T-Mobile Central LLC, a subsidiary of T-Mobile USA, Inc.

#### **AFFIDAVIT**

# T-Mobile Central LLC PROPOSED WIRELESS TELECOMMUNICATIONS FACILITY (3250 Eric Dr, White Lake, MI 48383) (White Lake Township, MI)

- 1. I, Heidi Zimmer, representing T-Mobile Central LLC, d/b/a T-Mobile, a Delaware limited liability company (hereinafter "T-Mobile"), whose address is 17187 North Laurel Park Drive, Suite 400, Livonia, MI 48152, being duly sworn, state the following:
- 2. I am a Site Development Manager engaged in the development and deployment of T-Mobile's metro Detroit area network and involved in Site Advocacy in the Great Lakes Area.
- 2. Attached to this Affidavit is a letter dated June \_\_\_\_\_\_, 2025 from Applicant, Vertical Bridge, to Mr. Sean O'Neil, White Lake Township Community Development Director. I adopt the letter and the facts pertaining to Co-Applicant, T-Mobile's, efforts to obtain permission to install or co-locate its equipment on the proposed Vertical Bridge antenna support structures pursuant to Section 4.51 of the White Lake Township Zoning Code.

T-Mobile Central LLC

Heidi Zimmer

Site Development Manager

June 18, 2025025

VIA HAND DELIVERY

Mr. Sean O'Neil Township Community Development Director 7525 Highland Rd White Lake, MI 48383

RE: Vertical Bridge Permit Application

New Wireless Communication Facility at 3250 Eric Dr, White Lake, MI 48383

T-Mobile Site ID: DE01277B

Dear Mr. O'Neil:

This letter is in support of a request by Vertical Bridge to construct a cell site for T-Mobile located at 3250 Eric Dr, White Lake Township and assess the feasibility of T-Mobile collocating its wireless communication equipment on the existing DTE transmission tower (DTE Tower #8762) ("Transmission Tower") approximately .5 miles to the east of the proposed Vertical Bridge site. Before delving into the specifics of the T-Mobile assessment, we would like to provide an overview of the distinct roles played by infrastructure providers, such as Vertical Bridge, and wireless carriers like T-Mobile in the site development process.

#### 1. Background

Vertical Bridge operates as a communications infrastructure provider that has proposed a new tower in this area at the specific request of T-Mobile. Infrastructure providers, such as Vertical Bridge, specialize in developing, constructing, leasing, and maintaining the physical components for wireless networks, including cellular towers. Infrastructure providers lay the physical groundwork that supports wireless communication networks. Wireless carriers, such as T-Mobile, lease space on this infrastructure to house their equipment and offer wireless services to end-users. Through strategic partnerships with wireless carriers, Vertical Bridge allows the opportunity for multiple carriers to collocate onto a single infrastructure and reduces the physical footprint of wireless facilities in the community. T-Mobile always seeks to construct new sites on existing infrastructure before proposing a facility on a new free-standing structure. Before allocating a search ring for a new site to an infrastructure provider like Vertical Bridge, T-Mobile conducts thorough research, ensuring all feasible collocation opportunities are explored and exhausted. While there are existing equipment locations on high voltage transmission towers, DTE transmission towers generally present significant challenges that make it extremely difficult for T-Mobile to install its initial system on the high voltage towers, perform repairs and upgrades and or modifications to their existing infrastructure. These challenges include access and maintenance issues, equipment and location limitations, future expansion limitations, and operational constraints.

Requiring T-Mobile to place a facility on a structure that does not meet its technical or operational needs materially inhibits T-Mobile's ability to build and improve its wireless network, contrary to federal law.

#### 1. White Lake Township Code ('WLTC") Assessment

As discussed above, as part of its due diligence, before assigning a search ring for a new site to an infrastructure provider, T-Mobile seeks out existing wireless infrastructure as its first choice for locating its facilities to serve local jurisdictions. Once that determination is made that there are no feasible collocation options, T-Mobile assigns the site to an infrastructure provider, in this case Vertical Bridge, who analyzes local ordinances to determine the

jurisdiction's requirements. WLTC Section 4.51 establishes the regulations for the sitting, design, construction, and maintenance of wireless facilities. Wireless communication towers are allowed under this section of the WLTC in Suburban Farm zones under a Special Land Use Approval (See WLTC Section 6.10 for Special Land Use Standards). Attached as Exhibit A to this letter is a detailed discussion of each section of the Township's wireless ordinance as it applies to the proposed site.

