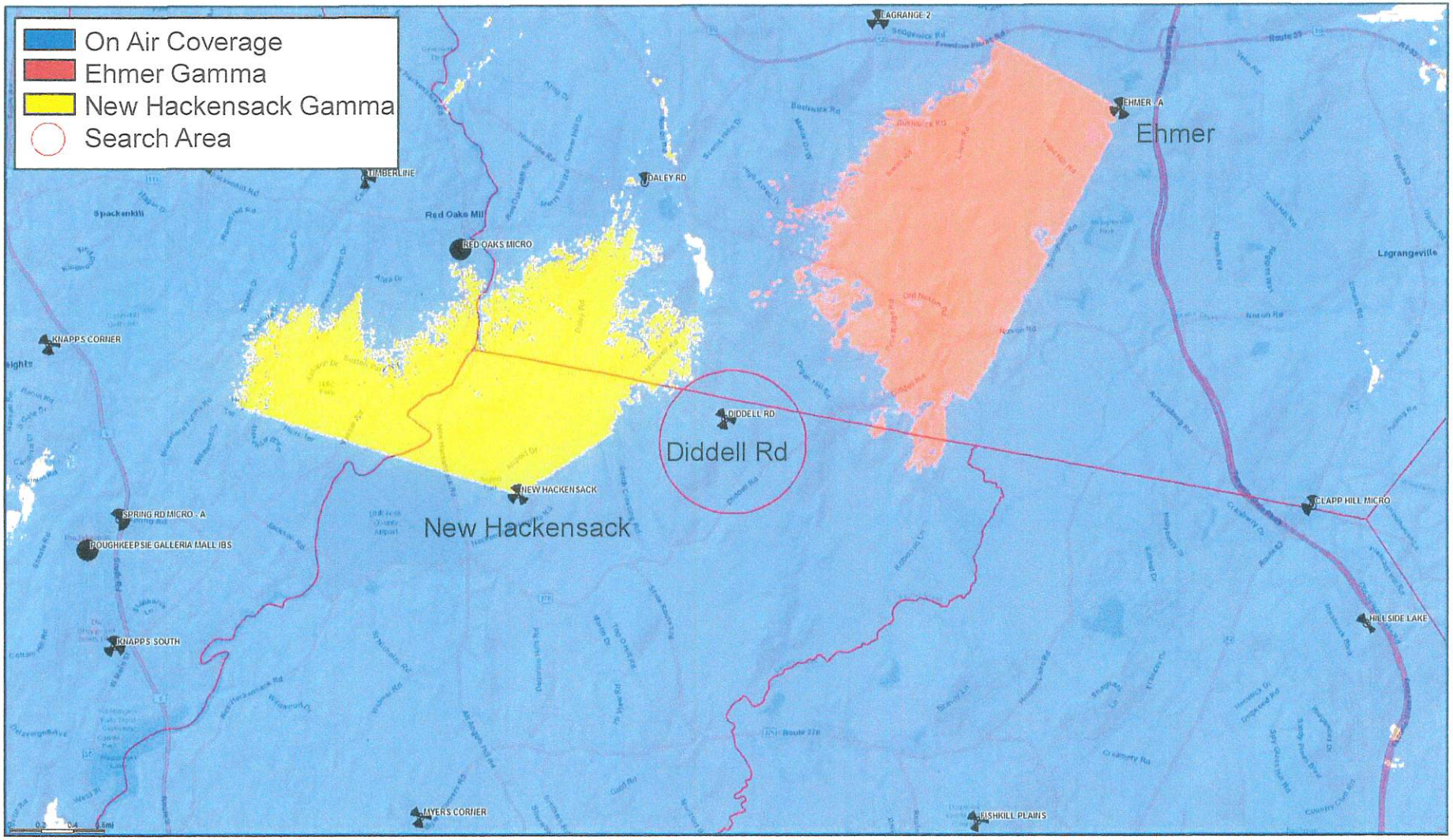
Existing 700MHz Best Server -105dBm RSRP

Best Server plots depict the actual footprint of each sector in question at one threshold so the viewer can accurately evaluate the area offloaded by the new sites dominant signal area.

