



Town of Stow
Planning Department
stow-ma.gov/planning-board
(978) 897-5098

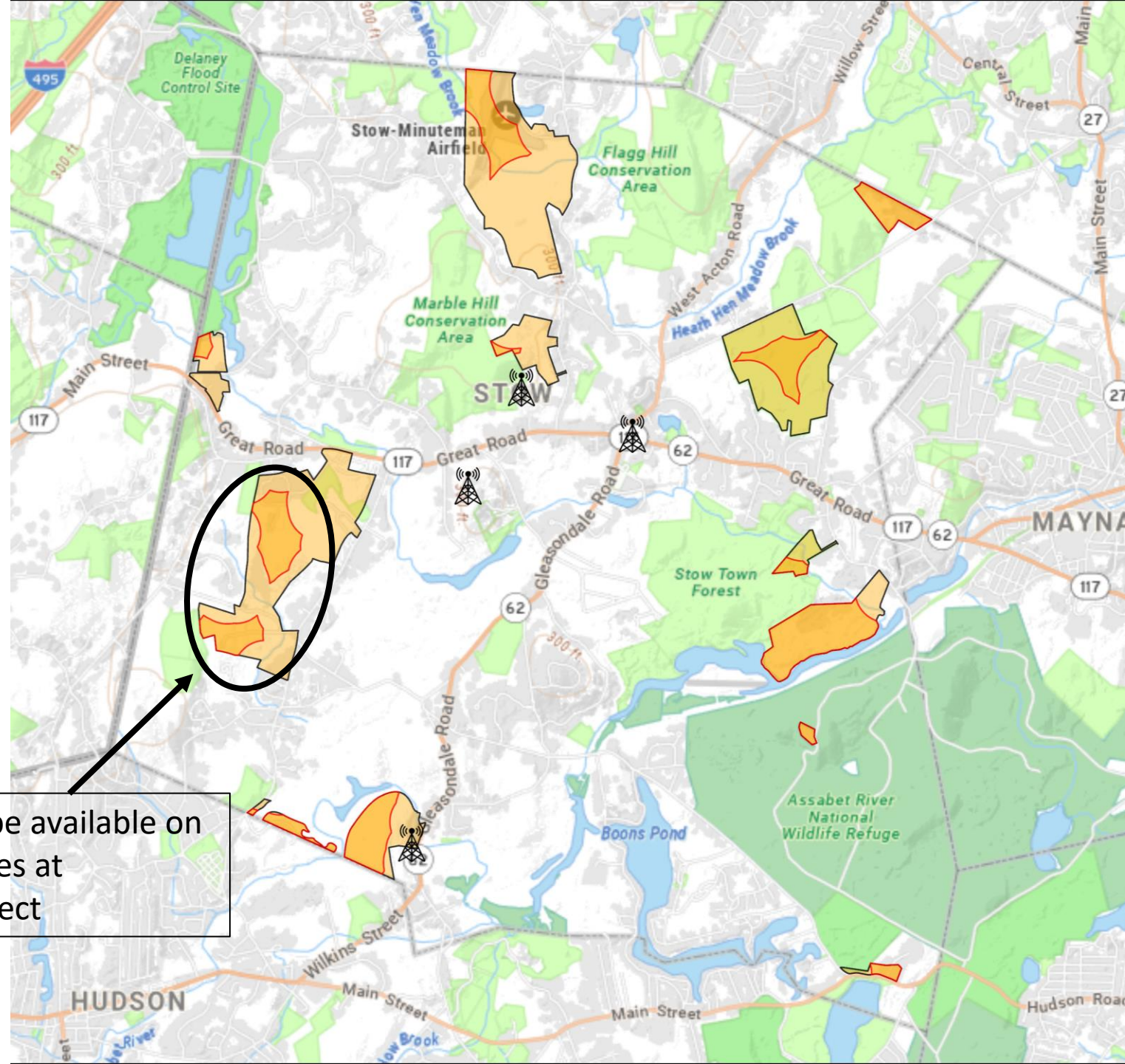
Site Suitability in the Wireless Service Facility Overlay District

