

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

IN RE: :
: :
APPLICATION OF CELLCO PARTNERSHIP : DOCKET NO. 337
D/B/A VERIZON WIRELESS FOR A :
CERTIFICATE OF ENVIRONMENTAL :
COMPATIBILITY AND PUBLIC NEED FOR :
THE CONSTRUCTION, MAINTENANCE :
AND OPERATION OF A WIRELESS :
TELECOMMUNICATIONS FACILITY OFF :
NORTH STREET (ROUTE 63) IN GOSHEN, :
CONNECTICUT : JULY 12, 2007

RESPONSES OF CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS
TO CONNECTICUT SITING COUNCIL PRE-HEARING INTERROGATORIES, SET ONE

On June 15, 2007, the Connecticut Siting Council (“Council”) issued Pre-Hearing Interrogatories to the applicant, Cellco Partnership d/b/a Verizon Wireless (“Cellco”), relating to the above-captioned docket. Below are Cellco’s responses.

Question No. 1

What frequencies is Cellco licensed to use in Litchfield County?

Response

In Litchfield County, Cellco is licensed to operate in the PCS F Block (1970-1975 MHz) and PCS C3 Block (1975-1980 MHz) frequency bands.

Question No. 2

Would Cellco’s antennas be compliant with E911 requirements?

Response

Yes.

Question No. 3

Identify distances and directions to the adjacent sites with which the proposed site would hand off signals?

Response

Cellco's proposed Goshen cell sites will hand-off calls with its Torrington West facility, 136 Wright Road, Torrington, Connecticut, approximately 4.2 miles to the southeast; and Goshen South facility, 113 Brush Hill Road, Goshen, Connecticut, approximately 4.1 miles to the south.

Question No. 4

Provide the following information: number of channels per sector for each antenna system that would be installed on the proposed tower, ERP per channel for each antenna system, and frequency at which each antenna system would operate.

Response

<u>Alpha Sector – 150 Ft.</u>	<u>Beta Sector – 150 Ft.</u>	<u>Gamma Sector – 150 Ft.</u>
Antenna Type: BXA – 185063/12CF	Antenna Type: BXA – 185063/12CF	Antenna Type: BXA – 185063/12CF
Frequency: 1970-1975 MHz	Frequency: 1970-1975 MHz	Frequency: 1970-1975 MHz
No. Channels: 6	No. Channels: 6	No. Channels: 6
ERP/Channel: 485 W Max	ERP/Channel: 485 W Max	ERP/Channel: 485 W Max

Question No. 5

What is the lowest height at which Cellco's antennas could achieve its coverage objectives from this site? Submit propagation maps showing the coverage at ten and twenty feet below this height.

Response

Cellco's antennas are located at the lowest level needed to achieve its coverage objectives in this area. A coverage plot, showing Cellco's coverage at the 140-foot level is attached behind Tab 1.

Question No. 6

Of the letters sent to abutting property owners, how many certified mail receipts did Cellco receive? If any receipts were not returned, which owners did not receive their notice? Did Cellco make additional attempts to contact those property owners?

Response

All certified mail receipts were returned.

Question No. 7

What is the signal strength for which Cellco designs its system?

Response

Negative 85 dBm.

Question No. 8

What is the existing signal strength in those areas Cellco is seeking to cover from this site? How were these signal strengths determined?

Response

Cellco's signal strength in the area around the Goshen cell site is far below Cellco's design threshold of -85 dBm.

Question No. 9

Did Cellco conduct any drive tests for this site? If so, provide information depicting the results of these tests.

Response

No drive tests were performed from this site. Cellco does, however, rely on base line drive data to fine-tune and confirm the information contained in its coverage plots.

Question No. 10

How many trees with a diameter of 6" or greater at breast height would be removed to develop this site?

Response

Cellco engineers are currently completing the tree survey for the driveway and site compound improvements. The total tree count will be provided as soon as the information is available.

Question No. 11

Quantify the amounts of cuts and fills that would be required to develop this site.

Response

Total Cut Required: 4900 Cubic Yards

Total Fill Required: 650 Cubic Yards

Question No. 12

Which specification would the proposed tower be built to — Electronic Industries Association Standard EIA/TIA-222-E or F?

Response

The Goshen tower will be built to the TIA/EIA-222-F-96 standard. This is the current revision to the Electronic Industries Association Standard that has been adopted as part of the Connecticut State Building Code.

Question No. 13

How many antenna placements would the tower be designed to accommodate?

Response

The tower would be designed to accommodate four carriers.

Question No. 14

When was Cellco's search ring for this area first issued? How large was the ring? Where was it centered? Submit a map showing the search ring.

