

STAFF REPORT FOR PLANNING COMMISSION MEETING OF FEBRUARY 27, 2019

FILE NO: SUP-18-166

AGENDA ITEM: E.2

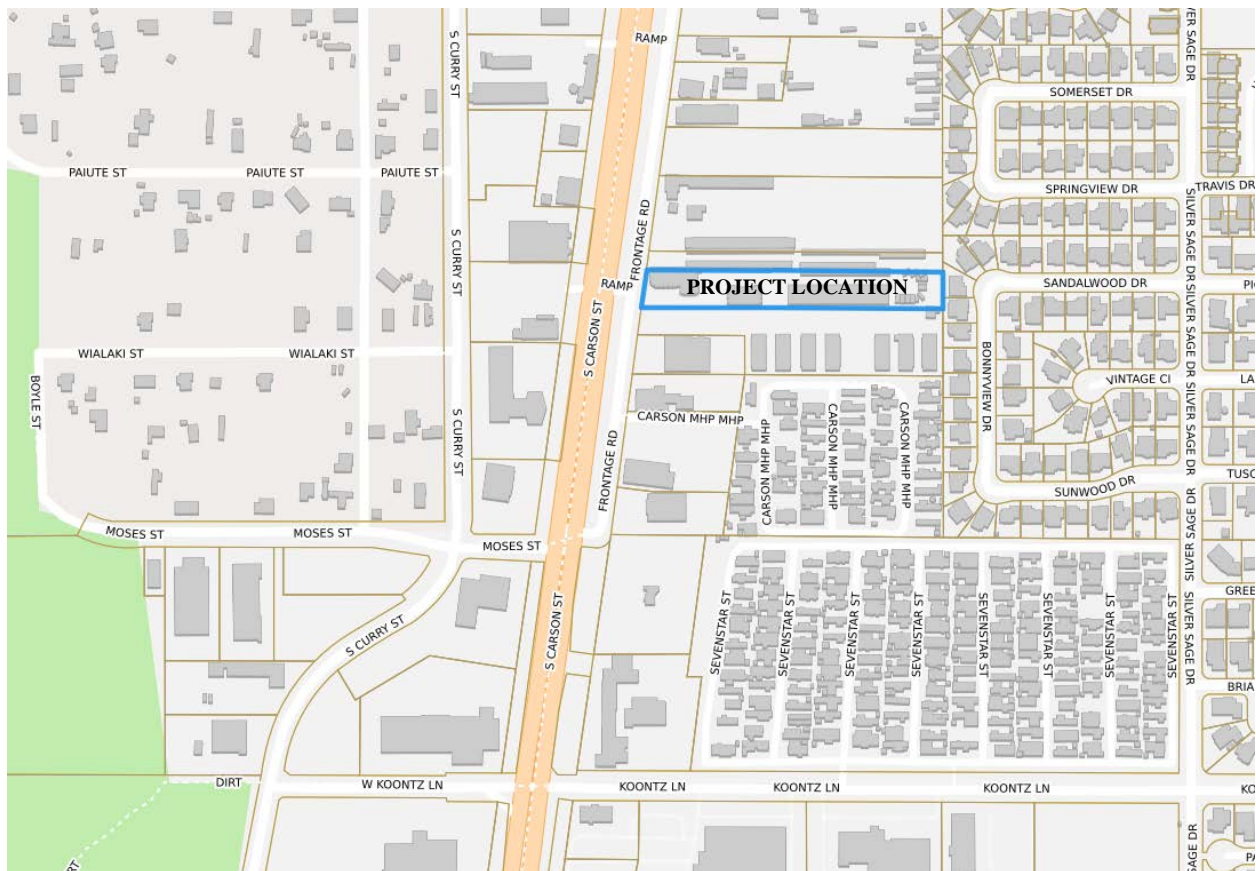
STAFF CONTACT: Heather Ferris, Associate Planner

AGENDA TITLE: For Possible Action: To consider a request for a Special Use Permit for a new 70 foot tall wireless communications facility on property zoned Retail Commercial (RC). The subject property is located at 3331 South Carson Street, APN 009-112-17. (Heather Ferris, hferris@carson.org)

Summary: The applicant is proposing a new 70 foot tall wireless telecommunication monopole with associated improvements in the Retail Commercial zoning district. New telecommunication facilities that exceed the 45 foot height limit of the Retail Commercial district require approval of a Special Use Permit. This matter was originally scheduled to be heard by the Planning Commission at their January 30, 2019 meeting; however, the item was continued to the February 27, 2019 meeting allowing staff time to continue to work with the applicant regarding the aesthetics of the proposed facility.

RECOMMENDED MOTION: “I move to approve SUP-18-166, based on the findings and subject to the conditions of approval contained in the staff report.”

VICINITY MAP:



RECOMMENDED CONDITIONS OF APPROVAL:

The following shall be completed prior to commencement of the use:

1. The applicant must sign and return the Notice of Decision for conditions for approval within 10 days of receipt of notification. If the Notice of Decision is not signed and returned within 10 days, then the item may be rescheduled for the next Planning Commission meeting for further consideration.
2. All development shall be substantially in accordance with the development plans approved with this application, except as otherwise modified by these conditions of approval.
3. All on- and off-site improvements shall conform to City standards and requirements.
4. The applicant shall obtain a building permit from the Carson City Building Division prior to any proposed construction.
5. The applicant shall meet all the conditions of approval and commence the use for which this permit is granted within 12 months of the date of final approval. A single, one year extension of time may be granted if requested in writing to the Community Development Department 30 days prior to the one year expiration date. Should this permit not be initiated within one year and no extension granted, the permit shall become null and void.

The following shall be submitted with any building permit application:

6. The applicant shall submit a copy of the Notice of Decision and conditions of approval, signed by the applicant and owner, with any building permit application.
7. The plans submitted for the building permit shall incorporate the use of the radome as shown in the February 5, 2019 photo simulations.
8. The applicant shall submit documentation with a building permit application that the applicant is licensed by the Federal Communications Commission (FCC) and has the legal right to install and use the proposed facility.
9. The exterior of facilities and equipment shall not be lighted unless required by Federal Aviation Administration (FAA), with the exception of manually operated emergency lighting. The applicant shall submit exterior light fixture details for any proposed fixtures for the facility with a building permit application. On-site lighting of the ground facility shall only be turned on during maintenance visits to the site. Lights must be recessed or shielded with a 90-degree full cutoff so that light is projected downward and not horizontally or upward. Light sources or refractors shall not extend below the bottom of the shield.
10. Ground-mounted facilities (monopole, antennas, and exterior of equipment building) shall be painted a non-glossy, earth toned/neutral color that blends with the surrounding natural environment. The applicant shall provide the Planning Division with the proposed color choices for review and approval with the building permit.
11. The applicant shall extend sidewalk, curb and gutter along the frontage of the parcel and the access ramp must be upgraded to meet current ADA standards.

12. The applicant shall provide a Knox Box at the entrance gate.

The following applies to the site throughout the life of the project:

13. The applicant shall limit any future costs assessed to other service providers requesting to co-locate. The costs shall be limited to a proportional share of the ground lease, site acquisition costs, design, capital costs for construction of the freestanding tower including associated permitting cost and reasonable maintenance, repair, and replacement costs.
14. The maximum overall height of the tower is limited to 70 feet.
15. The exterior of the lease area shall contain adequate controlled access and be posted with a one square foot sign indicating the facility owner(s) and 24-hour emergency telephone number.
16. This permit shall become null and void and the wireless communications tower structure and ancillary equipment shall be removed from the site if and when the use is abandoned for a period of more than 12 consecutive months.

LEGAL REQUIREMENTS: CCMC 18.02.080 (Special Use Permits), 18.04.130 (Retail Commercial Uses), 18.15 (Communication Facilities and Equipment), and Development Standards Division 1 Land Use and Site Design at 1.9 (Wireless Telecommunication Facilities and Equipment).

MASTER PLAN DESIGNATION: Commercial/Regional Commercial

PRESENT ZONING: Retail Commercial

KEY ISSUES: Will the proposed wireless telecommunication facility with a 70 foot tall monopole be in keeping with all of the standards of the Carson City Municipal Code? Has sufficient information been provided to justify the location and height of the facility?

SURROUNDING ZONING AND LAND USE INFORMATION

WEST: Retail Commercial/Frontage Road, S. Carson Street, Restaurant

EAST: Single Family-6,000/Single Family Residences

NORTH: Retail Commercial/Mini-storage

SOUTH: Retail Commercial/Cherry Creek Apartments

ENVIRONMENTAL INFORMATION

FLOOD ZONE: X-shaded (0.2% Annual Chance Flood Hazard); X-unshaded (areas of minimal flooding)

EARTHQUAKE FAULT: Moderate, Zone III, beyond 500 feet

SLOPE: Site is flat

SITE DEVELOPMENT INFORMATION

LOT SIZE: 1.81 acres

STRUCTURE SIZE/HEIGHT: 70-foot tall monopole, with an 18'x32' lease area containing the pole and supporting equipment.

SETBACKS: Zero setbacks are required other than when a property is adjacent to residential or streets in the Retail Commercial zoning district.

VARIANCES REQUESTED: None

PREVIOUS REVIEWS

- MPR-05-001- January 25, 2005 Major Project Review completed for a personal storage and retail and office complex.
- SUP-05-228- December 22, 2005 Planning Commission approved a Special Use Permit for a personal storage and retail and office complex.

DISCUSSION:

Carson City Municipal Code (CCMC) 18.15 *Communication Facilities and Equipment* requires approval of a Special Use Permit for the construction and operation of a wireless telecommunication facility in any non-residential zoning district, unless one of the following applies:

- The tower is proposed as a co-location on an existing tower, and does not increase the height of the tower by more than 10 feet;
- The tower meets the height restriction of the proposed zoning district; or
- The tower does not increase the height of an existing structure that already exceeds the height requirement of the zoning district.

The applicant is proposing the construction of a 70 foot monopole wireless communication facility within an 18' x 32' lease area at 3331 S. Carson Street. The property is zoned Retail Commercial. The Retail Commercial zoning district allows a maximum height of 45 feet. Therefore, the proposed 70 foot tower requires approval of a special use permit as it exceeds the maximum allowed height. The lease area will house the proposed monopole as well as equipment cabinets to house battery packs to provide back-up power to the site. The applicant has confirmed that a generator is not proposed at this facility.

The site is located on the east side of S. Carson Street approximately ¼ mile north of the Koontz Lane/S. Carson Street intersection. A personal storage and retail office complex is currently operated at the site. The surrounding properties to the north, south, and west are commercially zoned properties. Residentially zoned properties are located to the east of the site. The applicant is proposing the use of a radome to conceal the antennas and provide more of a "stealth" appearance to the tower. Additionally, the applicant will be required to paint the tower a neutral color.

Carson City Development Standards Division 1.9 *Wireless telecommunication facility* outlines the requirements for wireless telecommunication facilities. A summary of how the application complies with these standards is below:

1.9 - Wireless telecommunication facilities and equipment.

Regulations and standards set forth in this section are designed to address wireless telecommunication facilities and equipment used for the commercial broadcasting/receiving of transmissions regulated under the Telecommunications Act of 1996. Definitions for the various uses and terms referenced in this section are included in the Section 18.03 (Definitions). Electrical or mechanical equipment that creates video or audio interference in customary residential electrical appliances or causes fluctuations in line voltage outside the dwelling unit is prohibited.

1. *Location and Placement Standards.*

a. *Facilities and equipment shall be located according to the following priorities, (#1 is the most acceptable, #5 is the least acceptable):*

- (1) *Concealed within an existing structure;*
- (2) *Camouflaged or screened within an existing structure;*
- (3) *Camouflaged or screened on an existing structure, particularly existing telecommunications facilities, utility poles and towers, water towers, and commercial, industrial or public facility buildings;*
- (4) *Co-located with existing wireless communication service facilities;*
- (5) *Erection of a new, freestanding facility subject to other requirements of this section and where visual impact can be minimized and/or mitigated.*

The applicant proposes a new, freestanding facility. The ground mounted portions of the facility will be screened from view with existing vegetation and buildings. The visual impact from the portion of the structure that extends above these existing buildings will be minimized with the use of a radome to conceal the individual antenna, giving the tower more of a stealth appearance. Additionally, the tower will be required to be painted a neutral/earth-toned color that will blend with the back drop to further minimize visual impacts.

b. *The applicant shall adequately justify the location proposed based on a consideration of the above priorities.*

The applicant is proposing a new, freestanding 70 foot monopole in the southern part of the city. According to the application material, the height of the pole and size of the lease area can both accommodate future co-location. As noted above, the ground-mounted portions of the facility are easily screened from view using existing buildings and vegetation. The applicant has provided justification for the proposed location, showing existing and proposed coverage if the monopole is approved at this location. The applicant has also provided photo-simulation pictures of the vicinity of the proposed monopole.

c. *Placement on existing structures shall not jeopardize the character and integrity of the structures as determined by the building and/or engineering department.*

This is a new facility and will not be placed on existing structures.

d. *If ground mounted, facilities and equipment shall not be located in the front yard portion of a parcel with an existing structure.*

The new monopole is proposed to be located approximately 360 feet from the front property line.

e. *Either the applicant or co-applicant must be a carrier licensed by the Federal Communications Commission and submit documentation of the legal right to install and use the proposed facility.*

The applicant has submitted documentation of their FCC license.

2. *Height and Dimensional Standards.*

- a. *The height of the facility shall include any antenna, array or other appurtenances.*
- b. *Facilities shall not exceed 120 feet in height above grade. The applicant must provide a written justification for the proposed use and adequately demonstrate that the proposed height is necessary, including co-location opportunities. The applicant shall submit a report from an independent, accredited source providing justification for the proposed height or an alternative lower height.*

The Retail Commercial zoning allows for a maximum height of 45 feet. The applicant is proposing a 70 foot monopole. According to the application this height and the size of the lease area will allow for future co-location. The proposed height of 70 feet will allow the applicant to reach the intended service area at the lowest functional height.

3. *Setbacks.*

- a. *All facilities, equipment and equipment shelters shall comply with the building setback provisions of the zoning district in which they are located.*
- b. *Roof mounted facilities shall be stepped back from the front facade in order to limit their impact on the building's silhouette and/or concealed, camouflaged or screened.*
- c. *Facilities and equipment shall be located no closer than 4 times the facility height from any residentially zoned property.*

The facility will exceed the 0 foot setbacks for the Retail Commercial zoning. It will be closest to the northern property line at just over 7 feet from the property line. Additionally, the tower will be over 400 feet from the residentially zoned properties to the east.

4. *Design Standards.*

- a. *Ground mounted facilities and equipment not camouflaged by design, existing buildings or structures shall be screened according to adopted Carson City standards, including landscaping and screen walls.*

The applicant proposes a new, freestanding facility. The ground mounted portions of the facility will be screened from view with existing vegetation and buildings.

- b. *Facilities and equipment that are side mounted on buildings shall be consistent with the architectural style and color of the building on which it is mounted.*

The facility will be ground mounted.

- c. *Ground and roof mounted facilities shall be painted a non-glossy color that blends with the surrounding natural and built environment.*

The monopole and other ground-mounted equipment will be required to be painted a neutral/earth-toned color that will blend with the back drop to further minimize visual impacts.

- d. *Equipment shelters not placed underground shall be appropriately screened according to adopted Carson City standards.*

The equipment shelters will be above ground. The location of the lease area is surrounded by existing vegetation and buildings that will screen the equipment from view. The equipment shelters will also be required to be

painted a non-glossy neutral/earth-toned color that will blend with the surroundings.

- e. *New, stand-alone facilities shall be designed to allow additional wireless service providers to co-locate antennas on the structure.*

The applicant has acknowledged that the facility will be able to accommodate future collocation.

- f. *The exterior of facilities and equipment shall not be lighted unless required by the Federal Aviation Administration (FAA) with the exception of manually operated emergency lighting.*

There is downward facing lighting proposed on the facility near the equipment cabinets. No other lighting is proposed.

- g. *All ground mounted facilities and equipment shall be surrounded by a security barrier. The barrier shall contain adequate controlled access and be posted with a 1 square foot sign indicating the facility owner(s) and a 24-hour emergency telephone number.*

The applicant proposes a 6 foot tall chain link fence for security. Additionally, a sign will be posted listing the facility owner and 24-hour emergency telephone number.

Of note, wireless telecommunication facilities are regulated by the Federal Telecommunications Act which prohibits local governments from writing ordinances that impose unreasonable barriers to the siting of towers/antennas and the provision of wireless service. Local governments cannot write regulations that would (1) discriminate among providers of functionally equivalent services; (2) prohibit, or effectively prohibit, wireless service provisions; or (3) regulate personal wireless service facilities based on environmental effects of radio frequency emissions, assuming the facilities are in compliance with the FCC regulations related to radio frequency.

The Telecommunications act also requires local governments to review applications in a timely manner and sets timeframes for review and decision regarding such applications. Additionally, in the event an application is denied, the local government must include a written explanation for the denial, substantiated by evidence.

Local governments do have the ability to regulate telecommunication facilities to a certain extent. Regulations may include location and design elements of towers and antennas, setbacks and screening requirements, "stealth" design standards, and different standards for residential zones, historic districts or environmentally sensitive areas.

The regulations for such facilities within the Carson City Municipal Code are based on the requirements of the Act, which are generally intended to facilitate the provision and expansion of the wireless service network nationwide while retaining zoning control at the local government level.

PUBLIC COMMENTS: On January 11, 2019, public notices were mailed to 110 adjacent property owners and 77 tenants of mobile home parks within 600 feet of the subject site. At its meeting of January 30, 2019, the Planning Commission continued this matter to the date certain of February 27, 2019. As of the writing of this report staff has received three written comments expressing concern with the proximity to the residential neighborhood to the east. All comments

received as of the writing of this report are included as attachments. Any comments that are received after this report is completed will be submitted to the Planning Commission prior to or at the meeting on February 27, 2019, depending on the date of submission of the comments to the Planning Division.

OTHER CITY DEPARTMENTS OR OUTSIDE AGENCY COMMENTS: The following comments were received by various city departments. Recommendations have been incorporated into the recommended conditions of approval, where applicable.

Fire Department:

1. Project must comply with currently adopted edition of the International Fire Code and northern Nevada amendments.
2. Provide Knox Box at entrance gate.

