

Dane County, Wisconsin
Supplemental Letter
New Monopole Tower

CityScape
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March 10, 2023

Dane County Zoning & Land Regulation Committee (ZLR)
c/o Dane County Planning & Development
210 Martin Luther King Jr. Blvd.
Madison, WI 53703

APPLICANT/PROVIDER: CelluSite LLC, Agent for Iron Mountain Towers LLC dba TowerKing and DISH Wireless LLC
SITE NAME: “McFarland”
ADDRESS: 3486 County Road MN, Town of Dunn, WI
LATITUDE: 43°-01’-01.0” N LONGITUDE: 089°-16’-15.4” W
STRUCTURE PROPOSED: 170-foot Monopole Tower (plus 4-foot lightning rod)

Dear ZLR Committee Members,

At your request, on behalf of Dane County (“County”), CityScape Consultants, Inc. (“CityScape”), in its capacity as telecommunications consultant for the County, is submitting to you our supplemental report regarding our evaluation of additional information requested by CityScape and submitted by the Applicant for a new 170-foot wireless telecommunications *monopole* tower and associated antenna elements and ground equipment compound at 3486 County Road MN in the Town of Dunn, to be operated by DISH for its personal wireless network.

This application for a new wireless communications facility is proposed to bring DISH mobile personal wireless service to an area in southeastern Dane County, specifically the Village of McFarland and outlying areas, and along a portion of Interstate Highway 90/39.

As indicated on the Applicant’s photosimulations, the tower would be highly visible from the recently constructed residential subdivision in the Village of Richmond, adjacent to the subject property which is in the Town of Dunn. The nearest residential building is approximately 255 feet from the site of the proposed monopole. The Applicant has not addressed this visual impact to the residential area despite CityScape’s recommendation to do so.

The local authority has certain rights in regard to height, location, type and appearance of a proposed wireless antenna supporting structure as long as the local ordinance and application requirements do not conflict with federal or state statutes. It is apparent to CityScape that there is sufficient evidence of need for a DISH wireless facility in this area; however, the compatibility of the facility with the existing environs must also be considered, and it the right of the County to evaluate the height of the proposed structure relative to the proximity to the existing residences.

This report is to supplement our application review report dated February 3, 2023.

In order for CityScape to make conclusive findings regarding the requested height of the proposed tower at the proposed site, CityScape asked that the Applicant provide additional propagation maps with alternative lower antenna heights of 140 feet and 120 feet above ground. The requested antenna height is 160 feet on a 170-foot monopole. The Applicant requested that CityScape treat the additional material as confidential, and on February 20, 2023, CityScape received the documents from the Applicant. This was followed up by questions from CityScape regarding the material.

Upon receipt and review of the additional propagation maps, CityScape has the following observations:

- The predicted coverage at 140 feet of antenna height as compared to 160 feet results in a small, almost imperceptible, amount of coverage loss. This antenna height would require a tower of a minimum of 145 feet, not including a lightning rod.
- The predicted coverage at the 120-foot antenna height as compared to 160 feet results in a noticeable and significant amount of coverage loss. This antenna height would require a tower of a minimum of 125 feet, not including a lightning rod.
- The Applicant included predicted subscriber loss percentages for 140 feet and 120 feet with 160 feet as the baseline. Due to the confidentiality agreement with the Applicant, CityScape cannot reveal these numbers; however, we ascertain that these percentage losses align fairly well with our observations of the propagation maps.

I certify that, to the best of my knowledge, all the information included herein is accurate at the time of this report. CityScape only works for public entities and has unbiased opinions. All recommendations are based on technical merits without prejudice per prevailing laws and codes.

Respectfully submitted,



B. Benjamin Evans
Senior Project Engineer
CityScape Consultants, Inc.
