

Solano County

*675 Texas Street
Fairfield, California 94533
www.solanocounty.com*



Agenda - Final

Thursday, March 17, 2016

7:00 PM

Board of Supervisors Chambers

Planning Commission

Any person wishing to address any item listed on the Agenda may do so by submitting a Speaker Card to the Clerk before the Commission considers the specific item. Cards are available at the entrance to the meeting chambers. Please limit your comments to five (5) minutes. For items not listed on the Agenda, please see "Items From the Public".

All actions of the Solano County Planning Commission can be appealed to the Board of Supervisors in writing within 10 days of the decision to be appealed. The fee for appeal is \$150.

Any person wishing to review the application(s) and accompanying information may do so at the Solano County Department of Resource Management, Planning Division, 675 Texas Street, Suite 5500, Fairfield, CA. Non-confidential materials related to an item on this Agenda submitted to the Commission after distribution of the agenda packet are available for public inspection during normal business hours and on our website at www.solanocounty.com under Departments, Resource Management, Boards and Commissions.

The County of Solano does not discriminate against persons with disabilities and is an accessible facility. If you wish to attend this meeting and you will require assistance in order to participate, please contact Kristine Letterman, Department of Resource Management at (707) 784-6765 at least 24 hours in advance of the event to make reasonable arrangements to ensure accessibility to this meeting.

AGENDA

CALL TO ORDER

SALUTE TO THE FLAG

ROLL CALL

APPROVAL OF AGENDA

APPROVAL OF THE MINUTES

[PC 16-010](#)

PC Minutes of February 4, 2016

Attachments: [minutes](#)

ITEMS FROM THE PUBLIC:

This is your opportunity to address the Commission on a matter not heard on the Agenda, but it must be within the subject matter jurisdiction of the Commission. Please submit a Speaker Card before the first speaker is called and limit your comments to five

minutes. Items from the public will be taken under consideration without discussion by the Commission and may be referred to staff.

REGULAR CALENDAR

[PC 16-009](#)

Public hearing to consider Use Permit Application No. U-15-06 of Verizon Wireless for a 103' new wireless telecommunications facility to be located at 5093 Midway Road, Vacaville, in an "RR-5" Rural Residential Zoning District, APN 0106-220-560. The Planning Commission will also be considering adoption of a Mitigated Negative Declaration of Environmental Impact with substitute Mitigation Measures as recommended by the Solano County Department of Resource Management. (Project Planner: Karen Avery)

Attachments: [A - PC Resolution](#)
[B - Project Location Map](#)
[C - Project Plans](#)
[D - Neg Dec & Initial Study1](#)

ANNOUNCEMENTS AND REPORTS

ADJOURN

To the Planning Commission meeting of April 7, 2016 at 7:00 P.M., Board Chambers, 675 Texas Street, Fairfield, CA



Solano County

675 Texas Street
Fairfield, California 94533
www.solanocounty.com

Agenda Submittal

Agenda #: **Status:** PC Minutes
Type: PC-Document **Department:** Planning Commission
File #: PC 16-010 **Contact:** Kristine Letterman
Agenda date: 3/17/2016 **Final action:**
Title: PC Minutes of February 4, 2016

Governing body: Planning Commission

District:

Attachments: [minutes](#)

Date	Ver.	Action By	Action	Result
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MINUTES OF THE SOLANO COUNTY PLANNING COMMISSION

Meeting of February 4, 2016

The regular meeting of the Solano County Planning Commission was held in the Solano County Administration Center, Board of Supervisors' Chambers (1st floor), 675 Texas Street, Fairfield, California.

PRESENT: Commissioners Walker, Hollingsworth, and Chairperson Rhoads-Poston

EXCUSED: Commissioners Cayler and Castellblanch

STAFF PRESENT: Mike Yankovich, Planning Program Manager; Eric Wilberg, Associate Planner; Jim Laughlin, Deputy County Counsel; and Diane Gilliland, Office Assistant III

Chairperson Rhoads-Poston called the meeting to order at 7:00 p.m. with a salute to the flag. Roll call was taken and a quorum was present.

Approval of the Agenda

The Agenda was approved with an adjustment to move Item No. 1 to follow Item No. 2.

Approval of the Minutes

The minutes of the regular meeting of January 21, 2016 were approved as prepared.

Items from the Public

There was no one from the public wishing to speak.

Regular Calendar

Item No. 2.

PUBLIC HEARING to consider Use Permit Application No. U-15-05 of **Go Green Asphalt, Inc.** to construct and operate a recycling yard which accepts, processes, and stores construction debris including concrete, asphalt, and soil. The project is located within unincorporated Solano County approximately 1.5 miles southeast of the City of Vacaville in the Exclusive Agriculture "A-80" Zoning District, APN: 0166-040-060.. The Planning Commission will also be considering adoption of a Negative Declaration of Environmental Impact as recommended by the Solano County Department of Resource Management. (Project Planner: Eric Wilberg)

Eric Wilberg gave a brief presentation of staff's written report. The facility would operate as a construction debris recycling yard which accepts, processes, and stores concrete, asphalt, and soil. Asphalt and concrete would be accepted from slabs, roof tiles, sidewalks, driveways,

curbs, pipe, roadways, parking lots, etc. Materials would be sourced from various construction sites and crushed on-site in the unenclosed material storage and processing area. These materials would be imported, processed, and sold as needed for re-use as base rock and sold wholesale to contractors and municipalities. An Initial Study and Negative Declaration have been prepared for the project and circulated for public review. The public comment period expired January 29, 2016. Staff recommended approval of the project.

Commissioner Walker inquired about the storage and processing of the concrete. The applicant stated that processing will consist of crushing the concrete with electric and/or diesel powered machines. The product will then be stockpiled until it is offloaded and sold. The applicant noted that a permit from the State Air Resources Board for the crushing machines will be required.

Commissioner Hollingsworth inquired about noise and dust. The applicant stated that the crushing units are portable and self-contained. He said that it will be required that the dust be suppressed. He noted the closest residence is approximately 1 mile away and commented that the noise would dissipate by time it reached that distance. The applicant also commented that the diesel engine would be the source of the noise, and that it will be muffled to mitigate the sound.

Chairperson Rhoads-Poston opened the public hearing. Since there were no speakers either for or against this matter, the public hearing was closed.

Commissioner Walker commented that his concern is in looking at the environmental document there is a lot of supposition and not as much specificity. He commented as to how the applicant stated the diesel processing would be muffled, but it is not indicated in the negative declaration as something that is required. He said there is nothing that speaks to fugitive dust just the notion that there will not be any, or an assumption that it would be taken care of. Commissioner Walker said an assumption is made about air quality and the county's climate action plan, but nothing states what steps need to be taken and there is no requirement for a hazardous materials plan although there is fuel on site. Mr. Walker commented that other CEQA documents the commission has reviewed in the past have required the permittee to mitigate to a certain point and specify the details. He wanted to know if the environmental document for this project is specific enough to indemnify the county if someone should in the future question the operation.

Mike Yankovich said that the use itself has been conditioned to control those types of impacts. He noted that condition nos. 2 and 3 address dust and noise. In addition, there are permits that the applicant will be required to obtain irrespective of the county such as with the Bay Area Air Quality Management District to address the issue of fugitive dust. He stated that staff believes there are enough conditions to make sure those types of impacts will be minimized.

Jim Laughlin, deputy county counsel, spoke to the subject of the county's potential liability. He stated that there are two different issues; one being if there were any shortcomings in the negative declaration, a person could challenge the project approval claiming that the document was inadequate. The statute of limitations to bring a challenge forward against the negative declaration is 30 days; once that time passes the document is assumed to be adequate. If down the road the project is not operating in accord with the negative declaration

the county would have immunity from suit because the county has protection on discretionary actions, so action could not be brought against the county for noise or other problems caused by the project, however a nuisance claim could be brought against the site operator.

Mr. Yankovich noted that this use is considered a temporary use. There is a 5 year compliance review that will be required to make sure the project is operating in compliance with the conditions of approval. Mr. Yankovich said this project is located within the Travis AFB region which is an area designated to make sure that Travis is not impacted and therefore allowing temporary type uses to be located there.

Mr. Wilberg noted that Travis has a waterline easement that runs along North Gate Road. The county has supported their effort not to have any improvements within that easement by backing it up through a condition of approval as noted in condition no. 17 of the draft resolution.

Commissioner Hollingsworth spoke regarding the letter submitted by the City of Fairfield and their request that the use permit have a provision that it expire upon future annexation. He wanted to know if that would be incorporated into the permit.

Mr. Wilberg stated that condition no. 1 touches on the term of the permit. It is mentioned that the project is located within the Municipal Service Area of the City of Fairfield and that upon annexation the project site would be subject to the zoning and general plan designations of Fairfield or Travis Air Force Base.

Commissioner Hollingsworth asked if the other concerns expressed by the city in their letter were going to be addressed. Mr. Yankovich proposed amending condition no. 9 which relates to the need for an encroachment permit to include any other improvements as required by the City of Fairfield. Mr. Yankovich noted that the applicant has been working with the city and will continue to work with them if this project is approved.

Commissioner Hollingsworth asked if there was any discussion with regard to Cannon Road and its ability to handle the increased amount of traffic. Mr. Yankovich stated that the county's public works department has made the determination that the road is adequate for the amount of proposed traffic.

In response to Chairperson Rhoads-Poston, Mr. Yankovich stated that upon annexation the property would be governed by the City of Fairfield and their rules and regulations would apply. Mr. Laughlin added that if the commission wants to make it clear that the use permit is terminated upon annexation, they should request it be added to the conditions of approval.

Frank Andrews, representing the property owner, appeared before the commission. He clarified that they do not object to the condition that the use permit be terminated upon annexation. He noted that they have had discussions with city representatives about improvements required, and since an encroachment permit will be required to use the road, the city was satisfied with that method of dealing with this issue. Mr. Andrews commented that the applicant also owns the property located across the street from the project, and both North Gate and Cannon Roads will be relocated and rebuilt to the typical city standards when the industrial park is built. He estimated that the roads would be relocated within the next 4 to 5

years. As far as truck traffic, Mr. Andrews said there is already a significant amount of traffic especially coming from the Bay Area heading to the Vacaville landfill.

A motion was made by Commissioner Walker and seconded by Commissioner Hollingsworth to determine that the Negative Declaration prepared pursuant to the California Environmental Quality Act is adequate and complete, and approved Use Permit Application No. U-15-05 subject to the conditions of approval as amended. The motion passed unanimously. (Resolution No. 4635)

Item No. 1.

NOMINATION and ELECTION of Chair and Vice-Chair for the ensuing year.

A motion was made and seconded to nominate Commissioner Cayler and Commissioner Hollingsworth as Chairperson and Vice-Chairperson, respectively. The motion passed unanimously.

ANNOUNCEMENTS and REPORTS

Since there was no further business, the meeting was **adjourned**.

DRAFT



Agenda Submittal

Agenda #: **Status:** PC-Regular

Type: PC-Document **Department:** Planning Commission

File #: PC 16-009 **Contact:** Karen Avery

Agenda date: 3/17/2016 **Final action:**

Title: Public hearing to consider Use Permit Application No. U-15-06 of Verizon Wireless for a 103' new wireless telecommunications facility to be located at 5093 Midway Road, Vacaville, in an "RR-5" Rural Residential Zoning District, APN 0106-220-560. The Planning Commission will also be considering adoption of a Mitigated Negative Declaration of Environmental Impact with substitute Mitigation Measures as recommended by the Solano County Department of Resource Management. (Project Planner: Karen Avery)

Governing body: Planning Commission

District:

Attachments: [A - PC Resolution](#)
[B - Project Location Map](#)
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[D - Neg Dec & Initial Study1](#)

Date	Ver.	Action By	Action	Result
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Published Notice Required? Yes X No ___
 Public Hearing Required? Yes X No ___

RECOMMENDATION:

The Planning Commission ADOPT the Mitigated Negative Declaration and the mandatory and additional findings with respect to Use Permit 15-06 and,

The Planning Commission ADOPT the attached draft resolution and APPROVE Use Permit No. 15-06, subject to the recommending Findings and Conditions of Approval.

EXECUTIVE SUMMARY:

Verizon Wireless is requesting a use permit to install a telecommunications facility consisting of a 103' multi-carrier monopine within a 2500 sq. ft. lease area. The lease area will contain the ground equipment necessary to operate the site and will be enclosed by a 6' composite wall.

The project complies with the County's requirement for new wireless communications facilities. A Mitigated Negative Declaration has been prepared in accordance with CEQA requirements

ENVIRONMENTAL ANALYSIS:

A Mitigated Negative Declaration was prepared and circulated for public review. The public comment period ended on February 10, 2016. See the Environmental Determination discussion for further details.

BACKGROUND:

A. Prior approvals: Building Permits

B. Applicant/Owner:

Applicant: Verizon Wireless
c/o Complete Wireless
2009 V Street
Sacramento, CA 95818

Owner: Margarito & Maria Chavez
5093 Midway Road
Vacaville, CA 95688

C. General Plan Land Use Designation/Zoning:

General Plan: Rural Residential
Zoning: Rural Residential (RR5)

D. Existing Use: Residential

E. Adjacent Zoning and Uses:

North: Rural Residential (RR5) - Residential
South: Municipal Service Area in the City of Vacaville - Rural Residential
East: Rural Residential (RR5) - Residential
West: Rural Residential (RR5) - Residential

ANALYSIS:

A. Environmental Setting:

The project site is located at 5093 Midway Road in unincorporated Solano County outside the boundaries of the City of Vacaville. The project site is located on a 5.03 acre parcel in a rural residential area. The parcel is developed with a single family dwelling. There is a small animal shelter located behind the house within a fenced enclosure. There is a row of mature trees located along the frontage of the property bordering Midway Road. The remainder of the parcel is vegetated with annual grasses and it appears that the majority of the property has been used for animal grazing.

Access to the property is from a driveway located on the north side of Midway Road. The surrounding parcels are developed similarly with single family dwellings and accessory structures.

Water well, septic system and utilities for the single family dwelling are on-site.

B. Project Description:

The applicant is proposing to construct a 103' monopine (stealth telecommunications facility) behind the single family residence and animal shelter. The monopine would be located in the eastern half of a 50' x 50' (2500sf) fenced telecommunications equipment compound.

Monopine:

Verizon is proposing to mount nine panel antennas and associated equipment at the 90' centerline of the monopine. All antennas and pole mounted equipment will be painted a non-reflective flat green,

while the monopole will be painted a non-reflective flat brown. The pole is designed to resemble a pine tree with artificial limbs extending beyond the antennas mounted on the pole. Verizon will install green needle socks on all proposed panel antennas and remote radio units to blend in with the branches.

Equipment Compound:

The compound will accommodate the following equipment: radio cabinets, telco cabinet, a rack mounted MUX cabinet and appropriate electrical meters and subpanels. Any cabling will be run within the interior of the pole ("trunk") to the antennas. A stand-by 30 KW generator will be located within the compound to serve as a power source during power outages. The applicant is proposing to wrap the generator with a Level 2 Acoustic Enclosure to reduce noise levels. Per the applicant, it is anticipated that the generator will be tested twice per month during daylight hours for 15 minute durations.

The project application proposed that the equipment compound would be surrounded by a 6' chain link fence with brown privacy slats.

Access and utilities:

The applicant is proposing a new 15' wide gravel driveway within a 20' utility easement off the existing driveway entrance from Midway Road. The gravel access road would maintain a turnout to meet Fire Department requirements. Power and land-based telecommunications service will be provided from a nearby utility pole located near the parcel. All utilities will be run underground to the equipment compound.

C. Environmental Determination:

A Mitigated Negative Declaration was prepared and circulated for review. The public comment review period ended on February 10, 2016. The environmental review indicated that the Aesthetics of the project had the potential for significant impacts which were reduced to less than significant impacts with the addition of mitigation measures that were incorporated into the project. The mitigation measures include lowering the start of the branches on the monopole to 20' on the pole and adding landscaping around the chain-link fenced equipment compound to reduce visibility to neighboring property owners.

Since publishing the Mitigated Negative Declaration, staff is proposing to delete Aesthetics-Mitigation Measure 2 and substitute another Mitigation Measure:

Previous Mitigation Measure

"The equipment compound shall be screened by vegetation to reduce visibility of chain-link fence from neighboring properties. A landscape plan, which includes methods of irrigation and maintenance, shall be submitted and approved by the Planning Division prior to issuance of building permit."

Proposed Mitigation Measure

"The equipment compound shall be surrounded by a 6' tall composite wall painted dark brown to reduce visibility of the ground equipment from neighboring properties."

The California Environmental Quality Act (CEQA) Guidelines, Section 15074.1 "Substitution of Mitigation Measures in a Proposed Mitigated Negative Declaration", describes the process for lead agencies when deleting and substituting mitigation measures. Section 15074.1(b)(1,2) of the Guidelines requires the lead agency to hold a public hearing on the substitution matter and requires the lead agency to adopt a finding that the new measure is equivalent to or more effective than the original measure.

Staff believes the dark brown solid wall will further reduce the visibility of the equipment in the compound better than landscaping around the chain link fence. Also, with no landscaping requirement there would be no need for irrigation water which is a benefit to the environment during extended

period of drought. Per Section 15074.1(b)(2), Staff recommends that the proposed substitute mitigation measure for a 6' composite wall painted a dark brown would be equivalent to or more effective in screening the ground equipment, than the previous mitigation measure which required landscaping around the chain link fence.

Other conditions of approval for wireless communications facilities designed as a monopine have been included in this project. These conditions of approval will ensure the monopine design is maintained in appearance.

During the public review period, one letter was received from the Central Valley Regional Water Quality Control Board (RWQCB) listing types of water permits that may or may not be required for the project. The letter was reviewed by Solano County Public Works and Engineering and it was determined that the construction of the telecommunications facility does not meet the requirements for any of the water permits listed in the RWQCB letter.

D. General Plan Consistency:

The proposed project would occur on land designated Rural Residential per the Solano County General Plan.

E. Zoning Consistency:

The site is located on land zoned Rural Residential (RR5). This designation allows new wireless telecommunications facilities subject to approval of a Conditional Use Permit by the Planning Commission.

F. Alternatives Analysis:

Per the Zoning Regulations, an alternative analysis is required to be prepared by the applicant whenever a wireless facility requires Planning Commission review (Sec.28-81(F)). The alternative analysis shall address co-location potential at existing wireless communication facilities within the unincorporated County or City; lower more closely spaced wireless communication facilities and mounting of antennas on any existing non-residential structures.

The alternatives analysis submitted by the applicant stated that there were no suitable sites available for co-location that met Verizon's coverage objectives. The Verizon search area for this telecommunications facility area was limited due to the Scenic Highway designations of Interstate 80 and Interstate 505 as well as the Vacaville-Dixon Greenbelt located near Interstate 80 and Midway Road.

There is a PG&E transmission line with several towers located in the Verizon search area. Per the study, the PG&E towers were considered for possible co-location by Verizon; however, after radio frequency studies were conducted by a Radio Frequency Engineer, it was determined that adding Verizon antennas to the PG&E towers did not meet the coverage objectives.

Verizon representatives also contacted other property owners in the search area for possible lease agreements but there was either no response by the property owners or lease negotiations were not successful.

G. Radio-Frequency Exposure Review:

As part of the application requirements for a new wireless facility, Zoning Regulations require the applicant to submit a radio-frequency (RF) study for the proposed facility. The report must show that radio-frequency (RF) emissions from the facility will meet current Federal Communications Commission (FCC) adopted exposure standards.

A radio frequency (RF) study was conducted by Hammett & Edison, Inc. which evaluated the RF exposure level of the proposed facility with Verizon antennas and equipment configuration. The study concluded that the proposed Verizon equipment will comply with FCC guidelines limiting public exposure to RF energy.

Staff is requiring that if other cell carriers co-locate on the monopine, that the carrier submit a radio-frequency exposure study for not only their additional antennas/equipment but also include the antennas/equipment currently located on the monopine.

H. Noise Assessment:

The standards set forth by the Solano County General Plan for maximum noise produced by a land use in the Residential areas is 70 dB during the day and 65 dB at night. Section 28.70.10 of the Land Use Regulations of the Solano County Zoning Regulations limits any land uses to operate at a maximum of 65 dB Ldn. Section 28.81(D)(10) of the Solano County Zoning Regulations requires wireless communication facilities located within or adjacent to a rural residential districts, to limit noise to 50 dB Ldn at all property lines of the project parcel.

An Environmental Noise Analysis was conducted by Bollard Acoustical Consultants, Inc. (November 23, 2015) and concluded that in order to meet these standards, additional noise reducing methods were recommended. The noise reducing method recommended included a form fitting Level 2 Acoustic wrap covering the back-up emergency generator.

Staff is requiring that future carriers that co-locate on the monopine to submit a noise analysis study to ensure that any additional ground equipment does not exceed the standards set forth by the Solano County General Plan and Zoning Regulations.

I. Development Review Committee:

As part of the project review process, the application is reviewed by various divisions within the Department of Resource Management:

Environmental Health Division

The Environmental Health Division responded that the applicant will need to contact the Hazardous Materials Section of the Environmental Health Division to verify whether or not a hazardous materials business plan is needed for the site. This requirement is listed as a condition of approval below.

Public Works Engineering Division

The Public Works Engineering Division reviewed the project and will be requiring the applicant to construct the proposed access driveway to meet the Solano County Road Improvement Standards. The applicant will need to obtain an encroachment permit from Solano County for any work performed within the County right-of-way. Also, the applicant may require a grading permit during construction of the access driveway and site development. These comments are included in the conditions listed below.

Building Division

The Building Division reviewed the project and commented that the applicant will need to apply for a building permit prior to start of construction. A condition of approval requiring a building permit is

included below.

J. Outside Agency Review:

City of Vacaville

Initial comments received from the City of Vacaville requested additional information in regards to the alternative analysis and asked if the height of tower was compatible with the Airport Land Use Compatibility zone. The applicant submitted a more detailed alternatives analysis which was incorporated within the Negative Declaration and the site is not located within an area of influence for height limits with regard to airport land use. On January 26, 2016, the City of Vacaville sent an email concluding that they had no official comments on the proposed project.

Solano Irrigation District (SID)

The project site is located within the Solano Irrigation District boundaries. SID commented that the proposed telecommunications site will not have any impact to the District's facilities.

Dixon Fire District

Dixon Fire District reviewed the project and stated no additional information was required.

FINDINGS:

- 1. The establishment, maintenance, or operation of the proposed use is in conformity with the County General Plan with regard to traffic circulations, population densities and distribution, and other aspects of the General Plan.**

The operation and maintenance of a wireless communication facility is consistent with the goals, objectives, and policies of the Solano County General Plan, including but not limited to the Land Use, Resources, and Public Facilities and Service Chapters.

- 2. Adequate utilities, access roads, drainage and other necessary facilities have been or are being provided.**

Access to the site is from an existing driveway off Midway Road. The site has existing electrical power. No domestic water or septic system is required for the unmanned facility.

- 3. The subject use will not, under the circumstances of the particular case, constitute a nuisance or be detrimental to the health, safety, peace, morals, comfort or general welfare of persons residing or working in or passing through the neighborhood of such proposed use, or be detrimental or injurious to property and improvements in the neighborhood or to the general welfare of the County.**

The Solano County Department Review Committee has reviewed the project application and determined that the project should not present a detrimental or injurious impact on surrounding properties.

ADDITIONAL FINDINGS

4. The proposed facility complies with all applicable sub-sections of Wireless Communications Facilities, Sec. 28.81.
5. The RF Environmental Evaluation Report for the facility shows that the cumulative radio-frequency energy emitted by the facility and any near-by facilities will be consistent with FCC regulations.
6. The facility blends in with its existing environment and will not have significant visual impacts.

7. The addition of the wireless facility will not have a significant incremental impact on the environment. A Mitigated Negative Declaration was prepared and circulated for the project which found no significant impacts. Per Section 15074.1(b)(2), the proposed substitute mitigation measure requiring a 6' composite wall painted a dark brown would be equivalent to or more effective in screening the ground equipment, than the previous mitigation measure which included landscaping around a chain link fence.

RECOMMENDED CONDITIONS OF APPROVAL:

General

1. Approval is hereby granted to Verizon Wireless to install a 103 foot tall wireless facility (a monopine) with a 2500 sq. ft. lease area located at 5093 Midway Road. This approval includes the installation of Verizon's nine panel antennas at the 90' centerline of the monopine and the ground equipment within the 2500 sq. ft. equipment compound. The proposed use shall be established in accord with the application and plans for U-15-06, submitted October 15, 2015 for Verizon Wireless, drawn by MST Architects, and as approved by the Solano County Planning Commission.
2. The 2500 sq. ft. lease area shall be fenced with a 6' chain link fence with brown vinyl privacy slats. The emergency back-up generator shall be wrapped with a Level 2 form fitting noise reducing wrap.
3. Prior to issuance of a building permit, the permittee shall submit design specifications and samples regarding the branch and needle spacing, densities, and paint samples to the Planning Division for review and approval.
 - a. High density foliage shall be provided as needed to fully cover all antenna arrays and other pole mounted equipment. The antenna arrays shall not be the dominant visual feature, and painted a flat color (green) to match the faux needles and covered with antennas socks to blend in with the tree branches.
 - b. Branches shall have varied angles and lengths as needed to resemble the appearance of a natural tree.
 - c. The support pole shall be designed to appear like a natural tree trunk and painted a flat brown.
4. Mitigation Measures that address the aesthetics of the project:
 - a. Mitigation Measure 1 - To reduce the visibility of the trunk of the monopine, the branches of the monopine shall begin at 20'.
 - b. Mitigation Measure 2 - The equipment compound shall be surrounded by a 6' composite wall, painted a dark brown to reduce the visibility of the equipment within the compound from neighboring properties.
5. Regular maintenance shall be performed on the monopine including but not limited to replacing fading branches and antenna socks as well as repainting the pole as necessary. Regular maintenance shall be performed on the composite wall including necessary replacement and painting as the wall ages.
6. Prior to planning approval, all future wireless providers shall submit a radio frequency emissions report which examines both the existing antenna configuration(s) and the carrier's proposed antennas to ensure that the site will continue to meet the Federal Communication Commission standards.

