



STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

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VIA ELECTRONIC MAIL

November 13, 2023

Raymond Vergati
Homeland Towers, LLC
9 Harmony Street, 2nd Floor
Danbury, CT 06810
rv@homelandtowers.us

RE: **DOCKET NO. 509** – Homeland Towers, LLC Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a telecommunications facility located at 1837 Ponus Ridge Road, New Canaan, Connecticut. **Development and Management Plan.**

Dear Raymond Vergati:

At a public meeting of the Connecticut Siting Council (Council) held on November 9, 2023, the Council considered and approved the Development and Management (D&M) Plan submitted for this facility on September 18, 2023, with the recommendations to utilize mechanical removal if bedrock is encountered and install a 1,000-gallon propane tank for emergency backup generation and with following conditions:

1. Conduct tree clearing and grubbing operations in accordance with Site Plan N-2, note 5b; and
2. Use of clean imported fill and broken stone to protect water quality.

This approval applies only to the D&M Plan submitted on September 18, 2023, and additional information dated October 5, 2023. Requests for any changes to the D&M Plan shall be approved by Council staff in accordance with Regulations of Connecticut State Agencies Section (RCSA) §16-50j-77(b).

Furthermore, the Certificate Holder is responsible for compliance with the reporting requirements under RCSA §16-50j-77, including:

1. Quarterly construction progress reports;
2. Notification of completion of construction and commencement of operation **along with a representative photograph of the facility**; and
3. Final report.

Please be advised that deviations from the approved D&M Plan and non-compliance with the D&M Plan reporting requirements are enforceable under Connecticut General Statutes §16-50u.

Enclosed is a copy of the staff report for this D&M Plan, dated November 9, 2023.

Thank you for your attention and cooperation.

Sincerely,

A handwritten signature in dark ink, appearing to read "Melanie A. Bachman". The signature is fluid and cursive, with a long horizontal stroke at the end.

Melanie A. Bachman
Executive Director

MAB/RDM/laf

Enclosure: Staff Report, dated November 9, 2023

c: Service List, dated September 23, 2022



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Docket No. 509
Homeland Towers, LLC
1837 Ponus Ridge Road, New Canaan
Development and Management Plan

Staff Report
November 9, 2023

On December 9, 2022, the Connecticut Siting Council (Council) issued a Certificate of Environmental Compatibility and Public Need to Homeland Towers, LLC (HT) for the construction, maintenance, and operation of a 110-foot telecommunications facility at 1837 Ponus Ridge Road in New Canaan, Connecticut. As required in the Council's Decision and Order (D&O), HT submitted a Development and Management (D&M) Plan to the Council on September 18, 2023.

Pursuant to Regulations of Connecticut State Agencies (RCSA) §16-50j-75(e), copies of the D&M Plan were also submitted to the service list for comment. On October 12, 2023, Mark Buschmann, Trustee (Party and CEPA Intervenor) and Jamie Buschmann, Trustee (Party) submitted comments on the D&M Plan related to the geotechnical report, site phasing, stormwater control, and site runoff.

On September 29, 2023, the Council issued interrogatories to HT. On October 5, 2023, HT submitted responses to the Council's interrogatories.

The facility will be constructed at a site located on a 5.1-acre residentially-zoned host parcel developed with a residence, accessed from a driveway extending from Ponus Ridge Road. The tower will be located in the forested, western portion of the parcel near the top of a hill. Residentially developed properties are located to the north and east of the host parcel. An undeveloped lot is located to the northwest. Ponus Ridge Road abuts the parcel to the south and west, across which are watershed lands associated with Laurel Reservoir.

Condition No. 1 of the D&O requires the following:

“The tower shall be constructed as a stealth “tree” monopole (monopine) at a height of 110 feet above ground level to provide the proposed wireless services, sufficient to accommodate the antennas of AT&T, Cellco, the Town of New Canaan and other entities, both public and private. The height of the “tree branches” at the top of the monopole shall not exceed 115 feet above ground level and the density and configuration of the “tree branches” shall conceal the antennas. Panel and whip antennas shall be treated to match the monopine.”

