



TOWN OF JACKSON TOWN COUNCIL AGENDA DOCUMENTATION

PREPARATION DATE: SEPTEMBER 13, 2018
MEETING DATE: SEPTEMBER 17, 2018

SUBMITTING DEPARTMENT: PLANNING
DEPARTMENT DIRECTOR: TYLER SINCLAIR
PRESENTER: BRENDAN CONBOY

SUBJECT: **ITEM P18-164:** REQUEST FOR APPROVAL OF A CONDITIONAL USE PERMIT TO ALLOW A WIRELESS COMMUNICATIONS FACILITY ATTACHED TO THE RAFFERTY CENTER AT SNOW KING RESORT.

APPLICANT/OWNER: IRENE COOK, KAPPA CONSULTING, FOR VERIZON WIRELESS

REQUESTED ACTION

The applicant is requesting approval of a Conditional Use Permit to locate a wireless communications facility at the base of Snow King Resort in a “stealth” faux chimney on the Rafferty Center at 402 E. Snow King Ave.

APPLICABLE REGULATIONS

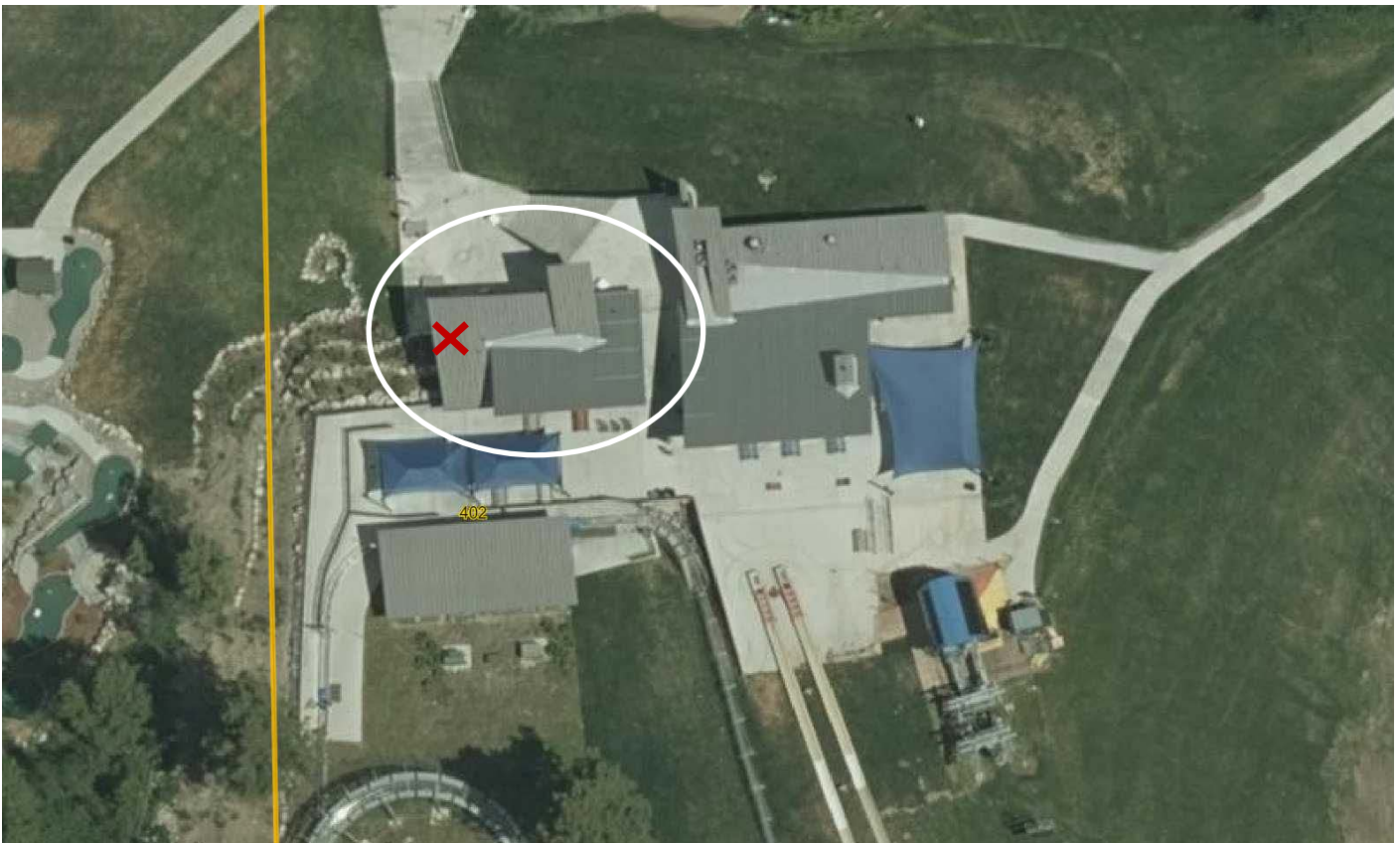
Section 4.3.2 Planned Resort-Snow King (PR-SK)
Section 6.1.10.D Wireless Communications Facilities
Section 8.4.2 Conditional Use Permit (CUP)

LOCATION

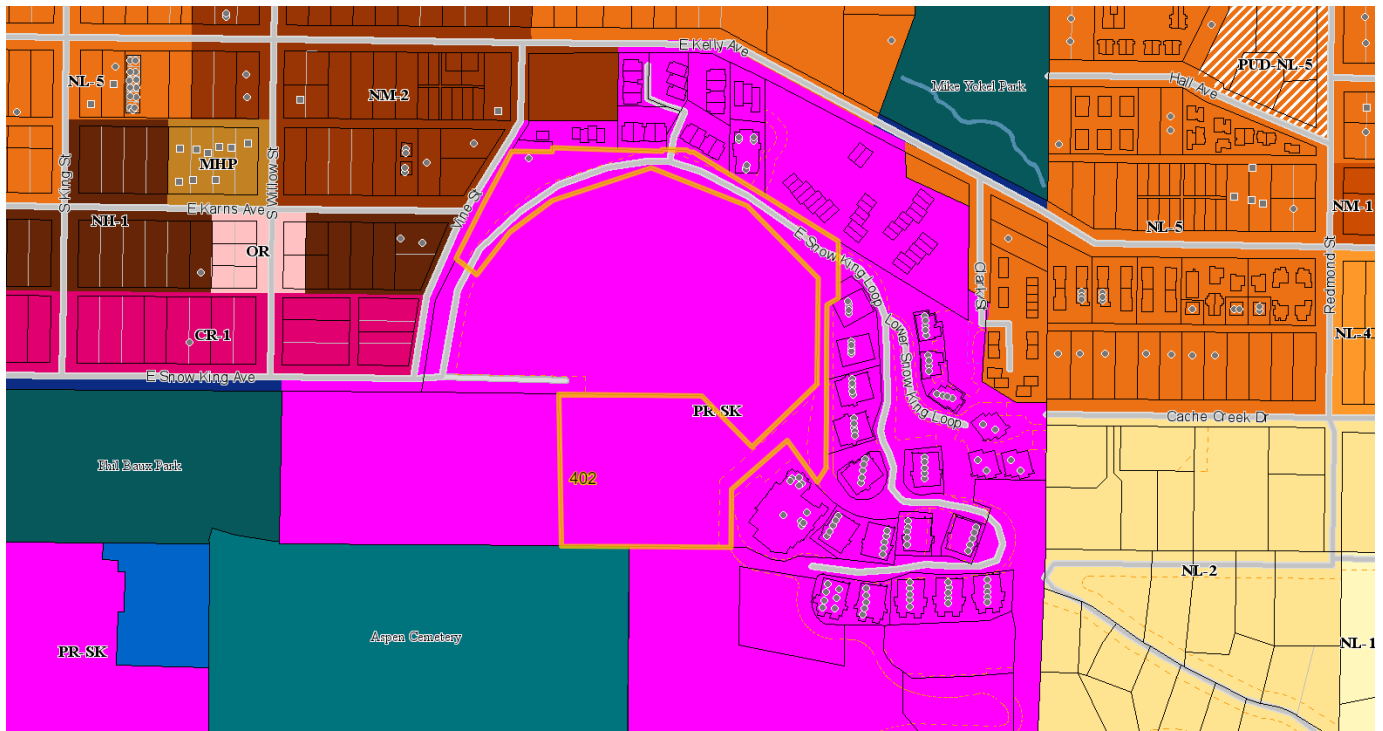
The subject property is addressed as 402 E. Snow King Ave and legally described as PT SE1/4NW1/4, SEC. 34, TWP. 41, RNG. 116. TRACT A (PER LOT DIVISION, MAP T-71-A). Aerial photos and a zoning map are shown on the following page showing the general location of the proposed site:



Rafferty Center circled in white



Rafferty Activity Center with location of proposed wireless facility denoted by red X
Note the separation between buildings.



BACKGROUND

The subject parcel is 5.3 acres (230,868 SF) and located in the Planned Resort – Snow King (PR-SK) zone. The parcel is almost entirely surrounded by PR-SK parcels, with portions of the parcel abutting the Public/Semi-Public (P/SP) zone to the south of the parcel (Aspen Cemetery), and Neighborhood High Density – 1 (NH-1), and Neighborhood Medium Density – 2 (NM-2) zones where the Snow King Loop Road parallels Vine Street. More specifically, the request is to affix the wireless facility to the western building of the Rafferty Center roof which is located at the base of the Snow King ski hill.

On January 4, 2017, the Jackson Town Council adopted amendments in the Land Development Regulations (LDRs) to modify the requirements for wireless communications facilities. The amendments were necessitated by changes in federal law that limited and defined the authority of local governments to regulate the permitting of wireless communications facilities. Through the amendments the Town set up two types of permits for all new proposed wireless facilities: 1) a Basic Use Permit for any facility that was an expansion of an existing approved wireless facility provided that it is not a “substantial change” over current conditions; and 2) a Conditional Use Permit for any proposed facility that is a new facility at a new location. The distinction between these two types of applications can be difficult and can involve the application of a variety of legal nuances embedded in the new federal law – such as what constitutes a “substantial change” or a “tower.” However, for the purposes of this application, all parties agree that this application requires a CUP as it would be a new wireless communications facility.

In addition, the Town’s new wireless standards require, among other things, that all new facilities a) be “stealth,” b) that the applicant justify the need for the new facility, c) the height of a rooftop facility be no more than 5’ above the existing roof, and d) that a stand-alone tower be no more than 30’ in height. Wireless facilities are allowed only in the Public/Semi Public (P/SP); Business Park (BP), Park and Open Space (P), and Planned Resort (PR) zones. This application is for a parcel in the Planned Resort – Snow King (PR-SK) zone. The practical effect of allowing wireless facilities in these limited zones is that the Town government has taken on the responsibility of needing to approve a certain number of these facilities in order to provide the public the level of wireless service required by federal law.

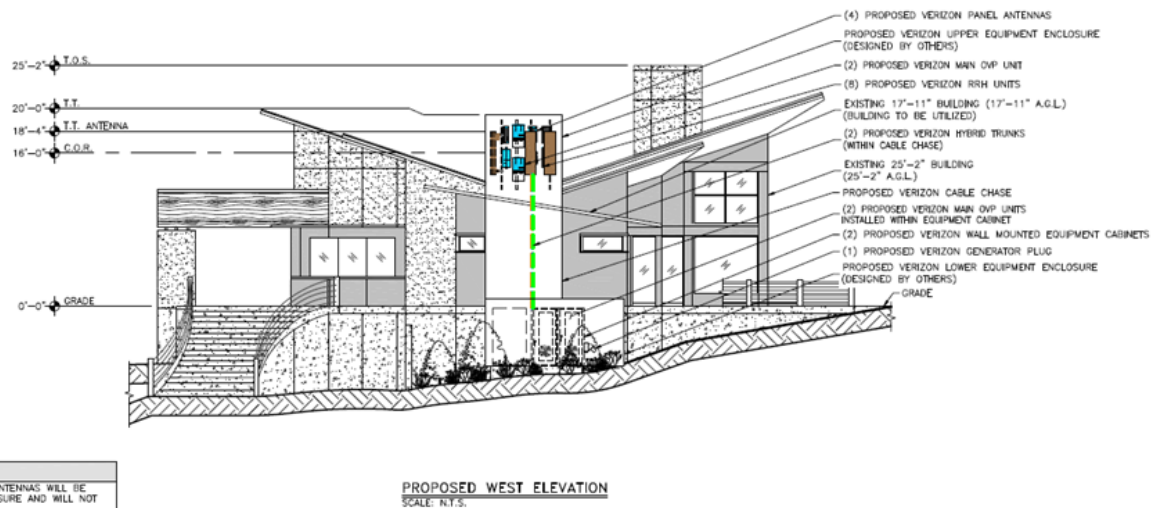
PROJECT DESCRIPTION

The applicant is requesting a Conditional Use Permit to construct a stealth wireless communications facility on the western building of the Rafferty Activity Center at Snow King Resort located at 402 East Snow King Avenue. The Rafferty Center is split into two separate buildings (see aerial image above). More specifically, the proposed facility will be located on the west side roof of the western building of Rafferty Activity Center building in a faux chimney that extends 2'-1" above the highest point on the roof of the structure to which it is affixed. This is in compliance with the requirement that no wireless facility extend more than 5' above the roof on which it is affixed.

The proposed faux chimney is meant to resemble the existing chimney on the eastern building of the Rafferty Center. Four (6)-foot antennas will be screened by radio frequency transparent material that matches the color and texture of the existing chimney on the east elevation. As proposed the chimney is 20' in height from the first level grade. The equipment enclosure is 9'-11" in height. The chimney is 29'-11" in height from grade, 8' wide by 5' long, and extends outwards from the building by 2'-6". The material for the faux chimney below roof level will not be the radio frequency transparent material but rather standard construction material which replicates the chimney on the east elevation. In response to the Design Review Committee's request, the applicant has extended the faux chimney from the foundation level on down to base grade to enclose and shield required and existing electronic equipment cabinets. This results in the faux chimney structure widening to 14'-6" at the base and extending outwards from the building 6' in order to enclose the wall mounted electronic equipment. The applicant has submitted revised site which show the elevation of the proposed base enclosure which are attached to this application.



A rendering of the proposed faux chimney with base elevation enclosure as approved by the DRC.



NOTE:
1. ALL PROPOSED EQUIPMENT AND ANTENNAS WILL BE INSIDE OF THE EQUIPMENT ENCLOSURE AND WILL NOT BE SEEN.

PROPOSED WEST ELEVATION
SCALE: R.T.S.

The proposed faux chimney western elevation with the separate east building rooflines flush in the background.

No new floor area will be added and no new driveways or access points are proposed as the main access point will be the existing roadway with 15' access easements granted over the lawn and pedestrian walkways. Verizon maintenance vehicles will park in the unpaved existing heavy equipment storage area at the base of the ski hill and no designated parking space is proposed as this is a unmanned site that will only require periodic visits. The proposed lease area is a 6' by 6' (36 SF) area at the base of the building adjacent to an existing 15' utility easement supplying existing power and conduit for fiber optic lines. An additional proposed 15' wide utility easement connects with the existing utility easement and runs southeast up the ski hill to connect with the other proposed stealth light pole antenna, item P18-163, located on the snow king ski hill adjacent to the coaster and the access road on Lot 59, Grand View Lodges, Third Addition. These are two separate applications due to the LDRs limiting one tower per legally created parcel of property. However the applicant has stated that the the two facilities work in tandem to achieve the coverage sought by the applicant. The primary purpose of the project is provide better 4G-LTE capacity in the downtown area of Jackson, especially during summer months when existing capacity is strained.

The applicant has provided a response to the Department Reviews which is attached to this report and portions of which are detailed in this report in the Staff Analysis section below.

STAFF ANALYSIS

The primary development standards that apply to CUP wireless communications facility are found in Sec. 6.1.10.D of the LDRs. Below staff has provided analysis of the primary standards.

Determination of Need (Sec. 6.1.10.D.3.f.ii.a))

The applicant is required to demonstrate that no existing facility or tower can accommodate the proposed use without causing impacts greater than the impacts caused by the proposed facility.

Complies: The applicant has provided a detailed explanation of the need for the proposed wireless facility. In summary, the applicant states that existing capacity for 4G-LTE is inadequate in downtown Jackson, especially during the busy summer months when the number of users on their network increases dramatically and the use of tablets and smartphones for data is a particular problem. The applicant further states that they have looked at other locations in the desired service area (e.g., Snow King Hotel) but that this is the best available site to avoid creating a substantially greater visual impact. Town Police Chief, Todd Smith, has stated with previous wireless applications that the Jackson Police Department relies on the Verizon network for its communications and that it has experienced slower speeds during the busy summer months. The

applicant has submitted coverage maps showing the existing coverage provided to the town of Jackson and the expanded coverage that the proposal will provide.

In addition, the applicant states that there is no existing facility, such as the Snow King Hotel rooftop site to collocate, which could accommodate Verizon Wireless' proposed use without causing a substantially greater visual impact. The applicant maintains that the Rafferty Activity Center is the best available location for the coverage area sought.

Stealth Requirement (Sec. 6.1.10.D.3.f.i)

All wireless facilities are required to be stealth. This means that the facility must be integrated into an existing structure that it is not visible or that it is designed so "that the purpose and nature of the Wireless facility is not readily apparent to the reasonable observer." The one exception is that a non-stealth facility (e.g., whip antenna) is allowed if it can be demonstrated that it would be less visually impactful than a stealth facility.

Complies. The proposed facility meets the standards for a stealth facility. The proposed design maintains composition with the Rafferty Center and is in proportion with the existing chimney on the east building of the Rafferty Center in terms of scale and massing. The proposed materials are in keeping with the existing design of the building. Please see the discussion below in the DRC section for more detail on this issue.

Design Review Committee (Sec. 6.1.10.D.3.d.ii)

All Wireless Communications Facility – Major uses shall be subject to review by the Design Review Committee (DRC) prior to submission of the Planning Commission. The DRC shall review such facilities for consistency with the stealth requirements in 6.1.10.D.3.f.

Complies. This application went before the DRC on July 11, 2018, and August 8, 2018. At the first DRC meeting the DRC continued the item and requested that the applicant:

- 1.) Revisit the mass of the proposed faux chimney and address the design of the chimney so that it extends all the way to the ground.
- 2.) Address/acknowledge the mechanical equipment beneath the faux chimney and how that relates to the chimney extending to the ground.

The DRC was concerned that the initially proposed chimney appeared to be floating irrespective of the actual base grade elevation, making the chimney appear out of place. As a result the DRC continued the item and asked the applicant to extend the chimney to the base elevation in order to better screen the mechanical equipment cabinets on the wall that would otherwise be unshielded and therefore make the structure appear to be an actual chimney.

The applicant responded to the DRC input by submitting two revised design options that showed the chimney extending beyond the first level and down to the ground elevation. Option A showed the base enclosure symmetrical with the chimney on either side, Option B showed the base enclosure aligned with the left edge of the chimney and extending to the right, as shown above in the rendering provided in the Project Description section. At the August 8, 2018, DRC hearing, the committee preferred option B and approved the design without conditions.

Height (Sec. 6.1.10.D.3.f.ii.c2))

The maximum height of a stand-alone tower for a Wireless Communications Facility is 30 feet, or 5' above the existing roof line for a roof-mounted facility

Complies. Because this is a roof-mounted facility that is shown as no more than 5' above the high point of existing roof line of the building to which it is affixed, the proposed facility meets the 5' height limit. The subject building has multiple sloping roof lines and roof planes. The highest point is 17'-11" above the first level grade. The proposed faux chimney is affixed to the roofline at 12' above first level grade and extends to 20' above grade making the structure approximately 8' tall where it is affixed to the roof. It is Staff's interpretation that this meets the intent of the 5' requirement for the highest point of the roofline as the proposed chimney structure will be 2'-1" above the highest point on the roof of the structure.

Collocation (Sec. 6.1.10.D.3.f.ii.13))

New towers shall be constructed to allow collocation of as many antenna arrays as feasible without causing interference, complying with height limits, and not defeating stealth elements.

Complies: The applicant has stated in their response to Department Reviews that it is their opinion that the site is not a tower and thus not subject to collocation requirements, however according to the Legal department this wireless facility is considered a tower. The LDRs define a tower as:

Any structure built for the sole or primary purpose of supporting any FCC-licensed or authorized antennas and their associated facilities, including structures that are constructed for wireless communications services including, but not limited to, private, broadcast, and public safety services, as well as unlicensed wireless services and fixed wireless services such as microwave backhaul, and the associated site.

Nonetheless, the applicant has stated that collocation is not practical as the requirement provides that new towers be constructed to accommodate as many antenna arrays as feasible without causing interference, subject to height limits, stealth facility requirements and concealment elements. The applicant submits that no additional antenna arrays would be feasible given the design of the proposed concealment element. It is Staff's opinion that any expansion of the chimney beyond what is proposed to collocate additional antennae on site would change the Stealth-Designed Facility or alter a Concealment Element such that the modified facility would result in the facility no longer being as effectively concealed/disguised, or blending in with the surrounding architecture, and the purpose or nature of the facility would likely become readily apparent to a reasonable observer. Thus, rather than 'over-sizing' the stealth chimney now to accommodate another possible carrier in the future (which may never come), the better option is to approve a smaller stealth structure now.

Noise (Sec. 6.1.10.D.3.f.ii.k))

All noise coming from a Wireless facility must comply with the standards in Sec. 6.4.3 Noise, that provides limits on allowed decibels (DBA) in different zones. The PR-SK zone has a maximum noise level of 65 DBA as measured from the property line. Emergency generators are exempt from this standard.

Complies. The applicant's submittal states that there is very little noise expected from the proposed electrical equipment and that the manufacturer does not provide noise specifications because the amount of noise is so minimal. Regardless, the Town reserves it right to enforce the noise limitations in the LDRs in the event that the proposed facility is proven to be in violation.

Landscaping (Sec. 6.1.10.D.3.f.ii.f))

Complies. The Rafferty Center has existing landscaping in place and there is no place to put additional landscaping on the site when the structure is installed. The removal of and replacement of any landscaping by the applicant shall be addressed at Building Permit submittal. In addition, the applicant intends to install the fiber optic line by boring, not trenching, and minimal surface disturbance is anticipated. The applicant will apply for any necessary grading and erosion control permits and comply with all requirements of said permits.

Visibility (*Sec. 6.1.10.D.3.f.ii.l*)

Complies. The antennas will be screened and contained within the faux chimney behind radio frequency transparent material that matches and replicates the existing chimney on the east building of the Rafferty Center.

All other standards in Sec. 6.1.10.D

There are a number of additional standards in Sec. 6.1.10.D that address requirements for application submittal, landscaping, setbacks, signage, lighting, access, visibility, and security. These standards are either met as part of this application (e.g., application submittal, access, security), will be met in the future at the building permit stage (e.g., landscaping), or do not apply to this particular application (setbacks, signage, lighting,). The proposed application, therefore, complies with each of these standards, as applicable to this project.

PLANNING COMMISSION

The applicant appeared before the Planning Commission on September 5, 2018, and received unanimous approval. The commission discussed the proposed locations of both item P18-163 and P18-164 seeking clarification on why the two locations were selected and whether there was a more appropriate location for the proposed facilities. The applicant provided an overview regarding the availability of locations in town which could accommodate wireless facilities based upon conformance with zoning, interference from topography, and space to collocate on existing facilities, stating that the proposed facilities at the Rafferty Center and on the Snow King ski hill are the best possible sites that could be utilized without creating a substantially greater visual impact. In addition, the Planning Commission sought guidance on their ability to respond to the possible health effects of the wireless facilities on the public in regards to public comment concerning radiofrequency radiation. Assistant Town Attorney Lea Colasuonno addressed the Commission and described the federal regulations which supersede local jurisdictions' ability to deny wireless facilities based upon health concerns so long as the application complies with the acceptable radiofrequency radiation limits adopted by the Federal Communications Commission. Ms. Colasuonno explained that what was within the Commission's purview was the location, stealthing, height, and other standards identified in Sec 6.1.10.D of the Land Development Regulations.

PUBLIC COMMENT

The Planning Department has received written public comment from Ms. Judith Campbell, MD, a resident/owner of 537 Snow King Loop #3770, in opposition to the proposed wireless facility at the Rafferty Center. The submitted letter which is attached to this report was also signed by Mr. Peter Witteveld, also of 537 Snow King Loop #3770, Ms. Jennifer M. Chopp of 537 Snow King Loop #3750, and Ms. Brenda Hisey of 536 Snow King Loop #3610. The letter presents concern for the proximity of the proposed facility and exposure to radiation and provides additional information from the matter attached to the letter.

At the Planning Commission Hearing Mr. John Hisey, a Snow King resident, provided comment regarding the safety and health aspects of wireless facilities in regards to radiofrequency radiation. Mr. Christian Grupp provided comment in support of the benefits of expanded wireless coverage in the town for residents and visitors alike. Mr. Martin Haggard provided comment in support of expanded coverage in the town related his experience with wildfires in California and the reliance of first responders upon wireless communications to help evacuate afflicted communities.

LEGAL REVIEW

Complete.

ATTACHMENTS

Applicant Submittal
Applicant's Response to Departmental Reviews
Departmental Reviews
Public Comment

STAFF FINDINGS

Pursuant to Section 8.4.2.C (Conditional Use Permit Standards) of the Land Development Regulations, the following findings shall be made for the approval of a Conditional Use Permit.

1. ***Compatibility with Future Character.*** *The proposed Conditional Use shall be compatible with the desired future character of the area.*

Subarea 2.1 Snow King Resort: This TRANSITIONAL Subarea is currently subject to the Snow King Resort Master Plan. The plan seeks to create a vibrant mixed use resort complex, including a multi-faceted conference/convention center and community facility that contributes to the economy of Downtown and also serves as a permeable border between the Town and Snow King Mountain. The resort has long been an integral part of the community, playing the role of the "Town Hill", providing a host of winter and summer recreational amenities.

In the future, the subarea will complement Downtown (Subarea 2.3) lodging and tourist amenities. Lodging will be provided in a variety of types and forms from hotel rooms to condominiums, in order to support the local tourism based economy. The size and scale of structures will often be larger than those typically allowed in other subareas of Town, as resorts typically require a larger critical mass necessary to support visitor functions. Though buildings will tend to be larger than in other districts, the subarea will maintain an abundance of open space in relation to the built environment as a key to a successful resort experience.

Consistent with the master plan, Snow King Avenue will be developed into a mixed use corridor that includes a variety of commercial uses while still serving as a major transportation corridor in the community. Along with this it will be important to create a more visible and attractive base area along Snow King Avenue to attract residents and visitors to the many amenities and recreational opportunities found there.

Complies. Staff finds that the project is consistent with the above described visions for Subarea 2.1 because it will increase the level of cellular service in East Jackson and at Snow King Resort where tourists need access to internet service to make travel plans, find businesses, and safely visit Jackson. Local businesses and residents also share the need for reliable internet service.

In addition, staff has analyzed this application for consistency with the Policy Objectives for District 2. Town Commercial Core as follows:

Common Value 1: Ecosystem Stewardship

Not applicable.

Common Value 2: Growth Management

Policy 4.1.b: Emphasize a variety of housing types, including deed-restricted housing (District 2)

Not applicable.

4.1.d: Maintain Jackson as the economic center of the region

Complies. The proposed project will provide improved cellular service to visitors, businesses, residents, and emergency services in the heart of downtown Jackson. Doing so will help to increase the vitality of downtown Jackson and maintain it as the economic center of the region.

4.2.c: Create vibrant walkable mixed use subareas

Complies. The provision of increased mobile cellular services will increase the availability of wireless services to more parts of downtown Jackson and make our outdoor spaces, such as sidewalks, more vibrant places. This will also reduce dependency on connections to private servers that are usually located inside businesses and other buildings.

4.2.d: Create a Downtown Retail Shopping District

Not applicable.

4.2.f: Maintain lodging as a key component in the downtown

Not applicable.

4.4.b: Enhance Jackson gateways

Not applicable.

Policy 4.4.d: Enhance natural features in the built environment

Not applicable.

Common Value 3: Quality of Life

Policy 5.2.d: Encourage deed-restricted rental units

Not applicable.

6.2.b: Support businesses located in the community because of our lifestyle

Complies. The availability of high-quality wireless communications in a geographically remote location like Jackson will enable many residents to pursue business opportunities based on our area's many unique natural and cultural amenities.

6.2.c: Encourage local entrepreneurial opportunities

Complies. The availability of high-quality wireless communications in a geographically remote location like Jackson will enable many residents to pursue business opportunities based on our area's many unique natural and cultural amenities.

6.3.a: Ensure year-round economic viability

Complies. The proposed project will help resolve a current deficit in summer-time wireless capacity that will help make the summer season a better experience for visitors and enable them to maximize their participation in the local economy while they are here.

7.1.c: Increase the capacity for use of alternative transportation modes

Not applicable.

2. ***Use Standards.*** *The proposed Conditional Use shall comply with the use specific standards of Division 6.1.*

Complies. The proposed request complies with all the standards in Sec. 6.1.10.D, as demonstrated in the Staff Analysis above in this staff report.

3. ***Visual Impacts.*** *The design, development, and operation of the proposed Conditional Use shall minimize the visual impact of the proposed use on adjacent lands.*

Complies. Staff finds that the proposed project will have minimal visual impacts on adjacent lands due to the stealth design of the wireless facility. The project has been modified to be consistent with the recommendations of the DRC which make the facility look more natural and integrated into the existing design and existing chimney present at the Rafferty Center.

4. ***Minimizes adverse environmental impacts.*** *The development and operation of the proposed Conditional Use shall minimize adverse environmental impacts.*

Complies. Staff finds that the proposed wireless facility will not have any significant adverse impacts to wildlife habitat, water or air quality, or any other environmental resources.

5. ***Minimizes adverse impacts from nuisances.*** *The development and operation of the proposed Conditional Use shall minimize adverse impacts from nuisances.*

Complies. Staff finds that the proposed wireless facility will not have any significant adverse impacts from nuisances, such as noise, light, vibration, dust, etc.

6. ***Impact on Public Facilities.*** *The proposed Conditional Use shall not have a significant adverse impact on public facilities and services, including transportation, potable water and wastewater facilities, parks, schools, police, fire, and EMT facilities.*

Complies. Staff finds that the proposal will have no significant adverse impact on public facilities.

7. ***Other Relevant Standards/LDRs.*** *The development and operation of the proposed Conditional Use shall comply with all standards imposed on it by all other applicable provisions of the LDRs and all other Town Ordinances.*

Complies. Staff finds that the proposed use, as conditioned, complies with other provisions of the LDRs and with all other Town Ordinances.

8. ***Previous Approvals.*** *The proposed Conditional Use shall be in substantial conformance with all standards or conditions of any prior applicable permits or approvals.*

Complies. There are no previous permits or approvals.

RECOMMENDATIONS / CONDITIONS OF APPROVAL

The Planning Director and the Planning Commission recommend **approval** of a request for a Conditional Use Permit (CUP) to construct a wireless communications facility on the west building of the Rafferty Center located at 402 East Snow King Avenue, subject to the department reviews attached hereto and the following condition of approval:

1. The lessee shall maintain the stealth Wireless Communication Facility as often as necessary and at its sole expense to ensure that the stealth elements remain in their approved condition such that they continue to i) blend in with the surrounding nature and architecture, ii) ensure that the presence, purpose and nature of the Facility are not readily apparent to a reasonable observer, and iii) provide stealth benefits in light of the weathering and aging of the stealthing material and the building to which it is attached.

SUGGESTED MOTIONS

Based upon the findings as presented in the staff report and as made by the applicant for Item P18-164, I move to make findings 1-8 as set forth in Section 8.4.2.C (Conditional Use Permit Standards) of the Land Development Regulations relating to 1) Compatibility with Future Character; 2) Use Standards; 3) Visual Impacts; 4) Minimizes adverse environmental impact; 5) Minimizes adverse impacts from nuisances; 6) Impact on Public Facilities; 7) Other Relevant Standards/LDRs; and 8) Previous Approvals for a Conditional Use Permit and approve a wireless communications facility on the Rafferty Center located at 402 East Snow King Avenue, subject to the department reviews attached hereto and the following condition of approval.

1. The lessee shall maintain the stealth Wireless Communication Facility as often as necessary and at its sole expense to ensure that the stealth elements remain in their approved condition such that they continue to i) blend in with the surrounding nature and architecture, ii) ensure that the presence, purpose and nature of the Facility are not readily apparent to a reasonable observer, and iii) provide stealth benefits in light of the weathering and aging of the stealthing material and the building to which it is attached.



PLANNING PERMIT APPLICATION
Planning & Building Department
Planning Division

150 E Pearl Ave. | ph: (307) 733-0440
P.O. Box 1687 | fax: (307) 734-3563
Jackson, WY 83001 | www.townofjackson.com

For Office Use Only

Fees Paid _____
Check # _____ Credit Card _____ Cash _____
Application #s _____

PROJECT.

Name/Description: WY3 SK COASTER 2
Physical Address: 204 E. SNOW KING AVENUE
Lot, Subdivision: PLEASE SEE LEGAL DESCRIPTION ATTACHED PIDN: 22-41-16-34-2-00-014

OWNER.

Name: SNOW KING MOUNTAIN RESORT. LLC Phone: 307-734-3351
Mailing Address: 575 S. WILLOW STREET, JACKSON, WY ZIP: 83001
E-mail: ryan@snowkingmountain.com

APPLICANT/AGENT.

Name: IRENE COOKE Phone: 970-531-0831
Mailing Address: 800 PEARL STREET #907, DENVER, CO ZIP: 80203
E-mail: irene@ireneco.com

DESIGNATED PRIMARY CONTACT.

____ Owner ☒ Applicant/Agent

TYPE OF APPLICATION. Please check all that apply; see Fee Schedule for applicable fees.