January 17, 2023

Applying 1000-ft buffer to dwellings

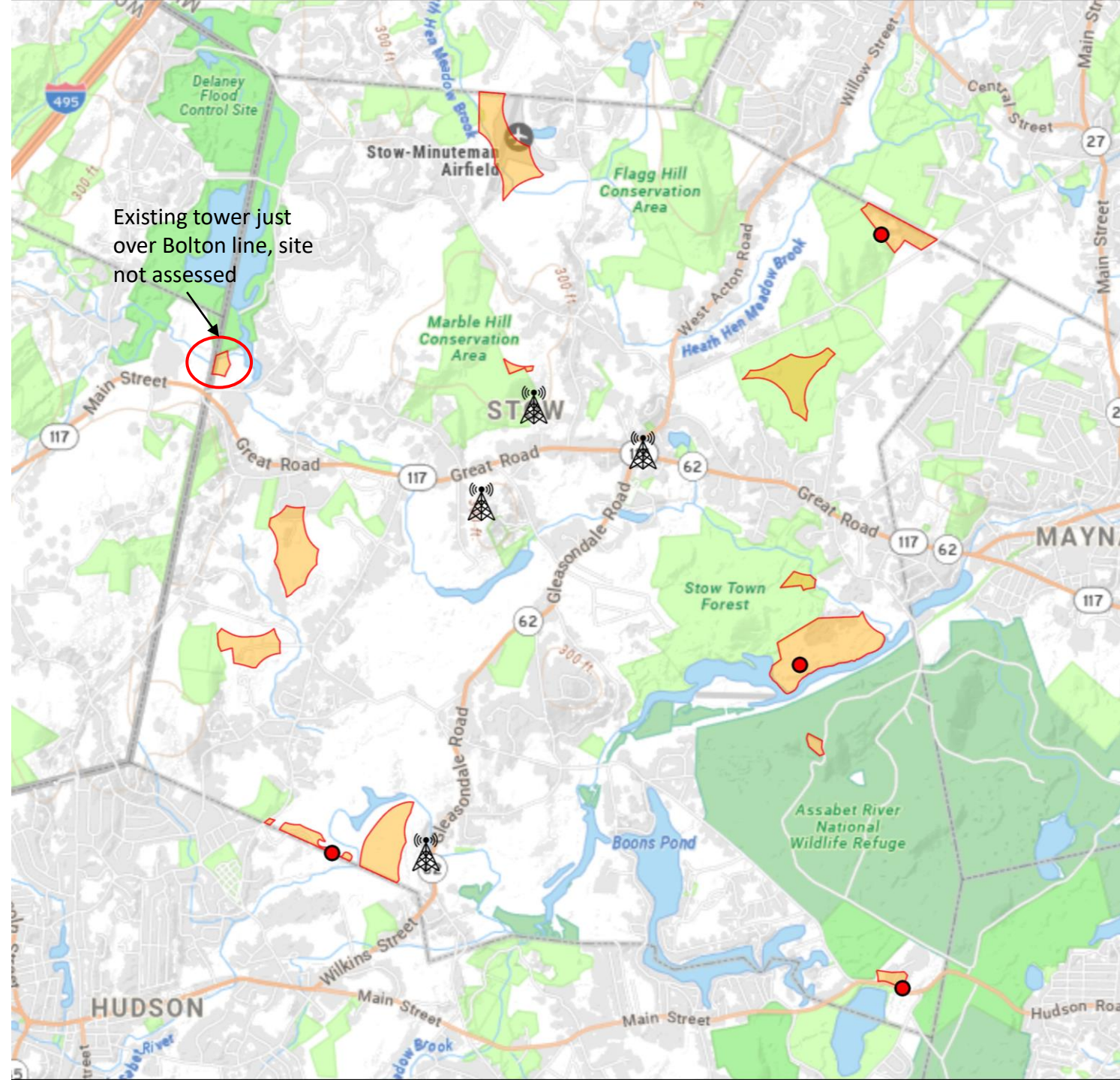
- Areas outlined in red are suitable areas for tower construction after a 1000-ft buffer to dwellings units is applied
- 1000 ft buffer required by Zoning Bylaw

These areas will not be available on completion of Cottages at Wandering Pond Project



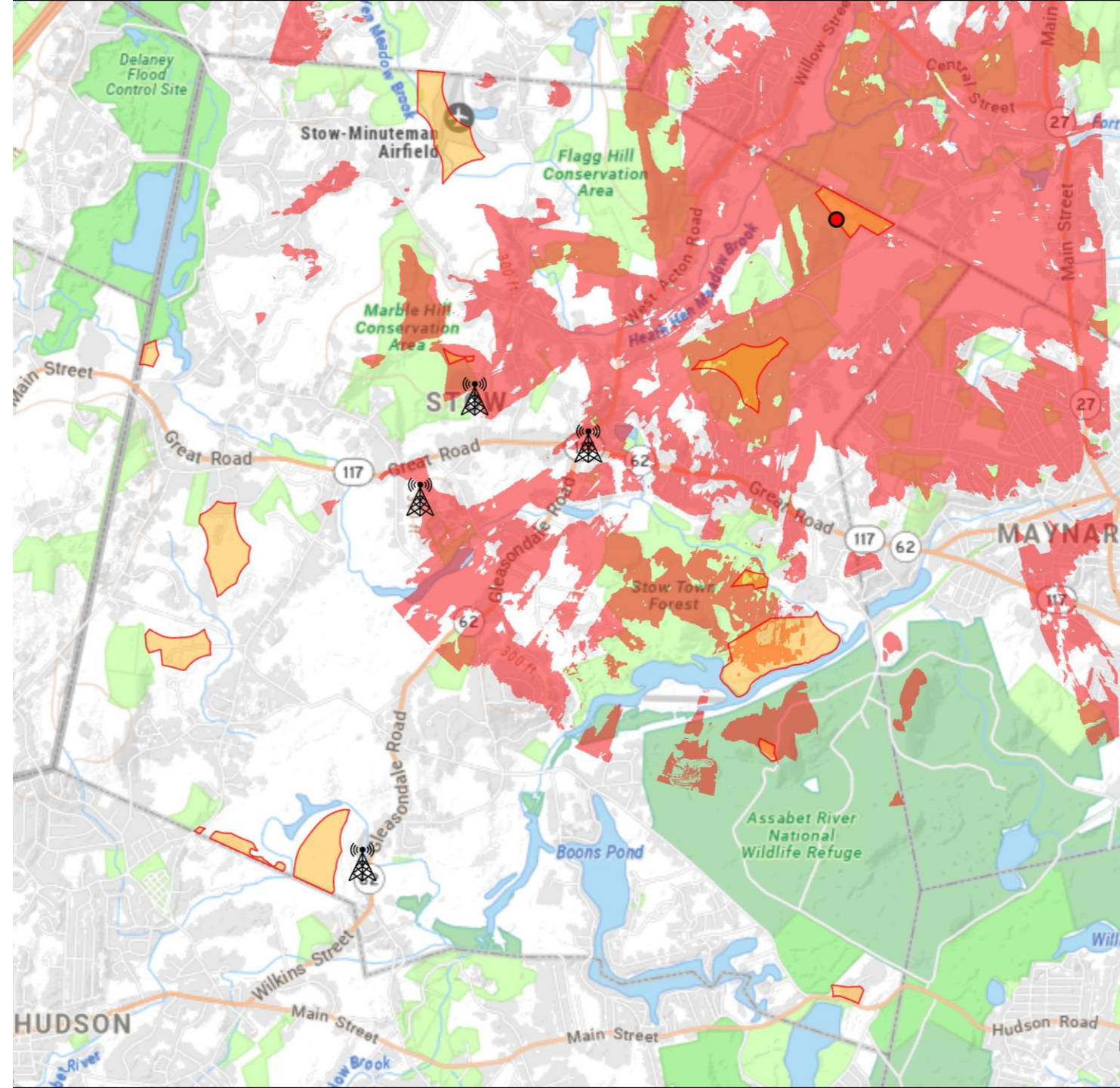
High Elevation Points within feasible sites