Response

Cellco's Goshen search ring was first issued in June or 2004. As you can see from the attached map the ring has no uniform diameter. The search area is roughly centered on Brass Mountain. (See Search Ring Map attached behind Tab 2).

Question No. 15

What are the average heights of the transmission line structures on the line that parallels Route 63? Could two or more co-locations on these structures achieve Cellco's coverage objectives in this area? If no, explain.

Response

Cellco is currently gathering the information required to respond to this question.

Question No. 16

Provide propagation maps of a single site and/or a series of co-locations on the transmission structures paralleling Route 63 to show what coverage could be achieved from this line.

Response

Cellco is currently gathering the information required to respond to this question.

Question No. 17

Has Cellco contacted any other carriers about the possibility of using this site? If so, have any other carriers shown a potential interest in this site? Provide any supporting documentation.

Response

Yes. On May 30, 2007, an e-mail was sent to legal counsel for T-Mobile, AT&T Wireless and Sprint Nextel regarding the proposed Bloomfield Blue Hills facility. To date, no other carrier has expressed an interest in the proposed Goshen tower.

Question No. 18

Would any blasting be required to develop this site?

Response

Until a final geotechnical survey is completed, at the time of D&M Plan approval, Cellco will not know whether blasting will be required to construct the facility. However, based on existing site conditions, we do not anticipate the need for blasting.

Question No. 19

Did any of the boards or commissions of the Town of Goshen conduct any meetings about this proposal or issue any statements or recommendations regarding it? If so, provide such documentation.

Response

As discussed in the Application, Cellco presented the Goshen tower proposal at a combined meeting of the Planning and Zoning Commission and Board of Selectmen. To date, Cellco has received a letter from First Selectman Robert Valentine to Sandy Carter regarding the

Town's desire to share the proposed tower. A copy of Mr. Valentine's letter is included behind Tab 3.

Question No. 20

Does Cellco currently use fuel cells as backup generators at any of its Connecticut tower sites? If yes, identify locations. Does Cellco plan to use a fuel cell at the proposed site or have any plans to install them at any existing or future sites in Connecticut?

Response

Cellco does not currently use fuel cells at any of its Connecticut cell site locations and has no plans to do so for the foreseeable future.

Question No. 21

Has Cellco investigated the feasibility of using fuel cells as back-up power at its facilities? If so, what has it determined?

Response

Cellco has an Internal Maintenance Engineering Organization whose responsibility it is to explore alternative power sources for existing cell sites. This organization is currently exploring the use of fuel cells, BioFuels for the fueling of generators, solar power and wind power as alternative energy sources at cell site locations. Generally speaking, these alternative technologies have a very low power output. Typically, Cellco's cell sites have a significant load requirement. For example, a typical cell site requires 200 amps of service to operate. Hydrogen fuel cells produce approximately 10 amps of power.

Cellco has conducted two fuel cell field trials (one in New Jersey (hydrogen fuel cell) and one in Tennessee (propane fuel cell)). These fuel cells were used for a low power microwave antenna installation. Cellco's maintenance engineering team forecasts that fuel cell technology

for use at cell sites is not currently realistic or feasible and is at least three to five years away from being considered as a realistic alternative power supply.

Question No. 22

How would utilities be brought to Cellco's facility?

Response

Cellco expects that utilities would run from North Street along the shoulder of the access road to the cell site. Final utility locations will be determined by CL&P prior to site construction.

Question No. 23

Has Cellco submitted a permit determination request to the Corps of Engineers for the wetlands crossing as recommended by VHB? If so, what is the status of this request?

Response

A Connecticut Programmatic General Permit (CT PGP) Category 1 eligibility determination has been requested from the U.S. Army Corps of Engineers New England District (COE NED) for the proposed wetland crossing. Cellco has carefully designed the wetland and intermittent stream crossing to minimize impacts and ensure the project satisfies all of the requirements for Category 1 under the CT PGP. To date, Cellco has not received a determination on this request as it is still under review by COE NED. It is Cellco's position that its proposal satisfies the criteria for the Category 1 determination.

Question No. 24

Does Cellco have a site on Mohawk Mountain? If not, is Cellco considering a co-locating on one of the existing Mohawk Mountain towers? If not, explain.

Response

No. Cellco does not maintain a facility on Mohawk Mountain, nor does Cellco intend to

install a facility at this location anytime in the near future. The ground elevation at Mohawk Mountain is approximately 1675 feet AMSL and would not provide reliable coverage to Cellco customers along Route 4 or 63.

