

MEMORANDUM

TO: Cape Elizabeth Planning Board
FROM: Maureen O'Meara, Town Planner
DATE: April 25, 2016
SUBJECT: Verizon Antennas/Concrete Pad Site Plan

Introduction

Verizon Wireless is requesting Site Plan Review to install wireless antennas on the existing water tower located at 11 Avon Rd, and to construct a 10' x 16' concrete pad at the base of the tower to support equipment cabinets and a generator. The application will be reviewed for compliance with Sec. 19-9, Site Plan Regulations.

Procedure

- The Board should begin by having the applicant *summarize changes* to last month's project submission.
- The Board should allow an opportunity for public comment. Planning Board rules allow the Planning Board to limit public comment to a total of 15 minutes, with a maximum of 3 minutes per speaker.
- At the close of public comment, the Board may begin discussion.
- When discussion ends, the Board has the option to approve, approve with conditions, table or deny the application.

Site Plan Review Standards

Below is a summary of application compliance with the Site Plan standards, Sec. 19-9-5. The Town Engineer's comments are attached.

A. Utilization of the Site

Most of the site is forested with the tower and support facilities located near the center of the property. The proposal locates the antennas on the water tower and the concrete pad at the base of the tower, both within the developed portion of the site.

B. Traffic Access and Parking

1. Adequacy of Road System- The project will general minimal trips, which the adjacent roadway system has adequate capacity to support.
2. Access into the Site- The existing driveway access will be used. At the last meeting, the Planning Board asked the applicant to better define the access drive and narrow it from the existing width of 48' \pm to a width closer to 24'. The applicant has revised the plan to expand the grassed area, add a fence for definition and also plantings. The Board may want to consider clustering the proposed plantings at the driveway edge to better define the narrower access. More comments regarding the plantings selected is located in Section N, Landscaping and Buffering.
3. Internal Vehicular Circulation-The existing circulation pattern has been adjusted to add more grass, plantings, and a split rail fence to an undefined gravel area.
4. Parking Layout and Design- The proposed grass and plantings will better define and reduce the area for parking. The proposal continues to provide an area for parking that is sufficient for the expected demand.

C. Pedestrian Circulation

No change is proposed.

D. Stormwater Management

Impervious surface will be increased with the 10' x 16' concrete pad. The proposed access management improvements appear to convert approximately 450 sq. ft. from gravel to grass and landscaping. The total amount of impervious surface of the site may be reduced by approximately 300 sq. ft., which should reduce stormwater flows from the site.

E. Erosion Control

Minimal disturbance of soil is proposed and best management practices will be used to avoid erosion.

F. Water Supply

The project does not require a water source.

G. Sewage Disposal

No sanitary wastewater will be produced by the project.

H. Utilities

New power and telecommunication will be extended from an existing pole and installed underground to the concrete pad.

I. Water Quality Protection

No discharge of noxious chemicals is proposed.

The site owner, Portland Water District, is working with the Maine Department of Protection to remediate lead detected on the site. The applicant has added note 7 to plane C-1 to avoid conflicts between Verizon installation and the soil remediation plan.

J. Wastes

No solid waste will be generated by the project.

K. Shoreland Relationship

The property is not located in the Shoreland Zone.

L. Technical and Financial Capacity

The applicant has provided documentation of financial and technical capability.

M. Exterior Lighting

No new lighting will be installed.

N. Landscaping and Buffering

Some trimming of existing tree branches that extend over the fenced area will be done to facilitate painting of the tower and general maintenance.

At the site walk, a board member suggested adding buffering at the access point. The applicant has provided a landscape plan stamped by a registered engineer which reduces width of the driveway to 24'. Grass will be planted in the gravel driveway and parking area, which will also be

framed with a split rail fence. Beyond the fence, 2 eastern red cedar trees will be planted behind the split rail fence. The previously proposed arborvitae have been replaced with 15 eastern red cedar and 6 cherry trees.

The quantity of landscaping proposed appears adequate to buffer the property, but the arrangement of the plantings should be changed to provide effective access management and maximize buffering. New eastern red cedar should be relocated as a cluster toward the old driveway opening to strengthen the new edge of driveway. In order to promote growth of grass, it is likely that loam will need to be added before seeding and should be noted on the plans. More thoughtful placement of the proposed plantings with a mulched bed could replace the proposed fencing. Finally, minimum sizes of plantings at time of planting should be provided such as 5'-6' at time of planting for evergreens, and 2 1/2 " caliper for deciduous trees.

