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**VIA FEDERAL EXPRESS AND  
ELECTRONIC MAIL**

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Ms. Melanie A. Bachman, Esq., Executive Director  
Connecticut Siting Council  
Ten Franklin Square  
New Britain, CT 06051

**Re: Petition No. 1467.**

Dear Attorney Bachman:

This office represents Barrett Outdoor Communications, Inc. (“Petitioner”). On behalf of Petitioner, I have enclosed one original and fifteen hardcopies of its partial response to the first set of interrogatories issued by the Connecticut Siting Council (“Council”). This partial response addresses the remaining interrogatories not answered in Petitioner’s partial response dated December 15, 2021. The deadline for the enclosed responses is on or before January 14, 2022, pursuant to an extension request granted by the Council, dated December 14, 2021.

Please do not hesitate to contact me with any questions.

Very truly yours,

Jesse A. Langer

Enclosures

**STATE OF CONNECTICUT  
CONNECTICUT SITING COUNCIL**

PETITION OF BARRETT OUTDOOR COMMUNICATIONS, INC. FOR A DECLARATORY RULING THAT A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED IS NOT REQUIRED FOR THE RELOCATION OF A TELECOMMUNICATIONS FACILITY	:	PETITION NO. 1467
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	:	January 11, 2022

**PETITIONER’S RESPONSES TO THE FIRST SET OF INTERROGATORIES BY THE CONNECTICUT SITING COUNCIL**

Barrett Outdoor Communications, Inc. (“Petitioner”) respectfully submits the following responses and non-privileged documentation to the First Set of Interrogatories issued by the Connecticut Siting Council (“Council”) in connection with the above-captioned matter.

**Site Search**

22. *Approximately when was the search ring established for the proposed facility?*

**Verizon established a search ring in 1995 that resulted in the existing facility. Verizon assessed the proposed relocated facility and determined that the proposed relocation would provide wireless service comparable to the existing facility.**

**Coverage/Capacity**

52. *Referencing Tab 3 of the Petition, Verizon coverage maps, does “Stratford S CT” represent the existing structure at 28 Sidney Street, and “Stratford S Relo CT” represent the proposed facility?*

**Yes.**

53. *Referencing Tab 3 of the Petition, Verizon coverage maps, do these coverage maps depict only existing service including from the existing structure at 28 Sidney Street, or do they depict existing plus proposed site coverage? If these plots are existing coverage only, provide similar plots that are existing plus proposed, or vice versa for each of the frequency bands.*

**The coverage maps depict Verizon’s existing coverage from its surrounding sites together with coverage from the proposed tower site. The coverage maps depicting service from Verizon’s existing facilities in the area including the existing billboard installation are appended hereto as Attachment 7.**

54. *Identify distances and directions to the adjacent sites with which the proposed facility would hand off signals. Include addresses, tower types, and Verizon's (and T-Mobile's, if applicable), antenna centerline heights at these sites.*

**Please see the table populated with the requested data appended hereto as Attachment 8.**

56. *Would the proposed site be needed for coverage, capacity, or both for Verizon (and T-Mobile, if applicable)? Explain.*

**Verizon's installation would serve as a coverage site, providing service comparable to that which is provided today by the billboard facility. The proposed tower site would also provide some capacity relief to Verizon's neighboring sites. The neighboring sites include: (a) 065258 Milford 2 CT (Gamma sector); (b) 065037 Milford CT (Beta sector); and (c) 065150 Stratford W CT (Alpha sector). These sectors are currently operating at or beyond their existing capacity limits. T-Mobile is not a part of the proposed project at this time.**

57. *Are all frequencies (700 MHz, 850 MHz, 1900 MHz, 2100 MHz, 3.55 GHz) used to transmit voice and data for Verizon (and T-Mobile, if applicable)?*

**The following frequencies are voice and data: 700 MHz, 850 MHz, 1900 MHz, and 2100 MHz. The following frequency is currently data only 3.55 GHz. T-Mobile is not a part of the proposed project at this time.**

58. *What is the specific purpose of the 700 MHz and 2100 MHz systems for Verizon (and T-Mobile, if applicable)?*

**Verizon uses both the 700 MHz and 2100MHz frequency ranges for its voice and data services. The 700 MHz frequencies travel further providing for a larger coverage footprint. The 2100 MHz frequencies travel a shorter distance compared to the 700 MHz system due to a higher frequency range providing higher data speeds and network capacity relief. T-Mobile is not a part of the proposed project at this time.**

59. *What is the lowest height at which Verizon's antennas could achieve its wireless service objectives from the proposed site? If applicable, what is the lowest height at which T-Mobile's antennas could achieve its wireless service objectives from the proposed site?*

**121feet AGL.**

60. *Could the required coverage and capacity needs for Verizon (and T-Mobile, if applicable) be met by a series of small cell facilities or a distributed antenna system rather than the proposed macro tower facility?*