Use Permit	Physical Development	Interpretations
____ Basic Use	____ Sketch Plan	____ Formal Interpretation
<input checked="" type="checkbox"/> Conditional Use	____ Development Plan	____ Zoning Compliance Verification
____ Special Use		
Relief from the LDRs	Development Option/Subdivision	Amendments to the LDRs
____ Administrative Adjustment	____ Development Option Plan	____ LDR Text Amendment
____ Variance	____ Subdivision Plat	____ Zoning Map Amendment
____ Beneficial Use Determination	____ Boundary Adjustment (replat)	____ Planned Unit Development
____ Appeal of an Admin. Decision	____ Boundary Adjustment (no plat)	

PRE-SUBMITTAL STEPS. Pre-submittal steps, such as a pre-application conference, environmental analysis, or neighborhood meeting, are required before application submittal for some application types. See Section 8.1.5, Summary of Procedures, for requirements applicable to your application package. If a pre-submittal step is required, please provide the information below. If you need assistance locating the project number or other information related to a pre-submittal step, contact the Planning Department. **If this application is amending a previous approval, indicate the original permit number.**

Pre-application Conference #:	<u>P16-129</u>	Environmental Analysis #:	<u></u>
Original Permit #:	<u></u>	Date of Neighborhood Meeting:	<u></u>

SUBMITTAL REQUIREMENTS. Twelve (12) hard copies and one (1) digital copy of the application package (this form, plus all applicable attachments) should be submitted to the Planning Department.. Please ensure all submittal requirements are included. The Planning Department will not hold or process incomplete applications. Partial or incomplete applications will be returned to the applicant.

Have you attached the following?

- ☒ **Application Fee.** Fees are cumulative. Applications for multiple types of permits, or for multiple permits of the same type, require multiple fees. See the currently adopted Fee Schedule in the Administrative Manual for more information.
- ☒ **Notarized Letter of Authorization.** A notarized letter of consent from the landowner is required if the applicant is not the owner, or if an agent is applying on behalf of the landowner. If the owner is a partnership or corporation, proof that the owner can sign on behalf of the partnership or corporation is also required. Please see the Letter of Authorization template in the Administrative Manual for a sample.
- ☒ **Response to Submittal Checklist.** All applications require response to applicable review standards. These standards are outlined on the Submittal Checklists for each application type. If a pre-application conference is held, the Submittal Checklists will be provided at the conference. If no pre-application conference is required, please see the Administrative Manual for the applicable Checklists. The checklist is intended as a reference to assist you in submitting a sufficient application; submitting a copy of the checklist itself is not required.


FORMAT.

The main component of any application is demonstration of compliance with all applicable Land Development Regulations (LDRs) and Resolutions. The submittal checklists are intended to identify applicable LDR standards and to outline the information that must be submitted to sufficiently address compliance with those standards.

For some submittal components, minimum standards and formatting requirements have been established. Those are referenced on the checklists where applicable. For all other submittal components, the applicant may choose to make use of narrative statements, maps, drawings, plans and specifications, tables and/or calculations to best demonstrate compliance with a particular standard.

Note: Information provided by the applicant or other review agencies during the planning process may identify other requirements that were not evident at the time of application submittal or a Pre-Application Conference, if held. Staff may request additional materials during review as needed to determine compliance with the LDRs.

Under penalty of perjury, I hereby certify that I have read this application and associated checklists and state that, to the best of my knowledge, all information submitted in this request is true and correct. I agree to comply with all county and state laws relating to the subject matter of this application, and hereby authorize representatives of Teton County to enter upon the above-mentioned property during normal business hours, after making a reasonable effort to contact the owner/applicant prior to entering.

<u></u>	<u>5/16/18</u>
Signature of Owner or Authorized Applicant/Agent	Date
<u>IRENE COOKE</u>	<u>AGENT</u>
Name Printed	Title

**VERIZON WIRELESS WY3 SK COASTER 2
LEGAL DESCRIPTION**

A Tract of Land located in the NW¼ of Section 34, Township 41 North, Range 116 West, 6th P.M., Town of Jackson, Teton County, Wyoming, being more particularly described as:

Tract A as shown on Map T-71-A as recorded in the Office of the Teton County Clerk

EXCEPTING THEREFROM: that portion of Said Tract A shown and described on Map T-71-E as recorded in Said Office as "parcel to be transferred from Snow King Resort, Inc., to SK Land LLC" and

FURTHER EXCEPTING THEREFROM: that portion of Lot 37 of Grand View Lodges Addition to the Town of Jackson, Plat No. 1156 as recorded in Said Office lying within Said Tract A.

FURTHER EXCEPTING THEREFROM: That portion of Lot 20 of Love Ridge Lodge Homes Fourth Addition to the Town of Jackson, Plat No. 1103 as recorded in Said Office lying within Said Tract A.

KAPPA CONSULTING

REPRESENTING

Verizon Wireless (VAW) LLC, d/b/a Verizon Wireless

APPLICATION FOR CONDITIONAL USE PERMIT

PROJECT INFORMATION:

Applicant Information: Verizon Wireless (VAW) LLC d/b/a/ Verizon Wireless, 3131 South Vaughn Way, Aurora, CO 80014

Applicant's Agent: Leasing and Zoning Consultant, Kappa Consulting LLC, Irene Cooke, 800 Pearl Street #907, Denver, CO 80203; (970) 531-0831

Structure Owner Information: Snow King Mountain Resort, Ryan Stanley, 575 S. Willow Street, Jackson, WY 83001; (307) 734-3351

Engineering Firm Preparing Site Plan: J5 Infrastructure Partners, Josh Malberg, 767 N. Star RD, Star, ID 83669; (801) 336-4694 Ext.170

Name of Project: Verizon Wireless WY3 SK COASTER 2

Address of Project: 402 E. Snow King Avenue, Jackson, WY 83001
(Assessor Parcel No. 22-41-16-34-2-00-014)

ZONING REGULATIONS:

This application is submitted pursuant to Sec. 6.1.10.D of the Town of Jackson Land Development Regulations regarding Wireless Telecommunications Facilities complies with all regulations set forth therein. On January 17, 2017, a pre-application conference with Bob Nevins provided direction for this conditional use permit application, including the items addressed below. Originally, this project contemplated one conditional use permit; however, due to topography constraints, it was necessary to propose 2 different locations at the base of the Snow King Mountain Resort. The project will require 2 different conditional use applications. This application, "WY3 SK Coaster 2," addresses the project on the above referenced parcel where Verizon Wireless proposes to add a "stealth" chimney to the existing Rafferty Activity Center at the Snow King Mountain Resort to conceal panel antennas and equipment. A separate application is being submitted concurrently for the other location; that application proposes to replace an existing light pole near the coaster track on the ski hill at the Resort on a separate parcel.

The enclosed application form and associated materials are in compliance with the requirements of Sec. 6.1.10.D.3 – Standards for Wireless Facility Permits. Subsection 6.1.10.D.3.d outlines Standards for Wireless Facility Conditional Use Permits. Pursuant to this subsection, the following are required:

- i) The Application form is signed by the Applicant;
- ii) A Letter of Authorization signed by Snow King Mountain Resort (please note that the ownership entity has changed in the time since the date of the pre-application submittal);
- iii) Detailed site plans are consistent with the Administrative Manual;
- iv) Fall zone certification does not apply, as this is not a new tower;
- v) Documentation providing compliance with American National Standards Institute (ANSI) standards for electromagnetic radiation has been provided (letter from Travis Griffin);
- vi) Affirmation in a written statement that the proposed facility complies with FCC regulations has been provided (letter from Travis Griffin);
- vii) Affirmation in a written statement that the new Base Station will comply with all non-discretionary structural, electrical, energy, building, and safety codes has been provided (letter from Jennifer Sedillo).

PROJECT DESCRIPTION:

Request and Justification: Verizon Wireless (“VZW”), the nation’s largest wireless telecommunications provider with over 109 million subscribers, has, through extensive testing and customer complaints, determined that delivery of wireless coverage and capacity in the Town of Jackson is not optimal. Since 2013, VZW has been attempting to improve coverage and capacity for 4G-LTE service in the Town of Jackson.

Particularly during the busy summer tourist season, there is an alarming depletion of capacity in the Town. Why is this happening? The short answer is that smartphones and tablet devices usage has grown exponentially in the past few years. These devices require large amounts of data to transmit the videos, photos, emails, downloaded “apps” and other uses that have become such a part of daily life. In North America, the average household has multiple connected devices, with smartphones outnumbering tablets 6 to 1. When those households travel to Jackson for vacations, the devices go with them!

To address the demand for increased capacity, VZW proposes to develop a several new facilities in the Town of Jackson. VZW is committed to serving its customers and the community as a whole by providing the optimum level of service. In a letter to Jackson Planning Director Tyler Sinclair dated March 17, 2017, Police Chief Todd Smith noted that the Jackson Police Department relies on VZW for its communications and that the Police Department has experienced slower speeds in its communications platforms during busy summer months. This is an example of the lack of

capacity in the VZW Jackson network and illustrates the need to provide increased capacity for the benefit of public safety.

VZW is mandated by the FCC to provide wireless communication services for the benefit of the public good. This mandate requires the development of communication sites to provide the service. Adequate service to the residents and visitors in this vicinity cannot be maintained without the proposed facility.

In a presentation to the Jackson Town Council on March 21, 2016, VZW representatives explained the need for additional sites in several locations in the Town. With the increasing demand for 4G-LTE capacity, users have experienced periods of less than optimal service. In response, VZW is planning 4 new sites in the Town of Jackson to meet this demand. There are currently 2 sites serving the Town, one at the top of the Snow King Resort and another at a storage facility near the intersection of U. S. Hwy. 189 and Teton Pass Road (see Figure 1, below).

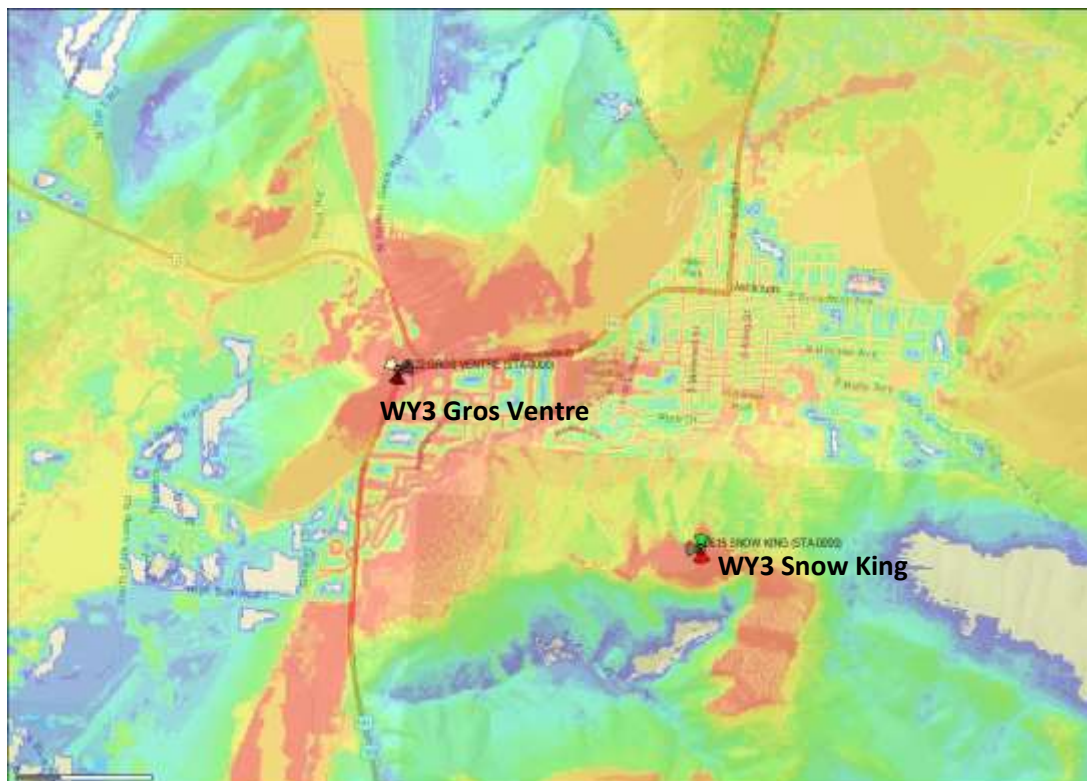


Figure 1: Existing VZW Sites

These 2 existing sites have provided coverage for the Town for several years, meaning that the signals from these sites reach most areas of the Town. However, there is a distinction between coverage and capacity. Although a site may provide coverage (i.e., one can make a cell phone call), there may not be sufficient capacity to provide 4G-LTE service to a large area (i.e., sufficient capacity to allow for operation of more sophisticated applications and services available on newer

devices). Therefore, multiple new sites are needed to supply the required capacity in various areas of Town.

Last year, a new site located at the Town Parking Garage, “WY3 Cutthroat,” received zoning approval and construction is scheduled for 2018. In February 2018, Town Council approved the application for the “WY3 Herbie” project, a stealth installation in the parking lot at 610 E. Broadway Avenue. VZW also plans to develop a new site, “WY3 Summit,” on High School Road, collocating on the existing tower at Colter Elementary School. Figure 2, below, illustrates the locations of the existing and proposed sites:

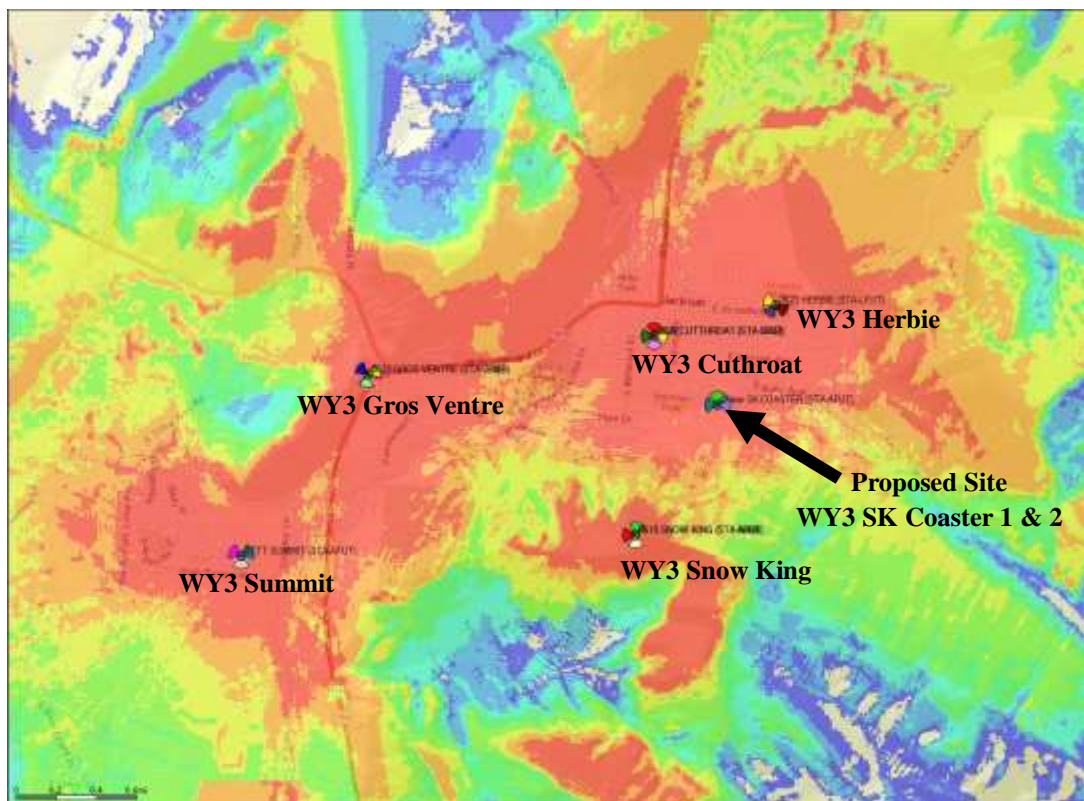


Figure 2: Existing and Proposed VZW Sites

Alternate Sites Considered: Although there are existing wireless communication antennas visible on the roof of the Snow King Hotel north of the proposed site, there are no existing facilities or towers in the area designated by VZW RF engineers which can accommodate the proposed facility without creating a substantially greater visual impact. Topography of this area is very challenging. Originally, VZW engineers planned to conceal all antennas for “WY3 SK Coaster” inside the proposed stealth chimney at the Rafferty Activity Center. However, when propagation studies showed that the area to the east would not be adequately served at that location, it became necessary to add a third sector with an antenna in a different location. That location is the subject of a concurrent zoning application, “SK Coaster 1.”

Determination of Need: As noted above, VZW has, through extensive testing and customer complaints, determined that delivery of wireless coverage and capacity in the Town of Jackson is not optimal. There is no existing facility or tower which can accommodate VZW's proposed use without causing a substantial change to an existing tower, or otherwise creating a greater visual impact. The proposed site at the Rafferty Activity Center is the best available location to serve the main area at the base of the Snow King Resort and surrounding residential properties in southeast Jackson.

Existing Condition: The existing property is known as the Rafferty Activity Center. The Center includes two contemporary style buildings with multiple roof lines. There is an existing chimney structure on the east façade of the larger east building, as shown in Figure 3, below.



Figure 3: Existing Rafferty Activity Center (East Elevation)

The existing west façade of the west building is shown in Figure 4, below. Please note the existing electronic equipment cabinet and electric meters at the base of the foundation wall. Also note the variety of roof elevations. Heights of the building rooflines are called out on Sheets Z-4 and Z-5 of the site plans. The east building roof (shown on the left in Figure 4, below) has a height of 25 ft. 2 in.; the west building roof (shown in the foreground, to the right in Figure 4, below) has a height of 17 ft. 11 in.



Figure 4: Existing Rafferty Activity Center (West Elevation)

Proposed Use: VZW proposes to conceal four 6 ft. antennas and radio equipment inside a stealth chimney on the roof of the west building of the Rafferty Activity Center at the base of Snow King Mountain Resort, as shown in Figure 5 below. The design of the proposed chimney, as shown in Figure 5, below, will be consistent with the existing chimney structure on the east façade (please refer to Figure 3 for view of existing east elevation). The stealth chimney proposed to screen the antennas will be fabricated of radio frequency transparent material to match the color and texture of the existing chimney on the east elevation. Below the roof, the faux chimney will extend to the foundation level, to accurately replicate the chimney on the east elevation. The material for the faux chimney below the roof level will not be radio frequency transparent material but will be standard construction material intended to replicate the chimney on the east elevation.

Electronic equipment associated with the antennas will be located in cabinets on the west façade of the building, also depicted in Figure 5, below. Please note that the proposed cabinets will match the existing equipment cabinet and electric meters on this wall. It will not be obvious that a wireless communication site is located here, i.e., the presence, purpose or nature of the facility is not readily apparent to a reasonable observer.



Figure 5: Proposed Stealth Chimney (West Elevation Photosimulation)

PROPOSED DEVELOPMENT PROGRAM:

Height: The antenna concealment structure will not exceed 5 ft. above the roof of the structure to which it is affixed. The Rafferty Activity Center has multiple roof lines and, as illustrated on Sheet Z-4, the height of the tallest point of the subject roof is 17 ft. 11 in., as shown on the “Existing West Elevation” on Sheets Z-4 and Z-5. The height of the proposed chimney, as shown on the Sheets Z-4 and Z-5, will be 20 ft.

Setbacks: No setbacks are applicable, as no development or construction is proposed to extend beyond the sides of the existing building. The proposed addition will appear to be a chimney matching the existing chimney on the structure.

Floor Area: No new floor area will be added to the building footprint for the rooftop antenna structure. Dimensions of the proposed chimney are 8 ft. x 5 ft. on the roof of the existing structure.

Utilities: The proposed site is an unmanned, unoccupied facility which requires only electric power and fiber optic connection for operation. No water, sewer, irrigation, natural gas or fuel storage will be required. Existing conduit for the required fiber optic line is already in place at this site, so only minimal new trenching or boring will be required. Existing utility meters and an equipment cabinet are located at the foundation level of the existing west elevation.

SITE PLAN:

The enclosed site plans meet the minimum standards established in the Administrative Manual. Sheet T-1 includes project data;

- Sheet T-1 is the Title Sheet;
- Sheet PS1 is a Photo Sheet;
- Sheet PS2 includes Photosimulations;
- Sheets SU1 and SU3 include land surveys;
- Sheet SU4 is the 1A certification of geographic coordinates;
- Sheet Z-1 shows the Site Plan of the entire parcel;
- Sheet Z-2 shows a zoomed view of the Site Plan;
- Sheet Z-3 is an Enlarged Site Plan showing the rooftop installation;
- Sheet Z-4 shows Existing and Proposed North Elevations; and
- Sheet Z-5 shows Existing and Proposed West Elevations.

FLOOR PLANS:

No new building is proposed at this site.

POSTED NOTICE:

When hearing dates are scheduled, Applicant will prepare the required signs and post notice as required by Sec. 8.2.14.C.4.

REVIEW CRITERIA:

Pursuant to the requirements outlined in the Pre-Application Conference Summary, the following items are addressed below.

GENERAL INFORMATION:

Planning Permit Application has been provided.

Notarized Letter of Authorization has been provided.

Application Fees have been paid in the amount of \$3,000.00 (amount indicated on the pre-application summary for Wireless Facility Conditional Use Permit @\$2,500.00 and a second, concurrent, Wireless Facility Conditional Use Permit @ \$500.00).

Review Fees: Applicant acknowledges responsibility for payment of review fees necessitated by the review of the application.

Mailed Notice Fee: Applicant acknowledges responsibility for payment of mailed notices in excess of 25 notices.

Digital Format: Applicant has submitted all application materials in digital format on the enclosed CD.

Response to Submittal Checklist: Applicant has provided responses to the comments identified in the Pre-Application Conference Summary in the text of this narrative.

Title Report: Per the pre-application summary, this is not required.

Narrative description of the proposed development: This has been provided herein (see “Project Description,” above).

Proposed Development Program: This has been provided herein (see “Proposed Development Program,” above).

Site Plan: The enclosed site plan set is based on revisions discussed at the Pre-Application Conference.

Floor Plans: Not applicable, as no new building is proposed at this site.

SUBMITTAL CHECKLIST: Subsection B, Physical Development:

Structure Location and Mass: The proposed structure will be located on the roof of the Rafferty Activity Center, a contemporary style structure at the base of the Snow King Mountain Resort. The dimensions of the proposed stealth chimney structure, 8 ft. x 5 ft., will add minimal mass to the existing structure. As noted above, the proposed chimney is intended to replicate an existing chimney on the structure. The proposed chimney is shorter than the existing chimney, in order to comply with zoning regulations limiting the height of the wireless facility to 5 ft. above the existing roof.

Maximum Scale of Development: Only one wireless communications site is allowed on any one parcel. This proposal is in compliance with that regulation. The companion site, “SK Coaster 1,” will be located on a separate legal parcel.

Site Development: Construction of the site will be limited to the faux chimney to conceal the rooftop antenna installation. Existing power and fiber lines are in place and minimal additional disturbance will be required to install these utilities.

SUBMITTAL CHECKLIST: Subsection C, Allowable Uses:

Allowed Uses: The proposed site is located in the PR zone district and wireless communications sites are an allowed use.

Maximum Scale of Use: Only one wireless communications site is allowed on any one parcel. This proposal is in compliance with that regulation. The companion site, “SK Coaster 1,” will be located on a separate legal parcel.

SUBMITTAL CHECKLIST: ARTICLE 4, Special Purpose Zones

Division 4.3, Planned Resort Zones: Per Division 4.3.2.D Land Use: The Snow King Planned Resort zone includes Convention center facilities for a year-round convention market, including community needs for convention space. Commercial services are provided for on-site guests and supplemental neighborhood services. The commercial space shall be sized and designed for serving the needs of on-site guests of the resort and nearby residents. The Snow King Master Plan

is relevant to this application. A section addressing “Institutional Uses” on page 48 of the Master Plan recognizes the importance of telecommunications uses on this property (*emphasis added*):

“Institutional Uses. As defined in Section 2220 three non-residential institutional uses are considered. Snow King Resort considers all to be valid and appropriate uses within the building envelope areas. Additionally, utility uses outside the envelopes are also allowed particularly in consideration of Snow King Mountain's expanding role in providing a base for valley wide telecommunications. Although the current plan does not contemplate most of the types of institutional uses named in Section 2220, these uses are allowed since in almost every instance large segments of the community would utilize the resort and its many activities and services.”

SUBMITTAL CHECKLIST: ARTICLE 5, Physical Development Standards Applicable In All Zones:

Division 5.3: Scenic Standards:

5.3.1 Exterior Lighting Standards: Night lighting currently exists and has previously been approved at the Snow King Resort development. This application proposes no new lighting.

Division 5.5: Landscaping Standards: Due to the character of the Activity Center uses and the surrounding ski slopes, no additional landscaping is proposed at this site.

Division 5.7: Grading, Erosion Control and Stormwater Standards: Conduit for fiber optic line is already in place on the property and no only minimal ground disturbance is anticipated. No grading is proposed. Any unanticipated ground disturbance will be managed in compliance with all erosion control and stormwater standards and best management practices.

Division 5.8: Design Guidelines: The following standards have been addressed in the proposed plans:

- A. **Public Space:** The proposed public space will be engaging and in scale with the existing building.
- B. **Composition:** The proposed design applies elements of composition, proportion and rhythm in the proposed materials, surfaces and massing. The proposed stealth chimney will add the least possible height to the existing structure, maintaining good proportion. The proposed chimney will match the existing chimney on the building.
- C. **Massing:** The mass, height, volume, complexity and arrangement of the proposed building elements of the proposed site mitigate adverse effects on adjoining properties. The proposed stealth chimney is the minimal mass to conceal antennas and match the existing chimney on the building.
- D. **Street Wall:** Not applicable.
- E. **Materials:** The proposed materials are appropriate based on the context of the existing building. The material used for the chimney addition will be durable, radio frequency-transparent material and will be maintainable over time. The chimney material will be fabricated and painted to match the texture and color of the existing chimney on the east elevation.

In summary, the proposed site plans are in compliance with the Design Guidelines per Resolution 04-02.

SUBMITTAL CHECKLIST: ARTICLE 6: Use Standards Applicable in All Zones

Division 6.1, Allowed Uses: The proposed site is located in the PR zone district and wireless communications sites are an allowed use.

Division 6.2, Parking and Loading Standards: Division 6.2.2 requires one parking space per employee and one space per stored vehicle. This is an unmanned site and no vehicles will be stored on the site. After construction, the site will be visited for a very brief period for routine maintenance and monitoring approximately one time per month. Technicians visiting the site for such monitoring and maintenance will park in the unpaved existing heavy equipment storage area at the base of the ski hill. No designated parking space is proposed.

Division 6.4, Operational Standards: There will be no outside storage. The unoccupied site will generate no refuse or recycling; it will be visited only occasionally by a VZW technician to monitor and maintain the equipment. The site will not generate noise or vibration. The Applicant attempted to find noise specifications for the proposed equipment that will be located in the space adjacent to the elevator; however, no such specifications are available because the equipment does not generate significant noise. All VZW facilities are monitored remotely 24/7; therefore, the likelihood of fire, explosive hazards or electrical disturbances is minimal. Any unusual activity at the site would generate an automatic alert to the VZW remote monitoring office and a technician would be dispatched immediately to address the issue. The site will include its own backup battery system for power in case of a general power outage in the Town. In addition, a “generator plug” will be added to the building so that a temporary generator could be used in case of a prolonged power outage.

SUBMITTAL CHECKLIST: ARTICLE 7: Development Option and Subdivision Standards Applicable in All Zones:

Division 7.6: Transportation Facility Standards: Proposed easements are shown on Sheet SU1, SU3, Z1 and Z2. Access to the site will be via the existing Snow King Loop Road, as shown on SU1 and SU3. The proposed use will not generate any traffic on the existing road. After construction, the site will be visited only occasionally by a technician in a standard pickup truck for regular maintenance and monitoring.

Division 7.7, Required Utilities: The proposed site is an unmanned, unoccupied facility which requires only electric power and fiber optic connection for operation. No water, sewer, irrigation, natural gas or fuel storage will be required. Existing conduit for the required fiber optic line is already in place at this site, so only minimal trenching or boring is anticipated.

GENERAL STANDARDS AND DESIGN REQUIREMENTS:

The following Standards are required pursuant to Sec. 6.1.10.D.3.f:

1. **Must be Stealth:** The application meets this requirement with all antennas and equipment concealed from public view. Antennas will be concealed within proposed stealth chimney. The chimney will appear consistent with the design of the existing structure since the proposed chimney will match the color and texture of the existing chimney on the building. It will not be obvious that a wireless communication site is located there, i.e., the presence, purpose or nature of the facility is not readily apparent to a reasonable observer.

2. **Standards to be applied include the following:**

i) Determination of Need: “Request and Justification,” “Determination of Need,” above at pages 2-5.

ii) Concealment Element: The proposed design is the most effective concealment that can be provided with the least added mass. There is no intent to frustrate the purpose of the conditions of approval. The concealment element is intended to be consistent with the design of the existing chimney on the east elevation of the Rafferty Activity Center.

iii) Height: The Rafferty Activity Center has multiple roof lines and, as illustrated on Sheets Z-4 and Z-5, the height of the tallest point of the roof on which the chimney is located is 17 ft. 11 in., compared with the height of the proposed chimney, which is 20 ft. This is in compliance with the standard limiting antenna concealment structures to 5 ft. above the building height.

iv) Setbacks: Setbacks do not apply to this application, as there will be no change to the existing building.

v) Other conditions: The proposed facility is designed and will be maintained to be visually compatible with adjoining terrain and structures. The proposed site will not be used for storage of excess equipment and there will be no outdoor storage.

vi) Landscaping: Due to the character of the Activity Center uses and the surrounding ski slopes, no additional landscaping is proposed at this site.

vii) Signage: No commercial messages will be displayed at the proposed facility. Signage will be limited to that required by federal regulatory agencies.

viii) Lighting: No new lighting is proposed for the facility. Existing lighting has been approved.

ix) Quantity Limit: There is a limit of one (1) wireless communication facility per parcel. The proposed facility is the only wireless communication facility proposed for the subject parcel. As noted above, the companion site, “WY3 SK Coaster 1,” will be located on a separate legal parcel.

x) Emergency Generators: No generator is proposed.

xi) Noise Level: The facility will not generate noise or vibration. Applicant attempted to find noise specifications for the proposed equipment that will be located in the existing equipment

building on the west side of the ski hill; however, no such specifications are available because the equipment does not generate significant noise.

xii) Visibility: Antennas will be completely concealed inside the proposed chimney addition. As noted above, the chimney is designed to match the texture and color of the existing chimney on the east façade of the east building in the Rafferty Activity Center complex. Electronic equipment associated with the antennas will be concealed in equipment cabinets at the foundation level below the faux chimney. These cabinets will be fabricated to match the existing electronic equipment at the foundation base of the building. Although the proposed chimney will be clearly visible, it will not be obvious that a wireless communication site is located there, i.e., the presence, purpose or nature of the facility is not readily apparent to a reasonable observer.

xiii) Notice: The facility will be in compliance with all requirements for public hearings. When dates for the required public hearings are scheduled, Applicant will order notice signs to be posted at designated locations on the property.

xiv) Access: No part of the proposed facility will obstruct access or cause the existing facility to fail to comply with the Americans with Disabilities Act.

xv) Security: Opportunities for unauthorized access will be minimized. There is no obvious access to the rooftop chimney concealment structure. All VZW facilities are monitored remotely 24/7; therefore, the likelihood of fire, explosive hazards or electrical disturbances is minimal. Any unusual activity at the site would generate an automatic alert to the VZW remote monitoring office and a technician would be dispatched immediately to address the issue.

xvi) Building Design: The proposed design is in scale and architecturally integrated with the existing building design to be visually unobtrusive. The proposed chimney will be fabricated and painted to match the existing chimney on the east elevation of the Rafferty Activity Center (east building). As noted above, it will not be obvious that a wireless communication site is located on this roof. The proposed chimney will be replicate the architecture of the existing structure and will not significantly increase the mass of the existing building.

CONDITIONAL USE PERMIT REQUIREMENTS:

The following findings must be made prior to approval of a conditional use permit:

1. The application is compatible with the desired future character of the area: The area surrounding the proposed chimney is part of the Snow King Mountain Resort. This area is focused on commercial and tourism interests and the proposed chimney will be consistent with the future character of this development. The Snow King Resort Master Plan contemplates this area as the Town's main convention and conference facility. Division 4.3.2.D specifically calls out Snow King's role in providing a base for wireless communications to serve the valley. As noted above, the demand for current 4G-LTE wireless technology is even more pronounced in the resort area,

where people rely on their smartphones and other advanced devices to assist with their business and tourist needs. The need for sufficient wireless capacity cannot be overstated.

2. The application complies with the use specific standards of Division 6.1: Jackson Land Development Regulations allow wireless communications sites in the PR zone district.

3. The application minimizes adverse visual impacts: As described above, the proposed antennas will be concealed in a stealth chimney which will replicate the existing chimney on the building. The purpose of this installation is to minimize the mass of the communications site. For example, the proposed chimney will be much less mass and visual impact than a “monopine” tower would have been.

4. The application minimizes adverse environmental impacts: There will be no adverse environmental impacts associated with this development. The proposed site will be unoccupied and requires only minimal electric utility service for operation. There will be minimal ground disturbance associated with construction of the site. Conduit for the fiber optic line is already in place at the site, so only minimal new trenching or boring will be required.

5. The application minimizes adverse impacts from nuisances: The proposed site will not generate noise, odor, dust or other impacts that could be considered nuisances. As noted above, Applicant could not find noise specifications for the proposed equipment because it does not generate any significant noise.

6. The application minimizes adverse impacts on public facilities: There will be minimal impact on public facilities. The site requires only minimal electric utility service. The site is unoccupied and requires no water, sewer, trash collection or other public services. The site will generate no traffic; it will be visited only occasionally by a sole technician to monitor and maintain the equipment. All VZW facilities are monitored remotely 24/7 and standard operating procedures minimize security risks.

7. The application complies with all other relevant standards of these LDRs and all other Town Ordinances: The proposed development will comply with all Land Development Regulations, building code requirements and other ordinances. VZW operates all its facilities to the highest standards in the industry. The Snow King Master Plan is relevant to this application. A section addressing “Institutional Uses” on page 48 of the Master Plan recognizes the importance of telecommunications uses on this property:

“Institutional Uses. As defined in Section 2220 three non-residential institutional uses are considered. Snow King Resort considers all to be valid and appropriate uses within the building envelope areas. Additionally, utility uses outside the envelopes are also allowed particularly in consideration of Snow King Mountain's expanding role in providing a base for valley wide telecommunications. Although the current plan does not contemplate most of the types of institutional uses named in Section 2220, these uses are allowed since in almost every instance large segments of the community would utilize the resort and its many activities and services.”

8. The application is in substantial conformance with all standards or conditions of any prior applicable permits or approvals: Applicant believes the proposed plans meet or exceed all requirements of applicable permits and required approvals.

In summary, the application satisfies the criteria established for Conditional Use Permit findings.

