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MEMORANDUM

DATE: September 1, 2022
TO: Planning Commission
FROM: Julia Krog, Director
SUBJECT: Second Memorandum - U_2017-0036 (AT&T) Project Support Statement

Staff provided in the initial memorandum for the September 1, 2022 hearing an Updated Alternative Site Analysis for the project. Staff discovered that the original Project Support Statement was not provided with the staff report and related materials and as such is providing that information for the Commission. Please see Attachment A to this memorandum.

Attachment A:
AT&T Project Support Statement

ATTACHMENT A



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PROJECT SUPPORT STATEMENT

**AT&T PROJECT NAME: CONNECT AMERICA FUND II (CAF II) PROJECT
DEVELOPMENT APPLICATION FOR AT&T SITE "MANCHESTER"**

AT&T SITE NUMBER: CCL03978

AUTHORIZED AGENT:

EPIC WIRELESS GROUP, LLC

ZONING MANAGER:

JARED KEARSLEY; 916-755-1326; jared.kearsley@epicwireless.net

PROPERTY OWNER: AT&T CORP

925-277-6250

APN: 133-010-04-05

45001 Kinney Road, Manchester, CA 95459

- **PROJECT'S BACKGROUND AND OBJECTIVES**
- **SEARCH RING'S DESCRIPTION AND OBJECTIVES**
- **POTENTIAL CO-LOCATIONS**
- **ALTERNATIVE SITE ANALYSIS**
- **SUBJECT PARCEL AND SITE DETAILS AND SUPPORTING DOCUMENTS**
- **OPERATIONAL STATEMENT**
- **FIRE SUPPRESSION SYSTEM**



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CAF II Project Background and objectives:

AT&T is participating in a Federal Government funded project called Connect America Fund (CAF) – which is to provide underserved areas throughout the United States in general and throughout Mendocino County in particular with hi-speed broadband internet. The build-up of hi-speed broadband internet throughout rural/underserved areas will not only drive economic growth in rural America, but will expand the online marketplace nationwide, creating jobs, educational and businesses opportunities across the country. The CAF project is required to provide broadband internet services capable of 10 Mbps download and 1 Mbps upload speeds.

AT&T has the necessary technology that allows them to build out their territory in Mendocino County with the much demanded hi-speed broadband internet to help improve the county's rural infrastructure. AT&T's basis for transmitting and receiving hi-speed broadband internet to residences is executed by providing one site with either a microwave fiber hop or a direct fiber line to the site and transferring the high speeds of fiber to each Living Unit (LU) via wireless signals. Each LU being provided with the service will have a small square antenna located in a vantage point on the property where it has a direct line of site to the tower. The square antenna will send and receive wireless broadband internet providing the LU with a minimum of 10/1 Mbps download and upload speeds, respectively.

AT&T's secondary objective is to provide and enhance AT&T's Wireless Telecommunications services (cellular services) to underserved areas. Cellular services go hand in hand with building the internet infrastructure throughout these underserved areas. People today rely on their mobile devices not only for educational and business purposes, but also for emergency services. Increasing AT&T's cellular coverage and capacity throughout Mendocino County's rural areas while providing wireless broadband internet will greatly assist with enhancing the county's economic growth and the area's infrastructure.

Given the need for direct line of site to residences, a taller than typical tower will be necessary in order to provide wireless broadband internet services to as many homes in the targeted areas as possible. During the tower design phase, the Radio Frequency (RF) engineers study many variables including surrounding tree heights, tree densities, population densities, and surrounding hill tops, in order to properly design a sufficient tower height with the goal of achieving the FCC's track census block mandates of reaching specific LU coverage objectives per area. Living Unit (LU) coverage objectives are provided by the RF engineer using density maps and are based on the area's approximate population. AT&T's goal is not only to reach the coverage objective, but to outperform the coverage objective to ensure that the maximum amount of homes are being provided this service while taking into consideration a small margin of error during the simulation process.



