

ARCHITECTURAL REVIEW BOARD STAFF REPORT

Project #/Name	ARB-2021-106: Southside Tier 2 PWSF
Review Type	Advisory Review for a personal wireless facility; Certificate of Appropriateness for ground equipment
Parcel Identification	087000000022E0
Location	2415 Southside Drive, North Garden (See Fig. 1.)
Zoned	Rural Areas (RA) / Entrance Corridor (EC)
Owner/Applicant	Roy Thomas or Lisa Fitzgerald / Parallel Infrastructure (Hadisha Gordon)
Magisterial District	Samuel Miller
Proposal	To construct a personal wireless services facility consisting of an 87'-tall monopole and associated equipment, including a request for a Special Exception (See Attach. A.)
Context	The surrounding area is rural/rural residential. Nearby, at the southwest corner of the intersection of Rt. 29 and Red Hill Rd. (3017 Monacan Trail Rd.) is the Trading Post convenience store with a fuel pump canopy and two PWSF monopoles. (See Fig. 2.)
ARB Meeting Date	October 4, 2021
Staff Contact	Margaret Maliszewski

HISTORY: The ARB has reviewed no previous proposals for this property. A letter outlining opposition to this proposal was received on Sep. 27. (See Attach. B.)

PROJECT DETAILS The proposal includes the following:

- Installation of an 87'-tall monopole within a fenced 50' x 50' compound in a 100' x 100' lease area, with monopole located approximately 178' from the Rt. 29 right-of-way.
- Installation of ground equipment including a utility H-frame with meter and cabinet.
- Installation of a 6'-tall chain link fence around the compound, with barbed wire on top.
- Creation of a 20'-wide access easement with 12' gravel access road to the lease area.
- Installation of 6 antennas (72" high x 19" wide x 8" deep), 2 raycap squids, and 3 Remote Radio Heads on pipe mounts.
 - A Special Exception is requested to allow the antennas to be mounted 63" from the face of the pole. The plans do not show where the measurement is taken.
- The reference tree is identified as 77' tall. Z-6 shows the tree immediately adjacent to the monopole and to be removed (which is not allowed for a Tier II facility); Z-3 illustrates a "tallest tree within 25 feet" a few feet beyond the fenced area, which places the trunk beyond 25' from the facility.
- Monopole, antennas, RRHs and associated mounting equipment are proposed to be painted Woodsy Brown SW 2924. A paint sample was not provided.
- A future lease area of 435 sf is also shown within the compound.

ANALYSIS REGARDING THE GROUND EQUIPMENT

A Certificate of Appropriateness from the ARB is required for the base equipment portion of this proposed telecommunications facility. The ARB may impose conditions on the Certificate of Appropriateness, based on the EC Guidelines, and consistent with Section 5.1.40 of the Zoning Ordinance.

Ref	Guideline	Issues	Recommendations
17	Accessory structures and equipment: The following should be screened to eliminate visibility from the Entrance Corridor street: e) Mechanical equipment g) Chain link fence	The plans show a monopole with a utility H-frame with meter and cabinet within a compound surrounded by a chain link fence topped with barbed wire. This is less ground equipment than is typically proposed. The ARB has consistently not approved chain link fence visible from the EC street. At its closest point, the fence would be located approximately 150' from the Rt. 29 right-of-way. Sheet Z-1 shows trees to remain that would screen the view of the fence from the street. However, the trees appear to be symbols generally signifying a wooded area rather than actual existing trees in specific locations, with many of the trees located off-site in the right-of-way, so the extent of actual screening that will be provided is unclear. More specific information on existing trees and trees to remain is needed to confirm that equipment and fencing won't be visible from the EC street.	Because there is insufficient information provided to confirm that visibility of the ground equipment and chain link fence will be eliminated, staff does not recommend approval of the Certificate of Appropriateness for the ground equipment and base station at this time. Staff recommends that the following information be submitted for further consideration: 1. Provide a tree plan that locates individual trees and trees to be removed, keyed to a list that provides species, caliper and height. Ensure that there are sufficient trees to remain on site to eliminate visibility of the ground equipment and chain link fence from Rt. 29. 2. Confirm that there is no ground equipment proposed beyond the utility H-frame with meter and cabinet as currently illustrated on the plan. If additional equipment is proposed, show it on the plan.