“FCC SHOT CLOCK”

Under the federal Telecommunications Act, local governments must act on wireless facility permit applications within a “reasonable period of time.” In 2009, the Federal Communications Commission (“FCC”) issued a declaratory ruling, commonly known as the “Shot Clock ruling,” which clarified this obligation. Under the Shot Clock ruling, local governments generally must take final action on a wireless facility permit application within 90 days after it was filed for a collocation application, or 150 days after any other application was filed. In this case, we believe the 150 day deadline applies. VZW requests that the Town of Jackson issue a written decision granting VZW’s request within one hundred fifty (150) days of the date this application is submitted. If applicable, within thirty (30) days of the date the application is submitted, VZW requests the Town to inform VZW in writing of the specific reasons why the application is incomplete and does not meet the submittal requirements; and in doing so, to please specifically identify the code provision, ordinance, instruction or public procedure that requires the information to be submitted.

4G-LTE CAPACITY:

Please note that this will be a 4G LTE site, which means voice calls will be carried over our LTE network. THIS IS A CHANGE AND WILL REQUIRE CUSTOMERS TO HAVE A DEVICE CAPABLE OF ADVANCED CALLING. A VZW 4G LTE cell site uses the latest technology to carry both voice and data. Voice service is provided over VoLTE or Voice Over Long Term Evolution technology through a service Verizon calls Advanced Calling 1.0. Advanced Calling offers high-definition or HD voice and video calling. To complete calls on this new cell site, customers’ phones must be capable of Advanced Calling and that feature must be activated in the phone itself. Both customers on a call must be served by 4G LTE and have the Advanced Calling feature activated to experience HD voice and video service. Customers with older 1X, 3G or 4G devices without Advanced Calling will not experience a change in voice service.

CONCLUSION:

Verizon Wireless respectfully requests the Town of Jackson to grant conditional use permit approval for the above described project. The proposed site will be part of a comprehensive wireless network and approval of this application will allow VZW to meet its federally mandated obligations under the license granted by the Federal Communications Commission (FCC) pursuant to the Telecommunications Act of 1996.

LETTER OF AUTHORIZATION

SNOW KING MOUNTAIN RESORT LLC, "Owner" whose address is: _____

575 SOUTH WILLOW STREET, JACKSON, WY 83001

(NAME OF ALL INDIVIDUALS OR ENTITY OWNING THE PROPERTY)

SNOW KING MOUNTAIN RESORT LLC

, as the owner of property

more specifically legally described as: PARCEL NO. 22-41-16-34-2-00-014

SEE LEGAL DESCRIPTION ATTACHED

(If too lengthy, attach description)

HEREBY AUTHORIZES IRENE COOKE, KAPPA CONSULTING LLC ON BEHALF OF VERIZON WIRELESS as agent to represent and act for Owner in making application for and receiving and accepting on Owners behalf, any permits or other action by the Town of Jackson, or the Town of Jackson Planning, Building, Engineering and/or Environmental Health Departments relating to the modification, development, planning or replatting, improvement, use or occupancy of land in the Town of Jackson. Owner agrees that Owner is or shall be deemed conclusively to be fully aware of and to have authorized and/or made any and all representations or promises contained in said application or any Owner information in support thereof, and shall be deemed to be aware of and to have authorized any subsequent revisions, corrections or modifications to such materials. Owner acknowledges and agrees that Owner shall be bound and shall abide by the written terms or conditions of issuance of any such named representative, whether actually delivered to Owner or not. Owner agrees that no modification, development, platting or replatting, improvement, occupancy or use of any structure or land involved in the application shall take place until approved by the appropriate official of the Town of Jackson, in accordance with applicable codes and regulations. Owner agrees to pay any fines and be liable for any other penalties arising out of the failure to comply with the terms of any permit or arising out of any violation of the applicable laws, codes or regulations applicable to the action sought to be permitted by the application authorized herein.

Under penalty of perjury, the undersigned swears that the foregoing is true and, if signing on behalf of a corporation, partnership, limited liability company or other entity, the undersigned swears that this authorization is given with the appropriate approval of such entity, if required.

OWNER:

(SIGNATURE) (SIGNATURE OF CO-OWNER)

Title:

(if signed by officer, partner or member of corporation, LLC (secretary or corporate owner) partnership or other non-individual Owner)

STATE OF Wyoming)
)SS.
COUNTY OF Teton)

The foregoing instrument was acknowledged before me by Ryan Stanley this 15 day of February, 2018

WITNESS my hand and official seal.

(Seal)

(Notary Public)

My commission expires: 2/13/2021



verizon

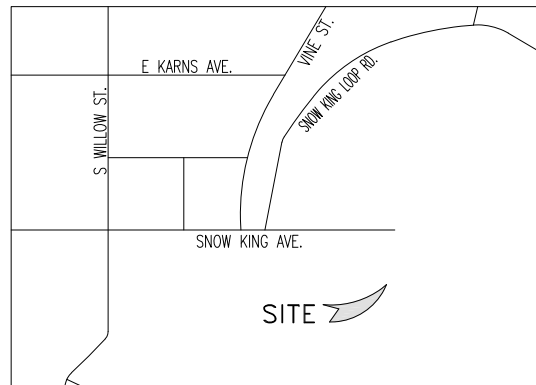
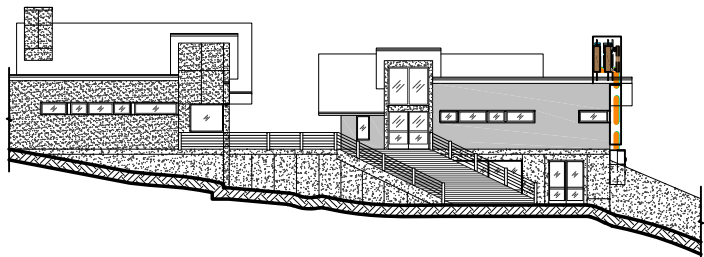
WY3 SK COASTER 2

PUBLIC RECORD PARCEL NO. 22-41-16-34-2-00-014

402 E. SNOW KING AVENUE

JACKSON, WY 83001

TETON COUNTY

EXISTING 17'-11" BUILDING
(OVERALL HEIGHT: 20'-0" A.G.L.)
RAWLANDVICINITY MAP
SCALE: N.T.S.

DESIGNED FOR:

verizon

3131 SOUTH VAUGHN WAY, SUITE 550
AURORA, COLORADO 80018THESE DRAWINGS AND SURVEYS ARE COPYRIGHT
PROTECTED AND THE SOLE PROPERTY OF J5
INFRASTRUCTURE PARTNERS, LLC AND PRODUCED FOR
THE USE OF OUR CLIENT. ANY REPRODUCTION OR
USE OF THE INFORMATION CONTAINED WITHIN SAID
DOCUMENTS IS PROHIBITED WITHOUT THE WRITTEN
CONSENT OF J5 INFRASTRUCTURE PARTNERS, LLC.J5 INFRASTRUCTURE
PARTNERS

AZ - CA - CO - ID - NM - NV - TX - UT

DESIGNED BY:

REV	DESCRIPTION	DATE	BY	CHK
C	REVISED PER COMMENTS	9/25/17	MDA	-
D	REVISED PER COMMENTS	11/1/17	MDA	-
E	REVISED PER RF COMMENTS	1/23/18	MDA	-
F	REVISED PER UPDATED SURVEY AND P COORD	3/21/18	MDA	-
G	REVISED PER UPDATED SURVEY	5/8/18	MDA	-

PROJECT DESCRIPTION:

THIS PROJECT CONSISTS OF THE FOLLOWING:

INSTALLATION

- ONE (1) PROPOSED EQUIPMENT ENCLOSURE (DESIGNED BY OTHERS)
- FOUR (4) PROPOSED PANEL ANTENNAS
- FOUR (4) PROPOSED MAIN OVP UNITS
- TWO (2) PROPOSED 700 RRH UNITS
- TWO (2) PROPOSED PCS RRH UNITS
- TWO (2) PROPOSED AWS RRH UNITS
- TWO (2) PROPOSED 850 RRH UNITS
- TWO (2) PROPOSED HYBRID TRUNKS
- TWO (2) PROPOSED EQUIPMENT CABINETS
- ONE (1) PROPOSED GENERATOR PLUG

SHEET INDEX:

SHEET	TITLE	REV.
T1	TITLE SHEET	G
PS1	PHOTO SHEET	G
PS2	PHOTO SIMULATION SHEET	G
SU1	SITE SURVEY	C
SU3	SITE SURVEY	C
SU4	1A CERTIFICATION LETTER	-
Z1	SITE PLAN	G
Z2	SITE PLAN	G
Z3	ENLARGED SITE PLAN	G
Z4	ELEVATIONS	G
Z5	ELEVATIONS	G
PHS	PROJECT HISTORY SHEET	G

PROJECT INDEX:

APPLICANT:
VERIZON
2730 BOZEMAN AVENUE
HELENA, MT 59601CONTACT: KENT MCDERMOTT
PHONE: 406-461-1359ENGINEERS/DESIGNERS:
J5 INFRASTRUCTURE PARTNERS
767 N. STAR RD.
CONTACT: JOSH MALBERG
PHONE: 208-286-0266 EXT 170SURVEYOR:
CIS PROFESSIONAL LAND SURVEYINGCONTACT: CORY SQUIRE
PHONE: 435-660-0816
CORY@CISPLS.COMZONING/SITE AQ:
KAPPA CONSULTING LLC
800 PEARL STREET #907
DENVER, CO 80203CONTACT: IRENE C. COOKE
PHONE: 970-531-0831
EMAIL: irene@ireneeco.com

FCC COMPLIANCE:

RADIATION FROM THIS FACILITY WILL
NOT INTERFERE WITH OPERATION OF
OTHER COMMUNICATION DEVICES.

GENERAL PROJECT NOTES:

1. PRIOR TO SUBMITTING A BID, THE CONTRACTOR SHALL FAMILIARIZE HIMSELF/HERSELF WITH THE SCOPE OF WORK AND ALL CONDITIONS AFFECTING THE PROPOSED PROJECT.
2. CONTRACTOR SHALL VERIFY ALL FIELD CONDITIONS AND DIMENSIONS OF THE JOB SITE AND CONFIRM THAT WORK AS INDICATED ON THESE CONSTRUCTION DOCUMENTS CAN BE ACCOMPLISHED AS SHOWN PRIOR TO COMMENCEMENT OF ANY WORK.
3. ALL FIELD MODIFICATIONS BEFORE, DURING, OR AFTER CONSTRUCTION SHALL BE APPROVED IN WRITING BY A VERIZON REPRESENTATIVE.
4. INSTALL ALL EQUIPMENT AND MATERIALS PER THE MANUFACTURER'S RECOMMENDATIONS, U.N.O.
5. NOTIFY VERIZON, IN WRITING, OF ANY MAJOR DISCREPANCIES REGARDING THE CONTRACT DOCUMENTS, EXISTING CONDITIONS, AND DESIGN INTENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING CLARIFICATIONS FROM A VERIZON REPRESENTATIVE AND ADJUSTING THE BID ACCORDINGLY.
6. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES OF THE WORK UNDER THE CONTRACT.
7. CONTRACTOR SHALL PROTECT ALL EXISTING IMPROVEMENTS AND FINISHES THAT ARE TO REMAIN. CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY OCCUR DURING THE CONSTRUCTION TO THE SATISFACTION OF A VERIZON REPRESENTATIVE.
8. THE CONTRACTOR IS RESPONSIBLE FOR RED-LINING THE CONSTRUCTION PLANS TO ILLUSTRATE THE AS BUILT CONDITION OF THE SITE. FOLLOWING THE FINAL INSPECTION BY VERIZON, THE CONTRACTOR SHALL PROVIDE VERIZON WITH ONE COPY OF ALL RED-LINED DRAWINGS.
9. VERIFY ALL FINAL EQUIPMENT WITH A VERIZON REPRESENTATIVE. ALL EQUIPMENT LAYOUT, SPECS, PERFORMANCE INSTALLATION AND THEIR FINAL LOCATION ARE TO BE APPROVED BY VERIZON. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING HIS/HER WORK WITH THE WORK AND CLEARANCES REQUIRED BY OTHERS RELATED TO SAID INSTALLATIONS.

PROJECT INFORMATION:

PROPERTY OWNER:	SNOW KING MOUNTAIN RESORT LLC
	CONTACT: RYAN STANLEY PHONE: 307-734-3351
JURISDICTION:	TOWN OF JACKSON
	CONTACT: PAUL ANTHONY PHONE: 307-733-0440 x1303
PUBLIC RECORD PARCEL NO:	22-41-16-34-2-00-014

DRIVING DIRECTIONS:

FROM THE VERIZON OFFICE LOCATED AT 3131 S VAUGHN WAY TURN RIGHT ONTO S VAUGHN WAY (0.2 MILES). TURN LEFT TO MERGE ONTO CO-83 N TOWARD INTERSTATE 225 (0.2 MILES). MERGE ONTO CO-83 N (0.1 MILES). TAKE THE INTERSTATE 225 N EXIT AND MERGE ONTO I-225 N (8 MILES). TAKE EXIT 12A ON THE LEFT TO MERGE ONTO I-70 W TOWARD DENVER (3.2 MILES). KEEP RIGHT AT THE FORK TO CONTINUE ON I-270 W, FOLLOW SIGNS FOR FORT COLLINS (64.3 MILES). TAKE EXIT 281 FOR OWL CANYON RD (0.3 MILES). TURN LEFT ONTO E CO RD 70 (6.5 MILES). AT THE TRAFFIC CIRCLE, TAKE THE 1ST EXIT (1.4 MILES). CONTINUE ONTO W COLORADO RD 72 (3.5 MILES). TURN RIGHT ONTO US-287 N (46.3 MILES). TURN RIGHT TO MERGE ONTO I-80 W TOWARD RAWLINS AND MERGE ONTO I-80 W (208.5 MILES). TAKE EXIT 104 FOR US 191 N (0.3 MILES). TURN RIGHT ONTO US-191 N (0.5 MILES). CONTINUE STRAIGHT TO STAY ON US-191 N (161 MILES). AT THE TRAFFIC CIRCLE, TAKE THE 1ST EXIT ONTO US-189 N (11.6 MILES). TURN RIGHT ONTO MAPLE WAY (0.5 MILES). TURN LEFT ONTO SCOTT LN (233 FT). TURN RIGHT ONTO W SNOW KING AVE (1.4 MILES) AND THE SITE AT LATITUDE 43°28'22.62690"N LONGITUDE 110°45'22.31"W WILL BE LOCATED ON THE RIGHT.

ADA COMPLIANCE:

THIS FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. LANDINGS AND EXITS SHALL COMPLY WITH ALL APPLICABLE BUILDING CODES.

ABBREVIATED LEGAL DESCRIPTION:

A TRACT OF LAND LOCATED IN THE NW¼ OF SECTION 34, TOWNSHIP 41 NORTH, RANGE 116 WEST, 6TH P.M., TOWN OF JACKSON, TETON COUNTY, WYOMING, BEING MORE PARTICULARLY DESCRIBED AS: TRACT A AS SHOWN ON MAP T-71-A AS RECORDED IN THE OFFICE OF THE TETON COUNTY CLERK EXCEPTING THEREFROM: THAT PORTION OF SAID TRACT A SHOWN AND DESCRIBED ON MAP T-71-E AS RECORDED IN SAID OFFICE AS "PARCEL TO BE TRANSFERRED FROM SNOW KING RESORT, INC., TO SK LAND LLC" AND FURTHER EXCEPTING THEREFROM: THAT PORTION OF LOT 37 OF GRAND VIEW LODGES ADDITION TO THE TOWN OF JACKSON, PLAT NO. 1156 AS RECORDED IN SAID OFFICE LYING WITHIN SAID TRACT A. FURTHER EXCEPTING THEREFROM: THAT PORTION OF LOT 20 OF LOVE RIDGE LODGE HOMES FOURTH ADDITION TO THE TOWN OF JACKSON, PLAT NO. 1103 AS RECORDED IN SAID OFFICE LYING WITHIN SAID TRACT A.

PRELIMINARY
FOR LEASING/ZONING

PROJECT NAME:

WY3 SK COASTER 2
EXISTING 17'-11" BUILDING
(OVERALL HEIGHT: 20'-0" A.G.L.)
RAWLAND

PROJECT ADDRESS:

402 E. SNOW KING AVENUE
JACKSON, WY 83001
TETON COUNTY

SHEET TITLE:

TITLE SHEET

SAVE DATE:

5/8/2018 4:38 PM

SHEET NUMBER:

T1

LEGEND OF SYMBOLS:

REFERENCE LETTER OR NUMBER
SECTION OR DETAIL
SCALE:
SHEET WHERE DRAWN
SHEET WHERE TAKEN

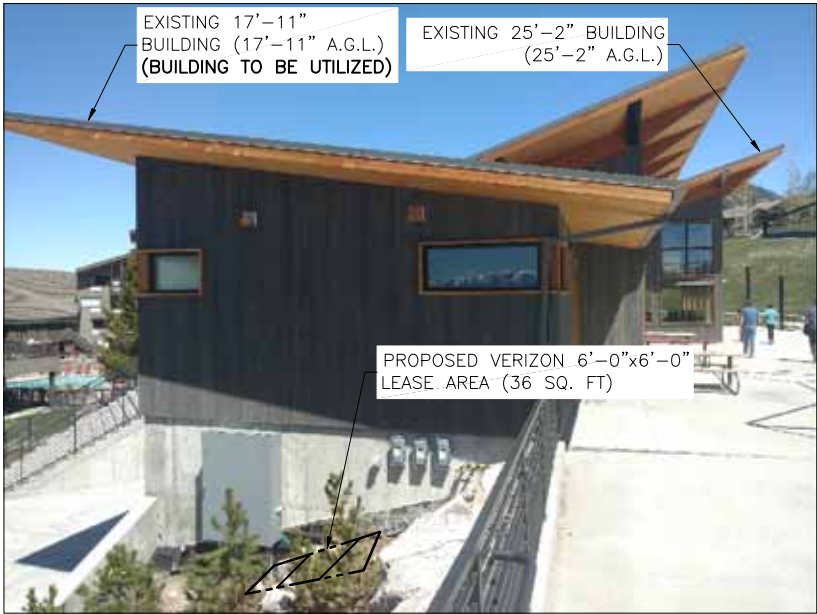
SECTION LETTER
SHEET WHERE DRAWN
SHEET WHERE TAKEN

DETAIL NUMBER
SHEET WHERE DRAWN
SHEET WHERE TAKEN

℄ CENTERLINE
d PENNY

EQUIPMENT OR FIXTURE NUMBER
KEYED NOTE
T.C. 1631.33
F.L. 1631.00 SPOT ELEVATION
TOP OF WALL 1639.00 CONTROL OR DATUM POINT

PROPERTY LINE
EXISTING CONTOUR
NEW CONTOUR
ROUND/DIAMETER
APPROXIMATELY



VIEW OF PROPOSED LEASE AREA
(LOOKING EAST)



VIEW OF EXISTING BUILDING
(LOOKING WEST)

DESIGNED FOR:

verizon

3131 SOUTH VAUGHN WAY, SUITE 550
AURORA, COLORADO 80018

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J5 INFRASTRUCTURE PARTNERS		AZ - CA - CO - ID - NM - NV - TX - UT		CHK
REV	DESCRIPTION	DATE	BY	
C	REVISED PER COMMENTS	9/25/17	MDA	-
D	REVISED PER COMMENTS	11/1/17	MDA	-
E	REVISED PER RF COMMENTS	1/23/18	MDA	-
F	REVISED PER UPDATED SURVEY AND P COORD	3/21/18	MDA	-
G	REVISED PER UPDATED SURVEY	5/8/18	MDA	-

PRELIMINARY
FOR LEASING/ZONING

PROJECT NAME:
WY3 SK COASTER 2
EXISTING 17'-11" BUILDING
(OVERALL HEIGHT: 20'-0" A.G.L.)
RAWLAND

PROJECT ADDRESS:
**402 E. SNOW KING AVENUE
JACKSON, WY 83001
TETON COUNTY**

SHEET TITLE:
PHOTO SHEET

SAVE DATE:
5/8/2018 4:38 PM

SHEET NUMBER:
PS1



EXISTING NORTHWEST PHOTO SIMULATION
(LOOKING SOUTHEAST)



PROPOSED NORTHWEST PHOTO SIMULATION
(LOOKING SOUTHEAST)

LEGEND OF SYMBOLS:

REFERENCE LETTER OR NUMBER
SECTION OR DETAIL
SCALE:
SHEET WHERE DRAWN
SHEET WHERE TAKEN

SECTION LETTER
SHEET WHERE DRAWN
SHEET WHERE TAKEN

DETAIL NUMBER
SHEET WHERE DRAWN
SHEET WHERE TAKEN

¢ CENTERLINE
d PENNY

EQUIPMENT OR FIXTURE NUMBER

KEYED NOTE

T.C. 1631.33
F.L. 1631.00 SPOT ELEVATION

TOP OF WALL
1639.00 CONTROL OR DATUM POINT

PROPERTY LINE

EXISTING CONTOUR

NEW CONTOUR

∅ ROUND/DIAMETER

~ APPROXIMATELY

DESIGNED FOR:

verizon

3131 SOUTH VAUGHN WAY, SUITE 550
AURORA, COLORADO 80018

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J5 INFRASTRUCTURE
P A R T N E R S
AZ - CA - CO - ID - NM - NV - TX - UT

DESIGNED BY:

REV	DESCRIPTION	DATE	BY	CHK
C	REVISED PER COMMENTS	9/25/17	MDA	-
D	REVISED PER COMMENTS	11/1/17	MDA	-
E	REVISED PER RF COMMENTS	1/23/18	MDA	-
F	REVISED PER UPDATED SURVEY AND P COORD	3/21/18	MDA	-
G	REVISED PER UPDATED SURVEY	5/8/18	MDA	-

PRELIMINARY
FOR LEASING/ZONING

PROJECT NAME:

WY3 SK COASTER 2
EXISTING 17'-11" BUILDING
(OVERALL HEIGHT: 20'-0" A.G.L.)
RAWLAND

PROJECT ADDRESS:

402 E. SNOW KING AVENUE
JACKSON, WY 83001
TETON COUNTY

SHEET TITLE:

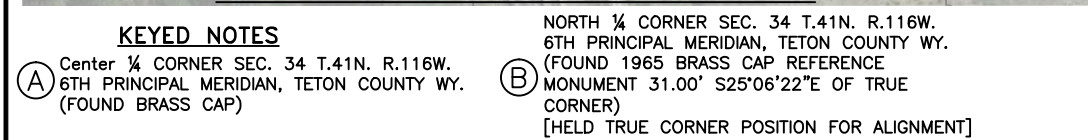
PHOTO SIMULATION SHEET

SAVE DATE:

5/8/2018 4:38 PM

SHEET NUMBER:

PS2



A strip of land fifteen feet (15') wide for the purpose of serving a telecommunications equipment lease area, situate within the corporate limits of Jackson City, Teton County, Wyoming, said lease parcel comprising a portion of Tract A as shown on Map T-71-A as recorded in the office of the Teton County Clerk; the centerline of said strip of land is more particularly described by metes and bounds as follows:

Beginning at a point that is 1033.69 feet West and 214.40 feet North of the Center Quarter Corner of Section 34 Township 41 North, Range 116 W, 6th P.M.; thence S. 87°17'32" W. 42.20 feet, thence S. 00°25'46" W. 83.82 feet, thence EAST 74.26 feet, thence S. 53°02'47" E. 205.31 feet to the terminus of said centerline.

The above described strip of land contains 5,671 square feet in area or 0.13 of an acre more or less.

A strip of land fifteen feet (15') wide for the purpose of providing access to a telecommunications equipment lease area, situate within the corporate limits of Jackson City, Teton County, Wyoming, said strip of land comprising a portion of Tract A as shown on Map T-71-a as recorded in the office of the Teton County Clerk; the centerline of said strip of land is more particularly described by metes and bounds as follows:

Beginning at a point that is 1052.45 feet West and 199.18 feet North of the Center Quarter Corner of Section 34 Township 41 North, Range 116 W, 6th P.M.; thence N. 87°17'32" E. 63.86 feet, thence SOUTH 17.73 feet, thence N. 86°10'26" E. 61.08 feet, thence S 03°46'06" E 27.27 feet, thence N 85°45'15" E 47.15 feet, thence N 26°59'17" E 88.99 feet, thence S 60°43'01" E 71.17 feet, thence S 04°34'10" E 204.75 feet the terminus of said centerline. The above described strip of land contains 5,379 square feet in area or 0.12 of an acre more or less.

A strip of land fifteen feet (15') wide for the purpose of providing access to a telecommunications equipment lease area, situate within the corporate limits of Jackson City, Teton County, Wyoming, said strip of land comprising a portion of Lot 59 Grand View Lodges Third Addition to the town of Jackson (subdivision plat no. 1333); the centerline of said strip of land is more particularly described by metes and bounds as follows:

Beginning at a point that is 1052.45 feet West and 199.18 feet North of the Center Quarter Corner of Section 34 Township 41 North, Range 116 W, 6th P.M.; thence S. 04°34'10" E. 17.86 feet, thence S. 50°43'37" E. 43.02 feet, thence N. 55°21'27" E. 53.47 feet, thence along a curve turning to the right with an arc length of 18.49 feet, a radius of 95.10 feet and a chord bearing and distance of N. 36°58'41" W. 18.46 feet, thence along a compound curve turning to the right with an arc length of 7.80 feet, a radius of 95.10 feet and a chord bearing and distance of N. 29°03'26" W. 7.80 feet, thence along a compound curve turning to the right with an arc length of 17.79 feet, a radius of 166.07 feet and a chord bearing and distance of N. 27°32'47" W. 17.78 feet to an existing access easement and the terminus of said centerline. The above described strip of land contains 5,379 square feet in area or 0.12 of an acre more or less.

A parcel of land (6' X 6') for the purpose of a telecommunications equipment lease area, situate within the corporate limits of Jackson City, Teton County, Wyoming, said lease parcel comprising Tract A as shown on Map T-71-a as recorded in the office of the Teton County Clerk; more particularly described by metes and bounds as follows:

Beginning at a point that is 1033.53 feet West and 212.01 feet North of a Center Quarter Corner of Section 34 Township 41 North, Range 116 W, 6th P.M., monument; thence S. 86°15'00" W. 6.00 feet, thence N. 03°45'00" W. 6.00 feet, thence N. 86°15'00" E. 6.00 feet, thence S. 03°45'00" E. 6.00 feet to the point of beginning.

The above described parcel of land contains 36 square feet in area or 0.001 of an acre more or less.

LEASE AREA 1 LAND DESCRIPTION

STAIRS

RAFFERTY CENTER

PARENT PARCEL
Parcel ID:
(22-41-16-34-2-00-014)

LA1

L1

UE

AE1

LINE	BEARING	DISTANCE
L2	S 86°15'00" W	6.00'
L3	N 03°45'00" W	6.00'
L4	N 86°15'00" E	6.00'
L5	S 03°45'00" E	6.00'

N 01°07'59" W 340.16'

S 00°25'46" W 88.82'

N

SNOW KING MOUNTAIN RESORT LLC
800 PEARL STREET #907, DENVER, CO 80203
CONTACT INFORMATION:
RYAN STANLEY
PHONE: 970-531-0831

22-41-16-34-2-00-014

A map of the area around the proposed site. The map shows several streets: S King St, S Willow St, E Karns Ave, E Hansen Ave, E Kelly Ave, E Snow King Ave, E Hall Ave, Redmond St, Snow Loop Rd, Clark St, and Cache Creek Dr. A star marks the 'SITE' location at the intersection of E Snow King Ave and S Willow St. A north arrow is in the top right corner.

ZONE: X PANEL: 56039C2907D DATE: 09/16/2015
FLOOD NOTE: AREAS DETERMINED TO BE OUTSIDE
THE 500-YEAR FLOODPLAIN.

TAKE W MCMILLAN RD TO ID-55 (0.6 MI), FOLLOW I-84 E, US-20 E, AND US-26 E TO ID-31 E/PINE CREEK RD IN SWAN VALLEY (308 MI), TAKE WY-22 E TO US-191 IN TETON COUNTY (43.9 MI), TURN LEFT ONTO US-191 N/US-26E/US-89 N (0.5 MI), DRIVE TO W SNOW KING AVE (1.4 MI). DESTINATION WILL BE ON THE RIGHT.

It is the intent of this map and the survey on which it is based is to represent the perimeter lines of the Parent Parcel and the location of the proposed lease area and Access/Utility easements within the parent parcel. Property corners and other survey markers, monuments or evidence that were found at the time of this survey are drawn and noted accordingly.

This "Lease Area Survey" is based on an actual field survey performed by me or under my direction. It correctly depicts existing, readily visible improvements and the perimeter of the parent parcel was verified from field and record information. This "Lease Area Survey" is not a Boundary Survey of the Parent Parcel and this Survey was developed to support the communications facility plan set named hereon.

I, James D. Pitkin, of Murray, Utah, do hereby certify that this Lease Area Map as prepared from field notes taken during an actual survey made under my direct supervision by CIS Professional Land Surveying, for whose work I stand personally responsible, on (7/3/17), that this map correctly shows the results of said survey and that this map represents the positions of the monuments and lines as found at the time of said survey; and that it is a correct and accurate representation of said survey to the best of my knowledge and belief.



ect and
id survey to
id belief.

cis

PROFESSIONAL LAND SURVEYING

Mona, UT
(435)660-0816
cory@cispls.com

JAMES D. PITKIN WSP | S. #10111 04/26/18

1.) All distances are at ground in US survey feet and all bearings are Grid based upon the Wyoming Coordinate System 1983, Wyoming West Zone. (NAD83)

2.) Survey Performed with a Survey Grade Trimble GPS receiver and computed using the National Geodetic Survey Online Positioning User Service.

Geodetic Position of Control Monument is:

LATITUDE: 43°28'20.56657"

LONGITUDE: 110°45'08.50460"W

APPROX. ELLIPSOID HEIGHT: 6317.614sft

(NOT 1A COORDINATES - SEE SEPARATE CERTIFICATION)

HORIZ. DATUM NAD83 VERT. DATUM NAVD88

APPROX. ELLIPSOID HEIGHT: 6317.614sft
(NOT 1A COORDINATES - SEE SEPARATE CERTIFICATION)
HORZ. DATUM NAD83 VERT. DATUM NAVD88

GRID POSITION (SURVEY FT)
NORTHING:
1411900.236
EASTING:
2447074.531
ELEVATION:
6349.634 sft

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REV.	DESCRIPTION	DATE	BY	CHK
A	90% PRELIMINARY FOR CLIENT REVIEW ONLY	07/07/17	CIS	CIS
B	ADDED SHEET 2 WITH ADDITIONAL TITLE REPORT	10/23/17	CIS	CIS
C	FINAL REVIEW AND SURVEYOR'S CERTIFICATION	04/26/18	CKS	CIS

VERIZON
WY3 SK2 COASTER
PROJECT ADDRESS:
402 E SNOW KING AVENUE
JACKSON CITY
TETON COUNTY
WYOMING

THIS IS TO CERTIFY THAT THE EXCEPTIONS LISTED IN SCHEDULE B PART II OF THAT CERTAIN COMMITMENT FOR TITLE INSURANCE ISSUED 08/03/2017 BY FIRST AMERICAN TITLE INSURANCE COMPANY (Policy 1402.06(06-17-06)) HAVE BEEN REVIEWED BY THE SURVEYOR. IF ANY OF THEM AFFECT THE VERIZON PROPOSED LEASE AREA(S) THEY ARE PLOTTED (if locatable) AND NOTED ACCORDINGLY HEREON.

