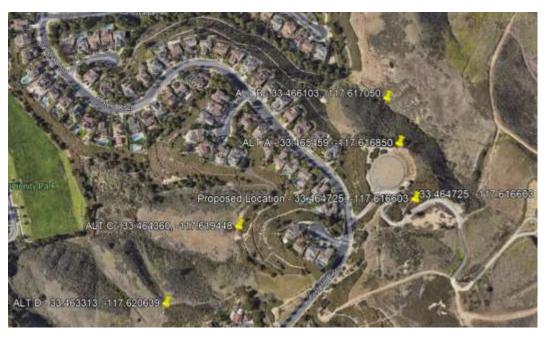
To: John Ciampa

Re: CLL01419 – Alternative Site Analysis Memo

Alternative Site Analysis Memo

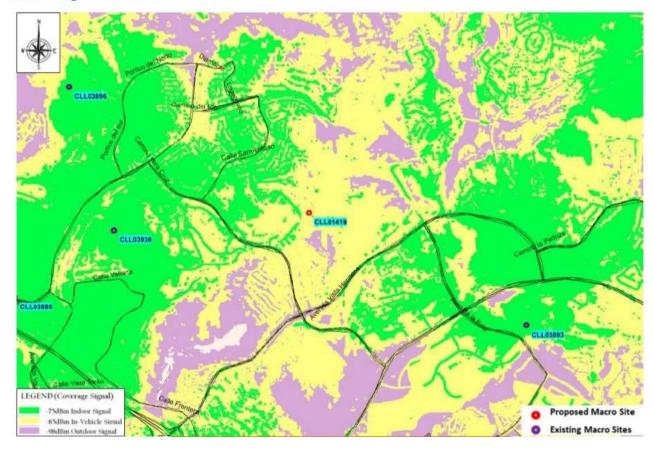
The city requested we provide an alternative site analysis, below is an image of alternative locations that was analyzed and deemed infeasible.



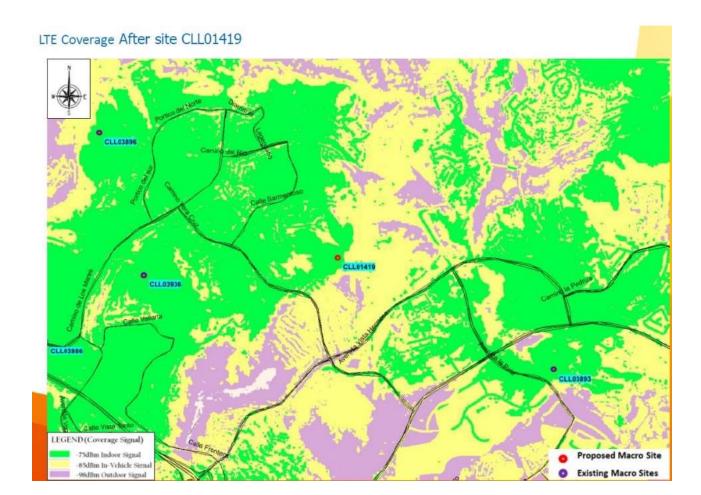


In the below image you can see the current "gap-in-coverage" that AT&T would like to fill. Also known as "RF's Objective". RF's Objective is to meet the area west of the water tank.

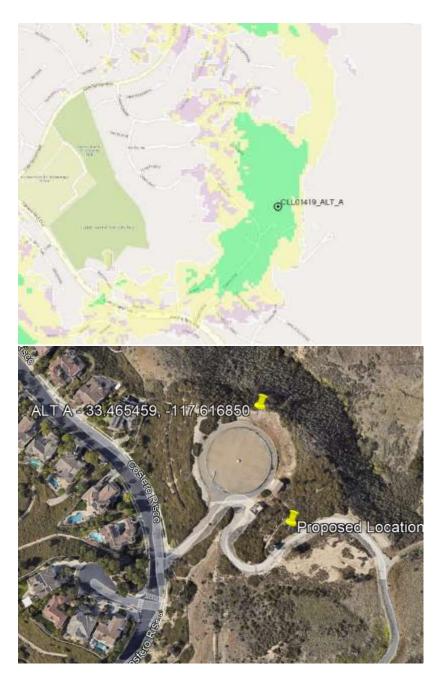
LTE Coverage Before site CLL01419



In the below Image you can see RF's objective being met at our proposed location at an overall height of 22'. that the primary increase in coverage occurs along Camino Vera Cruz and north of Camino Del Rio.



