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complete wireless solutions

Authorized Agent for Eco-Site

Whittier Elementary School for Review
Narrative for a New EcoSite / T-Mobile Disguised Structure
EcoSite is requesting a Special Use Permit

Subject Project Location:

Address: 733 N. Longmore
Mesa, AZ 85201

APN: 135-62-126A
Zoning: RS-6
Lot Size: Lot size 202,075 sq.ft.

Project Representatives

Velocitel, LLC

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Project Description

The proposal before you today is for a wireless communications facility located on school property within Mesa. The tower company proposing this facility is EcoSite for the benefit of T-Mobile. EcoSite's desire is always to work closely with the local municipality to be a good neighbor. In this case EcoSite is proposing a monopole application that will be hidden within an RF friendly camouflage structure. This structure will be designed to completely blend in with the proposed area. At the base of the structure within a CMU wall with a chain link topper will be all the equipment for the facility. Particular care has been initiated to anticipate the concerns for aesthetics, including working closely with the school construction inspector to design the camouflaging material.

Project Objectives

Initially identified as an area of concern from subscriber comments and feedback then verified using radio frequency modeling software it was determined that there is a significant drop in both coverage and capacity for voice and data capabilities in this area. From that data a search area and proposed site criteria was developed. A Wireless Communications Facility located at the subject property will service

the surrounding areas and fill in those gaps in coverage and capacity. This facility will augment and improve wireless voice, data and internet related services to the Mesa community, further enhancing the attractiveness of Mesa to future residents, businesses consumers, visitors and tourists. Within the last 4 years the FCC has determined that we have hit what was heretofore an unimaginable milestone: Over 51% of the American households are completely and totally wireless. National Chamber of Commerce studies identify telecommunications infrastructure as one of the key criteria both commercial and residential developers look at when targeting planned growth and development. The reasoning behind telecommunications being a key indicator is varied but sometimes taken for granted in our modern world. First and foremost it provides communications in all its many different forms.

This facility will provide several benefits for the Mesa community that, again, are often taken for granted.

1. This facility will provide enhanced voice and data services
2. It will provide for an enhanced E911 Service
3. Enhanced mobile streaming capabilities
4. Location services (GPS) for mapping programs.
5. Augmented Capacity to help prevent dropped calls or system busy

Project Compliance:

The need for a Special Use Permit stems from two separate points within the ordinance. The first criteria requiring the SUP is that the property currently zoned as RS-6 which has been determined to be a residential classification. Under the ordinance a wireless facility within a residential zone requires a special use permit. The second criteria that is affected under this proposal is the overall approved height of the structure itself.

The approved height for structures in this zoning designation is 35'. Subsequently placing a wireless facility here will exceed that height. The location of the structure on the school property was determined after many discussions with the Town Planner and school construction inspector. It was selected to meet and exceed all property setback lines and keep the structure out of the way of school activity and as far from residential property as possible.

Lastly, in an effort to produce a facility that blends in with the surrounding area and in consultation with the planning staff, EcoSite is designing this facility with radio frequency friendly camouflage that surrounds each sector, so no equipment can be seen.

Inventory of Existing Sites: See attached

Points of Concern:

1. Will the screening be constructed to go around all four sides of the antenna? **Yes**

2. Noise: No permit shall be issued for any facility, which generates a noise level greater than fifty decibels (50 db) as measured at the edge of the property upon which such facility is sited." **The Equipment is buffered behind an enclosed material and inside of a cabinet, and does not exceed 50db**

3. Availability of Suitable Existing Towers, Other Structures, or Alternative Technology: No new tower shall be permitted unless the applicant demonstrates to the reasonable satisfaction of the jurisdiction that no

existing tower, structure or alternative technology that does not require the use of towers or structures can accommodate the applicant's a proposed antenna. An applicant shall submit information requested by the jurisdiction related to the availability of suitable existing towers, other structures or alternative technology. Evidence submitted to demonstrate that no existing tower, structure or alternative technology can accommodate the applicant's proposed antenna may consist of any of the following:

a. No existing towers or structures are located within the geographic area, which meet applicant's engineering requirements. **When we are first assigned a location to search we do a great deal of research prior to going into the field. We utilize a mapping program and database to keep track of existing towers. We first plot the search area on that map and do a scrub against any existing structures. We then take the target coordinates and run a FAA Search for all types of applications. We look for those for towers that have been built and also those that are proposed. Should we find anything that is not in our database we add that to the program and plot them on our map. Once that is complete we do a Google Earth search of the area to see if we can see anything of any height from a satellite image. We make note of any properties that appear to have structures of height. We will often cross check with the local county GIS system. All of this is completed prior to doing an actual field reconnaissance. Once in the field we confirm all of our findings from our desktop discovery.**

A comprehensive evaluation has been completed and determined there are no existing towers or structures located within the geographic area that would meet the engineering requirements.

b. Existing towers or structures are not of sufficient height to meet applicant's engineering requirements.