7. Prior to building permit approval, all future wireless providers installing equipment shelter/cabinets and stand-by generators shall be required to submit a noise assessment study which meets the standards of the Solano County General Plan and the Solano County Zoning Regulations.
8. All onsite transmission lines leading to the wireless communication lease site shall be located underground.
9. Upon termination or expiration of the subject use permit, the proposed wireless communication infrastructure shall be removed from the site. All obsolete or unused facilities, including concrete pads, shall be removed within 12 months of cessation of operations at the site and the area returned to natural conditions.
10. The use permit approved on March 17, 2016, is granted for a fixed term of ten years and shall expire on March 17, 2026.

Building Division

11. Prior to any construction or improvements taking place, a building permit application shall first be submitted as per Section 105 of the 2013 California Building Code or the latest edition of the codes enforced at the time of building permit application. "Any owner or authorized agent who intends to construct, enlarge, alter, repair, move, demolish, or change the occupancy of a building or structure, or to erect, install, enlarge, alter, repair, remove, convert or replace any electrical, gas, mechanical or plumbing system, the installation of which is regulated by this code, or to cause any such work to be done, shall first make application to the building official and obtain the required permit."

Environmental Health Division

12. The maximum potential volume of hazardous materials stored at the facility shall be calculated and if required, the facility shall submit a hazardous materials business plan to the Solano County Hazardous Materials Section.

Public Works Engineering

13. If any work to the driveway entrance on Midway Road is required, the permittee shall apply for, secure and abide by the terms of an encroachment permit from Solano County Public Works Engineering.
14. The permittee shall construct the proposed access driveway to Solano County Road Improvement Standards, section 1-3.1. The driveway shall be constructed of 0.67 feet of compacted class II aggregate base. The width of the road shall be 12 feet, with 60 foot long by 8 foot wide turnouts every 300 feet (for roads over 300 feet long), plus 2 foot graded shoulders, and shall have an unobstructed width of 20 feet. Plans for the driveway shall be prepared by a Civil Engineer, licensed in the State of California, and submitted to Solano County Public Works Engineering for review and approval.
15. Should the project create a disturbed area in excess of 5000 square feet, the permittee shall apply for, secure and abide by the conditions of a grading permit for the proposed access road and communications facility improvements. Grading Plans shall be prepared by a Civil Engineer, licensed in the State of California.

ATTACHMENTS:

- A. Draft Resolution
- B. Project Location Map
- C. Project Plans - dated October 15, 2015
- D. Negative Declaration with attachments

SOLANO COUNTY PLANNING COMMISSION

RESOLUTION NO. XX

WHEREAS, the Solano County Planning Commission has considered Use Permit Application No. U-15-06 of **Verizon Wireless** for a 103' new wireless telecommunications facility to be located at 5093 Midway Road, Vacaville, in an "RR-5" Rural Residential Zoning District, APN 0106-220-560, and;

WHEREAS, the Commission has reviewed the report of the Department of Resource Management and heard testimony relative to the subject application at the duly noticed public hearing held on March 17, 2016, and;

WHEREAS, after due consideration, the Planning Commission has made the following findings in regard to said proposal:

1. **The establishment, maintenance, or operation of the proposed use is in conformity with the County General Plan with regard to traffic circulations, population densities and distribution, and other aspects of the General Plan.**

The operation and maintenance of a wireless communication facility is consistent with the goals, objectives, and policies of the Solano County General Plan, including but not limited to the Land Use, Resources, and Public Facilities and Service Chapters.

2. **Adequate utilities, access roads, drainage and other necessary facilities have been or are being provided.**

Access to the site is from an existing driveway off Midway Road. The site has existing electrical power. No domestic water or septic system is required for the unmanned facility.

3. **The subject use will not, under the circumstances of the particular case, constitute a nuisance or be detrimental to the health, safety, peace, morals, comfort or general welfare of persons residing or working in or passing through the neighborhood of such proposed use, or be detrimental or injurious to property and improvements in the neighborhood or to the general welfare of the County.**

The Solano County Department Review Committee has reviewed the project application and determined that the project should not present a detrimental or injurious impact on surrounding properties.

4. The proposed facility complies with all applicable sub-sections of Wireless Communications Facilities, Sec. 28.81.
5. The RF Environmental Evaluation Report for the facility shows that the cumulative radio-frequency energy emitted by the facility and any near-by facilities will be consistent with FCC regulations.
6. The facility blends in with its existing environment and will not have significant visual impacts.
7. The addition of the wireless facility will not have a significant incremental impact on the environment. A Mitigated Negative Declaration was prepared and circulated for the project which found no significant impacts. Per Section 15074.1(b)(2), the proposed substitute

mitigation measure requiring a 6' composite wall painted a dark brown would be equivalent to or more effective in screening the ground equipment, than the previous mitigation measure which included landscaping around a chain link fence.

BE IT, THEREFORE, RESOLVED, that the Planning Commission of the County of Solano does hereby subject to the following recommended conditions of approval:

General

1. Approval is hereby granted to Verizon Wireless to install a 103 foot tall wireless facility (a monopine) with a 2500 sq. ft. lease area located at 5093 Midway Road. This approval includes the installation of Verizon's nine panel antennas at the 90' centerline of the monopine and the ground equipment within the 2500 sq. ft. equipment compound. The proposed use shall be established in accord with the application and plans for U-15-06, submitted October 15, 2015 for Verizon Wireless, drawn by MST Architects, and as approved by the Solano County Planning Commission.
2. The 2500 sq. ft. lease area shall be fenced with a 6' chain link fence with brown vinyl privacy slats. The emergency back-up generator shall be wrapped with a Level 2 form fitting noise reducing wrap.
3. Prior to issuance of a building permit, the permittee shall submit design specifications and samples regarding the branch and needle spacing, densities, and paint samples to the Planning Division for review and approval.
 - a. High density foliage shall be provided as needed to fully cover all antenna arrays and other pole mounted equipment. The antenna arrays shall not be the dominant visual feature, and painted a flat color (green) to match the faux needles and covered with antennas socks to blend in with the tree branches.
 - b. Branches shall have varied angles and lengths as needed to resemble the appearance of a natural tree.
 - c. The support pole shall be designed to appear like a natural tree trunk and painted a flat brown.
4. Mitigation Measures that address the aesthetics of the project:
 - a. Mitigation Measure 1 – To reduce the visibility of the trunk of the monopine, the branches of the monopine shall begin at 20'.
 - b. Mitigation Measure 2 – The equipment compound shall be surrounded by a 6' composite wall, painted a dark brown to reduce the visibility of the equipment within the compound from neighboring properties.
5. Regular maintenance shall be performed on the monopine including but not limited to replacing fading branches and antenna socks as well as repainting the pole as necessary. Regular maintenance shall be performed on the composite wall including necessary replacement and painting as the wall ages.
6. Prior to planning approval, all future wireless providers shall submit a radio frequency emissions report which examines both the existing antenna configuration(s) and the carrier's

proposed antennas to ensure that the site will continue to meet the Federal Communication Commission standards.

7. Prior to building permit approval, all future wireless providers installing equipment shelter/cabinets and stand-by generators shall be required to submit a noise assessment study which meets the standards of the Solano County General Plan and the Solano County Zoning Regulations.
8. All onsite transmission lines leading to the wireless communication lease site shall be located underground.
9. Upon termination or expiration of the subject use permit, the proposed wireless communication infrastructure shall be removed from the site. All obsolete or unused facilities, including concrete pads, shall be removed within 12 months of cessation of operations at the site and the area returned to natural conditions.
10. The use permit approved on March 17, 2016, is granted for a fixed term of ten years and shall expire on March 17, 2026.

Building Division

11. Prior to any construction or improvements taking place, a building permit application shall first be submitted as per Section 105 of the 2013 California Building Code or the latest edition of the codes enforced at the time of building permit application. "Any owner or authorized agent who intends to construct, enlarge, alter, repair, move, demolish, or change the occupancy of a building or structure, or to erect, install, enlarge, alter, repair, remove, convert or replace any electrical, gas, mechanical or plumbing system, the installation of which is regulated by this code, or to cause any such work to be done, shall first make application to the building official and obtain the required permit."

Environmental Health Division

12. The maximum potential volume of hazardous materials stored at the facility shall be calculated and if required, the facility shall submit a hazardous materials business plan to the Solano County Hazardous Materials Section.

Public Works Engineering

13. If any work to the driveway entrance on Midway Road is required, the permittee shall apply for, secure and abide by the terms of an encroachment permit from Solano County Public Works Engineering.
14. The permittee shall construct the proposed access driveway to Solano County Road Improvement Standards, section 1-3.1. The driveway shall be constructed of 0.67 feet of compacted class II aggregate base. The width of the road shall be 12 feet, with 60 foot long by 8 foot wide turnouts every 300 feet (for roads over 300 feet long), plus 2 foot graded shoulders, and shall have an unobstructed width of 20 feet. Plans for the driveway shall be prepared by a Civil Engineer, licensed in the State of California, and submitted to Solano County Public Works Engineering for review and approval.
15. Should the project create a disturbed area in excess of 5000 square feet, the permittee shall apply for, secure and abide by the conditions of a grading permit for the proposed access

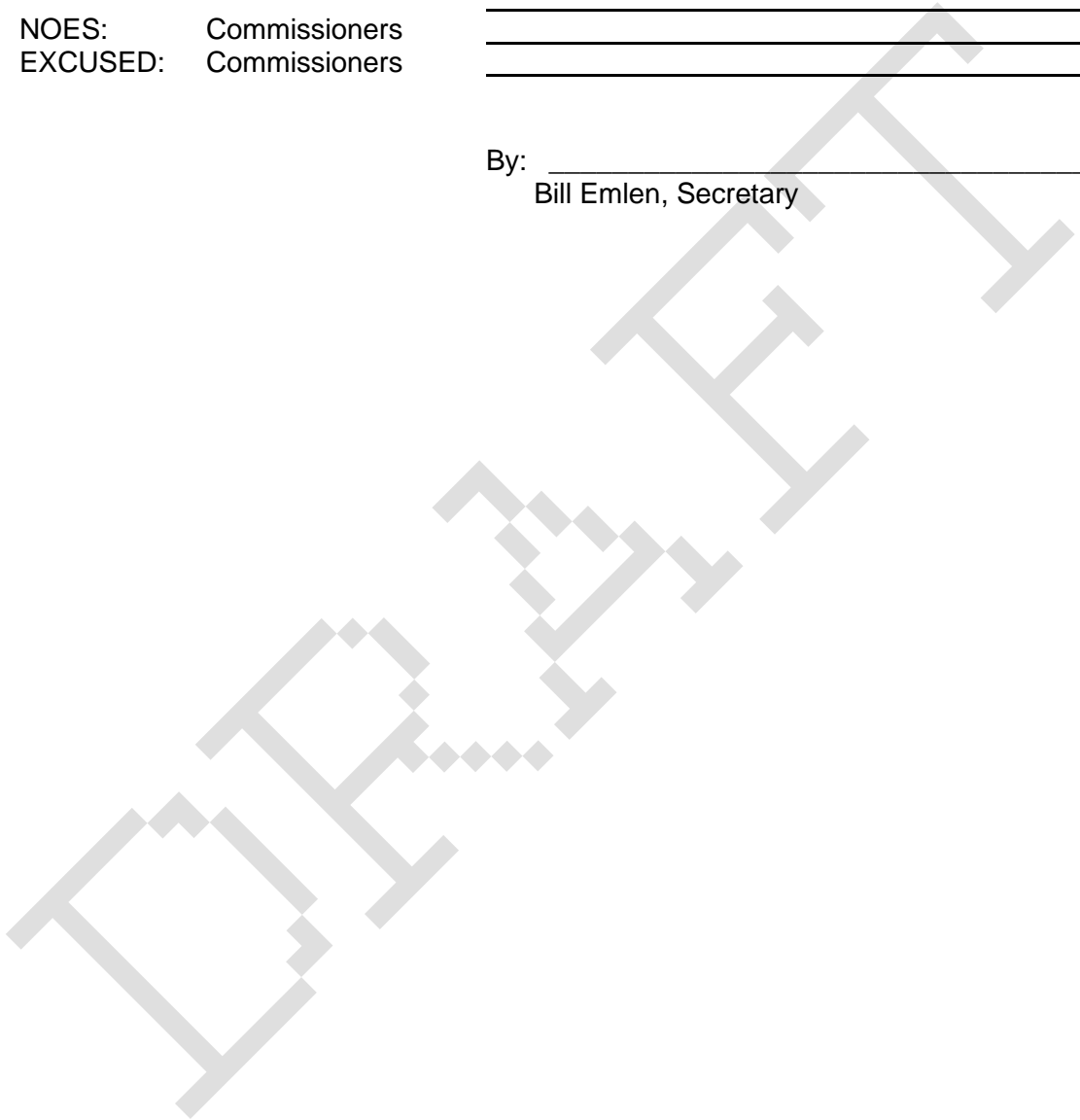
road and communications facility improvements. Grading Plans shall be prepared by a Civil Engineer, licensed in the State of California.

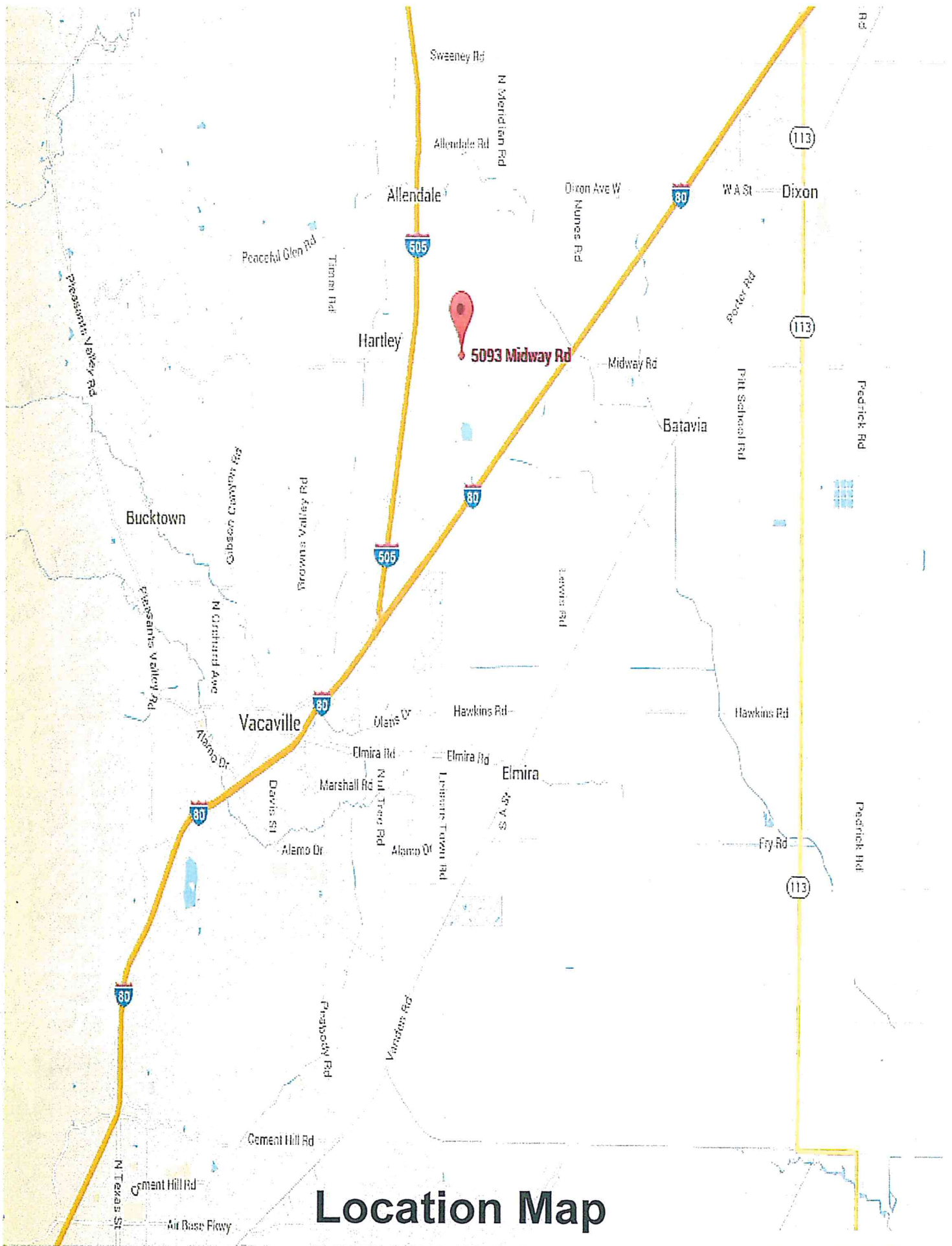
I hereby certify that the foregoing resolution was adopted at the regular meeting of the Solano County Planning Commission on March 17, 2016 by the following vote:

AYES:	Commissioners	_____

NOES:	Commissioners	_____
EXCUSED:	Commissioners	_____

By: _____
Bill Emlen, Secretary





Location Map

ZD DRAWING SIGN-OFF

DATE:	TIME:	%	CNC-PLEASE RETURN BY:
	SIGNATURE		DATE
SITE ACQUISITION:	_____		_____
PLANNING:	_____		_____
CONSTRUCTION:	_____		_____
MANAGEMENT:	_____		_____

	SIGNATURE	DATE
CONSTRUCTION:	_____	_____
REAL ESTATE:	_____	_____
RF ENGINEER:	_____	_____
EQUIPMENT ENGINEER:	_____	_____
HW ENG./TRANSPORT:	_____	_____

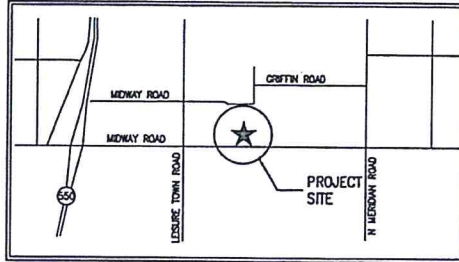
OTHER (IF APPLICABLE)	SIGNATURE	DATE
_____	_____	_____

verizon WIRELESS

2785 Mitchell Drive, Walnut Creek, CA 94598

HWY 80 MIDWAY

5093 MIDWAY ROAD
 VACAVILLE, CA 95688
 APN: 0106-220-560
 LOCATION #: 288201



LOCATION PLAN

PROJECT DIRECTORY

APPLICANT: VERIZON WIRELESS 2785 MITCHELL DRIVE WALNUT CREEK, CA 94598	LANDLORD: MARGARITO & MARIA CHAVEZ 5093 MIDWAY ROAD VACAVILLE, CA 95688
ARCHITECT: MANUEL S. TSHILAS MST ARCHITECTS, INC. 1520 RIVER PARK DRIVE SACRAMENTO, CA 95818 916-567-9630 manuel@mstarchitects.com	CONSTRUCTION MANAGER: CHAD ANJANAN COMPLETE WIRELESS CONSULTING, INC. 2009 V STREET SACRAMENTO, CA 95818 916-784-9339 chad@completewireless.net

PROJECT SUMMARY

ASSESSOR'S PARCEL NUMBER: 0106-220-560
 JURISDICTION: SOLANO COUNTY
 OCCUPANCY: S-2 (UNMANNED TELECOMMUNICATIONS FACILITY) U (TOWER)
 TYPE OF CONSTRUCTION: V-B
 ZONING: RRS

CODE COMPLIANCE

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:

2013 CALIFORNIA BUILDING STANDARDS CODE, TITLE 24, CALIFORNIA CODE OF REGULATIONS INCLUDING SUPPLEMENTS EFFECTIVE JULY 1, 2015

- PART 1 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE
- PART 2 CALIFORNIA BUILDING CODE
- PART 2.5 CALIFORNIA RESIDENTIAL BUILDING CODE
- PART 3 CALIFORNIA ELECTRICAL CODE
- PART 4 CALIFORNIA MECHANICAL CODE
- PART 5 CALIFORNIA PLUMBING CODE
- PART 6 CALIFORNIA ENERGY CODE
- PART 8 CALIFORNIA HISTORICAL BUILDING CODE
- PART 9 CALIFORNIA FIRE CODE
- PART 10 CALIFORNIA EXISTING BUILDING CODE
- PART 11 CALIFORNIA GREEN BUILDING STANDARDS CODE
- PART 12 CALIFORNIA REFERENCE STANDARDS CODE

LOCAL COUNTY OR CITY ORDINANCES

ACCESSIBILITY REQUIREMENTS: THIS FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. ACCESSIBILITY NOT REQUIRED IN ACCORDANCE WITH THE 2013 CBC 11B-203.5, AND 11B-202.4 EXCEPTION 7.

DIRECTIONS

- FROM VERIZON OFFICE @ 2785 MITCHELL DRIVE, WALNUT CREEK, CA 94598:
1. HEAD NORTH ON LOCUST ST TOWARD OLYMPIC BLVD
 2. TURN LEFT ONTO OLYMPIC BLVD
 3. TURN RIGHT TO MERGE ONTO I-680 N TOWARD SACRAMENTO
 4. MERGE ONTO I-680 N
 5. KEEP LEFT AT THE FORK TO STAY ON I-680 N
 6. PARTIAL TOLL ROAD
 7. KEEP LEFT AT THE FORK TO CONTINUE ON I-680
 8. PARTIAL TOLL ROAD
 9. USE ANY LANE TO TAKE EXIT 71A TOWARD I-80 E/SACRAMENTO
 10. MERGE ONTO I-80 E
 11. USE THE RIGHT 2 LANES TO TAKE EXIT 56 FOR I-505 N TOWARD WINTERS/REDDING
 12. KEEP LEFT TO CONTINUE TOWARD I-505 N
 13. CONTINUE ONTO I-505 N
 14. TAKE EXIT 3 FOR MIDWAY RD
 15. TURN RIGHT ONTO MIDWAY RD
- DESTINATION WILL BE ON THE LEFT

INDEX OF DRAWINGS

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| 3. A1.1 | OVERALL SITE PLAN |
| 4. A2.1 | EQUIPMENT LAYOUT PLAN |
| 5. A2.2 | ANTENNA LAYOUT PLAN |
| 6. A3.1 | PROJECT ELEVATIONS |

PROJECT DESCRIPTION

- PROPOSED VERIZON WIRELESS UNMANNED TELECOMMUNICATIONS FACILITY INCLUDING:
- A 50'-0" x 50'-0" LEASE AREA.
 - A FENCE @ LEASE AREA PERIMETER.
 - OUTDOOR EQUIPMENT CABINETS
 - POWER & TELCO UTILITIES BROUGHT TO FACILITY.
 - A STANDBY GENERATOR.
 - A CABLE ICE BRIDGE.
 - ANTENNAS W/ASSOCIATED TOWER MOUNTED EQUIPMENT MOUNTED ON A PROPOSED MONOPOLE.