- High elevation points are identified within sites that don't have significant constraints
- Sites excluded due to open space protections, incompatible existing uses, proximity to existing towers, and future development expectations

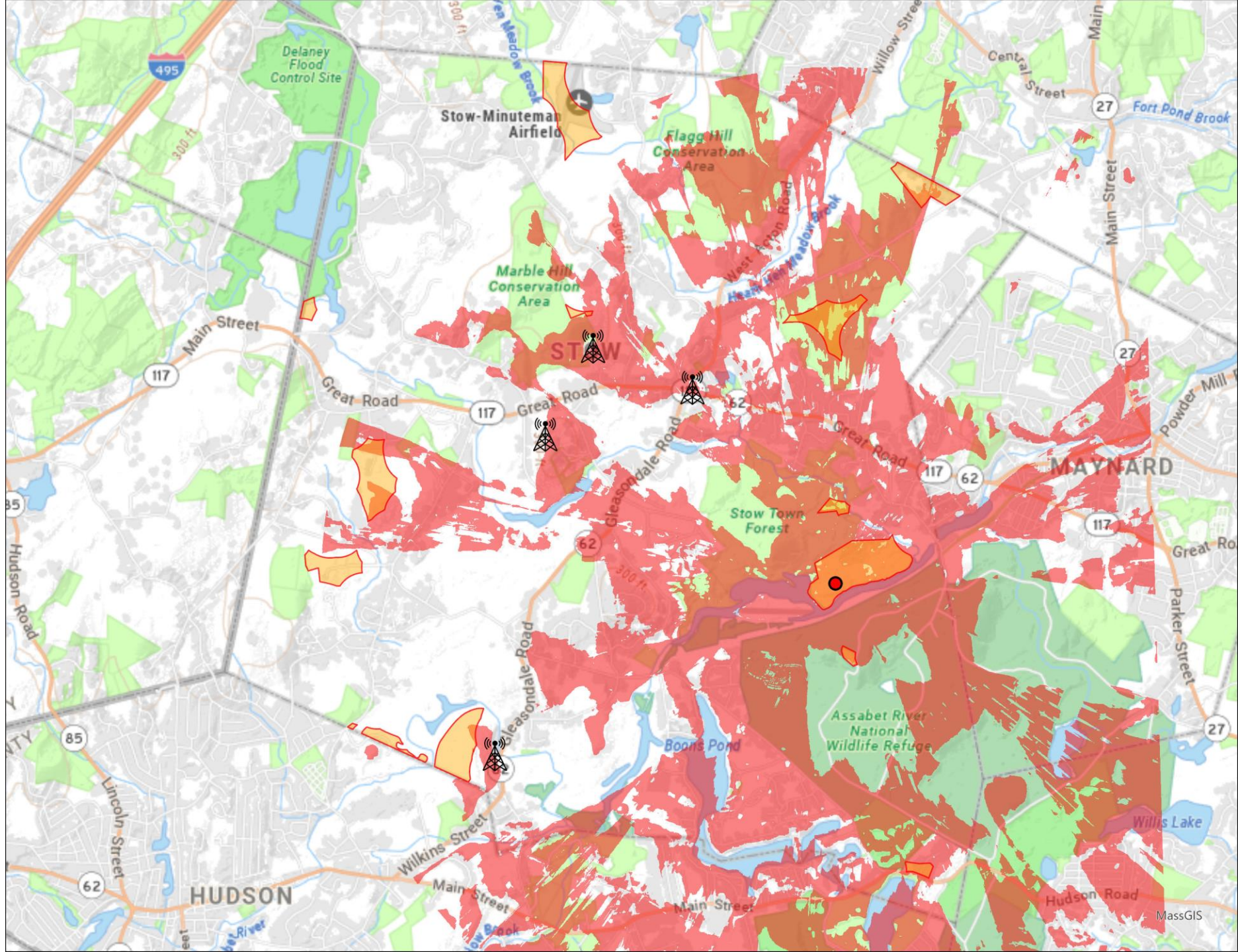


Viewsheds for each point calculated to a 5km distance

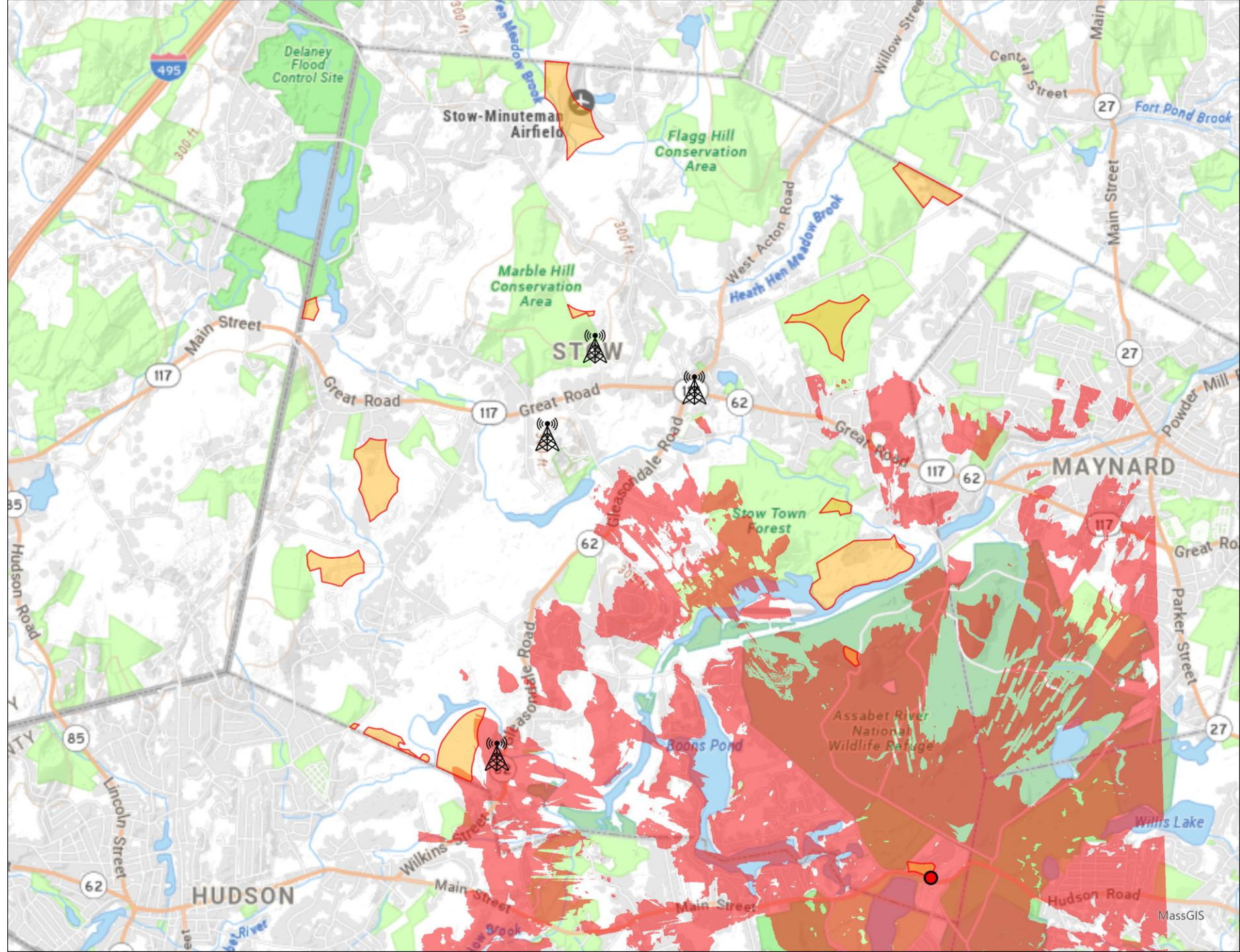
- Assuming a 100 ft tower and a 5ft 6in observer
- Wireless service does not require a clear line of sight and may extend well beyond 5km
- Line of sight is, at best, a crude approximation of where signal may be strongest
- Interesting to note areas blocked by topography for each hypothetical tower location



