

S17-0016/AT&T CAF4  
Site 6 Zee Estates  
Location Map  
Exhibit A



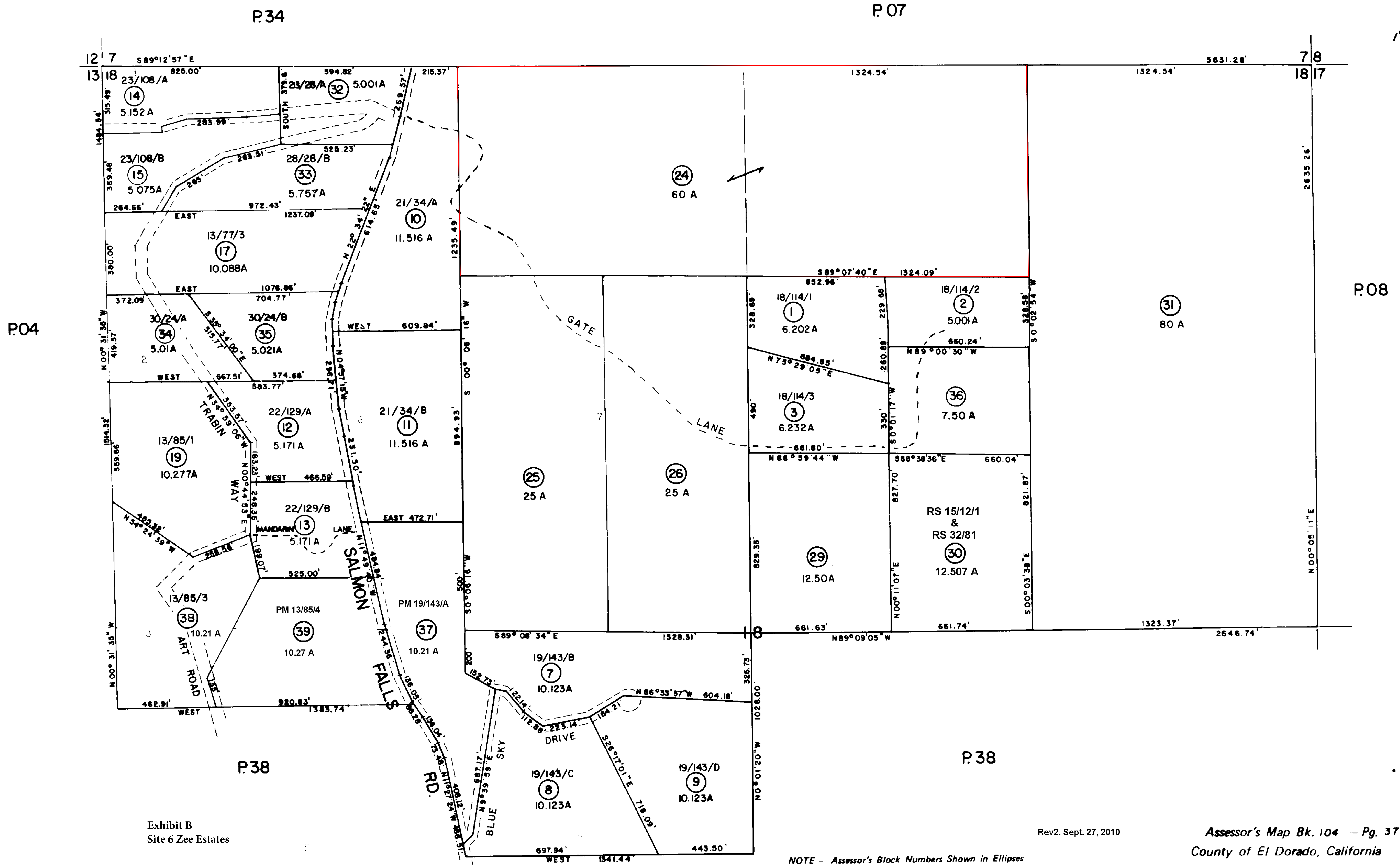
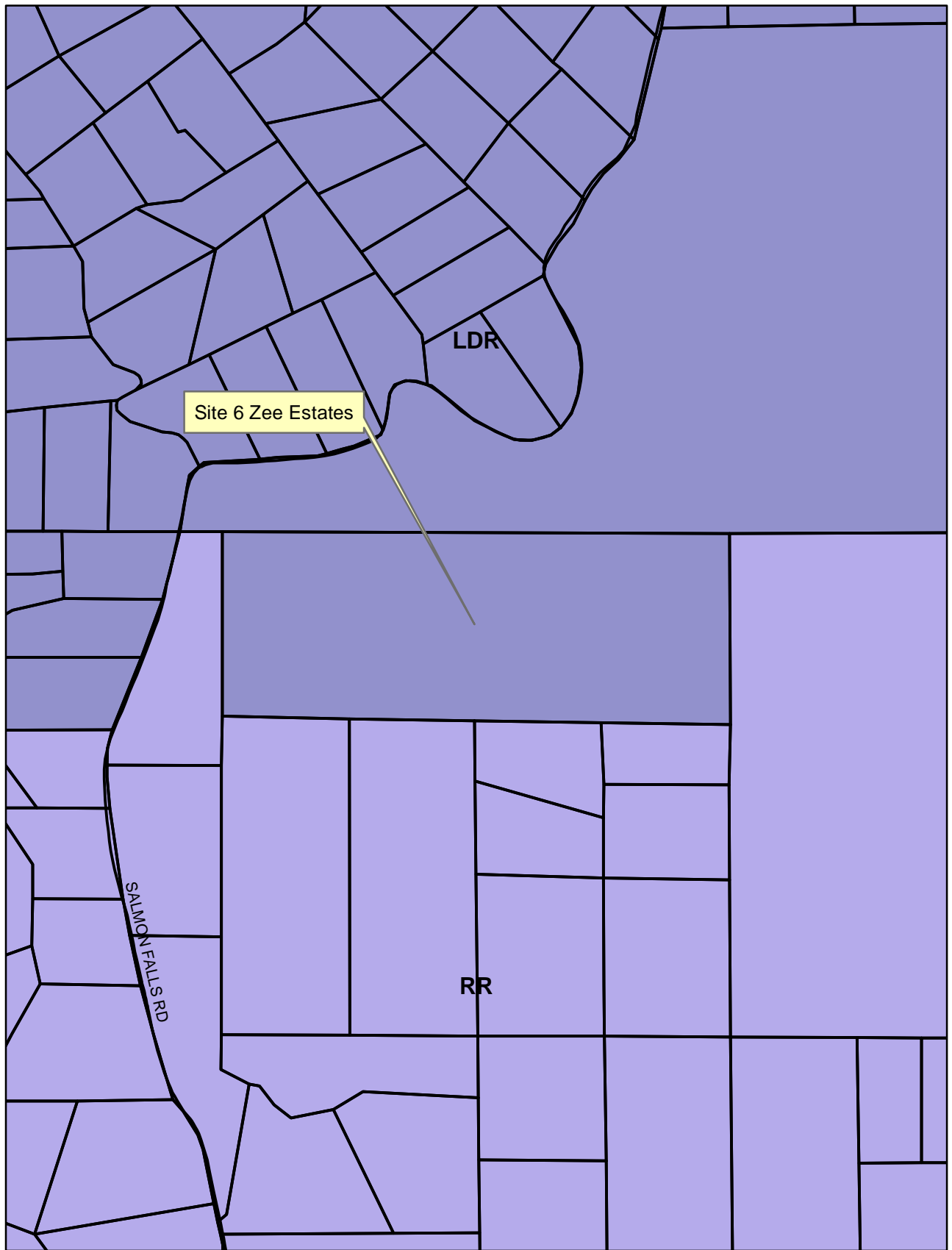


Exhibit B  
Site 6 Zee Estates

Rev2. Sept. 27, 2010

Assessor's Map Bk. 104 - Pg. 37  
County of El Dorado, California

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

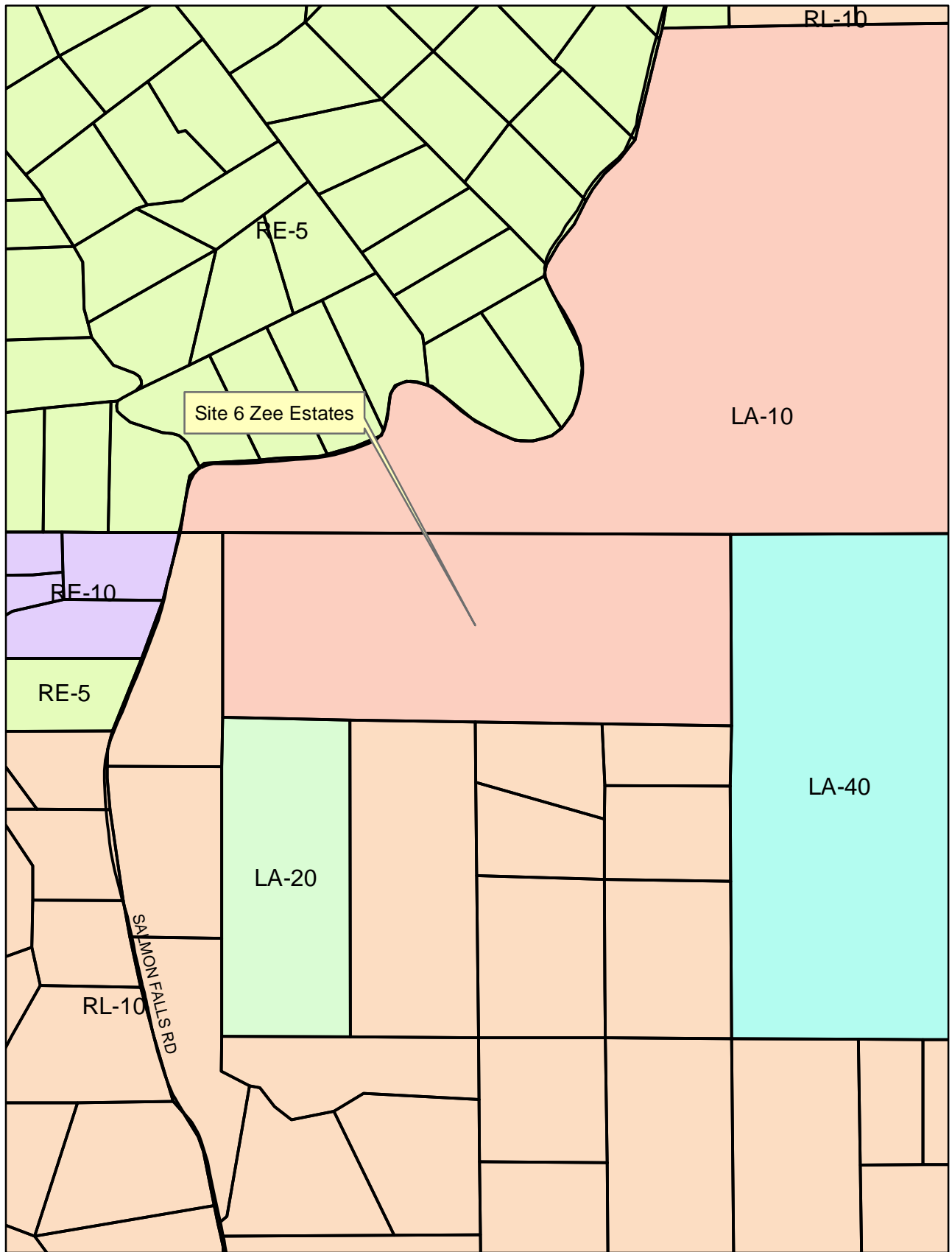


S17-0016/AT&T CAF4  
Site 6 Zee Estates  
General Plan Map  
Exhibit C



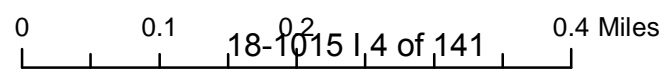
- LDR
- RR

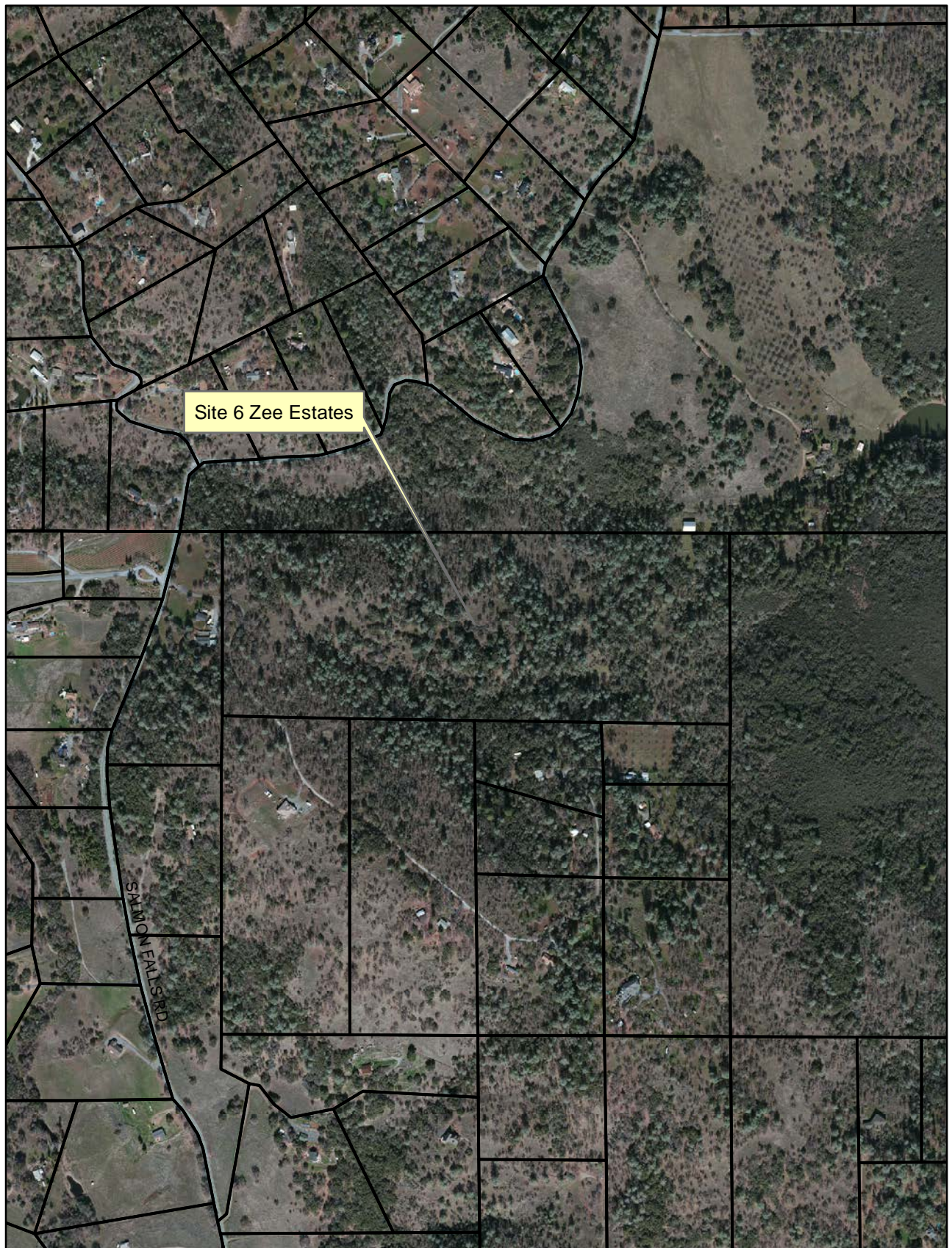
0 0.1 0.2 0.3 0.4 Miles  
18-1015 | 3 of 141



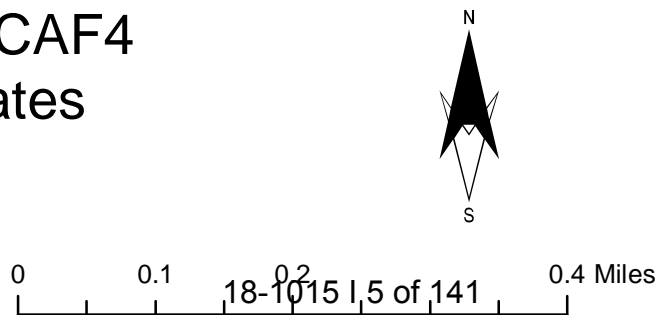
- LA-10
- LA-20
- LA-40
- RE-10
- RE-5
- RL-10

**S17-0016/AT&T CAF4**  
**Site 6 Zee Estates**  
**Zoning Map**  
**Exhibit D**





S17-0016/AT&T CAF4  
Site 6 Zee Estates  
Aerial Map  
Exhibit E





# at&t

## SITE NUMBER: CVL03629 SITE NAME: ZEE ESTATES

GATE LANE 1,000' SOUTH EAST OF  
THE INTERSECTION OF GATE LANE  
AND SALMON FALLS ROAD  
PILOT HILL, CA 95664  
APN: 104-370-24-100

PROPRIETARY INFORMATION  
THE INFORMATION CONTAINED IN THIS SET OF DRAWINGS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO PEEK SITE-COM IS STRICTLY PROHIBITED

CLIENT:



5001 EXECUTIVE PKWY  
SAN RAMON, CA 94583

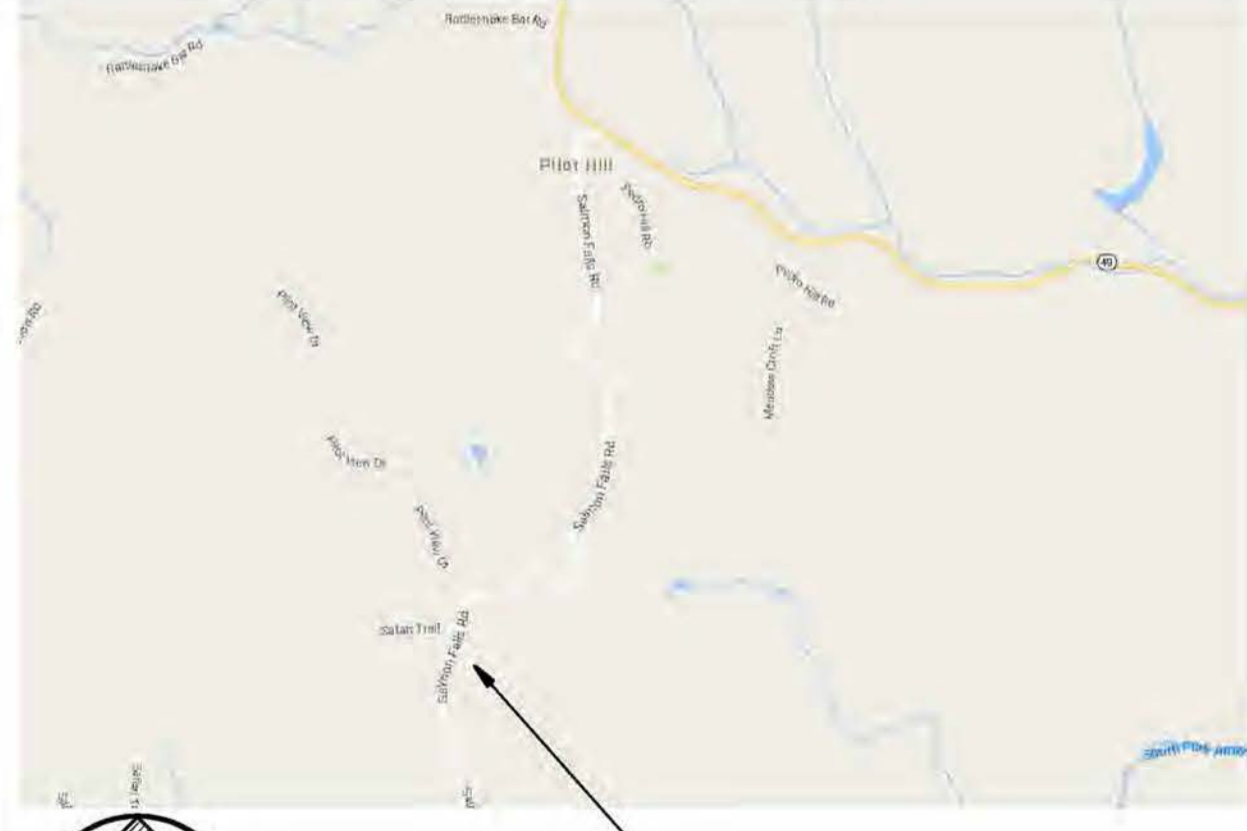
PROJECT INFORMATION	PROJECT TEAM	SHEET INDEX
<p><b>APPLICANT:</b> AT&amp;T MOBILITY 5001 EXECUTIVE PKWY SAN RAMON, CA 94583</p> <p><b>CONSTRUCTION MANAGER:</b> PETE MANAS EPIC WIRELESS 8700 AUBURN FOLSOM ROAD, SUITE 400 GRANITE BAY, CA 95746 (530) 383-5957</p> <p><b>SITE SURVEY:</b> GEL ENGINEERING 1226 HIGH STREET AUBURN, CA 95603 (530) 885-0426</p> <p><b>RF ENGINEER:</b> ASAD SHAHBAZ MS455V@ATT.COM</p> <p><b>RFDS VERSION/DATE:</b> 1.00.01 / 05-01-17 1.00.02 / 5-22-17</p> <p><b>ENGINEERING FIRM:</b> PEEK SITE-COM 12852 EARHART AVE SUITE 101 AUBURN, CA 95602 (530) 885-6160</p> <p><b>SITE ACQUISITION &amp; PLANNING:</b> JARED KEARSLEY EPIC WIRELESS 8700 AUBURN FOLSOM ROAD, SUITE 400 GRANITE BAY, CA 95746 (916) 755-1326</p> <p><b>CIVIL VENDOR:</b> VINCOLLUMS CONSTRUCTION MANAGER KEN ABEL KABEL@VINCOLLUMS.COM (916) 844-4602</p>	<p><b>SITE NAME:</b> ZEE ESTATES <b>SITE NUMBER:</b> CVL03629 <b>FA LOCATION#:</b> 13787593</p> <p><b>SITE ADDRESS:</b> GATE LANE 1,000' SOUTH EAST OF THE INTERSECTION OF GATE LANE AND SALMON FALLS ROAD PILOT HILL, CA 95664</p> <p><b>ASSESSORS PARCEL NUMBER:</b> 104-370-24-100 <b>LATITUDE:</b> 38.483647° <b>LONGITUDE:</b> -121.011305° <b>ELEVATION:</b> 1,563' AMSL</p> <p><b>ZONING:</b> LA-10 <b>JURISDICTION:</b> EL DORADO COUNTY <b>COUNTY:</b> EL DORADO</p> <p><b>PROPERTY OWNER:</b> WOLFE FAMILY TRUST <b>OWNER ADDRESS:</b> 9289 SHADOW BROOK PLACE GRANITE BAY, CA 95746</p>	<p>T-1 TITLE SHEET GN-1 GENERAL NOTES GN-2 SITE SIGNAGE C-1 SITE SURVEY C-2 SITE SURVEY C-3 EROSION CONTROL PLAN &amp; DETAILS C-4 GRADING NOTES &amp; DETAILS C-5 PRELIMINARY GROUNDING PLAN A-1 OVERALL SITE PLAN A-2 EQUIPMENT PLAN A-3 ANTENNA PLAN &amp; DETAILS A-4 ELEVATIONS A-4.1 ELEVATIONS</p>

PROJECT INFORMATION:

**ZEE ESTATES**  
GATE LANE 1,000' SOUTH EAST OF THE INTERSECTION OF GATE LANE AND SALMON FALLS ROAD PILOT HILL, CA 95664


REV: = DATE: DESCRIPTION: BY:

1	6-29-17	90% ZONING DOC'S	RB
2	8-3-17	90% ZONING DOC'S	ALP
1	8-9-17	100% ZONING DOC'S	ALP


CODE COMPLIANCE	VICINITY MAP	DIRECTIONS FROM AT&T	PROJECT DESCRIPTION
<p>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.</p> <ol style="list-style-type: none"> <li>2016 CALIFORNIA BUILDING CODE</li> <li>2016 CALIFORNIA FIRE CODE</li> <li>2016 CALIFORNIA ELECTRICAL CODE</li> <li>2016 CALIFORNIA PLUMBING CODE</li> <li>2016 CALIFORNIA MECHANICAL CODE</li> <li>2016 CALIFORNIA HEALTH AND SAFETY CODE</li> </ol>	 <p style="text-align: center;">SITE LOCATION</p>	<p><b>DIRECTIONS FROM AT&amp;T'S OFFICE AT 5001 EXECUTIVE PARKWAY, SAN RAMON, CA 94583</b></p> <ol style="list-style-type: none"> <li>HEAD NORTHEAST ON BISHOP DR TOWARD SUNSET DR</li> <li>TURN RIGHT ONTO SUNSET DR</li> <li>USE THE RIGHT 2 LANES TO TURN RIGHT ONTO BOLLINGER CANYON RD</li> <li>USE THE RIGHT 2 LANES TO MERGE ONTO I-680 N VIA THE RAMP TO SACRAMENTO</li> <li>MERGE ONTO I-680 N</li> <li>KEEP LEFT TO STAY ON I-680 N</li> <li>KEEP LEFT AT THE FORK TO STAY ON I-680 N</li> <li>KEEP LEFT AT THE FORK TO CONTINUE ON I-680</li> <li>USE ANY LANE TO TAKE EXIT 71A TOWARD I-80 E/SACRAMENTO</li> <li>MERGE ONTO I-80 E</li> <li>KEEP LEFT AT THE FORK TO STAY ON I-80 E</li> <li>KEEP LEFT AT THE FORK TO CONTINUE ON I-80BL E/US-50 E/CAPITAL CITY</li> <li>FREEWAY, FOLLOW SIGNS FOR INTERSTATE 80 BUSINESS/SACRAMENTO/SOUTH LAKE</li> <li>TAHOE</li> <li>CONTINUE ONTO US-50 E</li> <li>TAKE EXIT 30B TOWARD HILLS BLVD</li> <li>FOLLOW EL DORADO HILLS BLVD AND SALMON FALLS RD TO GATE LN</li> <li>MERGE ONTO LATROBE RD</li> <li>CONTINUE ONTO EL DORADO HILLS BLVD</li> <li>CONTINUE ONTO SALMON FALLS RD</li> <li>TURN RIGHT ONTO GATE LN</li> </ol>	<p>AT&amp;T PROPOSES TO CONSTRUCT A NEW UNMANNED TELECOMMUNICATIONS FACILITY. AT&amp;T WILL INSTALL:</p> <ul style="list-style-type: none"> <li>(1) NEW 15' WIDE GRAVEL ACCESS ROAD</li> <li>(1) NEW 30'X45' FENCED LEASE AREA</li> <li>(1) NEW 6' CHAIN LINK FENCE</li> <li>(1) NEW 12' WIDE DOUBLE ACCESS GATE</li> <li>(1) NEW 153' MONOPINE (TOP OF BRANCHES AT 160')</li> <li>(1) NEW PRE-FAB "MIC" LIGHT WEIGHT EQUIPMENT SHELTER WITH ANCILLARY INTERIOR EQUIPMENT</li> <li>(1) NEW GPS ANTENNA</li> <li>(1) NEW 35 Kw PROPANE GENERATOR</li> <li>(1) LP PROPANE TANK (500 GALLON)</li> <li>(12) NEW ANTENNAS</li> <li>(6) NEW RRUS-11, (3) NEW RRUS-12, (12) NEW RRUS-32</li> <li>(4) NEW SURGE SUPPRESSORS</li> <li>(2) FUTURE 4' M/W DISH</li> </ul>

COORDINATING ENGINEER:

**Peek Site-Com**  
12852 Earhart Ave, Suite 101  
Auburn, California 95602  
Phone (530) 885-6160  
E-Mail info@peeksitocom.com

OCCUPANCY & CONST. TYPE	SPECIAL INSPECTIONS	APPROVALS	GENERAL CONTRACTOR NOTES																											
<p>OCCUPANCY: U (UNMANNED) CONSTRUCTION TYPE: V-B</p> <p><b>ACCESSIBILITY REQUIREMENTS:</b> THIS FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION, HANDICAPPED ACCESS REQUIREMENTS ARE NOT REQUIRED IN ACCORDANCE WITH THE 2016 CALIFORNIA BUILDING CODE, CHAPTER 11B, EXCEPTION SECTION 11B-203.5</p>	<p>*SEE SPECIAL INSPECTION FORM</p> <ol style="list-style-type: none"> <li>POST-INSTALLED ANCHORS</li> <li>HIGH STRENGTH BOLTING</li> </ol> <p style="text-align: center;"><b>Exhibit F Site 6 Zee Estates</b></p>	<table border="1"> <thead> <tr> <th>APPROVED BY:</th> <th>INITIALS:</th> <th>DATE:</th> </tr> </thead> <tbody> <tr> <td>AT&amp;T:</td> <td></td> <td></td> </tr> <tr> <td>VENDOR:</td> <td></td> <td></td> </tr> <tr> <td>R.F.:</td> <td></td> <td></td> </tr> <tr> <td>LEASING/LANDLORD:</td> <td></td> <td></td> </tr> <tr> <td>ZONING:</td> <td></td> <td></td> </tr> <tr> <td>CONSTRUCTION:</td> <td></td> <td></td> </tr> <tr> <td>POWER/TELCO:</td> <td></td> <td></td> </tr> <tr> <td>PG&amp;E:</td> <td></td> <td></td> </tr> </tbody> </table>	APPROVED BY:	INITIALS:	DATE:	AT&T:			VENDOR:			R.F.:			LEASING/LANDLORD:			ZONING:			CONSTRUCTION:			POWER/TELCO:			PG&E:			<p><b>GENERAL CONTRACTOR NOTES</b></p> <p>DO NOT SCALE DRAWINGS</p> <p>THESE DRAWINGS ARE FORMATTED TO BE FULL SIZE 24"X36". CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOBSITE AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR MATERIAL ORDERS OR BE RESPONSIBLE FOR THE SAME.</p> 
APPROVED BY:	INITIALS:	DATE:																												
AT&T:																														
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R.F.:																														
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ZONING:																														
CONSTRUCTION:																														
POWER/TELCO:																														
PG&E:																														

SEAL:



SITE #: CVL03629    CHK.: ...    DRAWN BY: RB

SHEET TITLE: **TITLE SHEET**

SHEET NUMBER: **T-1**    REVISION: **0**

## GENERAL CONSTRUCTION NOTES:

- DRAWINGS ARE NOT TO BE SCALED. WRITTEN DIMENSIONS TAKE PRECEDENCE, AND THIS SET OF PLANS IS INTENDED TO BE USED FOR DIAGRAMMATIC PURPOSES ONLY, UNLESS NOTED OTHERWISE. THE GENERAL CONTRACTOR'S SCOPE OF WORK SHALL INCLUDE FURNISHING ALL MATERIALS, EQUIPMENT, LABOR, AND ANYTHING ELSE DEEMED NECESSARY TO COMPLETE INSTALLATIONS AS DESCRIBED HEREIN.
- PRIOR TO THE SUBMISSION OF BIDS, THE CONTRACTORS INVOLVED SHALL VISIT THE JOB SITE AND FAMILIARIZE THEMSELVES WITH ALL CONDITIONS AFFECTING THE PROPOSED PROJECT, WITH THE CONSTRUCTION AND CONTRACT DOCUMENTS, FIELD CONDITIONS AND CONFIRM THAT THE PROJECT MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY ERRORS, OMISSIONS, OR DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER.
- THE GENERAL CONTRACTOR SHALL RECEIVE WRITTEN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS/ CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO MANUFACTURER'S/ VENDOR'S SPECIFICATIONS UNLESS NOTED OTHERWISE OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
- ALL WORK PERFORMED ON PROJECT AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK.
- GENERAL CONTRACTOR SHALL PROVIDE AT THE PROJECT SITE A FULL SET OF CONSTRUCTION DOCUMENTS UPDATED WITH THE LATEST REVISIONS AND ADDENDUMS OR CLARIFICATIONS FOR THE USE BY ALL PERSONNEL INVOLVED WITH THE PROJECT.
- THE STRUCTURAL COMPONENTS OF THIS PROJECT SITE/ FACILITY ARE NOT TO BE ALTERED BY THIS CONSTRUCTION PROJECT UNLESS NOTED OTHERWISE.
- DETAILS INCLUDED HEREIN ARE INTENDED TO SHOW END RESULT OF DESIGN. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT JOB CONDITIONS OR SITUATIONS, AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE SCOPE OF WORK.
- SEAL PENETRATIONS THROUGH FIRE-RATED AREAS WITH U.L. LISTED OR FIRE MARSHALL APPROVED MATERIALS IF APPLICABLE TO THIS FACILITY AND OR PROJECT SITE.
- PROVIDE A PORTABLE FIRE EXTINGUISHER WITH A RATING OF NOT LESS THAN 2-A OR 2-A10BC WITHIN 75 FEET TRAVEL DISTANCE TO ALL PORTIONS OF THE PROJECT AREA DURING CONSTRUCTION.
- THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBING, ETC. DURING CONSTRUCTION. UPON COMPLETION OF WORK, CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY.
- CONTRACTOR SHALL SEE TO IT THAT GENERAL WORK AREA IS KEPT CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DIRT, DEBRIS, RUBBISH AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY. PREMISES SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE.
- THE ARCHITECTS/ENGINEERS HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK. CONTRACTORS BIDDING THE JOB ARE NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS. THE BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) THE ARCHITECT/ENGINEER OF ANY CONFLICTS, ERRORS, OR OMISSIONS PRIOR TO THE SUBMISSION OF CONTRACTOR'S PROPOSAL. IN THE EVENT OF DISCREPANCIES THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED OTHERWISE.

