STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

In Re:

APPLICATION OF CELLCO PARTNERSHIP 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 LOCATED AT 723 LEETES ISLAND ROAD IN THE TOWN OF BRANFORD, CONNECTICUT	)	DOCKET NO. 413 February 2, 2011

NEW CINGULAR WIRELESS PCS, LLC ("AT&T")
RESPONSES TO SITING COUNCIL INTERROGATORIES (SET ONE)

Q1. What frequencies is AT&T licensed to use in the area of the proposed facility?

A1. AT&T's licensed operating frequencies in this part of the state include the 850 MHz ("cellular") band, specifically 880-894 MHz, as well as the 1900 MHz ("PCS") band. AT&T will deploy both cellular (850 MHz) and PCS (1900 MHZ) frequencies at the proposed facility at the outset. At this time, there is no timetable for deployment of AT&T's 700 MHz frequencies at the site. These frequencies are all intended for use to provide services to customers. Currently, AT&T supports GSM, UMTS, HSPA and is migrating to LTE. The 850 MHz frequency band is the primary frequency currently used by AT&T in network design and deployment assessments.

Q2. 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.

A2. The power density report for AT&T's proposed facility included in Exhibit A provides the number of channels per sector for each antenna system, ERP per channel for each antenna system, and frequency at which each antenna system would operate.

Q3. Would AT&T's antennas comply with E911 requirements?

A3. Yes.

Q4. Identify AT&T's adjacent sites with which the proposed site would hand off signals. Include addresses of these sites.

A4. The proposed site would hand off to the sites listed in the table below.

Site Name	Address	Town	Lat Long
CT2014	21 Acorn Road	Branford	41.2931,-72.7629
CT2065	188 Sachem Head Road	Guilford	41.2644,-72.6952
CT2158	1919 Boston Post Road	Guilford	41.3003,-72.7076
CT2170	190 Totoket Road	Branford	41.2658,-72.7656
CT5200	201 Granite Road	Guilford	41.2920,-72.7330

Q5. For each of AT&T's licensed frequencies, provide propagation maps showing AT&T's existing coverage in the vicinity of the proposed facility and what AT&T's coverage would be with its antennas installed at their proposed height.

A5. Attached in Exhibit B are:
- Propagation maps for 850 MHz (cellular) and 1900 MHz (PCS) frequencies showing AT&T's existing coverage in the vicinity of the proposed facility; and
- Propagation maps for 850 MHz (cellular) and 1900 MHz (PCS) frequencies showing AT&T's proposed coverage with antennas installed at a centerline height of 100' AGL.

Q6. What is the lowest height at which AT&T's antennas could achieve its coverage objectives from this site? Submit propagation maps showing the coverage at ten feet below this height.

A6. AT&T's minimum height to achieve its coverage objectives from this site is 100' AGL. A propagation map showing coverage from 90' AGL is included in Exhibit C.

Q7. What is the signal strength for which AT&T designs its system? For in-vehicle coverage? For in-building coverage? Does this signal strength differ according to the different frequencies AT&T is licensed to use?

A7. AT&T designs for -82 dBm in-vehicle coverage and -74 dBm in-building coverage. As noted in response number 1 above, at this time, there is no timetable for deployment of AT&T's 700 MHz frequencies at the site. These frequencies are all intended for use to provide services to customers. Currently, AT&T supports GSM, UMTS, HSPA and is migrating to LTE. The 850 MHz frequency band is the primary frequency currently used by AT&T in network design and deployment assessments.

Q8. What are AT&T's existing signal strengths in those areas it is seeking to cover from this site? At what frequencies?

A8. Current signal levels range significantly in the proposed service area from -105 dBm to -75 dBm due to the terrain fluctuations. This type of spotty unreliable coverage is not acceptable for users of the AT&T network. AT&T customers are often mobile, making calls from their vehicles, their places of business and their homes. In addition, many customers are now substituting cell phones for their landline phone service as their only means of voice communications. To properly serve these customers, the service must be reliable, especially since the service will be carrying their 911 calls.