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Search Ring's Description and Objectives:



AT&T Mobility is proposing to build and maintain an unmanned wireless telecommunication facility consisting of a 40' x 45', 1,800 square foot enclosed compound (lease area). The compound will include an 80 foot Stealth Monopine tower, one equipment shelter, and one 15KW standby DC Diesel Generator. This facility will be located at 45001 Kinney Road, Manchester, CA 95459, within Mendocino County's jurisdiction on an 11.2 acre Public Facility zoned property.

AT&T's objective for the Manchester site is to provide wireless hi-speed broadband internet to nearby residences and to fill a significant mobility coverage gap in the service area. The site's elevation is approximately 40 feet. After running a coverage simulation at the site location, AT&T is anticipating meeting their FCC coverage objective for this search ring.

The Property is owned by AT&T Corp. and is currently operating a Cable Station. The site is adjacent to State Parks, however, the facility will be naturally screened from all directions by surrounding vegetation.



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Potential Co-locations:



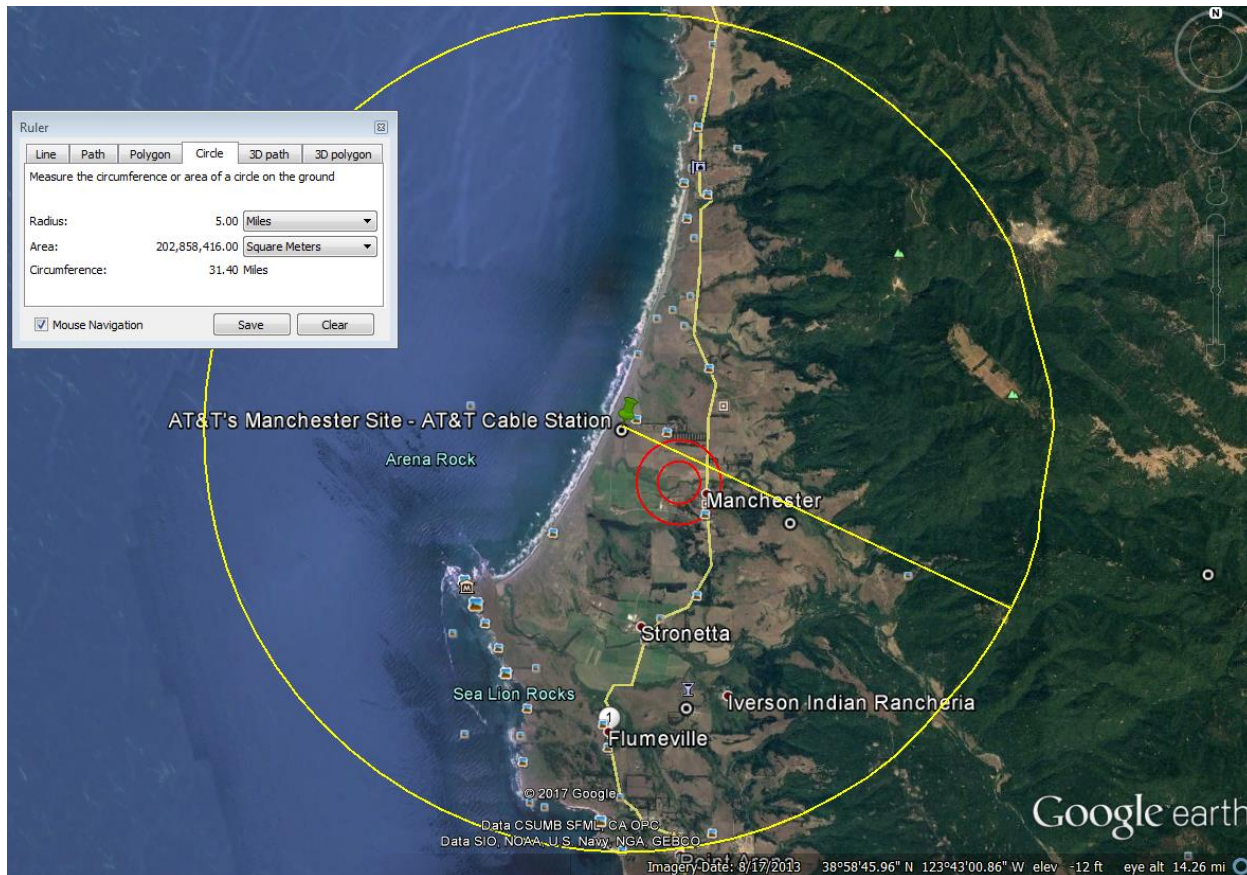
There are no potential Co-location opportunities in the near vicinity of the provided Search Ring. The targeted area is a relatively low populated area, therefore, typical cellular services are less prone to be present.

