

# **TELECOMMUNICATION SPECIAL USE APPLICATION**

**Summit Substation Field Area Network Project**

**SUBMITTED TO THE SUMMIT COUNTY**



**September 2019**

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## Section 1: Letter of Request and Application Form

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Siting and Land Rights  
1800 Larimer Street, 4th Floor  
Denver, CO 80202

September 20, 2019

Bill Gibson, AICP, CFM  
Assistant Director  
Community Development Department  
Town of Frisco  
1 East Main Street  
Frisco, CO 80443

**RE: Public Service Company of Colorado (PSCo) Special Use Permit for the Summit Substation Field Area Network Project (FAN)**

Public Service Company of Colorado hereby submits a Telecommunication Special Use Permit conforming to applicable sections of the Town of Frisco Land Use Code, including Section 180-5.2.11 Telecommunication Facilities. Approval of the Telecommunication Special Use Permit would allow the Field Area Network Project (the Project) at the Summit Substation (Substation) located at 39 School Road, Frisco, CO 80443. The Project would include the installation of three noncommercial wireless communication antennas on top of a new monopole located within the secured Substation yard. This antenna array is one of many that PSCo is installing throughout the PSCo Service Territory and together they will comprise PSCo's new Field Area Network (FAN).

The purpose of the Project is to provide the first step and key component to PSCo's new intelligent, integrated grid called the Advanced Grid. It brings greater value to the experience of PSCo's customers by providing faster, more efficient service and shorter, better-managed outages by connecting the electric grid with new energy devices and technologies.

Attached to this letter is a Telecommunication Special Use Permit Application. The respective fees were also included with the submittal. This information is submitted for review, referral and consideration for approval by the Town of Frisco. Please call me if you have any questions, or if you need additional information.

Thank you,

Jaxon Fagan  
Xcel Energy  
Agent, Siting and Land Rights  
1800 Larimer St, Suite 400, Denver, CO, 80202  
P: 303.571.7735 C: 541.420.8546  
E: jaxon.fagan@xcelenergy.com

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# APPLICATION: TELECOMMUNICATION SPECIAL USE

Updated: 6/10/2019

PROJECT LOCATION					
<b>Project Street Address:</b>					
<b>Legal Description:</b>					
PROJECT DESCRIPTION					
<b>Lot Size Information:</b>	Acres:	Sq. Feet:	Lot Coverage:	Existing (Sq. ft. and %):	Proposed (Sq. ft. and %):
<b>Zoning:</b>					
<b>Briefly describe the type of Telecommunication Use:</b>					
APPLICANT					
Name:			Phone #:		
Mailing Address:			City, State:		
E-Mail:			Zip Code:		
OWNER <i>(if not the applicant)</i>					
Name:			Phone #:		
Mailing Address:			City, State:		
E-Mail:			Zip Code:		
CERTIFICATION					
<p>I, the undersigned, authorize the Town of Frisco Community Development Department to proceed with this Telecommunication Special Use Application under the requirements set forth by the applicable Town of Frisco Code(s), as they may be amended. I, the undersigned, understand and accept that the accuracy of the information contained within this application is the responsibility of me, the undersigned, and any information found to be incorrect or inaccurate by the Town of Frisco Community Development Department during the processing of this application, will cause this application to be delayed. I, the undersigned, also, understand and accept that <b>only complete applications will be processed</b>. Incomplete applications will be returned to me to fulfill the requirements for my respective application. If the applicant is not the owner of the Property, <b>a statement by the owner consenting to this application shall be submitted</b> with this application.</p>					

A statement by the owner(s) consenting to this application is included (required if the applicant is different from the owner).

**APPLICANT** \_\_\_\_\_  
Signature
Title
Date

<b>For Office Use Only:</b>	File Number:	Application Fee(s) Paid:
<input type="checkbox"/> Approved	<input type="checkbox"/> Approved with Conditions	<input type="checkbox"/> Denied
		Date:
		Staff Initials:

# APPLICATION OVERVIEW AND SUBMISSION MATERIALS

The Telecommunication Special Use Application will be reviewed in accordance with the procedures and requirements as outlined in Section 180-5.2 of the Frisco Unified Development Code (UDC).

The telecommunication use process allows for the integration of certain land uses within the Town based on appropriate conditions imposed by the Planning Commission. Review is based primarily on compatibility of the use with its proposed location and with surrounding land uses and by reviewing the impacts a Telecommunication use may have.

Telecommunication Special Use applications are heard by the Planning Commission. Their review will focus on the compatibility of the use with its proposed location and surrounding land uses, and on the basis of all zoning, subdivision or other standards applicable to the proposed location and zoning district. If a development application is a component of the proposed Telecommunication use, a development application must be submitted concurrently for the Town to adequately review the proposal. Final approval or disapproval of Telecommunication Uses rests with the Planning Commission.

## **APPLICATION MATERIALS**

All applications are strongly recommended to have an accompanying e-copy with submission as applicable to the project. All applications must have existing and proposed project details.

### **1. Completed Application Form**

### **2. Property Owner Consent**

If the applicant is not the owner of the property, a written statement by the owner consenting to this application must be submitted.

### **3. Application Fee:**

- \$1,300 fee plus a development review account (DRA) for technical review with an initial deposit of:
  - \$800 DRA for regular projects
  - \$1,500 DRA for large projects (See page 3 for more information).

### **4. Pre-Application Conference**

A pre-application conference with Planning Division staff is required so the applicant can become acquainted with the Telecommunication use requirements & obtain a checklist of application materials.

### **5. Written Materials**

Applicant must submit the additional submittal requirements listed on page 2 with the application.

## USE THE CHECKLIST BELOW AS A GUIDE OF ELEMENTS TO INCLUDE IN YOUR APPLICATION

- Cover letter generally summarizing the Telecommunication use proposal including the following information:**
  - Demonstrated need for a facility that exceeds the height limitation for the zoning district
  - Proximity of the tower to residential structures and residential district boundaries
  - Nature of uses on adjacent and nearby properties
  - Surrounding topography
  - Surrounding coverage and tree foliage
  - Design of the tower, with particular reference to design characteristics that have the effect of reducing or eliminating visual obtrusiveness
  - Proposed ingress and egress to the property
  - An evaluation of the applicant's plans for development of its telecommunication facilities within the Town, as well as those plans on file from other telecommunication providers
  - An evaluation of the criteria set forth in Sections 180-5.2.11.C and 180-5.2.11.D above
  - Availability of suitable existing towers and other structures as discussed in Subsection 180-5.2.11.C.6
  - Any other information that the Town deems reasonably necessary in connection with the review of the application
  
- A completed site plan application and submittal if a site plan application is a component of the proposed Telecommunication use.**
  
- Two (2) paper copies and one (1) electronic copy of a site map indicating existing structures and their current uses (if application is not combined with a site plan application).**
  
- Additional Materials May be Requested:**
  - Any information of an engineering nature that the applicant submits, whether civil, mechanical, structural, or electrical, shall be certified by a licensed professional engineer, or a qualified radio frequency engineer.
  - Topographic survey
  - An accurate three-dimensional scale model, computer simulation, or other similar graphical representation
  - Any other special studies or information needed for the Community Development Department to make an informed decision

### DEVELOPMENT REVIEW ACCOUNT (DRA) INFORMATION

A development review account (DRA) is an account established for Planning Division applications that may incur legal, engineering or other similar technical fees for review and consultation incurred by the Town.

**A DRA must be established at the time an application is filed**, and an initial deposit of \$800 is required. For large project and annexation applications, a minimum deposit of \$1,500 is required. A large project is defined as any commercial or mixed use project occurring on a lot of 10,500 square feet or greater or occurring on a group of lots combined for a unified development project and contains collectively 10,500 square feet or greater or any residential development occurring on a lot of 21,000 square feet or greater or any development of 5 or more dwelling units.

The initial payment to set-up a DRA is not a guarantee of the final cost for legal and/or technical fees; it is only the minimum amount required to establish a DRA. The Town will notify the applicant of any deficiency in the DRA account balance as often as applicable. No plan approval will be given if the applicant does not have the minimum DRA balance, and no application shall be scheduled on an agenda or reviewed until such payment has been made.

Once costs have been incurred, there will be approximately four months from the date of the review activity for the Town records to reflect the actual costs. Descriptions of all review activities are available upon request.

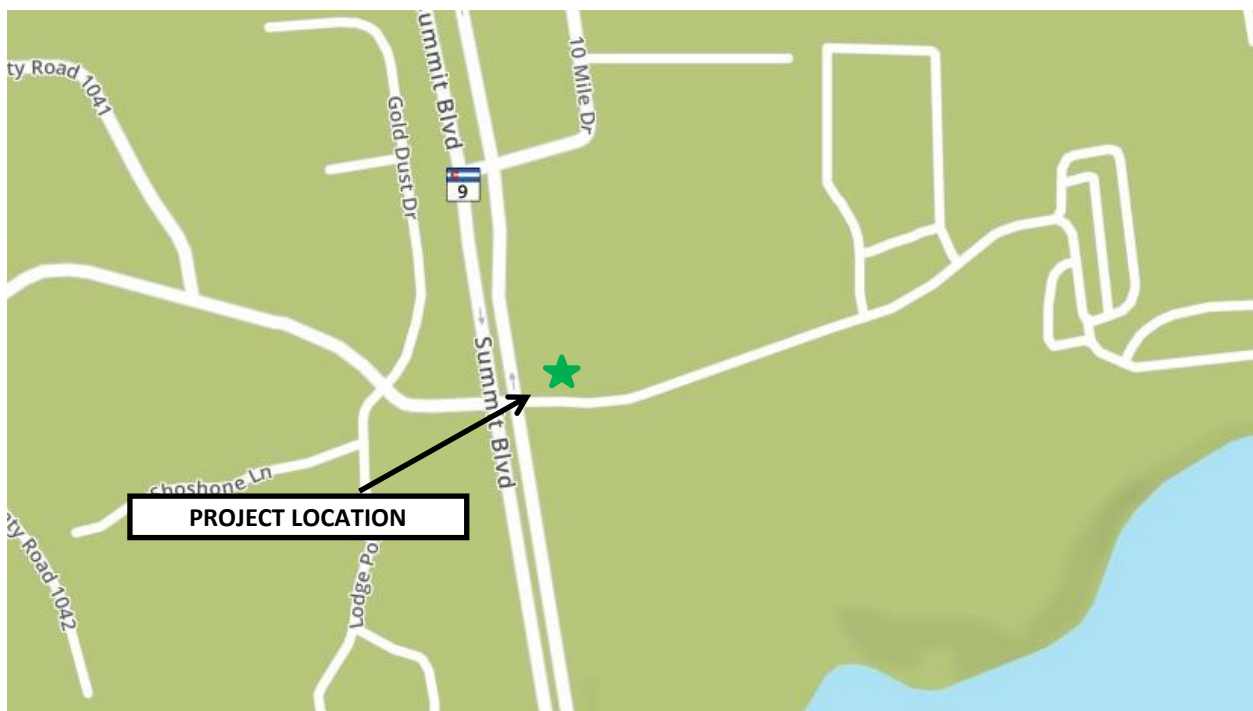
After final approval of an application, including all associated conditions that may require site inspections and/or other follow-up review, or upon a request for return of DRA funds, the Town will determine the balance remaining in the account. This amount can only be calculated after all bills associated with the application are submitted to the Town. All funds in the account over the costs incurred by the Town will be returned to the applicant.

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## Section 2: Project Narrative

### 2.1 Description of Development and Key Components

Public Service Company of Colorado (PSCo) is proposing the Summit Substation Field Area Network Project (Project), at its 3.15-acre parcel of land, which contains the Summit Substation located at 39 School Road, Frisco, CO 80443 in the Town of Frisco, see **Figure 1**. The Project involves the installation of three noncommercial wireless communication antennas on top of a new monopole located within the secured Substation yard. This antenna array is one of many that PSCo is installing throughout the PSCo Service Territory and together they will comprise PSCo's new Field Area Network (FAN).



