PROJECT NARRATIVE WCF CONDITIONAL USEAPPLICATION AT&T—YA4795 TEANAWAY FIRSTNET



Submitted to Ellensburg/ Kittitas of Kittitas County, Washington Department of Community Development

Applicant:	New Cingular Wireless PCS, LLC d/b/a "AT&T" 19801 SW 72 nd Avenue Suite 200 Tualatin, OR 97062 (425) 222-1026
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Property-Owner:	Department of Natural Resources Contact: Chad Unland) 509-925-0935 Chad.unland@dnr.wa.gov 713 Bowers Road, Ellensburg, WA 98926 Property Owner Address 2
Project Address:	Non-Situs LAT/LONG: 47.183066, -120.693726
Description & Tax Lot:	GPS Coordinates: NE ¼ ,N ½ SE ¼ Sec. 34, T. 20., R. 17, W.M. Parcel No. 545635
Zoning Classification:	Forest and Range (F-R)

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Velocitel is submitting this application on behalf of New Cingular Wireless PCS, LLC ("AT&T") and the underlying property owner.

1. PROJECT OVERVIEW

AT&T is proposing to build a new wireless communication facility WCF, YA4795 Teanaway, at the above noted project address. This proposed new WCF is intended to fill a significant gap in AT&T's high band 4G LTE coverage experienced by its customers. Specifically, the proposed new facility meets AT&T's coverage objectives within a geographic area not presently served by AT&T by extending coverage along Hwy-97, Hwy-970 and Lauderdale Junction.

In addition to AT&T LTE commercial facilities, this proposed WCF will provide an important public benefit by including facilities to support the FirstNet Nationwide Safety Public Broadband Network¹ (the "FirstNet Network"). As a FirstNet site, this proposed WCF is part of a more significant, state-wide initiative by AT&T to upgrade existing wireless sites and to build new sites, including in rural area with less coverage such as those along US HWY-97, to support the FirstNet Network and deploy the new frequency band for first responders ("Band 14").

AT&T intends for its application for the proposed WCF to include the following documents (collectively, "AT&T's Application"):

- Attachment 1- Project Narrative
- Attachment 2- Statement of Code Compliance
- Attachment 3- RF Justification
- Attachment 4- MPE-FCC Letter
- Attachment 5- TOWAIR Determination
- Attachment 6- Photo Sims
- Attachment 7- NIER Report
- Attachment 8- Final Zoning Drawings

As shown in this project application, AT&T's proposal meets all of Kittitas County's criteria for siting new wireless communications facilities and complies with all other applicable county, state, and federal regulations. AT&T's proposal is also the least intrusive means of extending AT&T's service to fill its coverage gap. Accordingly, AT&T respectfully requests Kittitas County to approve this project as proposed, subject only to the Kittitas County's standard conditions of approval.

¹ The First Responder Network Authority (FirstNet) is an independent authority within the U.S. Department of Commerce. Chartered in 2012, its mission is to ensure the building, deployment, and operation of the nationwide, broadband network that equips first responders to save lives and protect U.S. communities. FirstNet grew out of and addresses a 9/11 Commission recommendation calling for improved communications for all U.S. first responders. Learn more at <u>FirstNet.gov/mediakit</u>.

1. PROPOSED PROJECT DETAILS

1.1. Location

Detailed information regarding the subject property and proposed lease area is included in Attachment 8, Final Zoning Drawings, to AT&T's application.

1.1.1. Subject property. The subject property of this proposal is located at (LAT/LONG) 47.183066, -120.693726 outside the city limits of Ellensburg, WA just north of US HWY-97 (the "Property"). The Property is rural working land zoned Forest and Range (F-R) and is currently used as undeveloped land owned by Department of Natural Resources of Washington State.

1.1.2. Lease area.

• The proposed 70 x 70ft lease area for the WCF is located on a hilltop on the SW corner of the Property (the "Lease Area").

• The lease area will be surrounded by a a 6ft chain link fence with privacy slats, topped with barbed wire. Access to the lease area will be secured by a locked gate.

• The lease are will be covered in 6in of 3/4 in crushed rock and 95% compact fill.

1.1.3. Access and parking.

- Access to the lease area is available from an existing gravel access road off of HWY-97 across from the Old Quarry.
- A new 12ft hammer head access driveway and parking area will be constructed to connect the lease area with the existing access road. This extension will be covered in 6in of 3/4in crushed rock with weed barrier on 95% compacted fill.