Engineering Department:

The Engineering Division has no preference or objection to the special use request provided that the following conditions are met:

- Sidewalk, curb, and gutter must be extended along the frontage of the parcel and the access ramp must be upgraded to meet current ADA standards.

Health Department: No concerns with the project as submitted.

Transportation: No comment.

FINDINGS: Staff's recommendation is based upon the findings as required by CCMC Section 18.02.062 (Special Use Permits) enumerated below and substantiated in the public record for the project.

1. *Will be consistent with the master plan elements.*

Cellular coverage is a service provided universally to residents, the traveling public, tourists, and businesses. Ensuring coverage to users of these services has become as necessary as other commonly used and provided services such as water, sewer, electricity and natural gas. Wireless telecommunications have become so widespread that they are as necessary as other utilities in the community. Goal 1.5 of the Master Plan calls for the City to cooperate and coordinate services for infrastructure, schools, etc. This monopole site will strengthen the communications infrastructure in the southern part of the city. The proposed project is also consistent with Goal 3.2, Protect Visual Resources, Issue 3.2c, Communication Facilities and Equipment. The location of the tower has been chosen with the intent to provide service as well as to be less noticeable. Staff worked with the applicant to incorporate a radome design, concealing the individual antenna and providing a more stealth appearance. The proposed neutral color will be reviewed during the Building Permit process. The supporting equipment shelter will also be painted a matching neutral color. Additionally, the ground mounted features of the project will be concealed by existing buildings and vegetation.

2. *Will not be detrimental to the use, peaceful enjoyment, economic value, or development of surrounding properties or the general neighborhood; and will cause no objectionable noise, vibrations, fumes, odors, dust, glare or physical activity.*

The proposed project, as designed and conditioned, will not be detrimental to the use, peaceful enjoyment, economic value, or development of surrounding properties or the general

neighborhood. The project will not cause objectionable noise, vibrations, fumes, odors, dust, glare or physical activity. The subject property is zoned Retail Commercial with Retail Commercial zoning to the north, south, and west. The properties located to the east are zoned Single Family-6,000. Although zoned Retail Commercial, the property directly south of the subject site is residential in nature as this is the location of the Cherry Creek Apartments. The ground mounted portions of the facility will be screened from view with existing vegetation and buildings. The visual impact from the portion of the structure that extends above these existing buildings will be minimized with the use of a radome to conceal the individual antenna, giving the tower more of a stealth appearance. Additionally, the tower will be required to be painted a neutral/earth-toned color that will blend with the back drop to further minimize visual impacts. The facility will exceed the 0 foot setbacks for the Retail Commercial zoning. It will be closest to the northern property line at just over 7 feet from the property line. Additionally, the tower will be over 400 feet from the residentially zoned properties to the east and approximately 165 feet from the Cherry Creek Apartments. The applicant has provided a noise study that shows the noise generated from the facility will not be significant. The noise that is predicted to occur at the motel pool to the north and the apartment courtyard to the south would be 25 decibels (dB) and 35 dB, respectively. This is approximately equivalent to noises such as rustling leaves or a refrigerator humming. The only lighting proposed will be downward facing lights at the equipment cabinets.

3. Will have little or no detrimental effect on vehicular or pedestrian traffic.

The facility will be un-manned and therefore not expected to generate pedestrian or vehicular traffic. Verizon technicians will inspect the facility 1-2 times per month and will access the facility from the property's main entrance off of Frontage Road. The existence of sidewalk on either side of the property and lack of sidewalk extending through the property creates an unsafe situation for pedestrians. To mitigate this, staff is recommending a condition requiring the extension of sidewalk, curb and gutters, and the upgrade of the access ramp to current ADA standards, along the frontage of the parcel.

4. Will not overburden existing public services and facilities, including schools, police and fire protection, water, sanitary sewer, public roads, storm drainage, and other public improvements.

The facility will be un-manned and therefore will not require the extension or expansion of any public services and facilities are adequate in the area to accommodate the proposed facility.

5. Meets the definition and specific standards set forth elsewhere in this title for such particular use and meets the purpose statement of that district.

Pursuant to Carson City Municipal Code (CCMC) 18.04.130, the Retail Commercial zoning district is intended to preserve a commercial district limited primarily to offices and retail sales of new merchandise. Pursuant to CCMC 18.15.025, the applicant is requesting approval of a Special Use Permit for 70 wireless telecommunication facility. Division 1.9 of Carson City Development Standards must also be met. As outlined above, the facility will meet the standards outlined in Division 1.9.

6. Will not be detrimental to the public health, safety, convenience and welfare.

The proposed tower, antennas, equipment shelter building, fencing and related equipment will not be detrimental to the public health, safety, convenience and welfare, and will cause no

adverse impacts to surrounding properties. The monopole would provide the means to improve public safety, convenience and welfare by expanding wireless telecommunication coverage to the stationary as well as motoring public, and provide more coverage to the south section of Carson City. Per the Telecommunications Act, it has been determined that electromagnetic waves emitted by or to such facilities are not a public health risk and may not be considered in reviewing an application.

7. Will not result in material damage or prejudice to other property in the vicinity.

As noted above, the impacts of the proposed facility, with the recommended conditions of approval, will be minimal and will not result in material damage or prejudice to other property in the vicinity as the proposed facility will be located in such a way that the ground-mounted portions of the facility will be screened from view with the existing buildings and vegetation. The facility will be painted to blend with the surrounding landscape and will be required to utilize the radome design to help to mitigate any visual impacts from the tower.

Attachments:

City comments:

Engineering

Fire

Application SUP-18-166

Revised Photo Simulations 2-5-19

**Engineering Division
Planning Commission Report
File Number SUP-18-166**

TO: Heather Ferris - Planning Department
FROM: Stephen Pott y – Development Engineering Department
DATE: February 20, 2019

SUBJECT TITLE:

SUP-18-166 for a Cell Tower at 3331 S Carson St, apn 009-112-17

RECOMMENDATION:

The Engineering Division has no preference or objection to the special use request provided that the following conditions are met:

- Sidewalk, curb, and gutter must be extended along the frontage of the parcel and the access ramp must be upgraded to meet current ADA standards.

ENGINEERING DISCUSSION:

The Engineering Division has reviewed the application within our areas of purview relative to adopted standards and practices and to the provisions of CCMC 18.02.080, Conditional Uses. The Engineering Division offers the following discussion:

C.C.M.C. 18.02.080 (5a) - Master Plan

The request is not in conflict with any Engineering Master Plans.

C.C.M.C. 18.02.080 (5b) – Use, Peaceful Enjoyment, Economic Value, Compatibility

Development Engineering has no comment on this finding.

C.C.M.C. 18.02.080 (5c) - Traffic/Pedestrians

The use is not expected to generate pedestrian or vehicular traffic. However, the existence of sidewalk on either side of the property and lack of sidewalk extending through the property creates an unsafe situation for pedestrians. The above condition of approval is suggested to mediate this situation. .

C.C.M.C. 18.02.080 (5d) - Public Services

The use will have no impact on sewer, water, and storm drain infrastructure.

C.C.M.C. 18.02.080 (5e) – Title 18 Standards

Development Engineering has no comment on this finding.

Engineering Division
Planning Commission Report

C.C.M.C. 18.02.080 (5f) – Public health, Safety, Convenience, and Welfare

The project meets engineering standards for health and safety.

C.C.M.C. 18.02.080 (5g) – Material Damage or Prejudice to Other Property

Development Engineering has no comment on this finding.

C.C.M.C. 18.02.080 (5h) – Adequate Information

The plans and reports provided were adequate for this analysis.

Fire Department Comments

11/19/2018

Comments for SUP 18-166:

1. Project must comply with currently adopted edition of the International Fire Code and northern Nevada amendments.
2. Provide Knox Box at entrance gate.

Dave Ruben

Fire Marshal

Carson City Fire Department

777 S. Stewart Street

Carson City, NV 89701

Direct 775-283-7153

Main 775-887-2210

FAX 775-887-2209

Carson City Planning Division
 108 E. Proctor Street • Carson City NV 89701
 Phone: (775) 887-2180 • E-mail: planning@carson.org

FOR OFFICE USE ONLY:
 CCMC 18.02.080

FILE # SUP - 17 -

SPECIAL USE PERMIT

APPLICANT PHONE #
 Sacramento Valley LP d/b/a Verizon Wireless 916-247-3047

FEE*: \$2,450.00 MAJOR
 \$2,200.00 MINOR (Residential zoning districts)
 + noticing fee
 *Due after application is deemed complete by staff

MAILING ADDRESS, CITY, STATE, ZIP
 c/o Complete Wireless Consulting, 2009 V Street, Sacramento, CA 95818

EMAIL ADDRESS
 Mmoore@completewireless.net

SUBMITTAL PACKET – 4 Complete Packets (1 Unbound Original and 3 Copies) including:
 Application Form
 Detailed Written Project Description
 Site Plan
 Building Elevation Drawings and Floor Plans
 Special Use Permit Findings
 Master Plan Policy Checklist
 Applicant's Acknowledgment Statement
 Documentation of Taxes Paid-to-Date
 Project Impact Reports (Engineering)

PROPERTY OWNER PHONE #
 Arcata Hospital Corp. 707-445-4221

MAILING ADDRESS, CITY, STATE, ZIP
 c/o Doug Shaw, PO Box 1116, Arcata, CA 95518

EMAIL ADDRESS
 das@madriverhospital.com

CD or USB DRIVE with complete application in PDF

APPLICANT AGENT/REPRESENTATIVE PHONE #
 Matt Moore, Project Manager 916-247-3047

Application Received and Reviewed By: _____

MAILING ADDRESS, CITY STATE, ZIP
 c/o Complete Wireless Consulting, 2009 V Street, Sacramento, CA 95818

EMAIL ADDRESS
 Mmoore@completewireless.net

Submittal Deadline: See attached Planning Commission application submittal schedule.

Note: Submittals must be of sufficient clarity and detail for all departments to adequately review the request. Additional information may be required.

Project's Assessor Parcel Number(s): 009-112-17	Street Address 3331 S. Carson Street, Carson City, NV 98701
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Project's Master Plan Designation Mixed-Use Commercial	Project's Current Zoning RC (Retail Commercial)	Nearest Major Cross Street(s) S. Carson St., between Sonoma St and Koontz Ln
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Please provide a brief description of your proposed project and/or proposed use below. Provide additional pages to describe your request in more detail.

Verizon Wireless proposes a new unmanned telecommunications facility to provide improved wireless coverage along S. Carson Street.

PROPERTY OWNER'S AFFIDAVIT

I, Doug Shaw, being duly deposed, do hereby affirm that I am the record owner of the subject property, and that I have knowledge of, and I agree to, the filing of this application.

Signature: [Signature] Address: PO Box 1116 Date: 10-10-18
Arcata, CA 95518

Use additional page(s) if necessary for additional owners.

STATE OF NEVADA)
 COUNTY)
 On _____, 20____, personally appeared before me, a notary public, personally known (or proved) to me to be the person whose name is subscribed to the foregoing document and who acknowledged to me that he/she executed the foregoing document.
 Notary Public _____
See Attached Acknowledgment

NOTE: If your project is located within the Historic District or airport area, it may need to be scheduled before the Historic Resources Commission or the Airport Authority in addition to being scheduled for review by the Planning Commission. Planning staff can help you make this determination.

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

CIVIL CODE § 1189

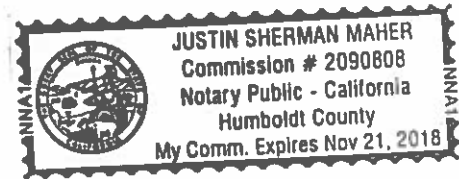
A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California)
County of Humboldt)
On 10-10-18 before me, Justin Maher, Notary Public
Date Here Insert Name and Title of the Officer
personally appeared Doug Shaw
Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.



Signature Justin Sherman Maher
Signature of Notary Public

Place Notary Seal Above

OPTIONAL

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document
Title or Type of Document: Catson City Planning Division Document Date: 10-10-18
Number of Pages: _____ Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____
 Corporate Officer — Title(s): _____
 Partner — Limited General
 Individual Attorney in Fact
 Trustee Guardian or Conservator
 Other: _____
Signer Is Representing: _____

Signer's Name: _____
 Corporate Officer — Title(s): _____
 Partner — Limited General
 Individual Attorney in Fact
 Trustee Guardian or Conservator
 Other: _____
Signer Is Representing: _____

If there is any additional information that would provide a clearer picture of your proposal that you would like to add for presentation to the Planning Commission, please be sure to include it in your detailed description.

Please type and sign the statement on the following page at the end of your findings response.

ACKNOWLEDGMENT OF APPLICANT

I certify that the forgoing statements are true and correct to the best of my knowledge and belief. I agree to fully comply with all conditions as established by the Planning Commission. I am aware that this permit becomes null and void if the use is not initiated within one-year of the date of the Planning Commission's approval; and I understand that this permit may be revoked for violation of any of the conditions of approval. I further understand that approval of this application does not exempt me from all City code requirements.


Applicant's Signature

Matt Moore, Project Manager
Print Name
On behalf of Applicant
AT&T Mobility

November 2, 2018
Date

**SPECIAL USE PERMIT APPLICATION QUESTIONNAIRE
VERIZON WIRELESS**

SITE NAME: FANDANGO

LOCATION: 3331 South Carson Street, Carson City, NV 89701

APN: 009-112-17

1. How will the proposed development further and be in keeping with, and not contrary to, the goals of the Master Plan Elements?

A. A Balanced Land Use Pattern

The proposed Verizon Wireless communications facility will further the goal of establishing a balance of land uses within the community by strengthening the communications infrastructure in Carson City. Modern life has become increasingly dependent upon wireless communications. Wireless access is critical to many facets of everyday life, such as safety, recreation, and commerce. This site will allow current and future Verizon Wireless customers to have access to wireless services in the areas shown on the Coverage Plots included in this Application.

B. Equitable Distribution of Recreational Opportunities

The proposed facility will not include recreational facilities, but will provide improved wireless service to parks and recreational facilities throughout Carson City. Both existing and future neighborhoods will be served by the proposed facility in the form of improved wireless services and communication abilities.

C. Economic Vitality

The proposed facility will strengthen the economic base of Carson City by enhancing wireless communication services for both residents and commercial enterprises in the surrounding areas. Enhanced wireless service in the area will support technology, tourism, and recreation in Carson City by improving wireless communication services for residents and visitors to the area.

D. Livable Neighborhoods and Activity Centers

The proposed facility will promote safety throughout Carson City's neighborhoods, activity centers, and the City as a whole by improving wireless service to the area. This site will serve as a backup to the existing landline service in the area and will provide improved wireless communication, which is essential to first responders, community safety, local businesses and area residents. As a backup system to traditional landline phone service, mobile phones have proven to be extremely important during natural disasters and other catastrophes. Additionally, this facility will strengthen the network by offloading capacity from existing facilities in the surrounding areas, which are experiencing high customer traffic. By alleviating that traffic, this facility will improve the Verizon Wireless Network for the entire City.

Special Use Permit Application Questionnaire – Verizon Wireless “Fandango”

E. *A Connected City*

Verizon’s proposed facility will promote a sense of community by linking the many neighborhoods, employment areas, activity centers, parks, recreational amenities and schools through improved communication between residents and visitors. Improved wireless communication will connect residents and visitors throughout the Carson City area.

2. Will the effect of the proposed development be detrimental to the immediate vicinity? To the general neighborhood?

A. *Land Uses and Zoning Designations of Adjoining Property*

The site of the proposed facility is zoned RC (Retail Commercial) and surrounding parcels to the north, west, and south are similarly zoned. Parcels roughly 400’ east of the facility are zoned Residential.

B. *Existing Development*

Verizon is proposing a monopole within an entirely commercial area. The facility will not hurt property values because it is appropriate in regards to the commercial character of the project site. The facility will not produce any dust, odors, fumes, glare, or physical activity in the area. Verizon technicians will inspect the facility 1-2 times per month.

During construction of the proposed facility, Verizon will follow best practices to contain any dust or noise that may be produced. The construction of the facility will be in compliance with all local rules and regulations. The typical duration is two months. The crew size will range from two to ten individuals. The construction phase of the project will last approximately two months and will not exceed acceptable noise levels.

Other areas near the proposed site were considered for development of a wireless facility but were not selected. Please see the Project Support Statement included with this submittal package for additional details.

C. *No Detriment to Use, Peaceful Enjoyment, or Development*

The proposed facility will not be detrimental to the use, peaceful enjoyment, or development of surrounding properties and the general neighborhood due to its similarity in appearance and character to existing structures in the area, and its lack of traffic or disruption to the surrounding community.

D. *Pedestrian and Vehicular Traffic*

N/A, the proposed facility will not create any additional traffic. Verizon technicians will inspect the facility 1-2 times per month and will access the facility from Frontage Road on those visits.

E. *Short- and Long-Range Benefit to People of Carson City*

Once the proposed facility is completed, the people of Carson City will see an immediate benefit in the form of improved wireless communication service. The long-range benefits will include strengthened communications infrastructure, quality of life, and safety.

Special Use Permit Application Questionnaire – Verizon Wireless “Fandango”

Verizon Wireless makes a committed effort to provide effective and reliable service to its customers. With the exponentially increasing demand being put on Verizon's network due to the overwhelming shift to dependence on wireless networks, additional wireless facilities are required in order to support current and future demand for this technology. This facility will provide for the additional coverage and capacity necessary for this location as identified by Verizon Wireless.

3. Has sufficient consideration been exercised by the applicant in adapting the project to existing improvements in the vicinity?

A. *School District*

The proposed facility will not affect the school district or add to the student population. The facility will provide a service to the student population and to the Sheriff's Office in the form of improved wireless service in and around Carson City.

B. *Drainage*

The facility has been designed to successfully drain in the same manner as the existing parcel. The proposed facility will not produce any additional drainage.

C. *Water Supplies*

N/A, the proposed facility will not be served by water supplies.

D. *Sewer Disposal*

N/A, the proposed facility will not be served by Public Works.

E. *Road Improvements*

No improvements or modifications to existing public roads are proposed.

F. *Source of Information Provided*

The information contained in this application is provided by Complete Wireless Consulting, Inc., on behalf of Verizon Wireless.

G. *Outdoor Lighting*

Unless tower lighting is required by the FAA, the only lighting on the facility will be a downward facing LED work light near the equipment cabinets.

H. *Proposed Landscaping*

Ground equipment will be enclosed within a security fence and screened from public view to minimize visual impacts. Please see the attached site plan and photo-simulations for additional information.