**Figure 1. Vicinity Map**

The 29-inch tall antennas would be placed atop a new 80-foot tall single steel monopole that would be located within the secured Substation, see **Appendix A – Site Plan**. A 5-foot tall lightning rod would be mounted on top of the monopole for an overall height of 85 feet, similar to the drawing included as **Appendix B – Monopole Structure Drawing**. More specific information on the antenna is included as **Appendix C – Antenna Specifications**. Details of this structure are included as **Appendix D - Photosimulations**. Wires would connect the antennas with equipment mounted to a new approximately eight-foot tall by eight-foot wide structure that would be placed near the base of the monopole and within the secured Substation yard. The equipment located near the base of the monopole would then be connected by buried power and communication lines to the Substation's electric equipment enclosure (EEE). The location and height of the monopole prevent signal interference from surrounding lands and buildings, see **Figure 2**. The equipment inside the Substation can reach 55 feet in height.

Construction of the Project is targeted for Fall 2019 and will take approximately three weeks to complete.



**Figure 2. View of Summit Substation, Looking to the northeast**

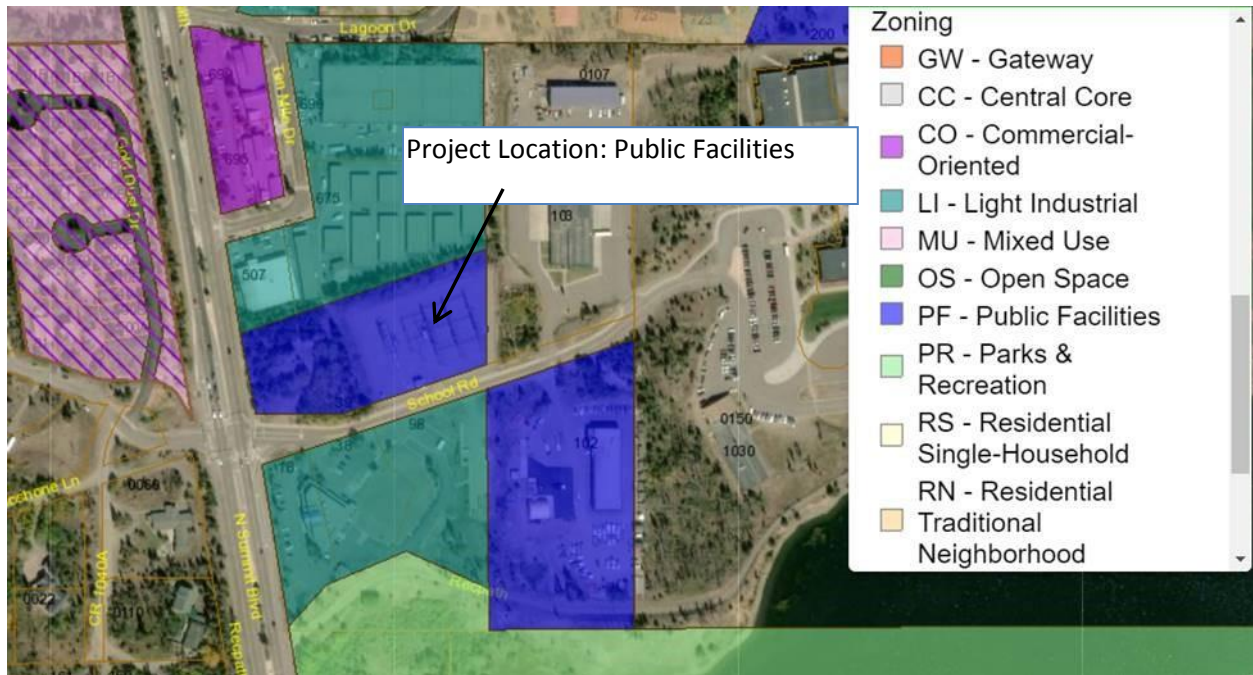
## *2.2 Purpose and Need*

The purpose of the FAN is to provide the first step and key component to PSCo's new intelligent, integrated grid, called the Advanced Grid, that brings greater value to the experience of PSCo's customers. The Advanced Grid meets the needs of the customers by providing faster, more efficient service and shorter, better-managed outages by connecting the electric grid with new energy devices and technologies. The FAN uses multiple layers of secure radio networks to provide wireless coverage across PSCo's electric grid. Intelligent devices installed on the grid connect to the wireless network and send information about current grid conditions to PSCo's control centers. In turn, the control centers can respond to changing grid conditions by sending commands to intelligent, integrated field devices.

## *2.3 Zoning and Adjacent Properties*

### *2.3.1 Substation Parcel*

The Summit Substation property is zoned Public Facilities (PF) as shown on the Town of Frisco Zoning Map, see **Figure 3**.



**Figure 3. Adjoining Properties Zoning Classifications**

*2.4 Adjoining Properties*

Location	Land Use	Zoning
North	Storage facility	LI (Light industrial)
East	Snowy Peaks High School	A-1 in Summit County
West	Undeveloped	PF
South	Fitness center, health services building	LI

*2.5 Color and Screening*

The Project monopole would have a galvanized treatment, which is gray in color. The finished color is neutral since it is compatible with the surface treatment and color of the existing transmission structures and equipment and facilities within the Substation yard. The Project monopole will blend somewhat with the 55-foot Substation equipment and adjacent transmission structures.

*2.6 Lighting*

The Project will not require any additional lighting.

*2.7 FAA, FCC and Section 106 Compliance*

The construction and operation of the Project is subject to Federal Aviation Administration (FAA) and Federal Communication Commission (FCC) oversight, review and approval. PSCo will work with both agencies on their respective reviews. A component of the FCC approval is compliance with Section 106 of the National Historic Preservation Act. As the lead agency, the FCC will conduct the necessary tribal and Colorado State Historic Preservation Officer

consultation to assure no adverse effects to historic properties will occur as a result of the Project.

## *2.8 Alternatives*

The exact location and height of this Project is strategic to the overall FAN Program. PSCo evaluated the use of existing transmission or distribution structures but determined they are not feasible because of safety concerns and insufficient elevations for signal coverage. PSCo did not consider other communication structures due to cyber and physical security concerns. PSCo must consider cyber security, performance, and operation of the FAN network and how these fit with North American Electric Reliability Corporation critical infrastructure protection federal regulations. The Substation property provides the opportunity to place the Project monopole within an existing Substation setting on property owned by PSCo. The placement of the Project at other nearby locations would require a potentially similar height structure in a setting potentially less compatible and on property that would need to be purchased by PSCo. For these reasons, this Substation site is the preferred location for the Project. A Feasibility Study further describing the need for the Project height and location is included with this submittal in **Appendix E**.

Within the Substation yard, there are many overhead and buried lines that substantially limit where the Project monopole can be placed. Each of these lines has certain clearance requirements for maintenance purposes and to prevent electric flash over. Adding to the challenge of the site selection within the Substation yard is that the communication and power lines connecting the antennas to the existing sources within the EEE must provide a path that does not cross any buried facilities.

## *2.9 Conclusion*

PSCo strives to maintain safe, reliable electric service to its customers. The installation of the Project supports PSCo's new intelligent, integrated grid that will provide customers with faster, more efficient service and shorter, better-managed outages.



## Section 3: Conformance with Telecommunication Special Use Criteria

Responses to applicable Code requirements are listed below. The Town of Frisco regulations are referenced in *italic text*, and PSCo's responses are listed in regular text.

### ***3.1 Conformance with Section 180-5.2.11, Telecommunication Facilities***

#### **C. General Requirements**

1. *Federal Requirements: All towers and antennas must meet or exceed the current standards and regulations of the FAA, the FCC, and any other agency of the federal government with the authority to regulate towers and antennas.*

The construction and operation of the Project is subject to FAA and FCC oversight, review, and approval. PSCo will work with both agencies on their respective reviews. A component of the FCC approval is compliance with Section 106 of the National Historic Preservation Act. As the lead agency, the FCC will conduct the necessary tribal and Colorado State Historic Preservation Officer consultation to assure no adverse effects to historic properties will occur as a result of the Project.

2. *Radio Frequency Standards*

- a. *All owners of telecommunication facilities shall comply with federal standards for radio frequency emissions.*

The construction and operation of the Project is subject to FCC oversight, review, and approval. As part of that approval process, the Project must comply with federal standards for radio frequency emissions.

- b. *With the exception of any low power telecommunications facility, at the time of application for a tower, antenna or related telecommunication facilities, and thereafter at the request of the Town upon complaint (but not more than annually), the owner shall submit a project implementation report that provides cumulative field measurements of radio frequency emissions of all antennas installed at the subject site, and that compares the results with established federal standards.*

Federal approvals can take six to twelve months. For that reason, PSCo is concurrently obtaining land use permits from local jurisdictions and federal authorizations. PSCo expects the FCC approvals are likely for this Project. To date, of the 50 PSCo FAN Projects submitted to FCC, all of them were permitted. Once approved, a copy of this approval can be submitted as a condition of the permit. PSCo will not construct the Project without FCC approvals.

- c. *If, upon review, or at any time any telecommunications facility within the Town is operational, the Town finds that the facility does not meet federal standards, the Town*

*may require corrective action within a reasonable period of time, and if not corrected, may require removal of the telecommunication facilities at the owner's expense. Any reasonable costs incurred by the Town, including reasonable consulting costs to verify compliance with these requirements, shall be paid by the owner.*

PSCo acknowledges this requirement.

### *3. Building Codes; Safety Standards*

*a. To ensure the structural integrity of towers, the owner of a tower shall ensure that the tower is of sufficient structural strength to accommodate reasonable co-location, if required, and is maintained in compliance with standards for towers that are published by the Electronic Industries Association, as amended from time to time, and all other applicable codes of the Town.*

Drawings depicting the design of the Project are shown in **Appendix B and Appendix C**. The Project is not designed for co-location. The monopole would be located within the secured Substation yard for cyber security reasons. PSCo must consider cyber security, performance and operation of the FAN network and how these fit with North American Electric Reliability Corporation critical infrastructure protection (NERC-CIP) federal regulations. PSCo feels that the interest of these components is best served by the security and ownership of the Summit Substation. Placement of the antenna and supporting equipment at a co-located structure would require physical access to the Project's high security components by non-PSCo employees.

*b. In addition to any other applicable standards and requirements, the following shall apply to all towers and telecommunication facilities:*

*i. Sufficient anti-climbing measures must be incorporated into each facility to reduce potential for trespass and injury.*

The Project is located within a secure Substation. The Substation is fenced with chain link and metal outrigger on the top of the fence.

*ii. No guy wires employed may be anchored within the area in front of any principal building or structure on a parcel.*

The Project is self supporting and does not require guy wires.

*iii. All telecommunication facilities shall comply with the power line clearance standards set forth by Colorado Public Utilities Commission.*

The Project complies with the power line clearance standards set forth by Colorado Public Utilities Commission.

*iv. All telecommunication facilities must be structurally designed and physically sited so that they do not pose a potential hazard to nearby residences or surrounding properties or improvements.*

Drawings depicting the design of the Project are shown in **Appendix B and Appendix C**. The national and local standards used when designing the Project are listed below:

- ANSI/TIA-222-G, Structure Class II, Exposure Category C. Topographic Category 1
- Meets requirements for Ultimate Wind Speed of 155 mph or Risk Category II in accordance with 2015 International Building Code
- Foundation is 25'-6" depth, 5'-6" diameter
- Foundation concrete has a minimum 28-day compressive strength of 4500 psi in accordance with ACE 318-11
- Foundation rebar conforms to ASTM specification A615 Grade 60 and have 3" of concrete cover
- Foundation design based on geotechnical report by Tiax Engineering dated August 27, 2018

*c. If, upon inspection, the Town concludes that a telecommunication facility fails to comply with such codes and standards and constitutes a danger to persons or property, then upon notice being provided to the owner of a telecommunication facility, the owner shall have 30 days to bring such telecommunication facility into compliance with such standards.*

PSCo acknowledges this requirement.