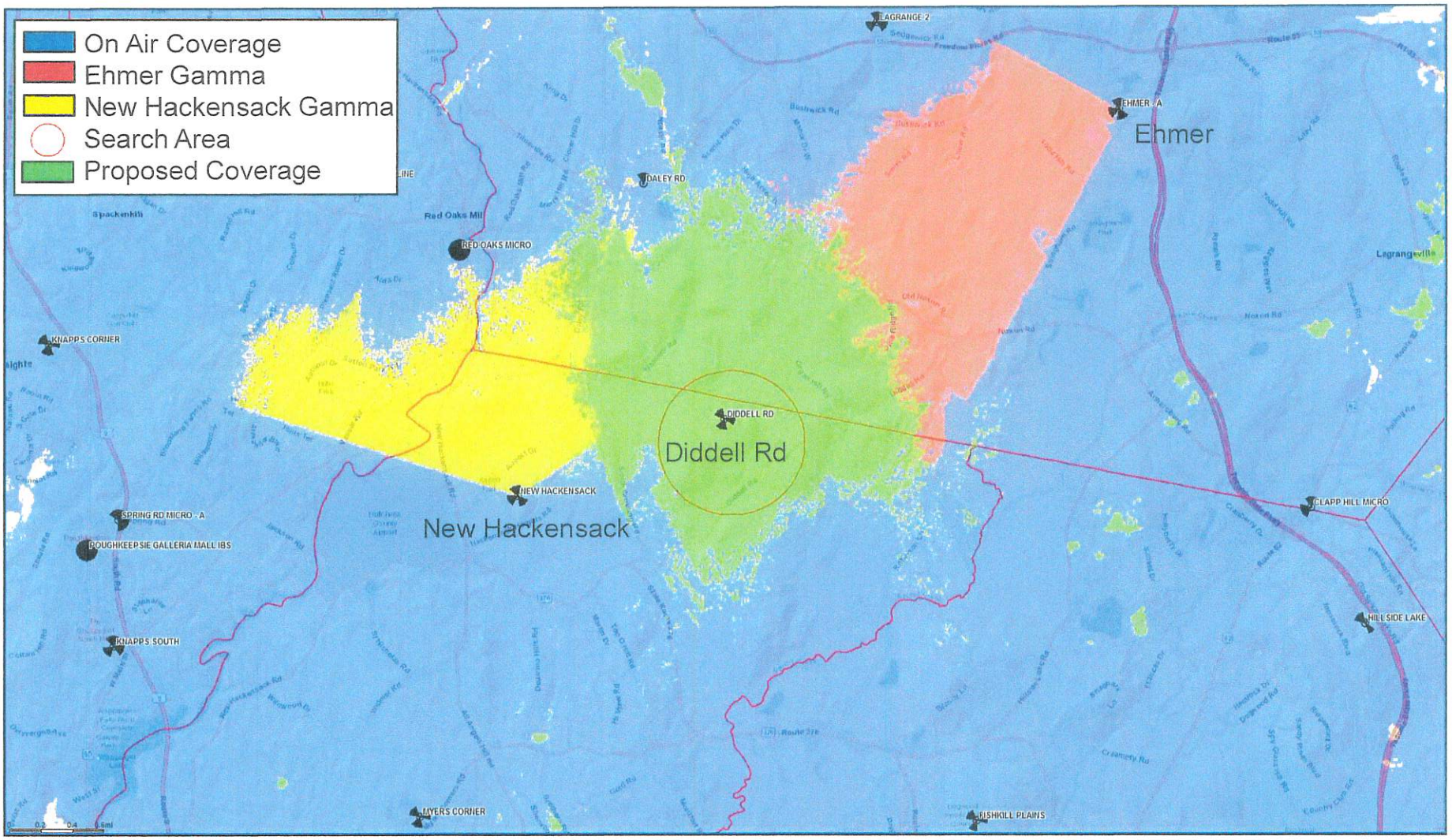


The map above represents existing low band coverage from existing sites, with the sites in need of capacity offload detailed in the legend above. Blue coverage is from other on air sites.

verizon

Proposed 700MHz Best Server -105dBm RSRP

Best Server plots depict the actual footprint of each sector in question at one threshold so the viewer can accurately evaluate the area offloaded by the new sites dominant signal area (at 116' ACL).



The map above adds the low band footprint of the proposed Diddell Rd site in green. The green best server footprint provides improved coverage and capacity throughout the identified significant gap area. This will help to resolve the coverage and capacity issues impacting the Ehmer Gamma and New Hackensack Gamma sectors.

