

**BEFORE THE HEARING EXAMINER  
FOR THE CITY OF REDMOND**

In the Matter of the Application of	)	NO. LAND-2016-01328
	)	
	)	
<b>Puget Sound Emergency Radio Network</b>	)	
	)	
For a	)	FINDINGS, CONCLUSIONS,
Conditional Use Permit and	)	AND DECISIONS
Site Plan Entitlement	)	
_____	)	

**SUMMARY OF DECISION**

The requested conditional use permit, special exception, and site plan entitlement to allow construction of a 170-foot tall monopole and associated equipment to provide emergency radio communications for emergency responders throughout King County at 10365 - 172<sup>nd</sup> Avenue NE in Redmond, Washington are **APPROVED** subject to conditions.

**SUMMARY OF RECORD**

**Request:**

Sarah Telschow of Odelia Pacific, on behalf of Puget Sound Emergency Radio Network of King County (Applicant), requested conditional use permit, special exception, and site plan entitlement to allow construction of a 170-foot tall monopole and associated equipment to provide emergency radio communications for emergency responders throughout King County at 10365 - 172<sup>nd</sup> Avenue NE in Redmond, Washington.

**Hearing Date:**

The City of Redmond Hearing Examiner conducted an open record hearing on the request on August 7, 2017.

**Testimony:**

At the open record hearing, the following individuals presented testimony under oath:

Heather Maiefski, Planner, City of Redmond  
Sarah Telschow, Odelia Pacific, Applicant Representative

**Exhibits:**

At the open record hearing, the following exhibits were admitted in the record:

Exhibit 1      Technical Committee Report to the Examiner, prepared for the August 7, 2017 hearing, with the following attachments:

1. Vicinity Map
2. Notice of Application and Certificate of Posting
3. Notice of Application Public Comment Letter
4. Determination of Non-Significance, issued May 15, 2017
5. SEPA Public Comment email, dated May 26, 2017
6. Notice of Public Hearing and Certificate of Posting
7. SEPA Environmental Checklist
8. Community Outreach Plan
9. PSERN Letter and Survey
10. Applicant Response to Survey Feedback
11. Neighborhood Meeting Notice
12. Plan Set
13. Tree Exception Letter
14. Critical Areas Report
15. Stormwater Report
16. Site Justification Letter
17. NIER Report
18. Completeness Letter
19. General Application Form

- Exhibit 2      Staff's PowerPoint Presentation (25 slides)
- Exhibit 3      Staff's memorandum regarding revocation of a recommended condition of approval
- Exhibit 4      Applicant project narrative
- Exhibit 5      Federal Aviation Administration Determination of No Hazard to Air Navigation, issued October 26, 2016
- Exhibit 6      Applicant's landscape report, prepared by Landplan PS, updated February 2017
- Exhibit 7      Applicant's noise survey, prepared by SSA Acoustics, dated June 30, 2016
- Exhibit 8      Applicant's Tree Survey and Visual Risk Assessment, prepared by Creative Landscape Solutions, dated March 7, 2017
- Exhibit 9      Applicant's (complete) photosimulation package, prepared by Tim Bradley Imaging, dated August 10, 2016 (16 pages)
- Exhibit 10     Applicant's market study, prepared by Integra Realty Resources, dated June 17, 2016
- Exhibit 11     Applicant's color sample

Upon consideration of the testimony and exhibits admitted, the Hearing Examiner enters the following findings and conclusions:

### FINDINGS

1. The Applicant requested conditional use permit, special exception, and site plan entitlement to allow construction of a 170-foot tall monopole and associated equipment to provide emergency radio communications for emergency responders throughout King County on a site located at 10365 - 172<sup>nd</sup> Avenue NE in Redmond, Washington. *Exhibits 1, 1.12, and 1.19.*
2. The application was determined to be complete on March 22, 2017. *Exhibits 1, 1.18, and 1.19.*
3. King County Puget Sound Emergency Radio Network (PSERN) is a project to upgrade and/or replace the existing aging regional emergency communications network. It provides a network of radio communications for 9-1-1 dispatchers and first responders to coordinate response efforts to an emergency. The proposal was included in the PSERN levee passed by King County voters on April 28, 2015 for funding the upgrade of the current emergency radio system. *Exhibits 1, 1.16, and 4; Sarah Telschow Testimony.*
4. Located in the Education Hill Neighborhood, the subject property is a City of Redmond utility site. The City-owned property abuts Jonathan Hartman Park to the east, Mann Elementary School to the west, Church of Jesus Christ Latter Day Saints to the south, and single-family residential development to the north. The northern half of the subject property is developed with existing public utilities including the water towers and also supports existing wireless communication facilities. The remainder of the parcel is undeveloped and vegetated with mature conifer and deciduous trees and a dense understory. The site is located within Wellhead Protection Zone three, but contains no critical areas. There is no public recreation at the site. *Exhibits 1, 1.1, and 4.*
5. The subject property is zoned R-6, Single-Family Urban Residential. *Exhibit 1.* The R-6 zone is intended to provide for primarily single-family residential neighborhoods on lands suitable for residential development with an allowed base density of six dwellings per gross acre. This designation provides for stable and attractive suburban residential neighborhoods that have a full range of public services and facilities. To complement the primarily residential nature of these zones, some nonresidential uses are allowed. *Redmond Zoning Code (RZC) 21.08.090.A.*
6. The proposal would construct a 170-foot wireless communications facility (WCF) antenna support structure with two omni antennas, two panel antennas, and two microwave dishes attached to the monopole. The unmanned facility would operate 24 hours a day, seven days a week. The WCF would be placed within a lease area of approximately 5,500 square feet and would include the monopole, a 350 square foot equipment shelter, a 50kw emergency generator, and a 2,000 gallon diesel fuel tank. The WCF would be accessed by a new 15-foot wide gravel access road connecting to 172<sup>nd</sup> Avenue NE. Access to the facility would be restricted to authorized personnel only by a

locked gate. No signage is proposed to be placed on the monopole. The antennas are proposed to be mounted as close as possible to the monopole to reduce their visual impact, and the tower and antennas would be painted a dark green color with a non-reflective finish in an attempt to blend visually with the surrounding evergreen trees to the extent possible. The chain link fence surrounding the lease area would be provided with green sight-obscuring vinyl slats to screen the ground equipment, and perimeter landscaping is proposed along the south, east, and west sides of the lease area outside the six-foot tall chain link fence. Because the proposed monopole exceeds the maximum heights allowed by RZC 21.56.040 and the site is located in the R-6 zone, a conditional use permit is required. A special exception is also required to exceed the maximum structure height allowed in the zone. *Exhibits 1, 1.12, and 4.*