The eastern red cedar proposed tends to thrive in open areas of full sun. Locally acquired hemlock may be more appropriate as they grow quickly, are dense and are shade tolerant. Mixing in light spruce and planting in clusters rather than proposed would also more closely support the goals of access management and buffering. Finally, it is unlikely the cherry trees will survive in this environment. If a flowering tree is desired by the applicant, a shadblow would be more appropriate in this ledgy, moderately sunny area. Flowering trees are typically placed in the front where they are more visible.

The Board may want to require that the landscaping plan be adjusted. Alternately, the Planning Board may want to require a peer review of the landscaping plan by a landscape architect, with the cost borne by the applicant.

O. Noise

The applicant has submitted supplemental materials indicating that the fan and scheduled operation of the generator will not exceed maximum noise levels.

Public comment has suggested that a fuel cell power source be considered. Fuel cells are used by other wireless providers and may also be in a testing phase by the applicant. The Board may want to include in an approval that swapping in a fuel cell generator to replace the proposed diesel generator is allowed as long as the noise standard will continue to be met.

P. Storage of Materials

No exterior storage of materials is proposed.

Sec. 19-8-12, Tower and Antenna Performance Standards

Under Sec. 19-3-2 (C), the Code Enforcement Officer may issue a building permit to install a commercial wireless antenna on an alternative tower structure. (A Superior Court decision has deemed the water tower an alternative tower structure.) The Code Enforcement Officer has referred this application to the Planning Board because he has determined that concealment of the antennas is not complete.

No installation of a commercial wireless telecommunication antenna on an alternative tower structure shall occur until after the issuance of a Building Permit by the Code Enforcement Officer in accordance with Sec. 19-3-3, except that the Code Enforcement Officer may refer the antenna installation application to the Planning Board for review under Sec. 19-9, Site Plan Review and Sec. 19-8-12, Tower and Antenna Performance Standards, if the antenna concealment is not complete. (Effective April 15, 2000)

The applicant is proposing to install antennas on an "alternative tower structure," the Portland Water District Water tower located on Avon Rd. The Zoning Ordinance provides the following definition:

Alternative Tower Structure: Mounting structures, such as, but not limited to, clock towers, bell steeples, utility and light poles, and water towers, that conceal the presence of antennas or towers and which are used primarily for purposes other than to support an antenna. (Effective April 15, 2000)

Because the definition includes "conceals the presence of antennas or towers," the Planning Board should consider making a finding that the application conceals the antennas.

Below is a summary of the application's possible compliance with the Performance Standards.

a. Colocation

The applicant has added a note (#6) to plan C-1 that the applicant will not interfere with colocation opportunities of other providers, in accordance with FCC regulations.

b. Color

The applicant has proposed to install fiberglass shrouds and cabling to match the color of the water tower, which will be painted by the owner Portland Water District.

c. Buffers

Existing vegetation wraps around most of the site. At the access area, the applicant is proposing a landscaping plan to narrow the access drive, thereby reducing the visibility of the base.

d. Lighting

No lighting is proposed.

e. Structural

Sheet GN-1 and S-1 specifies structural requirements. The Planning Board may want to add a condition that references EIA (Electronics Industries Association) standards.

f. Security

The site includes an existing security fence with a locked gate. The existing fence may not be 8' in height. The Planning Board may want to decide if the existing fence is adequate or if an 8' high fence should be installed.

g. Advertising

No advertising is proposed.

h. Non-interference

The applicant holds a license from the Federal Communications Commission (FCC) that regulates overlapping and interfering frequencies.

i. Abandonment

The Planning Board may want to discuss a condition that requires removal of equipment after 12 months of cessation of operation.

j. Performance Guarantee

The Planning Board may want to require a performance guarantee to cover proposed improvements and removal costs if operations cease.

Discussion

At the close of last month's discussion, the Planning Board noted the following items for the next meeting:

- Preparation of an access management plan for the driveway
- Correct the SCADA antenna information
- Request to provide an RF coverage map
- A more comprehensive note on lead mitigation
- noise mitigation/testing
- Refine colocation note

Motion for the Board to Consider

The Planning Board typically attaches conditions to an approval motion related to revisions needed to the submitted plans in order to bring the proposed project into compliance with the standards of review.

Federal legislation known as the Spectrum Act *may* allow future colocation of antennas on the water tower without Planning Board review as long as the requirements imposed on existing equipment are met. For this reason, conditions of approval are suggested by staff for this application that also serve to document minimum requirements for future colocation. These conditions, for the most part, are already reflected in the plans submitted for the current application.

Findings of Fact

1. Verizon Wireless is proposing to install wireless antennas on the existing water tower located at 11 Avon Rd, and to construct a 10' x 16' concrete pad at the base of the tower to support equipment cabinets and an generator, which requires review under Sec. 19-9, Site Plan Regulations and Sec. 19-8-12, Tower and Antenna Performance Standards.

