

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

IN RE:

APPLICATION OF MESSAGE CENTER
MANAGEMENT, INC. (MCM) AND NEW CINGULAR
WIRELESS (AT&T) FOR A CERTIFICATE OF
ENVIRONMENTAL COMPATIBILITY AND PUBLIC
NEED FOR THE CONSTRUCTION, MAINTENANCE
AND OPERATION OF A TELECOMMUNICATIONS
TOWER FACILITY IN REDDING, CONNECTICUT

DOCKET NO. 449

August 29, 2014

RESPONSES OF MESSAGE CENTER MANAGEMENT
AND NEW CINGULAR WIRELESS
TO CONNECTICUT SITING COUNCIL PRE-HEARING QUESTIONS, SET III

- Q56. Provide propagation maps showing existing plus proposed coverage at antenna centerline heights of 130 feet and 120 feet for 700 MHz, 850 MHz, and 1900 MHz or as applicable.
- A56. Please see Attachment 1.
- Q57. Provide propagation maps showing existing plus proposed coverage at antenna centerline heights of 150 feet and 120 feet depicting coverage to Putnam Memorial State Park and Huntington State Park for 700 MHz, 850 MHz, and 1900 MHz or as applicable.
- A57. Please see Attachment 1 for propagation maps at 120 feet. Please see Attachment 2 for propagation maps at 150 feet. In addition, propagation maps of a facility at 120 feet and a facility at 150 feet at 850 MHz are included as Attachment 3 in a different scale in order to show both Putnam Memorial and Collis P. Huntington State Parks in their entirety. Please note that coverage to Putnam Memorial State Park is provided by AT&T's existing site CT5515 which lies to the west of that park. A comparison of plots from 120' to 150' indicates that AT&T's coverage would benefit from the higher height of 150'. One example is the gap along Cross Highway which, due to topography of the Little River, will exist at either height. However, at 120' it is unlikely AT&T's customers will be able to maintain calls through this gap. At 150' however, more customers will be able to maintain a call through this area as the gap will be shorter in length (duration) and the overall signal in the gap will be stronger allowing for more calls or data connections to be maintained. Customers in the northerly areas of Collis P. Huntington State Park will have a similar experience: while the quality of connection will not necessarily meet AT&T's network standards, the signal levels will not be as weak at 150' thus reducing failed call and data connections as compared to a facility at 120'.

Q58. Provide the lengths of the coverage that AT&T would provide along primary roads from the proposed site for 700 MHz, 850 MHz, and 1900 MHz or as applicable, assuming antenna centerline heights of 130 feet and 120 feet.

A58.

	Incremental 700 MHz LTE Coverage @ 130 feet		Incremental 850 MHz UMTS Coverage @ 130 feet		Incremental 1900 MHz LTE Coverage @ 130 feet	
Area (mi²):	(≥ -83 dBm)	1.01	(≥ -74 dBm)	5.51	(≥ -86 dBm)	0.39
	(≥ -93 dBm)	3.05	(≥ -82 dBm)	7.84	(≥ -96 dBm)	2.04
Roadway (mi):	Main:	2.51	Main:	3.03	Main:	2.07
	Secondary:	6.03	Secondary:	19.07	Secondary:	5.01
	Total:	8.54	Total:	22.10	Total:	7.08

	Incremental 700 MHz LTE Coverage @ 120 feet		Incremental 850 MHz UMTS Coverage @ 120 feet		Incremental 1900 MHz LTE Coverage @ 120 feet	
Area (mi²):	(≥ -83 dBm)	0.93	(≥ -74 dBm)	5.32	(≥ -86 dBm)	0.31
	(≥ -93 dBm)	2.89	(≥ -82 dBm)	7.51	(≥ -96 dBm)	1.99
Roadway (mi):	Main:	2.13	Main:	2.83	Main:	1.95
	Secondary:	5.72	Secondary:	17.96	Secondary:	4.69
	Total:	7.85	Total:	20.79	Total:	6.64

Q59. Provide the lengths of the coverage that AT&T would provide along secondary roads from the proposed site for 700 MHz, 850 MHz, and 1900 MHz or as applicable, assuming antenna centerline heights of 130 feet and 120 feet.

A59. Please see above.

Q60. Provide the predicted coverage areas from the proposed site (in square miles) for AT&T assuming antenna centerline heights of 130 feet and 120 feet for 700 MHz, 850 MHz, and 1900 MHz or as applicable.

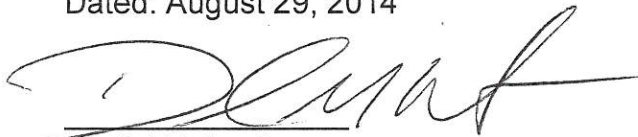
A60. Please see above.

CERTIFICATE OF SERVICE

I hereby certify that on this day, an original and fifteen copies of the foregoing were sent electronically and by overnight delivery to the Connecticut Siting Council with copy to:

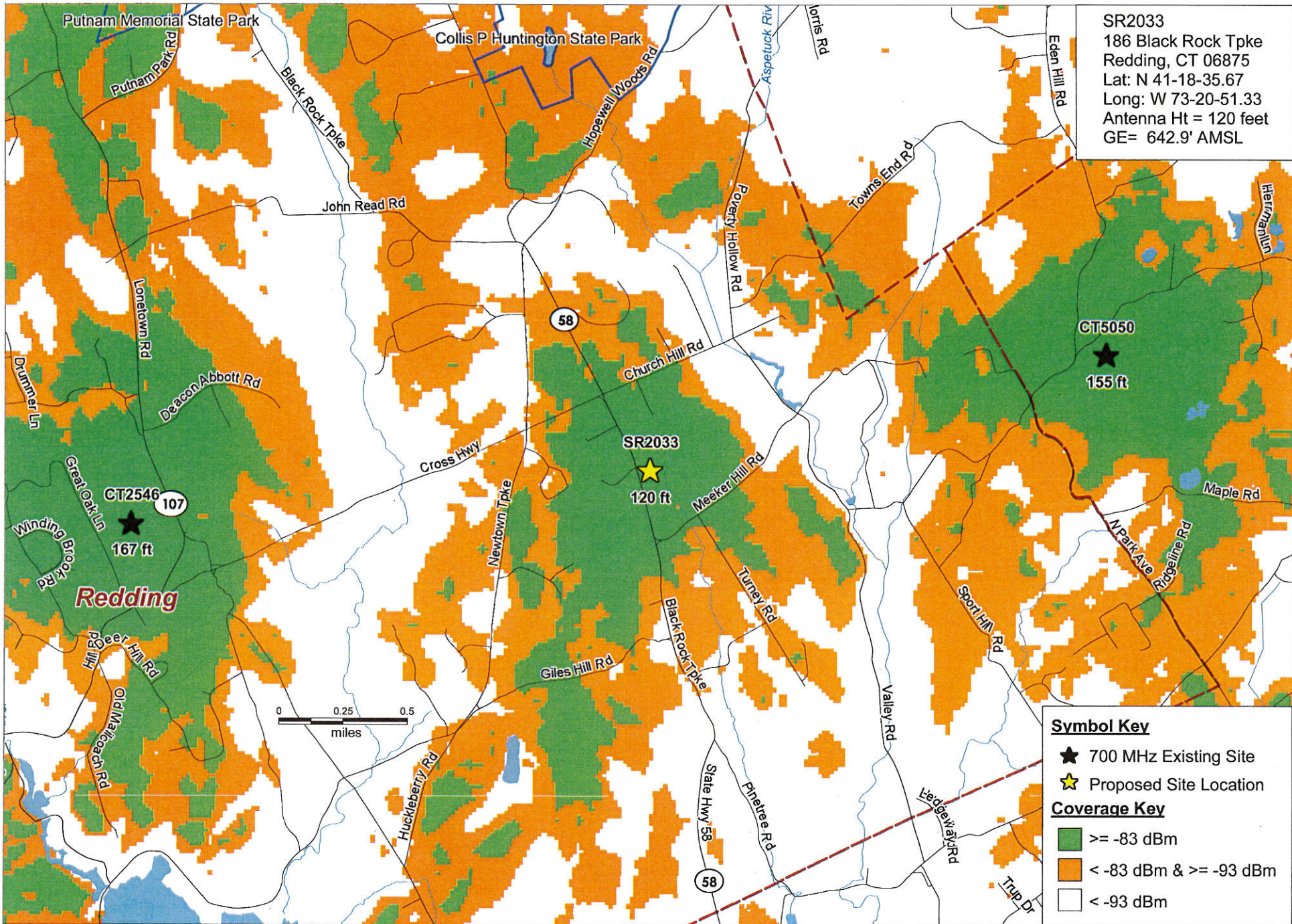
Kenneth C. Baldwin, Esq.
Robinson & Cole LLP
280 Trumbull Street
Hartford, CT 06103-3597
(860) 275-8200
kbaldwin@rc.com

Dated: August 29, 2014

A handwritten signature in black ink, appearing to read "D. Laub", written over a horizontal line.

Daniel M. Laub

ATTACHMENT 1



SR2033
 186 Black Rock Tpke
 Redding, CT 06875
 Lat: N 41-18-35.67
 Long: W 73-20-51.33
 Antenna Ht = 120 feet
 GE= 642.9' AMSL