For the reasons stated below, collocation on the nearby DTE high voltage tower is not feasible.

#### 2. The Proposed Site Location

T-Mobile approached Vertical Bridge because it needed to provide coverage in this area of White Lake Township. Previously, there was a Sprint site on the DTE Transmission Tower east of the proposed location that T-Mobile first tried to convert from the old Sprint equipment and upgrade to T-Mobile specific equipment. After making application to DTE and spending years in its attempts to convert this site, T-Mobile was unable to convert this site, and the Sprint network was shut off. This forced T-Mobile to decommission the site and seek a new location that would meet its coverage objectives of providing service to this area of White Lake Township and its residents and visitors. Attached as Exhibit B is the Affidavit of T-Mobile Radio Frequency Engineer Richard Nkosu. In it, he confirms that it is necessary to add a new wireless site to provide coverage to this area of White Lake Township and that there are no suitable structures for collocation within a 1-mile radius of the location. In addition, the propagation maps provided by T-Mobile also show that two other T-Mobile locations on DTE transmission towers, although operating, have not been able to be upgraded to 5g technology employed by T-Mobile.

After searching the surrounding area for suitable candidates, Vertical Bridge identified a location for a new telecommunication facility to replace T-Mobile's lost coverage. Residents of White Lake Township using the T-Mobile Network will benefit from improved safety, reliable coverage, signal strength, network capacity, and data speeds from the T-Mobile collocation onto this proposed Vertical Bridge installation.

Vertical Bridge is proposing to build a new wireless facility for T-Mobile (and other future carriers) in the field at 3250 Eric Drive. The proposed site is a 155-foot monopole tower (with a lightning rod going up to 160') with ground equipment located at the base of the tower within a 50x50-foot lease area. Attached as part of Exhibit B are propagation maps that show the existing coverage and the coverage with the proposed antenna height of 155 feet. Lowering the tower height does not meet T-Mobile coverage objectives at this location, so the 155-foot pole is necessary. Moreover, lowering the height may make collocation more difficult for other wireless carriers who wish to collocate on the tower. Encouraging collocation is a mainstay of the Township's wireless ordinance and the proposed site provides that opportunity.

The compound has an open field to the north, wooded residential consisting of several residences abutting Lake Ona to the west, wooded residential to the east, and Cooley Lake Road, a major traffic artery in the township to the south. The site is zoned Suburban Farm. The land is currently an open field with trees to the west and south of the proposed compound. Vertical Bridge's proposed monopole design will be built to hold a minimum of two (2) additional carriers other than the anchor tenant, T-Mobile. The fenced compound will be screened with a row of evergreens to the north, east, and west as well as by a berm and evergreens to the south. These details are shown in the site plan submitted with this application. The proposed site meets all setbacks required under the ordinance.

#### 3. DTE Transmission Tower is not feasible for collocation

Licenses for wireless antennas on high voltage transmission towers, approved as secondary uses by the Federal Energy Regulatory Commission and the Michigan Public Services Commission, place DTE and the International Transmission Company ("ITC") in charge of any colocations and all safety protocols for the high voltage towers located in proximity to the proposed Vertical Bridge site.

DTE and T-Mobile currently have a joint-use agreement to collocate on feasible existing DTE assets including high voltage transmission towers. While the contractual relationship is directly between DTE and T-Mobile, the International Transmission Company ("ITC") owns the high voltage transmission towers, after purchasing them from DTE. ITC also regulates use on these structures by determining the ability of wireless carriers to install at new site locations, make repairs and upgrades to equipment on existing structures, and the allowable loading on the structures and the scheduling of transmission line shutdown for these activities. T-Mobile must undergo a two-step review and approval process with DTE and ITC for any new installation, upgrade, or repair to these towers. Once DTE approves any work, ITC then does their own review and approval process. Once DTE and ITC approve requested work by T-Mobile, ITC is responsible for determining scheduling for a shutdown of the entire transmission line corridor. This shutdown is required so that ITC can balance electrical loading in the area and allow work to be performed safely without the risk of a cascading outage or the electrocution of the tower workers. This process results in delays that cost T-Mobile months to years to repair their sites or install needed upgrades to utilize its owned frequency. Similar delays would also apply to newly constructed sites because of this process.