PROJECT MILESTONES

08/03/2015	90% ZONING DOCUMENTS
09/09/2015	100% ZONING DOCUMENTS
XX/XX/XXXX	90% CONSTRUCTION DOCUMENTS
XX/XX/XXXX	100% CONSTRUCTION DOCUMENTS

FILE COPY

U-15-06

EXHIBIT C

MST ARCHITECTS
 1520 RIVER PARK DRIVE, SACRAMENTO, CA 95818
 916-567-9630
 www.mstarchitects.com

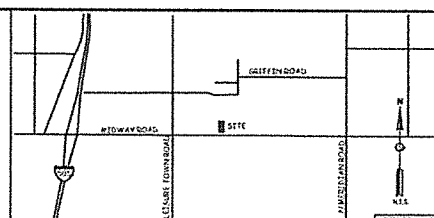
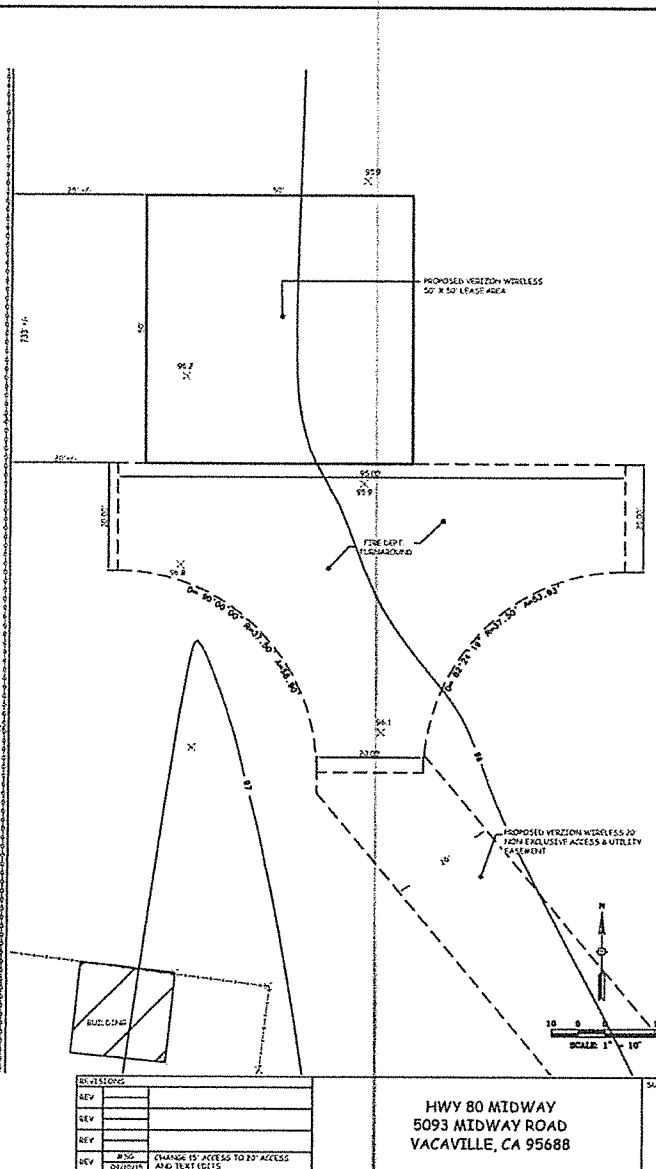
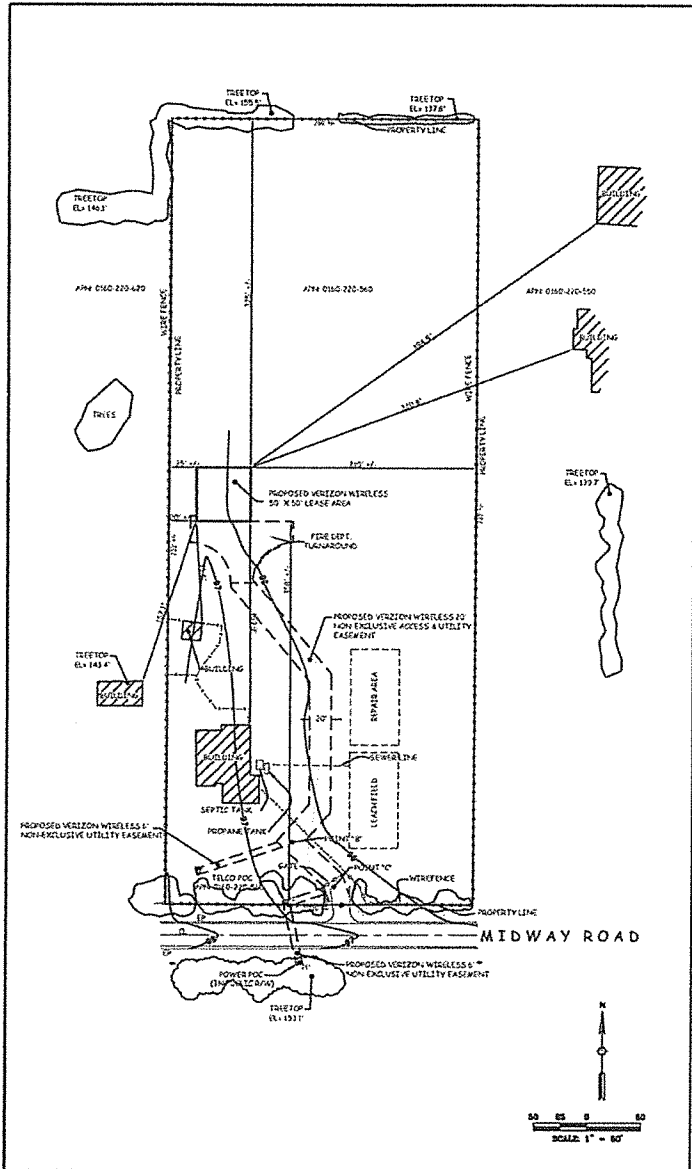
HWY 80 MIDWAY
 5093 MIDWAY ROAD
 VACAVILLE, CA 95688

SHEET TITLE: TITLE SHEET, LOCATION PLAN, PROJECT DATA

Revisions:

FRANCHISE #11499
 Drawn By: LS
 Checked By: SR
 Scale: AS SHOWN
 Date: 09/23/15
 Job No. 142199

T1.1



These drawings and accompanying specifications are the property of Gonzales Surveys, Inc. and their use and publication shall be restricted to the original plan and copies for which they are prepared. These drawings are not to be used for any purpose other than that for which they were prepared. Any reproduction or use of these drawings without the written consent of Gonzales Surveys, Inc. is prohibited. The user assumes all responsibility for any errors or omissions in these drawings and specifications. The user shall indemnify and hold Gonzales Surveys, Inc. harmless from and against all claims, damages, and expenses, including reasonable attorneys' fees, arising out of or from the use of these drawings and specifications.

The boundary shown is based on found monuments and records information. This is not a boundary survey. This is a special order topographic map with property lines and easements being a graphic depiction based on information gathered from various sources of records and available monuments on the ground. During the field survey, the easements were researched or placed. Property lines and lines of title were not investigated nor surveyed except as shown on this plan. No property monuments were set.

Date of Survey: 07/26/15
 Conducted by or under the direction of: Bryan Gonzalez P.L.S. 6582
 Located in the County of Solano, State of California
 Boundary shown are based upon monuments found and record information
 This is not a Boundary Survey
 Easements shown are based upon N.A.S. 89 Certificates
 Contour Interval: 1'
 Contractor is responsible to verify these areas prior to construction.
 Assessor's Parcel Number (APN): 0160-220-360
 Current Zoning: R2
 Owner: Morgan & Maria Chavez
 64574 (Map) Road
 Dixon, CA 95620

Boundary Survey: 151
 6440 West 9th Street
 San Luis Obispo, CA 93421
 Phone: (805) 961-0151

Version Wireless
 255 Equipment A S A C Survey Fee
 Survey Fee: \$1000
 Project Site Location: 5093 Midway Road
 Yuba City, CA 95999

Date of Construction: 07/26/15
 Equipment/Manufacturer used: not recorded
 Tower ID: 2012 processed with Tower ID System
 Type of Construction: Free Standing
 Earthquake Construction: as per owner
 Location: N 34°23'14" E
 Length: 101.875' ±
 (NAD 83)
 Structure at base of tower: 10.0' ± A.S.S.

Certification: I, the undersigned, do hereby certify that the above is based on a field survey done under my supervision and that the accuracy of these statements meet or exceed the standards set forth in the P.S. A.S.C. information sheet #15-03, and that these are true and accurate to the best of my knowledge and belief.

Surveyor's License: CA P.L.S. 6582
 Title: Professional Surveyor
 License Area: California
 All land and property returned to the unimpaired County of Solano, State of California, before this is filed as follows:

A portion of Parcel A is shown on the "Final Map of the 'Morgan & Maria Chavez' Project" filed in the Office of the Assessor of the County of Solano on August 21, 1995, as Book 11 of Parcel Map File 15, more particularly described as follows:

Commencing at a point on the West line of said Parcel A, a line which the Southern corner of said Parcel A bears S 11°11'11" E 60.77 feet, thence bearing and distance S 11°11'11" E 60.77 feet to the True Point of Beginning, thence North 90°00'00" East 12.00 feet, thence South 89°00'00" East 10.00 feet, thence South 89°00'00" East 10.00 feet, thence North 89°00'00" East 10.00 feet to the said True Point of Beginning, containing 2.00 acres of land.

Together with a State of California Easement to Support and Uphold the Project described as follows:

Commencing at the Southeast corner of the above described lot and area and the True Point of Beginning, thence North 90°00'00" East 10.00 feet, thence South 89°00'00" East 10.00 feet to a point located on the West line of said Parcel A, a line which the Southern corner of said Parcel A bears S 11°11'11" E 60.77 feet, thence bearing and distance S 11°11'11" E 60.77 feet to the True Point of Beginning, thence North 90°00'00" East 12.00 feet, thence South 89°00'00" East 10.00 feet, thence South 89°00'00" East 10.00 feet, thence North 89°00'00" East 10.00 feet to the said True Point of Beginning, containing 2.00 acres of land.

Together with a State of California Easement to Support and Uphold the Project described as follows:

Beginning at said "Point A", thence South 89°00'00" East 12.00 feet, thence North 89°00'00" East 12.00 feet, thence South 89°00'00" East 10.00 feet, thence South 89°00'00" East 10.00 feet, thence North 89°00'00" East 10.00 feet to a point located on the West line of said Parcel A, a line which the Southern corner of said Parcel A bears S 11°11'11" E 60.77 feet, thence bearing and distance S 11°11'11" E 60.77 feet to the True Point of Beginning, thence North 90°00'00" East 12.00 feet, thence South 89°00'00" East 10.00 feet, thence South 89°00'00" East 10.00 feet, thence North 89°00'00" East 10.00 feet to the said True Point of Beginning, containing 2.00 acres of land.

Together with a State of California Easement to Support and Uphold the Project described as follows:

Commencing at said "Point B", thence South 89°00'00" East 12.00 feet, thence North 89°00'00" East 12.00 feet, thence South 89°00'00" East 10.00 feet, thence South 89°00'00" East 10.00 feet, thence North 89°00'00" East 10.00 feet to a point located on the West line of said Parcel A, a line which the Southern corner of said Parcel A bears S 11°11'11" E 60.77 feet, thence bearing and distance S 11°11'11" E 60.77 feet to the True Point of Beginning, thence North 90°00'00" East 12.00 feet, thence South 89°00'00" East 10.00 feet, thence South 89°00'00" East 10.00 feet, thence North 89°00'00" East 10.00 feet to the said True Point of Beginning, containing 2.00 acres of land.

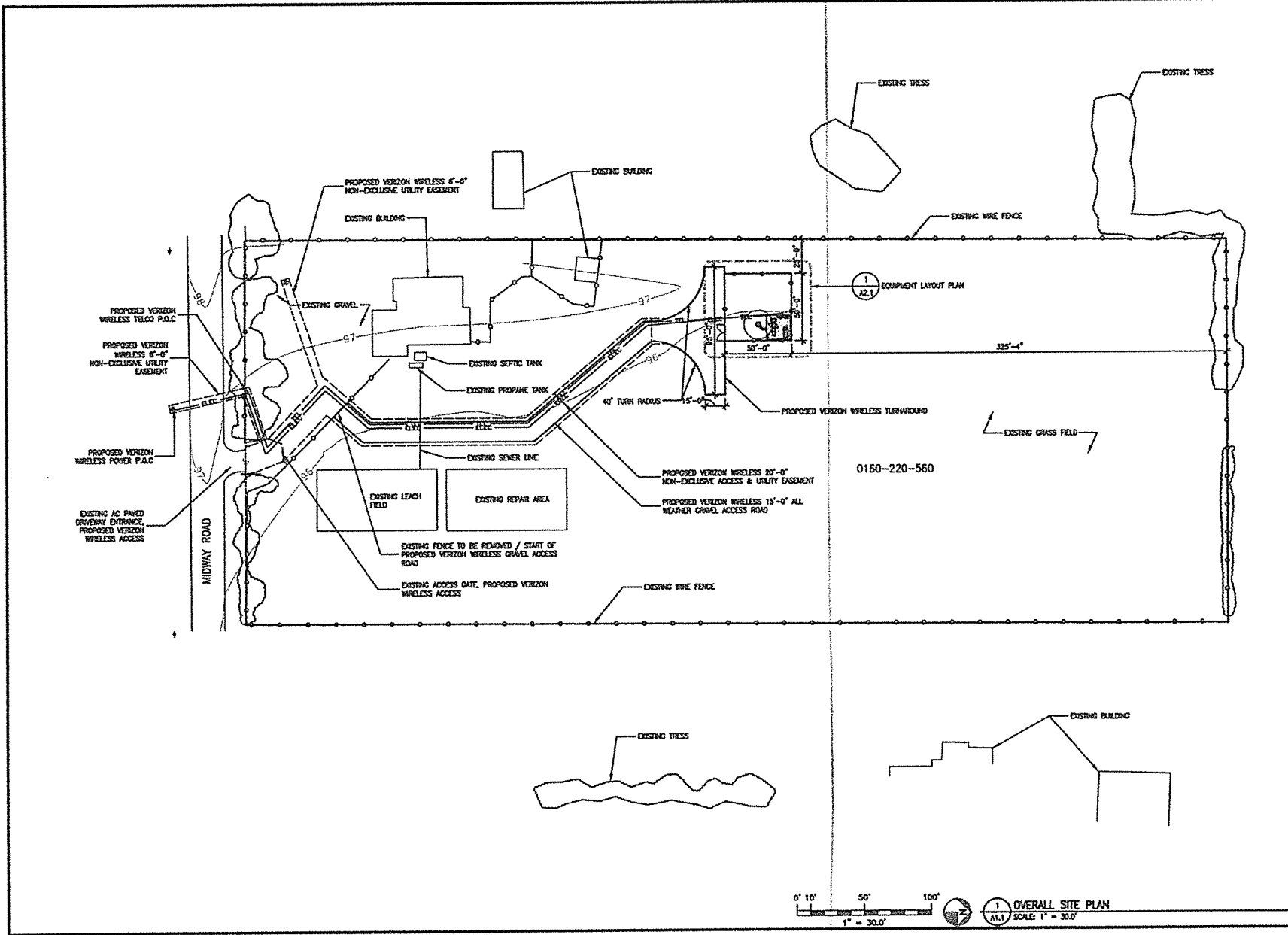
REVISIONS	
REV	
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REV	
REV	CHANGE 15' ACCESS TO 20' ACCESS AND TEXT D115

HWY 80 MIDWAY
 5093 MIDWAY ROAD
 VACAVILLE, CA 95688

DATE: 07/26/15 SHEET: C-1

Gonzales Surveys, Inc. 620 WEST 6TH STREET
 SOLOMA, CA 95673 (916) 704-5952 www.gonzalesurveys.com

CS1462 DRAWN BY: ESB CHECKED BY: AJB



MST ARCHITECTS
 5093 MIDWAY ROAD
 VACAVILLE, CA 95688
 707.449.1111
 www.mstarchitects.com

COMPLETES
 PROJECT COMPLETED

HWY 80 MIDWAY ROAD
 5093 MIDWAY ROAD
 VACAVILLE, CA 95688

verizon WIRELESS

SHEET TITLE: **OVERALL SITE PLAN**

DATE: 06/24/13

Scale: as shown

DATE: 06/24/13

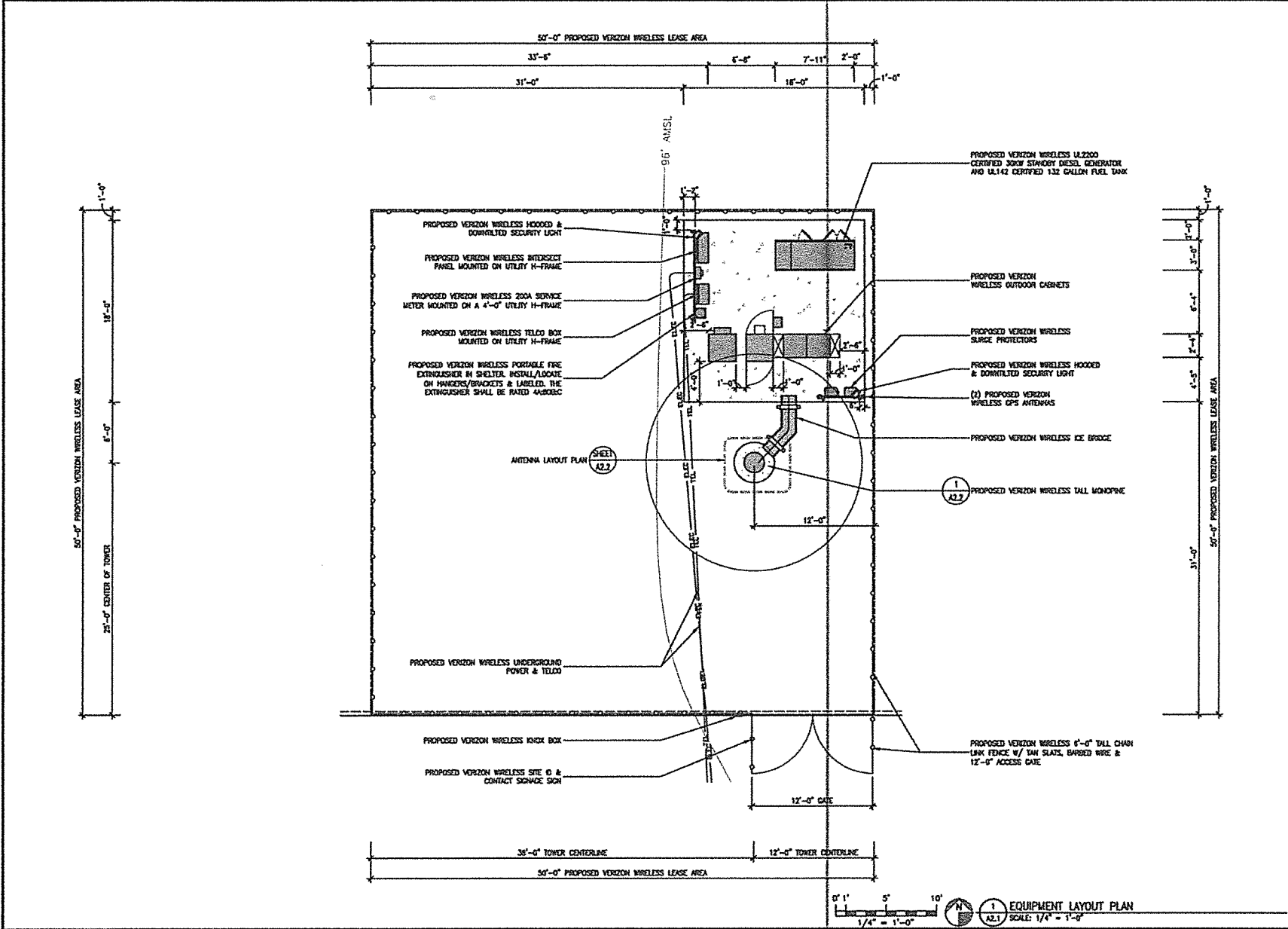
Job No. 130700

A1.1

0' 10' 50' 100'

1" = 30.0'

OVERALL SITE PLAN
 A1.1 SCALE: 1" = 30.0'



MST ARCHITECTS
 REGISTERED ARCHITECTS
 11141 14th St.
 San Diego, CA 92121
 www.mstarchitects.com

COMPLETE
 WIRELESS CONSULTING

HWY 80 MIDWAY
 5063 MIDWAY ROAD
 VACAVILLE, CA 95688

verizon WIRELESS

SHEET TITLE: EQUIPMENT LAYOUT PLAN

Not used unless noted by the architect.

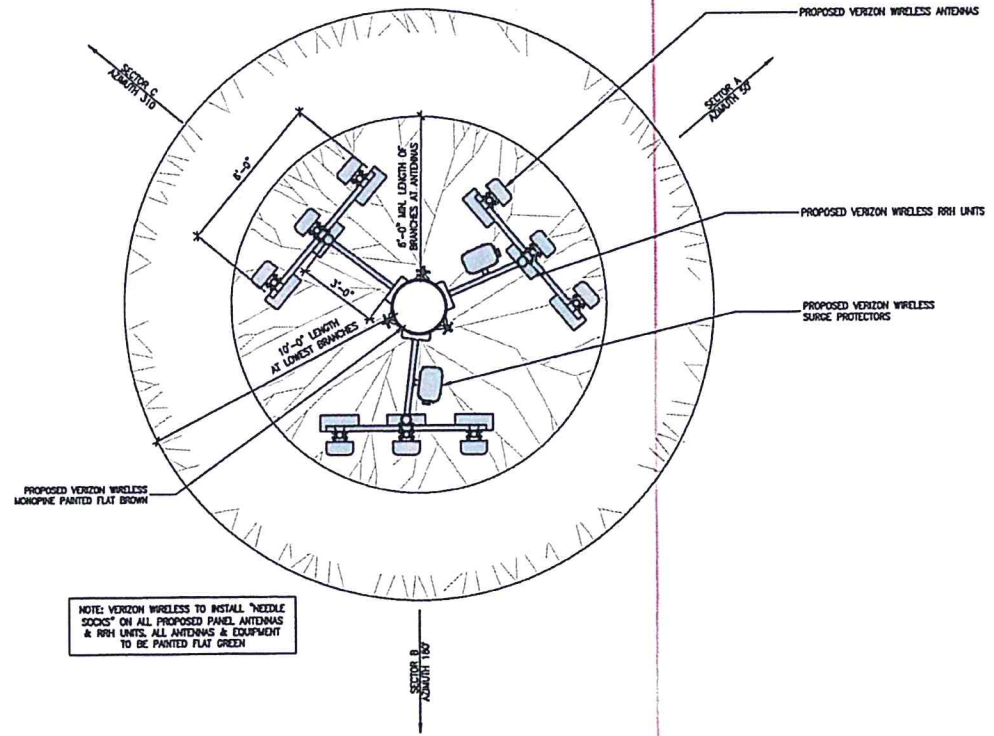
Revisions:
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Δ
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Plotted by: JTB
Drawn by: JTB
Checked by: JTB
Scale: as noted
Date: 05/20/24

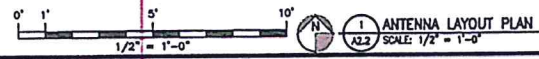
Job No. 241218

A2.1

EQUIPMENT SCHEDULE					
EQUIPMENT	DESCRIPTION	QUANTITY			TOTAL
		SECTOR A	SECTOR B	SECTOR C	
ANTENNA	TO BE DETERMINED	3	3	3	9
RRH	RRUS12 W/A2 OR EQUIVALENT	4	4	4	12
TMA OR DIPLEXER	N/A	0	0	0	0
SURGE PROTECTOR/HYBRID	RAYCAP DC3315 / HYBRID TRUNK CABLE	2/3			2/3
COAXIAL CABLE	N/A	0	0	0	0
RET CABLE	N/A	0			0



NOTE: VERIZON WIRELESS TO INSTALL "NEEDLE SOCKS" ON ALL PROPOSED PANEL ANTENNAS & RRH UNITS. ALL ANTENNAS & EQUIPMENT TO BE PAINTED FLAT GREEN



MST ARCHITECTS
 COMPLETE
 1111 Olive St. Suite 1000, Sacramento, CA 95811
 www.mstarchitects.com

VERIZON WIRELESS
 5093 MIDWAY ROAD
 MCANVILLE, CA 95688
 ANTENNA LAYOUT PLAN

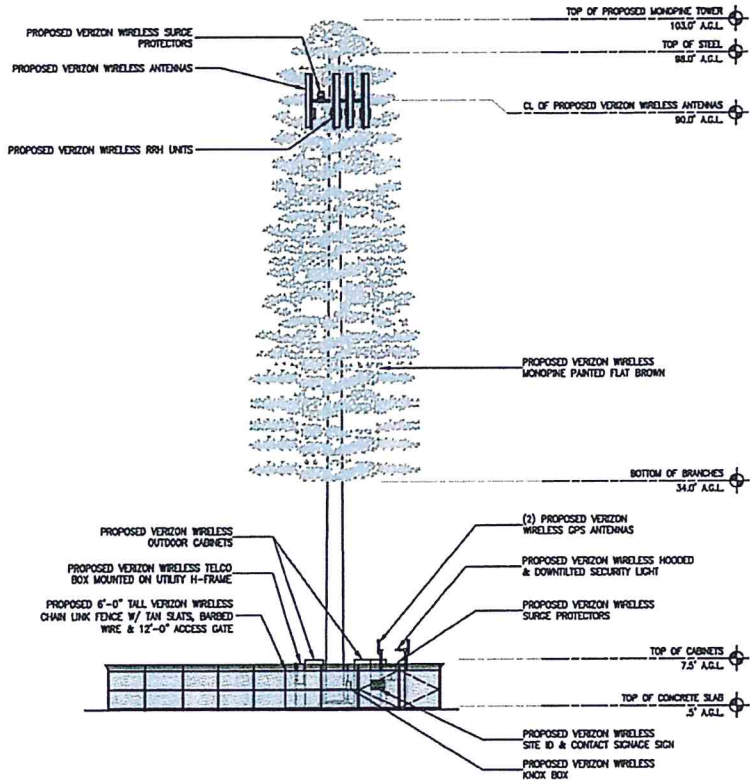
Revisions:
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 Δ 2
 Δ 3
 Δ 4

Drawn By: JZ
 Checked By: JZ
 Scale: as shown
 Date: 09/15/15

Job No. 1511110
A2.2

NOTE: VERIZON WIRELESS TO INSTALL "NEEDLE SOCKS" ON ALL PROPOSED PANEL ANTENNAS & RRH UNITS. ALL ANTENNAS & EQUIPMENT TO BE PAINTED FLAT GREEN

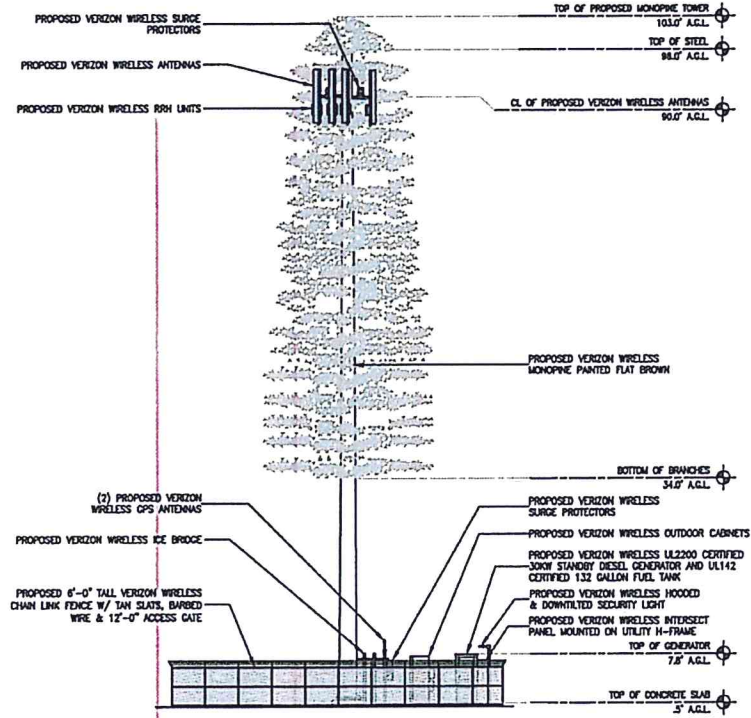
NOTE: BRANCHES SHOWN ARE FOR ILLUSTRATIVE PURPOSES ONLY. NOT TO SCALE



2 SOUTH ELEVATION
SCALE: 1/8" = 1'-0"

NOTE: VERIZON WIRELESS TO INSTALL "NEEDLE SOCKS" ON ALL PROPOSED PANEL ANTENNAS & RRH UNITS. ALL ANTENNAS & EQUIPMENT TO BE PAINTED FLAT GREEN

NOTE: BRANCHES SHOWN ARE FOR ILLUSTRATIVE PURPOSES ONLY. NOT TO SCALE



1 EAST ELEVATION
SCALE: 1/8" = 1'-0"

COMPLETE
PROJECT CONSULTANTS

MST ARCHITECTS
1111 N. 10th St., Suite 100
Tulsa, Oklahoma 74103
www.mstarchitects.com

Hwy. 80 MIDWAY
5093 MIDWAY ROAD
VERIZON WIRELESS
VACAVILLE, CA 95688

PROJECT ELEVATIONS

SHEET TITLE

Rev/Date:

Checked By:
Scale: as shown
Date: 05/15/15

Job No. 150105

A3.1

**MITIGATED NEGATIVE DECLARATION
OF THE
SOLANO COUNTY DEPARTMENT OF RESOURCE MANAGEMENT**

PROJECT TITLE:

Use Permit U-15-06 Verizon (Midway Road)

PROJECT DESCRIPTION AND LOCATION:

The project site is located at 5093 Midway Road in unincorporated Solano County outside the boundaries of the City of Vacaville. The project site is located in a rural residential area on a parcel approximately 4.8 acres in size. The parcel is developed with a single family dwelling. There is a small animal shelter located behind the house within a fenced enclosure. There is a row of mature trees located along the frontage of the property bordering Midway Road. The remainder of the parcel is vegetated with annual grasses. It appears the majority of the property has been used for animal grazing.