#### 4. Order of Preference

*a. Zoning District: Applicants are encouraged to construct alternative telecommunication facilities in commercial districts.*

The Project must be constructed in a PSCo owned Substation, which is zoned PF. The exact location and height of this Project is strategic to the overall FAN Program. PSCo evaluated the use of existing transmission or distribution structures but determined they are not feasible because of safety concerns and insufficient elevations for signal coverage. PSCo did not consider other communication structures due to cyber and physical security concerns.

*b. Facility Type: Wall- or roof-mounted telecommunication facilities and low power telecommunications facilities are preferred over freestanding telecommunication facilities.*

The exact location and height of this Project is strategic to the overall FAN Program. PSCo evaluated the use of existing transmission or distribution structures but determined they are not feasible because of safety concerns and insufficient elevations for signal coverage. There are no walls or roofs on the property. The antennas cannot be located on existing Substation or transmission line equipment due to cyber security concerns as well as clearance requirements for maintenance purposes and to prevent electric flash over.

## 5. Design Standards

*a. The location and design of a telecommunication facility and any accessory equipment shall use materials, colors, textures, screening, and landscaping that will blend the telecommunication facility to the surrounding natural setting and built environment. Accessory equipment in areas of high visibility shall, where possible, be sited below the ridgeline or designed (e.g., placed underground, depressed, or located behind earth berms) to minimize its profile.*

The monopole would have a galvanized treatment, which is gray in color. The finished color is neutral since it is compatible with the surface treatment and color of the existing transmission structures and equipment and facilities within the Substation yard. The monopole will blend somewhat with the 55-foot Substation equipment and adjacent foot transmission structures.

*b. Any accessory equipment located within an overlay district adopted by the Town must generally conform with the intent of the specific district standards.*

The Project is not located in an overlay district.

*c. Roof- and wall-mounted facilities shall be architecturally compatible with and colored to match the building or structure to which they are attached. Wall-mounted facilities shall be mounted as flush to the building wall as possible. A wall-mounted facility shall not encroach into the required setback for the building to which it is attached, and shall not extend across any required utility, pedestrian or sidewalk easement or extend across the property line.*

The Project is not mounted on an existing structure. The monopole will be a new self-supporting monopole within the Substation, which is owned by a public utility.

*d. Freestanding telecommunication facilities shall not be artificially lighted, unless required*

The Project will not require any additional lighting.

*e. No portion of any antenna array may extend across a required property setback or beyond the property line.*

The antenna array does not extend across a required property setback or beyond the property line. The setbacks for this zone district are:

- Minimum front yard setback 25 feet
- Minimum side yard setback 15 feet
- Minimum rear yard setback 10 feet

The monopole is located approximately 31 feet from the southeast or front yard property line, 225 feet from the east or side property line and 248 feet from the

northwest or rear property line. The 29-inch tall antennas will not exceed the front setback.

*f. All applicants under this Article VII shall comply with the landscaping requirements and guidelines found in Section 180-6.14 of this Chapter.*

The Project is located within an existing Substation. No new landscaping is proposed.

*g. The height, bulk, and setback requirements for the telecommunication facility shall be controlled by the district regulations of the zoning district in which the facility is located.*

The antenna array does not extend across a required property setback or beyond the property line. The setbacks for this zone district are:

Minimum front yard setback 25 feet

Minimum side yard setback 15 feet

Minimum rear yard setback 10 feet

The monopole is located approximately 31 feet from the southeast or front yard property line, 225 feet from the east or side property line and 248 feet from the northwest or rear property line. The 29-inch tall antennas will not exceed the front setback.

## 6. Co-Location

*a. No building permit shall be granted to construct a new freestanding telecommunication facility unless the applicant first demonstrates to the reasonable satisfaction of the Town that no existing tower or structure can accommodate the applicant's needs. Evidence submitted to demonstrate that no existing tower or structure can accommodate the applicant's proposed telecommunication facility shall consist of one or more of the following:*

- i. No existing towers or structures are located within the geographic area required to meet the applicant's coverage requirements.*
- ii. Existing towers or structures are not of sufficient height to meet the applicant's engineering requirements.*
- iii. Existing towers or structures do not have sufficient structural strength to support the applicant's proposed antenna and related equipment.*
- iv. The applicant's proposed antenna would cause electromagnetic interference with the antennas on the existing towers or structures, or the antennas on the existing towers or structures would cause interference with the applicant's proposed antenna.*
- v. The applicant demonstrates that there are other limiting factors, including but not limited to engineering factors, that render existing towers and structures unsuitable for co-location.*

*vi. There is insufficient land area to accommodate the placement of additional accessory equipment on the property.*

As described in the Feasibility Study in **Appendix E**, the exact location and height of this Project is strategic to the overall FAN Program. PSCo evaluated the use of existing transmission or distribution structures but determined they are not feasible because of safety concerns and insufficient elevations for signal coverage. PSCo did not consider other communication structures due to cyber and physical security concerns. PSCo must consider cyber security, performance, and operation of the FAN network and how these fit with North American Electric Reliability Corporation critical infrastructure protection federal regulations. The Substation property provides the opportunity to place the Project monopole within an existing Substation setting on property owned by PSCo. The placement of the Project at other nearby locations would require a potentially similar height structure in a setting potentially less compatible and on property that would need to be purchased by PSCo. For these reasons, this Substation site is the preferred location for the Project.

*b. No telecommunication facility owner or operator shall unreasonably exclude a telecommunication competitor from using the same facility or location. Upon request by the Town, the owner or operator shall provide evidence and a written statement to explain why co-location is not possible at a particular facility or site.*

The possibility of collocation is not feasible for the following reasons:

- *Safety and access concerns:* The monopole would be located within the secured Substation yard. To allow co-location on the monopole would require allowing access to the yard that contains high voltage electrical equipment. To meet National Electric Safety Code and PSCo safety standards, the co-locator's personnel would have to go through specific training and be escorted any time they would be in the yard. This would require making PSCo personnel available for these activities, which may be problematic due to work loads and schedules.
- *Cyber Security:* When determining the placement of these components, PSCo must consider cyber-security, and performance and operation of the FAN network and how these fit with North American Electric Reliability Corporation critical infrastructure protection (NERC-CIP) federal regulations. PSCo feels that the interest of these components is best served by the security and ownership of the Poncha Junction Substation. Placement of the antenna and supporting equipment at a co-located structure would require physical access to the Project's high security components by non-PSCo employees.
- *Interference with electric equipment in the Substation:* Any ground-based equipment required by the co-locator could potentially conflict with the needs of PSCo for the operation and maintenance of the Substation.

- *Engineering limitations of the monopole design:* The monopole and foundation were not designed for any other uses than PSCo's. Redesigning the monopole and its foundation would require additional costs and time, and the load requirements would be unknown.
- *Legal limitations:* In the event PSCo is required to allow co-location, the co-locator would be required to enter into an access and lease agreement, bear all costs associated with any monopole/foundation redesign costs, bear PSCo's costs associated with training and escort needs and meet all safety protocol with the Substation operation and maintenance, both current and future.
- *Maintenance Coordination:* Co-locating on poles with existing PSCo communication equipment requires the coordination of engineering efforts. In addition, any maintenance performed by a colocator on their facilities may impact PSCo's capabilities to use their own equipment.

*c. If a telecommunication competitor attempts to co-locate a telecommunication facility on an existing or approved telecommunication facility or location, and the parties cannot reach an agreement, the Town may require a third-party technical study to be completed at the expense of both parties to determine the feasibility of co-location.*

This telecommunication Project is unique in that it is proposed by a publicly regulated utility and not a commercial telecommunications carrier. It is not possible for PSCo to co-locate the FAN antennas on the nearby wireless communications tower or have a commercial provider co-locate on the PSCo Project in the Substation. This would present an unacceptable risk to cyber security and physical security. Even if another tower owner agreed to allow the PSCo on their tower, locating the antennas within the PSCo owned and secured Summit Substation will allow adequate cyber security and physical security protection

*7. Prohibited Use: Advertising or communication of any visual messages from a tower or antenna is prohibited.*

No advertising or communication of any visual messages from the Project is proposed.

*8. Abandonment; Removal: The owner of any telecommunication facility located within the Town shall notify the Community Development Department when such telecommunication facility and any associated accessory equipment is no longer in operation.*

PSCo will notify the Community Development Department if the Project and any associated accessory equipment is no longer in operation.

#### D. Permit and Application Requirements

*1. Building Permit: It shall be unlawful for any person, firm, or corporation to construct or erect a telecommunication facility without first obtaining a building permit.*

On July 23, 2019, the Town of Frisco Community Development Department Assistant Director and Town Attorney exempted the Project from building permits. Please refer to **Appendix F** for related correspondence.

*2. Information Required: In addition to any other information required by this Chapter, the following information shall be submitted with all telecommunication facility building permits:*

*a. The identity and legal status of the applicant, including any affiliates.*

The applicant is Public Service Company of Colorado, a Colorado Corporation. As a point of clarification, the Company name may be confusing since our utility company name is “branded” as Xcel Energy; however, the legal owner and operator of the utility facilities in Colorado is Public Service Company of Colorado. All utility facilities and related land rights, including fee property, easements, permits, etc, are owned by, operated by and held in the name of Public Service Company of Colorado, a Colorado Corporation.

*b. The name, address, and telephone number of the officer, agent, or employee responsible for the accuracy of the application.*

Jaxon Fagan  
Agent Siting and Land Rights  
Public Service Company of Colorado  
1800 Larimer Street, Suite 400  
Denver, CO 80202  
Phone 303-571-7735

*c. Information sufficient to determine that the applicant has applied for and received any construction permit, operating license, or other approvals required by the FCC to provide telecommunication services or facilities within the Town.*

The construction and operation of the Project is subject to FAA and FCC oversight, review and approval. PSCo will work with both agencies on their respective reviews. Federal approvals can take six to twelve months. For that reason, PSCo is concurrently obtaining land use permits from local jurisdictions and federal authorizations. PSCo expects the FCC approvals are likely for this Project. To date, of the 50 PSCo FAN Projects submitted to FCC, all of them were permitted. Once approved, a copy of this approval can be submitted as a condition of the permit. PSCo will not construct the Project without FCC approvals.

*d. An agreement to post a deposit at the time a permit is issued, in an amount to be set by the Town, reasonably related to the removal costs that may be incurred by the Town, should the applicant fail to comply with any of its obligations with regard to the removal of a telecommunication facility, any accessory equipment, and revegetation of the site.*



PSCo acknowledges this requirement.

- e. An agreement to (i) consider co-location proposals from other commercial radio providers with an interest in applicant's facility and (ii) not unreasonably to exclude co-location by such entities, along with a statement explaining how the facility may be used for co-location.*

For the previously stated reasons, co-location is not feasible. The Project is for noncommercial public utility purposes.

- f. An agreement to notify the Town at least ten days prior to introduction of new services or changes in existing service, and to allow the Town to monitor interference levels with public safety communications during the testing process.*

PSCo acknowledges this requirement.