## ABBREVIATIONS

ABV.	ABOVE	L.F.	LINEAR FEET (FOOT)
ADD'L	ADDITIONAL	MAX.	MAXIMUM
A.G.L.	ABOVE GROUND LEVEL	M.B.	MACHINE BOLT
ALUM.	ALUMINUM	MECH.	MECHANICAL
APPROX.	APPROXIMATELY	MFR.	MANUFACTURER
AWG.	AMERICAN WIRE GAUGE	MIN.	MINIMUM
BLDG.	BUILDING	MISC.	MISCELLANEOUS
BLK.	BLOCKING	MTL	METAL
CAB.	CABINET	(N)	NEW
CONC.	CONCRETE	NO. (#)	NUMBER
CONN.	CONNECTION(OR)	N.T.S.	NOT TO SCALE
CONST.	CONSTRUCTION	O.C.	ON CENTER
CONT.	CONTINUOUS	P/C	PRECAST CONCRETE
DBL.	DOUBLE	PPC	POWER PROTECTION CABINET
DEPT.	DEPARTMENT	P.S.F.	POUNDS PER SQUARE FOOT
D.F.	DOUGLAS FIR	P.S.I.	POUNDS PER SQUARE INCH
DIA.	DIAMETER	P.T.	PRESSURE TREATED
DIM.	DIMENSION	QTY.	QUANTITY
EA.	EACH	RAD. (R)	RADIUS
EL.	ELEVATION	REF.	REFERENCE
ELEC.	ELECTRICAL	REINF.	REINFORCEMENT(ING)
EMT.	ELECTRICAL METALLIC TUBING	REQ'D	REQUIRED
ENG.	ENGINEER	RGS	RIGID GALVANIZED STEEL
EQ.	EQUAL	SCH.	SCHEDULE
(E)	EXISTING	SHT.	SHEET
EXT.	EXTERIOR	SPEC.	SPECIFICATIONS
FAB.	FABRICATION	SQ.	SQUARE
F.A.	FINISHED FLOOR	S.S.	STAINLESS STEEL
F.B.	FINISHED GRADE	STD.	STANDARD
FT. (')	FOOT (FEET)	STL	STEEL
FTG.	FOOTING	STRUC.	STRUCTURAL
GA.	GAUGE	TEMP.	TEMPORARY
GALV.	GALVANIZE(D)	T.O.A.	TOP OF ANTENNAS
G.F.I.	GROUND FAULT CIRCUIT INTERRUPTER	T.O.F.	TOP OF FOUNDATION
GPS	GLOBAL POSITIONING SYSTEM	T.O.P.	TOP OF PLATE (PARAPET)
GRND.	GROUND(ING)	T.O.W.	TOP OF WALL
HT.	HEIGHT	TYP.	TYPICAL
ICGB.	ISOLATED COPPER GROUND BUS	U/G	UNDER GROUND
IN. (")	INCH(ES)	V.I.F.	VERIFY IN FIELD
INT.	INTERIOR	W	WIDE (WIDTH)
L.B.	LAG BOLTS	W/	WITH
		WT.	WEIGHT

## SYMBOLS LEGEND

	WOOD FENCE
	CHAIN LINK FENCE
	HIDDEN LINE
	COAX/POWER/FIBER CONDUIT
	PROPERTY LINE
	ELEVATION DATUM
	EARTH
	CONCRETE
	SAND
	GRATE PLATFORM
	GRAVEL
	FRP (FIBERGLASS REINFORCED PLASTIC)
	NEW DC SURGE SUPPRESSOR
	NEW ANTENNA
	NEW RRU

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CLIENT:



5001 EXECUTIVE PKWY  
SAN RAMON, CA 94583

PROJECT INFORMATION:

### ZEE ESTATES

GATE LANE 1,000' SOUTH EAST OF THE INTERSECTION OF GATE LANE AND SALMON FALLS ROAD  
PILOT HILL, CA 95664

REV: = DATE: DESCRIPTION: BY:

1	6-29-17	90% ZONING DOC'S	RB
1	8-3-17	90% ZONING DOC'S	ALP
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COORDINATING ENGINEER:

### Peek Site-Com

12852 Earhart Ave. Suite 101  
Auburn, California 95602  
Phone (530) 885-6160

E-Mail info@peeksitcom.com

SEAL:



SITE #: CHK.: DRAWN BY:

CVL03629 ... RB

SHEET TITLE:

### GENERAL NOTES

SHEET NUMBER: REVISION:

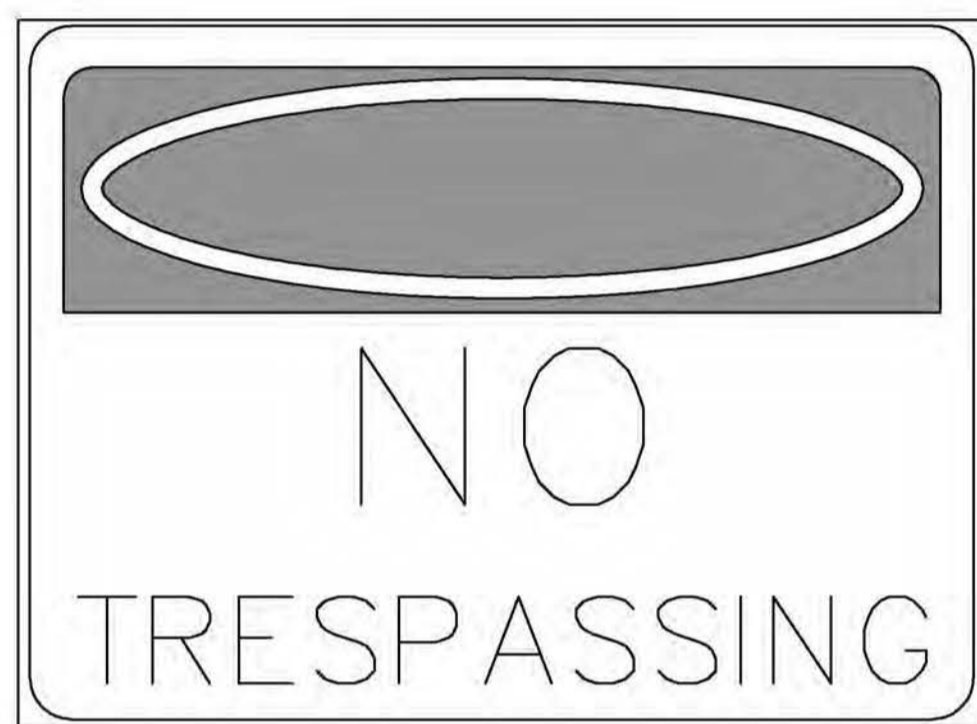
**GN-1 0**



This Site Operated by:  
**AT&T MOBILITY**  
 2600 CAMINO RAMON, 4W850 N  
 SAN RAMON, CA 94583  
 IN CASE OF FIRE AND THE NEED FOR SHUTDOWN  
 TO DEACTIVATE ANTENNAS CALL  
 THE FOLLOWING NUMBER:  
 For 24 Hour Emergency Contact and Access Please Call:  
 (800) 832-6662

Reference Site#: **CVL03629**  
 Site Address: **860 GATE LN. PILOT HILL, CA 95664**

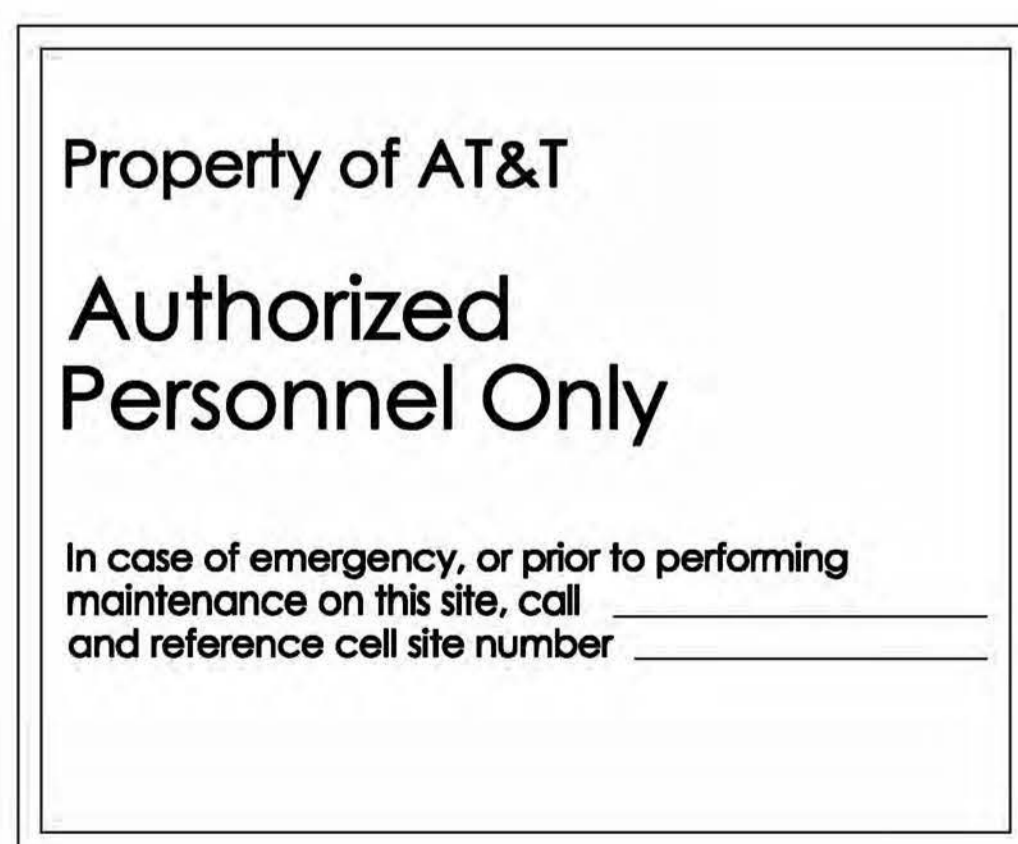
**FENCED COMPOUND SIGNAGE**



**FENCED COMPOUND SIGNAGE**



**DOOR/EQUIPMENT SIGN**



**SHELTER/CABINET DOORS SIGNAGE**

**INFORMATION**

AT&T MOBILITY OPERATES TELECOMMUNICATION ANTENNAS AT THIS LOCATION. REMAIN AT LEAST 3 FEET AWAY FROM ANY ANTENNA AND OBEY ALL POSTED SIGNS.

CONTACT THE OWNER(S) OF THE ANTENNA(S) BEFORE WORKING CLOSER THAN 3 FEET FROM THE ANTENNA(S).

CONTACT AT&T MOBILITY AT 800-368-2822 PRIOR TO PERFORMING ANY MAINTENANCE OR REPAIRS NEAR AT&T MOBILITY ANTENNAS.

THIS IS SITE # **CVL03629**.

CONTACT THE MANAGEMENT OFFICE IF THIS DOOR/HATCH/GATE IS FOUND UNLOCKED.

**INFORMACION**

EN ESTA PROPIEDAD SE UBICAN ANTENAS DE TELECOMUNICACIONES OPERADAS POR AT&T. FAVOR MANTENER UNA DISTANCIA DE NO MENOS DE 3 PIES Y OBEDECER TODOS LOS AVISOS.

COMUNIQUESE CON EL PROPIETARIO O LOS PROPIETARIOS DE LAS ANTENNAS ANTES DE TRABAJAR O CAMINAR DE MENOS DE 3 PIES DE LA ANTENA.

COMUNIQUESE CON AT&T MOBILITY 800-368-2822 ANTES DE REALIZAR CUALQUIER MANTENIMIENTO O REPARACION DE LAS ANTENNAS DE AT&T MOBILITY.

ESTA ES LA ESTACION BASE NUMERO **CVL03629**.

FAVOR COMUNICARSE CON LA OFICINA DE LA ADMINISTRACION DEL EDIFICIO SI ESTA PUERTA O CUBIERTA SE ENCUENTRA SIN CERRADA.

INFORMATION SIGN 1-1

**INFORMATION**

ACTIVE ANTENNAS ARE MOUNTED

ON THE OUTSIDE FACE OF THIS BUILDING

INFORMATION SIGN 1-2

ON THIS STRUCTURE

STAY BACK A MINIMUM OF 3 FEET FROM THESE ANTENNAS

CONTACT AT&T MOBILITY AT 800-368-2822 & FOLLOW THEIR INSTRUCTIONS PRIOR TO PERFORMING ANY MAINTENANCE OR REPAIRS CLOSER THAN 3 FEET FROM THE ANTENNAS

THIS IS AT&T MOBILITY SITE **CVL03629**

INFORMATION SIGN 1-2

**at&t**

INFORMATION SIGN 1-3

1-1/2"

2"

24"

STAY BACK 3 FEET FROM ANTENNA

INFORMATION SIGN 1-4

- CONTRACTOR SHALL INSTALL ALL INFORMATION SIGNAGE IN ACCORDANCE W/ AT&T WIRELESS DOCUMENT #03-0074, RF EXPOSURE POLICY AND RF SAFETY COMPLIANCE PROGRAM, LATEST EDITION.
- FABRICATION:
  - \*SIGN 1-1: ENTRANCE DOOR, SEE DETAIL 1A, THIS SHEET
  - \*SIGN 1-2: SIGN 1 IS TO BE MADE ON THE 50 MIL ALUMINUM SHEETING (SIZE 8 INCHES BY 12 INCHES) W/ (4) 1/4 INCH MOUNTING HOLES, ONE EACH CORNER OF THE SIGN FOR MOUNTING W/ HARDWARE W/ THE WRAPS. THE MAIN BACKGROUND COLOR IS THE BE WHITE FRONT & BACK W/ BLACK LETTERING
  - THE INFORMATION BAND SHALL BE 1.2 INCH SOLID GREEN BAND W/ 0.5 INCH HIGH BLACK LETTERING. THE BODY OF THE TEXT SHALL BE IN BLACK LETTERING W/ 0.2 INCH HIGH LETTERS. THE REF LINE SHALL BE IN 1/8 INCH LETTERS.
  - THE PLACEMENT OF TEXT SHALL BE DONE IN A MANNER THAT WILL PERMIT EASY READING FROM A DISTANCE OF APPROXIMATELY 6 FEET IN FRONT OF THE SIGN.
  - ALL PAINT WILL BE BAKER W/ ENAMEL W/ UV PROTECTIVE COATING OVER THE FACE OF THE SIGN.

- \*SIGN 1-2 POLE, SEE DETAIL 1B, THIS SHEET.
- SIGN 2 MUST BE A NON METALLIC LABEL W/ AN ADHESIVE BACKING, THE LABEL SHALL BE MADE USING VINYL OR SIMILAR WEATHERPROOF MATERIAL, THE LABEL SHALL BE APPROXIMATELY 5X7 INCHES W/ A WHITE BACKGROUND AND BLACK LETTERING. THE GREEN BAND SHALL BE 1.375 INCH IN HEIGHT & THE LETTERING SHALL BE BLACK W/ 0.75 INCH HIGH LETTERS. THE TEXT LETTERING SHALL BE BLACK W/ 1/8 INCH HIGH LETTERS. UV PROTECTION SHALL BE PLACED OVER THE FRONT OF THE LABEL.
- \*SIGN 1-3: BACK OF ANTENNAS, SEE DETAIL 1C & 3, THIS SHEET
- \*SIGN 3 IS A 1 INCH X 2 INCH PANEL THAT CAN BE APPLIED TO THE BACK OR SIDE OF AN ANTENNA TO IDENTIFY IT AS AN AT&T ANTENNA.
- \*SIGN 1-4: SIDE OF ANTENNAS, SEE DETAIL 1D & 3, THIS SHEET
- SIGN 4 IS MADE FROM TRANSPARENT MATERIAL 1-1/2 INCHES WIDE & 24 INCHES LONG. THE LETTERING IS TO BE BLACK W/ 1/2 INCH LETTERING IN A VERTICAL COLUMN. THE SPACING BETWEEN WORDS MUST BE SUCH THAT IT IS EASILY READ & FILLS THE LENGTH OF THE SIGN

**INFORMATION SIGNAGE**

**INFORMATION**

Federal Communications Commission  
Tower Registration Number

**1 2 3 4 5 6 7**

Posted in accordance with federal Communications Commission rules and antenna tower registration 47CFR 17.4(g).

**FCC ASR SIGNAGE**

Property of AT&T

**Authorized Personnel Only**

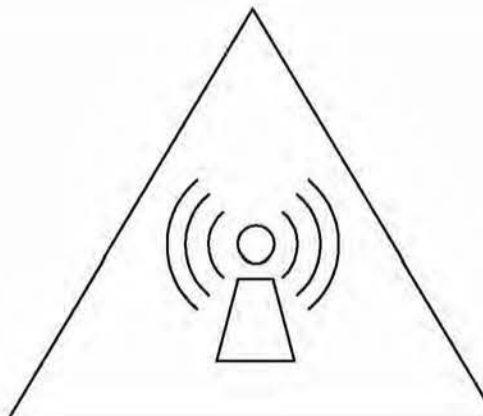
No Trespassing  
Violators will be Prosecuted

In case of emergency, or prior to performing maintenance on this site, call \_\_\_\_\_ and reference cell site number \_\_\_\_\_

**GATE SIGNAGE**

- NOTE:
- CONTRACTOR SHALL INSTALL ALL INFORMATION SIGNAGE IN ACCORDANCE W/ AT&T WIRELESS DOCUMENT #03-0074, RF EXPOSURE POLICY AND RF SAFETY COMPLIANCE PROGRAM, LATEST EDITION.
  - CONTRACTOR SHALL CONTACT AT&T R-RFSC FOR INFORMATION ON MPE LEVELS AND INSTRUCTIONS ON LEVEL AND LOCATION OF SIGNAGE.

**WARNING**

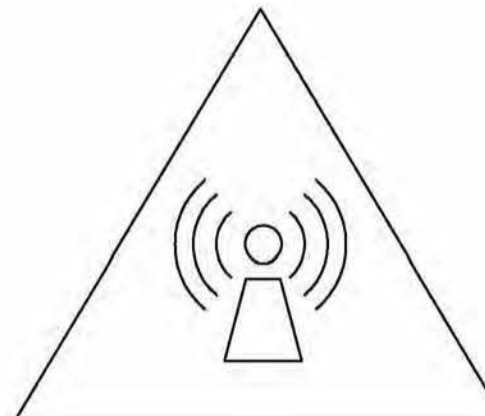


**Beyond This Point you are entering a controlled area where RF Emissions exceed the FCC Controlled Exposure limits**  
 Failure to obey all posted signs and site guidelines could result in serious injury

Ref: FCC 47CFR 1.1307(b)

**CAUTION AND WARNING SIGN**

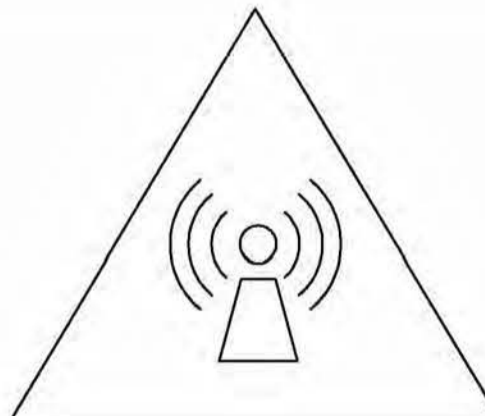
**CAUTION**



**Beyond This Point you are entering a controlled area where RF Emissions may exceed the FCC Controlled Exposure limits**  
 Obey all posted signs and site guidelines for working in an RF environment

Ref: FCC 47CFR 1.1307(b)

**NOTICE**



**Beyond This Point you are entering an area where RF Emissions may exceed the FCC General Population Exposure Limits**  
 Follow all posted signs and site guidelines for working in an RF environment

Ref: FCC 47CFR 1.1307(b)

**NOTICE SIGN**

**SIGNAGE AND STRIPING INFORMATION**


- THE FOLLOWING INFORMATION IS A GUIDELINE W/ RESPECT TO PREVAILING STANDARDS LIMITING HUMAN EXPOSURE TO RADIO FREQUENCY ENERGY AND SHOULD BE USED AS SUCH. IF THE SITE'S EMF REPORT OR ANY LOCAL, STATE OR FEDERAL GUIDELINES OR REGULATIONS SHOULD BE IN CONFLICT W/ ANY PART OF THESE NOTES OR PLANS, THE MORE RESTRICTIVE GUIDELINE OR REGULATION SHALL BE FOLLOWED AND OVERRIDE THE LESSER.
- THE PUBLIC LIMIT OF RF EXPOSURE ALLOWED BY AT&T IS 1MWCM<sup>2</sup> AND THE OCCUPATIONAL LIMIT OF RF EXPOSURE ALLOWED BY AT&T IS 5MWCM<sup>2</sup>
- IF THE BOTTOM OF THE ANTENNA IS MOUNTED (8) EIGHT FEET ABOVE THE GROUND OR WORKING PLATFORM LINE OF THE PERSONAL COMMUNICATION SYSTEM (PCS) AND DOES NOT EXCEED THE PUBLIC LIMIT OF RF EXPOSURE LIMIT THEN NO STRIPING OR BARRICADES SHOULD BE NEEDED.
- IF THE PUBLIC LIMIT OF RF EXPOSURE ON THE SITE IS EXCEEDED AND THE AREA IS PUBLICLY ACCESSIBLE (E.G. ROOF ACCESS DOOR THAT CANNOT BE LOCKED, OR FIRE EGRESS) THEN BOTH BARRICADES AND STRIPING SHALL BE PLACED AROUND THE ANTENNAS. THE EXACT EXTENT OF THE BARRICADES AND STRIPING SHALL BE DETERMINED BY THE EMF REPORT FOR THE SITE DONE BEFORE OR SHORTLY AFTER COMPLETION OF SITE CONSTRUCTION. USE THE PLANS AS A GUIDELINE FOR PLACEMENT OF SUCH BARRICADES AND STRIPING.
- IF THE PUBLIC LIMIT OF RF EXPOSURE ON THE SITE IS EXCEEDED AND THE AREA IS PUBLICLY ACCESSIBLE (E.G. ROOF ACCESS DOOR THAT CANNOT BE LOCKED, OR FIRE EGRESS) THEN BOTH BARRICADES AND STRIPING SHALL BE PLACED AROUND THE ANTENNAS. THE EXACT EXTENT OF THE BARRICADES & STRIPING SHALL BE DETERMINED BY THE EMF REPORT FOR THE SITE DONE BEFORE OR SHORTLY AFTER COMPLETION OF SITE CONSTRUCTION. USE THE PLANS AS A GUIDELINE FOR PLACEMENT OF SUCH BARRICADES AND STRIPING.
- ALL TRANSMIT ANTENNAS REQUIRE A THREE LANGUAGE WARNING SIGN WRITTEN IN ENGLISH, SPANISH, AND CHINESE. THIS SIGN SHALL BE PROVIDED TO THE CONTRACTOR BY THE AT&T CONSTRUCTION PROJECT MANAGER AT THE TIME OF CONSTRUCTION. THE LARGER SIGN SHALL BE PLACED IN PLAIN SIGHT AT ALL ROOF ACCESS LOCATIONS AND ON ALL BARRICADES. THE SMALLER SIGN SHALL BE PLACED ON THE ANTENNA ENCLOSURES IN A MANNER THAT IS EASILY SEEN BY ANY PERSON ON THE ROOF. WARNING SIGNS SHALL COMPLY W/ ANSI C95.2 COLOR, SYMBOL, AND CONTENT CONVENTIONS. ALL SIGNS SHALL HAVE AT&T'S NAME AND THE COMPANY CONTACT INFORMATION (E.G. TELEPHONE NUMBER) TO ARRANGE FOR ACCESS TO THE RESTRICTED AREAS. THIS TELEPHONE NUMBER SHALL BE PROVIDED TO THE CONTRACTOR BY THE AT&T CONSTRUCTION PROJECT MANAGER AT THE TIME OF CONSTRUCTION.
- PHOTOS OF ALL STRIPING, BARRICADES & SIGNAGE SHALL BE PART OF THE CONTRACTORS CLOSE OUT PACKAGE & SHALL BE TURNED INTO THE AT&T CONSTRUCTION PACKAGE & SHALL BE TURNED INTO THE AT&T CONSTRUCTION PROJECT MANAGER AT THE END OF CONSTRUCTION. STRIPING SHALL BE DONE W/ FADE RESISTANT YELLOW SAFETY PAINT IN A CROSS-HATCH PATTERN AS DETAILED BY THE CONSTRUCTION DRAWINGS. ALL BARRICADES SHALL BE MADE OF AN RF FRIENDLY MATERIAL SO AS NOT TO BLOCK OR INTERFERE W/ THE OPERATION OF THE ANTENNAS. BARRICADES SHALL BE PAINTED W/ FADE RESISTANT YELLOW SAFETY PAINT. THE CONTRACTOR SHALL PROVIDE ALL RF FRIENDLY BARRICADES NEEDED, & SHALL PROVIDE THE AT&T CONSTRUCTION PROJECT MANAGER W/ A DETAILED
- SHOP DRAWING OF EACH BARRICADE. UPON CONSTRUCTION COMPLETION.

**GENERAL NOTES**

PROPRIETARY INFORMATION

THE INFORMATION CONTAINED IN THIS SET OF DRAWINGS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO PEEK SITE-COM IS STRICTLY PROHIBITED

CLIENT:



5001 EXECUTIVE PKWY  
SAN RAMON, CA 94583

PROJECT INFORMATION:

**ZEE ESTATES**

GATE LANE 1,000' SOUTH EAST OF THE INTERSECTION OF GATE LANE AND SALMON FALLS ROAD  
PILOT HILL, CA 95664

REV: = DATE: = DESCRIPTION: = BY: =

1	6-29-17	90% ZONING DOC'S	RB
2	8-3-17	90% ZONING DOC'S	ALP
1	8-9-17	100% ZONING DOC'S	ALP

COORDINATING ENGINEER:

**Peek Site-Com**

12852 Earhart Ave. Suite 101  
Auburn, California 95602  
Phone (530) 885-6160  
E-Mail info@peeksitcom.com

SEAL:



SITE #: \_\_\_\_\_ CHK.: \_\_\_\_\_ DRAWN BY: \_\_\_\_\_  
 CVL03629 ... RB

**SITE SIGNAGE**

SHEET NUMBER: \_\_\_\_\_ REVISION: \_\_\_\_\_

**GN-2 0**

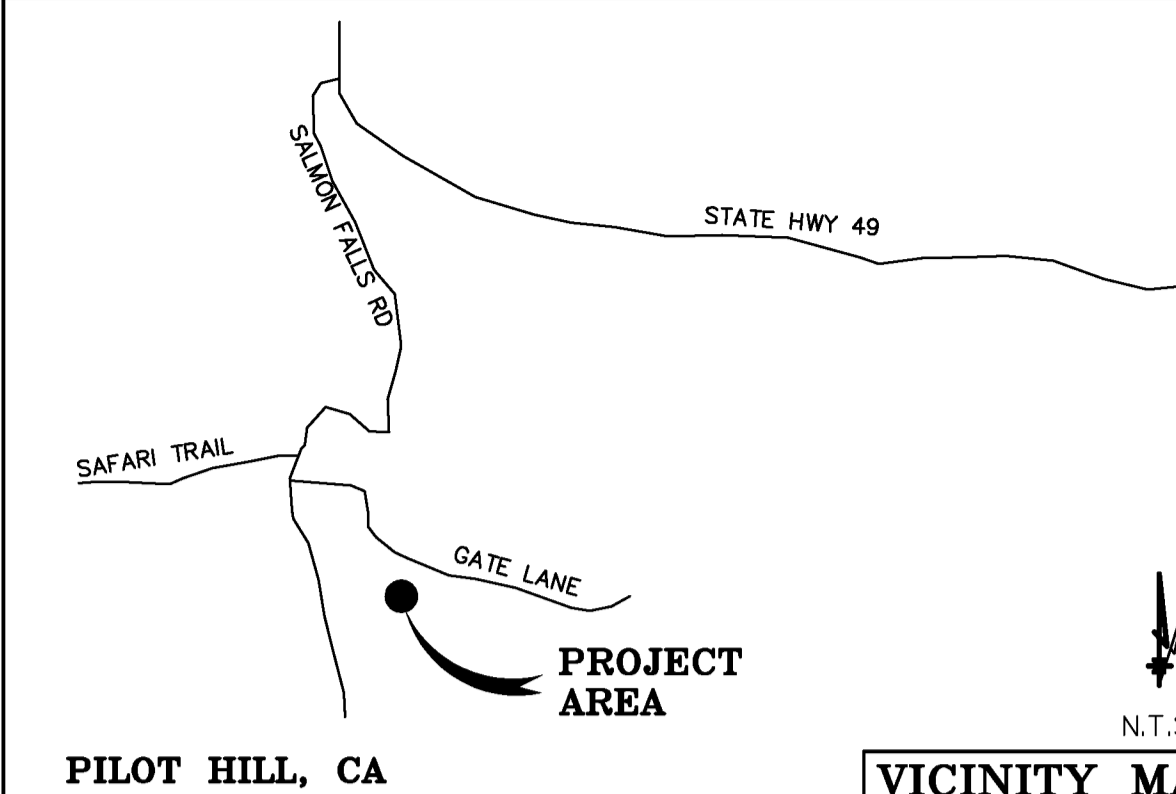


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BOUNDARY SHOWN IS BASED ON MONUMENTATION FOUND AND RECORD INFORMATION. THIS IS NOT A BOUNDARY SURVEY. THIS IS A SPECIALIZED TOPOGRAPHIC MAP WITH PROPERTY LINES AND EASEMENTS BEING A GRAPHIC DEPICTION BASED ON INFORMATION GATHERED FROM VARIOUS SOURCES 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: 04-17-17  
 SURVEYED BY OR UNDER DIRECTION OF: KENNETH D. GEIL, R.C.E. 14803  
 LOCATED IN THE COUNTY OF EL DORADO, 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.  
 N.G.V.D. 1929 CORRECTION: SUBTRACT 2.62' FROM ELEVATIONS SHOWN.  
 CONTOUR INTERVAL: 1'  
 CONTRACTOR IS RESPONSIBLE TO VERIFY LEASE AREA PRIOR TO CONSTRUCTION.  
 ASSESSOR'S PARCEL NUMBER: 104-370-24-100  
 OWNER(S): WOLFE FAMILY TRUST  
 9289 SHADOW BROOK PLACE  
 GRANITE BAY, CA 95746

Lease Area Description  
 All that certain lease area being a portion of the North 1/2 of Lot 7 as is shown on that certain Parcel Map filed for record at Book 13 of Parcel Maps, Page 106, El Dorado County Records, located in the County of El Dorado, State of California, and being a portion of Section 18, Township 11 N., Range 9 E., M.D.B. & M, and being more particularly described as follows:  
 Commencing at a 1-1/2" Capped Iron Pipe monument set at the Northeast corner of Parcel B as is shown on that certain Parcel Map filed for record at Book 21 of Parcel Maps at Page 34, Official Records of El Dorado County, from which a similar monument set West 442.06 feet from the Southeast corner of said parcel bears South 26°22'17" West 998.99 feet; thence from said point of commencement North 09°35'24" East 320.91 feet to the True Point of Beginning; thence from said True Point of Beginning North 46°36'50" East 45.00 feet; thence North 43°23'10" West 30.00 feet; thence South 46°36'50" West 45.00 feet; thence South 43°23'10" East 30.00 feet to the point of beginning.  
 Together with a non-exclusive easement for access and utility purposes fifteen feet in width the centerline of which is described as follows: beginning at a point which bears South 43°23'10" East 7.50 feet from the Southeast corner of the above described lease area and running thence South 46°36'50" West 27.43 feet; thence through a tangent curve to the left having a radius of 20.00 feet through an arc distance of 31.20 feet; thence South 42°46'14" East 46.11 feet; thence through a tangent curve to the left having a radius of 20.00 feet through an arc distance of 27.54 feet; thence North 58°20'12" East 34.31 feet; thence through a tangent curve to the right having a radius of 30.00 feet through an arc distance of 3.53 feet; thence North 65°04'17" East 25.36 feet; thence through a tangent curve to the left having a radius of 30.00 feet through an arc distance of 10.13 feet; thence North 45°43'15" East 32.48 feet to a point on the centerline of the road commonly known as "Gate Lane" and running thence over and across said Lane as is shown hereon to the public right of way more commonly known as Salmon Falls Road.