Access to the property is from a driveway located on the north side of Midway Road. The surrounding parcels are developed similarly with single family dwellings and accessory structures.

Water well, septic system and utilities for the single family dwelling are on-site.

The applicant, Verizon Wireless, is proposing to construct a 103' monopine (stealth telecommunications facility) behind the single family residence and animal shelter. The monopine would be located in the eastern half of a 50' x 50' (2500sf) fenced telecommunications equipment compound.

Monopine:

Verizon is proposing to install nine panel antennas with associated equipment mounted at the 90' centerline of the monopine. All antennas and pole mounted equipment will be painted a non-reflective flat green, while the monopole will be painted a non-reflective flat brown. The pole will be designed to resemble a pine tree with artificial limbs extending beyond the antennas mounted on the monopole. Verizon will install needle socks on all proposed panel antennas and remote radio units to blend in with the branches installed on the pole.

Equipment Compound:

The compound would accommodate the following equipment: radio cabinets, telco cabinet, a rack mounted MUX cabinet and appropriate electrical meters and subpanels. Any cabling would be run within the interior of the pole ("trunk") to the antennas. A stand-by 30KW generator will be located within the compound to serve as a power source during power outages. The applicant is proposing to wrap the generator with a Level 2 Acoustic Enclosure to reduce noise levels. Per the applicant, it is anticipated that the generator will be tested twice per month during daylight hours for a duration of 15 minutes.

Access:

The applicant is proposing a new 15' wide gravel driveway within a 20' utility easement off the existing driveway entrance from Midway Road. The gravel access road would maintain a turnout to meet Fire Department requirements.

FINDINGS:

The Solano County Department of Resource Management has evaluated the Initial Study which was prepared in regards to the project. The County found no potentially significant adverse environmental impacts likely to occur. The County determined that the project qualifies for a Mitigated Negative Declaration. The Initial Study of Environmental Impact, including the project description, findings and disposition, are attached.

MITIGATION MEASURES INCORPORATED:

The following Mitigation Measures have been included in the project:

Aesthetics - Mitigation Measure 1:

The applicant is proposing to begin the artificial branches on the monopine at 34'. To reduce the visibility of the trunk, the branches of the monopine shall begin at 20'.

Aesthetics - Mitigation Measure 2:

The equipment compound shall be screened by vegetation to reduce visibility of chain-link fence from neighboring properties. A landscape plan, which includes methods of irrigation and maintenance, shall be submitted and approved by the Planning Division prior to issuance of building permit.

PREPARATION:

This Mitigated Negative Declaration was prepared by the Solano County Department of Resource Management. Copies may be obtained at the address listed below.



Michael Yankovich, Planning Program Manager
Solano County Dept. of Resource Management
675 Texas Street, Suite 5500, Fairfield, CA 94533
(707) 784-6765

Verizon Wireless

**Use Permit No. U-15-06
Draft Initial Study and
Negative Declaration**

January 7, 2016

**Prepared By
Department of Resource Management
County of Solano**

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DEPARTMENT OF RESOURCE MANAGEMENT PART II OF INITIAL STUDY OF ENVIRONMENTAL IMPACTS

Introduction

The following analysis is provided by the Solano County Department of Resource Management as a review of and supplement to the applicant's completed "Part I of Initial Study". These two documents, Part I and II, comprise the Initial Study prepared in accordance with the State CEQA Guidelines, Section 15063.

Project Title:	Verizon Wireless
Application Number:	U-15-06
Project Location:	5093 Midway Road, Vacaville
Assessor Parcel No.(s):	0106-220-560
Project Sponsor's Name and Address:	Complete Wireless Consulting, Inc. 2009 V Street Sacramento, CA 95818

General Information

This document discusses the proposed project, the environmental setting for the proposed project, and the impacts on the environment from the proposed project and any measures incorporated which will minimize, avoid and/or provide mitigation measures for the impacts of the proposed project on the environment.

- Please review this Initial Study. You may order additional copies of this document from the Planning Services Division, Resource Management Department, County of Solano at 675 Texas Street, Suite 5500, Fairfield, CA, 94533.
- We welcome your comments. If you have any comments regarding the proposed project please send your written comments to this Department by the deadline listed below.
- Submit comments via postal mail to

Planning Services Division
Resource Management Department
Attn: Karen Avery, Senior Planner
675 Texas Street Suite 5500
Fairfield, CA 94533

- Submit comments via fax to: (707) 784-4805
- Submit comments via email to: kmavery@solanocounty.com
- Submit comments by the deadline of: February 10, 2016**

Next Steps

After comments are received from the public and any reviewing agencies, the Department may recommend that the environmental review is adequate and that a Negative Declaration be adopted or that the environmental review is not adequate and that further environmental review is required.

ENVIRONMENTAL DETERMINATION

On the basis of this initial study:

- I find the proposed project could not have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the project proponent has agreed to revise the project to avoid any significant effect. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find the proposed project could have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT (EIR) is required.
- I find the proposed project could have a significant effect on the environment, but at least one effect has been (1) adequately analyzed in a previous document pursuant to applicable legal standards, and (2) addressed by mitigation measures based on the previous analysis as described in the attached initial study.
An EIR is required that analyzes only the effects that were not adequately addressed in a previous document.
- I find that although the proposed project could have a significant effect on the environment, no further environmental analysis is required because all potentially significant effects have been (1) adequately analyzed in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (2) avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are included in the project, and further analysis is not required.

1/7/16
Date

Karen Avery

Karen Avery
Senior Planner

INCORPORATION OF MITIGATION MEASURES INTO THE PROPOSED PROJECT

By signature of this document, the project proponent amends the project description to include the mitigation measures as set forth in Section 2.

1/7/16
Date

Jenny Blocker

Jenny Blocker
Complete Wireless Consulting

1.0 ENVIRONMENTAL SETTING and PROJECT DESCRIPTION

1.1 ENVIRONMENTAL SETTING:

The project site is located at 5093 Midway Road in unincorporated Solano County outside the boundaries of the City of Vacaville. The project site is located in a rural residential area on a parcel approximately 4.8 acres in size. The parcel is developed with a single family dwelling. There is a small animal shelter located behind the house within a fenced enclosure. There is a row of mature trees located along the frontage of the property bordering Midway Road. The remainder of the parcel is vegetated with annual grasses. It appears the majority of the property has been used for animal grazing.

Access to the property is from a driveway located on the north side of Midway Road. The surrounding parcels are developed similarly with single family dwellings and accessory structures.

Water well, septic system and utilities for the single family dwelling are on-site.

1.2 PROJECT DESCRIPTION:

The applicant, Verizon Wireless, is proposing to construct a 103' monopine (stealth telecommunications facility) behind the single family residence and animal shelter. The monopine would be located in the eastern half of a 50' x 50' (2500sf) fenced telecommunications equipment compound.

Monopine:

Verizon is proposing to install nine panel antennas with associated equipment mounted at the 90' centerline of the monopine. All antennas and pole mounted equipment will be painted a non-reflective flat green, while the monopole will be painted a non-reflective flat brown. The pole will be designed to resemble a pine tree with artificial limbs extending beyond the antennas mounted on the monopole. Verizon will install needle socks on all proposed panel antennas and remote radio units to blend in with the branches installed on the pole.

Equipment Compound:

The compound would accommodate the following equipment: radio cabinets, telco cabinet, a rack mounted MUX cabinet and appropriate electrical meters and subpanels. Any cabling would be run within the interior of the pole ("trunk") to the antennas. A stand-by 30KW generator will be located within the compound to serve as a power source during power outages. The applicant is proposing to wrap the generator with a Level 2 Acoustic Enclosure to reduce noise levels. Per the applicant, it is anticipated that the generator will be tested twice per month during daylight hours for a duration of 15 minutes.

Access:

The applicant is proposing a new 15' wide gravel driveway within a 20' utility easement off the existing driveway entrance from Midway Road. The gravel access road would maintain a turnout to meet Fire Department requirements.

1.2.1 ADDITIONAL DATA:

NRCS Soil Classification:	San Ysidro sandy loam 0-2% - Class III
Agricultural Preserve Status/Contract No.:	N/A
Non-renewal Filed (date):	
Airport Land Use Referral Area:	Zone E
Alquist Priolo Special Study Zone:	N/A
Primary or Secondary Management Area of the Suisun Marsh:	N/A
Primary or Secondary Zone identified in the Delta Protection Act of 1992:	N/A
Other:	None

1.2.2 Surrounding General Plan, Zoning and Land Uses

	General Plan	Zoning	Land Use
Property	Rural Residential	RR 5	Residential
North	Rural Residential	RR 5	Residential
South	Municipal Service Area – Urban Residential	RR 5	Residential
East	Rural Residential	RR 5	Residential
West	Rural Residential	RR 5	Residential

1.3 CONSISTENCY WITH EXISTING GENERAL PLAN, ZONING, AND OTHER APPLICABLE LAND USE CONTROLS:

1.3.1 General Plan

The proposed project would occur on land designated Rural Residential per the Solano County General Plan.

1.3.2 Zoning

The site is located on land zoned Rural Residential (RR 5). This designation allows wireless telecommunications facilities subject to approval of a Conditional Use Permit.

1.4 Permits and Approvals Required from Other Agencies (Responsible, Trustee and Agencies with Jurisdiction):

1.41 Agencies that May Have Jurisdiction over the Project

- a. Federal Communications Commission (FCC)
- b. California Public Utility Commission (CPUC)

AFFECTED ENVIRONMENT, ENVIRONMENTAL CONSEQUENCES AND AVOIDANCE, MINIMIZATION AND/OR PROTECTION MEASURES

This chapter discusses the potential for adverse impacts on the environment. Where the potential for adverse impacts exist, the report discusses the affected environment, the level of potential impact on the affected environment and methods to avoid, minimize or mitigate for potential impacts to the affected environment.

Findings of SIGNIFICANT IMPACT

Based on the Initial Study, Part I as well as other information reviewed by the Department of Resource Management, the project does not have the potential for significant impacts to any environmental resources.

Findings of LESS THAN SIGNIFICANT IMPACT Due to Mitigation Measures Incorporated Into the Project

Based on the Initial Study, Part I as well as other information reviewed by the Department of Resource Management, the following environmental resources were considered and the potential for significant impacts were reduced to less than significant due to mitigation measures incorporated into the project. A detailed discussion of the potential adverse effects on environmental resources is provided below:

- Aesthetics

Findings of LESS THAN SIGNIFICANT IMPACT

Based on the Initial Study, Part I as well as the review of the proposed project by the Department of Resource Management, the following environmental resources were considered and the potential for impact is considered to be less than significant. A detailed discussion of the potential adverse effects on environmental resources is provided below:

- Air Quality
- Geology and Soils
- Greenhouse Gas Emissions
- Noise

Findings of NO IMPACT

Based on the Initial Study, Part I as well as the review of the proposed project by the Department of Resource Management, the following environmental resources were considered but no potential for adverse impacts to these resources were identified. A discussion of the no impact finding on environmental resources is provided below:

- Agricultural Resources
- Biological Resources
- Population & Housing

- | | |
|--|--|
| <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Hydrology and Water | <input type="checkbox"/> Transportation & Traffic |
| <input type="checkbox"/> Land Use Planning | <input type="checkbox"/> Utilities & Service Systems |
| <input type="checkbox"/> Mineral Resources | |

2.1 Aesthetics

Would the project	Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to, trees, rock out-croppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Increase the amount of shading on public open space (e.g. parks, plazas, and/or school yards)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

a-c. The project site is not located within ¼ mile of the nearest scenic roadway (Interstate 505 or Interstate 80) as designated by the Resources Chapter of the Solano County General Plan. The applicant has designed the pole to look like a redwood tree (monopine). The pole will be painted a flat brown and the antennas will be painted a flat green. The pole will be fitted with artificial branches and will surround the antennas. The monopine will be placed behind the animal enclosure on the west side of the parcel, 50' from the western property line.

Because the site is disguised as a monopine, it should blend in better with the rural nature of the area. There are several groups of trees on the property and on adjacent properties, however; none are as tall as the proposed 103' monopine. The applicant submitted photosimulations of the proposed monopine (see attached Appendices). Most of the photosimulations indicate the monopine will blend within the surrounding neighborhood from a distance, however, the photosimulations looking northeast and northwest indicate how visible the monopine would be to neighboring property owners and passers-by along Midway Road. Mitigation measures shall be incorporate to reduce the visibility of the monopine to neighboring property owners and along Midway Road.

Aesthetics - Mitigation Measure 1:

The applicant is proposing to begin the artificial branches on the monopine at 34'. To reduce the visibility of the trunk, the branches of the monopine shall begin at 20'.

Aesthetics - Mitigation Measure 2 :

The equipment compound shall be screened by vegetation to reduce visibility of chain-link fence from neighboring properties. A landscape plan, which includes methods of irrigation and maintenance, shall be submitted and approved by the Planning Division prior to issuance of building permit.

With the inclusion of these two mitigation measures, aesthetics and visual resource impacts will be **reduced to a less than significant impact with mitigation** incorporated.

d. The project will have two lights located on the adjacent corners of the equipment area. The security lights will hooded and tilted downward and away from any neighboring properties; therefore a **less than significant impact** is expected.

e. The project would not increase shading on public open space. **No impact.**

2.2 Agricultural Resources

Would the project

	Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

a-c. The proposed project not located in an agricultural area of Solano County and will not convert farmland to a non-agricultural use. The property is not under a Williamson Act contract. **No impact.**

2.3 Air Quality

Checklist Items: Would the project	Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is classified as non-attainment under an applicable federal or state	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?

d.	Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e.	Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

a-e. The project site is in a rural area of Solano County and is managed by the Yolo Solano Air Quality Management District. The project will have no impacts on implementation of the applicable air quality plans established by the YSAQMD. Verizon will be required to obtain a permit from the District for the operation of the emergency back-up generator. Once the facility is established, the site will remain unmanned. Service technicians will visit the site on a monthly basis. No other site visits are anticipated. The amount of traffic will have no impact on the air quality for the specific parcel or general area. The proposed telecommunication facility would not cause a substantial increase of new emissions, additional pollutant concentrations, or objectionable odors and no impacts to air quality are expected.

2.4 Biological Resources

Checklist Items: Would the project	Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Have a substantial adverse effect on any aquatic, wetland, or riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act including, but not limited to, marsh, vernal pool, coastal, etc., through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors,	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

or impede the use of native wildlife nursery sites?

e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f.	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

a The project site has been previously disturbed by the property owner. The property has been used for grazing and residential type uses. The property is located in an area designated as Rural Residential which provides for single-family residential uses. The Solano County General Plan did not designate this area as a priority habitat area per Figure RS-1. These Priority Habitat Areas are located throughout the County but not within this area in rural Vacaville. **No impacts** expected.

b-f. The proposed project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, impede the use of native wildlife nursery sites, conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, or conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. **No impact.**

2.5 Cultural Resources

Checklist Items: Would the project	Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of an historical resource as defined in CEQA Guidelines §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a-d. There are no structures proposed for removal, historical or otherwise. The proposed telecommunications facility will be located on grounds that have been disturbed by the property owner. No changes in archaeological, paleontological or geologic resources are anticipated. State law (Section 7050.5 of the California Health and Safety Code) dictates that any human remains found

during construction activities shall be reported to the proper official(s). Therefore, **no impacts** are anticipated.

2.6 Geology and Soils

Checklist Items: Would the project	Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a.				
1) Rupture of a known earthquake fault, as described on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, differential settlement, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

a-i,ii. The Public Health and Safety Chapter of the General Plan indicates that the area is not in an earthquake fault zone and does not have unique geologic or physical features. The closest known fault, Midland Fault, is approximately five miles north. Rupture of this fault or any fault, could expose people or structures to potential substantial adverse effects and strong ground shaking. However, properly designed structures, using the current Uniform Building Code requirements, should reduce any damage from ground shaking impacts to be **less than significant**.

a.iii & c. Figure HS-6 (Liquefaction Potential) of the Health and Safety chapter in the General Plan, shows the subject property to be located within an area of low liquefaction potential. A geotechnical study will be required for any building permit approval to ensure the building and structure foundations

meet the required standards for the soil conditions on site. Thus impacts are anticipated to be **less than significant**.

a.iv. The project site is not located in an area known for landslides, per Solano County General Plan Figure HS-5 – Landslide Stability. **No impact**.

b. The placement of several equipment foundations and the 103’ monopine will require a minimal amount of surface displacement and should not result in a substantial loss of topsoil. Per Solano County General Plan Figure HS-6, the proposed site is located in an area that is not prone to liquefaction. **No impacts** are expected.

d. As noted above, the site specific geotechnical studies would be required at the time of building permit application. This would verify the absence or presence of potentially expansive soils and any mitigation necessary. Therefore, impacts are expected to be **less than significant**.

e. The communications facility is unmanned and will not require the installation of a waste water disposal system. No impacts to soils with regard to septic systems are anticipated. **No impact**.

2.7 Greenhouse Gas Emissions

Checklist Items: Would the project	Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a. No one single project can have a significant impact on greenhouse gas emissions (GhG) as the impact of GhG emissions is considered to be global in nature. **No impact**.

b. As proposed, the project should not conflict with goals and policies of the Solano County Plan which are intended to reduce or indirectly reduce GhG emissions. Nor would the project conflict with the County’s recently adopted Climate Action Plan (June 2011). **Less than significant impact**.

2.8 Hazards and Hazardous Materials

Checklist Items: Would the project	Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

c.	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d.	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e.	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f.	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g.	Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h.	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

a-d. The project site is not listed on a list of hazardous materials site and the applicant has indicated that no hazardous materials will be stored on the property. The applicant has indicated that the generator is self-contained and includes a fuel tank. A Hazardous Materials Business Plan will be required to be submitted and approved by the Solano County Environmental Health Division. The applicant is required to submit a report to the FCC indicating compliance of the proposed facility with appropriate guidelines limiting human exposure to radio frequency electromagnetic fields. A study was conducted by Hammett & Edison, Inc. in October 2015, which concluded that the proposed project would comply with the prevailing standards for limiting public exposure to radio frequency energy and the proposal would not cause a significant impact on the environment. **No impacts** are anticipated.

e-f. The project is located within Zone E of the Travis Air Force Base Land Use Compatibility Plan and because the monopine is less than 200', the site is not required to be reviewed by the Solano Airport Land Use Commission. The site is unmanned and no people are expected to be effected by the proposed project; therefore, **no impact** should occur.

g-h The project would not impair the implementation or physically interfere with an emergency response or evacuation plan. The project site is located in an area of low to moderate fire risk; however, the site is unmanned and should not expose people or structures to a significant risk of loss. **No impact.**

2.9 Hydrology and Water

Checklist Items: Would the project	Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on-or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h. Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i. Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j. Be subject to inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

a-i. The project is an unmanned telecommunications facility and therefore poses no impact to groundwater since neither water wells nor septic systems are proposed. According to FEMA maps, the proposed lease area is not located within a 100-year flood zone (Panel #06095C0166F – dated 8/2/2012). The 2500 square foot project area would not alter the direction of a negligible amount of storm water runoff; as a result, no impact is expected. The proposed construction would not violate any water quality standards or waste discharge requirements. No waste water is expected to be produced as part of this project. **No impact** to water quality or waste discharge is expected.

j. Per the Health and Safety Chapter of the Solano County General Plan, the proposed project is not located in an area prone to inundation due to dam or levee failure, seiche, tsunami, or mudflow. Therefore, the project will have **no impacts**.

2.10 Land Use and Planning

Checklist Items: Would the project	Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

a-c. The project would not divide an established community as the project is in a rural area of Solano County. The project site is zoned Rural Residential (RR5) which allows wireless telecommunications facilities with an approved use permit. The General Plan designates the subject property as Rural Residential. The project will not conflict with any Habitat Conservation Plan or natural Community Conservation Plan as there is no conservation plan in the area. **No impacts** are expected.

2.11 Mineral Resources

Checklist Items: Would the project	Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

a-b. There are no known mineral resources of value to the region in the project area and no locally important mineral resource recovery sites delineated in County documents. Therefore, no mineral resources will be lost and **no impacts** will occur.

2.12 Noise

Checklist Items: Would the project	Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a. Exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Exposure of persons to or generation of, excessive ground borne vibration or ground borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

a-d. There may be a minor increase in long-term ambient noise level from the equipment cabinets. The equipment cabinets contain a fan component for cooling the equipment if the equipment were to begin to overheat. The need for the fans occurs mostly in the daytime hours when daytime temperatures are higher and are rarely used during the cooler evenings. Noise will be generated when the emergency back-up generator is tested twice per month, during daytime hours, for duration of approximately 15 minutes.

There are noise standards addressed by the Solano County General Plan and Chapter 28 of the Solano County Code (Zoning Regulations). Per the Solano County General Plan, the maximum allowable noise exposure for daytime noise is 70 dB (7am to 10 pm) and at nighttime 65 dB (10 pm to 7 am). Section 28.70.10 of the Solano County Zoning Regulations requires that noise generated from land uses not exceed 65 dBA LDN at any property line. Specific to wireless facilities, Section 28.81(D)(10) of the Zoning Regulations requires that a wireless facility within 100 feet of a residential district, reduce the maximum exterior noise level to 50 Ldn at the facility site's property lines.

An Environmental Noise Analysis was conducted by Bollard Acoustical Consultants, Inc. dated November 23, 2015. The study noted that the generator will be equipped with a Level 2 Acoustic Enclosure which should result in a noise level of 68dB at 23 feet; therefore, noise levels are not expected to exceed decibel limits as established by the General Plan and Zoning Regulations. All future carriers will be required to submit a noise study to ensure that any new equipment cabinets and/or emergency generators will not exceed decibel limits as set by the General Plan and Zoning Regulations for residential areas. A **less than significant impact** is expected.

e-f. The project is located near Nut Tree airport, a public airport; however, the site is unmanned and will not expose employees to excessive noise. **No impact.**

2.13 Population and Housing

Checklist Items: Would the project	Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

a-c., The proposed project will not induce population growth directly or indirectly or construct infrastructure that could induce population growth. The project does not involve the displacement of homes or people or necessitate construction of more housing elsewhere. **No impact.**

2.14 Public Services

Checklist Items: Would the project	Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
1) Fire Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2) Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5) Other Public Facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

The project itself will have a minimal effect on public services.

(a 1-5) The Fire District has adequate facilities and this project does not require the need for new fire station facilities. The Sheriff’s Department has adequate facilities and staff to serve the area. The project would not require the need for new schools or parks. Approval of this proposed project would have **no impact** on public services.

2.15 Recreation

Checklist Items: Would the project	Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Physically degrade existing recreational resources?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

a-c. The proposed project would not increase the number of use of existing parks or other recreational facilities, nor require the construction or expansion of new recreational facilities nor physically degrade existing recreational resources. **No impact.**

2.16 Transportation and Traffic

Checklist Items: Would the project	Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?				
b.	Conflict with an applicable congestion management program, including, but not limited to level of service standard and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c.	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d.	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e.	Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f.	Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g.	Conflict with adopted policies, plans, or programs regarding public transit, bicycle or pedestrian facilities or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

a,b,e,f. After initial construction, the only vehicular traffic associated with the project would be routine monthly maintenance visits by service technicians. The addition of one visit per month per carrier would not represent an impact to Midway Road, which is a shared City and County maintained road. This small increase in traffic would not have significant impacts on the existing traffic load and capacity of the street systems. There would be no impact to level of service standard, change in air traffic patterns, or impact to emergency access or parking capacity. The applicant has designed an access driveway coming off the existing property owner's driveway. The new gravel driveway will be 15' wide and is designed with a turn-out for emergency access purposes and parking for the technicians. **No impact.**

c. The closest airport is the Nut Tree Airport but the height of the monopine is less than 200' and does not require Airport Land Use Commission approval or lighting per the Federal Aviation Administration. **No impact.**

g. The proposed project does not conflict with adopted policies, plans, or programs supporting alternative transportation. **No impact.**

2.16 Utilities and Service Systems

Checklist Items: Would the project	Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a. Exceed wastewater treatment requirements of the	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

applicable Regional Water Quality Control Board?

b.	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c.	Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d.	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e.	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f.	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g.	Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

a-g. Wastewater and potable water are not required for this telecommunications facility and this project will not generate any wastewater. Power and telephone service will be obtained from existing power poles located on the property via a proposed utility easement. **No impacts** are anticipated.

2.17 Mandatory Findings of Significance

Checklist Items: Would the project	Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a. Does the project have the potential to (1) degrade the quality of the environment, (2) substantially reduce the habitat of a fish or wildlife species, (3) cause a fish or wildlife population to drop below self-sustaining levels, (4) threaten to eliminate a plant or animal community, (5) reduce the number or restrict the range of a rare or endangered plant or animal, or (6) eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Does the project have impacts that are individually limited, but cumulatively considerable? "Cumulatively	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

- c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Discussion:

a. The project will not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory.

b. The project will not have impacts that are individually limited, but cumulatively considerable.

c. The project will not have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly.