- g. Except for low power telecommunications facilities, a verified statement of a qualified radio frequency engineer certifying that a technical evaluation of existing and proposed facilities indicates no potential interference problems, or if such potential interference problems exist, a description of the nature of the potential interference and a plan to mitigate and eliminate any such interference.*

Xcel Energy Field Area Network Planning Engineers have stated that the proposed equipment is typically categorized as low-powered, operating at a maximum of 10 Watts, and radiating a maximum of 40 dBm EIRP. It should also be noted that Xcel Energy is not collocating with other carriers, and have a respectable distance to other antennas in the area, which will also reduce interfere with nearby carriers. Xcel Energy can work with the City of Frisco as to the timing of our turn up, and the company also has appropriate analyzing equipment to assist in confirming RF signal levels and their potential interference in the area.

- h. A narrative and map description of the applicant's existing or then currently proposed telecommunication facilities within the Town, and outside of the Town within three miles of its boundaries, including specific information about the location, height, and design of each tower and any accessory equipment. In addition, the applicant shall inform the Town generally of the areas of the Town in which it believes telecommunication facilities may need to be located within the next three years.*

The Feasibility Study in **Appendix E** contains information about existing and proposed public utility telecommunication facilities. The Feasibility Study also demonstrates the need for the specific location and height. Additional design information is included in **Appendix B** and **Appendix C**.

3. *Supplemental Information: After issuance of a permit, each owner or operator of a telecommunication facility shall inform the Town, within 60 of any change of the information set forth in this Section 180-5.2.11.D.*

PSCo acknowledges this requirement.

#### *E. Fees*

*In addition to any other fees required by this Chapter or other applicable law, the applicant shall pay a telecommunication facility permit fee. Each application shall be submitted with the telecommunication facility permit fee. Such fee schedule shall be reasonably related to the cost of administering this Section 180-5.2.11. In addition, any reasonable costs incurred by the Town, including reasonable costs to verify compliance with any requirements under this Section 180-5.2.11, shall be paid by the applicant.*

PSCo acknowledges this requirement.

#### *F. Permitted Uses*

The Project is not a permitted use. Telecommunication facilities are permitted in the PF zone district only if they meet the setback and height limitations for the zone district. The Project exceeds the 25-foot height limitation, so a Special Use Permit Application is requested.

#### G. Special Uses

##### *2. Review and Approval*

*Applications to construct telecommunication facilities that require a special use permit shall be processed according to the following procedure:*

##### *a. Pre-Application Conference*

*The applicant shall schedule an informal conference with the Community Development Department prior to the submittal of an application.*

A pre-application meeting with Town of Frisco staff was held on May 22, 2019.

##### *b. Information Required*

*Each applicant requesting special use approval under this section shall submit, in addition to the information required by Section 180-2.5.2 of this Chapter, documentation, signed and sealed by appropriate licensed professionals, showing the location and dimensions of the proposed telecommunication facilities, including information concerning topography, radio frequency coverage, tower height requirements, setbacks, drives, parking, fencing, landscaping, adjacent uses, and all other information deemed by the Community Development Department to be necessary to assess compliance with this Section 180-5.2.11.*

The project dimension are shown in **Appendix B and Appendix C**. The location, setbacks, fencing, drive are shown in **Appendix A**. The radio frequency coverage and tower height requirements are shown in **Appendix E**. The Summit Substation is bound on the south by County Road 1030/School Road and on the west by State Highway

9/Summit Boulevard. A storage facility, which is zoned Light Industrial, is located to the north. The Snowy Peaks High School property, which is zoned A-1 in Summit County, is to the east.

*c. Planning Commission*

*The Planning Commission, at its next available meeting, a minimum of 45 days after the filing of a complete application, shall hold a public hearing on the application and consider the recommendations of the Community Development Department staff and the merits of the proposed application. The application shall be noticed in accordance with Section 180-2.3.5. In approving any application, the Planning Commission may impose any reasonable conditions to ensure that the proposal satisfies the criteria set forth in this Chapter.*

PSCo acknowledges this requirement.

**3. Height**

*An applicant proposing to construct a telecommunication facility that exceeds the height limitations set by the zoning district in which such facility is proposed shall provide a statement that justifies the need for the proposed facility and height requested. Such a statement shall include evidence that:*

- a. The facility is designed to be the minimum height necessary to provide service; and Chapter 180, Article 5: Use Standards 180-5.2 Use-Specific Standards Frisco Unified Development Code 131 10-24-18*

The maximum building height in the PF zone district is 25 feet. The surrounding topography, buildings and vegetation exceed 25 feet, so PSCo proposes an 80-foot tall single steel monopole with 5 ft lightning rod. As described in Feasibility Study in **Appendix E**, this height is a sufficient elevation for signal coverage.

- b. A greater number of towers built at a lesser height would be inadequate to meet the applicant's service demands.*

The exact location and height of this Project is strategic to the overall FAN Program. PSCo did not consider other communication structures due to cyber and physical security concerns. PSCo must consider cyber security, performance, and operation of the FAN network and how these fit with North American Electric Reliability Corporation critical infrastructure protection federal regulations. The placement of the Project at an additional location would require a potentially similar height structure in a setting potentially less compatible and on property that would need to be purchased by PSCo. PSCo believes constructing one 80-foot FAN Tower at the Summit Substation provides the best overall solution when considering coverage and impact to communities.

**4. Factors Considered in Granting Special Use Permits for Telecommunication Facilities 4.**

*In addition to the applicable requirements of this Chapter, the Town shall consider the following factors in determining whether to issue a special use permit:*

*a. Demonstrated need for a facility that exceeds the height limitation for the zoning district*

As described in the Feasibility Study in **Appendix E**, the exact location and height of this Project is strategic to the overall FAN Program. PSCo evaluated the use of existing transmission or distribution structures but determined they are not feasible because of safety concerns and insufficient elevations for signal coverage. PSCo did not consider other communication structures due to cyber and physical security concerns. PSCo must consider cyber security, performance, and operation of the FAN network and how these fit with North American Electric Reliability Corporation critical infrastructure protection federal regulations. The Substation property provides the opportunity to place the Project monopole within an existing Substation setting on property owned by PSCo. The placement of the Project at other nearby locations would require a potentially similar height structure in a setting potentially less compatible and on property that would need to be purchased by PSCo. For these reasons, this Substation site is the preferred location for the Project.

*b. Proximity of the tower to residential structures and residential district boundaries*

The proposed tower is located in a secure Substation. The Substation is surrounded by light industrial and public facility uses. There are not residential structures or district boundaries in the vicinity of the existing Summit Substation.

*c. Nature of uses on adjacent and nearby properties; and*

The adjoining property adjacent uses are described below.

<b>Location</b>	<b>Land Use</b>	<b>Zoning</b>
North	Storage facility	LI (Light industrial)
East	Summit Middle School / Snowy Peaks High School	A-1 in Summit County
West	Undeveloped	PF
South	Fitness center, health services building	LI

*d. Surrounding topography*

The Substation topography is flat. The Substation is surrounded by developed properties that are also graded and flat.

*e. Surrounding coverage and tree foliage*

Surrounding the Substation, there is existing vegetation native to the area. On the west, north and east sides of the Substation, it is surrounded by a species of pine and on the south the Substation faces the sidewalk and road. Across the street on the south side of School Rd, there is low lying vegetation and some scattered trees.

*f. Design of the tower, with particular reference to design characteristics that have the effect of reducing or eliminating visual obtrusiveness*

The monopole would have a galvanized treatment, which is gray in color. The finished color is neutral since it is compatible with the surface treatment and color of the existing transmission structures and equipment and facilities within the Substation yard. The monopole will blend somewhat with the 55-foot Substation equipment and adjacent transmission structures. More information specific to the Telecommunication Design Standards are listed in response to 180-5.2.11.C.5 of this application.

*g. Proposed ingress and egress to the property;*

The Project will use the existing access to the Substation, which is from County Road 1030/School Road.

*h. An evaluation of the applicant's plans for development of its telecommunication facilities within the Town, as well as those plans on file from other telecommunication providers*

Other than the proposed Project at the Summit Substation, PSCo does not have any plans from additional telecommunication facilities within the Town. PSCo is not aware of other plans on file from other telecommunication providers.

*i. An evaluation of the criteria set forth in Sections 180-5.2.11.C and 180-5.2.11.D above; and*

An evaluation of the criteria set forth in Sections 180-5.2.11.C is described on pages 14-20 of this document. An evaluation of the criteria set forth in Sections 180-5.2.11.D is described on pages 21-23 of this document.

*j. Availability of suitable existing towers and other structures as discussed in Subsection 180-5.2.11.C.6*

As described in the Feasibility Study in **Appendix E**, the exact location and height of this Project is strategic to the overall FAN Program. PSCo evaluated the use of existing transmission or distribution structures but determined they are not feasible because of safety concerns and insufficient elevations for signal coverage. PSCo did not consider other communication structures due to cyber and physical security concerns. PSCo must consider cyber security, performance, and operation of the FAN network and how these fit with North American Electric Reliability Corporation critical infrastructure protection federal regulations. The Substation property provides the opportunity to place the Project monopole within an existing Substation setting on property owned by PSCo. The placement of the Project at other nearby locations would require a potentially similar height structure in a setting potentially less compatible and on property that would need to be purchased by PSCo. For these reasons, this Substation site is the preferred location for the Project. Additional

information addressing the criteria on 180-5.2.11.C.6 is included on pages 18-20 of this document.

- k. Any other information that the Town deems reasonably necessary in connection with the review of the application.*

The Town of Frisco did not request any additional information. During the May 22, 2019, pre-application meeting, staff suggested that additional photosimulations be developed and that a feasibility study be presented as part of the application. Additional photosimulations were developed and are included in **Appendix D**. A Feasibility Study is included in **Appendix E**.

*5. The Following Additional Provisions Shall Govern the Issuance of Special Use Permits for Telecommunication Facilities:*

- a. In granting a special use permit, the Town may impose conditions to the extent it concludes such conditions are necessary to minimize any adverse effect of the proposed telecommunication facility on adjoining properties.*

PSCo acknowledges that the Town may impose conditions to the extent it concludes such conditions are necessary to minimize any adverse effect of the proposed telecommunication facility on adjoining properties. PSCo would appreciate if the Town would review the conditions with PSCo early in the application process.

- b. Telecommunication facilities approved as a special use shall not require a variance for any specific conditions approved as part of the special use process.*

PSCo acknowledges this requirement.

- c. Any information of an engineering nature that the applicant submits, whether civil, mechanical, structural, or electrical, shall be certified by a licensed professional engineer, or a qualified radio frequency engineer.*

All information of an engineering nature was developed by licensed professional engineer and a qualified radio frequency engineer

*6. All applications and the subsequent decision on whether to approve, approve with conditions or deny an application for a special use permit shall be in writing, based upon evidence presented to the Town.*

PSCo acknowledges this requirement.

## Section 4: Town of Frisco Checklist of Elements to include in the Application

The requirements listed below in italics are from the Town of Frisco Telecommunication Special Use Form and PSCo's responses are listed in regular text.

*Cover letter generally summarizing the Telecommunication use proposal including the following information:*

*Demonstrated need for a facility that exceeds the height limitation for the zoning district*

The demonstrated need for a facility that exceeds the height limitation for the zoning district are in **Appendix E**.

*Proximity of the tower to residential structures and residential district boundaries*

The proposed tower is located in a secure Substation. The Substation is surrounded by light industrial and public facility uses. There are not residential structures or district boundaries in the vicinity of the existing Summit Substation. The closest residential structures and districts are over 500 feet from the existing Summit Substation.

*Nature of uses on adjacent and nearby properties*

The adjoining property adjacent uses are described below.

Location	Land Use	Zoning
North	Storage facility	LI (Light industrial)
East	Summit Middle School/Snowy Peaks High School	A-1 in Summit County
West	Undeveloped	PF
South	Fitness center, health services building	LI

*Surrounding topography*

The Substation topography is flat. The Substation is surrounded by developed properties that are also graded and flat.