An evaluation, by driving, actually accessing rooftops has determined that there are no existing towers or structures within the search area that can meet the engineering requirements for this facility.

c. Existing towers or structures do not have sufficient structural strength to support applicant's proposed antenna and related equipment. **There are no co-locatable opportunities in the search area or immediately outside the search parameters.**

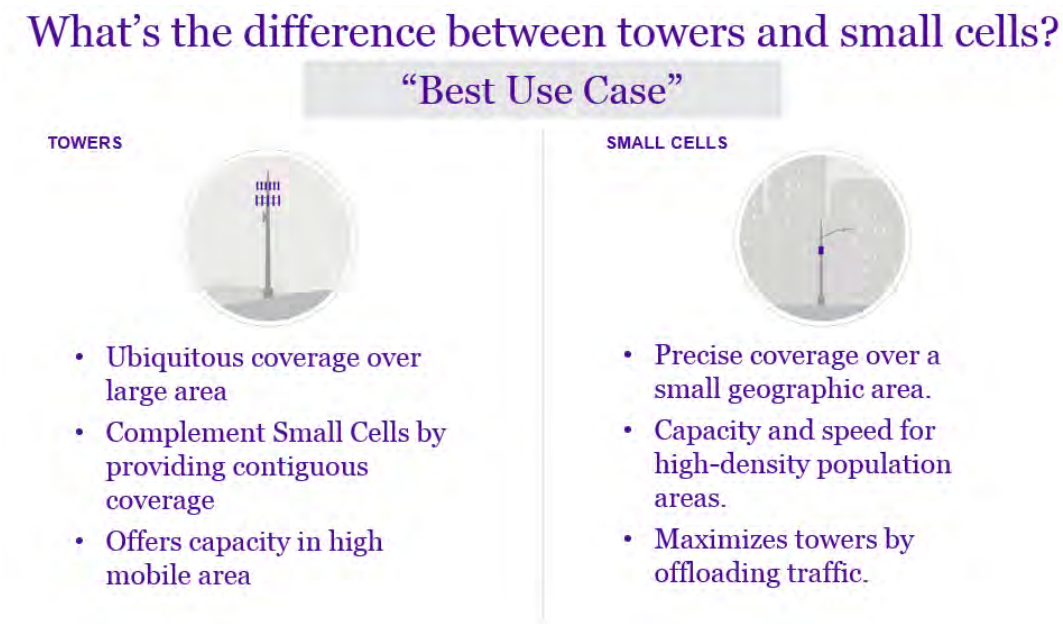
d. The applicant's proposed antenna would cause electromagnetic interference with the antenna on the existing towers or structures, or the antenna on the existing towers or structures would cause interference with the applicant's proposed antenna. **While it has been determined that there are no existing structures of height that could fulfil the requirements of the facility, regulations by the FCC will not allow interference between carriers and most agreements have interference clauses within them that prohibit interference with other facilities.**

e. The fees, costs, or contractual provisions required by the owner in order to share an existing tower or structure or to adapt an existing tower or structure for sharing are unreasonable. Costs exceeding new tower development are presumed to be unreasonable. **Not applicable as there are no existing towers or structures of height within the search parameters or immediately outside of the search parameters.**

