10300 Old Alabama Connector Road
Alpharetta, GA 30022

October 24, 2016

City of Johns Creek Planning and Zoning
Attn: Sharon Elbert
1200 Findley Rd, Ste. 400
Johns Creek, GA 30097

Re: Special Use Permit Application for a 70' Stealth Monopole (Mono-Pine) on Property Located at 10475 Medlock Bridge Road, Johns Creek, GA 30097 (Parcel #: 11 09200325C01).

Dear Ms. Elbert:

The proposed location of the 70' monopole on the property located at 10475 Medlock Bridge Road, has been specifically designed to enable Verizon Wireless to provide reliable, improved voice and broadband data coverage to the surrounding area. As indicated on the propagation maps attached hereto, the proposed location will greatly improve wireless service capacity and coverage in this specific area of the City of Johns Creek. The proposed Old Medlock site is designed as a coverage site to improve 4G coverage and data throughput for Verizon customers along SR-141 (Medlock Bridge Road) and to the residential & commercial areas around SR-141 between the SR-120 and State Bridge Road. The Old Medlock site is also designed as a capacity site to provide capacity relief to existing Verizon sites in the area.

The proposed tower height of 70' has been determined to be the minimum height required by Verizon Wireless to effectively provide improved coverage and capacity through 3G/4G technology to the surrounding area as shown in the propagation maps.

The proposed telecommunications facility is essential to allow Verizon Wireless to provide optimal wireless data speeds and much needed capacity relief to Verizon customers. This site will also enable Verizon Wireless to provide additional calling and data resources that may be needed in the event of an emergency by being equipped with battery back-up and an emergency generator to provide extended runtime capability.

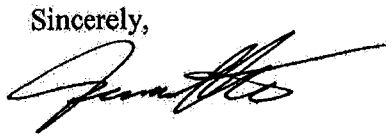
The search area for this site was centered near the intersection of SR-141 and Parsons Road in order to be as close to the target coverage area as possible. Verizon Wireless has made every reasonable attempt to utilize existing structures to meet the network design goals. There are no other known structures suitable for collocation within or near the search area. There are also no existing towers in the general area that will satisfy the required coverage objectives of the

Old Medlock site. There are two towers to the east that are too far (more than 3,600') east and south to satisfy the required coverage objectives. There are three towers to the west that are too far west (more than 4,800') and south to satisfy the required coverage objectives.

Therefore, the location of the proposed location at the aforementioned height is imperative to allow much-needed service improvements to customers in this area.

For the above mentioned reasons, Verizon Wireless respectfully requests approval of this Special Use Permit application for the proposed telecommunications facility to allow Verizon Wireless to continue to provide the most reliable wireless network to customers in this area. Thank you for your thoughtful consideration of this request.

Sincerely,



James Hurst
SR RF Engineer
Verizon Wireless – GA/AL Region

Cell Site Justification for
Old Medlock

James Hurst
Sr. Radio Frequency Engineer

October 24, 2016

verizon

Confidential and proprietary materials for authorized Verizon personnel and outside agencies only. Use, disclosure or distribution of this material is not permitted to any unauthorized persons or third parties except by written agreement.

Design Objectives for Old Medlock

The proposed **Old Medlock** site is designed as a coverage site to improve 4G coverage and data throughput for Verizon customers along SR-141 (Medlock Bridge Road) and to the residential & commercial areas around SR-141 between the SR-120 and State Bridge Road.

Old Medlock site is also designed as a capacity site to provide capacity relief to existing Verizon sites in the area.

verizon

Confidential and proprietary materials for authorized Verizon personnel and outside agencies only. Use, disclosure or distribution of this material is not permitted to any unauthorized persons or third parties except by written agreement.