*Surrounding coverage and tree foliage*

Surrounding the Substation, there is existing vegetation native to the area. On the west, north and east sides of the Substation, it is surrounded by a species of pine and on the south the Substation faces the sidewalk and road. Across the street on the southside of School Rd, there is low lying vegetation and some scattered trees.

*Design of the tower, with particular reference to design characteristics that have the effect of reducing or eliminating visual obtrusiveness.*

The monopole would have a galvanized treatment, which is grey in color. The finished color is neutral since it is compatible with the surface treatment and color of the existing transmission structures and equipment and facilities within the Substation yard. The monopole will blend somewhat with the 55 foot Substation equipment and adjacent transmission structures. More information specific to the Telecommunication Design Standards are listed in response to 180-5.2.11.C.5 of this application.

*Proposed ingress and egress to the property*

The Project will use the existing access to the Substation, which is from County Road 1030/School Road.

*An evaluation of the applicant's plans for development of its telecommunication facilities within the Town, as well as those plans on file from other telecommunication providers*

Other than the proposed Project at the Summit Substation PSCo does not have any plans from additional telecommunication facilities within the Town. PSCo is not aware of other plans on file from other telecommunication providers.

*An evaluation of the criteria set forth in Sections 180-5.2.11.C and 180-5.2.11.D above*

An evaluation of the criteria set forth in Sections 180-5.2.11.C is described on pages 14-20 of this document. An evaluation of the criteria set forth in Sections 180-5.2.11.D is described on pages 21-23 of this document.

*Availability of suitable existing towers and other structures as discussed in Subsection 180-5.2.11.C.6*

As described in the Feasibility Study in **Appendix E**, the exact location and height of this Project is strategic to the overall FAN Program. PSCo evaluated the use of existing transmission or distribution structures but determined they are not feasible because of safety concerns and insufficient elevations for signal coverage. PSCo did not consider other communication structures due to cyber and physical security concerns. PSCo must consider cyber security, performance, and operation of the FAN network and how these fit with North American Electric Reliability Corporation critical infrastructure protection federal regulations. The Substation property provides the opportunity to place the Project monopole within an existing Substation setting on property owned by PSCo. The placement of the Project at other nearby locations would require a potentially similar height structure in a setting potentially less compatible and on property that would need to be purchased by PSCo. For these reasons, this Substation site is the preferred location for the Project. Additional information addressing the criteria on 180-5.2.11.C.6 is included on pages 18-20 of this document.



*Any other information that the Town deems reasonably necessary in connection with the review of the application*

The Town of Frisco did not request any additional information. During the May 22, 2019, pre-application meeting, staff suggested that additional photosimulations be developed and that a feasibility study be presented as part of the application. Additional photosimulations were developed and are included in **Appendix D**. A Feasibility Study is included in **Appendix E**.

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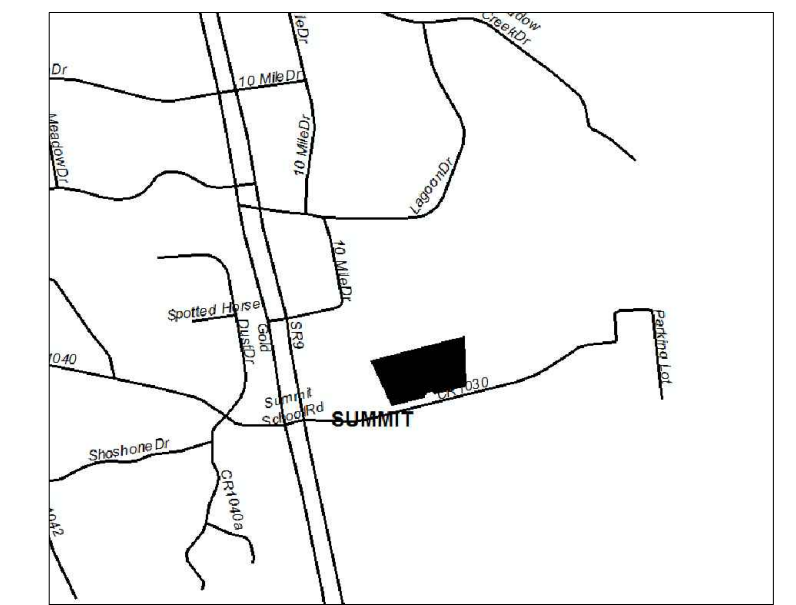
Appendix A –Site Plan

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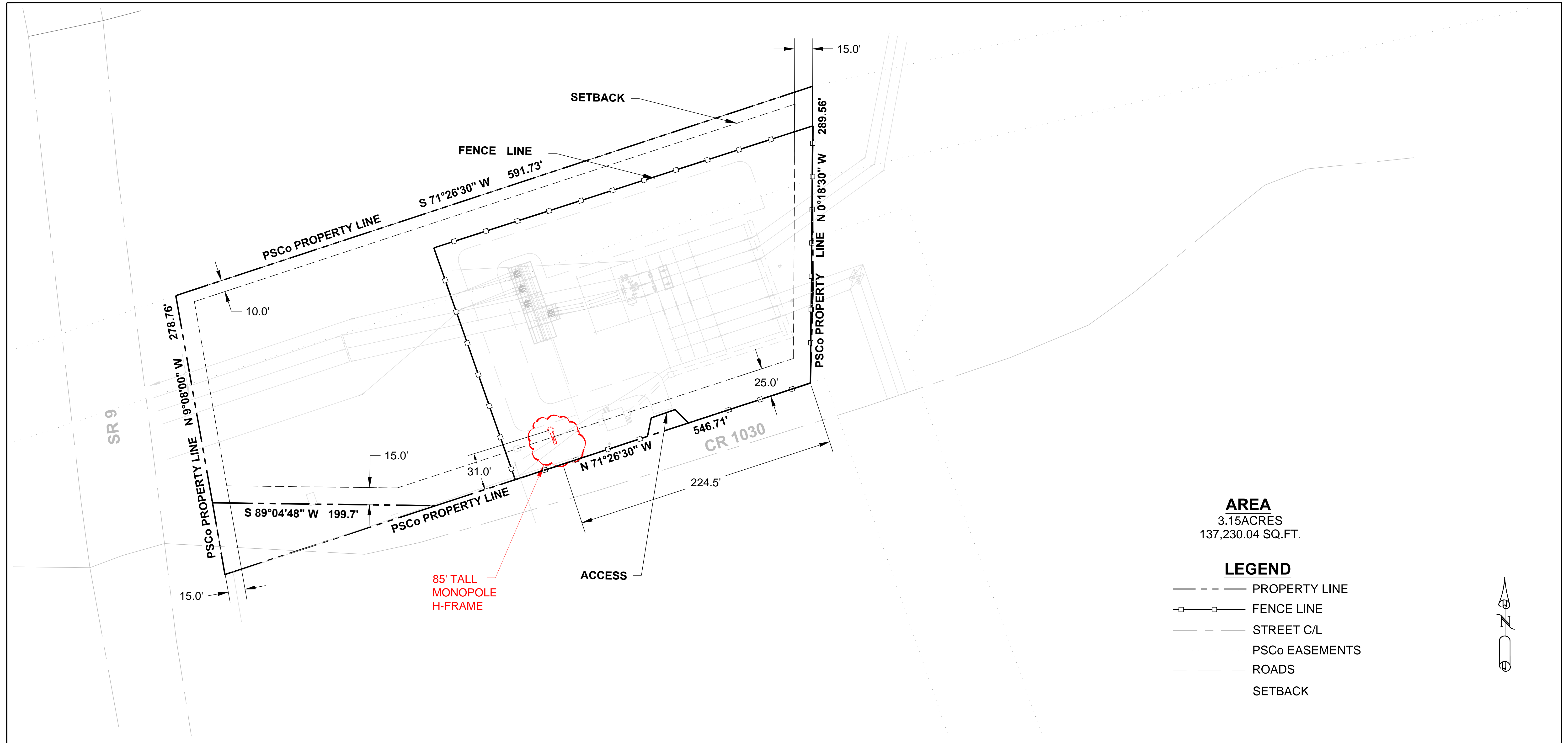
# PUBLIC SERVICE COMPANY OF COLORADO SUMMIT SUBSTATION

## APPENDIX A

LOCATED IN SW1/4 OF SECTION 26, T5S, R78W  
SUMMIT COUNTY, STATE OF COLORADO  
SITE PLAN EXHIBIT



VICINITY MAP NOT TO SCALE

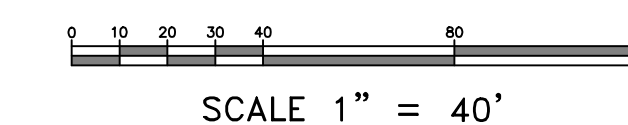


NOTE: THE INFORMATION CONVEYED BY THESE DRAWINGS IS FOR REFERENCE PURPOSES ONLY AND DOES NOT CONSTITUTE A LAND SURVEY.

**SUMMIT SUBSTATION**  
50 COUNTY LINE ROAD 103, FRISCO COLORADO 80443



PUBLIC SERVICE COMPANY OF COLORADO SITING AND LAND RIGHTS  
1800 LARIMER STREET, SUITE 400  
DENVER, COLORADO 80202  
(303) 571-7799



ORIG. DWG.:  
REV. BY: I. FRIDMAN  
DATE: 5/17/19  
APPROVED: J. FAGAN  
DATE: 5/17/19

REVISION	DATE

SHEET 1 of 1



## Appendix B – Monopole Structure Drawing

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### 5.3 Proposed Antenna Elevation and Equipment Location