Starting in 2021, T-Mobile attempted to work with DTE and ITC to convert the former Sprint sites on high voltage sites to the T-Mobile proprietary network and its tower equipment. Those efforts were in vain, as numerous review delays and revision requests, along with the inability to get a shutdown date for the high voltage lines from ITC, made it impossible to make the conversion. With high voltage towers, any work that T-Mobile requires faces significant delays because any tower repair or upgrade can take from 3 months to 4 years to complete because the electrical grid must be shutdown to safely work on the tower. T-Mobile was forced to decommission this site, losing out on coverage in the area that was provided by the T-Mobile network and was forced to seek a new site in the immediate area. <sup>1</sup>

#### 3. Conclusion Summary

T-Mobile's assessment demonstrates that collocating its wireless communication equipment on existing DTE/ITC transmission towers in the vicinity of the proposed site is not commercially feasible

Given these challenges, T-Mobile determined that collocating on future DTE transmission towers was not feasible in this location and was forced to pursue a new facility through partnership with Vertical Bridge. The proposed Vertical Bridge communications tower, designed to be collocatable for T-Mobile and multiple carriers and in full compliance with local regulations, is the most technically feasible and commercially viable solution to meet T-Mobile's network expansion needs in the White Lake Township community.

We appreciate your attention to this matter and welcome any further inquiries or discussions to address any questions or concerns you may have. Thank you for your consideration.

Sincerely,

Patrick Bardone

Name: Vice President

<sup>&</sup>lt;sup>1</sup> The wireless carrier collocation on the DTE high voltage tower on the north side of Cooley Lake Road has also been decommissioned. Sprint/T-Mobile was located on the DTE tower on the south side of Cooley Lake Road.

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#### **EXHIBIT A**

#### **VERTICAL BRIDGE'S RESPONSES TO APPLICABLE ITEMS IN THE TOWNSHIP'S ORDINANCES**

Below are Section 6.10, which deals with special land use standards, and Section 4.51 which deals with standards specifically for wireless communication facilities. Each applicable section and subsection are addressed below. Sections that are not applicable are denoted N/A.

#### SECTION 6.10 GENERAL STANDARDS FOR ALL SPECIAL LAND USES

A. General Requirements. For all special land uses, a site plan shall be submitted to the White Lake Township Planning Commission and conform to the Requirements and Procedures for Site Plan Review set forth in Section 6.8. If the plans meet the required standards of this Ordinance, Article and applicable sections and indicate no adverse effects which, in the opinion of the approval authority, cause injury to the residents, users or adjoining property, or the Township as a whole, the Planning Commission shall approve the use. The power to approve or disapprove all special land uses shall be vested with the Planning Commission as provided by State Law and this Ordinance. In consideration of all applications for special land use approval, the Planning Commission shall review each case individually as to its applicability and must find affirmatively to each of the following standards of the proposed special land use if it is to be approved. Such uses shall be subject to conditions, restrictions and safeguards deemed necessary within the scope of the law as set forth below.

RESPONSE: A site plan and accompanying documents detail the proposed facility and how it meets the applicable ordinances. The applicant respectfully requests approval. Please see responses to the applicable ordinances for this project below.

i. The proposed special land use shall be of such location, size and character that it will be in harmony with the appropriate and orderly development of the surrounding neighborhood and/or vicinity and applicable regulations of the zoning district in which it is to be located.

RESPONSE: The proposed telecommunications facility is on a parcel zoned SF – Suburban Farm. Communications towers are permitted as Special Land Use in the SF districts. The site meets the township requirements of height, setbacks and minimal parcel size. These criteria were established by the Township to insure harmony with neighboring land uses. The proposed site meets these standards.

ii. The proposed use shall be of a nature that will make vehicular and pedestrian traffic no more hazardous than is normal for the district involved, taking into consideration vehicular turning movements in relation to routes of traffic flow, proximity and relation to intersections, adequacy

of sight distances, location and access of off-street parking and provisions for pedestrian traffic, with particular attention to minimizing child-vehicle interfacing.

RESPONSE: The proposed wireless facility is in an open area with ample space on the gravel driveway for any routine maintenance traffic to park and turn around. The facility will pose no hazard to the vehicular and pedestrian traffic in the area.

iii. The proposed use shall be designed as to the location, size, intensity, site layout and periods of operation of any such proposed use to eliminate any possible nuisance emanating therefrom which might be noxious to the occupants of any other nearby permitted uses, whether by reason of dust, noise, fumes, vibration, smoke or lights.

RESPONSE: The wireless facility produces no dust, noise, fumes, vibration, smoke, or lights.

iv. The proposed use shall be such that the proposed location and height of buildings or structures and location, nature and height of walls, fences and landscaping will not interfere with or discourage the appropriate development and use of adjacent land and buildings or unreasonably affect their value.

