ALTERNATIVES ANALYSIS

RESUBMITTAL – 11/16/12

AT&T Proposed Wireless Facility
1035 SAN PABLO, ALBANY, CALIFORNIA

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Summary

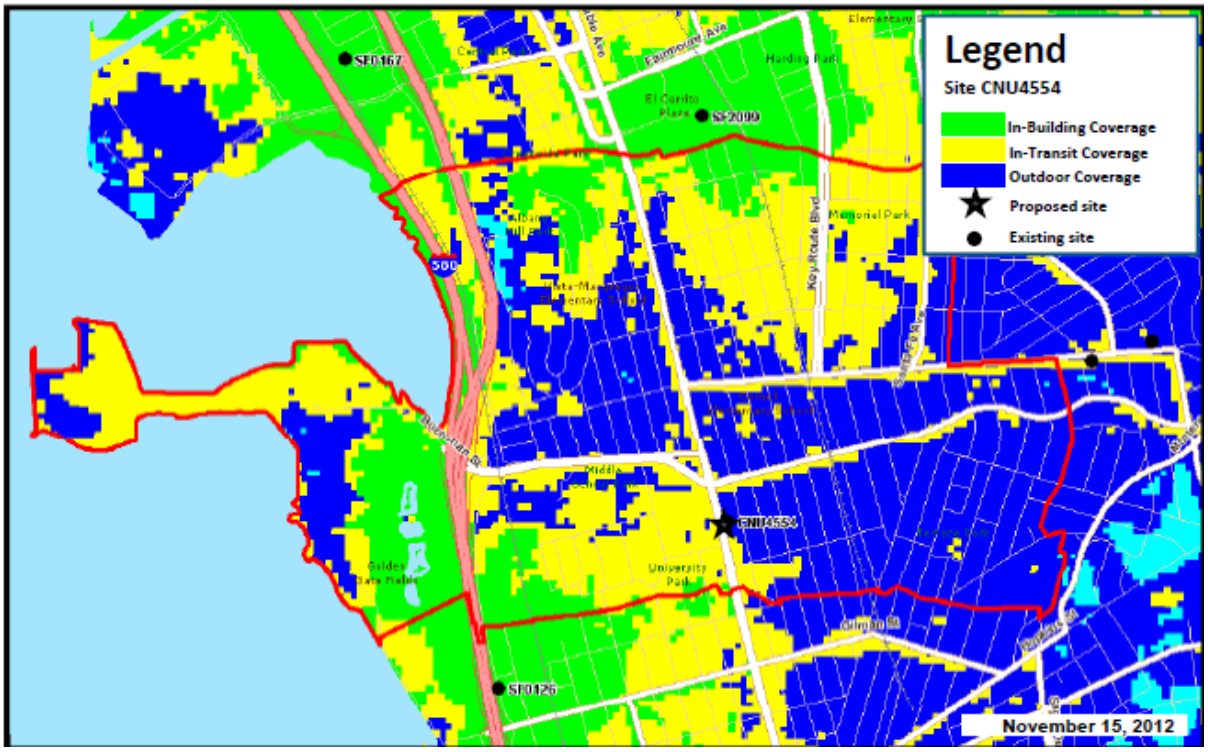
AT&T Mobility has identified a significant service coverage gap in its Wireless service in southeast Albany. AT&T Mobility proposes to install a wireless communications facility ("WCF") at 1035 San Pablo Avenue ("The Proposed Facility") as a means to fill this gap in coverage. The facility consists of nine panel antennas (three antennas for each of three sectors) concealed from view by screening materials which match the color and texture of the building. The antennas will be mounted approximately 43 feet above ground level on the roof of the building, which is the tallest building in the area. The associated equipment cabinets will be located inside the building on the ground floor. The existing rooftop penthouse will be reduced in size by 350.6 square feet. The Proposed Facility is the least intrusive means to fill the significant gap of the ten alternatives investigated by AT&T Mobility as set forth below.

Objective

The coverage gap that presently exists in Albany is large. In order to completely fill this gap AT&T will need to install multiple Wireless Communications Facilities. There has been an enormous growth in the use of smart phones, tablets as well as an increase in the number of customers who rely solely on their mobile phones for home phone service. As a result of these changes AT&T is focused on providing superior in building residential coverage. Our goal is to provide in-building coverage to all residents in Albany. In order to achieve this in-building residential coverage in southeast Albany AT&T is proposing to construct a Wireless Communication Facility at 1035 San Pablo Avenue which will allow us to cover southeast Albany to the Berkeley border.

If we are able to construct the site at 1035 San Pablo Avenue then anticipate being able to complete this in-building residential coverage in southeast Albany. Alternatively if we were to build a site at 850 Stannage, 1231 San Pablo Avenue, 1000 San Pablo Avenue, or 979 San Pablo Avenue then we would not adequately cover the residential areas of southeast Albany. We then would need to construct an additional site in southeast Albany to fill this significant service coverage gap. As a result, location of this site at 1035 San Pablo Avenue is the "Least Intrusive" means of covering this significant service coverage gap.

Existing Coverage



● In-Building Coverage (Green): AT&T customers can make and receive calls on 3G and 4G service and transmit 3G and 4G data reliably indoors.

● In Transit Coverage (Yellow): AT&T customers can make or receive calls and transmit data reliably on 3G and 4G service in a bus, train, vehicle or other above ground transportation, and unreliably indoors

● Outdoor Coverage (Blue): AT&T customers can make and receive calls on 3G and 4G service and transmit 3G and 4G data outdoors but not inside of a vehicle, public transportation or indoors reliably.

● Existing AT&T Wireless communications facilities are marked with black circle.

Methodology and Zoning Criteria

The location of a WCF to fill a significant service gap in coverage is dependant upon topography, zoning, existing structures, collocations opportunities, available utilities, access and a willing landlord. Wireless communications is line-of-sight technology which requires WCFs to be in relatively close proximity to the wireless handsets to be served. The gently sloping urban topography of the gap to be filled in Albany requires elevation to serve a broader coverage area.

