

CVL00431 – Plymouth

Bell Road

Bell Road, Plymouth, CA 95669 (APN: 014-120-001)

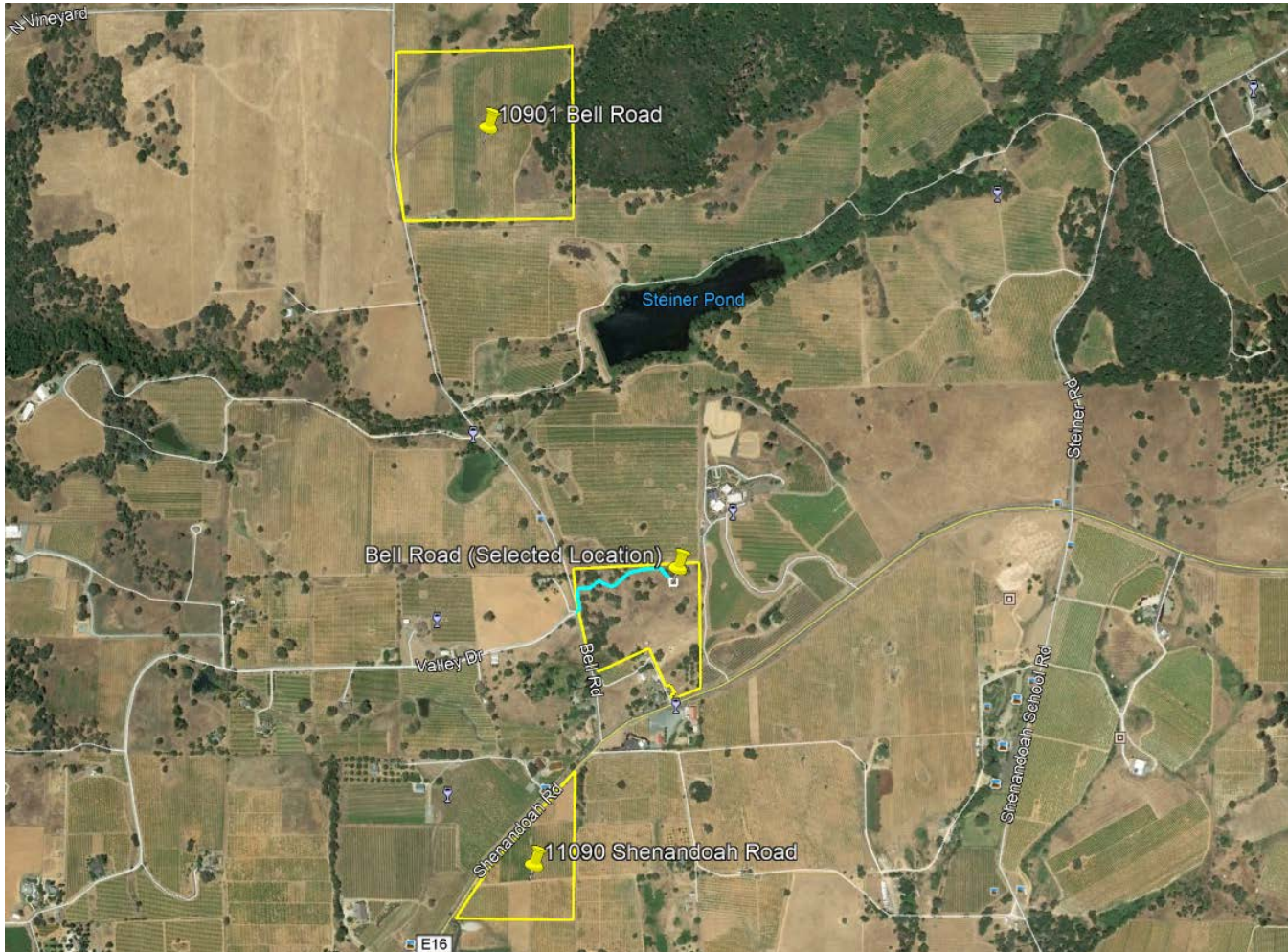
Alternative Site Location Analysis

CVL00431– Service Improvement Objective



The purpose of the proposed site is to improve coverage and capacity in the area indicated in the red circle above along Shenandoah Road/E16 in Plymouth, California.