Q9. Does AT&T have any statistics on dropped calls in the vicinity of the proposed facility? If so, what do they indicate? Does AT&T have any other indicators of substandard service in this area?

A9. Dropped calls are above system wide averages and objectives and blocking/ineffective attempts are not an issue given the low capacity environment in this area of the State. That data is considered proprietary by AT&T but is not necessarily relevant in this particular Docket because this area is known as a poor coverage area by both benchmark data and customer experience which necessitates a coverage solution. In addition, in many instances, dropped calls may not be a reliable indicator of an inadequate network for reasons such as:

- Many users become familiar with areas of poor coverage or no service and stop making calls in these areas;
- Since mobile communication is a two-way connection, if a cell site cannot hear a mobile unit, it will not register as a failure if that link is problematic; and
- Dropped calls are a partial indicator of quality - sometimes you can hold a call but the person on the other end cannot hear you.

Q10. What are the lengths of the respective coverage gaps on Route 146 and along the Amtrak rail line that AT&T is seeking to cover from the proposed site at cellular frequencies? At PCS frequencies?

A10. The length of the coverage gaps along Route 146 and the Amtrak rail line that AT&T is seeking to cover at 850 MHz and 1900 MHz frequencies are provided in the table below:

	Cellular (850 MHz)	PCS(1900 MHz)
Route 146	2.01 miles	2.03 miles
Amtrak	1.49 miles	2.11 miles

Q11. What are the coverage gaps on local streets that AT&T would cover from the proposed site at cellular frequencies? At PCS frequencies?

A11. The site covers approximately 4.4 miles of local streets. Details are as follows:

850 MHz:

Street Name	**Covered Length (miles)**
Old Quarry Rd	0.73
Dromara Rd	0.38
Seaview Ave	0.32
Andrews Rd	0.30
Wingate Rd	0.28
Sawmill Rd	0.27
New Quarry Rd	0.27
Stony Creek Quarry Rd	0.22
Flat Rock Road Ext	0.20
Beach Rd	0.19
Harrison Point Rd	0.19

Street Name	Covered Length (miles)
Point Rd	0.18
Old New England Rd	0.15
Uncas Point Rd	0.12
Watrous Ave	0.09
Grove Hill Rd	0.08
Walden Hill Rd	0.07
Bowhay Hill Rd	0.05
Chimney Corner Cir	0.05
Seastrand Rd	0.04
Birch Grv	0.04
Old Sachems Head Rd	0.04
Little Harbor Rd	0.03
8th Ave	0.03
Juniper Knolls	0.03
Uncas Cir	0.02
Harbor View Rd	0.02
Flat Rock Rd	0.01
Ridge Rd	0.01
Dolan Dr	0.01

1900 MHz:

Street Name	Covered Length (miles)
Old Quarry Rd	0.55
Andrews Rd	0.22
Wingate Rd	0.20
Harrison Point Rd	0.19
New Quarry Rd	0.14
Flying Point Rd	0.11
Prospect Hill Rd	0.10
Sawmill Rd	0.08
Dromara Rd	0.06
Seaview Ave	0.05
Brandegee Ave	0.05
Thimble Island Rd	0.05
Point Rd	0.03
Benton Rd	0.03
Island View Rd	0.03
Island View Ave	0.02
1st Ave	0.01
Lavassa Ter	0.01
Beach Rd	0.01

Q12. What distances on AT&T's target areas would AT&T cover from the proposed facility?

A12. The distances along the target area of coverage along Route 146 and the Amtrak rail line are included in the table below:

	Cellular (850 MHz)	PCS(1900 MHz)
Route 146	1.72 miles	1.16 miles
Amtrak	1.37 miles	0.84 miles

Q13. Describe the antenna array AT&T would install on the proposed facility.