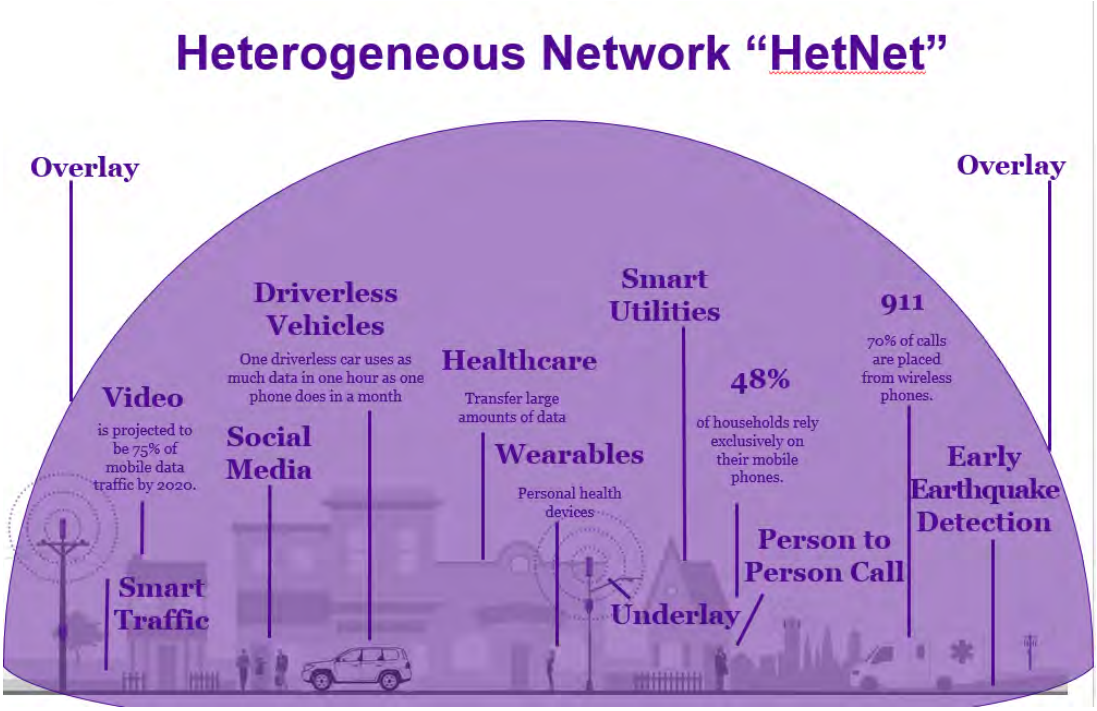
f. The applicant demonstrates that there are other limiting factors that render existing towers and structures unsuitable. **Please see the included coverage plots**

g. The applicant demonstrates that an alternative technology that does not require the use of towers or structures, such as a cable micro cell network using multiple low-powered transmitters/receivers attached to a wire line system, is unsuitable. Costs of alternative technology that exceed new tower or antenna development shall not be presumed to render the technology unsuitable. **See Below for explanation of the Heterogeneous Network or HetNet**