ANALYSIS REGARDING VISIBILITY OF THE FACILITY AND THE SPECIAL EXCEPTION REQUEST

The ARB may act in an advisory capacity to the Agent as to whether the facility is being sited to minimize its visibility.

Ref	Guideline/Ordinance	Issues	Recommendations
33	Development pattern: The relationship of buildings and other structures to the Entrance Corridor street and to other development within	A balloon test was conducted on September 16, 2021. A balloon measuring 12.5' x 9' was used to represent the proposed 63" standoff for the antennas. Due to the density of the wooded area and the size of the balloon, the balloon was not flown from the proposed monopole location. Instead, it was flown in the clearing between the wooded area of the site and the wooded street frontage, approximately 80' north of the Rt. 29 right-of-way and 150' southeast of the proposed monopole location.	Given the degree of visibility displayed at the balloon test and the intrusive and incompatible appearance of the proposed standoff, staff recommends that the proposed location of the facility does <u>not</u> sufficiently minimize the visibility of the monopole from the Rt. 29 EC

5.1.40.b(2)(c)	the corridor should be as follows: f. The placement of structures on the site should respect existing views and vistas on and around the site. <i>Projection.</i> in no case shall the closest point of the back of the antenna be more than 12 inches from the facility ... and in no case shall the farthest point of the back of the antenna be more than 18 inches from the facility...	The test revealed that the balloon was visible from Rt. 29 in various locations between Rt. 708 (Red Hill Rd.) and just west of Rt. 710 (Taylors Gap Rd.), a distance of approximately one mile (Fig. 3). It was most visible from the vicinity of 2936 Monacan Trail Rd. (Fig. 4) to just west of the Rt. 710 intersection, a distance of approximately 1/3 mile. When it was visible, the balloon was skylit (Fig. 5). It is anticipated that a balloon flown from the actual proposed monopole location would have similar visibility and would also be skylit. The test showed that the 63” standoff, as represented by the balloon, does not minimize visibility of the facility. It results in a structure that is an intrusion in the landscape and incompatible with the surroundings. The standoff does not minimize the visibility of the facility; rather, it highlights it. There is potential, however, that the proposed site might be appropriate with a facility using flush-mounted antennas. There is inconsistent/incomplete information in the plan set, so it is difficult to predict what additional impact proposed tree removal could have on visibility of the proposed facility. Z-6 notes that all vegetation within the 50’ compound is to be removed, including the reference tree, and Z-1 shows no trees within the 100’ lease area. To qualify as a Tier II facility, the site must retain a reference tree with a trunk no more than 25’ from the monopole. A landscape plan/tree inventory showing that sufficient on-site tree cover, including a reference tree, will remain to mitigate visibility, would be helpful. Photo-simulations could help clarify visibility of the facility in its actual proposed location. The proposal includes a “Woodsy Brown” paint for the pole and related equipment. A physical sample of the paint color could confirm that it is coordinated with the wooded surroundings.	and staff does not recommend approval of the Special Exception. The following changes/ submittals are recommended for additional consideration: 1. Revise the proposal to flush mount antennas. 2. Provide photo-simulations of the proposed facility. 3. Provide to-scale drawings showing the pole and antennas and the distances from pole to antennas and mounting equipment. 4. Show the reference tree accurately on all relevant plans. Include the distance from the pole to the tree trunk. Note that to qualify as a Tier II facility, the site must retain a reference tree with a trunk no more than 25’ from the monopole. 5. Submit a paint sample for SW2924.
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Figure 1: Project location. The yellow star marks the general location of the proposed facility. The red triangle marks the approximate location from which the balloon was flown.



