

Board of Adjustment

Staff Report

CASE NUMBER: BOA18-00916
LOCATION/ADDRESS: 733 N. Longmore
COUNCIL DISTRICT: District 3
STAFF PLANNER: Lisa Davis, AICP
OWNER: School District 4
APPLICANT: Ashton Burns, Velocitel

REQUEST: *Requesting a Special Use Permit (SUP) to allow for a wireless communications facility (WCF) in an RS-6 district, and a SUP to allow the facility to exceed the allowed height in an RS-6 District.*

SUMMARY OF APPLICANT'S REQUEST

The applicant is proposing the construction of a new 65-foot high mono-elm (a stealth WCF) measured to the top of the antennae with the branches extending up to 70-feet high. The WCF is proposed to be located at an existing school property, Whittier Elementary School, located at the east side of Longmore and south of Rio Salado Parkway. The mono-elm will be constructed on the east side of the existing school buildings at the north side of the parking lot.

STAFF RECOMMENDATION

Staff recommends **approval** of case **BOA18-00916**, with the following conditions:

1. Compliance with the plans dated February 18, 2019, except as modified by the following conditions:
2. The wireless communication facility shall utilize a mono-elm design with a maximum height of sixty-five feet (65') to the top of the steel tower. The artificial tree branches used for stealth design shall be allowed to be at a maximum height of seventy feet (70').
3. The stealth design of the wireless communication facility shall conform to the following standards:
 - (a) Provide (3) branches per linear foot of tree height.
 - (b) Provide curved antenna branches to better conceal antenna panels.
 - (c) All antennas, mounting hardware, and other equipment near the antennas shall be painted to match the color of the faux elm branches.
 - (d) Provide bark color and texture cladding along the entire length of the pole to match the bark of a natural elm tree. This shall include multiple colors to better simulate the bark of a tree.
 - (e) Antenna socks with leaves and branches shall be installed to match the tree foliage to assist in the concealment.
 - (f) The faux elm branches shall start at 15' from the ground level. (This height may be adjusted depending on the overall tree height to ensure it is proportional.)
 - (g) The faux elm branch density shall not be reduced near the antenna arrays.
 - (h) The faux branches shall extend past the antennas a minimum of 12".
4. The antenna array stand-off shall not exceed 2'-6" maximum from the pole.
5. The antenna array for each sector shall not exceed an overall length of 4'.
6. Any future co-location carrier antennas shall be fully screened and concealed with branches and antenna socks.
7. The area containing the equipment shelter and generator shall be screened by a minimum 8' tall masonry wall, or a wall equivalent to the height of the equipment being screened. This screening wall shall be finished with stucco and painted to match the color of the adjacent school buildings.

- The access gate shall be a solid metal gate painted to be compatible with the structure.*
- 8. Provide a permanent, weather-proof identification sign, approximately 16-inches by 32-inches in size on the gate of the fence identifying the facility operator(s), operator's address, and 24-hour telephone number for reaching the operator or an agent authorized to provide 24/7 response to emergency situations.*
 - 9. Provide and maintain four natural living Majestic Ash trees minimum height of 35' tall, as shown on the friends plan to camouflage the proposed wireless communication facility.*
 - 10. Provide and maintain a 5'-wide landscape area around the masonry wall enclosure of the facility, with decomposed granite, and shrubs planted at 6' on center.*
 - 11. Maintenance of the facility shall conform to the requirements of Zoning Ordinance Section 11-35-5.I.*
 - 12. The operator of the WCF shall respond to and complete all identified maintenance and repair of the facility within 30-days of receiving written notice of the problem.*
 - 13. No later than 90 days from the date the use is discontinued or from the cessation of operations, the owner of the abandoned tower or the owner of the property on which the facilities are sited shall remove all equipment and improvements associated with the use and shall restore the site to its original condition as shown on the plans submitted with the original approved application. The owner or his agent shall provide written verification of the removal of the wireless communications facility within 30 days of the date the removal is completed.*
 - 14. Future modifications must be approved by the Planning Director to ensure the modifications remain in compliance with the stealth elements, outlined in condition number 3, for the mono-elm or base station as approved with the subject request (case# BOA18-00916) and the Mesa Zoning Ordinance as amended.*
 - 15. Compliance with all requirements of the Development Services Department regarding the issuance of building permits.*

SITE CONTEXT

CASE SITE: Existing Elementary school – zoned single residence (RS-6)
NORTH: (Across Rio Salado Parkway) Existing residential-zoned multi-residence (RM-4) and single-residence (RS-7)
EAST: Existing residential – zoned single-residence (RS-6)
SOUTH: (Across 7th Place) Existing residential – zoned single-residence (RS-6)
WEST: (Across Longmore) Existing residential – zoned single-residence (RS-6)

STAFF SUMMARY AND ANALYSIS

The project site was annexed by the City of Mesa in 1956 and developed as a school site, known today as Whittier Elementary School. The proposed WCF will be enclosed by a 10-foot-tall, 32' x 30' concrete masonry unit (CMU) block structure. Currently, there is an existing bike rack at the proposed location of the WCF. According to the applicant, they will work with the school to relocate the rack within the school site.

