

Applicant Narrative
Parallel Infrastructure
Site Name: Hampton (Todd's Lane)

Network objective

PI Telecom Infrastructure T, LLC (t/a "Parallel Infrastructure") (the "Applicant") is making this application to construct and operate a 150-foot monopole communication tower for T-Mobile on a 0.32 acre parcel located at 1605 Aberdeen Road ("Property"). T-Mobile is licensed by the Federal Communications Commission to provide wireless communications services throughout the City of Hampton ("City"). As is indicated on the propagation maps submitted with this application, which depict the coverage objective of Hampton (Todd's Lane), T-Mobile currently has a gap in coverage between VA10032A located at 2101 Executive Drive and 10068A located at 8110 Orcutt Avenue. The enclosed propagation maps depict T-Mobile's network of existing antenna sites in this portion of the City. This network of sites is largely based on the use of existing towers and tall structures built by T-Mobile, other carriers and tower companies.

The subject Property is vacant. The Applicant is proposing to locate the tower and associated ground equipment within a 40' x 70' fenced compound. The fenced compound will be screened with landscaping (per City code). The proposed tower will have an overall structure height of 152 feet (150 foot tower with a 2 foot lightning rod). The tower will be made of galvanized steel to match the backdrop of the sky and will accommodate at least three (3) users. The facility will be unmanned and will be visited approximately once a month by technicians. The facility will not be lit and will not emit any odor, fumes or glare. The noises emitted from the equipment on the ground will not be any louder than normal residential HVAC equipment. Therefore, the impact on surrounding properties resulting from this passive use will be minimal.

As indicated, the purpose of the tower is to provide improved voice and data coverage to the surrounding area. Specifically, the proposed tower will achieve the following:

- Enhance the existing wireless network by supporting the latest wireless technologies and provide coverage to the following:
 - Those working in nearby businesses (businesses along West Mercury Blvd.);
 - Those living in the adjacent residential neighborhoods (i.e. Wythe Farms and Greenwood Farms);
 - Those travelling on nearby roads (i.e. West Mercury Blvd., Aberdeen Road, Todd's Lane, Power Plant Pkwy.).
- Provide multiple collocation positions for other wireless carriers to expand their networks.

Compatibility with Community Plan

The Hampton Community Plan states the following under "Changes in Communications and Other Technologies":

Maintaining flexibility in response to potential changes in technology is an important consideration when planning for many community facilities. Communications, energy, and transportation technologies are particularly important for facilities planning. The growing use of the internet and cell phones continue to

offer opportunities for improving customer service and remaining economically competitive. Demands for infrastructure that supports new communication and technology pose significant challenges as well as opportunities when upgrading pre-existing developments.

As shown in the attached propagation maps, T-Mobile has a gap in coverage between several other existing towers. The proposed tower will provide the infrastructure needed to upgrade T-Mobile's network (and the networks of other carriers) with the latest wireless technologies. This will not only improve customer service in the area, but it will also provide nearby businesses reliable wireless service to remain economically competitive in their everyday operations.

Zoning Ordinance requirements

The subject property is zoned C-2, Limited Commercial District. In accordance with Chapter 3, Section 3-2, Table of Permitted Uses, communication towers are permitted in the C-2 district subject to an approved conditional use permit (CUP). The applicable requirements for this section are as follows:

Sec. 3-2 – Additional standards on uses.

- (4) Commercial communication towers are permitted in the R-R, R-33, R-22, R-15, R-13, R-11, R-9, R-8, R-M, MD-T, MD-2, MD-3, MD-4, R-T, C-1, C-2, C-3, M-1, M-2, M-3, SPI-PL, SPI-HRC, and SPI-OH Districts subject to securing a use permit. Such use permit shall include the following submittals with application and at a minimum, satisfy the following conditions:
 - (a) Conditional use permit applications for communication towers shall include the following:
 - (i) A site plan drawn to scale specifying the location of tower(s), guy anchors (if any), transmission building(s) and other accessory uses, parking, access, landscaped areas (specifying size, spacing, and plant material proposed) fences, and identify adjacent property owners.