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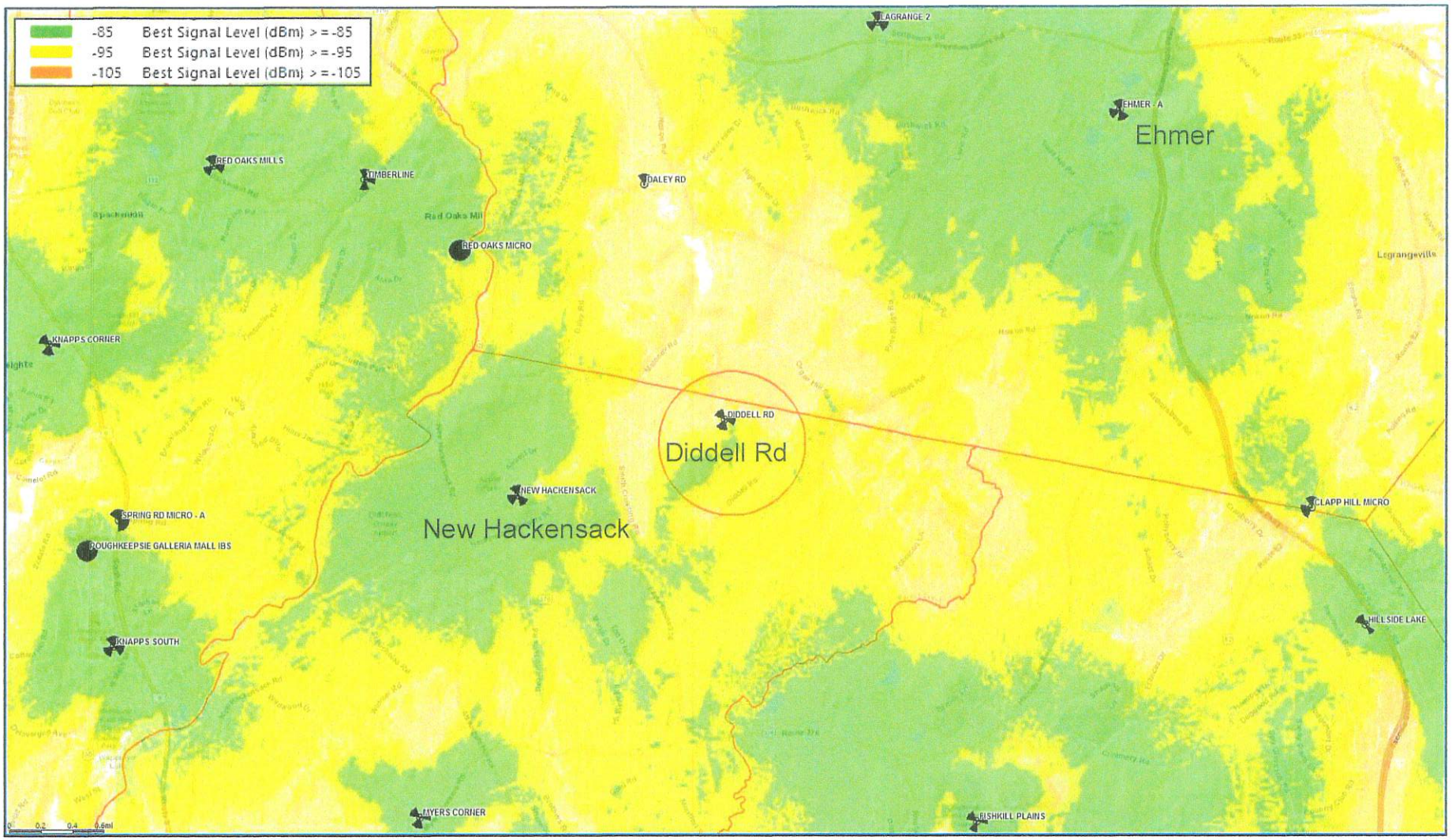
Existing 700MHz Coverage

This coverage map shows how weak the RF conditions are in and around the Diddell Rd site area.
Refer to slide 10 for further explanation of these color thresholds



The map above represents existing low band signal strength coverage from existing sites.

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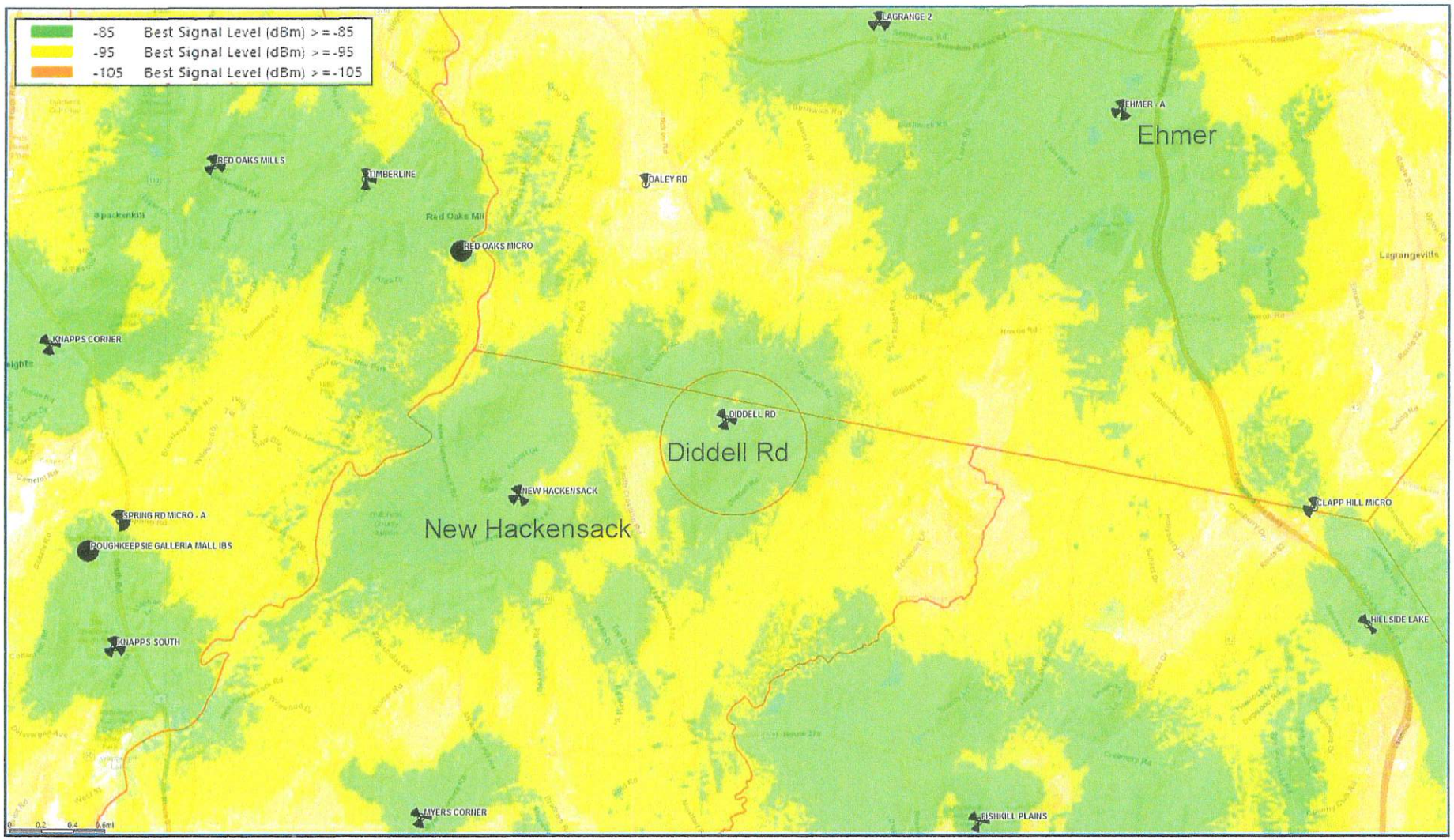
Proposed 700MHz Coverage