3.0 Agency Coordination and Public Involvement

3.1 Consultation and Coordination with Public Agencies

The Initial Study is being circulated for public comment.

3.2 Public Participation Methods

The Initial Study is available at the Solano County Department of Resource Management and online at the Department’s Planning Services Division website at:

<http://www.solanocounty.com/depts/rm/documents/eir/default.asp>

Interested parties may contact the planner assigned to this project at the contact points provided below:

Karen Avery
Senior Planner
Planning Services Division
Resource Management Department
675 Texas Street Suite 5500
Fairfield, CA 94533

PHONE: (707) 784-6765
FAX: (707) 784-4805
EMAIL: kmavery@solanocounty.com

4.0 List of Preparers

This Initial Study was prepared by the Solano County Department of Resource Management. The following staff and consultants contributed to the preparation of this Initial Study:

Solano County Department of Resource Management Staff

5.0 Distribution List

State Agencies

Regional Agencies

Other

City of Vacaville

6.0 Appendices

- 6.1 Initial Study, Part I – Use Permit application**
- 6.2 Assessor’s Parcel Map**
- 6.3 Project Plans**
- 6.4 EMF Exposure Study – Hammet & Edison, Inc.**
- 6.5 Environmental Noise Analysis – Bollard Acoustical Consultants, Inc.**
- 6.6 Photosimulations of Site**

6.1



DEPARTMENT OF RESOURCE MANAGEMENT
PLANNING SERVICES APPLICATION FORM

675 Texas Street Suite 5500, Fairfield, CA 94533

(707) 784-6765 Phone
(707) 784-4805 Fax

www.solanocounty.com

Application Type: [X] New [] Extension (maps) [] Minor Revision [] Map Modification

- [] Administrative Permit (AD) [] Minor Use Permit (MU) [] Sign Permit (SGN)
[] Architectural Review (AR) [] Mobilehome Storage Permit (MH) [X] Use Permit (U)
[] General Plan Amendment (G) [] Mutual Agreement (MA) [] Variance (V)
[] Major Subdivision (S) [] Performance Standards (PS) [] Waiver (WA)
[] Marsh Development Permit (MD) [] Policy Plan Overlay (PP) [] Zone Text Amendment (ZT)
[] Minor Subdivision (MS) [] Rezone (Z)

FOR OFFICE USE ONLY

Application No: MR# Hrg: AD ZA PC BOS Date Filed: PInr:

Project Name: Highway 80 Midway

Subject Site Information

Site Address: 5093 Midway Road City: Vacaville State: CA Zip: 95688

Assessor's Parcel Number (s): 0106-220-560 Size (sq. ft/acre): 4.80 acres

Preferred Property Access by Staff: [] OK to access [X] Call applicant before access [] Call owner before access

Contact Information

Property Owner Name: Margarito & Maria Chavez

Contact Name: Same Phone: 707-678-0514 Email: teresa@chaveztrucking.com

Mailing Address: 5093 Midway Road City: Vacaville State: CA Zip: 95688

Architect/Engineer/Land Surveyor Company Name: MST Architects

Contact Name: Manuel Tshilas Phone: 916.567.9630 Email: manuel@mstarchitects.com

Mailing Address: 1520 River Park Drive Sacramento CA 95815

Applicant/Company Name: GTE Mobilnet of California d/b/a Verizon Wireless c/o Complete Wireless Consulting, Inc.

Contact Name: Jenny Blocker Phone: 916-217-7503 Email: jblocker@completewireless.net

Mailing Address: 2009 V Street Sacramento State: CA Zip: 95818

Other Contacts:

Name: Phone: Email:

Mailing Address: City: State: Zip:

3 Williamson Act Contract

A. Is any portion of the property under Williamson Act Contract? Yes No

If yes, Contract No. _____ please provide a copy.

If yes, has a Notice of Non-Renewal been filed? Yes No

If yes, please provide a copy.

B. Are there any agricultural conservation, open space or similar easements affecting the use of the project site?
(such easements do not include Williamson Act contracts)

Yes No *if yes, please list and provide a copy.*

4 Additional Background Information

A. Does the proposal propose the demolition or alteration of any existing structures on the subject site?

Yes No *If yes, please describe in the project narrative.*

B. List any permits that are required from Solano County and/or other local, state, federal agencies (i.e. building permit, Department of Fish and Game permits, etc.)

Building Permit

C. List any known previously approved projects located on the property (i.e. Use Permit, Parcel Maps, etc). Identify the project name, type of project and date of approval.

N/A

D. List any known professionally prepared reports for the project (i.e. biological survey, traffic study, geologic, hazardous materials, etc.)

N/A

E. Does the project involve Housing and Urban Development (HUD) federal funding? Yes No
Is HUD funding anticipated? Yes No

If yes, indicate the type of funding (i.e. CDBG grant, HOME, Investment Partnership Program, etc), funding amount, whether awarded or application pending and fiscal year of award or application request.

H. Is this part of a larger project? If yes, please explain. Yes No

5 Existing Conditions

Describe in general the project site and surrounding properties as they presently exist; including but not limited to, information on existing land uses, unique physical and topographic features, soil stability, plants and animals, cultural, historical, or scenic aspects, and any other information which would assist the Department in understanding the project's environmental setting. Clear, representative color photographs may be submitted to show the project area. Draw in property boundaries on the photographs.

A. Project site: Residential Structure and open fields.

B. Surrounding properties: Same as above

C. Existing use of land: Residence and cattle grazing

D. Describe number and type of existing structures:

	Type/Number	Square Feet
Residential	1 -house	2,753
Agricultural		
Commercial		
Industrial		
Other	1-Garagfe	450

E. Describe existing vegetation on site, including number and type of existing trees.

Short Grass and approximately 10 trees property line at Midway Road.

F. If in agricultural use, describe type of use or crop (cattle, sheep, hay, vegetables, fruit, etc).

N/A

G. Slope of property:

Flat or sloping (0 - 6% slope) ALL acres
 Rolling (7 - 15% slope) _____ acres
 Hilly (16 - 24% slope) _____ acres
 Steep (> 24% slope) _____ acres

H. Describe existing drainage conditions on site. Indicate direction of surface flows, adjacent parcels affected.

I. Describe land uses on adjacent parcels (specify types of crops if agricultural).

North	Rural Residential	South	Rural Residential
East	Rural Residential	West	Rural Residential

J. Distance to nearest residence(s) or other adjacent use(s): +/-350' (ft/mi)

K. Describe and indicate location of any power lines, water mains, pipelines or other transmission lines which are located on or adjacent to the property. N/A

L. Describe number and location of natural creeks or water courses through or adjacent to the property. Specify names (if any). Indicate whether ephemeral (brief flows following rains), intermittent (seasonal flows during wet season), or perennial (year-round flows). N/A

M. Describe number and location of man-made drainage channels through or adjacent to the property. Specify names, if any. N/A

N. Identify and describe any on-site or adjacent marshes, wetlands, vernal pools, wet meadows, riparian (i.e. dependant on water bodies) vegetation, etc.: N/A

O. Are there any unique, sensitive, rare, threatened, or endangered animals, plants, or habitats on the project site or located in close proximity which may be affected by the project?

Yes _____ No X Don't Know _____ If yes, please list:

P. Describe existing vehicle access(s) to property:

Dirt driveway off of Midway Road

Q. List and describe the nature and location of all existing easements serving or affecting the property, including access, utility, and other public or private easements (see deed or recent preliminary title report).

See Site Survey

R. List and describe any freestanding and attached signage on the property. Describe the dimensions, area and height. Include the location on the site plan.

See site Survey

6 Proposed Changes to the Site

A. Topography and grading (attach copy of grading plan showing existing and proposed topography and drainage patterns.)

i. Percent of site previously graded: 100 %.

ii. Project area (area to be graded or otherwise disturbed): minimal sq. ft./acres.

iii. Estimate amount of soil to be moved (cut and/or fill):

X Less than 50 cubic yds³ _____ More than 50 cubic yds³ _____ More than 1000 cubic yds³

iv. Estimate amount of soil to be: N/A
n/

Imported _____ yd³ Exported _____ yd³ Used on site _____ yd³.

B. Number, size and type of trees, and type and quantity of vegetation to be removed. (size of trees = diameter at 4ft. above grade)

None

C. Number, type and use of existing structures to be removed, and removal schedule:

None

D. Describe proposed fencing and/or visual screening (landscaping):

see project drawings

E. Proposed access to project site (road name, driveway location, etc.):

Midway Road

F. Proposed source and method of water supply:

N/A

G. Proposed method of sewage disposal (specify agency if public sewer):

N/A

H. Provisions for solid/hazardous waste disposal (specify company or agency if applicable):

N/A

I. List hazardous materials or wastes handled on-site:

N/A

J. Duration of construction and/or anticipated phasing:

8 weeks

K. Will the proposed use be affected by or sensitive to existing noise in the vicinity? If so, describe source (e.g. freeway, industrial) and distance to noise source.

No

7 Proposed Site Utilization

A. RESIDENTIAL PROJECTS

N/A

1. Number of structures: Single Family: _____ Multi-family: _____ Accessory: _____

If multi-family, number of units: _____ Maximum height: _____

2. Signage: Freestanding: _____ Dimension(s): _____ Area: _____ (sq.ft)
Attached/Wall: _____ Dimensions(s): _____ Area: _____ (sq.ft)

B. NON-RESIDENTIAL PROJECTS (Commercial, Industrial, Agricultural, Other)

1. Lot coverage: N/A

Building coverage: _____ (sq.ft) Surfaced area: _____ (sq.ft)

Landscaped or open space: _____ (sq.ft)

2. Total floor area: _____ (sq.ft)

3. Number of stories: _____ Maximum height: _____ (ft.)

4. Proposed hours of operation:

Days: _____

From: _____ a.m./p.m to _____ a.m./p.m

Year round: Yes No Months of operation: from _____ through _____

5. Proposed construction schedule: N/A per previous page
 Daily construction schedule: from _____ a.m./p.m. to _____ a.m./p.m.
 Days of construction: _____
6. Will this project be constructed in phases? Describe:
 No

7. Maximum number of people using facilities: N/A
 At any one time: _____ Throughout day: _____
8. Total number of employees: N/A
 Expected maximum number of employees on site: _____
 During a shift: _____ During day: _____
9. Number of parking spaces proposed: N/A

10. Maximum number of vehicles expected to arrive at site: N/A
 At any one time: _____ day: _____
11. Radius of service area: N/A

12. Type of loading/unloading facilities: N/A

13. Type of exterior lighting proposed:
 (2) hooded and downtilted security lights are proposed, (1) at the northwest corner of equipment area and (1) at southeast corner of equipment area.

14. Describe all anticipated noise-generating operations, vehicles or equipment on-site.
 Back up generator is proposed and will run for testing 1/week during normal business hours and in the event of a loss of electricity. An Acoustical Analysis/Study is provided with this application package for review.

15. Describe all proposed uses which may emit odors detectable on or off-site.
 N/A

16. Describe all proposed freestanding and wall signage. Include the dimensions, area and height.
 N/A

8 Environmental Checklist

Indicate the following items applicable to the project or its effects. Discuss in Section 9 all items checked "Yes" or "Maybe". **Attach additional sheets as necessary.**

	YES	MAYBE	NO
A. Change in existing natural features including any bays, tidelands, lakes, streams, beaches, natural landforms or vegetation.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
B. Change in scenic views or vistas from existing residential areas, public lands or roads.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
C. Change in scale, pattern or character of general area of project.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D. Increased amounts of solid waste or litter.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
E. Dust, ash, smoke, fumes or odors on site or in vicinity.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
F. Change in ground water quality or quantity.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
G. Alteration of existing drainage patterns, or change in surface water quantity or quality.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
H. Change in existing noise or vibration levels.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
I. Construction on filled land or construction or grading on slopes of 25% or more.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
J. Storage, use or disposal of materials potentially hazardous to man or wildlife, including gasoline and diesel fuel. (See Environmental Health Division for assistance or information).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
K. Increase in demand for public services (police, fire, water, sewer, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
L. Increase in fossil fuel consumption (electricity, natural gas, oil, etc.).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
M. Change in use of or access to an existing recreational area or navigable stream.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
N. Change in traffic or vehicular noise on road system in immediate vicinity.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
O. Increased hazards for vehicles, bicycles or pedestrians.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P. Removal of agricultural or grazing lands from production.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Q. Relocation of people.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

9 Additional Information by Applicant

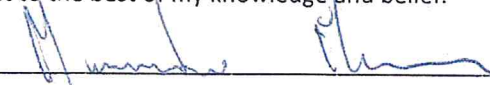
In order to make this application COMPLETE, please submit any additional data, information or special study reports that may be necessary to determine whether the project may have significant effect on the environment or to evaluate any adverse impacts, and to determine how they may be mitigated. Add additional pages as necessary.

10 Information Verification - Signed by Owner and Applicant

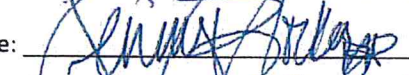
Owner and Applicant must sign below certifying that all information is to the best of his/her knowledge true and correct.

If the applicant is not the owner of record of all property included in this application, the signature given below is certification that the owners of record have knowledge of and consent to the filing of this application and supporting information. Additionally, the undersigned does hereby authorize representatives of the County to enter upon the above mentioned property for inspection purposes. This certification acknowledges that if the project exceeds double that of the application fee, applicants are subject to the hourly billing rate of staff time. You will be notified if the project is approaching this threshold.

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this initial evaluation to the best of my ability, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Owner signature:  Date: 9-18-15

PRINTED NAME: Margaretta Chavez

Applicant signature:  Date: 10/15/15

PRINTED NAME: Jenny Blocker, Complete Wireless Consulting

For Office Use Only

Planning Permit Fee(s)		Environmental Review Fees	
_____	\$ _____	Initial Study	\$ _____
_____	\$ _____	Archaeological Study (Sonoma State NWIC)	\$ _____
_____	\$ _____	Negative Declaration	\$ _____
_____	\$ _____	CA Fish and Games (ND or EIR)	\$ _____
_____	\$ _____	Initiate EIR	\$ _____
_____	\$ _____	Mitigation Monitoring Plan	\$ _____
Total	\$ _____	Total	\$ _____
Total Fees Paid (P + E)	\$ _____	Receipt No.:	DATE:

Staff verify: Zoning: _____ GP Land Use & Consistency: _____

Comments: _____ Staff/Date: _____

T:\PLANNING\Planning Templates\Front Counter Application and Instruction Forms\COUNTER FORMS - (O-R-I-G-I-N-A-L-S)\Land Use Permit\Permit Application & Instructions\Land Use Permit - Application.doc(June 23, 2011)

PROJECT SUPPORT STATEMENT

VERIZON WIRELESS

SITE NAME: HIGHWAY 80 MIDWAY
LOCATION: 5093 Midway Road, Vacaville, CA 95688
APN: 0106-220-560

Introduction

Verizon Wireless is seeking to improve communications service to residences, businesses, public services, and area travelers in Solano County, California. Verizon maintains a strong customer base in Solano County and strives to improve coverage for both existing and potential customers. The proposed facility is needed to offload capacity from Verizon facilities in Vacaville along Interstate 80 near the 505 junction. This project will expand Verizon's existing network and improve call quality, signal strength, and wireless connection services in Solano County. The improved wireless service will benefit residents, local businesses, public services, and roadway safety throughout the region.

Verizon looked at numerous alternative locations in a laborious effort to find the most least intrusive candidate to fill the significant coverage gap. Due to the greenbelt and proximity to the scenic corridor (which limited facilities to 35'), many candidates were initially investigated and rejected. The Alternative Sites Analysis, included, details these efforts in further detail.

Location/Design

Verizon Wireless proposes building a new wireless communications facility on the property located at 5093 Midway Road, in unincorporated Vacaville. The property is located in the Rural Residential Zone (RR-5). The parcel is bordered by Midway Road on the south and similarly zoned (RR-5) parcels on the other 3 sides. The parcel is 4.80 acres and currently used as a private residence with some agricultural use by property owners Margarito and Maria Chavez. The proposed communications facility, a "monopine", will be 103' tall and installed in an undeveloped area slightly south and just west of the center of the parcel. The nearest offsite dwelling is approximately 320' east of the proposed lease area.

PROPOSED PROJECT LOCATION

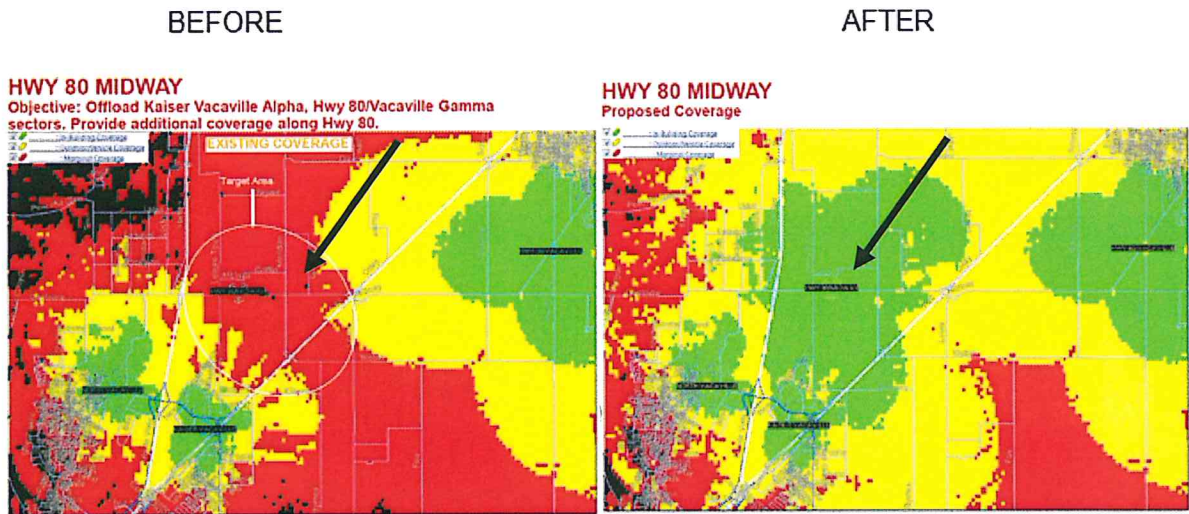


Project Support Statement – Verizon Wireless “Highway 80 Midway”

Project Description

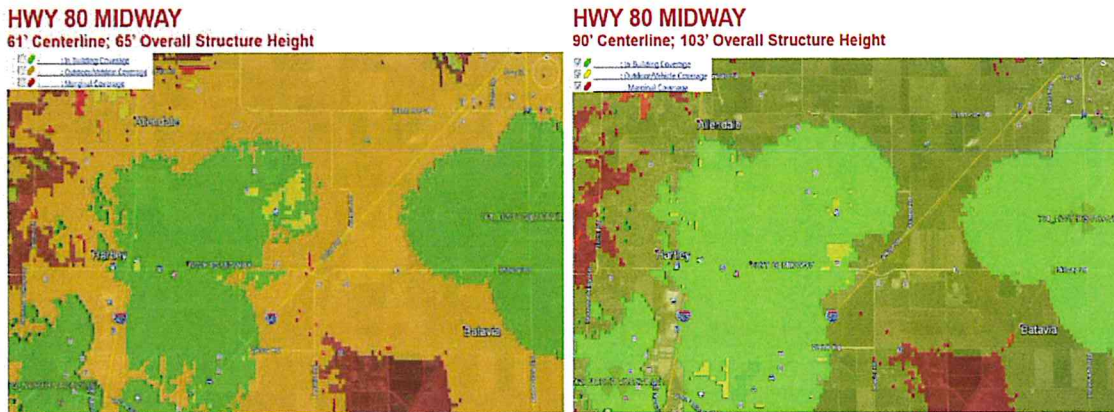
The proposed facility consists of nine (9) Verizon Wireless panel antennas with associated equipment mounted on a 103’ monopine. The 50’ x 50’ lease area will have a 6’ tall chain link fence with privacy slats at the perimeter and will house all equipment for the antennas just adjacent to the base of the structure, including , underground power and telco utilities, a standby diesel generator, and a coaxial cable ice bridge. The diesel generator will be installed on a new concrete pad, and the proposed facility will not require grading. The unmanned facility will provide enhanced wireless network coverage 24 hours a day, 7 days a week.

Coverage Gap



Increased Height Approval

The overall height of the proposed monopine is 103’. This height exceed the 65’ height limit requirement by Solano County. This height is needed because the objective of the site is to cover Interstate 80 between Vacaville and Dixon. The proposed location of the site is offset from Interstate 80 by approximately 1.7 miles, a taller centerline is needed to allow for a larger propagation footprint. With a lower centerline, the propagation modeling, as shown below, illustrates a much smaller footprint, which can lead to unintended coverage gaps along Interstate 80.



Project Support Statement – Verizon Wireless “Highway 80 Midway”

Public Benefits of Improved Wireless Service

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. Additionally, 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.

Aesthetic Impacts

Verizon Wireless has carefully chosen a location for a new facility that will result in minimal visual impact to the residents of Solano County. The facility will be concealed beneath arboreal camouflage designed to match existing trees in the area. Verizon will install needle socks on all proposed panel antennas and RRH units to further conceal the tower equipment. All antennas and pole mounted equipment will be painted flat green, while the monopole itself will be painted flat brown, and all paint will be non-reflective. The facility has been designed to minimize visibility from public view and to blend into the surrounding vegetation. Support cables will be installed underground and the equipment will be effectively screened from public view by a 6’ chain link fence.

The proposed facility needs to be a total of 103’ for the signal to reach the intended service area. The antennas will be mounted at a 90’ centerline, on a 98’ monopole. The additional 5’ of tower height will allow for a lifelike “hat” to sit atop the tower, resembling the top of a pine tree and similar to trees nearby. The location of this facility is not within $\frac{3}{4}$ of a mile of a designated scenic corridor. The tower has been designed at its minimal functioning height to meet the coverage objectives. Enclosed information from Verizon’s Radio Frequency Engineering Department demonstrates the need for this additional facility height, given the coverage and capacity needs of this area. Please see the project plans included in this application package site plans and elevation drawings. Please also see the photosimulations included with this application package. These demonstrate how the facility will look upon completion of construction, from highly visible perspectives.

Alternative Sites Analysis

Included with this application package is an Alternative Sites Analysis showing alternate sites considered and the reason(s) why they were not selected as a feasible location for this facility.

Statement of Commitment to Allow Collocation

The proposed facility has been designed in a manner that will structurally accommodate additional antennas and/or future collocation. Verizon Wireless welcomes other carriers to collocate on their facilities whenever possible. Additional ground space is available within Verizon’s lease area for at least one future carrier.

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

Project Support Statement – Verizon Wireless “Highway 80 Midway”

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 equipment shelter and will provide power to the facility in the event that local power systems are offline.

Maintenance and Standby Generator Testing

Verizon Wireless installs a standby generator and batteries at all of its cell sites. The generator and batteries play 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. Following construction, the security fence will include a small sign indicating the facility owner and a 24-hour emergency telephone number. The lease area will be surrounded by a 6’ chain link fence for additional security.

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.

Lighting

Unless tower lighting is required by the FAA the only lighting on the facility will be a total of (2) hooded, down tilted security lights at (2) adjacent corners of the equipment area.

Compliance with FCC Standards

This project will not interfere with any TV, radio, telephone, satellite, or other signals. Any interference would be against federal law and a violation of Verizon Wireless’s FCC license. An RF report verifying compliance with FCC guidelines is included with this submittal.

Notice of Actions Affecting Development Permit

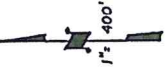
In accordance with California Government Code Section 65945(a), Verizon Wireless requests notice of any proposal to adopt or amend the: general plan, specific plan, zoning ordinance, ordinance(s) affecting building or grading permits that would in any manner affect this development permit. Any such notice may be sent to 2009 V Street, Sacramento, CA 95818.