I. *Parking Plan*

No parking is proposed at the project site. Following construction, Verizon technicians will utilize the access driveway or street parking in the area.

Site Name: Fandango

LETTER OF AUTHORIZATION

This authorization is not a commitment of any kind. All land-use approvals obtained will be subject to the successful completion of lease negotiations and the approval of site configuration by an authorized representative.

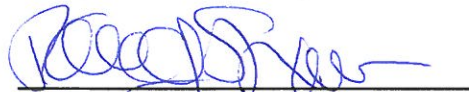
In order to determine the viability and permit the use of a wireless antenna facility on the real property ("Property") at the address stated below, the undersigned authority hereby grants, consents, and agrees with Verizon Wireless as follows:

1. Entry. Owner or authorized agent consents that approved Verizon Wireless representatives may enter upon the Property to conduct and perform the following permitted activities upon at least 24 hour notice to Owner: boundary and positioning surveys, radio propagation studies, soils boring/report, power and telephone existing service capacity, subsurface boring tests, an environmental site assessment, visual inspections of the Property, and other activities as Verizon Wireless may deem necessary. Verizon Wireless agrees to be responsible for all costs related to these surveys and investigations.

2. Filings. Owner or authorized agent consents that Verizon Wireless may make and file applications for the proposed wireless antenna facility on the Property to such local, state and federal governmental entities whose approval may be necessary for this type of use. Submittals and approvals include zoning applications, variances, land use descriptions, and other submittals necessary for this type of use. Verizon Wireless agrees to be responsible for all costs related to the governmental approvals for this project.

3. Telco. Owner or authorized agent consents that Verizon Wireless may order, coordinate, and install upgraded telephone connectivity to the site. Verizon Wireless agrees to be responsible for any and all costs related to this installation. Owner or authorized agent understands that the upgrade of telephone connectivity does not constitute construction start.

Authorized Signature:



Print Name:

DAVID SHAW

Title:

CEO

Phone number:

w/ 707.826.8202 / 707.407.5556

Dated:

10.20.17

Assessor's Parcel Number: 009-112-17

Property Address: 3331 S Carson St. in Carson City, NV.

PROJECT SUPPORT STATEMENT

VERIZON WIRELESS

SITE NAME: FANDANGO

LOCATION: 3331 South Carson Street, Carson City, NV 89701

APN: 009-112-17

Introduction

Verizon Wireless is seeking to improve communications service to residences, businesses, public services, and area travelers in Carson City. Verizon maintains a strong customer base in Carson City and strives to improve coverage for both existing and potential customers. The proposed facility is needed to bring improved wireless communication coverage to downtown Carson City by improving along Highway 50, as well as within the surrounding residential and commercial areas. This project will expand Verizon's existing network and improve call quality, signal strength, and wireless connection services in Carson City. The improved wireless service will benefit residents, local businesses, and public services, and roadway safety throughout the region.

Location/Design

Verizon Wireless proposes a new wireless communications facility on a new 70 tall monopole at the above-referenced location. The property is located in the Retail Commercial (RC) zone and is currently used for commercial purposes. The immediate surrounding area consists of similarly zoned parcels to the west, north, and south, with Residential districts roughly 440' to the east.



Project Description

The proposed facility consists of twelve (12) Verizon Wireless panel antennas, to be mounted on a proposed 70’ tall monopole. The 18’ by 32’ equipment area will be surrounded by a 6’ tall chain link fence with barbed wire. The lease area will contain 2 outdoor equipment cabinets, and power and telecommunications cables will be installed underground from the point of connection to the lease area. The unmanned facility will provide enhanced wireless network coverage 24 hours a day, 7 days a week.

Compliance with Carson City Development Standards – Division 1 Land Use and Site Design *Section 1.9 Wireless telecommunication facilities and equipment*

A. Location and Placement Standards

Verizon is proposing a monopole as it best blends with the surrounding commercial uses. The height of pole and size of lease area will provide other carriers with opportunities for future collocation. Verizon Wireless has carefully chosen a location that will minimize the visual impact of the facility, as it will be partially screened by existing, built features both on the parcel and in the surrounding area.

The proposed facility has been designed in a manner that will structurally accommodate additional antennas and future collocation. Verizon Wireless welcomes other carriers to collocate on their facilities whenever possible. In compliance with Carson City Municipal Code 18.15.030.2.b, Verizon will accommodate future potential collocation and cooperate in good faith with other carriers that wish to access the proposed monopole. Verizon has existing agreements with other wireless providers that include pre-determined pricing for co-location arrangements, subject to the standard industry practice.

B. Height and Dimensional Standards

The proposed facility height complies with the City’s development standards for wireless facilities in the Retail Commercial zoning designation. Carson City limits tower height to 120’ in the RC zone and the proposed tower is 70’, well within that limit. Because of the surrounding topography and development, the proposed facility needs to be a total of 70’ for the signal to reach the intended service area. (See Coverage Plots, below). The proposed facility has been designed at its minimum functional height.

C. Setbacks

The proposed facility complies with the building setback provisions for the RC zoning district. The tower and ground equipment will be more than 280’ (70’ tower height x 4) from any residential zones, as required by the Carson City Development Standards. The nearest residential zone is over 400’ from the proposed lease area with several commercial building in between.

D. Design Standards

Verizon Wireless designed the facility to be centrally located on the parcel to aid in screening, with all ground equipment being screened from any off-site views by existing buildings on the parcel. The equipment itself will be surrounded by a 6’ chain link fence with barbed wire, which

will serve as a security barrier and will include a sign indicating the facility owner and a 24-hour emergency telephone number. Unless tower lighting is required by the FAA, the only lighting on the facility will be downward facing LED work light near the equipment cabinets.

Safety Benefits of Improved Wireless Service

Verizon Wireless offers its customers multiple services such as voice calls, text messaging, mobile email, picture/video messaging, mobile web, navigation, broadband access, V CAST, and E911 services. Mobile phone use has become an extremely important tool for first responders and serves as a back-up system in the event of a natural disaster. Verizon Wireless will install a standby generator at this facility to ensure quality communication for the surrounding community in the event of a natural disaster or catastrophic event. This generator will be fully contained within the lease area and will provide power to the facility in the event that local power systems are offline.

Compliance with FCC Standards

This project will not interfere with any TV, radio, telephone, satellite, or any other signals. Any interference would be against federal law and a violation of Verizon Wireless’s FCC License.

Maintenance and Standby Generator Testing

Verizon Wireless installs a standby generator and batteries at all of its cell sites. The generator and batteries serve a vital role in Verizon’s emergency and disaster preparedness plan. In the event of a power outage, Verizon Wireless communications equipment will first transition to the back-up batteries. The batteries can run the site for a few hours depending on the demand placed on the equipment. Should the power outage extend beyond the capacity of the batteries, the back-up generator will automatically start and continue to run the site for up to 24 hours. The standby generator will operate for approximately 15 minutes per week for maintenance purposes, during the daytime. Back-up batteries and generators allow Verizon Wireless’s communications sites to continue providing valuable communications services in the event of a power outage, natural disaster, or other emergency.

Construction Schedule

The construction of the facility will be in compliance with all local rules and regulations. The crew size will range from two to ten individuals. The construction phase of the project will last approximately two months and will not exceed acceptable noise levels.

Notice of Actions Affecting Development Permit

Verizon Wireless requests notice of any proposal to adopt or amend the: general plan, specific plan, zoning ordinance, ordinance(s) affecting building or grading permits that would in any manner affect this development permit. Any such notice may be sent to 2009 V Street, Sacramento, CA 95818.

Alternative Site Analysis

The selection of a location for a wireless telecommunications facility that is needed to improve wireless capacity is dependent upon many factors, such as: topography, zoning regulations,

existing structures, co-location opportunities, available utilities, access, and the existence of a willing landlord. Wireless communication utilizes line-of-sight technology that requires facilities to be in relative close proximity to the wireless handsets to be served. Each proposed site is unique and must be investigated and evaluated on its own terms.

The proposed coverage area consists of commercial, public, and residential uses in Carson City. Verizon strives to minimize visual and noise impacts for each facility and seeks to incorporate ways to preserve the local community character to the greatest extent feasible at all stages of site selection and design process.

The proposed facility will consist of Verizon panel antennas mounted on a proposed 70’ monopole. Equipment cables will be run underground in order to minimize visual impacts and equipment will be screened by existing building onsite. The proposed location best serves the interest of Carson City and the local community because it is the least intrusive means available to improve service to the area. The process that Verizon implements to identify the least intrusive location is outlined below.

Selection Process and Candidates Considered

In early 2014, Verizon Wireless determined that the service objectives discussed above must be met. After establishing the need for the proposed facility, Verizon set out to identify the least intrusive means of achieving the necessary service objective. A total of eleven candidates were considered prior to selecting the proposed location. VZW begins its process by identifying a search area called a Search Ring, depicting the optimal geographic for the facility to be placed in order to meet its intended objectives, and a required centerline height for the antennas. After reviewing the City’s zoning regulations, the next step is to identify any existing towers within the search ring that could allow for collocation.

In this case, Verizon determined a new tower must be constructed to adequately meet its coverage goals in this search ring. Verizon identified several potential alternative sites prior to selecting the presently proposed location. Below is a list of the candidate properties that were considered for the proposed facility, as well as an explanation as to why each site was not selected:

1. **Morsani** (321 Moses St. / APN 009-151-60)
Though this candidate was initially investigated, the owner was nonresponsive to any attempts at communication.
2. **Courtright** (3390 S. Carson St. / APN 009-11-28)
This candidate was initially investigated and did initially respond with interest, however, the owner was ultimately unresponsive to requests for an on-site meeting and the candidate was abandoned.
3. **Teixiera** (3301. Carson St. / APN 009-112-06)
This candidate was nonresponsive to any initial attempts at communication.
4. **Etchemendy** (3251 S Carson St. / APN 009-112-07)
This candidate was nonresponsive to any initial attempts at communication.
5. **Theo Properties** (2800 S. Carson St. / APN 009-111-36)
This candidate was initially submitted but ultimately rejected as being unfavorable by Verizon’s Radio Frequency Engineers.

Project Support Statement – Verizon Wireless ‘Fandango’

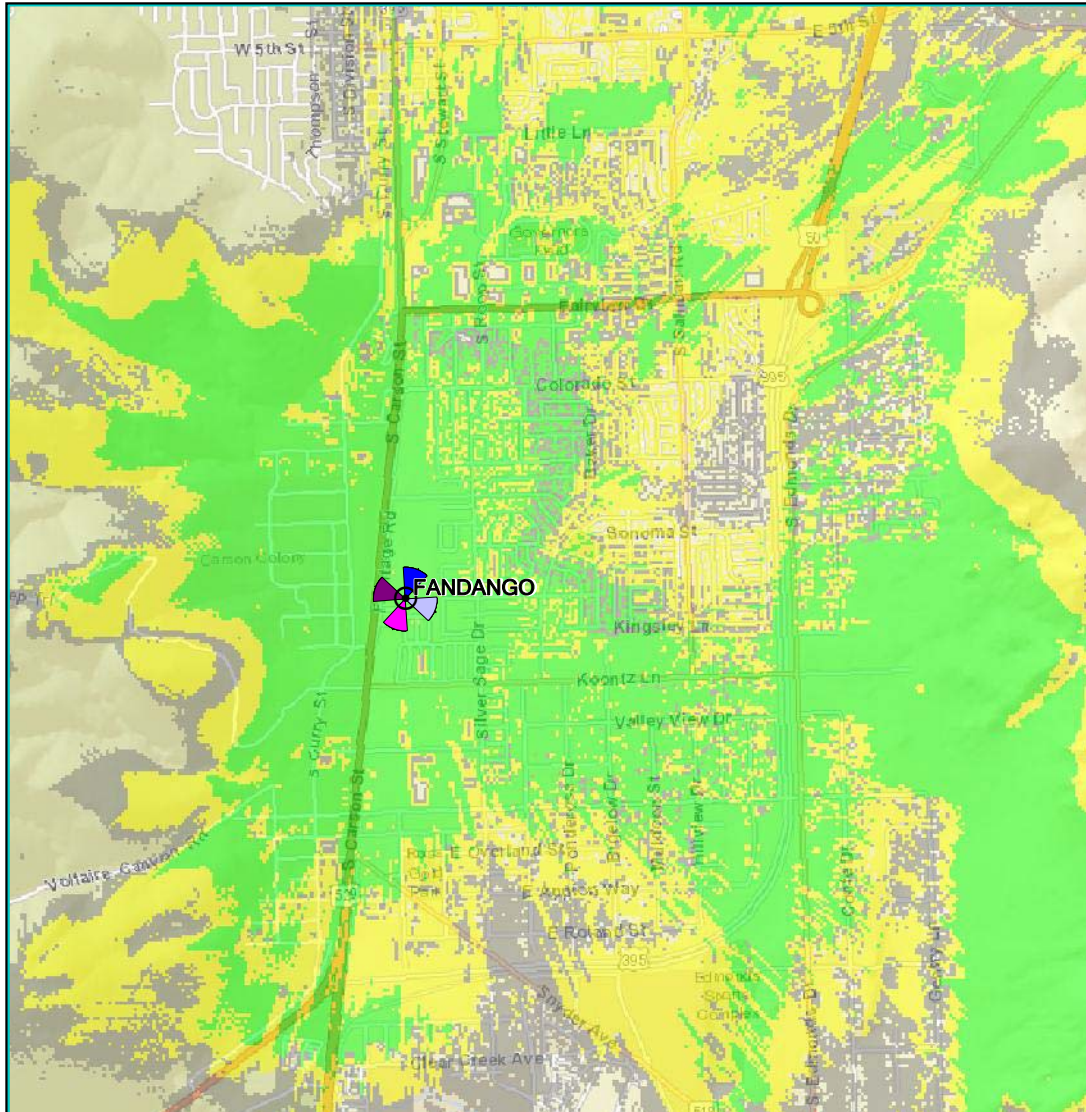
6. Yeager (187 Sonoma St. / APN 009-112-27)

This candidate was initially submitted but ultimately rejected as being unfavorable by Verizon’s Radio Frequency Engineers.

FANDANGO COVERAGE MAPS



Site Coverage



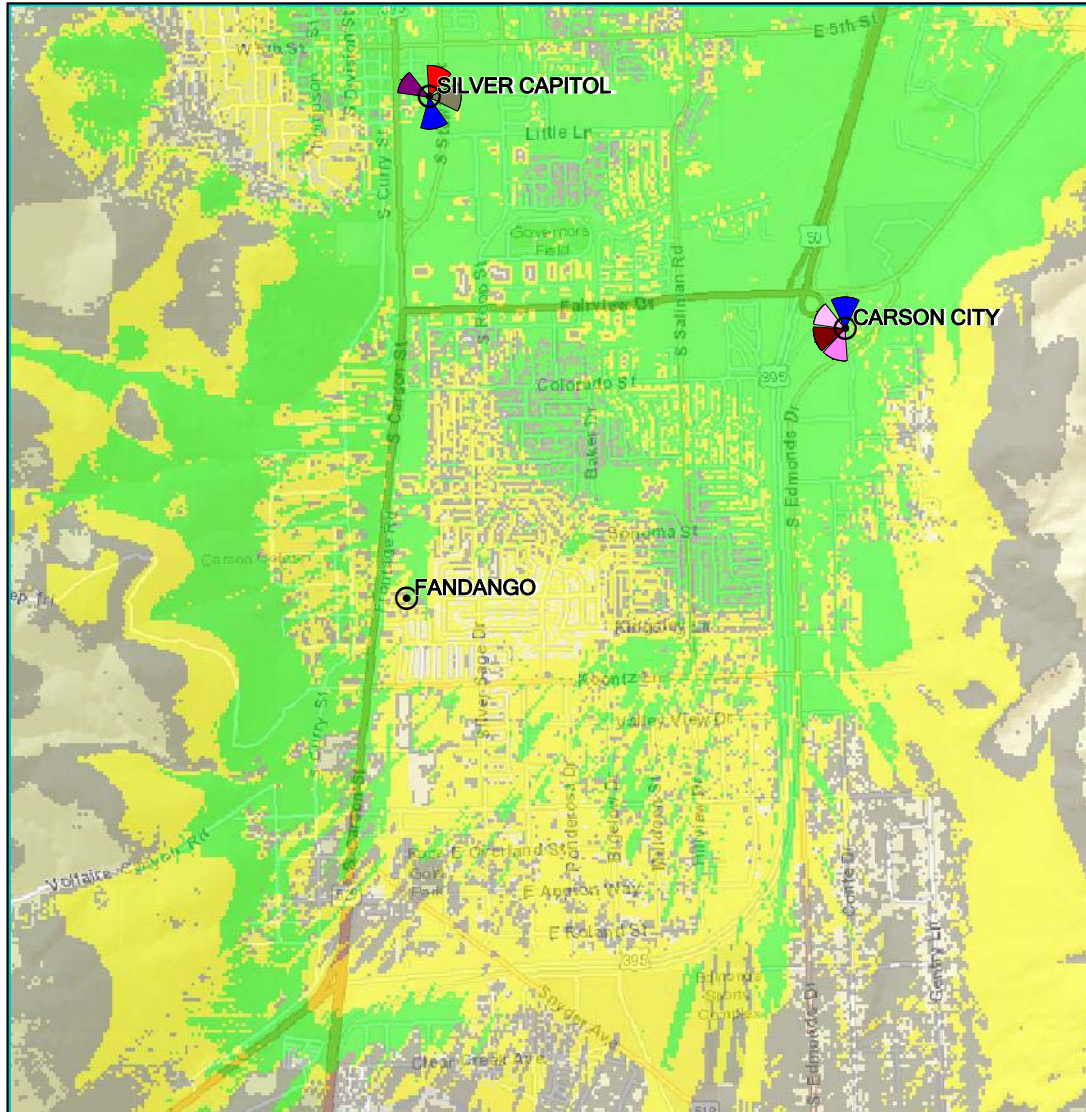
LTE: AWS: RSRP - Site Coverage

- Best Signal Level (dBm) ≥ -85
- Best Signal Level (dBm) ≥ -95
- Best Signal Level (dBm) ≥ -105

FANDANGO COVERAGE MAPS



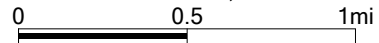
Before Coverage



LTE: AWS: RSRP - Existing Coverage

- Best Signal Level (dBm) ≥ -85
- Best Signal Level (dBm) ≥ -95
- Best Signal Level (dBm) ≥ -105