This coverage map shows how improved the RF conditions will be in and around the Diddell Rd site area (at 116' ACL).
Refer to slide 10 for further explanation of these color thresholds



The map above adds the low band footprint of the proposed Diddell Rd site. The significantly improved signal strength corresponds to improved coverage and capacity throughout the identified significant gap area. This will help to resolve the coverage and capacity issues impacting the Ehmer Gamma, and New Hackensack Gamma sectors.

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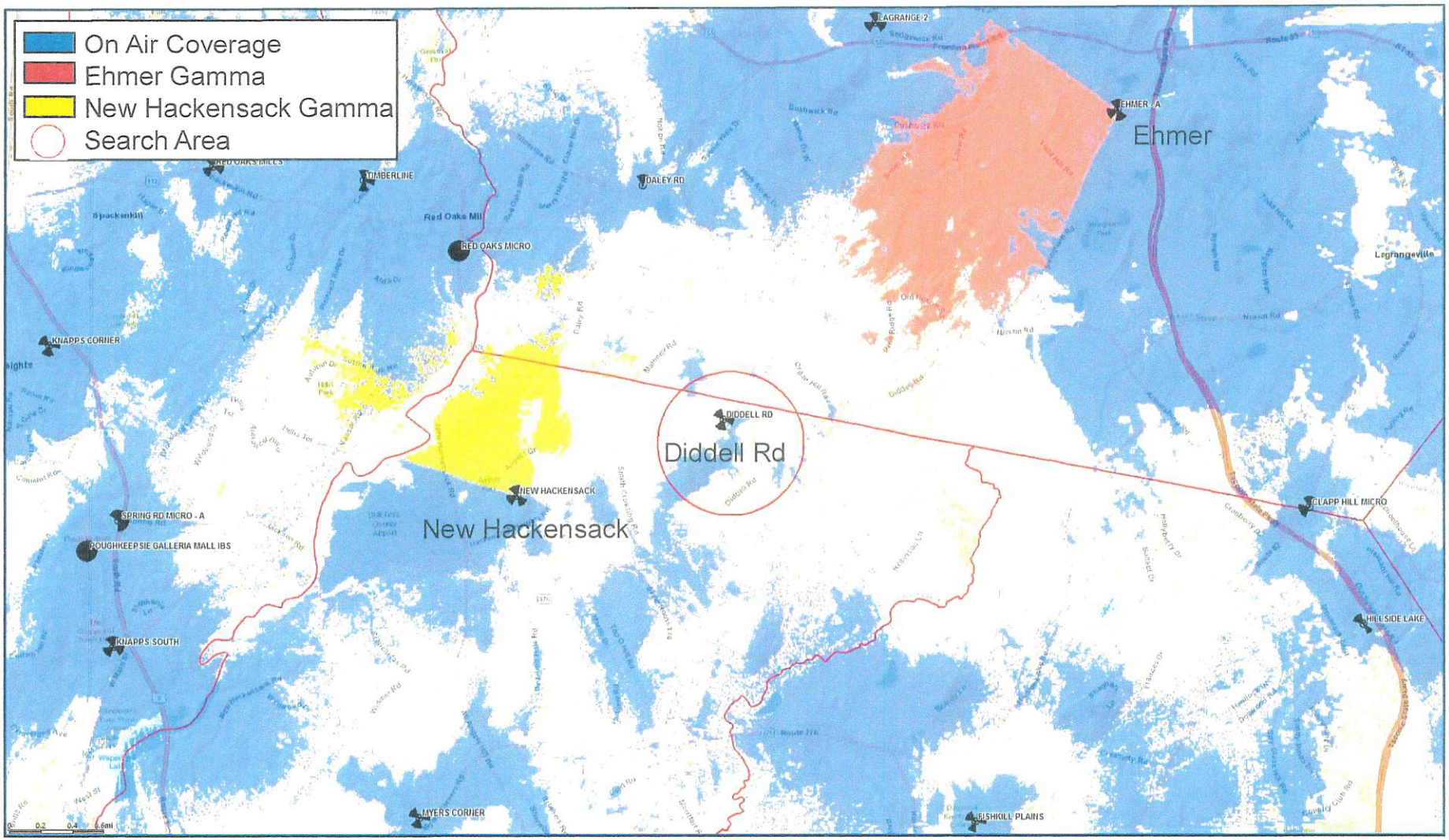
Existing 2100MHz Best Server -105dBm RSRP