Old Medlock Site Justification

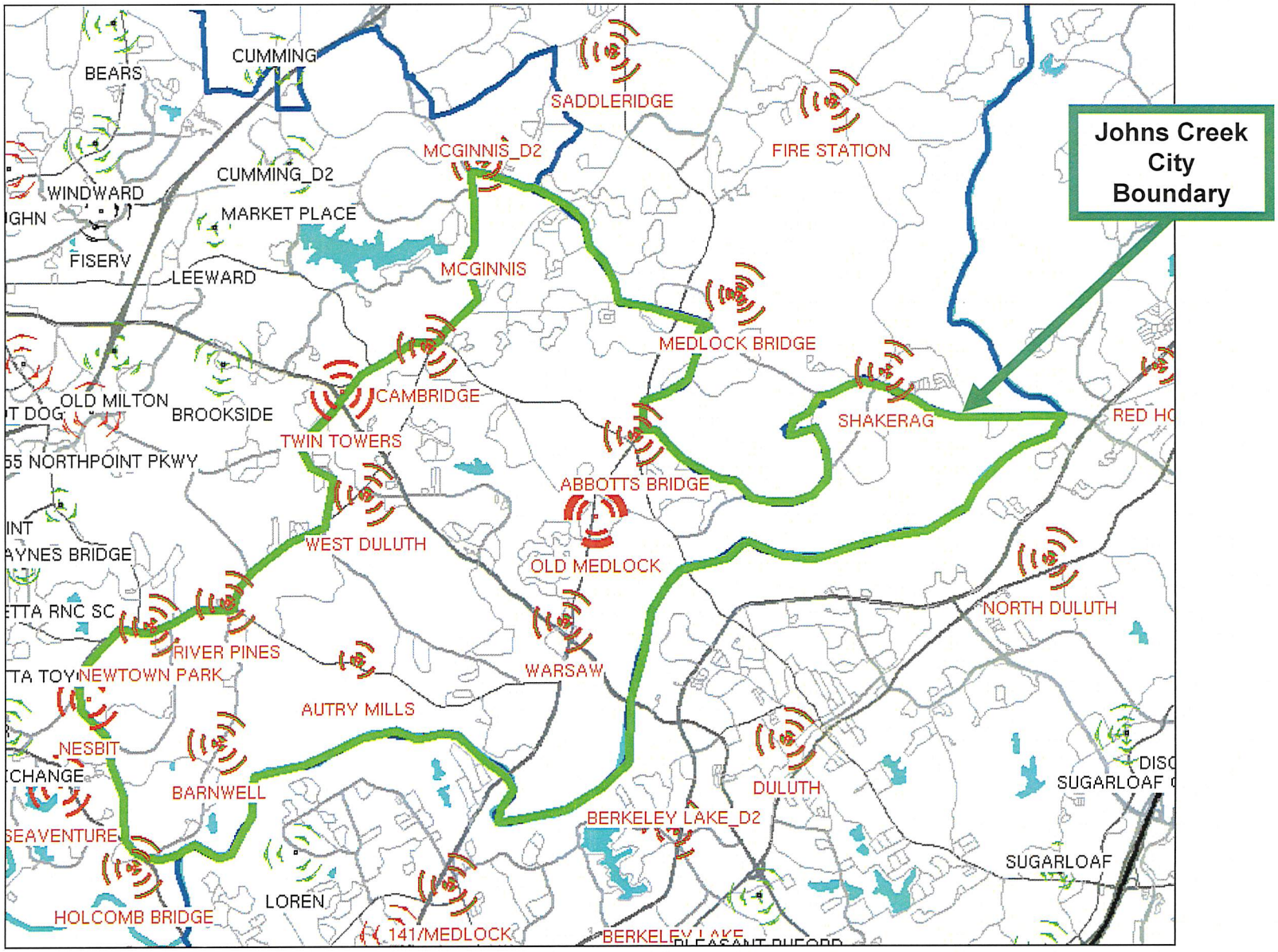
- The **Old Medlock** site with antenna center lines at 70'AGL provides controlled coverage across the target area at optimal signal levels and with minimal interference to and from neighboring Verizon sites.

- There are no existing towers within 3,700 feet of the proposed Old Medlock site location. The nearest Verizon Wireless site is 4,500 feet away. This distance from the area of interest combined with the rolling terrain in this area impede the nearest existing Verizon sites ability to provide quality signal strength and sufficient capacity to Verizon customers along SR-141 (Medlock Bridge Road) and to the residential areas around SR-141 between the SR-120 and State Bridge Road.

verizon

Confidential and proprietary materials for authorized Verizon personnel and outside agencies only. Use, disclosure or distribution of this material is not permitted to any unauthorized persons or third parties except by written agreement.