The following below images you will a quick analysis of the alternative locations that is mentioned above, accounting for the same constraints and project parameters.



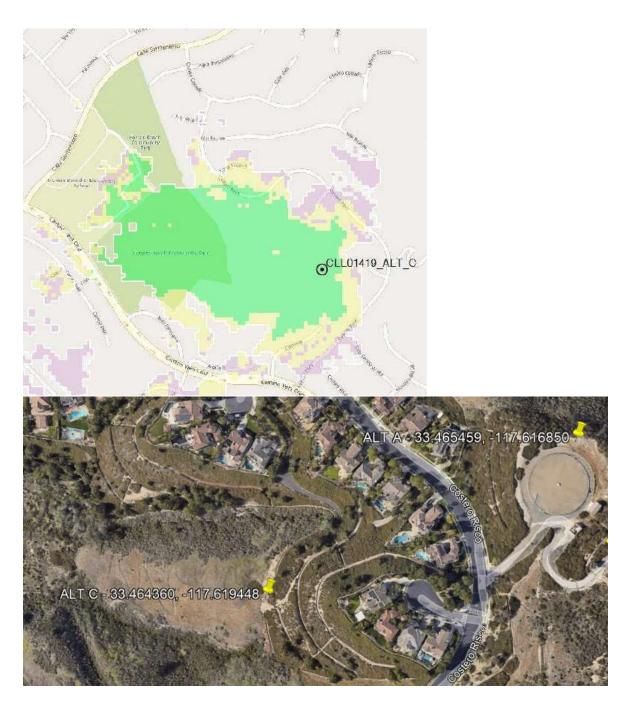
ALT A - AT&T RF's objective ring encompasses terrain like the original proposal (water tank location) and family residentials. Due to the underground nature of the water tank, they're typically encumbered by restrictions to preserve the water infrastructure's integrity and operations. Construction here could compromise underground utilities and essential maintenance access, posing risks to the water supply system. Additionally, the water tank location drops about 40' in elevation and hypothetically AT&T will need a height requirement equal or greater to ~62' to meet its objective ring. As you can see above RF's objective is partially met, just enough to provide coverage to the nominal number of adjacent homes.





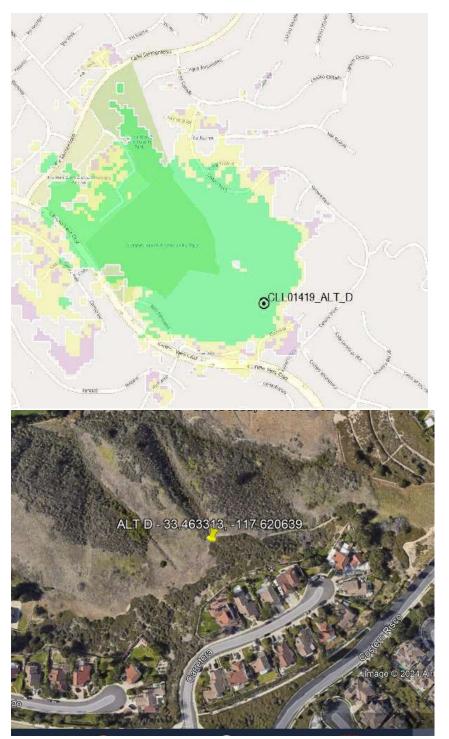
ALT B – located between a canyon. As you can see above RF Objection is not met. RF is being obstructed by the canyons to the east and west and sliver of coverage is touching only $^{\sim}12$ homes. The elevation between the canyons is $^{\sim}477'$ vs. $^{\sim}626.19'$ at our proposed location. The difference between those numbers is the additional height needed to meet RF's coverage (assuming the canyons are being cleared).

Additionally, there are topographical and ecological challenges; the terrain demands extensive grading and excavation, incurring high costs and potential environmental impacts, including soil erosion, habitat disruption, and alteration of the landscape. The complexity of the soil or rock composition in these areas poses additional technical hurdles, escalating construction difficulties and expenses. An array of undisturbed flora populates the area, which, if disturbed, could lead to environmental compliance flags due to the potential disruption of local ecosystems.