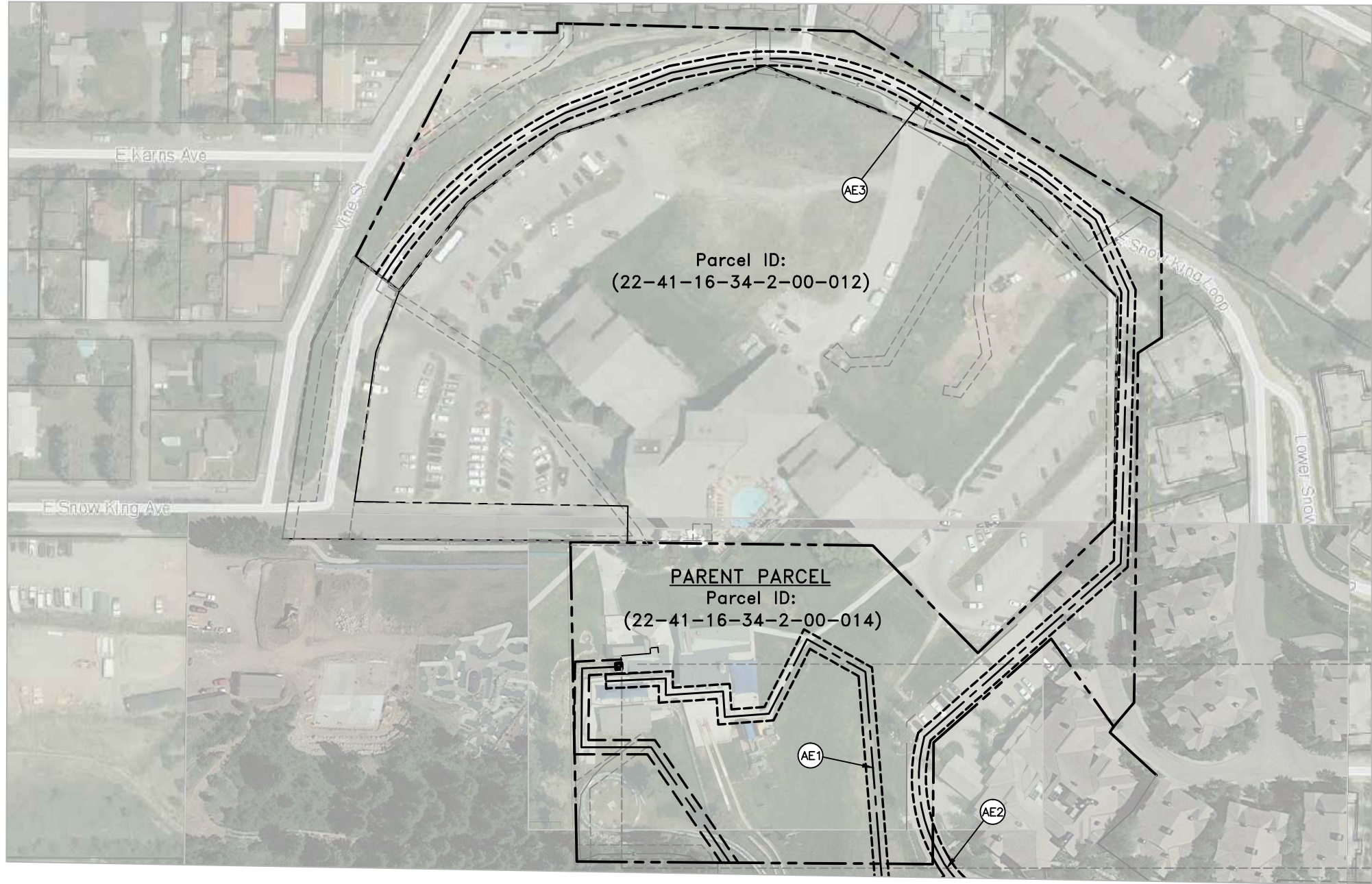
DATE OF SURV.:	8/2/17
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verizon✓
12877 W MCMILLAN RD.
BOISE, ID 83713

J5 INFRASTRUCTURE
P A R T N E R S
AZ - CA - CO - ID - NM - NV - TX - UT

SURVEY NOTES & REFERENCE
SURVEY CONTROL OVERVIEW
ENLARGED LEASE AREA SITE PLAN

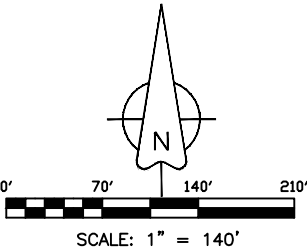
J5 SITE I.D.:	VZ WY3 SK2 COASTER	
SHEET INFO.:	Sheet 1 of 3	SU1



A strip of land fifteen feet (15') wide for the purpose of providing access to a telecommunications equipment lease area, situate within the corporate limits of Jackson City, Teton County, Wyoming, said lease parcel comprising a portion of Tract A as shown on Map T-71-a as recorded in the office of the Teton County Clerk; the centerline of said parcel is more particularly described by metes and bounds as follows:

Beginning at a point that is 628.57 feet North and 1294.61 feet West of the Center ¼ Corner of Section 34, Township 41 North, Range 116 West, 6th Principal Meridian; thence along a curve turning to the right with an arc length of 115.16 feet, a radius of 166.07 feet and a chord bearing and distance of N. 04°36'41" W. 112.87 feet, thence N. 48°38'45" E. 278.33 feet, thence N. 01°36'43" E. 290.24 feet, thence N. 24°32'43" W. 83.78 feet, thence N. 51°44'59" W. 75.84 feet, thence N. 57°55'26" W. 147.90 feet, thence along a curve turning to the left with an arc length of 226.07 feet, a radius of 300.00 feet and a chord bearing and distance of N. 79°30'41" W. 220.75 feet, thence S. 78°54'03" W. 50.54 feet, thence S. 69°24'12" W. 120.25 feet, thence along a curve turning to the left with an arc length of 248.76 feet, a radius of 482.69 feet and a chord bearing and distance of S. 49°00'07" W. 246.01 feet, thence S. 33°02'36" W. 17.08 feet to the terminus of said centerline. The above described parcel of land contains 23,296.20 square feet in area or 0.535 of an acre more or less.

ACCESS EASEMENT 3 LAND DESCRIPTION



CIS
PROFESSIONAL LAND SURVEYING
Mona, UT (435)660-0816
cispls1@gmail.com

DESIGNED FOR:		
<div>verizon</div> <div>12877 W MCMILLAN RD. BOISE, ID 83713</div>		
DESIGNED BY:		
<div>J5 INFRASTRUCTURE</div> <div>PARTNERS</div> <div>AZ - CA - CO - ID - NM - NV - TX - UT</div>		
SHEET TITLE:		
ACCESS EASEMENT		
J5 SITE I.D.:	WY3 SK COASTER	
SHEET INFO.:	Sheet 3 of 3	SU3

PREPARED FOR:

verizon
9658 SOUTH PROSPERITY ROAD
WEST JORDAN, UTAH 84081

1A CERTIFICATION LETTER

FOR
VERIZON WIRELESS
FACILITY KNOWN AS:

WY3 SK COASTER 2, Y&Z Sectors
TETON COUNTY, WYOMING

ELEVATION REPORT:

NAVD88 - GROUND ELEVATION: 6310 sft
[ELEVATION METERS]: 1923.292 m

LEGAL DESCRIPTION:

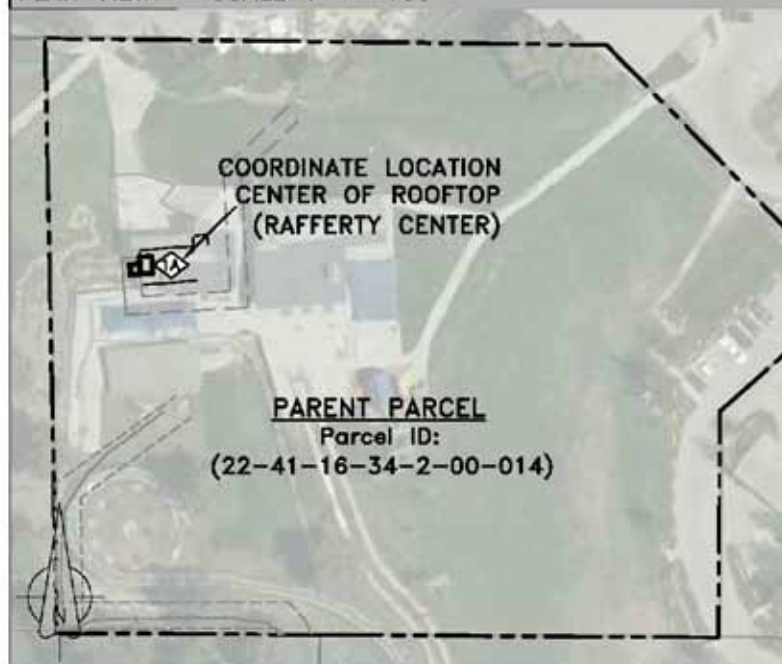
218 FEET N 00°22'55" E ALONG
THE ¼ SECTION LINE AND 1020
FEET WEST OF THE CENTER ¼
CORNER OF SECTION 34, T.41N.
R.116W. 6TH PRINCIPAL MERIDIAN,
TETON COUNTY WY.

SITE LOCATION:

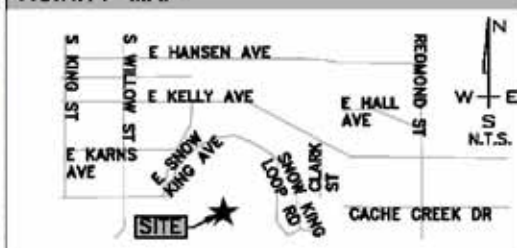
SITE IS LOCATED AT:

402 E SNOW KING AVENUE
JACKSON CITY,
TETON COUNTY, WYOMING.

PLAN VIEW: SCALE 1" = 100'



VICINITY MAP



PROFILE VIEW LOOKING SOUTHEAST

BASIS OF GEODETIC COORDINATES:

(1) HORIZONTAL DATUM: NORTH AMERICAN DATUM OF 1983 (NAD83) [PRIMARY] EXPRESSED IN DEGREES (°) MINUTES (') AND SECONDS (") AND CARRIED TO THE 10,000TH OF A SECOND, AND ALSO EXPRESSED IN DEGREES AND DECIMAL DEGREES.

(2) VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) EXPRESSED IN U.S. SURVEY FEET AND METERS (METER EQUIVALENT TO 39.37 INCHES).

(3) NAD83 GEODETIC DATA SHOWN HEREON WAS DERIVED FROM AND IS TIED TO THE NATIONAL GEODETIC SURVEY, NATIONAL C.O.R.S. VIA THE O.P.U.S. UTILITY AND OR TRIMBLE GEOMATICS SOFTWARE.

SURVEYOR'S CERTIFICATION:

I HEREBY CERTIFY THAT THE GEO-
DETIC COORDINATES REPORTED
HEREON ARE ACCURATE AND
MEET FAA/FCC REPORTING RE-
QUIREMENTS OF 1A: FIFTEEN
FEET (15') HORIZONTALLY AND
THREE FEET (3') VERTICALLY.

DATE OF SURV.:

8/2/17

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THE USE OF OUR CLIENT. ANY REPRODUCTION OR USE OF THE
INFORMATION CONTAINED WITHIN SAID DOCUMENTS IS PROHIBITED WITHOUT
THE WRITTEN CONSENT BY J5 INFRASTRUCTURE PARTNERS.

PREPARED BY:



PROFESSIONAL LAND SURVEYING
JAMES D. PITKIN WY P.L.S. #10111 09/22/2017

295 N 200 E
MONA, UT 84645
(435)660-0818
cory@cislps.com

J5 INFRASTRUCTURE
P A R T N E R S
AZ - CA - CO - ID - NM - NV - TX - UT

DESIGNED FOR:

verizon

3131 SOUTH VAUGHN WAY, SUITE 550
AURORA, COLORADO 80018

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CONSENT OF J5 INFRASTRUCTURE PARTNERS, LLC.

J5 INFRASTRUCTURE
P A R T N E R S
AZ - CA - CO - ID - NM - NV - TX - UT

REV	DESCRIPTION	DATE	BY	CHK
C	REVISED PER COMMENTS	9/25/17	MDA	-
D	REVISED PER COMMENTS	11/1/17	MDA	-
E	REVISED PER RF COMMENTS	1/23/18	MDA	-
F	REVISED PER UPDATED SURVEY AND P COORD	3/21/18	MDA	-
G	REVISED PER UPDATED SURVEY	5/8/18	MDA	-

DESIGNED BY:

PRELIMINARY
FOR LEASING/ZONING

PROJECT NAME:

WY3 SK COASTER 2
EXISTING 17'-11" BUILDING
(OVERALL HEIGHT: 20'-0" A.G.L.)
RAWLAND

PROJECT ADDRESS:

402 E. SNOW KING AVENUE
JACKSON, WY 83001
TETON COUNTY

SHEET TITLE:

1A CERTIFICATION LETTER

SAVE DATE:

5/8/2018 4:38 PM

SHEET NUMBER:

SU4

PENETRATIONS

RRH/BBU

ANTENNAS

FIBER

POWER/GROUNDING

HYBRID/COAX

- SITE NOTES:**
1. PRIOR TO EXCAVATION, CONTRACTOR SHALL CHECK THE AREA FOR UNDERGROUND FACILITIES.
 2. INFORMATION SHOWN BELOW FOR DEPICTION PURPOSES ONLY. ALL DATA GATHERED FROM PUBLIC RECORDS AND GENERATED FROM AERIAL IMAGES AND SITE VISITS. INFORMATION DOES NOT CONSTITUTE A LEGAL BOUNDARY SURVEY AND SHOULD NOT BE USED FOR SURVEYING OR OTHER RELATED PURPOSES.

SETBACK TABLE:	
	LEASE AREA BOUNDARY TO PARENT PROPERTY LINE
NORTH	~128'
SOUTH	~205'
EAST	~332'
WEST	~46'


DESIGNED FOR:


3131 SOUTH VAUGHN WAY, SUITE 550
AURORA, COLORADO 80018

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J5 INFRASTRUCTURE PARTNERS, LLC		AZ - CA - CO - ID - NM - NV - TX - UT	
REV	DESCRIPTION	DATE	CHK
C	REVISED PER COMMENTS	9/25/17	MDA
D	REVISED PER COMMENTS	11/1/17	MDA
E	REVISED PER RF COMMENTS	1/23/18	MDA
F	REVISED PER UPDATED SURVEY AND P COORD	3/21/18	MDA
G	REVISED PER UPDATED SURVEY	5/8/18	MDA

DESIGNED BY:



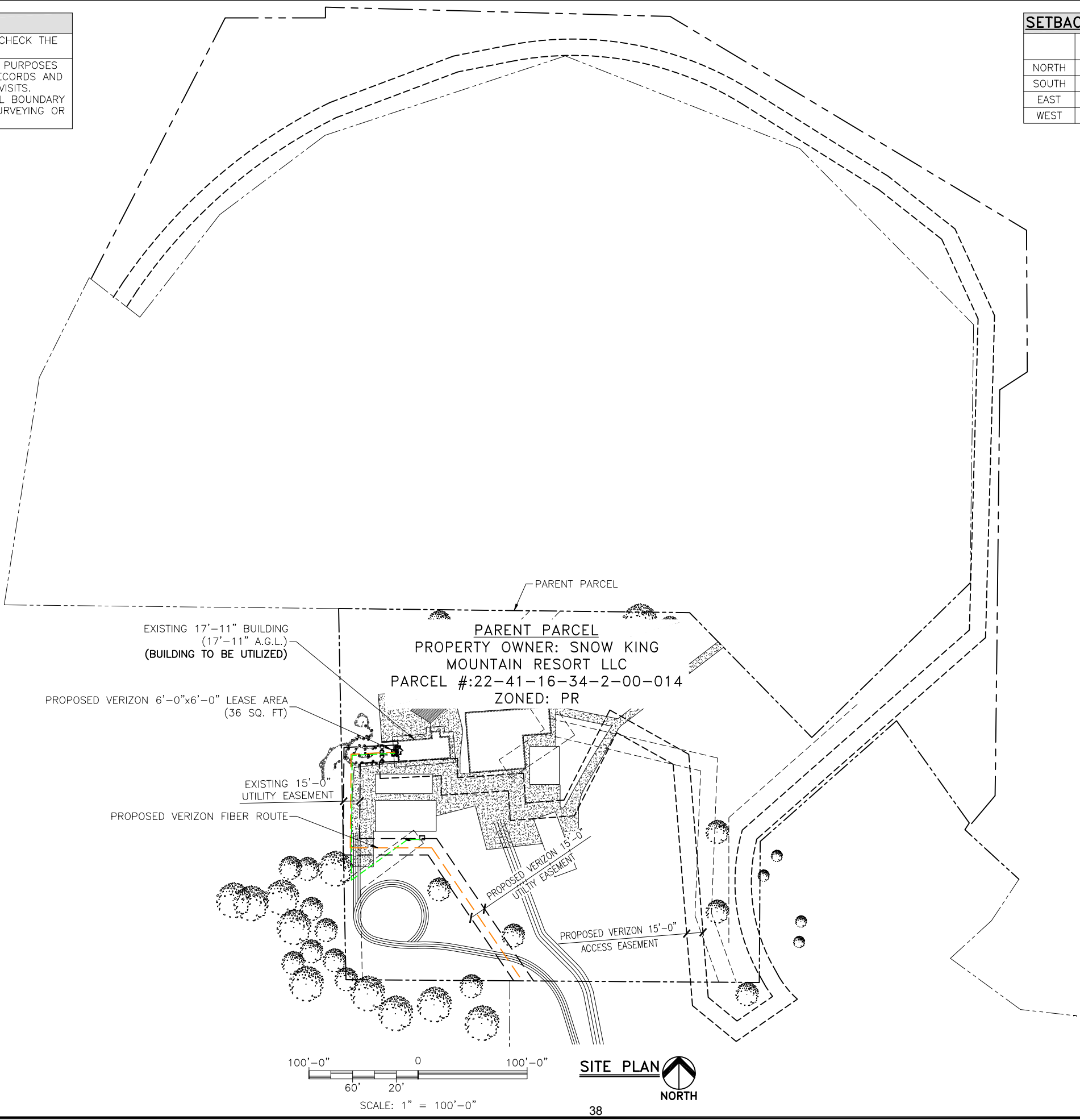
PROJECT NAME:
WY3 SK COASTER 2
EXISTING 17'-11" BUILDING
(OVERALL HEIGHT: 20'-0" A.G.L.)
RAWLAND

PROJECT ADDRESS:
402 E. SNOW KING AVENUE
JACKSON, WY 83001
TETON COUNTY

SHEET TITLE:
SITE PLAN

SAVE DATE:
5/8/2018 4:38 PM

SHEET NUMBER:
Z1



PENETRATIONS

RRH/BBU

ANTENNAS

FIBER

POWER/GROUNDING

HYBRID/COAX

SITE NOTES:

1. PRIOR TO EXCAVATION, CONTRACTOR SHALL CHECK THE AREA FOR UNDERGROUND FACILITIES.
2. INFORMATION SHOWN BELOW FOR DEPICTION PURPOSES ONLY. ALL DATA GATHERED FROM PUBLIC RECORDS AND GENERATED FROM AERIAL IMAGES AND SITE VISITS. INFORMATION DOES NOT CONSTITUTE A LEGAL BOUNDARY SURVEY AND SHOULD NOT BE USED FOR SURVEYING OR OTHER RELATED PURPOSES.

SETBACK TABLE:

	LEASE AREA BOUNDARY TO PARENT PROPERTY LINE
NORTH	~128'
SOUTH	~205'
EAST	~332'
WEST	~46'

DESIGNED FOR:


3131 SOUTH VAUGHN WAY, SUITE 550
AURORA, COLORADO 80018

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J5 INFRASTRUCTURE PARTNERS

AZ - CA - CO - ID - NM - NV - TX - UT

REV	DESCRIPTION	DATE	BY	CHK
C	REVISED PER COMMENTS	9/25/17	MDA	-
D	REVISED PER COMMENTS	11/1/17	MDA	-
E	REVISED PER RF COMMENTS	1/23/18	MDA	-
F	REVISED PER UPDATED SURVEY AND P COORD	3/21/18	MDA	-
G	REVISED PER UPDATED SURVEY	5/8/18	MDA	-

DESIGNED BY:

PRELIMINARY
FOR LEASING/ZONING

PROJECT NAME:

WY3 SK COASTER 2
EXISTING 17'-11" BUILDING
(OVERALL HEIGHT: 20'-0" A.G.L.)
RAWLAND

PROJECT ADDRESS:

402 E. SNOW KING AVENUE
JACKSON, WY 83001
TETON COUNTY

SHEET TITLE:

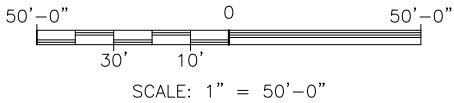
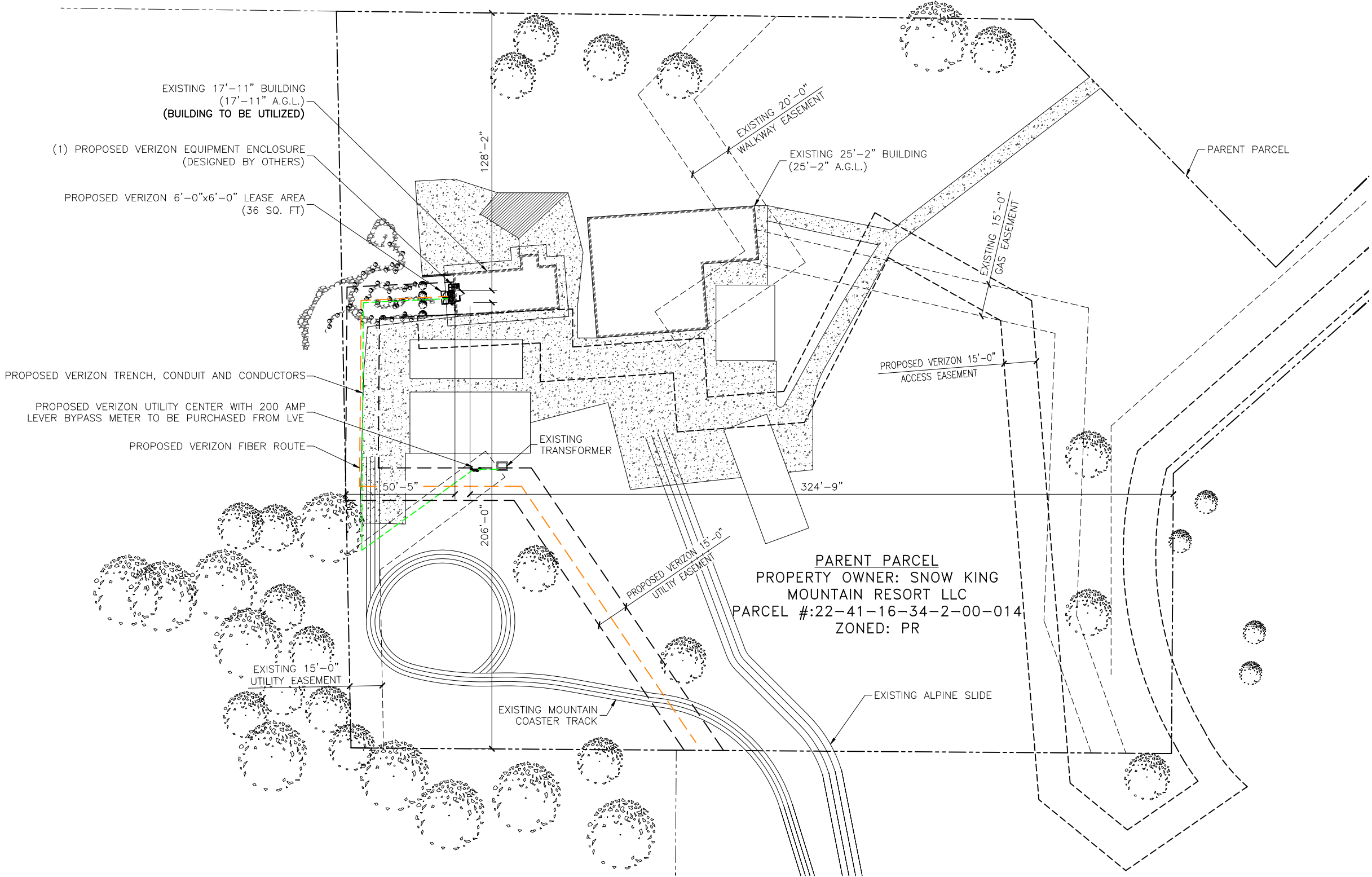
SITE PLAN

SAVE DATE:

5/8/2018 4:38 PM

SHEET NUMBER:

22



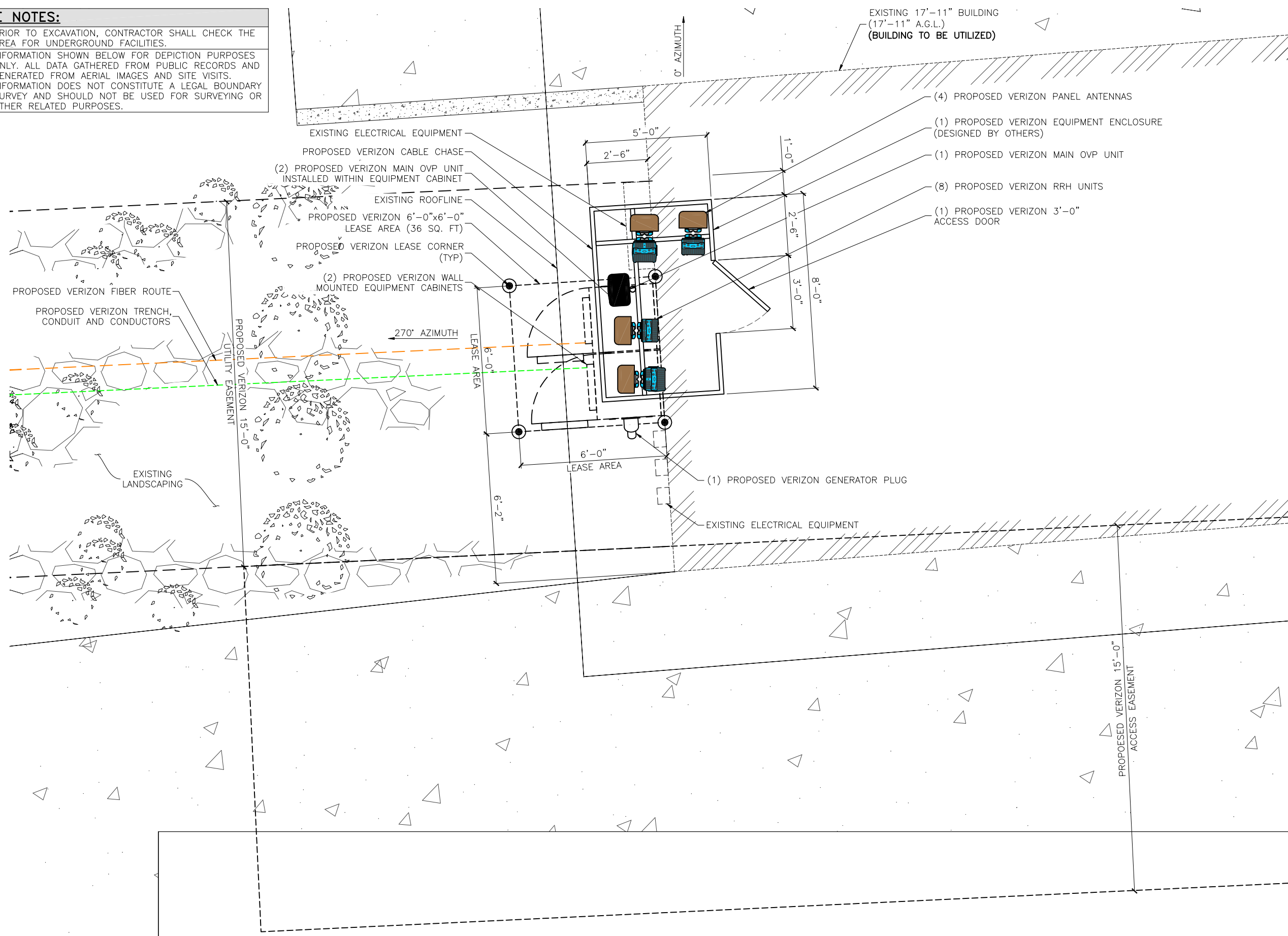
SITE PLAN



NORTH

SITE NOTES:

- | | |
|----|--|
| 1. | PRIOR TO EXCAVATION, CONTRACTOR SHALL CHECK THE AREA FOR UNDERGROUND FACILITIES. |
| 2. | INFORMATION SHOWN BELOW FOR DEPICTION PURPOSES ONLY. ALL DATA GATHERED FROM PUBLIC RECORDS AND GENERATED FROM AERIAL IMAGES AND SITE VISITS. INFORMATION DOES NOT CONSTITUTE A LEGAL BOUNDARY SURVEY AND SHOULD NOT BE USED FOR SURVEYING OR OTHER RELATED PURPOSES. |



SITE PLAN

SCALE: 1/4" = 1'-0" NORTH

DESIGNED FOR:

DESIGNED FOR:

verizon

3131 SOUTH VAUGHN WAY, SUITE 550
AURORA, COLORADO 80018

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CONSENT OF J5 INFRASTRUCTURE PARTNERS, LLC.

DESIGNED BY:		J5 INFRASTRUCTURE PARTNERS				AZ - CA - CO - ID - NM - NV - TX - UT	
REV	DESCRIPTION	DATE	BY	CHK			
C	REVISED PER COMMENTS	9/25/17	MDA	—			
D	REVISED PER COMMENTS	11/1/17	MDA	—			
E	REVISED PER RF COMMENTS	1/23/18	MDA	—			
F	REVISED PER UPDATED SURVEY AND P COORD	3/21/18	MDA	—			

**PRELIMINARY
FOR LEASING/ZONING**

PROJECT NAME:

WY3 SK COASTER 2
EXISTING 17'-11" BUILDING
(OVERALL HEIGHT: 20'-0" A.G.L.)
RAWLAND

PROJECT ADDRESS:

402 E. SNOW KING AVENUE
JACKSON, WY 83001
TETON COUNTY

SHEET TITLE:

ENLARGED
SITE PLAN

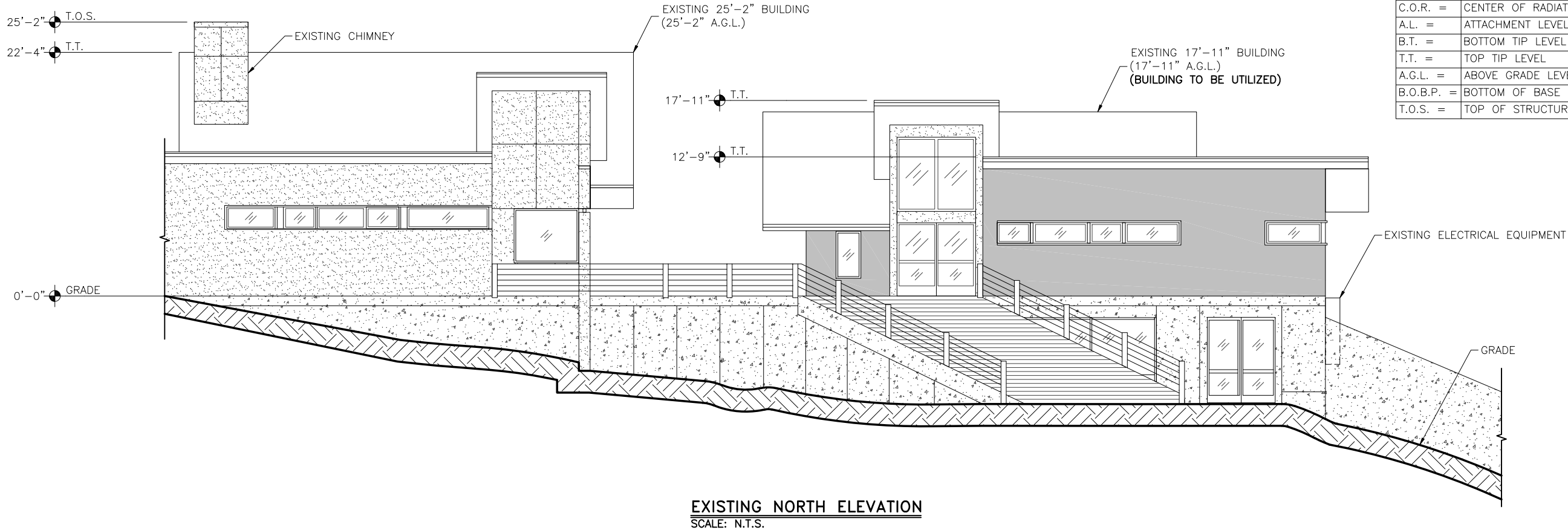
SAVE DATE:

5/8/2018 4:38 PM

SHEET NUMBER:

73

PENETRATIONS
RRH/BBU
ANTENNAS
FIBER
POWER/GROUNDING
HYBRID/COAX



KEY:	
C.O.R. =	CENTER OF RADIATION
A.L. =	ATTACHMENT LEVEL
B.T. =	BOTTOM TIP LEVEL
T.T. =	TOP TIP LEVEL
A.G.L. =	ABOVE GRADE LEVEL
B.O.B.P. =	BOTTOM OF BASE PLATE
T.O.S. =	TOP OF STRUCTURE

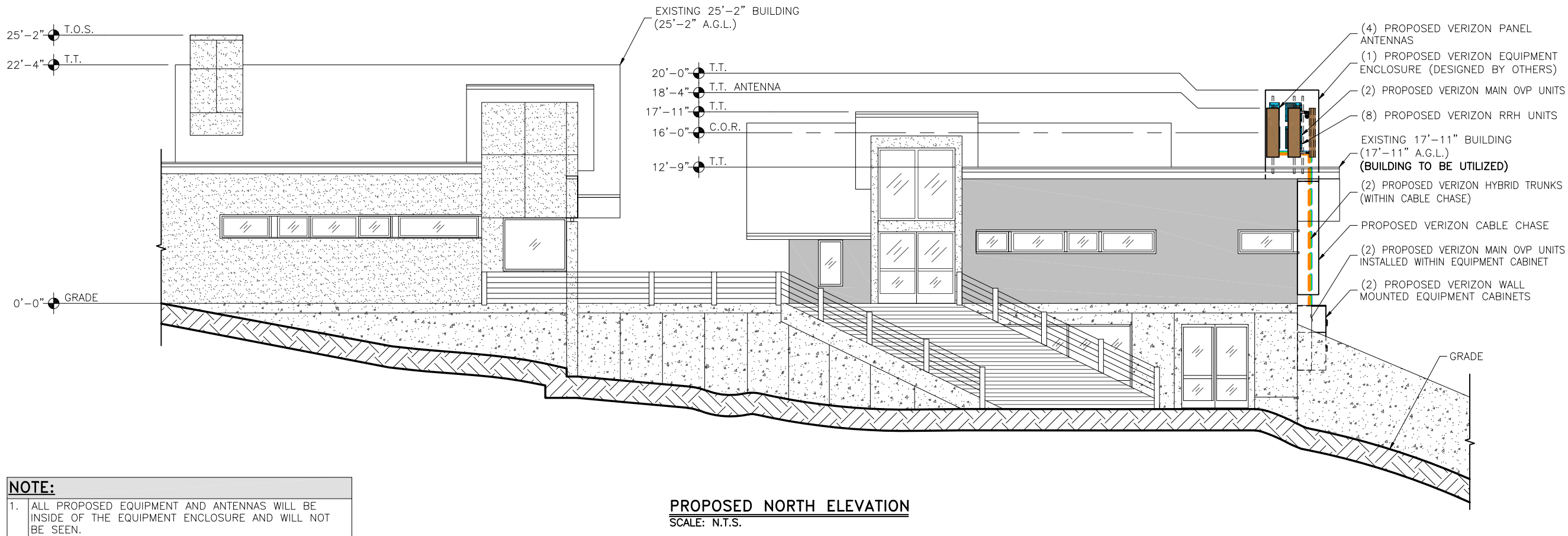
DESIGNED FOR:

verizon

3131 SOUTH VAUGHN WAY, SUITE 550
AURORA, COLORADO 80018

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J5 INFRASTRUCTURE PARTNERS		AZ - CA - CO - ID - NM - NV - TX - UT	
REV	DESCRIPTION	DATE	CHK
C	REVISED PER COMMENTS	9/25/17	MDA
D	REVISED PER COMMENTS	11/1/17	MDA
E	REVISED PER RF COMMENTS	1/23/18	MDA
F	REVISED PER UPDATED SURVEY AND P COORD	3/21/18	MDA
G	REVISED PER UPDATED SURVEY	5/8/18	MDA



NOTE:
1. ALL PROPOSED EQUIPMENT AND ANTENNAS WILL BE INSIDE OF THE EQUIPMENT ENCLOSURE AND WILL NOT BE SEEN.