Symbol Key

- ★ 700 MHz Existing Site
- ★ Proposed Site Location

Coverage Key

- >= -83 dBm
- < -83 dBm & >= -93 dBm
- < -93 dBm

Existing & Proposed @ 120
 700 MHz LTE Coverage

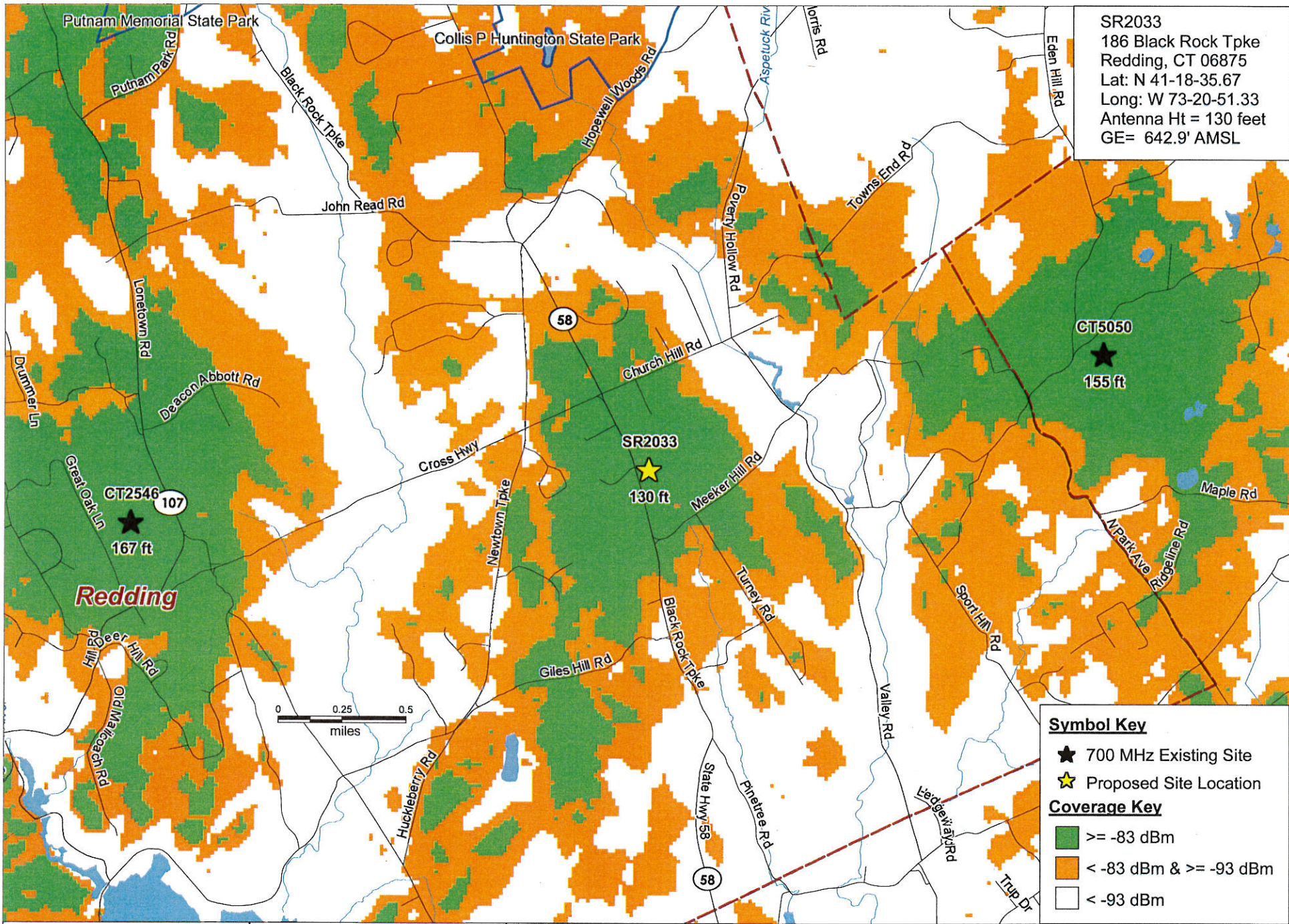
SR2033
 Redding, CT

186 Black Rock Tpke.
 Redding, CT



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 DATE: 08/19/2014

REV 0



SR2033
 186 Black Rock Tpke
 Redding, CT 06875
 Lat: N 41-18-35.67
 Long: W 73-20-51.33
 Antenna Ht = 130 feet
 GE= 642.9' AMSL

Symbol Key
 ★ 700 MHz Existing Site
 ☆ Proposed Site Location

Coverage Key
 ■ >= -83 dBm
 ■ < -83 dBm & >= -93 dBm
 □ < -93 dBm

Existing & Proposed @ 130
 700 MHz LTE Coverage

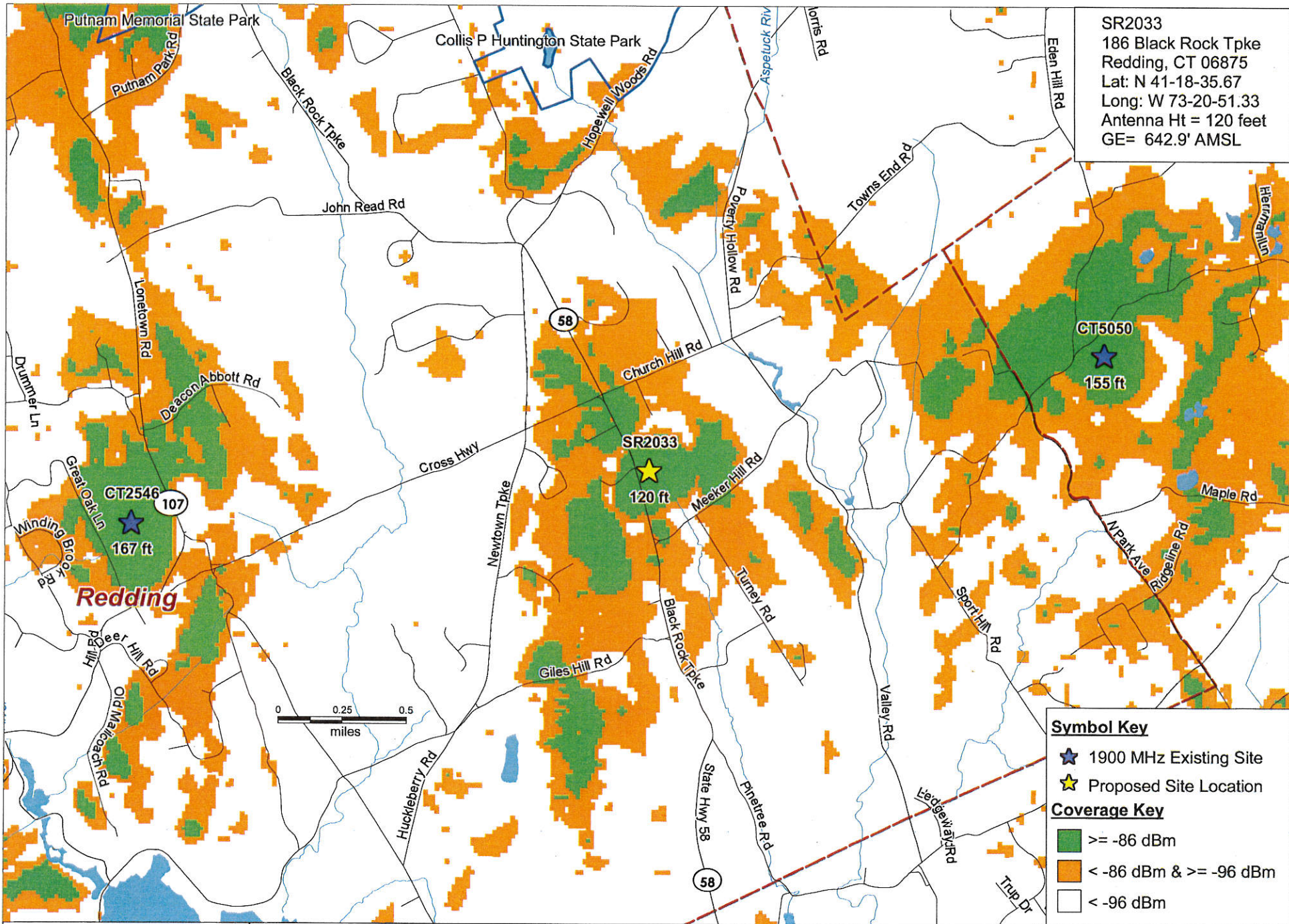
SR2033
 Redding, CT

186 Black Rock Tpke.
 Redding, CT



PREPARED ON
 DATE: 08/19/2014

REV 0



SR2033
 186 Black Rock Tpke
 Redding, CT 06875
 Lat: N 41-18-35.67
 Long: W 73-20-51.33
 Antenna Ht = 120 feet
 GE= 642.9' AMSL