A13. AT&T would install up to twelve (12) antennas at a centerline height of approximately 100' AGL within the water tank designed wireless facility. The antenna details include:

Manufacturer: Powerwave
Model No: P90-15-XLH-RR or equivalent
Antenna Dimensions – 72"H x 12"W x 7.3"D

Manufacturer: KMW Communications
Model No: AM-X-CD-14-65-00T-RET or equivalent
Antenna Dimensions – 48"H x 11.8W x 5.9"D

CERTIFICATE OF SERVICE

I hereby certify that on this day, a copy of the foregoing was sent by electronic mail and overnight mail to the Connecticut Siting Council and:

Kenneth C. Baldwin, Esq.
Robinson & Cole LLP
280 Trumbull Street
Hartford, CT 06103-3597
(860) 275-8200
kbaldwin@rc.com

Sandy Carter
Regulatory Manager
Verizon Wireless
99 East River Drive
East Hartford, CT 06108

Julie D. Kohler, Esq.
Jesse A. Langer, Esq.
Cohen and Wolf, P.C.
1115 Broad Street
Bridgeport, CT 06604
(203) 368-0211
jkohler@cohenandwolf.com
jlanger@cohenandwolf.com

Dated: February 2, 2011

Lucia Chiocchio

cc: Michele Briggs, AT&T
David Vivian, SAI
Anthony Wells, C Squared Systems
Scott Pollister, C Squared Systems

A

Tony Wells
C Squared Systems
920 Candia Road
Manchester, NH 03109
603-657-9702
Tony.Wells@csquaredsystems.com

C Squared Systems, LLC

February 1, 2011

Connecticut Siting Council

Subject: New Cingular Wireless, New Canaan, CT

Dear Connecticut Siting Council:

C Squared Systems has been retained by New Cingular Wireless to investigate the RF Power Density at the proposed site located at 723 Leetes Island Road, Branford, CT.

Calculations were done in accordance with FCC OET Bulletin 65. These worst-case calculations assume that all transmitters are simultaneously operating at full power and pointing directly at the ground. The calculation point is 6 feet above ground level to model the RF power density at the head of a person standing at the base of the tower.

Location	Carrier	Antenna Centerline Height Above Ground Level (Ft.)	Operating Frequency (MHz)	Number of Trans.	Effective Radiated Power (ERP) Per Transmitter (Watts)	Power Density (mw/cm^2)	Limit	% FCC MPE Limit General Public/ Uncontrolled
Ground Level	AT&T UMTS	97	880	1	500	0.0217	0.5867	3.70%
	AT&T UMTS	97	1900	1	500	0.0217	1.0000	2.17%
	AT&T GSM	97	880	3	296	0.0386	0.5867	6.58%
	AT&T GSM	97	1900	1	427	0.0186	1.0000	1.86%
							Total	**14.30%**

