



Environmental, Planning, and Engineering Consultants

34 South Broadway
Suite 401
White Plains, NY 10601
tel: 914 949-7336
fax: 914 949-7559
www.akrf.com

January 2, 2018

Mr. William Rice, Chairman
and Members of the Zoning Board of Appeals
Village of Nelsonville
258 Main Street
Nelsonville, NY 10516

Re: Homeland Towers, LLC Application – 15 Rockledge Road

Dear Mr. Rice and Members of the Zoning Board of Appeals:

AKRF, Inc. was retained by the Village of Nelsonville to review the Visual Impact Assessment, and related materials, prepared by Homeland Towers, LLC in relation to its application for a telecommunication tower at 15 Rockledge Road.

AKRF has reviewed the following principal documents:

- Visual Resource Assessment prepared by Saratoga Associates, dated 6/2/2017;
- Report of the Balloon Test prepared by Saratoga Associates, dated 11/15/2017.

AKRF has also been provided with the following supplementary documents:

- State Environmental Quality Review Act (SEQRA) Environmental Assessment Form (EAF), dated 8/30/2017 (including correspondence from the United States Fish & Wildlife Service dated 8/3/2017);
- Section 106 Notification e-mail, from Philip Perazio, NYS Office of Parks, Recreation and Historic Preservation (OPRHP), dated 10/2/2017;
- Letter of Robert J. Atzl, CBRE, dated 10/18/2017;
- Letter of John Bonafide, NYS Office of Parks, Recreation and Historic Preservation (OPRHP), dated 11/22/2017;
- Statement in Opposition to Homeland Towers, LLC Application presented by the Philipstown Cell Solutions Group, dated 11/28/2017;
- Letter of Laura Mancuso, CBRE, dated 12/18/2017

My comments below are presented in the context of the New York State Department of Environmental Conservation (NYSDEC) Program Policy DEP-00-2, "Assessing and Mitigating Visual Impacts," and the Nationwide Programmatic Agreement between the Federal Communications Commission and the National Conference of State Historic Preservation Officers and the Advisory Council on Historic Preservation, dated September 2004 (FC 04-222).

My comments are also provided with the awareness of the site's location within the Hudson Highlands Scenic Areas of Statewide Significance (SASS) and adjacent to the State/National Register (S/NR) of Historic Places-eligible Cold Spring Rural Cemetery and S/NR-listed Cold Spring Rural Cemetery Gatehouse.

Since I was not part of the initial review of the application and have no direct knowledge as to the timing of, or involvement by, the Zoning Board of Appeals with the public notice or conduct of the balloon test, I cannot comment on the balloon test's consistency with the requirements of the Village's Zoning Code.

Proposed Project

Homeland Towers, LLC proposes to construct a 110-foot tall telecommunication tower (also referred to as a "stealth mono-pine") on an approximately 9.63-acre property accessed from Rockledge Road approximately 450 to 500 feet east of the edge of clearing within the Cold Spring Rural Cemetery and at an elevation of approximately 373 above mean sea level (AMSL).

Context of Visual Impact Assessment

The analysis of visual impacts is typically based upon the New York State Department of Environmental Conservation (NYSDEC) Program Policy DEP-00-2, "Assessing and Mitigating Visual Impacts." While this policy was developed for NYSDEC review of larger actions such as utility plants or transmission lines, the methodology and impact assessment criteria established by the policy are comprehensive and can be used by other State and local agencies to assess potential impacts.