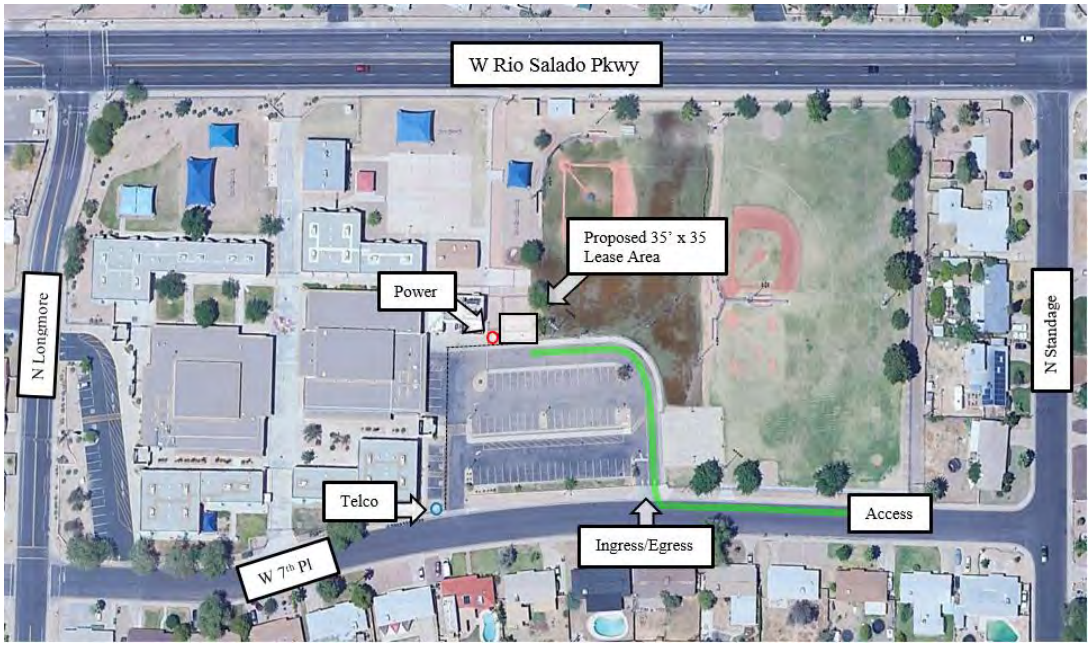
Macro Cell vs Small Cell



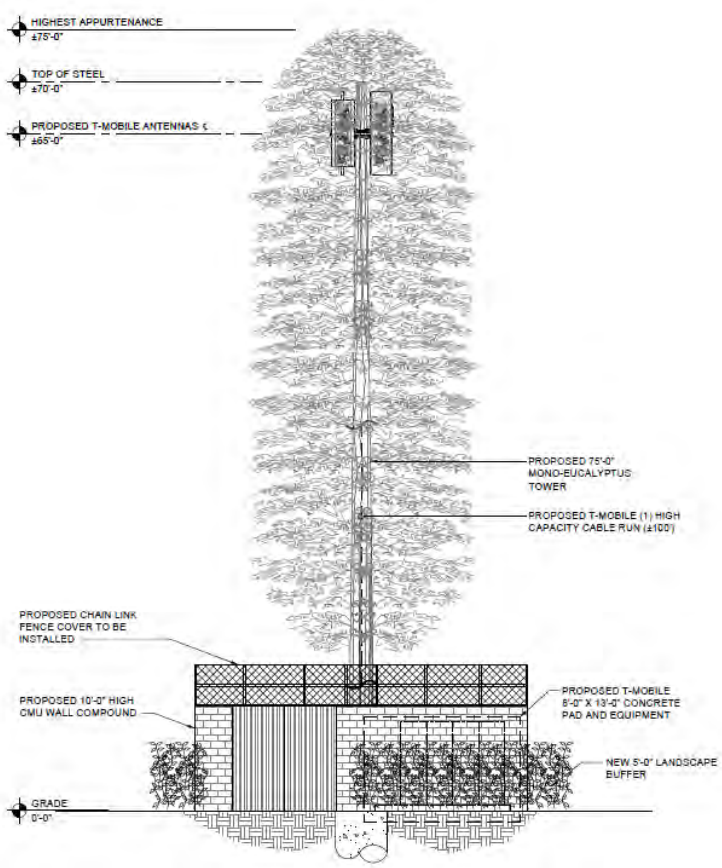
What is a Heterogeneous Network – "HetNet"



Aerial showing locations



ELEVATION and CAMOUFLAGE DESIGN:



County Assessors Map

Summary:

In summary, EcoSite / T-Mobile have demonstrated a need for a facility within the City of Mesa. The subject property provides the ideal location for a facility that would satisfy this need in a manner that has the least impact on the surrounding community. EcoSite has also shown how this facility could act as the anchor location for the possibility of a very robust network in the future to accommodate the ever-growing demand for service, reliability and connectivity