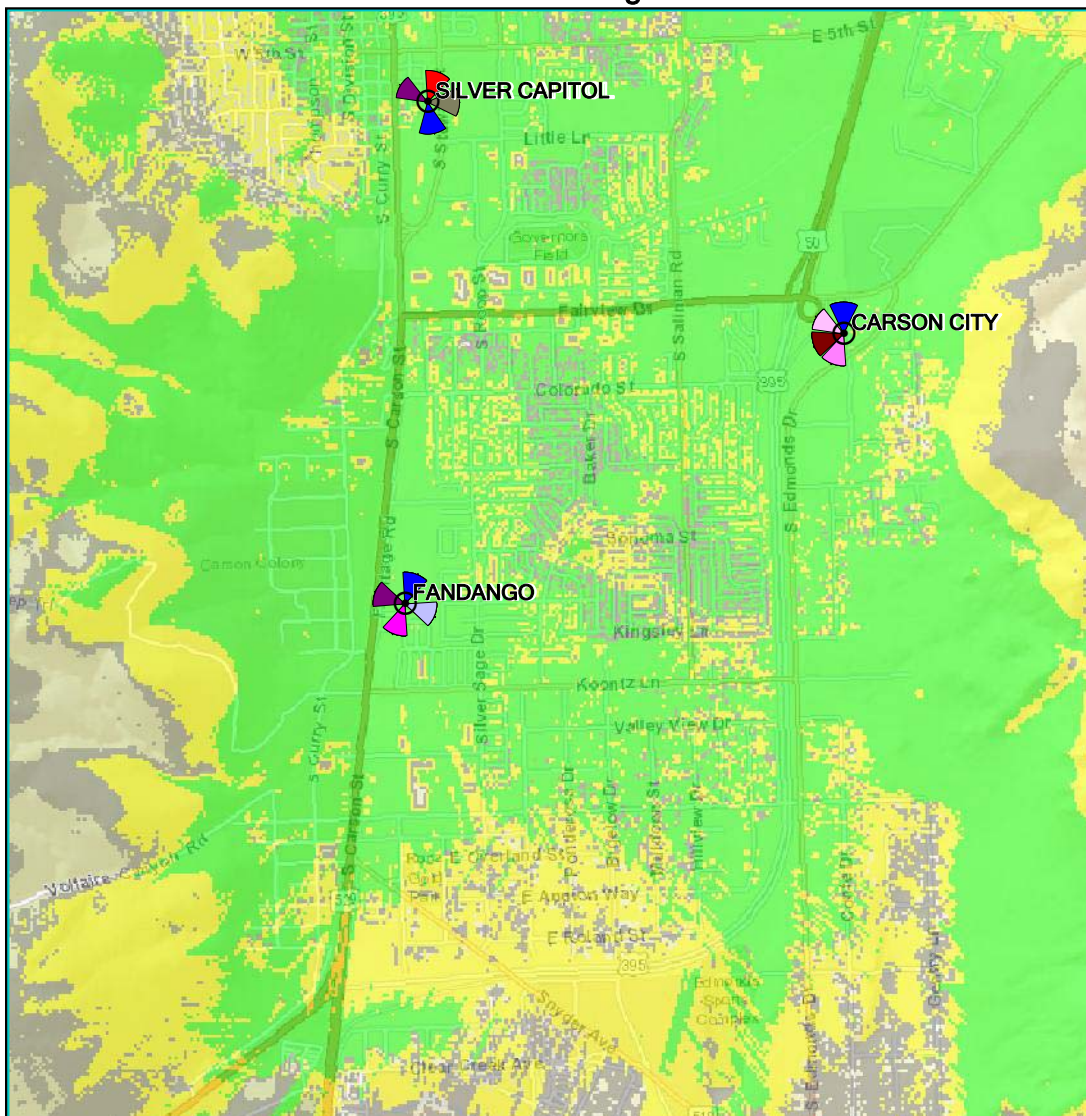
Scale: 1:36,067



FANDANGO COVERAGE MAPS



After Coverage



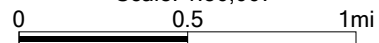
LTE: AWS: RSRP - After Coverage

Best Signal Level (dBm) ≥ -85

Best Signal Level (dBm) ≥ -95

Best Signal Level (dBm) ≥ -105

Scale: 1:36,067



**Verizon Wireless • Proposed Base Station (Site No. 295546 “Fandango”)
3331 South Carson Street • Carson City, Nevada**

Statement of Hammett & Edison, Inc., Consulting Engineers

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained on behalf of Verizon Wireless, a personal wireless telecommunications carrier, to evaluate the base station (Site No. 295546 “Fandango”) proposed to be located at 3331 South Carson Street in Carson City, Nevada, for compliance with appropriate guidelines limiting human exposure to radio frequency (“RF”) electromagnetic fields.

Executive Summary

Verizon proposes to install directional panel antennas on a tall steel pole to be sited at 3331 South Carson Street in Carson City, Nevada. The proposed operation will comply with the FCC guidelines limiting public exposure to RF energy.

Prevailing Exposure Standards

The U.S. Congress requires that the Federal Communications Commission (“FCC”) evaluate its actions for possible significant impact on the environment. A summary of the FCC’s exposure limits is shown in Figure 1. These limits apply for continuous exposures and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health. The most restrictive FCC limit for exposures of unlimited duration to radio frequency energy for several personal wireless services are as follows:

Wireless Service	Frequency Band	Occupational Limit	Public Limit
Microwave (Point-to-Point)	5–80 GHz	5.00 mW/cm ²	1.00 mW/cm ²
WiFi (and unlicensed uses)	2–6	5.00	1.00
BRS (Broadband Radio)	2,600 MHz	5.00	1.00
WCS (Wireless Communication)	2,300	5.00	1.00
AWS (Advanced Wireless)	2,100	5.00	1.00
PCS (Personal Communication)	1,950	5.00	1.00
Cellular	870	2.90	0.58
SMR (Specialized Mobile Radio)	855	2.85	0.57
700 MHz	700	2.40	0.48
[most restrictive frequency range]	30–300	1.00	0.20

General Facility Requirements

Base stations typically consist of two distinct parts: the electronic transceivers (also called “radios” or “channels”) that are connected to the traditional wired telephone lines, and the passive antennas that send the wireless signals created by the radios out to be received by individual subscriber units. The transceivers are often located at ground level and are connected to the antennas by coaxial cables. A small antenna for reception of GPS signals is also required, mounted with a clear view of the sky. Because of the short wavelength of the frequencies assigned by the FCC for wireless services, the antennas require line-of-sight paths for their signals to propagate well and so are installed at some height



**Verizon Wireless • Proposed Base Station (Site No. 295546 “Fandango”)
3331 South Carson Street • Carson City, Nevada**

above ground. The antennas are designed to concentrate their energy toward the horizon, with very little energy wasted toward the sky or the ground. This means that it is generally not possible for exposure conditions to approach the maximum permissible exposure limits without being physically very near the antennas.

Computer Modeling Method

The FCC provides direction for determining compliance in its Office of Engineering and Technology Bulletin No. 65, “Evaluating Compliance with FCC-Specified Guidelines for Human Exposure to Radio Frequency Radiation,” dated August 1997. Figure 2 describes the calculation methodologies, reflecting the facts that a directional antenna’s radiation pattern is not fully formed at locations very close by (the “near-field” effect) and that at greater distances the power level from an energy source decreases with the square of the distance from it (the “inverse square law”). The conservative nature of this method for evaluating exposure conditions has been verified by numerous field tests.

Site and Facility Description

Based upon information provided by Verizon, including zoning drawings by MST Architects, Inc., dated May 15, 2018, it is proposed to install eight CommScope Model NHH-45C directional panel antennas on a 70-foot steel pole to be sited at the northeast corner of the parking lot of the Central Carson Self Storage facility located at 3331 South Carson Street in Carson City, Nevada. The antennas would employ up to 6° downtilt, would be mounted at an effective height of about 66 feet above ground, and would be oriented in pairs toward 20°T, 110°T, 200°T, and 290°T, to provide service in all directions. The maximum effective radiated power in any direction would be 42,390 watts, representing simultaneous operation at 21,390 watts for AWS, 5,000 watts* for PCS, 5,000 watts* for cellular, and 11,000 watts* for 700 MHz service. There are reported no other wireless telecommunications base stations at the site or nearby.

Study Results

For a person anywhere at ground, the maximum RF exposure level due to the proposed Verizon operation is calculated to be 0.031 mW/cm², which is 5.8% of the applicable public exposure limit. The maximum calculated level at the second-floor elevation of any nearby building[†] is 8.2% of the public exposure limit. It should be noted that these results include several “worst-case” assumptions and therefore are expected to overstate actual power density levels from the proposed operation.

* The power levels reflect Verizon’s intent to operate at 26% of maximum capacity in the PCS band, 37% of maximum capacity in the cellular band, and 87% of maximum capacity in the 700 MHz band, so as not to exceed the emission limits in FCC Rules §24.232, §22.913, and §27.50(b), respectively.

† Including the residences located at least 160 feet away, based on photographs from Google Maps.

**Verizon Wireless • Proposed Base Station (Site No. 295546 “Fandango”)
3331 South Carson Street • Carson City, Nevada**

No Recommended Mitigation Measures

Due to their mounting location and height, the Verizon antennas would not be accessible to unauthorized persons, and so no mitigation measures are necessary to comply with the FCC public exposure guidelines. It is presumed that Verizon will, as an FCC licensee, take adequate steps to ensure that its employees or contractors receive appropriate training and comply with FCC occupational exposure guidelines whenever work is required near the antennas themselves.

Conclusion

Based on the information and analysis above, it is the undersigned’s professional opinion that operation of the base station proposed by Verizon Wireless at 3331 South Carson Street in Carson City, Nevada, will comply with the prevailing standards for limiting public exposure to radio frequency energy and, therefore, will not for this reason cause a significant impact on the environment. The highest calculated level in publicly accessible areas is much less than the prevailing standards allow for exposures of unlimited duration. This finding is consistent with measurements of actual exposure conditions taken at other operating base stations.

Authorship

The undersigned author of this statement is a qualified Professional Engineer, holding California Registration Nos. E-13026 and M-20676, which expire on June 30, 2019. This work has been carried out under his direction, and all statements are true and correct of his own knowledge except, where noted, when data has been supplied by others, which data he believes to be correct.



A handwritten signature in blue ink that reads "William F. Hammett".

William F. Hammett, P.E.

707/996-5200

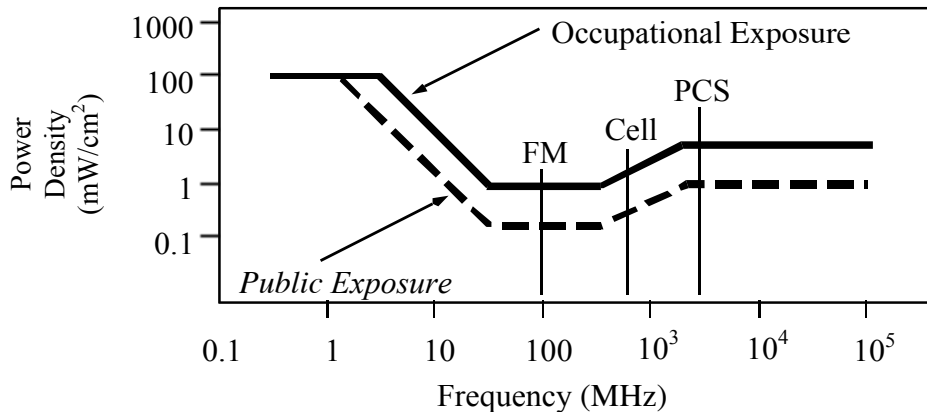
August 31, 2018

FCC Radio Frequency Protection Guide

The U.S. Congress required (1996 Telecom Act) the Federal Communications Commission (“FCC”) to adopt a nationwide human exposure standard to ensure that its licensees do not, cumulatively, have a significant impact on the environment. The FCC adopted the limits from Report No. 86, “Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields,” published in 1986 by the Congressionally chartered National Council on Radiation Protection and Measurements (“NCRP”). Separate limits apply for occupational and public exposure conditions, with the latter limits generally five times more restrictive. The more recent standard, developed by the Institute of Electrical and Electronics Engineers and approved as American National Standard ANSI/IEEE C95.1-2006, “Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz,” includes similar limits. These limits apply for continuous exposures from all sources and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health.

As shown in the table and chart below, separate limits apply for occupational and public exposure conditions, with the latter limits (in *italics* and/or dashed) up to five times more restrictive:

Frequency Applicable Range (MHz)	Electromagnetic Fields (f is frequency of emission in MHz)					
	Electric Field Strength (V/m)		Magnetic Field Strength (A/m)		Equivalent Far-Field Power Density (mW/cm ²)	
0.3 – 1.34	614	<i>614</i>	1.63	<i>1.63</i>	100	<i>100</i>
1.34 – 3.0	614	<i>823.8/f</i>	1.63	<i>2.19/f</i>	100	<i>180/f²</i>
3.0 – 30	1842/f	<i>823.8/f</i>	4.89/f	<i>2.19/f</i>	900/f ²	<i>180/f²</i>
30 – 300	61.4	<i>27.5</i>	0.163	<i>0.0729</i>	1.0	<i>0.2</i>
300 – 1,500	3.54√f	<i>1.59√f</i>	√f/106	<i>√f/238</i>	f/300	<i>f/1500</i>
1,500 – 100,000	137	<i>61.4</i>	0.364	<i>0.163</i>	5.0	<i>1.0</i>



Higher levels are allowed for short periods of time, such that total exposure levels averaged over six or thirty minutes, for occupational or public settings, respectively, do not exceed the limits, and higher levels also are allowed for exposures to small areas, such that the spatially averaged levels do not exceed the limits. However, neither of these allowances is incorporated in the conservative calculation formulas in the FCC Office of Engineering and Technology Bulletin No. 65 (August 1997) for projecting field levels. Hammett & Edison has built those formulas into a proprietary program that calculates, at each location on an arbitrary rectangular grid, the total expected power density from any number of individual radio sources. The program allows for the description of buildings and uneven terrain, if required to obtain more accurate projections.



RFR.CALC™ Calculation Methodology

Assessment by Calculation of Compliance with FCC Exposure Guidelines

The U.S. Congress required (1996 Telecom Act) the Federal Communications Commission (“FCC”) to adopt a nationwide human exposure standard to ensure that its licensees do not, cumulatively, have a significant impact on the environment. The maximum permissible exposure limits adopted by the FCC (see Figure 1) apply for continuous exposures from all sources and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health. Higher levels are allowed for short periods of time, such that total exposure levels averaged over six or thirty minutes, for occupational or public settings, respectively, do not exceed the limits.

Near Field.

Prediction methods have been developed for the near field zone of panel (directional) and whip (omnidirectional) antennas, typical at wireless telecommunications base stations, as well as dish (aperture) antennas, typically used for microwave links. The antenna patterns are not fully formed in the near field at these antennas, and the FCC Office of Engineering and Technology Bulletin No. 65 (August 1997) gives suitable formulas for calculating power density within such zones.

For a panel or whip antenna, power density $S = \frac{180}{\theta_{BW}} \times \frac{0.1 \times P_{net}}{\pi \times D \times h}$, in mW/cm²,

and for an aperture antenna, maximum power density $S_{max} = \frac{0.1 \times 16 \times \eta \times P_{net}}{\pi \times h^2}$, in mW/cm²,

- where θ_{BW} = half-power beamwidth of the antenna, in degrees, and
 P_{net} = net power input to the antenna, in watts,
 D = distance from antenna, in meters,
 h = aperture height of the antenna, in meters, and
 η = aperture efficiency (unitless, typically 0.5-0.8).

The factor of 0.1 in the numerators converts to the desired units of power density.

Far Field.

OET-65 gives this formula for calculating power density in the far field of an individual RF source:

power density $S = \frac{2.56 \times 1.64 \times 100 \times RFF^2 \times ERP}{4 \times \pi \times D^2}$, in mW/cm²,

- where ERP = total ERP (all polarizations), in kilowatts,
RFF = relative field factor at the direction to the actual point of calculation, and
D = distance from the center of radiation to the point of calculation, in meters.

The factor of 2.56 accounts for the increase in power density due to ground reflection, assuming a reflection coefficient of 1.6 (1.6 x 1.6 = 2.56). The factor of 1.64 is the gain of a half-wave dipole relative to an isotropic radiator. The factor of 100 in the numerator converts to the desired units of power density. This formula has been built into a proprietary program that calculates, at each location on an arbitrary rectangular grid, the total expected power density from any number of individual radiation sources. The program also allows for the description of uneven terrain in the vicinity, to obtain more accurate projections.



Environmental Noise Analysis

Fandango Cellular Facility

Carson City, Nevada

BAC Job # 2018-048

Prepared For:

Complete Wireless Consulting

Attn: Johnathon Heflin
2009 V Street
Sacramento, CA 95818

Prepared By:

Bollard Acoustical Consultants, Inc.



Paul Bollard, President

March 12, 2018



Introduction

The Fandango Verizon Wireless Unmanned Telecommunications Facility Project (project) proposes the construction of a monopole tower, and the installation of outdoor equipment cabinets within a fenced lease area located at 3331 South Carson Street in Carson City, Nevada. The outdoor equipment cabinets have been identified as primary noise sources associated with the project. Please see Figure 1 for the general site location. The studied site design is dated February 1, 2018.

Bollard Acoustical Consultants, Inc. has been contracted by Complete Wireless Consulting, Inc. to complete an environmental noise assessment regarding the proposed project cellular equipment operations. Specifically, the following addresses daily noise production and exposure associated with operation of the outdoor equipment cabinets.