AT&T Mobility seeks to fill any significant gap in coverage using the least intrusive means under the values expressed in the Wireless Communications Facilities provisions of the Albany Municipal Code (Sec. 20.20.100 et. seq., "The Wireless Code") and General Plan. The Wireless Code sets forth the preferences for the locations of WCFs in Albany. Facilities are effectively prohibited in residential zones (Sec. 20.20.100.D.1). In descending order, facilities are preferred in Commercial Mixed Use Districts ("CMX"), Public Facilities Districts ("PF") and the San Pablo Commercial ("SPC") or Solano

Commercial ("SC") districts. The Wireless Code further establishes preferences for co-location (See Sec. 20.20.100.E.2.a) and for use of existing structures. Further, the Wireless Code requires maximum setback from permitted child care facilities and schools (See Sec. 20.20.100. D.3.a.) and specifies setbacks from residential districts (See Secs.20.20.100.D.3.b and 20.20.100.D.4).

Based on the foregoing parameters, AT&T investigated available site locations that could provide coverage to the significant gap, first looking to collocate with facilities and existing structures that would provide adequate elevation for propagation of RF signal over the coverage area. AT&T Mobility also investigated preferred zoning districts and sought the use of public facilities. The result of AT&T Mobility's analysis is set forth below.

Analysis

AT&T Mobility investigated ten potential alternatives for facilities to fill the identified significant gap in Albany. Following is a map showing the locations of these alternatives. All ten alternatives are discussed in the analysis which follows.

1. <u>1035 San Pablo Avenue -- Proposed Facility</u>

<u>Zoning District:</u> (SPC) San Pablo Commercial

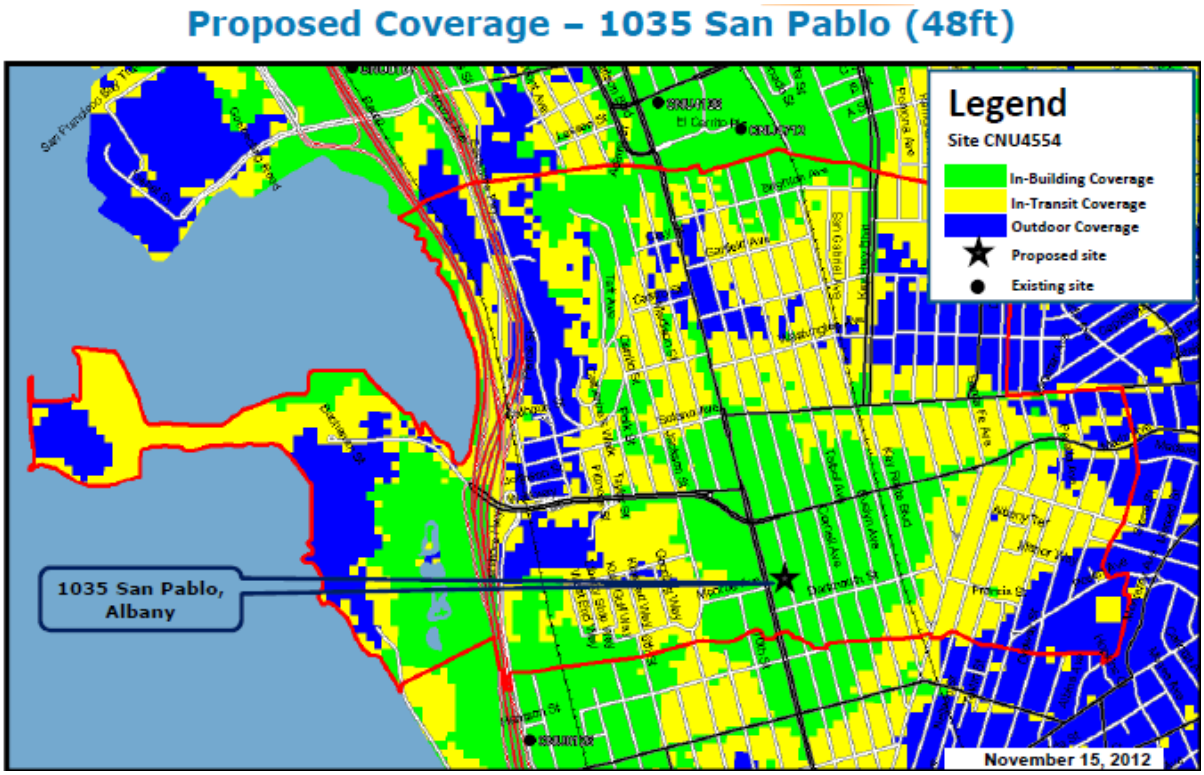
<u>Leasing:</u> We have a lease with our LL here

Conclusion: Based upon the fact that we are collocating on a site already occupied by another wireless carrier, the location and height of the existing structure and overall compliance with the Wireless Code described above, the Proposed Facility constitutes the least intrusive means for AT&T Mobility to provide 3Gand 4G service to the significant gap described above.

This site has a willing landlord and is feasible from a construction standpoint with all antennas being located on the rooftop of the existing building. The proposed equipment cabinets are to be located inside the building on the ground floor. The facility will be located on an existing structure in compliance with Section 20.20.100.E.3 of the Wireless Code. In addition, the building currently hosts an existing wireless facility and qualifies as a collocation under Section 20.20.100.E.2.a. Antennas and radio equipment on the facility will be camouflaged and screened from view in compliance with Section 20.20.100.E.1.j. Finally, the Proposed Facility is located in the San Pablo Commercial District, which is a permitted location for wireless facilities and meets the required setbacks from adjacent residential zone according to Section 20.20.100.D.2.c. As designed the Proposed Facility will have least intrusive impacts on the surrounding neighborhood as shown in the photo simulations provided with the use permit application and on the cover of this report. The Proposal also complies with the daylight plane requirements of the Albany code as the rooftop mounted antennas are set back from the Residential Property Lines by no less than 50 feet. In addition we are removing the vast majority of the rooftop penthouse with the result of removing an existing non-conforming use as well as reducing the rooftop equipment coverage to below 10% even if the Proposed Facility is included in that calculation. The Proposed Facility is located on the tallest building closest to the center of

the identified coverage gap, providing ideal line-of-sight coverage to the identified coverage objective. A propagation map depicting the anticipated signal coverage from the facility is shown below.