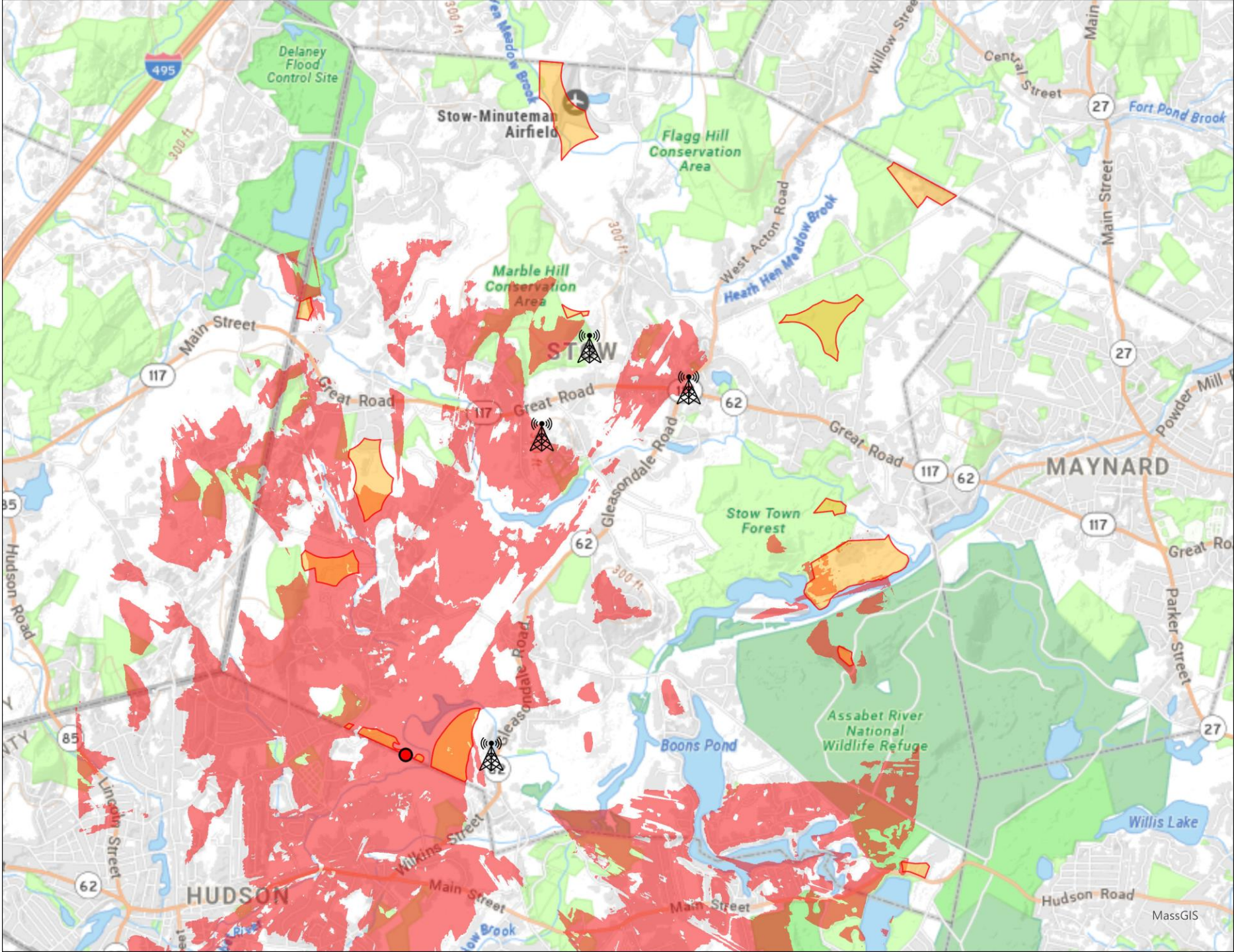
Stowaway Golf Course



Dept of Fire Services



Landfill

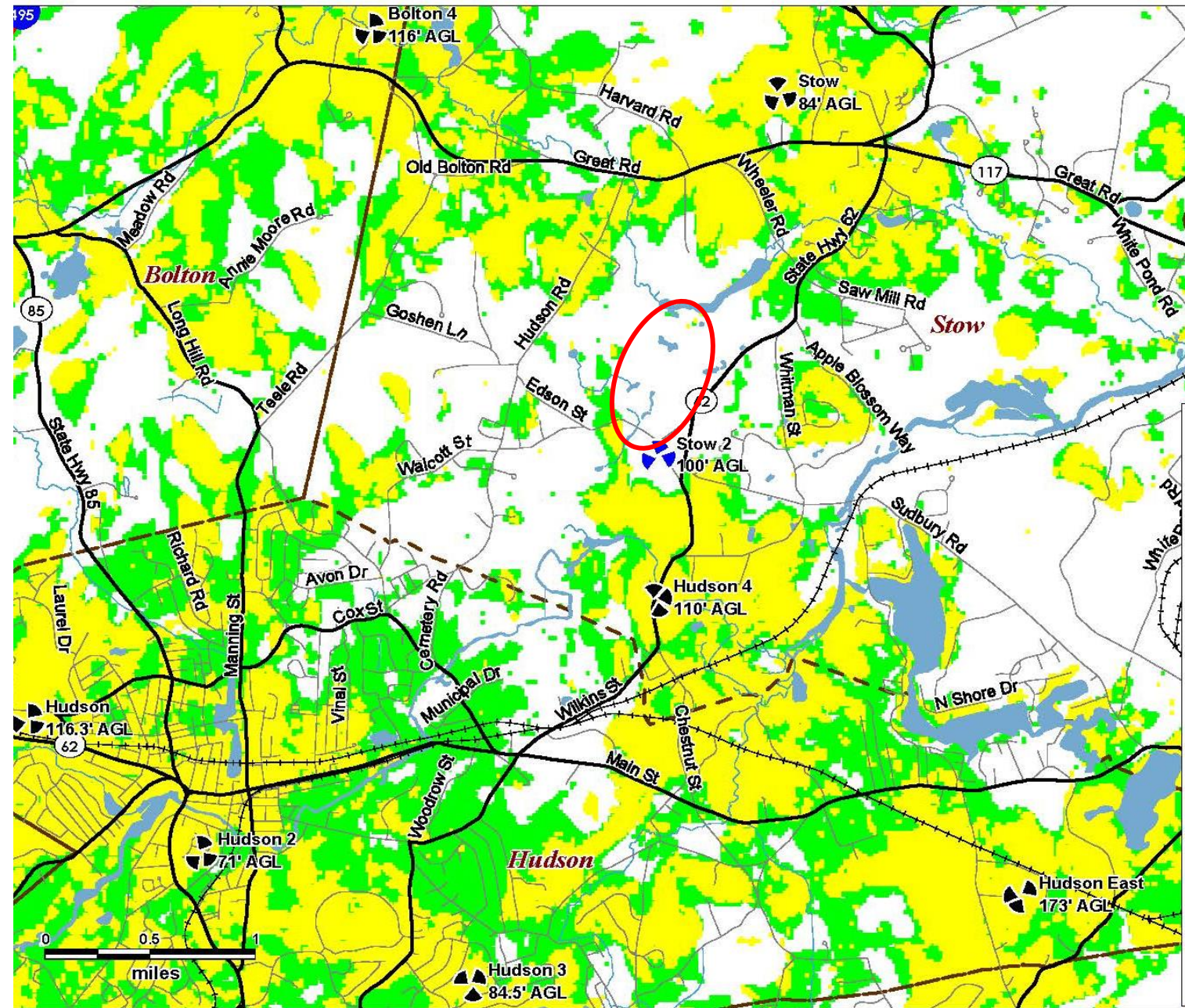


Would the Planning Board like to see viewshed assessments for any other sites?