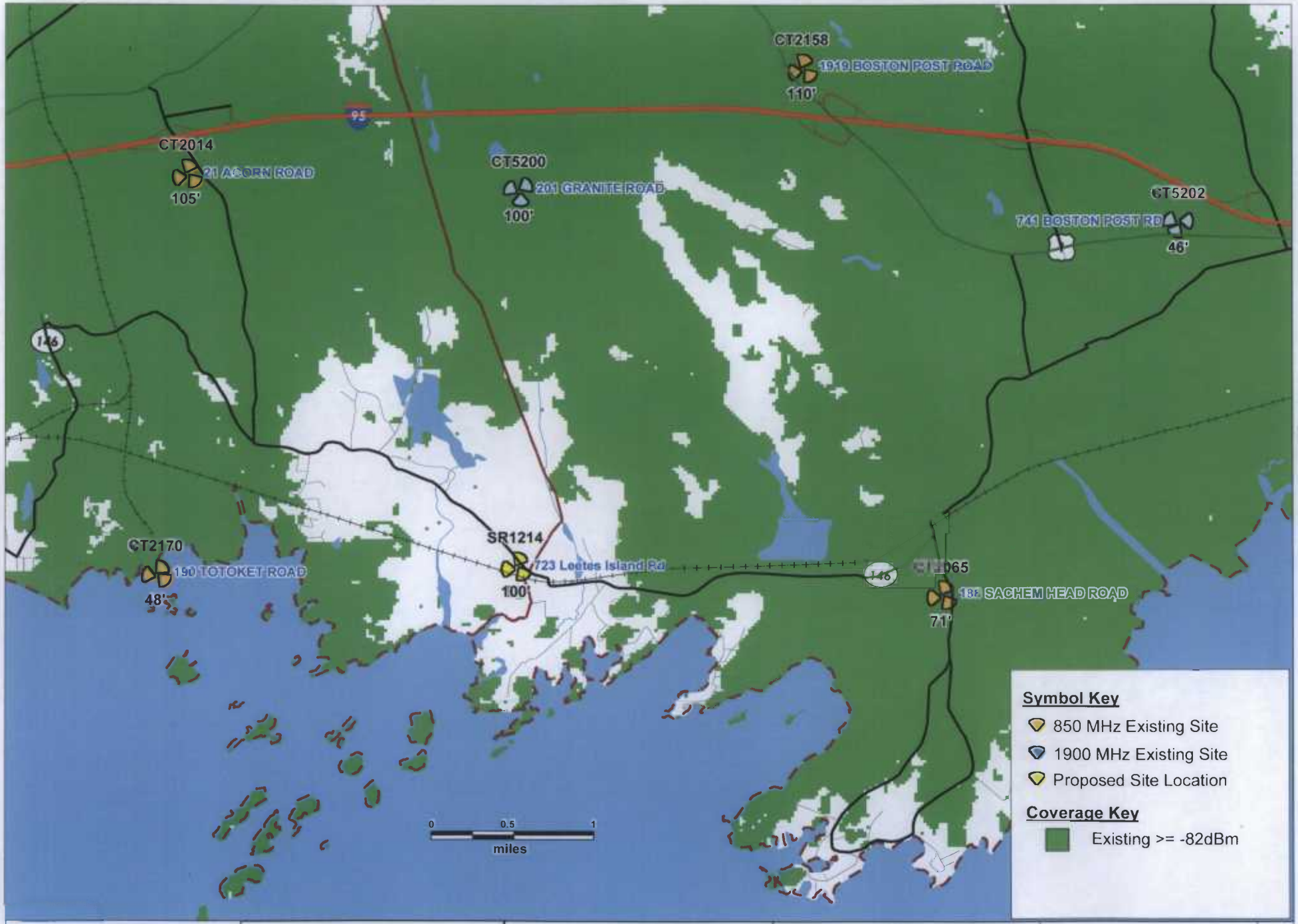
Summary: Under worst-case assumptions, the RF Power Density at the proposed site located at 723 Leetes Island Road, Branford, CT will not exceed 14.30% of the FCC MPE limit for General Public/Uncontrolled Environments.