Symbol Key

- ★ 1900 MHz Existing Site
- ★ Proposed Site Location

Coverage Key

- Green: ≥ -86 dBm
- Orange: < -86 dBm & ≥ -96 dBm
- White: < -96 dBm

Existing & Proposed @ 120
 1900 MHz LTE Coverage

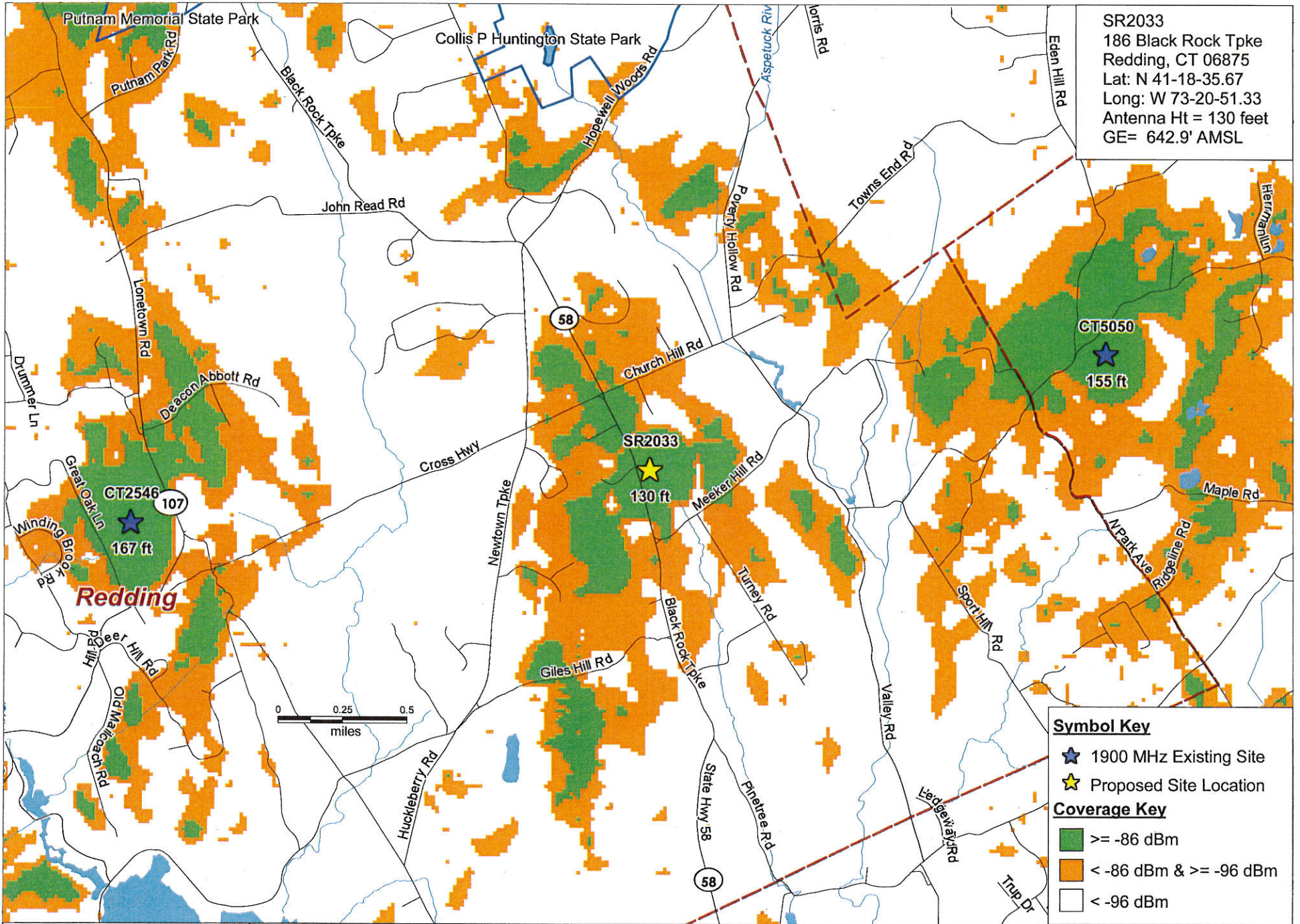
SR2033
 Redding, CT

186 Black Rock Tpke.
 Redding, CT



PREPARED ON _____
 DATE: 08/19/2014

REV 0



SR2033
 186 Black Rock Tpke
 Redding, CT 06875
 Lat: N 41-18-35.67
 Long: W 73-20-51.33
 Antenna Ht = 130 feet
 GE= 642.9' AMSL