See attached site plan addressing the items referenced above.

- (ii) A report from a registered structural or civil engineer indicating tower height and design, structure, installation and total anticipated capacity of the structure (including number and types of antennas which could be accommodated). This data shall demonstrate that the proposed tower conforms to all structural requirements of the Uniform Statewide Building Code and shall set out whether the tower will meet the structural requirements of EIA-222 E "Structural Standards for Steel Antenna Towers and Antenna Supporting Structures" published by the Electronic Industries Association, effective June 1, 1987 or current update.

See attached report from a registered civil engineer.

- (iii) A statement from a registered engineer that the NIER (nonionizing electromagnetic radiation) emitted does not result in a ground level exposure at any point outside such facility which

exceeds the lowest applicable exposure standards established by any regulatory agency of the U.S. government or the American National Standards Institute.

See attached NIER, which states that ground level exposure at any point outside such facility meets all exposure standards.

- (iv) Evidence of the lack of space on suitable existing towers, buildings, or other structures to locate the proposed antenna and the lack of space on existing tower sites to construct a tower for the proposed antenna within the service area shall be considered in the review of conditional use permit applications for a new tower.

As is the case with all carriers, T-Mobile first looked for a building or other tall structure within the search ring on which to collocate its antennas. There were no buildings or transmission towers within the search ring that were tall enough to meet the coverage objective. The attached map shows all tower collocation opportunities within a two mile radius. The closest tower is located approximately 0.71 miles east of the proposed tower in the cloverleaf of Exit 263A on I-64. T-Mobile looked at this tower as a possible collocation opportunity; however, it is only .40 miles south of an existing T-Mobile rooftop collocation at 2101 Executive Drive. Due to the proximity to the existing site, and the long distance from the center of the needed search ring (.71 miles), this tower would not meet the intended coverage objective. T-Mobile also looked at a proposed 150 foot Verizon Wireless (VZW) tower at 1435 Todds Lane as a possible collocation opportunity. This tower is approximately .85 miles northwest of the proposed tower and is too far out of the search ring to meet the coverage objective. Specifically, it is too far north to connect the propagation rings of VA10032A and VA10068A (see propagation maps). T-Mobile, however, may look to collocate on the VZW tower in the future in order to connect the propagation rings of the proposed tower with the rings of VA40124D and VA10024B to the north.

- (v) Intermodulation testing is coordinated through the Hampton police division demonstrating that the proposed antenna operation is designed in a manner to eliminate interference with public safety communications. Such testing shall also be required from each subsequent operator prior to any building permits to add or modify antennae. Should any equipment associated with the antennae be found to interfere with public safety communications, the owner shall be responsible for the elimination of such interference.

See attached Intermod, which demonstrates that the proposed antenna operation is designed in a manner to eliminate interference with public safety communications.

- (b) The following locational criteria shall be considered in determining the appropriateness of sites for communication towers:

- (i) Whether the application represents a request for multiple use of a tower or site, or use on a site contiguous to an existing tower site.

See attached site drawings; the proposed tower and compound will have adequate space for multiple other carriers.

- (ii) Whether the application contains a report that other potential users of the site and tower have been contacted, and they have no current plans, to the best of their ability to determine, that could be fulfilled by joint use.

The Applicant will construct and own the proposed tower. T-Mobile will be the anchor tenant; however, the tower will be constructed to support at least two additional carriers.

- (iii) Whether the application shows how the tower or site will be designed or laid out to accommodate future multiple users. Specific design features evaluated shall include but not be limited to height, wind loading, and coaxial cable capacity.

See attached site drawings; the proposed tower and compound will have adequate space for at least two other carriers.

- (iv) Whether the proposed tower is to be located in an area where it would be unobtrusive and would not substantially detract from aesthetic or neighborhood character, due either to location, to the nature of surrounding uses, (such as industrial uses) or to lack of visibility caused by natural growth or other factors.