2. The location of the antennas and supporting equipment (are/are not) located within the developed portion of the site.
3. There (is/is not) adequate capacity in the existing road system to accommodate the small amount of traffic generated by the project. Access into the site, internal vehicular circulation and parking accommodations (are/are not) safe and convenient, [with access management improvements].
4. A system of pedestrian ways is not appropriate for the proposed use and therefore is not provided.
5. Adequate provision for stormwater (has/has not) been provided by minimizing the increase in impervious surface and preserving the surrounding vegetation to retain stormwater on the site.
6. Erosion control on the site (is/is not) adequate by minimizing disturbed soils, and complying with Maine's Erosion and Sedimentation Control Law when soils are disturbed.
7. The proposed project does not require a water supply.
8. The proposed project does not require sanitary waste disposal.
9. The project (has/has not) been provided with adequate electrical and telecommunication service.
10. The project includes provisions to (prevent/allow) discharge of materials harmful to human health or the environment. The owner Portland Water District has an agreement with the Maine Department of Environmental Protection for remediation of lead on the site.
11. The project (will/will not) general solid, hazardous or special wastes.
12. The project is not located in the Shoreland Performance Overlay District.
13. The applicant (has/has not) demonstrated the financial and technical capability to complete the project.
14. The project (will/will not) provide adequate safety lighting but not excessive lighting.

15. The project (does/does not) comply with the noise standard. The operation of a generator at night during a power outage (is/is not) an emergency and not a continuous, regular or frequent or intermittent sound regulated by the Site Plan Review noise standard.
16. No outside storage of materials is proposed.
17. The use of shrouds and color coordinated cabling (conceals/does not conceal) the antennas. It is necessary to paint the water tower in order for color coordinated equipment to be concealed.
18. The applicant (has/has not) demonstrated, by adding note #5 to plan C-1, that it will obstruct co-location by other providers.
19. The proposed antennas (will/will not) blend into the surrounding environment through the use of color and camouflaging architectural treatment.
20. The existing vegetation and proposed plantings (will/will not) provide a buffer and minimize visual impact.
21. No lighting is proposed.
22. The new antennas and ground supporting pad and equipment (are/are not) designed in conformance with structural standards.
23. The facility is surrounded by an existing fence, which is less than 8' in height but in existence prior to this application, that (provides/does not provide) adequate security.
24. No advertising is proposed on the site.
25. Based on the license issued by the Federal Communications Commission (FCC), the equipment (will/will not) interfere with existing telecommunication within the service area.
26. The applicant (has/has not) agreed to remove equipment after no more than 12 months of cessation of use.
26. The applicant (shall/shall not) be required to post a performance guarantee for the proposed improvements on the site.

27. The Planning Board conducted a site walk of the site located at 11 Avon Rd on Saturday, February 27, 2016 beginning at 7:30 am.
28. The application substantially complies with Sec. 19-9, Site Plan Regulations and Sec. 19-8-12, Tower and Antenna Performance Standards.

THEREFORE BE IT ORDERED that, based on the plans and materials submitted and the facts presented, the application of Verizon Wireless is requesting Site Plan Review to install wireless antennas on the existing water tower located at 11 Avon Rd, and to construct a 10' x 16' concrete pad at the base of the tower to support equipment cabinets and a generator be approved, subject to the following conditions:

1. That the plans be revised to label the height of the existing SCADA antennas as 8' high based on information provided by the Portland Water District;
2. That the tower be painted and that all lead remediation be completed to the satisfaction of the DEP as described in their letter dated January 7, 2015 to Roger Paridis at the Portland Water District prior to installation of any antennas or supporting equipment or cabling;
3. That the antennas and supporting equipment, including but not limited to any generator, not produce any noise that cumulatively exceeds 45 dbh between 10 pm and 7 am nor 55 dbh between 7 am and 10 pm of noise at the property line for the site;
4. That the antennas and cabling be concealed.
5. That the base of the tower including any supporting equipment, structure or cabinetry be enclosed within a minimum height 8' fence with locking gate and that supporting equipment be further concealed with a wood stockade fence of a height of 8' or lesser height if cabinetry is less than 8' high;
6. That a note be added to the plans that the installation shall be done in accordance with the current standards of the Electronics Industries Association (EIA) *Structural Standards for Steel Antenna Towers and Antenna Supporting Structures*;
7. That a performance guarantee in an amount to cover the proposed improvements to the site [and the cost of removal of the equipment after 12 months of cessation of use];

8. That there be no issuance of a building permit or alteration of the site until the plans have been revised to satisfy the above conditions and submitted to the town planner.