ALT C – this location is situated below the proposed water tank location between the park and single-family homes that is situated above two hills that are depicted similarly like a canyon. In addition to the obtrusiveness of this location, RF's objective is being partially met but only narrowly to the west covering just an open field. The homes above the hill to the north, south, and the rest of the area to the west are not being covered. Similarly to ALT B, the elevation here is ~500' vs. ~626.19' at our proposed location. The difference between those numbers is the additional height needed to meet RF's coverage (assuming the canyons are being cleared). Which will land in the viewshed of the homes situated above the hill.

Additionally, there are topographical challenges; the terrain demands extensive grading and excavation, incurring high costs and potential environmental impacts, including soil erosion, habitat disruption, and alteration of the landscape. The complexity of the soil or rock composition in these areas poses additional technical hurdles, escalating construction difficulties and expenses.



ALT D – this location is situated on top of a hill but still below the homes that are located above the hill. Here RF's objective is only being met for an open field and portion of the elementary school. The homes

above and surroundings are not being touched by RF because they are located at a higher elevation. Similarly to ALT B and ALT C, the elevation here is ~489' vs. ~626.19' at our proposed location. The difference between those numbers is the additional height needed to meet RF's coverage (assuming the canyons are being cleared). Which will land in the viewshed of the homes situated above the hill.

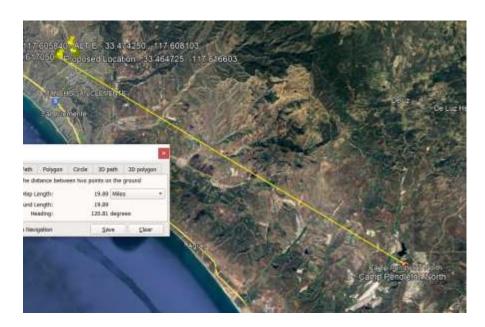
Additionally, there are topographical challenges; the terrain demands extensive grading and excavation, incurring high costs and potential environmental impacts, including soil erosion, habitat disruption, and alteration of the landscape. The complexity of the soil or rock composition in these areas poses additional technical hurdles, escalating construction difficulties and expenses.

The following locations are significantly outside of the intended objective:

ALT E – Nearest SCE Tower: 33.474250, -117.608103 ALT F – Nearest SCE Tower: 33.469036, -117.605840 ALT G - Nearest SCE Tower: 33.465002, -117.604113 ALT H – Nearest SCE Tower: 33.463377, -117.603405

At the request of city staff, we were guided to vet out locations where AT&T can install their antennae onto existing transmission towers. SDGE doesn't have physical assets on the hillside and the nearest transmission towers are to the east noted as ALT E/F/G/H. Due to the steep topography to the west of these SCE transmission towers (an increase of greater than 300' in elevation) these locations will not meet AT&T's RF's objectives. Additionally, the area of the SCE transmission towers has already AT&T coverage provided in that area. The target area for this proposed location is to the east of hills.

Please note that any antennae attached to an existing asset such as transmission towers, will not be visually concealed.



ALT I - Camp Pendelton

Another location that was given by a constituent to city staff was Camp Pendelton. Camp Pendelton is located over 19 miles away (straight line) from the proposed location. Hypothetically speaking if we assume USMC allows structures in the area of their operations, accounting for the northernmost border of Camp Pendleton, it will not meet RF's objective for this specific area – it is too far away. Building a wireless facility there will not meet AT&T's objective here. Which is to fill a certain gap to the east, including its nearby population.



ALT J & ALT K -

At the request of the city staff, AT&T's RF engineers analyzed locations ALT J and ALT K. It was confirmed that the locations are operated by City's water department. This is their Reservoir 9 facility. It's a 3-million-gallon freshwater tank with influent and effluent pipes and telemetry in various runs around the site.

Additionally, at the proposed height, these locations do not meet the RF objectives. The terrain in these areas is gradually increasing, which introduces a critical factor: shadowing. A structure that is only 22 feet tall will not clear the gradually rising elevation of the hill or other potential obstacles. This increasing terrain causes a shadowing effect, where the RF signal is blocked or deflected, leading to signal degradation. AT&T would require a significantly higher structure to clear the constraint.

In conclusion, the original location near the existing Verizon faux tree remains the most viable option. This site's proximity to existing structures offers a less intrusive solution, away from the viewshed of the homes, and meets the minimum requirements for AT&T RF's objectives. Building at the proposed location with a 22-foot faux tree minimizes visual impact while providing the necessary service coverage.