6.2

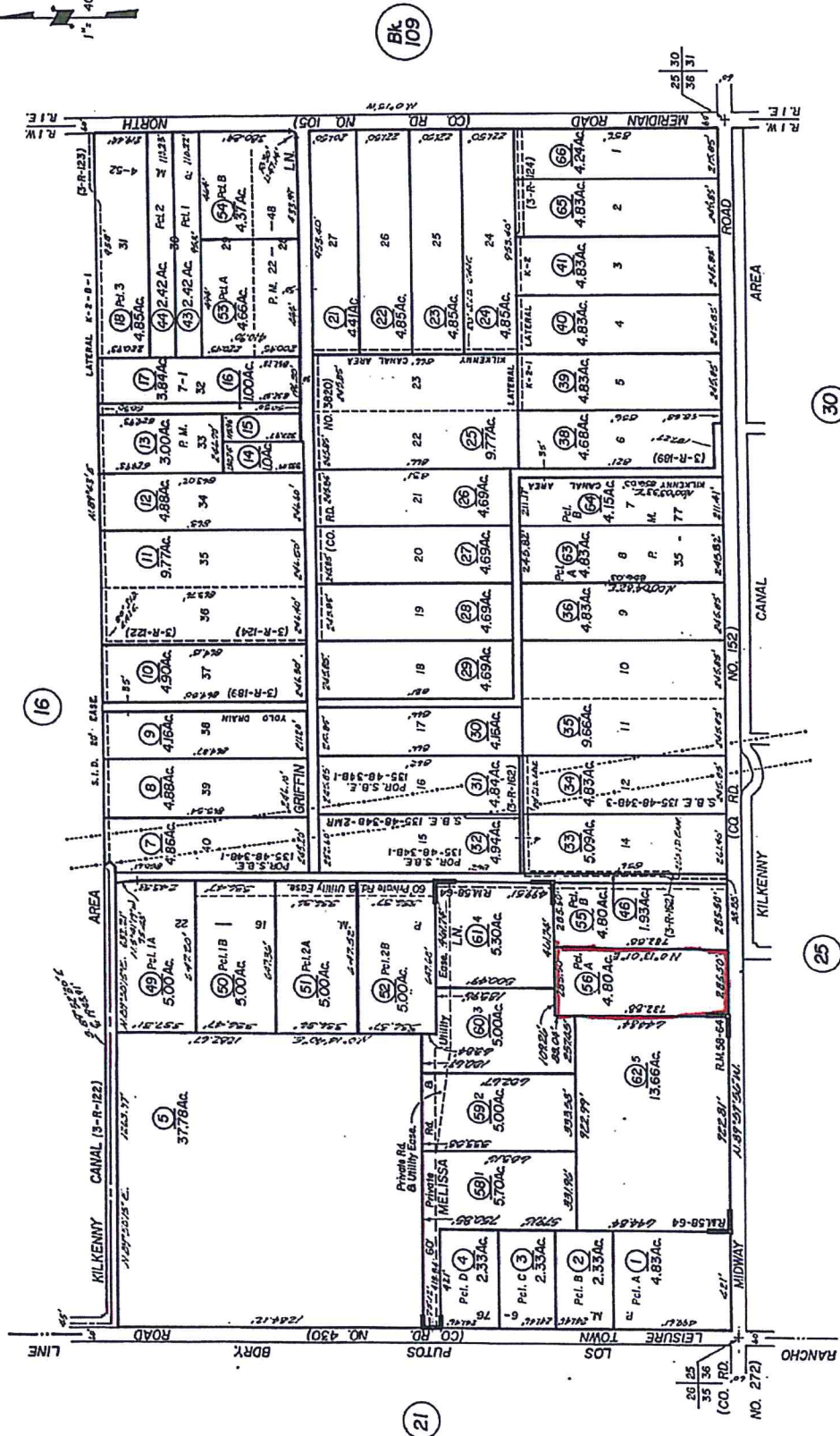
FILE COPY

U-15-04

Tax Area Code 91007 106-22



S. 1/2 SEC. 25, T. 7 N., R. 1 W., M. D. B. & M.



Assessor's Map Blk. 106 Pg. 22
 County of Solano, Calif.
 9/8/97

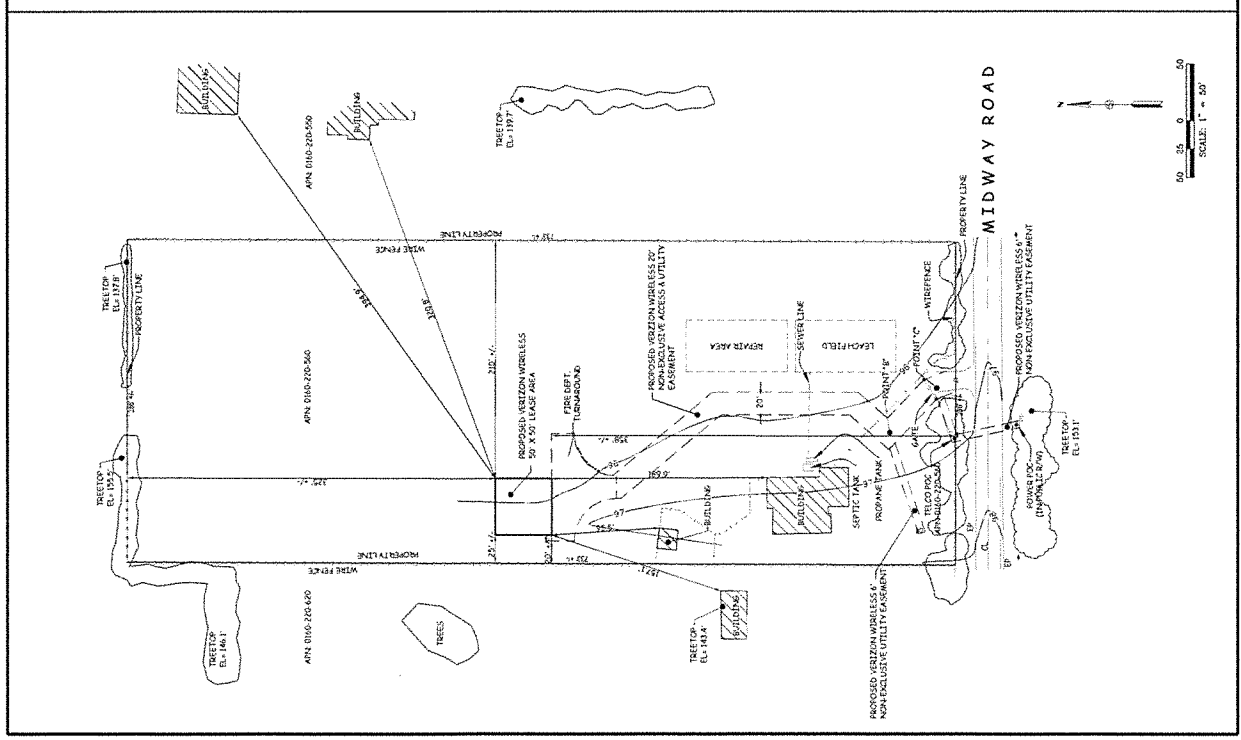
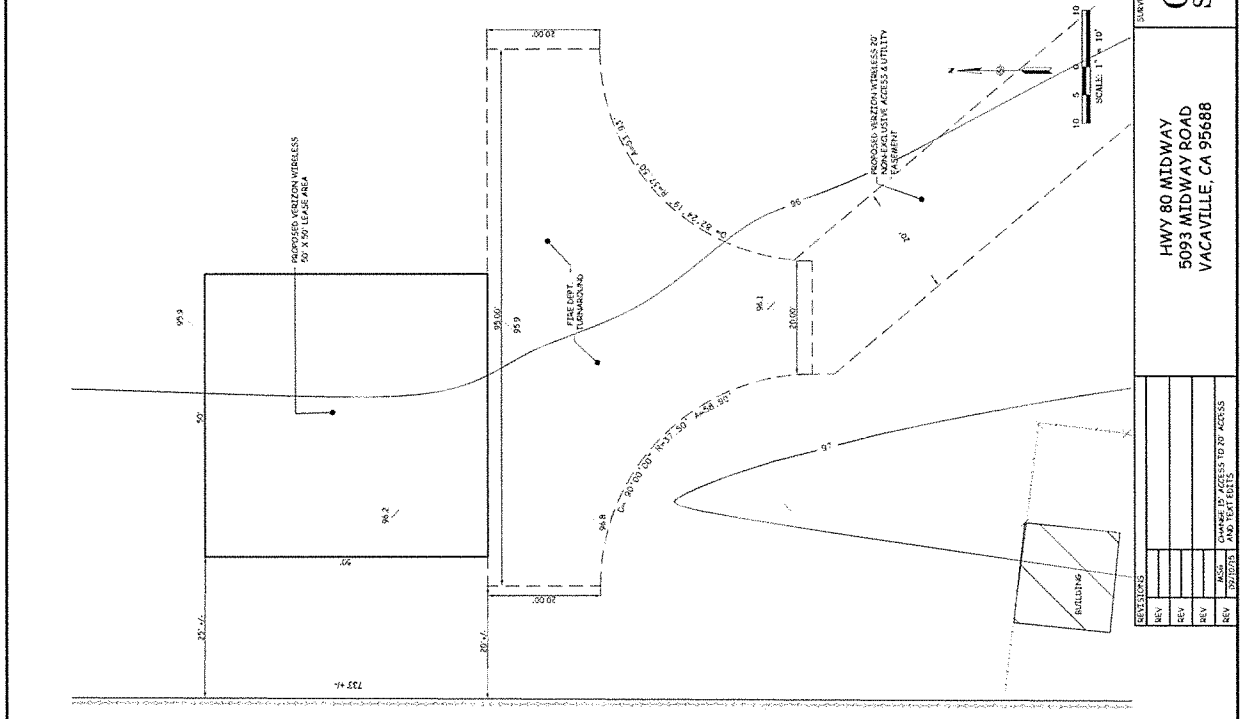
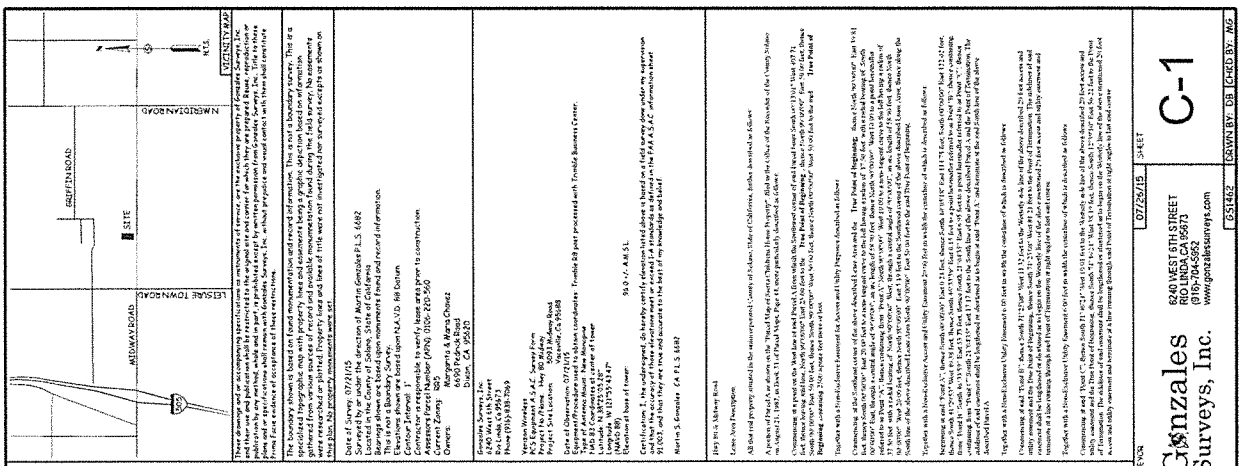
NOTE: This map is for assessment purposes only and is not a warranty of interest, title, or priority. It is subject to all laws, zoning regulations and/or legality of land division laws.

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C. Locke Paddon Col. No. 14 R.M. Blk. 05 Pg. 32
 Sierra Children's Home R.M. Blk. 58 Pg. 64

NOTE - Assessor's Block Numbers Shown in Ellipses
 Assessor's Block Numbers Shown in Circles

6.3



PROPOSED VERIZON WIRELESS
20 X 50' LEASE AREA

PROPOSED VERIZON WIRELESS 20 X 50' LEASE AREA
ACCESS TO UTILITY FACILITIES

REV	DESCRIPTION

HWY 80 MIDWAY
5093 MIDWAY ROAD
VACAVILLE, CA 95688

Gonzales
Surveys, Inc.

300 WEST 10TH STREET
RIO LINDA, CA 95073
www.gonzalesurvey.com

07/26/19 SHEET

C-1

CS-142 DRAWN BY: DB CHECKED BY: MS

DATE OF SURVEY: 07/21/19
CLIENT: Verizon Wireless
PROJECT: 5093 Midway Road
PROJECT NO.: 1908
PROJECT ADDRESS: 5093 Midway Road, Vacaville, CA 95688
PROJECT OWNER: Verizon Wireless
PROJECT ENGINEER: [Name]
PROJECT SURVEYOR: [Name]
PROJECT CHECKER: [Name]
PROJECT APPROVER: [Name]

DATE OF SURVEY: 07/21/19
CLIENT: Verizon Wireless
PROJECT: 5093 Midway Road
PROJECT NO.: 1908
PROJECT ADDRESS: 5093 Midway Road, Vacaville, CA 95688
PROJECT OWNER: Verizon Wireless
PROJECT ENGINEER: [Name]
PROJECT SURVEYOR: [Name]
PROJECT CHECKER: [Name]
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PROJECT SURVEYOR: [Name]
PROJECT CHECKER: [Name]
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PROJECT SURVEYOR: [Name]
PROJECT CHECKER: [Name]
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PROJECT OWNER: Verizon Wireless
PROJECT ENGINEER: [Name]
PROJECT SURVEYOR: [Name]
PROJECT CHECKER: [Name]
PROJECT APPROVER: [Name]

MST ARCHITECTS
 13300 RAY ROAD, SUITE 100, SAN DIEGO, CA 92128
 (619) 444-1111
 www.mstarchitects.com

COMPLETISTS
 WIRELESS CONSULTING, INC.
 10000 SAN DIEGO AVENUE, SUITE 100, SAN DIEGO, CA 92128
 (619) 444-1111
 www.wirelessconsulting.com

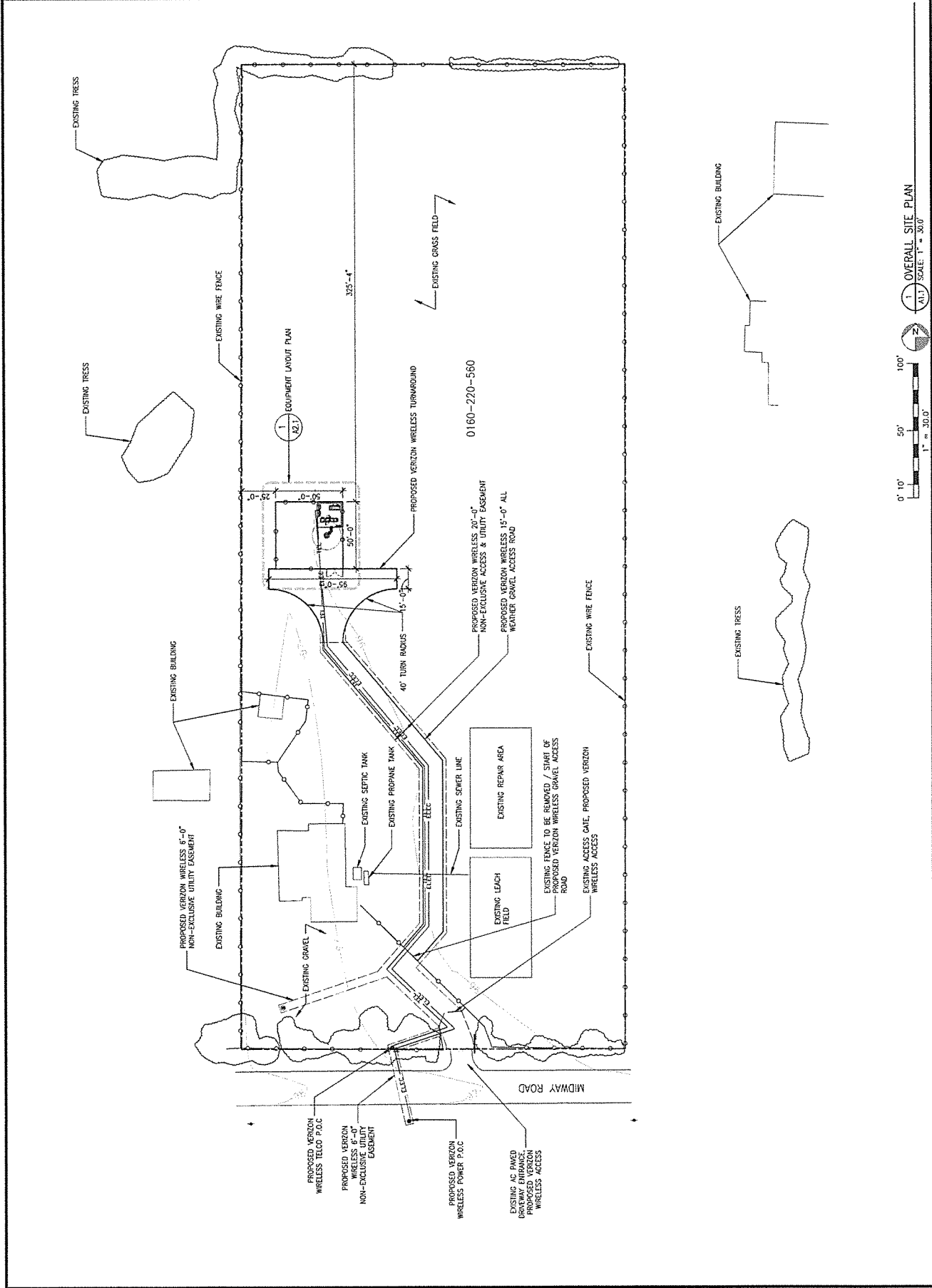
OVERALL SITE PLAN

Verizon Wireless
 5093 MIDWAY ROAD
 HWY 80 MIDWAY
 YACALILE, CA 95688

SHEET TITLE:

DATE: 08/27/15	JOB NO.: 053348
DESIGNED BY: J. D. DAVIS	CHECKED BY: J. D. DAVIS
DRAWN BY: J. D. DAVIS	SCALE: AS SHOWN
DATE: 08/27/15	JOB NO.: 053348

A1.1



1" = 30.0'
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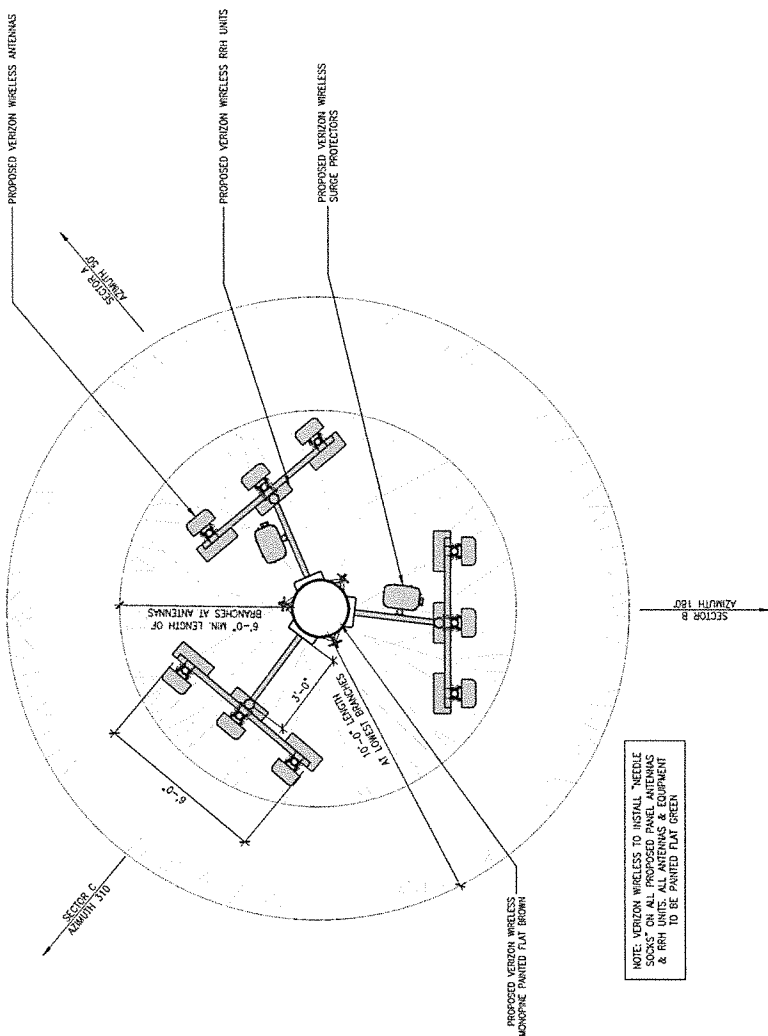
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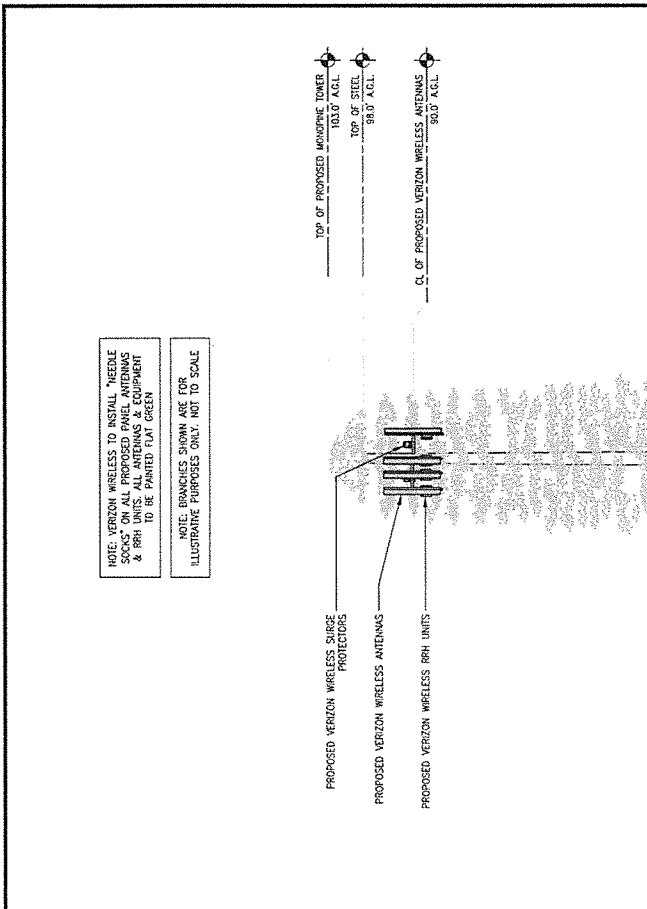
EQUIPMENT SCHEDULE

EQUIPMENT	DESCRIPTION	QUANTITY			TOTAL
		SECTOR A	SECTOR B	SECTOR C	
ANTENNA	TO BE DETERMINED	3	3	3	9
RRH	RRH12 W/A2 OR EQUIVALENT	4	4	4	12
TRIA OR DIPOLE	N/A	0	0	0	0
SURGE PROTECTOR/HYBRID	HAYCAP DC3315 / HYBRID TRUNK CABLE	0	2/3	2/3	2/3
POWERM CABLE	N/A	0	0	0	0
RET CABLE	N/A	0	0	0	0



DATE: 06/20/15
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CHECKED BY: [Blank]
DATE: 06/20/15

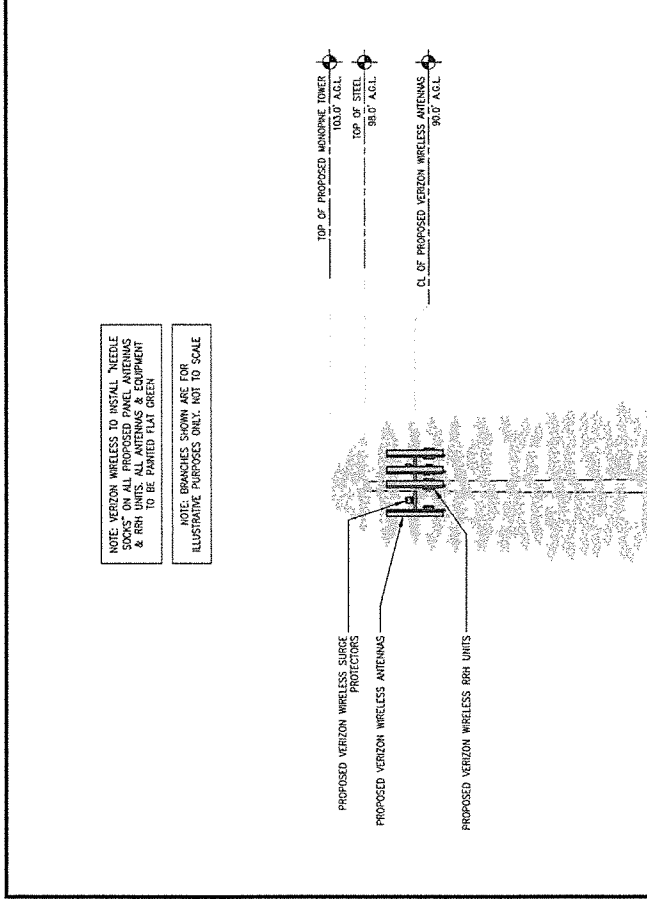
DATE: 06/20/15
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CHECKED BY: [Blank]
DATE: 06/20/15



NOTE: VERIZON WIRELESS TO INSTALL "NEEDLE SOCKS" ON ALL PROPOSED PANEL ANTENNAS & RRH UNITS. ALL ANTENNAS & EQUIPMENT TO BE PAINTED FOR GREEN.

NOTE: BRACKETS SHOWN ARE FOR ILLUSTRATIVE PURPOSES ONLY. NOT TO SCALE.

1 EAST ELEVATION
 A3.1 SCALE: 1/8" = 1'-0"



NOTE: VERIZON WIRELESS TO INSTALL "NEEDLE SOCKS" ON ALL PROPOSED PANEL ANTENNAS & RRH UNITS. ALL ANTENNAS & EQUIPMENT TO BE PAINTED FOR GREEN.

NOTE: BRACKETS SHOWN ARE FOR ILLUSTRATIVE PURPOSES ONLY. NOT TO SCALE.

2 SOUTH ELEVATION
 A3.1 SCALE: 1/8" = 1'-0"

6.4

**Verizon Wireless • Proposed Base Station (Site No. 288201 “Hwy 80 Midway”)
5093 Midway Road • Vacaville, California**

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. 288201 “Hwy 80 Midway”) proposed to be located at 5093 Midway Road in Vacaville, California, 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 pole, configured to resemble a pine tree, to be located near 5093 Midway Road in Vacaville. 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.



**Verizon Wireless • Proposed Base Station (Site No. 288201 “Hwy 80 Midway”)
5093 Midway Road • Vacaville, California**

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 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 August 3, 2015, it is proposed to install nine Andrew Model SBNHH-1D65C directional panel antennas on a 98-foot steel pole, configured to resemble a pine tree, to be sited on the rural residential parcel located at 5093 Midway Road in unincorporated Solano County near Vacaville. The antennas would employ no downtilt, would be mounted at an effective height of about 90 feet above ground, and would be oriented in groups of three toward 50°T, 180°T, and 310°T. The maximum effective radiated power in any direction would be 11,070 watts, representing simultaneous operation at 4,160 watts for AWS, 4,160 watts for PCS, and 2,750 watts for 700 MHz service; no operation on cellular frequencies is presently proposed from this site. 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 0.010 mW/cm², which is 1.1% of the applicable public exposure limit. The maximum calculated level at the top-floor elevation of any nearby residence* is 0.27% 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.

* Located at least 210 feet away, based on the drawings.