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Map of all other wireless communications facilities subject to a use permit within five miles of the proposed facility.

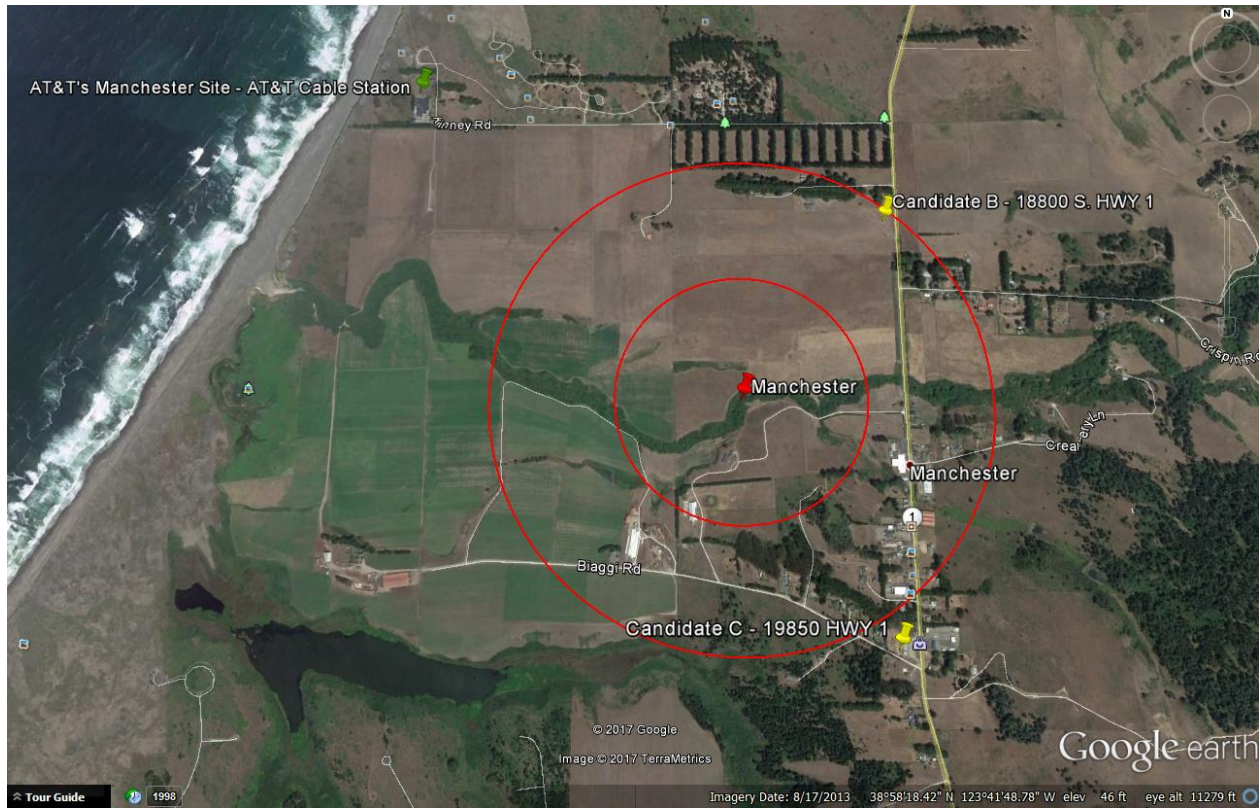


According to Mendocino County's GIS map overlay, there are two permitted wireless telecommunication sites within five miles of the proposed facility. Neither of the two facilities would fill the significant mobility coverage gap nor fulfill the CAF II LU coverage requirements for the Search Ring.