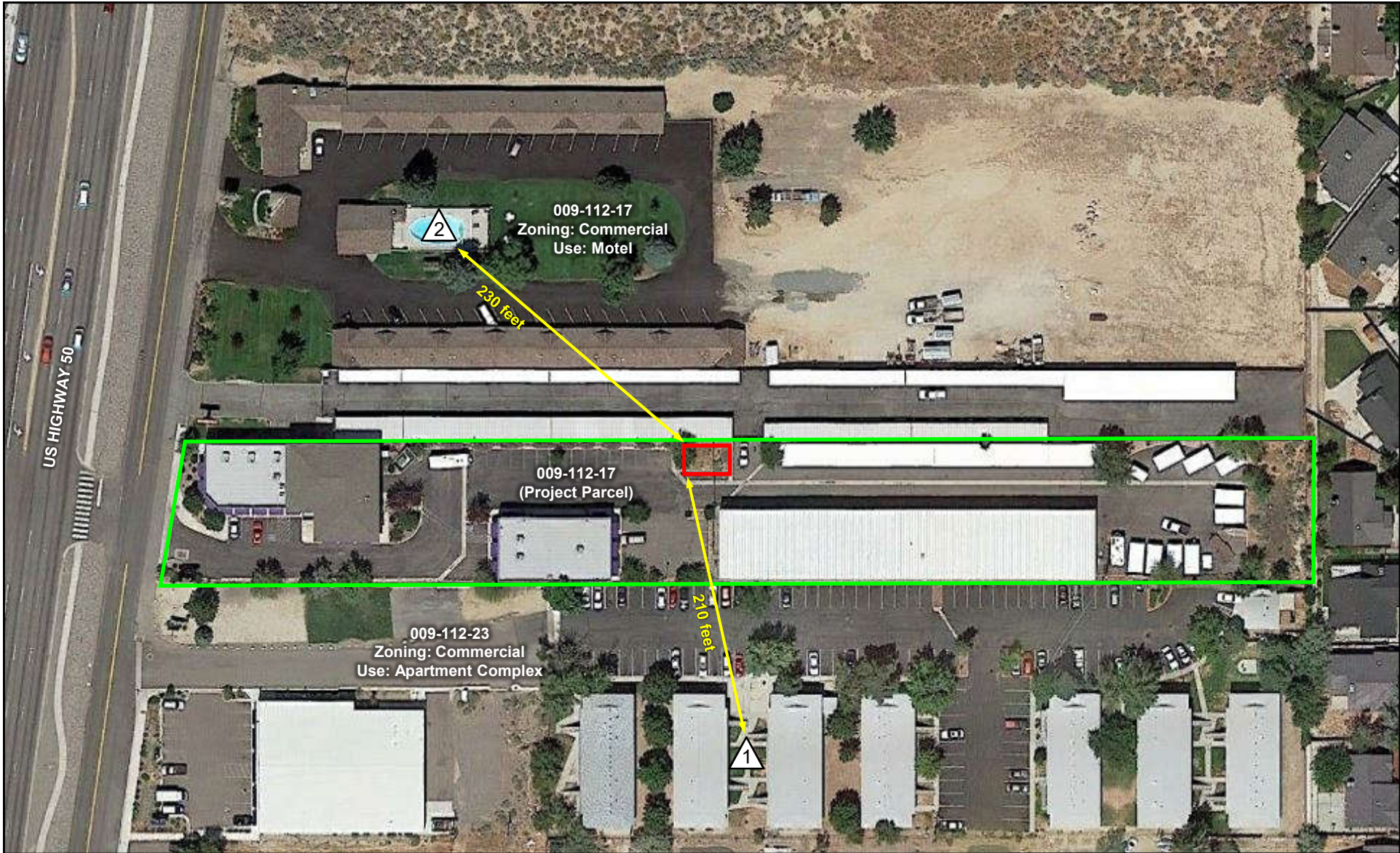
Please refer to Appendix A for definitions of acoustical terminology used in this report. Appendix B illustrates common noise levels associated with various sources.

Criteria for Acceptable Noise Exposure




Carson City

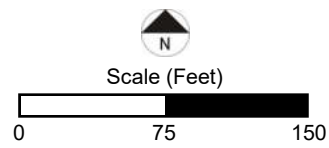
Carson City does not have a noise ordinance that contains specific noise level criteria. For telecommunications projects it is common to apply non-transportation (stationary) noise level performance standards. For the purposes of this noise study, the noise level standards provided below in Table 1 were utilized to assess potential noise impacts at the nearest noise-sensitive uses. The recommended noise level performance standards seen below are generally consistent with the non-transportation noise standards found in many general plan noise elements and noise ordinances.

Table 1		
Maximum Allowable Noise Exposure for Stationary Noise Sources – Recommended		
Noise Level Descriptor	Daytime 7 a.m. to 10 p.m.	Nighttime 10 p.m. to 7 a.m.
Hourly L_{eq} , dB	50	45
Maximum Level (L_{max}), dB	70	65
Source: Bollard Acoustical Consultants, Inc.		



Legend

-  Noise-Sensitive Receivers
-  Proposed Cellular Facility Lease Area
-  Project Parcel Boundaries



Fandango Cellular Facility
 Carson City, Nevada
 Project Site Location

Figure 1



Project Noise Generation

The project proposes the installation of three equipment cabinets within the project lease area, illustrated on Figure 1. Specifically, the cabinets assumed for the project are as follows: two Charles Industries 48V Power Plants and one miscellaneous cabinet cooled by a McLean Model T-20 air conditioner. The cabinets and their respective reference noise levels are provided in Table 2. The manufacturer's noise level data specification sheets for the proposed cabinets are provided as Appendix C.

Equipment	Number of Cabinets	Reference Noise Level, dB	Reference Distance, feet
Charles Industries 48V Power Plant	2	60	5
McLean T-20	1	66	5

Notes: Manufacturer specification sheets provided as Appendix C.

Predicted Facility Noise Levels at Nearest Noise-Sensitive Receivers

The project parcel and adjacent parcels are zoned RC (Retail Commercial). These land uses are not considered noise sensitive, but rather noise-generating. However, nearby commercially zoned parcels (APN: 009-112-07 and 009-112-23) contain noise-sensitive uses (motel and apartments). Because these commercially zoned parcels contain noise-sensitive uses, the recommended noise level criteria identified in Table 1 was applied to the proposed project equipment and assessed at the noise-sensitive locations of these parcels (apartment complex courtyard and motel pool area).

As indicated in Figure 1, the project equipment lease area maintains a separation of approximately 210-230 feet from the nearest noise-sensitive uses, identified as receivers 1 and 2 (apartment complex courtyard and motel pool area). Assuming standard spherical spreading loss (-6 dB per doubling of distance), project-equipment noise exposure at the nearest noise-sensitive receivers was calculated and the results of those calculations are presented in Table 3.

The predicted equipment noise levels at receiver 2 (motel pool) take into consideration the shielding provided by intervening buildings, and have been conservatively adjusted by -10 dB to account for the screening.

Table 3			
Summary of Project-Related Noise Exposure at Nearest Noise-Sensitive Receivers			
Fandango Verizon Wireless Telecommunications Facility Project			
Nearest Receiver¹	Noise-Sensitive Location	Distance from Lease Area (feet)	Predicted Noise Levels, L_{eq} (dBA)^{2,3}
1	Apartment Courtyard	210	35
2	Motel Pool	230	25
Notes:			
¹ Receiver locations and distances are shown on Figure 1. ² The predicted equipment noise levels at receiver 2 (motel pool) take into consideration the shielding provided by intervening buildings, and have been conservatively adjusted by -10 dB to account for the screening. ³ Equipment cabinets were assumed to be running continuously (and concurrently) for the duration of an hour.			

Because the proposed outdoor equipment cabinets could potentially be in operation during nighttime hours, the operation of the cabinets would be subject to the recommended nighttime noise level standard of 45 dB L_{eq}. As indicated in Table 3, predicted outdoor equipment cabinet noise levels of 25-35 dB L_{eq} at the nearest noise-sensitive receivers would satisfy the recommended 45 dB L_{eq} nighttime noise level standard. As a result, no additional noise mitigation measures would be warranted for this aspect of the project.

Conclusions

Based on the equipment noise level data and analyses presented above, project-related equipment noise exposure is expected to satisfy the recommended noise exposure limits at the closest noise-sensitive receivers. As a result, no additional noise mitigation measures would be warranted for this project.

This concludes our environmental noise assessment for the proposed Fandango Cellular Facility in Carson City, Nevada. Please contact BAC at (916) 663-0500 or paulb@bacnoise.com with any questions or requests for additional information.

Table 3			
Summary of Project-Related Noise Exposure at Nearest Noise-Sensitive Receivers Fandango Verizon Wireless Telecommunications Facility Project			
Nearest Receiver¹	Noise-Sensitive Location	Distance from Lease Area (feet)	Predicted Noise Levels, L_{eq} (dBA)^{2,3}
1	Apartment Courtyard	210	35
2	Motel Pool	230	25
Notes:			
¹ Receiver locations and distances are shown on Figure 1. ² The predicted equipment noise levels at receiver 2 (motel pool) take into consideration the shielding provided by intervening buildings, and have been conservatively adjusted by -10 dB to account for the screening. ³ Equipment cabinets were assumed to be running continuously (and concurrently) for the duration of an hour.			

Because the proposed outdoor equipment cabinets could potentially be in operation during nighttime hours, the operation of the cabinets would be subject to the recommended nighttime noise level standard of 45 dB L_{eq}. As indicated in Table 3, predicted outdoor equipment cabinet noise levels of 25-35 dB L_{eq} at the nearest noise-sensitive receivers would satisfy the recommended 45 dB L_{eq} nighttime noise level standard. As a result, no additional noise mitigation measures would be warranted for this aspect of the project.

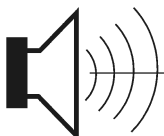
Conclusions

Based on the equipment noise level data and analyses presented above, project-related equipment noise exposure is expected to satisfy the recommended noise exposure limits at the closest noise-sensitive receivers. As a result, no additional noise mitigation measures would be warranted for this project.

This concludes our environmental noise assessment for the proposed Fandango Cellular Facility in Carson City, Nevada. Please contact BAC at (916) 663-0500 or paulb@bacnoise.com with any questions or requests for additional information.

Appendix A Acoustical Terminology

Acoustics	The science of sound.
Ambient Noise	The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.
Attenuation	The reduction of an acoustic signal.
A-Weighting	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.
Decibel or dB	Fundamental unit of sound, A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell.
CNEL	Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.
Frequency	The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz.
L_{dn}	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
Leq	Equivalent or energy-averaged sound level.
L_{max}	The highest root-mean-square (RMS) sound level measured over a given period of time.
Loudness	A subjective term for the sensation of the magnitude of sound.
Masking	The amount (or the process) by which the threshold of audibility is for one sound is raised by the presence of another (masking) sound.
Noise	Unwanted sound.
Peak Noise	The level corresponding to the highest (not RMS) sound pressure measured over a given period of time. This term is often confused with the Maximum level, which is the highest RMS level.
RT₆₀	The time it takes reverberant sound to decay by 60 dB once the source has been removed.
Sabin	The unit of sound absorption. One square foot of material absorbing 100% of incident sound has an absorption of 1 sabin.
SEL	A rating, in decibels, of a discrete event, such as an aircraft flyover or train passby, that compresses the total sound energy of the event into a 1-s time period.
Threshold of Hearing	The lowest sound that can be perceived by the human auditory system, generally considered to be 0 dB for persons with perfect hearing.
Threshold of Pain	Approximately 120 dB above the threshold of hearing.

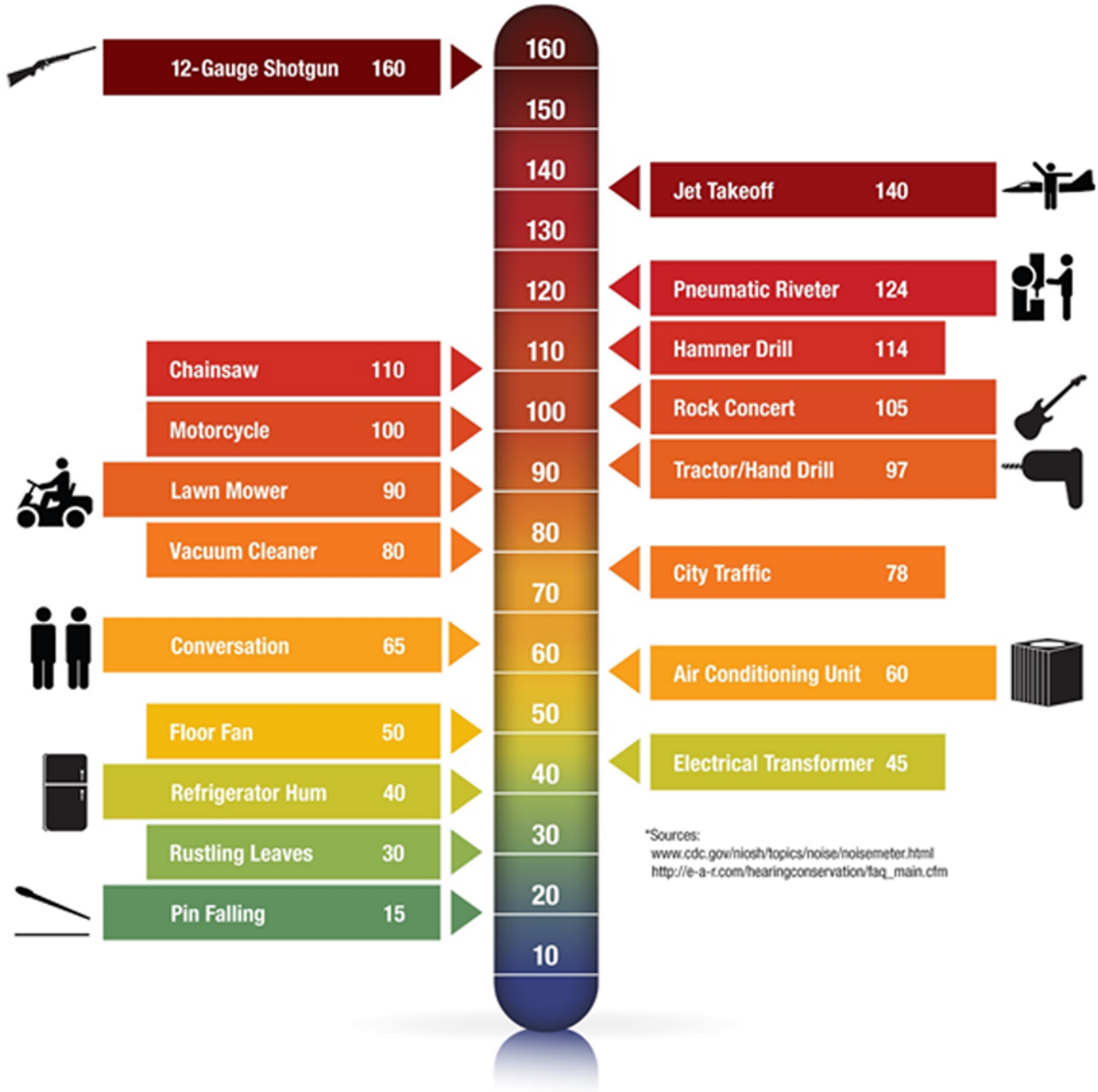


BOLLARD

Acoustical Consultants

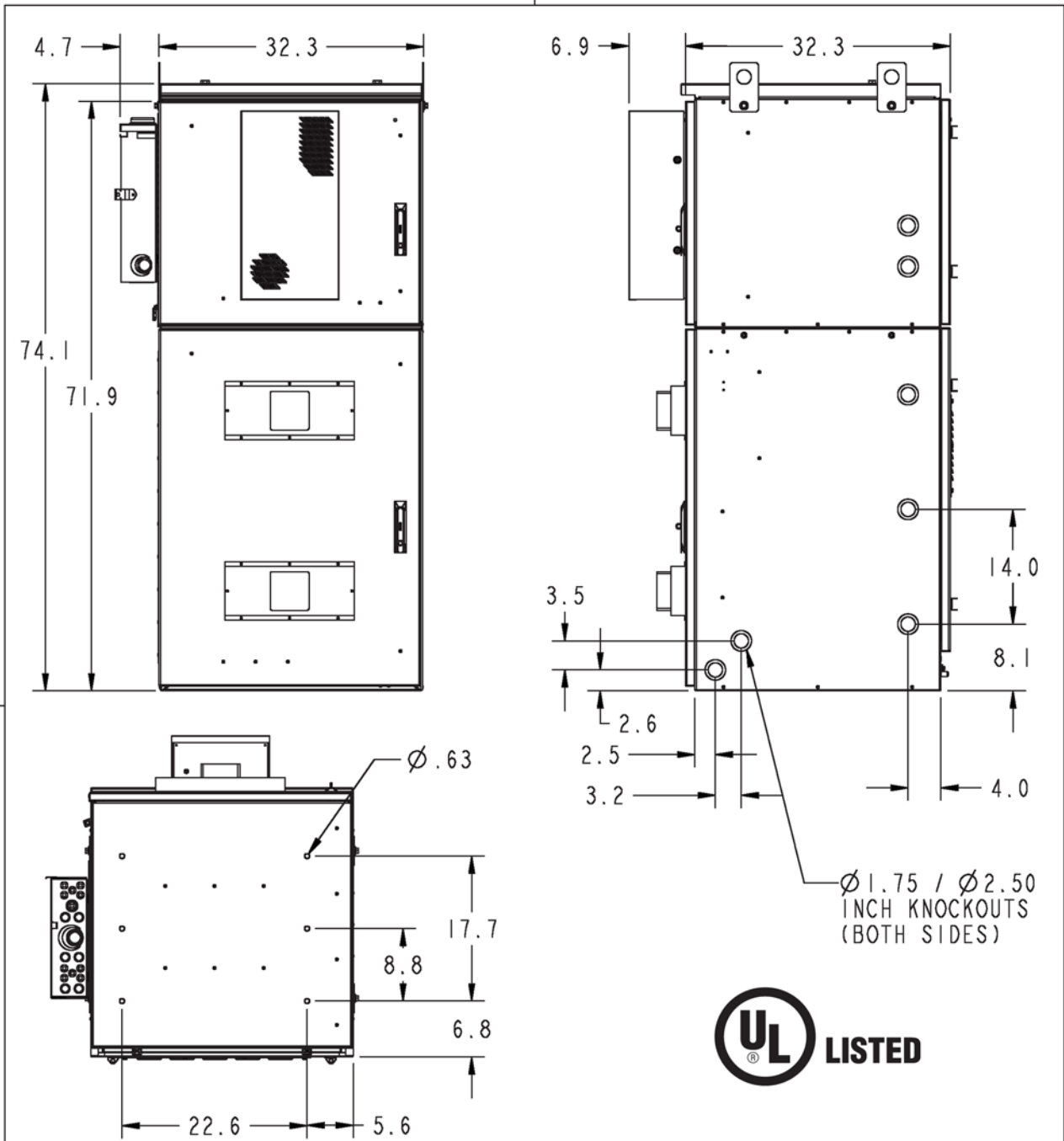
Appendix B

Typical A-Weighted Sound Levels of Common Noise Sources Decibel Scale (dBA)*



*Sources:
www.cdc.gov/niosh/topics/noise/noisemeter.html
http://e-a-r.com/hearingconservation/faq_main.cfm

Appendix C-1



WEIGHT WITH BATTERIES:
2296 LBS.

