

CASEY & KELLER, INC.

LAND SURVEYORS + CIVIL ENGINEERS + PLANNERS

N.J. STATE BOARD OF PROFESSIONAL ENGINEERS & LAND SURVEYORS
CERTIFICATE OF AUTHORIZATION NO. 24GA27985400

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Memorandum: Technical Review #1

To: Township of Long Hill Zoning Board of Adjustment
Board Chairman and Members

From: Casey & Keller, Inc.
Richard Keller, PE, PP, CME
Board Engineering Consultant

Re: Application No. 20-06Z
T-Mobile Northeast LLC
Block 13908, Lot 15.01
Long Hill Road, Long Hill, Morris County
C&K Project #: 1190102-24 (20-06Z)

Date: January 11, 2021

Documents Reviewed:

As part of our engineering technical review, we have received and reviewed the following documents:

1. Site Plan entitled "Temporary Site NJCLT56 Preliminary and Final Major Site Plan Proposed Temporary Equipment and Tower at an Existing Transmission Tower" prepared by Maser Consulting P.A., dated June 4, 2020, consisting of 6 sheets;
2. Existing Conditions Plan prepared by Maser Consulting P.A., dated November 1, 2019;
3. Completed Township application for development including checklist, addendum/project narrative, and a Board of Adjustment Resolution (98-1 SZ) for a prior approval;

Brief Project Description:

The subject property is a 150' wide by 1425' +/- deep 5.00 acre parcel located in the C Conservation Zone. The southerly portion of the property, on which the proposed development is located, fronts on the north side of Long Hill Road, between Gillette Road to the west and Hickory Tavern Road to the east. The northerly limit of the parcel fronts on Hickory Tavern Road along with an unimproved portion of Long View Terrace.

The property which is owned by PSE&G / Service Corp contains overhead electric transmission wires and an associated 123-foot-high support tower located approximately midway between Long Hill Road and Hickory Tavern Road. T-Mobile has an existing and operating wireless communications facility on this electric transmission tower which must be temporarily decommissioned due to PSE&G's plan to replace the existing tower.

T-Mobile proposes to install a 100-foot-tall temporary ballast frame mounted tower on the Property for use during the PSE&G tower replacement. The existing PSE&G tower is expected to be removed at some point during the fall of 2021, and the construction of the new tower is expected to last between six months and one year. T-Mobile will move its antennas back onto the PSE&G transmission tower once construction of same is completed and will remove its temporary tower.

The review of this application is based on the submitted plans and supporting documents and visits to the project site.

1. Observations & Comments:

- 1.1. Based upon a review of the NJDEP Geo-Web GIS and the most recent FEMA mapping along with a site inspection, the subject property does not appear to contain or be in close proximity to any freshwater wetlands or flood hazard areas.
- 1.2. Since the proposed plan creates a net increase of less than 400 sq. ft. of impervious area, the application is NOT subject to the requirements of the Stormwater Management section of the Land Use Ordinance (Sec. 146.)

2. Technical Review

- 2.1. Site Plan Sheet Z-1 indicates that nearest dwelling to the northwest (566 Long Hill Road, Block 13908, Lot 15.02) will be 254' +/- from the center of the tower. However, based upon a review of hi-resolution aerial photography, the horizontal distance to the nearest dwelling on Lot 19.02 appears to be at or just under 200 feet. The applicant should indicate whether there are any State or Federal requirements regarding the minimum separation between the temporary tower and any adjoining dwellings or habitable structures and whether the proposed location is compliant.
- 2.2. The proposed location of the temporary tower will be accessed via an existing dirt and gravel access drive. The Site Plan (Sheet Z-1) indicates that the connection from the existing drive to the pad location will cut across slopes in excess of 50%. If the site access were extended along the existing drive for another 75 feet to the northeast, the pad location could be accessed along the 442 contour line with little or no disturbance of steep slopes. The Applicant should confirm the feasibility of redefining the site access accordingly.
- 2.3. Site Plan Sheet Z-1 indicates that the proposed tower will be serviced by "Proposed Temporary Electric/Telco Conduits on Sleepers from Existing Utility Pole." Graphically the plan indicates that the conduit will be run from the proposed tower location down to the road shoulder, run east along said shoulder, crossing the existing entry drive and ultimately connect to Utility Pole #UP28. Since the conduits will run along the ground surface, supported by sleepers, the Applicant should provide details of the driveway crossing. The Applicant may wish to consider connecting to Utility Pole #UP43. Provided that these surface laid conduits will not affect the nearby buried gas transmission pipe, this would obviate the need to cross the entry drive.

- 2.4. Partial Site Plan (Sheet Z-3) The applicant should provide testimony as to whether security fencing around the tower ballast frame is planned or will be required to ensure the safety of the public. If fencing is proposed, the Applicant should provide testimony as to the location, material and height. The Site Plans should be amended as required to be consistent with such testimony including construction details.
- 2.5. While the amount of land disturbance is not large enough to require a formal Soil Erosion & Sediment Control Plan certification from the Morris County Soil Conservation District, we recommend that the plan be amended to include soil erosion control measures to define the limit of disturbance, limit disturbance of steep slopes, minimize potential erosion and reduce the potential of construction vehicles depositing mud and debris along Long Hill Drive in the area of the dirt & gravel access drive.
- 2.6. It should be noted that the Site Plan contained on Sheet Z-1 is presented at a scale of 1" =100'. This scale results in a drawing that is too small to clearly delineate the proposed work however minimal in nature. Our review of this document was aided by the fact that digital copies were available in advance of the remote Board hearing so that we could enlarge the plan. Furthermore, the Partial Site Plan detail on Sheet Z-4 is presented at a scale of 1" =6'. This scale results in a drawing that does not allow for the Board to understand how this area relates to the street and access drive.

We request that any revisions to the Site Plan required by the Board be provided on a unified Site Plan at a Scale not larger than 1" = 30'.
- 2.7. If the Board were to act favorably upon the variance relief sought by the applicant, we would take no exception to the applicant providing the information requested as a condition of any approval.

Any revised plans or other documents should be accompanied by a cover letter responding individually to each of the comments presented in this review letter. The cover letter should also outline those changes to the plans that were requested as well as those not requested or readily apparent.



Aerial Site Photo with the approximate Temporary Tower location Shown (NearMap)



Google Street View of the Existing Site Entrance off Long Hill Road