The Applicant has chosen a location on a C-2, Limited Commercial zoned property that not only provides improved wireless service to the area, but also a location that has limited visibility and is outside of environmentally sensitive areas. The existing trees between the tower site and the residences will serve to screen the tower. The Applicant will also install landscaping around the fenced compound, which will further screen the facility from adjacent properties.

- (c) Accessory facilities may not include offices, vehicle storage, or outdoor storage unless permitted by underlying zoning.

The Applicant is not proposing any offices, vehicle storage, or outdoor storage.

- (d) Advertising and/or signage on tower structures is prohibited.

There will be no advertising or signage on the tower.

- (e) The minimum setback requirements from the base of the tower to any property line abutting a right-of-way of any planned or existing street, and all residential uses shall be at least fifty (50) feet unless a greater setback is specified due to site specific characteristics. For property lines abutting

nonresidential uses, the minimum setback requirements shall be at least twenty-five (25) feet unless a greater setback is specified due to site specific characteristics. The minimum setback for guy towers shall be equal to forty (40) percent of tower height.

The proposed tower setbacks are as follows:

- *Front – 107'*
- *Right side – 30'*
- *Left side – 30'*
- *Rear – 102.2'*

- (f) Minimum site size shall be no less than two thousand (2,000) square feet.

The subject property is 0.32 acres.

- (g) Towers two hundred (200) feet in height or less shall have a galvanized finish or be painted silver. Regulations of the Federal Aviation Commission or Federal Communications Commission supersede this requirement if contradictory.

The proposed tower will be have a galvanized finish and be natural grey in color.

- (h) Towers shall be illuminated as required by the Federal Aviation Administration. However, if not required by the Federal Aviation Commission, no lighting shall be incorporated.

No lighting is proposed with this request.

- (i) Landscaping shall be required as follows:

- (i) For towers two hundred (200) feet or less in height, at least one (1) row of evergreen shrubs capable of forming a continuous hedge at least five (5) feet in height shall be provided with individual plantings spaced not more than five (5) feet apart and at least one (1) row of evergreen trees with a minimum caliper of one and three-fourths (1¾) inches at the time of planting and spaced not more than twenty-five (25) feet apart shall be provided within fifteen (15) feet of the perimeter of the setback area.

See Sheet L-1 of the attached site plans showing landscaping details.

- (ii) For towers more than two hundred (200) feet in height, in addition to the requirements for landscaping above, one (1) row of deciduous trees, with a minimum caliper of two and one-half (2½) inches at time of planting and spaced not more than forty (40) feet apart shall be provided within twenty-five (25) feet of the perimeter of the setback area required by item (i) above.

Not applicable; this tower is less than 200 feet.

- (iii) In lieu of the above requirements, in special cases including cases where a required tree would be closer to the tower or to a guy wire supporting the tower than the height of the tree at maturity, the applicant may prepare a detailed plan and specifications for landscape and screening, including plantings, fences, walls, topography, etc., to screen the base of the tower and accessory uses. The plan shall accomplish the same degree of screening achieved in items (i) and (ii) above.

Not applicable; this is a monopole tower.

- (iv) All required landscaping must be installed and approved in accordance with chapter 9, article IV of the city code, the site plan ordinance.

Landscaping will be installed in accordance with chapter 9, article IV of the city code.

- (j) Commercial communication towers up to one hundred fifty (150) feet in height sited on properties included in the inventory of appropriate sites for communication towers recommended in the master plan which is adopted by reference as a component of the 2010 comprehensive plan are exempt from the use permit requirement provided all the above listed provisions are satisfied and proposals to site said improvements are first reviewed by the planning commission, with their recommendation forwarded to the appropriate board or commission for further consideration. Failure on the part of the planning commission to act on such proposals within ninety (90) days of submission shall be deemed approval, unless the applicant agrees to an extension of time.

Not applicable.