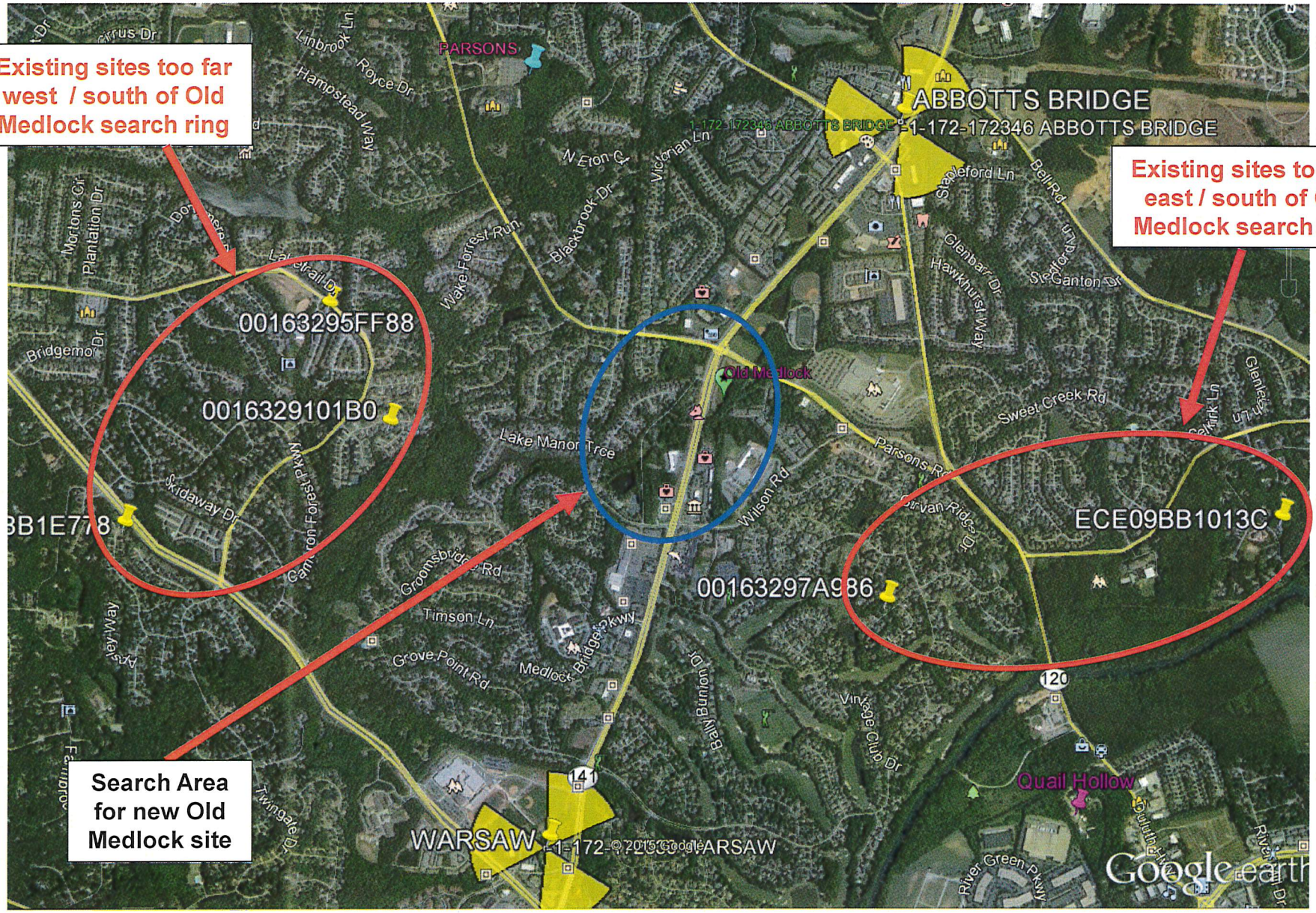
Verizon Wireless Sites serving Johns Creek including proposed **Old Medlock** Site



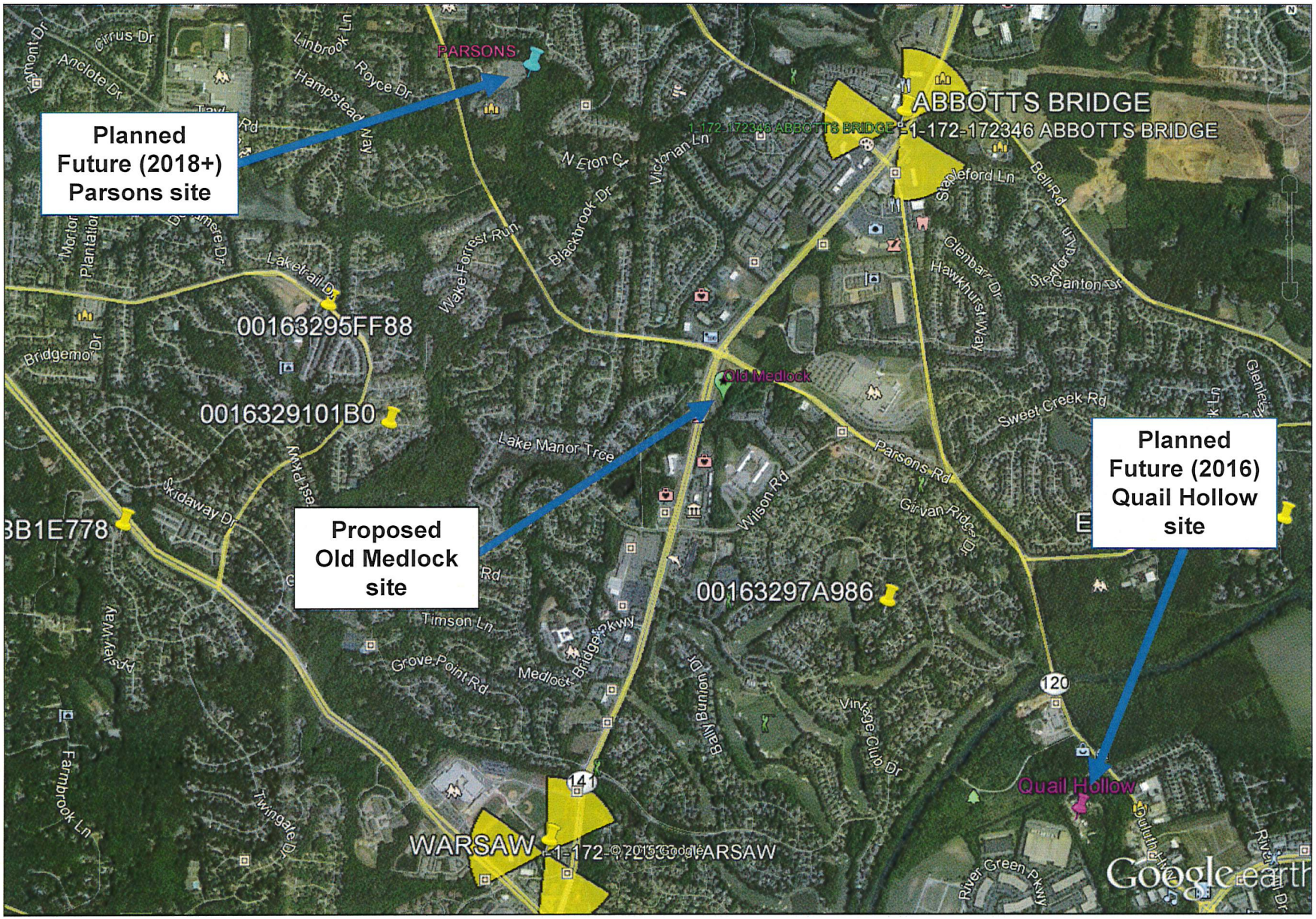
Verizon Wireless Sites serving Johns Creek including proposed **Old Medlock** Site