PRELIMINARY FOR LEASING/ZONING

PROJECT NAME:

WY3 SK COASTER 2
EXISTING 17'-11" BUILDING
(OVERALL HEIGHT: 20'-0" A.G.L.)
RAWLAND

PROJECT ADDRESS:

402 E. SNOW KING AVENUE
JACKSON, WY 83001
TETON COUNTY

SHEET TITLE:

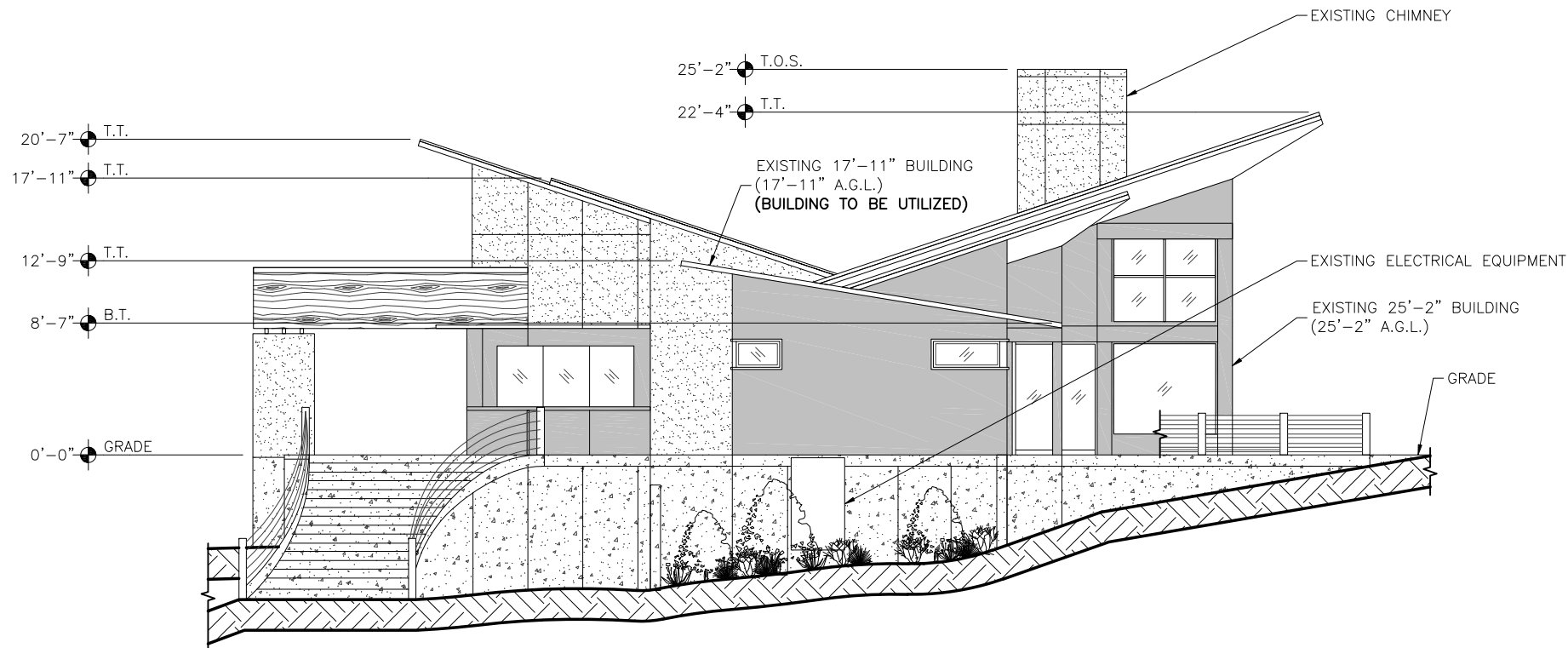
ELEVATIONS

SAVE DATE:

5/8/2018 4:38 PM

SHEET NUMBER:

Z4



EXISTING WEST ELEVATION
SCALE: N.T.S.

KEY:

C.O.R. =	CENTER OF RADIATION
A.L. =	ATTACHMENT LEVEL
B.T. =	BOTTOM TIP LEVEL
T.T. =	TOP TIP LEVEL
A.G.L. =	ABOVE GRADE LEVEL
B.O.B.P. =	BOTTOM OF BASE PLATE
T.O.S. =	TOP OF STRUCTURE

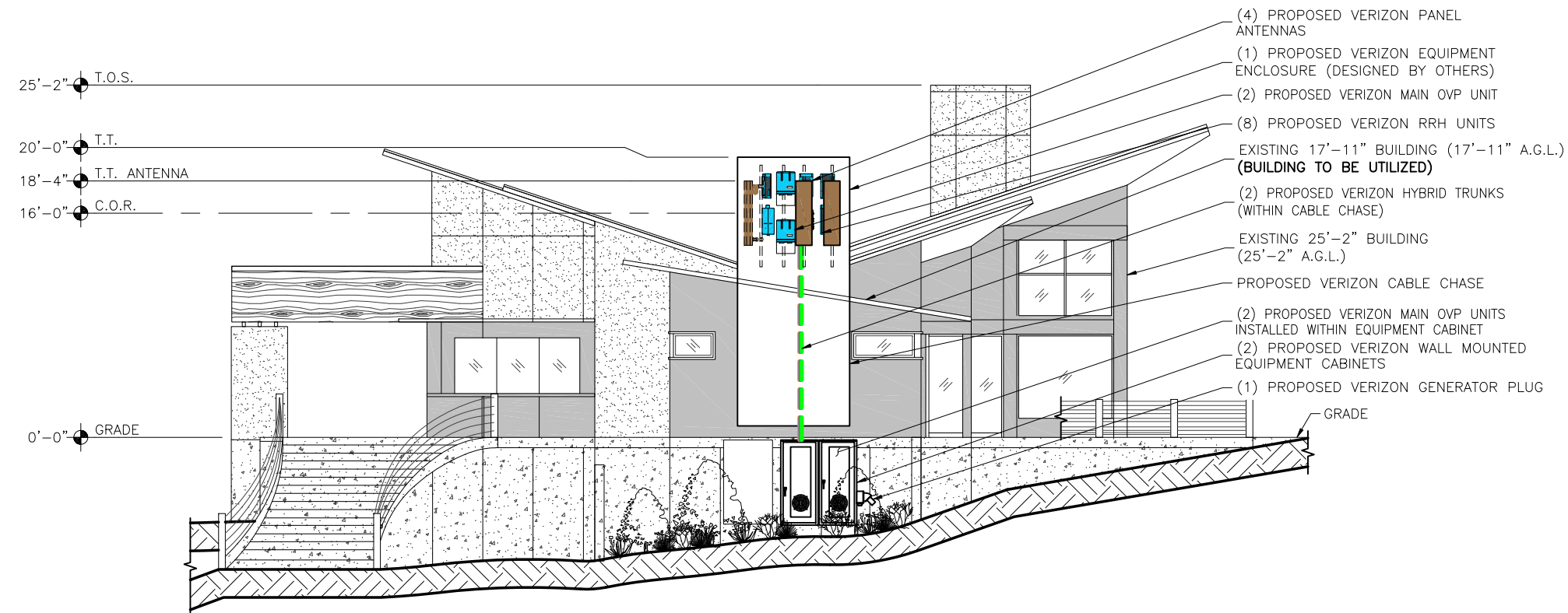
DESIGNED FOR:

verizon3131 SOUTH VAUGHN WAY, SUITE 550
AURORA, COLORADO 80018

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J5 INFRASTRUCTURE
PARTNERS
AZ - CA - CO - ID - NM - NV - TX - UT

REV	DESCRIPTION	DATE	BY	CHK
C	REVISED PER COMMENTS	9/25/17	MDA	-
D	REVISED PER COMMENTS	11/1/17	MDA	-
E	REVISED PER RF COMMENTS	1/23/18	MDA	-
F	REVISED PER UPDATED SURVEY AND P COORD	3/21/18	MDA	-
G	REVISED PER UPDATED SURVEY	5/8/18	MDA	-



PROPOSED WEST ELEVATION
SCALE: N.T.S.

NOTE:

1. ALL PROPOSED EQUIPMENT AND ANTENNAS WILL BE INSIDE OF THE EQUIPMENT ENCLOSURE AND WILL NOT BE SEEN.

PRELIMINARY
FOR LEASING/ZONING

PROJECT NAME:

WY3 SK COASTER 2
EXISTING 17'-11" BUILDING
(OVERALL HEIGHT: 20'-0" A.G.L.)
RAWLAND

PROJECT ADDRESS:

402 E. SNOW KING AVENUE
JACKSON, WY 83001
TETON COUNTY

SHEET TITLE:




ELEVATIONS

SAVE DATE:

5/8/2018 4:38 PM

SHEET NUMBER:

Z5

REV	DESCRIPTION	DATE	BY	DESIGNED FOR:
A	PRELIMINARY – FOR LEASING & ZONING	8/15/17	MDA	 <p>3131 SOUTH VAUGHN WAY, SUITE 550 AURORA, COLORADO 80018</p> <p>THESE DRAWINGS AND SURVEYS ARE COPYRIGHT PROTECTED AND THE SOLE PROPERTY OF J5 INFRASTRUCTURE PARTNERS, LLC AND PRODUCED FOR THE USE OF OUR CLIENT. ANY REPRODUCTION OR USE OF THE INFORMATION CONTAINED WITHIN SAID DOCUMENTS IS PROHIBITED WITHOUT THE WRITTEN CONSENT OF J5 INFRASTRUCTURE PARTNERS, LLC.</p>
B	REMOVED GAMMA SECTOR AND ASSOCIATED EQUIPMENT	9/8/17	MDA	
C	UPDATED EQUIPMENT ENCLOSURE DIMENSIONS AND ADDED WEST ELEVATIONS PER P&Z COMMENTS	9/20/17	MDA	
D	REVISED PER UPDATED SURVEY TO INCLUDE ACCESS EASEMENT	10/25/17	MDA	
D	REVISED PER COMMENTS	11/1/17	MDA	
E	REVISED PER RF COMMENTS	11/15/17	MDA	
E	ADDED GENERATOR PLUG	1/23/18	MDA	
F	REVISED PER UPDATED SURVEY AND POWER COORD	3/16/18	MDA	
F	REVISED PER COMMENTS	3/21/18	MDA	
G	REVISED EASEMENTS PER SURVEY	4/30/18	MDA	
G	REVISED PER COMMENTS	5/8/18	MDA	 <p>AZ - CA - CO - ID - NM - NV - TX - UT</p>
				
				PROJECT NAME: WY3 SK COASTER 2 PROPOSEED 17'-11" BUILDING (OVERALL HEIGHT: 20'-0" A.G.L.) RAWLAND
				PROJECT ADDRESS: 402 E. SNOW KING AVENUE JACKSON, WY 83001 TETON COUNTY
				SHEET TITLE: PROJECT HISTORY SHEET
				SAVE DATE: 5/8/2018 4:38 PM
				SHEET NUMBER: PHS

PENETRATIONS

RRH/BBU

ANTENNAS

FIBER

POWER/GROUNDING

HYBRID/COAX



Verizon Wireless
9656 South Prosperity Road
West Jordan, Utah 84088

TO: Bob Nevins, Senior Planner

RE: Compliance with Applicable Codes
Verizon Wireless WY3 SK Coaster 1 and 2

DATE: April 21, 2017

This letter is submitted in accordance with Sec. 6.1.10.D.3.d.vii of the Town of Jackson Land Development Regulations. Verizon Wireless affirms that the proposed Base Stations known as "WY3 SK Coaster 1 and 2," to be located at the base of the Snow King Resort, will be constructed and maintained in compliance with all applicable non-discretionary structural, electrical, energy, building and safety codes.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Jennifer Sedillo".

Jennifer Sedillo
Real Estate Manager



TO: Bob Nevins, Senior Planner

RE: Compliance with ANSI Standards
Verizon Wireless WY3 SK Coaster 1 and 2

DATE: April 22, 2017

This letter is submitted in accordance with Sec. 6.1.10.D.3.d.v of the Town of Jackson Land Development Regulations. Verizon Wireless affirms that the proposed base stations known as WY3 SK Coaster 1 and 2, to be located at the base of Snow King Resort at 402 E. Snow King Avenue, will be constructed and maintained in compliance with all applicable standards of the American National Standards Institute (ANSI) for electromagnetic radiation. Verizon Wireless further affirms that the facility will meet or exceed current ANSI standards as adopted by the Federal Communications Commission (FCC).

Sincerely,

A handwritten signature in blue ink, appearing to read "T. Griffin", with a stylized flourish at the end.

Travis Griffin
Senior Manager RF System Design
Verizon Wireless
3131 South Vaughn Way, Suite 550
Aurora, CO 80014



TO: Bob Nevins, Senior Planner

RE: Verizon Wireless SK Coaster 1 and 2

DATE: April 22, 2017

To Whom It May Concern:

We write to inform you that Verizon Wireless has performed a radio frequency (RF) compliance pre-construction evaluation for the above-referenced proposed sites and based on the results of those evaluations the sites will be compliant with FCC Guidelines.

The FCC has established safety guidelines relating to potential RF exposure from cell sites. The FCC developed the standards, known as the Maximum Permissible Exposure (MPE) limits, in consultation with numerous other federal agencies, including the Environmental Protection Agency, the Food and Drug Administration, and the Occupational Safety and Health Administration. The FCC provides information about the safety of radio frequency (RF) emissions from cell towers on its website at : <https://www.fcc.gov/engineering-technology/electromagnetic-compatibility-division/radio-frequency-safety/faq/rf-safety>.

Please refer to the FCC Office of Engineering and Technology Bulletin 65 for information on RF exposure guidelines.

Policy questions should be directed to VZWRFCCompliance@verizonwireless.com. Please contact your local Verizon Wireless resource below if you have additional site-specific questions.

Contact Name	Contact Email	Contact Phone
Travis Griffin	Travis.Griffin2@vzw.com	303-489-9198

Sincerely,

Travis Griffin
Senior Manager RF System Design
Verizon Wireless
3131 South Vaughn Way, Suite 550
Aurora, CO 80014

Kappa Consulting Limited Liability Company

Irene C. Cooke
1599 County Road 5221
P O Box 423
Tabernash, CO 80478

Mobile: 970-531-0831
Office: 970-726-4574
Fax: 970-726-6953
Email: irene@ireneco.com

June 7, 2018

Sent via email to Brendan Conboy; BConboy@jacksonwy.gov

Brendan Conboy
Town of Jackson
150 E. Pearl Avenue
Jackson, WY 83001

RE: Verizon Wireless CUP Applications
402 E. Snow King Avenue
Project Numbers P18-163 and P18-164

Dear Brendan:

Please accept this letter as an addendum to the above referenced applications for wireless communications sites. Based on the Snow King Master Plan in the PR-SK zone, no employee housing mitigation plan will be required. Please see Snow King Master Plan, Page 51: Snow King Resort Land Use Schedule; Institutional Uses: Allowed: C (Conditional Use).

DIVISION 49500 of the 1994 LDRs provides certain exemptions from Employee Housing Standards:

SECTION 49520 EXEMPTIONS

49520.G. Institutional Uses: This section provides that development of an institutional use, as listed in Section 2220.C., Institutional uses, is exempt from the standards of this Division.

SECTION 2220 DEFINITIONS FOR USE SCHEDULE

2200.C.1 Institutional Uses: This section includes wireless communications services and/or facilities are included in the definition of an Institutional Use, and wireless communications facilities, such as the ones proposed in the above referenced applications, are thus exempt from the Employee Housing Standards as provided under Section 49520.G.

Thank you in advance for your consideration of this addendum.

Sincerely,



Irene Cooke

**VERIZON WIRELESS WY3 SK COASTER 2
LEGAL DESCRIPTION**

A Tract of Land located in the NW¼ of Section 34, Township 41 North, Range 116 West, 6th P.M., Town of Jackson, Teton County, Wyoming, being more particularly described as:

Tract A as shown on Map T-71-A as recorded in the Office of the Teton County Clerk

EXCEPTING THEREFROM: that portion of Said Tract A shown and described on Map T-71-E as recorded in Said Office as "parcel to be transferred from Snow King Resort, Inc., to SK Land LLC" and

FURTHER EXCEPTING THEREFROM: that portion of Lot 37 of Grand View Lodges Addition to the Town of Jackson, Plat No. 1156 as recorded in Said Office lying within Said Tract A.

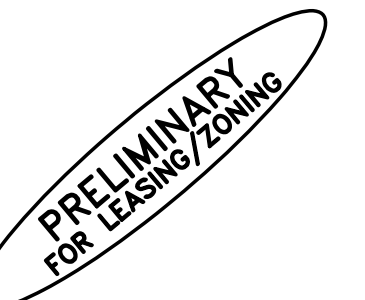
FURTHER EXCEPTING THEREFROM: That portion of Lot 20 of Love Ridge Lodge Homes Fourth Addition to the Town of Jackson, Plat No. 1103 as recorded in Said Office lying within Said Tract A.



PUBLIC RECORD PARCEL NO. 22-41-16-34-2-00-014



EXISTING 17'-11" BUILDING
(OVERALL HEIGHT: 20'-0" A.G.L.)
RAWLAND



PROJECT INDEX:
APPLICANT:
VERIZON WIRELESS
2730 BOZEMAN AVENUE
HELENA, MT 59601

CONTACT: KENT MCDERMOTT
PHONE: 406-461-1359
ENGINEERS/DESIGNERS:
JIS INFRASTRUCTURE PARTNERS
567 NORTH STAR RD.
STAR, ID 83669

CONTACT: JOSH MALBERG
PHONE: 208-286-0266 EXT. 170
SURVEYOR:
CIS PROFESSIONAL LAND SURVEYING

CONTACT: CORY SQUIRE
PHONE: 435-660-0816
CORY@CISPLS.CO
ZONING/SITE AQ:
KAPPA CONSULTING LLC
800 PEARL STREET #907
DENVER, CO 80203

CONTACT: IRENE C. COOKE
PHONE: 970-531-0831
EMAIL: irene@ireneneco.com

PROJECT INFORMATION:	
OWNER:	SNOW KING MOUNTAIN RESORT LLC
JURISDICTION:	CONTACT: RYAN STANLEY PHONE: 307-734-3351 TOWN OF JACKSON
PUBLIC RECORD PARCEL NO:	CONTACT: PAUL ANTHONY PHONE: 307-733-0440 X1303 22-41-16-34-2-00-014

PROJECT DESCRIPTION:

THIS PROJECT CONSISTS OF THE FOLLOWING:

INSTALLATION

- * TWO (2) PROPOSED EQUIPMENT ENCLOSURES (DESIGNED BY OTHERS)
- * FOUR (4) PROPOSED PANEL ANTENNAS
- * TWO (4) PROPOSED MAIN OVP UNITS
- * TWO (2) PROPOSED 700 RRH UNITS
- * TWO (2) PROPOSED PCS RRH UNITS
- * TWO (2) PROPOSED AWS RRH UNITS
- * TWO (2) PROPOSED 850 RRH UNITS
- * TWO (2) PROPOSED HYBRID TRUNKS
- * TWO (2) PROPOSED SUPPLEMENTARY BACKS
- * ONE (1) PROPOSED GENERATOR PLUG
- * ONE (1) PROPOSED WALL MOUNTED TRANSFORMER
- * ONE (1) PROPOSED LCL
- * ONE (1) PROPOSED 100A FUSED DC

VICINITY MAP
SCALE: N.T.S.



NORTH

49

LEGEND OF SYMBOLS:

REFERENCE LETTER OR NUMBER

SECTION OR DETAIL

SCALE:

SHEET WHERE DRAWN

SHEET WHERE TAKEN

SECTION LETTER

SHEET WHERE DRAWN

SHEET WHERE TAKEN

DETAIL NUMBER

SHEET WHERE DRAWN

SHEET WHERE TAKEN

CENTERLINE

PENNY

EQUIPMENT OR FIXTURE NUMBER

KEYED NOTE

T.C. 1631.33
F.L. 1631.00

SPOT ELEVATION

TOP OF WALL
1639.00

CONTROL OR DATUM POINT

PROPERTY LINE

EXISTING CONTOUR

NEW CONTOUR

ROUND/DIAMETER

APPROXIMATELY



VIEW OF PROPOSED LEASE AREA
(LOOKING EAST)



VIEW OF EXISTING BUILDING
(LOOKING WEST)

PRELIMINARY
FOR LEASING/ZONING

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DESIGNED FOR:

verizon

3131 SOUTH VAUGHN WAY, SUITE 550
AURORA, COLORADO 80014

DESIGNED BY:

J5 INFRASTRUCTURE
P A R T N E R S
AZ - CA - CO - ID - NM - NV - TX - UT

PROJECT NAME:

WY3 SK COASTER 2
EXISTING 17'-11" BUILDING
(OVERALL HEIGHT: 20'-0" A.G.L.)
RAWLAND

PROJECT ADDRESS:

402 E. SNOW KING AVENUE
JACKSON, WY 83001
TETON COUNTY

SHEET TITLE:

PHOTO SHEET

REV	DESCRIPTION	DATE	BY	CHK
D	REVISED TO 24"x36" TEMPLATE	11/1/17	MDA	-
E	REVISED PER RF COMMENTS	1/23/18	MDA	-
F	REVISED PER UPDATED SURVEY AND POWER COORD	3/21/18	MDA	-
G	REVISED PER UPDATED SURVEY	5/8/18	MDA	-
H	REVISED PER COMMENTS	8/24/18	MDA	-

SAVE DATE:

8/24/2018 4:09 PM

SHEET NUMBER:

PS1

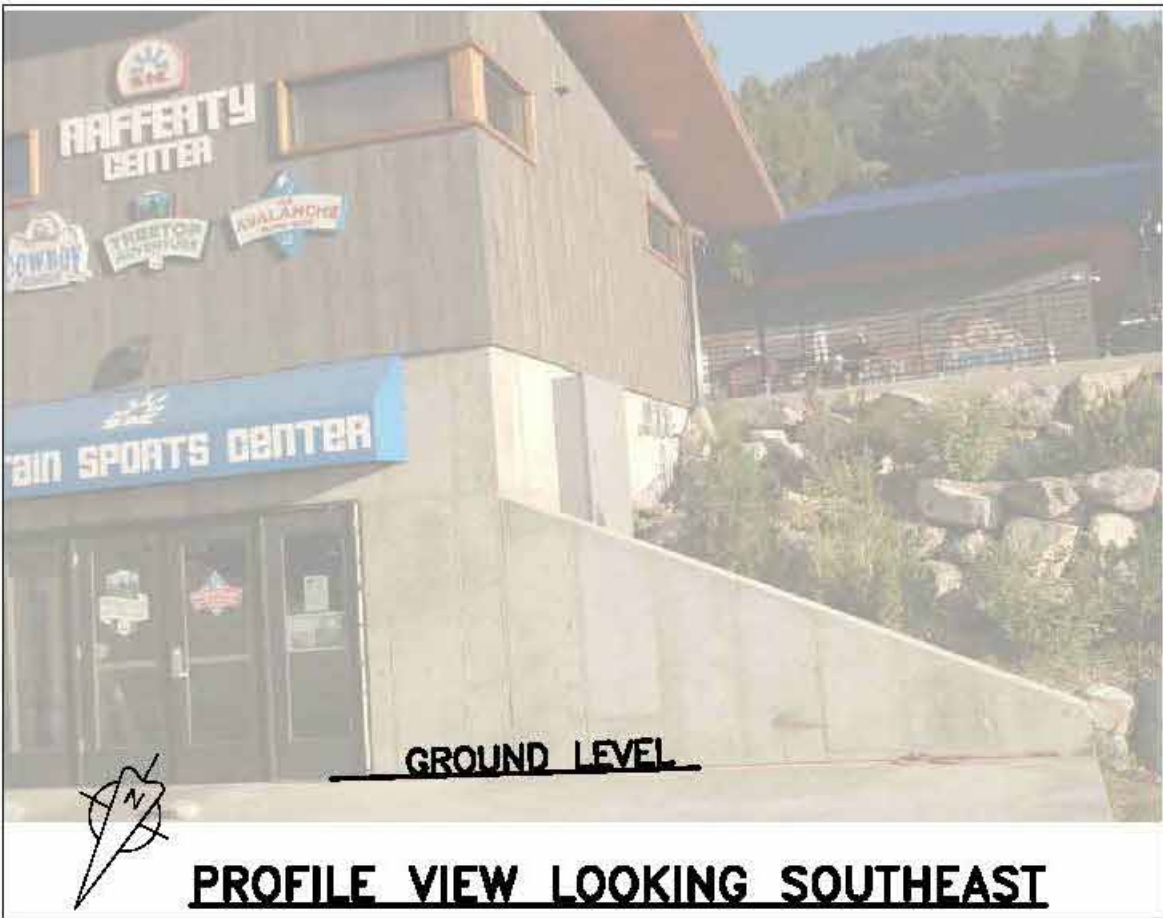
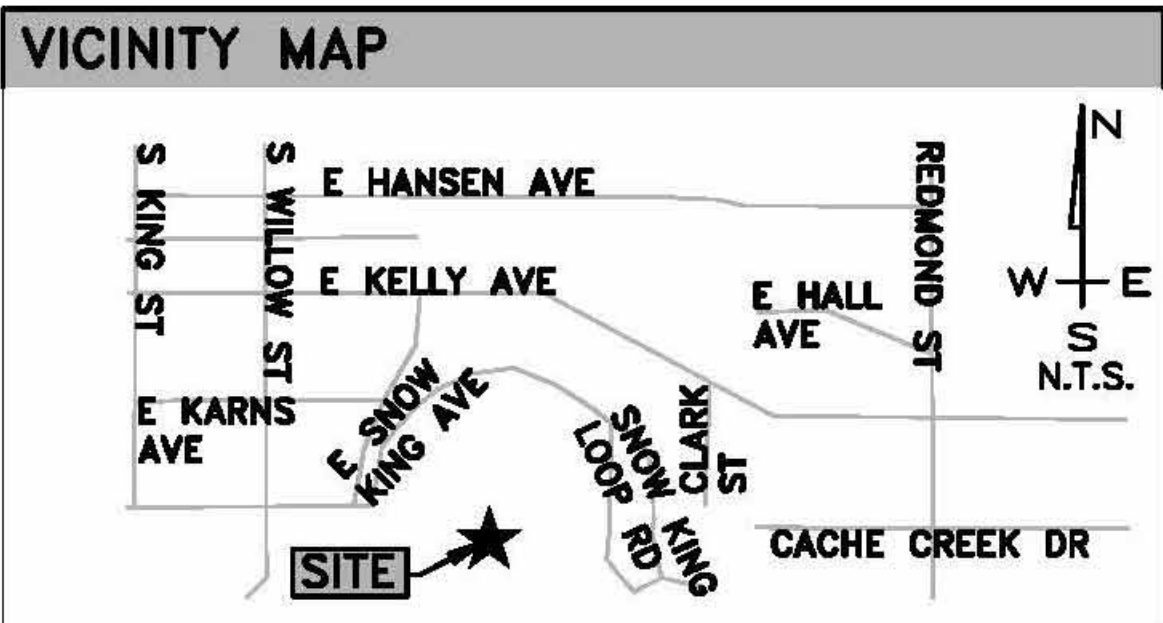
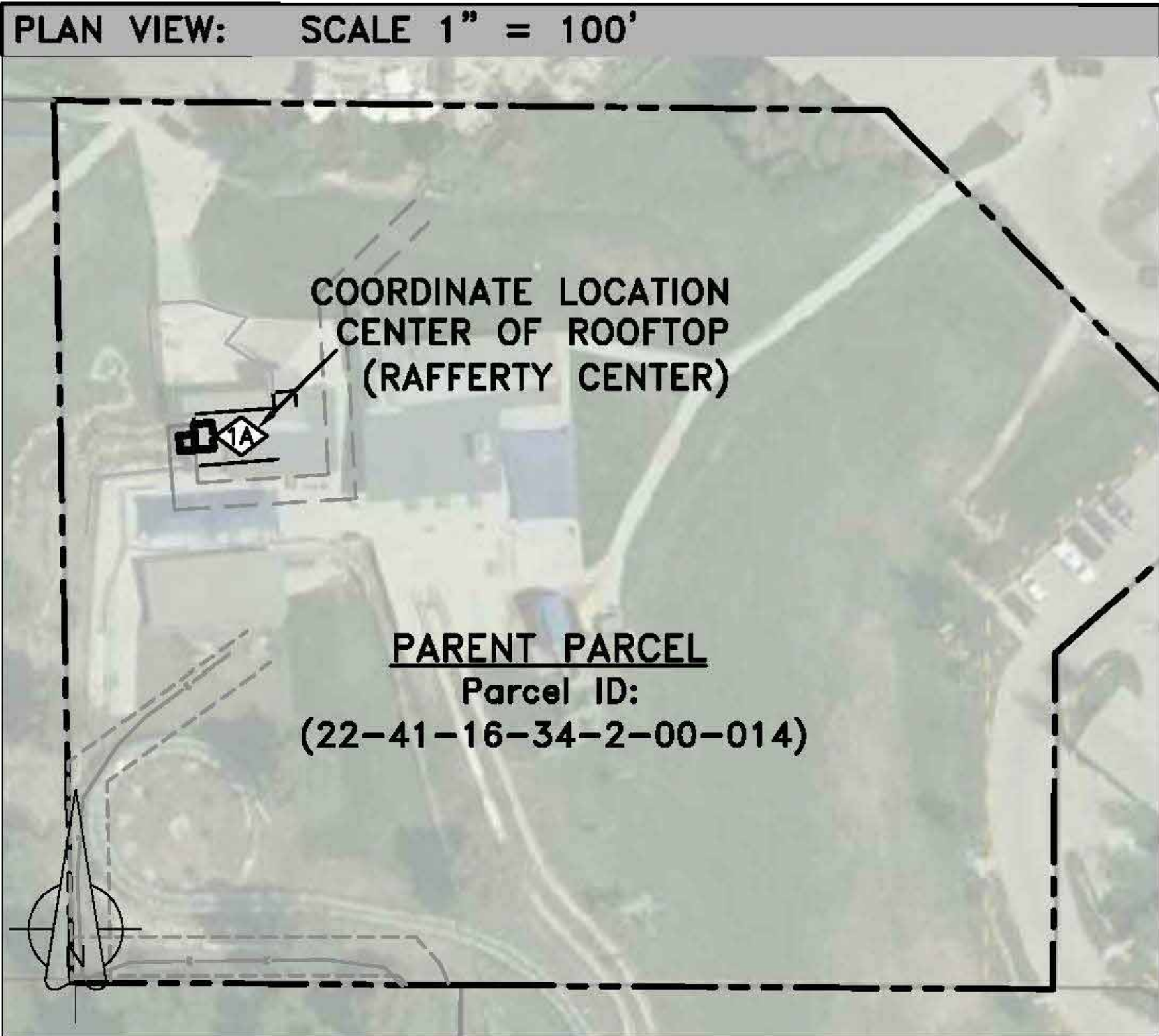
PENETRATIONS
RRH/BBU
ANTENNAS
FIBER
POWERS/GROUNDING
HYBRID/COAX

PREPARED FOR:



1A CERTIFICATION LETTER
FOR
VERIZON WIRELESS
FACILITY KNOWN AS:
WY3 SK COASTER 2, Y&Z Sectors
TETON COUNTY, WYOMING

ELEVATION REPORT:	LEGAL DESCRIPTION:	SITE LOCATION:
NAVD88 - GROUND ELEVATION: 6310 sft [ELEVATION METERS]: 1923.292 m	218 FEET N 00°22'55" E ALONG THE ¼ SECTION LINE AND 1020 FEET WEST OF THE CENTER ¼ CORNER OF SECTION 34, T.41N. R.116W. 6TH PRINCIPAL MERIDIAN, TETON COUNTY WY.	SITE IS LOCATED AT: 402 E SNOW KING AVENUE JACKSON CITY, TETON COUNTY, WYOMING.



BASIS OF GEODETIC COORDINATES:

(1) HORIZONTAL DATUM: NORTH AMERICAN DATUM OF 1983 (NAD83) [PRIMARY] EXPRESSED IN DEGREES (°) MINUTES (') AND SECONDS (") AND CARRIED TO THE 10,000TH OF A SECOND, AND ALSO EXPRESSED IN DEGREES AND DECIMAL DEGREES.
(2) VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) EXPRESSED IN U.S. SURVEY FEET AND METERS (METER EQUIVALENT TO 39.37 INCHES).
(3) NAD83 GEODETIC DATA SHOWN HEREON WAS DERIVED FROM AND IS TIED TO THE NATIONAL GEODETIC SURVEY, NATIONAL C.O.R.S. VIA THE O.P.U.S. UTILITY AND OR TRIMBLE GEOMATICS SOFTWARE.

SURVEYOR'S CERTIFICATION:	DATE OF SURV.:
I HEREBY CERTIFY THAT THE GEO- DETIC COORDINATES REPORTED HEREON ARE ACCURATE AND MEET FAA/FCC REPORTING RE- QUIREMENTS OF 1A: FIFTEEN FEET (15') HORIZONTALLY AND THREE FEET (3') VERTICALLY.	8/2/17

GEODETIC COORDINATES:

NAD 83:	43°28'22.63"N 110°45'22.31"W
DECIMAL DEGREES:	43.472953°N 110.756197°W

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PREPARED BY:

295 N 200 E
MONA, UT 84645
(435)660-0816
cory@cispls.com

AZ - CA - CO - ID - NM - NV - TX - UT

JAMES D. PITKIN WY P.L.S. #10111 09/22/2017

PRELIMINARY
FOR LEASING/ZONING

THESE DRAWINGS AND SURVEYS ARE COPYRIGHT PROTECTED AND THE SOLE PROPERTY OF TOWERCOM TECHNOLOGIES, LLC AND PRODUCED FOR THE USE OF OUR CLIENT. ANY REPRODUCTION OR USE OF THE INFORMATION CONTAINED WITHIN SAID DOCUMENTS IS PROHIBITED WITHOUT THE WRITTEN CONSENT OF TOWERCOM TECHNOLOGIES, LLC.