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Alternative Site Analysis:



Above is a map showing the Search Ring (center is the red pin), Proposed Site (green pin) and the two alternative sites (yellow pins) that were considered for placement of the telecommunications facility. Each Alternative Site is discussed below:

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Manchester Alternative Candidate B:

18800 S. Hwy 1, Manchester, CA 95459

Latitude/Longitude: 38.977311, -123.687453

Proposal – New Tower



Considerations:

Candidate A is located approximately ½ mile north-east of the center of AT&T's search ring. The proposed tower would be located on a 24 acre, RL zoned property owned by Sandy and William Houston. The property is located on the west side of Hwy 1 and the site was proposed on the east side of the property. Candidate A was chosen as AT&T's second preferred candidate as the RF Engineer's simulation yielded fewer LU's than the subject site located at 45000 Kinney Road. Furthermore, there are more residences in the nearby vicinity and less tree/canopy coverage creating a more aesthetically impactful location than the Primary Candidate. One setback waiver would be required for this location. The site is along the side of Hwy 1 and would be very visible on the scenic corridor.



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Manchester Alternative Candidate C:

19850 So. Hwy 1, Manchester, CA 95459

Latitude/Longitude: 38.9649, -123.687664

Proposal – New Tower



Considerations:

Candidate C is located approximately 0.56 miles south-east of the center of AT&T's search ring. The proposed tower would be located on a 1.9636 acre, RV zoned property owned by Morgan Bonniejean. The property is located on the west side of Hwy 1 and the site was proposed on the south side of the property. Candidate C was chosen as AT&T's third preferred candidate as the RF Engineer's simulation yielded below the subject site located at 45001 Kinney Road. Furthermore, there are more residences in the nearby vicinity creating a more aesthetically impactful location than the Primary Candidate. Multiple setback waivers would be required for this location as well.



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Actual View of the Proposed Location:

The proposed lease area is rather centrally located on the property. The site will not interfere with the existing use of the property. Access will be directly off of Kinney Road. The site has great potential for line of site to the communities near the subject parcel. The property is lined with foliage creating natural stealthing of the facility from the public right of way. The backdrop is lined with evergreens at which the Monopine will blend in with. This location meets all county setbacks therefore no setback waivers are required. The property is owned by AT&T Corp. and currently being utilized for a Cable Station.





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Overhead View of Lease Area and Distances to nearby residences:



Emergency 15kw Diesel Generator and 1 Ton HVAC Noise Analysis:

- **Equation and Calculation Method:**

The sound analysis methods and results are hypothetical only, using Sound Level and Distance calculations. These calculations do not take outside sounds, trees, hills, buildings, and other sound dampening variables into consideration, but, only raw sound levels after specific traveled distances which results in the worst case scenario for the sounds of the onsite backup generator and HVAC systems.

Formulas to calculate the sound level L in dB (sound pressure level or sound intensity level) in dependence of the distance r .

Sound level L and Distance r	
$L_2 = L_1 - 20 \cdot \log\left(\frac{r_1}{r_2}\right) $	$L_2 = L_1 - 10 \cdot \log\left(\frac{r_1^2}{r_2^2}\right) $
$r_2 = r_1 \cdot 10^{\left(\frac{ L_1 - L_2 }{20}\right)}$	$r_1 = \frac{r_2}{10^{\left(\frac{ L_1 - L_2 }{20}\right)}}$

Sound pressure level (dB) = Sound intensity level (dB)