RESPONSE: As discussed above, the proposed site meets the township criteria established to protect surrounding development.

v. The proposed use shall relate harmoniously with the physical and economic aspects of adjacent land uses as regards prevailing shopping habits, convenience of access by prospective patrons, continuity of development, and need for particular services and facilities in specific areas of the Township.

RESPONSE: Wireless service in this area is critical for residents and visitors to the Township. That service not only includes traditional voice and data but also protects the public safety by providing wireless access to emergency services.

vi. The standards of density and required open spaces for the proposed special land use shall be at least equal to those required by this Ordinance in the Zoning District in which the proposed special land use is to be located.

RESPONSE: The 50'x50' wireless facility on the 5.23 acre parcel does not impact the density and open space requirements of the underlying 30% maximum lot coverage required for the Suburban Farms Districts.

vii. The public services and facilities affected by a proposed special land use or activity shall be capable of accommodating increased service and facility loads caused by the land use or activity.

RESPONSE: The wireless facility does not require any supplemental public facilities.

viii. Protection of the natural environment and conservation of natural resources and energy.

RESPONSE: The 50'x50' fenced compound is in an open field currently used as a horse pasture. This existing use will continue, and the wireless facility will have no effect on natural resources or energy.

ix. The proposed use is necessary for the public convenience at the proposed location.

RESPONSE: As discussed in greater detail below, T-Mobile has a significant gap in coverage in this area of the township and the proposed use will fill that gap. By providing service to this area, emergency wireless services coverage will also be enhanced

x. The proposed use is so designed, located, planned and to be operated that the public health, safety and welfare will be protected.

RESPONSE: Cellular service benefits the safety and welfare of the communities that use it. Communication is vital in an emergency. This facility will provide those services in the surrounding area. Cellphones are necessary to the livelihood of the general public and to the public health, safety and welfare of the White Lake Township Community.

xi. The proposed use shall not cause substantial injury to the value of other property in the neighborhood in which it is to be located and will not be detrimental to existing and/or other permitted land uses in the zoning district.

RESPONSE: As discussed above, the Township wireless ordinance sets the criteria to protect other property and/or permitted land uses in the neighborhood. The proposed facility meets these criteria.

#### SECTION 4.51 WIRELESS COMMUNICATION ANTENNAS

Wireless Communication Antennas shall be permitted as Special Land Uses in the AG (Agricultural), SF (Suburban Farms), R1-A, R1-B, R1-C, R1-D (Single-Family), MHP (Mobile Home Park), RM-1 and RM-2 (Multiple-Family), NB-O (Neighborhood Office), LB (Local Business), GB (General Business), PD (Planned Development), ROS (Recreation and Open Space), LM (Light Manufacturing), and upon any publicly-owned land within the boundaries of the Township, and subject further to the following conditions:

RESPONSE: The wireless facility is located in the SF district and is permissible as a Special Land Use.

A. Operational requirements necessitate locating within the zoning district, and co-location on or joint use of any existing tower or antenna is not feasible.

RESPONSE: As discussed in the Vertical Bridge letter/project summary there are no viable antenna support structures that would meet the carrier's needs in the surrounding area.

B. The minimum setback to any exterior property line for the wireless communication tower or antenna shall be equal to the height of the tower. The Planning Commission may reduce the required setback of a tower or antenna from an exterior property line which is not adjacent to residentially zoned property or a public right-of way or a private street, as provided herein.

RESPONSE: The tower has an overall height of 160'. The tower is setback from the nearest parcel line or Right Of Way by the following:

North - 164.66'
East - 452.84'
South - 194.34'
West - 182'

C. The tower or antenna shall not be unreasonably injurious to the safety or aesthetics of any nearby properties, and the design and appearance of the tower or antenna shall minimize distraction, maximize aesthetic appearance, and insure compatibility with any existing structure(s) and other surrounding

RESPONSE: The proposed tower meets the township established criteria for protecting nearby properties. It is on a 5.32 acre site (3 acre minimum required), is set back from all neighboring property at least the height of the tower, is a monopole design, and has significant landscaping around the fenced compound. The site is also located along a major traffic artery in the Township.

D. In order to maximize the efficiency of the provision of telecommunication services, while also minimizing the impact of such facilities on the township, co-location, or the provision of more than one antenna on a single tower at a single location, shall be strongly encouraged. In this regard, an applicant seeking to establish a new tower or antenna shall provide information regarding feasibility of co-location at existing sites. Before approval is granted for a new facility, the applicant shall demonstrate that it is not feasible to co-locate at an existing site.