Best Server plots depict the actual footprint of each sector in question at one threshold so the viewer can accurately evaluate the area offloaded by the new sites dominant signal area.



The map above represents mid band coverage from existing sites, with the sites in need of capacity offload detailed in the legend above. Blue coverage is from other on air sites.

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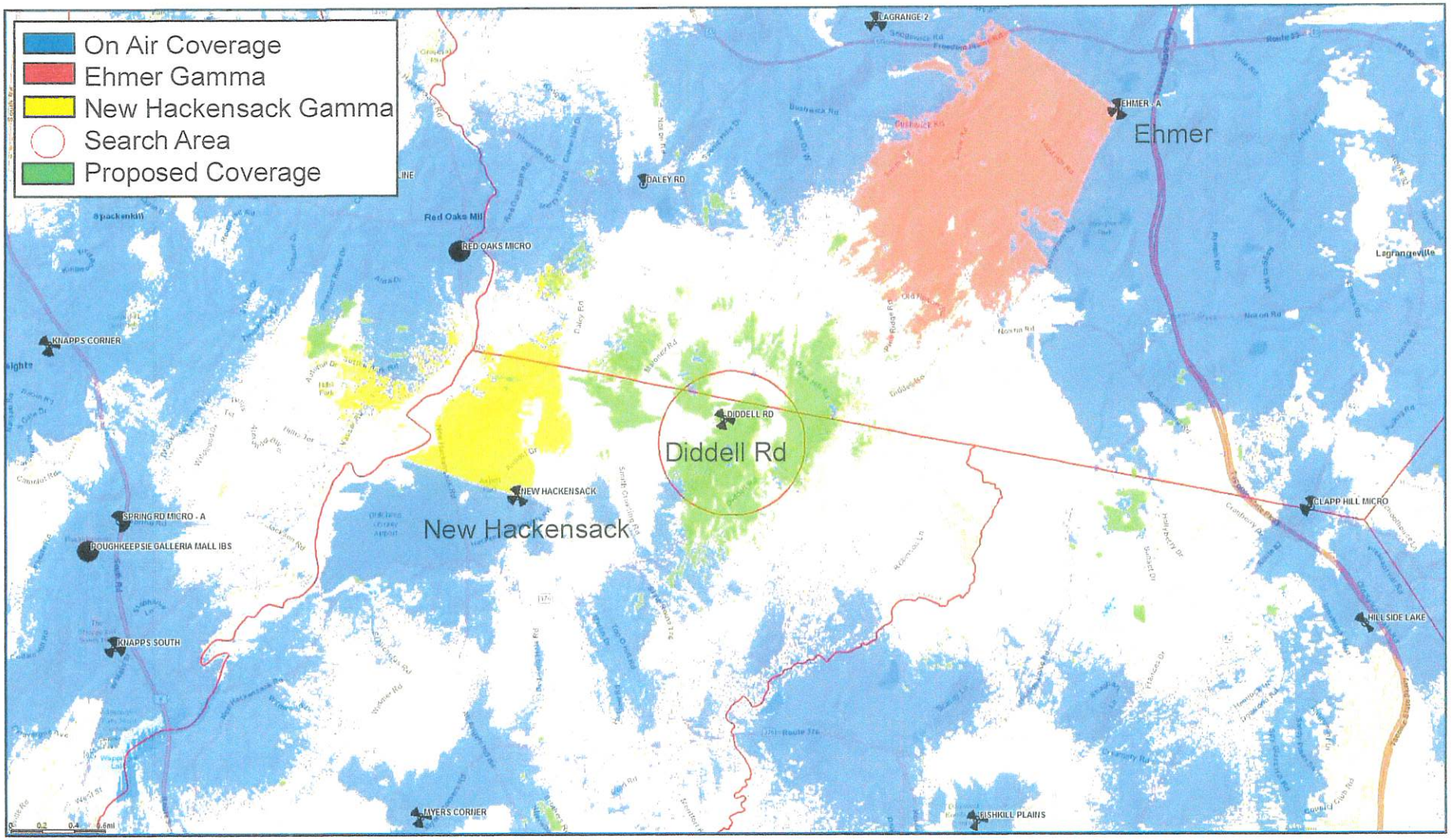
Proposed 2100MHz Best Server -105dBm RSRP

Best Server plots depict the actual footprint of each sector in question at one threshold so the viewer can accurately evaluate the area offloaded by the new sites dominant signal area (at 116' ACL).