**Verizon Wireless • Proposed Base Station (Site No. 288201 “Hwy 80 Midway”)
5093 Midway Road • Vacaville, California**

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 5093 Midway Road in Vacaville, California, 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, 2017. 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.



William F. Hammett

William F. Hammett, P.E.

707/996-5200

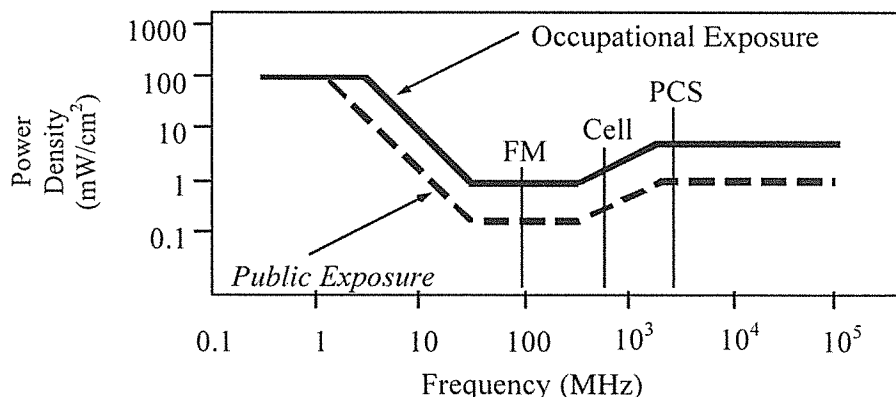
October 7, 2015

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.

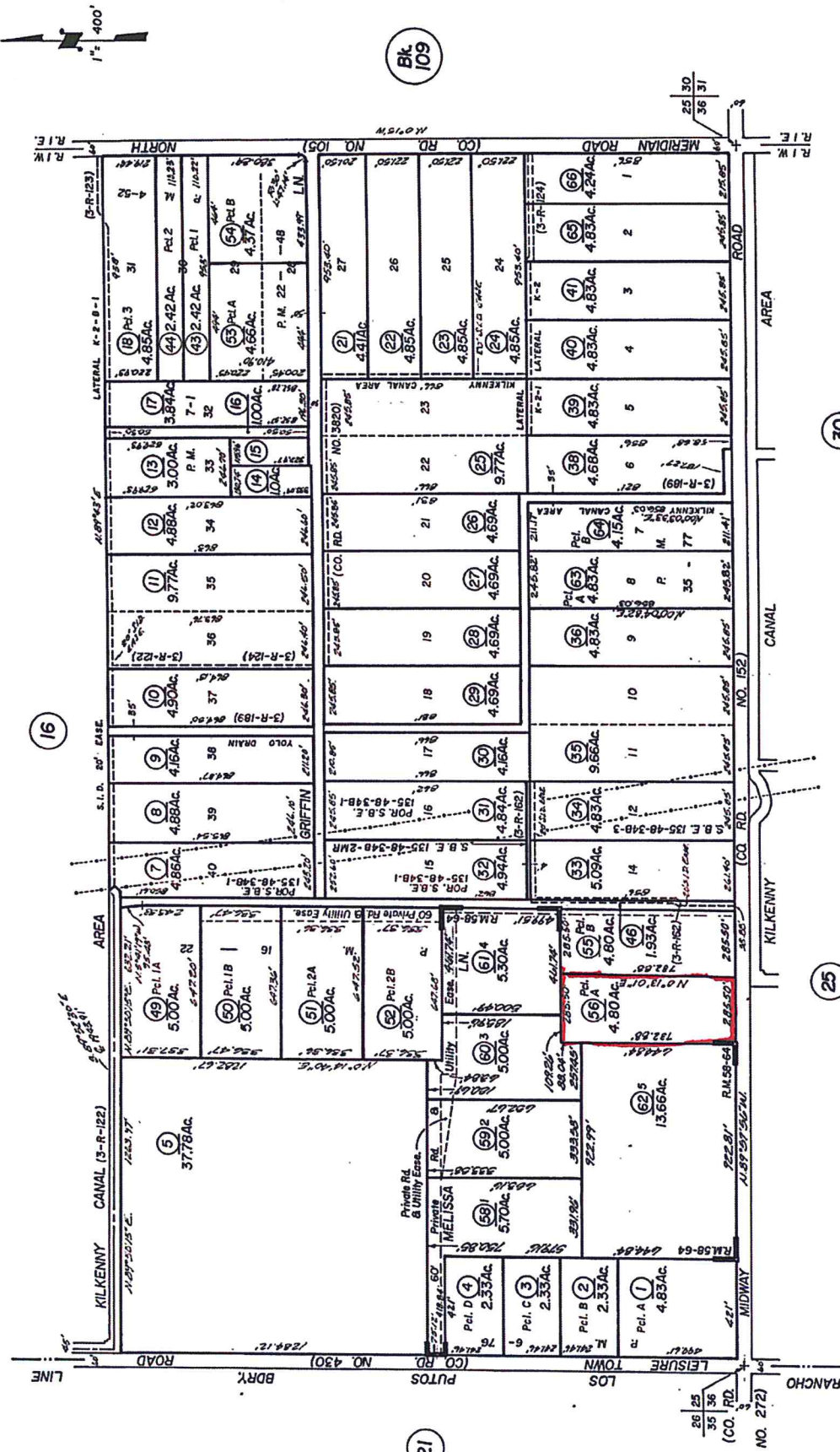


FILE COPY

U-15-06

Tax Area Code 91007 106-22

S. 1/2 SEC. 25, T. 7 N., R. 1 W., M. D. B. & M.



Assessor's Map Bk. 106 Pg. 22
County of Salano, Calif.

NOTE: This map is for assessment purposes only and is not a warranty of interest in land. It is subject to all laws, regulations and/or orders of the State Board of Equalization and/or the State Board of Tax Appeals.

REVISION	DATE	BY
1	12-15-06	...
2	1-10-07	...
3	2-15-07	...
4	3-15-07	...
5	4-15-07	...
6	5-15-07	...
7	6-15-07	...
8	7-15-07	...
9	8-15-07	...
10	9-15-07	...
11	10-15-07	...
12	11-15-07	...
13	12-15-07	...
14	1-15-08	...
15	2-15-08	...
16	3-15-08	...
17	4-15-08	...
18	5-15-08	...
19	6-15-08	...
20	7-15-08	...
21	8-15-08	...
22	9-15-08	...
23	10-15-08	...
24	11-15-08	...
25	12-15-08	...
26	1-15-09	...
27	2-15-09	...
28	3-15-09	...
29	4-15-09	...
30	5-15-09	...
31	6-15-09	...
32	7-15-09	...
33	8-15-09	...
34	9-15-09	...
35	10-15-09	...
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37	12-15-09	...
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62	1-15-12	...
63	2-15-12	...
64	3-15-12	...
65	4-15-12	...
66	5-15-12	...

NOTE - Assessor's Block Numbers Shown in Ellipses
Assessor's Parcel Numbers Shown in Circles

C. Locke Paddon Col. No. 14 R.M. Bk. 05 Pg. 32
Sierra Children's Home R.M. Bk. 58 Pg. 64

9697

6.5

Environmental Noise Analysis

Hwy 80 Midway Cellular Facility

Solano County, California

BAC Job # 2014-292

Prepared For:

Complete Wireless Consulting

Attn: Ms. Kim Le
2009 V Street
Sacramento, CA 95818

Prepared By:

Bollard Acoustical Consultants, Inc.



Paul Bollard, President

November 23, 2015



Introduction

The Hwy 80 Midway Verizon Wireless Unmanned Telecommunications Facility Project (project) proposes the construction of a monopine, outdoor equipment cabinets, and emergency diesel standby generator inside a fenced area located at 5093 Midway Road, Vacaville (Solano County), California. The outdoor equipment cabinets and emergency diesel standby generator 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 September 9, 2015.

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 project emergency generator and 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

Solano County General Plan Health & Safety Element

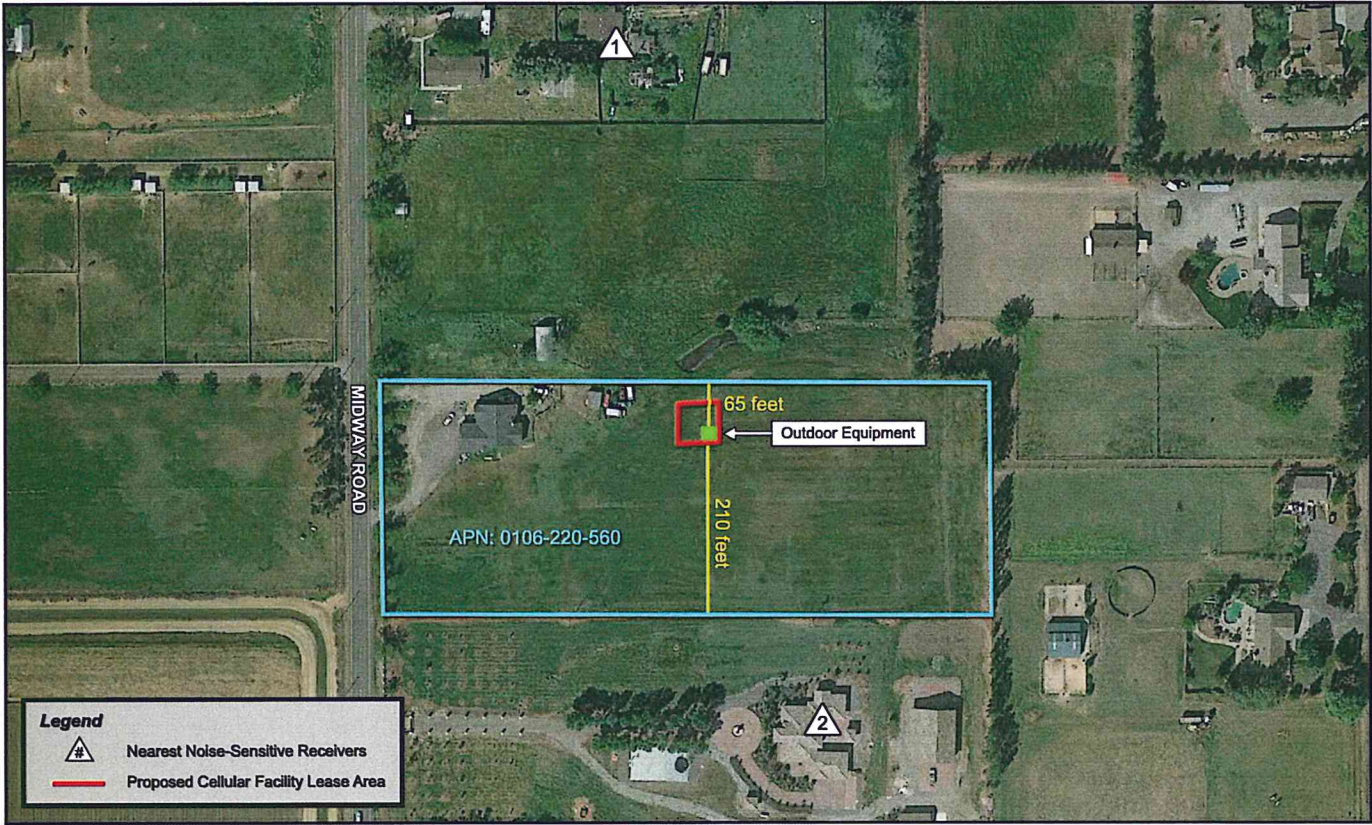
The Solano County General Plan Health & Safety Element contains a noise section that establishes acceptable noise level limits for non-transportation (stationary) noise sources (see Table 1). The primary objective of the noise section of the Health & Safety Element is to prescribe policies that lead to the preservation and enhancement of the quality of life for the residents of Solano County by securing and maintaining an environment free from excessive noise.

Table 1 Maximum Allowable Noise Exposure for Stationary Noise Sources – Residential Land Uses Solano County Noise Element of the General Plan		
Noise Level Descriptor	Daytime	Nighttime
	7 a.m. to 10 p.m.	10 p.m. to 7 a.m.
Hourly L_{eq} , dB	55	50
Maximum Level (L_{max}), dB	70	65
Source: Solano County Health & Safety Element of the General Plan		

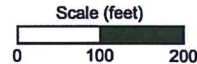
Solano County Code

Section 28.70.10(B)(1)(b) of the Solano County Code, which pertains to general development standards applicable to all uses in every zoning district, requires that all uses of land shall not generate noise that exceeds 65 dBA L_{dn} at any property line.

Figure 1
Project Area and Nearest Noise-Sensitive Receivers
Hwy 80 Midway Cellular Facility - Solano County, California



Legend
▲ Nearest Noise-Sensitive Receivers
■ Proposed Cellular Facility Lease Area



Section 28.81(D)(10) of the Solano County Code, which pertains to noise generation of wireless communications facilities, reads as follows:

All wireless communication facilities shall be designed to minimize noise. If a facility is located in or within 100 feet of a residential district, noise attenuation measures shall be included to reduce noise levels to a maximum exterior noise level of 50 L_{dn} at the facility site's property lines.

Noise Standards Applied to the Project

The Solano County General Plan non-transportation (stationary) noise level standards seen in Table 1 were applied to the project. As required by the general plan, the noise level standards were applied at the outdoor activity area of the nearest noise-sensitive land uses.

The proposed facility is also located within a rural residential district. As a result, Section 28.81(D)(10) of the Solano County Code was also applied to this project. Specifically, the wireless communication facility noise standard of 50 dB L_{dn} was applied at the property lines of the site the facility is located upon.

The Solano County Code, Section 28.70.10(B)(1)(b) property line noise level standard of 65 dB L_{dn} is less restrictive than the County's wireless communication facility property line noise standard of 50 dB L_{dn}. As a result, the more restrictive 50 dB L_{dn} property line noise level standard was applied to this project.

Project Noise Generation

As discussed previously, there are two project noise sources which are considered in this evaluation; the equipment cabinet cooling systems and the emergency generator. The evaluation of potential noise impacts associated with the operation of each noise source is evaluated separately as follows:

Equipment Cabinet Noise Sources and Reference Noise Levels

The project proposes the installation of four equipment cabinets within the lease area illustrated on Figure 1. Specifically, the cabinets assumed for the project are as follows: two Ericsson eNB RBS6101, one Charles Industries 48V Power Plant and one miscellaneous cabinet cooled by a McLean Model T-20 air conditioner. The cabinets and their respective reference noise levels are provided below in Table 2. The manufacturer's noise level data specification sheets for the proposed equipment cabinets are provided as Appendix C.

Table 2 Reference Noise Level Data of Proposed Equipment Cabinets			
Equipment	Number of Cabinets	Reference Noise Level, dB	Reference Distance, feet
Ericsson eNB RBS6101	2	53	5
Charles Industries 48V Power Plant	1	60	5
McLean T-20	1	66	5

Notes: Manufacturer specification sheets provided as Appendix C.

Generator Noise Sources and Reference Noise Levels

A Generac Industrial Power Systems Model SD030 is proposed for use at this facility to maintain cellular service during emergency power outages. The site plans indicate that the generator, located within the same lease area as the equipment cabinets, will be equipped with the Level 2 Acoustic Enclosure resulting in a reference noise level of 68 dB at 23 feet. The manufacturer's noise level data specification sheet for the proposed generator is provided as Appendix D.

The generator which is proposed at this site would only operate during emergencies (power outages) and brief daytime periods for periodic maintenance/lubrication. According to the project applicant, testing of the generator would occur twice per month, during daytime hours, for a duration of approximately 15 minutes. The emergency generator would only operate at night during power outages. It is expected that nighttime operation of the project emergency generator would be exempt from the County's exterior noise exposure criteria due to the need for continuous cellular service provided by the project equipment.

Predicted Facility Noise Levels at Nearby Sensitive Receptors

Assessment Relative to Solano County General Plan:

The proposed outdoor equipment maintains a separation of 330-400 feet from the outdoor activity areas of the nearest noise-sensitive land uses, identified as receivers 1-2. Assuming standard spherical spreading loss (-6 dB per doubling of distance), project-equipment noise exposure at the closest receivers was calculated and the results of those calculations are presented in Table 3.

Table 3			
Summary of Project-Related Noise Exposure at Nearest Residences			
Hwy 80 Midway Verizon Wireless Telecommunications Facility Project			
Nearest Receiver ¹	Distance from Cellular Equipment (feet)	Predicted Noise Levels (dBA)	
		Equipment Cabinets (L _{eq})	Generator (L _{max}) ²
1	400	29	43
2	330	31	45
Notes:			
¹ Receiver locations are shown on Figure 1.			

Because the cooling fans of the proposed equipment cabinets could potentially be in operation during nighttime hours, the operation of the equipment cabinets would be subject to the County's nighttime noise level standard of 50 dB L_{eq}. As shown in Table 3, the predicted equipment cabinet noise levels of 29-31 dB L_{eq} at the outdoor activity areas of the nearest noise-sensitive receiver locations would satisfy the Solano County 50 dB L_{eq} nighttime noise level standard. As a result, no additional noise mitigation measures would be warranted for this aspect of the project.

Because the project generator would only operate during daytime hours for brief periods required for testing and maintenance, the operation of the generator would be subject to the County's maximum daytime noise level standard of 70 dB L_{max}. As shown in Table 3, the predicted generator noise levels of 43-45 dB L_{max} at the outdoor activity areas of the nearest noise-sensitive receiver locations would satisfy the Solano County 70 dB L_{max} daytime noise level standard. As a result, no additional noise mitigation measures would be warranted for this aspect of the project.

Assessment Relative to Solano County Code:

The project equipment maintain a separation of 65 feet from the nearest property line to the west. To predict cellular facility noise emissions relative to the Solano County Code 50 dB L_{dn} noise standard at the nearest property line, the number of hours per day the equipment would be in operation must be known. For the purpose of this analysis, the equipment cabinets were conservatively assumed to be operating concurrently and continuously for 24 hours. As indicated previously, the project applicant has indicated that the proposed generator is tested twice per month for a duration of approximately 15 minutes during daytime hours. As a result, it was assumed for this analysis that the project generator would be operating continuously for a 15 minute period during daytime hours.

Assuming standard spherical spreading loss (-6 dB per doubling of distance), the combined project-equipment noise exposure at the nearest property line was calculated to be 47 dB L_{dn}. The combined project noise level of 47 dB L_{dn} at the nearest property line would satisfy the County's 50 dB L_{dn} noise level standard. As a result, no additional noise mitigation measures would be warranted for the project.

Conclusions

Based on the equipment noise level data and analyses presented above, project-related equipment noise exposure is expected to satisfy the Solano County General Plan noise exposure limits applied at the outdoor activity areas of the nearest noise-sensitive land uses without the need for additional noise mitigation. In addition, project-related equipment noise exposure is expected to satisfy the Solano County Code noise exposure limits applied at the nearest property lines without the need for additional noise mitigation. As a result, no additional noise mitigation measures would be warranted for this project.

This concludes our environmental noise assessment for the proposed Hwy 80 Midway Cellular Facility in Solano County, California. Please contact BAC at (916) 663-0500 or paulb@bacnoise.com with any questions or requests for additional information.

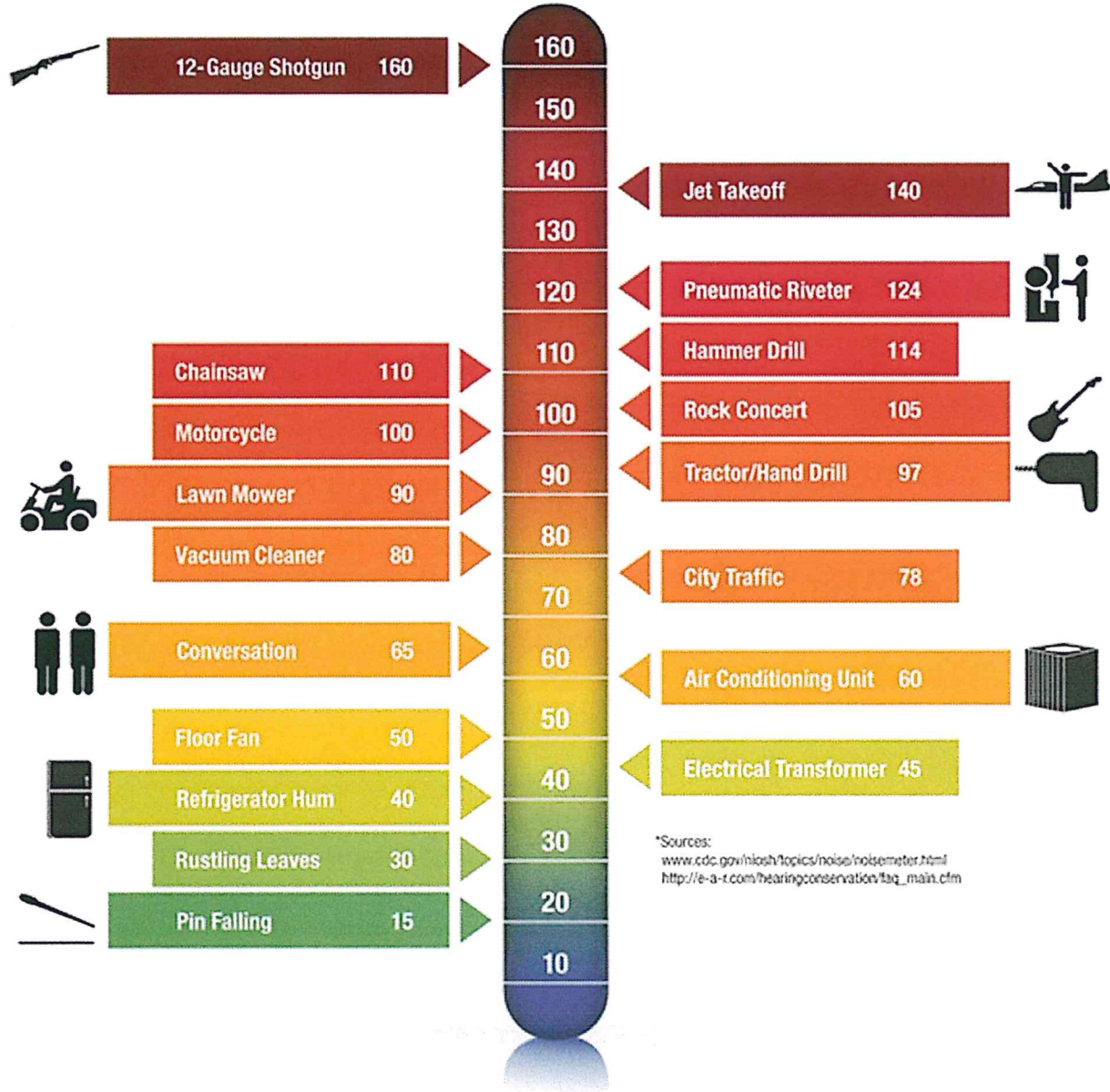
Appendix A Acoustical Terminology

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.