Symbol Key

- ★ 1900 MHz Existing Site
- ★ Proposed Site Location

Coverage Key

- ≥ -86 dBm
- < -86 dBm & ≥ -96 dBm
- < -96 dBm

Existing & Proposed @ 130
 1900 MHz LTE Coverage

SR2033
 Redding, CT

186 Black Rock Tpke.
 Redding, CT



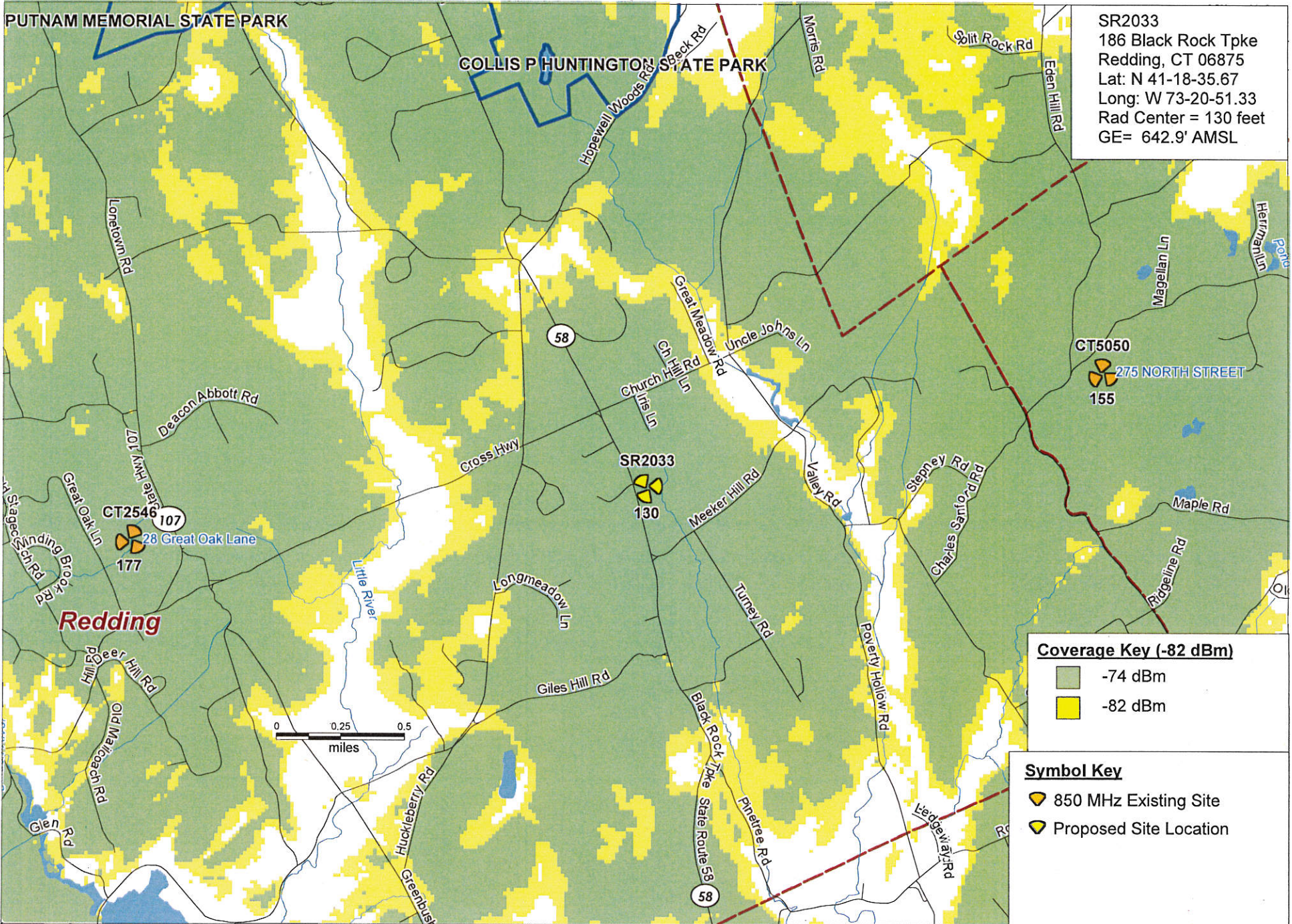
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 DATE: 08/19/2014

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PUTNAM MEMORIAL STATE PARK

COLLIS P HUNTINGTON STATE PARK

SR2033
186 Black Rock Tpke
Redding, CT 06875
Lat: N 41-18-35.67
Long: W 73-20-51.33
Rad Center = 130 feet
GE= 642.9' AMSL



Coverage Key (-82 dBm)