Coverage with Proposed Site

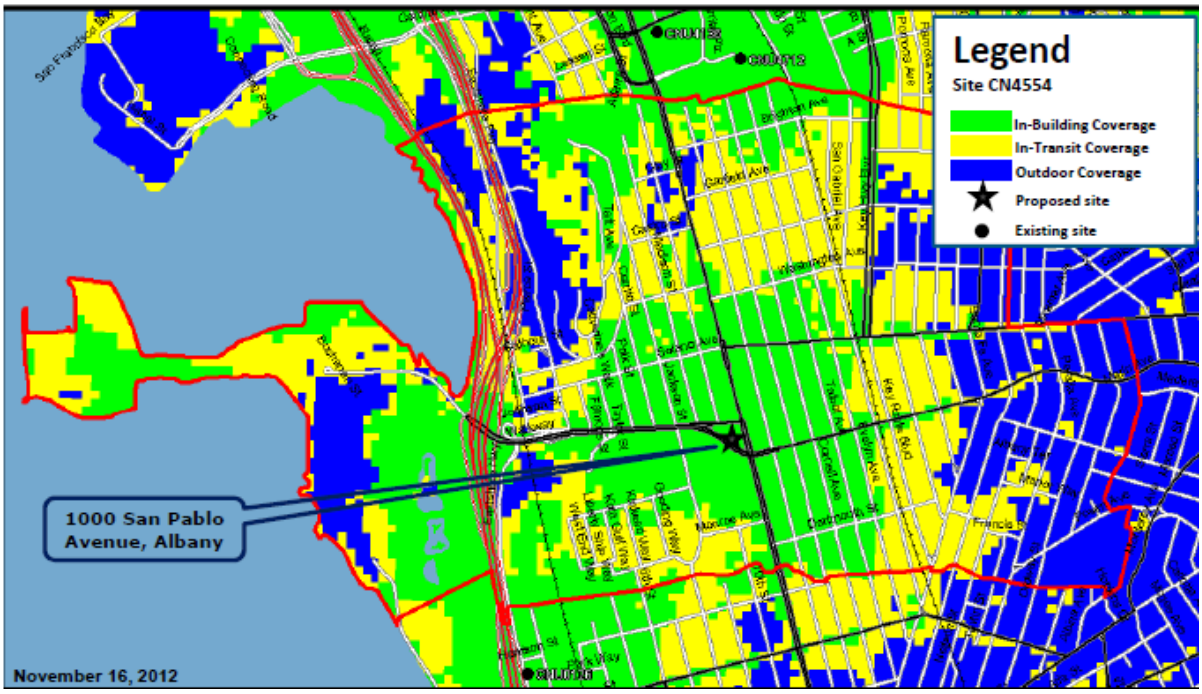


2. 1000 San Pablo Avenue –Albany Fire Department

Zoning District: (PF) Public Facility, collocation opportunity

Leasing: This is City of Albany property and the City has refused to allow AT&T to collocate at this time

Alternate 2 @ 1000 San Pablo Avenue (50ft)

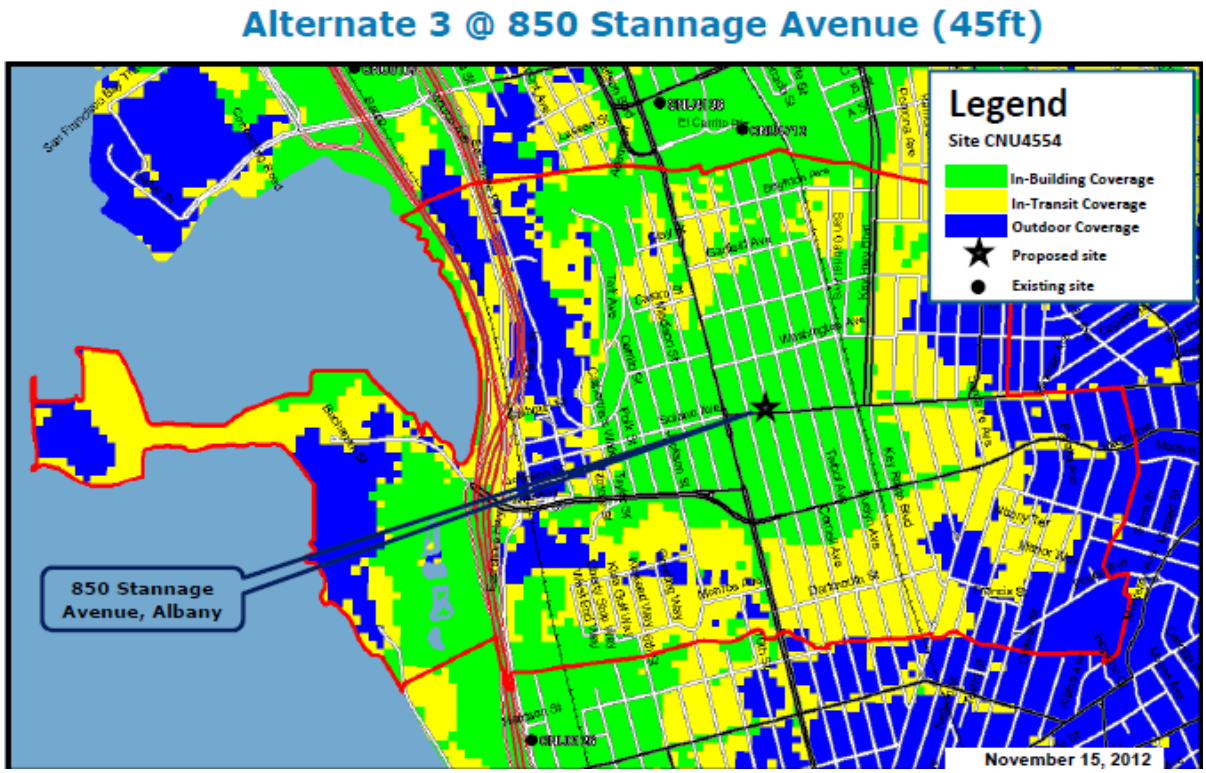


3. 850 Stannage Avenue

Zoning District: Solano Commercial.

There is not currently a wireless facility located on this property so this would not be a collocation

Leasing: This landlord was not approached.