RESPONSE: Please see the Vertical Bridge letter/project summary, the Affidavit of Heidi Zimmer, T-Mobile Site Development Manager, and Exhibit B, the affidavit of T-Mobile RF Engineer Richard Nkosu, which confirms there are no existing support structures in the area that can fill T-Mobile coverage objectives. The proposed facility will be constructed for a minimum of 2 additional collocations.

E. Should a new antenna co-locate on an existing wireless tower or existing electric transmission tower, Special Land Use Approval shall not be necessary and Site Plan Approval for a new antenna and any related equipment building, may be granted administratively, pursuant to the provisions of Section 6.8.J of this ordinance. Where a new antenna is co-located on a structure other than an existing wireless tower or electric transmission tower, Special Land Use Approval shall not be necessary and Site Plan Approval for a new antenna and any related equipment building may be granted by the Planning Commission and Township Board pursuant to the provisions of this ordinance.

RESPONSE: Collocation on the DTE electric transmission towers to the east is specifically addressed in other documents submitted with the application.

- F. Co-location shall be deemed to be feasible where all of the following are met:
- i. The applicant will undertake to pay fair market rent or other market compensation for co-location.

#### **RESPONSE: N/A**

ii. The site on which co-location is being considered, including reasonable modification or replacement of a facility, is able to provide structural support.

RESPONSE: As discussed in greater detail in other documents, the DTE towers are not a feasible collocation option.

iii. The co-location being considered is technologically reasonable, e.g., the co-location will not result in unreasonable interference, given appropriate physical and other adjustment(s) in relation to the structure, antennas, and the like.

#### **RESPONSE: N/A**

iv. Existing towers or structures are located within the geographic area which meets the applicant's engineering requirements.

RESPONSE: As discussed in greater detail in other documents, the DTE towers are not a feasible collocation option

v. The fees, costs, or contractual provisions required in order to share an existing tower or structure or to adapt an existing tower or structure for co-location are not unreasonable. For the purposes of this paragraph, costs exceeding new tower development are presumed to be unreasonable.

**RESPONSE: N/A** 

G. In furtherance of the township's objective of strongly encouraging co-location, where feasible, should it be necessary to erect a new tower or antenna, the applicant shall provide a letter of intent to lease excess space on a facility and commit itself to:

Respond to any requests for information from another potential shared use applicant;

RESPONSE: As discussed in the Vertical Bridge letter/project summary, Vertical Bridge's market mission is to lease space on its towers. In this case, Vertical Bridge is constructing this tower for T-Mobile as the first carrier. The proposed monopole is constructed for additional carriers and the ground space is sufficient in size for other carriers to house their base station equipment without exceeding the fenced area. Vertical Bridge is in the business of providing tower infrastructure for carriers to collocate on, and it is in Vertical Bridge's best interest to provide information to any potential applicants.

ii. Negotiate in good faith and allow for leased shared use, provided it can be demonstrated that it is technically practicable, and

RESPONSE: Vertical Bridge has experience in leasing space on wireless facilities to wireless carriers. Vertical Bridge has Master Lease Agreements with the major wireless carriers which streamline collocation on its assets. Vertical Bridge will continue existing negotiation practices for this new site.

iii. Make no more than a reasonable charge, based upon fair market value, for a shared use lease.

RESPONSE: Vertical Bridge rates are governed by the Master Lease Agreements with the wireless carriers and are competitive with rates in the industry.

H. A condition of every approval of a wireless communication antenna shall be adequate provision for the removal of all or part of the facility by users and/or owners upon the determination that the antenna has not been used for 180 days or more. Removal includes the proper receipt of a demolition permit from the Building Official and proper restoration of the site to the satisfaction of the Building Official.

RESPONSE: In the event that the tower has not been used for 180 days or more, Vertical Bridge will remove the tower.

I. To insure proper removal of the tower and/or antenna when it is abandoned, any application for a new antenna shall include a description of security to be posted at the time of receiving a Building Permit for the facility. In this regard, the security shall, at the election of the applicant, be in the form of (i) cash; (ii) bank letter of credit; or (iii) an agreement in a form approved by the Township Attorney and recordable at the office of the Register of Deeds, establishing a promise of the applicant and the owner of the property to remove the facility in a

timely manner with the further provision that the applicant and owner shall be responsible for the payment of any costs incurred by the Township in securing removal. In the event the applicant is proposing to place its facilities on an existing tower, then the agreement referred to above may be signed by the applicant only, and shall contain provisions satisfactory to the Township Attorney to assure the timely removal of the facilities including adequate remedies.