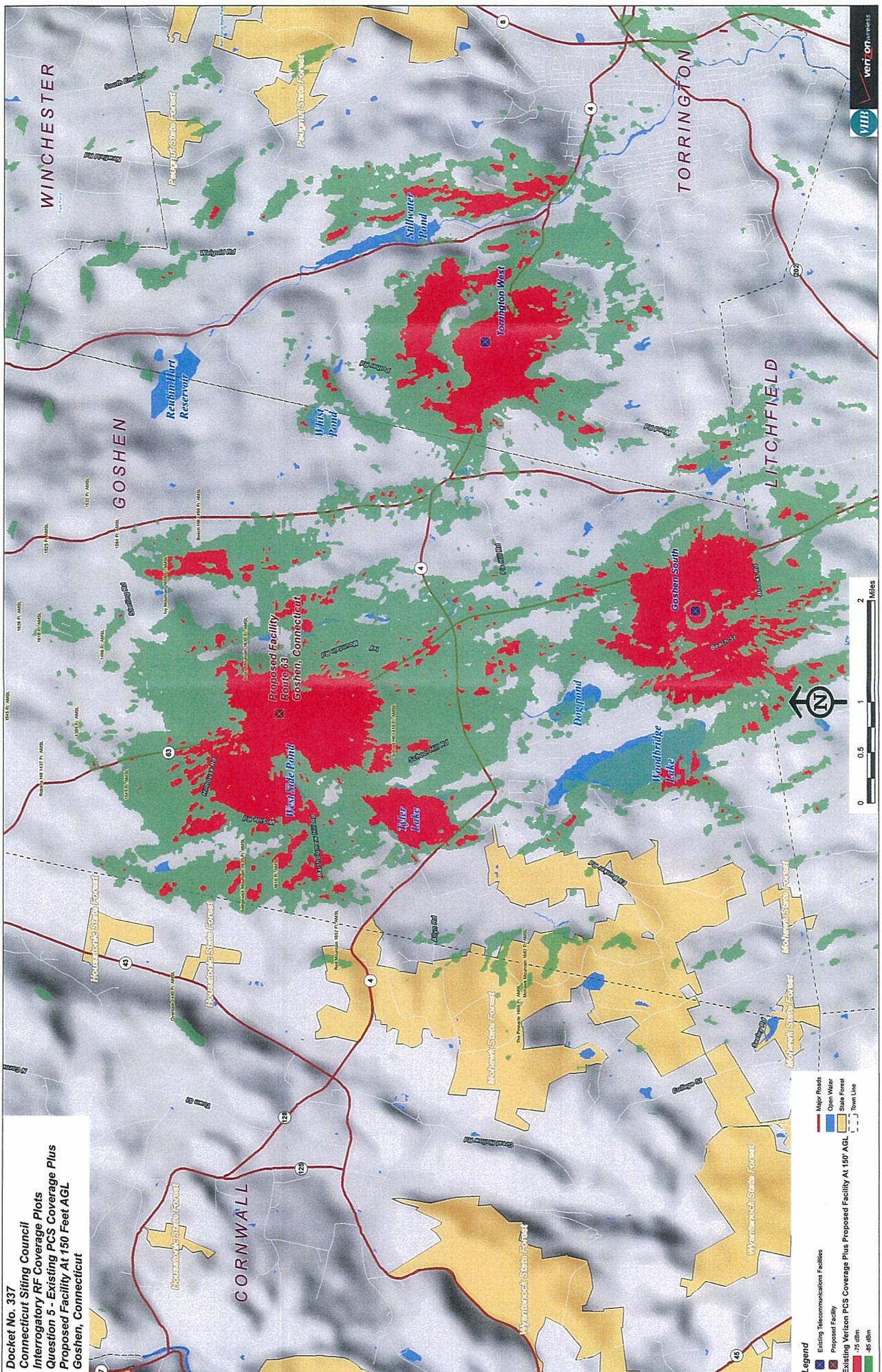
Question No. 25

Is Cellco considering a site between its proposed Route 63 site and its existing Torrington West site that would cover the apparent coverage gaps on Route 4 that would remain if the Route 63 site were to be approved?

Response

Not at this time.