In compliance with Condition No. 1 of the D&O, the D&M Plan includes plans and specifications for construction of a 110-foot monopine sufficient to accommodate the antennas of New Cingular Wireless PCS, LLC (AT&T), Cellco Partnership d/b/a Verizon Wireless (Cellco), the Town of New Canaan (Town) and other entities. The top of the faux tree branches will reach a maximum height of 115 feet. Antennas and antenna mounts will be painted brown to match the color of the monopine. Panel antennas will have wraps/socks to match the faux branch/needle pattern. Whip antennas extending above the tower will be painted “Horizon Blue”.

The total faux branch count for the facility is 214 with an average of 3.06 branches per vertical foot.

Condition No. 2 of the D&O requires the following information to be included in the D&M Plan:

- a) **A certified letter from a wireless telecommunications carrier with a firm commitment to install associated wireless equipment at the facility upon completion of construction;**

The D&M Plan contains letters from AT&T, dated August 28, 2023, and from Cellco, dated September 15, 2023, certifying that AT&T and Cellco are committed to collocating on the facility once HT completes construction.

- b) **Final site plan(s) for development of the facility that employ the governing standard in the State of Connecticut for tower design in accordance with the currently adopted International Building Code and include specifications for the tower, tower foundation, antennas and equipment compound including, but not limited to, wood shadowbox fence design, ground equipment, access road, utility installation and emergency backup power;**

HT will construct a 110-foot monopine, with faux branches extending to 115 feet, designed in accordance with the EIA/TIA Structural Standards for Steel Antenna Towers and Antenna Supporting Structures-Revision H. It is designed to support four levels of platform-mounted panel antennas and municipal public safety communications equipment.

Based on a geotechnical investigation, the tower will be supported by a mat foundation installed to a minimum depth of 6 feet. A soil boring determined bedrock occurs from 12 feet to 22 feet at the tower location. The geotechnical investigation recommends mechanical removal of bedrock to achieve these design grades.

Chipping will be used to remove bedrock to create suitable grades. Blasting is not anticipated, but if required, HT would conduct blasting in accordance with state and municipal regulations. HT will retain an engineering firm to oversee excavation and foundation installation.

AT&T will install 6 panel antennas and 9 remote radio units on t-arm mounts at a centerline height of 106 feet above ground level (agl), Cellco will install antennas at a centerline height of 95-feet agl and the Town will install two 24-inch diameter dish antennas and one 12-foot whip antenna at the top of the tower, and one 12-foot whip antenna at a centerline height of 66 feet agl on the tower.

The 86-foot and 76-foot levels of the tower will be available for future collocation by other carriers.

The tower will be located within the western portion of an irregularly shaped 3,515 square foot gravel equipment compound within a 5,950 square-foot lease area. The compound will be enclosed by an 8-foot high wood shadow box fence with a natural finish. A 12-foot swing gate will provide access to the compound from an adjacent gravel compound parking area. Radio-frequency access restriction and caution signage will be installed at the site in compliance with FCC guidance.

AT&T will install a walk-in equipment cabinet on an 8.6-foot by 10.5-foot concrete pad located within the compound. The cabinet will reach a maximum height of approximately 11 feet above grade. It will have an underground connection to a meter board, protected by bollards, adjacent to the compound fence.

Ground equipment installations for Cellco and the Town have not been specified at this time. Three 12-foot by 20-foot ground equipment lease areas are available within the compound for use by Cellco, the Town and one future tenant.

AT&T will install an emergency backup 15-kilowatt (kW) propane-fueled generator adjacent to the walk-in cabinet. AT&T will install a 500-gallon propane tank on a 4-foot by 6-foot concrete pad in the northeast side of the compound, in an area designated for four separate 500-gallon propane tanks to serve facility tenants.

Access to the facility will be from an approximate 12-foot wide, 460-foot long drive extending north from the existing paved driveway serving the residence on the host parcel. The access drive ascends the hillside attaining a maximum slope of 19.4 percent, then gradually curves east at a more moderate slope of 8.9 percent to the compound parking area. The lower 250 feet of the access drive will be paved due to the steep grade and the upper 210-feet will consist of gravel where the grade moderates.