According to DEP-00-2, certain variables can affect a viewer's perception of an object or project and the visibility of that object or project in the overall viewshed; these variables include the character of the landscape (existing vegetation, buildings, and topography), size perspective (reduction of apparent size of objects as distance increases), and atmospheric perspective.¹ Consequently, according to the NYSDEC guidance, a "visual impact" would occur "when the mitigating² effects of perspective [such as vegetation, distance, and atmospheric perspective or other designed mitigation] do not reduce the visibility of a project to insignificant levels. Beauty plays no role in this concept" (DEP-00-2, p. 10). Further, "[a] visual impact may also be considered in the context of contrast." Thus, objects that may be visible but are of a similar color or reflectance to background forms, would not constitute a visual impact. NYSDEC provides further definition of an "aesthetic impact," which occurs when "there is a detrimental effect on the perceived beauty of a place or structure. Mere visibility, even startling visibility of a project proposal, should not be the threshold for decision making. Instead a project, by virtue of its visibility, must clearly interfere with or reduce the public's enjoyment and/or appreciation in the appearance of an inventoried resource" (DEP-00-2, p. 9).

Therefore, while the project may be visible from certain vantage points, visibility alone is not a threshold of significance. A determination of significance depends on several factors: presence of designated historic or scenic resources within the viewshed of the project; distance between the viewer and the project; general characteristics of the surrounding landscape; and the extent to which the visibility of the project interferes with the public's enjoyment or appreciation of the resource. A significant adverse "visual impact" would only occur when the effects of design, distance, and intervening topography and vegetation do not minimize the visibility of an object to the maximum extent practicable. A "significant aesthetic impact" would only occur when the visibility causes a diminishment of the public's enjoyment

¹ DEP-00-2 describes atmospheric perspective as the "reduction in the intensity of colors and the contrast between light and dark as the distance of objects from the observer increases." This phenomenon is a product of the natural particles within the atmosphere that scatter light and minimize the significance of the project in the overall viewshed as one moves further away from the project.

² DEP-00-2 uses the term "mitigating" or "mitigation" to refer to design parameters that avoid or reduce potential visibility of a project. This should not be confused with the use of the term "mitigation" with respect to mitigation of significant adverse environmental impacts as required by SEQRA.

and appreciation of an inventoried resource (e.g., a cooling tower plume blocks a view from a State Park overlook thereby blocking the view of the panorama).

The methodologies used to determine where a visual impact or aesthetic impact could occur are varied and depend on the context and scale of the proposed project. Typically, visual assessments are conducted through use of existing conditions photography, preparation of topographic cross-sections (or “profiles”), development of three-dimensional viewshed analyses, and/or development of photo-simulations. Each of these methodologies need not be applied to every project, however.

Similarly, the study area for analysis would vary by the context and scale of the proposed project. While DEP-00-2 identifies a “safe” study area of a five (5) mile radius for “large” projects, no recommendation is provided for “small” projects. In my professional experience assessing potential visual impacts of telecommunication towers of up to 150 feet in height, I have determined that most visibility of such towers is within ½ to one (1) mile, with very limited visibility beyond that due to intervening topography, vegetation, and structures. The Nationwide Programmatic Agreement between the Federal Communications Commission and the State Historic Preservation Officers cites a study area (or “Area of Potential Effect”) for assessing visual effects of ½ mile for towers of 200 feet or less.

Review of the Visual Resource Assessment

The Visual Resource Assessment (VRA) prepared by Saratoga Associates (dated 6/2/2017) describes general landscape characteristics within a two-mile radius study area as well as a more detailed assessment within a ½-mile study area. The VRA accurately describes the general topography within the two-mile study area as “characterized by steep rolling hills” leading to the shoreline of the Hudson River. Also, according to the VRA, within the two-mile study area “[m]ature tree cover generally ranges from 50 to 75 feet in height.” Land uses within the two-mile study area are accurately described, including the presence of both the Village of Nelsonville and Village of Cold Spring, and the Hudson Highlands State Park. The VRA also notes the project’s location within the Hudson Highlands Scenic Area of Statewide Significance.

The VRA includes a “bare earth” and “land cover” viewshed analysis of both the two-mile and ½-mile study areas. The bare earth analysis demonstrates potential visibility within the study area if there were no intervening vegetation or structures. The land cover analysis conservatively assumed vegetation at 50 feet in height and structures at 25 feet in height. Within one mile of the proposed project, the height of individual buildings was modeled.