1.2. Wireless Facilities and Equipment

Specifications of the facilities outlined below, including a site plan, can be found in Attachment 8, Final Zoning Drawings, to AT&T's Application.

1.2.1. Support structure design. AT&T is proposing to build a new 150ft tall self-supported tower (the "Tower") on the Property. This will be an unmanned telecommunications facility.

1.2.2. Antennas and accessory equipment.

• The Tower will contain AT&T 4G LTE and FirstNet equipment (up to 8 panel antennas, 4 RRUs, and 1 new surge protectors, with all associated equipment).

• The antennae, RRH, and accessory equipment on the Tower will be painted to match. All paint will have an anti-glare finish.

1.2.3. Ground equipment.

• The Tower and all ground equipment will be constructed within the 70' x 70' Lease Area.

• The ground equipment will be enclosed within a pre-fabricated walk-in cabinet shelter.

1.3. Additional Details

1.3.1. Landscaping. No additional landscaping will be needed as it is zoned Forest and Range which is exempt of KCC Chapter 17.56. See Attachment 8, Final Zoning Drawings and Attachment 6, Photo Sims.

1.3.2. Lighting. The Tower will not be artificially illuminated, and no artificial lighting is required pursuant to state or federal authorities. See Attachment 5 – TOWAIR Determination.

2. AT&T NETWORK COVERAGE AND SERVICES

2.1. Overview—AT&T 4G LTE

AT&T is upgrading and expanding its wireless communications network to support the latest 4G LTE technology. LTE stands for "Long Term Evolution." This acronym refers to the ongoing process of improving wireless technology standards, which is now in its fourth generation. With each generation comes improvement in speed and functionality—4G LTE offers speeds up to ten times faster than 3G. LTE technology is the next step in increasing broadband speeds to meet the demands of uses and the variety of content accessed over mobile networks.

Upon completion of this update, AT&T will operate a state-of-the-art digital network of wireless communications facilities throughout the proposed coverage area as part of its nationwide wireless communications network.

2.2. Coverage Objectives for Proposed Facility

This proposed Facility Meets AT&T's coverage objectives (providing outdoor, in-vehicle, and inbuilding wireless coverage) within a geographic area not presently served by AT&T's network. Specifically, this facility is intended to fill a gap in AT&T's high band 4G LTE network coverage experienced by its customers towards along US HWY-97 from Ellensburg to Cle Elum and within the Roslyn area, generally. This coverage objective was determined through a combined analysis of customer complaints, service requests, and radio frequency engineering design. (*See* Attachment 3—RF Justification)

Additionally, AT&T has established a need for service in this geographic area, as determined by market demand, coverage requirements for a specific geographic area, and the need to provide continuous coverage from one site to another in a particular geographic region. This proposed Facility will allow for uninterrupted wireless service in the targeted coverage area with fewer

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dropped calls, improved call quality, and improved access to additional wireless services that the public now demands. This includes emergency 911 calls throughout the area.

This proposed Facility will also allow AT&T to provide wireless communications and service for FirstNet users in the targeted service area (as further detailed in the next section).

3. FIRSTNET

FirstNet is the country's first nationwide communications platform dedicated to public safety, representing a giant leap in communications capabilities for public safety that will benefit the communities they serve. FirstNet gives first responders access to one highly secure, dedicated, interoperable network and ecosystem supporting voice, data, text, and video communications—technology they need to better communicate and collaborate across agencies and jurisdictions.

3.1. FirstNet Authority

The First Responder Network Authority ("FirstNet Authority") is an independent authority within the U.S. Department of Commerce. Chartered in 2012, the FirstNet Authority is charged with carrying out public safety's vision of FirstNet, bringing first responders a dedicated communications ecosystem. The FirstNet Authority consulted extensively with each state, tribes, local governments, and the public safety community regarding how FirstNet will be deployed.

3.2. AT&T FirstNet Partnership

Through a first of its kind public-private partnership with FirstNet, AT&T is responsible for building, maintaining, operating, and upgrading FirstNet for the next 25 years. AT&T is upgrading its existing wireless sites and building new wireless facilities to deploy the wireless spectrum set aside for public safety—Band 14. Band 14 is designed to be reliable, functional, safe, and secure and provide optimal levels of operational capacity at all times. Additionally, as of January 1, 2018, FirstNet users have access to FirstNet on all AT&T commercial LTE bands, allowing them to also benefit from AT&T's overall improvements to its commercial network.

Simply put, FirstNet provides public safety users with the assurance of network access whenever they need it. Accordingly, AT&T must closely consider location, lease, and facility requirements for the siting, placement, and operation of FirstNet facilities to ensure that, over the course of its 25-year partnership, appropriate accommodations can be made to support the evolving mission-critical services of FirstNet.