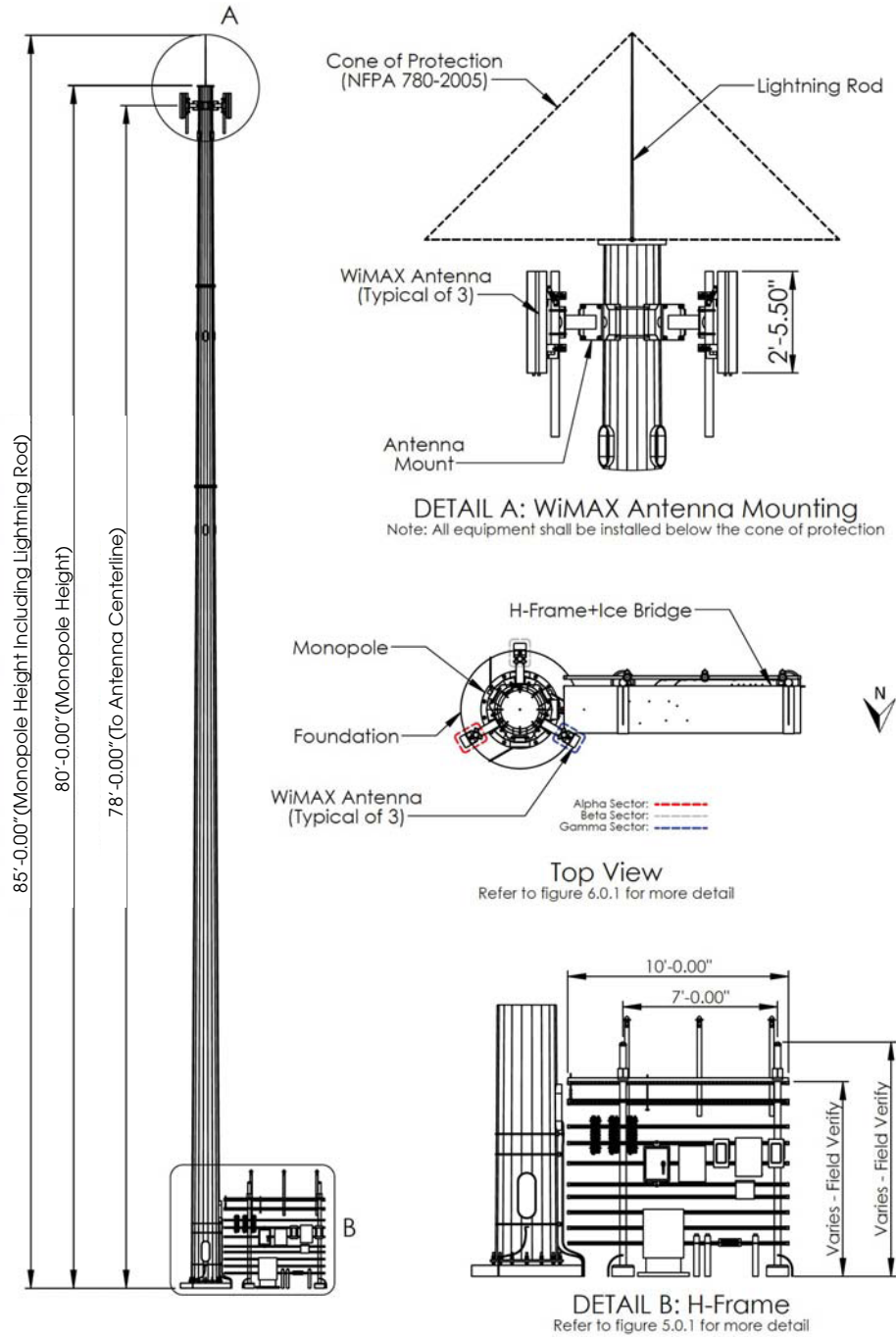


Illustration Purposes Only

Figure 5.3.1 – Mineral Road Proposed Equipment Location on monopole

Important: H-frame and Ice Bridge are to be installed at 270 degrees with respect to true north. Facing H-frame looks towards North.

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## Appendix C – Antenna Specifications

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## 3300-3800MHz Sector Antenna

(Dual Port, 65° Beamwidth, +/-45° Polarisation, Fixed Tilt)

\*The parameters in this specification follow the definitions and recommendations per NGMN P-Basta, Release 9.6

### RF Specifications

Frequency Range per Input	MHz	3300 - 3800
Polarisation:	NA	+/-45° Slant Linear
Gain		
Over all Tilts	dBi	18
Azimuth Beamwidth	Degree	65
Azimuth Beam Squint	Degree <	3
Elevation Beamwidth	Degree	7
Electrical Downtilt:	Degree	T0° or T4°
Electrical Downtilt Deviation	Degree <	1
Impedance	Ohms	50
VSWR	NA <	1.4
Return Loss:	dB >	15
Isolation	dB >	28
Front to Back Ratio: Total Power +/-30°	dB >	30
Upper Sidelobe Suppression, Peak to 20°	dB >	18
Cross Polar Discrimination at Sector	dB >	16
Maximum Effective Power Per Port	W	100



### Mechanical Specifications

Dimensions (LxWxD) mm (in) (inc RET )	mm (in)	750 (29.5) x 160 (6.2) x 85 (3.3)
Packing Size (LxWxD)	mm (in)	823(32.4) x 240(9.4) x 178(7)
Net Weight (antenna)	kg (lb)	4.3 (9.4)
Net Weight (mount)	kg (lb)	1.43 (3.1)
Shipping Weight	kg (lb)	5.7 (12.5)
Connector Quantity	NA	2 x N Type Female
Connector Position	NA	Bottom
Windload calculation	km/h	$F=1/2*\rho*(Cdp*\lambda)*v^2*A$
Windload Frontal	N	240
Windload Lateral	N	130
Survival Wind Speed	km/h	200 (125)
Radome Material	NA	UV-Stabilised PVC
Radome Colour	RAL	7035
Product Compliance Environmental	NA	RoHS
Lightening Protection	NA	DC Grounded
Cold Temperature Survival	Celsius	-40
Hot Temperature Survival	Celsius	+ 70

### Ordering Information:

\* T0 (Electrical Tilt 0)

\*\* T4 (Electrical Tilt 4)

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## Appendix D – Photosimulations

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Summit Substation

School Road

9

Summit Blvd

Frisco Public Works



Existing



Proposed





Existing



Proposed





Summit Substation

School Road

Summit Blvd



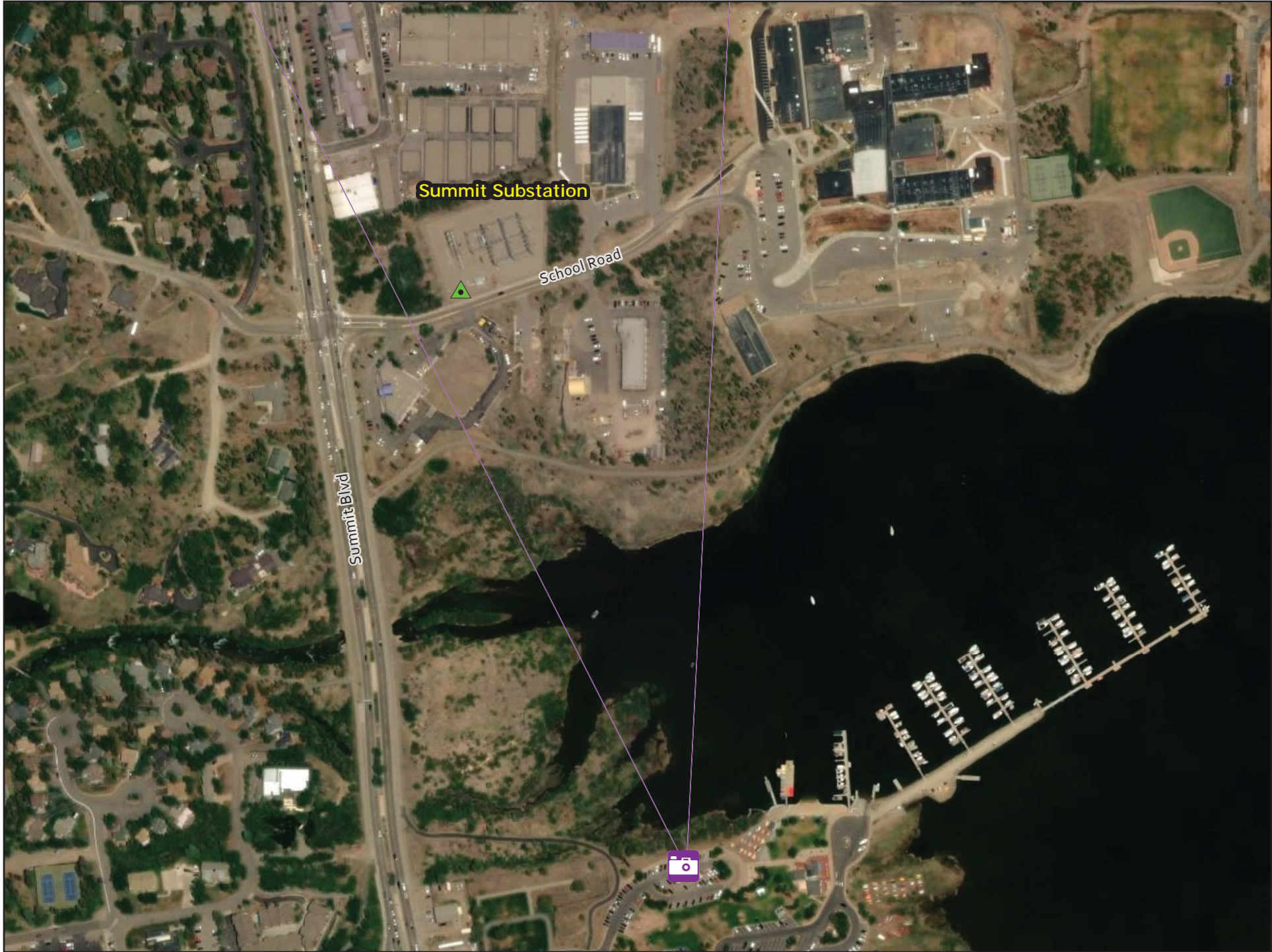
Existing





Proposed





Summit Substation

School Road

Summit Blvd



Existing



Proposed



## Appendix E – Feasibility Study

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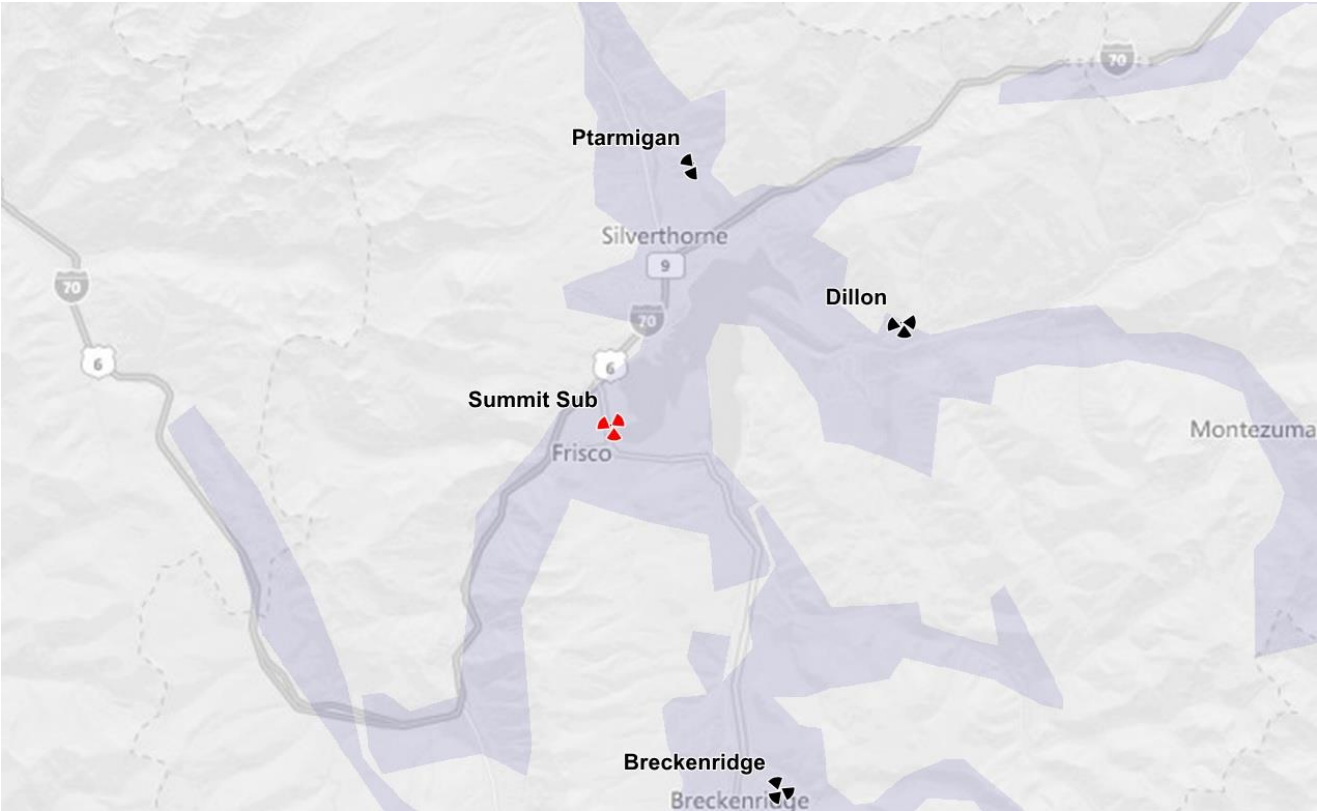
# Summit Feasibility Study