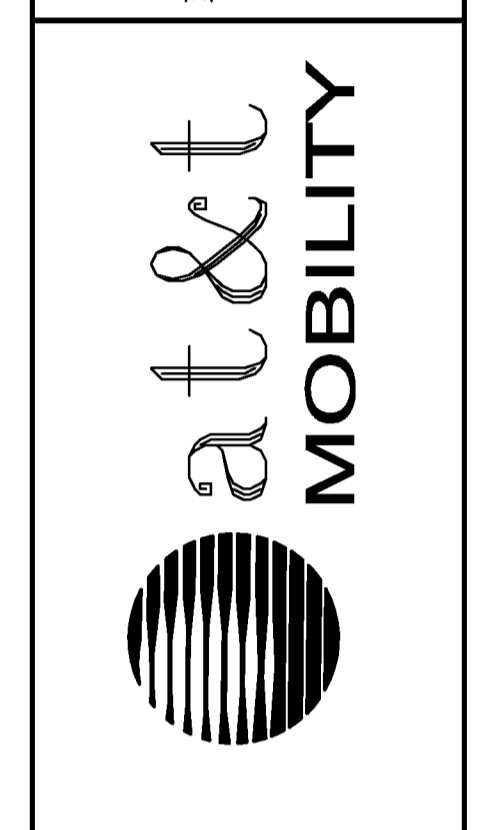
PILOT HILL, CA  
 VICINITY MAP  
 Geil Engineering  
 Engineering \* Surveying \* Planning  
 1226 High Street  
 Auburn, California 95603-5015  
 Phone: (530) 885-0426 \* Fax: (530) 823-1309

A.T. & T. Mobility  
 Project No./Name: CVL03629 / ZEE ESTATES  
 Project Site Location: Gate Lane 1,000' South East of the Intersection of Gate Lane and Salmon Falls Road  
 Pilot Hill, CA 95664  
 El Dorado County  
 Date of Observation: 04-17-17

Equipment/Procedure Used to Obtain Coordinates: Trimble Pathfinder Pro XL post processed with Pathfinder Office software.  
 Type of Antenna Mount: Proposed Monopine Tower  
 Coordinates (Tower)  
 Latitude: N 38° 48' 36.47" (NAD83) N 38° 48' 36.83" (NAD27)  
 Longitude: W 121° 01' 13.05" (NAD83) W 121° 01' 09.25" (NAD27)  
 ELEVATION of Ground at Structure (NAVD88) 1563' AMSL  
 CERTIFICATION: I, the undersigned, do hereby certify elevation listed above is based on a field survey done under my supervision and that the accuracy of those elevations meet or exceed 1-A Standards as defined in the FAA ASAC Information Sheet 91:003, and that they are true and accurate to the best of my knowledge and belief.  
 Kenneth D. Geil California RCE 14803

DEPT	APPROVED	DATE
ARC		
RE		
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EE/IN		
OPS		
EE/OUT		

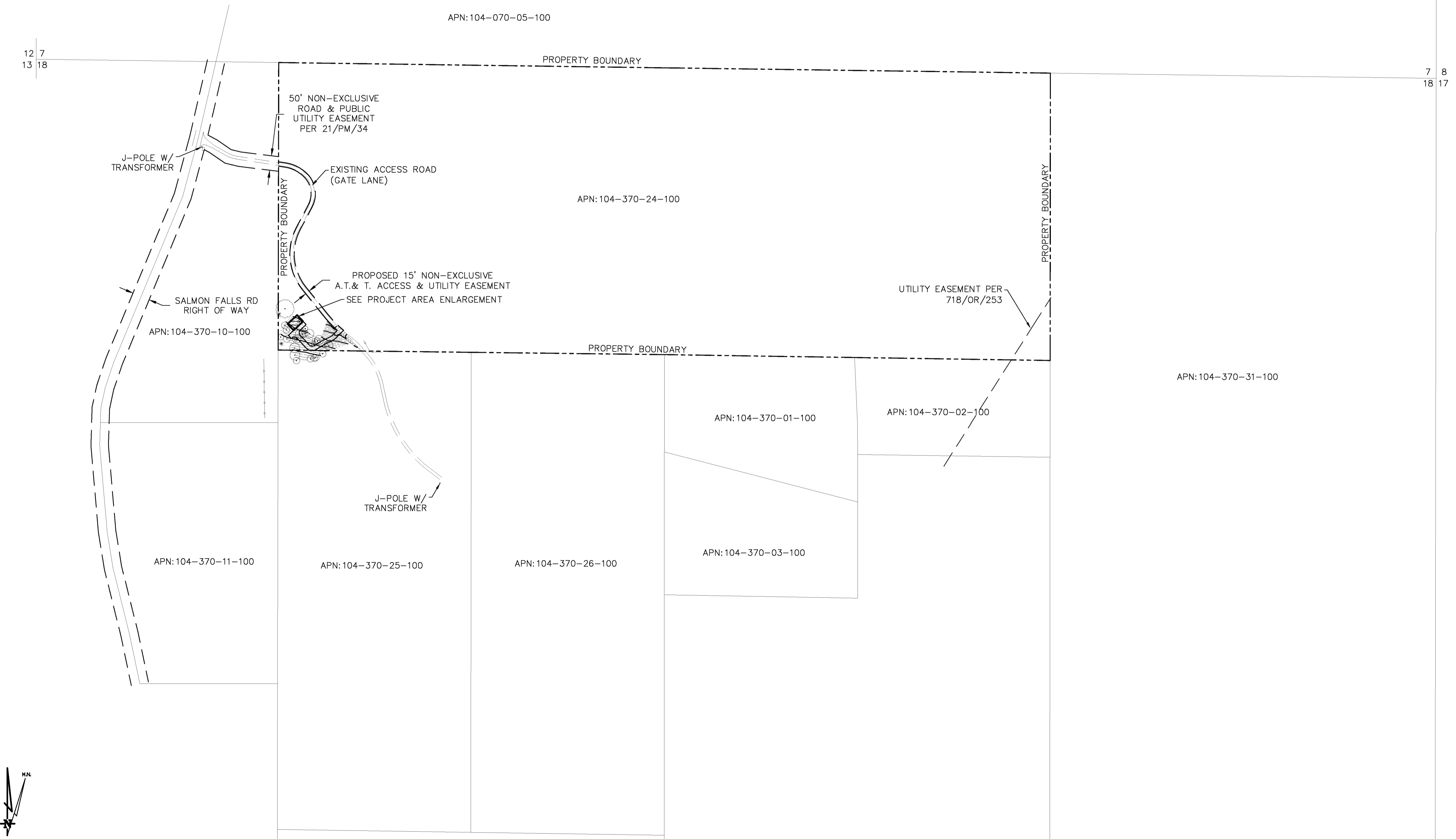
Surveyor  
**GEIL ENGINEERING**  
 ENGINEERING \* SURVEYING \* PLANNING  
 1226 HIGH STREET  
 AUBURN, CALIFORNIA 95603  
 Phone: (530) 885-0426  
 Fax: (530) 823-1309



**CVL03629 ZEE ESTATES**  
**GATE LANE 1,000' SOUTH EAST OF THE INTERSECTION OF GATE LANE AND SALMON FALLS ROAD**  
**PILOT HILL, CA 95664**  
**PLOT PLAN AND SITE TOPOGRAPHY**

REV	DATE	DESCRIPTION
04-18-17	N. ROIDE	PRELIMINARY DRAWING
05-08-17	N. ROIDE	LEASE AREA DELETED
08-18-17	N. ROIDE	ADDRESS CHANGE

Sheet  
**C-1**

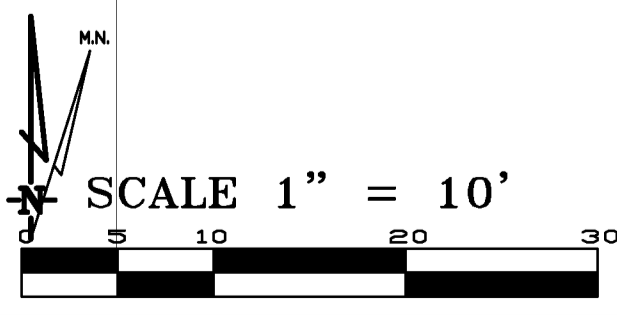
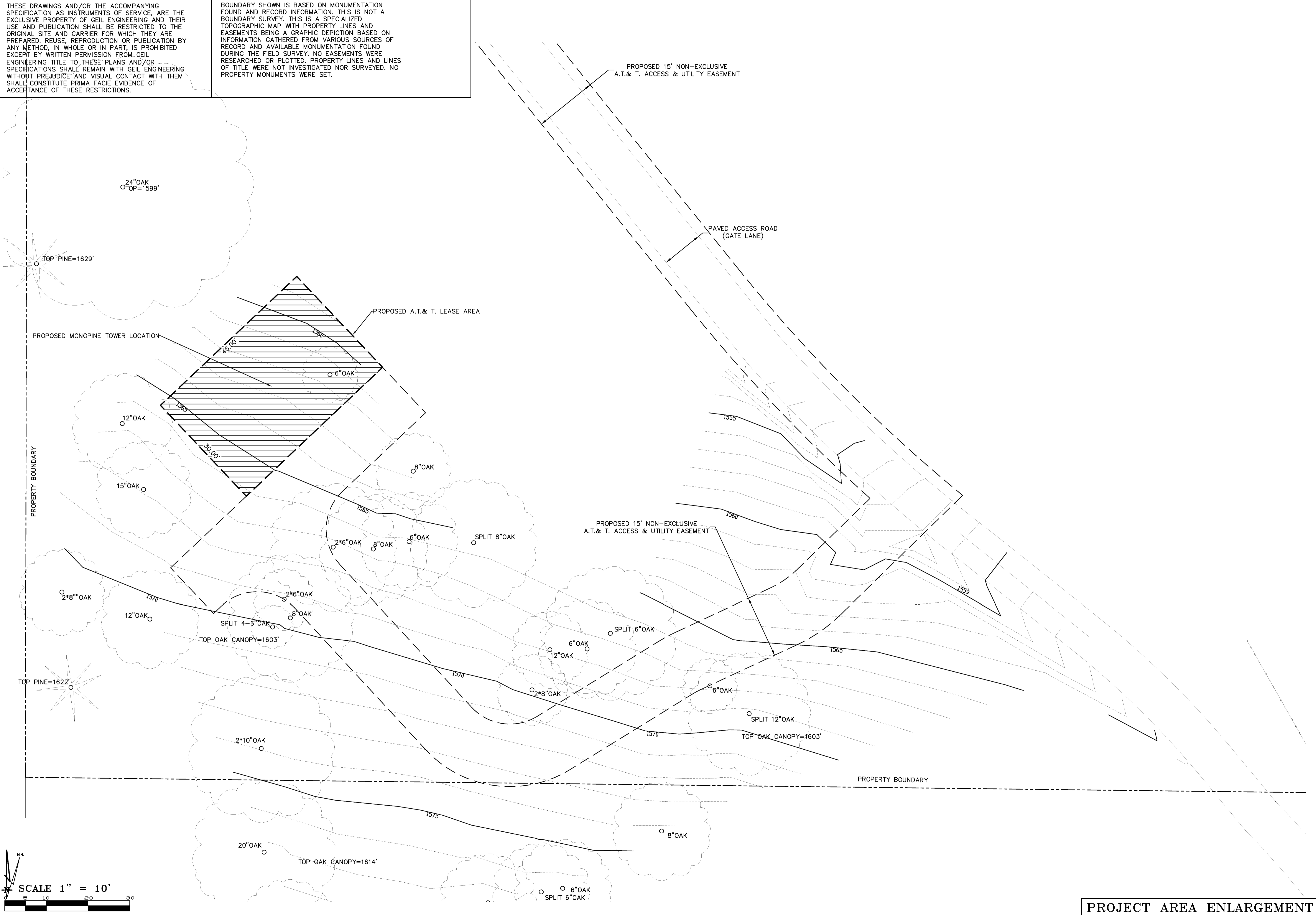


SCALE 1" = 200'

OVERALL SITE PLAN

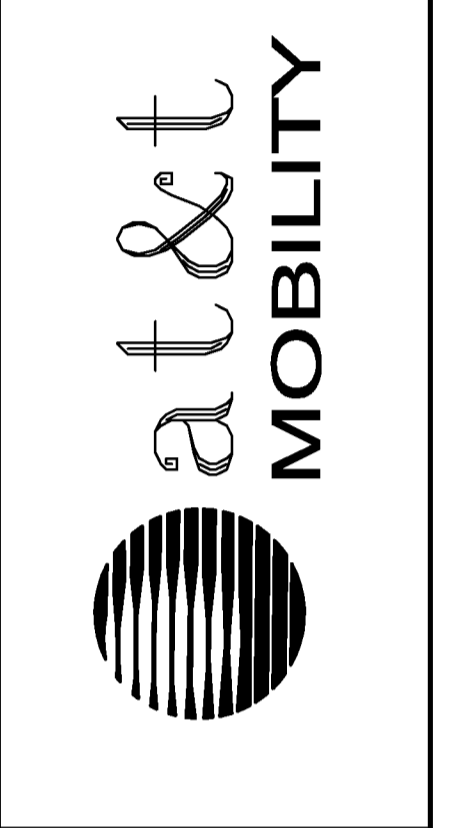
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DEPT	APPROVED	DATE
ARC		
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RF		
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OPS		
EE\OUT		

Surveyor  
**GEIL ENGINEERING**  
 ENGINEERING • SURVEYING • PLANNING  
 1226 HIGH STREET  
 AUBURN, CALIFORNIA 96905  
 Phone: (530) 885-1886  
 Fax: (530) 885-1806



**CVL03629 ZEE ESTATES**  
 GATE LANE 1,000' SOUTH EAST OF THE INTERSECTION  
 OF GATE LANE AND SALMON FALLS ROAD  
 PILOT HILL, CA 95664  
 PLOT PLAN AND  
 SITE TOPOGRAPHY

Sheet

C-2

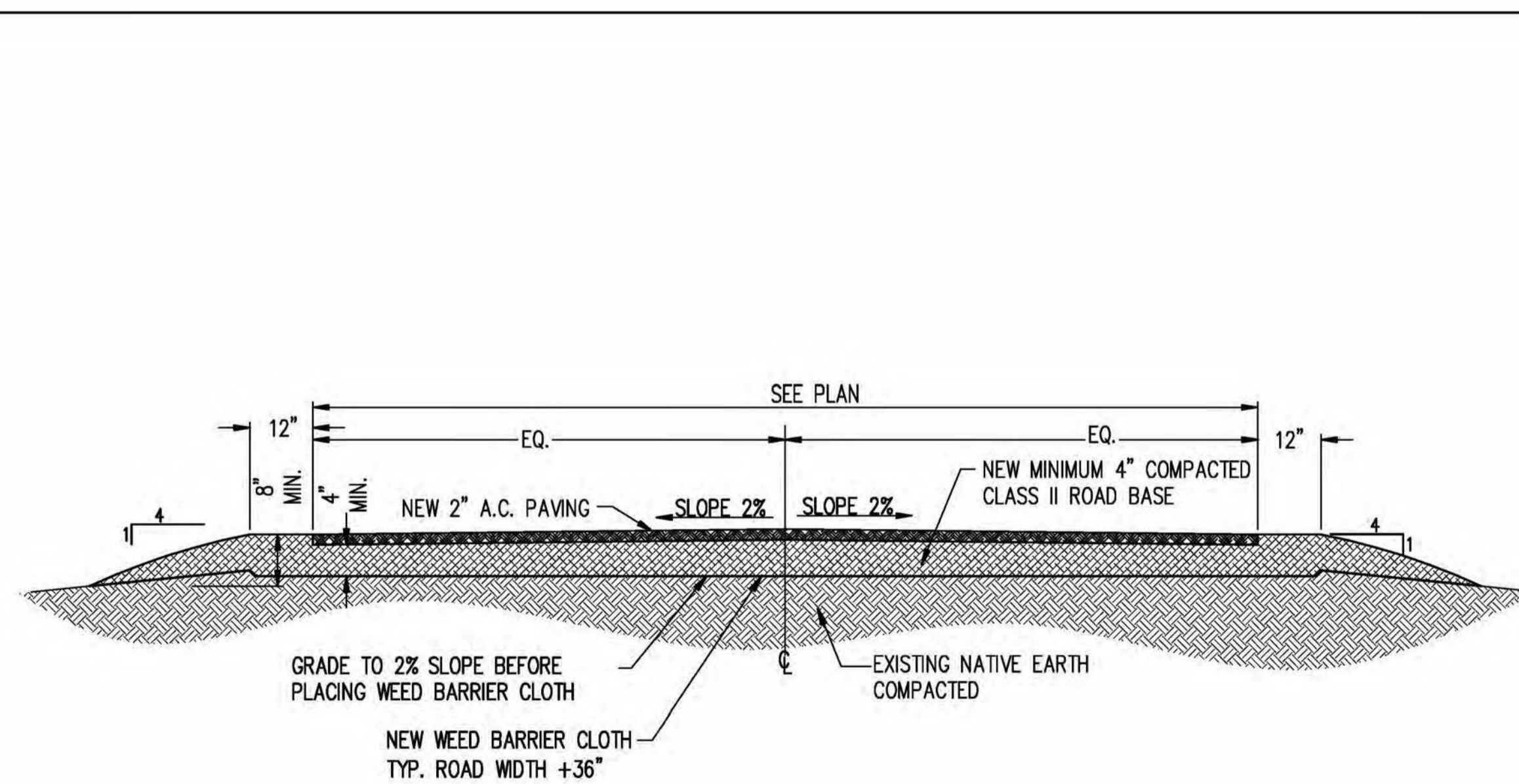
PROJECT AREA ENLARGEMENT



GRADING STANDARDS

1. GENERAL. UNLESS OTHERWISE RECOMMENDED IN THE APPROVED SOILS ENGINEERING OR ENGINEERING GEOLOGY REPORT, GRADING ACTIVITIES SHALL CONFORM TO THE PROVISIONS OF THIS SECTION.
  - A. CUT SLOPE. THE SLOPE OF CUT SURFACES SHALL BE NO STEEPER THAN IS SAFE FOR THE INTENDED USE AND SHALL BE NO STEEPER THAN 1 UNIT VERTICAL IN 2 UNITS HORIZONTAL (50% SLOPE) UNLESS THE PERMITTEE FURNISHES A SOILS ENGINEERING OR AN ENGINEERING GEOLOGY REPORT, OR BOTH, STATING THAT THE SITE HAS BEEN INVESTIGATED AND GIVING AN OPINION THAT A CUT AT A STEEPER SLOPE WILL BE STABLE AND NOT CREATE A HAZARD TO PROPERTY OR THE ENVIRONMENT.
  - B. FILL SLOPE AND PREPARATION
    - (1) PREPARATION OF GROUND. THE GROUND SURFACE SHALL BE PREPARED TO RECEIVE FILL BY REMOVING VEGETATION, NON-COMPLYING FILL, TOPSOIL AND OTHER UNSUITABLE MATERIALS SCARIFYING TO PROVIDE A BOND WITH THE NEW FILL.
    - (2) FILL MATERIAL. AMOUNT OF ORGANIC MATERIAL DETRIMENTAL TO STRUCTURAL INTEGRITY SHALL NOT BE PERMITTED IN FILLS. EXCEPT AS PERMITTED BY THE BUILDING OFFICIAL, NO ROCK OR SIMILAR IRREDUCIBLE MATERIAL WITH A MAXIMUM DIMENSION GREATER THAN 12 INCHES (0.31 M) SHALL BE BURIED OR PLACED IN FILLS.
    - (3) EXCEPTION. THE BUILDING OFFICIAL MAY PERMIT PLACEMENT OF LARGER ROCK WHEN THE SOILS ENGINEER PROPERLY DEVISES A METHOD OF PLACEMENT, AND CONTINUOUSLY INSPECTS ITS PLACEMENT AND APPROVES THE FILL STABILITY. THE FOLLOWING CONDITIONS SHALL ALSO APPLY:
      - (a) PRIOR TO ISSUANCE OF THE GRADING PERMIT, POTENTIAL ROCK DISPOSAL AREAS SHALL BE SHOWN ON THE GRADING PLAN.
      - (b) ROCK SIZES GREATER THAN 12 INCHES (0.31 M) IN MAXIMUM DIMENSION SHALL BE 10 FEET (3.05 M) OR MORE BELOW GRADE, MEASURED VERTICALLY.
      - (c) ROCKS SHALL BE PLACED SO AS TO ASSURE FILLING OF ALL VOIDS WITH WELL-GRADED SOIL.
    - (4) COMPACTION. ALL FILLS SHALL BE COMPACTED TO A MINIMUM OF 90 PERCENT OF MAXIMUM DRY DENSITY WITH SUFFICIENT TESTING FOR DOCUMENTATION OF COMPLIANCE WITH THIS STANDARD.
    - (5) SLOPE. THE SLOPE OF FILL SURFACES SHALL BE NO STEEPER THAN IS SAFE FOR THE INTENDED USE. FILL SLOPES SHALL BE NO STEEPER THAN 1 UNIT VERTICAL IN 2 UNITS HORIZONTAL (50% SLOPE).
2. SETBACKS
  - a. GENERAL. CUT AND FILL SLOPES SHALL BE SET BACK FROM SITE BOUNDARIES IN ACCORDANCE WITH THIS SECTION. SETBACK DIMENSIONS SHALL BE HORIZONTAL DISTANCES MEASURED PERPENDICULAR TO THE SITE BOUNDARY.
  - b. TOP OF CUT SLOPE. THE TOP OF CUT SLOPES SHALL NOT BE MADE NEARER TO A SITE BOUNDARY LINE THAN A MINIMUM OF 2 FEET. THE SETBACK MAY NEED TO BE INCREASED FOR ANY REQUIRED INTERCEPTOR DRAINS.
  - c. TOE OF FILL SLOPE. THE TOE OF FILL SLOPE SHALL BE MADE NOT NEARER TO THE SITE BOUNDARY LINE THAN MINIMUM OF 2 FEET. WHERE A FILL SLOPE IS TO BE LOCATED NEAR THE SITE BOUNDARY AND THE ADJACENT OFFSITE PROPERTY IS DEVELOPED, SPECIAL PRECAUTIONS SHALL BE INCORPORATED IN THE WORK AS THE BUILDING OFFICIAL DEEMS NECESSARY TO PROTECT THE ADJOINING PROPERTY FROM DAMAGE AS A RESULT OF SUCH GRADING. THESE PRECAUTIONS MAY INCLUDE BUT ARE NOT LIMITED TO:
    - (1) ADDITIONAL SETBACKS.
    - (2) PROVISION FOR RETAINING, OR SLOUGH WALLS.
    - (3) MECHANICAL OR CHEMICAL TREATMENT OF THE FILL SLOPE SURFACE TO MINIMIZE EROSION.
    - (4) PROVISIONS FOR THE CONTROL OF SURFACE WATERS.
  - e. MODIFICATION OF SETBACKS. THE BUILDING OFFICIAL MAY APPROVE ALTERNATE SETBACKS. THE BUILDING OFFICIAL MAY REQUIRE AN INVESTIGATION AND RECOMMENDATION BY A QUALIFIED ENGINEER OR ENGINEERING GEOLOGIST TO DEMONSTRATE THAT THE INTENT OF THIS SECTION HAS BEEN SATISFIED.
3. MAINTENANCE REQUIRED. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR ADEQUATELY MAINTAINING ALL DRAINAGE FACILITIES INSTALLED PURSUANT TO THIS SECTION.
4. GRADING INSPECTION
  - A. GENERAL. GRADING OPERATIONS FOR WHICH A PERMIT IS REQUIRED SHALL BE SUBJECT TO INSPECTION BY THE BUILDING OFFICIAL.
  - B. PERMITTEE. THE PERMITTEE SHALL BE RESPONSIBLE FOR THE WORK TO BE PERFORMED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS AND IN CONFORMANCE WITH THE PROVISIONS OF THIS CODE, AND THE PERMITTEE SHALL ENGAGE CONSULTANTS, IF REQUIRED, TO PROVIDE PROFESSIONAL INSPECTIONS ON A TIMELY BASIS. THE PERMITTEE SHALL ACT AS A COORDINATOR BETWEEN THE CONSULTANTS, THE CONTRACTOR AND THE BUILDING OFFICIAL. IN THE EVENT OF CHANGED CONDITIONS, THE PERMITTEE SHALL BE RESPONSIBLE FOR INFORMING THE BUILDING OFFICIAL OF SUCH CHANGE AND SHALL PROVIDE REVISED PLANS FOR APPROVAL.
  - C. BUILDING OFFICIAL. THE BUILDING OFFICIAL SHALL INSPECT THE PROJECT AT THE VARIOUS STAGES OF WORK REQUIRING APPROVAL TO DETERMINE THAT ADEQUATE CONTROL IS BEING EXERCISED BY THE PROFESSIONAL CONSULTANTS.
  - D. NOTIFICATION OF NONCOMPLIANCE. IF, IN THE COURSE OF FULFILLING THEIR RESPECTIVE DUTIES UNDER THIS CHAPTER, THE CIVIL ENGINEER, THE SOILS ENGINEER OR THE ENGINEERING GEOLOGIST FINDS THAT THE WORK IS NOT BEING DONE IN CONFORMANCE WITH THIS CHAPTER OR THE APPROVED GRADING PLANS, THE DISCREPANCIES SHALL BE REPORTED IMMEDIATELY IN WRITING TO THE PERMITTEE AND TO THE BUILDING OFFICIAL.
  - E. TRANSFER OF RESPONSIBILITY. IF THE CIVIL ENGINEER, THE SOILS ENGINEER, OR THE ENGINEERING GEOLOGIST OF RECORD IS CHANGED DURING GRADING, THE WORK SHALL BE STOPPED UNTIL THE REPLACEMENT HAS AGREED IN WRITING TO ACCEPT THEIR RESPONSIBILITY WITHIN THE AREA OF TECHNICAL COMPETENCE FOR APPROVAL UPON COMPLETION OF THE WORK. IT SHALL BE THE DUTY OF THE PERMITTEE TO NOTIFY THE BUILDING OFFICIAL IN WRITING OF SUCH CHANGE PRIOR TO THE RE-COMMENCEMENT OF SUCH GRADING.
5. EROSION AND SEDIMENTATION CONTROL
  - A. ADMINISTRATION
    - (1) THE EROSION AND SEDIMENT CONTROL PROVISIONS OF THIS SECTION SHALL BE APPLICABLE TO ALL FACILITIES AND ACTIVITIES UNDER THE SUPERVISION OF THE DIRECTOR OF THE DEPARTMENT OF PUBLIC WORKS.
    - (2) THE ADMINISTRATION OF THIS SECTION, AS IT AFFECTS COUNTY FACILITIES AND ACTIVITIES, IS THE RESPONSIBILITY OF THE DIRECTOR OF THE DEPARTMENT OF PUBLIC WORKS.
    - (3) THE ADMINISTRATION OF THIS SECTION AS IT AFFECTS OTHER BUILDING, GRADING, AND RELATED ACTIVITIES IS THE RESPONSIBILITY OF THE CHIEF BUILDING OFFICIAL.
    - (4) ANY SOILS OR GEOLOGIC REPORTS PREPARED FOR ANY PROJECT WHERE A GRADING PERMIT IS SUBMITTED AS A PART OF A TENTATIVE SUBDIVISION MAP APPLICATION, OR RELATED ENVIRONMENTAL DOCUMENT, SHALL BE PLACED IN THE RECORDS OF THE CHIEF BUILDING OFFICIAL.
  - B. EROSION AND SEDIMENTATION CONTROL. THESE MINIMUM EROSION AND SEDIMENTATION CONTROL STANDARDS SHALL APPLY TO ALL PROJECTS REQUIRING BUILDING, GRADING, AND DEVELOPMENT PERMITS, AND COUNTY OF MENDOCINO PUBLIC WORKS ACTIVITIES, TO PREVENT SEDIMENTATION OR DAMAGE TO ONSITE AND OFFSITE PROPERTY. THESE STANDARDS SHALL BE INCORPORATED INTO THE PROJECT DESIGN AND SHALL BE ADHERED TO DURING PROJECT CONSTRUCTION:
    - (1) GENERAL GUIDELINES
      - (a) MINIMIZE SOIL EXPOSURE DURING THE RAINY SEASON BY PROPER TIMING OF GRADING AND CONSTRUCTION.
      - (b) RETAIN TREES AND NATURAL VEGETATION TO STABILIZE HILLSIDES, RETAIN MOISTURE, REDUCE EROSION, MINIMIZE SILTATION AND NUTRIENT RUNOFF AND PRESERVE SCENIC QUALITIES.
      - (c) VEGETATE AND MULCH DENUDED AREAS TO PROTECT THEM FROM WINTER RAINS.
      - (d) DIVERT RUNOFF AWAY FROM STEEP, DENUDED SLOPES OR OTHER CRITICAL AREAS WITH BARRIERS, BERMS, DITCHES OR OTHER FACILITIES.
      - (e) LIMIT CONSTRUCTION, CLEARING OF VEGETATION AND DISTURBANCE OF THE SOIL TO AREAS OF PROVEN STABILITY. MITIGATE GEOLOGIC HAZARDS AND ADVERSE SOIL CONDITIONS WHEN THEY ARE ENCOUNTERED.
      - (f) REDUCE SEDIMENT TRANSPORT OFF THE SITE TO THE MAXIMUM EXTENT FEASIBLE THROUGH THE USE OF BEST MANAGEMENT PRACTICES (BMPs).

- (g) PROPOSE A NEW OR MODIFIED EROSION AND SEDIMENT CONTROL TECHNIQUE IF THE TECHNIQUE IS PREFERRED AND MEETS THE INTENT OF THESE REGULATIONS. OBTAIN APPROVAL FROM THE COUNTY PRIOR TO IMPLEMENTATION.
  - (h) CONDUCT FREQUENT SITE INSPECTIONS TO ENSURE THAT CONTROL MEASURES ARE WORKING PROPERLY AND TO CORRECT PROBLEMS AS NEEDED.
  - (i) EMPLOY OTHER MEANS OF EROSION AND SEDIMENT CONTROL AS REQUIRED BY THE CHIEF BUILDING OFFICIAL OR DIRECTOR OF THE DEPARTMENT OF PUBLIC WORKS AS APPLICABLE.
- (2) SEDIMENT CONTROL
- (a) USE SEDIMENT BASINS, SILT TRAPS, OR SIMILAR MEASURE TO RETAIN SEDIMENT TRANSPORTED BY RUNOFF WATER ONSITE.
  - (b) COLLECT AND DIRECT SURFACE RUNOFF AT NON-EROSIVE VELOCITIES TO THE COMMON NATURAL WATERCOURSE OF THE DRAINAGE AREA.
  - (c) AVOID CONCENTRATING SURFACE WATER ANYWHERE EXCEPT SWALES OR WATERCOURSES.
  - (d) PREVENT MUD FROM BEING TRACKED ONTO THE PUBLIC ROADWAY BY TRAVELING OVER A TEMPORARY GRAVEL CONSTRUCTION ENTRANCE OR WASHING OFF VEHICLE TIRES BEFORE ENTERING A PUBLIC OR PRIVATE DRIVEWAY.
- (3) SLOPE CONSTRUCTION
- (a) MINIMIZE LENGTH AND STEEPNESS OF SLOPES BY BENCHING, TERRACING OR CONSTRUCTING DIVERSION STRUCTURES.
  - (b) PRESERVE, MATCH, OR BLEND CUTS AND FILLS WITH THE NATURAL CONTOURS AND UNDULATIONS OF THE LAND.
  - (c) ROUND SHARP ANGLES AT THE TOP AND SIDES OF CUT AND FILL SLOPES.
  - (d) MAINTAIN CUT AND FILL SLOPES AT LESS THAN TWO-TO-ONE (2:1, RUN:RISE) SLOPE UNLESS A GEOLOGICAL AND ENGINEERING ANALYSIS INDICATES THAT STEEPER SLOPES ARE SAFE AND EROSION AND SEDIMENT CONTROL MEASURES CAN SUCCESSFULLY PREVENT EROSION.
- (4) PROTECTION OF WATERCOURSES AND DRAINAGE INLETS
- (a) PREPARE DRAINAGEWAYS TO HANDLE CONCENTRATED OR INCREASED RUNOFF FROM DISTURBED AREAS BY USING APPROPRIATE LINING MATERIALS OR ENERGY ABSORBING DEVICES TO REDUCE THE VELOCITY OF RUNOFF WATER.
  - (b) TRAP SEDIMENT-LADEN RUNOFF IN BASINS TO ALLOW SOIL PARTICLES TO SETTLE OUT BEFORE FLOWS ARE RELEASED TO RECEIVING WATERS, STORM DRAINS, STREETS OR ADJACENT PROPERTY. THIS STANDARD IS NOT MANDATORY FOR GRADING THE SITE IS FULLY WINTERIZED AND STABILIZED PRIOR TO AND WHEN CONDUCTED BETWEEN APRIL 15 AND OCTOBER 15. REMOVE TRAPPED SEDIMENT TO A SUITABLE LOCATION ON-SITE OR AT A DISPOSAL SITE APPROVED BY THE COUNTY.
  - (c) DO NOT GRADE OR DRIVE EQUIPMENT IN A STREAMSIDE MANAGEMENT OR OTHER WET AREAS EXCEPT AS ALLOWED THROUGH THE COUNTY STREAMSIDE MANAGEMENT AREA ORDINANCE.
  - (d) DEPOSIT OR STORE EXCAVATED MATERIALS AWAY FROM WATERCOURSES.
  - (e) PROTECT ALL EXISTING OR NEWLY INSTALLED STORM DRAINAGE STRUCTURES FROM SEDIMENT CLOGGING.
  - (f) USE STRAW BALES, FILTER FABRIC WRAPS AND DRAINAGE INLET PROTECTIONS IN A MANNER THAT DOES NOT CAUSE ADDITIONAL EROSION OR FLOODING OF A ROADWAY.
- (5) DISPOSAL OF EXCAVATED MATERIALS
- (a) STOCKPILE TOPSOIL ON THE SITE FOR USE ON AREAS TO BE REVEGETATED.
  - (b) PLACE STOCKPILED SOIL IN LOCATIONS, SO THAT IF EROSION OCCURS, IT WILL NOT CONTRIBUTE TO OFFSITE SEDIMENT DISCHARGE.
  - (c) PROTECT STOCKPILED SOIL PROMPTLY THROUGH THE USE OF APPROPRIATE BMPs TO REDUCE THE RISK OF EROSION AND SEDIMENT TRANSPORT. APPLY MULCH OR OTHER PROTECTIVE COVERINGS ON STOCKPILED MATERIAL THAT WILL BE EXPOSED THROUGH THE WINTER SEASON.
  - (d) DISPOSE OF EXCAVATED MATERIAL NOT USED AT THE SITE AT A LOCATION APPROVED BY THE COUNTY.
- (6) DUST CONTROL
- (a) ALL CONSTRUCTION AREAS, INCLUDING DISPOSAL SITES, SHALL BE TREATED AND MAINTAINED AS NECESSARY TO MINIMIZE THE EMISSION OF DUST. MAINTENANCE SHALL BE CONDUCTED AS NECESSARY TO PREVENT A NUISANCE TO OFFSITE PROPERTIES.
  - (b) ALL CONSTRUCTION SITES, INCLUDING DRIVEWAYS, SHALL BE MAINTAINED AS NECESSARY TO MINIMIZE THE EMISSION OF DUST AND PREVENT THE CREATION OF A NUISANCE TO ADJACENT PROPERTIES.
- (7) REVEGETATION
- (a) APPLY TEMPORARY SEEDING AND MULCHING TO DENUDED AREAS PRIOR TO OCTOBER 15 UNLESS THE PROJECT IS CONDITIONED OTHERWISE.
  - (b) ESTABLISH A PERMANENT VEGETATIVE COVER ON DENUDED AREAS NOT OTHERWISE STABILIZED. PERMANENT VEGETATION GROUND COVER MUST CONTROL SOIL EROSION SATISFACTORILY AND SURVIVE SEVERE WEATHER CONDITIONS.
  - (c) RETAIN A VEGETATIVE BARRIER WHENEVER POSSIBLE AROUND PROPERTY BOUNDARIES.
  - (d) USE SELF-SUSTAINING, NON-INVASIVE PLANTS THAT REQUIRE LITTLE OR NO MAINTENANCE AND DO NOT CREATE AN EXTREME FIRE HAZARD.
  - (e) USE NATIVE PLANT SPECIES WHENEVER FEASIBLE.



TYP. A/C ROAD SECTION

SCALE: N.T.S.