RESPONSE: Vertical Bridge elects to enter into a tower removal agreement similar to the form attached as Exhibit C.

J. All tower bases and related equipment shall be screened from view from any major arterial and any adjoining residential areas, consistent with Section 5.19, Landscape and Screening Requirements.

RESPONSE: As seen on page Z-4 of the site plans, the proposed landscaping will include a berm on the South side by a berm (Cooley Lake Road side) with arborvitae on top, and from the North, East, and West directions by a double row of arborvitae.

K. Monopole antenna structures shall be encouraged in all areas where technologically feasible. "Web" or "lattice" type towers shall be discouraged, unless absolutely necessary for structural reasons.

RESPONSE: The support structure that Vertical Bridge is proposing at this site is a monopole.

L. All towers and related equipment shall be designed to be compatible and harmonious in terms of style and building materials to the surrounding area. When necessary to insure compatibility with the surrounding area, a visual simulation may be required of the applicant. A visual simulation consists of an artist's or architect's rendering of how the tower will appear in the area proposed, taking into account existing buildings and natural features.

RESPONSE: The proposed monopole is in an open field. To maintain compatibility with the field, the compound will be screened with a berm and two rows of arborvitae. The Township is very familiar with this type of tower and height as a similar site is located at the Township hall.

M. The maximum height of any new wireless communication tower or antenna shall as determined by the Planning Commission through the granting of Special Land Use Approval. The height permitted shall be the minimum height necessary to meet the applicant's engineering requirements for the site being considered, but in no instance shall exceed a maximum height of 200 feet. It is understood that the height of a wireless communication tower or antenna may exceed the maximum permitted height specified in Section 3.0 Zoning Districts of this ordinance. Should co-location be proposed upon an existing structure, thereby qualifying for

administrative approval, the height proposed may be approved by the administrative official approving the site plan.

RESPONSE: The newly proposed tower is 155 feet tall (160 feet including lightning rod). As discussed in Exhibit B of the Vertical Bridge letter to the township, this height is necessary to meet T-Mobile's requirements while also allowing for additional collocation and is substantially lower than the maximum 200 feet allowed.

#### N. Cell Tower Site Access

All trees and brush shall be kept cleared for a minimum width of fourteen (14) feet for the full length of all cell tower site access drives.

All topsoil, stumps, and unstable soil shall be removed and backfilled with appropriate granular material and surfaced with gravel, crushed limestone, finely crushed concrete or similar material approved by the Township, for a minimum width of twelve (12) feet for the full length of the driveway.

An appropriate area shall be provided for vehicles to turn around to exit the site. The turnaround area may be incorporated as part of the parking area for service personnel.

RESPONSE: The proposed access drive is a 12-foot-wide gravel driveway. Vertical Bridge will ensure that the drive is kept clear of trees and brush, with the additional foot to either side of the drive. There is adequate turn-around space at the entrance to the compound.

O. Prior to and as a condition of granting Special Land Use Approval for a new wireless communication tower, it shall be necessary for the applicant to demonstrate that it is not feasible to (a) locate the tower on any publicly-owned land within the Township upon which the public entity reasonably anticipates the need or desirability of a future wireless communication tower for public purposes; and (b) locate the tower on publicly-owned land not owned by the Township where such location would minimize the impact on other properties by providing a setback larger than the minimum requirements of the ordinance, while meeting all of the other requirements contained in this Section.

RESPONSE: A representative for the applicant has meet with the township planning staff who has opined that there are no township or other municipal land in this area of the Township.

P. Applicants who erect a new wireless communication tower shall design the tower and site to accommodate future co- location of at least two (2) additional antennae and associated accessory buildings, and shall make the tower available for use by public service agencies, provided that public service agency equipment mounted on the tower does not adversely affect any existing equipment and mounting the public service agency equipment is technologically feasible.

RESPONSE: Shown on page Z-3 of the site plans, the proposed monopole is designed to accommodate a minimum of 2 additional carriers. Although mandating collocation of municipal equipment on non-municipal would be an illegal condition, Vertical Bridge has worked with and will continue to work with any public service agencies that are looking to collocate onto the tower.