The Mesa Zoning Ordinance (MZO) 11-35-6.D. requires approval of a SUP by the Board of Adjustment for any new, freestanding communications facility in any residential district. Also, per table 11-30-3 of the MZO, antennas are subject to provisions of MZO Chapter 35 (i.e. Antennas and Wireless Communication Facilities) which requires approval of an SUP for commercial communication towers that exceed the maximum permitted height of the zoning designation on the property. The proposed WCF mono-elm is 65' high which exceeds the 30-ft. maximum height permitted in the RS-6 District, the zoning designation on the property. Sections 11-35-5 and 11-35-6 of the MZO outline requirements for allowing WCF. These requirements include location, design, and operation standards for all non-exempt WCFs; as well as

findings for WCFs proposed to be placed in a residential zoning district. The analysis below discusses the applicable requirements of MZO 11-35-5 and 11-35-6.

MZO SECTION 11-35-5: LOCATION, DESIGN AND OPERATION REQUIREMENTS

Location Preferences: MZO Section 11-35-5. A provides a ranked listing of preferred locations for new wireless communication facilities. The most preferred option for locating a WCF is on existing non-residential structures, such as buildings or utility facilities located more than 300 feet from residential zones. When such locations are not available, locations within industrial zones are preferred, followed by stealth towers in commercial zones, and finally, stealth tower locations in residential districts.

The proposed location is within a residential district. According to the applicant, the proposed location is the most viable site and the existing structures cannot be utilized for a new tower and eliminate the break in coverage.

MZO Section 11-35-5.B Design Preferences: Per this section of the MZO, the highest preference is for design of the tower is one that is architecturally designed with integrated building mounted antennas, such as steeples, chimneys, and cupolas. When building-mounted locations are not available, freestanding structure designs such as sculptures and clock towers are preferred, followed by freestanding stealth trees, then freestanding monopoles. In addition, MZO 11-35-5.F requires antennas, antenna support structures, and related equipment to be located, designed, and screened to blend with the existing natural or built surroundings.

The applicant proposes a freestanding mono-elm measuring 65' to the top of the steel structure. The pole will be built of steel with bark cladding to simulate an elm tree which will also include branches to conceal future co-locations. According to the applicant, a mono-elm design was chosen both by the applicant and the school as the best alternative that blend the tower with surrounding developments. In addition, the mono-elm is proposed to have a stand-off distance of 30" with a 4' array. To ensure maintenance of the stealth design, staff is recommending a condition of approval (condition #3) to require branches with varying sizes to screen the antennas.

MZO Section 11-35-5.C.2 Location of Facilities: In accordance with this section of the MZO, no new freestanding antenna structure, including towers, lattice towers, and monopoles proposed within Residential and Mixed-Use Districts, shall be located within 1,000 feet of another freestanding facility, unless mounting on a building or co-location on an existing pole or tower is not feasible and techniques have been used to camouflage, screen, or otherwise minimize the visual impact of the facility to the extent feasible. In addition, within the Commercial and Employment Districts, new freestanding antenna structures, including towers, lattice towers, and monopoles, may be located within 1,000 feet of another freestanding facility, provided a stealth or camouflaged design is used.

The coverage maps submitted with the application show there are no freestanding antenna structures located within 1000 feet of proposed facility. The elevation plans provided with the application also show the tower as a stealth design. Per Section 11-35-5.C.3, antenna stealth designed antennas can be located within a 1,000 feet of another facility, if needed.

MZO Section 11-35-5.D Height of Facilities: Per this section of the MZO, the height of the mono-elm is limited to the maximum height allowed on the property's zoning designation. In this case, the RS-6 district which allows a maximum height of 30' unless an SUP is approved to allow a higher height.

The applicant is requesting to construct 65' high wireless telecommunication tower on the property. According to the applicant, the additional height is needed in order to fill the gap in coverage with the

proposed facility. As part of the request, the applicant is proposing to construct a 10' high masonry screen wall around the perimeter of the equipment site. The masonry wall must be finished with stucco and painted and painted to match the existing school buildings per condition number 7 of this report.

MZO 11-35-5.E.1 Required Separation and Setbacks: This section of the MZO outlines minimum setback and separation requirements between proposed antenna structures and residential uses. Per the section of the code, alternative antenna structures, such as a mono-elm, must be setback from residential uses a distance equal to the height of the structure plus one foot, and setback from streets a distance equal to the height of the structure plus one foot. Also, all WCF and related equipment must comply with the required building setbacks for the zoning district.

The site plan shows the proposed 65'-tall mono-elm tower will be setback 186 feet from the nearest the nearest right-of-way 7th Place at the south side of the site. The nearest residential property is located on the south side of 7th place and is 236' from the proposed tower.