Cell Name	Street Address	City	Latitude	Longitude	Tower Owner	Structure Type	Structure Ht (feet)	Antenna Ht (feet)
141/MEDLOCK	3817 Medlock Bridge Rd	Norcross	33.980486	-84.213375	American Towers	Monopole	180	180
ABBOTTS BRIDGE	10984 Bell Road	Duluth	34.049247	-84.176928	New Cingular Wireless	Monopole	170	170
AUTRY MILLS	9633 Autry Mill Rd.	Alpharetta	34.015806	-84.229403	AT&T Wireless	Monopole	195	150
BARNWELL	9152 Barnwell Road	Johns Creek	34.003408	-84.255489	New Towers LLC	Monopole	130	105
BERKELEY LAKE	3865 Peachtree Industrial Blvd.	Duluth	33.98825	-84.171778	Verizon Wireless	Monopole	140	140
BERKELEY LAKE_D2	3865 Peachtree Industrial Blvd.	Duluth	33.98825	-84.171778	Verizon Wireless	Monopole	140	140
CAMBRIDGE	11554 Jones Bridge Road	Alpharetta	34.063889	-84.214722	Crown Castle	Monopole	180	157
DULUTH	3573 Ridgeway Drive	Duluth	34.001489	-84.150472	Verizon Wireless	Self-support	290	290
FIRE STATION	3680 Atlanta Road	Suwanee	34.100311	-84.138703	Crown Castle	Monopole	178	154
HOLCOMB BRIDGE	8510 Holcomb Bridge Road	Roswell	33.984544	-84.271867	Verizon Wireless	Monopole	170	160
MCGINNIS	5360 McGinnis Ferry Rd	Alpharetta	34.092503	-84.203397	Crown Castle	Monopole	180	140
MEDLOCK BRIDGE	MCGinnes Ferry Road (New Boyd)	Cumming	34.070655	-84.157138	Verizon Wireless	Self-support	150	150
NESBIT	9539 Nesbit Ferry rd	Alpharetta	34.011047	-84.279317	AT&T Towers	Monopole	150	140
NEWTOWN PARK	3165 Old Alabama Road	Roswell	34.022106	-84.267386	Global Tower Partners	Monopole	180	178
NORTH DULUTH	1695 Buford Hwy NW	Duluth	34.028303	-84.100942	Crown Castle	Self-support	200	136
OLD MEDLOCK	10475 Medlock Bridge Rd	Johns Creek	34.036947	-84.1845	Ivy Falls OCA	Monopole	110	100
RED HOOK	700 Peachtree Industrial Blvd.	Suwanee	34.057817	-84.079358	Verizon Wireless	Monopole	180	180
RIVER PINES	9940 Jones Bridge Road	Alpharetta	34.025292	-84.253208	Verizon Wireless	Monopole	194	188
SADDLERIDGE	2130 Peachtree Parkway	Cumming	34.108919	-84.179028	STC Tow, LLC	Monopole	184	165
SEAVENTURE	2600 Holcomb Bridge Rd	Roswell	33.9975	-84.285	Crown Castle	Rooftop	100	84
SHAKERAG	6451 Old Atlanta Road	Suwanee	34.058111	-84.130083	Crown Castle	Monopole	148	130
TWIN TOWERS	4455 State Bridge Way	Alpharetta	34.057278	-84.230806	ATC	Rooftop	195	100
WARSAW	9800 Medlock Bridge Road	Alpharetta	34.020778	-84.19075	Cingular Wireless	Monopole	195	153
WEST DULUTH	10735 Jones Bridge Road	Alpharetta	34.041222	-84.226861	Fulton County	Guyed Tower	200	161