Problem: Stow Acres housing development will be a (Verizon) dead zone

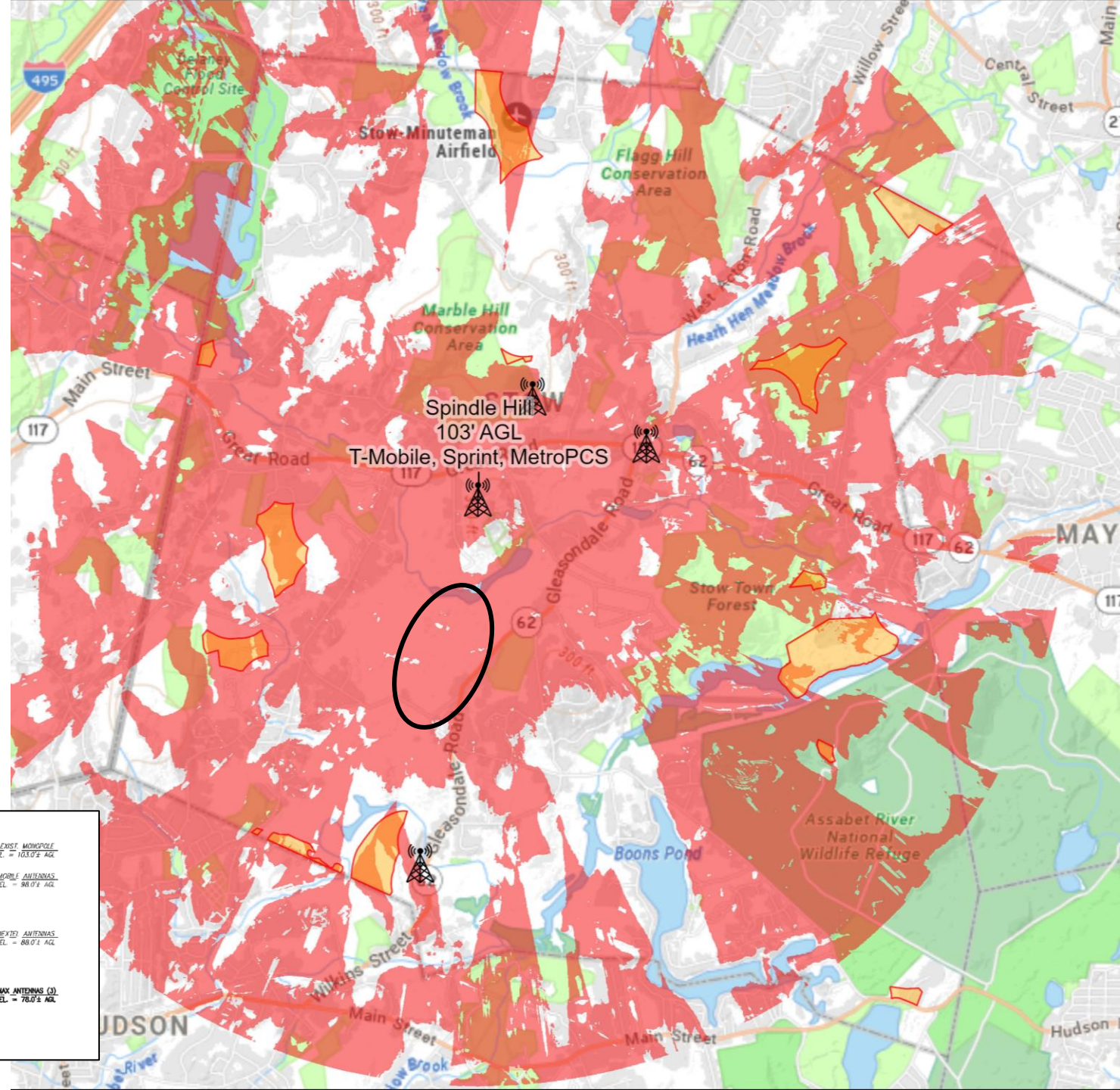
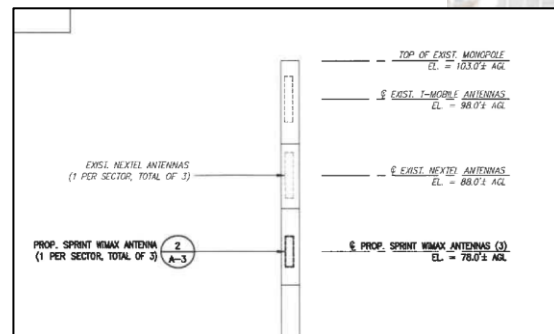
- Map at right is from an RF report provided by Verizon's engineers to the Planning Department