CVL00431 – Area Map



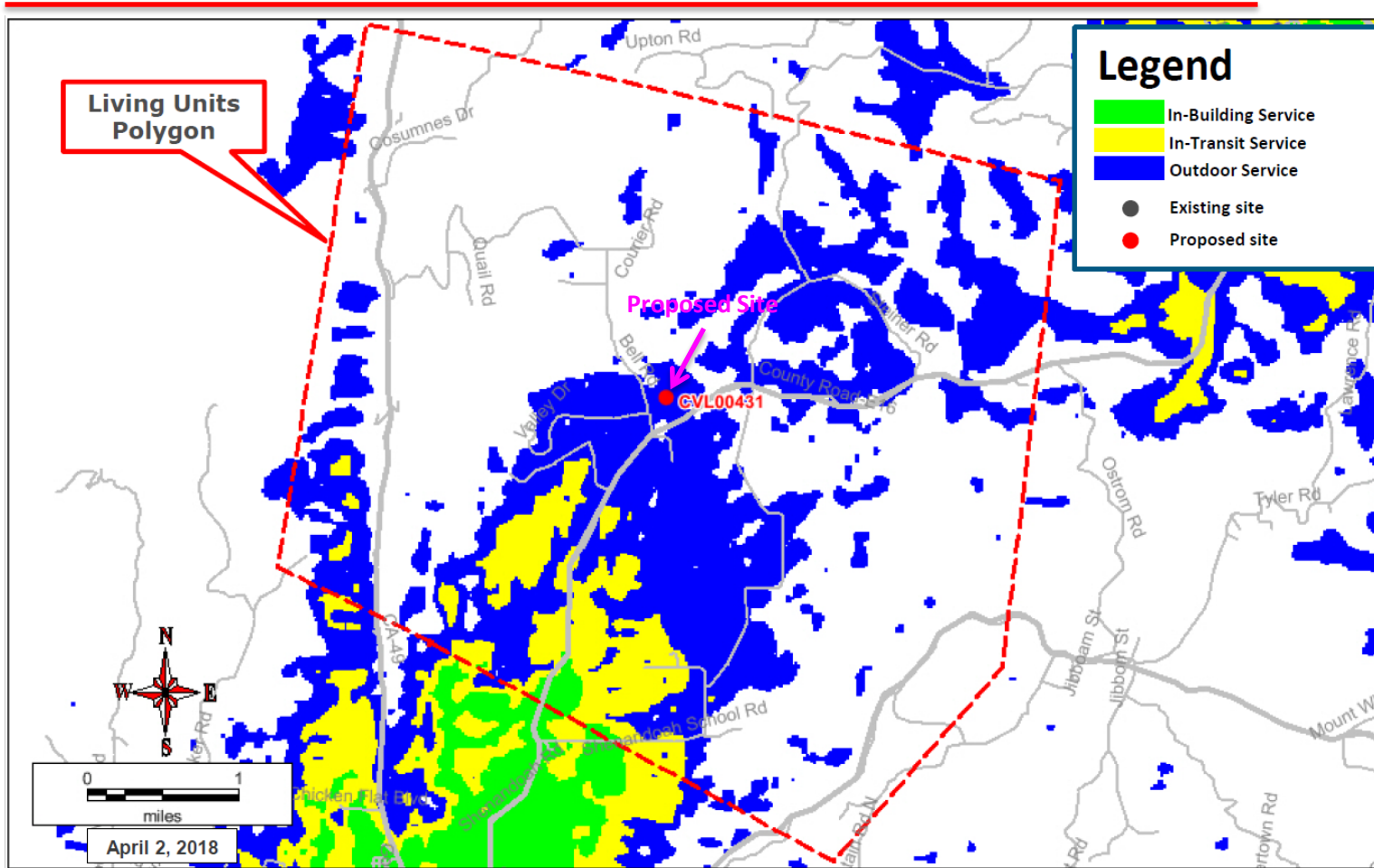
Locations Analyzed:

Project Location: Bell Road, Plymouth, CA 95669 (APN: 014-120-001)

Alternative Locations Analyzed:

1. Crain Winery, 10901 Bell Road, Plymouth, CA 95669
2. Andis Winery, 11090 Shenandoah Road, Plymouth, CA 95669

CVL00431 – Current Coverage Map



- This map represents the coverage without the proposed site.
- Significant coverage gaps appear in the primary coverage area presented during High Demand Periods.
- For the express purpose of meeting AT&T's coverage objectives for this area, AT&T proposes the following Alternative Site Location Analysis.

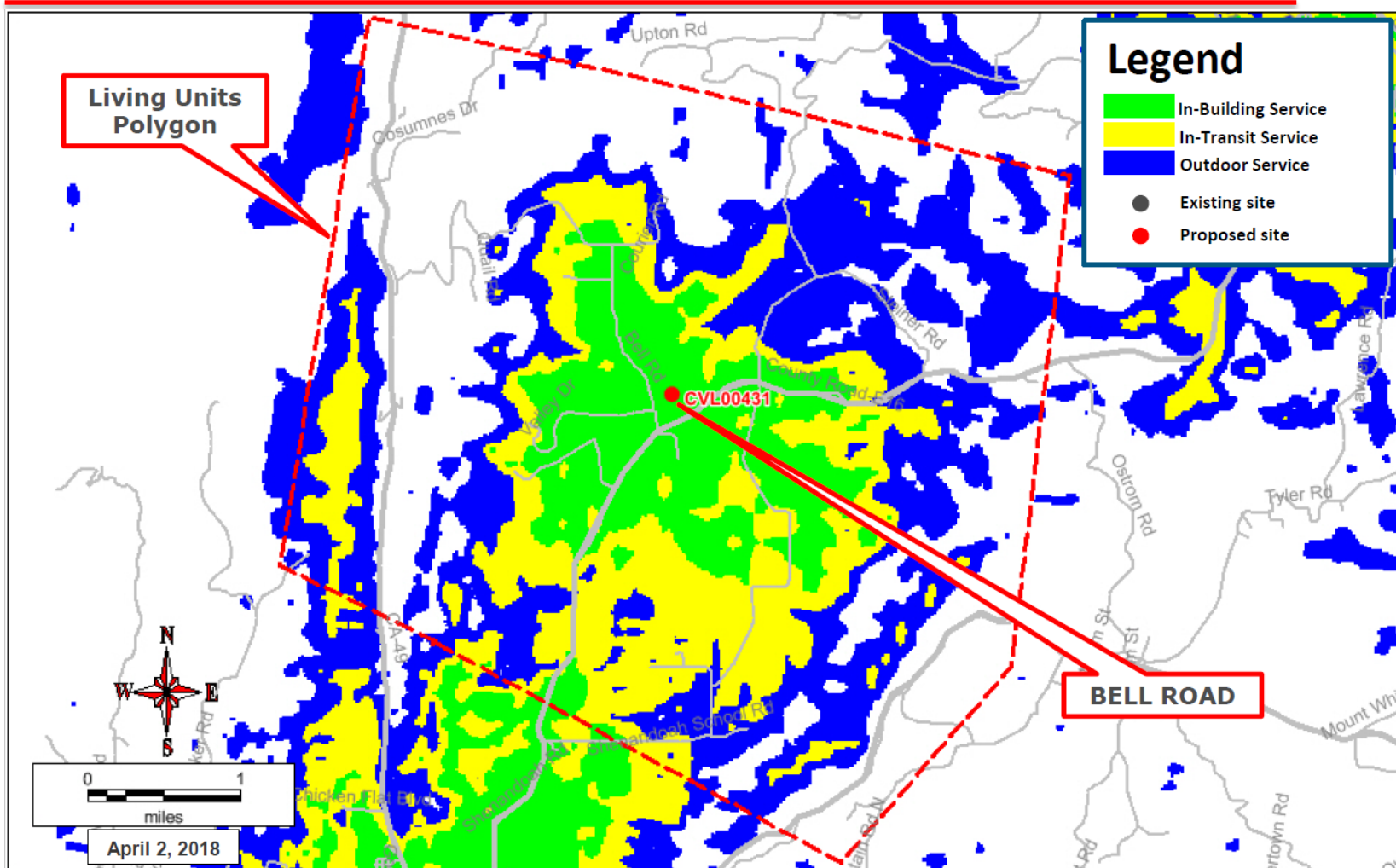
CVL00431 – Primary Site Location

Proposed Site Location



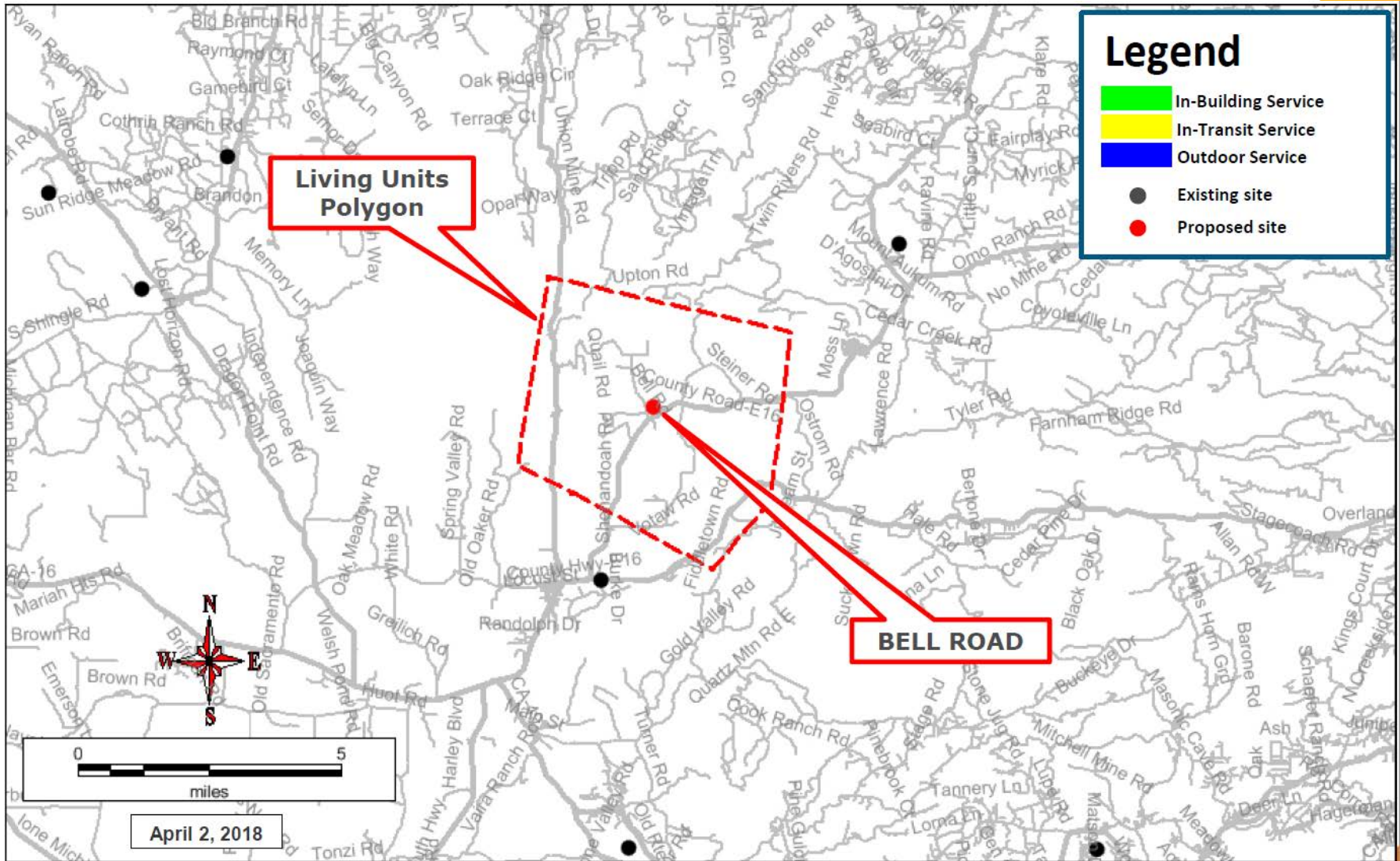
- Upon review of the region AT&T found no locations that would provide collocation within the search ring. The majority of the search ring region is agricultural (wineries or farm land) or open natural land so a new build tower becomes essential.
- After initially approaching several landlords in the region three proved the most interested. Of the three locations, placement at the property of Bell Road (APN: 014-120-001) would provide the best improvement to the coverage gaps that currently exist in the area.
- The primary site (Bell Road) was therefore chosen because a new build was necessary, the location provided the best technical and engineering advantage to provide for the greatest coverage to the local area, and because there is a high probability of obtaining a successful lease.