1

PROPRIETARY INFORMATION  
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CLIENT:



5001 EXECUTIVE PKWY  
SAN RAMON, CA 94583

PROJECT INFORMATION:

ZEE ESTATES

GATE LANE 1,000' SOUTH EAST OF THE INTERSECTION OF GATE LANE AND SALMON FALLS ROAD  
PILOT HILL, CA 95664

REV: DATE: DESCRIPTION: BY:

REV	DATE	DESCRIPTION	BY
1	6-29-17	90% ZONING DOC'S	RB
1	8-3-17	90% ZONING DOC'S	ALP
2	8-9-17	100% ZONING DOC'S	ALP

COORDINATING ENGINEER:

Peek Site-Com  
12852 Earhart Ave. Suite 101  
Auburn, California 95602  
Phone (530) 885-6160  
E-Mail info@peeksitecom.com



SITE #: CHK.: DRAWN BY:

CVL03629 ... RB

SHEET TITLE:

GRADING NOTES & DETAILS

SHEET NUMBER: REVISION:

C-4 0

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SEAL:



SITE #: CHK.: DRAWN BY:

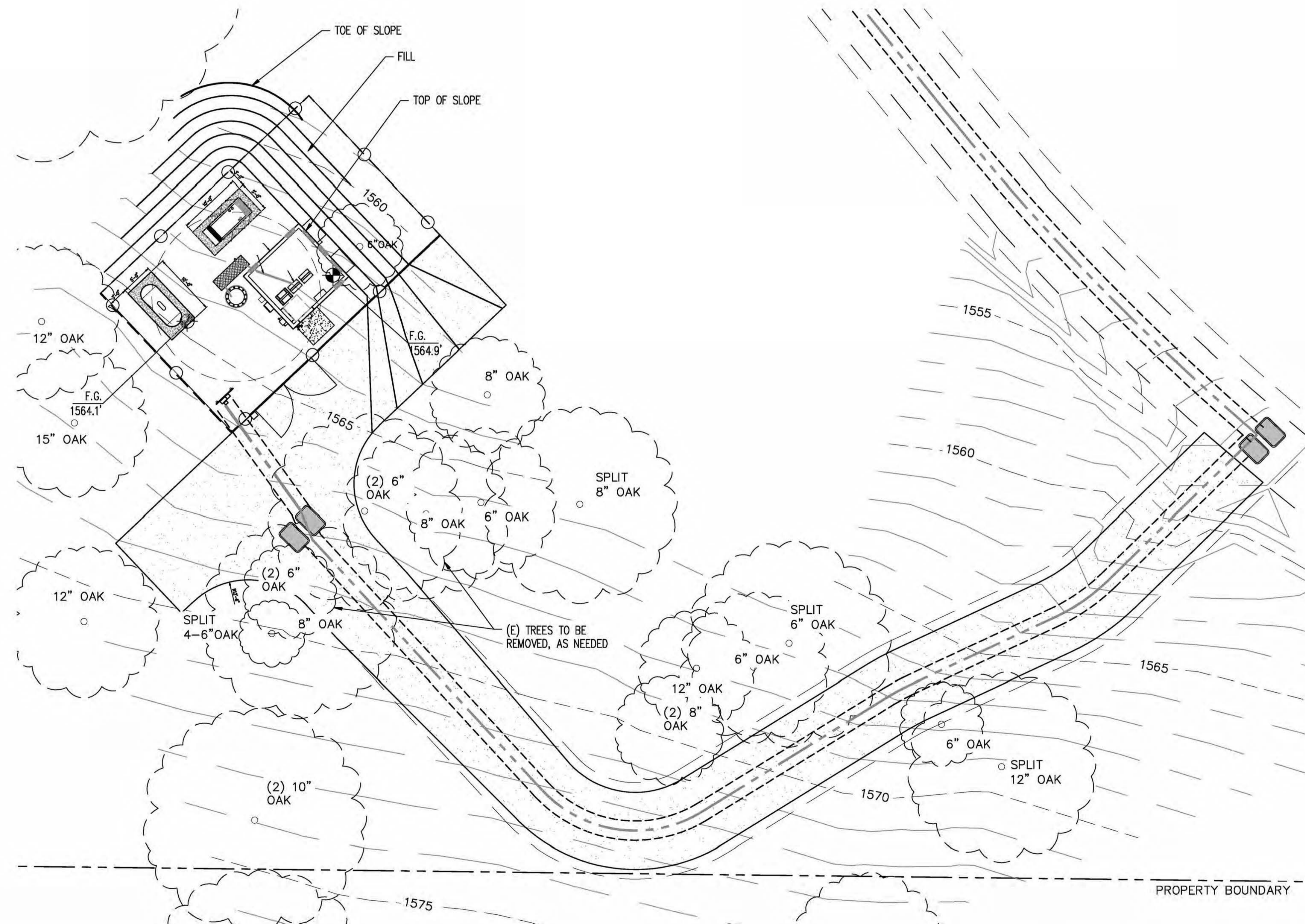
CVL03629 ... RB

SHEET TITLE:

**PRELIMINARY  
 GRADING PLAN**

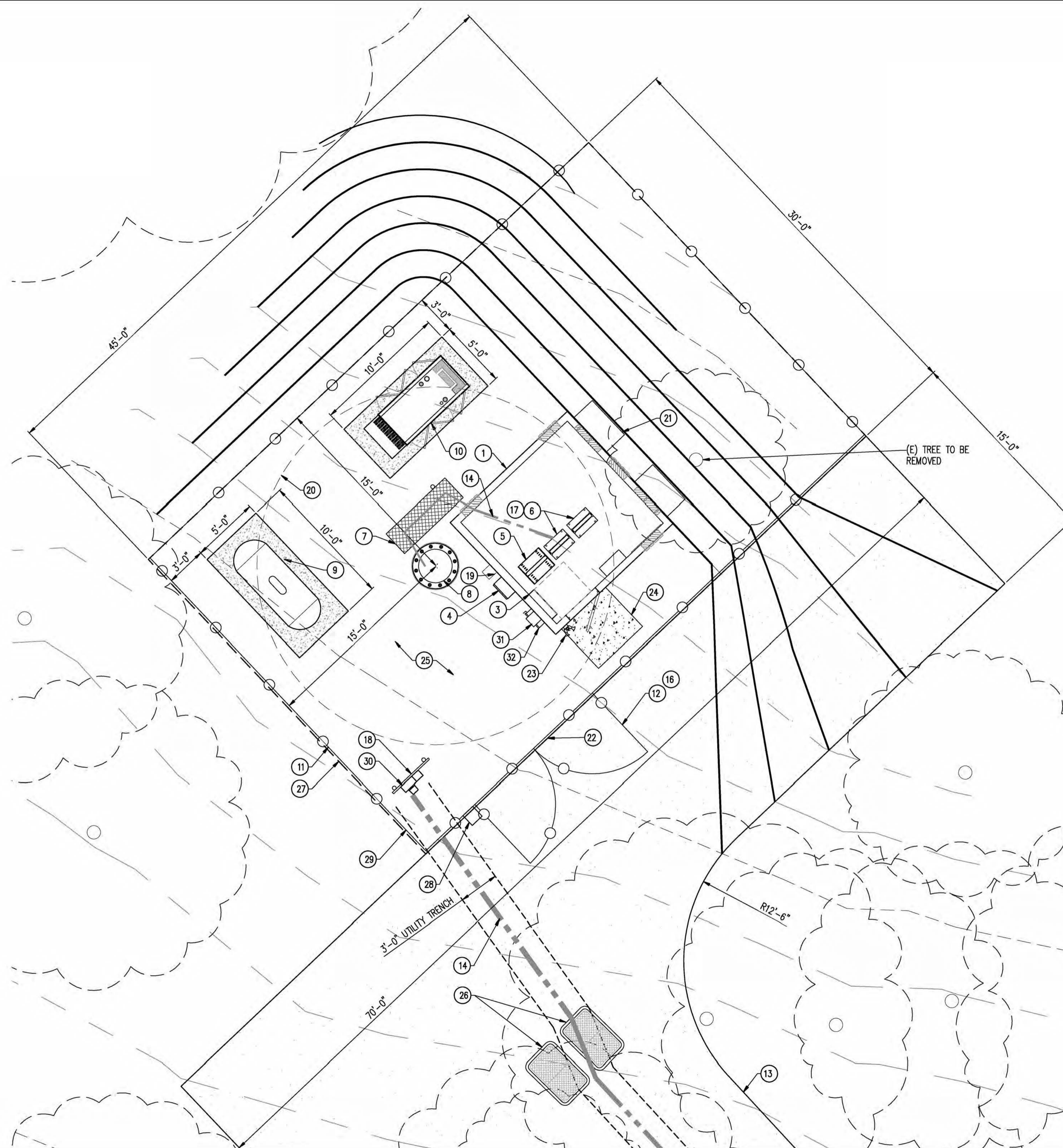
SHEET NUMBER: REVISION:

**C-5 0**



PRELIMINARY GRADING PLAN SCALE: 1"=10'-0"

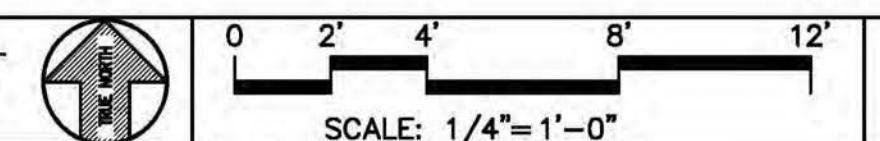




**KEY NOTES**

1. NEW 11' x 12' LIGHTWEIGHT PRE-FAB "MIC" EQUIPMENT SHELTER
2. (1) NEW GPS ANTENNA
3. NEW ELEC. PANEL, PROVIDED WITH SHELTER
4. TELCO BOX, PROVIDED WITH SHELTER
5. NEW D/C POWER PLANT, PROVIDED WITH SHELTER
6. NEW 23" FIF RACK, PROVIDED WITH SHELTER, TYP. OF (2)
7. NEW HEAVY DUTY METAL CABLE TRAY LID W/ CONG. SLEEPERS EVERY 4'
8. NEW 160' MONOPINE
9. NEW 500 GAL LP PROPANE TANK ON NEW CONG. SLAB
10. NEW 35 KW LP PROPANE BACK UP GENERATOR ON NEW CONG. SLAB
11. NEW 6'-0" CHAIN LINK FENCE W/ VINYL SLATS
12. NEW 12' WIDE DOUBLE ACCESS GATE
13. NEW 12' WIDE A/C PAVED ACCESS ROAD
14. NEW U/G POWER AND TELCO CONDUITS
15. NEW CAMLOCK GENERATOR INTERFACE
16. NEW CARRIER CONTACT SIGNAGE AT GATE
17. NEW CIENA WITHIN FIF RACK
18. NEW UTILITY RACK
19. NEW 2A:20BC RATED FIRE EXTINGUISHER IN WEATHER RESISTANT CABINET
20. 24" MAX BRANCH DIAMETER AT BASE OF POLE
21. NEW HVAC, PROVIDED WITH SHELTER
22. OUTLINE OF NEW TOWER MAT FOUNDATION 32'X32', VERIFY WITH ENGINEERING
23. NEW OUTDOOR LIGHTS PROVIDED WITH SHELTER, W/ TIMER AND MOTION SENSOR
24. NEW CONC. STOOP
25. NEW MIN. 2" CLEAN CRUSHED ROCK OVER 4" CLASS II ROAD BASE OVER WEED BARRIER FABRIC
26. NEW P48 PULL BOXES FOR TELCO AND POWER
27. NEW AT&T 30'X45' LEASE AREA
28. NEW FIRE DEPT. KNOX BOX
29. NEW SOUND BLANKET
30. NEW 200 AMP METER/ MAIN PANEL
31. NEW CAMLOCK GENERATOR INTERFACE
32. NEW 200A DISCONNECT

**EQUIPMENT PLAN**



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E-Mail info@peeksitecom.com

SEAL:



SITE #: CHK.: DRAWN BY:

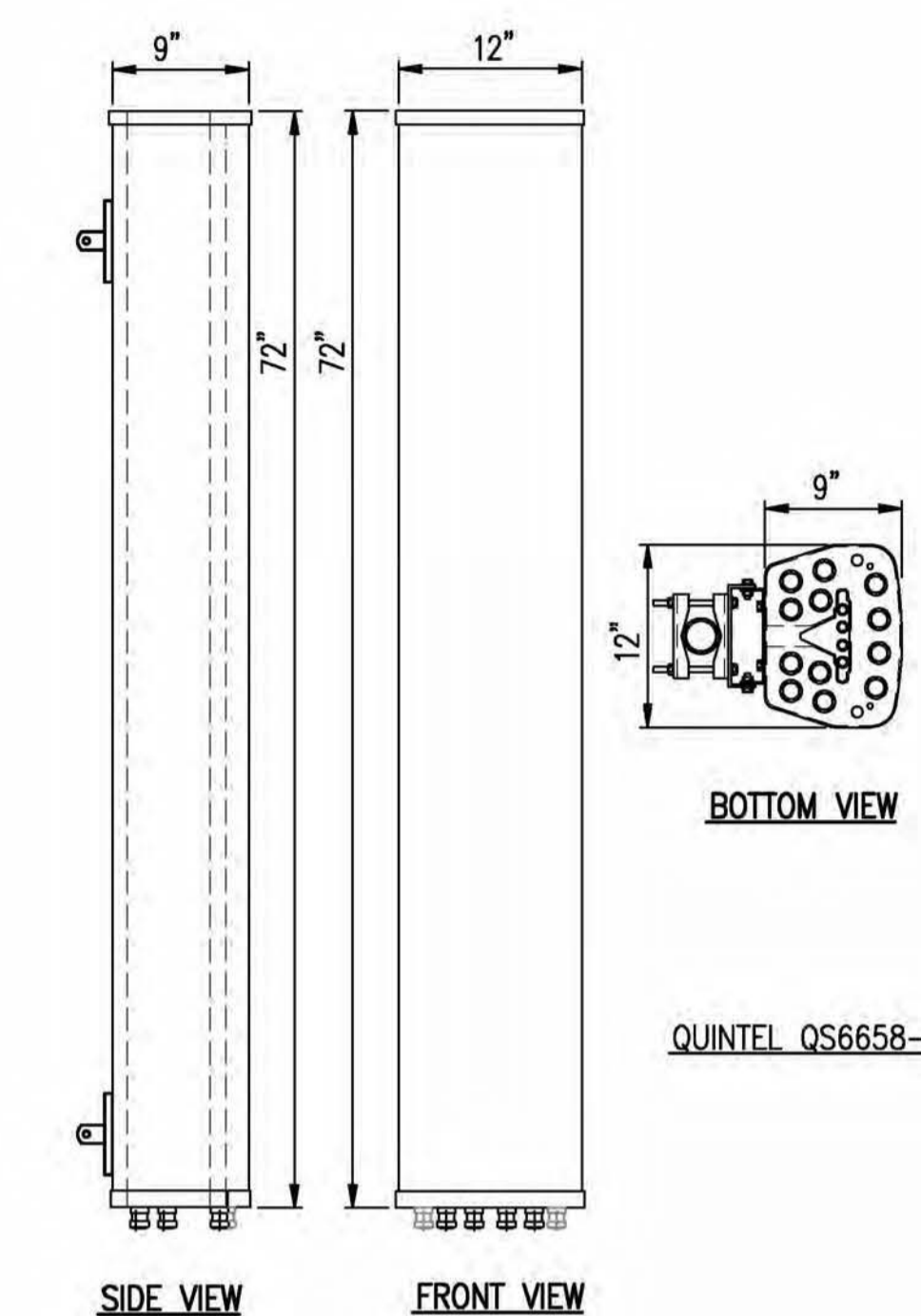
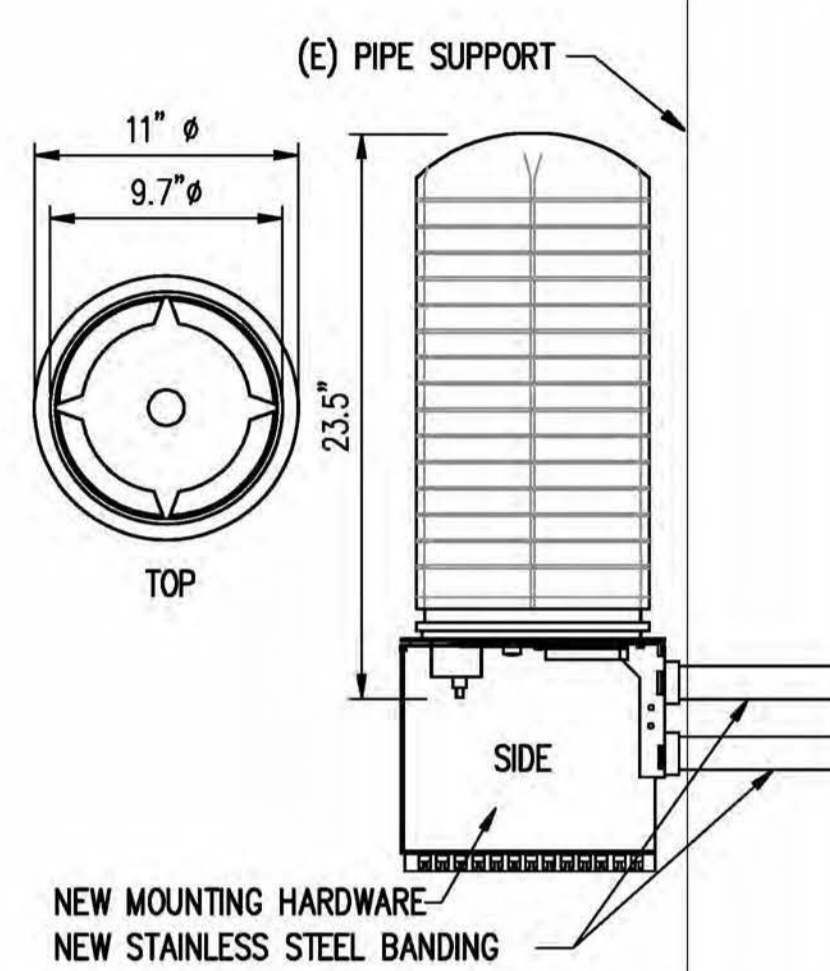
CVL03629 ... RB

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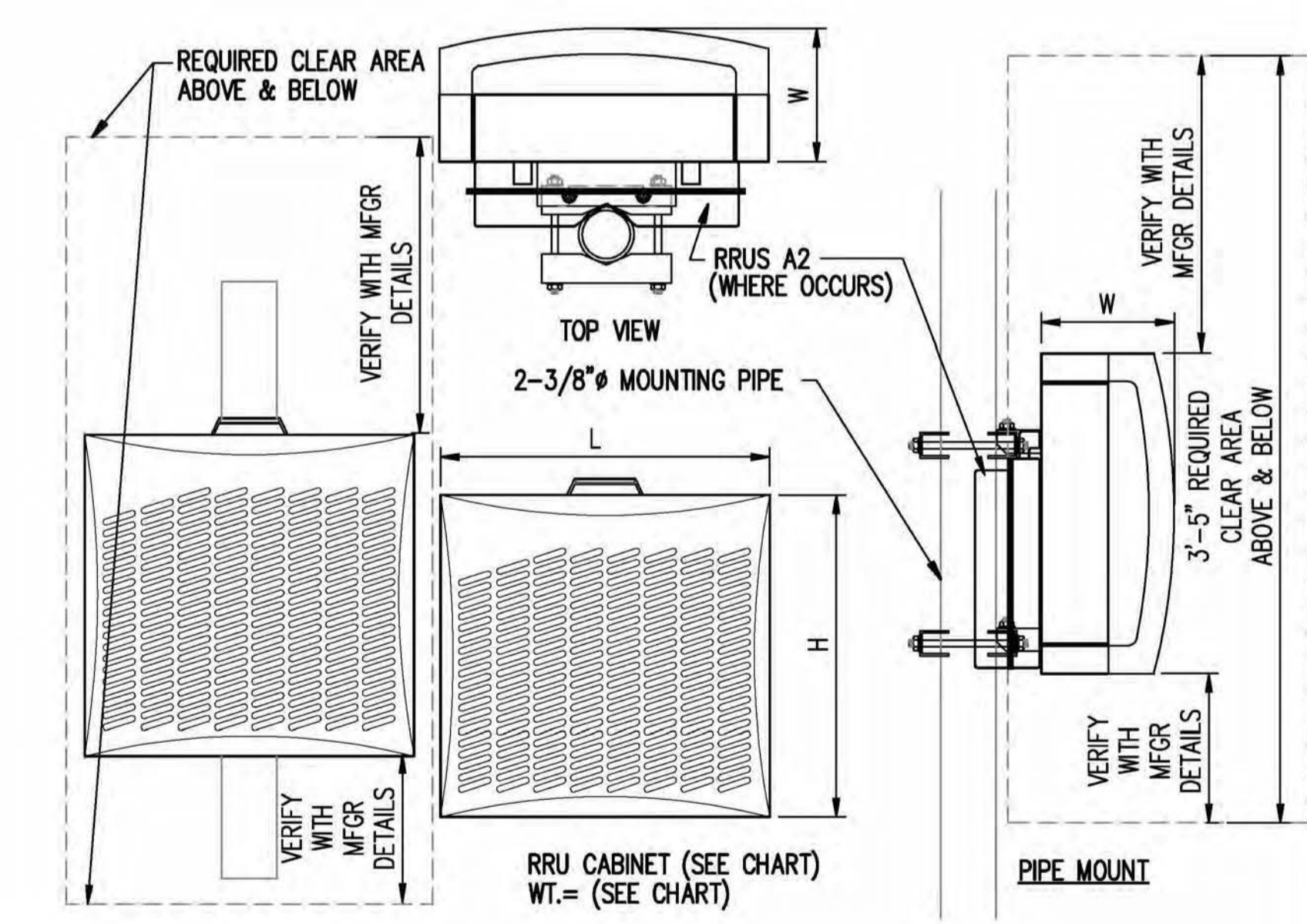
**EQUIPMENT PLAN**

SHEET NUMBER: REVISION:

**A-2 0**



**SURGE SUPP. DETAIL** SCALE: N.T.S. 5 **ANTENNA DETAIL** SCALE: N.T.S. 3



TYPE	LENGTH	HEIGHT	WIDTH	WEIGHT
RRU-11	17.8"	17.3"	7.19"	50 LBS
RRUS-E2	20.4"	18.5"	7.5"	50 LBS
RRUS-32	29.9"	13.3"	9.5"	60 LBS
RRU-12	20.4"	18.5"	7.5"	50 LBS
A2	12.8"	15"	3.5"	21 LBS

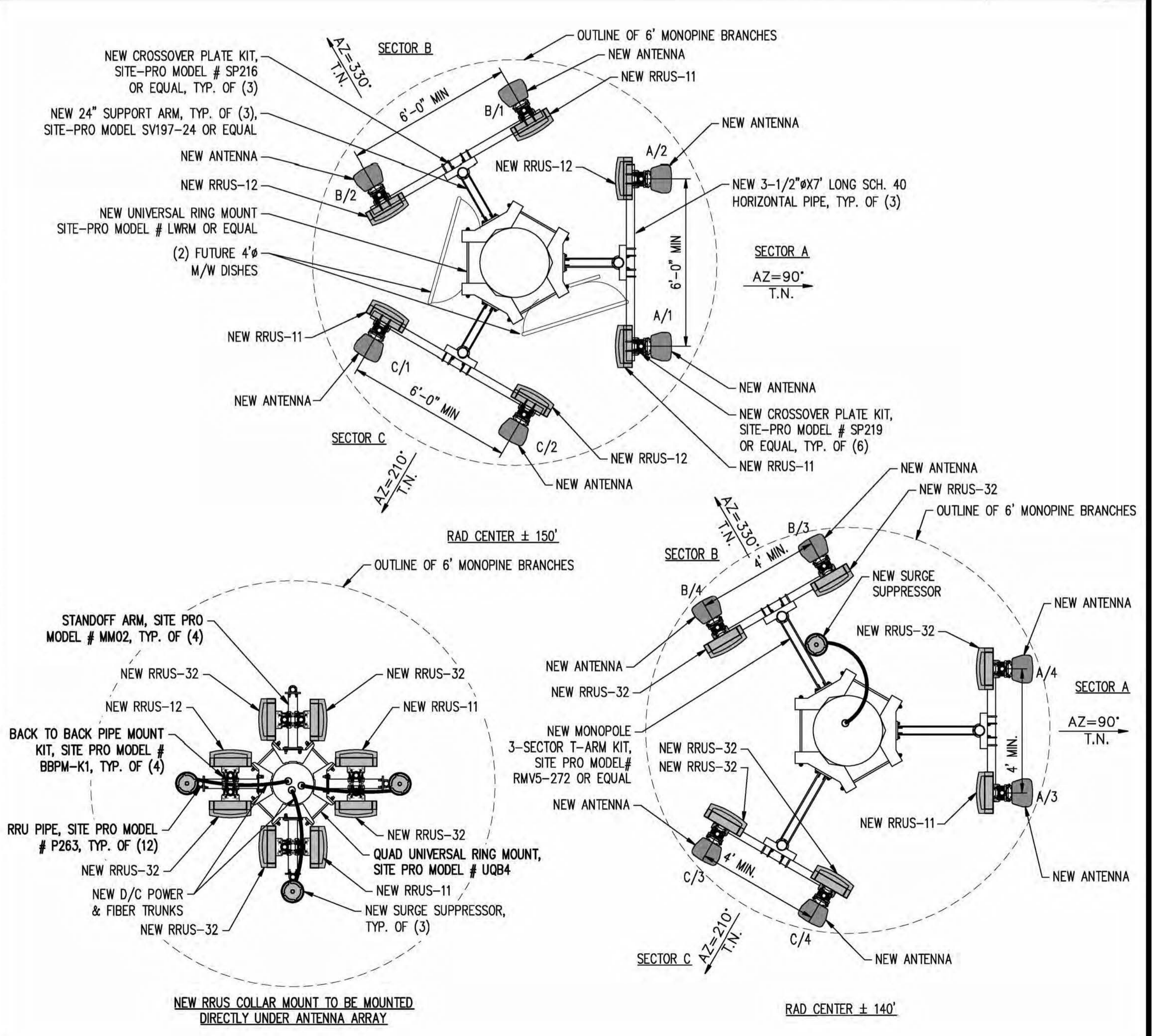
NOTE: SEE RF SHEET FOR RRU PLACEMENT

**RRU DETAIL** SCALE: N.T.S. 4

**RF SCHEDULE**

SECTOR/POS.	ANTENNA MODEL	RAD CENTER	PHYSICAL AZIMUTH	RRU	TMA	FIBER LENGTH	COAX LENGTH	COAX DIA.	NO.
A/1	QS6656-3	± 150'	90°	(1) RRU-11 & (1) RRU-32 B2	N/A	± 220'	± N/A	N/A	-
A/2	QS6656-3	± 150'	90°	(1) RRU-12 & (1) RRU-32 B66	N/A	± 220'	± N/A	N/A	-
A/3	QS6656-3	± 140'	90°	(1) RRU-11	N/A	± 210'	± N/A	N/A	-
A/4	QS6656-3	± 140'	90°	(1) RRU-32 B30	N/A	± 210'	± N/A	N/A	-
B/1	QS6656-3	± 150'	330°	(1) RRU-11 & (1) RRU-32 B2	N/A	± 220'	± N/A	N/A	-
B/2	QS6656-3	± 150'	330°	(1) RRU-11, (1) RRU-12 & (1) RRU-32 B66	N/A	± 220'	± N/A	N/A	-
B/3	QS6656-3	± 140'	330°	(1) RRU-32 B30	N/A	± 210'	± N/A	N/A	-
B/4	QS6656-3	± 140'	330°	(1) RRU-32 B30	N/A	± 210'	± N/A	N/A	-
C/1	QS6656-3	± 150'	210°	(1) RRU-11 & (1) RRU-32 B2	N/A	± 220'	± N/A	N/A	-
C/2	QS6656-3	± 150'	210°	(1) RRU-11, (1) RRU-12 & (1) RRU-32 B66	N/A	± 220'	± N/A	N/A	-
C/3	QS6656-3	± 140'	210°	(1) RRU-32 B30	N/A	± 210'	± N/A	N/A	-
C/4	QS6656-3	± 140'	210°	(1) RRU-32 B30	N/A	± 210'	± N/A	N/A	-

**RF SCHEDULE** SCALE: N.T.S. 1



**ANTENNA PLAN** SCALE: 3/8"=1'-0" 2

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COORDINATING ENGINEER:

**Peek Site-Com**  
12852 Earhart Ave. Suite 101  
Auburn, California 95602  
Phone (530) 885-6160  
E-Mail info@peeksitecom.com

SEAL:

SITE #: CVL03629 CHK.: ... DRAWN BY: RB

SHEET TITLE: **ANTENNA PLAN & DETAILS**

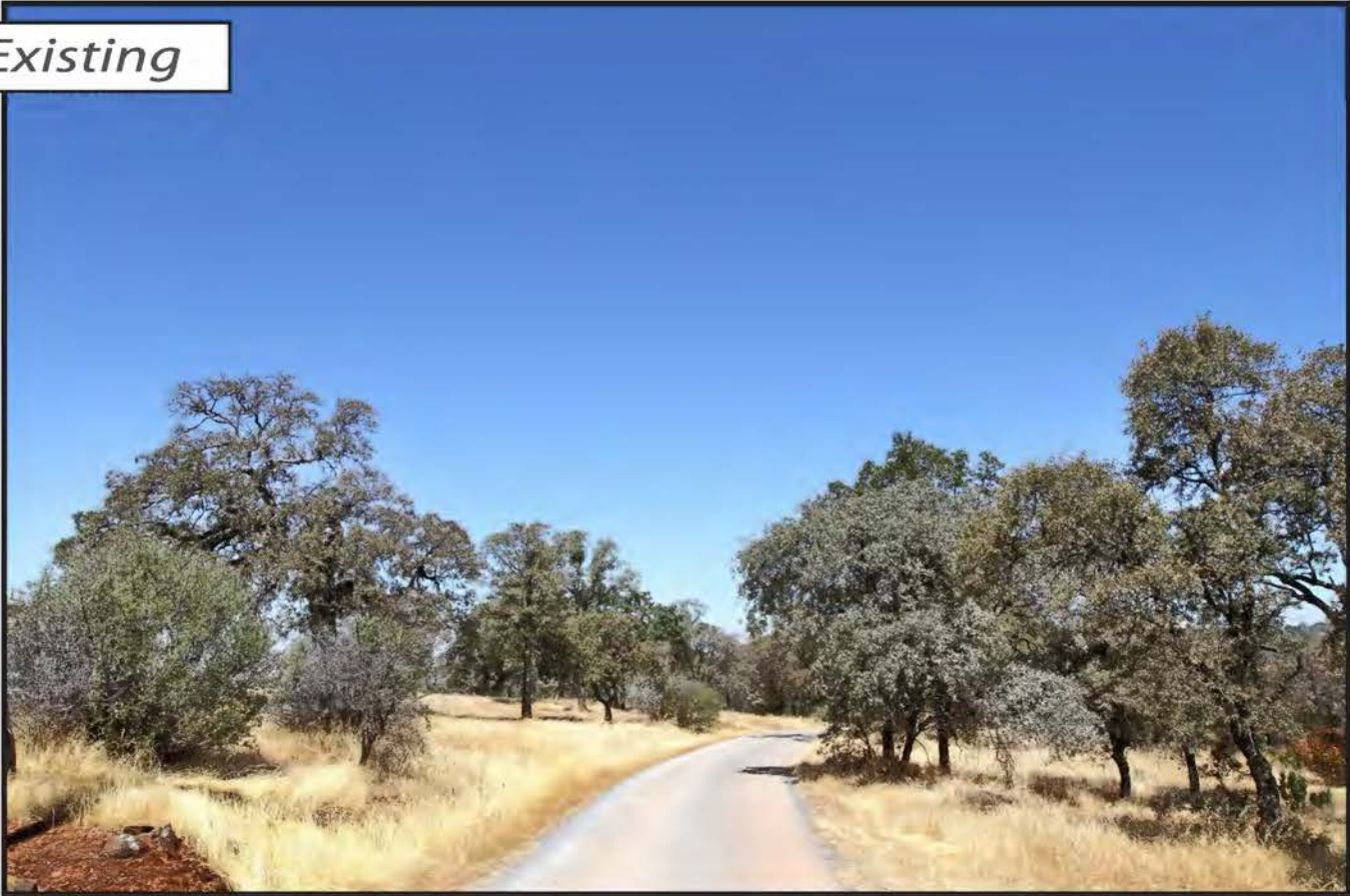
SHEET NUMBER: **A-3** REVISION: **0**







*Existing*



*Proposed*



*view from Gate Lane looking northwest at site*



CVL03629 Zee Estates  
850 Gate Lane, Pilot Hill, CA  
Photosims Produced on 7-21-2017

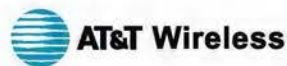
*Existing*



*Proposed*



*view from Safari Trail looking southeast at site*



CVL03629 Zee Estates  
850 Gate Lane, Pilot Hill, CA  
Photosims Produced on 7-21-2017



Contact (925) 202-8507

*Existing*



*Proposed*



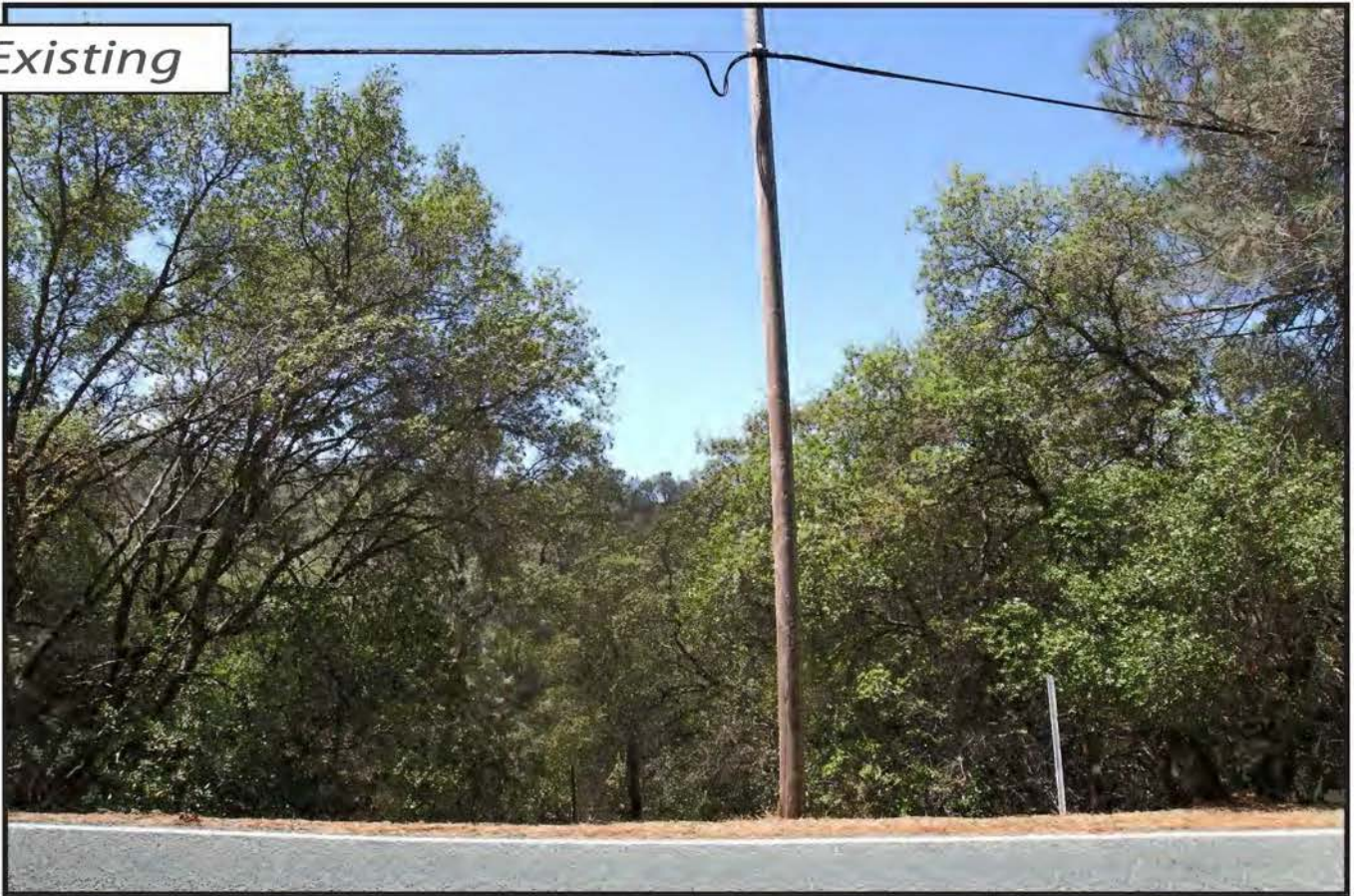
*view from Pilot View Drive looking southeast at site*

**AdvanceSim**  
Photo Simulation Solutions  
Contact (925) 202-8507

 **AT&T Wireless**

CVL03629 Zee Estates  
850 Gate Lane, Pilot Hill, CA  
Photosims Produced on 7-21-2017