**It may be theoretically and technically possible to install a large number of small cells or Distributed Antenna System (“DAS”) nodes in the area that could closely match the coverage footprint of the proposed facility. Such an approach, however, is not economically feasible and is not consistent with good RF Engineering practice. Typically, small cell facilities or DAS nodes would utilize existing infrastructure (i.e., electric distribution poles) along public rights of way in areas where coverage and/or capacity problems exist. These existing utility poles are often encumbered by other equipment (i.e., transformers, street lights and risers) that will limit Verizon’s ability to use the pole. Structural limitations of the existing poles will limit Verizon’s ability to deploy all of the equipment needed to provide service in all of its operating frequencies. Providing some form of back-up power to small cells or DAS nodes is very difficult and, in many cases, impossible, making the service even more vulnerable to storm events. In areas where this existing infrastructure is not available, for example, along private roads or on private and municipal properties, property rights would need to be acquired and new poles would need to be installed. The actual number of small cell facilities that would be needed to provide a service comparable to that from the proposed existing facility or the proposed facility is not known but would be significant given the overall size of the area that Verizon is attempting to serve with the proposed facility.**

61. *What is the signal strength for which Verizon (and T-Mobile, if applicable) designs its system? For in-vehicle coverage? For in-building coverage?*

**$\geq -85\text{dBm}$  RSRP for In Building service and  $\geq -95\text{dBm}$  RSRP for in-Vehicle service. T-Mobile is not a part of the proposed project at this time.**

62. *What is the existing signal strength within the area Verizon (and T-Mobile, if applicable) is seeking to cover from this site?*

**$\geq -95\text{dBm}$  RSRP. T-Mobile is not a part of the proposed project at this time.**

63. *What is Verizon’s (and T-Mobile’s, if applicable) existing coverage footprint from the structure at 28 Sidney Street and Verizon’s existing and predicted coverage footprint from the proposed site (in square miles), at each frequency that would be installed?*

**Verizon’s existing and predicted coverage footprint at each frequency is appended hereto as Attachment 9. T-Mobile is not a part of the proposed project at this time.**

64. *What was the approximate size of Verizon’s (and T-Mobile’s, if applicable) search area in the vicinity of the proposed site?*

**The search area had a radius of approximately 0.5 mile from the center of the existing tower. T-Mobile is not a part of the proposed project at this time.**

65. *What nearby wireless facilities (or sectors) are nearing capacity limits for Verizon (and T-Mobile, if applicable)? At what frequencies? Please include a projected exhaustion date for each of these sectors. Would the deployment of the proposed facility be sufficient to address these capacity concerns or would an additional facility be required in the near term to off-load traffic?*

**The nearby facilities include: (1) 065258 Milford 2 CT Gamma low and high bands; (2) 065037 Milford CT Beta low band; and (3) 065150 Stratford W CT Alpha sector low band sectors. The relocated facility would provide some capacity relief to the aforementioned sectors but might require additional facilities and/or site upgrades in the future. T-Mobile is not a part of the proposed project at this time.**

66. *Once the proposed site is on-line and providing capacity relief to adjacent sites, what would be the effective service area for the 700 MHz frequency for Verizon (and T-Mobile, if applicable)? Would parts of overlapping service be handled by the existing sites, thus lessening the effective service area of the proposed site? Please explain.*

**Although there would be overlapping coverage due to the relocated facility, Verizon's System Performance counterparts will be moving/reassigning the user traffic from the exhausted sectors to the non-exhausted sectors to balance the traffic and provide better experience to the users. T-Mobile is not included in this proposal at this time.**

67. *Would flush-mounted antennas provide the required coverage for Verizon (and T-Mobile, if applicable)? Would the flush-mount configuration result in reduced coverage and/or necessitate greater antenna height with multiple levels of antennas? Explain.*

**No. A flush mount configuration is not feasible because Verizon would need multiple levels on the monopole for its antennas, and would likely require additional levels for future Verizon frequency deployments and other wireless carriers, thus requiring a taller monopole. T-Mobile is not a part of the proposed project at this time.**

#### **Backup power**

73. *Would a battery backup (if applicable) be used for Verizon (and T-Mobile, if applicable) to provide uninterrupted power and prevent a reboot condition? How long could the battery backup alone supply power to the facility in the event that the generator fails to start?*

**Yes, Verizon would utilize a battery backup system lasting four to eight hours depending upon load. T-Mobile is not a part of the proposed project at this time.**

#### **Public Safety**

76. *Would Verizon's (and T-Mobile's, if applicable) proposed co-location(s) support text-to-911 service? Is additional equipment required for this purpose?*

**Verizon's installation would support text-to-911 service without the need for additional equipment. T-Mobile is not a part of the proposed project at this time.**

78. *Would Verizon's (and T-Mobile's, if applicable) installation(s) comply with the intent of the Warning, Alert and Response Network Act of 2006?*

**Verizon's installation would comply with the intent of the Warning, Alert and Response Network Act of 2006. T-Mobile is not included in this proposal at this time.**

Respectfully submitted by,

BARRETT OUTDOOR COMMUNICATIONS,  
INC.



By: \_\_\_\_\_

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**ATTACHMENT 7**

*(Existing Coverage Propagation Plots)*

**ATTACHMENT 8**

*(Adjacent Sites Table)*



**ATTACHMENT 9**

*(Existing Coverage Footprint)*