The map above adds the mid band footprint of the proposed Diddell Rd site in green. The green best server footprint provides improved coverage and capacity throughout the identified significant gap area.

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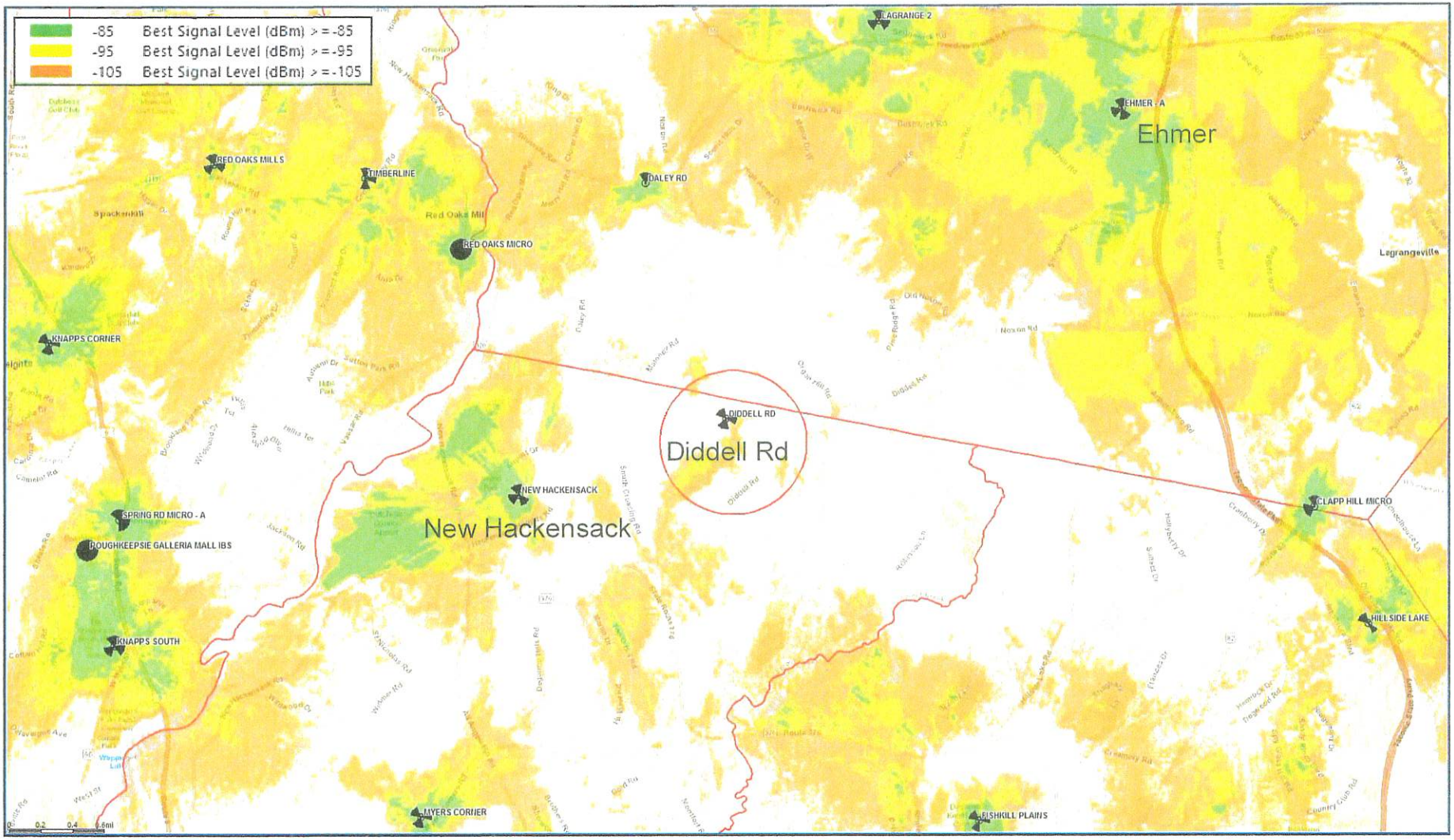
Existing 2100MHz Coverage

This coverage map shows the RF conditions in and around the Diddell Rd site area.
Refer to slide 10 for further explanation of these color thresholds



The map above represents mid band coverage from existing sites. This 2100MHz signal is very weak throughout the project area. Additional mid band network densification is required to resolve these conditions.

