

NEVADA CITY PLANNING DEPARTMENT
317 Broad Street
Nevada City CA 95959
INITIAL DISTRIBUTION / PROJECT DESCRIPTION

DATE: March 5, 2020

To: Nevada City Engineer – B. McAlister	Parks and Rec. Manager – D. Zydonis
Nevada City Public Works – B. Highsmith	Northern Sierra AQMD – S. Longmire
Nevada City Police – C. Ellis	City Manager – C. Olson
Nevada City Fire – S. Goodspeed	City Attorney – C. Hodgson
Nev. Co. Building Dept. – C. Griesbach	

This project is being distributed to you for your review and comment. Your comments and/or conditions must be received, *in writing*, no later than **Wednesday, March 11, 2020**. Please e-mail a digital copy of your comments to the City Planner. If you need additional information to complete your review, please contact the City Planner before the comment deadline.

PLEASE NOTE: The following documents are available on the Planning Department page of the Nevada City website under the “current projects” heading, This list will be updated as materials are revised or added for the duration of project processing if applicable:

1. *Variance Application/Applicant Support Statement*
2. *Site Plan/ Elevations*
3. *Generator Spec Sheet*

PROJECT: The applicant is proposing to co-locate wireless telecommunication antennas on an existing monopine at 980 Helling Way. Pursuant to Ordinance 2019-06, adopted by City Council in September 2019, which regulates wireless telecommunication facilities within the City, review of this project qualifies for administrative permit review. The city is in contract with the Center for Municipal Solutions to review wireless telecommunication facility applications, and who is currently reviewing the subject application for compliance with the City’s adopted standards. Section 17.150.070 A.15(b) regulates facility noise as follows:

At no time shall equipment noise from any facility exceed an exterior noise level of fifty-five (55) dBA three (3) feet from the source of the noise if the facility is located in the public right-of-way adjacent to a business, commercial, manufacturing, utility or school zone; provided, however, that for any such facility located within five hundred (500) feet of any property zoned residential or improved with a residential use, such equipment noise shall not exceed forty-five (45) dBA three (3) feet from the sources of the noise.

The subject property is zoned multi-family residential and is located approximately 60-feet from a County residential facility known as the Odyssey House. They are proposing to install an emergency generator which, when in operation, will exceed the 45 dBA level at three feet from the source. The applicant is seeking a Variance from this noise standard.

APPLICANT: Complete Wireless, represented by Kevin Gallagher
OWNER: County of Nevada, property owner, represented by Steve Monahan, Facilities Manager.
APN(s): 005-020-018
LOCATION: 980 Helling Way

Lot Size: 6.13 acres	Lot Coverage: 50%
Zoning: R2-SC: Multi-Family Residential-Scenic Corridor	
Setbacks: Front yard: 25-ft, Rear Yard: 25-ft, Interior side yards: 5-ft	Historical Dist.: Outside
	Date Filed 02/27/2020

NEVADA CITY PLANNING COMMISSION
APPLICATION FOR VARIANCE

The undersigned, requests that a VARIANCE from the provisions of Ordinance No. 367 be granted, pursuant to Section 16.20 of said Ordinance, and hereby certifies as follows:

OWNER'S NAME: County of Nevada

ADDRESS: 12548 Loma Rica Dr, Grass Valley, CA 95945 PHONE: 530-470-2637

LOCATION OF SUBJECT PROPERTY: 980 Helling Way, Nevada City, CA 95959

ASSESSOR'S PARCEL NO. 05-020-18 ZONE: R2-SC PRESENT USE: County Buildings, Wireless Facility

NATURE OF REQUESTED VARIANCE: Waiver of noise requirements under the Nevada City wireless code, Section 17.150.080(A)(13)

sub parts (a) and (b), requiring no noise exceeding 55 DB 3' from the source of the noise, (or 45 DB if there is a residential property within 500')

STATEMENT OF HARDSHIP (Note: The Planning Commission is not authorized to grant a variance if the result would be to confer a special privilege inconsistent with the limitations placed upon other properties in the same zone):

(a) The following special circumstances or conditions applicable to subject property (including size, shape, topography, location or surroundings) do not generally apply to other properties in the same zone.

Please see "Statement of Hardship" in attached request for waiver.

(b) The granting of a variance would not be materially detrimental to the health, safety or welfare of other persons residing in the vicinity of the subject property, or to other property or improvements in the vicinity, for the following reasons:

Please see attached request for waiver.

ATTACH MAP or SKETCH showing boundary lines of subject property, adjacent streets, and other relevant facts. SUBMIT 10 COPIES OF APPLICATION AND ACCOMPANYING DOCUMENTS.

2/20/2020

Date



Signature of Applicant

New Cingular Wireless PCS c/o Complete wireless Consulting

CITY OF NEVADA CITY
317 BROAD STREET
NEVADA CITY, CA 95959

Request for Waiver of City of Nevada City Wireless Noise Standards - §17.150.070 A.15(a) and (b)

AT&T project “CVL03071 Coyote Street”

APN: 05-020-18

980 Helling Way, Nevada City, CA

Per the attached project support statement, New Cingular Wireless PCS, LLC (AT&T Mobility) is proposing to collocate on an existing Nevada County owned wireless facility. Multiple other carriers are currently located on the facility, and this is a 6409(a) eligible facility.

Under the City of Nevada City’s Wireless Code §17.150.070 A.15(b), any equipment noise for any wireless facility located within 500’ of any property zoned residential or improved with a residential use may not exceed 45 dBA three feet from the source of noise. The closest private residences appear to be roughly 400’ away from the facility, the property line of the closest residential zoned parcel is approximately 230’ way from AT&T’s proposed equipment, and the closest residential use, a County operated halfway house on the subject parcel, is approximately 80’ away.

Statement of Hardship

AT&T’s proposed equipment includes an HVAC unit, which is required to keep AT&T’s equipment cooled and operational, and a backup generator for emergencies. The facility will not function without the HVAC unit, while the generator is required to keep the site online in event of power outages. (As stated in the project support statement, aside from testing to keep it functional, the generator will only be in operation during power outages.)

The HVAC unit has a noise level of 62 dBA at 5’, while the backup generator has a noise level of 68 dBA at 23’. There are no feasible mitigation measures that would bring either piece of equipment into compliance with the City’s wireless code noise requirement of 45 dBA from 3’ away, or even 55’ dBA from 3’ away.

On visits to the site, AT&T observed that existing HVAC equipment on the site does not comply with the 45 dBA from 3’ requirement of the City’s noise ordinance. This noise level characterized by the FAA as being on the level of “quiet rural nighttime,” Nor, assuming the existing equipment was outside the 500’ distance of the nearest residential zoned parcel, which it is not, did the existing equipment on site comply with the 55 dBA from 3’ away requirement, which the FAA likens to being slightly below the level of a quiet urban nighttime, or a dishwasher running in the next room.¹

Additionally, the parcel is not a typical R2-SC zoned parcel – it is a 6-acre parcel owned by the county which, in addition to county buildings, contains an existing, fully operation wireless telecommunications facility.

¹ “Fundamentals of Noise and Sound,” Federal Aviation Administration website, https://www.faa.gov/regulations_policies/policy_guidance/noise/basics/. Accessed 11/24/19.

Statement Waiver will not be Detrimental

The City of Nevada City requires any waiver not be “materially detrimental to the health, safety, or welfare of other persons residing in the vicinity of the subject property, or to other property or improvements in the vicinity.” As stated above, AT&T proposes to install an HVAC unit comparable to existing HVAC units already in operation on the site and an emergency backup generator. Neither will cause detriment to the health, safety, or welfare of persons residing in the vicinity of the property, especially given that the nearest offsite residence is upwards of 400’ away.

Because the City’s Wireless Ordinance strongly preferences colocations, but the noise section bars the only viable colocation to fill the existing coverage gap, AT&T requests a waiver of the noise policy for this colocation, both for the HVAC equipment and the backup generator.

Notwithstanding the above request, AT&T will **fully comply** with the portion of §17.150.070 A.15(a), forbidding the testing of backup generators between the hours of 7 PM and 7 AM or on holidays or weekends.

Although AT&T is unable to provide an acoustic study that will satisfy the requirements of the City’s wireless code, AT&T will provide an acoustic study on an alternate standard at the City’s request.