7. The R-6 zone requires setbacks of 15 feet from front and side streets, and 10 feet from side and rear lot lines. Maximum lot coverage by structure is 35%, and maximum impervious surface area is 65%. At least 20% of the total site must be maintained in open space. Maximum structure height is 35 feet. *RZC 21.08.060.* As proposed, the nearest the lease area is to a lot line is 126 feet from the front lot line at 172nd Avenue; all other setbacks exceed 200 feet. With the project, only 7% of the parcel would be covered by structures, and only 5% in impervious surfaces; approximately 87% of the parcel would be retained in open space. The proposal complies with all development standards for the R-6 zone except for maximum height, which triggers review through the CUP and special exception request processes. *Exhibits 1 and 1.12.*
8. The proposal is necessary to complete a critical emergency communications network in Redmond and the greater King County region. According to the Applicant's site justification letter, the Education Hill Neighborhood is both currently underserved by emergency communications and is a necessary location in the regional communications network. In selecting the site for the instant proposal, the Applicant considered locating the needed facility at Redmond Station 17, Rose Hill AM Towers, PSE Substation on 80th Street, Bridle Trails Shopping Center, Redmond High School, Hartmann Park, and Nike Neighborhood Park. As detailed in the site justification letter, the subject property was determined to be the best location at least in part because placement on top of Education Hill prevents the hill itself from becoming an obstruction to emergency communications. The site justification letter included a microwave path survey report and coverage maps depicting this. The instant site also proved best because it is developed with utilities including existing communications facilities and because it is not a site accessed by the public. In order to establish effective microwave paths that would connect to the other sites in the network and function for a 20-year facility life, a tower height of 170 feet was deemed the minimum necessary to account for future tree growth. The nearest non-residential lands, Urban Recreation (UR) and Manufacturing Park (MP) zones located approximately one mile to the west, are located off of the hill which would reduce the coverage provided. An Education Hill radio site is a crucial link in the PSERN network in the northwest Lake Washington area. Together with Norway Hill, the Education Hill location is the backbone for emergency services in this region and also serves as a critical link the network by connecting the Norway Hill and Tolt Reservoir

sites. According to King County PSERN, emergency services in Redmond would have a much lower level of service without a tower on Education Hill. *Exhibit 1.16.*

9. The Applicant submitted a professionally prepared evaluation of the proposed WCF's compliance with Federal Communications Commission (FCC) guidelines for human exposure to radiofrequency radiation generated by the project. According to this evaluation, the maximum ground level predicted exposure would be 0.0154 mW/cm<sup>2</sup> or 1.96% of the FCC general exposure limit at a location approximately 330 feet from the tower. The consultant indicated that this level of exposure in a place with public access is properly considered negligible. *Exhibit 1.17.* Of note, there is little to no public access at the subject property.
10. The facility would extend electric service already in use at other utilities on-site to the lease area underground. A diesel powered generator is proposed together with a fuel storage tank in order to ensure continued operation during power outages. After construction, the unmanned facility would generate minimal traffic and demand for electrical service but would otherwise create no demand or adverse impact on public services or facilities. The project would improve emergency communications in the region. *Exhibits 1 and 4.*
11. The record includes a Determination of No Hazard to Air Navigation from the Federal Aviation Administration. The FAA determination indicated that no marking or lighting would be required on the tower. *Exhibit 5.*
12. The Applicant submitted a professionally prepared acoustic study assessing the sound volumes generated by the proposed improvements at the subject property's boundaries. The noise study considered the two nearest residential uses, one 170 feet to the east and the other 190 feet to the west of the proposed WCF, as those uses most likely to be affected. Considering the distance from those residential properties and the sound barrier of the equipment shelter itself, the acoustic consultant determined that sound levels from the WCF itself experienced by the adjacent residential uses would be 34 decibels at the east property boundary and 41 decibels at the west boundary. Both of these sound levels are within the 45 decibel limit for nighttime noise allowed by City and State noise regulations. The emergency generator would be placed approximately 170 feet from the residential property to the east and 220 feet from the residential property to the west. The generator would be exempt from noise ordinances during actual emergencies, but it must occasionally be tested to ensure function. The code allows daytime noise limits to be exceeded by five decibels for a fifteen minute period during any one hour, which makes the maximum sound level at a residential property boundary 60 decibels. The acoustic consultant projected that testing of the generator would create sound levels of 60 decibels at the east boundary and 57 at the west boundary, indicating that emergency generator testing and maintenance should comply with Redmond's noise ordinance. *Exhibit 7.*
13. Consistent with an approved public involvement plan, the Applicant undertook a program of community outreach detailed in the record at Exhibit 1.8. Outreach methods included printed material, electronic materials, and in-person events. A mailed letter, photo

simulations, survey, preliminary site plan, and elevations were sent to residents within a 1,000 foot radius of the subject property. The property owners who provided survey feedback received individual responses from the Applicant. The highlights and timeline of outreach are as follows:

- June 20, 2016: Mailed General Community Notification and Survey
- July 16, 2016: Performed Balloon Test
- July 25, 2016: Due Date for General Community Notification and Survey –
- September 13, 2016: Community Open House/Neighborhood Public Meeting

A total of 19 surveys were submitted in response to the Applicant's outreach, of which 14 were supportive of the project. One household of two individuals attended the neighborhood meeting. *Exhibits 1, 1.8, 1.9, 1.10, and 1.11.*