Sincerely,

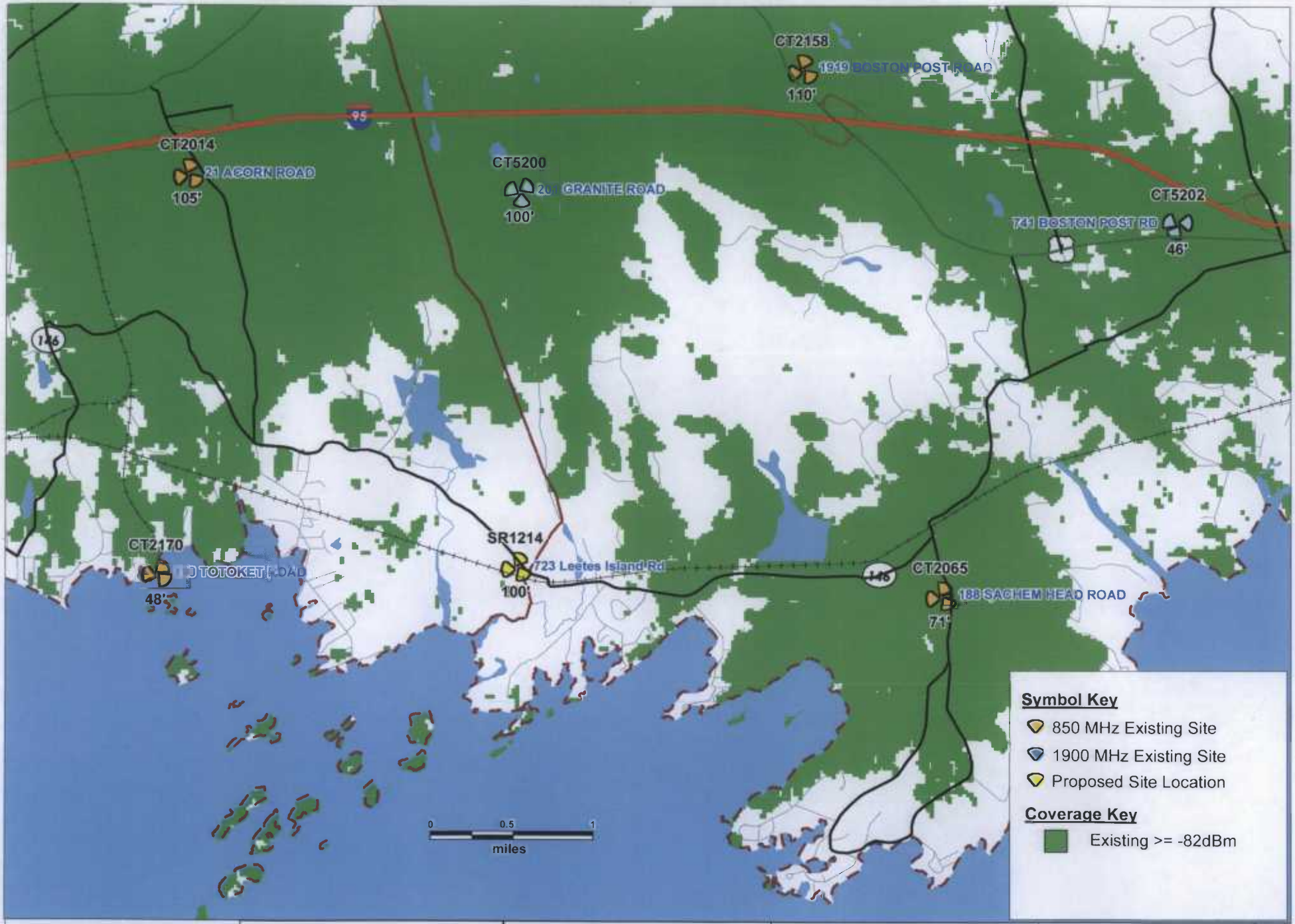
anthony wells

Anthony Wells
Managing Partner

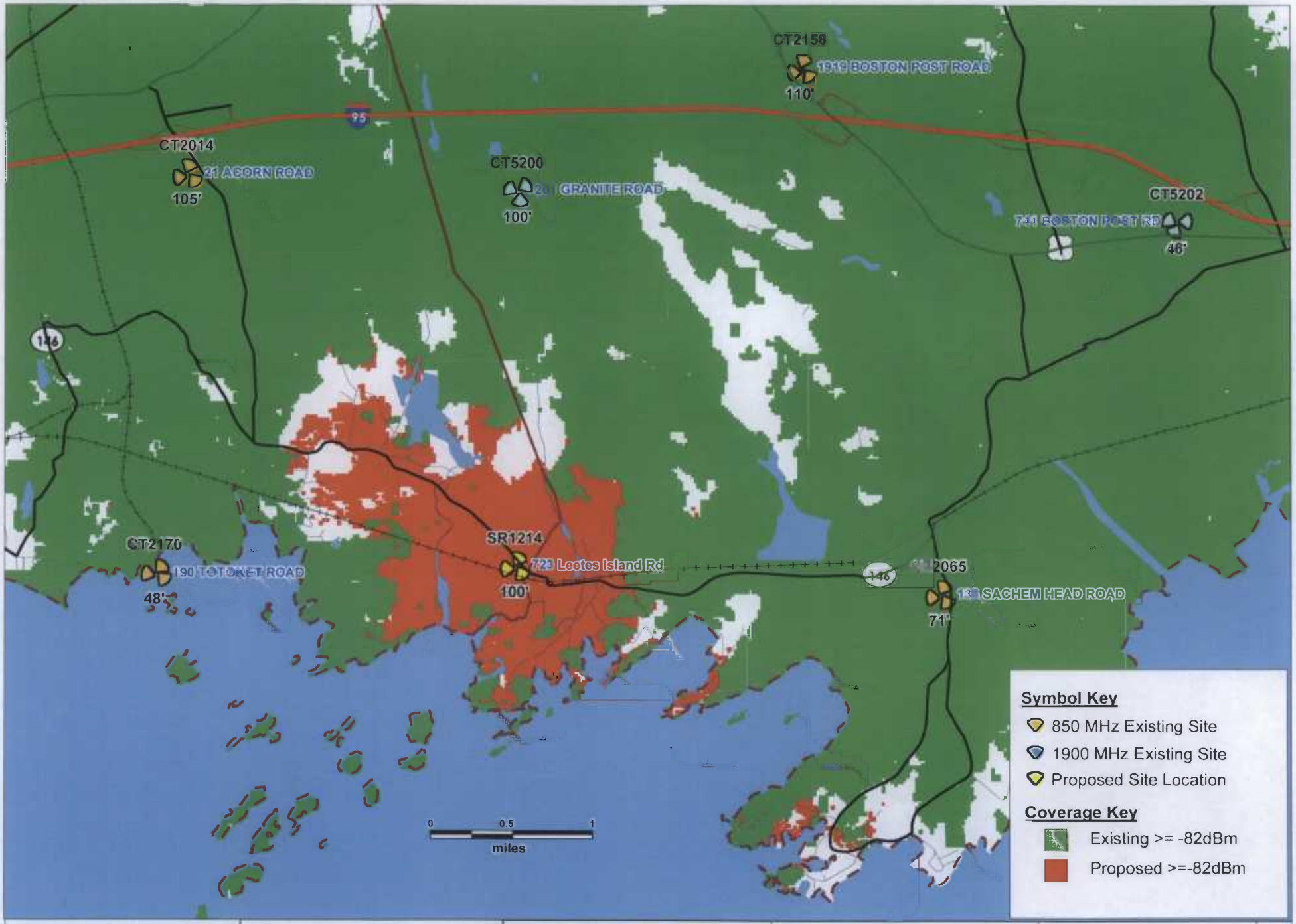