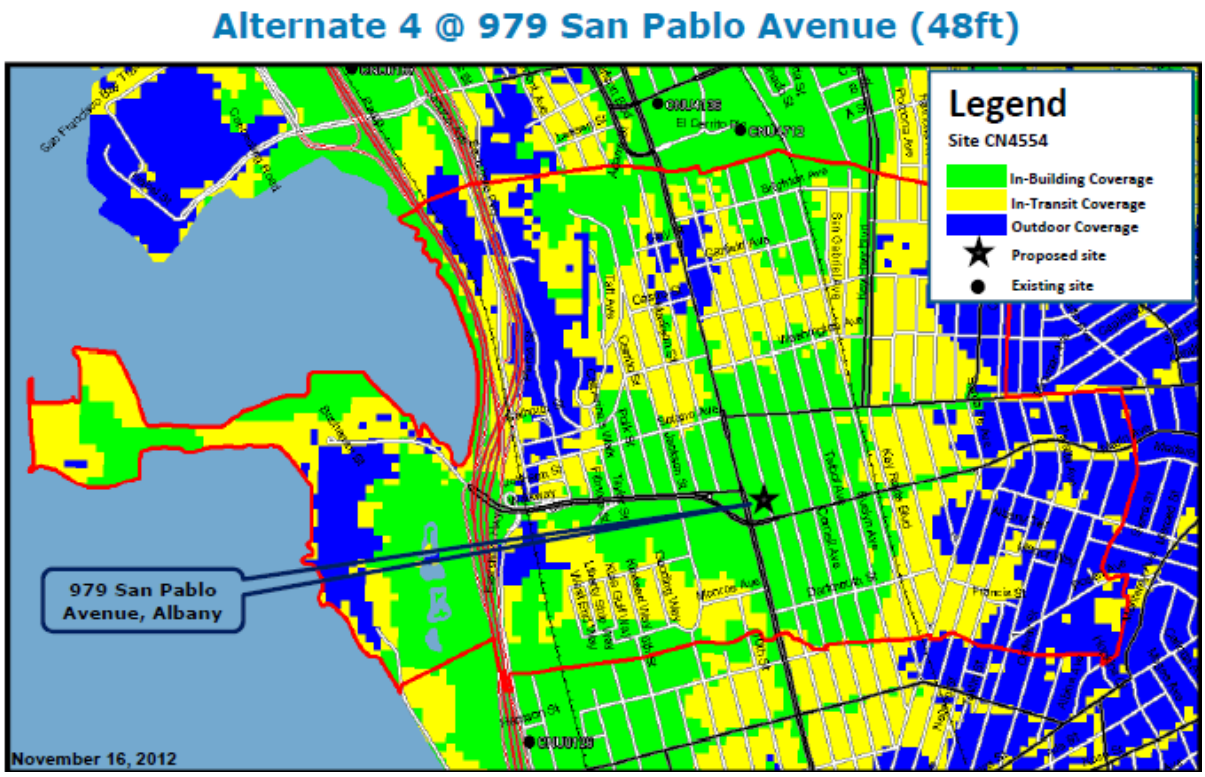


4. **<u>979 San Pablo Avenue</u>**

<u>Zoning District:</u> San Pablo Commercial

There is not currently a wireless facility located on this property so this would not be a collocation