- Q. If the Planning Commission determines that the applicant has adequately demonstrated that it is not feasible to locate a new wireless communication tower in any of the zoning districts or publicly-owned areas noted in paragraph (b) above, Special Land Use Approval may be granted by the Planning Commission for a new wireless communication tower in the AG, SF, R1-A, R1-B, R1-C, R1-D, RM-1, and RM-2 Districts provided that Applicant has demonstrated compliance with each standard set forth in this Section and with each of the following requirements:
- i. The applicant shall furnish maps which note the location of all wireless communication tower locations within the Township and within six (6) miles of the Township boundaries which have the capacity to accommodate additional wireless antennae systems. The map shall also contain the locations of any other existing structures capable of supporting a wireless antenna system.

### RESPONSE: Please see attached RF coverage maps given in Exhibit B showing T-Mobile's existing locations surrounding the proposed site.

ii. The map(s) provided by the applicant shall also contain the locations of any publicly owned sites within the primary search area together with any developed sites containing non-residential land uses. Eligible sites must consist of at least three (3) acres of land and be of such size and shape that they could host a tower location with minimal impact on the surrounding areas. Publicly owned sites and larger non-residential uses, such as churches, schools or other nonresidential uses permitted within residential districts, are preferred. Sites which are part of a recorded subdivision or condominium development shall only be considered when located within a common open area of at least three (3) acres set aside for residents of the development or for use by a public utility.

#### RESPONSE: N/A - There are no publicly owned parcels within the primary search area.

R. New wireless communication towers must be setback a distance of at least one (1) foot for each one (1) foot of overall tower and antennae height. The setback is measured from the base of the tower to the nearest property line or unit boundary line, in the case of a site condominium development. The applicant shall seek to provide a greater setback to exterior property lines which abut lands developed or potentially developed for any residential living units on adjoining properties. The minimum setback distance may be reduced, but not less than

the minimum setback required in the zoning district at issue, when it is clearly demonstrated by applicant that the adjacent property is unbuildable; surface areas occupied by lakes, streams or ponds having other riparian owners/users shall not be considered as unbuildable areas. Antennae located on electric transmission towers, existing wireless communication towers, or other tall structures shall be considered to have complied with the setback and height requirements. The setback to adjacent properties which are zoned for non-residential uses, and not including any setbacks from a public right- of-way or public or private street, may be reduced to one-half (1/2) the height of the tower.

RESPONSE: The proposed monopole and equipment are a total of 160 feet high. The proposed location setbacks, listed below, all meet the above 1 foot setback for 1 foot of tower height.

• North - 164.66'

• East - 452.84'

• South - 194.34'

West - 182'

# M X I B I W

T-Mobile Central LLC, a subsidiary of T-Mobile USA, Inc.

#### **AFFIDAVIT**

# T-Mobile Central LLC PROPOSED WIRELESS TELECOMMUNICATIONS FACILITY (3250 Eric Dr, White Lake, MI 48383) (White Lake Township, MI)

- 1. I, Richard Nkosu, representing T-Mobile Central LLC, d/b/a T-Mobile, a Delaware limited liability company (hereinafter "T-Mobile"), whose address is 17187 North Laurel Park Drive, Suite 400, Livonia, MI 48152, being duly sworn, state the following:
- 2. I am a Radio Frequency Engineer engaged in the development and deployment of T-Mobile's metro Detroit area network and involved in network design and optimization, including evaluation and selection of candidates for wireless telecommunications base station sites in the network.
- 2. In an effort to provide seamless coverage in White Lake Township, MI, we have determined that it is necessary to develop and operate a new wireless site to provide outdoor and in-building coverage to a portion of White Lake. The proposed Vertical Bridge tower location meets T-Mobile's radio frequency objectives and limits the need for additional sites in the future to cover this critical area of the Township.
- 3. There are no collocatable existing tower structures or feasible building structures with a suitable height within a 1-mile radius of the search location.
- 4. My evaluation, conducted in the normal course of T-Mobile's operations, consisted of predicting signal propagation via industry-standard software models. I calculated the proposed site's contribution to T-Mobile's needs for coverage and capacity in the area intended to be served by the site with reference to surrounding proposed sites.
- 5. Attached are three radio frequency (RF) propagation plots. The first details current T-Mobile coverage in the area. A large portion of the targeted area has only outdoor coverage or no coverage at all. T-Mobile intends to provide in-building coverage to this area with the proposed Vertical Bridge site. The second plot shows the predicted coverage at a 150-foot RAD level once the proposed site becomes operational. The addition of this site provides in-building coverage and provides coverage to areas that currently have none. The 150-foot RAD is required to meet T-Mobile's coverage objectives. Lowering the to 130 feet reduces the coverage by 15% and would not meet T-Mobile's coverage objectives. Moreover, a lowered height would make the tower less attractive to additional wireless carriers looking to provide coverage for this area of the Township.