14. Neighbors received advanced notice of the balloon test to allow them to have a visual approximation of tower height to inform their comments on the application. The Applicant submitted photographs of the balloon as seen from 14 locations, together with photosimulations of what the completed WCF would look like. Of the 14 test photograph locations, the balloon was only visible in five locations. In those five locations, the tower is surrounded by, or appears in a visual field with, tall trees that serve to screen its height. *Exhibit 9.*
15. In addition to the WCF standards in the RZC (RZC 21.56.020.C), the Redmond Municipal Code (RMC) Chapter 12.14 also governs WCFs located on City property. Planning Staff included conditions intended to ensure compliance with the applicable RMC provisions. *Exhibit 1.*
16. Redmond's wireless communications facilities siting regulations establish a hierarchy of desirable sites for new WCFs. Pursuant to RZC 21.56.030.B, new WCFs must be located on a highest ranking site unless the applicant can demonstrate that a highest ranking site is not technically feasible or justified. The highest ranking sites are existing, legally established WCF sites or existing antenna support structures. The subject property has existing legally established communication facilities on-site, making it a highest ranked site. *Exhibits 1, 1.12, and 4.*
17. The Redmond Zoning Code contains standards that regulate development impacts to wildlife habitat (RZC 21.64), among other sensitive areas. According to the Applicant's professionally prepared critical areas report, evidence of pileated woodpecker foraging has been identified on the site; the pileated woodpecker is a priority species. No other priority species, priority habitats, or other critical areas been identified at the site. The report recommended mitigation measures to minimize and mitigate impacts to this priority species as follows:
  - Retain snags if possible near the clearing boundaries.
  - Move existing down/dead logs, intact if possible, to areas outside the lease boundary.
  - Provide three new logs at least 15 inches in diameter outside the lease area.

- Perform clearing during the fall or winter to avoid general avian species nesting periods.

Planning Staff determined that the recommended mitigation would eliminate negative impacts to regulated critical areas and recommended that the mitigation be made a condition of permit approval. *Exhibits 1 and 1.14.*

18. The subject property is located within Wellhead Protection Zone 3 and protection standards apply to the project. The Technical Committee report indicates that the project poses very little risk related to wellhead protection. Groundwater impacts during and after construction would be minimized through the application of best management practices established in RZC 21.64.050 and the Stormwater Technical Notebook Issue Number 6, including section 8.3, Stormwater Management in Wellhead Protection Zones. These standards would require the following: the proposed 2,000-gallon aboveground fuel storage tank must meet secondary containment requirements; a monitoring detection system is required; drip pans or absorbent materials must be placed under all potential drip and spill locations during fueling activities; spill control measures/spill kits must be placed near the tank and any liquid transfer areas; and a spill control plan will be available to all personnel. *Exhibit 1.*
19. The Applicant submitted a professionally prepared stormwater site plan report addressing preliminary stormwater management requirements. Stormwater runoff from all impervious surfaces on the site, including the equipment shelter, lease area, and access road, must be managed in conformance with the standards at RMC 15.24.080. According to the stormwater report, runoff would be dispersed into vegetated buffers that would be sized according to the 2005 Department of Ecology Manual. Natural drainage patterns would be maintained. *Exhibits 1 and 1.15.*
20. Redmond's tree conservation ordinance (RZC Chapter 21.72) requires that all healthy landmark trees and 35 % of all healthy significant trees be saved.<sup>1</sup> The Applicant submitted a tree survey conducted for trees located within 50 feet of the lease area. The survey showed a total of 82 trees within 50 feet of the new lease area, including two landmark trees and 80 significant trees. Of these, the project would retain a total of 50 significant trees within 50 feet of the lease area, or 61% tree retention, which exceeds the minimum requirement. The proposal includes the removal of 14 significant trees and impacts to 16 significant trees and two landmark trees. Although the two landmark trees are not proposed for removal, the Applicant submitted a tree exception request, which was approved by the Planning Director on March 27, 2017 authorizing the project to impact but retain two landmark trees. The project is required to plant six replacement trees for the impacts to the two landmark trees and 30 replacement trees for the removal of 14 significant trees and impacts to 16 significant trees, for a total of 36 replacement trees required. The project would provide 38 replacement trees. *Exhibits 1, 1.12, and 1.13.*

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<sup>1</sup> The Code defines landmark trees as those trees that are greater than 30 inches in diameter at breast height and significant trees as those trees that are between six-inches and 30-inches in diameter at breast height.

21. The City of Redmond Comprehensive Plan contains policies governing the placement and height of telecommunications facilities. Planning Staff identified the following policy as applicable to the instant application:

LU-30: Allow some compatible nonresidential uses in Residential zones, such as appropriately scaled schools, religious facilities, home occupations, parks, open spaces, senior centers and day care centers. Maintain standards in the Redmond Zoning Code for locating and designing these uses in a manner that represents the character and scale of the neighborhood.

LU-14: Encourage the provision of needed facilities that serve the general public, such as facilities for education, libraries, parks, culture and recreation, police and fire, transportation and utilities. Ensure that these facilities are located in a manner that is compatible with the City's preferred land use pattern.

UT-87: Avoid the proliferation of telecommunications towers and reduce the visual impact of telecommunications equipment.

PI-21: Ask applicants to carry out the following responsibilities during the development review process:

- Use processes for early review of proposals, such as pre-application conferences, where appropriate to the scale and nature of the proposal;
- Involve the community early in the design process in a manner appropriate to the scale and nature of the proposal;
- Provide project information appropriate to the level of review as soon as possible; and
- Respond to requests for information and review comments in a timely manner.

FW-31: Plan, finance, build, rehabilitate and maintain capital facilities and services consistent with the following principles:

- Provide facilities and service that support the City's vision and Land Use Plan as articulated in the Redmond Comprehensive Plan
- Ensure that capital facilities are sustainable, well designed, attractive and safe;
- Provide facilities and services that protect public health and safety;
- Ensure adequate provision of needed infrastructure and services;
- Allocate infrastructure funding responsibilities fairly;
- Optimize strategic actions and investments over near, mid, and long-term portions of the Comprehensive Plan's 2030 planning horizon while recognizing the need to retain flexibility to leverage opportunities and respond to changing conditions; and
- Provide reasonable certainty that needed facility and service improvements are completed in a timely manner.