*Existing*



*Proposed*

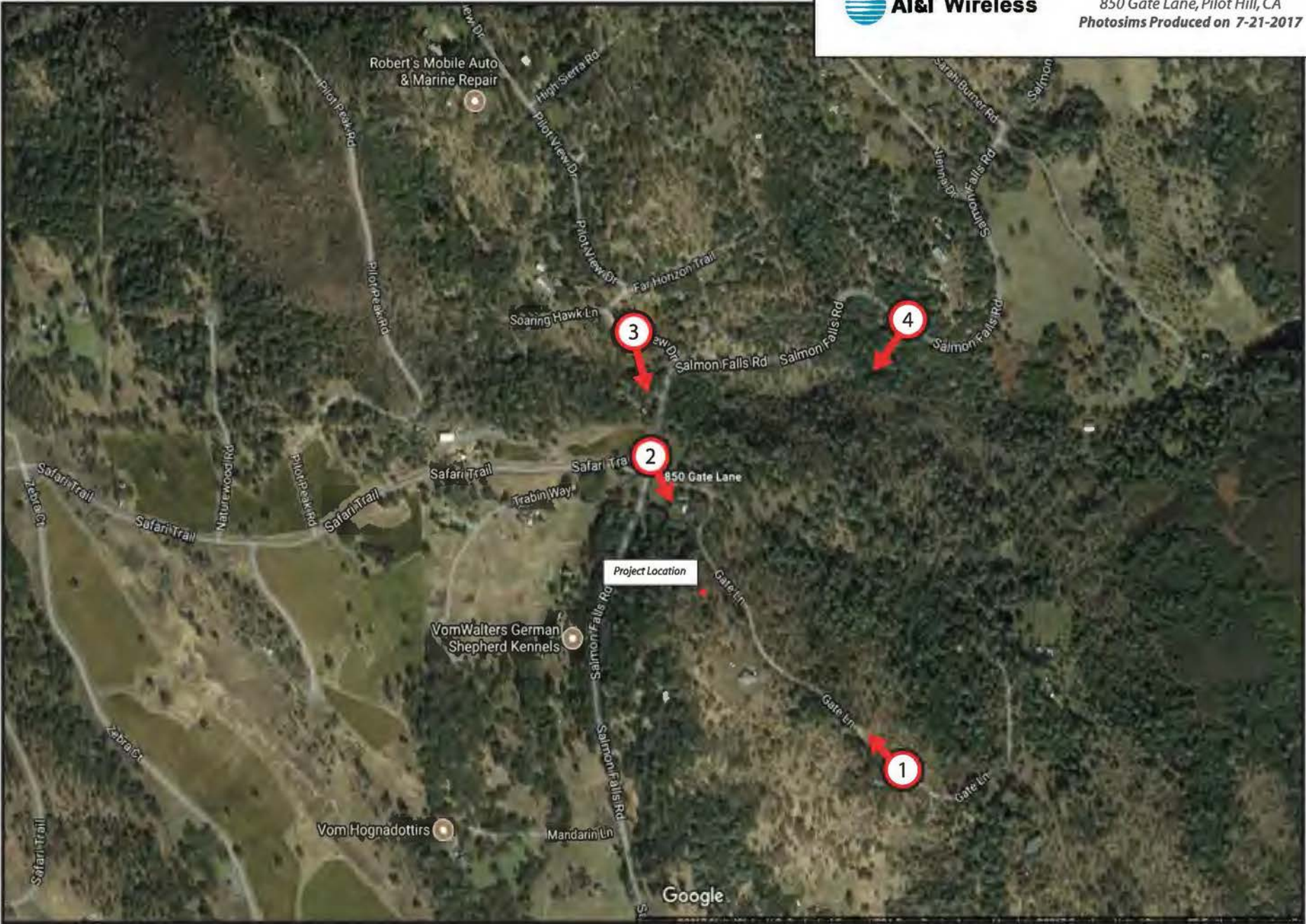


*view from Salmon Falls Road looking southwest at site*

**AdvanceSim**  
Photo Simulation Solutions  
Contact (925) 202-8507

 **AT&T Wireless**

CVL03629 Zee Estates  
850 Gate Lane, Pilot Hill, CA  
Photosims Produced on 7-21-2017

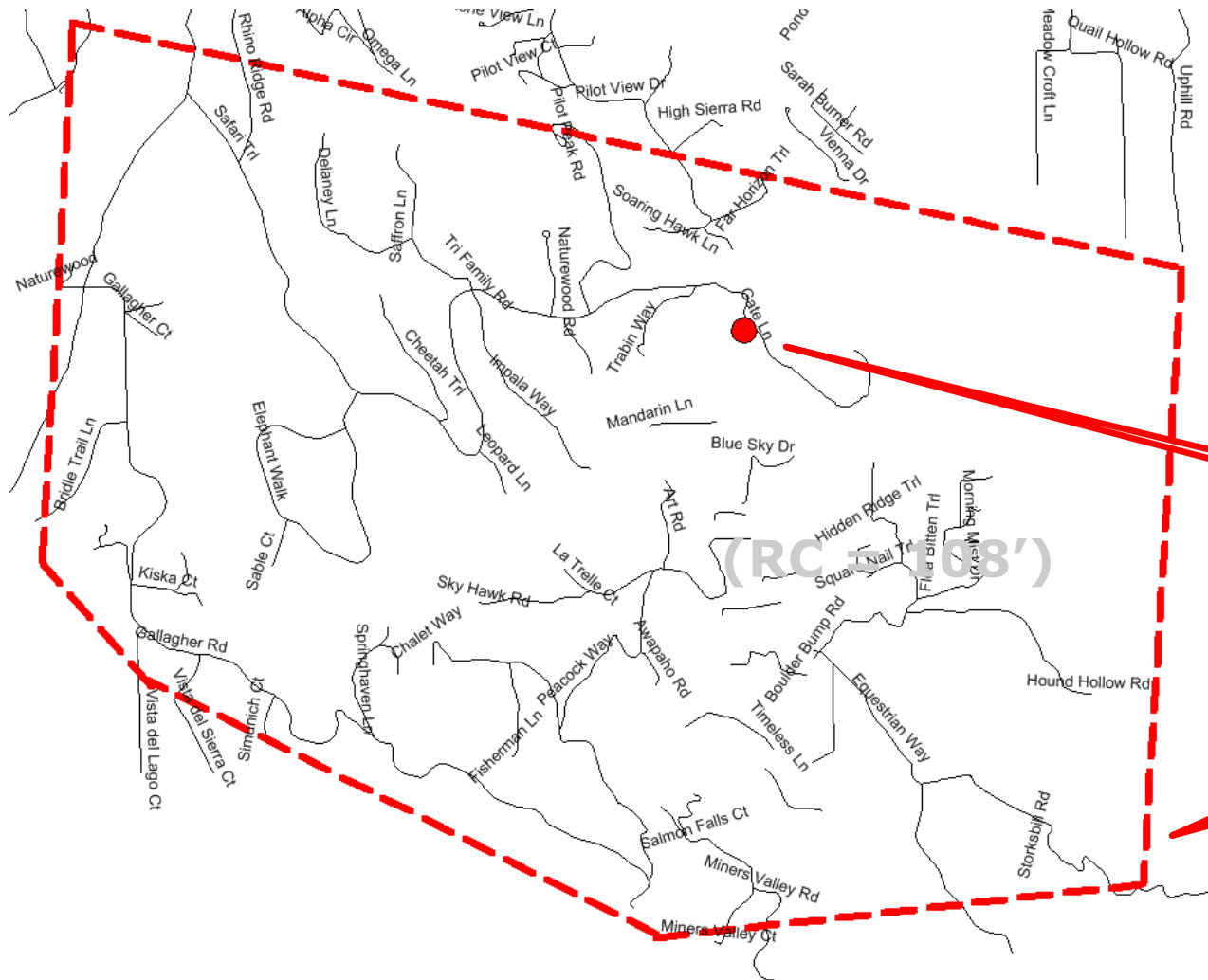


# CVL03629 Zoning Propagation Map

June 13, 2017



# EXISTING LTE 700 Coverage (RC = 150')



### Legend

- In-Building Service
- In-Transit Service
- Outdoor Service
- Existing site
- Proposed site

**Zee Estates**

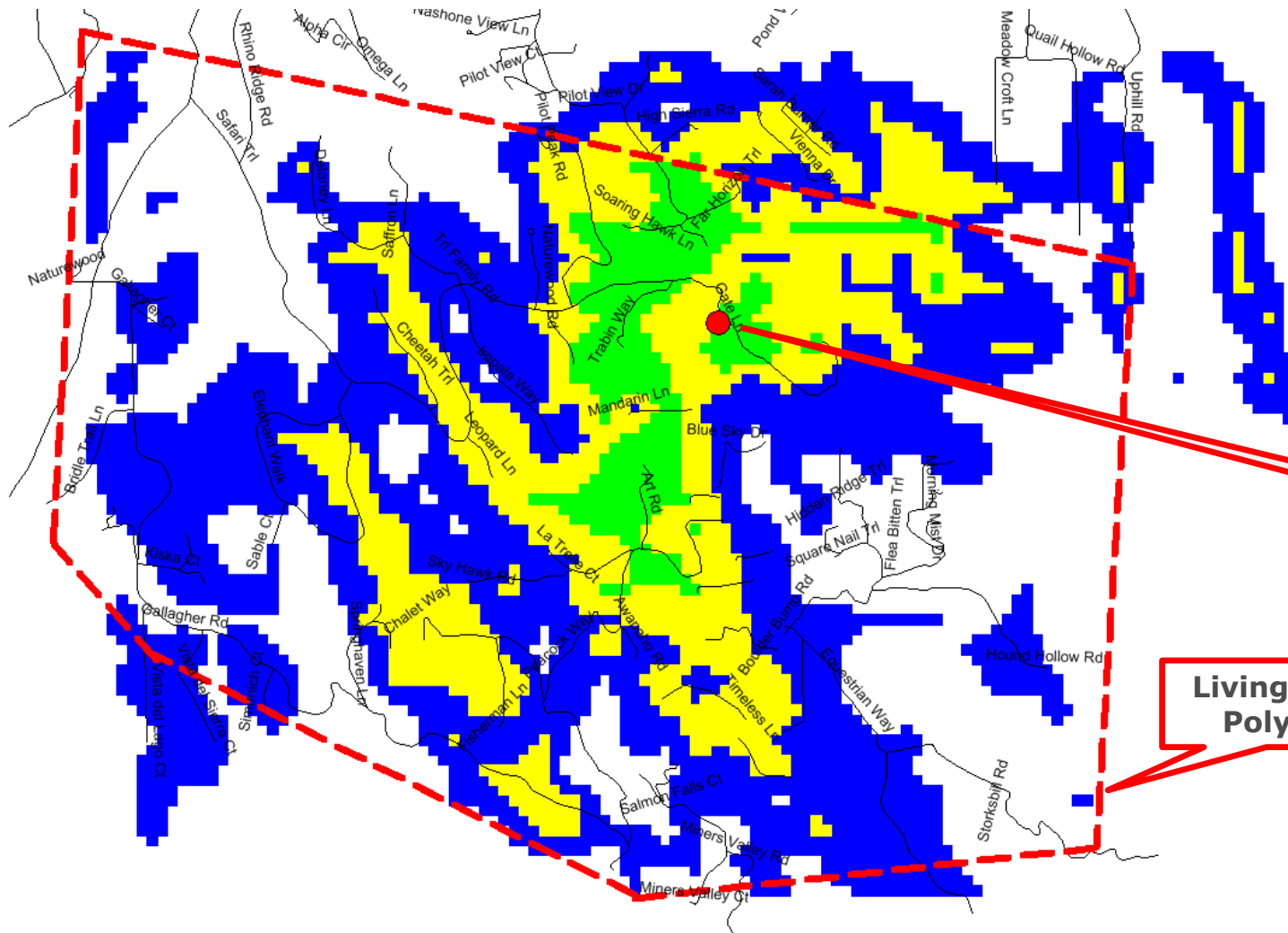
**Living Units Polygon**



Scale: 1:22,660

June 13, 2017

# PROPOSED LTE 700 Coverage (RC = 150')



## Legend

- In-Building Service
- In-Transit Service
- Outdoor Service
- Existing site
- Proposed site

**Zee Estates**

**Living Units Polygon**



Scale: 1:22,660



June 13, 2017



## Radio Frequency Emissions Compliance Report For AT&T Mobility

<b>Site Name:</b>	<b>Zee Estates</b>	<b>Site Structure Type:</b>	<b>Monopine</b>
<b>Address:</b>	Gate Lane 1,000' South East of the intersection of Gate Lane and Salmon Falls Road Pilot Hill, CA	<b>Latitude:</b>	<b>38.810023</b>
<b>Report Date:</b>	<b>July 17, 2017</b>	<b>Longitude:</b>	<b>-121.020325</b>
		<b>Project:</b>	<b>New Build</b>

### General Summary

AT&T Mobility has contracted Waterford Consultants, LLC to conduct a Radio Frequency Electromagnetic Compliance assessment of the proposed Zee Estates site located at Gate Lane 1,000' South East of the intersection of Gate Lane and Salmon Falls Road, Pilot Hill, CA. This report contains information about the radio telecommunications equipment to be installed at this site and the surrounding environment with regard to RF Hazard compliance. This assessment is based on installation designs and operational parameters provided by AT&T Mobility.

The compliance framework is derived from the Federal Communications Commission (FCC) Rules and Regulations for preventing human exposure in excess of the applicable Maximum Permissible Exposure ("MPE") limits. At any location at this site, the power density resulting from each transmitter may be expressed as a percentage of the frequency-specific limits and added to determine if 100% of the exposure limit has been exceeded. The FCC Rules define two tiers of permissible exposure differentiated by the situation in which the exposure takes place and/or the status of the individuals who are subject to exposure. General Population / Uncontrolled exposure limits apply to those situations in which persons may not be aware of the presence of electromagnetic energy, where exposure is not employment-related, or where persons cannot exercise control over their exposure. Occupational / Controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment, have been made fully aware of the potential for exposure, and can exercise control over their exposure.

Frequency (MHz)	Limits for General Population/ Uncontrolled Exposure		Limits for Occupational/ Controlled Exposure	
	Power Density (mW/cm <sup>2</sup> )	Averaging Time (minutes)	Power Density (mW/cm <sup>2</sup> )	Averaging Time (minutes)
30-300	0.2	30	1	6
300-1500	f/1500	30	f/300	6
1500-100,000	1.0	30	5.0	6

f=Frequency (MHz)

In situations where the predicted MPE exceeds the General Population threshold in an accessible area as a result of emissions from multiple transmitters, FCC licensees that contribute greater than 5% of the aggregate MPE share responsibility for mitigation.

Based on the computational guidelines set forth in FCC OET Bulletin 65, Waterford Consultants, LLC has developed software to predict the overall Maximum Permissible Exposure possible at any particular location given the spatial orientation and operating parameters of multiple RF sources. These theoretical results represent worst-case predictions as emitters are assumed to be operating at 100% duty cycle.

## Exhibit I Site 6 Zee Estates

For any area in excess of 100% General Population MPE, access controls with appropriate RF alerting signage must be put in place and maintained to restrict access to authorized personnel. Signage must be posted to be visible upon approach from any direction to provide notification of potential conditions within these areas. Subject to other site security requirements, occupational personnel should be trained in RF safety and equipped with personal protective equipment (e.g. RF personal monitor) designed for safe work in the vicinity of RF emitters. Controls such as physical barriers to entry imposed by locked doors, hatches and ladders or other access control mechanisms may be supplemented by alarms that alert the individual and notify site management of a breach in access control. Waterford Consultants, LLC recommends that any work activity in these designated areas or in front of any transmitting antennas be coordinated with all wireless tenants.

## **Analysis**

AT&T Mobility proposes the following installation at this location:

- Install twelve (12) new panel antennas
- Install six (6) new RRUS-11, three (3) RRUS-12, twelve (12) RRUS-32

The antennas will be mounted on a 160-foot Monopine with centerlines at 150 and 140 feet above ground level. The antennas will be oriented toward 90, 330 and 210 degrees. The Effective Radiated Power (ERP) in any direction from all AT&T Mobility operations will not exceed 26,556 Watts. Other appurtenances such as RRUs and hybrid cable are not sources of RF emissions. From this site, AT&T Mobility will enhance voice and data services to surrounding areas in licensed 700, 850, 1900, 2100 and 2300 MHz bands. No other antennas are known to be operating in the vicinity of this site.

Power density decreases significantly with distance from any antenna. The panel-type antennas to be employed at this site are highly directional by design and the orientation in azimuth and mounting elevation, as documented, serve to reduce the potential to exceed MPE limits at any location other than directly in front of the antennas. For accessible areas at ground level, the maximum predicted power density level resulting from all AT&T Mobility operations is 0.4105% of the FCC General Population limits (0.0821% of the FCC Occupational limits). Incident at adjacent buildings depicted in Figure 1, the maximum predicted power density level resulting from all AT&T Mobility operations is 0.7055% of the FCC General Population limits (0.1411% of the FCC Occupational limits). The proposed operation will not expose members of the General Public to hazardous levels of RF energy and will not contribute to existing cumulative MPE levels on walkable surfaces at ground or at adjacent buildings by 5% of the General Population limits.

Waterford Consultants, LLC recommends posting contact information signage at the gate that informs personnel entering the site of basic precautions to be followed when working around antennas. RF alerting signage (Caution) should be posted at the base of the proposed Monopine to inform authorized climbers of potential conditions near the antennas. These recommendations are depicted in Figure 2.

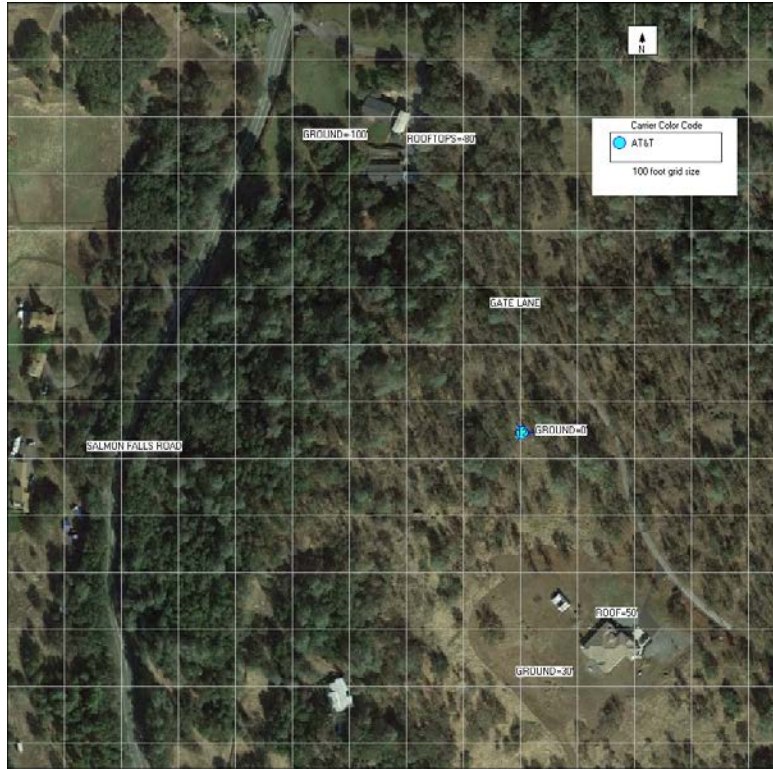


Figure 1: Antenna Locations

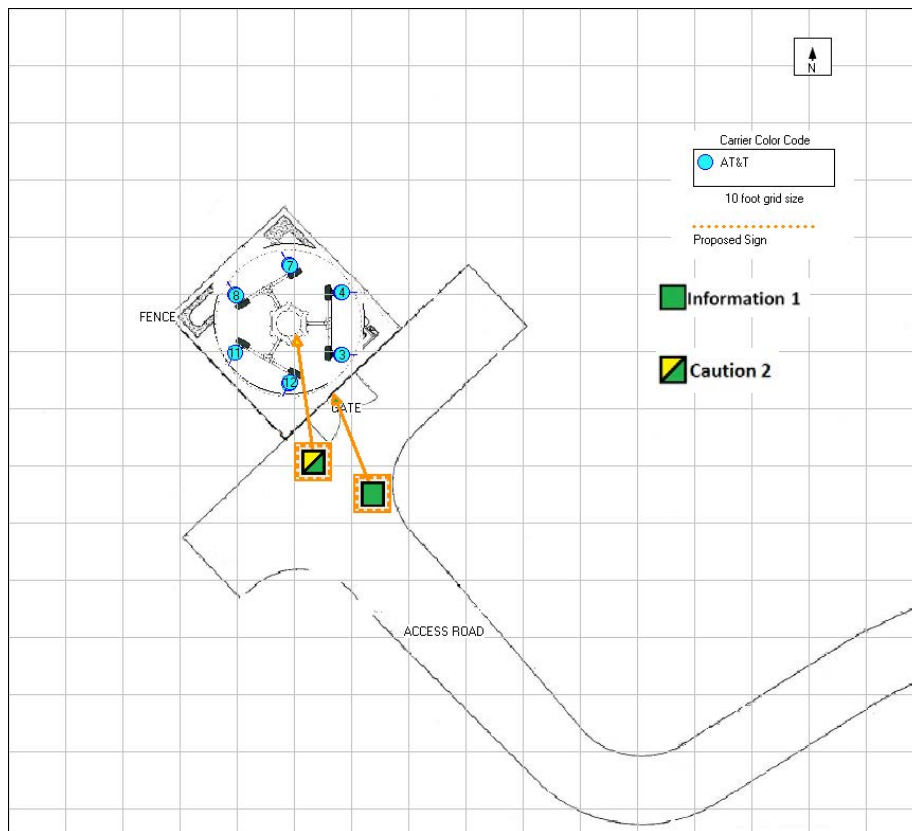


Figure 2: Mitigation Recommendations

### Compliance Statement

Based on information provided by AT&T Mobility and predictive modeling, the installation proposed by AT&T Mobility at Gate Lane 1,000' South East of the intersection of Gate Lane and Salmon Falls Road, Pilot Hill, CA will be compliant with Radiofrequency Radiation Exposure Limits of 47 C.F.R. § 1.1307(b)(3) and 1.1310. RF alerting signage and restricting access to the Monopine to authorized climbers that have completed RF safety training is required for Occupational environment compliance.

### Certification

I, David H. Kiser, am the reviewer and approver of this report and am fully aware of and familiar with the Rules and Regulations of both the Federal Communications Commissions (FCC) and the Occupational Safety and Health Administration (OSHA) with regard to Human Exposure to Radio Frequency Radiation, specifically in accordance with FCC's OET Bulletin 65. I have reviewed this Radio Frequency Exposure Assessment report and believe it to be both true and accurate to the best of my knowledge.





on Behalf of



**PROJECT SUPPORT STATEMENT**

**AT&T PROJECT NAME: CONNECT AMERICA FUND II (CAF II) PROJECT**

**DEVELOPMENT APPLICATION FOR AT&T SITE "ZEE ESTATES"**

**AT&T SITE NUMBER: CVL03629**

**AUTHORIZED AGENT:**

**EPIC WIRELESS GROUP, LLC**

**ZONING MANAGER:**

**JARED KEARSLEY; 916-755-1326; jared.kearsley@epicwireless.net**

**PROPERTY OWNER: RICHARD AND ELLEN WOLFE**

**LANDOWNER CONTACT: 916-417-5937**

**APN: 104-370-24-100**

**GATE LANE, PILOT HILL, CA 95667**

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- **PROJECT'S BACKGROUND AND OBJECTIVES**
- **SEARCH RING'S DESCRIPTION AND OBJECTIVES**
- **POTENTIAL CO-LOCATIONS**
- **ALTERNATIVE SITE ANALYSIS**
- **SUBJECT PARCEL AND SITE DETAILS AND SUPPORTING DOCUMENTS**
- **OPERATIONAL STATEMENT**
- **FIRE SUPPRESSION SYSTEM**
- **OTHER CONSIDERATIONS RELATING TO NEW WIRELESS TELECOMMUNICATION FACILITIES PURSUANT TO 17.14.210 AND 17.22.500 OF THE EL DORADO COUNTY ZONING CODE**

**Exhibit J**  
**Site 6 Zee Estates**



on Behalf of



**Project Background and objectives:**

AT&T is participating in a Federal Government funded project called Connect America Fund (CAF) – which is to provide underserved areas throughout the United States in general and throughout El Dorado County in particular with hi-speed broadband internet. The build-up of hi-speed broadband internet throughout rural/underserved areas will not only drive economic growth in rural America, but will expand the online marketplace nationwide, creating jobs, educational and businesses opportunities across the country. The CAF project is required to provide broadband internet services capable of 10 Mbps download and 1 Mbps upload speeds.

AT&T has the necessary technology that allows them to build out their territory in El Dorado County with the much demanded hi-speed broadband internet to help improve the county’s rural infrastructure. AT&T’s basis for transmitting and receiving hi-speed broadband internet to residences is executed by providing one site with either a microwave fiber hop or a direct fiber line to the site and transferring the high speeds of fiber to each Living Unit (LU) via wireless signals. Each LU being provided with the service will have a small square antenna located in a vantage point on the property where it has a direct line of site to the tower. The square antenna will send and receive wireless broadband internet providing the LU with a minimum of 10/1 Mbps download and upload speeds, respectively.

AT&T’s secondary objective is to provide and enhance AT&T’s Wireless Telecommunications services (cellular services) to underserved areas. Cellular services go hand in hand with building the internet infrastructure throughout these underserved areas. People today rely on their mobile devices not only for educational and business purposes, but also for emergency services. Increasing AT&T’s cellular coverage and capacity throughout El Dorado County’s rural areas while providing wireless broadband internet will greatly assist with enhancing the county’s economic growth and the area’s infrastructure.

Given the need for direct line of site to residences, a taller than typical tower will be necessary in order to provide wireless broadband internet services to as many homes in the targeted areas as possible. During the tower design phase, the Radio Frequency (RF) engineer study many variables including surrounding tree heights, tree densities, population densities, and surrounding hill tops, in order to properly design a sufficient tower height with the goal of achieving the FCC’s track census block mandates of reaching specific LU coverage objectives per area. Living Unit (LU) coverage objectives are provided by the RF engineer using density maps and are based on the area’s approximate population. AT&T’s goal is not only to reach the coverage objective, but to outperform the coverage objective to ensure that the maximum amount of homes are being provided this service while taking into consideration a small margin of error during the simulation process.



**Search Ring's Description and Objectives:**

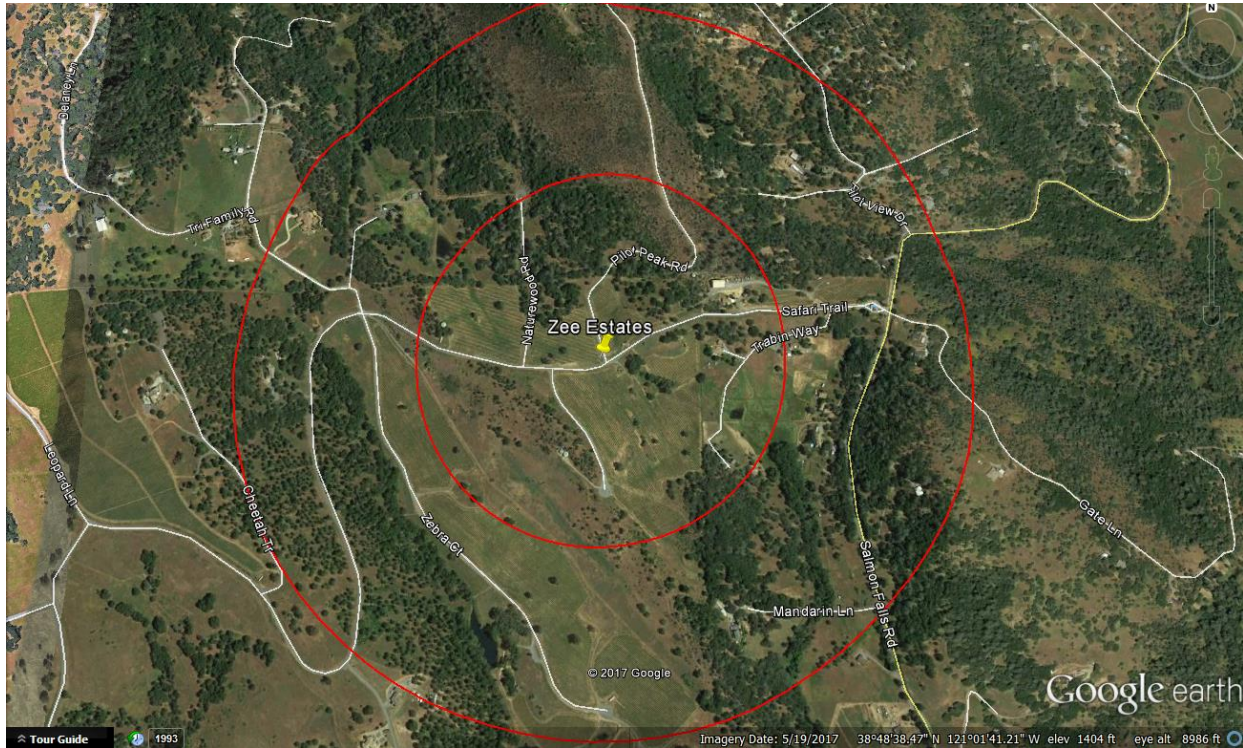


AT&T Mobility is proposing to build and maintain an unmanned wireless telecommunication facility consisting of a 30' x 45' (1350) square foot enclosed compound (lease area). The compound will include a 160 foot Stealth Monopine tower, one equipment shelter, one 35kw standby propane generator, and one 500 gallon propane tank. This facility will be located right off of Gate Lane, within El Dorado County's jurisdiction in a 60 acre LA-10 zone. The site is approximately 1.3 miles east of Acorn Creek and the area consists of evergreen trees, and rolling hills with rocky terrain.

AT&T's objective for the Zee Estates site is to provide wireless hi-speed broadband internet and cellular services to the nearby residences. This site is to provide hi-speed internet and enhanced cellular coverage & capacity to the Pilot Hill area, in all directions of the search ring which is a relatively dense underserved area. The site location's elevation is approximately 1,560 feet while the surrounding community's elevation averages around 1,450 feet, giving the homes within the community great potential for line of site to the tower. After running a coverage simulation at the site location, AT&T is anticipating meeting their FCC objective for this Search Ring.

The Search Ring comprises of properties within Safari Estates HOA community. The properties are affected by CC&Rs that restricts commercial building such as a wireless facility. For this reason, Epic was forced to search to the east, north, and south of the Search Ring. The RF Engineer approved Candidate A, the subject property, as primary candidate to work in conjunction with AT&T's Pilot Hill site located on Salmon Falls Road. Candidates B and C became unsatisfactory given their close proximity to AT&T's Pilot Hill site.

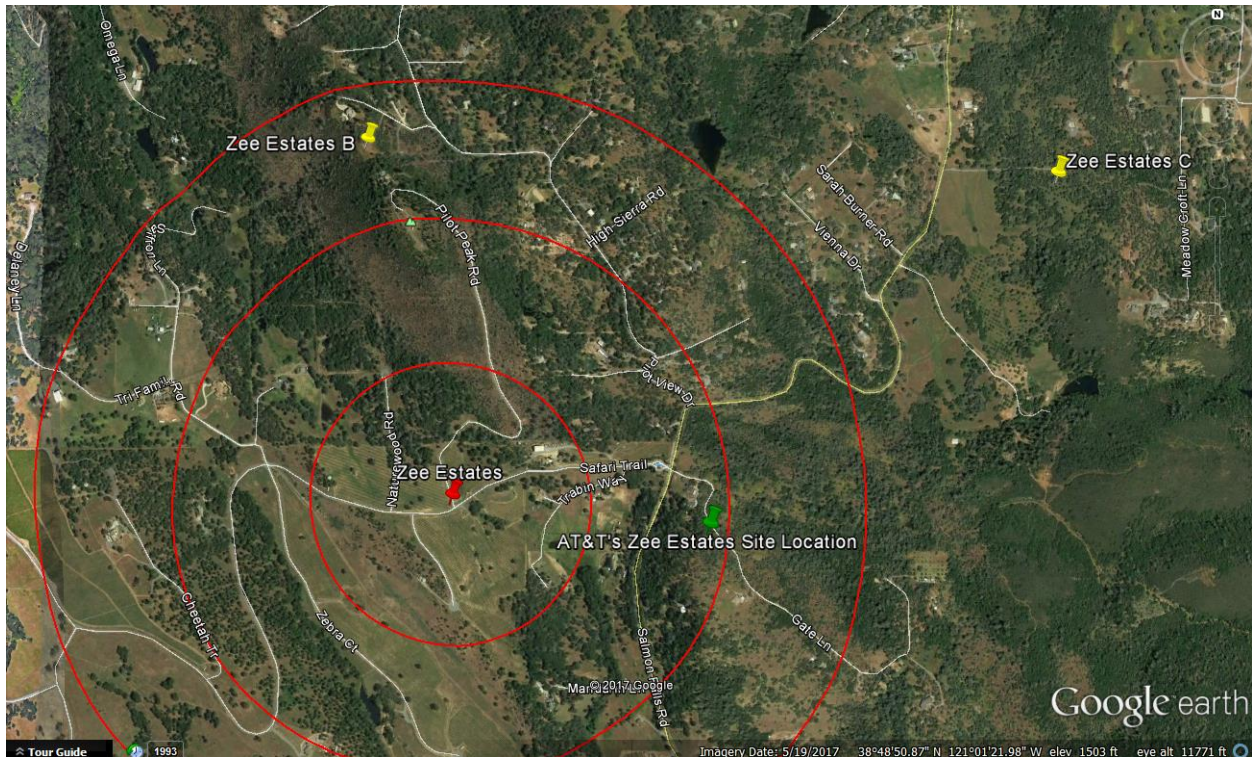
**Potential Co-locations:**



There are no potential Co-location opportunities in the near vicinity of the provided Search Ring. The targeted area is a relatively low populated area, therefore, typical cellular services are less prone to be present.

The nearest El Dorado Approved Tower is AT&T's Pilot Hill proposed tower located on Salmon Falls Road, 1.25 miles to the northeast of the center of AT&T's Search Ring. The nearest existing Tower is located in Pilot Hill northeast of AT&T's proposed Pilot Hill site, which is 1.85 miles northeast of the Zee Estates' Search Ring.

**Alternative Site Analysis pursuant to 17.14.210 (B) (1):**



Above is a map showing the Search Ring (center is the red pin), Proposed Site (green pin) and the two alternative sites (yellow pins) that were considered for placement of the telecommunications facility. Each Alternative Site is discussed below:

**Zee Estates Alternative Candidate B:**

**4150 Pilot View Court, Pilot Hill, CA 95664**

**Latitude/Longitude: 38.819931, -121.031460**

**Proposal – New Tower**



**Considerations:**

Candidate B is located approximately 0.60 miles north of the center of AT&T's search ring. The proposed tower would be located on a 5.26 acre, RE-5 zoned property owned by Brian Cummings. The property is located on the south side of Pilot View Court and the site was proposed on the west side of the property. Candidate B was chosen as AT&T's second preferred candidate as the RF Engineer's simulation yielded 18% fewer LU's than the subject site located at Gate Lane (Subject Parcel) and the site location conflicted with AT&T's Pilot Hill coverage. No Oak Woodland's would be required to be removed for this location. The surrounding Land Use is LDR and RR. The nearest homes are approximately 300 feet from the site location. The site location would be well suited for a wireless facility, however, the RF engineer disqualified the property after Pilot Hill site was selected and ultimately approved by the County.