<u>Leasing:</u> We have not been able to secure an agreement with this landlord

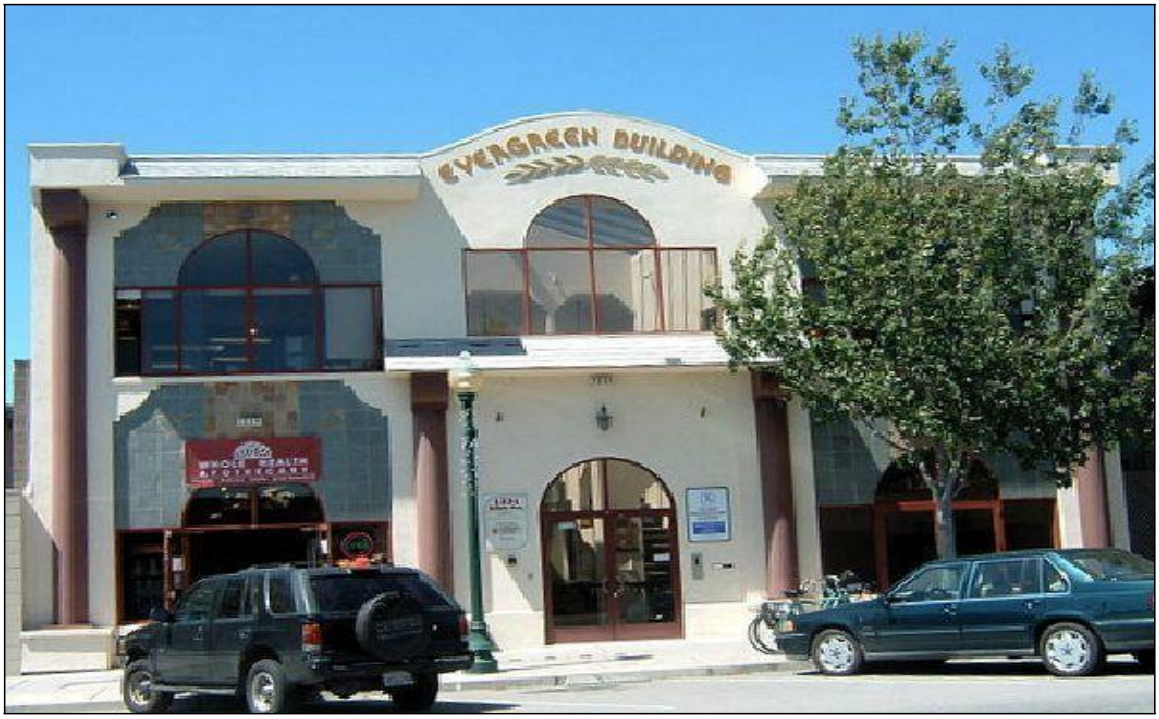


5. 1231 Solano Avenue: Evergreen Building

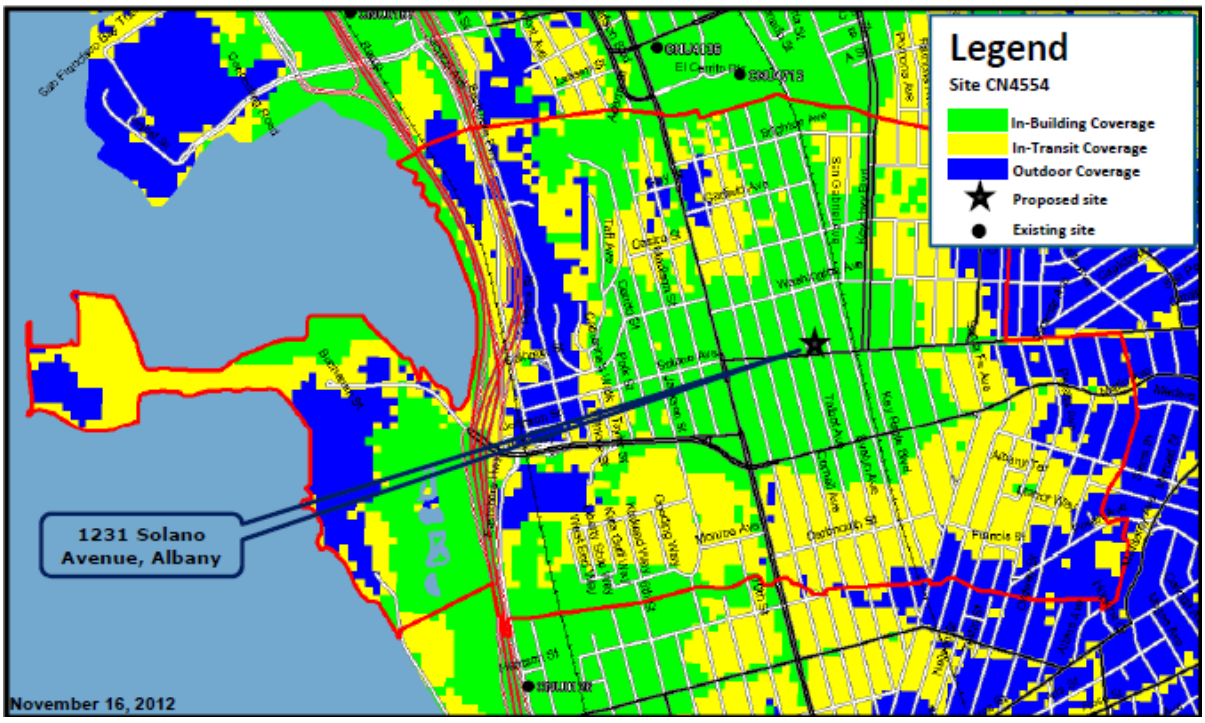
Zoning District: Solano Commercial

There is not currently a wireless facility located on this property so this would not be a collocation

Leasing: This landlord was not approached.



Alternate 5 @ 1231 Solano Avenue (45ft)

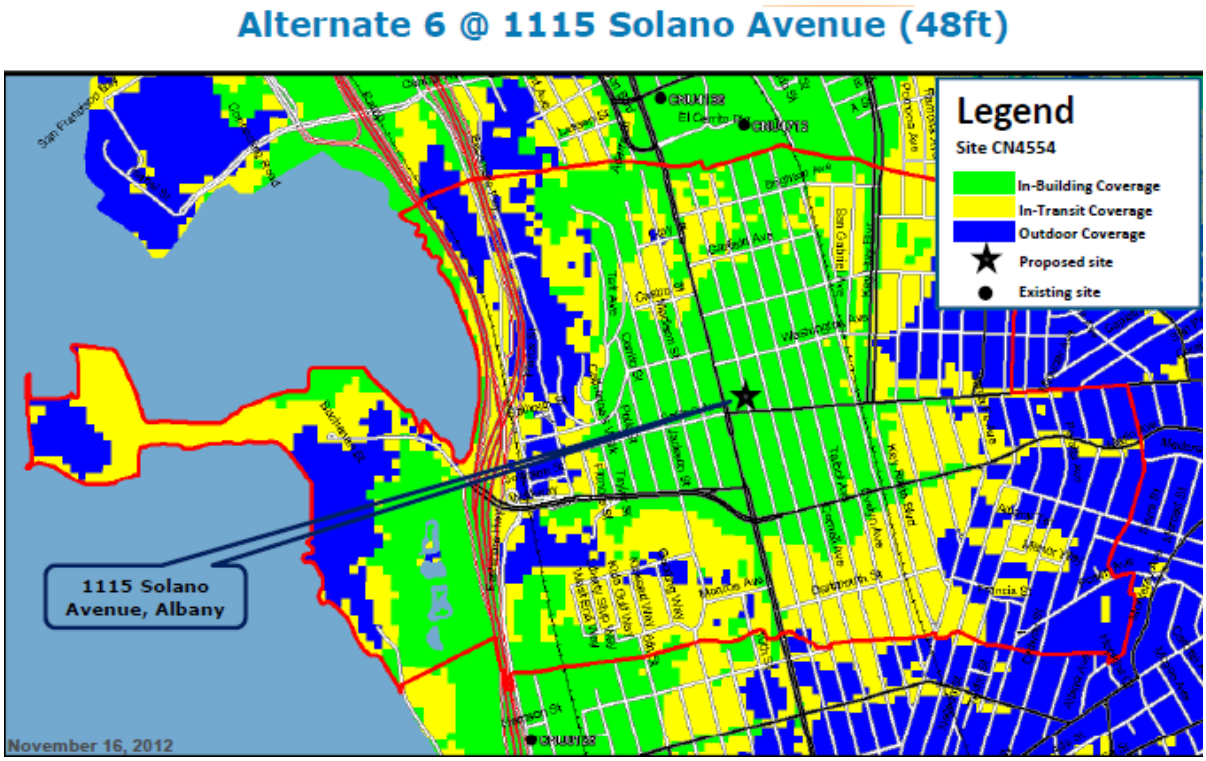


6. <u>1115 Solano Avenue -- Albany Theater</u>

<u>Zoning District:</u> (SPC) San Pablo Commercial

There is not currently a wireless facility located on this property so this would not be a collocation

<u>Leasing:</u> The property owner has refused to lease to AT&T.