DESIGNED FOR:

3131 SOUTH VAUGHN WAY, SUITE 550
AURORA, COLORADO 80014

DESIGNED BY:

AZ - CA - CO - ID - NM - NV - TX - UT

PROJECT NAME:

WY3 SK COASTER 2
EXISTING 17'-11" BUILDING
(OVERALL HEIGHT: 20'-0" A.G.L.)
RAWLAND

PROJECT ADDRESS:

402 E. SNOW KING AVENUE
JACKSON, WY 83001
TETON COUNTY

SHEET TITLE:

1A CERTIFICATION LETTER

REV	DESCRIPTION	DATE	BY	CHK
D	REVISED TO 24"x36" TEMPLATE	11/1/17	MDA	-
E	REVISED PER RF COMMENTS	1/23/18	MDA	-
F	REVISED PER UPDATED SURVEY AND POWER COORD	3/21/18	MDA	-
G	REVISED PER UPDATED SURVEY	5/8/18	MDA	-
H	REVISED PER COMMENTS	8/24/18	MDA	-

SAVE DATE: 8/24/2018 4:09 PM SHEET NUMBER: SU4

PENETRATIONS
RRH/BBU
ANTENNAS
FIBER
POWER/GROUNDING
HYBRID/COAX

- SITE NOTES:**
1. PRIOR TO EXCAVATION, CONTRACTOR SHALL CHECK THE AREA FOR UNDERGROUND FACILITIES.
 2. INFORMATION SHOWN BELOW FOR DEPICTION PURPOSES ONLY. ALL DATA GATHERED FROM PUBLIC RECORDS AND GENERATED FROM AERIAL IMAGES AND SITE VISITS. INFORMATION DOES NOT CONSTITUTE A LEGAL BOUNDARY SURVEY AND SHOULD NOT BE USED FOR SURVEYING OR OTHER RELATED PURPOSES.

SETBACK TABLE:	
	LEASE AREA BOUNDARY TO PARENT PROPERTY LINE
NORTH	~123'
SOUTH	~201'
EAST	~331'
WEST	~44'



SITE PLAN
NORTH

50'-0" 0 50'-0"
30' 10'
SCALE: 1" = 50'-0"

PRELIMINARY
FOR LEASING/ZONING

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DESIGNED FOR:

verizon

3131 SOUTH VAUGHN WAY, SUITE 550
AURORA, COLORADO 80014

DESIGNED BY:

J5 INFRASTRUCTURE
P A R T N E R S
AZ - CA - CO - ID - NM - NV - TX - UT

PROJECT NAME: WY3 SK COASTER 2
EXISTING 17'-11" BUILDING
(OVERALL HEIGHT: 20'-0" A.G.L.)
RAWLAND

PROJECT ADDRESS:
402 E. SNOW KING AVENUE
JACKSON, WY 83001
TETON COUNTY

SHEET TITLE: SITE PLAN				
REV	DESCRIPTION	DATE	BY	CHK
D	REVISED TO 24"x36" TEMPLATE	11/1/17	MDA	-
E	REVISED PER RF COMMENTS	1/23/18	MDA	-
F	REVISED PER UPDATED SURVEY AND POWER COORD	3/21/18	MDA	-
G	REVISED PER UPDATED SURVEY	5/8/18	MDA	-
H	REVISED PER COMMENTS	8/24/18	MDA	-
SAVE DATE:		SHEET NUMBER:		Z1
8/24/2018 4:09 PM				

SITE NOTES:

1. PRIOR TO EXCAVATION, CONTRACTOR SHALL CHECK THE AREA FOR UNDERGROUND FACILITIES.

2. INFORMATION SHOWN BELOW FOR DEPICTION PURPOSES ONLY. ALL DATA GATHERED FROM PUBLIC RECORDS AND GENERATED FROM AERIAL IMAGES AND SITE VISITS. INFORMATION DOES NOT CONSTITUTE A LEGAL BOUNDARY SURVEY AND SHOULD NOT BE USED FOR SURVEYING OR OTHER RELATED PURPOSES.

SETBACK TABLE:	
	LEASE AREA BOUNDARY TO PARENT PROPERTY LINE
NORTH	~123'
SOUTH	~201'
EAST	~331'
WEST	~44'

PENETRATIONS

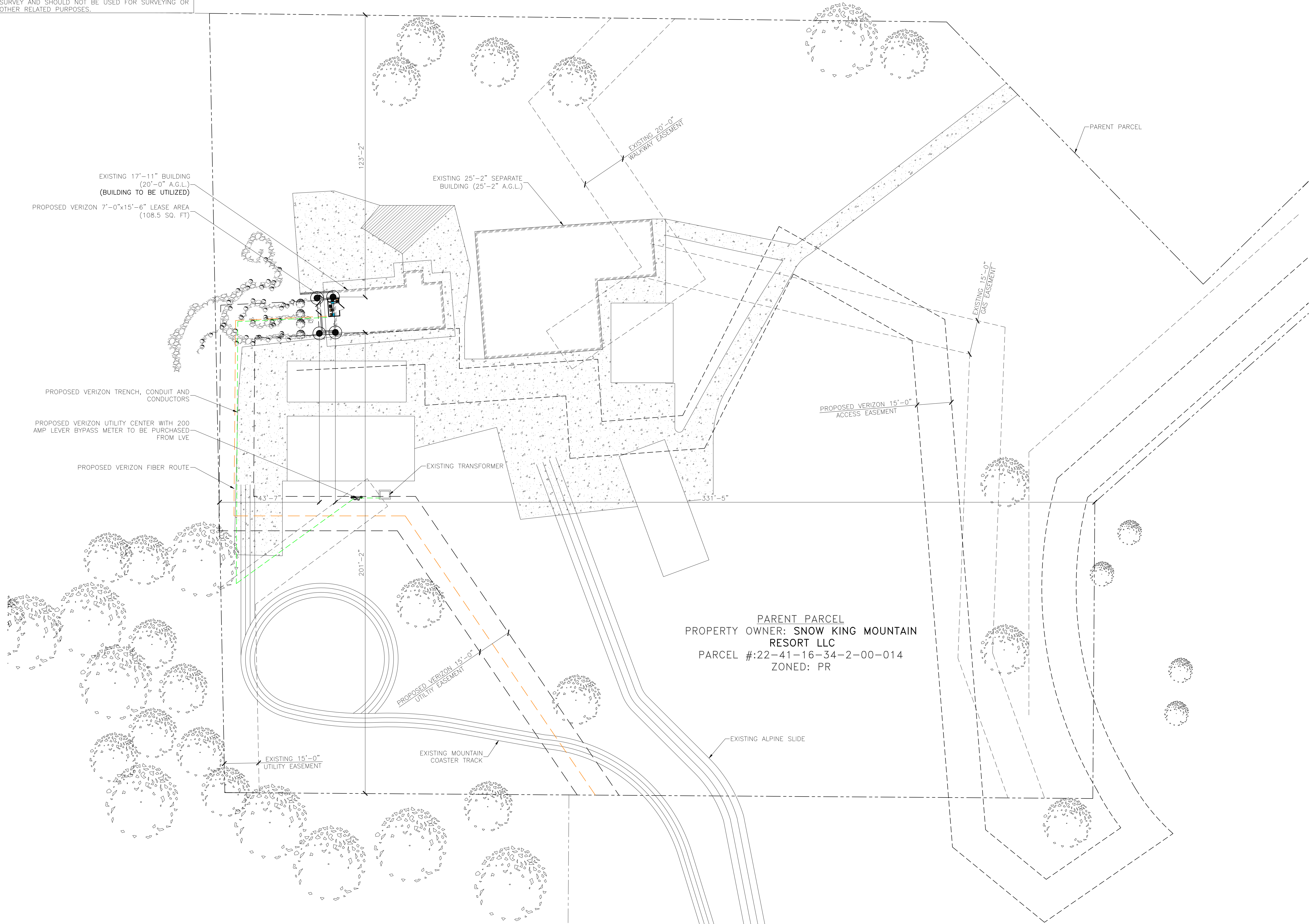
RRH/BBU

ANTENNAS

FIBER

POWER/GROUNDING

HYBRID/COAX



PRELIMINARY
FOR LEASING/ZONING

THESE DRAWINGS AND SURVEYS ARE COPYRIGHT PROTECTED AND THE SOLE PROPERTY OF TOWERCOM TECHNOLOGIES, LLC AND PRODUCED FOR THE USE OF OUR CLIENT. ANY REPRODUCTION OR USE OF THE INFORMATION CONTAINED WITHIN SAID DOCUMENTS IS PROHIBITED WITHOUT THE WRITTEN CONSENT OF TOWERCOM TECHNOLOGIES, LLC.

DESIGNED BY:

verizon

3131 SOUTH VAUGHN WAY, SUITE 550
AURORA, COLORADO 80014

DESIGNED BY:

INFRASTRUCTURE PARTNERS
AZ - CA - CO - ID - NM - NV - TX - UT

PROJECT NAME:

WY3 SK COASTER 2
EXISTING 17'-11" BUILDING
(OVERALL HEIGHT: 20'-0" A.G.L.)
RAWLAND

PROJECT ADDRESS:

402 E. SNOW KING AVENUE
JACKSON, WY 83001
TETON COUNTY

SHEET TITLE:

SITE PLAN

REV	DESCRIPTION	DATE	BY	CHK
D	REVISED TO 24"x36" TEMPLATE	11/1/17	MDA	-
E	REVISED PER RF COMMENTS	1/23/18	MDA	-
F	REVISED PER UPDATED SURVEY AND POWER COORD	3/21/18	MDA	-
G	REVISED PER UPDATED SURVEY	5/8/18	MDA	-
H	REVISED PER COMMENTS	8/24/18	MDA	-

SAVE DATE:

8/24/2018 4:09 PM

SHEET NUMBER:

Z2

SITE PLAN



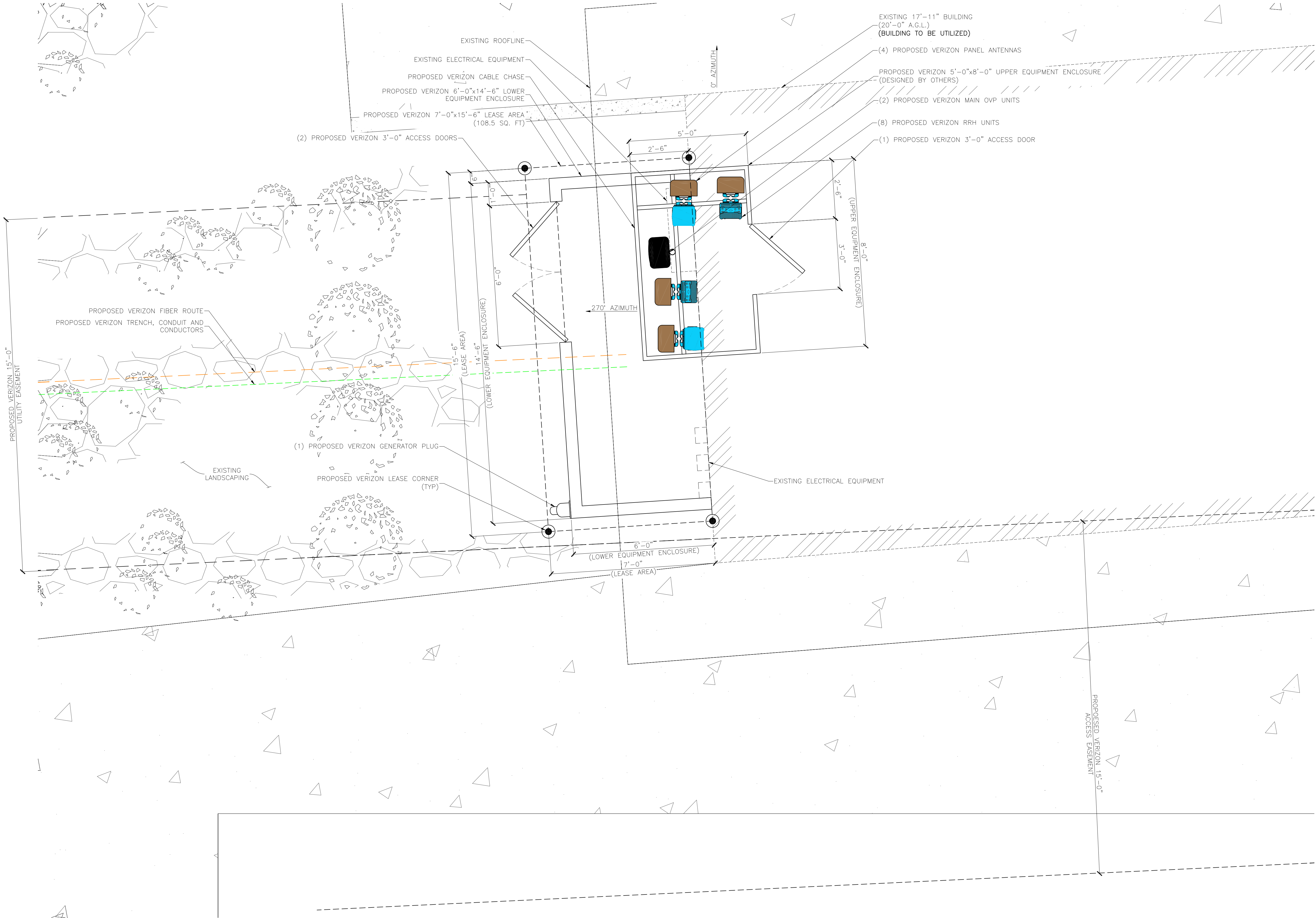
20'-0" 0 20'-0"
1" = 20'-0"

PENETRATIONS
RRH/BBU
ANTENNAS
FIBER
POWER/GROUNDING
HYBRID/COAX

SITE NOTES:

1. PRIOR TO EXCAVATION, CONTRACTOR SHALL CHECK THE AREA FOR UNDERGROUND FACILITIES.

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PRELIMINARY
FOR LEASING/ZONING

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DESIGNED FOR:

verizon

3131 SOUTH VAUGHN WAY, SUITE 550
AURORA, COLORADO 80014

DESIGNED BY:

JS INFRASTRUCTURE
PARTNERS
AZ - CA - CO - ID - NM - NV - TX - UT

PROJECT NAME:

WY3 SK COASTER 2
EXISTING 17'-11" BUILDING
(OVERALL HEIGHT: 20'-0" A.G.L.)
RAWLAND

PROJECT ADDRESS:

402 E. SNOW KING AVENUE
JACKSON, WY 83001
TETON COUNTY

SHEET TITLE:

ENLARGED SITE PLAN

REV	DESCRIPTION	DATE	BY	CHK
D	REVISED TO 24"x36" TEMPLATE	11/1/17	MDA	-
E	REVISED PER RF COMMENTS	1/23/18	MDA	-
F	REVISED PER UPDATED SURVEY AND POWER COORD	3/21/18	MDA	-
G	REVISED PER UPDATED SURVEY	5/8/18	MDA	-
H	REVISED PER COMMENTS	8/24/18	MDA	-

SAVE DATE:

8/24/2018 4:09 PM

SHEET NUMBER:

Z3

SITE PLAN
SCALE: 1/2"=1'-0"



PENETRATIONS

RRH/BBU

ANTENNAS

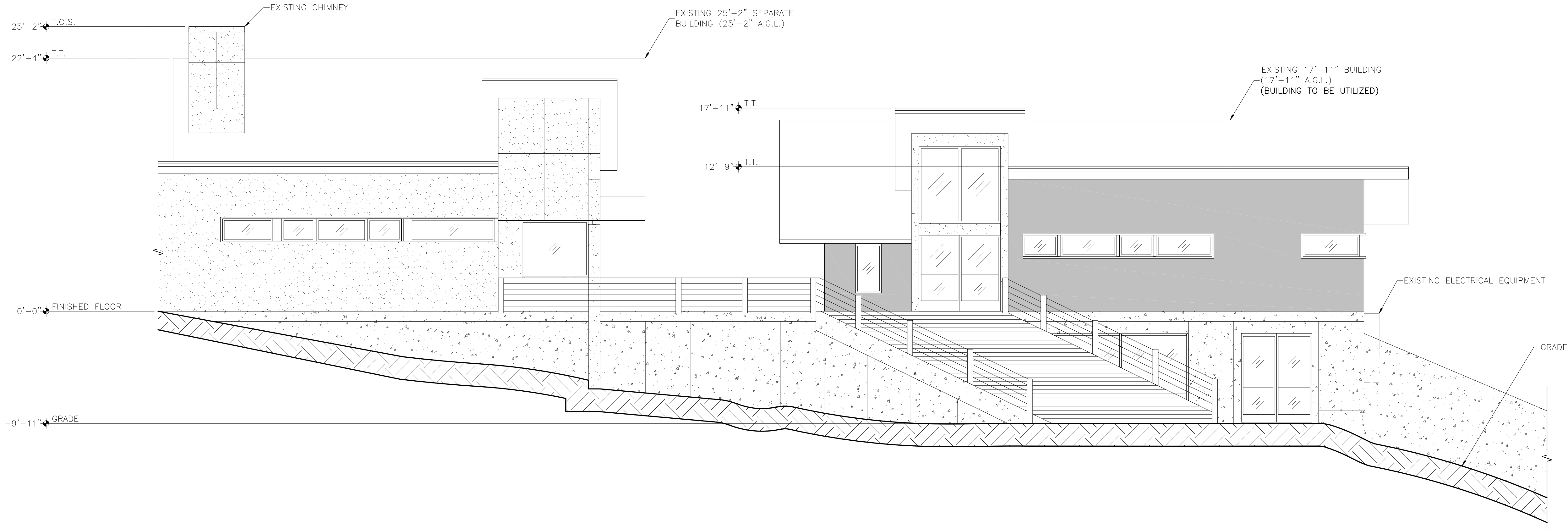
FIBER

POWER/GROUNDING

HYBRID/COAX

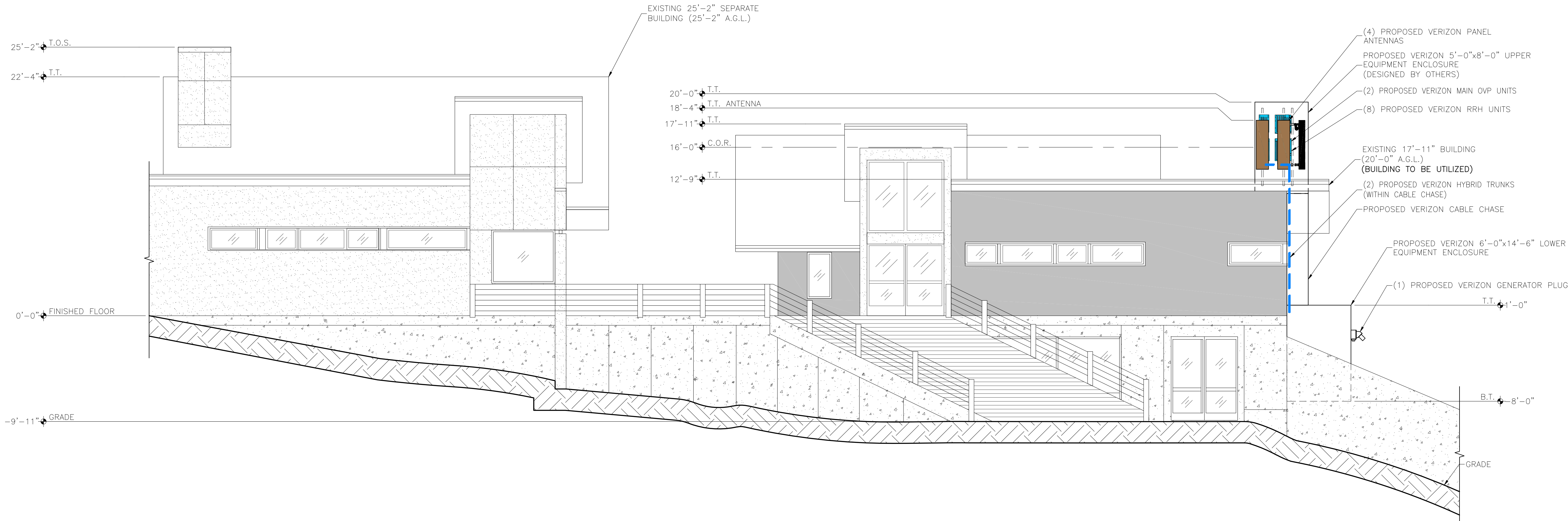
KEY:

C.O.R. =	CENTER OF RADIATION
A.L. =	ATTACHMENT LEVEL
B.T. =	BOTTOM TIP LEVEL
T.T. =	TOP TIP LEVEL
A.G.L. =	ABOVE GRADE LEVEL
B.O.B.P. =	BOTTOM OF BASE PLATE



EXISTING NORTH ELEVATION

SCALE: 3/32" = 1'-0"



PROPOSED NORTH ELEVATION

SCALE: 3/32" = 1'-0"

NOTE:
1. ALL PROPOSED EQUIPMENT AND ANTENNAS WILL BE INSIDE OF THE EQUIPMENT ENCLOSURE AND WILL NOT BE SEEN.

PRELIMINARY
FOR LEASING ZONING

THESE DRAWINGS AND SURVEYS ARE COPYRIGHT PROTECTED AND THE SOLE PROPERTY OF TOWERCOM TECHNOLOGIES, LLC AND PRODUCED FOR THE USE OF OUR CLIENT. ANY REPRODUCTION OR USE OF THE INFORMATION CONTAINED WITHIN SAID DOCUMENTS IS PROHIBITED WITHOUT THE WRITTEN CONSENT OF TOWERCOM TECHNOLOGIES, LLC.

DESIGNED FOR:
verizon
3131 SOUTH VAUGHN WAY, SUITE 550
AURORA, COLORADO 80014

DESIGNED BY:
INFRASTRUCTURE PARTNERS
AZ - CA - CO - ID - NM - NV - TX - UT

PROJECT NAME: WY3 SK COASTER 2
EXISTING 17'-11" BUILDING
(OVERALL HEIGHT: 20'-0" A.G.L.)
RAWLAND

PROJECT ADDRESS:
402 E. SNOW KING AVENUE
JACKSON, WY 83001
TETON COUNTY

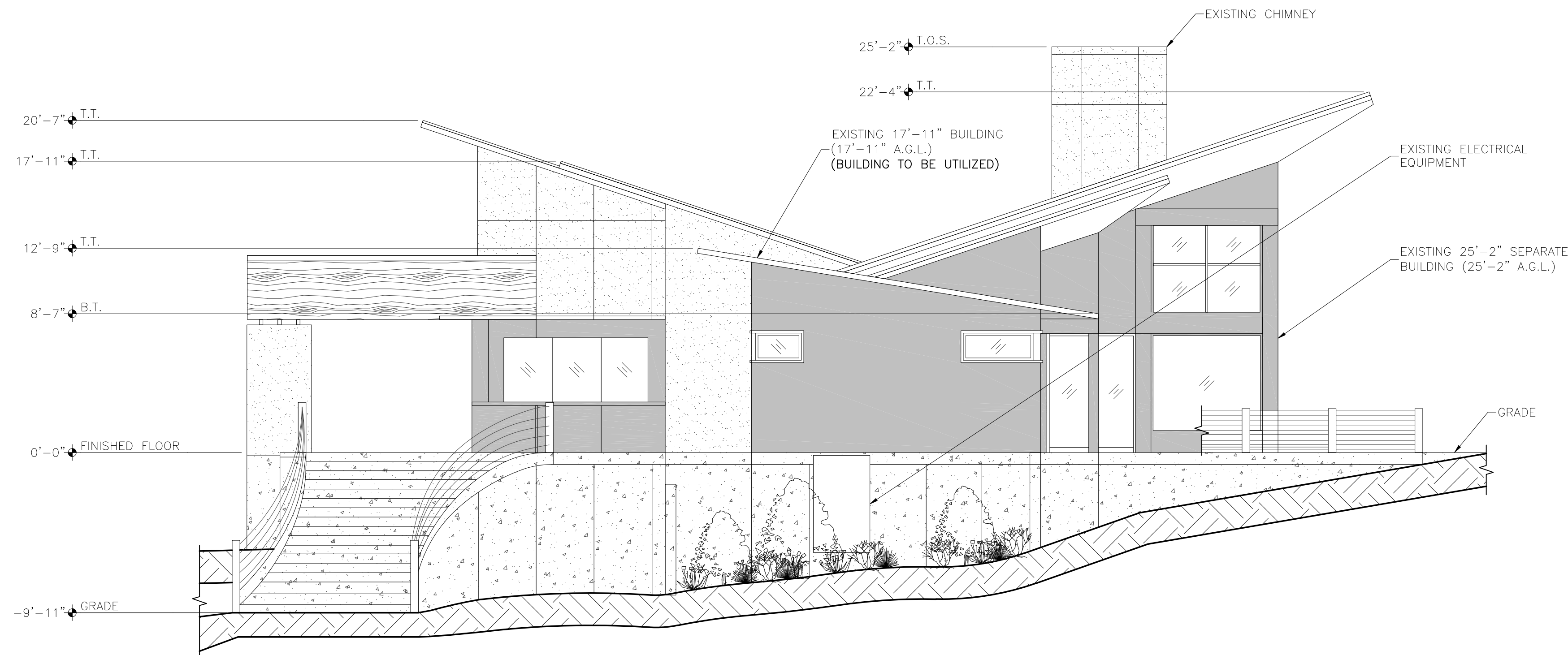
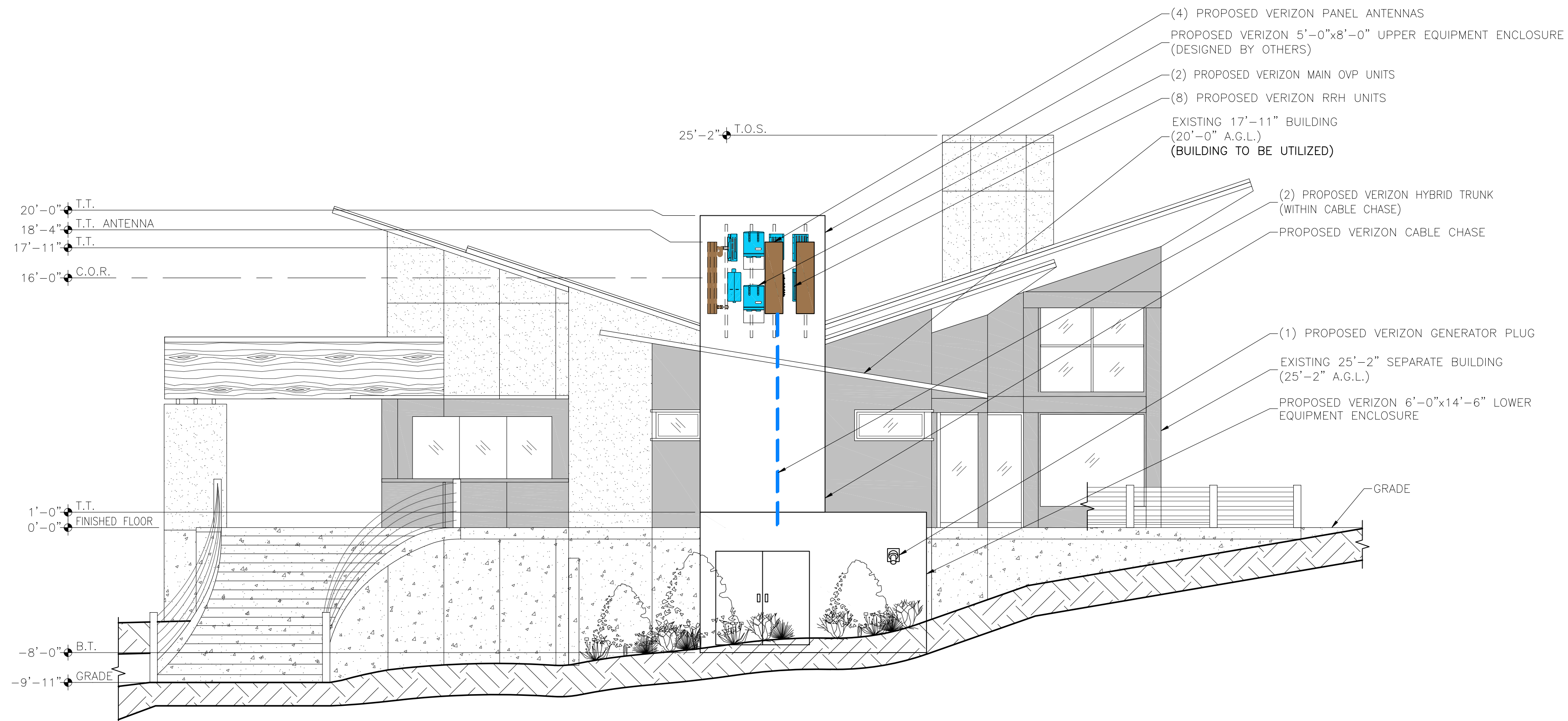
SHEET TITLE:
ELEVATIONS

REV	DESCRIPTION	DATE	BY	CHK
D	REVISED TO 24"x36" TEMPLATE	11/1/17	MDA	-
E	REVISED PER RF COMMENTS	1/23/18	MDA	-
F	REVISED PER UPDATED SURVEY AND POWER COORD	3/21/18	MDA	-
G	REVISED PER UPDATED SURVEY	5/8/18	MDA	-
H	REVISED PER COMMENTS	8/24/18	MDA	-

SAVE DATE: 8/24/2018 4:09 PM
SHEET NUMBER: Z4

KEY:

C.O.R. =	CENTER OF RADIATION
A.L. =	ATTACHMENT LEVEL
B.T. =	BOTTOM TIP LEVEL
T.T. =	TOP TIP LEVEL
A.G.L. =	ABOVE GRADE LEVEL
B.O.B.P. =	BOTTOM OF BASE PLATE

EXISTING WEST ELEVATION
SCALE: 3/32" = 1'-0"PROPOSED WEST ELEVATION
SCALE: 3/32" = 1'-0"

NOTE:

1. ALL PROPOSED EQUIPMENT AND ANTENNAS WILL BE INSIDE OF THE EQUIPMENT ENCLOSURE AND WILL NOT BE SEEN.

PRELIMINARY
FOR LEASING/ZONING

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DESIGNED BY:

verizon
3131 SOUTH VAUGHN WAY, SUITE 550
AURORA, COLORADO 80014

DESIGNED BY:

J5 INFRASTRUCTURE
P A R T N E R S
AZ - CA - CO - ID - NM - NV - TX - UT

PROJECT NAME:

WY3 SK COASTER 2
EXISTING 17'-11" BUILDING
(OVERALL HEIGHT: 20'-0" A.G.L.)
RAWLAND

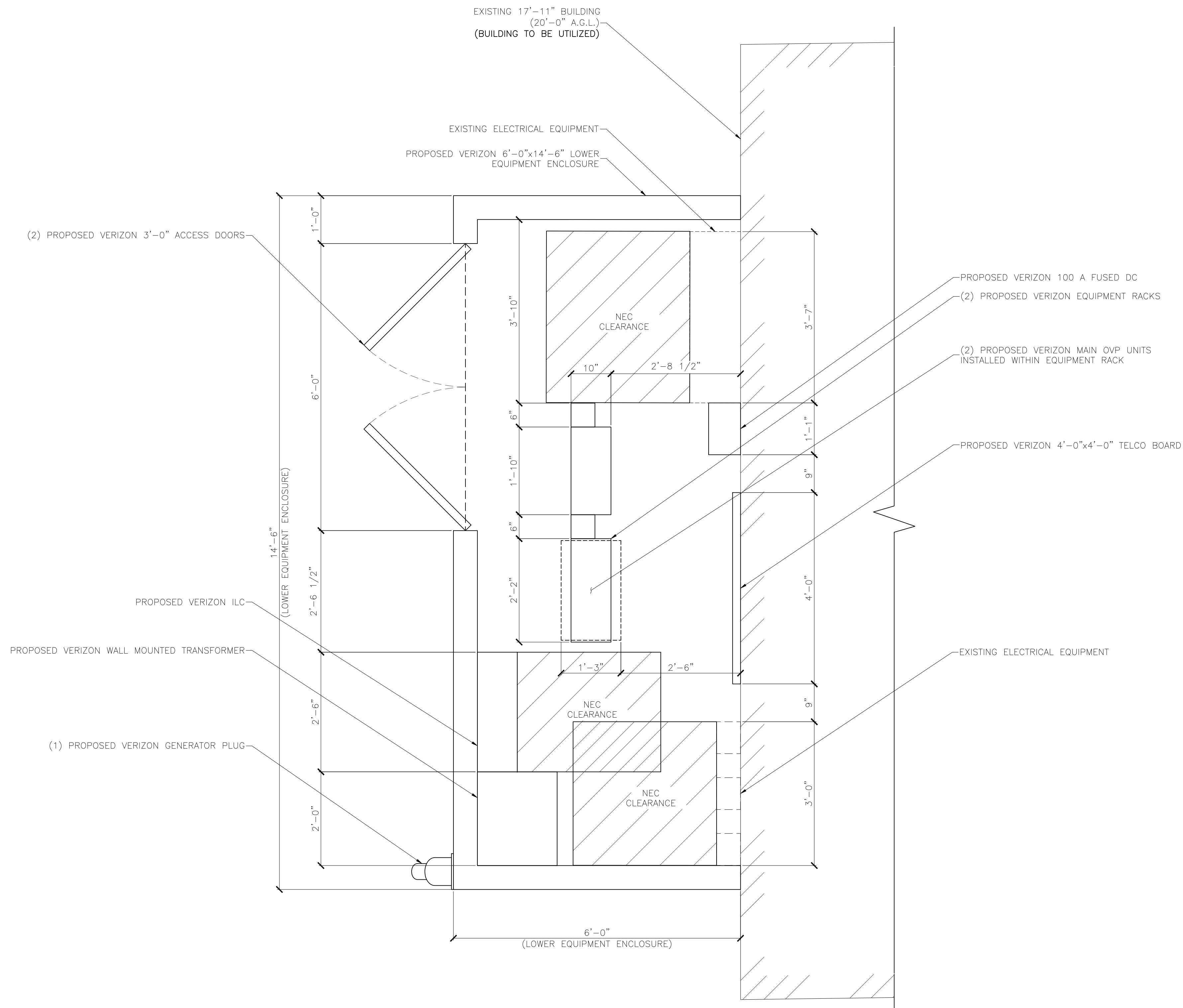
PROJECT ADDRESS:

402 E. SNOW KING AVENUE
JACKSON, WY 83001
TETON COUNTY

SHEET TITLE:

ELEVATIONS

REV	DESCRIPTION	DATE	BY	CHK
D	REVISED TO 24"x36" TEMPLATE	11/1/17	MDA	-
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G	REVISED PER UPDATED SURVEY	5/8/18	MDA	-
H	REVISED PER COMMENTS	8/24/18	MDA	-
SAVE DATE:		SHEET NUMBER:		
8/24/2018 4:09 PM				Z5



EQUIPMENT ROOM FLOOR PLAN
SCALE: 3/4"=1'-0"



PRELIMINARY
FOR LEASING/ZONING

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WITHIN SAID DOCUMENTS IS PROHIBITED WITHOUT THE
WRITTEN CONSENT OF TOWERCOM TECHNOLOGIES, LLC.