A timber guardrail will be installed along the upper half of the access drive.

Underground utilities (electric/telecommunications) will be installed from the compound along the downslope side of the access drive to an existing overhead utility pole located on Ponus Ridge Road.

c) Details of the monopine structure, including, but not limited to, manufacturer, branch pattern, and photographs of other monopine installations that used the selected design;

The tower is designed by Cell Trees, Inc. and will resemble a pine tree. The tower will have a faux branch pattern of three branches per foot beginning at 40 feet agl extending to the top. A tapered faux cone will extend above the monopole for approximately 5 feet for a more natural appearance. Faux branch lengths range from 12 feet long at the 40-foot level tapering to 4 feet long at the 110-foot level.

HT included a photo of a 90-foot monopine, designed by Valmont Inc., that was approved by the Council in Docket 487 at 183 Soundview Lane in New Canaan. The Docket 487 monopine featured a branch pattern with 14-foot long branches at 32 feet above grade tapering to 8 feet at the top.

Antennas and antenna mounts will be painted brown to match the color of the monopine. Panel antennas will have wraps/socks to match the faux branch/needle pattern.

d) Post-construction stormwater control plan including, but not limited to, results of the geotechnical investigation, stormwater/drainage report, design details for a 25-year storm, and incorporation of a rain garden if geotechnical conditions allow;

The site drains generally eastward through existing woodland to Ponus Ridge Road. Slopes range from approximately 5 to 50 percent throughout the host parcel with elevations varying from 412 feet above mean sea level (amsl) in the northeast corner to 322 amsl in the northwest corner.

Site drainage was modeled for 2-, 5-, 10-, and 25-year storm events and included soil survey information. The design of the stormwater management system will result in post development peak discharges that are less than the pre-development peak discharges. Peak discharges will be reduced by 2.7 to 3.1 percent depending on the duration of the storm event.

A riprap lined swale with 7 stone check dams will be installed adjacent to the access road to control stormwater runoff. As runoff proceeds downhill, the swale will discharge at four locations, three of which feature riprap lined stilling basins which will slow down the water velocity before it is discharged as overland flow.

The gravel equipment compound will use 14-inch crushed stone with 40% voids to promote storage and infiltration of runoff.

A rain garden could not be incorporated into the stormwater management design due to the presence of shallow bedrock.

- e) **Construction plans for site clearing, grading, water drainage and stormwater control, site stabilization measures during construction; and erosion and sedimentation (E&S) controls consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended, with monitoring of the E&S controls by a civil engineer independent of the contractor. Selected E&S control measures shall account for site-specific geotechnical conditions;**

Limits of construction disturbance comprise an approximate 0.87-acre area. E&S controls include filter sox and geotextile silt fencing.

The grading plan includes 5 to 10-foot cuts on steep slopes to develop the access road and compound. Excavated steep slopes (greater than 3:1) will be stabilized using erosion control blankets and filter sox installed at 15-foot intervals. The blankets will be seeded to promote a stable vegetated slope. The geotechnical investigation included a slope stability analysis which determined the design slopes to be stable.

Soils at the site are highly erodible. E&S controls will be inspected and repaired daily by the contractor. If E&S controls are compromised and sediment is released into the 100-foot wetland buffer or the Laurel Reservoir, the contractor will repair the sediment barrier and sediment removal/remedial actions will be established upon consultation with HT's environmental monitor.

A civil engineer independent of the contractor will monitor the E&S controls on a monthly basis.

Construction of the facility will require approximately 3,550 cubic yards of cut and approximately 1,500 cubic yards of imported fill. A temporary stockpile for organics will be located adjacent to the compound construction area for re-use on site, if suitable.

E&S controls will comply with the *2002 Connecticut Guidelines for Soil Erosion and Sedimentation Control*. Disturbed areas will be final seeded once work is complete.

- f) **Use of 100 percent natural fiber erosion control blankets to reduce the possibility for wildlife entanglement;**

The site plans specify the use of 100 percent natural fiber erosion control blankets.