GENERAL CONSTRUCTION NOTES:

- PLANS ARE INTENDED TO BE DIAGRAMMATIC OUTLINE ONLY, UNLESS NOTED OTHERWISE. THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
- THE CONTRACTOR SHALL OBTAIN, IN WRITING, AUTHORIZATION TO PROCEED BEFORE STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED OR IDENTIFIED BY THE CONTRACT DOCUMENTS.
- CONTRACTOR SHALL CONTACT USA (UNDERGROUND SERVICE ALERT) AT (800) 227-2600, FOR UTILITY LOCATIONS, 48 HOURS BEFORE PROCEEDING WITH ANY EXCAVATION, SITE WORK OR CONSTRUCTION.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY INDICATED OTHERWISE, OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CBC / UBC'S REQUIREMENTS REGARDING EARTHQUAKE RESISTANCE, FOR, BUT NOT LIMITED TO, PIPING, LIGHT FIXTURES, CEILING GRID, INTERIOR PARTITIONS, AND MECHANICAL EQUIPMENT. ALL WORK MUST COMPLY WITH LOCAL EARTHQUAKE CODES AND REGULATIONS.
- REPRESENTATIONS OF TRUE NORTH, OTHER THAN THOSE FOUND ON THE PLOT OF SURVEY DRAWINGS, SHALL NOT BE USED TO IDENTIFY OR ESTABLISH BEARING OF TRUE NORTH AT THE SITE. THE CONTRACTOR SHALL RELY SOLELY ON THE PLOT OF SURVEY DRAWING AND ANY SURVEYOR'S MARKINGS AT THE SITE FOR THE ESTABLISHMENT OF TRUE NORTH, AND SHALL NOTIFY THE ARCHITECT / ENGINEER PRIOR TO PROCEEDING WITH THE WORK IF ANY DISCREPANCY IS FOUND BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND THE TRUE NORTH ORIENTATION AS DEPICTED ON THE CIVIL SURVEY. THE CONTRACTOR SHALL ASSUME SOLE LIABILITY FOR ANY FAILURE TO NOTIFY THE ARCHITECT / ENGINEER.
- THE BUILDING DEPARTMENT ISSUING THE PERMITS SHALL BE NOTIFIED AT LEAST TWO WORKING DAYS PRIOR TO THE COMMENCEMENT OF WORK, OR AS OTHERWISE STIPULATED BY THE CODE ENFORCEMENT OFFICIAL HAVING JURISDICTION.
- DO NOT EXCAVATE OR DISTURB BEYOND THE PROPERTY LINES OR LEASE LINES, UNLESS OTHERWISE NOTED.
- ALL EXISTING UTILITIES, FACILITIES, CONDITIONS, AND THEIR DIMENSIONS SHOWN ON THE PLAN HAVE BEEN PLOTTED FROM AVAILABLE RECORDS. THE ARCHITECT / ENGINEER AND THE OWNER ASSUME NO RESPONSIBILITY WHATSOEVER AS TO THE SUFFICIENCY OR THE ACCURACY OF THE INFORMATION SHOWN ON THE PLANS, OR THE MANNER OF THEIR REMOVAL OR ADJUSTMENT. CONTRACTORS SHALL BE RESPONSIBLE FOR DETERMINING EXACT LOCATION OF ALL EXISTING UTILITIES AND FACILITIES PRIOR TO START OF CONSTRUCTION. CONTRACTORS SHALL ALSO OBTAIN FROM EACH UTILITY COMPANY DETAILED INFORMATION RELATIVE TO WORKING SCHEDULES AND METHODS OF REMOVING OR ADJUSTING EXISTING UTILITIES.
- CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES, BOTH HORIZONTAL AND VERTICALLY, PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES OR DOUBTS AS TO THE INTERPRETATION OF PLANS SHOULD BE IMMEDIATELY REPORTED TO THE ARCHITECT / ENGINEER FOR RESOLUTION AND INSTRUCTION, AND NO FURTHER WORK SHALL BE PERFORMED UNTIL THE DISCREPANCY IS CHECKED AND CORRECTED BY THE ARCHITECT / ENGINEER. FAILURE TO SECURE SUCH INSTRUCTION MEANS CONTRACTOR WILL HAVE WORKED AT HIS/HER OWN RISK AND EXPENSE.
- ALL NEW AND EXISTING UTILITY STRUCTURES ON SITE AND IN AREAS TO BE DISTURBED BY CONSTRUCTION SHALL BE ADJUSTED TO FINISH ELEVATIONS PRIOR TO FINAL INSPECTION OF WORK.
- ANY DRAIN AND/OR FIELD TILE ENCOUNTERED / DISTURBED DURING CONSTRUCTION SHALL BE RETURNED TO ITS ORIGINAL CONDITION PRIOR TO COMPLETION OF WORK. SIZE, LOCATION AND TYPE OF ANY UNDERGROUND UTILITIES OR IMPROVEMENTS SHALL BE ACCURATELY NOTED AND PLACED ON "AS-BUILT" DRAWINGS BY GENERAL CONTRACTOR, AND ISSUED TO THE ARCHITECT / ENGINEER AT COMPLETION OF PROJECT.
- ALL TEMPORARY EXCAVATIONS FOR THE INSTALLATION OF FOUNDATIONS, UTILITIES, ETC., SHALL BE PROPERLY LAID BACK OR BRACED IN ACCORDANCE WITH CORRECT OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REQUIREMENTS.
- INCLUDE MISC. ITEMS PER AT&T SPECIFICATIONS

APPLICABLE CODES, REGULATIONS AND STANDARDS:

SUBCONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION.

THE EDITION OF THE AHJ ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.

SUBCONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS:

- AMERICAN CONCRETE INSTITUTE (ACI) 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
- AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), MANUAL OF STEEL CONSTRUCTION, ASD, NINTH EDITION
- TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-G, STRUCTURAL STANDARD FOR STRUCTURAL ANTENNA TOWER AND ANTENNA SUPPORTING STRUCTURES
- INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE) 81, GUIDE FOR MEASURING EARTH RESISTIVITY, GROUND IMPEDANCE, AND EARTH SURFACE POTENTIALS OF A GROUND SYSTEM IEEE 1100 (1999) RECOMMENDED PRACTICE FOR POWERING AND GROUNDING OF ELECTRICAL EQUIPMENT.
- IEEE C62.41, RECOMMENDED PRACTICES ON SURGE VOLTAGES IN LOW VOLTAGE AC POWER CIRCUITS (FOR LOCATION CATEGORY "C3" AND "HIGH SYSTEM EXPOSURE")

TIA 607 COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS TELCORDIA GR-63 NETWORK EQUIPMENT-BUILDING SYSTEM (NEBS): PHYSICAL PROTECTION
 TELCORDIA GR-347 CENTRAL OFFICE POWER WIRING
 TELCORDIA GR-1275 GENERAL INSTALLATION REQUIREMENTS
 TELCORDIA GR-1503 COAXIAL CABLE CONNECTIONS

ANY AND ALL OTHER LOCAL & STATE LAWS AND REGULATIONS

FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING MATERIAL, METHODS OF CONSTRUCTION, OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE SHALL GOVERN. WHERE THERE IS CONFLICT BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.

ABBREVIATIONS

A.B.	ANCHOR BOLT	IN. (")	INCH(ES)
ABV.	ABOVE	INT.	INTERIOR
ACCA	ANTENNA CABLE COVER ASSEMBLY	LB.(#)	POUND(S)
ADD'L	ADDITIONAL	L.B.	LAG BOLTS
A.F.F.	ABOVE FINISHED FLOOR	L.F.	LINEAR FEET (FOOT)
A.F.G.	ABOVE FINISHED GRADE	L.	LONG(ITUDINAL)
ALUM.	ALUMINUM	MAS.	MASONRY
ALT.	ALTERNATE	MAX.	MAXIMUM
ANT.	ANTENNA	M.B.	MACHINE BOLT
APPRX.	APPROXIMATE(LY)	MECH.	MECHANICAL
ARCH.	ARCHITECT(URAL)	MFR.	MANUFACTURER
AWG.	AMERICAN WIRE GAUGE	MIN.	MINIMUM
BLDG.	BUILDING	MISC.	MISCELLANEOUS
BLK.	BLOCK	MTL.	METAL
BLKG.	BLOCKING	(N)	NEW
BM.	BEAM	NO.(#)	NUMBER
B.N.	BOUNDARY NAILING	N.T.S.	NOT TO SCALE
BTCW.	BARE TINNED COPPER WIRE	O.C.	ON CENTER
B.O.F.	BOTTOM OF FOOTING	OPNG.	OPENING
B/U	BACK-UP CABINET	P/C	PRECAST CONCRETE
CAB.	CABINET	PCS	PERSONAL COMMUNICATION SERVICES
CANT.	CANTILEVER(ED)	PLY.	PLYWOOD
C.I.P.	CAST IN PLACE	PPC	POWER PROTECTION CABINET
CLG.	CEILING	PRC	PRIMARY RADIO CABINET
CLR.	CLEAR	P.S.F.	POUNDS PER SQUARE FOOT
COL.	COLUMN	P.S.I.	POUNDS PER SQUARE INCH
CONC.	CONCRETE	P.T.	PRESSURE TREATED
CONN.	CONNECTION(OR)	PWR.	POWER (CABINET)
CONSTR.	CONSTRUCTION	QTY.	QUANTITY
CONT.	CONTINUOUS	RAD.(R)	RADIUS
d	PENNY (NAILS)	REF.	REFERENCE
DBL.	DOUBLE	REINF.	REINFORCEMENT(ING)
DEPT.	DEPARTMENT	REQ'D/	REQUIRED
D.F.	DOUGLAS FIR	RGS.	RIGID GALVANIZED STEEL
DIA.	DIAMETER	SCH.	SCHEDULE
DIAG.	DIAGONAL	SHT.	SHEET
DIM.	DIMENSION	SIM.	SIMILAR
DWG.	DRAWING(S)	SPEC.	SPECIFICATIONS
DWL.	DOWEL(S)	SQ.	SQUARE
EA.	EACH	S.S.	STAINLESS STEEL
EL.	ELEVATION	STD.	STANDARD
ELEC.	ELECTRICAL	STL.	STEEL
ELEV.	ELEVATOR	STRUC.	STRUCTURAL
EMT.	ELECTRICAL METALLIC TUBING	TEMP.	TEMPORARY
E.N.	EDGE NAIL	THK.	THICK(NESS)
ENG.	ENGINEER	T.N.	TOE NAIL
EQ.	EQUAL	T.O.A.	TOP OF ANTENNA
EXP.	EXPANSION	T.O.C.	TOP OF CURB
EXST.(E)	EXISTING	T.O.F.	TOP OF FOUNDATION
EXT.	EXTERIOR	T.O.P.	TOP OF PLATE (PARAPET)
FAB.	FABRICATION(OR)	T.O.S.	TOP OF STEEL
F.F.	FINISH FLOOR	T.O.W.	TOP OF WALL
F.G.	FINISH GRADE	TYP.	TYPICAL
FIN.	FINISH(ED)	U.G.	UNDER GROUND
FLR.	FLOOR	U.L.	UNDERWRITERS LABORATORY
FDN.	FOUNDATION	U.N.O.	UNLESS NOTED OTHERWISE
F.O.C.	FACE OF CONCRETE	V.I.F.	VERIFY IN FIELD
F.O.M.	FACE OF MASONRY	W	WIDE (WIDTH)
F.O.S.	FACE OF STUD	w/	WITH
F.O.W.	FACE OF WALL	WD.	WOOD
F.S.	FINISH SURFACE	W.P.	WEATHERPROOF
FT.(')	FOOT (FEET)	WT.	WEIGHT
FTG.	FOOTING	CL	CENTERLINE
G.	GROWTH (CABINET)	EL	PLATE, PROPERTY LINE
GA.	GAUGE		
GI.	GALVANIZE(D)		
G.F.I.	GROUND FAULT CIRCUIT INTERRUPTER		
GLB. (GLU-LAM)	GLUE LAMINATED BEAM		
GPS	GLOBAL POSITIONING SYSTEM		
GRND.	GROUND		
HDR.	HEADER		
HGR.	HANGER		
HT.	HEIGHT		
ICGB.	ISOLATED COPPER GROUND BUS		