Planning Staff submitted that an emergency response tower is a complementary, compatible use with residential development. The WCF has been sited among other

utilities and provided with setbacks, screening, stealthing, and tree retention designed to reduce and mitigate visual and other impacts of its placement in a residential area. The application materials adequately justify the need for the new tower at the proposed location and show compliance with federal requirements established by the Federal Aviation Administration (FAA) and the Federal Communication Commission (FCC). A thorough community outreach plan was successfully executed. The facility would ensure that the City of Redmond can continue to provide high-quality public safety services with excellent response times. *Exhibit 1.*

22. Notice of application was published, posted at City Hall, the Redmond Regional Library, and on the subject property, and mailed to owners of property within 500 feet of the site on April 3, 2017. *Exhibits 1 and 1.2.*
23. The City received one written comment during the notice of application public comment period, expressing concerns regarding the fuel tank giving rise to a possible leak and/or explosion and concerns about the WCF's effects on property values. *Exhibit 1.3.*
24. The City of Redmond was designated lead agency for review of the proposal's compliance with the requirements of the State Environmental Policy Act (SEPA). Based on a review of the Applicant's SEPA Environmental Checklist and SEPA Application, the City determined that the requirements of environmental analysis and protection would be adequately addressed through compliance with the City's regulations and Comprehensive Plan, as well as applicable state and federal regulations. The City issued a determination of non-significance (DNS) on May 15, 2017, concluding that the project would not have probable significant adverse impacts on the environment. Notice of the DNS was issued on the same date through posting at City Hall, the Redmond Regional Library, and at the site, forwarding to state and local agencies, and mailing to parties of record and owners of property within 500 feet of the site. No appeals were filed and the DNS became final. *Exhibits 1, 1.4, and 1.7.*
25. The City received one public comment after notice of the DNS was published requesting that the City's water tanks be noted as Historic inventory resources. *Exhibit 1.5.* Planning Staff determined that the water tanks were constructed in about 1962 and were determined not eligible for the National Register of Historic Places by a 2014 assessment. *Exhibit 1.*
26. Notice of the August 7, 2017 public hearing was posted on the site, at City Hall, and at the Redmond Regional Library, and mailed to owners of property within 500 feet of the site and parties of record on July 17, 2017. *Exhibits 1 and 1.6.* There was no public comment at the hearing.
27. After reviewing all submitted information, the Technical Committee recommended approval of the conditional use permit subject to the conditions detailed in its report to the Examiner. However, as shown in Exhibit 3, the Committee agreed to rescind recommended condition 5(d)(4) (page 22 of the Report) which would have required re-evaluation every five years to ensure compliance with conditional use criteria. Due to the

nature of the proposed communications - radio communications for emergency services, rather than wireless communication for the general population - Staff agreed with the Applicant that radio technology does not evolve as quickly as wireless technology and public infrastructure is not driven by changes in the market to the same extent that commercial wireless services are, rendering this recommended condition unnecessary for the instant project. *Exhibits 1 (page 22) and 3; Heather Maiefski Testimony.*

28. The Applicant representative reviewed and concurred with the remaining recommended conditions of approval. *Sarah Telschow Testimony.*

## CONCLUSIONS

### **Jurisdiction:**

Pursuant to RZC 21.76.050.C (Table B) and RZC 21.76.060.F, the Hearing Examiner has jurisdiction to hear and issue the City's final decision on requests for conditional use permit.

Pursuant to RZC 21.76.050.E.2, where two or more land use applications for a given development are submitted for consolidated review, the review shall be conducted using the highest numbered process type applicable to any of the land use applications, provided that each land use application shall only be subject to the relevant decision criteria applicable to that particular development application. This provision confers jurisdiction on the Hearing Examiner to decide the associate application for site plan entitlement.

### **Criteria for Review:**

#### *Conditional Use Permit*

Pursuant to RZC 21.76.070.K.4, applications for conditional use permit may be approved if the Applicant demonstrates compliance with the following criteria for approval:

- a. The conditional use is consistent with the RZC and the Comprehensive Plan;
- b. The conditional use is designed in a manner which is compatible with and responds to the existing or intended character, appearance, quality of development, and physical characteristics of the subject property and immediate vicinity;
- c. The location, size, and height of buildings, structures, walls and fences, and screening vegetation for the conditional use shall not hinder neighborhood circulation or discourage the permitted development or use of neighboring properties;
- d. The type of use, hours of operation, and appropriateness of the use in relation to adjacent uses minimize unusual hazards or characteristics of the use that would have adverse impacts;
- e. The conditional use is such that pedestrian and vehicular traffic associated with the use will not be hazardous or conflict with existing and anticipated traffic in the neighborhood;
- f. The conditional use will be supported by adequate public facilities or services, and will not adversely affect public services to the surrounding area or conditions are established to mitigate adverse impacts on such facilities.

*Special Exception Request*

Pursuant to RZC 21.56.060.D, special exceptions to the wireless communications facilities development standards in RZC Chapter 21.56 can be granted in the following circumstances.

1. The applicant shall justify the request for a Special Exception by demonstrating that the obstruction or inability to receive a communication signal is the result of factors beyond the property owner's or applicant's control, taking into consideration potential permitted development on adjacent and neighboring lots with regard to future reception window obstruction. Pictures, drawings (to scale), maps and/or manufacturer's specifications, and other technical information as necessary, should be provided to demonstrate to the City that the Special Exception is necessary.
2. The applicant for a Special Exception shall demonstrate that the proposed materials, shape, and color of the antenna(s) will, to the greatest extent possible, minimize negative visual impacts on adjacent or nearby residential uses and recreational uses in the Agriculture and Urban Recreation zones and shoreline areas. The use of certain materials, shapes and colors, and landscaping may be required in order to minimize visual impacts.
3. n/a
4. Additional Requirements for locating or exceeding height limits in UR, RA-5, R-1, or shoreline areas; or proposals to exceed height limits in residential and nonresidential zones:
  - a) An applicant will be required to provide an evaluation of alternative sites during this process.
  - b) An amplified public involvement process shall be required and shall be conducted and paid for by the applicant. The purpose of the public involvement process is to involve the persons within the zone of likely and foreseeable impacts, and to determine potential mitigation measures that would make siting of that facility more acceptable.
    - 1) The applicant shall propose an acceptable public involvement plan to be reviewed and approved by the Administrator.
    - 2) The public involvement process shall be initiated within 45 days of the issuance of a notice of application.
  - c) In addition to meeting the CUP decision criteria, the following criteria shall be used to make a determination on the application
    - 1) The impact of the facility including the design and operation on the surrounding uses, the environment and the City has been minimized;
    - 2) The proposal considers possible incentives that can be developed which would make siting the facility within the community more acceptable

*Site Plan Entitlement:*

Pursuant to RZC 21.76.070.Y.3, Site Plan Entitlement Decision Criteria:

- a. The Technical Committee, composed of the Departments of Planning and Public Works, shall review all Development Review permits with the State Environmental Policy Act and the RZC.
- b. The Landmarks and Heritage Commission will review all Certificates of Appropriateness for compliance with the RZC.