Fig. 2: Existing PWSFs at the Trading Post, 3017 Monacan Trail Rd. View from Red Hill Rd. near the intersection with Rt. 29, facing southwest.



Figure 3: The subject parcel is highlighted in yellow. The purple line shows the segment of the Rt. 29 Entrance Corridor where views of the balloon were available. The red lines mark the area of clear, sustained views. Outside the red lines, views were intermittent. When visible, the balloon was skylit.



Figure 4: View of the balloon from the northbound lanes of Rt. 29 at 2991 Monacan Trail Rd., facing northwest.



Figure 5: View of the balloon from the northbound lanes of Rt. 29 at 2991 Monacan Trail Rd., facing northeast.

SUMMARY OF RECOMMENDATIONS

Points of Discussion

1. Anticipated visibility of the monopole
2. Anticipated visibility of the ground equipment and chain link fence
3. Visual impacts of the proposed 63” antenna standoff

Recommendations

Regarding the Certificate of Appropriateness for the ground equipment and base station:

Because there is insufficient information provided to confirm that visibility of the ground equipment and chain link fence will be eliminated, staff does not recommend approval of the Certificate of Appropriateness for the ground equipment and base station at this time. Staff recommends that the following information be submitted for further consideration:

1. Provide a tree plan that locates individual trees and trees to be removed, keyed to a list that provides species, caliper and height. Ensure that there are sufficient trees to remain on site to eliminate visibility of the ground equipment and chain link fence from Rt. 29.
2. Confirm that there is no ground equipment proposed beyond the utility H-frame with meter and cabinet as currently illustrated on the plan. If additional equipment is proposed, show it on the plan.

Regarding visibility of the facility:

Staff recommends that the ARB forward the following recommendation to the Agent:

- The ARB finds that the proposed location will not sufficiently minimize the visibility of the monopole from the Rt. 29 Entrance Corridor. The ARB recommends the following changes/submittals for additional consideration:
 1. Revise the proposal to flush mount antennas.
 2. Provide photo-simulations of the proposed facility.
 3. Provide to-scale drawings showing the pole and antennas and the distances from pole to antennas and mounting equipment.
 4. Show the reference tree accurately on all relevant plans. Include the distance from the pole to the tree trunk. Note that to qualify as a Tier II facility, the site must retain a reference tree with a trunk no more than 25’ from the monopole.
 5. Submit a paint sample for SW2924.

Regarding the Special Exception:

Staff recommends that the ARB forward the following recommendation to the Agent:

- The ARB does not recommend approval of the Special Exception due to the intrusive and incompatible appearance of the proposed standoff. The ARB recommends the following changes/submittals for additional consideration:
 1. Revise the proposal to flush mount antennas.
 2. Provide photo-simulations of the proposed facility.
 3. Provide to-scale drawings showing the pole and antennas and the distances from pole to antennas and mounting equipment.
 4. Show the reference tree accurately on all relevant plans. Include the distance from the pole to the tree trunk. Note that to qualify as a Tier II facility, the site must retain a reference tree with a trunk no more than 25’ from the monopole.
 5. Submit a paint sample for SW2924.

ATTACHMENTS**Attach. 1** – [ARB2021-106 Southside Tier 2 plans](#)**Attach. 2** – [ARB2021-106 Southside Tier 2 correspondence](#)**TABLE 1** This report is based on the September 16, 2021 balloon test and the following submittal items:

Sheet #	Drawing Name	Drawing/Revision Date
T-1	Title Sheet	8/9/21
1 of 3	(survey information)	
2 of 3	Site Information	
3 of 3	Legal Description Sheet	
Z-1	Plan View	
Z-2	Proposed Site Plan	
Z-3	Elevation	
Z-4	(antenna information)	
Z-5	Equipment Specifications	
Z-6	Tree Height Study	
-	Tree Height Study (photo)	-
-	Tree Height Study (photo)	-
-	Special Exception Request	8/20/21