- 74 dBm
- 82 dBm

Symbol Key

- 850 MHz Existing Site
- Proposed Site Location

Existing and Proposed Coverage at 130 feet

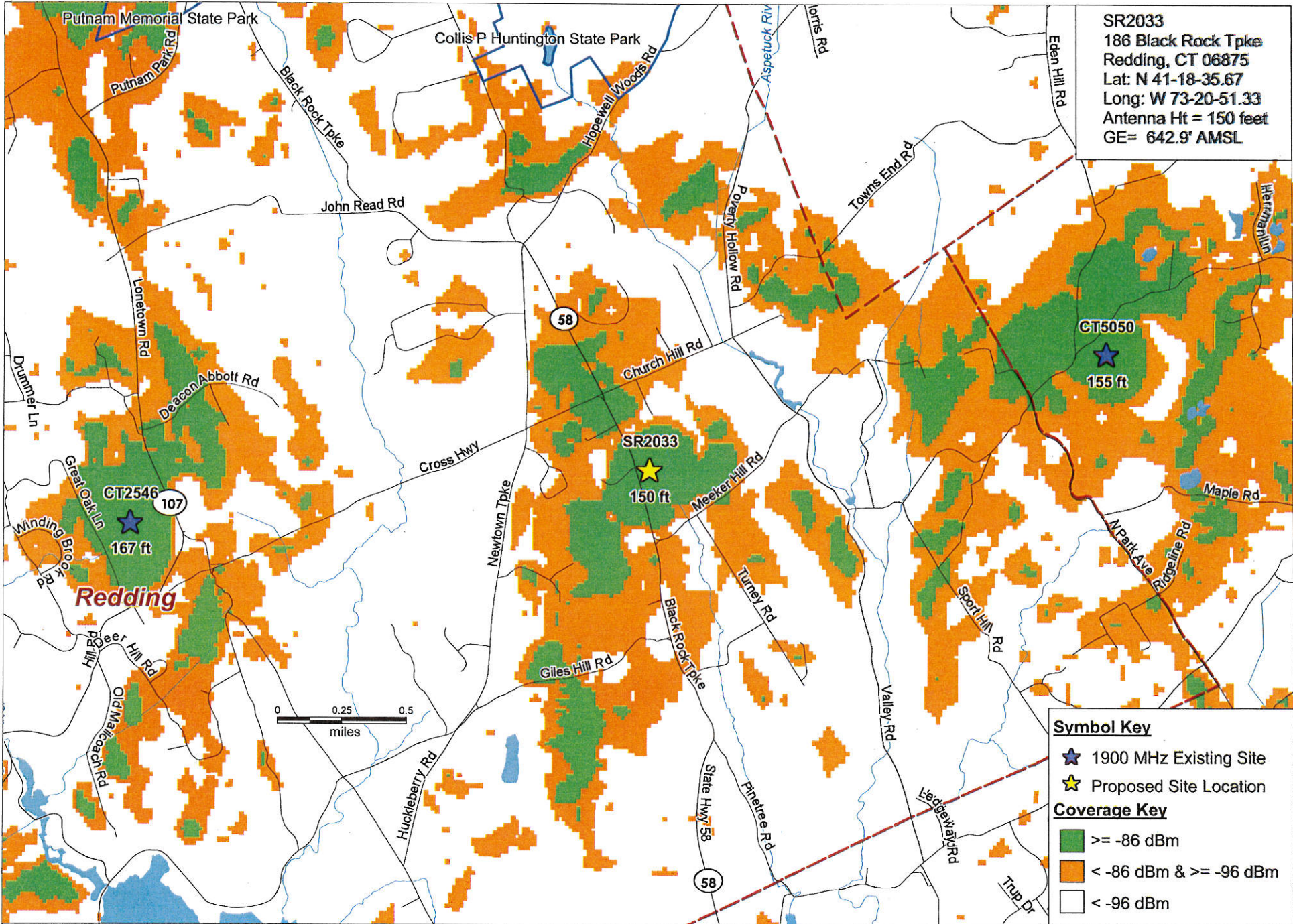
SR2033
Redding, CT

186 Black Rock Tpke.
Redding CT



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DATE: 06/25/2014	REV 0

ATTACHMENT 2



Existing & Proposed
 1900 MHz LTE Coverage

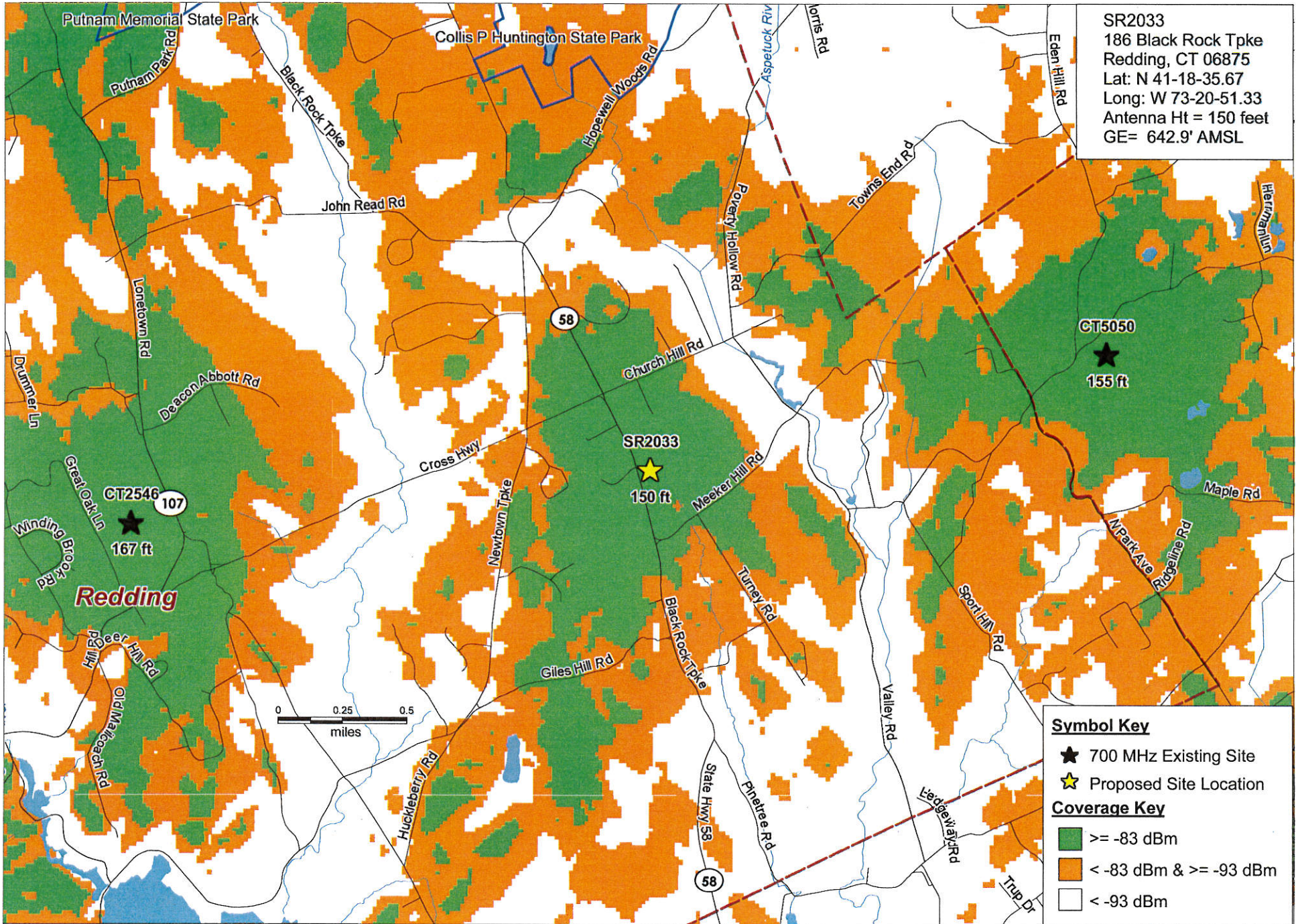
SR2033
 Redding, CT

186 Black Rock Tpke.
 Redding, CT



PREPARED ON