Sincerely

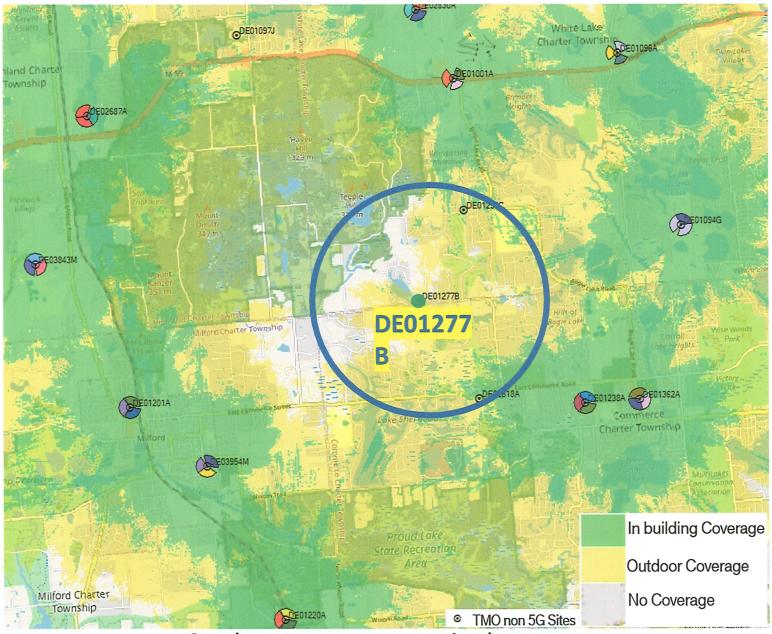
On Behalf of T-Mobile

Mkv Kell V

Richard Nkosu

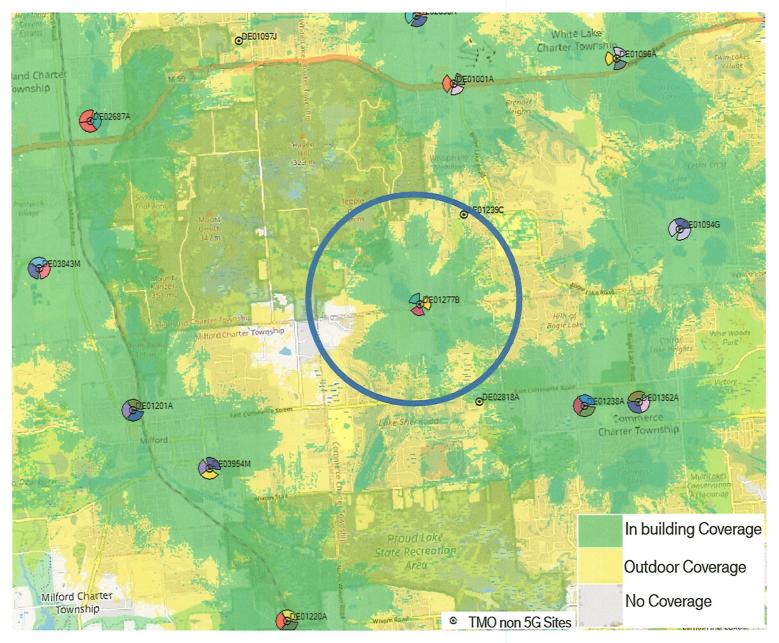
Radio Frequency Engineer

# 5g Coverage without New Site



Outdoor to no coverage in the area

# 5g Coverage with New Site



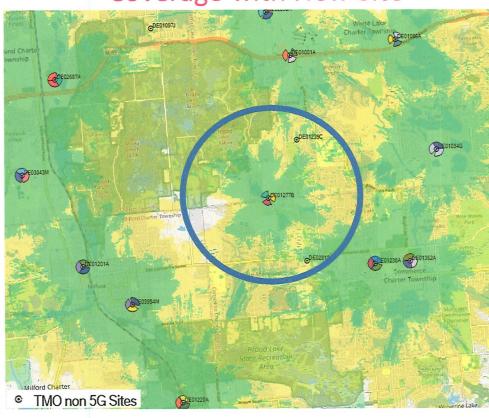
## **Comparison Coverage**

Coverage without New

Mand Charter Township

Charter

Coverage with New Site



**Before** 

Outdoor coverage only

In building Coverage
Outdoor Coverage
No Coverage

T-Mobile Confidential

After