**Other code provisions with which the Applicant must demonstrate compliance:**

*RZC 21.56.020 Applicability Permits and Exemptions*

...

- C. Facilities on Public Property. WCFs located in public rights-of-way and on other City property shall comply with RMC Chapter 12.14, *Telecommunications*.

*RZC 21.56.030 General Siting Criteria*

- A. RZC 21.76.070.AD, *Wireless Communication Facilities*, identifies zoning districts and the review process for Wireless Communication Facilities. The standards in this section address site-specific location factors for Wireless Communication Facilities other than amateur radio towers and small satellite dishes.
- B. All Wireless Communication Facilities other than small satellite dishes and amateur radio towers shall comply with the siting standards and hierarchy set forth in the following subsections.
- C. The collocation of new antennas or other wireless communication facilities on an existing legally established antenna support structure or an existing wireless communication facility site is allowed regardless of any prohibition otherwise set forth in the underlying zoning district.
- D. Wireless communication facilities other than satellite dishes and amateur radio towers shall be sited within the other zoning districts of the City according to the following siting hierarchy, with (1) being the highest (most preferable) ranking site and (6) being the lowest (least preferable) ranking site. A new wireless communication facility must be located on the highest ranking site unless the applicant can demonstrate, through relevant information, including but not limited to, the report of a licensed radio frequency engineer, that the highest ranking site is not technically feasible or justified given the location of the proposed wireless communication facility and the network need. In order of ranking, from highest to lowest, the sites are:
  1. Existing legally established sites or antenna support structures on which other wireless communications facilities are located.
  2. Structures or sites used exclusively for industrial or manufacturing park uses within the I and MP zones.

3. Existing public facilities and structures, such as water towers, utility structures, fire stations, bridges, and other public buildings, within all zoning districts not used primarily for recreational or residential uses.
4. Structures or sites used exclusively for manufacturing, research and development, commercial, and office uses in the commercial, Downtown, and Overlake zoning districts. Within these zoning districts, the highest to lowest ranking sites are I, MP, BP, GC, NC-2, RR, OBAT, OV, DT, and NC-1.
5. On institutional structures, places of worship, and other nonresidential sites located in residential zones.
6. Attached to residential structures in the R-20 and R-30 zoning districts, provided that a conditional use permit is obtained as provided in RZC 21.76.070.DD, *Wireless Communication Facilities*. Wireless communication facilities attached to residential structures are not permitted in any residential zoning district other than R-20 and R-30. (Ord. 2614)

*Table 21.56.040, General Development Standards for Wireless Communications Facilities*

Wireless Communication Facility Type	Zone	Installation Type	Location	Size Requirements	Supplemental Requirements
Antenna Support Structures and Antenna Arrays	All non-residential zones		Above-ground equipment shelters for antenna arrays located on buildings shall be located within, on the sides or behind the buildings and screened to the fullest extent possible.	Associated above-ground equipment shelters shall not exceed 240 square feet (e.g., 12 by 20 feet) unless operators can demonstrate that more space is needed.	Construction plans and final construction of the mountings of wireless antenna(s) and equipment shelters shall be approved by the City's Building Division. Applications shall document that the proposed antenna support structure and any mounting

					bases are designed to reasonably withstand wind and seismic loads.
	All Zones	Tower	May not be located in setback areas.	Criteria for each zone set forth below.	A Washington-licensed professional engineer shall certify in writing, over his or her seal, that both construction plans and final construction of the antenna support structures are designed to reasonably withstand wind and seismic loads as established by the International Building Code.
	UR and R	Tower	Shall be located at a point farthest from lot lines as feasible.	The combined height inclusive of antenna(s) shall not extend more than 15 feet above the maximum height of the zone for which it is proposed to a maximum of 60 feet. A height bonus of 15 feet may be allowed by the approval authority when collocation is specifically provided.	
	All Other Zones	Tower	No specific criteria	The combined height inclusive of antenna arrays shall not exceed 85 feet, except when collocation is specifically provided for, then the antenna support structure shall not exceed 100 feet.	

Table 21.56.050, Design Standards for Wireless Communication Facilities

WCF Type	Zone	Design Standards	Landscaping and Screening Standards	Additional Standards
Antenna Support Structures and Antenna Arrays	All zones		Specific paint colors shall be required to integrate the tower through location and design where technically feasible and in compliance with safety regulations.	No specific criteria
	UR and R	The antenna array shall not dominate the structure upon which it is attached and shall be visually concealed utilizing color and compatible material to camouflage the facility. Stealth technology that mimics natural features, such as native trees, shall be employed.	Required when view of the antenna array is visible from any street and from the yards and main living floor areas of surrounding residential properties. Within the shoreline jurisdiction, additional screening shall be provided through plantings or double rows of native conifers surrounding the base of the structure. (SMP)	Visual screen shall be provided as high as the center of the dish. The screening shall be located above the center of the dish and shall be 50 percent or more to the top of the antenna(s). Evergreen plants shall be used to accomplish year-round screening, and shall be large enough at installation to meet appropriate screening standards.

*RZC 21.56.060 Special Exceptions*

- A. Purpose. The purpose of this section is to provide for the granting of special exceptions when adherence to all development standards of this chapter would result in a physical barrier which would block signal reception or transmission or prevent effective communication in all permissible locations.
- B. Applicability.
  - 1. A special exception is required whenever an applicant desires to:
    - a. Vary from the height, location, or setback limitations on the siting of amateur radio towers; or
    - b. Locate an antenna support structure within the R-2, R-3, R-4, R-5, and R-6 zones; or
    - c. Exceed the height limit on a base station; or

- d. Vary from the setback, size, screening, landscape, and service area requirements for large satellite dishes in all zones.
2. The special exceptions provided in this section do not apply to variations from the International Building Code. A variance pursuant to RZC 21.76, *Review Procedures*, is required for variations from applicable zoning regulations not described in this section.
3. The special exceptions provided in this section do not apply to a request to locate a proposed antenna support structure in the Urban Recreation, RA-5, or R-1 zone or within the shoreline areas of the City or to exceed the height limit for a proposed antenna support structure in any zone. Such requests shall be granted only through the conditional use permit process established under RZC 21.76.070.K, *Conditional Use Permit*.