B



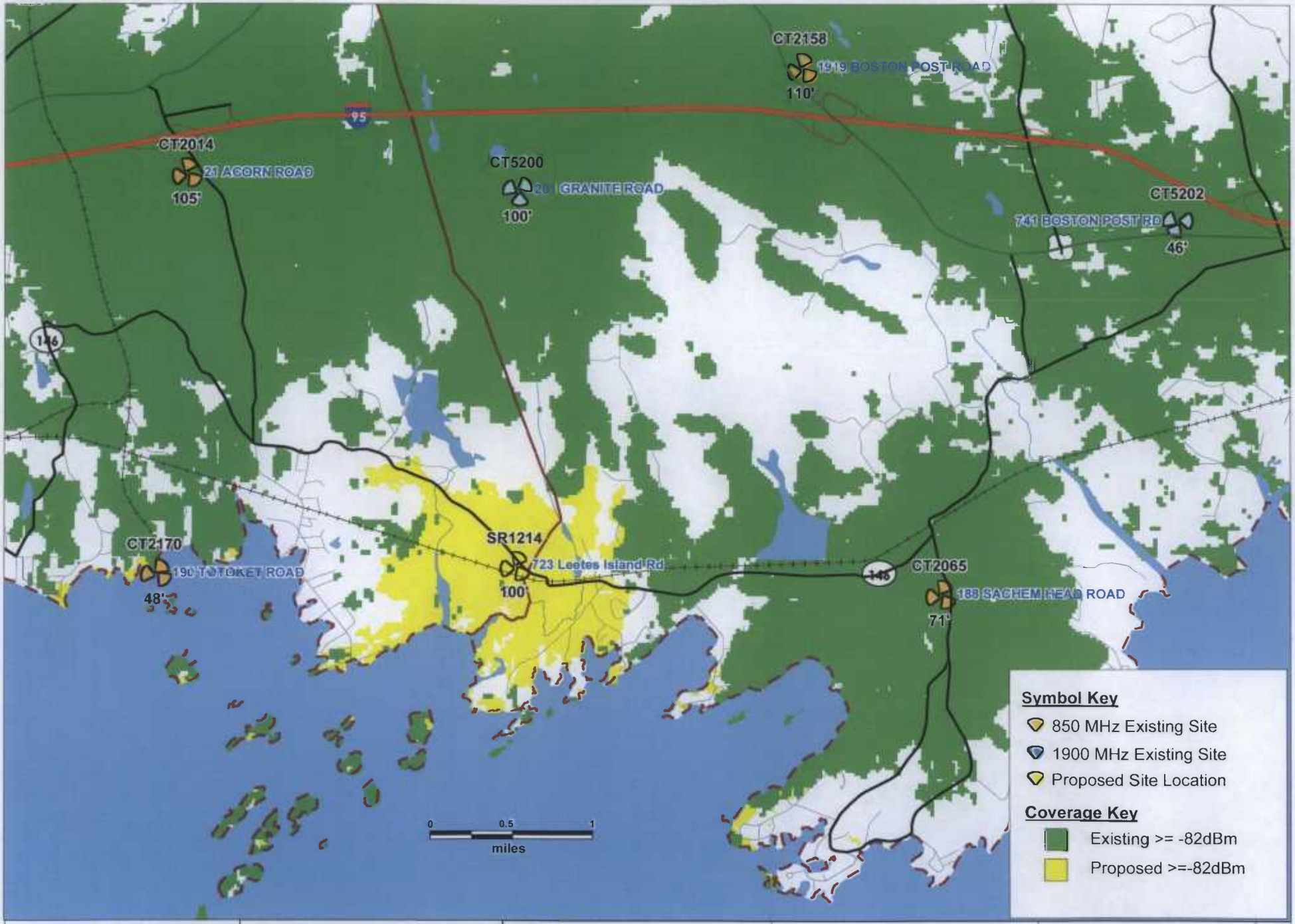
Existing Cellular Coverage	Branford	723 Leetes Island Rd Branford, CT	at&t	PREPARED ON DATE:01/31/2011



Existing PCS Coverage	Branford	723 Leetes Island Rd Branford, CT	at&t	PREPARED ON DATE:01/31/2011