3.3. FirstNet Coverage

FirstNet, built by AT&T, will span all 50 states, five U.S. territories, and the District of Columbia, including rural communities and tribal lands in those states and territories. As an all-band solution, FirstNet is built on AT&T's commercial LTE bands in addition to Band 14. This gives FirstNet users access to even more coverage and capacity.

3.4. FirstNet Core

FirstNet is a separate communications platform operating on a physically separate, dedicated core that is purpose-built for public safety based on their specifications and requirements. The FirstNet core is built on physically separate hardware, which effectively separate public safety's traffic from commercial traffic. The FirstNet core is also monitored 24/7/365 by a dedicated Security Operations Center with a dedicated team of experts.

3.5. Priority and Preemption

A key differentiator of FirstNet is always-on priority and preemption with multiple priority levels that primary users can allocate as needed. This technology is available to FirstNet users over the AT&T LTE commercial bands and Band 14.

Priority means first responders connect first. Priority moves first responders to the front of the "communications line," prioritizing their network needs—they don't have to compete with non-emergency users for a connection.

Preemption goes a step further to make sure first responders can access FirstNet when they need to, 24/7/365. Preemption helps ensure first responders have the bandwidth they need, when they need it most—when the communications line becomes crowded, preemption shifts non-emergency traffic, freeing up space for FirstNet users to easily get through. Calls or texts to 911 will never be preempted or shifted from the network.

4. SEARCH RING

AT&T's radio frequency ("RF") engineers performed an RF engineering study, considering multiple objectives, to determine the approximate site location and antenna height required to fulfill the noted network objectives for the targeted service area. From this study, AT&T's RF engineers identified a "search ring" area where a WCF may be located to provide effective service in the target coverage area.

The search ring established for this proposal, and a description of the methodology used to identify the search ring, is provided in Attachment 3—RF Justification.

5. ALTERNATIVE SITE ANALYSIS

5.1. Collocation

The following collocation options in the targeted search ring were identified and deemed insufficient by AT&T:

5.1.1. This alternative location is a collocation with an existing, solar wind tower located on the same property. The existing FairPoint tower is a 50' self-support structure. Due to RF interference concerns with the existing FairPoint site, the highest available antenna tip is way below the design requirement of at least 150'. With this

option, AT&T will have difficulty providing seamless coverage along Hwy 97 & Hwy 970, and link with existing/planned sites in Cle Elum and Ellensburg. Thus, will not be able to meet the coverage requirement for this area. AT&T would need to ensure that the RF equipment would be able to propagate coverage according to the designed objective.

Placing antenna at the minimum height necessary to reliably make and receive telephone calls and provide data service in the presence of varying signals is crucial for the efficient and effective operation of this site as a FirstNet Network site. As previously noted, the FirstNet network will provide public safety users with an evolving set of Quality of Service, Priority and Preemption (QPP) capabilities that will exceed anything previously available to public safety.

QPP capabilities will continue to evolve over the next several years, with the addition of mission-critical services and priority levels.

Additionally, the law that established FirstNet specified that the network shall be based on the minimum technical requirements on the commercial standards for LTE service. LTE is the evolution of a proven technology, which is now in its fourth generation, and will inevitably evolve into further generations over the next 25-years. With each generation comes improvement in speed and functionality, as well as potential changes and improvements to the physical equipment used to deploy such technology.

The rapid evolution of wireless technologies makes it impossible for AT&T to fully contemplate FirstNet Network facility needs and requirements over the 25-year term of its partnership with FirstNet. Accordingly, AT&T must not only ensure that the antennae deployed under this project are located at the minimum height necessary to fill the identified coverage gap, but also must also look past the deployment in this WCF Application and ensure that entitlement rights for all foreseeable equipment needs are secured for the entire 25-year FirstNet contract period. This will ensure that public safety users have network access whenever needed. Such surety in meeting the evolving needs and requirements of the FirstNet Network can only be obtained by AT&T building and owning its own support tower.

6. APPLICABLE LAW

6.1. Local Codes

Pursuant to KCC Chapter 17.61.040, new WCF in the Forest and Range Zone are subject to an Administrative Conditional Use Permit and must comply with the review criteria in KCC Chapter 17.61A.015. *See* Attachment 2—Statement of Code Compliance for AT&T's demonstration of compliance with the applicable code.