C. Procedures.

1. A request for a Special Exception shall be processed in conjunction with the permit approving the Wireless Communication Facility and shall not require any additional application or fees. The final approval authority for granting of the Special Exception shall be the same as that for the permit approving the antenna(s) location.
2. Upon review of Special Exception requests, the approval authority shall consider first those standards having the least effect upon the resulting aesthetic compatibility of the antenna(s) or tower with the surrounding environment. The approval authority shall review setback, size, screening requirements, and height limits.

**Conclusions Based on Findings:**

***A. Conditional Use Permit***

1. The proposed conditional use is consistent with the applicable provisions of the Redmond Zoning Code and the Redmond Comprehensive plan.
  - a. With the exception of tower height (addressed in conclusion B below), the application materials demonstrate compliance with use-specific standards applicable to WCFs. Developed with existing utilities including communications facilities, the subject property is a highest ranking site with regard to WCF location standards. No signage is proposed on the tower. The tower is located well outside all required zoning setbacks. Conditions would ensure that the construction drawings and building plans include the certification required addressing wind and seismic loads. The tower and antennas would be painted a dark green color with a non-reflective finish to blend visually with the surrounding evergreen trees, and the antennas would be mounted as close as possible to the tower. In addition to retention of the majority of mature trees surrounding the lease area, the proposal would provide additional perimeter landscaping along the south, east, and west sides of the lease area, which would be enclosed by a six-foot tall chain link fence fitted with sight-obscuring green vinyl slats, providing adequate screening. The Applicant conducted a thorough and approved community outreach program. Compliance with the requirements of RMC 21.14, Telecommunications, and with RZC 21.56.020.D, requiring

removal upon cessation of use, would be ensured through conditions of approval. *Findings 4, 6, 7, 8, 9, 10, 13, 14, 15, 16, and 20.*

- b. The Applicant has demonstrated compliance with the City's tree conservation ordinance. Both tree retention and tree replacement exceed the minimum thresholds. Conditioned to comply with the recommendations of the critical areas study related to Pileated woodpecker foraging habitat, the project would comply with the City's critical areas ordinance. Conditions would ensure compliance with stormwater management and wellhead protection zone standards. *Findings 4, 17, 18, 19, and 20.*
  - c. The proposed conditional use is consistent with the applicable provisions of the Comprehensive Plan. The proposed emergency response tower is complementary and use with residential and other types of development allowed in the R-6 zone. Setbacks from property boundaries dramatically exceed the minimum required. The project location is set next to existing utilities and amongst dense mature evergreen trees. This 'capital' facility is needed locally to improve emergency response times, and is also a necessary part of the wider regional emergency response network. The application materials adequately justify both the need for the tower and its proposed location. The Applicant conducted a thorough community outreach program. The record demonstrates the tower as proposed would comply with all FCC guidelines regarding human exposure to radiofrequency radiation. Approval would benefit Education Hill and the wider Redmond region by enhancing emergency response times, benefitting public health and safety for an anticipated project life of 20 years. *Findings 3, 4, 6, 8, 9, 10, 12, 13, and 21.*
2. The project would be compatible with the existing uses on the site and, as proposed, exceeds all setback, lot coverage, impervious surface area, and open space requirements for the R-6 zone. The excess tower height, again, is addressed in Conclusion B below; however, relevant here is that the tower's height would be mitigated by dark green paint, close-mounted antennae, placement among trees, a privacy-slatted fence around the lease area, and additional plantings. *Findings 4, 6, 7, 8, and 20.*
  3. The location, size, and height of the structures, fence, and screening vegetation would have no impact off-site. All improvements would be substantially setback from property boundaries. *Findings 6 and 7.*
  4. There are no unusual hazards or characteristics of the use that would affect off-site properties or other on-site uses. Its operation would at all times comply with City noise standards. The record shows it would comply with applicable FAA and FCC requirements. *Findings 6, 7, 9, 11, and 12.*
  5. The WCF would generate negligible traffic volumes after construction. The facility would access from 172<sup>nd</sup> Avenue NE by a new 15-foot wide gravel access road without affecting other traffic. Access to and from the site would be restricted to authorized

personnel; however, the subject property is not used by the public for recreation and lack of access would not alter any pedestrian routes. *Findings 4, 6, and 10.*

6. Electricity would be extended to the lease area to serve the WCF. The record shows no negative impact to public or private utilities, excess transportation facilities demands, or other negative public impacts. The WCF would significantly improve emergency response in the area, resulting in a net benefit to public health and safety. *Findings 3, 6, 8, and 10.*

### ***B. Special Exception***

1. The record amply demonstrates justification for placing the proposed WCF in the R-6 zone. The submitted microwave path survey report included several coverage maps demonstrating the need to locate the facility in, and specifically on top of, Education Hill. In order to establish effective microwave paths, line of sight without obstruction is required. The nearest non-residentially zoned areas are all off the hill, meaning the hill itself would become an obstruction reducing effectiveness of the facility. The subject property serves as an ideal location to connect the Norway Hill and Tolt Reservoir facilities, creating a critical link in the radio communications network. Placing the WCF in another zoning district would necessitate multiple additional towers to avoid the shadow created by Education Hill. *Findings 5, 6, 7, and 8.*
2. The application materials demonstrate that care has been taken to minimize negative visual impacts on adjacent or nearby residential and recreational uses. The site currently supports existing wireless communication facilities and water tanks, so the proposal would blend with these. The site is heavily treed, providing natural screening of the proposed tower and antennas which will be painted a dark green color with a non-reflective finish to blend in. The site is not used by the public for recreational activities. The antennas are proposed to be mounted as close as possible to the tower. A majority of the tower will also be screened by existing vegetation. *Findings 4, 5, 6, 7, 8, 10, 14, and 20.*
3. The 170-foot height of the tower was selected to retain facility function with anticipated tree growth over the next 20-years. The lease area would be adjacent to existing utilities and set back far in excess of minimum setback requirements from residential parcels. In addition to the color and antennae mounting choices, and siting the facility among tall trees, the project incorporates a chain link fence with privacy slats and additional landscaping around the exterior of the lease area, ensuring visual impacts are reduced to the extent possible. The Applicant's balloon test showed that the WCF would be screened by trees from most vantage points. *Findings 6, 7, 8, and 14.*
4. The improvement of emergency response times is a strong incentive for community acceptance of the facility. Of the 19 community outreach surveys returned, 14 were supportive. *Findings 3 and 13.*
5. The Applicant's site justification letter provided an evaluation of alternative sites. The Applicant completed an amplified public involvement process. *Findings 8, 13, and 14.*