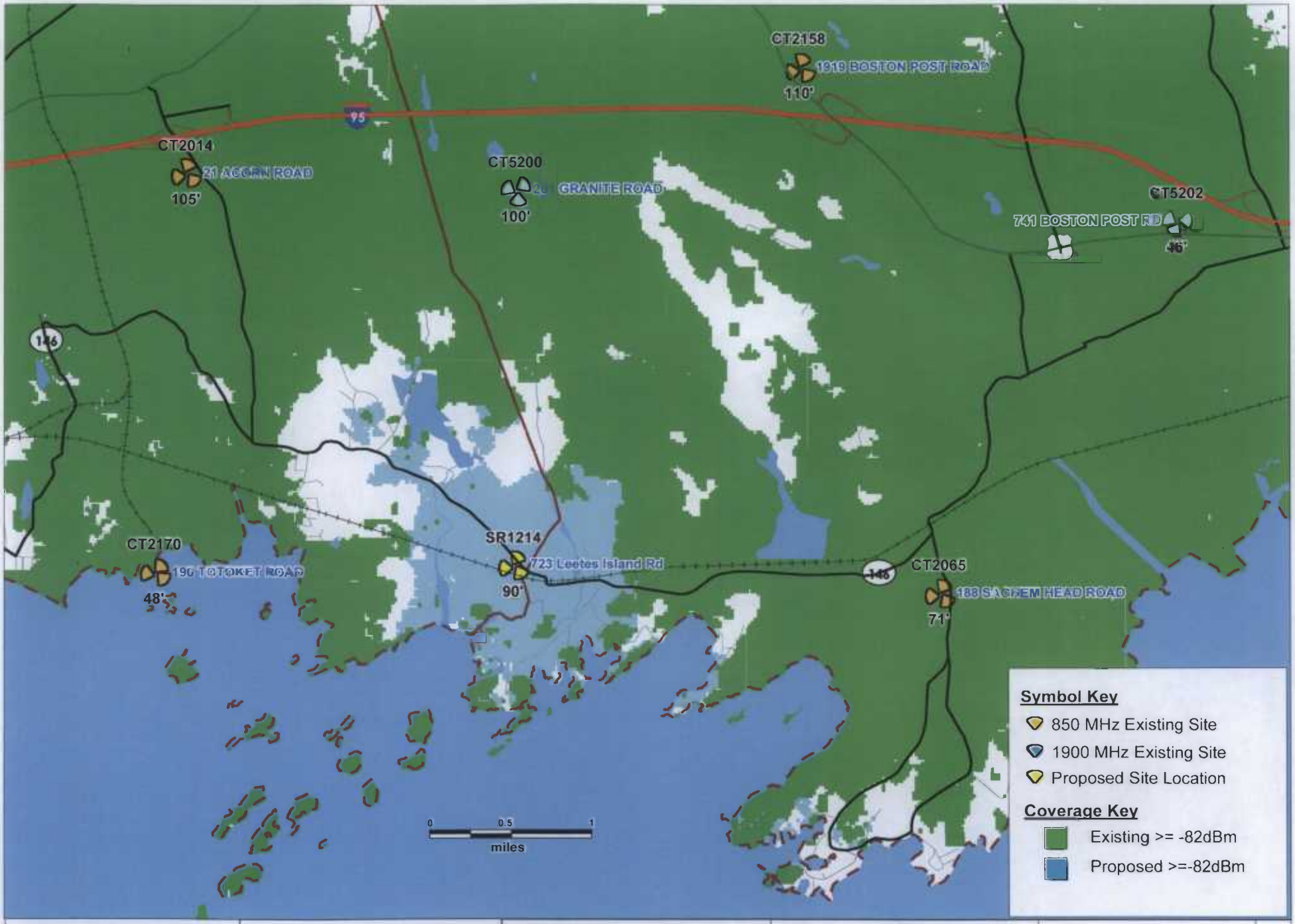


Existing & Proposed Cell @ 100 feet AGL	Branford	723 Leetes Island Rd Branford, CT	at&t	PREPARED ON DATE:01/31/2011



Existing & Proposed PCS @ 100 feet AGL	Branford	723 Leetes Island Rd Branford, CT	at&t	PREPARED ON DATE:01/31/2011 REV 0

C



Existing & Proposed Cell @ 90 feet AGL	Branford	723 Leetes Island Rd Branford, CT	at&t	PREPARED ON DATE:01/31/2011