Aerial Map – Proposed **Old Medlock** Site Location and Existing Verizon Sites

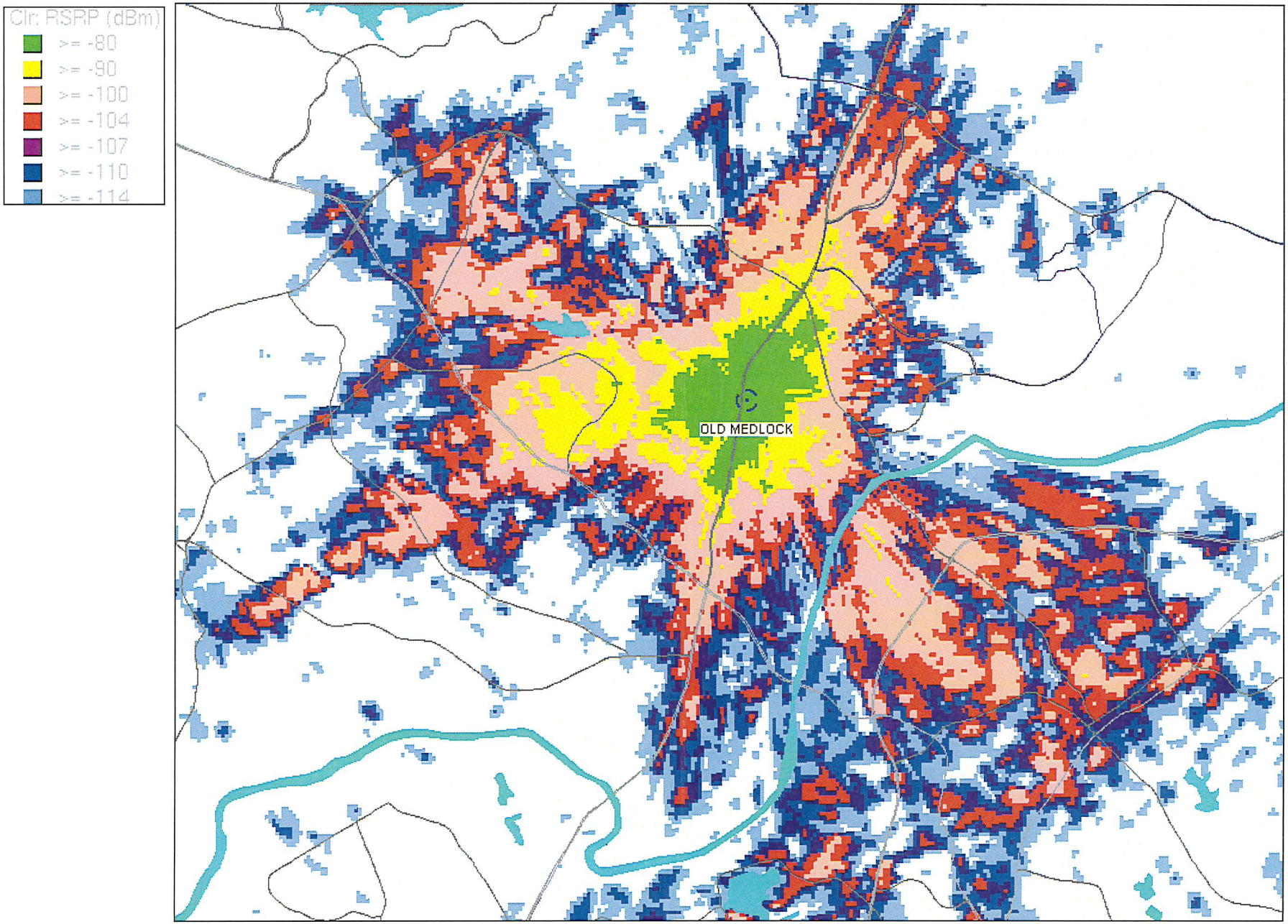


Aerial Map – Proposed **Old Medlock** Site Location and FUTURE Verizon Sites