WEIGHT WITHOUT BATTERIES:
760 LBS.

MAX NOISE LEVEL:
55-60dB

NorthStar NSB-170FT batteries
at 128 lbs each, Qty 12

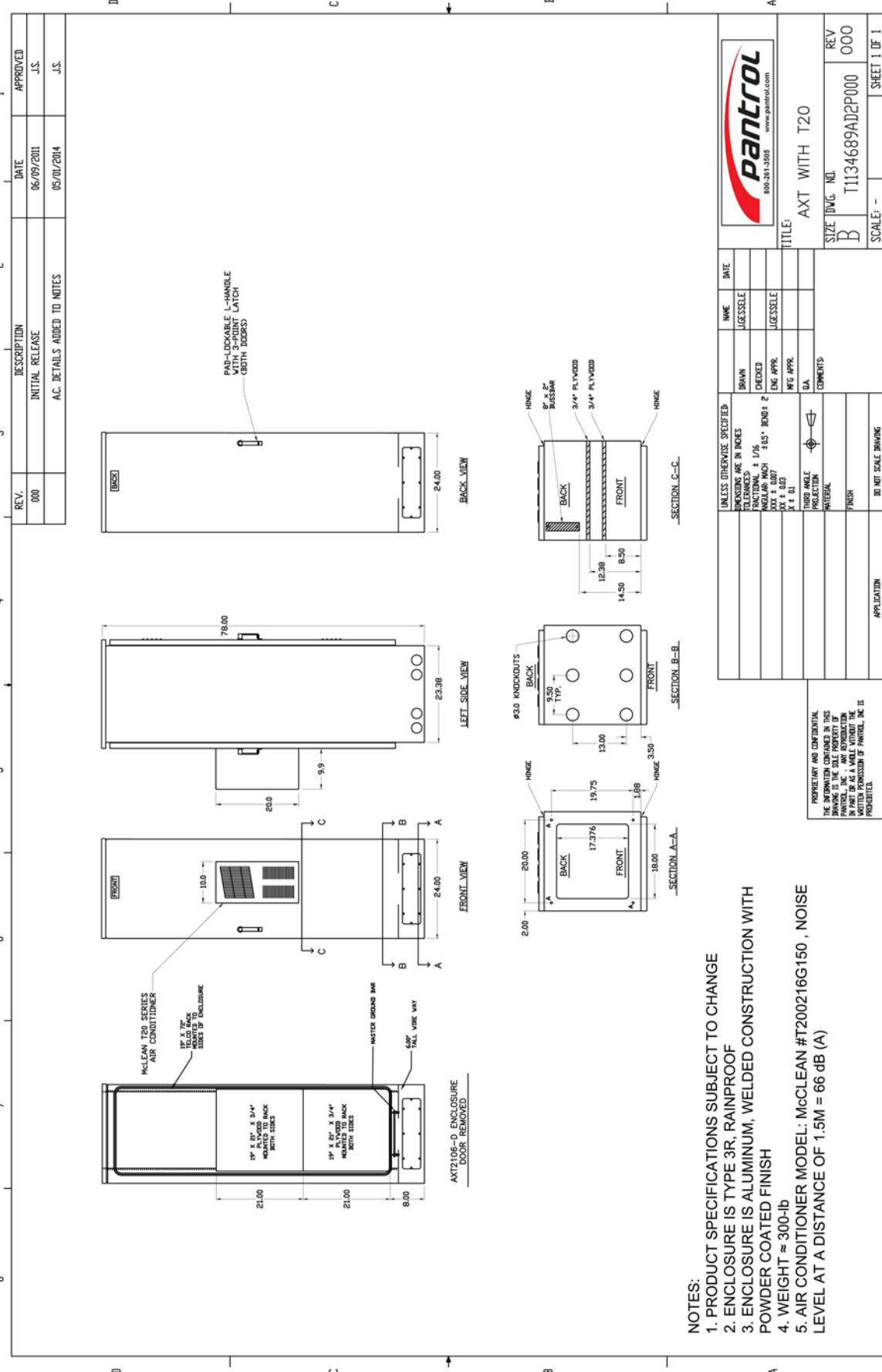
CHARLES PART #
CUBE-SS4C215XC1

Charles
Charles Industries Ltd.
Telecommunications Group
Charles Center, 5600 Apollo Drive
Rolling Meadows, IL 60008
Telephone: 847-808-6300

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Verizon Wireless
Large Site Support Enclosure

Appendix C-2



- NOTES:**
1. PRODUCT SPECIFICATIONS SUBJECT TO CHANGE
 2. ENCLOSURE IS TYPE 3R, RAINPROOF
 3. ENCLOSURE IS ALUMINUM, WELDED CONSTRUCTION WITH POWDER COATED FINISH
 4. WEIGHT ≈ 300-lb
 5. AIR CONDITIONER MODEL: McCLEAN #T200216G150, NOISE LEVEL AT A DISTANCE OF 1.5M = 66 dB (A)

pantron
 800-281-2305 www.pantron.com

TITLE: AXT WITH T20

SIZE DWG. NO. T1134689A2P000

REV 000

SCALE: -- SHEET 1 OF 1

NAME	DATE
JEGESSELE	
JEGESSELE	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
 TOLERANCES ± 1/16
 ANGULAR W/CH ± 1°
 HOLE ± .007
 SURF. ± .015

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NAME	DATE
JEGESSELE	
JEGESSELE	
JEGESSELE	
JEGESSELE	
JEGESSELE	

COMMENTS: AXT WITH T20

30 NOT SCALE DRAWING

ULS License

Cellular License - KNKN241 - SACRAMENTO VALLEY LIMITED PARTNERSHIP

Call Sign	KNKN241	Radio Service	CL - Cellular
Status	Active	Auth Type	Regular

Market

Market	CMA545 - Nevada 3 - Storey	Channel Block	B
Submarket	0	Phase	2

Dates

Grant	09/09/2009	Expiration	10/01/2019
Effective	11/02/2016	Cancellation	

Five Year Buildout Date

07/25/1995

Control Points

1 500 W. Dove Rd., TARRANT, Southlake, TX
P: (800)264-6620

Licensee

FRN	0002972149	Type	Limited Partnership
-----	------------	------	---------------------

Licensee

SACRAMENTO VALLEY LIMITED PARTNERSHIP 5055 North Point Pkwy, NP2NE Network Engineering ALPHARETTA, GA 30022 ATTN Regulatory	P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.com
--	---

Contact

VERIZON WIRELESS Licensing Manager 5055 North Point Pkwy, NP2NE Network Engineering Alpharetta, GA 30022 ATTN Regulatory	P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.com
--	---

Ownership and Qualifications

Radio Service Type	Mobile		
Regulatory Status	Common Carrier	Interconnected	Yes

Alien Ownership

Is the applicant a foreign government or the representative of any foreign government?	No
Is the applicant an alien or the representative of an alien?	No
Is the applicant a corporation organized under the laws of any foreign government?	No
Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	No
Is the applicant directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country?	Yes
If the answer to the above question is 'Yes', has the applicant received a ruling(s) under Section 310(b)(4) of the Communications Act with respect to the same radio service involved in this application?	Yes

Basic Qualifications

The Applicant answered "No" to each of the Basic Qualification questions.

Demographics

Race

Ethnicity

Gender

Z D DRAWING SIGN - OFF

DATE: _____ TIME: _____ % CWC-PLEASE RETURN BY: _____

COMPLETE Wireless Consulting, Inc. SIGNATURE _____ DATE _____

SITE ACQUISITION: _____

PLANNING: _____

CONSTRUCTION: _____

MANAGEMENT: _____

verizon SIGNATURE _____ DATE _____

CONSTRUCTION: _____

REAL ESTATE: _____

RF ENGINEER: _____

EQUIPMENT ENGINEER: _____

MW ENG./TRANSPORT: _____

OTHER (IF APPLICABLE) SIGNATURE _____ DATE _____



FANDANGO
 3331 SOUTH CARSON STREET
 CARSON CITY, NV 89701
 APN: 009-112-17
 LOCATION #: 295546

LOCATION PLAN

D I R E C T I O N S

FROM VERIZON OFFICE @ 255 PARKSHORE DR., FOLSOM, CA 95630:

HEAD NORTHEAST ON RIVER PARK DR TOWARD RESPONSE RD
 TURN RIGHT ONTO RESPONSE RD
 TURN RIGHT ONTO EXPOSITION BLVD
 USE THE RIGHT 2 LANES TO TAKE THE I-80 W RAMP TO SAN FRANCISCO
 MERGE ONTO I-80BL
 CONTINUE ONTO I-80BUS W
 TAKE EXIT 6A FOR US-50 E TOWARD S LAKE TAHOE
 TURN RIGHT ONTO PIONEER TRAIL
 FOLLOW US-50 E TO CARSON CITY
 TURN RIGHT ONTO US-50 E/LAKE TAHOE BLVD
 CONTINUE TO FOLLOW US-50 E
 USE THE LEFT 2 LANES TO STAY ON US-50 E
 USE THE LEFT 2 LANES TO TURN LEFT AT THE 1ST CROSS STREET ONTO S CARSON ST
 DRIVE TO FRONTAGE RD
 TURN RIGHT TOWARD FRONTAGE RD
 TURN LEFT ONTO FRONTAGE RD
 DESTINATION WILL BE ON THE RIGHT

I N D E X O F D R A W I N G S

1. T1.1	TITLE SHEET, LOCATION PLAN, PROJECT DATA
2. C1	CIVIL SURVEY SHEET
3. A1.1	OVERALL SITE PLAN
4. A2.1	EQUIPMENT LAYOUT PLAN
5. A2.2	ANTENNA LAYOUT PLAN
6. A3.1	PROJECT ELEVATIONS

P R O J E C T D I R E C T O R Y

APPLICANT:
 VERIZON WIRELESS
 295 PARKSHORE DRIVE
 FOLSOM, CA 95630

PROPERTY OWNER:
 ARCATA HOSPITAL CORPORATION
 ATTN: DOUG SHAW
 P.O. BOX 1116
 ARCATA, CA 95518

ARCHITECT:
 MANUEL S TSIHLAS
 1520 RIVER PARK DRIVE
 SACRAMENTO, CA 95815
 916-505-3811 PH

CONSTRUCTION MANAGER:
 BOB SCHROEDER
 COMPLETE WIRELESS CONSULTING, INC.
 2009 V STREET
 SACRAMENTO, CA 95818
 916-217-7512
 bschroeder@completewireless.net

P R O J E C T S U M M A R Y

ASSESSOR'S PARCEL NUMBER: 009-112-17

JURISDICTION: CARSON CITY

OCCUPANCY: S-2 (UNMANNED TELECOMMUNICATIONS FACILITY) U (TOWER)

TYPE OF CONSTRUCTION: V-B

ZONING: RC

C O D E C O M P L I A N C E

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

- 2012 INTERNATIONAL BUILDING CODE
- 2012 INTERNATIONAL RESIDENTIAL CODE
- 2012 INTERNATIONAL MECHANICAL CODE
- 2012 UNIFORM MECHANICAL CODE
- 2012 UNIFORM PLUMBING CODE
- 2012 INTERNATIONAL FUEL GAS CODE
- 2012 INTERNATIONAL PROPERTY MAINTENANCE CODE
- 2012 INTERNATIONAL EXISTING BUILDING CODE
- 2011 NATIONAL ELECTRICAL CODE
- 2009 INTERNATIONAL ENERGY CONSERVATION CODE
- 2011 NORTHERN NEVADA ENERGY CODE AMENDMENTS
- 2012 NORTHERN NEVADA AMENDMENTS

ACCESSIBILITY REQUIREMENTS:
 THIS FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS REQUIREMENTS ARE NOT REQUIRED IN ACCORDANCE WITH THE 2012 INTERNATIONAL BUILDING CODE.

P R O J E C T D E S C R I P T I O N

PROPOSED VERIZON WIRELESS UNMANNED TELECOMMUNICATIONS FACILITY INCLUDING:

- A 32'-0"x18'-0" LEASE AREA.
- A CHAIN LINK FENCE @ LEASE AREA PERIMETER.
- OUTDOOR EQUIPMENT CABINETS.
- UNDERGROUND POWER & TELCO UTILITIES BROUGHT TO FACILITY.
- ANTENNAS W/ASSOCIATED TOWER MOUNTED EQUIPMENT MOUNTED ON A PROPOSED MONOPOLE.

P R O J E C T M I L E S T O N E S

02/01/2018	90% ZONING DOCUMENTS
04/13/2018	100% ZONING DOCUMENTS
04/15/2018	100% ZONING DOCUMENTS REV 1
xx/xx/xxxx	90% CONSTRUCTION DOCUMENTS
xx/xx/xxxx	100% CONSTRUCTION DOCUMENTS

COMPLETE Wireless Consulting, Inc.

Manuel S. Tsihlas, Architect
 1520 River Park Drive, Sacramento, CA 95815
 916-505-3811

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FANDANGO
 3331 SOUTH CARSON STREET
 CARSON CITY, NV 89701

verizon

SHEET TITLE: TITLE SHEET, LOCATION PLAN, PROJECT DATA

Revisions:

△ --	
△ --	
△ --	
△ --	
△ --	

File:1622150_T11.dwg
 Drawn By: xxx
 Checked By: MST
 Scale: AS NOTED
 Date: 05/15/2018

Job No. 1622150

T1.1

LEGEND

- PARCEL BOUNDARY
- - - - - NEIGHBORING PARCEL BOUNDARY
- - - - - LEASE AREA BOUNDARY
- - - - - UTILITIES
- (E) EASEMENTS
- (P) EASEMENTS
- FENCE LINE
- JP JOINT UTILITY POLE
- TP TELEPHONE POLE
- EP ELECTRICAL POLE
- 6" OAK TREE WITH DIAMETER BREAST HEIGHT (DBH)
- W WATER VALVE
- W WATER BOX
- SSMH SANITARY SEWER MANHOLE
- SDMH STORM DRAIN MANHOLE
- DI DROP INLET

DATE OF SURVEY: 01-18-18

SURVEYED BY OR UNDER DIRECTION OF: KENNETH D. GEIL, PLS 13385
LOCATED IN THE COUNTY OF CARSON, STATE OF NEVADA

BEARINGS SHOWN ARE BASED UPON MONUMENTS FOUND AND RECORD INFORMATION. THIS IS NOT A BOUNDARY SURVEY.

ELEVATIONS SHOWN ON THIS PLAN ARE BASED UPON U.S.G.S. N.A.V.D. 88 DATUM. ABOVE MEAN SEA LEVEL UNLESS OTHERWISE NOTED.

N.G.V.D. 1929 CORRECTION: SUBTRACT 3.71' FROM ELEVATIONS SHOWN.

CONTOUR INTERVAL: N.A.

ASSESSOR'S PARCEL NUMBER: 009-112-17

LANDLORD(S): DOUG SHAW
P.O. BOX 1116
ARCATA, CA 95518

Project Name: Fandango

Project Site Location: 3331 S. Carson Street
Carson City, NV 89701
Carson City County

Date of Observation: 01-18-18

Equipment/Procedure Used to Obtain Coordinates: Trimble Geo XT post processed with Pathfinder Office software.

Type of Antenna Mount: Proposed Free Standing Monopole

Coordinates

Latitude: N 39°08'15.30"(NAD83) N 39°08'15.62"(NAD27)

Longitude: W 119°46'02.54"(NAD83) W 119°45'58.89"(NAD27)

ELEVATION of Ground at Structure (NAVD88) 4721.5' AMSL

Fandango
Lease Area Description

All that certain lease area being a portion of the "Steffy Bransetter" parcel as delineated on the plat filed as Record of Survey 2216 file as Document 201578 Official Records of Carson County, Nevada being more particularly described as follows:

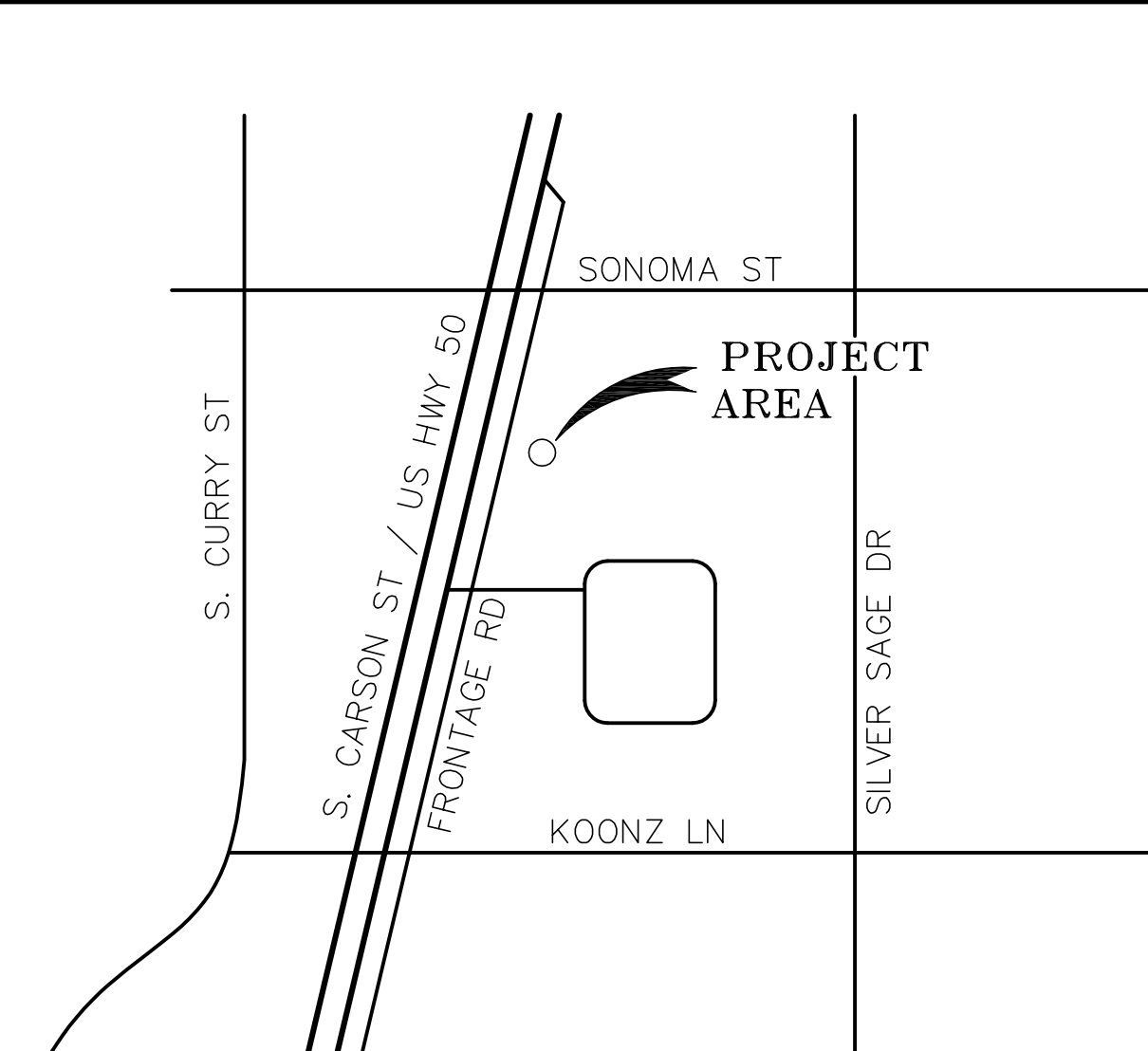
Commencing at the Northwest corner of the aforementioned parcel of land; thence along the North boundary thereof South 88°55'33" East, 335.69 feet; thence leaving said North boundary South 1°04'27" West, 2.73 feet to the True Point of Beginning; thence from said point of beginning South 88°55'33" East, 32.00 feet; thence South 1°04'27" West, 18.00 feet; thence North 88°55'33" West, 32.00 feet; thence North 1°04'27" East, 18.00 feet to the true point of beginning.