**Zee Estates Alternative Candidate C:**

**5081 Salmon Falls Road, Pilot Hill, CA 95664**

**Latitude/Longitude: 38.819348, -121.008285**

**Proposal – New Tower**



**Considerations:**

Candidate C is located approximately 1.2 miles north-east of the center of AT&T's search ring. The proposed tower would be located on a 145 acre, LA-10 zoned property owned by Richard and Ellen Wolfe. The property is located on the east side of Salmon Falls Road and the site was proposed on the north side of the property. Candidate C was chosen as AT&T's third preferred candidate as the RF Engineer's simulation yielded 22% fewer LU's than the subject site located at Gate Lane (Subject Parcel) and the site location conflicted with AT&T's Pilot Hill coverage. No Oak Woodland's would be required to be removed for this location. The surrounding Land Use is LDR and RR. The nearest homes are approximately 555 feet from the site location. The site location would be well suited for a wireless facility, however, the RF engineer disqualified the property after Pilot Hill site was selected and ultimately approved by the County.



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**Additional alternative sites considered and letters of interest sent out but received either no response by landlords or uninterested landlords or land affected by CC&Rs included the following parcels:**

Safari Estates, Pilot Hill, CA 95664 – APN: 104-461-08; Owner: Safari Estates (CC&Rs)

Safari Estates, Pilot Hill, CA 95664 – APN: 104-130-45; Owner: Jeffrey Barcal (Interested, but, contacted Epic post County Submittal) (CC&Rs)

4100 Pilot View Court, Pilot Hill, CA 95664 – APN: 104-130-42; Owner: Michael & Corrinne Merrick

860 Gate Lane, Pilot Hill, CA 95664 – APN: 104-370-25; Property was up for sale during the feasibility stage

4448 Zebra Ct., Pilot Hill, CA 95664 – APN: 104-462-05; Owner: Carl Ross (CC&Rs)

1100 Cheetah Trail, Pilot Hill, CA 95664 – APN: 104-471-06; Owner: Safari Estates (CC&Rs)

**Actual View of the Proposed Location:**

The proposed lease area is located on the south-west side of the subject property. The site will not interfere with the existing Land Use of the property (LDR). Access will be directly off of Gate Lane. The site is elevated above the surrounding area and has great potential for line of site to the communities down below the subject parcel. The subject parcel is one of few that are not within the affected CC&R area. The few other non-CC&R properties are either uninterested or are too low in elevation resulting in insufficient coverage. The nearest home to the site location is approximately 300 feet to the north west which is substantially below grad from the site location. The next nearest home is approximately 610 feet due southeast. This property is elevated just above the site location. The site location doesn't appear to obstruct a premier viewpoint of this residence. Between two and five Oak Woodland will be required to be removed, pending utility boring/trenching. No Special Species or animals will be affected by the installation, per Sycamore Environmental Consultants, Inc.



on Behalf of

**Planning Services**

[Home](#) > [Government](#) > [Planning](#)

**PARCEL DATA INFORMATION**

8/3/2017

[Enter Another Parcel](#)

**Assessor's Parcel Number: 104-370-24**

**PROPERTY INFORMATION:**

STATUS	JURISDICTION	TAX RATE	MAP	ACREAGE
ON ASSESSMENT ROLL AND TAXED	COUNTY OF EL DORADO	83 - 50	SEC 18 11 9	60

**2015 GENERAL PLAN LAND USE INFORMATION:**

LAND USE DES.	AG DIST.	ECOLOGICAL PRESERVES	IMPORTANT BIOLOGICAL CORRIDOR	MINERAL RESOURCES	PLATTED LANDS	COMMUNITY REGIONS	RURAL CENTERS	SPECIFIC PLANS	ADOPTED PLAN NAME
LDR			IBC						

**2015 ZONING INFORMATION:**

ZONING DESIGNATION	DESIGN CONTROL	PLANNED DEVELOPMENT	OTHER OVERLAYS
LA-10			

**2004 GENERAL PLAN LAND USE INFORMATION:**

LAND USE DES.	AG DIST.	ECOLOGICAL PRESERVES	IMPORTANT BIOLOGICAL CORRIDOR	MINERAL RESOURCES	PLATTED LANDS	COMMUNITY REGIONS	RURAL CENTERS	SPECIFIC PLANS	ADOPTED PLAN NAME
LDR			IBC						

**2004 ZONING INFORMATION:**

ZONING DESIGNATION	DESIGN CONTROL	PLANNED DEVELOPMENT	OTHER OVERLAYS
AE			

**DISTRICTS:**

FIRE	CSD	SCHOOL	WATER
EL DORADO COUNTY FPD		BLACK OAK MINE UNIFIED	UNASSIGNED

**FLOOD ZONE INFORMATION (See Note below):**

FIRM PANEL NUMBER & REVISION	PANEL REVISION DATE	FLOOD ZONE	FLOOD ZONE BUFFER	FLOODWAY
06017C0450E	09/26/2008	X		

**MISCELLANEOUS DATA:**

SUPERVISORIAL DISTRICT	AG PRESERVE	RARE PLANT MITIGATION AREA	MISSOURI FLAT MC&FP
4 MICHAEL RANALLI		Mitigation Area 1	No

**REMARKS:**

No Eligibility Review Required

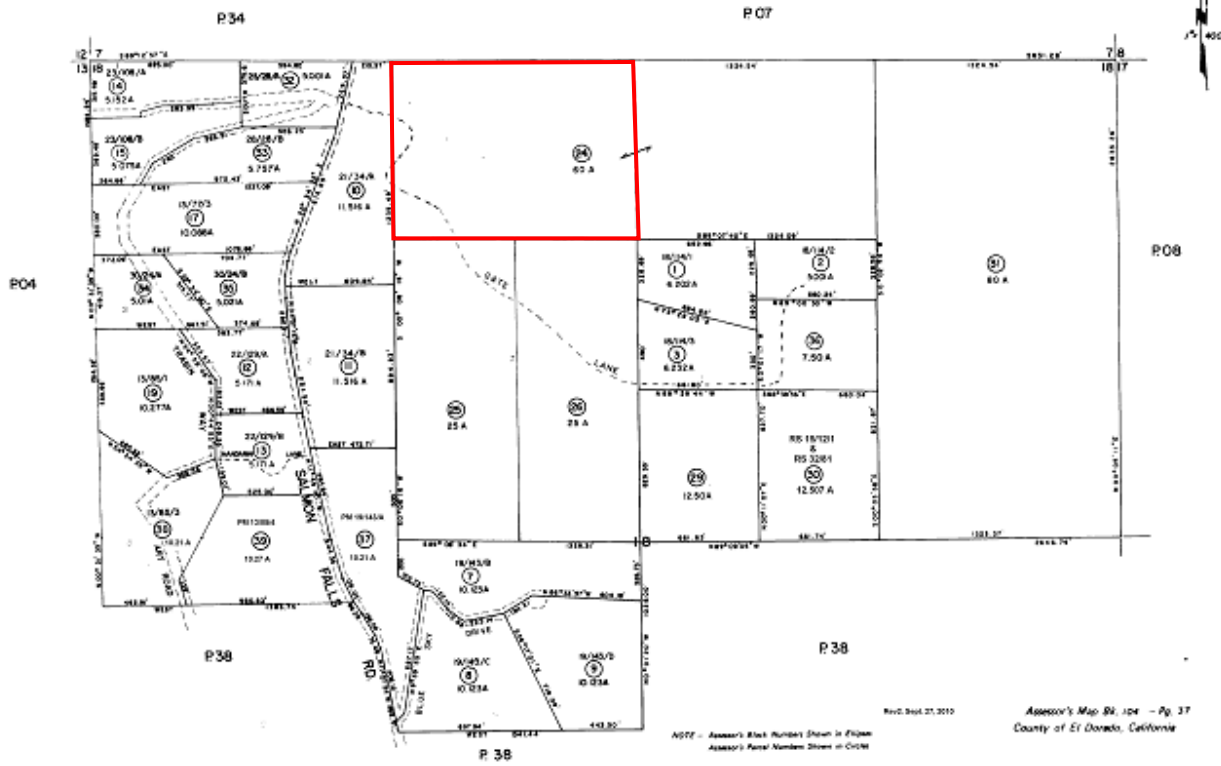
**NOTE:** The flood zone information presented here is based solely on data derived from the FEMA Flood Information Rate Maps, and does not include data from any other flood studies.

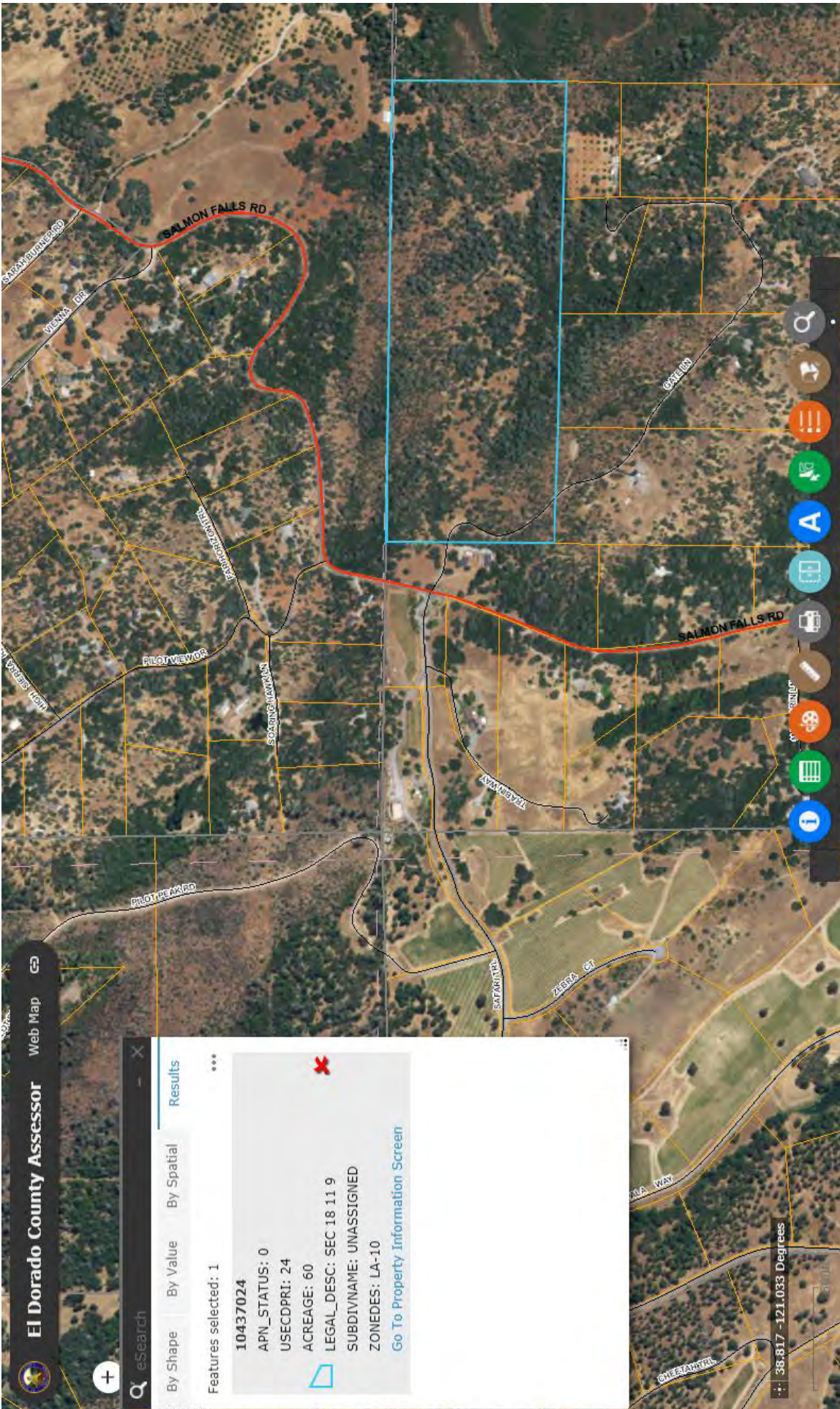


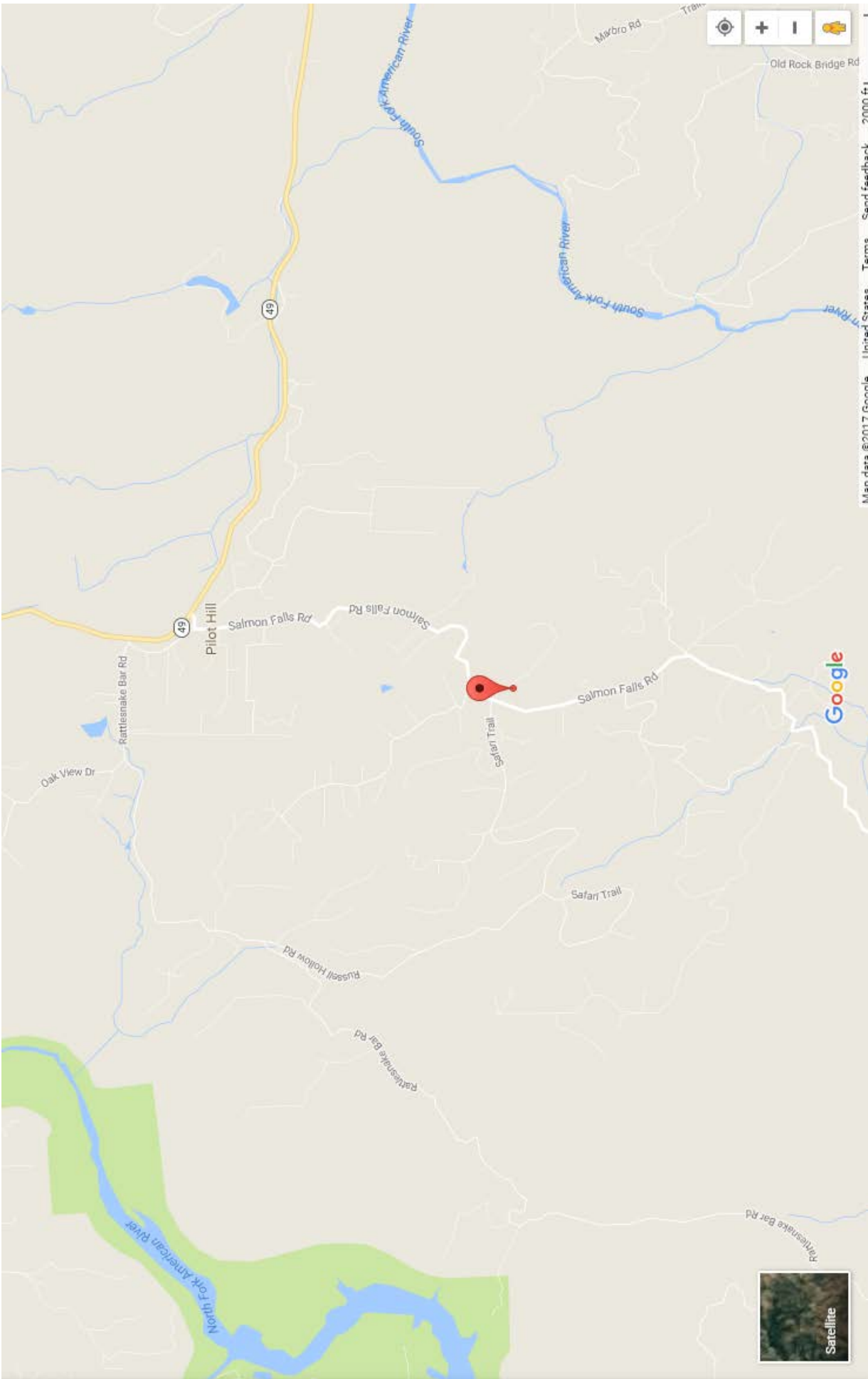
**Assessor's Parcel Map**

POR. SEC. 18, T. 11 N. R. 9 E

104:37

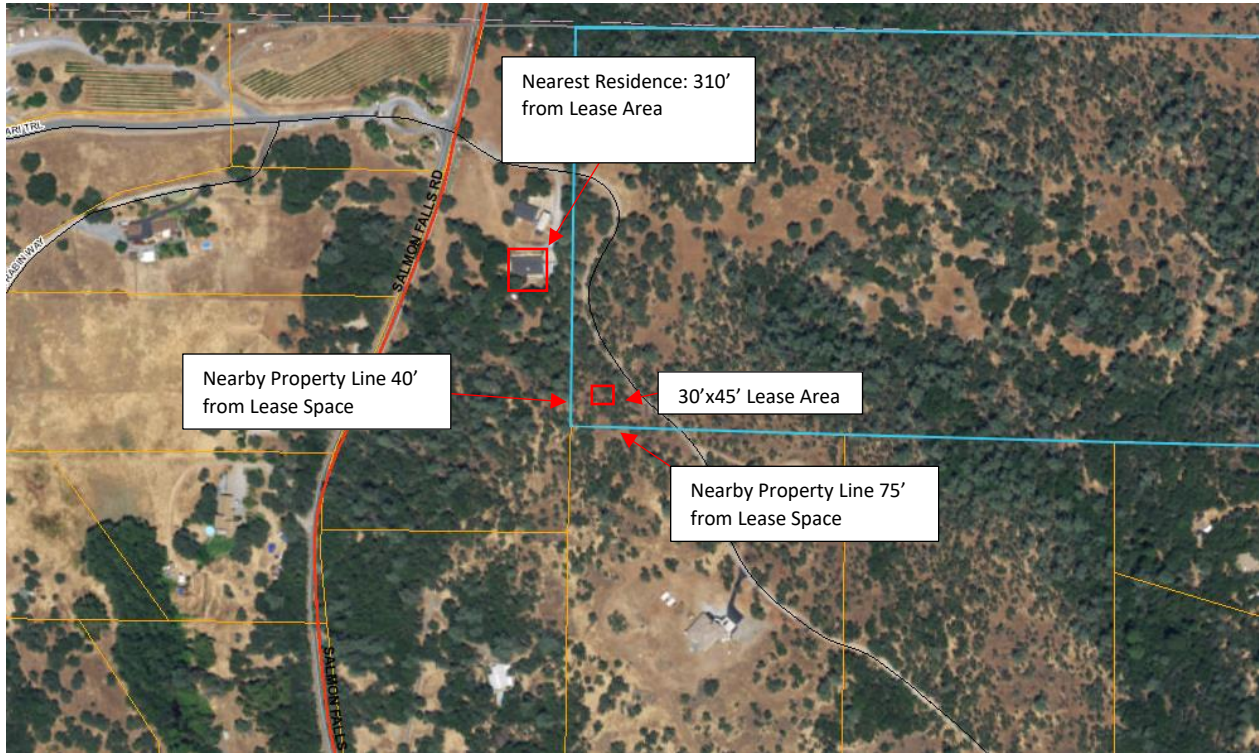






on Behalf of

**Overhead View of Lease Area and Distances to nearby residences:**



**Emergency 35kw Propane Generator and 4 Ton HVAC Noise Analysis:**

- **Equation and Calculation Method:**

The sound analysis methods and results are hypothetical only, using Sound Level and Distance calculations. These calculations do not take outside sounds, trees, hills, buildings, and other sound dampening variables into consideration, but, only raw sound levels after specific traveled distances which results in the worst case scenario for the sounds of the onsite backup generator and HVAC systems.

The use of emergency equipment is exempted from these limits per section 130.37.20(B).

Formulas to calculate the sound level  $L$  in dB (sound pressure level or sound intensity level) in dependence of the distance  $r$ .

**Sound level  $L$  and Distance  $r$**

$$L_2 = L_1 - \left| 20 \cdot \log \left( \frac{r_1}{r_2} \right) \right| \quad L_2 = L_1 - \left| 10 \cdot \log \left( \frac{r_1}{r_2} \right)^2 \right|$$

$$r_2 = r_1 \cdot 10^{\left( \frac{|L_1 - L_2|}{20} \right)} \quad r_1 = \frac{r_2}{10^{\left( \frac{|L_1 - L_2|}{20} \right)}}$$

Sound pressure level (dB) = Sound intensity level (dB)

$L_2 = L_1 - \left  20 \cdot \log \left( \frac{r_1}{r_2} \right) \right $	$L_2 = L_1 - 10 \cdot \lg \left( \frac{r_1}{r_2} \right)^2$
---	---

**Sound Specifications:**

- Emergency Generator Model: SG035 Generac
  - Average decibel (dBa) level at 23 feet = 64.9 dBa
- HVAC Model: ASDCA48
  - Average decibel (dBa) level at 50 feet = 57 dBa

**Sound Specifications while taking the Sound Blanket into consideration:**

- Emergency Generator Model: SG035 Generac
  - Average decibel (dBa) level at 23 feet = 58.11 dBa
- HVAC Model: ASDCA48
  - Average decibel (dBa) level at 50 feet = 46.36 dB

**Findings:**

1. Distance to the nearest property line = 40'
  - a. Generator Decibel level at 40' = 53.3 dBa
  - b. HVAC Decibel level at 40' = 48.3 dBa
2. Distance to alternative nearest property line = 75'
  - a. Generator Decibel level at 75' = 47.84 dBa
  - b. HVAC Decibel level at 75' = 42.84 dBa
3. Distance to a nearest residence = 310'
  - a. Generator Decibel level at 310' = 35.52 dBa
  - b. HVAC Decibel level at 310' = 30.51 dBa

**Conclusion:**

After calculating all decibel levels at each nearby residence's property line and actual residence, the onsite Emergency Backup Generator and HVAC systems are within El Dorado County's noise level standards according to El Dorado County Title 130 Zoning and Noise Ordinance, Chapter 130.37 – Noise Standards.

**Table 1 – Eldorado County Table 130.37.060.1**  
Noise Level Performance Standards for Noise Sensitive Land Uses  
Affected by Non-Transportation Sources

Noise Level Descriptor	Daytime 7 a.m. – 7 p.m.		Evening 7 p.m. – 10 p.m.		Night 10 p.m. – 7 a.m.	
	Community / Rural Centers	Rural Regions	Community / Rural Centers	Rural Regions	Community / Rural Centers	Rural Regions
Hourly Leq, dBA	55	50	50	45	45	40
Maximum Level, dBA	70	60	60	55	55	50

**BBC-13X Sound Curtains**

Sound Seal’s **BBC-13X** offers the benefits of both a noise barrier and a sound absorber for outdoor applications. The BBC-13X consists of a one-inch thick vinyl-coated-fiberglass-cloth faced quilted fiberglass that is bonded to a one-pound per sq. ft. reinforced loaded vinyl noise barrier. “X” style Sound Curtain panels are constructed with grommets across the top and **bottom, and exterior grade** Velcro seals along the vertical edges. The product is also available in roll form with edges bound or unbound.



- Class A (or 1) flammability rated per ASTM E 84
- For use on Indoor or Outdoor Applications
- Available facing colors: gray, tan, black, or off-white
- Available barrier colors: gray, tan, blue or olive drab

**Applications:**

Even in the harshest environments, with a minimum life span of 5 years\* and wind load ratings of 120 mph, this product is typically used as a **temporary noise barrier on outdoor applications such as construction site noise mitigation projects**. Also available with a two-pound psf noise barrier or a two-inch thick quilted fiberglass sound absorber for better acoustical performance.

**Product Data:**

<b>Description</b>	Vinyl coated fiberglass cloth facing on 1” quilted fiberglass 1lb-psf reinforced loaded vinyl barrier
<b>Flammability</b>	Flame Spread: 23.0 Smoke density: 30.0
<b>Nominal thickness</b>	1.0 inch
<b>Temperature range</b>	-20° to +180° F
<b>Standard roll size</b>	54” wide x 25’ long
<b>Weight</b>	1.2 lb psf

**Acoustical Performance:**

**Sound Transmission Loss**

Product	OCTAVE BAND FREQUENCIES (Hz)						STC
	125	250	500	1000	2000	4000	
BBC-13 X	11	16	24	30	35	35	27

ASTM E-90 & E 413

**Sound Absorption Data**

Product	OCTAVE BAND FREQUENCIES (Hz)						NRC
	125	250	500	1000	2000	4000	
BBC-13 X	.12	.47	.85	.84	.64	.62	.70

ASTM C 423

\* when properly installed.



on Behalf of



**Operation Statement:**

This project is an AT&T Mobility unmanned Telecommunication Wireless Facility. It will consist of the following:

**NEW SITE BUILD UNMANNED TELECOMMUNICATIONS FACILITY.**

1. **(1) NEW 15' WIDE GRAVEL ACCESS ROAD**
2. **(1) NEW 30' X 45' FENCED LEASE AREA**
3. **(1) NEW 6' CHAIN LINK FENCE**
4. **(1) NEW 12' WIDE DOUBLE ACCESS GATE**
5. **(1) NEW 160' MONOPINE TOWER**
6. **(1) NEW PRE-FAB EQUIPMENT SHELTER**
7. **(1) NEW GPS ANTENNA**
8. **(1) NEW 35KW PROPANE GENERATOR**
9. **(1) LP PROPANE TANK (500 GALLON)**
10. **(12) NEW ANTENNAS**
11. **(6) NEW RRUS-11, (3) NEW RRUS-12 & (12) RRUS-32**
12. **(4) NEW SURGE SUPPRESSORS**
13. **(2) FUTURE 4' M/W DISH**

The facility will operate 24 hours a day 7 days a week. Maintenance workers will visit the site approximately once a month. A 15 foot wide access route will be created directly from Snows Road. There will be minimal noise from the standby generator, turning on once a week for 15 minutes for maintenance purposes and during emergency power outages. The Facility is approximately 40' feet east and 75 feet north of the nearest property lines and approximately 310 feet south-east of the nearest residence. The location is surrounded by evergreen trees which will naturally stealth the facility. The surrounding area is covered with evergreen tree backdrops. The tower will be built to provide co-location opportunities.

**Fire Suppression System:**

A 15 foot wide access route will be created directly from Gate Lane. A Hammer Head Fire Turnaround will be proposed within the access route. A Fire Department Knox Box will be located at the Facility's access gate. The nearest Fire Department is only 1.3 miles from the Proposed Facility. Additionally, a 2A:20BC Rated Fire Extinguisher in a weather resistant cabinet will be mounted on the exterior wall of the proposed shelter.



on Behalf of



**Conclusion:**

Candidate A, Gate Lane, meets the FCC’s mandated objectives for the targeted area of Zee Estates and is the best choice for the surrounding area. The chosen location will meet and exceed the FCC’s mandated coverage objectives with providing hi-speed broadband internet to the homes in the Targeted Area of El Dorado County. The Stealth Monopine Tower design has been chosen to blend into the existing surrounding environment as the least intrusive means while filling AT&T’s significant gap in coverage. The property’s surrounding foliage and tree canopy will naturally camouflage the facility thereby proving low visual impact to the surrounding residents. Existing CC&R’s on the surrounding properties prevent building commercial projects on said properties, forcing AT&T to a non-CC&R property. Between two and five Oak Woodlands will be removed or significantly impacted, pending utility trenching/boring. No special species or protected animals will be impacted per the biological resource assessment prepared by Sycamore Environmental Consultants, Inc.



**LETTER OF AUTHORIZATION  
TO FILE PERMIT APPLICATIONS**

Re: El Dorado County APN # 104-370-24-100

To Whom It May Concern:

The undersigned, Landlord, are the owners of the property located in Pilot Hill, CA 95664, County Assessor's Parcel No. #104-370-24-100, that is the subject of an CUP application for a new Telecommunications Facility. The undersigned has leased a portion of the property to AT&T Mobility C/O Epic Wirelss Group, and hereby authorizes Epic Wireless Group, its agent, to act as applicant to obtain any and all permits required for the approval and construction of this antenna/communication facility.

Landlord/Lessor: Wolfe Family Trust / Rick Wolfe

*Richard Wolfe*

\_\_\_\_\_  
Landlord

July 7, 2017

\_\_\_\_\_  
Date

Ref ID: zee estates

# Property Detail Report

For Property Located At :  
 , PILOT HILL, CA 95664



## Owner Information

Owner Name: WOLFE FAMILY TRUST  
 Mailing Address: 9289 SHADOW BROOK PL, GRANITE BAY CA 95746-9644 R037  
 Vesting Codes: // PT

## Location Information

Legal Description:	SEC 18 11 9	APN:	104-370-24-100
County:	EL DORADO, CA	Alternate APN:	104-370-24-100
Census Tract / Block:	306.01 /	Subdivision:	
Township-Range-Sect:	11-09-18	Map Reference:	/
Legal Book/Page:		Tract #:	
Legal Lot:	7	School District:	BLACK OAK MINE
Legal Block:		School District Name:	
Market Area:		Munic/Township:	
Neighbor Code:			

## Owner Transfer Information

Recording/Sale Date:	05/16/2016 / 05/12/2016	Deed Type:	QUIT CLAIM DEED
Sale Price:		1st Mtg Document #:	
Document #:	<a href="#">21215</a>		

## Last Market Sale Information

Recording/Sale Date:	07/24/2013 / 07/11/2013	1st Mtg Amount/Type:	\$495,000 / PRIVATE PARTY
Sale Price:	\$1,000,000	1st Mtg Int. Rate/Type:	/
Sale Type:	FULL	1st Mtg Document #:	<a href="#">38468</a>
Document #:	<a href="#">38467</a>	2nd Mtg Amount/Type:	/
Deed Type:	GRANT DEED	2nd Mtg Int. Rate/Type:	/
Transfer Document #:		Price Per SqFt:	
New Construction:		Multi/Split Sale:	MULTI
Title Company:	INTER-COUNTY TITLE CO.		
Lender:	PRIVATE INDIVIDUAL		
Seller Name:	JONES FAMILY TRUST		

## Prior Sale Information

Prior Rec/Sale Date:	12/29/1999 / 07/15/1999	Prior Lender:	
Prior Sale Price:	\$66,000	Prior 1st Mtg Amt/Type:	/
Prior Doc Number:	<a href="#">78721</a>	Prior 1st Mtg Rate/Type:	/
Prior Deed Type:	GRANT DEED		

## Property Characteristics

Year Built / Eff:	/	Total Rooms/Offices		Garage Area:	
Gross Area:		Total Restrooms:		Garage Capacity:	
Building Area:		Roof Type:		Parking Spaces:	
Tot Adj Area:		Roof Material:		Heat Type:	
Above Grade:		Construction:		Air Cond:	
# of Stories:		Foundation:		Pool:	
Other Improvements:		Exterior wall:		Quality:	
		Basement Area:		Condition:	

## Site Information

Zoning:	AE	Acres:	60.00	County Use:	RURAL LAND OVER 20 AC (24)
Lot Area:	2,613,600	Lot Width/Depth:	x	State Use:	
Land Use:	AGRICULTURAL LAND	Commercial Units:		Water Type:	
Site Influence:		Sewer Type:		Building Class:	

## Tax Information

Total Value:	\$217,460	Assessed Year:	2016	Property Tax:	\$2,262.66
Land Value:	\$217,460	Improved %:		Tax Area:	083050
Improvement Value:		Tax Year:	2016	Tax Exemption:	
Total Taxable Value:	\$217,460				

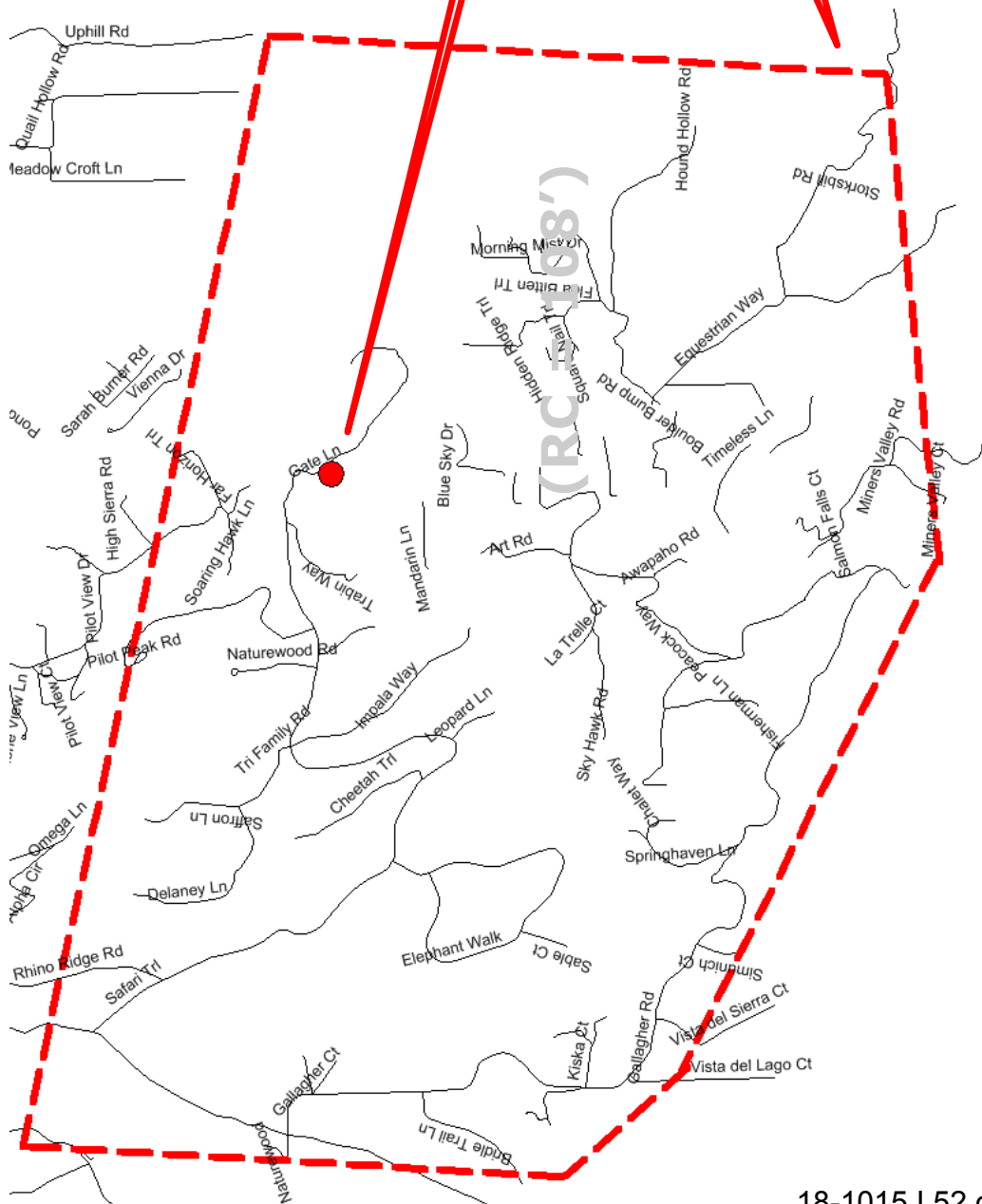
# CVL03629 Zoning Propagation Map

June 13, 2017

# EXISTING LTE 700 Coverage (RC = 150')

## Legend

- In-Building Service
- In-Transit Service
- Outdoor Service
- Existing site
- Proposed site



Zee Estates

Living Units Polygon



Scale: 1:22,660

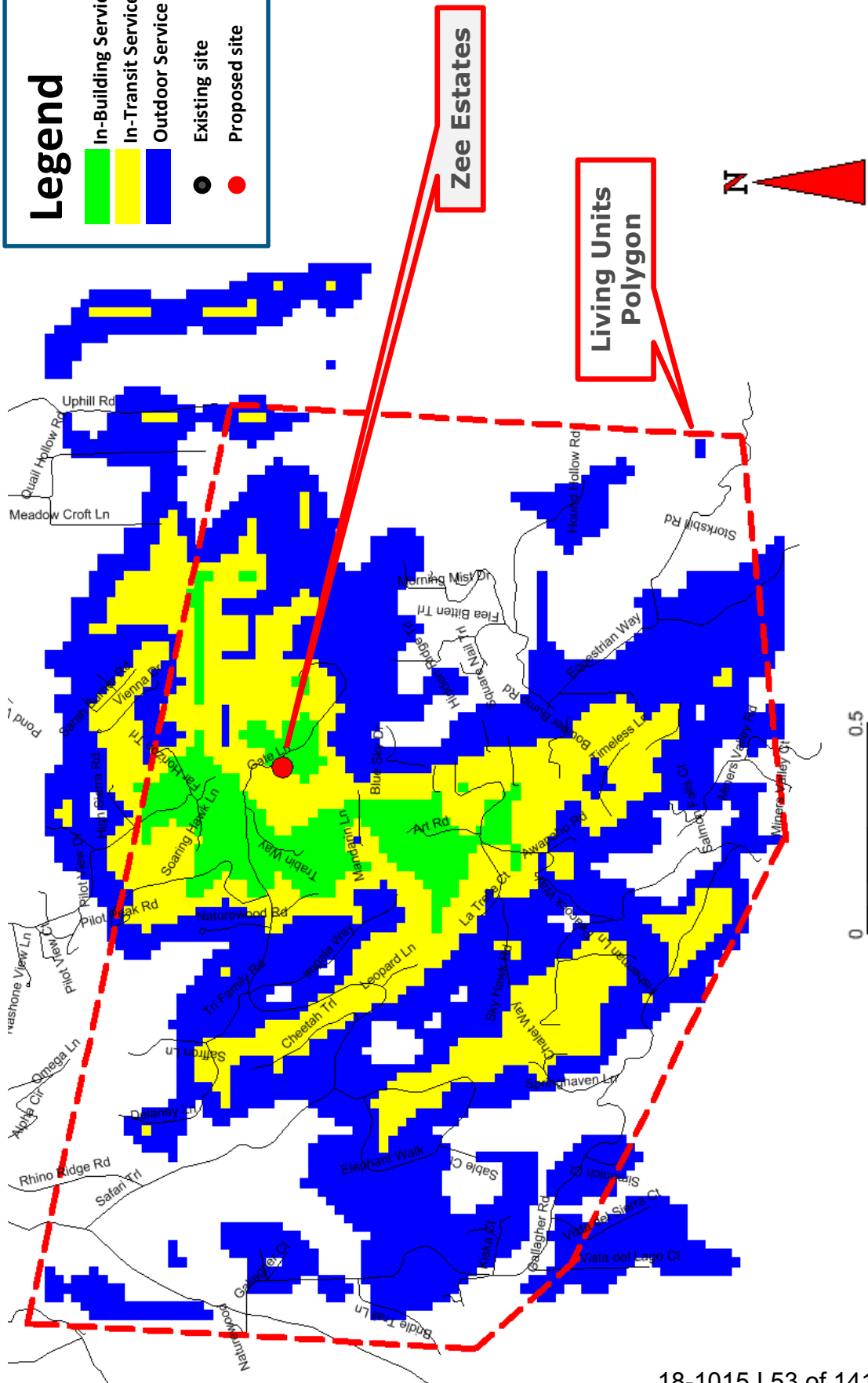
June 13, 2017



# PROPOSED LTE 700 Coverage (RC = 150')

## Legend

- In-Building Service
- In-Transit Service
- Outdoor Service
- Existing site
- Proposed site



June 13, 2017

Scale: 1:22,650





## Radio Frequency Emissions Compliance Report For AT&T Mobility

<b>Site Name:</b>	Zee Estates	<b>Site Structure Type:</b>	Monopine
<b>Address:</b>	Gate Lane 1,000' South East of the intersection of Gate Lane and Salmon Falls Road Pilot Hill, CA	<b>Latitude:</b>	38.810023
<b>Report Date:</b>	July 17, 2017	<b>Longitude:</b>	-121.020325
		<b>Project:</b>	New Build

### General Summary

AT&T Mobility has contracted Waterford Consultants, LLC to conduct a Radio Frequency Electromagnetic Compliance assessment of the proposed Zee Estates site located at Gate Lane 1,000' South East of the intersection of Gate Lane and Salmon Falls Road, Pilot Hill, CA. This report contains information about the radio telecommunications equipment to be installed at this site and the surrounding environment with regard to RF Hazard compliance. This assessment is based on installation designs and operational parameters provided by AT&T Mobility.