 DATE: 08/19/2014

REV 0



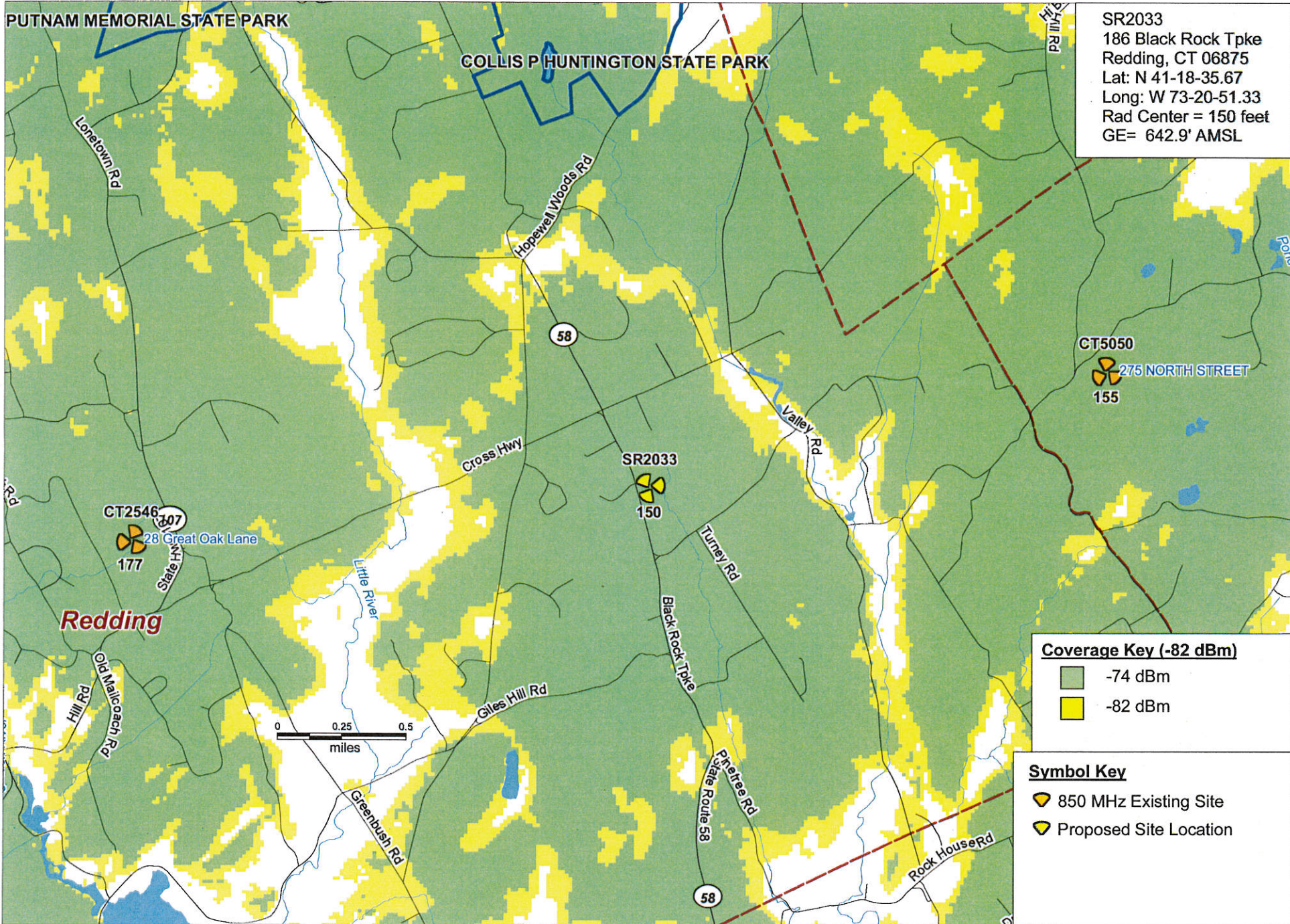
SR2033
 186 Black Rock Tpke
 Redding, CT 06875
 Lat: N 41-18-35.67
 Long: W 73-20-51.33
 Antenna Ht = 150 feet
 GE= 642.9' AMSL

Symbol Key

- ★ 700 MHz Existing Site
- ☆ Proposed Site Location

Coverage Key

- ≥ -83 dBm
- < -83 dBm & ≥ -93 dBm
- < -93 dBm



SR2033
 186 Black Rock Tpke
 Redding, CT 06875
 Lat: N 41-18-35.67
 Long: W 73-20-51.33
 Rad Center = 150 feet
 GE= 642.9' AMSL

Coverage Key (-82 dBm)