MZO 11-35-5.H Required Landscaping: This section of the MZO requires site with antenna, antenna support structures, and related equipment to be landscaped with a buffer of plant material that effectively screens view of the base of support structures and equipment facilities from adjacent residential property or from any public right-of-way, path or trail. Typically, the standard buffer requirement is a continuous landscape strip with a minimum width of 4 feet around the perimeter of the installation.

The site plan shows a 5' wide landscape buffer surrounding the proposed masonry equipment yard. Condition number 10 includes a requirement for shrubs planted at 6' on center within the proposed 5' wide landscape area. Four live trees of comparable height, Majestic Ash trees, are shown on the landscape plan to be planted at the east side of the school site to assist in the camouflage of the mono-elm structure.

MZO SECTION 11-35-6: REVIEW AND APPROVAL PROCEDURES

MZO 11-35-6.E: Additional findings are required, to approve a SUP request for a WCF. This includes MZO 11-35-6.E.8, which requires evidence that the proposed location of a WCF in a residential district is necessary "for the provision of personal wireless services to Mesa residents and businesses, or their owners, customers, guests, or invitees, or other persons traveling in or about the City based on substantial evidence that siting the facility outside of a Residential district is infeasible and without the proposed facility, the operator will be unable to provide personal wireless services to its customers in the proposed coverage area, or unable to provide the capacity necessary to meet call volumes."

The documentation provided by the applicant demonstrates compliance with the outlined section of the MZO. Specifically, the applicant's maps of coverage and available facilities indicate that the proposed location, in a residential district, is necessary for the provision of personal wireless services to Mesa residents and businesses.

MZO 11-70-5.E Special Use Permit

In accordance with this section of the MZO, to approve a SUP, the proposed use must be : 1) in conformance with the intent of the Zoning Ordinance; 2) in conformance with the General Plan and other specified plans or Council Policies; 3) compatible with and not detrimental to adjacent properties or the neighborhood in general; and 4) Adequate public services, public facilities and public

infrastructure are available to serve the proposed project.

The subject request to allow the placement of a 65-foot tall mono-elm at an elementary school in the RS-6 District conforms to requirements outlined in the MZO 11-35-5 for location, design, and operation of WCF. As well as MZO 11-35-6, requirements for review and approval procedures for the location of a WFC in a residential district.

RECOMMENDED FINDINGS

1. The proposed location is a residentially zoned site that is within the Whittier Elementary School property.
2. The proposed mono-elm design is considered a stealth design.
3. The proposed mono-elm is designed principally to address a significant gap in coverage, and a capacity shortfall.
4. The mono-elm design and the proposed planting of four Majestic Ash trees on the school site will enhance the ability for the tower to blend with its surroundings.
5. The proposed mono-elm will include a minimum 8' CMU enclosure and 5' of landscape area for screening of the base of the tower and associated equipment.
6. The stealth design mono-elm is proposed to be setback more than the proposed height of 65, and plus one foot from all residential uses and the nearest Right-of-Way.
7. The proposed mono-elm is located more than 186± feet from the nearest residential properties, specifically on the south side of 7th Place.
8. The proposed mono-elm conform with the applicable requirements of MZO 11-35-5 and MZO11-35-6.
9. The proposed mono-elm is compatible with the Neighborhood Suburban character type of the General Plan.
10. The proposed mono-elm, masonry wall, and landscape material will be compatible and not detrimental to the surrounding neighborhood.
11. The location of the tower in a residential district is necessary for the provision of personal wireless services to surrounding residents.

CITIZEN PARTICIPATION

The applicant held a neighborhood meeting on February 12, 2019 at the (name??) elementary school site. According to the information provided by the applicant and staff observation at the meeting, the following issues were discussed:

- a. Screening of the antennae.
- b. Likely noise from the facility.
- c. Were other sites or existing structures researched in the area to allow the WCF?
- d. Explanation of the difference between a Macro cell and a small cell site.

As a result of the neighborhood meeting, the applicant has modified the tower to include:

- Reduction in height from 70' to the top of the antennae to 65'.
- The initial stealth design has been revised from a mono-eucalyptus design to a mono-elm design. The design is more compatible with the area.
- The support structure will not exceed 4' in diameter. The antenna mounts will not extend beyond the outside edge of the materials used to provide stealth design.

ORDINANCE REQUIREMENTS

Zoning Ordinance, Section 11-70-5 – Special Use Permit:

- E. **Required Findings.** A SUP shall only be granted if the approving body determines that the project as submitted or modified conforms to all of the following criteria. If it is determined that it is not possible to make all of the required findings, the application shall be denied. The specific basis for denial shall be established in the record.
1. Approval of the proposed project will advance the goals and objectives of and is consistent with the policies of the General Plan and any other applicable City plan and/or policies;
 2. The location, size, design, and operating characteristics of the proposed project are consistent with the purposes of the district where it is located and conform with the General Plan and with any other applicable City plan or policies;
 3. The proposed project will not be injurious or detrimental to the adjacent or surrounding properties in the area, nor will the proposed project or improvements be injurious or detrimental to the neighborhood or to the general welfare of the City; and
 4. Adequate public services, public facilities and public infrastructure are available to serve the proposed project.