Respectfully submitted,

Ashton Burns
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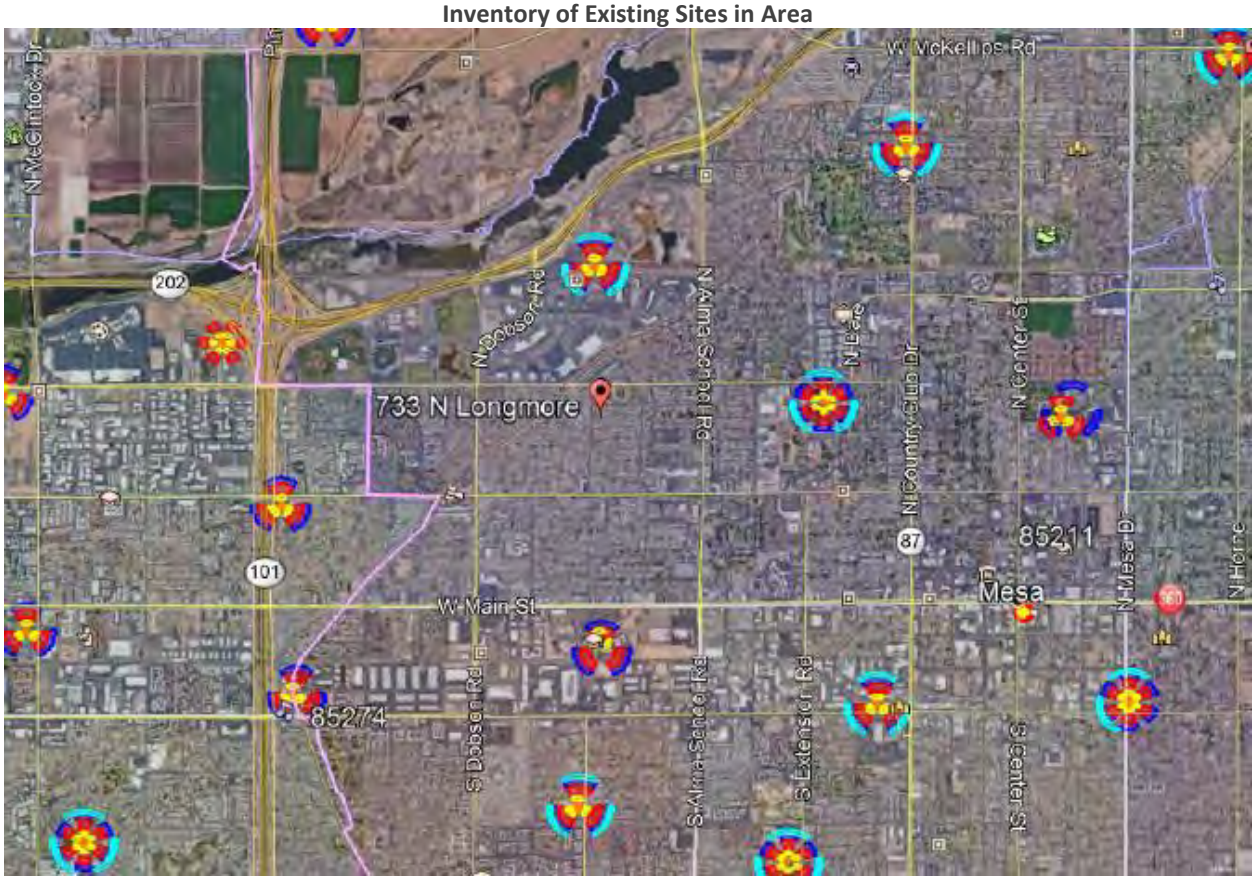
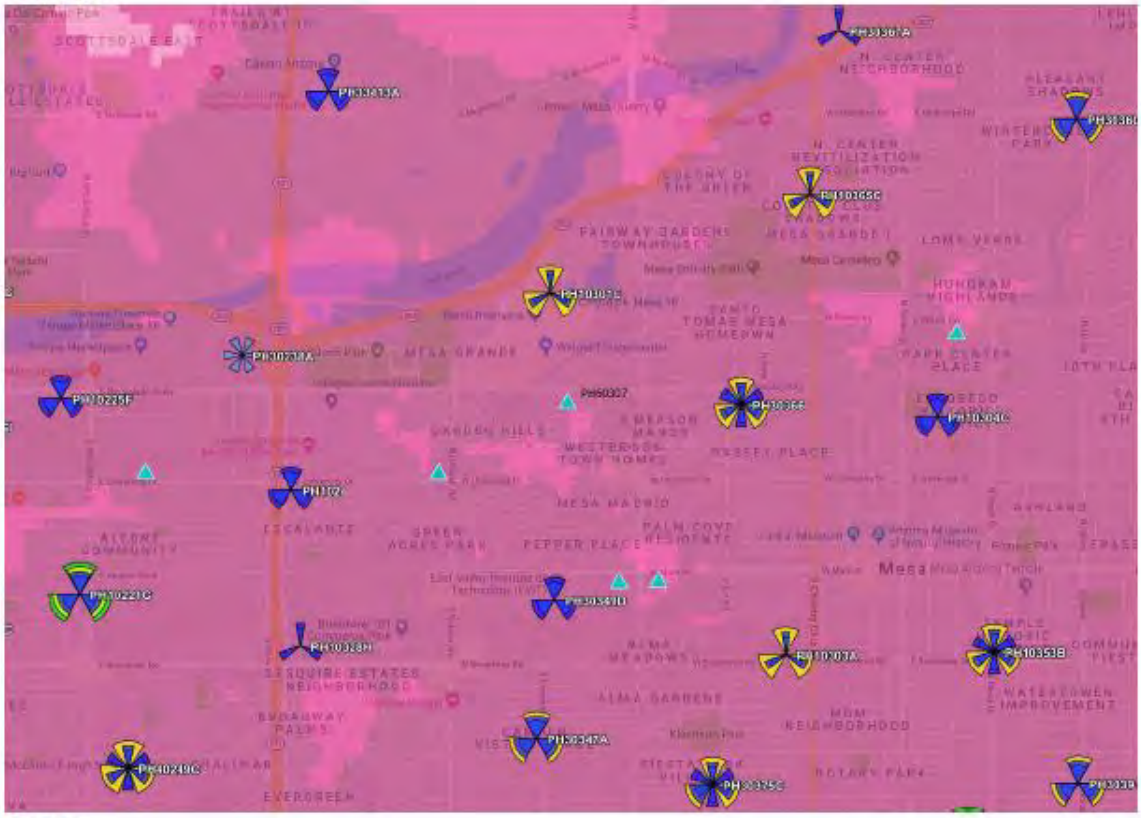
Inventory of Existing Sites in Area



Propagation Maps

BEFORE



AFTER