Together with an easement for access and utility purposes, twenty feet in width, the centerline of which is described as follows: Beginning at a point which bears South 1°04'27" West, 10.00 feet from the Southeast corner of the above described lease area; thence from said point of beginning North 88°55'33" West, 160.83 feet to a point hereafter referred to as Point A; thence continuing North 88°55'33" West, 5.96 feet; thence South 39°30'32" West, 52.60 feet to a point hereafter referred to as Point B; thence continuing South 39°30'32" West, 14.24 feet; thence North 88°55'31" West, 123.37 feet; thence North 69°05'52" West, 47.56 feet more or less to the public right of way.

Also together with an easement for access and utility purposes, six feet in width, the centerline of which is described as follows: Beginning at the above described Point A; thence from said point of beginning South 01°04'27" West 23.8 feet more or less to an existing utility service connection location.

Also together with an easement for access and utility purposes, six feet in width, the centerline of which is described as follows: Beginning at the above described Point B; thence from said point of beginning North 50°29'28" West 22.2 feet more or less to an existing utility service connection location.

Also together with an easement for utility purposes over and across the Westerly most 6.0 feet of the aforementioned parcel of land.

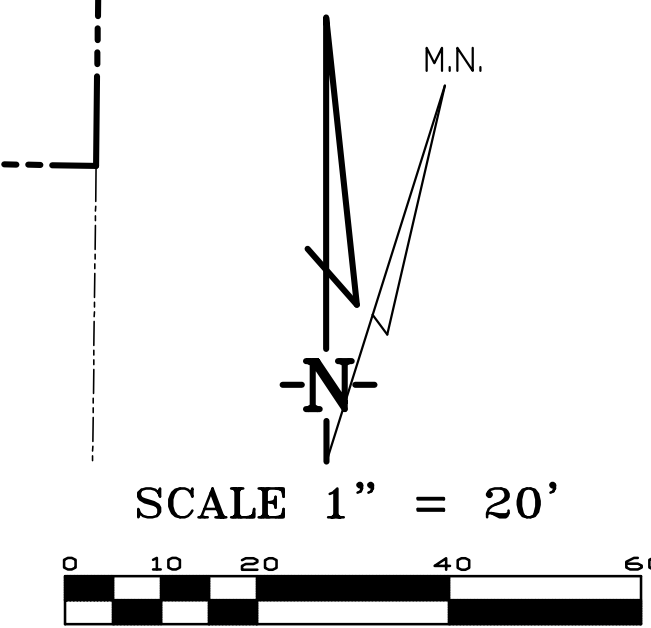
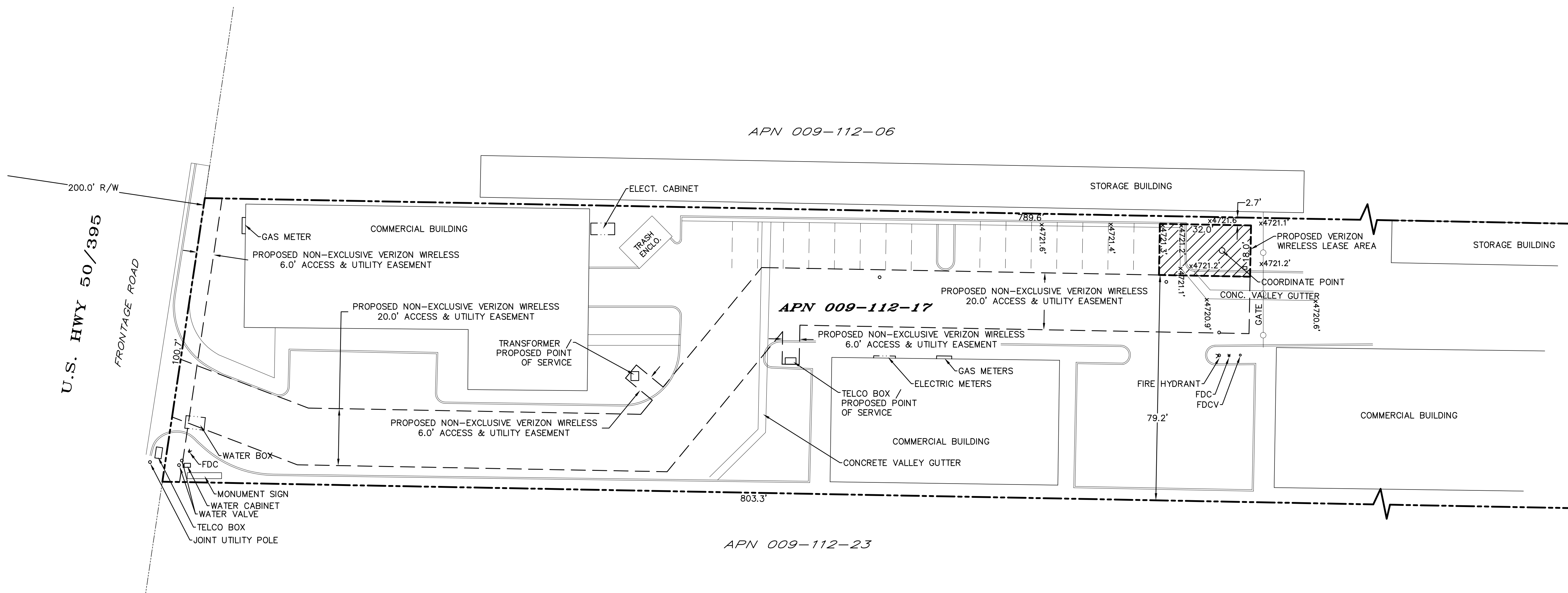


CARSON CITY, NV

VICINITY MAP

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PROJECT AREA ENLARGEMENT

DEPT	APPROVED	DATE
ARC		
RE		
RF		
INT		
EE\IN		
OPS		
EE\OUT		

Surveyor
GEIL ENGINEERING
ENGINEERING • SURVEYING • PLANNING
1226 HIGH STREET
AUBURN, CALIFORNIA 96905
Phone: (530) 828-0106
Fax: (530) 828-0109

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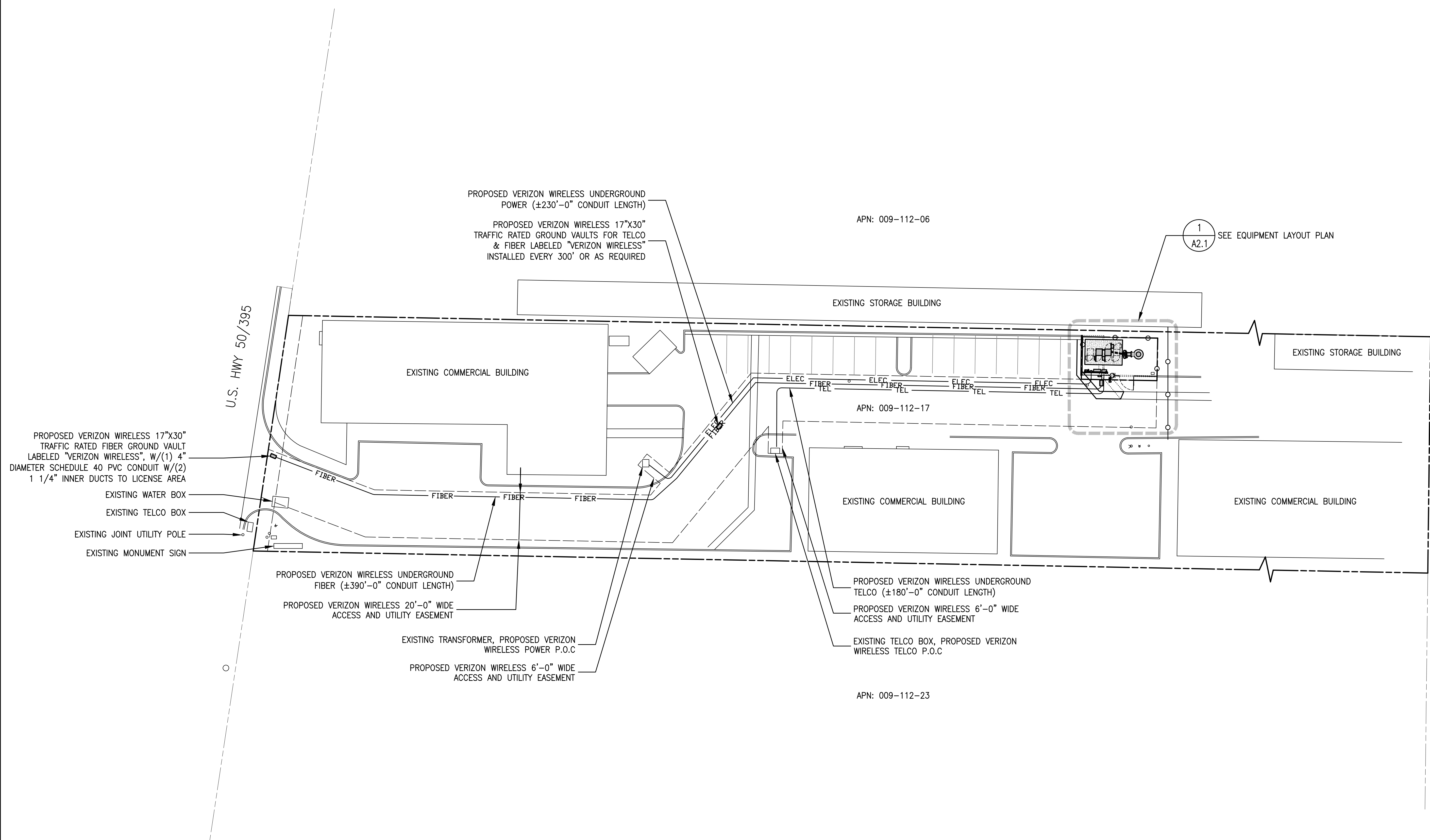


FANDANGO
3331 S. Carson Street
Carson City, NV 89701

**PLOT PLAN AND
SITE TOPOGRAPHY**

REVISIONS	DG
01-25-18 Preliminary Drawing	

Sheet
C-1



PROPOSED VERIZON WIRELESS 17"x30" TRAFFIC RATED FIBER GROUND VAULT LABELED "VERIZON WIRELESS", W/(1) 4" DIAMETER SCHEDULE 40 PVC CONDUIT W/(2) 1 1/4" INNER DUCTS TO LICENSE AREA

EXISTING WATER BOX

EXISTING TELCO BOX

EXISTING JOINT UTILITY POLE

EXISTING MONUMENT SIGN

U.S. HWY 50/395

PROPOSED VERIZON WIRELESS UNDERGROUND POWER (±230'-0" CONDUIT LENGTH)

PROPOSED VERIZON WIRELESS 17"x30" TRAFFIC RATED GROUND VAULTS FOR TELCO & FIBER LABELED "VERIZON WIRELESS" INSTALLED EVERY 300' OR AS REQUIRED

APN: 009-112-06

1 SEE EQUIPMENT LAYOUT PLAN
A2.1

EXISTING STORAGE BUILDING

EXISTING COMMERCIAL BUILDING

EXISTING STORAGE BUILDING

APN: 009-112-17

EXISTING COMMERCIAL BUILDING

EXISTING COMMERCIAL BUILDING

PROPOSED VERIZON WIRELESS UNDERGROUND FIBER (±390'-0" CONDUIT LENGTH)

PROPOSED VERIZON WIRELESS 20'-0" WIDE ACCESS AND UTILITY EASEMENT

PROPOSED VERIZON WIRELESS UNDERGROUND TELCO (±180'-0" CONDUIT LENGTH)

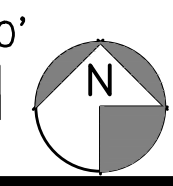
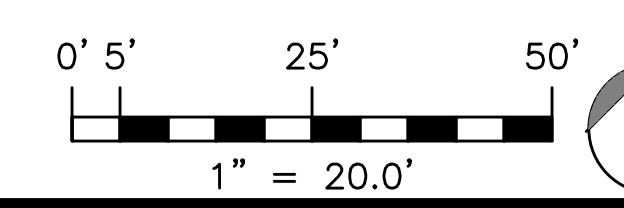
PROPOSED VERIZON WIRELESS 6'-0" WIDE ACCESS AND UTILITY EASEMENT

EXISTING TRANSFORMER, PROPOSED VERIZON WIRELESS POWER P.O.C

PROPOSED VERIZON WIRELESS 6'-0" WIDE ACCESS AND UTILITY EASEMENT

EXISTING TELCO BOX, PROPOSED VERIZON WIRELESS TELCO P.O.C

APN: 009-112-23



1 OVERALL SITE PLAN
A1.1 SCALE: 1" = 20.0'

Manuel S. Tsilias, Architect
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916-505-3811

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Wireless Consulting, Inc.

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SHEET TITLE:
OVERALL SITE PLAN

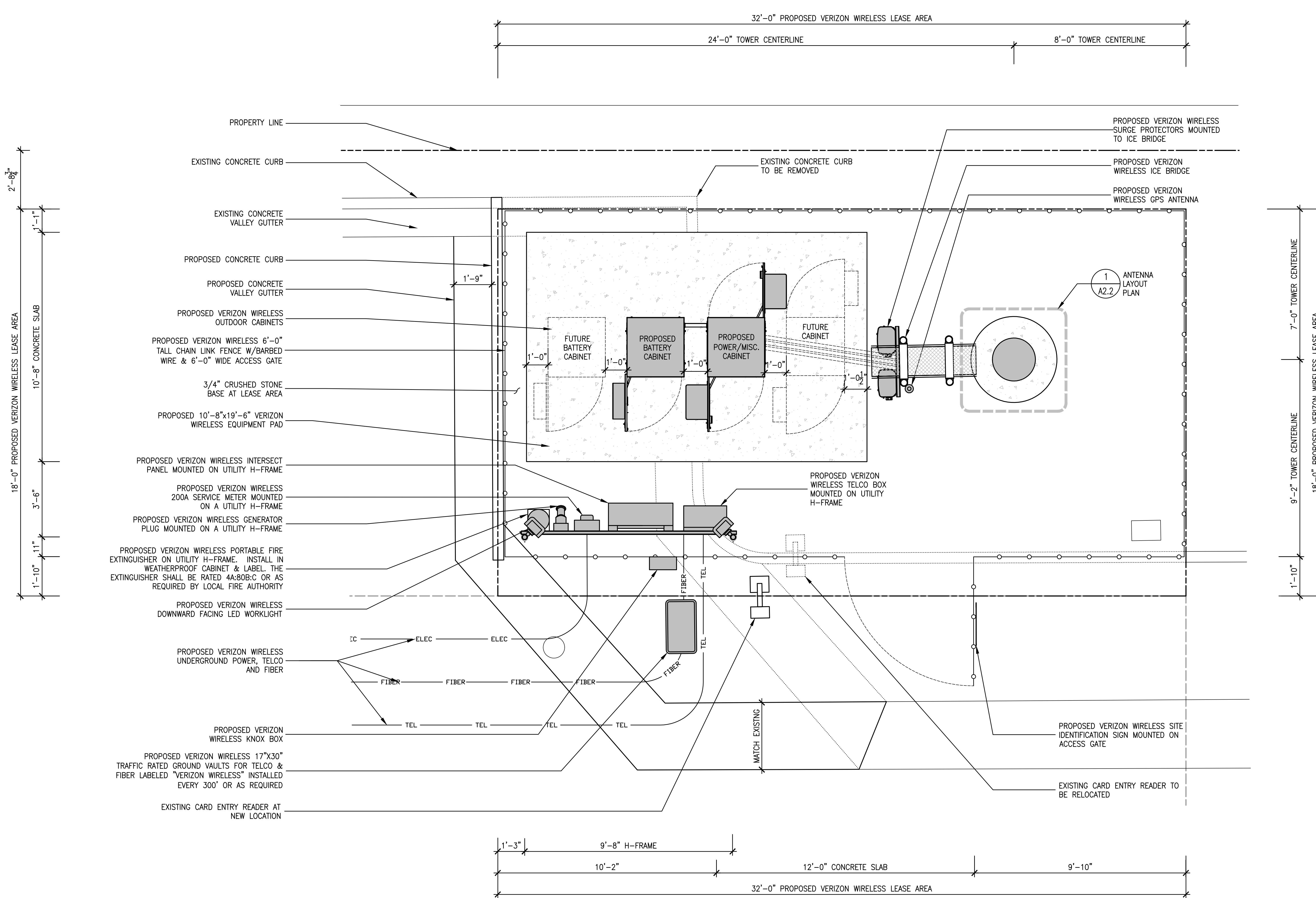
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Checked By: tsr
Scale: AS NOTED
Date: 05/15/2018