SYMBOLS LEGEND

	BLDG. SECTION		GROUT OR PLASTER
	WALL SECTION		(E) BRICK
	DETAIL		(E) MASONRY
	ELEVATION		CONCRETE
	DOOR SYMBOL		EARTH
	WINDOW SYMBOL		GRAVEL
	TILT-UP PANEL MARK		PLYWOOD
	PROPERTY LINE		SAND
	CENTERLINE		PLYWOOD
	ELEVATION DATUM		SAND
	GRID/COLUMN LINE		(E) STEEL
	KEYNOTE, DIMENSION ITEM		MATCH LINE
	KEYNOTE, CONSTRUCTION ITEM		GROUND CONDUCTOR
	WALL TYPE MARK		OVERHEAD SERVICE CONDUCTORS
	ROOM NAME		TELEPHONE CONDUIT
	ROOM NUMBER		POWER CONDUIT
			COAXIAL CABLE
			CHAIN LINK FENCE
			WOOD FENCE
			(P) ANTENNA
			(P) RRU
			(P) DC SURGE SUPPRESSION
			(F) ANTENNA
			(F) RRU
			(E) EQUIPMENT

Issued For:
CVL03071
COYOTE STREET
 - COUNTY OF
NEVADA
 980 HELLING WAY
 NEVADA CITY, CA 95959

PREPARED FOR

 2600 Camino Ramon
 San Ramon, California 94583

Vendor:

COMPLETE
 Wireless Consulting, Inc.

AT&T SITE NO: CVL03071
 PROJECT NO: 162.2566
 DRAWN BY: TLS
 CHECKED BY: SV

REV	DATE	DESCRIPTION
	10/14/19	100% ZD REV 1
	09/16/19	100% ZD
	08/27/19	90% ZD

Licensee:

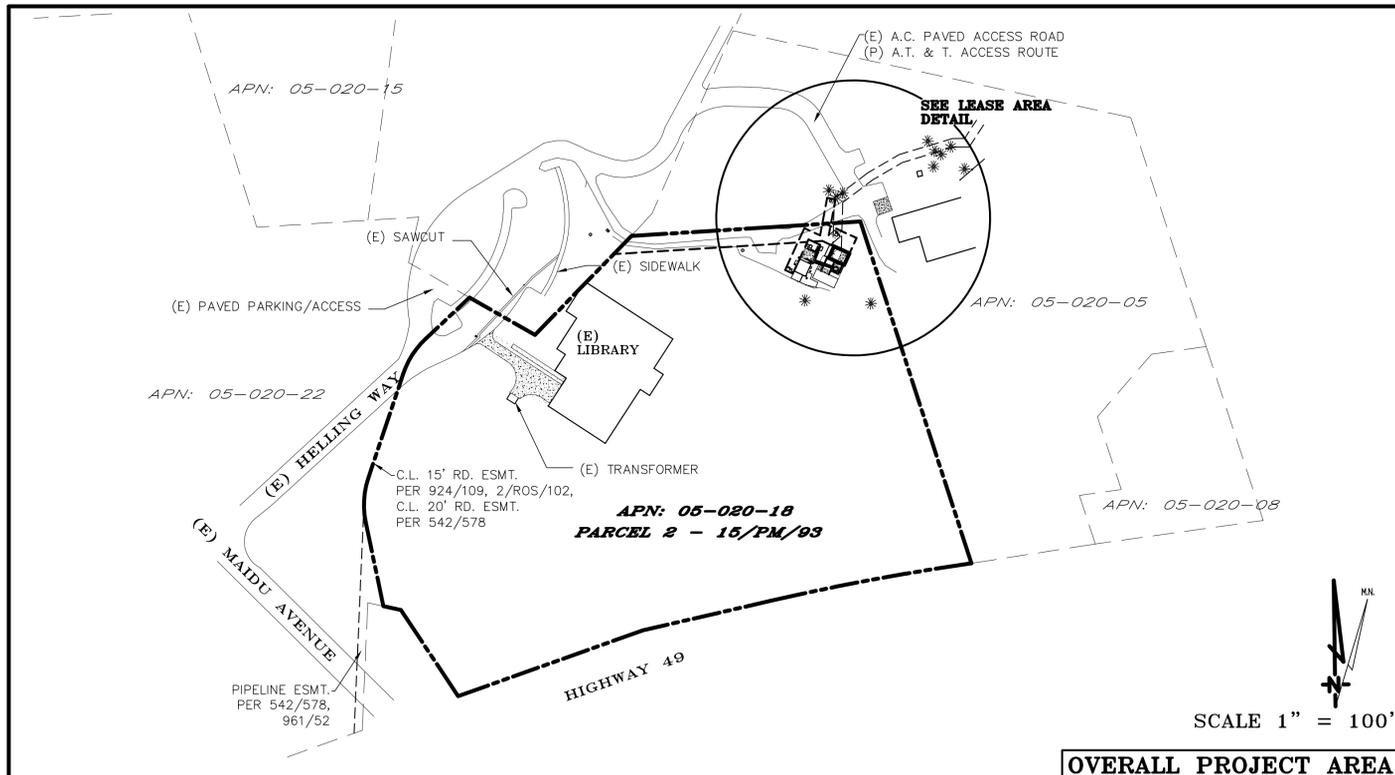
 1520 River Park Drive
 Sacramento, California 95815

Architect:

 1520 River Park Drive
 Sacramento, California 95815

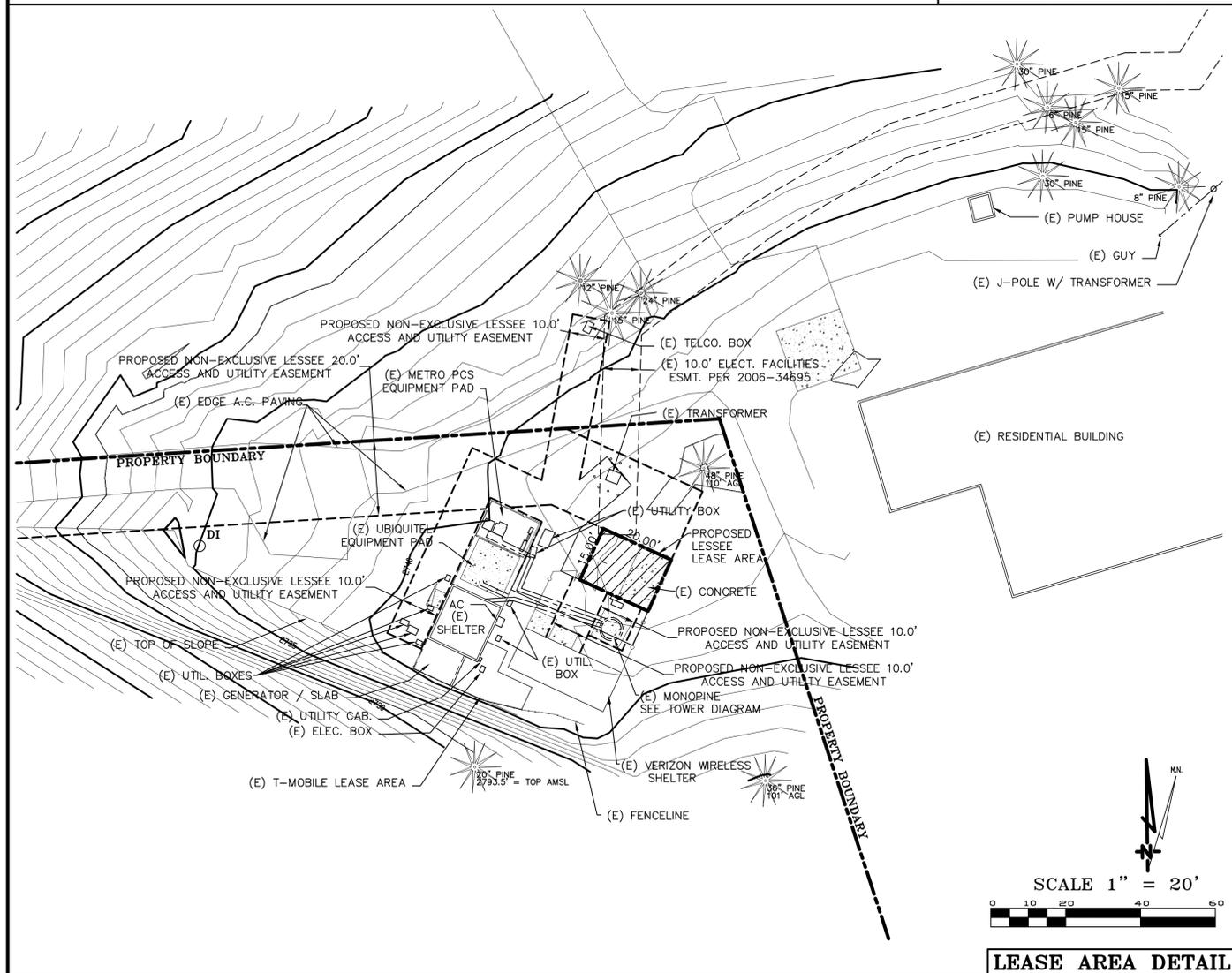
SHEET TITLE:
GENERAL NOTES, ABBREVIATIONS, & LEGEND