Attachment A:
How 2 MA - Existing 700 & 2100 MHz LTE Coverage

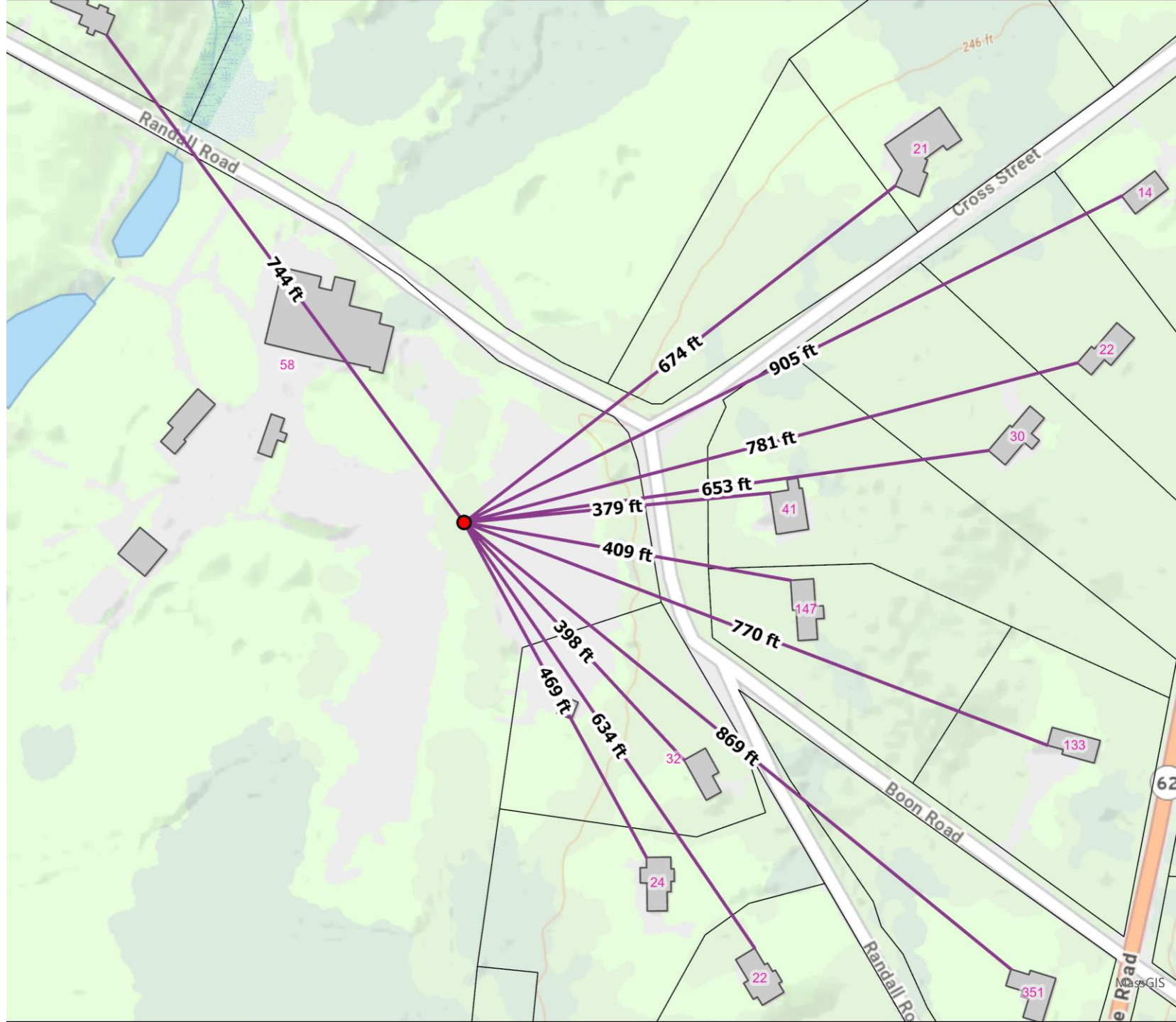


Spindle Hill tower has clear line of sight to Stow Acres housing location

- Existing T-Mobile, Sprint, and MetroPCS