The compliance framework is derived from the Federal Communications Commission (FCC) Rules and Regulations for preventing human exposure in excess of the applicable Maximum Permissible Exposure (“MPE”) limits. At any location at this site, the power density resulting from each transmitter may be expressed as a percentage of the frequency-specific limits and added to determine if 100% of the exposure limit has been exceeded. The FCC Rules define two tiers of permissible exposure differentiated by the situation in which the exposure takes place and/or the status of the individuals who are subject to exposure. General Population / Uncontrolled exposure limits apply to those situations in which persons may not be aware of the presence of electromagnetic energy, where exposure is not employment-related, or where persons cannot exercise control over their exposure. Occupational / Controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment, have been made fully aware of the potential for exposure, and can exercise control over their exposure.

Frequency (MHz)	Limits for General Population/ Uncontrolled Exposure		Limits for Occupational/ Controlled Exposure	
	Power Density (mW/cm <sup>2</sup> )	Averaging Time (minutes)	Power Density (mW/cm <sup>2</sup> )	Averaging Time (minutes)
30-300	0.2	30	1	6
300-1500	f/1500	30	f/300	6
1500-100,000	1.0	30	5.0	6

f=Frequency (MHz)

In situations where the predicted MPE exceeds the General Population threshold in an accessible area as a result of emissions from multiple transmitters, FCC licensees that contribute greater than 5% of the aggregate MPE share responsibility for mitigation.

Based on the computational guidelines set forth in FCC OET Bulletin 65, Waterford Consultants, LLC has developed software to predict the overall Maximum Permissible Exposure possible at any particular location given the spatial orientation and operating parameters of multiple RF sources. These theoretical results represent worst-case predictions as emitters are assumed to be operating at 100% duty cycle.

For any area in excess of 100% General Population MPE, access controls with appropriate RF alerting signage must be put in place and maintained to restrict access to authorized personnel. Signage must be posted to be visible upon approach from any direction to provide notification of potential conditions within these areas. Subject to other site security requirements, occupational personnel should be trained in RF safety and equipped with personal protective equipment (e.g. RF personal monitor) designed for safe work in the vicinity of RF emitters. Controls such as physical barriers to entry imposed by locked doors, hatches and ladders or other access control mechanisms may be supplemented by alarms that alert the individual and notify site management of a breach in access control. Waterford Consultants, LLC recommends that any work activity in these designated areas or in front of any transmitting antennas be coordinated with all wireless tenants.

## **Analysis**

AT&T Mobility proposes the following installation at this location:

- Install twelve (12) new panel antennas
- Install six (6) new RRUS-11, three (3) RRUS-12, twelve (12) RRUS-32

The antennas will be mounted on a 160-foot Monopine with centerlines at 150 and 140 feet above ground level. The antennas will be oriented toward 90, 330 and 210 degrees. The Effective Radiated Power (ERP) in any direction from all AT&T Mobility operations will not exceed 26,556 Watts. Other appurtenances such as RRUs and hybrid cable are not sources of RF emissions. From this site, AT&T Mobility will enhance voice and data services to surrounding areas in licensed 700, 850, 1900, 2100 and 2300 MHz bands. No other antennas are known to be operating in the vicinity of this site.

Power density decreases significantly with distance from any antenna. The panel-type antennas to be employed at this site are highly directional by design and the orientation in azimuth and mounting elevation, as documented, serve to reduce the potential to exceed MPE limits at any location other than directly in front of the antennas. For accessible areas at ground level, the maximum predicted power density level resulting from all AT&T Mobility operations is 0.4105% of the FCC General Population limits (0.0821% of the FCC Occupational limits). Incident at adjacent buildings depicted in Figure 1, the maximum predicted power density level resulting from all AT&T Mobility operations is 0.7055% of the FCC General Population limits (0.1411% of the FCC Occupational limits). The proposed operation will not expose members of the General Public to hazardous levels of RF energy and will not contribute to existing cumulative MPE levels on walkable surfaces at ground or at adjacent buildings by 5% of the General Population limits.

Waterford Consultants, LLC recommends posting contact information signage at the gate that informs personnel entering the site of basic precautions to be followed when working around antennas. RF alerting signage (Caution) should be posted at the base of the proposed Monopine to inform authorized climbers of potential conditions near the antennas. These recommendations are depicted in Figure 2.



Figure 1: Antenna Locations

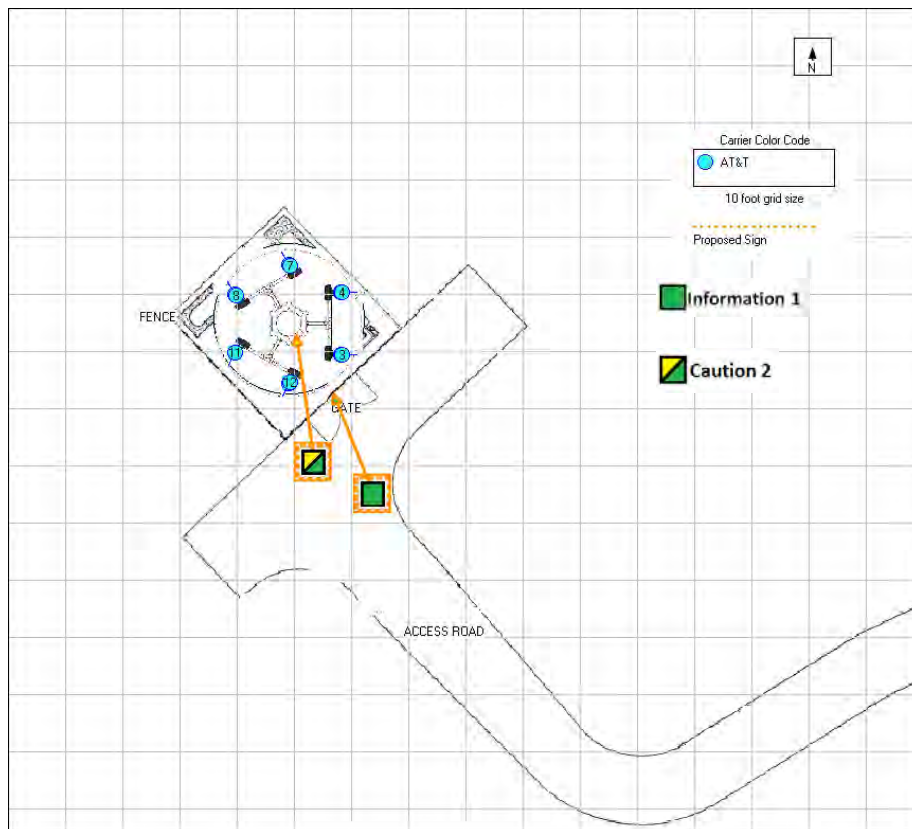


Figure 2: Mitigation Recommendations



### Compliance Statement

Based on information provided by AT&T Mobility and predictive modeling, the installation proposed by AT&T Mobility at Gate Lane 1,000' South East of the intersection of Gate Lane and Salmon Falls Road, Pilot Hill, CA will be compliant with Radiofrequency Radiation Exposure Limits of 47 C.F.R. § 1.1307(b)(3) and 1.1310. RF alerting signage and restricting access to the Monopine to authorized climbers that have completed RF safety training is required for Occupational environment compliance.

### Certification

I, David H. Kiser, am the reviewer and approver of this report and am fully aware of and familiar with the Rules and Regulations of both the Federal Communications Commissions (FCC) and the Occupational Safety and Health Administration (OSHA) with regard to Human Exposure to Radio Frequency Radiation, specifically in accordance with FCC's OET Bulletin 65. I have reviewed this Radio Frequency Exposure Assessment report and believe it to be both true and accurate to the best of my knowledge.





**Marvair DC Free Air HVAC Unit  
with 48 VDC Evaporator Fan Motor, 100%  
Free Cooling and CoolLinks™ Controller**

**Models ASDCA36-42-48-60-72**

**PRELIMINARY**

## General Description

The Marvair® ComPac® II air conditioners are designed to cool telecommunications shelters where the high internal heat load requires year round cooling-even when ambient temperatures are below 60°F (15°C). To provide cooling during a wide range of ambient conditions, the ASDCA air conditioners have the necessary controls and components for year round cooling. The unit uses the non-ozone depleting R-410A refrigerant.

### DC power provides emergency cooling/ventilation

Should there be loss of power to the site, the Marvair DC Free Air unit will continue to cool/ventilate the site by utilizing DC power to introduce outside air into the shelter for free cooling. The DC Free Air unit will continue to ventilate the site and extend the run time of the equipment until battery power is exhausted or, at the minimum, owner specified pull down of battery drain.



**ASDCA36**

The ASDCA models operate on both AC and DC power. The compressor, condenser fan motor and electric heat operate on AC power, but the evaporator motors, the 100% free cooling economizer damper and the internal control board operate on DC power – an inverter is **not** required. Since these key components are all powered by 48 VDC – the same 48 VDC power used by the shelter's radios- they are always operational.

The 48 VDC power supply connects to an internal DC breaker. From this breaker, power is supplied to the DC indoor blower and control board. A 48 VDC to 24 VDC converter powers the 100% DC free cooling damper.

### Free Cooling with the Marvair 100% Full flow Economizer

When the outside air is cool and dry, the economizer damper opens and draws in filtered, outside air to cool the shelter. The Marvair 100% full flow economizer means the same CFM of outside air is brought into the shelter as the rated air flow of the unit. The innovative design of the full flow economizer assembly also allows outside air to exit the building – pressure relief- when the full flow economizer is operating. This design eliminates the need for additional, costly penetrations in the shelter.

Free cooling provides temperature control, energy savings, and increased reliability by decreasing the operating hours of the compressor and the condenser fan. To insure proper operation and optimum performance, all economizers are non-removable, factory installed and tested.

## CoolLinks™ PLC controller

The Siemens PLC-based CoolLinks controller sequences the operation of the two Marvair ComPac II units to ensure the most energy-efficient conditioning of the shelter space and the most balanced use of the conditioning equipment. The CoolLinks system determines the need to cool or heat the shelter based on an indoor temperature sensor and outside temperature/humidity sensor connected directly to the controller. When cooling or heating is required, the controller selects the unit that was not running in the previous cooling/heating cycle. This lead/lag operation ensures that each unit receives equal runtime and therefore extends the operating life of the units. In the event that one of the units is unavailable, for example, scheduled maintenance, the system will automatically select the active unit. Similarly, if the internal shelter temperature continues to rise/fall, the system will run both units.

For cooling requests, the CoolLinks controller first examines the external shelter conditions to establish whether DC Free Cooling is possible. If acceptable, the 100% full flow economizer damper on the lead unit is opened to 100%. The damper then modulates its position, regulated by the controller, to cool the shelter to the target set point. During extreme cold outdoor temperatures this prevents “shocking” the equipment in the shelter.

If DC Free Cooling is active on one unit and the internal temperature continues to rise, DC Free Cooling will then be activated on the second unit. Should the temperature continue to rise, the DC Free Cooling will be disabled on both units, both economizer dampers will be closed, and mechanical cooling activated on the lead unit. The control scheme allows the CoolLinks controller to make as efficient use of the external air as possible to minimize HVAC power consumption.

The CoolLinks controller communicates with the Marvair air conditioners over Ethernet. Should communications between the controller and one of the units fail, the unit will continue to run in stand-alone mode and cool to a mixed-air set point of 55°F (12.8°C). Whenever communications are restored, the CoolLinks controller will assume control of the air conditioner. An Ethernet connection is also provided for a SNMP interface through which the Network Operations Center can receive traps (alarms), monitor/change cooling and heating set points, and monitor HVAC unit and system operational parameters.

## Air Conditioner Alarms and Lockouts

Each air conditioner is monitored over Ethernet and if a problem is detected, an alarm is generated. The alarm is displayed on the CoolLinks PLC in the shelter **and** sent via SNMP trap to the network operations center.

- High Pressure Alarm – the refrigerant pressure has exceeded the set point pressure *once* in a cooling cycle. The air conditioner will continue to operate, but notification is sent that there is a high pressure fault.
- High Pressure Lockout Alarm - the refrigerant pressure has exceeded the set point pressure *twice* in a cooling cycle. The air conditioner will shut down and notification will be sent that there is a high pressure lockout.
- Low Pressure Alarm – the refrigerant pressure has dropped below the set point pressure *once* in a cooling cycle. The air conditioner will continue to operate, but notification is sent that there is a low pressure fault.
- Low Pressure Lockout Alarm - the refrigerant pressure has dropped below the set point pressure *twice* in a cooling cycle. The air conditioner will shut down and notification will be sent that there is a low pressure lockout.
- Damper Alarm – if the 100% full flow damper does not open when required, an alarm notification is sent that the damper is not open.
- Dirty Filter Alarm – a switch monitors the pressure on either side of the filter. If the differential pressure exceeds the set point pressure, an alarm notification is sent that there is not sufficient air flow through the filter.
- Communications Alarm – a signal is sent if there is a loss of communication between the air conditioner and the CoolLinks controller.

## Shelter & System Alarms

- In addition to the HVAC alarms, the CoolLinks controller also provides Shelter and System alarms. The alarm is displayed on the CoolLinks PLC in the shelter **and** also sent via SNMP trap to the network operations center.
- First Stage High Temperature Alarm – Inside temperature above 85°F (29.4°C).
- Second Stage High Temperature Alarm – Inside temperature above 90°F (32.2°C).
- Low Temperature Alarm - Inside temperature is below 45°F (7.2°C).
- Landline Power Alarm – A loss of landline power.
- Smoke Alarm - If the smoke sensor input to the CoolLinks system is active, the Compressor, Heater, and Indoor Blower Motor on both HVAC units will be shut down and the damper will closed completely. This will stop air flow within the shelter.
- Hydrogen Detector Alarm- If the hydrogen sensor input to the CoolLinks system is active, the damper(s) on units that are not currently in mechanically cooling will be fully opened and the Indoor Blower Motor(s) will be turned on. This will expel noxious gases and introduce outside air into the shelter. If one unit is in mechanical cooling, it will continue to run. The other air conditioner will turn on and operate in the emergency ventilation mode.
- Generator Operation Alarm - If the generator running input to the CoolLinks system is active, only one HVAC unit will be permitted to run in mechanical cooling. As the generator is typically sized to run only one HVAC unit, this ensures that the generator load is not exceeded.

## Remote Access Data Points

Through the Ethernet connection, the network operations center can monitor and change various data points in the HVAC system and the shelter.

Data Points which can be monitored **and** changed:

- First Stage Cooling Set Point Temperature
- Second Stage Cooling Set Point Differential Temperature
- First Stage Heating Set Point Temperature
- Second Stage Heating Set Point Differential Temperature

Data points which can only be monitored:

- Inside Temperature - Current
- Outside Temperature - Current
- Outside Humidity - Current
- Dew point - Current
  
- Inside Temperature - Average Last Hour
- Outside Temperature - Average Last Hour
- Outside Humidity - Average Last Hour
- Dew point - Average Last Hour
  
- Unit 1 & Unit 2 Mechanical Cooling Time - Last Hour
- Unit 1 & Unit 2 Mechanical Cooling Requests - Last Hour
- Unit 1 & Unit 2 DC Free Air Cooling Time - Last Hour
- Unit 1 & Unit 2 DC Free Air Cooling Requests - Last Hour
- Unit 1 & Unit 2 Heating Time - Last Hour
- Unit 1 & Unit 2 Heating Requests - Last Hour

## Standard Features

### Designed for Operation in Low Ambient Conditions

- **Low ambient control cycles** condenser fan to maintain proper refrigerant pressures. Allows operation in mechanical cooling (compressor) down to 0°F (-18°C). Note: low temperature operation is affected by ambient conditions, e.g. wind and humidity.
- **Three minute by-pass of the low pressure switch** for start-up of compressor when outdoor temperatures are below 55°F (13°C).
- **Factory built-in economizer.**

### High Efficiency

- **High efficiency compressor.**
- **Lanced fins standard on all evaporator and condenser coils.**

### Built-in Reliability

- **High pressure switch and low pressure switch with lockout** protects refrigerant circuit.
- **Adjustable .03 to ten minute delay on make for short cycle protection.**

### Ease of Installation

- **Sloped top with flashing** eliminates need of rain hood.
- **Built-in mounting flanges** facilitate installation and minimize chance of water leaks.
- **Supply and return openings** exactly match previous models.
- **Factory installed disconnect** on all units.
- **Single Point Power Entry** complies with latest edition of U.L. Standard 1995.

### Rugged Construction

- **Copper tube, aluminum fin** evaporator & condenser coils.
- **Field or factory installed heaters** on discharge side of evaporator coil (optional)
- **Baked on neutral beige finish** over galvanneal steel for maximum cabinet life. (Other finishes are available.)

### Ease of Service

- **Service access valves** are standard.
- **Standard 2" (50 mm) pleated filter** with a MERV rating of 8 changeable from outside.
- **All major components** are readily accessible.
- **Front Control Panel** allows easy access and complies with NEC clearance codes on redundant side-by-side systems.
- **LEDs indicate operational status** and fault conditions.
- **Foiled backed insulation** on the indoor air path.
- **A minimum position potentiometer that can be adjusted to prevent the economizer damper from closing completely.** This control ensures that whenever the evaporator fan is operating, fresh air is being introduced into the building.

Kim: are these statements valid?

## Grilles

### For ASDCA36

Supply Grille:  
28" x 8" (711mm x 203mm)..... P/N 80675

Return Grille:  
20" x 12" (508mm x 356mm)..... P/N 80678

### For ASDCA42-48-60-72

Supply Grille:  
30" x 10" (762mm x 254mm)..... P/N 80676

Return Grille:  
30" x 16" (762mm x 406mm)..... P/N 80679

## Factory Installed Accessories

**Phase Monitor** - Monitors 3Ø power supply and will turn the air conditioner off if power supply is not phased properly. Not required on 1Ø units.

**Compressor Sound Jacket** - To reduce sound of compressor.

### Right & Left Side Compressor Configuration –

The air conditioners can be built with the compressor on the opposite side to facilitate service access when two units are installed side by side. In the 36, the standard location for the compressor is on the right hand side. In the 42-48-60, the standard location for

the compressor is on the left hand side. In the 72, the compressor is accessed from the front of the unit and an opposing configuration is not required.

**Hard Start Kit** - Used on single phase equipment to give the compressor higher starting torque under low voltage conditions. (Field installed only) (Note: Not recommended for use on scroll compressors.)

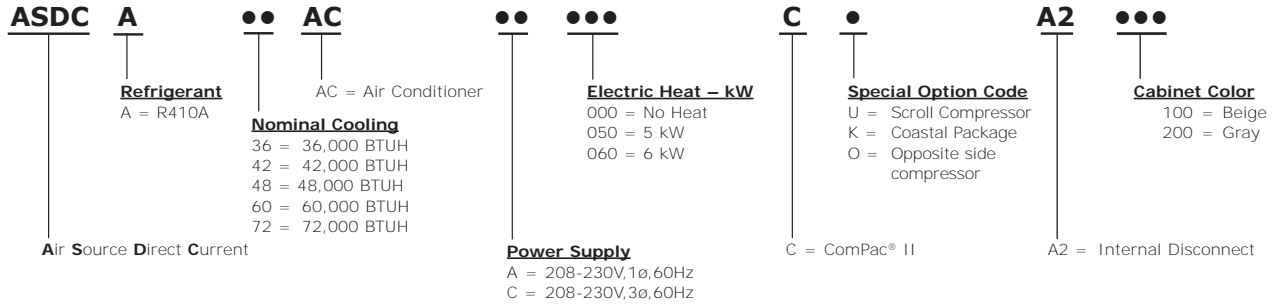
## Options

**Coastal Environment Package** – Recommended for units to be installed near an ocean or on seacoast. Includes corrosion resistant fasteners, sealed or partially sealed condenser fan motor, protective coating applied to all exposed internal copper and metal in the in the condenser section and an impregnated polyurethane on the condenser coil and fan blades. See Coastal Environmental Technical Bulletin for more details.

**Protective Coil Coatings** - Either the condenser or evaporator coil can be coated, however, coating of the evaporator coil is not common. For harsh conditions, e.g., power plants, paper mills or sites where the unit will be exposed to salt water, the coil should be coated. Note: Cooling capacity may be reduced by up to 5% on units with coated coils.

# MODEL # - ASDCA48ACA050C-A2-100-VAR

## Model Identification



## Electrical Characteristics - Compressor, Fan & Blower Motors

BASIC MODEL	COMPRESSOR			OUTDOOR FAN MOTOR				INDOOR BLOWER MOTORS				
	VOLTS / HZ / PH	RLA <sup>1</sup>	LRA <sup>2</sup>	VOLTS / HZ / PH	RPM <sup>3</sup>	FLA <sup>4</sup>	HP <sup>5</sup>	QTY	VDC <sup>6</sup>	RPM <sup>3</sup>	FLA <sup>4</sup>	HP <sup>5</sup>
ASDCA36ACA	208/230-60-1	14.7	84.0	208/230-60-1	1075	1.8	1/4	2	48	2070	4.4	1/6
ASDCA42ACA	208/230-60-1	15.7	84.0	208/230-60-1	825	2.8	1/3	2	48	1930	6.0	1/4
<b>ASDCA48ACA</b>	<b>208/230-60-1</b>	<b>18.6</b>	<b>102.0</b>	<b>208/230-60-1</b>	<b>825</b>	<b>2.8</b>	<b>1/3</b>	<b>2</b>	<b>48</b>	<b>1930</b>	<b>6.0</b>	<b>1/4</b>
ASDCA60ACA	208/230-60-1	23.0	130.0	208/230-60-1	825	2.8	1/3	2	48	1930	6.0	1/4
ASDCA72ACA	208/230-60-1	30.1	158.0	208/230-60-1	825	2.9	1/2	2	48	1930	6.0	1/4
ASDCA36ACC	208/230-60-3	13.2	88.0	208/230-60-1	1075	1.8	1/4	2	48	2070	4.4	1/6
ASDCA42ACC	208/230-60-3	13.6	83.1	208/230-60-1	825	2.8	1/3	2	48	1930	6.0	1/4
ASDCA48ACC	208/230-60-3	13.7	83.1	208/230-60-1	825	2.8	1/3	2	48	1930	6.0	1/4
ASDCA60ACC	208/230-60-3	15.6	111.0	208/230-60-1	825	2.8	1/3	2	48	1930	6.0	1/4
ASDCA72ACC	208/230-60-3	22.4	149.0	208/230-60-1	825	2.9	1/2	2	48	1930	6.0	1/4

<sup>1</sup>RLA = Rated Load Amps   <sup>2</sup>LRA = Locked Rotor Amps   <sup>3</sup>RPM = Revolutions per Minute   <sup>4</sup>FLA = Full Load Amps   <sup>5</sup>HP = Horsepower   <sup>6</sup>VDC = Volts, DC

## Summary Electrical Ratings (Wire and Circuit Breaker Sizing)

BASIC MODEL	VOLTAGE PHASE / HZ	000 = None		050 = 5 kw		060 = 6 kw	
		SPPE <sup>3</sup>		SPPE <sup>3</sup>		SPPE <sup>3</sup>	
		MCA <sup>1</sup>	MFS <sup>2</sup>	MCA <sup>1</sup>	MFS <sup>2</sup>	MCA <sup>1</sup>	MFS <sup>2</sup>
ASDCA36ACA	208/230-1-60	24.2	40	26.0	40		
ASDCA42ACA	208/230-1-60	27.6	45	27.6	45		
ASDCA48ACA	208/230-1-60	30.1	50	30.1	50		
ASDCA60ACA	208/230-1-60	35.6	60	35.6	60		
ASDCA72ACA	208/230-1-60	40.5	60	40.5	60		
ASDCA36ACC	208/230-3-60	18.3	30			18.3	30
ASDCA42ACC	208/230-3-60	19.8	30			19.8	30
ASDCA48ACC	208/230-3-60	19.9	30			19.9	30
ASDCA60ACC	208/230-3-60	22.3	35			22.3	35
ASDCA72ACC	208/230-3-60	30.9	50			30.9	50

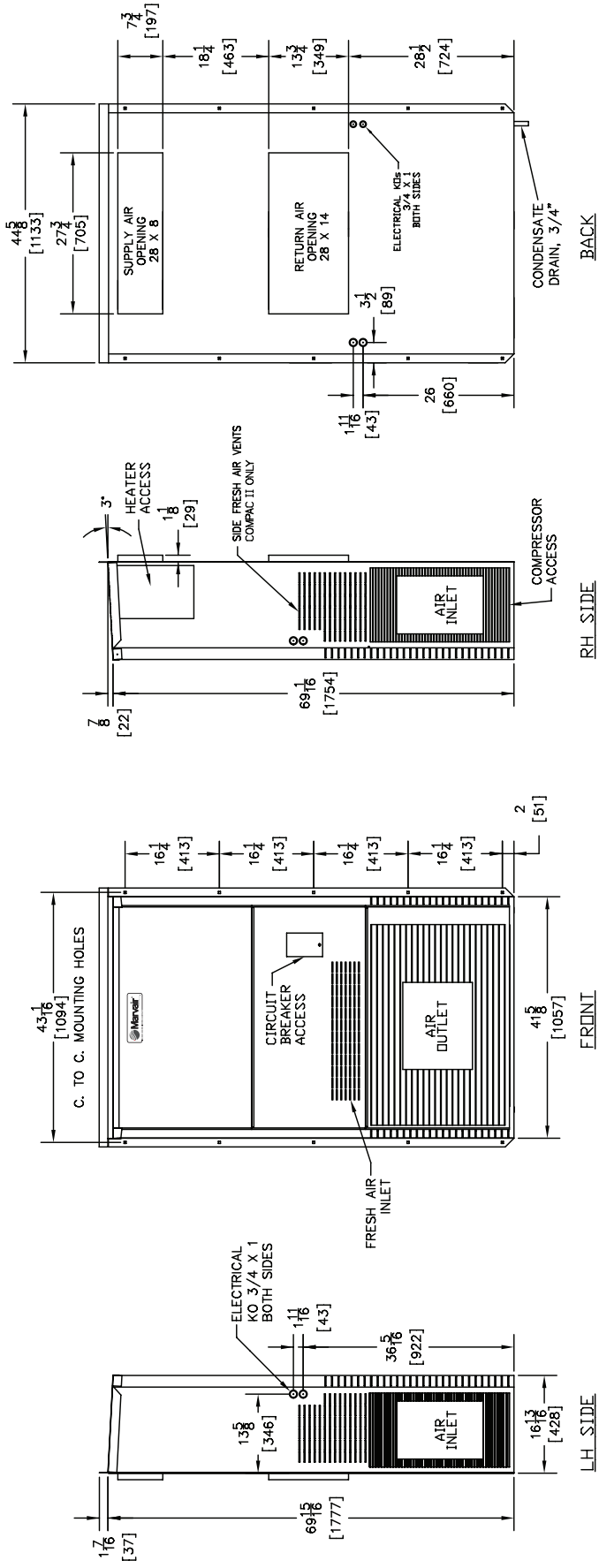
<sup>1</sup>MCA = Minimum Circuit Ampacity (Wiring Size Amps)   <sup>2</sup>MFS = Maximum Fuse Size   <sup>3</sup>SPPE = Single Point Power Entry  
MCA & MFS are calculated at 230 volts on the ACA & ACC models. This chart should only be used as a guideline for estimating conductor size and overcurrent protection. For the requirements of specific units, always refer to the data label on the unit.

## Unit Load Amps

BASIC MODEL NUMBER	VOLTAGE PHASE / HZ	CURRENT LOAD (MOTORS)		LOAD OF RESISTIVE HEATING - ELEMENTS ONLY (AMPS)	
		Compressor & Outdoor Fan	Indoor Blower	TOTAL MAXIMUM HEATING AMPS (VAC)	
				ALL HEATING ELEMENTS ARE ON A SEPARATE CIRCUIT	
VAC Amps	DC Amps	05 kW	06 kW		
ASDCA36ACA	208/230-1-60	19.7	8.8	20.8	
ASDCA42ACA	208/230-1-60	22.6	12.0	20.8	
ASDCA48ACA	208/230-1-60	24.6	12.0	20.8	
ASDCA60ACA	208/230-1-60	29.0	12.0	20.8	
ASDCA72ACA	208/230-1-60	33.0	12.0	20.8	
ASDCA36ACC	208/230-3-60	15.0	8.8		14.4
ASDCA42ACC	208/230-3-60	16.4	12.0		14.4
ASDCA48ACC	208/230-3-60	16.5	12.0		14.4
ASDCA60ACC	208/230-3-60	18.4	12.0		14.4
ASDCA72ACC	208/230-3-60	25.3	12.0		14.4

Heating kW is rated at 240 volts   Total heating and cooling amps includes all VAC motors.  
Loads are not equally balanced on each phase and values shown are maximum phase loads.   Three phase models contain single phase motor loads.  
Derate heater output by 25% for operation at 208 volts.