CVL00431 – Proposed Coverage from Primary Site Location



- RF modeling predicts this will be the expanded coverage with the proposed site installed.
- This location and elevation is considered to be “optimal” as a permanent site.

CVL00431 – Existing Surrounding Sites



- This map represents the location of existing on air sites surrounding the proposed site location

Alternative 1 – Crain Winery

– New build at the Crain Winery



- Crain Winery located at Crain Winery, 10901 Bell Road, Plymouth, CA 95669.
- While both the primary site candidate and this alternate site candidate were commensurate in probability of having a successfully completed project; this alternative location is much further away from the area we wish to improve coverage too so a tower in this location would not accomplish the goals of the project as well as a tower further south.
- This site was discarded in favor of the primary candidate because it does not provide the best coverage for the region AT&T is attempting to cover because it is too far north.

Alternative 2 – Andis Winery

– New build at the Andis Winery



- **Andis Winery located at 11090 Shenandoah Road, Plymouth, CA 95669**
- **While this site had a willing landlord the proposed site location was approximately 100 feet lower in elevation than the proposed site location. This elevation loss will produce a weaker signal to the region so was not advantageous to meeting our coverage objective.**
- **This site was discarded in favor of the primary candidate because Bell Road with its higher elevation will provide better overall coverage to the area.**

Conclusion

CVL00431- Plymouth - Bell Road

Photo Simulation

Existing



Proposed



Based on AT&T's analysis of alternative sites, our engineering staff has confirmed that the Primary site location at Bell Road, Plymouth, CA 95669 remains the most appropriate site for new build construction in this area.

View 1 to the North West from Shenandoah Rd.
Bell Road at Valley Drive
Plymouth, CA 95669



at&t

*For illustrative purposes only



About this Statement

RF Engineer – Asad Shahbaz

646-369-2573

RF Tools

- **ATOLL**

The ALT Sites Analysis is compiled using a wireless coverage prediction tool from Forsk called ATOLL. The tool has several GIS layers as inputs such as ground clutter data and average ground elevation height. The tool also knows about our antennas that we use for the cell sites and the transmit powers and everything in the link budget. This tool simulates what a customer will receive as a signal power. This tool is used to compare future site choices so that the optimal coverage can be attained.

- **Google Earth Pro**

A powerful GIS tool which is used to overlay the ATOLL prediction and drive test data. With this data and the topography models in this program, further analysis of data and graphic displays of coverage areas can be generated for reference.