- 74 dBm
- 82 dBm

Symbol Key

- 850 MHz Existing Site
- Proposed Site Location

Existing and Proposed Coverage at 150 feet

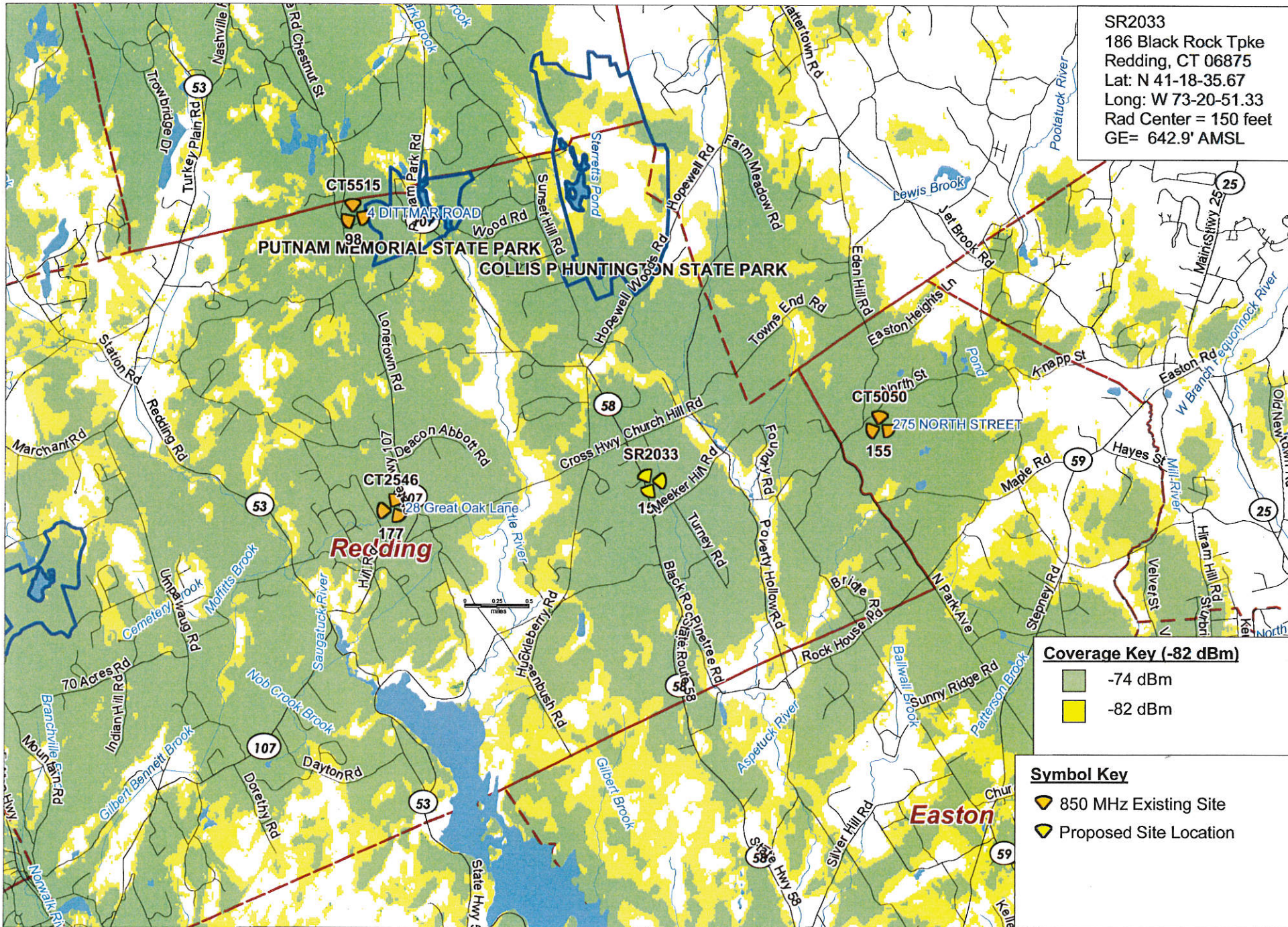
SR2033
 Redding, CT

186 Black Rock Tpke.
 Redding CT



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DATE: 06/25/2014	REV 0

ATTACHMENT 3



SR2033
 186 Black Rock Tpke
 Redding, CT 06875
 Lat: N 41-18-35.67
 Long: W 73-20-51.33
 Rad Center = 150 feet
 GE= 642.9' AMSL

Coverage Key (-82 dBm)

- 74 dBm
- 82 dBm

Symbol Key

- 850 MHz Existing Site
- Proposed Site Location

Existing and Proposed Coverage at 150 feet

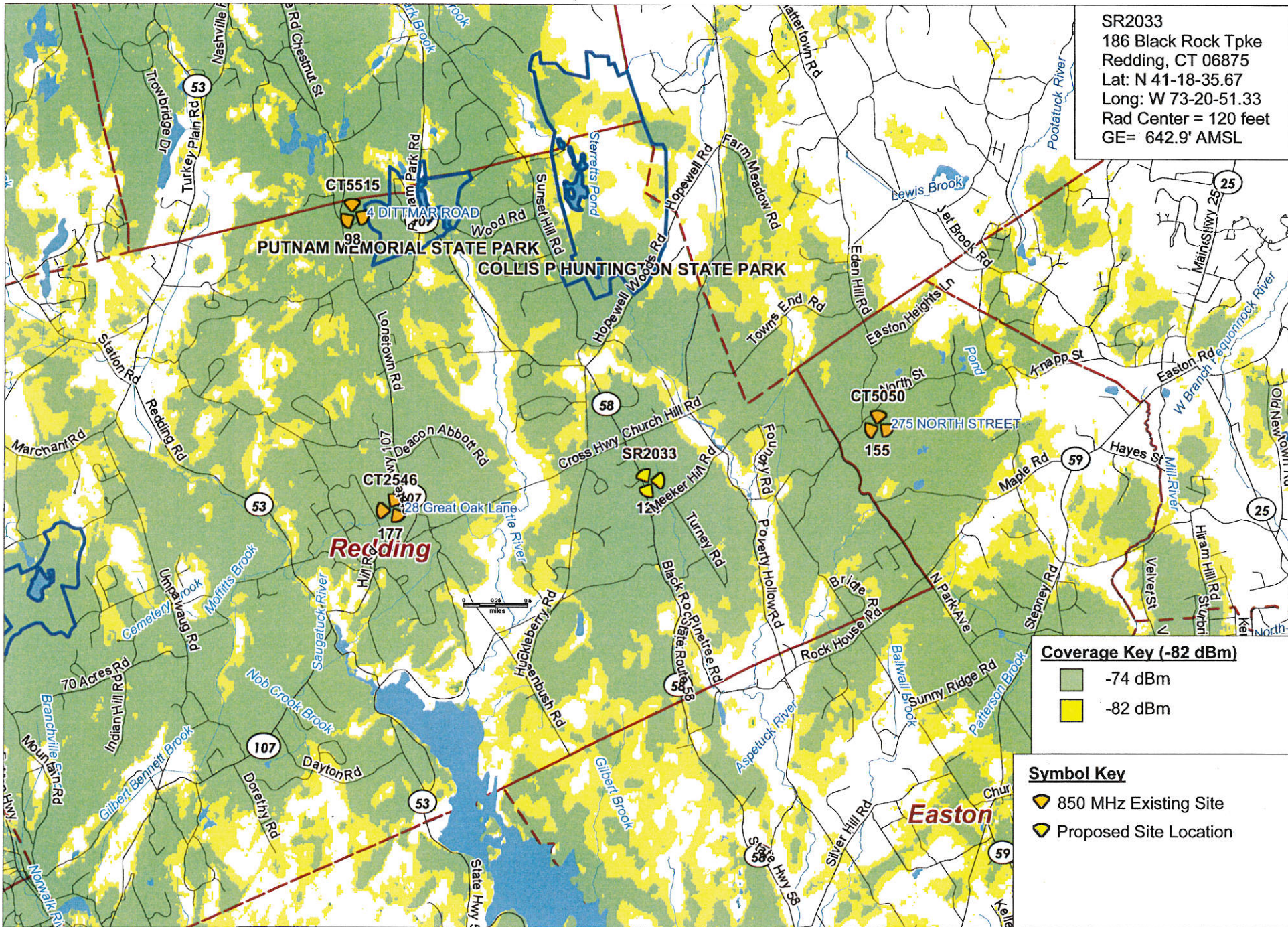
SR2033
 Redding, CT

186 Black Rock Tpke.
 Redding CT



PREPARED ON
 DATE: 06/25/2014

REV 0



SR2033
 186 Black Rock Tpke
 Redding, CT 06875
 Lat: N 41-18-35.67
 Long: W 73-20-51.33
 Rad Center = 120 feet
 GE= 642.9' AMSL

Coverage Key (-82 dBm)

- 74 dBm
- 82 dBm

Symbol Key

- 850 MHz Existing Site
- Proposed Site Location

Existing and Proposed Coverage at 120 feet	SR2033 Redding, CT	186 Black Rock Tpke. Redding CT					
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DATE: 06/25/2014	REV 0						