**C. Site Plan Entitlement**

1. With the exception of height, the proposal complies with, and in fact greatly exceeds, all bulk dimensional standards of the R-6 zone. *Findings 5, 6, and 7.*
2. The proposal was reviewed for compliance with the requirements of the State Environmental Policy Act and a determination of non-significance was issued, which became final when no timely appeal was filed. *Findings 24 and 25.*
3. Notice of application, of SEPA determination, and of public hearing were provided in accordance with the notice requirements of the Redmond Zoning Code. *Findings 2, 22, and 26.*

**DECISION**

Based on the preceding findings and conclusions, the requested conditional use permit, special exception, and site plan entitlement to allow construction of a 170-foot tall monopole and associated equipment to provide radio communications for emergency responders throughout King County at 10365 - 172<sup>nd</sup> Avenue NE in Redmond, Washington are **APPROVED** subject to the following conditions:

**A. Site Specific Conditions of Approval**

The following table identifies those materials that are approved with conditions as part of this decision.

<b>Item</b>	<b>Date Received</b>	<b>Notes</b>
Plan Set, [pages 1-60]	3/22/17	<i>and as conditioned herein.</i>
SEPA Checklist	3/22/17	<i>and as conditioned herein and as conditioned by the SEPA threshold determination on May 15, 2017</i>
Stormwater Report	3/22/17	<i>and as conditioned herein.</i>

**The following conditions shall be reflected on the Civil Construction Drawings, unless otherwise noted:**

**1. Development Engineering - Transportation and Engineering**

**Reviewer: Andy Chow, Senior Transportation Engineer**

**Phone: 425-556-2740**

**Email: [kachow@redmond.gov](mailto:kachow@redmond.gov)**

- a. **Construction Restoration.** In order to mitigate damage due to trenching and other work on 172<sup>nd</sup> Ave NE, the asphalt street shall be planed, overlaid, and/or patched, as determined by the Traffic Operations and Safety Engineering Division in Public Works. Contact Rob Crittenden at 425-556-2838.

(Code Authority: RMC 12.08; Redmond Standard Specifications & Details; RZC 21 Appendix 2-A.8.e)

**b. Access Road Improvements**

- i. The utility access road must meet current City Standards which include asphalt paving [15 feet] edge to edge with hammerhead for turnaround. The minimum pavement section for the streets shall consist of:
- 7 inches HMA Class ½” PG 64-22
  - 4 inches of 1-1/4 inch minus crushed rock course per WSDOT Standard Spec 9-03.0(3)
  - Subgrade compacted to 95% compacted maximum density as determined by modified Proctor (ASTMD 1557)
  - Maximum 2% cross slope

(Code Authority: Redmond Standard Specifications & Details DG11)

**c. Access Improvements**

- i. The type and location of the proposed site accesses are approved as shown on the PSERN site plan prepared by C&G Engineering.

(Code Authority: RZC 21.52.030 (E); RZC 21 Appendix 2)

- ii. Direct access to NE 104<sup>th</sup> ST will not be permitted. This restriction shall be indicated on the face of the civil plans and other final documents.

(Code Authority: RZC 21.52.030 (E); RZC 21 Appendix 2)

- iii. The following driveway is required to be improved as specified below:

Project site access on 172<sup>nd</sup> Ave NE with standard Type “2” driveway per COR SD 306.

(Code Authority: RZC 21 Appendix 2)

**2. Development Engineering – Water and Sewer**

**Reviewer: Zheng Lu, Senior Utility Engineer**

**Phone: 425-556-2844**

**Email: [zlu@redmond.gov](mailto:zlu@redmond.gov)**

- a. Water Service.** Water service is not required for this project.  
(Code Authority: RZC 21.17)
- b. Sewer Service.** Sewer service is not required for this project.  
(Code Authority: RZC 21.17)

**3. Development Engineering – Stormwater/Clearing and Grading**  
**Reviewer: Cindy Wellborn, Senior Stormwater and Utility Engineer**  
**Phone: 425-556-2495**  
**Email: cwellborn@redmond.gov**

**a. Clearing and Grading.**

- i. Sheet flow dispersion shall be utilized for the paved or landscaped surfaces
- ii. Provide a 2-foot wide transition gravel zone between the edge of the paved surface and the downslope vegetation utilized for dispersion
- iii. Provide a Downspout Infiltration Trench, Downspout Infiltration Drywell, or Downspout Dispersion System for roof runoff from buildings. If none of these systems are feasible, then splashblocks may be used.
- iv. Splashblocks for roof downspouts shall discharge to a vegetated flowpath of at least 50 feet between the discharge point and any property line or structure
- v. A maximum of 700 square feet of roof area may drain to each splashblock
- vi. Place a splashblock or a pad of crushed rock (2 feet wide by 3 feet long by 6 inches deep) at each downspout discharge point.

(Code Authority: RMC 15.24.080)

**b. Temporary Erosion and Sediment Control (TESC).**

- i. Rainy season work permitted October 1<sup>st</sup> through April 30<sup>th</sup> with an approved Wet Weather Plan.

(Code Authority: RMC 15.24.080)

**4. Fire Department**

**Reviewer: Stan Noble, Deputy Fire Marshal**

**Phone: 425-556-2239**

**Email: snoble@redmond.gov**

The current submittal is generally adequate. The applicant shall obtain a Fire Installation permit for the installation of the Diesel tank (fuel for generator).  
(Code Authority: RMC 15.06; RZC Appendix 3, RFD Standards, RFDD&CG)

**4. Natural Resources – Wellhead Protections**

**Reviewer: Aaron Moldver, Environmental Scientist**

**Phone: 425-556-2756**

**Email: amoldver@redmond.gov**

- a. The Project lies within Well Head Protection Zone III. The applicant shall comply with Redmond Zoning Code 21.64.050, and comply with the applicable sections of the Stormwater Technical Notebook Issue Number 6, especially section 8.3 Stormwater Management in Wellhead Protection Zones.