SHEET NUMBER:
GN-1



SCALE 1" = 100'

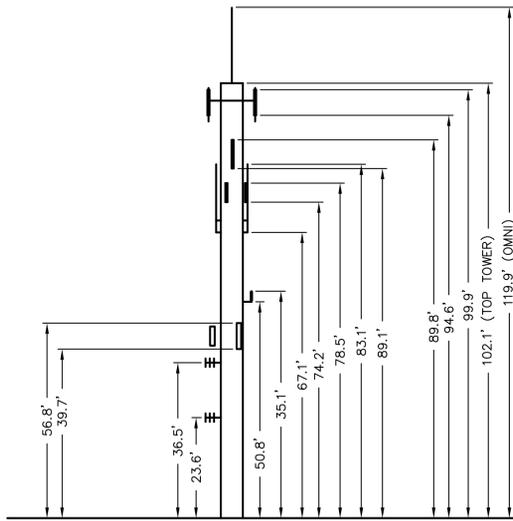
OVERALL PROJECT AREA



SCALE 1" = 20'



LEASE AREA DETAIL



NOTE:
(E) MONOPINE
BRANCHES NOT SHOWN

TOWER DIAGRAM

**CVL03071 Coyote Street
Lease Area Description**

All that certain lease area being a portion of Parcel 2 as shown on that certain Parcel Map Recorded at Book 15 of Parcel Maps at Page 93, Official Records of Nevada County, California, being more particularly described as follows:

Commencing at a the Northeast corner of the 6.13 Acre Parcel 2 as shown on the above referenced map; thence along the Northern boundary thereof South 86°24'49" West 32.83 feet; thence leaving said Northern boundary South 03°35'11" East 27.20 feet to the True Point of Beginning; thence from said point of beginning South 65°23'14" East 20.0 feet; thence South 24°36'46" West 15.0 feet; thence North 65°23'14" West 20.0 feet; thence North 24°36'46" East 15.0 feet to the point of beginning.

Together with an easement for utility purposes ten feet in width the centerline of which is described as follows: beginning at a point on the South boundary of the above described lease area which bears North 65°23'14" West 6.94 feet from the Southeast corner thereof; thence from said point of beginning South 24°36'46" West 12.5 feet more or less and as necessary for the placement of cellular antennas and appurtenances on the existing tower now constructed.

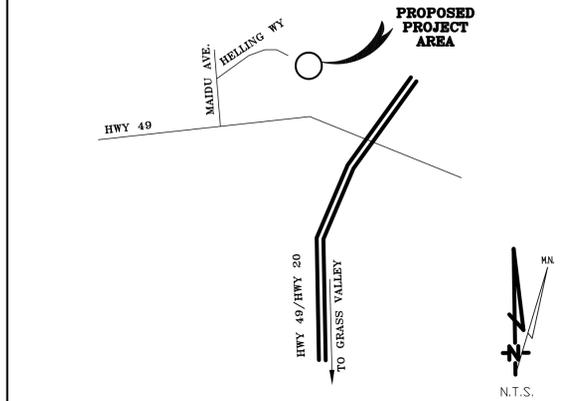
Also together with an easement for utility purposes ten feet in width the centerline of which is described as follows: beginning at a point on the South boundary of the above described lease area which bears North 65°23'14" West 16.94 feet from the Southeast corner thereof; thence from said point of beginning South 24°36'46" West 17.7 feet more or less and as necessary for connection to public utility service.

Also together with an easement for utility purposes ten feet in width the centerline of which is described as follows: beginning at a point on the South boundary of the above described lease area which bears South 24°36'46" West 5.0 feet from the Southeast corner of the above described lease area; thence from said point of beginning North 65°23'14" West 30.63 feet; thence North 23°55'31" East 18.64 feet to a point hereafter referred to as Point "A" thence continuing North 24°55'31" East 1.17 feet; thence North 65°08'14" West 3.40 feet to a point hereafter referred to as Point "B" thence continuing North 65°08'14" West 21.84 feet; thence South 24°55'31" West 49.22 feet more or less and as necessary for connection to public utility service.

Also together with an easement for utility purposes six feet in width the centerline of which is described as follows: beginning at the above described Point "A" and running thence North 49°46'05" East 18.80 feet more or less and as necessary for connection to public utility service.

Also together with an easement for utility purposes six feet in width the centerline of which is described as follows: beginning at the above described Point "B" and running thence North 10°40'29" East 51.3 feet more or less and as necessary for connection to public utility service.

Also together with an easement for access purposes from the above described lease area over and across the existing traveled way, to the public right of way more commonly known as Maidu Drive.



NEVADA CITY, CA VICINITY MAP

THESE DRAWINGS AND/OR THE ACCOMPANYING SPECIFICATION AS INSTRUMENTS OF SERVICE, ARE THE EXCLUSIVE PROPERTY OF GEIL ENGINEERING AND THEIR USE AND PUBLICATION SHALL BE RESTRICTED TO THE ORIGINAL SITE AND CARRIER FOR WHICH THEY ARE PREPARED. REUSE, REPRODUCTION OR PUBLICATION BY ANY METHOD, IN WHOLE OR IN PART, IS PROHIBITED EXCEPT BY WRITTEN PERMISSION FROM GEIL ENGINEERING. TITLE TO THESE PLANS AND/OR SPECIFICATIONS SHALL REMAIN WITH GEIL ENGINEERING WITHOUT PREJUDICE AND VISUAL CONTACT WITH THEM SHALL CONSTITUTE PRIMA FACIE EVIDENCE OF ACCEPTANCE OF THESE RESTRICTIONS.

BOUNDARY SHOWN IS BASED ON MONUMENTATION FOUND AND RECORD INFORMATION. THIS IS NOT A BOUNDARY SURVEY. THIS IS A SPECIALIZED TOPOGRAPHIC MAP WITH PROPERTY LINES AND EASEMENTS BEING A GRAPHIC DEPICTION BASED ON INFORMATION GATHERED FROM VARIOUS SOURCES OF RECORD AND AVAILABLE MONUMENTATION FOUND DURING THE FIELD SURVEY. NO EASEMENTS WERE RESEARCHED OR PLOTTED. PROPERTY LINES AND LINES OF TITLE WERE NOT INVESTIGATED NOR SURVEYED. NO PROPERTY MONUMENTS WERE SET.

DATE OF SURVEY: 08-07-19

SURVEYED BY OR UNDER DIRECTION OF: KENNETH D. GEIL, RCE 14803

LOCATED IN THE COUNTY OF NEVADA, STATE OF CALIFORNIA

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

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

N.G.V.D. 1929 CORRECTION: SUBTRACT 2.58' FROM ELEVATIONS SHOWN.

FEMA FIRM: FLOOD ZONE X PER FIRM 06057C0369E, DATED 02-03-2010.

CONTOUR INTERVAL: 1 FT.

ASSESSOR'S PARCEL NUMBER: 05-020-18

LANDLORD(S): COUNTY OF NEVADA - DEPT. OF GEM. SERVICES
12548 LOMA RICA DR.
GRASS VALLEY, CA 95945

Project Name: CVL03071 Coyote Street

Project Site Location: 980 Helling Way
Nevada City, CA 95959
Nevada County

Date of Observation: 08-07-19

Equipment/Procedure Used to Obtain Coordinates: Trimble Pathfinder GeoXT Receiver Post processed with Pfinder Software.