While the VRA does not cite NYSDEC’s DEP-00-2 as a reference, the viewshed analysis and visual impact analysis were completed consistent with principles outlined in that document.

The VRA concludes that “[t]he mountainous landscape combined with dense woodland vegetation screens views of the proposed Project from most vantage points,” including from eleven (11) sites listed on the S/NR of Historic Places. The VRA notes potential visibility of the project from public roads but that “[d]ense vegetation and intervening topography substantially limit Project views from these travel corridors to isolated and brief glimpses.” The VRA recognizes that the project may be visible from the Washburn (white) trail located approximately ¾-mile north within the Hudson Highlands State Park, but that “trail views are more likely focused on the dramatic landscape of the surrounding Hudson Highlands” and views of the project “...will likely be considered incidental and within the context of existing development in the Villages of Cold Spring and Nelsonville.”

With respect to the presence of the project within the Hudson Highlands Scenic Area of Statewide Significance, the VRA concludes that “[t]he relatively minor addition of a low profile and slender stealth monopine telecommunications tower is unlikely to create a point of visual distinction that would be considered detrimental to the scenic quality of the regional landscape.”

The VRA also concludes that views of the project will be possible from the Cold Spring Rural Cemetery Gatehouse (S/NR) and from within the Cold Spring Rural Cemetery (which at the time the VRA was prepared was not considered listed or eligible for listing on the S/NR, but which was determined eligible

by OPRHP as noted in the 11/22/2017 letter from John Bonafide). The VRA determines that visibility of the project from the Gatehouse would “have No Adverse Effect on the characteristics that make the Cold Spring Cemetery Gatehouse eligible for listing on the National Register of Historic Places,” a determination to which the OPRHP offers its concurrence by e-mail dated 10/2/2017. (My interpretation of the letter from John Bonafide of 11/22/2017 is that OPRHP does not intend to “reopen the review process” or reconsider its determination of No Adverse Effect. The letter appears to only request additional documentation of any alternatives analysis.)

A balloon test was conducted on or about 11/4/2017 with the report submitted on or about 11/15/2017. A total of ten (10) photographs are provided documenting the location of the balloon and whether it was visible above or below the treeline or background ridge. I compared these studies against the photo-simulations presented in the Visual Resource Assessment and find that they generally concur with the detailed viewshed analysis and photo-simulations.

In my opinion, the VRA and balloon test were prepared according to standard methodologies and accurately describe the two-mile study area and more detailed ½-mile study area. While the VRA reaches conclusions as to impact to the majority of visual receptors that I believe can be supported by analysis, I feel that, in its current form, the VRA does not provide enough supporting evidence to document lack of visual impact or aesthetic impact to either the Hudson Highlands State Park or the Hudson River. In both instances, use of existing conditions photography to demonstrate prevalent views from both resources and the use of topographic cross-sections (or “profiles”) would enhance the overall assessment and likely bolster the conclusions drawn.

Finally, although only a minor point on nuance, I feel that the VRA mischaracterizes the lack of an adverse visual impact by using the definition of an “aesthetic impact” instead. In my professional opinion, the project would have a visual impact on the Cold Spring Rural Cemetery and Cold Spring Rural Cemetery Gatehouse, as defined by DEP-00-2, but agree that it would not have a significant aesthetic impact on either resource. The visual impact is likely not avoidable given the close distance between the project and the Cemetery and Gatehouse and the visibility of the pole above treeline and the ridgeline. In my opinion, mitigation of the visual impact can be better achieved through alternative design measures such as internal mounting of antenna panels or use of a “flagpole” installation (although it would have to be without lighting to avoid impacts to protected bat species). Either design would be less noticeably different from other structures within the study area and would be more consistent from a character point of view. The proposed “stealth mono-pole,” in my opinion, has the unintended effect of drawing greater attention to the installation. In either case, I caution the Zoning Board of Appeals against the requirement of colors that might be considered to “match” background conditions. In my professional experience, a neutral gray color blends with a wider variety of background conditions, especially within a ridgeline or against the horizon. I believe that the project would not have an aesthetic impact on the Cemetery or Gatehouse as the underlying historic integrity of both resources, including the setting, would not be affected in such a way as to “clearly interfere with or reduce the public’s enjoyment and/or appreciation” of the Cemetery or Gatehouse. I believe that both resources can still be experienced and interpreted within an overall landscape consistent with the rural cemetery movement and the Hudson Highlands SASS, even if there are very few, if any, comparable modern visual intrusions, within the surrounding study area.