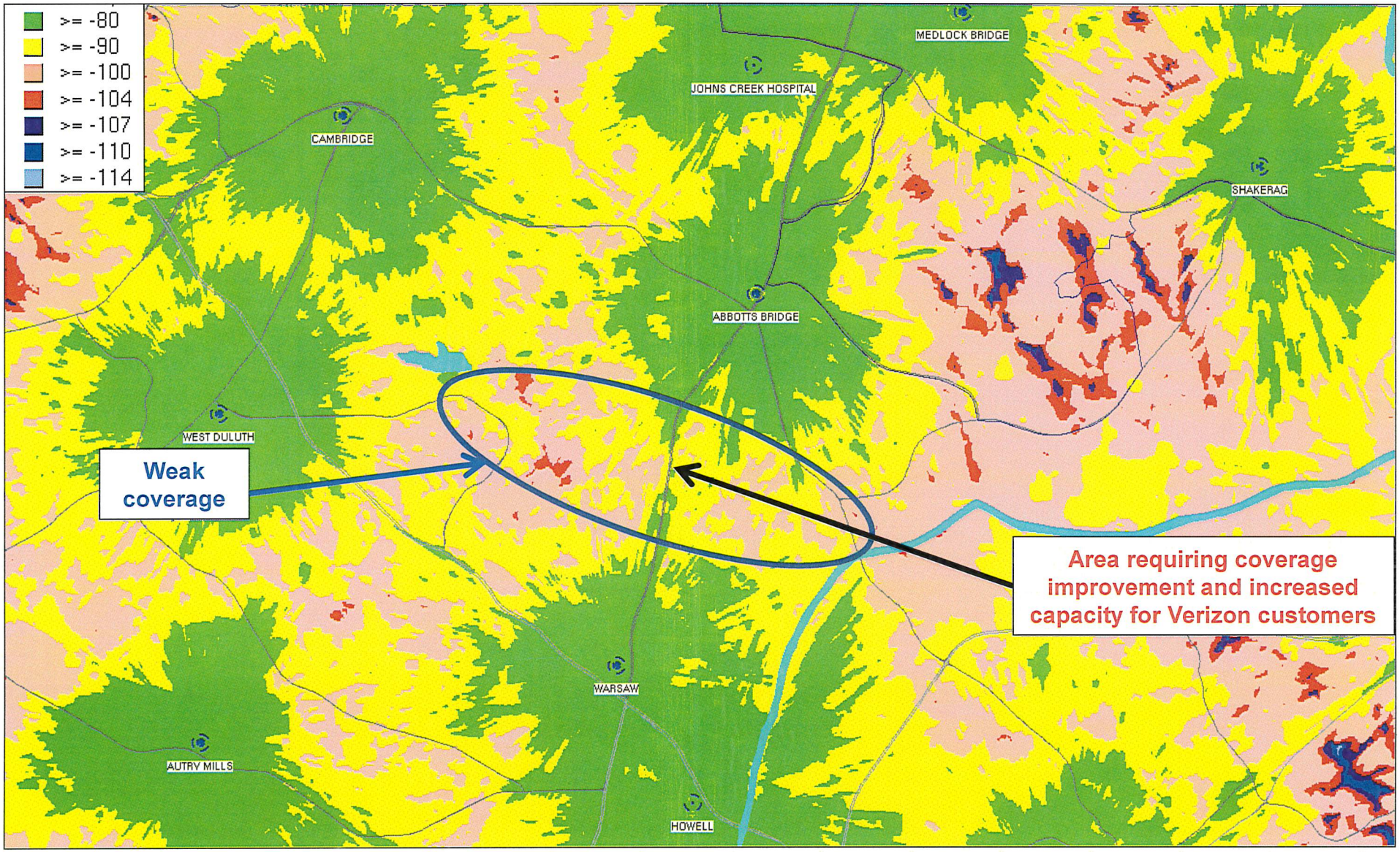


Old Medlock TURNED ON at 70' AGL

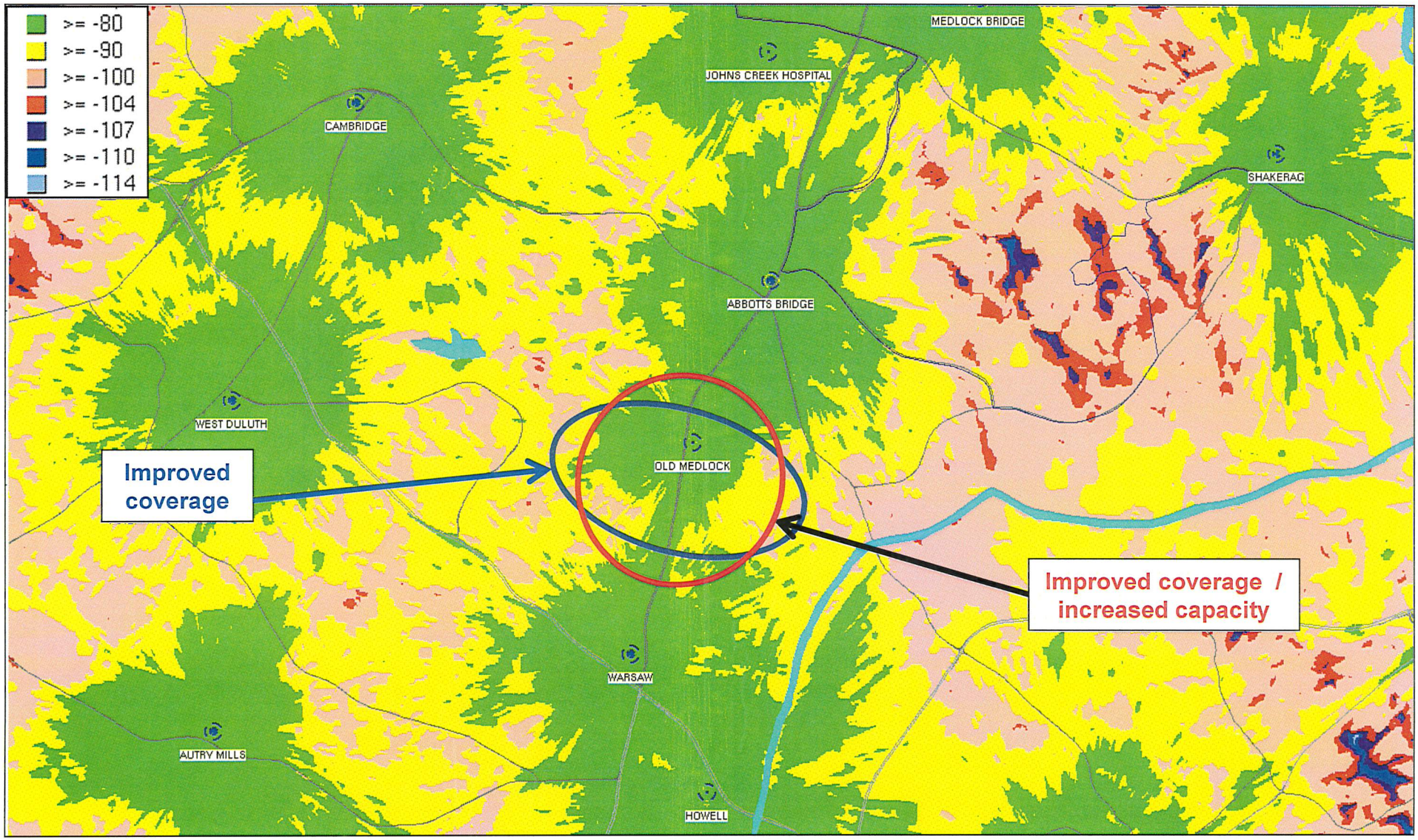
30, 150, 270 deg azimuths, 2/2/2 EDT, 0/0/0 MDT