DESIGNED FOR:

verizon

3131 SOUTH VAUGHN WAY, SUITE 550
AURORA, COLORADO 80014

DESIGNED BY:

J5 INFRASTRUCTURE
P A R T N E R S
AZ - CA - CO - ID - NM - NV - TX - UT

PROJECT NAME:

WY3 SK COASTER 2
EXISTING 17'-11" BUILDING
(OVERALL HEIGHT: 20'-0" A.G.L.)
RAWLAND

PROJECT ADDRESS:

402 E. SNOW KING AVENUE
JACKSON, WY 83001
TETON COUNTY

SHEET TITLE:

EQUIPMENT ROOM FLOOR PLAN

REV	DESCRIPTION	DATE	BY	CHK
D	REVISED TO 24"x36" TEMPLATE	11/1/17	MDA	-
E	REVISED PER RF COMMENTS	1/23/18	MDA	-
F	REVISED PER UPDATED SURVEY AND POWER COORD	3/21/18	MDA	-
G	REVISED PER UPDATED SURVEY	5/8/18	MDA	-
H	REVISED PER COMMENTS	8/24/18	MDA	-

SAVE DATE:

8/24/2018 4:09 PM

SHEET NUMBER:

Z6

[illegible]

**PRELIMINARY
FOR LEASING/ZONING**

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DESIGNED FOR:

3131 SOUTH VAUGHN WAY, SUITE 550
AURORA, COLORADO 80014

DESIGNED BY:

J5 INFRASTRUCTURE PARTNERS
AZ - CA - CO - ID - NM - NV - TX - UT

PROJECT NAME

ECT NAME: WY3 SK COASTER 2
EXISTING 17'-11" BUILDING
(OVERALL HEIGHT: 20'-0" A.G.L.)
RAWLAND

PROJECT ADDRESS:

402 E. SNOW KING AVENUE
JACKSON, WY 83001
TETON COUNTY

SHEET TITLE:

PROJECT HISTORY SHEET

REV	DESCRIPTION	DATE	BY	CHK
D	REVISED TO 24"x36" TEMPLATE	11/1/17	MDA	—
E	REVISED PER RF COMMENTS	1/23/18	MDA	—
F	REVISED PER UPDATED SURVEY AND POWER COORD	3/21/18	MDA	—
G	REVISED PER UPDATED SURVEY	5/8/18	MDA	—
H	REVISED PER COMMENTS	8/24/18	MDA	—

SAVE DATE: 8/24/2018 4:09 PM

SHEET NUMBER: PHS

PENETRATIONS

RRH/BBU

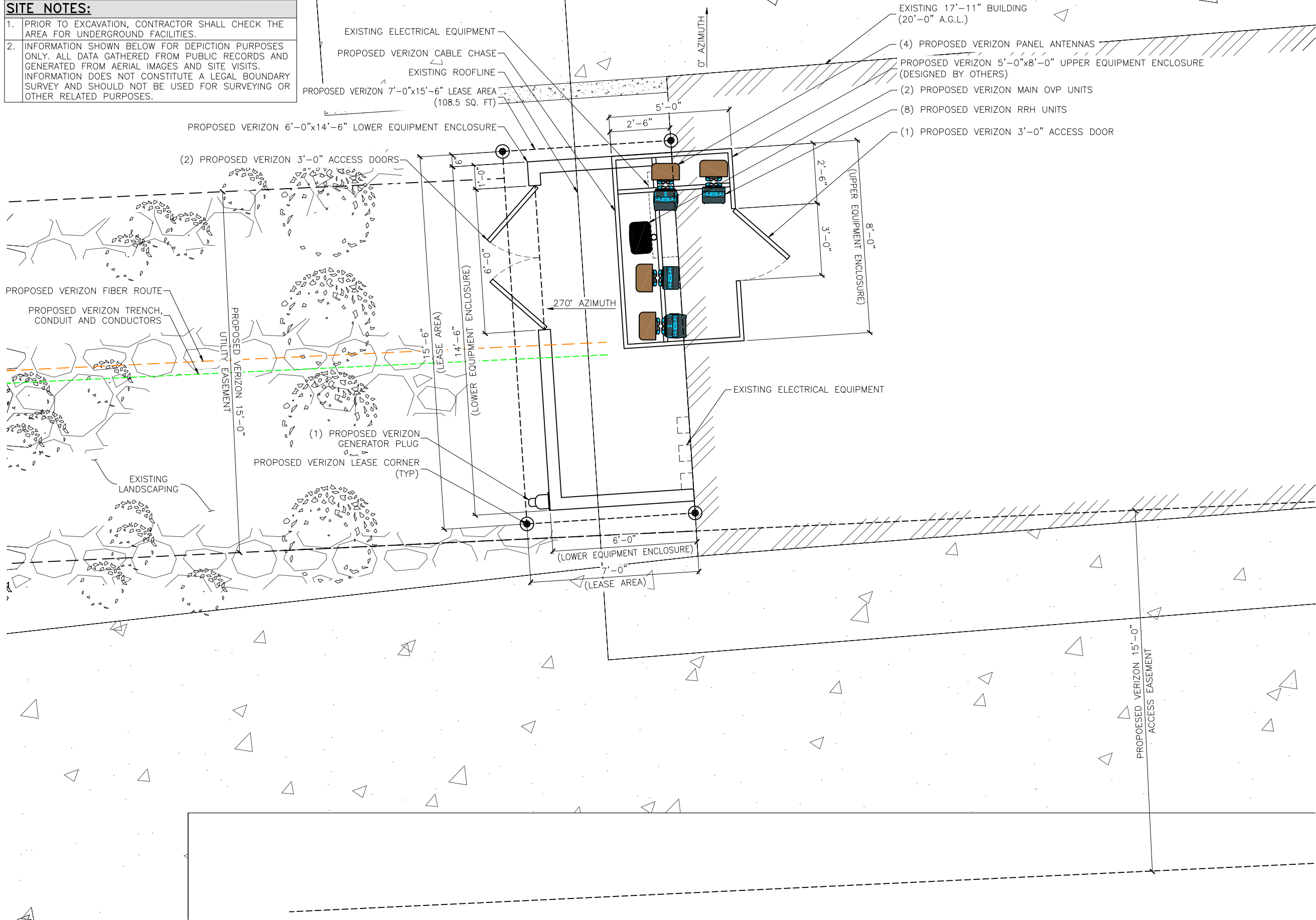
ANTENNAS

FIBER

POWER/GROUNDING

HYBRID/COAX

- SITE NOTES:**
1. PRIOR TO EXCAVATION, CONTRACTOR SHALL CHECK THE AREA FOR UNDERGROUND FACILITIES.
 2. INFORMATION SHOWN BELOW FOR DEPICTION PURPOSES ONLY. ALL DATA GATHERED FROM PUBLIC RECORDS AND GENERATED FROM AERIAL IMAGES AND SITE VISITS. INFORMATION DOES NOT CONSTITUTE A LEGAL BOUNDARY SURVEY AND SHOULD NOT BE USED FOR SURVEYING OR OTHER RELATED PURPOSES.



SITE PLAN
SCALE: 1/4" = 1'-0" NORTH

DESIGNED FOR:
verizon
3131 SOUTH VAUGHN WAY, SUITE 550
AURORA, COLORADO 80018

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J5 INFRASTRUCTURE PARTNERS, LLC		AZ - CA - CO - ID - NM - NV - TX - UT	
REV	DESCRIPTION	DATE	CHK
A	FOR INFORMATION ONLY	7/27/18	MDA
B	REVISED PER COMMENTS	8/24/18	MDA

FOR INFORMATION ONLY

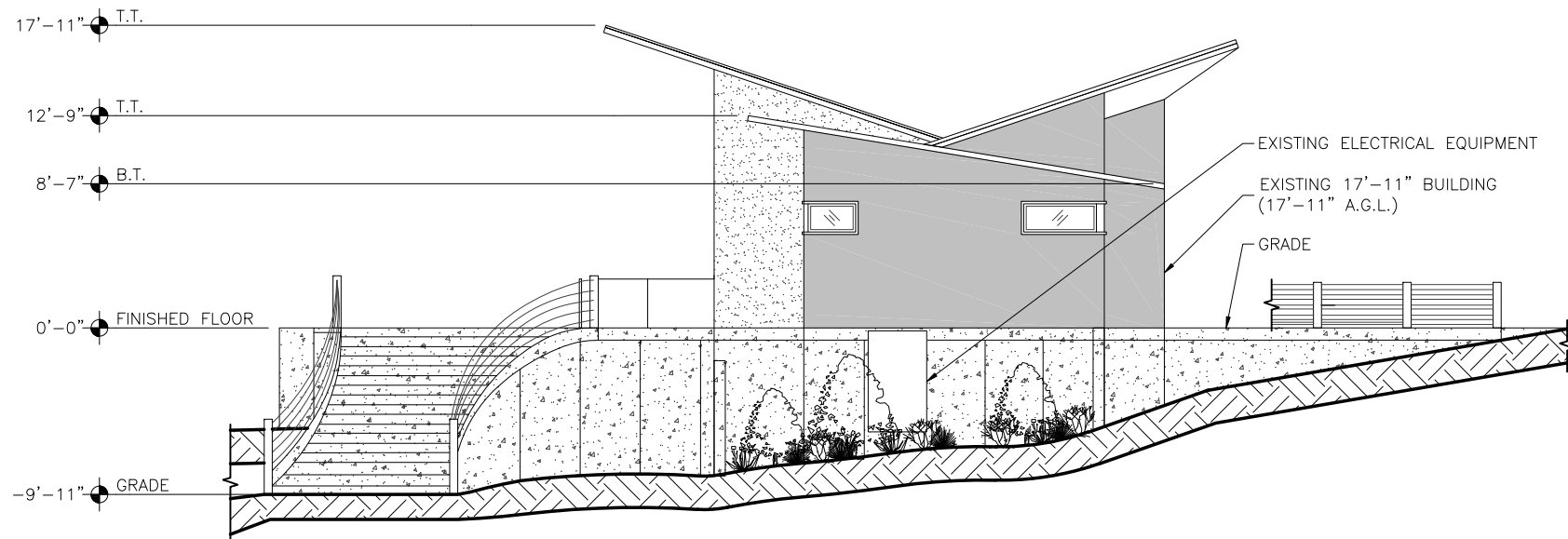
PROJECT NAME:
WY3 SK COASTER 2
EXISTING 17'-11" BUILDING
(OVERALL HEIGHT: 20'-0" A.G.L.)
RAWLAND

PROJECT ADDRESS:
402 E. SNOW KING AVENUE
JACKSON, WY 83001
TETON COUNTY

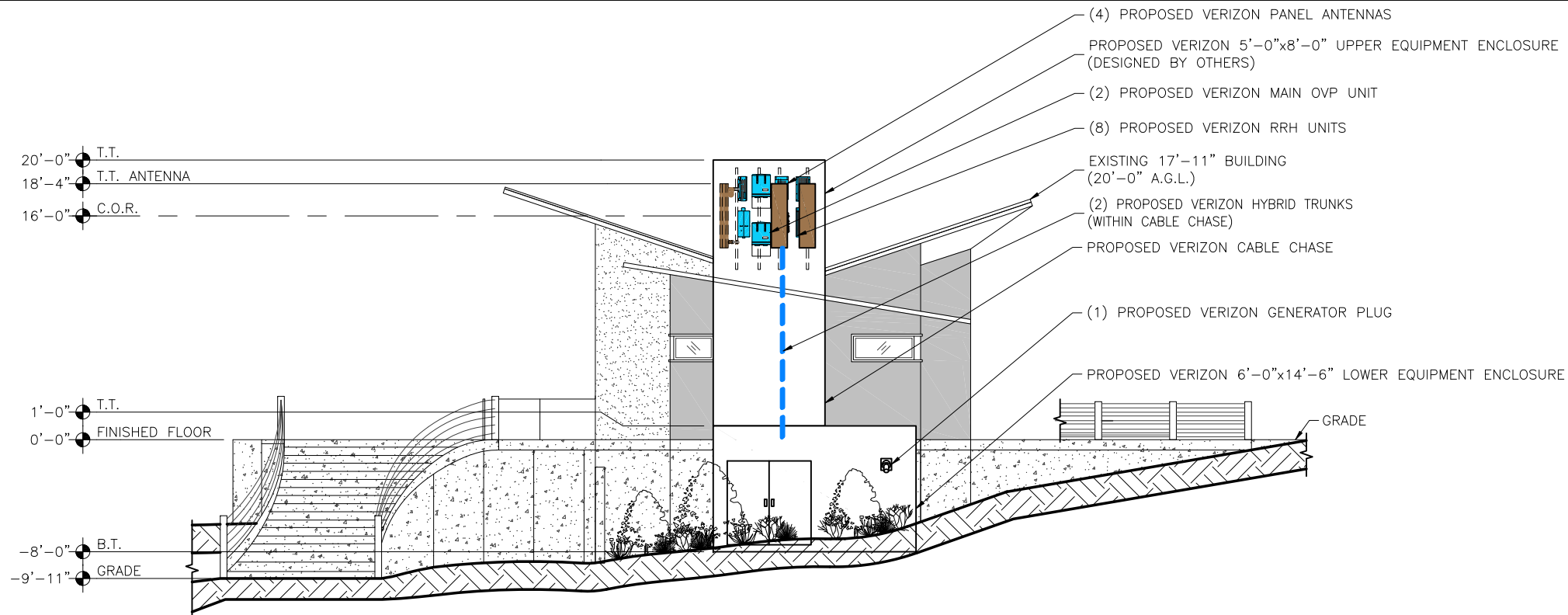
SHEET TITLE:
ENLARGED SITE PLAN

SAVE DATE:
8/24/2018 4:33 PM

SHEET NUMBER:
SK1



EXISTING WEST ELEVATION
SCALE: 3/32"=1'-0"



PROPOSED WEST ELEVATION
SCALE: 3/32"=1'-0"

NOTE:

1. ALL PROPOSED EQUIPMENT AND ANTENNAS WILL BE INSIDE OF THE EQUIPMENT ENCLOSURE AND WILL NOT BE SEEN.

KEY:

C.O.R. =	CENTER OF RADIATION
A.L. =	ATTACHMENT LEVEL
B.T. =	BOTTOM TIP LEVEL
T.T. =	TOP TIP LEVEL
A.G.L. =	ABOVE GRADE LEVEL
B.O.B.P. =	BOTTOM OF BASE PLATE
T.O.S. =	TOP OF STRUCTURE

DESIGNED FOR:

verizon

3131 SOUTH VAUGHN WAY, SUITE 550
AURORA, COLORADO 80018

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J5 INFRASTRUCTURE
PARTNERS
AZ - CA - CO - ID - NM - NV - TX - UT

REV	DESCRIPTION	DATE	BY	CHK
A	FOR INFORMATION ONLY	7/27/18	MDA	-
B	REVISED PER COMMENTS	8/24/18	MDA	-

DESIGNED BY:

FOR
INFORMATION
ONLY

PROJECT NAME:

WY3 SK COASTER 2
EXISTING 17'-11" BUILDING
(OVERALL HEIGHT: 20'-0" A.G.L.)
RAWLAND

PROJECT ADDRESS:

402 E. SNOW KING AVENUE
JACKSON, WY 83001
TETON COUNTY

SHEET TITLE:

ELEVATIONS

SAVE DATE:

8/24/2018 4:33 PM

SHEET NUMBER:

SK2

KAPPA CONSULTING

REPRESENTING

Verizon Wireless (VAW) LLC, d/b/a Verizon Wireless

APPLICATION FOR CONDITIONAL USE PERMIT

ADDENDUM: RESPONSE TO REVIEW COMMENTS

Project Number P18-164

August 10, 2018

In response to Project Plan Review Comments received on August 8, 2018, Applicant offers the following:

LEGAL:

First comment from Legal requests clarification of the statement that no landscaping will be done. When the application was submitted, Applicant proposed equipment cabinets at the base of the proposed chimney. The Rafferty Center has existing landscaping in this area and it appeared that no additional landscaping was necessary. In light of the design change required by the Design Review Committee, there will not be sufficient space for additional landscaping in this area. To accommodate sufficient working space inside the required equipment enclosure, that enclosure will extend 8 ft. from the existing building foundation wall.

Second comment from Legal requests clarification of the statement that disturbance in the fiber route will be minimal. Applicant proposes to install the fiber optic line by boring, not trenching. Installation by boring minimizes ground disturbance, as surface penetration is required only in small areas between boring runs. Applicant will apply for any necessary grading permits associated with this installation and comply with all requirements of any such permits.

Third comment from Legal asks for clarification of the dimensions of the equipment cabinets. Again, given the design change required by the Design Review Committee, the equipment cabinets will not be visible; the proposed equipment cabinets and the existing electric panel and other electric connections on the foundation level will be entirely enclosed in a new structure at the base of the chimney. Dimensions of this new equipment enclosure will be shown in detail on the revised site plans which will be submitted as soon as possible.

Finally, the General Comment from Legal notes that collocation at the site is not addressed with respect to 6.1.10.D.3.f.ii.1.3. Applicant would note that the proposed stealth chimney is not a tower and therefore not subject to the requirements of this section. However, even if the stealth chimney is for some reason considered to be a tower, the requirement provides that that new towers be

constructed to accommodate as many antenna arrays as feasible without causing interference, subject to height limits, stealth facility requirements and concealment elements. Applicant submits that no additional antenna arrays would be feasible given the design of the proposed concealment element.

PUBLIC WORKS:

Under Conditions of Approval, Public Works notes that if the installation of fiber is accomplished by trenching, a grading permit pre-application meeting and grading permit will be required. At this time, it is anticipated that the fiber will be installed by boring so that no grading permit will be required.

Under Additional Comments, Public Works notes that sections of the proposed fiber route appear to go under the existing alpine slide and coaster that may require a change in alignment. Applicant has reviewed the proposed fiber route in detail with Snow King Resort management and has proposed the fiber route that is most acceptable to operations at the Resort.

PLEASE NOTE:

Based on Design Review Committee approval of the revised site plan on August 8, 2018, Applicant will submit the revised drawings showing the proposed equipment enclosure detail as soon as possible.

PLANNING

Project Number	P18-164	Applied	5/21/2018	STOL
Project Name	CUP - SK Rafferty antenna	Approved		
Type	CUP	Closed		
Subtype	WIRELESS COMS FACILITY	Expired		
Status	STAFF REVIEW	Status		
Applicant	Irene Cook	Owner	SNOW KING MOUNTIAN RESORT, LLC	
Site Address		City	State	Zip
402 E SNOW KING AVENUE		JACKSON	WY	83001
Subdivision		Parcel No	General Plan	
		22411634200014		

Type of Review	Status	Dates			Remarks
		Sent	Due	Received	
Contact					
Notes					
Building		5/21/2018	6/11/2018		
Jim Green					

Fire	NO COMMENT	5/21/2018	6/11/2018	5/22/2018
Kathy Clay				

Legal	APPROVED W/CONDITI	5/21/2018	6/11/2018	7/23/2018
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Lea Colasuonno

(7/23/2018 12:11 PM LC)

Disturbance/Landscaping: Z1 & Z2 & Z5; pgs. 10 & 12 (narrative)

- The drawings for this facility show an extensive fiber route (Z1 & Z2), as well as the construction of cabinets at the base of the faux chimney (narrative 13), however the narrative (pgs. 10 & 12) states that no landscaping will be done "due to the character of the Activity Center uses and the surrounding ski slopes." This should be clarified, as the ski slope is quite some distance away (and has vegetation on it) and the Activity Center is currently landscaped.
- Disturbance is stated as minimal, however given the length of the fiber route, some clarity is sought on the term "minimal."
- Z3 is unclear regarding the dimensions (height, width, length) of the equipment cabinets. It appears to be drawn as 6 x 6, but there is also a box listed as 6'2" (that is unnamed) next to the initial box mentioned, and no height is listed. Please clarify.

General Comment:

- Collocation at this site is not addressed (6.1.10.D.3.f.ii.1.3)

Parks and Rec	NO COMMENT	5/21/2018	6/11/2018	5/22/2018
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Steve Ashworth

(5/22/2018 1:24 PM STOL)

No concerns from P and R regarding Trans Mem P18-164.

Andy Erskine

Pathways	NO COMMENT	5/21/2018	6/11/2018	5/30/2018
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Brian Schilling

(5/30/2018 8:22 AM STOL)

No comments from pathways

Type of Review Contact Notes	Status	Dates			Remarks
		Sent	Due	Received	
Planning Brendan Conboy		5/21/2018	6/11/2018		See Staff Report
Police Todd Smith (5/22/2018 1:21 PM STOL) No concerns from the police department.	NO COMMENT	5/21/2018	6/11/2018	5/22/2018	
thanks, Todd					
Public Works Brian Lenz Conditional Use Permit – APPROVED P18-164 Irene Cook for Snow King Mountain Resort 402 E Snow King Ave. 7/26/2018 Brian Lenz, 307 733-3079	APPROVED W/CONDITI	5/21/2018	6/11/2018	7/26/2018	
NOTES FOR APPROVAL					
CONDITIONS OF APPROVAL:					
If trenched, the installation of the fiber to the antenna site will require a grading permit pre-application meeting and a grading permit.					
ADDITIONAL COMMENTS					
For consideration, sections of the proposed fiber appear to go under the existing alpine slide and coaster that may require a change in alignment.					
START Darren Brugmann		5/21/2018	6/11/2018		
TC Housing Authority Stacy Stoker	INSUFFICIENT	5/21/2018	6/11/2018	5/23/2018	No Housing Mitigation Plan

Type of Review	Status	Dates			
		Sent	Due	Received	Remarks
Contact					
Notes					
Snow King Master Plan					

Page 51: Snow King Resort Land Use Schedule

Institutional Uses: Allowed: C (Conditional Use)

1994 LDRs:

DIVISION 49500 EMPLOYEE HOUSING STANDARDS

SECTION 49520 EXEMPTIONS

49520.G. Institutional uses. Development of an institutional use, as listed in Section 2220.C.,

Institutional uses, is exempt from the standards of this Division.

SECTION 2220 DEFINITIONS FOR USE SCHEDULE

2200.C.1 - Institutional Uses

b. Utility. Utility includes utility substations, transmission and distribution facilities or pipelines, including telephone, cable, and natural gas; sewage treatment plants, water supply facilities, pump stations, booster pumps, and any other appurtenance that requires a structure; radio or TV broadcasting towers, telecommunications towers, personal wireless telecommunication services and/or facilities including commercial wireless telecommunication services, unlicensed wireless services, and common carrier wireless exchange access services; antenna and antenna arrays. Specifically excluded are residential satellite dishes, antennas used for the reception of television broadcast signals, transformers, junction boxes, pedestals, and other appurtenances that do not require a structure. (Ord 607 1, 1998)

-Addendum added to file by BC 6/7/18

July 23, 2018

Planning and Building Department
Town of Jackson, Wyoming
Attention: Brendan Conboy

Regarding item P18-164 Conditional Use Permit for an Antenna on Rafferty Building
402 E. Snow King Avenue

Dear Mr. Conboy,

The owners of property within 200 feet of the subject property received a letter dated June 21, 2018 from you notifying us of the request for approval of the above-mentioned conditional use permit for cell tower. In response to that notification and request for comment, owners listed below offer these attached documents from experts all over the world outlining our health concerns about the location.

We understand the need for more antennas for safety as well as convenience. That is not the issue. Our concern is for the proposed location and the danger of its placement in an area of dense resident, worker, and visitor concentration. We already reside within the close proximity of the AT&T antenna on top of the Snow King Hotel. The additional antenna at the proposed location would further concentrate the exposure to long term, non-thermal radiation.

The proposed location is at the center of a high use recreational area, hotel, and high density condominium development. While cell phones, tablets, and computers can be turned off, cell towers cannot. This creates 24-hour exposure to those who live, work, and visit the immediate area. The current FCC standards/guidelines do not protect. They were based on preventing thermal effects. These guidelines do not account for the cumulative effects of constant exposure. FCC guidelines are set for 30 minutes of exposure. They are outdated and do not consider current research.

We are asking that an area of less concentrated exposure be chosen and that that area also has a 200-foot "safety" area around it to minimize exposure. One possibility might be in close proximity to the cemetery, as the possibility of constant exposure to humans is improbable.

We ask that the town take a strong stand against location of cell towers in areas that expose children and other family members to this constant radiation exposure. Most of the cell tower leases are long term. What the town does now affects generations that follow. There is already at least one cell tower atop a school here in Jackson.

We understand the financial benefits of tower rentals. Please understand the health risks associated with their placements.

I am Judith Campbell, MD. I am an owner within the 200 foot area of the proposed tower on the Rafferty building. Please find included research documents supporting these requests. The Hippocratic Oath that I took when I became a physician applies here. "First Do No Harm".

Judith Campbell, MD
537 Snow King Loop #3770

~~John Hittsola~~
537 Snow King Loop, UNIT 3770

Jennifer M Chopp
537 Snow King Loop #3750

Wendy Chopp
537 Snow King Loop #3750

~~536 SNOW KING #3610~~

Brenda Hisey
536 Snow King Loop #3610

3. Health Effects of RF Radiation

The proliferation of cellular antennas and other RF generating devices has led to concerns about the potential health effects from exposure to RF radiation. The short-term thermal effects of RF radiation on humans are well documented, but less is known about the long-term health effects.

The existing research has focused on the health risks associated with cell phone use and the public's exposure at ground level from RF radiation emitted from antennas located on rooftops, sides of structures, or towers. According to the American Cancer Society, "very few human studies have focused specifically on cellular phone towers and cancer risk." At this time, no available research has focused on occupational exposures to RF radiation among construction workers.

There are, however, several organizations that address the potential health effects of RF radiation, including:

- Occupational Safety and Health Administration (OSHA)
- Federal Communications Commission (FCC)
- World Health Organization – International Agency for Research on Cancer (WHO/IARC)
- Centers for Disease Control and Prevention (CDC)

While these organizations note that non-thermal health effects have not been fully explored, they have (individually or collectively) identified potential thermal and non-thermal effects, including:

- Thermal effects:
 - Blindness
 - Sterility
 - Heating of tissues – eyes and testes are particularly vulnerable
 - Burns
 - Electrical shocks
- Non-thermal effects including: alteration of body's circadian rhythms, immune system, and nature of the electrical and chemical signals communicated through the cell membrane
- Possibly carcinogenic to humans (Group 2B)
- Potential for other disorders
- Interference with medical devices such as pacemakers

3.1 Health Effects According to OSHA

According to OSHA: “At sufficiently high power densities, [RF radiation] can cause thermal effects that can cause blindness and sterility...[And] Non-thermal effects, such as alteration of the human body’s circadian rhythms, immune system and the nature of the electrical and chemical signals communicated through the cell membrane have been demonstrated.”⁶

In its 2015 Request for Information on Communication Tower Safety, OSHA stated that: “General health effects reviews have found that high levels of exposure to radio frequencies may result in burns...[and] the link between exposure to radio frequencies and cancer, reproductive diseases, and neurological effects has not been thoroughly explored.”

3.2 Health Effects According to the Federal Communications Commission (FCC)

The FCC, which has regulatory authority over the telecommunications industry, relies on other agencies and organizations for guidance on health and safety. However, it acknowledges in its guidelines the potentially harmful thermal effects of RF radiation, noting that:

“[E]xposure to very high levels of RF radiation can be harmful due to the ability of RF energy to heat biological tissue rapidly [and]...two areas of the body, the eyes and the testes, are particularly vulnerable to RF heating.”

“When cellular and PCS antennas are mounted on rooftops, RF emissions could exceed higher than desirable guideline levels on the rooftop itself, even though rooftop antennas usually operate at lower power levels than free-standing power antennas. Such levels might become an issue for maintenance or other personnel working on the rooftop.”

The FCC also notes that pacemakers and other medical devices “could be susceptible to electromagnetic signals that could cause them to malfunction.” As such, individuals with pacemakers are encouraged to check with their doctor before performing work in areas where there is the potential to be exposed to RF radiation.

Sources:

- FCC Policy on Human Exposure to Radiofrequency Electromagnetic Fields, accessed April 28, 2016. <https://www.fcc.gov/general/radio-frequency-safety-0>
- RF Safety FAQ, accessed April 28, 2016. <https://www.fcc.gov/engineering-technology/electromagnetic-compatibility-division/radio-frequency-safety/faq/rf-safety>
- PPE and other Controls to Prevent RF Burns and Shock Hazards during Construction near an AM Radio Broadcast Antenna, accessed April 28, 2016. <https://www.aiha.org/aihae07/handouts/rt214lamson.pdf>

⁶ The Safety and Health Topics section of OSHA’s website on radiofrequency and microwave radiation, accessed April 28, 2016. https://www.osha.gov/dts/hib/hib_data/hib19900905.html

3.3 Health Effects According to the World Health Organization (WHO) – International Agency for Research on Cancer (IARC)

The World Health Organization's International Agency for the Research on Cancer (IARC) has also been studying the potential health effects of exposure to RF radiation. The possible IARC classifications are listed in Figure 3-A. In 2011, IARC classified radiofrequency electromagnetic fields as Group 2B "possibly carcinogenic to humans based on an increased risk for glioma, a malignant type of brain cancer associated with wireless phone use."

Figure 3-A

Group 1	Carcinogenic to humans
Group 2A	Probably carcinogenic to humans
Group 2B	Possibly carcinogenic to humans
Group 3	Not classifiable
Group 4	Probably not carcinogenic to humans

The Chairman of the IARC Working Group noted that while they are still accumulating evidence, the existing evidence "is strong enough to support" the 2B classification and the conclusion:

"...that there could be some risk, and therefore we need to keep a close watch for a link between cell phones and cancer risk...Given the potential consequences for public health of this classification and findings...it is important that additional research be conducted into the long-term, heavy use of mobile phones...Pending the availability of such information, it is important to take pragmatic steps..."

The IARC 2B decision, though largely based on studies of cell phone users, reportedly applies to all RF exposures regardless of the source.

A more recent study released in 2014, "Occupational Exposure to Extremely Low-Frequency Magnetic Fields and Brain Tumor Risks in the INTEROCC Study," focused on ELF, which is another form of non-ionizing radiation. This study found a "positive association between ELF in the recent past and glioma." As noted earlier, according to the CDC, "RF radiation is much higher frequency than ELF radiation and therefore potentially more harmful."

As more research and studies are done, the IARC classification of a substance can change. For more information, visit: <http://monographs.iarc.fr/ENG/Classification/>.

Source: Electromagnetic Fields (EMFs), Extremely Low-Frequency (ELF) and Radiofrequency (RF): What are the Health Impacts?, accessed April 28, 2016.
<http://www.globalresearch.ca/electromagnetic-fields-emf-extremely-low-frequencies-elf-and-radio-frequencies-rf-what-are-the-health-impacts/5335801>

3.4 Symptoms of Overexposure

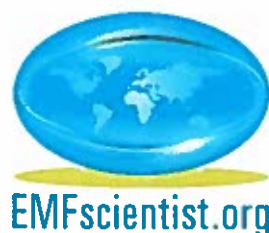
While there is uncertainty about the long-term health effects of exposure to RF, there is consensus around the thermal effects. Thermal effects occur when the body cannot deal with the heat buildup caused by the RF radiation quickly enough. This buildup is dependent on the frequency and intensity of the RF radiation fields as well as the length of time the worker is exposed and how close he or she is working from the source. Symptoms of overexposures include, but are not limited to:

- ☐ Labored breathing
- ☐ Perspiring – immediate sensation of intense heating of the parts of the body exposed
- ☐ Pain
- ☐ Headache
- ☐ Numbness
- ☐ Paresthesia – a tingling or numbness, skin crawling, or itching
- ☐ Malaise or an overall sense of feeling mentally or physically unwell
- ☐ Diarrhea
- ☐ Skin erythema – a reddening of the skin due to inflammation

In addition to these symptoms, workers who come in direct contact with an antenna may suffer severe burns since active RF antennas are energized (or hot). The resulting burns can be deep and may be worse than they appear. Any construction worker experiencing these symptoms should move to a new location immediately, and if the symptoms persist, see a doctor.

Sources:

- ☐ City of Philadelphia, Safety Program Templates - Radio Frequency– September 2008, accessed May 3, 2016. <http://www.phila.gov/finance/units-riskmanagementtemplates.html> [available online as a document].
- ☐ Erythema Frequently Asked Questions, accessed April 28, 2016. https://rpop.iaea.org/FPoP/FPoP/Content/InformationFor/HealthProfessionals/5_InterventionalCardiology/erythema.htm



**To: His Excellency Antonio Guterres, Secretary-General of the United Nations;
Honorable Dr. Tedros Adhanom, Director-General of the World Health Organization;
Honorable Erik Solheim, Executive Director of the U.N. Environment Programme;
U.N. Member Nations**

International Appeal: Scientists call for Protection from Non-ionizing Electromagnetic Field Exposure

We are scientists engaged in the study of biological and health effects of non-ionizing electromagnetic fields (EMF). Based upon peer-reviewed, published research, we have serious concerns regarding the ubiquitous and increasing exposure to EMF generated by electric and wireless devices. These include—but are not limited to—radiofrequency radiation (RFR) emitting devices, such as cellular and cordless phones and their base stations, Wi-Fi, broadcast antennas, smart meters, and baby monitors as well as electric devices and infra-structures used in the delivery of electricity that generate extremely-low frequency electromagnetic field (ELF EMF).

Scientific basis for our common concerns

Numerous recent scientific publications have shown that EMF affects living organisms at levels well below most international and national guidelines. Effects include increased cancer risk, cellular stress, increase in harmful free radicals, genetic damages, structural and functional changes of the reproductive system, learning and memory deficits, neurological disorders, and negative impacts on general well-being in humans. Damage goes well beyond the human race, as there is growing evidence of harmful effects to both plant and animal life.

These findings justify our appeal to the United Nations (UN) and, all member States in the world, to encourage the World Health Organization (WHO) to exert strong leadership in fostering the development of more protective EMF guidelines, encouraging precautionary measures, and educating the public about health risks, particularly risk to children and fetal development. By not taking action, the WHO is failing to fulfill its role as the preeminent international public health agency.