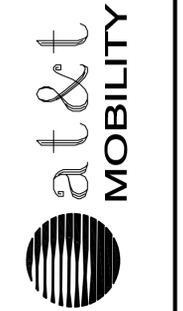
Type of Antenna Mount: Existing Free Standing Monopine

Coordinates:
Latitude N 39° 16' 12.27" (NAD 83) N 39° 16' 12.65" (NAD27)
Longitude W 121° 01' 23.21" (NAD83) W 121° 01' 19.39" (NAD27)

ELEVATION of Ground at Base of Structure (NAVD 88): 2741' AMSL
HEIGHT of Structure: (Existing Monopine) 102.1' AGL
Overall Height: (Omni Antenna) 119.9' AGL

DEPT	APPROVED	DATE
A&C		
RE		
RF		
INT		
EE\IN		
OPS		
EE\OUT		

Surveyor
GEIL ENGINEERING
ENGINEERING • SURVEYING • PLANNING
1226 HIGH STREET
AUBURN, CALIFORNIA 95603
Phone: (530) 885-0426
Fax: (530) 885-0409



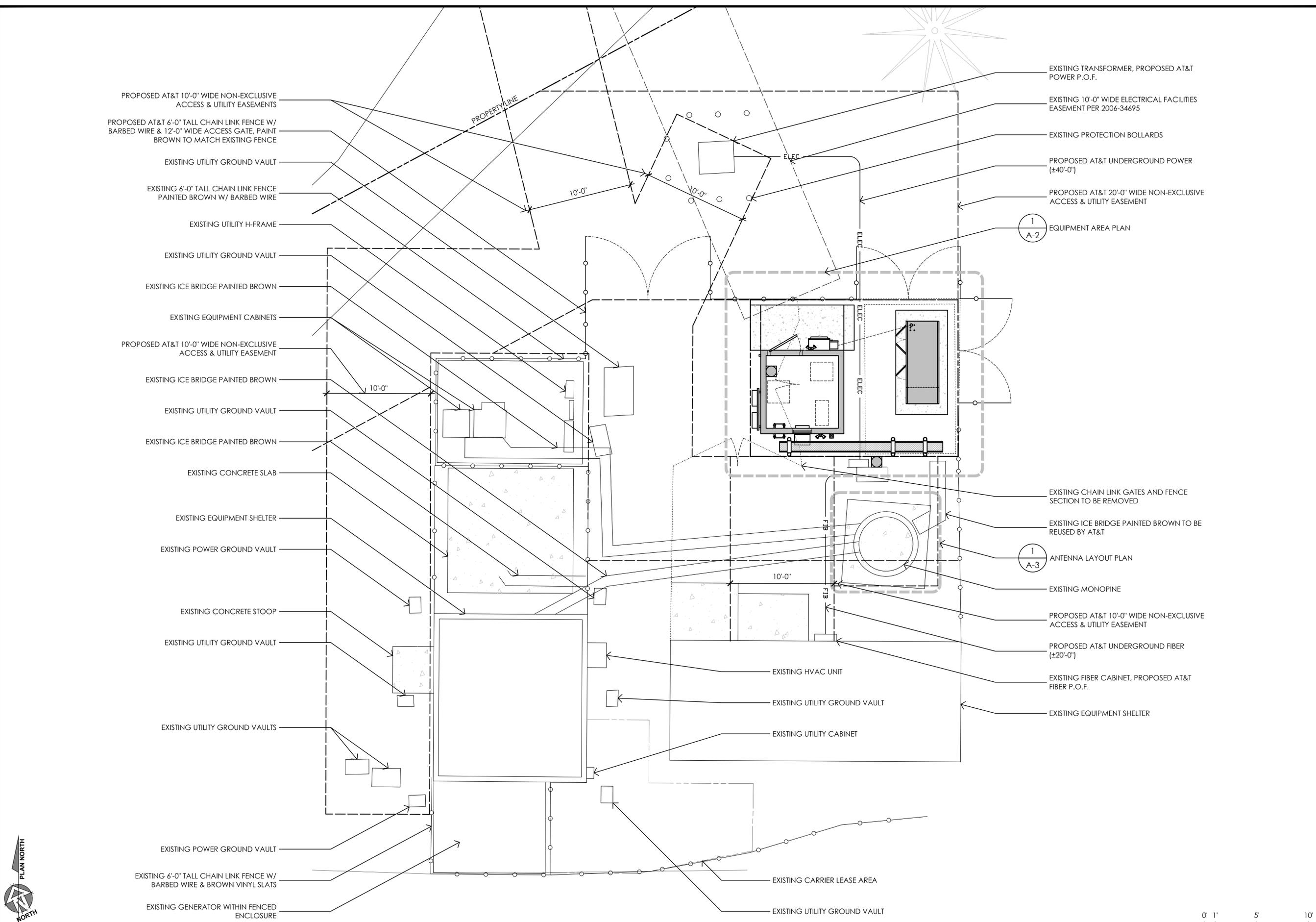
**CVL03071 Coyote Street
980 Helling Way
Nevada City, CA 95959**

**PLOT PLAN AND
SITE TOPOGRAPHY**

REVISIONS	DATE	DESCRIPTION
08-15-19	dg	Preliminary Drawing
10-12-19	dg	rev. esmts.

Sheet

C-1



Issued For:
CVL03071
COYOTE STREET
- COUNTY OF
NEVADA
 980 HELLING WAY
 NEVADA CITY, CA 95959

PREPARED FOR

2600 Camino Ramon
 San Ramon, California 94583

Vendor:

COMPLETE
 Wireless Consulting, Inc.

AT&T SITE NO:	CVL03071
PROJECT NO:	162.2566
DRAWN BY:	TLS
CHECKED BY:	SV

REV	DATE	DESCRIPTION
	10/14/19	100% ZD REV 1
	09/16/19	100% ZD
	08/27/19	90% ZD

Licensee:

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

Architect:

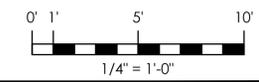
MST ARCHITECTS
 1520 River Park Drive
 Sacramento, California 95815

SHEET TITLE:
ENLARGED SITE PLAN

SHEET NUMBER:
A-1.1

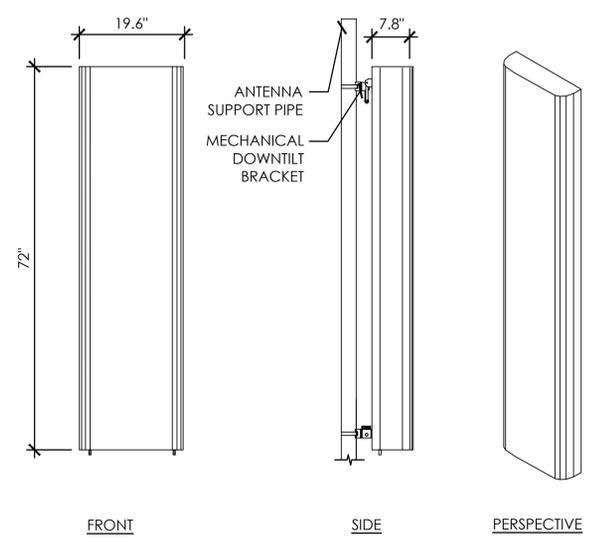


1 ENLARGED SITE PLAN
 1/4" = 1'-0"



6 NOT USED
NONE

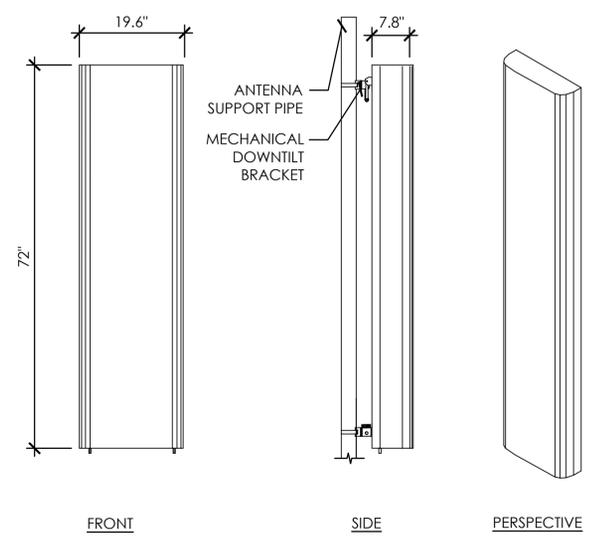
EQUIPMENT SUBJECT TO CHANGE



ANTENNA = ANDREW/COMMSCOPE (NNH4-65B-R6H4)
WEIGHT = 78.3 LBS
DIMENSIONS = 72.0" (H) x 19.6" (W) x 7.8" (D)

4 PROPOSED ANTENNA SPEC
3/4" = 1'-0"

EQUIPMENT SUBJECT TO CHANGE

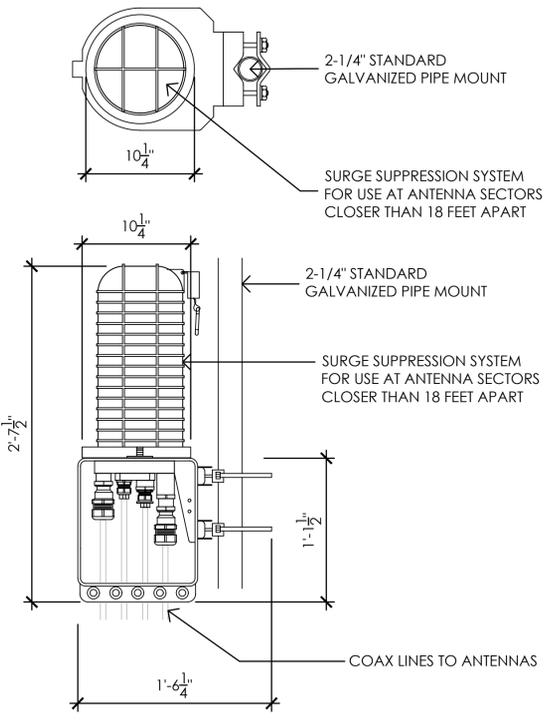


ANTENNA = ANDREW/COMMSCOPE (NNHH-65B-R4)
WEIGHT = 82 LBS
DIMENSIONS = 72.0" (H) x 19.6" (W) x 7.8" (D)