## PSCo Field Area Network - WiMAX

August 22, 2019

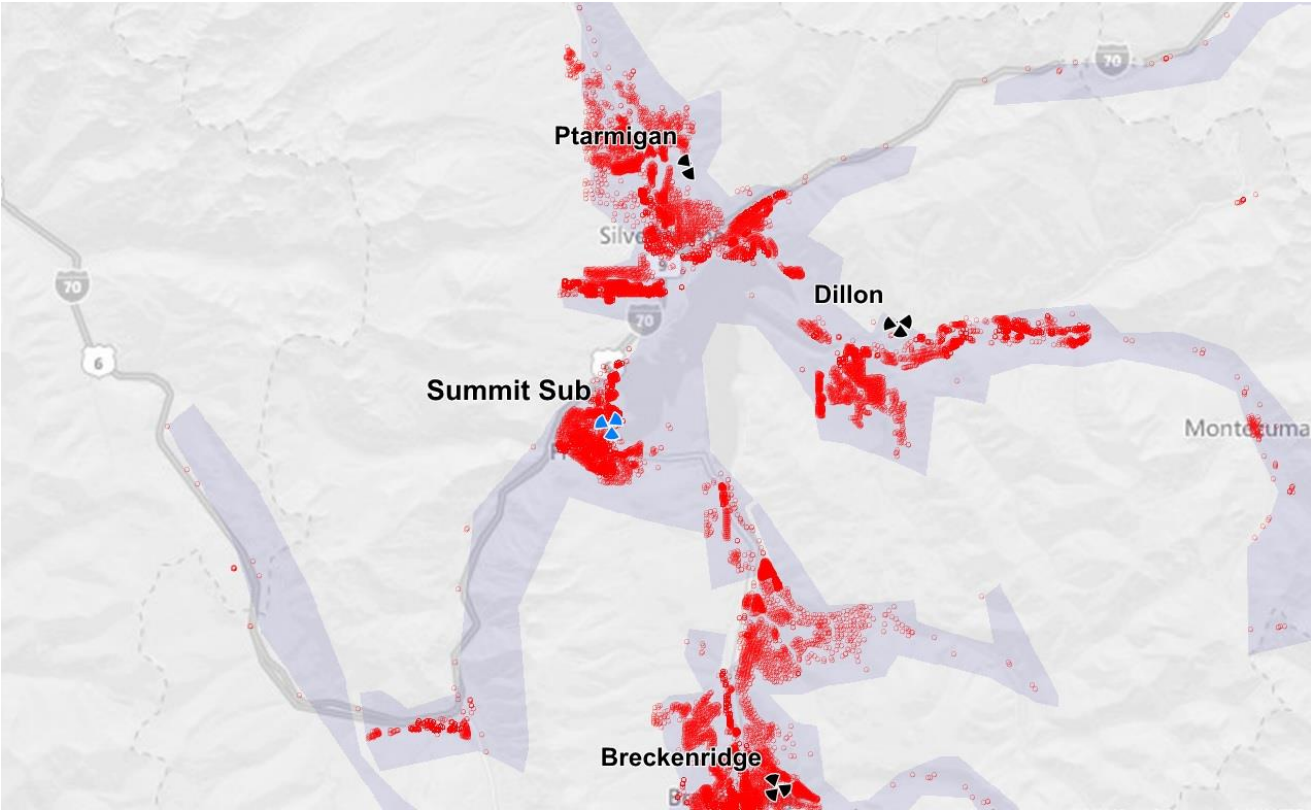


# Territory Overview





# Electric Meter Density



# Terrain Elevation in Area

➤ 12000 feet

➤ 11200 feet

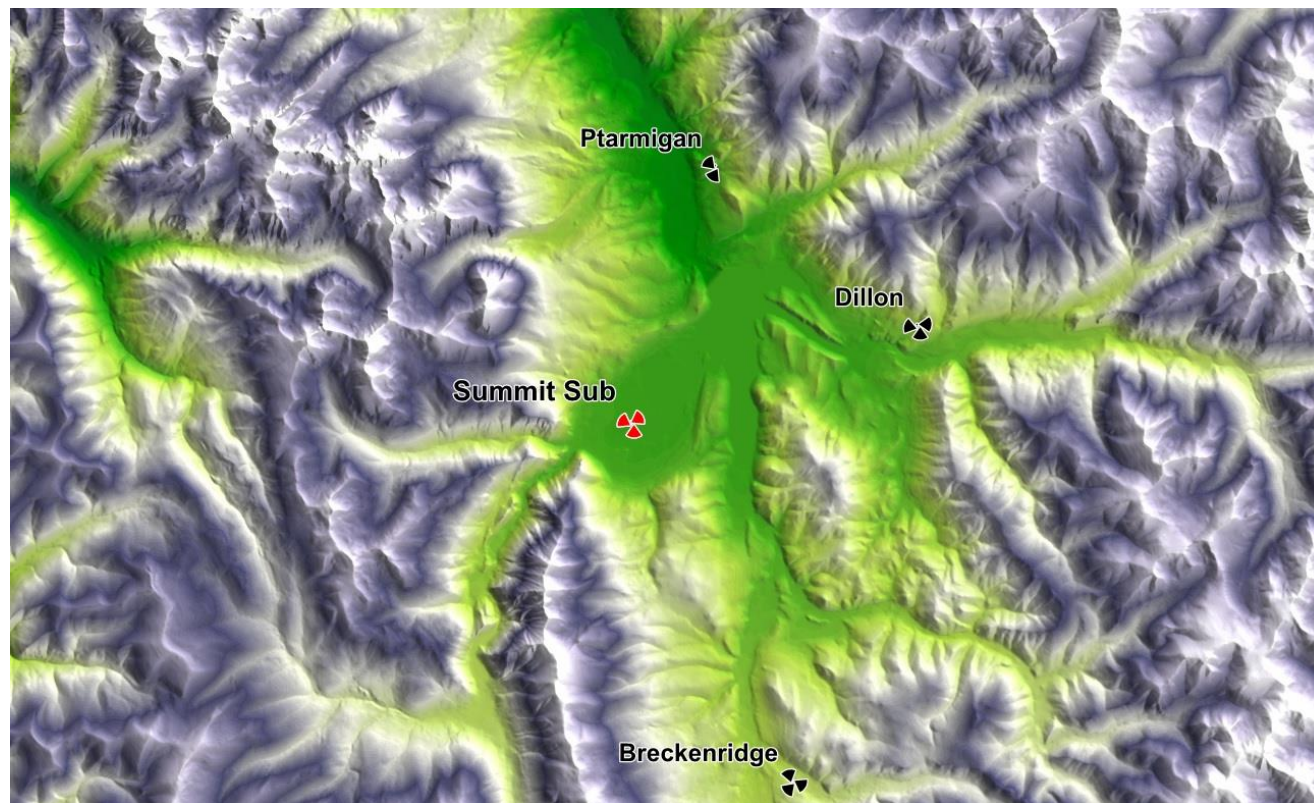
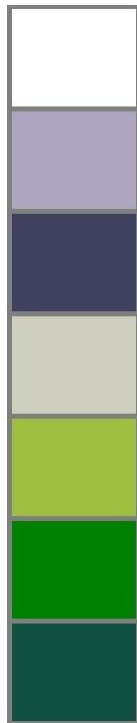
➤ 10400 feet

➤ 9600 feet

➤ 8800 feet

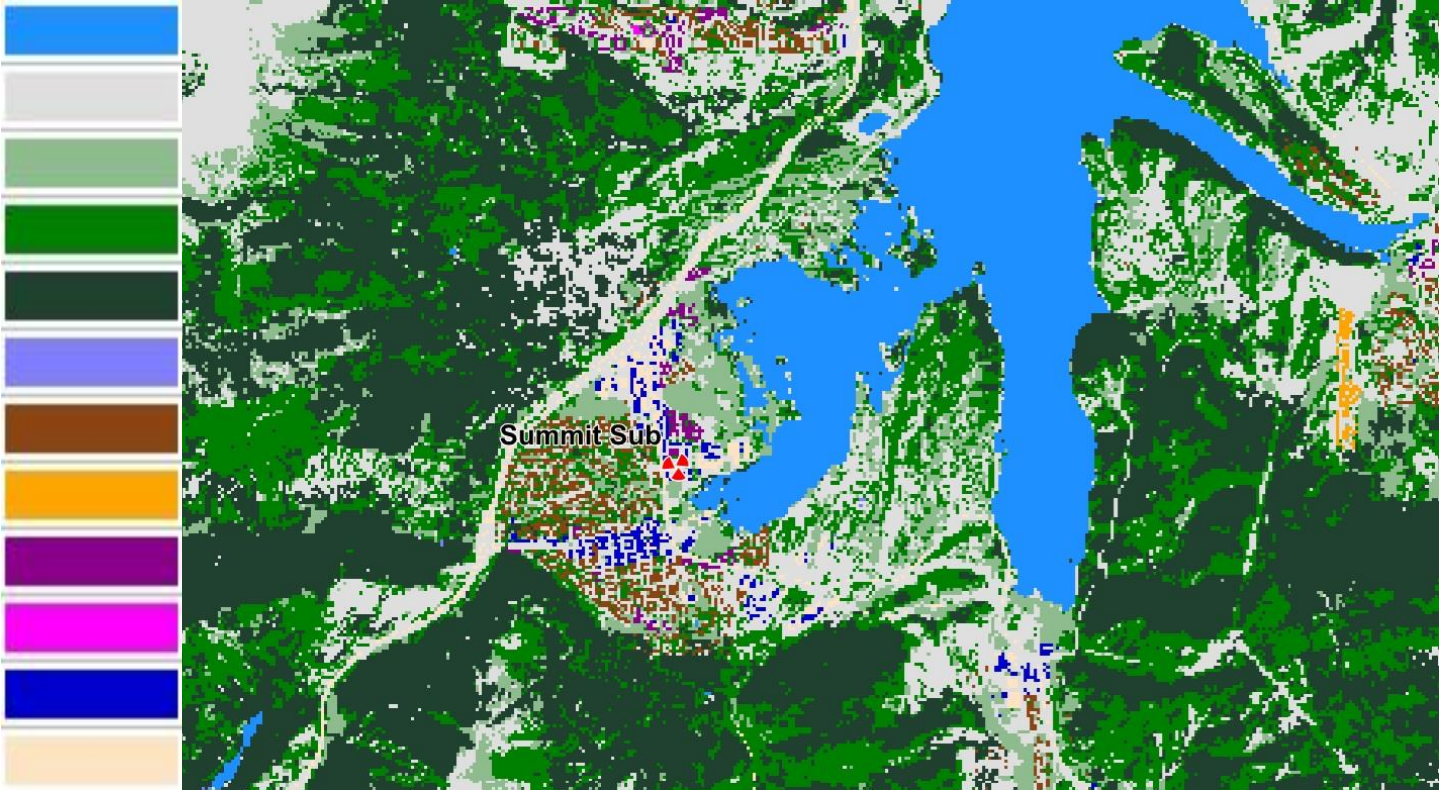
➤ 8000 feet

➤ 7200 feet



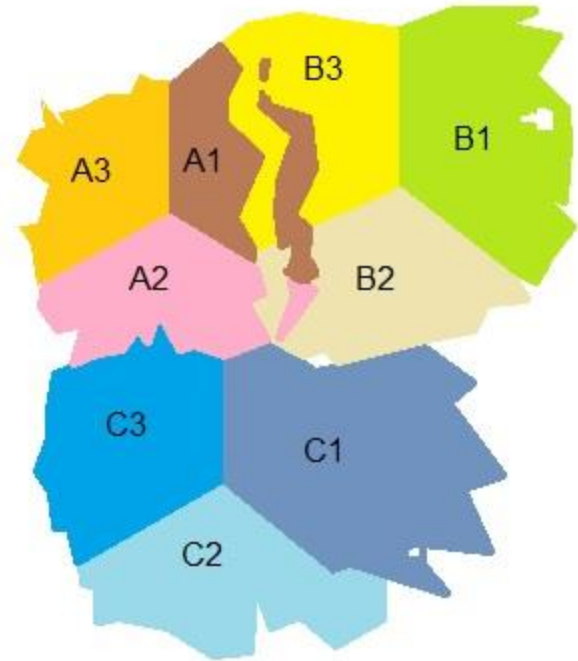
# Frisco Area Ground Clutter

- Inland water
- Barren ground
- Low Vegetation
- Sparse Forest
- Dense Forest
- Village Buildings
- Homes with trees
- Homes, few trees
- Multifamily
- Building blocks
- Commercial
- Open urban area