- g) **Site construction phasing plan that incorporates the results of the geotechnical investigation and accounts for species mitigation measures;**

Site Plan EC-1 includes a site construction phasing plan. Main elements of the phasing plan include site clearing and grubbing to install E&S controls, completion of clearing/grubbing and seeding of disturbed areas that will not be worked on within 30 days, excavation and rough grading of the access drive and stormwater management system, construction of swales in progression towards the compound, excavation and grading of the compound and tower area, finalizing the access drive and swales, paving the lower access drive, completion of the tower and compound, installation of landscaping and final seeding of disturbed areas.

Site clearing will be in accordance with the limits recommended by DEEP.

In accordance with the Geotechnical Investigation that identified erodible and moisture sensitive soils at the site, grubbing will commence once ground conditions allow for disturbed soil stabilization methods to be deployed, as recommended on Sheet N-2, Note 5b.

h) Use of clean fill and broken stone to protect water quality;

Approximately 1,500 cubic yards of fill will be imported to the site. An additional 250 cubic yards of clean broken stone will be imported for the gravel access drive.

i) Landscaping Plan, including but not limited, evergreen plantings in the compound area that are tall enough to conceal the equipment cabinets, and native vegetation on disturbed slopes if geotechnical conditions allow;

A Landscape Plan has been developed that includes, but is not limited to, the installation of 14 eastern hemlocks along the eastern corner of the compound. The hemlocks will be 8 to 10 feet tall at planting and will be installed 10 feet off center to allow for branch growth.

The steep slope along the access road will be planted with 30 native trees and 90 shrubs.

j) Wetland Protection Plan with monitoring by a wetland scientist;

A Wetland Protection Plan has been developed that includes, but is not limited to, provisions for E&S controls, contractor education, herbicide and pesticide restrictions, petroleum storage and handling measures, elimination of ruts and depressions, inspections by an environmental monitor, and reporting.

k) Invasive Species Control Plan;

An Invasive Species Control Plan has been developed that includes, but is not limited to, measures to reduce importation of invasives into the site and the monitoring of restored areas of the site for a period of two years. Invasives that colonize 10 percent of the restored areas will be removed. Invasive species monitoring reports will be prepared and submitted to the Council.

l) Natural Diversity Database Species Protection Plan, including but not limited to, provisions for contractor education, site inspections, isolation barriers and tree clearing between November 1 and March 30;

A Natural Diversity Database Species Protection Plan has been developed to reduce construction related impacts to three state-listed species that were recorded in the site area: little brown bat, red bat, and eastern box turtle. The plan, developed in accordance with DEEP's recommendations, includes contractor education, site inspections, isolation barriers, and tree removal from October 2 to March 31.

m) Petroleum Materials Storage and Spill Prevention Plan including, but not limited to, servicing construction machinery outside of the Laurel Reservoir public water supply watershed, spill cleanup procedures, and detailed contact information for the spill response contractor;

Site Plan N-2 includes a Petroleum Materials Storage and Spill Plan which specifies refueling of vehicles at a minimum of 100 feet from wetlands and the Laurel Reservoir, servicing construction

machinery outside of the public supply watershed, absorbent pad protection during refueling, on-site spill kits, and spill response, cleanup, and reporting procedures to state agencies and Aquarion Water Company.

n) Acid rock drainage mitigation plan, if applicable, based on the results of the geotechnical investigation; and

All excavated rock will be disposed of off-site.

o) Construction schedule including hours and days of the week for construction activities;

Construction hours will be from 8:00 a.m. to 5:00 p.m., Monday through Friday. Site construction will occur over a 12-week period.

Condition No. 4 of the D&O requires the following:

“Prior to the commencement of operation, the Certificate Holder shall provide the Council with a rigorous cumulative far-field radio frequency analysis for the facility that accounts for all entities on the tower, a 6-foot tall person at ground level and the actual antenna pattern for antennas on the facility with a cumulative percent maximum permissible exposure at or below 100 percent, consistent with FCC, Office of Engineering and Technology, Bulletin No. 65, August 1997....”

In accordance with Condition No. 4, HT shall provide a final calculated cumulative far-field worst-case modeling of radio frequency power density for all entities on the tower prior to commencement of operation.