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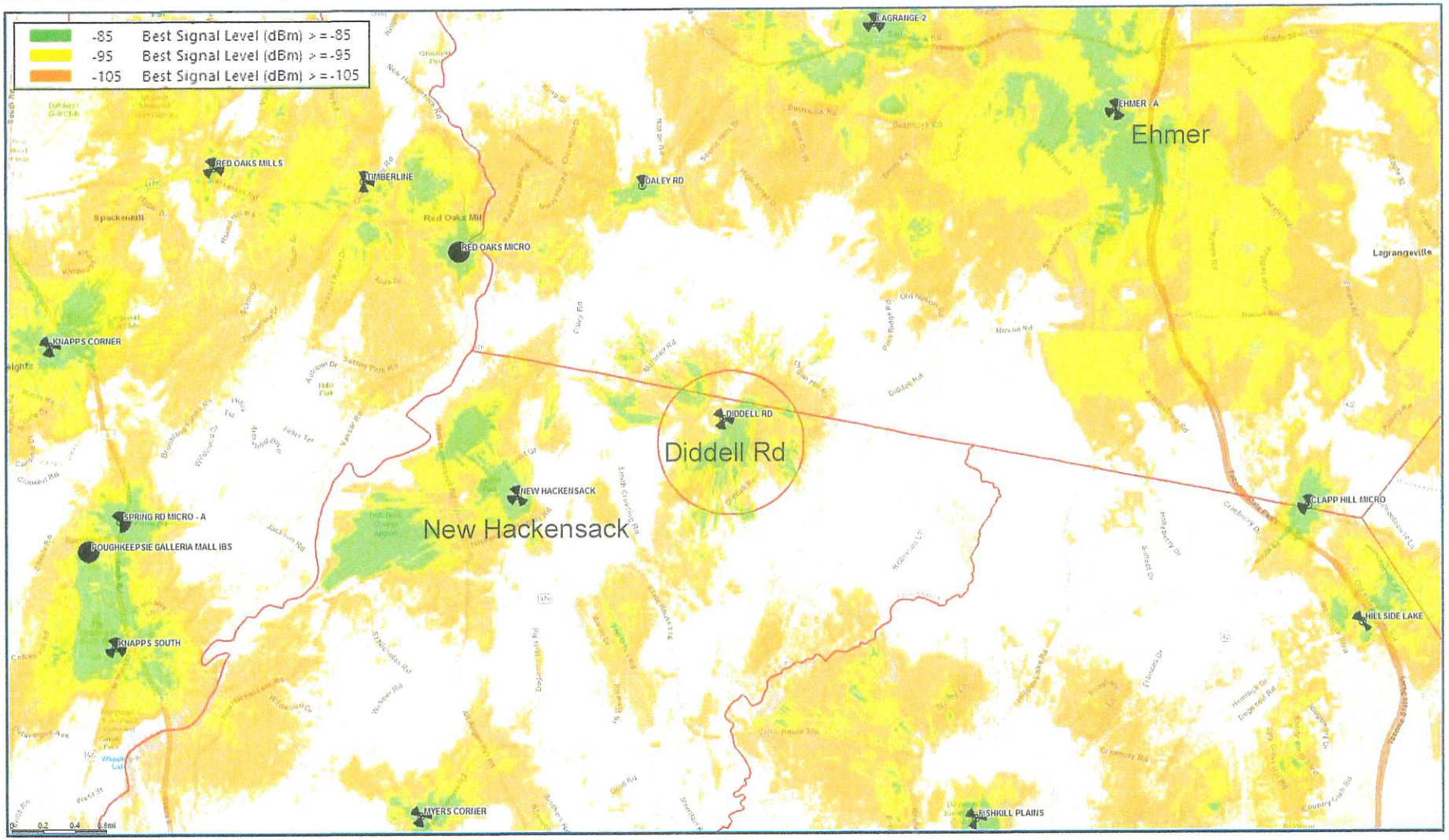
Proposed 2100MHz Coverage

This coverage map shows how improved the RF conditions will be in and around the Diddell Rd site area (at 116' ACL).
Refer to slide 10 for further explanation of these color thresholds



The map above adds the mid band footprint of the proposed Diddell Rd site. The improved signal strength corresponds to improved coverage and capacity throughout the identified significant gap area.