Inadequate non-ionizing EMF international guidelines

The various agencies setting safety standards have failed to impose sufficient guidelines to protect the general public, particularly children who are more vulnerable to the effects of EMF. The International

Commission on Non-Ionizing Radiation Protection (ICNIRP) established in 1998 the "Guidelines For Limiting Exposure To Time-Varying Electric, Magnetic, and Electromagnetic Fields (up to 300 GHz)"¹. These guidelines are accepted by the WHO and numerous countries around the world. The WHO is calling for all nations to adopt the ICNIRP guidelines to encourage international harmonization of standards. In 2009, the ICNIRP released a statement saying that it was reaffirming its 1998 guidelines, as in their opinion, the scientific literature published since that time "has provided no evidence of any adverse effects below the basic restrictions and does not necessitate an immediate revision of its guidance on limiting exposure to high frequency electromagnetic fields"². ICNIRP continues to the present day to make these assertions, in spite of growing scientific evidence to the contrary. It is our opinion that, because the ICNIRP guidelines do not cover long-term exposure and low-intensity effects, they are insufficient to protect public health.

The WHO adopted the International Agency for Research on Cancer (IARC) classification of extremely low frequency electromagnetic field (ELF EMF) in 2002³ and radiofrequency radiation (RFR) in 2011⁴. This classification states that EMF is a *possible human carcinogen (Group 2B)*. Despite both IARC findings, the WHO continues to maintain that there is insufficient evidence to justify lowering these quantitative exposure limits.

Since there is controversy about a rationale for setting standards to avoid adverse health effects, we recommend that the United Nations Environmental Programme (UNEP) convene and fund an independent multidisciplinary committee to explore the pros and cons of alternatives to current practices that could substantially lower human exposures to RF and ELF fields. The deliberations of this group should be conducted in a transparent and impartial way. Although it is essential that industry be involved and cooperate in this process, industry should not be allowed to bias its processes or conclusions. This group should provide their analysis to the UN and the WHO to guide precautionary action.

Collectively we also request that:

1. children and pregnant women be protected;
2. guidelines and regulatory standards be strengthened;
3. manufacturers be encouraged to develop safer technology;
4. utilities responsible for the generation, transmission, distribution, and monitoring of electricity maintain adequate power quality and ensure proper electrical wiring to minimize harmful ground current;
5. the public be fully informed about the potential health risks from electromagnetic energy and taught harm reduction strategies;
6. medical professionals be educated about the biological effects of electromagnetic energy and be provided training on treatment of patients with electromagnetic sensitivity;
7. governments fund training and research on electromagnetic fields and health that is independent of industry and mandate industry cooperation with researchers;
8. media disclose experts' financial relationships with industry when citing their opinions regarding health and safety aspects of EMF-emitting technologies; and
9. white-zones (radiation-free areas) be established.

¹ <http://www.icnirp.org/cms/upload/publications/ICNIRPemfgdl.pdf>

² <http://www.icnirp.org/cms/upload/publications/ICNIRPStatementEMF.pdf>

³ <http://monographs.iarc.fr/ENG/Monographs/vol80>

⁴ <http://monographs.iarc.fr/ENG/Monographs/vol102/>

Initial release date: May 11, 2015

Date of this version: July 3, 2018

Inquiries, including those from qualified scientists who request that their name be added to the Appeal, may be made by contacting Elizabeth Kelley, M.A., Director, EMFscientist.org, at info@EMFscientist.org.

Note: the signatories to this appeal have signed as individuals, giving their professional affiliations, but this does not necessarily mean that this represents the views of their employers or the professional organizations they are affiliated with.

Signatories

Armenia

Prof. Snerik Ayrapetyan, Ph.D., UNESCO Chair - Life Sciences International Postgraduate Educational Center, Armenia

Australia

Dr. Priyanka Bandara, Ph.D., Independent Env. Health Educator/Researcher, Advisor, Environmental Health Trust; Doctors for Safer Schools, Australia

Dr. Peter French BSc, MSc, MBA, PhD, FRSM, Conjoint Senior Lecturer, University of New South Wales, Australia

Dr. Bruce Hocking, MD, MBBS, FAOEM (RACP), FRACGP, FAFPS, specialist in occupational medicine; Victoria, Australia

Dr. Gautam (Vini) Khurana, Ph.D., F.R.A.C.S., Director, G.N.S Neurosurgery, Australia

Dr. Don Maisch, Ph.D., Australia

Dr. Elena Frolova, Ph.D., Biomed Eng., B. Eng (Hon) Chem. Eng., Engineering & Health College; RMIT University, Australia

Dr. Mary Redmayne, Ph.D., Department of Epidemiology & Preventive Medicine, Monash University, Australia

Dr. Charles Teo, BM, BS, MBBS, Member of the Order of Australia, Director, Centre for Minimally Invasive Neurosurgery at Prince of Wales Hospital, NSW, Australia

Austria

Dr. Michael Kundi, MD, University of Vienna, Austria

Dr. Gerd Oberfeld, MD, Public Health Department, Salzburg Government, Austria

Dr. Bernhard Pollner, MD, Pollner Research, Austria

Prof. Dr. Hugo W. Rüdiger, MD, Austria

Bahrain

Dr. Amer Kamal, MD, Physiology Department, College of Medicine, Arabian Gulf University, Bahrain

Belgium

Prof. Marie-Claire Cammaerts, Ph.D., Free University of Brussels, Faculty of Science, Brussels, Belgium

Dr. Andre Vander Vorst, PhD, professor emeritus, University Louvain-la-Neuve, Belgium

Brazil

Vânia Araújo Condessa, MSc, Electrical Engineer, Belo Horizonte, Brazil

Prof. Dr. João Eduardo de Araújo, MD, University of São Paulo, Brazil

Dr. Francisco de Assis Ferreira Tejo, D. Sc., Universidade Federal de Campina Grande, Campina Grande, State of Paraíba, Brazil

Prof. Alvaro deSalles, Ph.D., Federal University of Rio Grande do Sul, Brazil

Prof. Adilza Dode, Ph.D., MSc. Engineering Sciences, Minas Methodist University, Brazil

Dr. Daiana Condessa Dode, MD, Federal University of Medicine, Brazil

Michael Condessa Dode, Systems Analyst, MFE Engenharia Ltda, Belo Horizonte, Brazil

Prof. Orlando Furtado Vieira Filho, PhD, Cellular & Molecular Biology, Federal University of Rio Grande do Sul, Brazil

Canada

Dr. Magda Havas, Ph.D., Environmental and Resource Studies, Centre for Health Studies, Trent University, Canada

Dr. Paul Héroux, Ph.D., Director, Occupational Health Program, McGill University; InVivoPlus Labs, Royal Victoria Hospital, McGill University, Canada

Dr. Tom Hutchinson, Ph.D., Professor Emeritus, Environmental and Resource Studies, Trent University, Canada

Prof. Ying Li, Ph.D., InVivoPlus Labs, Dept. of Surgery, Royal Victoria Hospital, McGill University, Canada

James McKay M.Sc., Ecologist, City of London; Planning Services, Environmental and Parks Planning, London, Canada

Prof. Anthony B. Miller, MD, FRCP, University of Toronto, Canada

Prof. Klaus-Peter Ossenkopp, Ph.D., Department of Psychology (Neuroscience), University of Western Ontario, Canada

Dr. Malcolm Paterson, PhD, Molecular Oncologist (ret.), British Columbia, Canada

Prof. Michael A. Persinger, Ph.D., Behavioural Neuroscience and Biomolecular Sciences, Laurentian University, Canada

China

Prof. Huai Chiang, Bioelectromagnetics Key Laboratory, Zhejiang University School of Medicine, China
Prof. Yuqing Duan, Ph.D., Food & Bioengineering, Jiangsu University, China
Dr. Kaijun Liu, Ph.D., Third Military Medical University, Chongqing, China
Prof. Xiaodong Liu, Director, Key Lab of Radiation Biology, Ministry of Health of China; Associate Dean, School of Public Health, Jilin University, China
Prof. Wenjun Sun, Ph.D., Bioelectromagnetics Key Lab, Zhejiang University School of Medicine, China
Prof. Minglian Wang, Ph.D., College of Life Science & Bioengineering, Beijing University of Technology, China
Prof. Qun Wang, Ph.D., College of Materials Science & Engineering, Beijing University of Technology, China
Prof. Haihui Zhang, Ph.D., School of Food & BioEngineering, Jiangsu University, China
Prof. Jianbao Zhang, Associate Dean, Life Science and Technology School, Xi'an Jiaotong University, China
Prof. Hui-yan Zhao, Director of STSOFW, College of Plant Protection, Northwest A & F University, Yangling Shaanxi, China
Prof. J. Zhao, Department of Chest Surgery, Cancer Center of Guangzhou Medical University, Guangzhou, China

Croatia

Ivanka Trosic, Ph.D., Institute for Medical Research and Occupational Health, Croatia

Egypt

Prof. Dr. Abu Bakr Abdel Fattih El-Bediwi, Ph.D., Physics Dept., Faculty of Science, Mansoura University, Egypt
Prof. Dr. Emad Fawzy Eskander, Ph.D., Medical Division, Hormones Department, National Research Center, Egypt
Prof. Dr. Heba Salah El Din Aboul Ezz, Ph.D., Physiology, Zoology Department, Faculty of Science, Cairo University, Egypt
Prof. Dr. Nasr Radwan, Ph.D., Neurophysiology, Faculty of Science, Cairo University, Egypt

Estonia

Dr. Hile Hinrikus, Ph.D., D.Sc, Tallinn University of Technology, Estonia
Mr. Tarmo Koppel, Tallinn University of Technology, Estonia

Finland

Dr. Mikko Ahonen, Ph.D, University of Tampere, Finland
Dr. Marjukka Hagström, LL.M., M.Sc.Sc, Principal Researcher, Radio and EMC Laboratory, Finland
Prof. Dr. Osmo Hänninen, Ph.D., Dept. of Physiology, Faculty of Medicine, University of Eastern Finland, Finland;
Editor-In-Chief, Pathophysiology, Finland
Dr. Dariusz Leszczynski, Ph.D., Adjunct Professor of Biochemistry, University of Helsinki, Finland;
Member of the IARC Working Group that classified cell phone radiation as possible carcinogen.
Dr. Georgiy Ostroumov, Ph.D. (in the field of RF/EMF), independent researcher, Finland

France

Prof. Dr. Dominique Belpomme, MD, MPH, Professor in Oncology, Paris V Descartes University, ECEPI Executive Director
Dr. Pierre Le Ruz, Ph.D., Crlirem, Le Mans, France
Dr Annie JSasoo, MD, MPH, MS, DrPH, Fmr. Research Dir., French NIH (INSERM); Fmr. Chief, Unit of Epidemiology for Cancer Prevention at International Agency for Research on Cancer; Fmr. Acting Head, Programme for Cancer Control, World Health Organization; France.

Georgia

Prof. Besarion Partsvania, Ph.D., Head of Bio-cybernetics Department of Georgian Technical University, Georgia

Germany

Prof. Dr. Franz Adlkofer, MD, Chairman, Pandora Foundation, Germany
Prof. Dr. Hynek Burda, Ph.D., University of Duisburg-Essen, Germany
Dr. Horst Eger, MD, Electromagnetic Fields in Medicine, Association of Statutory Health Insurance Physicians, Bavaria, Germany
Prof. Dr. Karl Hecht, MD, former Director, Institute of Pathophysiology, Charité, Humboldt University, Berlin, Germany
Dr.Sc. Florian M. König, Ph.D., Florian König Enterprises (FKE) GmbH, Munich, Germany
Dr. rer. nat. Lebrecht von Kitzing, Ph.D., Dr. rer. nat. Lebrecht von Kitzing, Ph.D., Head, Institute of Environ.Physics; Ex-Head, Dept. Clinical Research, Medical University, Lubeck, Germany
Dr. Cornelia Waldmann-Selsam, MD, Member, Competence Initiative for the Protection of Humanity, Environment and Democracy e.V, Bamberg, Germany
Dr. Ulrich Warnke, Ph.D., Bionik-Institut, University of Saarlandes, Germany

Greece

Dr. Adamantia F. Fragopoulou, M.Sc., Ph.D., Department of Cell Biology & Biophysics, Biology Faculty, University of Athens, Greece
Dr. Christos Georgiou, Ph.D., Biology Department, University of Patras, Greece
Prof. Emeritus Lukas H. Margaritis, Ph.D., Depts. Cell Biology, Radiobiology & Biophysics, Biology Faculty, Univ. of Athens, Greece
Dr. Aikaterini Skouroliaou, M.Sc., Ph.D., Department of Energy Technology Engineering, Technological Educational Institute of Athens, Greece
Dr. Stellos A Zinelis, MD, Hellenic Cancer Society-Kefalonia, Greece

Iceland

Dr. Oon Famon, Ph.D., Affiliate Professor, University of Washington, USA; Professor, Reykjavik University, Iceland

India

Prof. Dr. B. D. Banerjee, Ph.D., Fmr. Head, Environmental Biochemistry & Molecular Biology Laboratory, Department of Biochemistry, University College of Medical Sciences, University of Delhi, India
Prof. Jitendra Behari, Ph.D., Ex-Dean, Jawaharlal Nehru University; presently, Emeritus Professor, Amity University, India
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Dr. Obajuluwa Adejoke PhD, Cell Biology and Genetics Unit, Dept of Zoology, University of Ilorin; Lecturer, Biological Sciences Department, Bio-technology Unit, Afe Babalola University, Nigeria
 Dr. Idowu Ayisat Obe, Department of Zoology, Faculty of Science, University of Lagos, Akoka, Lagos, Nigeria
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Serbia

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Dr. Sadjana Spasic, Ph.D., Institute for Multidisciplinary Research, University of Belgrade, Serbia

Slovak Republic

Dr. Igor Belyaev, Ph.D., Dr.Sc., Cancer Research Institute, Slovak Academy of Science, Bratislava, Slovak Republic

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Prof. Kwon-Saok Chae, Ph.D., Molecular-ElectroMagnetic Biology Lab, Kyungpook National University, South Korea
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Prof. Dr. Myung Chan Gye, Ph.D., Hanyang University, South Korea
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Turkey

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Associate Prof. Dr. Halil Abraham Atasoy, MD, Pediatrics, Abant İzzet Baysal University, Faculty of Medicine, Turkey
Prof. Ayşe G. Canseven (Kursun), Ph.D., Gazi University, Faculty of Medicine, Dept. of Biophysics, Turkey
Prof. Dr. Mustafa Salih Celik, Ph.D., Fmr. Head, Turkish Biophysical Society; Head, Biophysics Dept.; Medical Faculty, Dicle Univ., Turkey
Prof. Dr. Osman Cerezci, Electrical-Electronics Engineering Department, Sakarya University, Turkey
Prof. Dr. Süleyman Dasdag, Ph.D., Dept. of Biophysics, Medical School of Dicle University, Turkey
Prof. Omar Elmas, MD, Ph.D., Mugla Sıtkı Kocman University, Faculty of Medicine, Department of Physiology, Turkey

Prof. Dr. Ali H. Eriş, MD, faculty, Radiation Oncology Department, BAV University Medical School, Turkey
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 Prof. Dr. Mustafa Nazıroğlu, Ph.D., Biophysics Dept, Medical Faculty, Süleyman Demirel University, Isparta, Turkey
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 Prof. Dr. Bahriye Srav (Aral), PhD., Gazi University Faculty of Medicine, Dept of Biophysics, Turkey

Ukraine

Dr. Oleg Banyra, MD, 2nd Municipal Polyclinic, St. Paraskeva Medical Centre, Ukraine
 Prof. Victor Martynyuk, PhD., ECS "Institute of Biology", Head of Biophysics Dept, Taras Shevchenko National University of Kyiv, Ukraine
 Prof. Igor Yakymenko, Ph.D., D.Sc., Instit. Experimental Pathology, Oncology & Radiobiology, National Academy of Sciences of Ukraine

United Kingdom

Michael Bevington, M.A., M.Ed., Chair of Trustees, ElectroSensitivity UK (ES-UK), UK
 Mr. Roger Coghill, MA C Biol, MSc Biol, MA Environ Mgt; Member Instit. of Biology; Member, UK SAGE Committee on EMF Precautions, UK
 Mr. David Gee, Associate Fellow, Institute of Environment, Health and Societies, Brunel University, UK
 Dr. Andrew Goldsworthy BSc PhD, Lecturer in Biology (retired), Imperial College, London, UK
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United States

Dr. Martin Blank, Ph.D., Columbia University, USA
 Prof. Jim Burch, MS Ph.D., Dept. of Epidemiology & Biostatistics, Arnold School of Public Health, University of South Carolina, USA
 Prof. David O. Carpenter, MD, Director, Institute for Health and the Environment, University of New York at Albany, USA
 Prof. Prof. Simona Carrubba, Ph.D., Biophysics, Daemen College, Women & Children's Hospital of Buffalo Neurology Dept., USA
 Dr. Sandra Cruz-Pol, PhD., Professor Electrical Engineering, on Radio Frequencies, Electromagnetics, University of Puerto Rico at Mayaguez; Member of US National Academies of Sciences Committee for Radio Frequencies; Puerto Rico, USA
 Dr. Zohreh Davanipour, D.V.M., Ph.D., Friends Research Institute, USA
 Dr. Devra Davis, Ph.D., MPH, President, Environmental Health Trust; Fellow, American College of Epidemiology, USA
 Dr. James DeMeo, PhD, retired in private research
 Paul Raymond Doyon, BMFS, MAT, MA, Doyon Independent Research Associates, USA
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 Dr. Reba Goodman Ph.D, Columbia University, USA
 Dr. Martha R. Herbert, MD, Ph.D., Harvard Medical School, Harvard University, USA
 Dr. Gunnar Heuser, M.D., Ph.D., F.A.C.P. Emeritus member, Cedars Sinai Medical Center, Los Angeles, CA; Former Assistant Clinical Professor, UCLA; Former member, Brain Research Institute, UCLA, USA
 Dr. Donald Hillman, Ph.D., Professor Emeritus, Michigan State University, USA
 Elizabeth Kelley, MA, Fmr. Managing Secretariat, ICEMS Italy; Director, EMFScientist.org, USA
 Dr. Ronald N. Kostoff, Ph.D., Gainesville, VA, USA
 Neha Kumar, Founder, Nonionizing Electromagnetic Radiation Shielding Alternatives, Pvt. Ltd; B.Tech - Industrial Biotech., USA

Dr. Henry Lai, Ph.D., University of Washington, USA
 B. Blake Levitt, medical/science journalist, former New York Times contributor, EMF researcher and author, USA
 Prof. Trevor G. Marshall, PhD, Autoimmunity Research Foundation, USA
 Dr. Albert M. Marville, II, Ph.D. and C.W.B., Adj. Professor, Johns Hopkins University Krieger Graduate School of Arts & Sciences; Migratory Bird Management, U.S. Fish & Wildlife Service, USA
 Dr. Andrew Marino, J.D., Ph.D., Retired Professor, LSU Health Sciences Center, USA
 Dr. Marko Markov, Ph.D., President, Research International, Buffalo, New York, USA
 Dr. Jeffrey L. Marrongelle, DC, CCN, President/Managing Partner of BioEnergiMed LLC, USA
 Dr. Ronald Melnick, PhD, Senior Toxicologist, (Retired, leader of the NTP's health effects studies of cell phone radio frequency radiation) US National Toxicology Program, National Institute of Environmental Health Sciences, USA
 Dr. Samuel Milham, MD, MPH, USA
 L. Lloyd Morgan, Environmental Health Trust, USA
 Dr. Joel M. Moskowitz, Ph.D., School of Public Health, University of California, Berkeley, USA
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Olga Ameixa, PhD, Post-Doctoral Researcher, Dept of Biology & CESAM, University of Aveiro Campus, Universitário de Santiago, Portugal
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Electromagnetic Radiation Safety

Scientific and policy developments regarding the health effects of electromagnetic radiation exposure from cell phones, cell towers, Wi-Fi, Smart Meters, and other wireless technology

Monday, March 24, 2014

Cell Tower Radiation Affects Wildlife: Dept. of Interior Attacks FCC

The Department of Interior charges that the FCC standards for cell phone radiation are outdated and no longer applicable as they do not adequately protect wildlife.

The Director of the Office of Environmental Policy and Compliance of the United States Department of the Interior sent a letter to the National Telecommunications and Information Administration in the Department of Commerce which addresses the Interior Department's concern that cell tower radiation has had negative impacts on the health of migratory birds and other wildlife.

The Interior Department accused the Federal government of employing outdated radiation standards set by the Federal Communications Commission (FCC), a federal agency with no expertise in health. The standards are no longer applicable because they control only for overheating and do not protect organisms from the adverse effects of exposure to the low-intensity radiation produced by cell phones and cell towers:

"the electromagnetic radiation standards used by the Federal Communications Commission (FCC) continue to be based on thermal heating, a criterion now nearly 30 years out of date and inapplicable today."

The Department criticized the Federal government's proposed procedures for placement and operation of communication towers, and called for "independent, third-party peer-reviewed studies" in the U.S. to examine the effects of cell tower radiation on "migratory birds and other trust species."

Following are excerpts from the letter, dated Feb 7, 2014:

"The Department believes that some of the proposed procedures are not consistent with Executive Order 13186 Responsibilities of Federal Agencies to Protect Migratory Birds, which specifically requires federal agencies to develop and use principles, standards, and practices that will lessen the amount of unintentional take reasonably attributed to agency actions. The Department, through the Fish and Wildlife Service (FWS), finds that the proposals lack provisions necessary to conserve migratory bird resources, including eagles. The proposals also do not reflect current information regarding the effects of communication towers to birds. Our comments are intended to further clarify specific issues and address provisions in the proposals.

The Department recommends revisions to the proposed procedures to better reflect the impacts to resources under our jurisdiction from communication towers. The placement and operation of communication towers, including un-guyed, unit, monopole or lattice-designed structures, impact protected migratory birds in two significant ways. The first is by injury, crippling loss, and death from collisions with towers and their supporting guy-wire infrastructure, where present. The second significant issue associated with communication towers involves impacts from non-ionizing electromagnetic radiation emitted by them (See Attachment)."

Enclosure A

"The second significant issue associated with communication towers involves impacts from nonionizing electromagnetic radiation emitted by these structures. Radiation studies at cellular communication towers were begun circa 2000 in Europe and continue today on wild nesting birds. Study results have documented nest and site abandonment, plumage deterioration, locomotion problems, reduced survivorship, and death (e.g., Balmori 2005, Balmori and Hallberg 2007, and Everaert and Bauwens 2007). Nesting migratory birds and their offspring have apparently been affected by the radiation from cellular phone towers in the 900 and 1800 MHz frequency ranges- 915 MHz is the standard cellular phone frequency used in the United States. However, the electromagnetic radiation standards used by the Federal Communications Commission (FCC) continue to be based on thermal heating, a criterion now nearly 30 years out of date and inapplicable today. This is primarily due to the lower levels of radiation output from microwave-powered communication devices such as cellular telephones and other sources of point-to-point communications; levels typically lower than from microwave ovens. The problem, however, appears to focus on very low levels of non-ionizing electromagnetic radiation. For example, in laboratory studies, T. Litovitz (personal communication) and DiCarlo et al. (2002) raised concerns about impacts of low-level, non-thermal electromagnetic radiation from the standard 915 MHz cell phone frequency on domestic chicken embryos- with some lethal results (Manville 2009, 2013a). Radiation at extremely low levels (0.0001 the level emitted by the average digital cellular telephone) caused heart attacks and the deaths of some chicken embryos subjected to hypoxic conditions in the laboratory while controls subjected to hypoxia were unaffected (DiCarlo et al. 2002). To date, no independent, third-party field studies have been conducted in North America on impacts of tower electromagnetic radiation on migratory birds. With the European field and U.S. laboratory evidence already available, independent, third-party peer-reviewed studies need to be conducted in the U.S. to begin examining the effects from radiation on migratory birds and other trust species."

Radiation Impacts and Categorical Exclusions

"There is a growing level of anecdotal evidence linking effects of non-thermal, non-ionizing electromagnetic radiation from communication towers on nesting and roosting wild birds and other wildlife in the U.S. Independent, third-party studies have yet to be conducted in the U.S. or Canada, although a peer-reviewed research protocol developed for the U.S. Forest Service by the Service's Division of Migratory Bird Management is available to study both collision and radiation impacts (Manville 2002). As previously mentioned, Balmori (2005) found strong negative correlations between levels of lower-emitted microwave radiation and bird



Jeef M. Moskowitz, Ph.D.
Director
Center for Family and Community Health
School of Public Health
University of California, Berkeley

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breeding, nesting, and roosting in the vicinity of electromagnetic fields in Spain. He documented nest and site abandonment, plumage deterioration, locomotion problems, reduced survivorship, and death in House Sparrows, White Storks, Rock Doves, Magpies, Collared Doves, and other species. Though these species had historically been documented to roost and nest in these areas, Balmori (2005) did not observe these symptoms prior to construction and operation of the cellular phone towers. Balmori and Halberg (2007) and Everaert and Bauwens (2007) found similar strong negative correlations among male House Sparrows. Under laboratory conditions, DiCarlo et al. (2002) raised troubling concerns about impacts of low-level, non-thermal electromagnetic radiation from the standard 915 MHz cell phone frequency on domestic chicken embryos- with some lethal results (Marville 2009). Given the findings of the studies mentioned above, field studies should be conducted in North America to validate potential impacts of communication tower radiation both direct and indirect - to migratory birds and other trust wildlife species."

The full text of the letter, the addendum and citations are available at: <http://1.usa.gov/1jn3CZg>

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American Academy of Environmental Medicine

6505 E Central • Ste 296 • Wichita, KS 67206

Tel: (316) 684-5500 • Fax: (316) 684-5709

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Wireless Radiofrequency Radiation in Schools

Founded in 1965 as a non-profit medical association, the American Academy of Environmental Medicine (AAEM) is an international organization of physicians and scientists interested in the complex relationships between the environment and health. For forty years the Academy has trained Physicians to treat the most difficult, complex patients who are often left behind by our medical system, because their illness, rather than stemming from traditionally understood factors, is related to underlying environmental causes, including (bio)chemical or radiation exposures. AAEM physicians, and physicians world-wide, are treating patients who report adverse, debilitating health effects associated with exposure to radiofrequency energy (RF).

The AAEM strongly supports the use of wired Internet connections, and encourages avoidance of radiofrequency such as from WiFi, cellular and mobile phones and towers, and "smart meters."

The peer reviewed, scientific literature demonstrates the correlation between RF exposure and neurological, cardiac, and pulmonary disease as well as reproductive and developmental disorders, immune dysfunction, cancer and other health conditions. The evidence is irrefutable. Despite this research, claims have been made that studies correlating emissions from WiFi, phones, smart meters, etc. with adverse health effects do not exist.

In May 2011 the World Health Organization elevated exposure to wireless radiation, including WiFi, into the Class 2b list of Carcinogens; recent research strengthens the level of evidence regarding carcinogenicity.

There is consistent, emerging science that shows people, especially children who are more vulnerable due to developing brains and thinner skulls, are being affected by the increasing exposure to wireless radiation. In September 2010, the Journal of the American Society for Reproductive Medicine-Fertility and Sterility, reported that only four hours of exposure to a standard laptop using WiFi caused DNA damage to human sperm.

In December 2012 the American Academy of Pediatrics, representing 60,000 pediatricians, wrote to Congress requesting that it update the safety levels of microwave radiation exposure especially for children and pregnant women.

With WiFi in public facilities as well as schools, children would be exposed to WiFi for unprecedented periods of time, for their entire childhood. Some of these signals will be much more powerful than would be received at home, due to the need for the signals to go through thick walls and to serve many computers

simultaneously. Signals in institutions are dozens of times more powerful than café and restaurant systems.

To install WiFi in schools plus public spaces risks a widespread public health hazard that the medical system is not yet prepared to address. Statistics show that you can expect to see an immediate reaction in 3% and delayed effects in 30% of citizens of all ages.

It is better to exercise caution and substitute with a safe alternate such as a wired connection. While more research is being conducted, children must be protected. Wired technology is not only safer, it also stronger and more secure.

While the debate ensues about the dangers of RF, it is the doctors who must deal with the after effects. Until we can determine why some get sick and others do not, and some are debilitated for indeterminate amounts of time, we implore you to not take the risk, particularly with the health of so many children with whose safety you have been entrusted. Avoidance will always be the best policy. It should be reflected by minimizing RF exposures in public spaces.

Respectfully,

The Board of Directors of the American Academy of Environmental Medicine

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Biomed Pharmacother. 2008 Feb;62(2):104-9. doi: 10.1016/j.biopha.2007.12.004. Epub 2007 Dec 31.

Biological effects from electromagnetic field exposure and public exposure standards.

Hardell L¹, Sage C.

Author information

Abstract

During recent years there has been increasing public concern on potential health risks from power-frequency fields (extremely low frequency electromagnetic fields; ELF) and from radiofrequency/microwave radiation emissions (RF) from wireless communications. Non-thermal (low-intensity) biological effects have not been considered for regulation of microwave exposure, although numerous scientific reports indicate such effects. The BioInitiative Report is based on an international research and public policy initiative to give an overview of what is known of biological effects that occur at low-intensity electromagnetic fields (EMFs) exposure. Health endpoints reported to be associated with ELF and/or RF include childhood leukaemia, brain tumours, genotoxic effects, neurological effects and neurodegenerative diseases, immune system deregulation, allergic and inflammatory responses, breast cancer, miscarriage and some cardiovascular effects. The BioInitiative Report concluded that a reasonable suspicion of risk exists based on clear evidence of bioeffects at environmentally relevant levels, which, with prolonged exposures may reasonably be presumed to result in health impacts. Regarding ELF a new lower public safety limit for habitable space adjacent to all new or upgraded power lines and for all other new constructions should be applied. A new lower limit should also be used for existing habitable space for children and/or women who are pregnant. A precautionary limit should be adopted for outdoor, cumulative RF exposure and for cumulative indoor RF fields with considerably lower limits than existing guidelines, see the BioInitiative Report. The current guidelines for the US and European microwave exposure from mobile phones, for the brain are 1.6 W/Kg and 2 W/Kg, respectively. Since use of mobile phones is associated with an increased risk for brain tumour after 10 years, a new biologically based guideline is warranted. Other health impacts associated with exposure to electromagnetic fields not summarized here may be found in the BioInitiative Report at www.bioinitiative.org.

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Rev Environ Health. 2010 Oct-Dec;25(4):325-33.

Health risk assessment of electromagnetic fields: a conflict between the precautionary principle and environmental medicine methodology.

Dåmvik M¹, Johansson O.

Author information

Abstract

The purpose of the precautionary principle is that legal requirements are to be made to safeguard against the possible health risks that have not yet been scientifically established. That a risk is not established cannot, therefore, be used as an excuse for not applying the principle. Yet, that rationale is exactly what is happening in the case of the possible health risks from exposure to electromagnetic fields (EMF). The scientists, representing both the World Health Organization and the European Commission, do not have at all the precautionary principle in mind when they report on health risks. Their starting point is instead to determine whether new research findings have been scientifically established and thus cannot be the basis for an amendment to the existing exposure limits. Uncertain indications of risk are ignored or played down. This approach is in conflict with European Union (EU) law, which requires that the degree of scientific uncertainty should be presented correctly. A thorough examination of the state of research shows many serious indications of possible health risks from exposure very far below existing limits for EMF. Case law, for other types of exposure, also shows that the precautionary principle can be applied on the basis of weaker evidence than that. Our investigation shows that the precautionary principle is not being used for its intended purpose in relation to exposure to EMF. The reason for this position is that decision-makers are being misled by inaccurate risk assessments.

PMID: 21268445

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The Seletun Scientific Statement

Lower EMF Standards for World Health Are
Urgently Needed,
International Scientists Say

Oslo, Norway, February 3, 2011.

The International Electromagnetic Fields Alliance (IEMFA) today announces a new published report and scientific Consensus Statement concerning health hazards of electromagnetic fields (EMFs). Led by Olle Johansson, PhD of the Karolinska Institute, the report published by a consortium of international scientists urges global governments to adopt significantly lower human exposure standards for electromagnetic fields. The recommendations are based on the latest body of evidence in biological sciences, and the public-health implications of the unprecedented global exposures to electromagnetic fields from telecommunications and electric power technologies. The scientists recommend specific exposure limits for different frequency fields, including microwaves, used in wireless communications, and ELF electric fields and magnetic fields.



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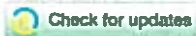
Original Article

A cross-sectional case control study on genetic damage in individuals residing in the vicinity of a mobile phone base station

Gursatej Gandhi , Gurpreet Kaur & Uzma Nisar

Pages 344-354 | Received 17 Jan 2014, Accepted 27 Apr 2014, Published online: 09 Jul 2014

 Download citation  <https://doi.org/10.3109/15368378.2014.933349>



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Abstract

emitting radiations from these stations have raised health concerns. Hence in this study, genetic damage using the single cell gel electrophoresis (comet) assay was assessed in peripheral blood leukocytes of individuals residing in the vicinity of a mobile phone base station and comparing it to that in healthy controls. The power density in the area within 300 m from the base station exceeded the permissive limits and was significantly ($p=0.000$) higher compared to the area from where control samples were collected. The study participants comprised 63 persons with residences near a mobile phone tower, and 28 healthy controls matched for gender, age, alcohol drinking and occupational sub-groups. Genetic damage parameters of DNA migration length, damage frequency (DF) and damage index were significantly ($p=0.000$) elevated in the sample group compared to respective values in healthy controls. The female residents ($n=25$) of the sample group had significantly ($p=0.004$) elevated DF than the male residents ($n=38$). The linear regression analysis further revealed daily mobile phone usage, location of residence and power density as significant predictors of genetic damage. The genetic damage evident in the participants of this study needs to be addressed against future disease-risk, which in addition to neurodegenerative disorders, may lead to cancer.

Keywords: DNA damage, radiofrequency radiations, peripheral blood leukocytes



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Abstract

Human populations are increasingly exposed to microwave/radiofrequency (RF) emissions from wireless communication technology, including mobile phones

epidemiological studies that assessed for putative health effects of mobile phone base stations. Seven of these studies explored the association between base station proximity and neurobehavioral effects and three investigated cancer. We found that eight of the 10 studies reported increased prevalence of adverse neurobehavioral symptoms or cancer in populations living at distances < 500 meters from base stations. None of the studies reported exposure above accepted international guidelines, suggesting that current guidelines may be inadequate in protecting the health of human populations. We believe that comprehensive epidemiological studies of longterm mobile phone base station exposure are urgently required to more definitively understand its health impact.

Keywords: BASE STATIONS, ELECTROMAGNETIC FIELD (EMF), EPIDEMIOLOGY, HEALTH EFFECTS, MOBILE PHONE, RADIOFREQUENCY (RF), ELECTROMAGNETIC RADIATION



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