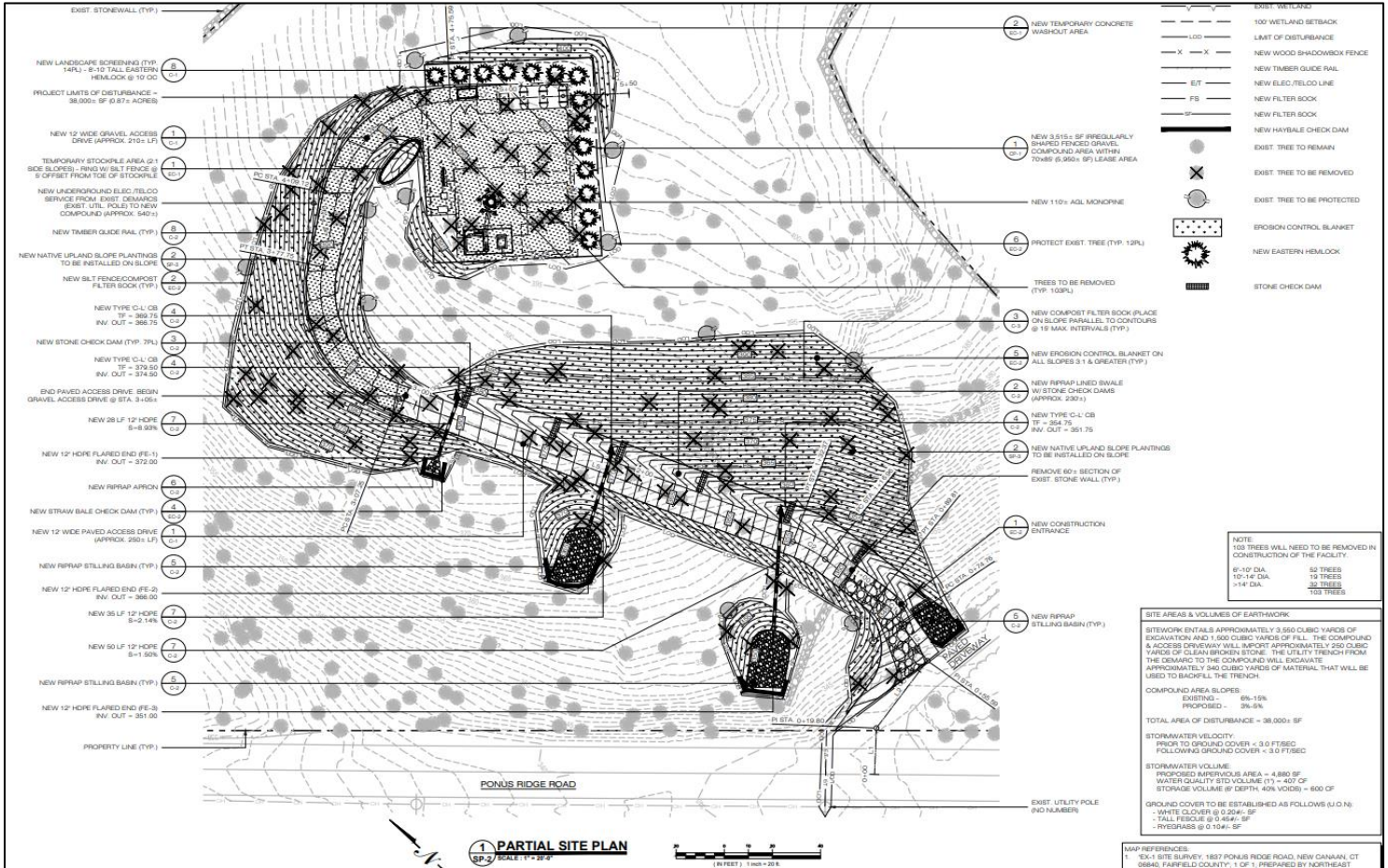
Conclusion

The D&M Plan is consistent with the Council’s D&O for Docket No. 509.

If approved, staff recommends the following conditions:

1. Conduct tree clearing and grubbing operations in accordance with Site Plan N-2, note 5b; and
2. Use of clean imported fill and broken stone to protect water quality.

Site Plan



Tower Profile