3 PROPOSED ANTENNA SPEC
3/4" = 1'-0"

RAYCAP DC9-48-60-24-8C-EV SURGE SUPPRESSION SOLUTION

COLOR: BLACK/SILVER
DIMENSIONS: 10.25" DIA X 2'-7.5" TALL W/ 1'-1.5" BASE
WEIGHT: 26.2 LBS.±

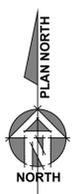
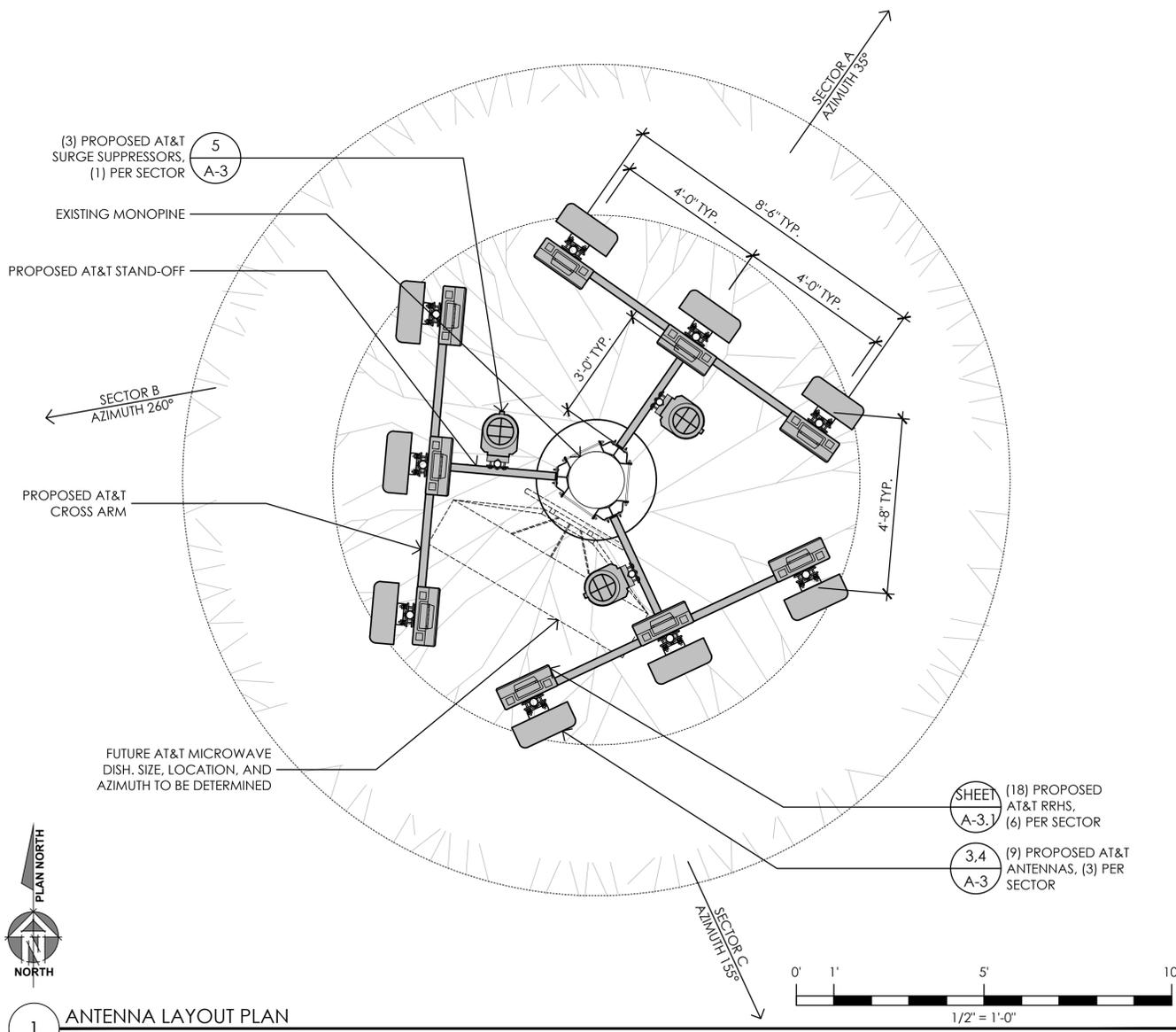


5 DC SURGE SUPPRESSION (SQUID)
1-1/2" = 1'-0"

RF SCHEDULE										
SECTOR	ANTENNA MODEL NO.	AZIMUTH	CENTERLINE	RRH	TMA	FIBER LENGTH	COAX LENGTH	JUMPER TYPE	RRU NO.	
A L P H A	A1	NNH4-65B-R6H4	35°	± 70'-0"	(1) 4449 B5/B12 / (1) 8843 B2/B66A	-	± 90'-0"	-	LDF4	(2)
	A2	NNHH-65B-R4	35°	± 70'-0"	(1) 4478 B14 / (1) 4415 B25	-	± 90'-0"	-	LDF4	(2)
	A3	NNHH-65B-R4	35°	± 70'-0"	(1) RRUS-E2 B29 / (1) 4415 B30	-	± 90'-0"	-	LDF4	(2)
	A4	-	-	-	-	-	-	-	-	-
B E T A	B1	NNH4-65B-R6H4	260°	± 70'-0"	(1) 4449 B5/B12 / (1) 8843 B2/B66A	-	± 90'-0"	-	LDF4	(2)
	B2	NNHH-65B-R4	260°	± 70'-0"	(1) 4478 B14 / (1) 4415 B25	-	± 90'-0"	-	LDF4	(2)
	B3	NNHH-65B-R4	260°	± 70'-0"	(1) RRUS-E2 B29 / (1) 4415 B30	-	± 90'-0"	-	LDF4	(2)
	B4	-	-	-	-	-	-	-	-	-
G A M M A	C1	NNH4-65B-R6H4	155°	± 70'-0"	(1) 4449 B5/B12 / (1) 8843 B2/B66A	-	± 90'-0"	-	LDF4	(2)
	C2	NNHH-65B-R4	155°	± 70'-0"	(1) 4478 B14 / (1) 4415 B25	-	± 90'-0"	-	LDF4	(2)
	C3	NNHH-65B-R4	155°	± 70'-0"	(1) RRUS-E2 B29 / (1) 4415 B30	-	± 90'-0"	-	LDF4	(2)
	C4	-	-	-	-	-	-	-	-	-

RF DATA SHEET v1.00.0 DATED 08/12/2019 NOTE: ANTENNA POSITIONS ARE LEFT TO RIGHT FROM FRONT OF ANTENNA EQUIPMENT IS PRELIMINARY AND SUBJECT TO CHANGE.

2 RF SCHEDULE
NO SCALE



1 ANTENNA LAYOUT PLAN
1/2" = 1'-0"

Issued For:
CVL03071
COYOTE STREET
- COUNTY OF
NEVADA
980 HELLING WAY
NEVADA CITY, CA 95959



AT&T SITE NO: CVL03071
PROJECT NO: 162.2566
DRAWN BY: TLS
CHECKED BY: SV

REV	DATE	DESCRIPTION
	10/14/19	100% ZD REV 1
	09/16/19	100% ZD
	08/27/19	90% ZD

Licensee:

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.



SHEET TITLE:
ANTENNA PLAN,
SCHEDULE, &
DETAILS

SHEET NUMBER:
A-3

SD030

2.4L

Industrial Diesel Generator Set

EPA Certified Stationary Emergency

Standby Power Rating
30 kW 38 kVA 60 Hz

Prime Power Rating*
27 kW 34 kVA 60 Hz



*Built in the USA using domestic and foreign parts

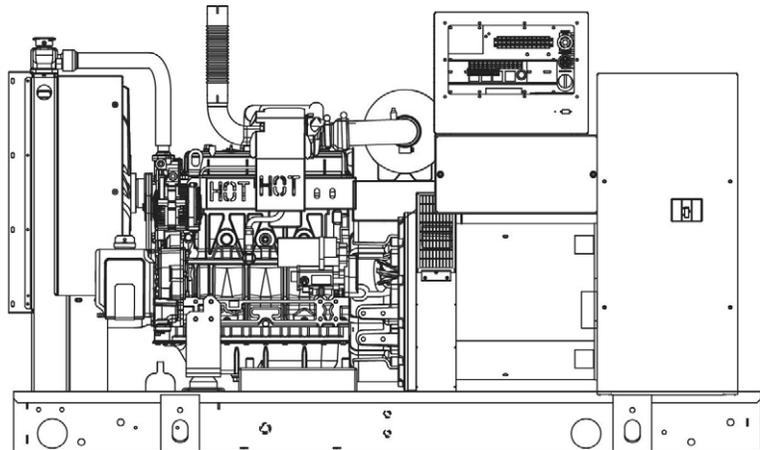


Image used for illustration purposes only

*EPA Certified Prime ratings are not available in the U.S. or its Territories

Codes and Standards

Generac products are designed to the following standards:



UL2200, UL508, UL142, UL498



NFPA70, 99, 110, 37



NEC700, 701, 702, 708



ISO9001, 8528, 3046, 7637, Pluses #2b, 4



NEMA ICS10, MG1, 250, ICS6, AB1



ANSI C62.41

American National Standards Institute

Powering Ahead

For over 50 years, Generac has led the industry with innovative design and superior manufacturing.