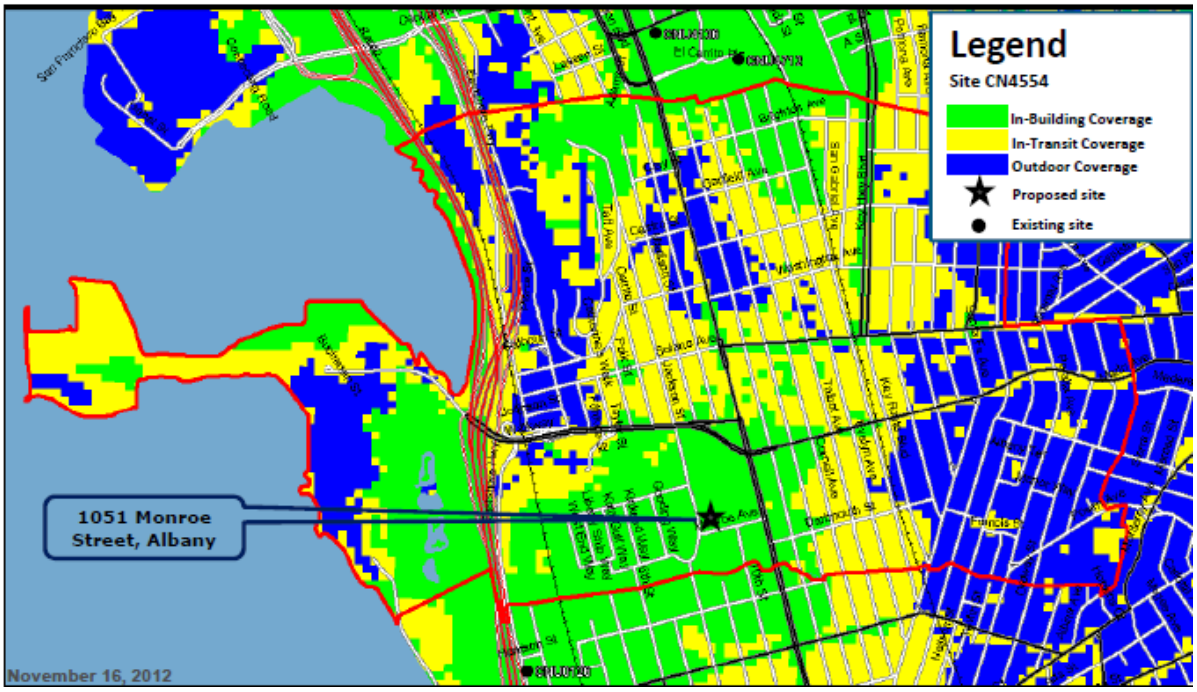
7. <u>1051 Monroe Street – University of California, Albany Unified School District</u>

<u>Zoning District:</u> PF – Public Facility

There is not currently a wireless facility located on this property so this would not be a collocation

<u>Leasing:</u> We have not been able to secure an agreement with this landlord

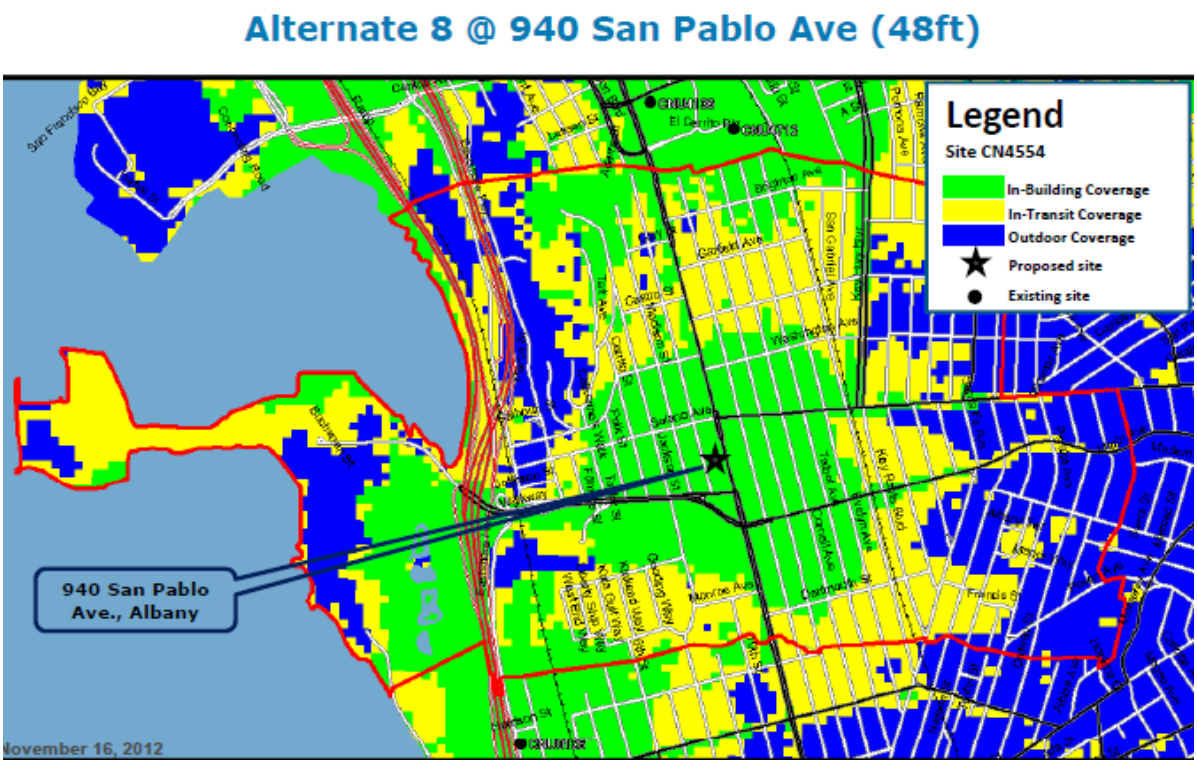
Alternate 7 @ 1051 Monroe Street (50ft)