Consistency with the New York State Coastal Management Program

Similar to demonstrating compliance with the Federal Endangered Species Act and the National Historic Preservation Act through a concurrence consultation with Federal and/or State agencies, the applicant would need to demonstrate the project’s consistency with the New York State Coastal Management Program (CMP) through consultation with the New York State Department of State (NYSDOS).

As part of its compliance with the Federal Coastal Zone Management Act, NYSDOS prepared a Coastal Management Program, which was filed with the Department of Commerce in 1982 and updated as recently as 2017. While the Village of Nelsonville and the project site are located within the State’s Coastal Zone, the Village of Nelsonville does not have an approved Local Waterfront Revitalization

Program (LWRP); thus the responsibility for determining consistency of Federal, State, and local actions against the State's coastal policies rests with NYSDOS. Policy 24 of the State's Coastal Management Program affirms the State's intent to "Prevent impairment of scenic resources of statewide significance."

In 1993, NYSDOS adopted a document designating six (6) Scenic Areas of Statewide Significance (SASS) along the Hudson River, including the Hudson Highlands, as partial implementation of Policy 24 of the CMP. The project site is located within the Garrison Four Corners (HH-20) subunit. The Cold Spring Cemetery Gatehouse is identified as one of the many historic elements that, together, comprise the "cultural character" of HH-20 (page 341). The SASS report notes that "[t]he subunit is generally free of discordant features" (page 346).

The SASS designation report cites several siting and facility-related guidelines that would achieve Policy 24 (see pages 279-281). Two relevant guidelines from the SASS designation report are provided below:

"Siting structures and other development such as highways, power lines, and signs, back from shorelines or in other inconspicuous locations to maintain the attractive quality of the shoreline and to retain views to and from the shore"

While the project site is located approximately one (1) mile inland from the Hudson River, it is located along a local height of land that makes its visibility more pronounced from immediate surrounding areas, including a designated historic resource. The guidance provided by the SASS document notes "[t]he siting of residential development, structures and other discordant features such as large buildings, highways, power lines and signs on ridgelines, hilltops and exposed hillsides and in the direct viewshed of the Hudson River would introduce discordant elements into the landscape and impair the scenic quality of the SASS" (page 279).

"Using appropriate scales, forms and materials to ensure that buildings and other structures are compatible with and add interest to the landscape"

Here, the SASS designation report notes "[f]ailure to use appropriate scale, form, and materials to ensure that new development is compatible with the surrounding landscape and does not distract from the landscape composition of a designated area would impair the scenic quality of the SASS. In addition, failure to mitigate the effects associated with development such as lighting, horizontal or vertical interruption of form, incongruous colors, or plume discharge would impair the quality of the landscape and the scenic quality of the SASS" (page 281).

Nothing in the VRA or other documents that I have reviewed provides the applicant's conclusions on consistency with the State CMP, and with Policy 24 specifically. Concurrence from NYSDOS must be obtained prior to the FCC being able to grant a license or permit for the facility.

I hope that my review provides useful guidance to you as you review this application. I will be available to you at your January 4, 2018 meeting to answer any questions you may have.

Sincerely,

AKRF, INC.

A handwritten signature in black ink, appearing to read "Graham Trelstad". The signature is stylized and written over a faint, larger version of the same signature.

Graham L. Trelstad, AICP
Senior Vice President, Director of Planning