Generac ensures superior quality by designing and manufacturing most of its generator components, including alternators, enclosures and base tanks, control systems and communications software.

Generac's gensets utilize a wide variety of options, configurations and arrangements, allowing us to meet the standby power needs of practically every application.

Generac searched globally to ensure the most reliable engines power our generators. We choose only engines that have already been proven in heavy-duty industrial application under adverse conditions.

Generac is committed to ensuring our customers' service support continues after their generator purchase.

SD030

Standard Features

ENGINE SYSTEM

- General
- Oil Drain Extension
 - Air Cleaner
 - Fan Guard
 - Stainless Steel flexible exhaust connection
 - Critical Exhaust Silencer (enclosed only)
 - Factory Filled Oil
 - Radiator Duct Adapter (open set only)

Fuel System

- Fuel lockoff solenoid
- Primary fuel filter

Cooling System

- Closed Coolant Recovery System
- UV/Ozone resistant hoses
- Factory-Installed Radiator
- Radiator Drain Extension
- 50/50 Ethylene glycol antifreeze
- 120 VAC Coolant Heater

Engine Electrical System

- Battery charging alternator
- Battery cables
- Battery tray
- Solenoid activated starter motor
- Rubber-booted engine electrical connections

ALTERNATOR SYSTEM

- UL2200 GENprotect™
- 12 leads (3-phase, non 600 V)
- Class H insulation material
- Vented rotor
- 2/3 pitch
- Skewed stator
- Auxiliary voltage regulator power winding
- Amortisseur winding
- Brushless Excitation
- Sealed Bearings
- Automated manufacturing (winding, insertion, lacing, varnishing)
- Rotor dynamically spin balanced (get tolerance)
- Full load capacity alternator
- Protective thermal switch

GENERATOR SET

- Internal Genset Vibration Isolation
- Separation of circuits - high/low voltage
- Separation of circuits - multiple breakers
- Silencer Heat Shield
- Wrapped Exhaust Piping
- Silencer housed in discharge hood (enclosed only)
- Standard Factory Testing
- 2 Year Limited Warranty (Standby rated Units)
- 1 Year Limited Warranty (Prime rated units)
- Silencer mounted in the discharge hood (enclosed only)

ENCLOSURE (if selected)

- Rust-proof fasteners with nylon washers to protect finish
- High performance sound-absorbing material
- Gasketed doors
- Stamped air-intake louvers
- Air discharge hoods for radiator-upward pointing
- Stainless steel lift off door hinges
- Stainless steel lockable handles
- Rhino Coat™ - Textured polyester powder coat

TANKS (if selected)

- UL 142
- Double wall
- Vents
- Sloped top
- Sloped bottom
- Factory pressure tested (2 psi)
- Rupture basin alarm
- Fuel level
- Check valve in supply and return lines
- Rhino Coat™ - Textured polyester powder coat
- Stainless hardware

CONTROL SYSTEM



Control Panel

- Digital H Control Panel - Dual 4x20 Display
- Programmable Crank Limiter
- 7-Day Programmable Exerciser
- Special Applications Programmable PLC
- RS-232/485
- All-Phase Sensing DVR
- Full System Status
- Utility Monitoring
- Low Fuel Pressure Indication
- 2-Wire Start Compatible
- Power Output (kW)
- Power Factor
- kW Hours, Total & Last Run

- Real/Reactive/Apparent Power
- All Phase AC Voltage
- All Phase Currents
- Oil Pressure
- Coolant Temperature
- Coolant Level
- Engine Speed
- Battery Voltage
- Frequency
- Date/Time Fault History (Event Log)
- Isochronous Governor Control
- Waterproof/sealed Connectors
- Audible Alarms and Shutdowns
- Not in Auto (Flashing Light)
- Auto/Off/Manual Switch
- E-Stop (Red Mushroom-Type)
- NFPA110 Level I and II (Programmable)
- Customizable Alarms, Warnings, and Events
- Modbus protocol
- Predictive Maintenance algorithm
- Sealed Boards
- Password parameter adjustment protection
- Single point ground

- 15 channel data logging
- 0.2 msec high speed data logging
- Alarm information automatically comes up on the display

Alarms

- Oil Pressure (Pre-programmable Low Pressure Shutdown)
- Coolant Temperature (Pre-programmed High Temp Shutdown)
- Coolant Level (Pre-programmed Low Level Shutdown)
- Low Fuel Pressure Alarm
- Engine Speed (Pre-programmed Over speed Shutdown)
- Battery Voltage Warning
- Alarms & warnings time and date stamped
- Alarms & warnings for transient and steady state conditions
- Snap shots of key operation parameters during alarms & warnings
- Alarms and warnings spelled out (no alarm codes)

SD030

Configurable Options

ENGINE SYSTEM

- General
- Oil Make-Up System
 - Oil Heater
 - Industrial Exhaust Silencer

Fuel System

- Flexible fuel lines
- Primary fuel filter

Engine Electrical System

- 10A UL battery charger
- 2.5A UL battery charger
- Battery Warmer

ALTERNATOR SYSTEM

- Alternator Upsizing
- Anti-Condensation Heater
- Tropical coating
- Permanent Magnet Excitation

CIRCUIT BREAKER OPTIONS

- Main Line Circuit Breaker
- 2nd Main Line Circuit Breaker
- Shunt Trip and Auxiliary Contact
- Electronic Trip Breakers

GENERATOR SET

- Gen-Link Communications Software (English Only)
- 8 Load Position Load Center
- 2 Year Extended Warranty
- 5 Year Warranty
- 5 Year Extended Warranty

ENCLOSURE

- Weather Protected
- Level 1 Sound Attenuation
- Level 2 Sound Attenuation
- Steel Enclosure
- Aluminum Enclosure
- 150 MPH Wind Kit
- 12 VDC Enclosure Lighting Kit
- 120 VAC Enclosure Lighting Kit
- AC/DC Enclosure Lighting Kit
- Door Alarm Switch

TANKS (Size on last page)

- Electrical Fuel Level
- Mechanical Fuel Level
- 54 Gal (204.4 L) Usable Capacity
- 132 Gal (499.7 L) Usable Capacity
- 211 Gal (798.7 L) Usable Capacity
- 300 Gal (1135.6 L) Usable Capacity
- 8" Vent Extension
- 13" Vent Extension
- 19" Vent Extension

CONTROL SYSTEM

- 21-Light Remote Annunciator
- Remote Relay Panel (8 or 16)
- Oil Temperature Sender with Indication Alarm
- Remote E-Stop (Break Glass-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Flush Mount)
- Remote Communication - Modem
- Remote Communication - Ethernet
- 10A Run Relay
- Ground fault indication and protection functions

Engineered Options

ENGINE SYSTEM

- Coolant heater ball valves
- Block Heaters
- Fluid containment pans

ALTERNATOR SYSTEM

- 3rd Breaker System

GENERATOR SET

- Special Testing
- IBC Seismic Certification

ENCLOSURE

- Motorized Dampers
- Door switched for intrusion alert
- Enclosure ambient heaters

TANKS

- Overfill protection valve
- UL2085 Tank
- ULC S-601 Tank
- Stainless Steel Tank
- Special Fuel Tanks (MIDEQ and FL DEP/DERM, etc.)
- Vent Extensions

CONTROL SYSTEM

- Spare inputs (x4) / outputs (x4) - H Panel Only
- Battery Disconnect Switch

Rating Definitions

Standby – Applicable for a varying emergency load for the duration of a utility power outage with no overload capability.

Prime – Applicable for supplying power to a varying load in lieu of utility for an unlimited amount of running time. A 10% overload capacity is available for 1 out of every 12 hours. The Prime Power option is only available on International applications.

Power ratings in accordance with ISO 8528-1, Second Edition dated 2005-06-01, definitions for Prime Power (PRP) and Emergency Standby Power (ESP).