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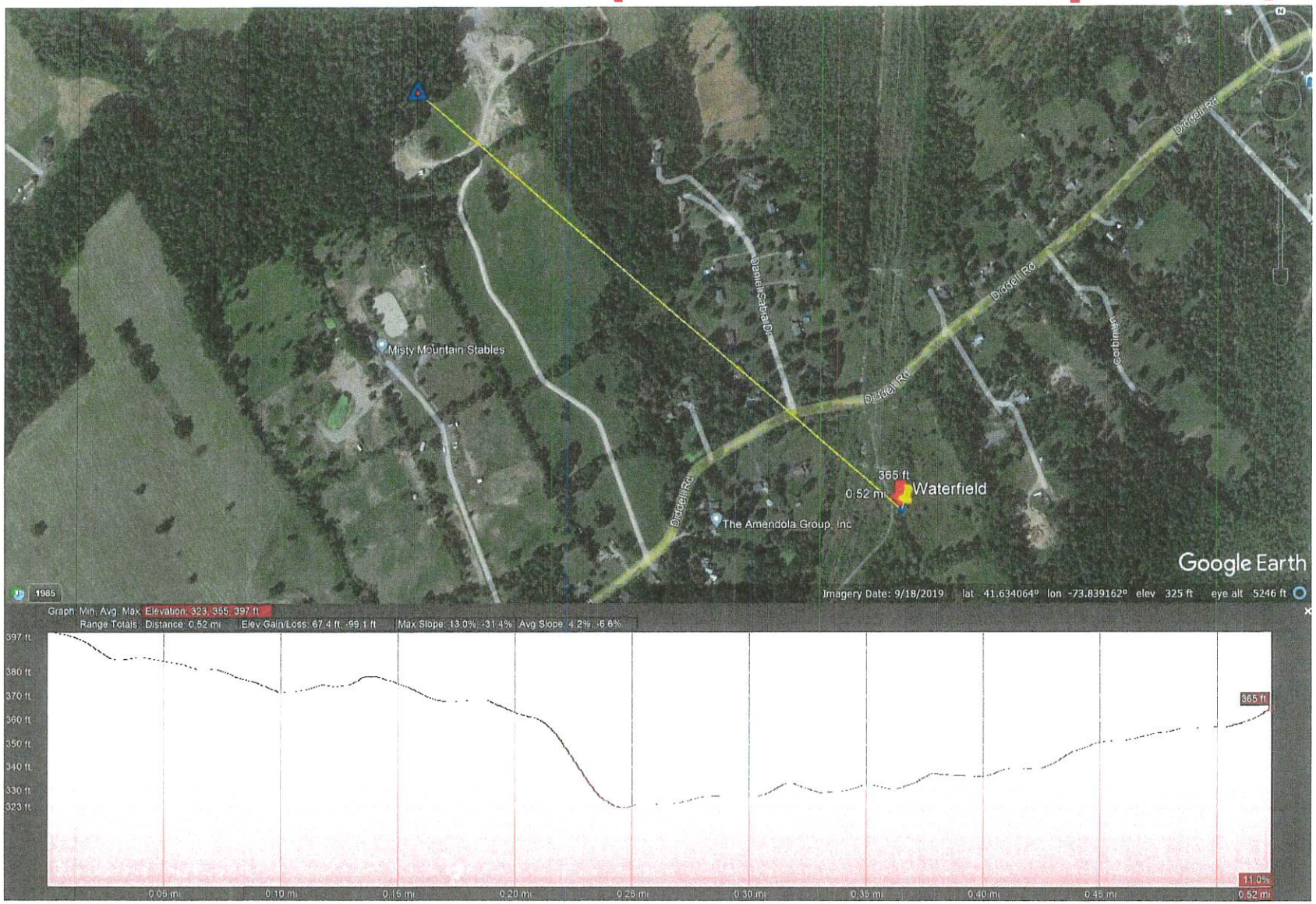
Location Justification

Location Justification (Candidate E Comparison)



The map above shows the ground elevation profile between the proposed location and the candidate E location. The terrain profile shows that candidate E (~365' GE) is approximately 30 ft lower in elevation at its lowest point when compared to the proposed location (~397' GE). There are pieces of the candidate E parcel that are located within the search area that reach up to ~380' GE.

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Location Justification Summary

Locating the site at candidate E presents (2) problems when compared to the proposed location:

Reduction in Ground Elevation

As shown previously in the candidate E comparison slide, moving the site to the candidate E property from the currently proposed location results in a reduced ground elevation. Depending on the location of the site on the candidate E parcel, there would be anywhere between 15'-30' of elevation loss when compared to the proposed location. This reduction in elevation would result in a reduced coverage footprint of the proposed site and would require the tower to be built approximately 15'-30' higher to achieve comparable coverage. This would take the site from 116' ACL to 131'-146' ACL.

700 MHz Capacity Offload to New Hackensack & Ehmer

An objective of the proposed site is to provide capacity relief to (2) neighboring sectors: New Hackensack Gamma & Ehmer Gamma. One of the reasons the proposed location was chosen was because it was close to both of the neighboring sites that require offload. The best server plot on page 13 of this document shows that the proposed site has considerable coverage overlap with the capacity constrained neighboring sectors on Ehmer and New Hackensack. If the proposed site was located at the candidate E property, which is ~0.5 mile further SE from the proposed location, then there would not be as much coverage overlap between the proposed site, Hackensack Gamma sector, and Ehmer Gamma sector. This would result in less traffic offload to these neighboring sectors. Without efficient offload for the congested neighbors, more sites would be required in the project area to achieve the project objective.

The combination of proximity to neighboring sites requiring offload and the higher ground elevation makes the currently proposed location a better solution then if the site were to be located on the candidate E parcel.