antennae may provide adequate service to the area
- Tower design only allows for maximum of 3 co-locators. Verizon unable to lease tower space

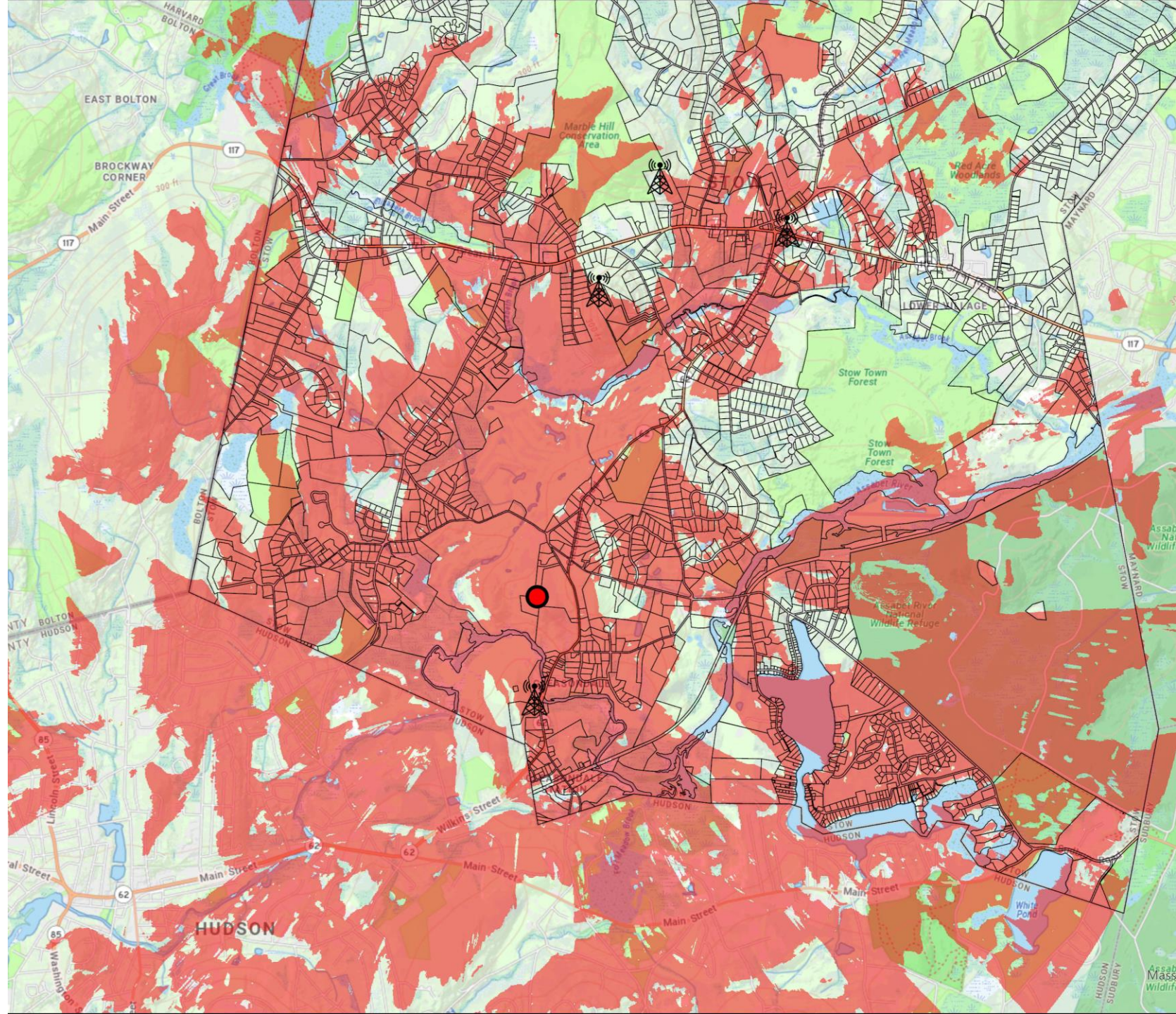
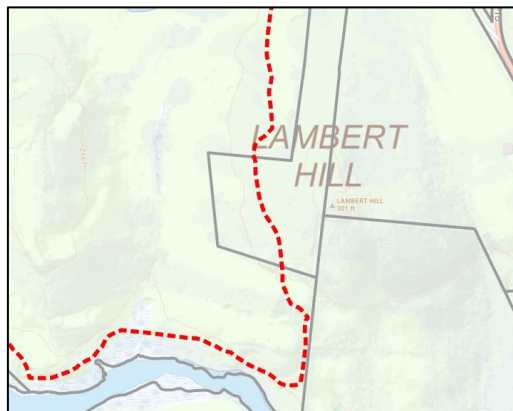