- b. Protection Standards During Construction shall apply to the project (RZC 21.64.050(D)(f)(i-viii)).
- c. Fill Material must comply with the standards in RMC 15.24.080 and 15.24.095  
(Code Authority: RZC 21.64.010; RZC 21.64.050) RMC 13.07.100)

**5. Planning Department**

**Reviewer: Heather Maiefski, Planner**

**Phone: 425-556-2437**

**Email: hmaiefski@redmond.gov**

**a. Site Specific Conditions.**

1. Subject Site is located on Public Property - The proposed Antenna Support Structure shall be comply with RMC 12.14, Telecommunications. (Code Authority: RZC 21.56.020)
2. Wildlife Mitigation -
  - Retain snag if possible near clearing boundary and;
  - Move existing dead/down logs (intact to degree possible) to areas outside of lease area boundary and;
  - Provide three (3) new logs greater or equal to 15 inches in diameter and at least ten (10) feet in length, and place outside of lease area boundary and;
  - Clear during fall/winter months to avoid general avian species nesting periods. If clearing activity is to occur outside of fall/winter season a recommendation from a qualified wildlife biologist shall be required to permit clearing.

- b. **Tree Preservation Plan.** A Tree Preservation Plan depicting all significant and landmark trees required to be preserved as part of the site development must be provided with the civil construction drawings. A plan showing the location of preserved trees and containing protection language approved by the City shall be shown on the face of the deed or similar document and shall be recorded with the King County Department of Records and Elections.  
(Code Authority: RZC 21.72.060(D)(2))

- c. **Landscaping.** A final Landscape Plan incorporating the required replacement trees and depicting a Type I Solid Screen barrier around the perimeter of the ground equipment must be provided with the civil construction drawings. The sight barrier

is required to provide 80% sight-obscuring screen at time of planting. The plan shall identify proposed plantings at the base of the tower and around the ground equipment. A variety of native, drought tolerant species, including medium and tall shrubs, soil amendments and other planting related details shall be identified. A detailed Plan Schedule shall also be provided. (Code Authority: RZC 21.32)

**d. Antenna Support Structure.** The tower shall comply with the following standards:

1. The tower (including the antennas) shall not exceed 170' in height. All cable shall be routed through the inside of the tower. Exterior conduit, running up the sides of the tower shall not be permitted.
2. The proposed tower and antennas shall be painted a dark green color using a non-reflective finish in order to blend in with the surrounding tall evergreen trees. The antennas will be mounted as close as possible to the support structure.
3. The facility owner shall remove the tower and associated ground mounted equipment within 12 months of the date the facility ceases to be operational, or if the facility falls into disrepair and is not maintained. Disrepair includes structural features, paint, landscaping, or general lack of maintenance, which could result in safety or visual impacts. The conditions shall apply even in the event of ownership change of the facility.

**B. Compliance with City of Redmond Codes and Standards**

This approval is subject to all applicable City of Redmond codes and standards, including the following:

**Transportation and Engineering**

RMC 6.36:	Noise Standards
RZC 21.52:	Transportation Standards
RZC 21.40.010(E):	Design Requirements for Parking Facilities
RZC 21.54:	Utility Standards
RMC 12.08:	Street Repairs, Improvements & Alterations
RMC 12.12:	Required Improvements for Buildings and Development
RMC 12.16:	Highway Access Management
RZC 21.76.100(F)(9)(c)	Nonconforming Landscaping and Pedestrian System Area
RZC 21.76.020(G):	Site Construction Drawing Review
RZC 21.76.020(H)(6):	Preconstruction Conference
RZC 21.76.020(H)(7):	Performance Assurance

RZC Appendix 3: Construction Specification and Design Standards for Streets and Access  
City of Redmond: Record Drawing Requirements, July 2015  
City of Redmond: Standard Specifications and Details (current edition)

### **Water and Sewer**

RMC 13.04: Sewage and Drainage  
RMC 13.08: Installing and Connecting Water Service  
RMC 13.10: Cross-Connection and Backflow Prevention  
RZC 21.17.010: Adequate Public Facilities and Services Required  
RZC Appendix 4: Design Requirements for Water and Wastewater System Extensions  
City of Redmond: Standard Specifications and Details (current edition)  
City of Redmond: Design Requirements: Water and Wastewater System Extensions - January 2012.

### **Stormwater/Clearing and Grading**

RMC 15.24: Clearing, Grading, and Storm Water Management  
RZC21.64.060 (C): Planting Standards  
RZC 21.64.010: Critical Areas  
RZC 21.64.040: Frequently Flooded Areas  
RZC 21.64.050: Critical Aquifer Recharge Areas  
RZC 21.64.060: Geologically Hazardous Areas  
City of Redmond: Standard Specifications and Details (current edition)  
City of Redmond: Stormwater Technical Notebook, 2012  
Department of Ecology: Stormwater Management Manual for Western Washington (revised 2005)

### **Fire**

RMC 15.06: Fire Code  
RZC Appendix 3: Construction Specification and Design Standards for Streets and Access  
City of Redmond: Fire Department Design and Construction Guide 5/6/97  
City of Redmond: Fire Department Standards

### **Planning**

RZC 21.58-21.62: Design Standards  
RZC 21.32, 21.72: Landscaping and Tree Protection  
RZC 21.34: Exterior Lighting Standards  
RZC 21.38: Outdoor Storage and Service Areas  
RZC 21.40: Parking Standards  
RCZ 21.64: Critical Areas

**Building**

2012 International Building Codes (IBCs)  
2012 Uniform Plumbing Code  
2012 International Residential Code (IRC)

Decided August 22, 2017

By:



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Sharon A. Rice  
City of Redmond Hearing Examiner

Note: Pursuant to RZC 21.76.050.H, the Decision of the Hearing Examiner in this consolidated Type III permit process are appealable to the City Council, which would consider the appeal in a closed record appeal proceeding. The City Council's decision may be appealed to the King County Superior Court.