8. 940 San Pablo Avenue -- Town Centre Structure

Zoning District: (SPC) San Pablo Commercial

Leasing: The property owner has refused to lease to AT&T

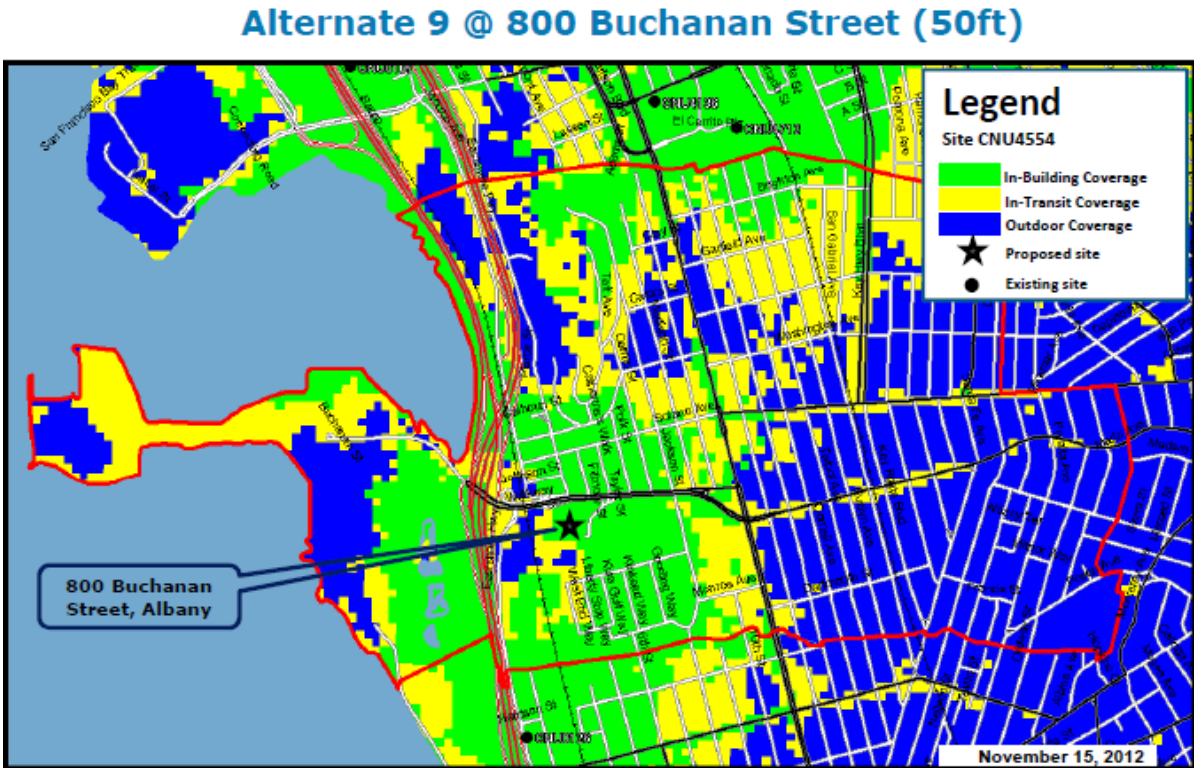


9. <u>800 Buchanan Street/US Agricultural Building</u>

<u>Zoning District:</u> PF – Public Facility

There is not currently a wireless facility located on this property so this would not be a collocation

<u>Leasing:</u> We have not been able to secure an agreement with this landlord



10. <u>CMX District</u>

Zoning: CMX

<u>Leasing:</u> Property owners were not approached

Alternate 10 @ CMX Area(55ft)

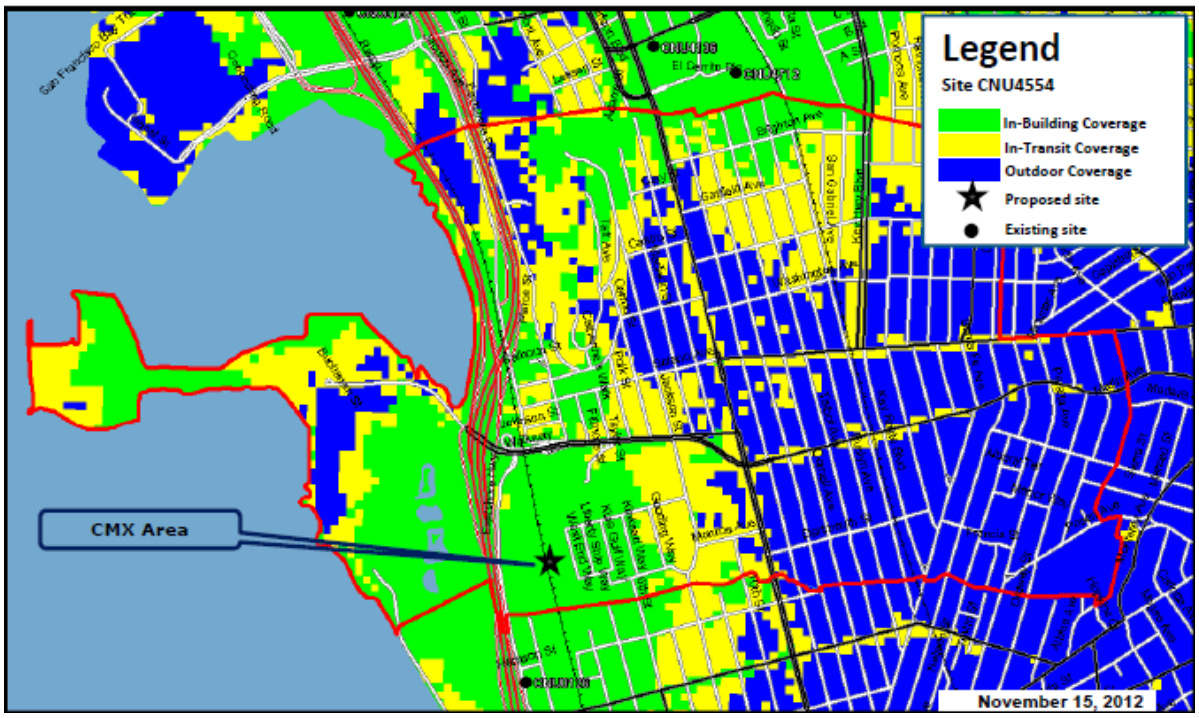


Exhibit A

The city's November 30th e-mail to Valerie Tallerico requested the following additional information:

- Description of Tools Used to Calculate Propagation Predictions (previously a description was provided of the radio frequency software used to prepare the propagation maps)
- Radiofrequency Considerations description for each site considered
- Conclusion of the Analysis

The following is AT&T's response:

Description of Tools Used to Calculate Propagation Predictions:

AT&T uses "RF" (radio frequency) Planning software, ATOLL, to analyze and predict its network's coverage, as well as performing other analysis such as interference and hand- over data. The prediction software is calibrated with network's live service coverage measurement data and is accurate to within the industry's 9 dB standard deviation metric, i.e., the predicted coverage has a +/- 9 dB margin of error relative to real life measurement. Typically, ATOLL's predicted coverage is color coded to represent the various service coverage conditions that wireless devices can reliably operate under. For example, green levels are suitable for wireless devices to be used reliably inside most buildings, yellow levels are suitable for wireless devices to be used reliably inside most vehicles (but not reliably in the majority of buildings), and blue levels are suitable for wireless devices to be used reliably outside (but not reliably in vehicles and in buildings).