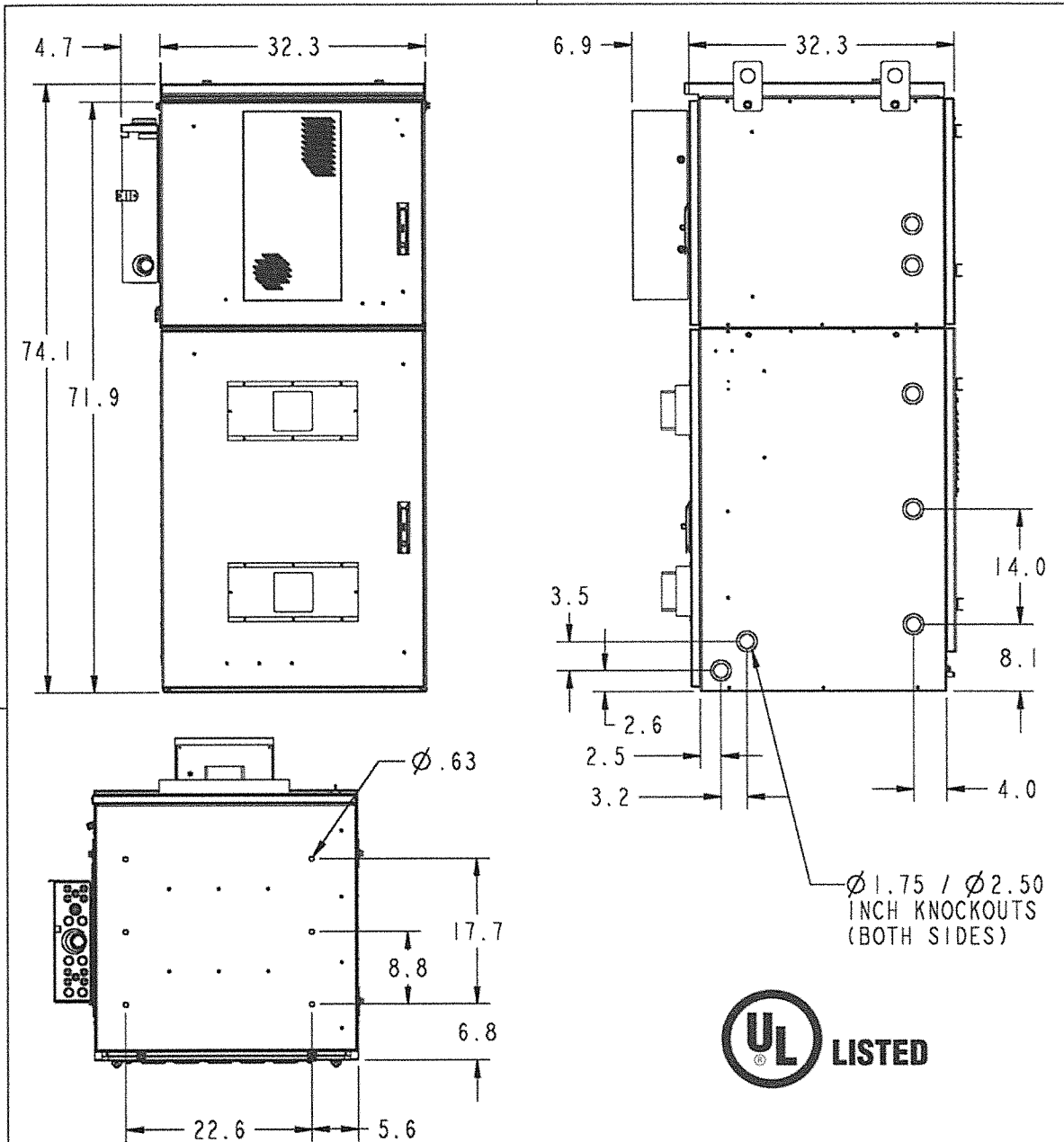
Appendix B

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



*Sources:
www.cdc.gov/niosh/topics/noise/noisemeter.html
http://e-a-t.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 Industries Ltd.
Telecommunications Group
Charles Center, 5450 Apollo Drive
Bellingham, WA 98208
Telephone: 847-808-6300

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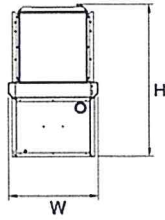
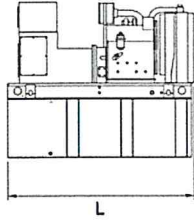
Verizon Wireless
Large Site Support Enclosure

Appendix D

SD030

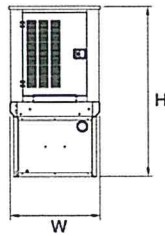
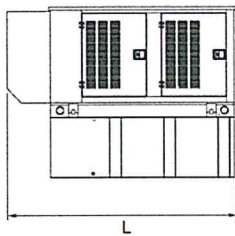
dimensions, weights and sound levels

5 of 5



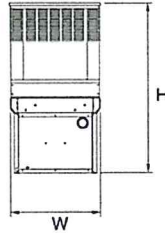
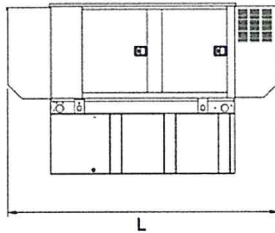
OPEN SET

RUN TIME HOURS	USABLE CAPACITY (GAL)	L	W	H	WT	dBA*
NO TANK	-	76	38	46	2060	82
20	54	76	38	59	2540	
48	132	76	38	71	2770	
77	211	76	38	83	2979	
109	300	93	38	87	3042	



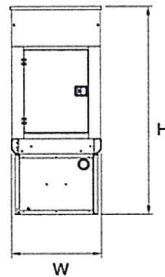
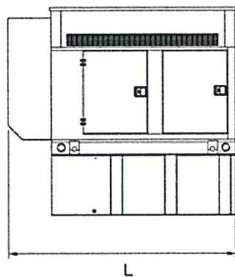
STANDARD ENCLOSURE

RUN TIME HOURS	USABLE CAPACITY (GAL)	L	W	H	WT	dBA*
NO TANK	-	95	38	50	2362	77
20	54	95	38	63	2842	
48	132	95	38	75	3072	
77	211	95	38	87	3281	
109	300	95	38	91	3344	



LEVEL 1 ACOUSTIC ENCLOSURE

RUN TIME HOURS	USABLE CAPACITY (GAL)	L	W	H	WT	dBA*
NO TANK	-	113	38	50	2515	70
20	54	113	38	63	2995	
48	132	113	38	75	3225	
77	211	113	38	87	3434	
109	300	113	38	91	3497	



LEVEL 2 ACOUSTIC ENCLOSURE

RUN TIME HOURS	USABLE CAPACITY (GAL)	L	W	H	WT	dBA*
NO TANK	-	95	38	62	2520	68
20	54	95	38	75	3000	
48	132	95	38	87	3230	
77	211	95	38	99	3439	
109	300	95	38	103	3502	

*All measurements are approximate and for estimation purposes only. Weights are without fuel in tank. Sound levels measured at 23ft (7m) and does not account for ambient site conditions.

Tank Options

- | | |
|---|------|
| <input type="radio"/> MDEQ | OPT |
| <input type="radio"/> Florida DERM/DEP | OPT |
| <input type="radio"/> Chicago Fire Code | OPT |
| <input type="radio"/> IFC Certification | CALL |
| <input type="radio"/> ULC | CALL |

Other Custom Options Available from your Generac Industrial Power Dealer

YOUR FACTORY RECOGNIZED GENERAC INDUSTRIAL DEALER

Specification characteristics may change without notice. Dimensions and weights are for preliminary purposes only. Please consult a Generac Power Systems Industrial Dealer for detailed installation drawings.

Generac Power Systems, Inc. • S45 W29290 HWY. 59, Waukesha, WI 53189 • generac.com

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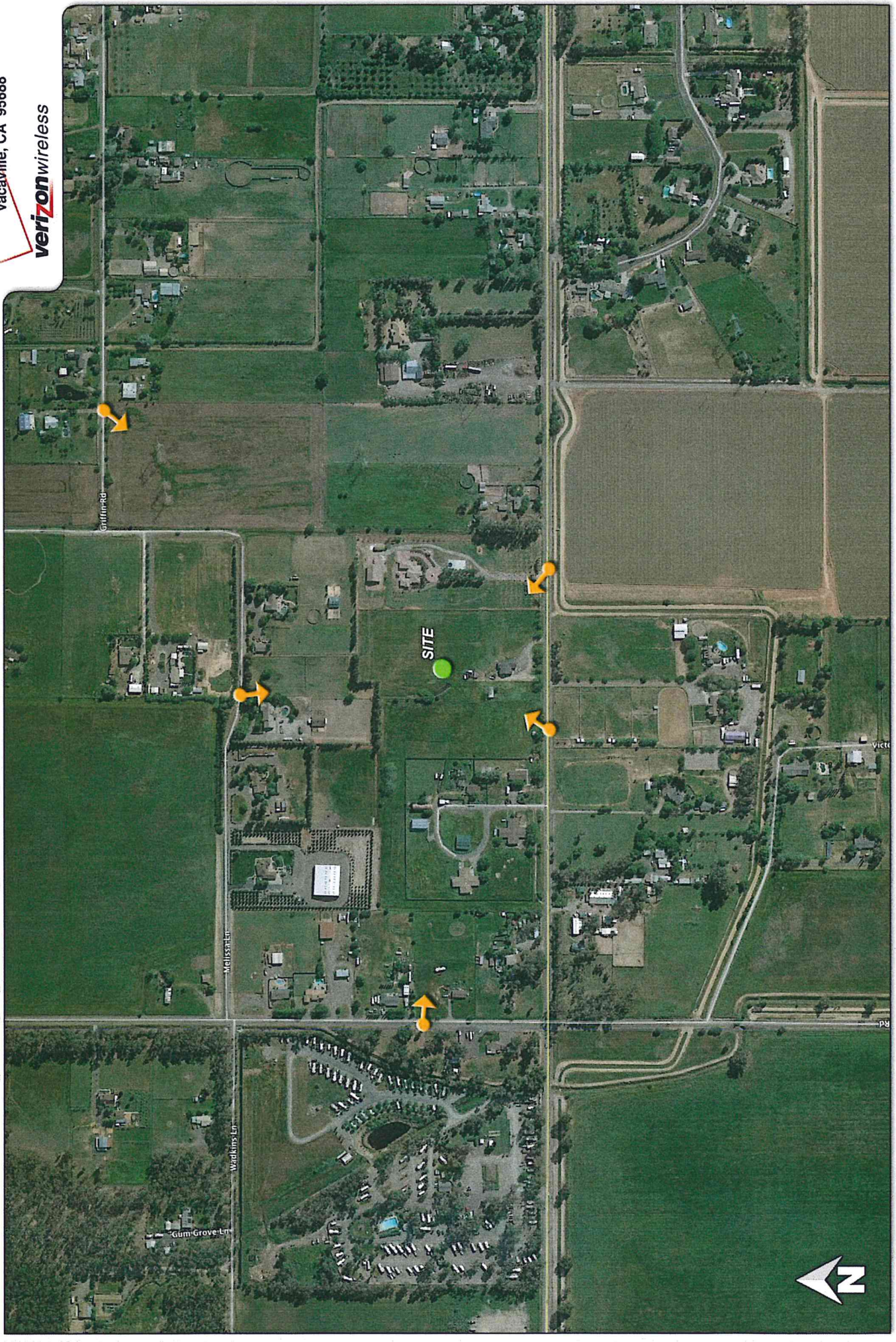
6.6

Hwy 80 Midway

5093 Midway Road
Vacaville, CA 95688



Aerial photograph showing the viewpoints for the photosimulations.

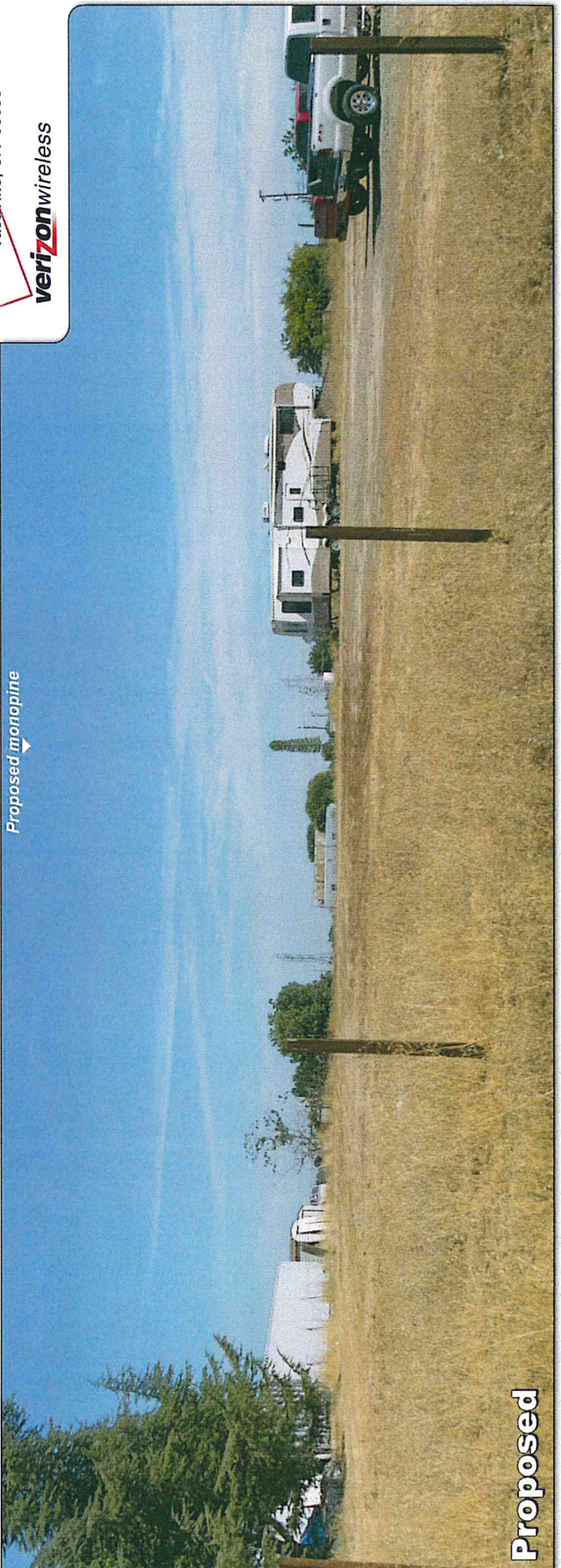




Existing

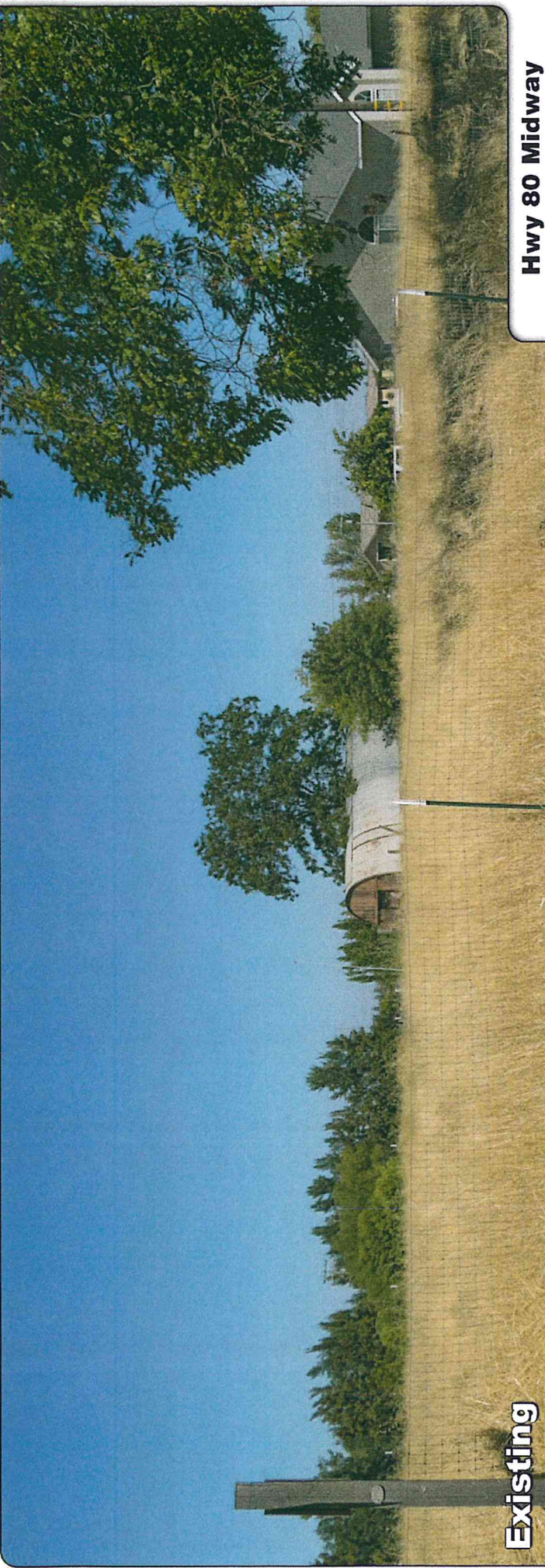
Photosimulation of the view looking east from the nearest point along Leisure Town Road.

Proposed *monopine* ▶



Proposed

Hwy 80 Midway
 5093 Midway Road
 Vacaville, CA 95688

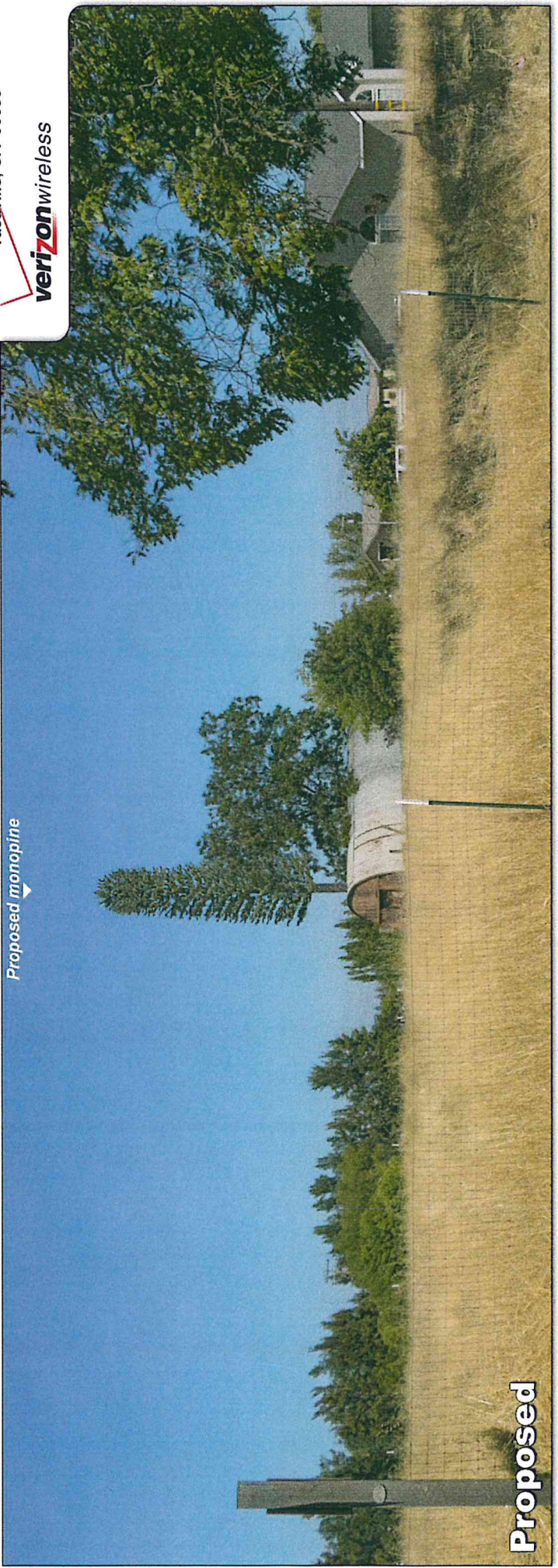


Existing

Hwy 80 Midway
5093 Midway Road
Vacaville, CA 95688
verizonwireless

Photosimulation of the view looking northeast from Midway Road.

Proposed monopine →



Proposed



Existing

Hwy 80 Midway
 5093 Midway Road
 Vacaville, CA 95688

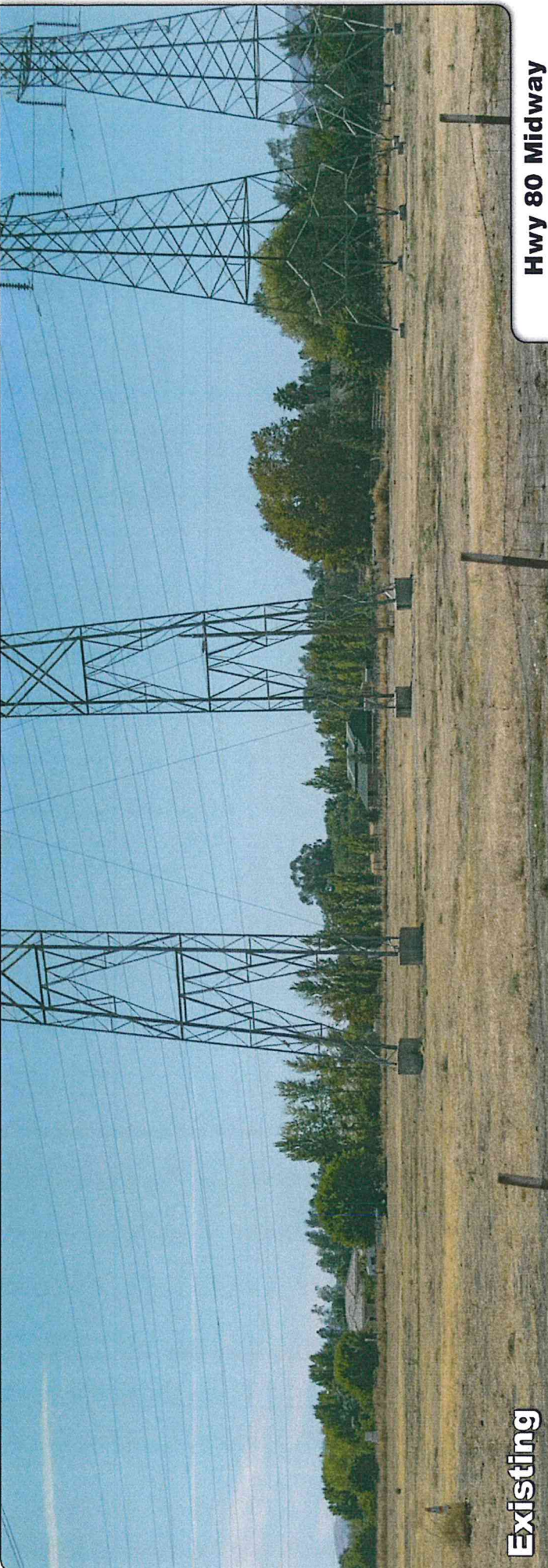


Photosimulation of the view looking northwest along Midway Road.



Proposed monopine

Proposed

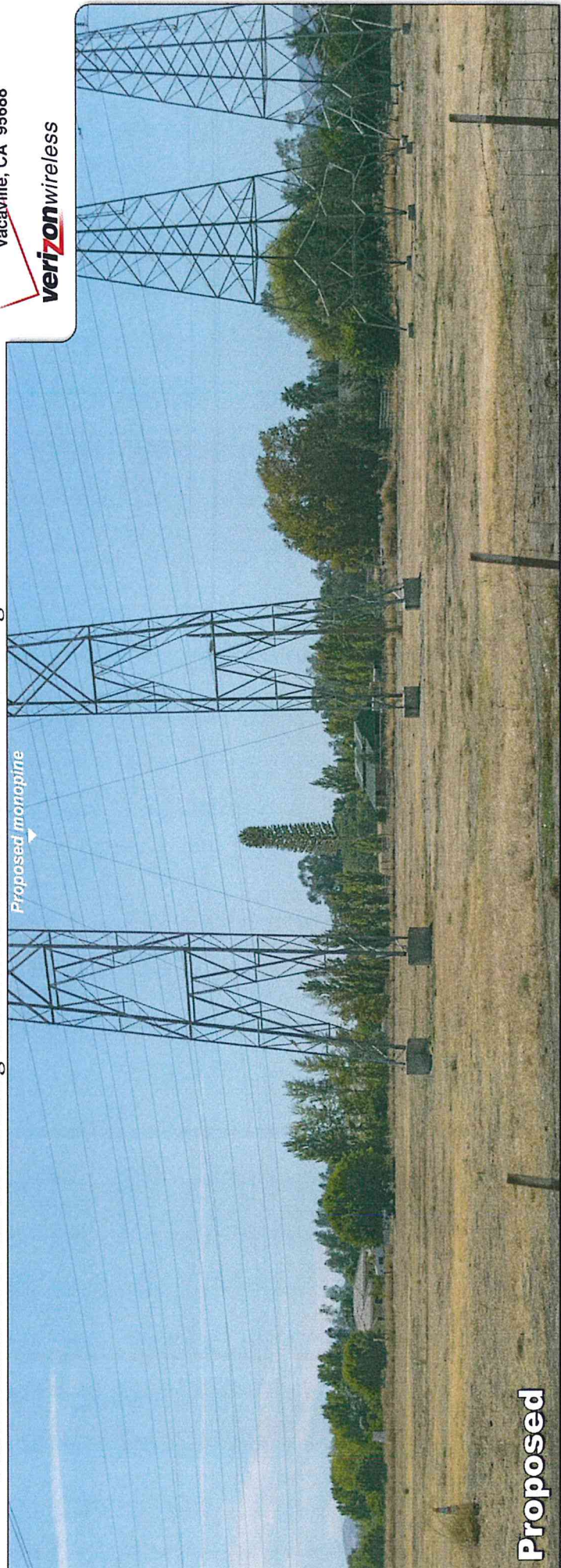


Existing

Photosimulation of the view looking southwest from the clearest view along Griffin Road.

Hwy 80 Midway
 5093 Midway Road
 Vacaville, CA 95688

Proposed monopine



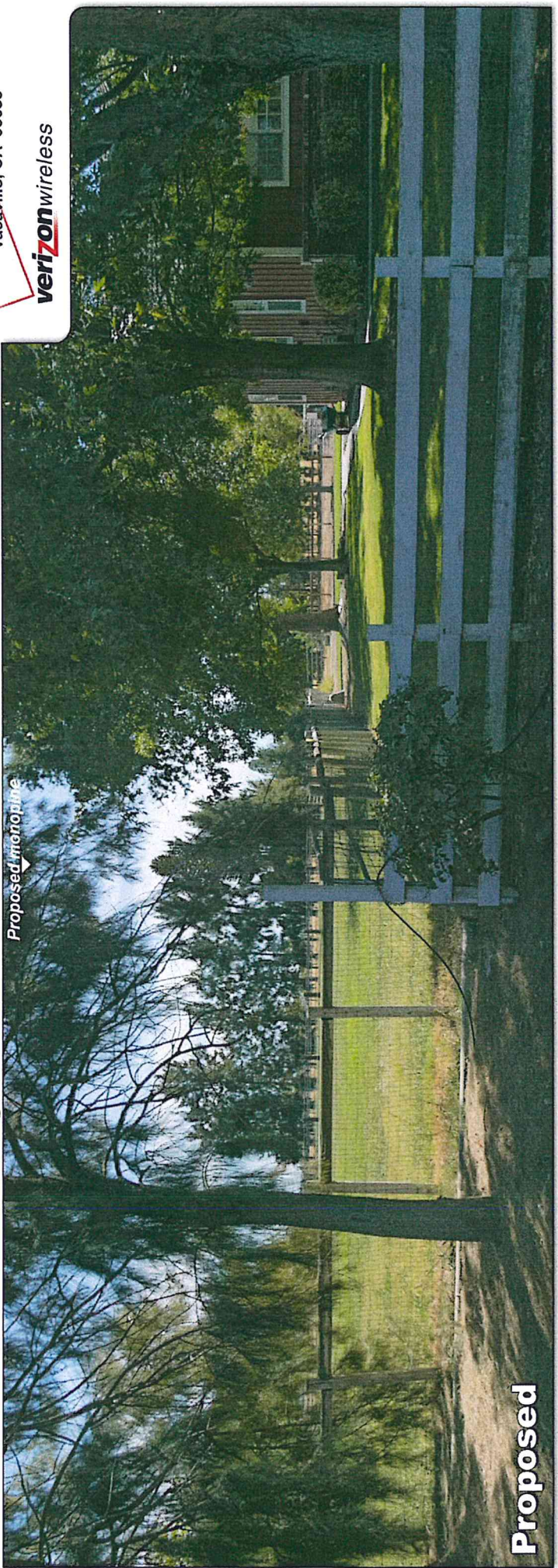
Proposed



Existing

Photosimulation of the view looking south from the nearest and clearest view along Melissa Lane.

Hwy 80 Midway
 5093 Midway Road
 Vacaville, CA 95688



Proposed merquite

Proposed