Problem: Verizon's proposed Stow Acres site is within 1000 ft of twelve existing dwellings



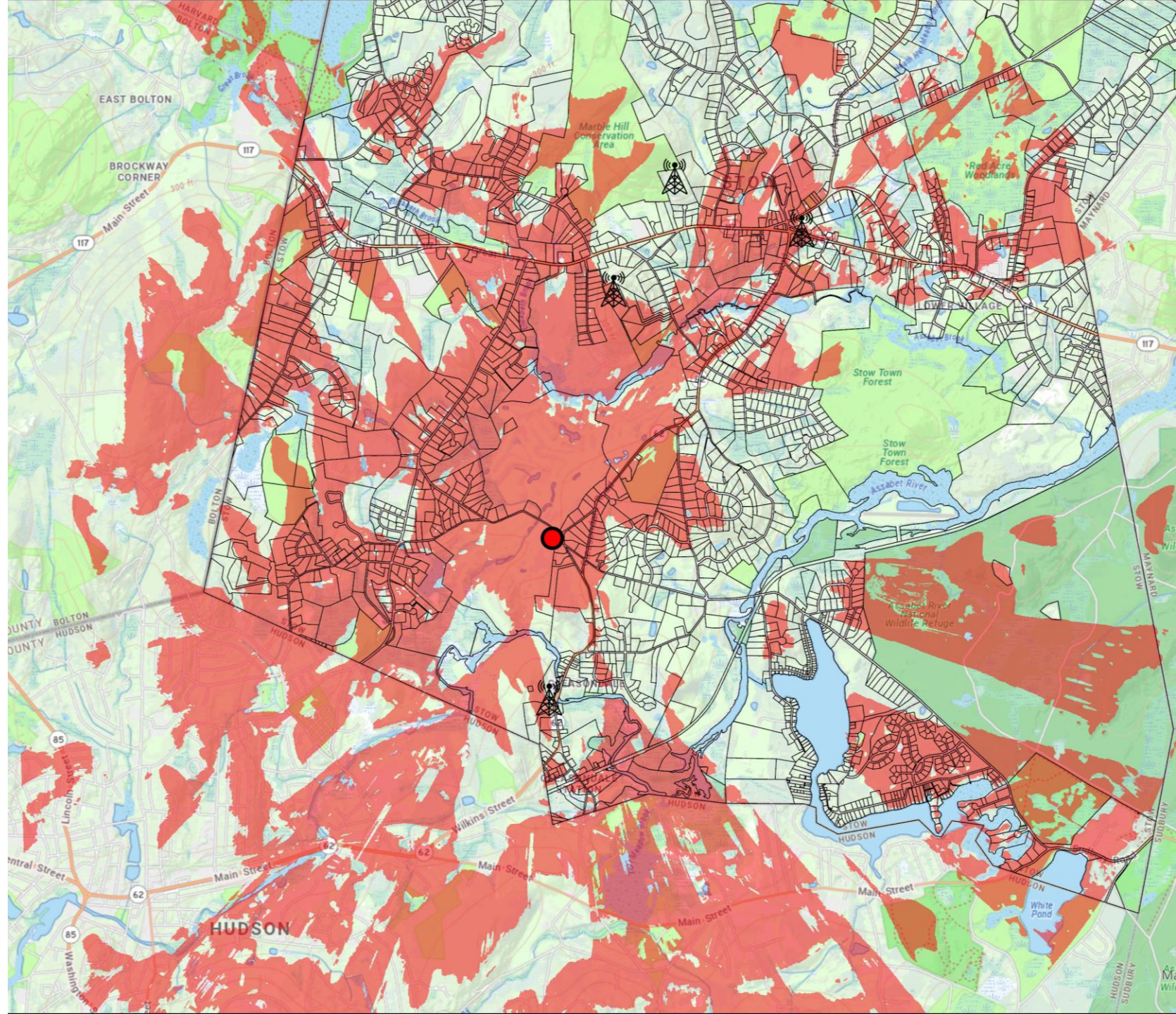
Potential Alternative Location?

- A nearby undeveloped parcel near the peak of Lambert Hill has a similar but more expansive viewshed compared to Verizon's proposed location
- Note: Trail around the Stow Acres South Course will cut through this parcel



Verizon's Proposed location, for comparison

- Fewer overall dwelling units are included in the viewshed from the lower elevation location in the Stow Acres parking lot



Highest point at Lambert Hill parcel (aka “Parcel K”) is within 1000ft of only two dwellings

- A location slightly southwest of the highest point could locate a tower >900 ft from nearest dwelling
- ZBL §5.3.7.2(a) allows the Planning Board to approve a 900 ft setback if a substantially better design would result