Radio frequency Considerations description for each site considered:

To begin with, it should be noted that it is not AT&T's standard procedure to complete RF analyses of sites other than the primary site. Such analysis take significant time and resources to conduct. Even though neither federal law nor the Albany code requires such RF analyses of alternative sites, AT&T has completed and submitted propagation maps of alternative sites multiple times to the city. Those propagation maps are the basis of AT&T's answers below.

1. **1000 San Pablo Avenue –Albany Fire Department**

   - Based on the propagation maps included with the Alternatives Analysis resubmitted on November 16, 2012, antennas placed at this location will achieve reliable in-building coverage within the Significant Gap.

   - This property was analyzed assuming AT&T is allowed to install antennas on a new 50 foot monopole. This is the maximum height allowed for antennas at this location under the Albany Code and we require this height to fill the Significant Gap.

   - This is city property, and the city has refused to allow AT&T to collocate at this time.

2. **850 Stanage Avenue**

- Based on the propagation maps included with the Alternatives Analysis resubmitted on November 16, 2012, antennas placed at this location will achieve reliable in-building coverage within the Significant Gap.

- This property was analyzed assuming AT&T is allowed to install antennas on the buildings' rooftop, with tip heights at 45 feet. This is the maximum height allowed for antennas at this location under the Albany Code and we require this height to fill the Significant Gap.

- An AT&T antenna installation on this property would require the addition of a new structure to the existing rooftop adding approximately 10 feet in height.

- There is currently no wireless facility located on this property, so this would not be a collocation.

3. **979 San Pablo Avenue**

- Based on the propagation maps included with the Alternatives Analysis resubmitted on November 16, 2012, antennas placed at this location will achieve reliable in-building coverage within the Significant Gap.

- This property was analyzed assuming AT&T is allowed to install antennas on the building's rooftop, with tip heights at 48 feet. This is the maximum height allowed for antennas at this location under the Albany Code and we require this height to fill the Significant Gap.

- A newly proposed AT&T antenna installation on this property would require the addition of a new structure totaling approximately 20 feet in height.

- There is currently no wireless facility located on this property, so this would not be a collocation. Further, AT&T has not been able to secure an agreement with the landlord.

4. **1231 Solano Avenue: Evergreen Building**

- Based on the propagation maps included with the Alternatives Analysis resubmitted on November 16, 2012, antennas placed at this location will achieve reliable in-building coverage within the Significant Gap.

- This property was analyzed assuming AT&T is allowed to install antennas on the buildings' rooftop, with tip heights at 45 feet. This is the maximum height allowed

for antennas at this location under the Albany Code and we require this height to fill the Significant Gap.

- A newly proposed AT&T antenna installation on this property would require the addition of a new structure totaling approximately 15 feet in height.

- There is currently no wireless facility located on this property, so this would not be a collocation.

5. 1115 Solano Avenue -- Albany Theater

- Based on the propagation maps included with the Alternatives Analysis resubmitted on November 16, 2012, antennas placed at this location will achieve reliable in-building coverage within the Significant Gap.

- This property was analyzed assuming AT&T is allowed to install antennas on the building's rooftop, with tip heights at 48 feet. This is the maximum height allowed for antennas at this location under the Albany Code and we require this height to fill the Significant Gap.

- There is currently no wireless facility located on this property, so this would not be a collocation. Further, the property owner refuses to lease to AT&T.

6. 1051 Monroe Street – University of California, Albany Unified School District

- Based on the propagation maps included with the Alternatives Analysis resubmitted on November 16, 2012, antennas placed at this location fail to achieve reliable in-building coverage within the Significant Gap.

- The proposed property is located too far southwest.

- This property was analyzed assuming AT&T proposes to install antennas on a new 50 foot monopole. This is the maximum height allowed for antennas at this location under the Albany Code and we require this height to fill the Significant Gap.

- There is currently no wireless facility located on this property, so this would not be a collocation. Further, AT&T has not been able to secure an agreement with the landlord.

7. 940 San Pablo Avenue -- Town Centre Structure

- Based on the propagation maps included with the Alternatives Analysis resubmitted on November 16, 2012, antennas placed at this location will achieve reliable in-building coverage the Significant Gap.

- This property was analyzed assuming AT&T is allowed to install antennas inside of the existing Town Centre sign, with tip heights at 48 feet. This is the maximum height allowed for antennas at this location under the Albany Code and we require this height to fill the Significant Gap.

- The property owner refuses to lease to AT&T.

8. 800 Buchanan Street/US Agricultural Building

- Based on the propagation maps included with the Alternatives Analysis resubmitted on November 16, 2012, antennas placed at this location fail to achieve reliable in-building coverage within the Significant Gap.

- This building is located too far to the southwest of the Significant Gap.

- This property was analyzed assuming AT&T proposes to install antennas on the building's rooftop, with top of antenna heights measuring approximately 50 feet. This is the maximum height allowed for antennas at this location under the Albany Code and we require this height to fill the Significant Gap.

- There is currently no wireless facility located on this property, so this would not be a collocation. Further, AT&T has not been able to secure an agreement with the landlord.

9. CMX District

- Based on the propagation maps included with the Alternatives Analysis resubmitted on November 16, 2012, antennas placed at this location fail to achieve reliable in-building coverage within the Significant Gap.

- The proposed region is located too far to the southwest of the Significant Gap.

- An additional site in and around this location would be needed to fulfill another portion of the Significant Gap in Albany.

- This region was analyzed assuming AT&T is allowed to install a new 55 foot monopole. This is the maximum height allowed for antennas at this location under the Albany Code and we require this height to fill the Significant Gap.

Conclusion:

Based on the November 16, 2012 Alternative Site Analysis and the propagation maps which accompanied that report, as well as the foregoing radio frequency analysis, the proposed Wireless Facility located at 1035 San Pablo Avenue constitutes the least intrusive means to fill the significant gap in AT&T's coverage in southeast Albany. As

noted above, there are alternative sites that would provide decent coverage within the gap area, but those sites are either not available for lease, not less intrusive because they either do not constitute a collocation or would require building a new monopole, or would ultimately not adequately cover the residential areas of southeast Albany, which would result in AT&T needing to construct an additional site in that area to fill the gap. Thus, the proposed facility at 1035 San Pablo Avenue is the least intrusive means by which to close this service coverage gap.