$L_2 = L_1 - 20 \cdot \log\left(\frac{r_1}{r_2}\right) $	$L_2 = L_1 - 10 \cdot \lg\left(\frac{r_1^2}{r_2^2}\right)$
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Sound Specifications:

- Emergency Generator Model: SD015 Generac (Spec Sheet included with Packet)
 - Average decibel (dBa) level at 23 feet = 65 dBa
- 1 Ton HVAC Model: HVAC MarvairSlimPacECUA12ACA
 - Average decibel (dBa) level at 30 feet = 46.5 dBa

Findings:

1. Distance to the nearest adjacent Property Line = 198'
 - a. Generator Decibel level at 198' = 46.3 dBa
 - b. HVAC Decibel level at 198' = 30.11 dBa

Conclusion:

After calculating decibel levels at the nearest property line, the onsite Emergency Backup Generator and the HVAC unit is within Mendocino County's noise level standards according to Mendocino County's Wireless Guidelines – Noise Standards. Note: There are no residences within 1000 feet of the Tower.

- i. Generators shall be equipped with mufflers and spark arresters, and shall not produce noise levels exceeding 50 dba at the nearest off site residence. Routine testing and maintenance shall be limited to weekdays between 8:30 a.m. and 4:30 p.m. Repairs and emergency use are not included in this limitation.



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**Operation Statement:**

This project is an AT&T Mobility unmanned Telecommunication Wireless Facility. It will consist of the following:

(P) NEW SITE BUILD UNMANNED TELECOMMUNICATIONS FACILITY.

1. BRING POWER / TELCO / FIBER TO SITE LOCATION
2. GRAVELED ROAD IMPROVEMENT AT SITE
3. 40'X45' LEASE AREA
4. INSTALL 2' TALL CELL BLOCK FOUNDATION, TYPICAL OF (20 7'x7' SQUARE BLOCKS) OVERALL WIDTH OF 28'X35'
5. INSTALL AT&T APPROVED PRE-MANUFACTURED WALK IN EQUIPMENT CABINET AND ASSOCIATED INTERIOR EQUIPMENT
6. ADD (1) NEW GPS UNITS
6. ADD 80'-0" MONOPINE
7. ADD (8) ANTENNAS (4) PER ALPHA, BETA SECTOR
8. ADD (15) PROPOSED RRUS
9. ADD (3) SURGE SUPPRESSORS
10. ADD (2) FUTURE 4' MICROWAVE DISHES
11. ADD 6'-0" HIGH CHAIN LINK FENCE
12. ADD 15KW DC DIESEL GENERATOR

The facility will operate 24 hours a day 7 days a week. Maintenance workers will visit the site approximately once a month. A 15 foot wide access route will be created directly from Kinney Road. There will be minimal noise from the standby generator, turning on once a week for 15 minutes for maintenance purposes limited to Monday through Friday between 8:30am and 4:30pm and during emergency power outages. The Facility is beyond 1000' to residences. The location is surrounded by foliage which will naturally stealth the facility. The surrounding area is covered with evergreen trees creating a natural looking backdrop. The tower will be built to provide co-location opportunities for future carriers or public safety entities.

Fire Suppression System:

A 15 foot wide access route will be created directly from Kinney Road. A Hammer Head Fire Turnaround will be proposed within the access route proceeding the driveway. A Fire Department Knox Box will be located at the Facility's access gate. Additionally, a 2A:20BC Rated Fire Extinguisher in a weather resistant cabinet will be mounted on the exterior wall of the proposed shelter.

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Conclusion:

Candidate A, 45001 Kinney Road, meets and exceeds the FCC's mandated objectives for the targeted area of Manchester providing wireless services to the nearby community. The Stealth Monopine Tower design has been chosen to blend into the existing surrounding environment and sets beyond the required county setback of 500% of the tower's height to dwelling units. The site is also environmentally friendly given no trees or mature foliage will be removed. The site has been designed per fire code and is designed for future colocation opportunities. The property is owned by AT&T Corp and is zoned Public Facility.