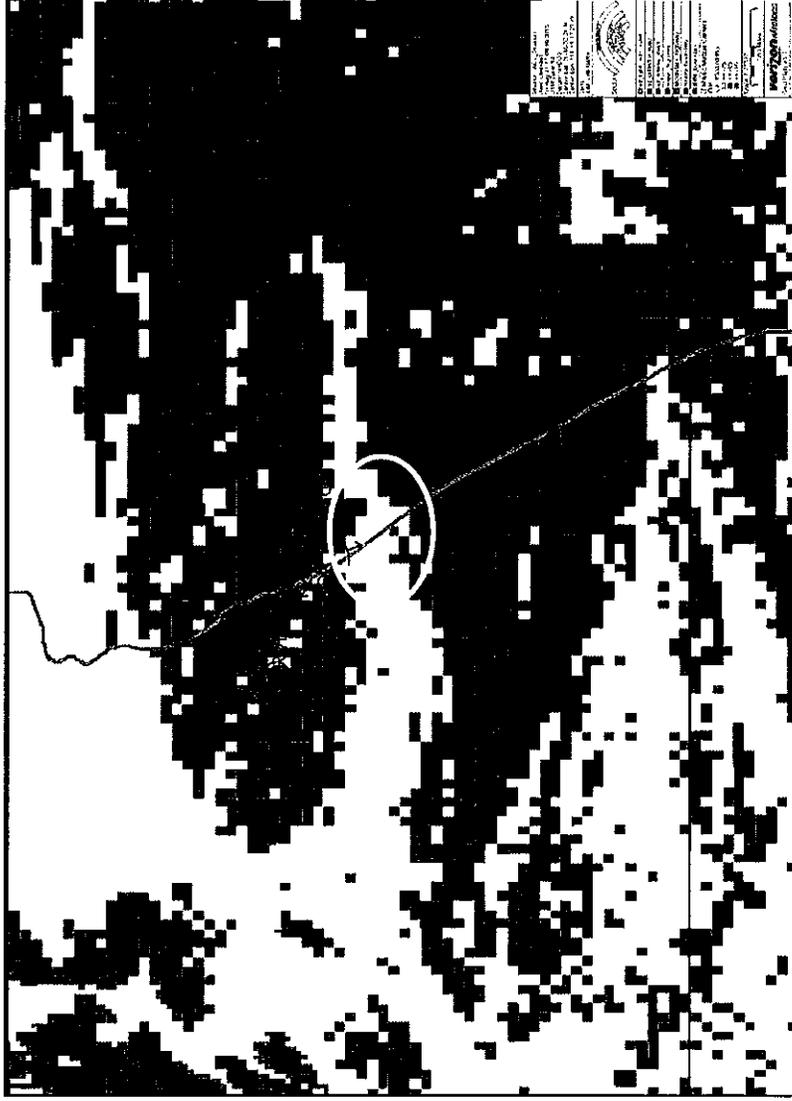
Existing Coverage

- Yellow – In-building voice and data signal strength
- Blue – Outside voice and data
- Red – Outside voice only
- White – No signal



Coverage hole pending June 2016

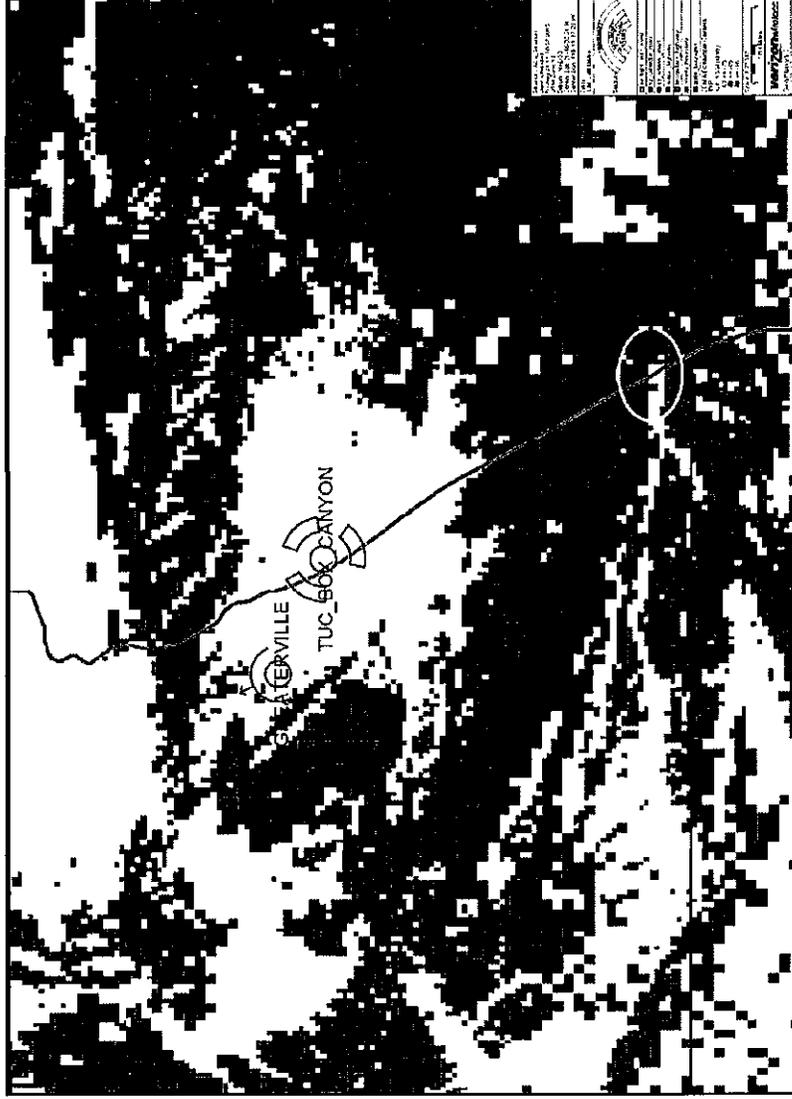
- HOA around Greaterville site loses its in-building coverage
- Voice and data coverage are spotty at best due to signal propagating from a site miles away
- Calls dropped heading south along Sonoita Hwy



*Coverage hole circled

Coverage for proposed tower at 130' c/l

- Due to terrain, 130' is absolute minimum height needed at proposed location to maintain existing coverage
- Added benefits of improved voice and data coverage
- Almost continuous data coverage south to County line



*Coverage hole can only be eliminated with a taller tower



APC Towers

CUP Case Comparisons