6.2. Federal Law

Federal law, primarily found in the Telecommunications Act of 1996 ("Telecom Act"), acknowledges a local jurisdiction's zoning authority over proposed wireless facilities but limits the exercise of that authority in several important ways.

6.2.1. Local jurisdictions may not materially limit or inhibit. The Telecom Act prohibits a local jurisdiction from taking any action on a wireless siting permit that "prohibits or has the effect of prohibiting the provision of personal wireless services." 47 U.S.C. § 332(c)(7)(B)(i)(II). According to the Federal Communications Commission ("FCC") Order adopted in September 2018,² a local jurisdiction's action has the effect of prohibiting the provision of wireless services when it "materially limits or inhibits the ability of any competitor or potential competitor to compete in a fair and balanced legal and regulatory environment."³ Under the FCC Order, an applicant need not prove it has a significant gap in coverage; it may demonstrate the need for a new wireless facility in terms of adding capacity, updating to new technologies, and/or maintaining high quality service.⁴

While an applicant is no longer required to show a significant gap in service coverage, in the Ninth Circuit, a local jurisdiction clearly violates section 332(c)(7)(B)(i)(II) when it prevents a wireless carrier from using the least intrusive means to fill a significant gap in service coverage. *T-Mobile U.S.A., Inc. v. City of Anacortes*, 572 F.3d 987, 988 (9th Cir. 2009).

• **Significant Gap**. Reliable in-building coverage is now a necessity and every community's expectation. Consistent with the abandonment of land line telephones and reliance on only wireless communications, federal courts now recognize that a "significant gap" can exist based on inadequate in-building coverage. See, e.g., *T-Mobile Central, LLC v. Unified Government of Wyandotte County/Kansas City,* 528 F. Supp. 2d 1128, 1168-69 (D.Kan. 2007), *affirmed in part,* 546 F.3d 1299 (10th Cir. 2008); *MetroPCS, Inc. v. City and County of San Francisco,* 2006 WL 1699580, *10-11 (N.D. Cal. 2006).

• **Least Intrusive Means.** The least intrusive means standard "requires that the provider 'show that the manner in which it proposes to fill the significant gap in service is the least intrusive on the values that the denial sought to serve.'" 572 F.3d at 995, *quoting MetroPCS, Inc. v. City of San Francisco*, 400 F.3d 715, 734 (9th Cir. 2005). These values are reflected by the local code's preferences and siting requirements.

² Accelerating Wireless and Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment, Declaratory Ruling and Third Report and Order, WT Docket No. 17-79, WC Docket No. 17-84 (rel. Sept. 27, 2018); 83 Fed. Reg. 51867 (Oct. 15, 2018) ("FCC Order").

³ <u>Id</u>. at ¶ 35.

⁴ Id. at ¶¶ 34-42.

6.2.2. Environmental and health effects prohibited from consideration. Also under the Telecom Act, a jurisdiction is prohibited from considering the environmental effects of RF emissions (including health effects) of the proposed site if the site will operate in compliance with federal regulations. 47 U.S.C. § 332(c)(7)(B)(iv). AT&T has included with this application a statement from its radio frequency engineers demonstrating that the proposed facility will operate in accordance with the Federal Communications Commission's RF emissions regulations. *See* Attachment 4—FCC MPE Letter. Accordingly, this issue is preempted under federal law and any testimony or documents introduced relating to the environmental or health effects of the proposed site should be disregarded in this proceeding.

6.2.3. No discrimination amongst providers. Local jurisdiction also may not discriminate amongst providers of functionally equivalent services. 47 U.S.C. § 332(c)(7)(B)(i)(I). A jurisdiction must be able to provide plausible reasons for disparate treatment of different providers' applications for similarly situated facilities.

6.2.4. Shot Clock. Finally, the Telecom Act requires local jurisdictions to act upon applications for wireless communications sites within a "reasonable" period of time. 47 U.S.C. § 332(c)(7)(B)(ii). The FCC has issued a "Shot Clock" rule to establish a deadline for the issuance of land use permits for wireless facilities. 47 C.F.R. § 1.6001, *et seq*. According to the Shot Clock rule, a reasonable period of time for local government to act on wireless applications is 90 days for a collocation application, with "collocation"⁵ defined to include an attachment to any existing structure regardless of whether it already supports wireless, and 150 days for all other applications.

The Shot Clock applies to all authorizations required for siting a wireless facility, including the building permit, and all application notice and administrative appeal periods.

Pursuant to federal law, the reasonable time period for review of this application is 150 days.

^{5 47} C.F.R. § 1.6002(g).