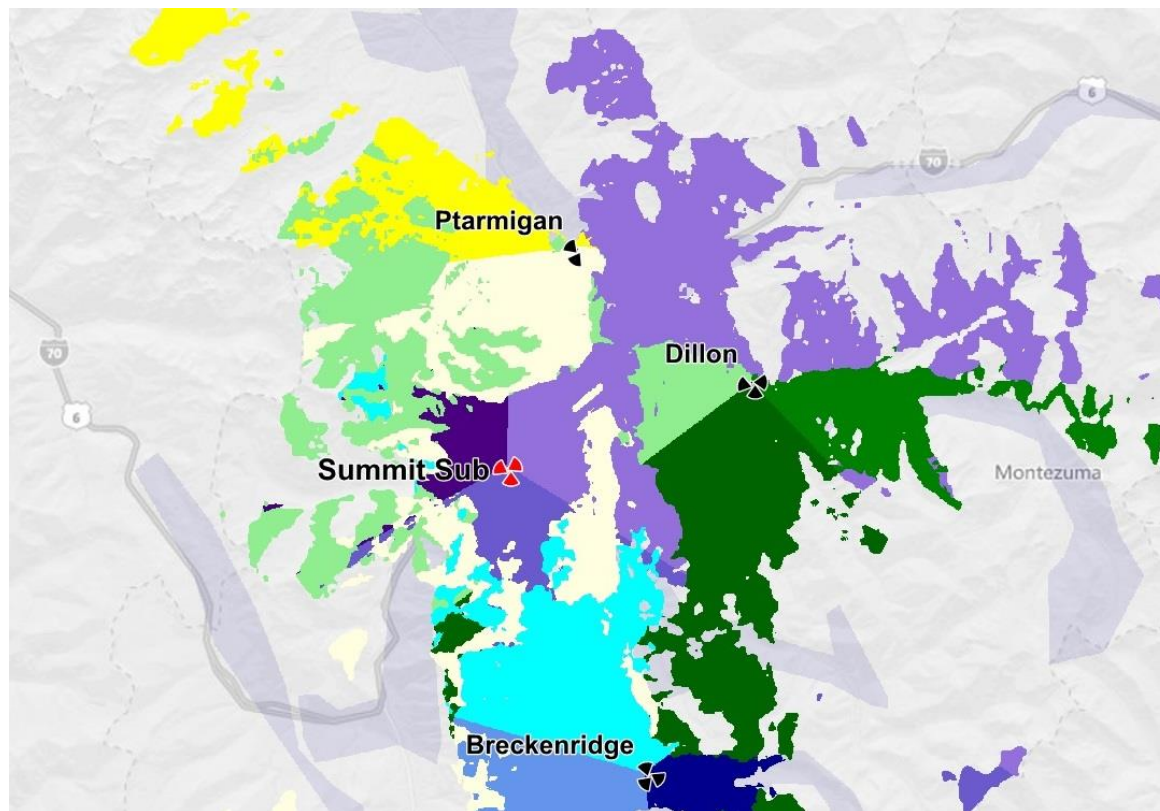
# Best Server Studies

- All Planned Base Stations in the area are included in the displays
- The displayed coverage edge represents a signal down to -96 dBm, our lowest usable signal
- Each color represents 1 sector of a typical 3 sector base station



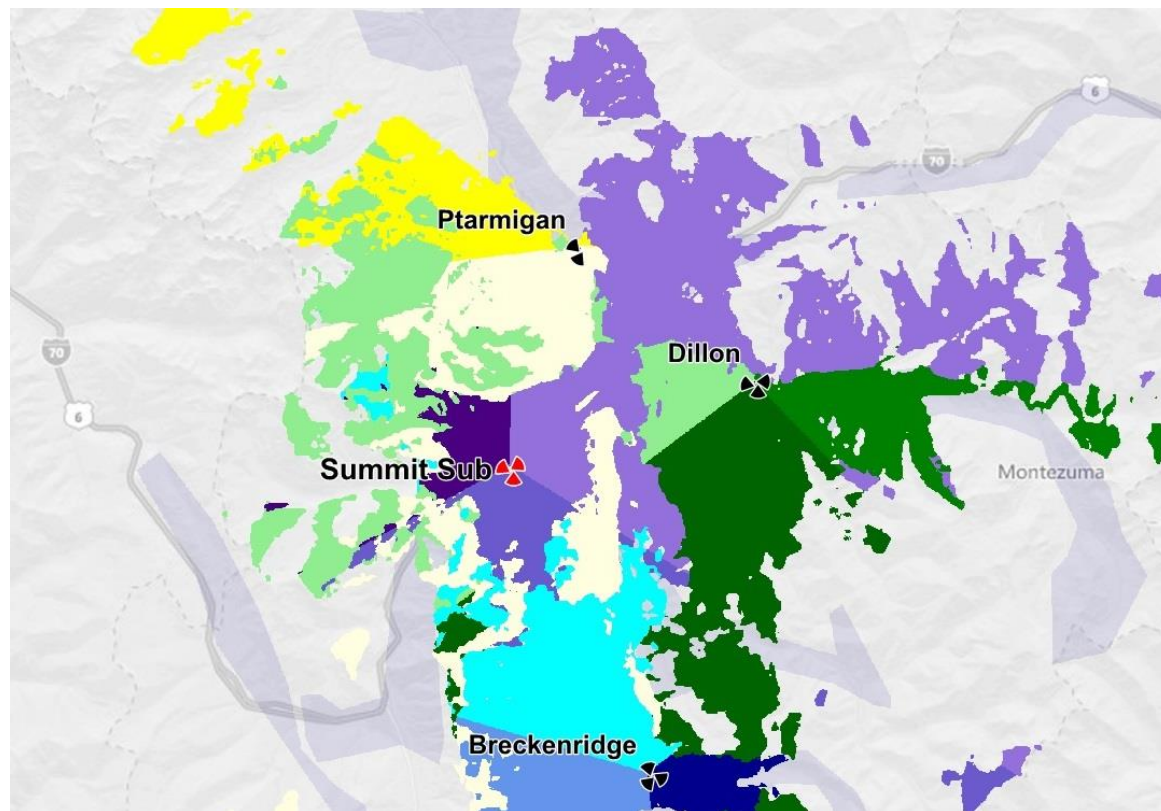
# Best Server: Tower at 85 feet

- Overall area covered: 46.52 sq. miles
  - Sector A: 38.39 sq. miles (82%)
  - Sector B: 5.01 sq. miles (11%)
  - Sector C: 3.12 sq. miles (7%)
- 
- Service area covered: 13.32 sq. miles
  - Sector A: 8.70 sq. miles (65%)
  - Sector B: 2.79 sq. miles (21%)
  - Sector C: 1.83 sq. miles (14%)
- 
- Electric meters covered: 6,762 meters
  - Sector A: 2,976 meters (44%)
  - Sector B: 2,429 meters (36%)
  - Sector C: 1,357 meters (20%)



# Best Server: Tower at 125 feet

- **Overall area covered: 49.56 sq. miles**
  - Sector A: 40.72 sq. miles (82%)
  - Sector B: 5.57 sq. miles (11%)
  - Sector C: 3.27 sq. miles (7%)
- 
- **Service area covered: 13.64 sq. miles**
  - Sector A: 8.91 sq. miles (65%)
  - Sector B: 2.89 sq. miles (21%)
  - Sector C: 1.84 sq. miles (14%)
- 
- **Electric meters covered: 6,775 meters**
  - Sector A: 3,000 meters (44%)
  - Sector B: 2,433 meters (36%)
  - Sector C: 1,342 meters (20%)



**F – Building Permit Exemption**

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## Fagan, Jaxon

---

**From:** Gibson, William <billg@townoffrisco.com>  
**Sent:** Tuesday, July 23, 2019 9:49 PM  
**To:** Fagan, Jaxon  
**Cc:** Keary Hallack  
**Subject:** RE: PSCo's Field Area Network (FAN) Project at the Summit Substation

Jaxon,

In speaking with the Town Attorney, we will be taking the position that the more specific rule of the International Building Code which exempts this project from building permit applications supersedes the more general rule of the Unified Development Code requiring building permits for telecom facilities. Therefore, a building permit will not be required for the subject PSCO FAN Project.

Sincerely,  
Bill

Bill Gibson, AICP, CFM  
Assistant Director  
Community Development Department  
Town of Frisco  
(970) 668-9121  
[www.frisco.gov](http://www.frisco.gov)



---

**From:** Fagan, Jaxon [mailto:Jaxon.Fagan@xcelenergy.com]  
**Sent:** Thursday, July 18, 2019 1:48 PM  
**To:** Gibson, William  
**Cc:** Keary Hallack  
**Subject:** RE: PSCo's Field Area Network (FAN) Project at the Summit Substation

Bill,

Based on my review of your correspondence with Keary Hallack, it is my understanding that the Town of Frisco is requesting a building permit for the project. PSCo is not typically required to obtain building permits for FAN towers. The attached letter includes a rationale for exempting the project from building permits. Please let me know if you have any questions.

Thank you,

**Jaxon Fagan**

**Xcel Energy | Responsible By Nature**

**Agent, Siting and Land Rights**

1800 Larimer St, Suite 400, Denver, CO, 80202

P: 303.571.7735 C: 541.420.8546

E: [jaxon.fagan@xcelenergy.com](mailto:jaxon.fagan@xcelenergy.com)



July 18, 2019

Bill Gibson, AICP, CFM  
Assistant Director  
Community Development Department  
Town of Frisco, Colorado

**RE: Summit Substation Field Area Network – Building Permit Exemption Rationale**

Bill,

Thank you for providing feedback on the Town of Frisco permitting requirements for the proposed Summit Substation Field Area Network (FAN) project. Based on my review of your correspondence with Keary Hallack, it is my understanding that the Town of Frisco is requesting a building permit for the project.

Public Service Company of Colorado (PSCo) is not typically required to obtain building permits for substation equipment, including FAN Towers. To date, at 29 FAN towers have been constructed through PSCo's service territory, and no local jurisdiction have required building permits to date.

The 2012 International Building Code (2012 IBC) adopted by the Town of Frisco exempts Public Service Agencies from obtaining building permits for transmission, distribution, and metering equipment. The specific language in the 2012 IBC reads as follows:

*Section 105.2.3. Public Service Agencies: A permit shall not be required for the installation, alteration, or repair of generation, transmission, distribution, or metering or other related equipment that is under the ownership and control of public service agencies by established right.*

The FAN tower is an installation of equipment related to the safe, cost effective, and reliable transmission and distribution of electricity, and is under the ownership of PSCo. Based on Section 105.2.3 of 2012 IBC, the project should be exempt from building permits.

Please let me know if you would like to discuss this on the phone or in person.

Thank you,

Jaxon Fagan  
Xcel Energy | Responsible By Nature  
Agent, Siting and Land Rights  
1800 Larimer St, Suite 400, Denver, CO, 80202  
P: 303.571.7735 C: 541.420.8546  
E: [jaxon.fagan@xcelenergy.com](mailto:jaxon.fagan@xcelenergy.com)