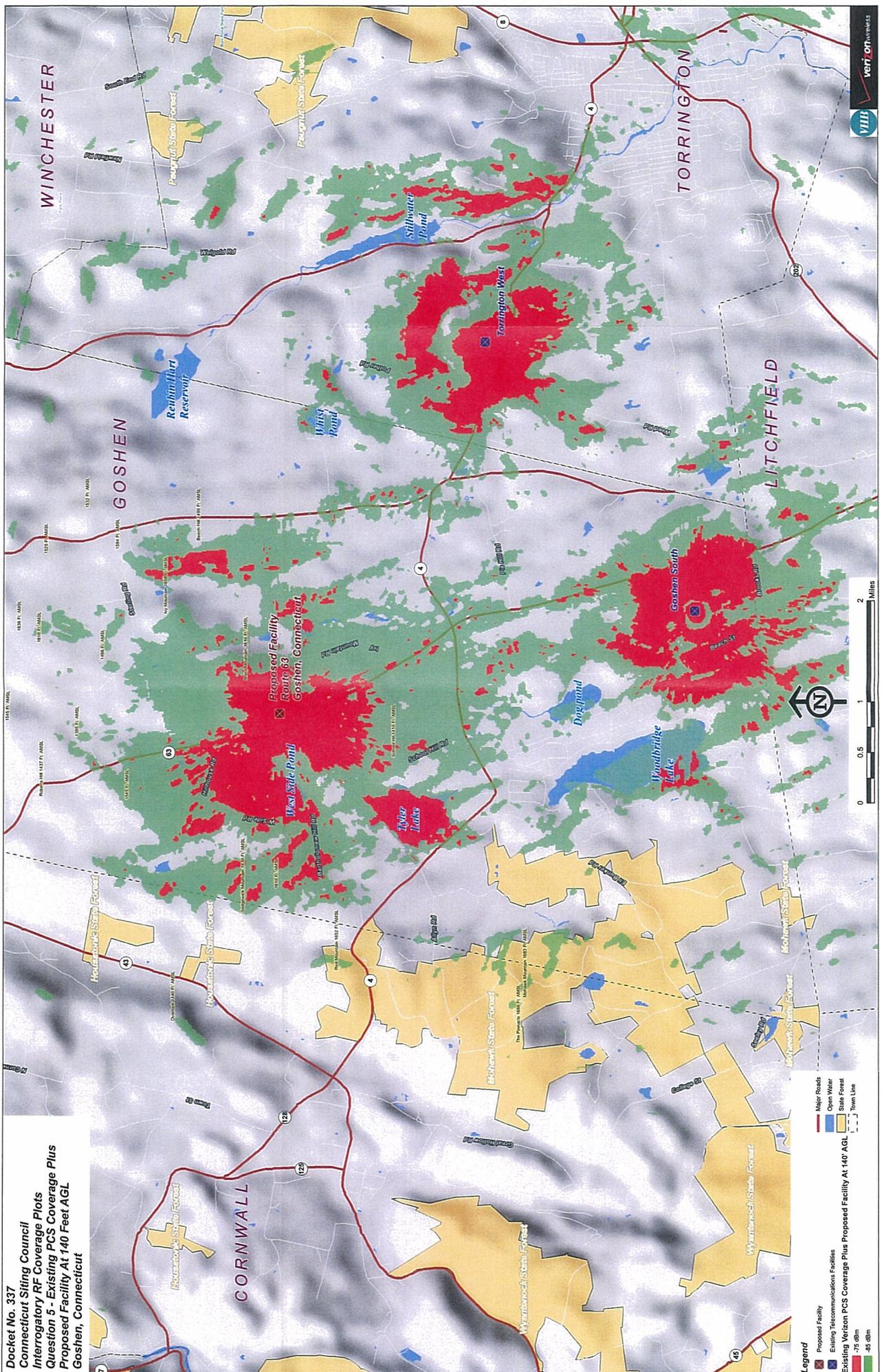
**Docket No. 337
 Connecticut Siting Council
 Interrogatory RF Coverage Plots
 Question 5 - Existing PCS Coverage Plus
 Proposed Facility At 150 Feet AGL
 Goshen, Connecticut**



- Legend**
- Existing Telecommunications Facilities
 - Proposed Facility
 - Existing Verizon PCS Coverage Plus Proposed Facility At 150' AGL
 - State Forest
 - 2-5 dBm
 - >5 dBm
 - Major Roads
 - Open Water
 - Town Line



Docket No. 337
Connecticut Siting Council
Interrogatory RF Coverage Plots
Question 5 - Existing PCS Coverage Plus
Proposed Facility At 140 Feet AGL
Goshen, Connecticut



- Legend**
- Proposed Facility
 - Existing Telecommunications Facilities
 - Open Water
 - State Forest
 - Existing Verizon PCS Coverage Plus Proposed Facility At 140' AGL
 - -75 dbm
 - -85 dbm
 - Major Roads
 - State Forest
 - Town Line



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Litchfield Search Ring - L141 - Goshen, CT (PCS)



Tyler Lake



miles

SCHOOL

WEST SIDE

West Side Pond

Side Pond

GOSHEN, CT (PCS)

LUCAS