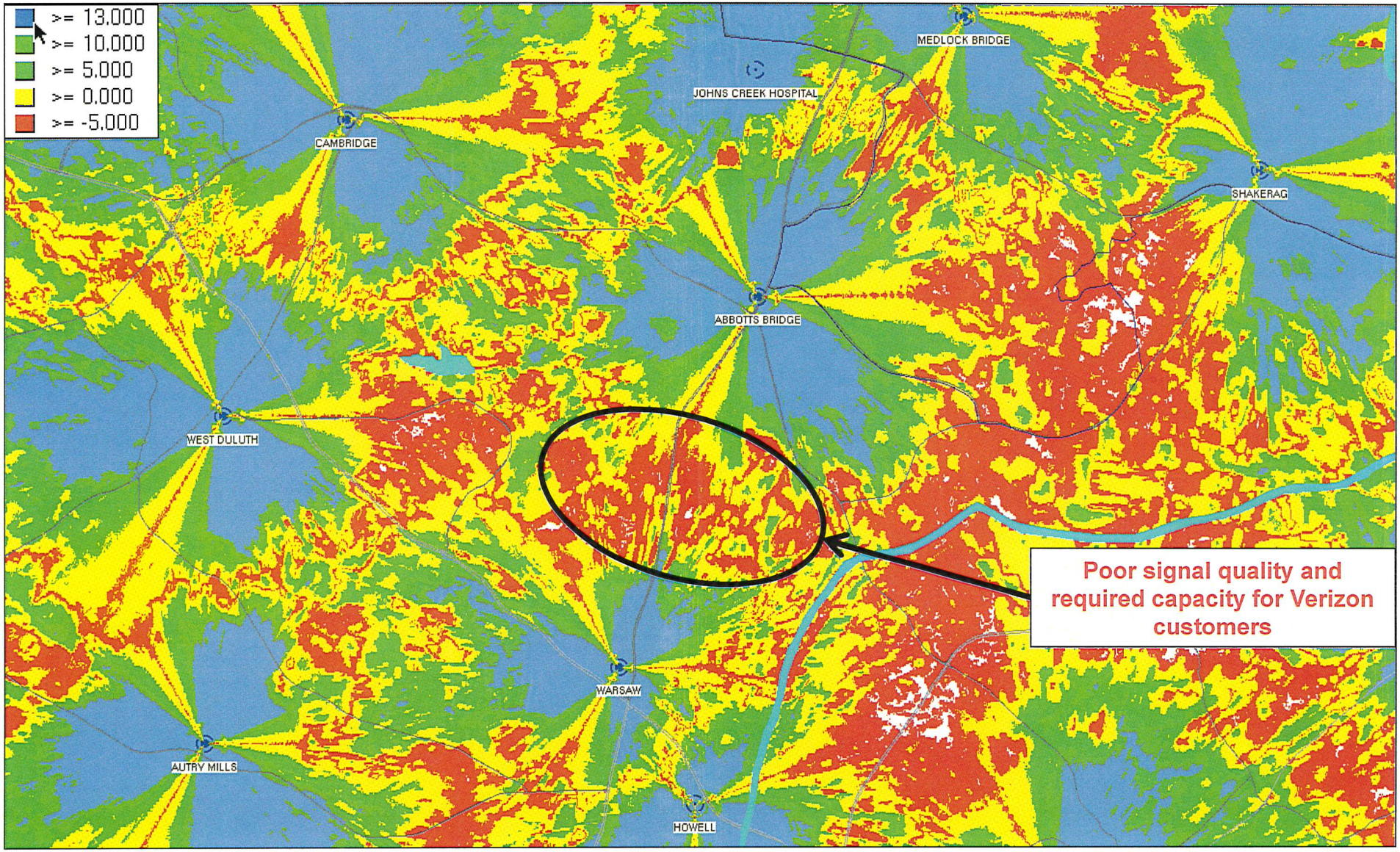
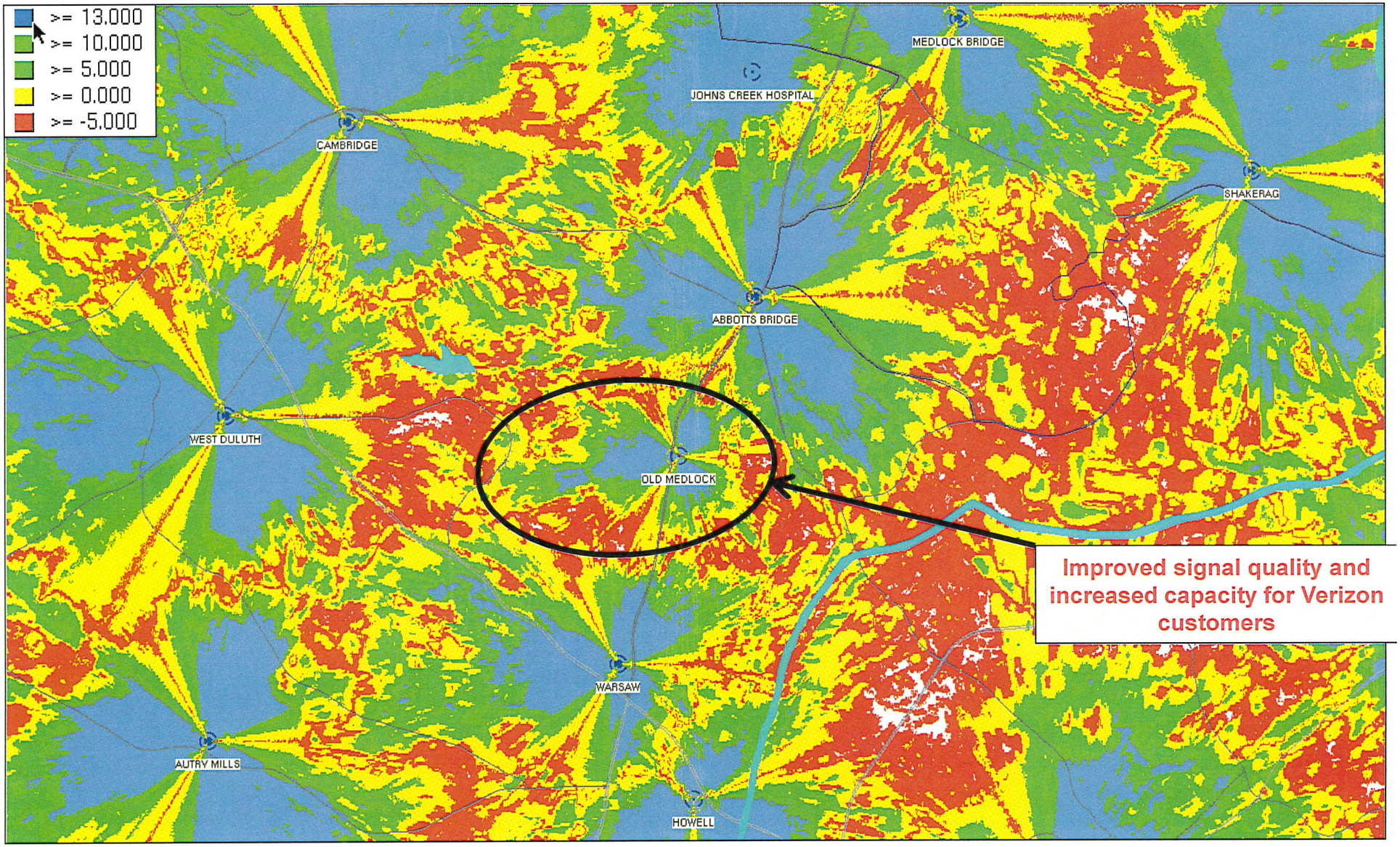
Current Verizon 4G LTE Coverage (**without** the proposed **Old Medlock** site)



Future Verizon 4G LTE Coverage with the proposed **Old Medlock** site at 70' AGL



Current Verizon 4G LTE Signal Quality Level (**without** the proposed **Old Medlock** site)



Future Verizon 4G LTE Signal Quality Level with the proposed **Old Medlock** site at 70' AGL