SD030

application and engineering data

ENGINE SPECIFICATIONS

General

Make	Generac
EPA Emissions Compliance	Stationary Emergency
EPA Emissions Reference	See Emissions Data Sheet
Cylinder #	4
Type	In-Line
Displacement - L (cu in)	2.4 (146.46)
Bore - mm (in)	90 (3.54)
Stroke - mm (in)	94 (3.70)
Compression Ratio	21.3:1
Intake Air Method	Turbocharged
Cylinder Head Type	Cast Iron
Piston Type	Aluminum

Engine Governing

Governor	Electronic Isochronous
Frequency Regulation (Steady State)	± 0.25%

Lubrication System

Oil Pump Type	Gear
Oil Filter Type	Full Flow
Crankcase Capacity - L (qts)	6.2 (6.52)

Cooling System

Cooling System Type	Closed Recovery
Water Pump Flow	Pre-Lubed, Self Sealing
Fan Type	Pusher
Fan Speed (rpm)	2698
Fan Diameter mm (in)	560 (22)
Coolant Heater Wattage	1500
Coolant Heater Standard Voltage	120 VAC

Fuel System

Fuel Type	Ultra Low Sulfur Diesel Fuel
Fuel Specifications	ASTM
Fuel Filtering (microns)	5
Fuel Inject Pump	Distribution Injection Pump
Fuel Pump Type	Engine Driven Gear
Injector Type	Mechanical
Fuel Supply Line - mm (in)	7.94 (0.31)
Fuel Return Line - mm (in)	7.94 (0.31)

Engine Electrical System

System Voltage	12 VDC
Battery Charging Alternator	Std
Battery Size	See Battery Index 0161970SBY
Battery Voltage	12 VDC
Ground Polarity	Negative

ALTERNATOR SPECIFICATIONS

Standard Model	390
Poles	4
Field Type	Revolving
Insulation Class - Rotor	H
Insulation Class - Stator	H
Total Harmonic Distortion	< 5%
Telephone Interference Factor (TIF)	< 50
Standard Excitation	Synchronous
Bearings	Single Sealed Cartridge
Coupling	Direct, Flexible Disc
Load Capacity - Standby	100%
Prototype Short Circuit Test	Yes

Voltage Regulator Type	Digital
Number of Sensed Phases	All
Regulation Accuracy (Steady State)	± 0.25%

SD030

operating data

POWER RATINGS

	Standby	
Single-Phase 120/240 VAC @1.0pf	30 kW	Amps: 125
Three-Phase 120/208 VAC @0.8pf	30 kW	Amps: 104
Three-Phase 120/240 VAC @0.8pf	30 kW	Amps: 90
Three-Phase 277/480 VAC @0.8pf	30 kW	Amps: 46
Three-Phase 346/600 VAC @0.8pf	30 kW	Amps: 36

STARTING CAPABILITIES (sKVA)

sKVA vs. Voltage Dip

Alternator	kW	480 VAC						208/240 VAC					
		10%	15%	20%	25%	30%	35%	10%	15%	20%	25%	30%	35%
Standard	35	24	36	48	60	72	84	18	27	36	45	54	63
Upsize 1	40	27	41	54	68	81	95	20	31	41	51	61	71
Upsize 2	50	34	52	69	86	103	120	26	39	52	65	77	90

FUEL CONSUMPTION RATES*

Fuel Pump Lift - ft (m)		Diesel - gph (lph)	
3 (1)		Percent Load	gph (lph)
Total Fuel Pump Flow (Combustion + Return)		25%	0.92 (3.5)
4.5 gph		50%	1.45 (5.5)
		75%	1.96 (7.4)
		100%	2.74 (10.4)

* Fuel supply installation must accommodate fuel consumption rates at 100% load.

COOLING

	Standby	
Coolant Flow per Minute	gpm (lpm)	10 (38)
Coolant System Capacity	gal (L)	2.8 (10.95)
Heat Rejection to Coolant	BTU/hr	111,000
Inlet Air	cfm (m ³ /hr)	4,500 (7647)
Max. Operating Radiator Air Temp	F° (C°)	122 (50)
Max. Ambient Temperature (before derate)	F° (C°)	104 (40)
Maximum Radiator Backpressure	in H ₂ O	0.5

COMBUSTION AIR REQUIREMENTS

	Standby
Flow at Rated Power	cfm (m ³ /min)
	90 (2.55)

ENGINE

	Standby	
Rated Engine Speed	rpm	1800
Horsepower at Rated kW**	hp	49
Piston Speed	ft/min (m/min)	1110 (338)
BMEP	psi	153

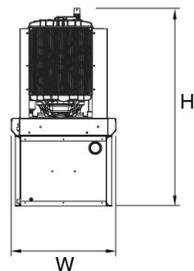
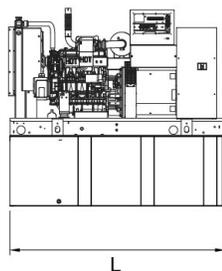
EXHAUST

	Standby	
Exhaust Flow (Rated Output)	cfm (m ³ /min)	230 (391)
Max. Backpressure (Post Silencer)	inHg (Kpa)	1.5 (5.1)
Exhaust Temp (Rated Output)	°F (°C)	850 (454)
Exhaust Outlet Size (Open Set)	mm (in)	63.5 (2.5)

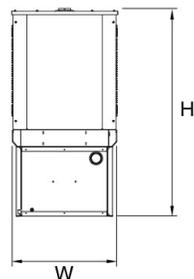
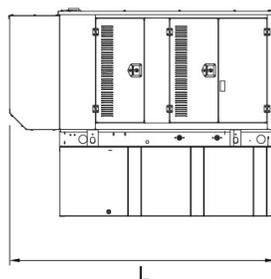
** Refer to "Emissions Data Sheet" for maximum bHP for EPA and SCAQMD permitting purposes.

Deration – Operational characteristics consider maximum ambient conditions. Derate factors may apply under atypical site conditions. Please consult a Generac Power Systems Industrial Dealer for additional details. All performance ratings in accordance with ISO3046, BS5514, ISO8528 and DIN6271 standards.

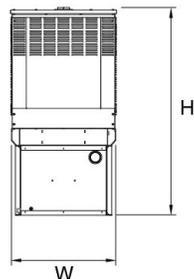
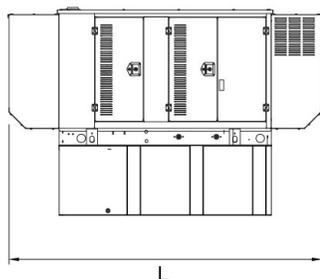
SD030

dimensions and weights*
**OPEN SET**

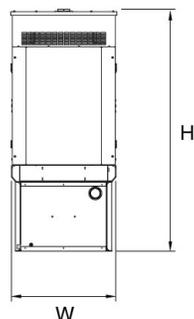
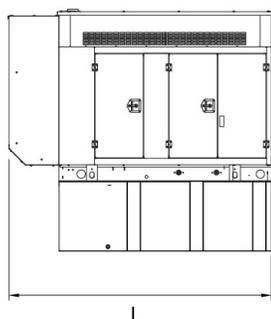
RUN TIME HOURS	USABLE CAPACITY GAL (L)	L x W x H in (mm)	WT lbs (kg) - Tank & Open Set	
			Steel	Aluminum
NO TANK	-	76 (1930.4) x 38 (914.4) x 46 (1168.4)	2060 (934)	
20	54 (204.4)	76 (1930.4) x 38 (914.4) x 59 (1498.6)	2540 (1152)	
48	132 (499.7)	76 (1930.4) x 38 (914.4) x 71 (1803.4)	2770 (1257)	
77	211 (798.7)	76 (1930.4) x 38 (914.4) x 83 (2108.2)	2979 (1351)	
109	300 (1135.6)	93 (2362.2) x 38 (914.4) x 87 (2209.8)	3042 (1380)	

**STANDARD ENCLOSURE**

RUN TIME HOURS	USABLE CAPACITY GAL (L)	L x W x H in (mm)	WT lbs (kg) - Enclosure Only	
			Steel	Aluminum
NO TANK	-	95 (2413) x 38 (965.2) x 50 (1270)	302 (137)	191 (87)
20	54 (204.4)	95 (2413) x 38 (965.2) x 63 (1600.2)		
48	132 (499.7)	95 (2413) x 38 (965.2) x 75 (1905)		
77	211 (798.7)	95 (2413) x 38 (965.2) x 87 (2209.8)		
109	300 (1135.6)	95 (2413) x 38 (965.2) x 91 (2311.4)		

**LEVEL 1 ACOUSTIC ENCLOSURE**

RUN TIME HOURS	USABLE CAPACITY GAL (L)	L x W x H in (mm)	WT lbs (kg) - Enclosure Only	
			Steel	Aluminum
NO TANK	-	113 (2870.2) x 38 (965.2) x 50 (1270)	455 (206)	288 (131)
20	54 (204.4)	113 (2870.2) x 38 (965.2) x 63 (1600.2)		
48	132 (499.7)	113 (2870.2) x 38 (965.2) x 75 (1905)		
77	211 (798.7)	113 (2870.2) x 38 (965.2) x 87 (2209.8)		
109	300 (1135.6)	113 (2870.2) x 38 (965.2) x 91 (2311.4)		

**LEVEL 2 ACOUSTIC ENCLOSURE**

RUN TIME HOURS	USABLE CAPACITY GAL (L)	L x W x H in (mm)	WT lbs (kg) - Enclosure Only	
			Steel	Aluminum
NO TANK	-	95 (2413) x 38 (965.2) x 62 (1574.8)	460 (209)	291 (132)
20	54 (204.4)	95 (2413) x 38 (965.2) x 75 (1905)		
48	132 (499.7)	95 (2413) x 38 (965.2) x 87 (2209.8)		
77	211 (798.7)	95 (2413) x 38 (965.2) x 99 (2514.6)		
109	300 (1135.6)	95 (2413) x 38 (965.2) x 103 (2616.2)		

*All measurements are approximate and for estimation purposes only. Sound dBA can be found on the sound data sheet. Enclosure Only weight is added to Tank & Open Set weight to determine total weight.

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.