Job No. 1622150

A1.1



2'-8 3/4"
1'-1"
10'-8" CONCRETE SLAB
18'-0" PROPOSED VERIZON WIRELESS LEASE AREA
3'-6"
1'-10"
11"

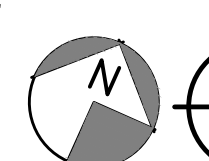
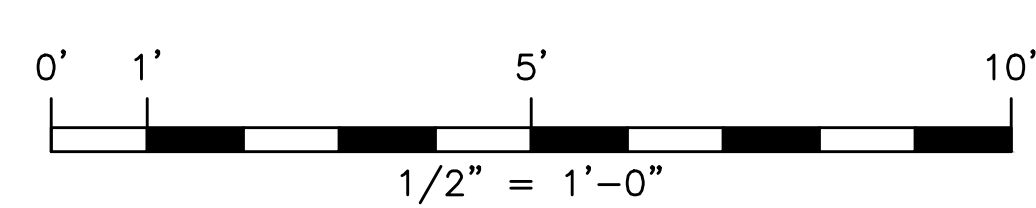
- PROPERTY LINE
- EXISTING CONCRETE CURB
- EXISTING CONCRETE VALLEY GUTTER
- PROPOSED CONCRETE CURB
- PROPOSED CONCRETE VALLEY GUTTER
- PROPOSED VERIZON WIRELESS OUTDOOR CABINETS
- PROPOSED VERIZON WIRELESS 6'-0" TALL CHAIN LINK FENCE W/BARBED WIRE & 6'-0" WIDE ACCESS GATE
- 3/4" CRUSHED STONE BASE AT LEASE AREA
- PROPOSED 10'-8"x19'-6" VERIZON WIRELESS EQUIPMENT PAD
- PROPOSED VERIZON WIRELESS INTERSECT PANEL MOUNTED ON UTILITY H-FRAME
- PROPOSED VERIZON WIRELESS 200A SERVICE METER MOUNTED ON A UTILITY H-FRAME
- PROPOSED VERIZON WIRELESS GENERATOR PLUG MOUNTED ON A UTILITY H-FRAME
- PROPOSED VERIZON WIRELESS PORTABLE FIRE EXTINGUISHER ON UTILITY H-FRAME. INSTALL IN WEATHERPROOF CABINET & LABEL. THE EXTINGUISHER SHALL BE RATED 4A:80B:C OR AS REQUIRED BY LOCAL FIRE AUTHORITY
- PROPOSED VERIZON WIRELESS DOWNWARD FACING LED WORKLIGHT
- PROPOSED VERIZON WIRELESS UNDERGROUND POWER, TELCO AND FIBER
- PROPOSED VERIZON WIRELESS KNOX BOX
- PROPOSED VERIZON WIRELESS 17"x30" TRAFFIC RATED GROUND VAULTS FOR TELCO & FIBER LABELED "VERIZON WIRELESS" INSTALLED EVERY 300' OR AS REQUIRED
- EXISTING CARD ENTRY READER AT NEW LOCATION

- PROPOSED VERIZON WIRELESS SURGE PROTECTORS MOUNTED TO ICE BRIDGE
- PROPOSED VERIZON WIRELESS ICE BRIDGE
- PROPOSED VERIZON WIRELESS GPS ANTENNA

1 ANTENNA LAYOUT PLAN A2.2

7'-0" TOWER CENTERLINE
18'-0" PROPOSED VERIZON WIRELESS LEASE AREA
9'-2" TOWER CENTERLINE
1'-10"

1'-3"
9'-8" H-FRAME
10'-2"
12'-0" CONCRETE SLAB
9'-10"
32'-0" PROPOSED VERIZON WIRELESS LEASE AREA



1 EQUIPMENT LAYOUT PLAN A2.1 SCALE: 1/2" = 1'-0"

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EQUIPMENT LAYOUT PLAN

SHEET TITLE:

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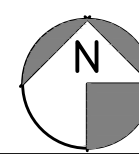
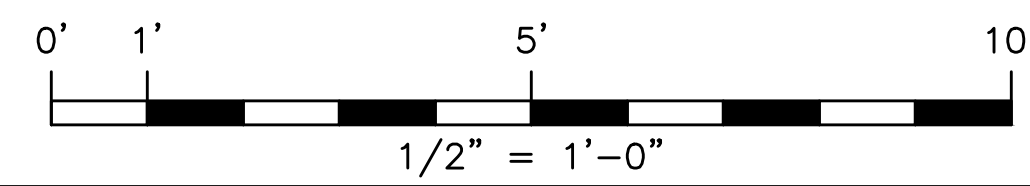
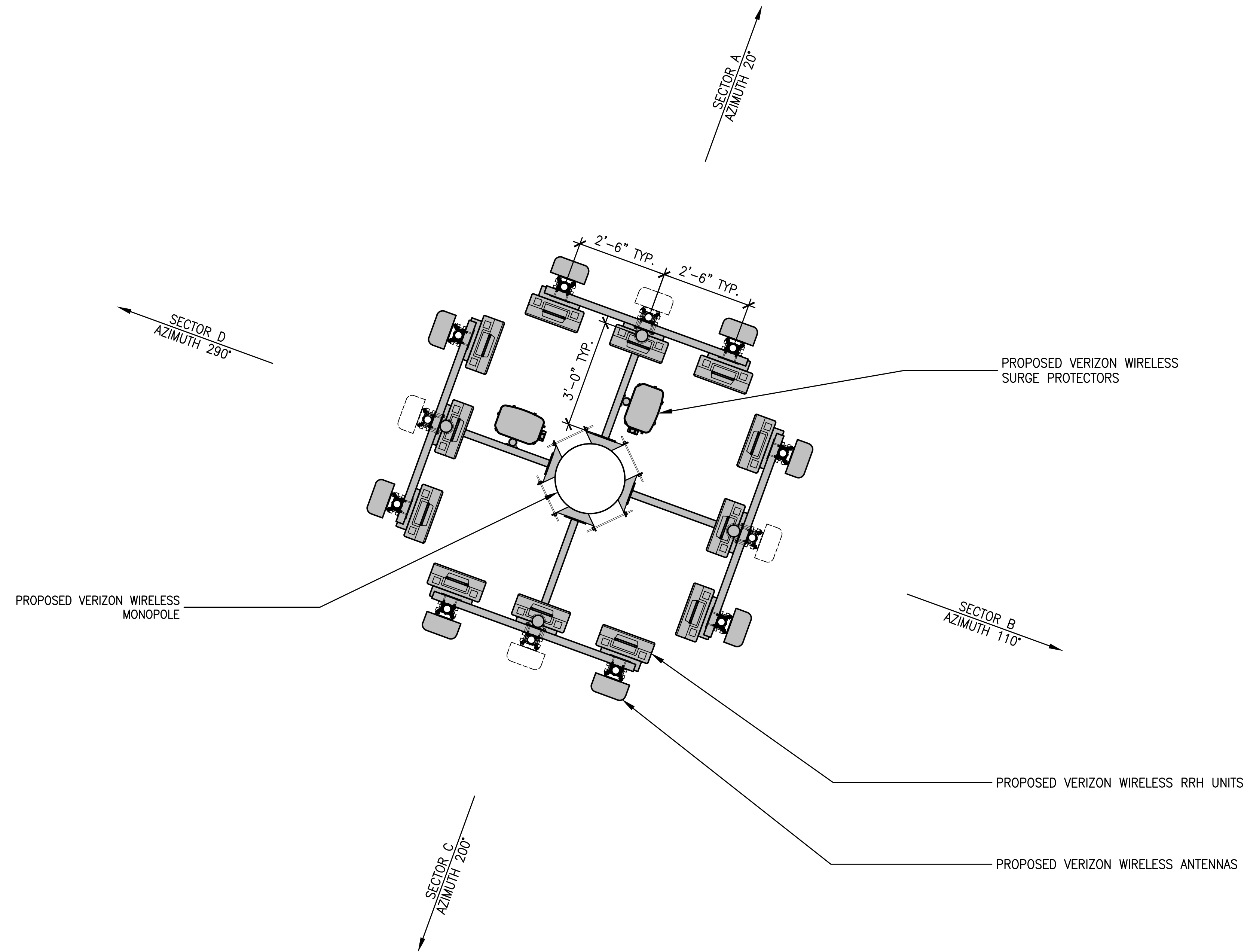
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Date: 05/15/2018

Job No. 162.2150

A2.1

TOWER MOUNTED EQUIPMENT SCHEDULE (PRELIMINARY & SUBJECT TO CHANGE)						
EQUIPMENT	DESCRIPTION	QUANTITY				TOTAL
		SECTOR A	SECTOR B	SECTOR C	SECTOR D	
ANTENNA	ANTENNA MODEL OR TO BE DETERMINED	2	2	2	2	8
FUTURE ANTENNA	ANTENNA MODEL OR TO BE DETERMINED	1	1	1	1	4
RRH / RADIO	TO BE DETERMINED	3	3	3	3	12
SURGE PROTECTOR/HYBRID	RAYCAP / HYBRID TRUNK CABLE	2/4				2/4



1 ANTENNA LAYOUT PLAN
A2.2 SCALE: 1/2" = 1'-0"

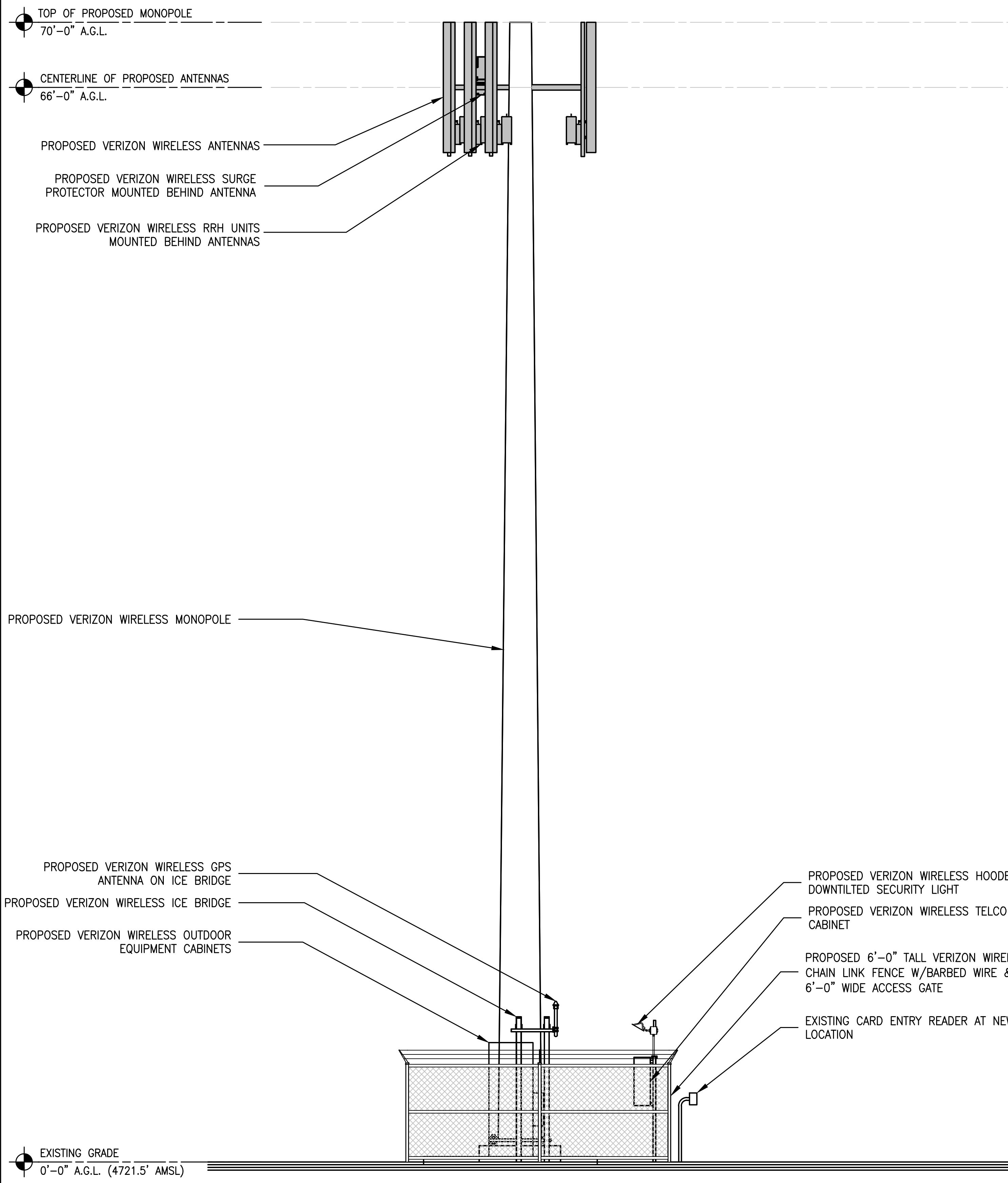
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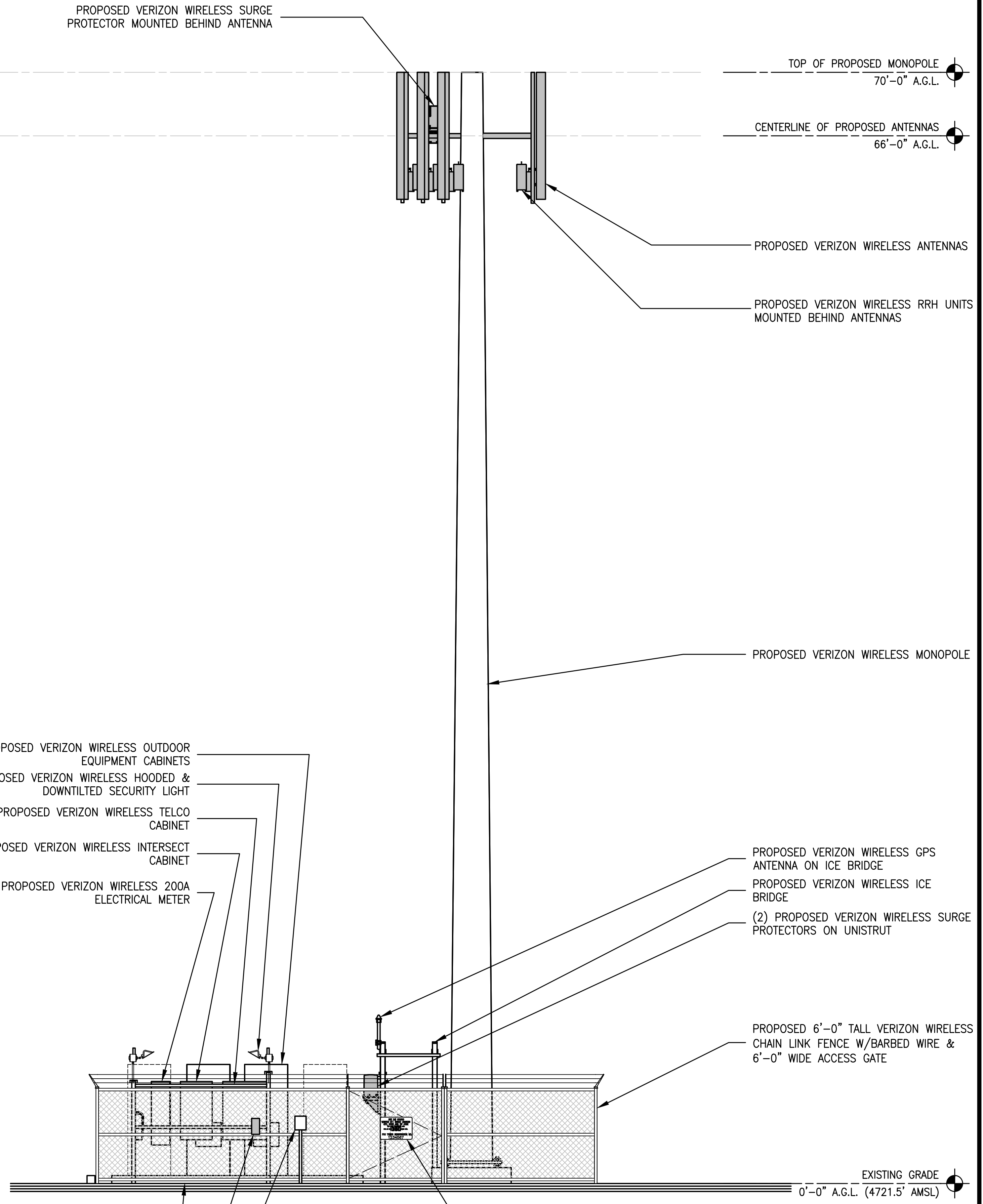
Job No. 162.2150

A2.2



EXISTING GRADE
0'-0" A.G.L. (4721.5' AMSL)

2 WEST ELEVATION
A3.1 SCALE: 1/4" = 1'-0"



EXISTING GRADE
0'-0" A.G.L. (4721.5' AMSL)

1 SOUTH ELEVATION
A3.1 SCALE: 1/4" = 1'-0"

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SHEET TITLE:
PROJECT ELEVATIONS

Revisions:

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Drawn By: sv
Checked By: TST
Scale: AS NOTED
Date: 05/15/2018

Job No. 162.2150

A3.1

Aerial photograph showing the viewpoints for the photosimulations.

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Carson City, NV 89701



Stationary drone for exact height and placement



Existing

Photosimulation of the view looking east along Carson Street.

Fandango

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Carson City, NV 89701

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Proposed 70 ft monopole



Proposed

Stationary drone for exact height and placement



Existing

Photosimulation of the view looking northeast from Carson Street.

Fandango

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Carson City, NV 89701

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Proposed 70 ft monopole



Proposed

Stationary drone for exact height and placement



Existing

Photosimulation of the view looking north-northwest from the adjacent mobile home park.

Fandango

3331 South Carson Street
Carson City, NV 89701



Proposed 70 ft monopole



Proposed

Stationary drone for exact height and placement



Existing

Photosimulation of the view looking due west from Sandalwood Drive.

Fandango

3331 South Carson Street
Carson City, NV 89701

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Proposed 70 ft monopole



Proposed