# Dimensional Data - ASDCA36



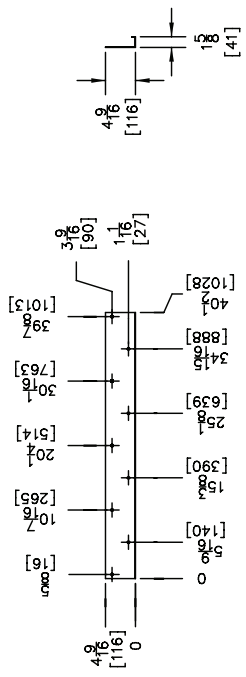
## Shipping Weight (pounds/kilograms)

ASDCA36	LBS/KGS	410/186.4
COMPAC II		

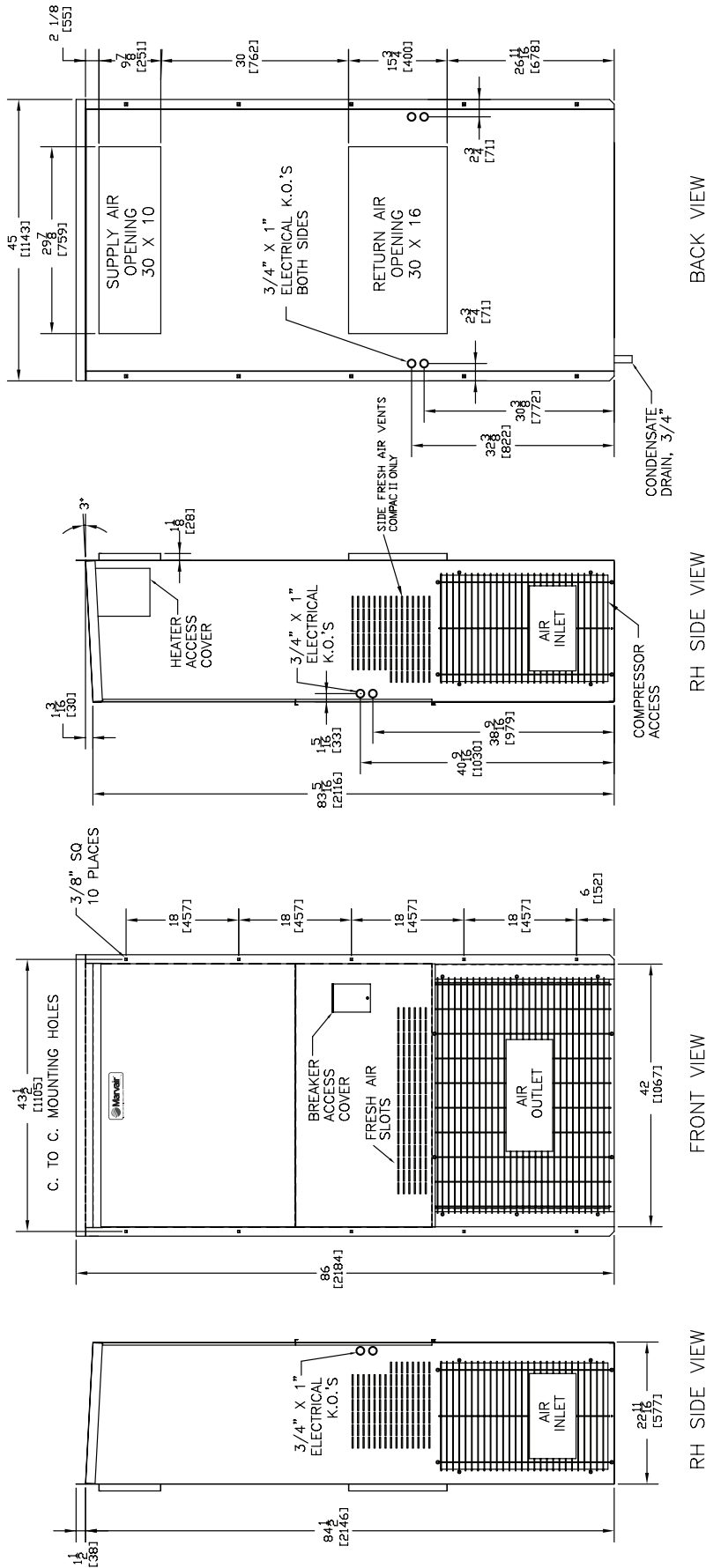
## Filter Size

ASDCA36	INCHES	MILLIMETERS	PART NUMBER	FILTERS PER UNIT	MERV RATING
RETURN AIR FILTER	30 x 16 x 2	762 x 406 x 51	92486	1	8

## BOTTOM MOUNTING BRACKET



# Dimensional Data - ASDCA42-48-60

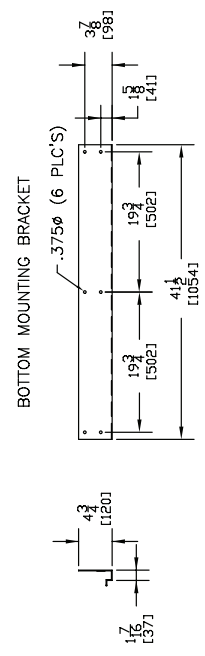


## Shipping Weight (pounds/kilograms)

ASDCA42-48-60	LBS/KGS
COMPAC II	590/268

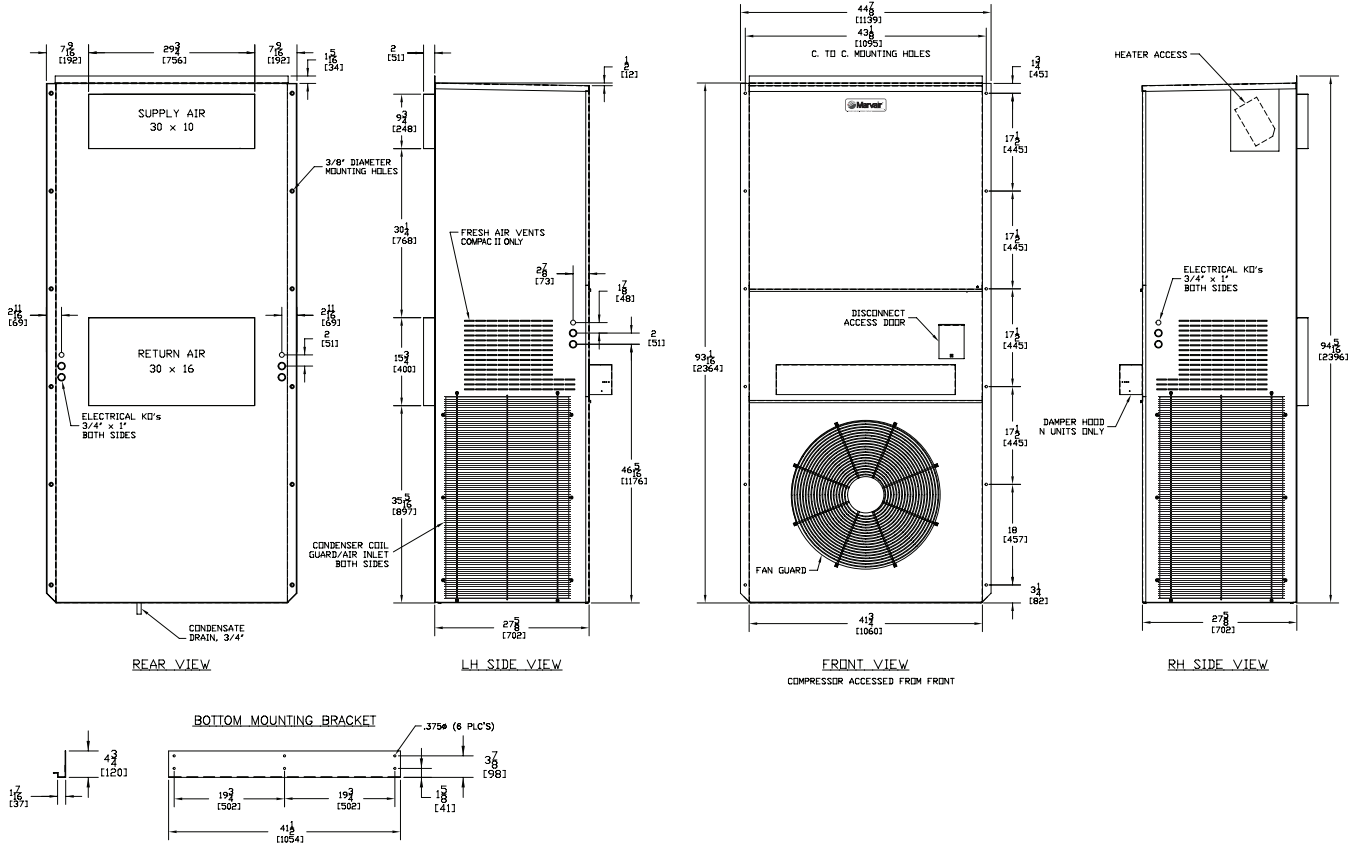
## Filter Size

ASDCA42-48-60	INCHES	MILLIMETERS	PART NUMBER	FILTERS PER UNIT	MERV RATING
RETURN AIR FILTER	36 1/2 x 22 x 2	927 x 559 x 51	80162	1	8





## Dimensional Data - ASDCA72



## Shipping Weight (pounds/kilograms)

ASDCA72	LBS/KGS
COMPAC II	640/291

## Filter Size

ASDCA72	INCHES	MILLIMETERS	PART NUMBER	FILTERS PER UNIT	MERV RATING
RETURN AIR FILTER	18 x 24 x 2	457 x 610 x 51	TBD	2	8



Please consult the Marvair® website at [www.marvair.com](http://www.marvair.com) for the latest product literature. Detailed dimensional data is available upon request. A complete warranty statement can be found in each product's Installation/Operation Manual, on our website or by contacting Marvair at 229-273-3636. As part of the Marvair continuous improvement program, specifications are subject to change without notice.



P.O. Box 400 • Cordele, GA 31010  
 156 Seedling Drive • Cordele, GA 31015  
 Ph: 229-273-3636 • Fax: 229-273-5154  
 Email: [marvair@airxcel.com](mailto:marvair@airxcel.com) • Internet: [www.marvair.com](http://www.marvair.com)

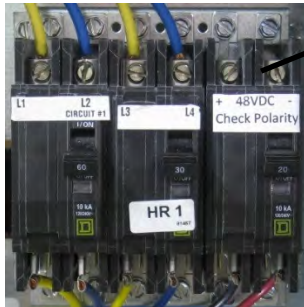
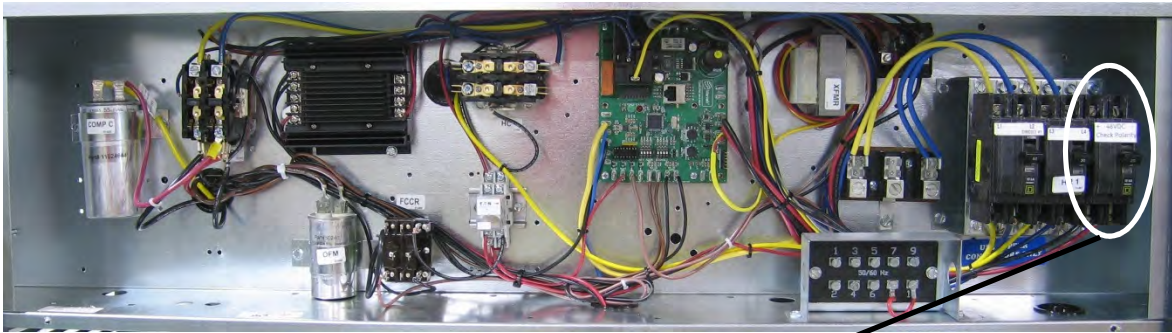


## **Supplement to the ComPac Product Manual for the ASDC air conditioners**

This supplement to the ComPac Product Manual describes the 48 VDC wiring, the connection of the Ethernet cable (page 2) and the CoolLinks™ Operator Interface Instructions (page 3) for the ASDCA air conditioners. These air conditioners require a 48 Volt DC power to operate the evaporator air movers and the free cooling damper motor.

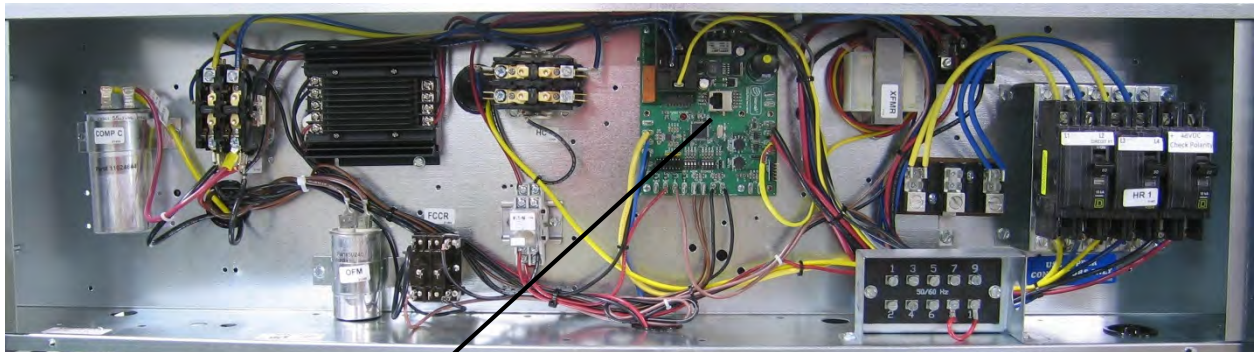
### **48 VDC wiring**

1. If the air conditioners are powered, remove AC **and** DC power to the air conditioners by switching the breakers **in the shelter** to the OFF position.
2. Size a 2 conductor wire cable per NEC standard taking into account the ampacity of the DC circuit listed on the rating plate and the location of the power supply. Connect the properly sized cable between a DC breaker in the shelter and the DC breaker in the air conditioner. The DC breaker in the air conditioner is located on the right side of the bank of breakers.
3. Turn on the DC breaker in the shelter.
4. Verify the polarity and the voltage to make sure the polarity is correct and that there is 48 VDC at the breaker in the air conditioner. If the polarity is not correct, switch the wires.
5. Turn on the DC breaker in the air conditioner.  
(See photos on following page.)



## Connection of PLC controller board in shelter to CoolLinks™ board in the air conditioner

Route a standard Cat 5e Ethernet cable from the PC board in the air conditioner to the PLC controller in the shelter. If the cable is routed through the air stream, it must be plenum rated. When the PLC is configured, the air conditioners will be designated as AC #1 and AC#2.



CoolLinks Ethernet jack



## Operator Interface Instructions

### System Status

The main screen displays the status of the Marvair CoolLinks system and the two Marvair HVAC units. Standing inside the shelter facing the HVAC return air vents, unit 1 is the left-hand unit and unit 2 is the right-hand unit. The fields on the status screen are as follows:

Indoor Temperature:	Indoor temperature from the temperature sensor mounted on the wall between the HVAC return air grilles. This sensor controls the enabling/disabling of the cooling/heating.
IBM Pushbutton:	Indicates the status of the Indoor Blower Motor (IBM) as Running or Stopped. If the blower motor is not under automatic control, pressing the pushbutton will turn the motor on and off. Press once to turn on and press again to turn off. The motor is under automatic control whenever the HVAC unit is the lead unit, during cooling post-purge, free-air operation, and emergency ventilation.
Unit Status Panel:	Indicates the status of the HVAC unit as follows: <ul style="list-style-type: none"><li>• Lead Yes: unit is lead unit, No: unit is lag unit</li><li>• Cool Yes: unit is cooling, No: unit is not cooling</li><li>• Heat Yes: unit is heating, No: unit is not heating</li><li>• Filter Ok: filter is good, Maint: filter is blocked</li><li>• Comm Yes: PLC comms active, No: PLC comms fault</li></ul>
Lead Swap Pushbutton:	Swap the lead and lag unit. Note that if the lag unit is in lockout or has a comms fault, the system will not swap. If the lead unit experiences a lockout or



comms failure, the system will automatically swap to the lag unit.

**Comfort Mode Pushbutton:** Drop the first-stage cooling set point to 75°F to allow a service technician to work comfortably inside the shelter. After one hour the set point will return to its previous value. Comfort mode is also cancelled if the technician enters a new first-stage cooling set point.

**Reset Lockout Pushbutton:** Resets the lockout condition on whichever unit is in lockout. Note that a call for cooling must be active before the lockout can be reset.

**Outdoor Air:** Outside air temperature (°F).

**Humidity:** Outside air relative humidity (%).

**Dew Point:** Dew point temperature (°F). When the calculated dew point (based on outside air temperature and relative humidity) is below the maximum dew point temperature and the free-air enable temperature, and the outside air temperature is below the indoor air temperature, then enable free-air cooling.

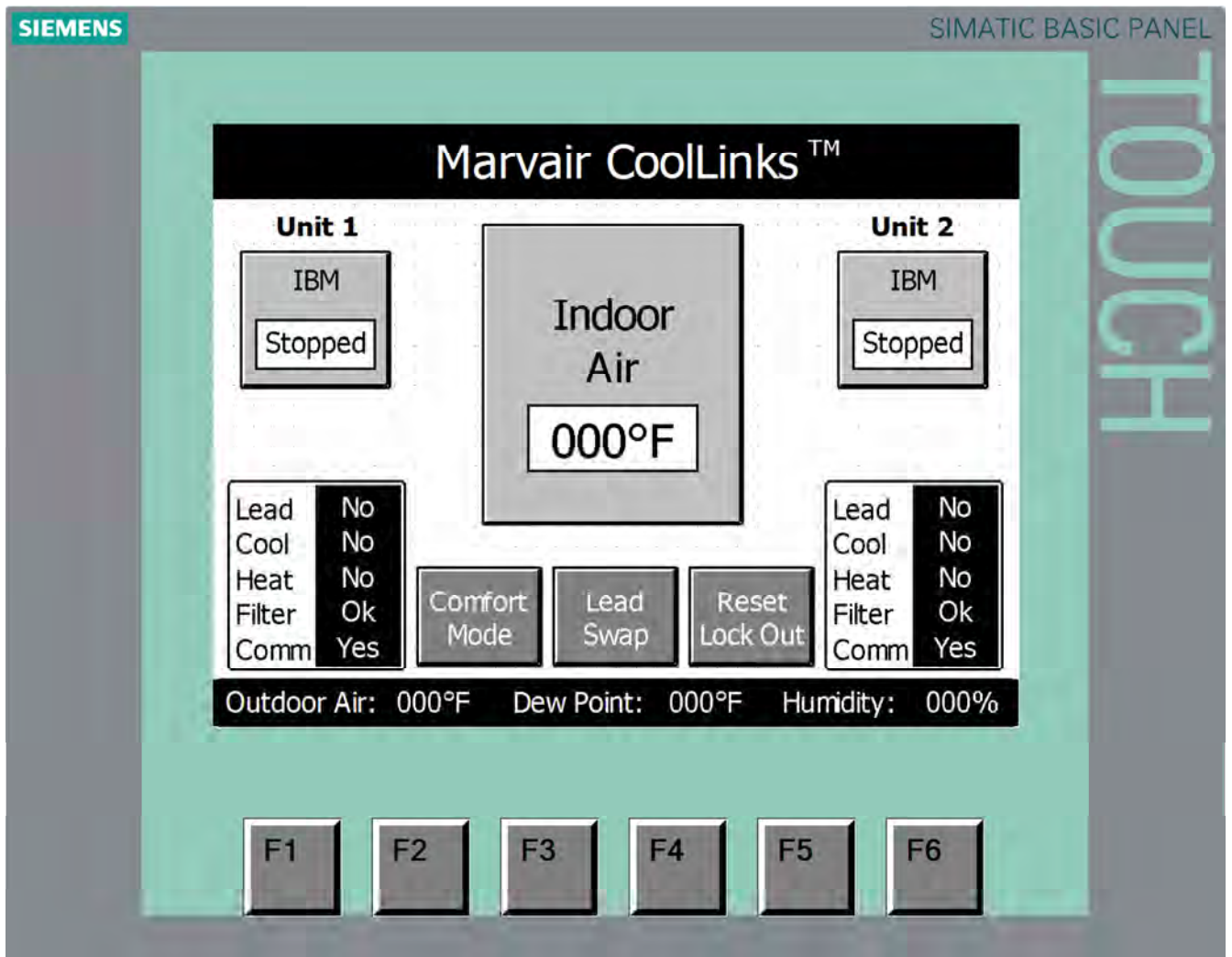
**Alarm Message:** Active unit alarms are displayed in the alarm message window between the IBM (Indoor blower Motor) pushbutton and the unit status panel. If multiple alarms are present the system scrolls through the active alarms with each alarm displayed for five seconds. If no alarms are present, the message window is blank. Thirteen possible alarm messages may be displayed:

- High Pressure Switch Alarm
- Low Pressure Switch Alarm
- High Pressure Switch Lockout Alarm
- Low Pressure Switch Lockout Alarm
- 1<sup>st</sup> High Indoor Temperature Alarm (> 85°F)



- 2<sup>nd</sup> High Indoor Temperature Alarm (> 90°F)
- Low Indoor Temperature Alarm (< 45°F)
- Landline Power Alarm
- Damper Alarm
- Smoke Alarm
- Generator Running
- Hydrogen Alarm
- Communications Alarm

The main screen with each of the operator/display fields is presented below. Note that the six function keys at the bottom of the screen are not currently assigned and have no effect on the operation of the Marvair CoolLinks system.





## Changing Set Points

Set points control the cooling and heating operation of the Marvair CoolLinks system. Basically, there are two groups of set points, cooling first and second stage set points, and heating first and second stage set points. The minimum set point for cooling is 50°F and the maximum set point for heating is 90°F. To access these set points, simply touch the top or bottom of the Indoor Temperature display. This will then enable the set point control panel. If a new set point value is not entered within ten seconds, the display will revert back to the Indoor Temperature display. From the set point control panel, alter the set points as follows:

### *Cooling First Stage:*

Press the Cooling push-button then press the 1st Stage push-button. Both push buttons will turn dark gray with white text and the current cooling first-stage set point value will be displayed. Next, press the set point value to display the numeric entry screen and enter the desired set point. The system will now enable cooling whenever the indoor temperature is 1° F above the set point and disable cooling when the indoor temperature drops to 2° F below the set point.

### *Cooling Second Stage:*

Press the Cooling push-button then press the 2<sup>nd</sup> Stage push-button. Both push buttons will turn dark gray with white text and the current cooling second-stage set point value will be displayed. Next, press the set point value to display the numeric entry screen and enter the differential set point. The system will now enable second-stage cooling whenever the indoor temperature is 1° F higher than the first-stage cooling set point plus the second stage cooling differential and disable second-stage cooling when the indoor temperature drops to 2° F below the first-stage set point. It is strongly recommend that the second-stage cooling differential be set to a minimum of 5° F to allow the first-stage cooling time to operate fully and to prevent short-cycling of the second unit.



*Cooling Example:*

First-Stage Set Point: 78°F

Second-Stage Differential: 5°F

First-stage cooling will start when the indoor temperature reaches 79°F (set point + 1°F) and will stop when the indoor temperature reaches 76°F (set point – 2°F).

Second-stage cooling will start when the indoor temperature reaches 84°F (set point + 1°F + 5°F) and will stop when the indoor temperature reaches 76°F (set point – 2°F).

Note that once first-stage cooling is enabled, the unit will run for at least **five minutes** even if the indoor temperature reaches the disable temperature. This is to prevent short-cycling of the unit and to allow the compressor sufficient time to remove moisture from the air as well cool the shelter.

*Heating First Stage:*

Press the Heating push-button then press the 1<sup>st</sup> Stage push-button. Both push buttons will turn dark gray with white text and the current heating first-stage set point value will be displayed. Next, press the set point value to display the numeric entry screen and enter the desired set point. The system will now enable heating whenever the indoor temperature is 1°F below the set point and disable heating when the indoor temperature rises to 1° F above the set point.

*Heating Second Stage:*

Press the Heating push-button then press the 2<sup>nd</sup> Stage push-button. Both push buttons will turn dark gray with white text and the current heating second-stage set point value will be displayed. Next, press the set point value to display the numeric entry screen and enter the differential set point. The system will now enable second-stage heating whenever the indoor temperature is 1° F lower than the first-stage heating set point minus the second stage heating differential and disable second-stage heating when the indoor temperature rises to 1° F above the first-stage set point. It is strongly recommend that the second-stage heating differential be set to a minimum of





two degrees F to allow the first-stage heating time to operate fully and to prevent short-cycling of the second unit.

*Heating Example:*

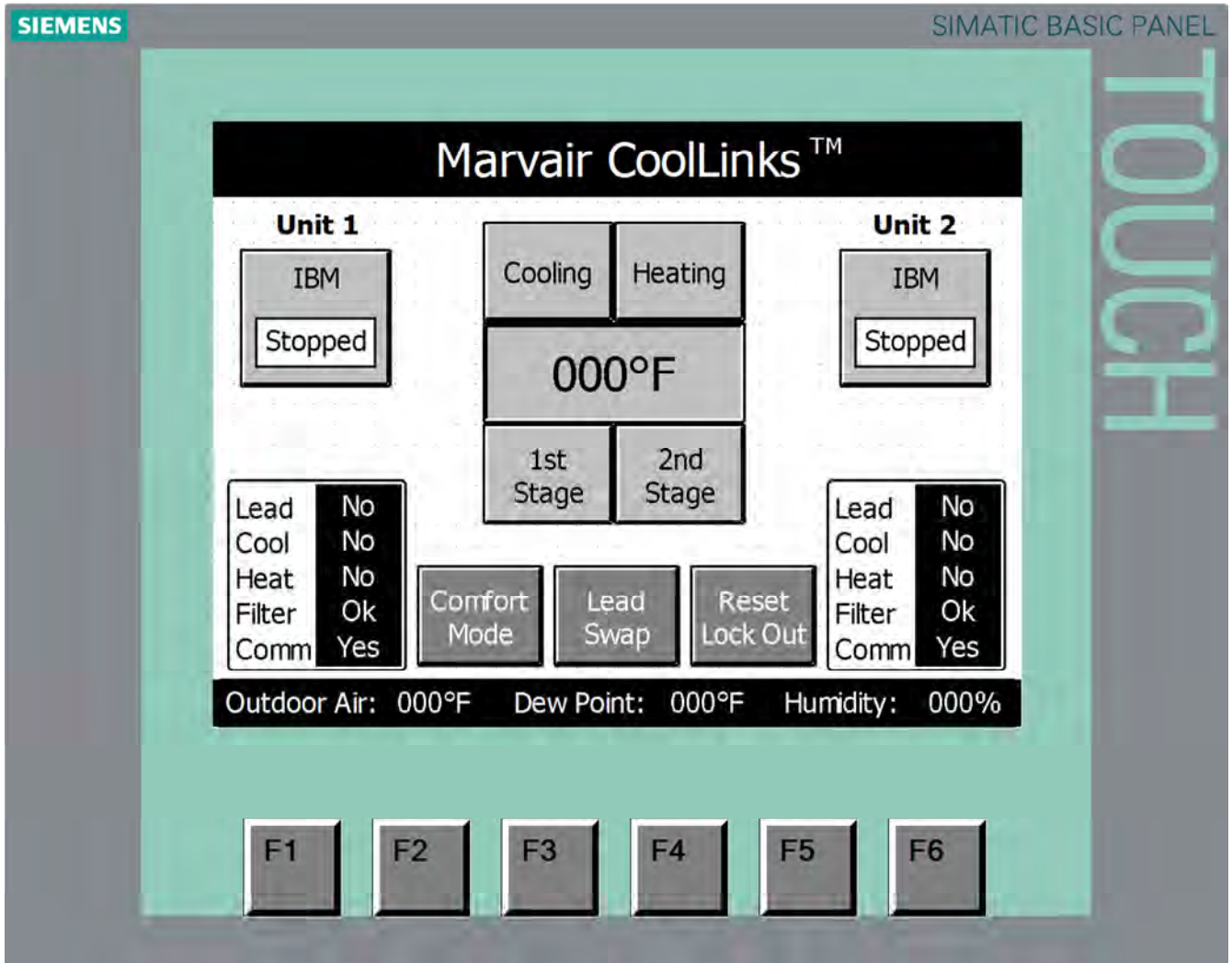
First-Stage Set Point: 60°F

Second-Stage Differential: 2°F

First-stage heating will start when the indoor temperature reaches 59°F (set point – 1°F) and will stop when the indoor temperature reaches 61°F (set point + 1°F).

Second-stage heating will start when the indoor temperature reaches 57°F (set point – 1° - 2°F) and will stop when the indoor temperature reaches 61°F (set point + 1°F).

The main screen with the set point control panel is presented below. Note that if the cooling and heating temperature set points overlap, the system will only allow cooling to be active. As with the status screen, the six function keys at the bottom of the screen are not currently assigned and have no effect on the operation of the Marvair CoolLinks system.



**DC Free-Air Cooling**

When the outside temperature and humidity are below acceptable limits, mechanical cooling is disabled and outside air is introduced to cool the shelter. The position of the damper is first opened to 100% then regulated to maintain a mixed air temperature of 55°F. This set point is user-selectable on the CoolLinks HVAC board for 55°, 57°, 59°, or 61°F. Both the damper and the Indoor Blower Motor are powered by 48 VDC. Every twenty-four hours, the damper is opened to 25% to verify the operation of damper motor, damper fault switch, and damper actuator linkage.



## **Emergency Ventilation**

The Marvair CoolLinks system will enable emergency ventilation if landline power is lost or if both HVAC units are in lockout. In this situation, the system will fully open the damper and run the Indoor Blower Motor on each HVAC unit. The system will also try to modulate the damper position to maintain a mixed air temperature of 55°F).

## **Smoke Detection**

If the smoke sensor input to the CoolLinks system is active, the Compressor, Heater, and Indoor Blower Motor on both HVAC units will be shut down and the damper will be fully closed. This is to halt the flow of air within the shelter.

## **Hydrogen Detection**

If the hydrogen sensor input to the CoolLinks system is active, the damper(s) on units that are not currently mechanically cooling will be fully opened and the Indoor Blower Motor(s) will be turned on. The intention here is to expel noxious gases and to introduce outside air into the shelter.

## **Generator Running**

If the generator running input to the CoolLinks system is active, only one HVAC unit will be permitted to run mechanical cooling. As the generator is sized to run only one HVAC unit, this ensures that the generator load is not exceeded.

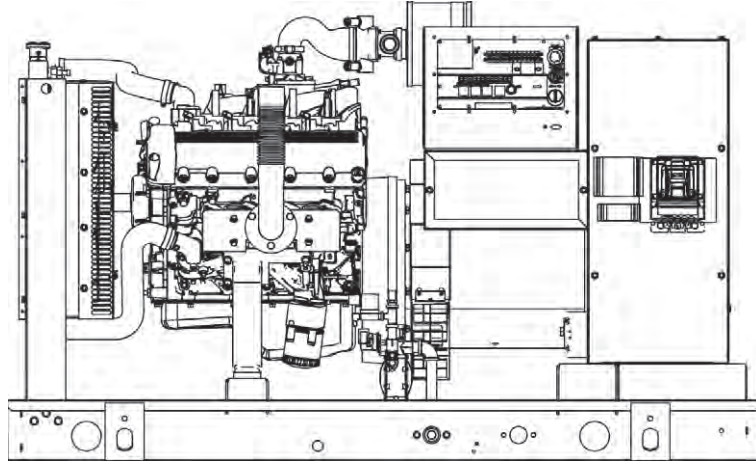
Note: When in generator run mode, the HVAC unit is **not** allowed to operate in the DC Free-Air Cooling mode. This prevents "wet stacking" of the generator because the engine would be running at a small percentage of its capacity.

**STANDBY POWER RATING**

35 kW, 44 kVA, 60 Hz

**PRIME POWER RATING\***

32 kW, 39 kVA, 60 Hz



\*Built in the USA using domestic and foreign parts


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

Image used for illustration purposes only


**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

  IBC 2009, CBC 2010, IBC 2012, ASCE 7-05, ASCE 7-10, ICC-ES AC-156 (2012)

**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.

**STANDARD FEATURES**

**ENGINE SYSTEM**

General

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

Fuel System

- Flexible fuel line NPT Connection
- Primary and secondary fuel shutoff

Cooling System

- Closed Coolant Recovery System
- UV/Ozone resistant hoses
- Factory-Installed Radiator
- 50/50 Ethylene glycol antifreeze
- Radiator drain extension

Engine Electrical System

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

**ALTERNATOR SYSTEM**

- UL2200 Genprotect™
- Class H insulation material
- 2/3 Pitch
- Skewed Stator
- Brushless Excitation
- Sealed Bearings
- Amortisseur winding
- Full load capacity alternator

**GENERATOR SET**

- Internal Genset Vibration Isolation
- Separation of circuits - high/low voltage
- Separation of circuits - multiple breakers
- Wrapped Exhaust Piping
- Standard Factory Testing
- 2 Year Limited Warranty (Standby rated Units)
- 1 Year 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 (L1 & L2)
- 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

**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)

## CONFIGURABLE OPTIONS

### ENGINE SYSTEM

#### General

- Engine Block Heater
- Oil Heater
- Air Filter Restriction Indicator
- Stone Guard (Open Set Only)
- Critical Exhaust Silencer (Open Set Only / Standard on Ultra Low Emissions Option)

#### Fuel Electrical System

- 10A & 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 Breaker

## ENGINEERED OPTIONS

### ENGINE SYSTEM

- Fluid containment Pans
- Coolant heater ball valves

### ALTERNATOR SYSTEM

- 3rd Breaker Systems

### CONTROL SYSTEM

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

### GENERATOR SET

- Gen-Link Communications Software (English Only)
- Extended Factory Testing (3 Phase Only)
- IBC Seismic Certification
- 8 Position Load Center
- 2 Year Extended Warranty
- 5 Year Warranty
- 5 Year Extended Warranty

### ENCLOSURE

- Standard Enclosure
- 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

### GENERATOR SET

- Special Testing
- Battery Box

### ENCLOSURE

- Motorized Dampers
- Enclosure Ambient Heaters

### CONTROL SYSTEM

- 21-Light Remote Annunciator
- Remote Relay Board (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 - Bridge
- Remote Communication - Ethernet
- 10A Run Relay
- Ground Fault Indication and Protection Functions

## 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

**APPLICATION AND ENGINEERING DATA**

**ENGINE SPECIFICATIONS**

General

Make	Generac
Cylinder #	8
Type	V
Displacement - L (cu In)	5.4L (329.53)
Bore - mm (in)	90.17 (3.55)
Stroke - mm (in)	105.92 (4.17)
Compression Ratio	9:1
Intake Air Method	Naturally Aspirated
Number of Main Bearings	4
Connecting Rods	Forged
Cylinder Head	Aluminum
Cylinder Liners	No
Ignition	Single Fire
Piston Type	Aluminum Alloy
Crankshaft Type	Nodular Iron
Lifter Type	Hydraulic
Intake Valve Material	Steel Alloy
Exhaust Valve Material	Hardened Steel
Hardened Valve Seats	Yes

Engine Governing

Governor	Electronic
Frequency Regulation (Steady State)	±0.25%

Lubrication System

Oil Pump Type	Gear
Oil Filter Type	Full-flow sping-on cartridge
Crankcase Capacity - L (qts)	5.7 (6)

Cooling System

Cooling System Type	Pressurized Closed Recovery
Water Pump Flow -gal/min (l/min)	38 (144)
Fan Type	Pusher
Fan Speed (rpm)	2143
Fan Diameter mm (in)	508 (20)
Coolant Heater Wattage	1500
Coolant Heater Standard Voltage	120 V

Fuel System

Fuel Type	Natural Gas, Propane Vapor
Carburetor	Down Draft
Secondary Fuel Regulator	Standard
Fuel Shut Off Solenoid	Standard
Operating Fuel Pressure	7" - 11" H <sub>2</sub> O

Engine Electrical System

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

**ALTERNATOR SPECIFICATIONS**

Standard Model	390mm
Poles	4
Field Type	Revolving
Insulation Class - Rotor	H
Insulation Class - Stator	H
Total Harmonic Distortion	<5%
Telephone Interference Factor (TIF)	<50

Standard Excitation	Brushless
Bearings	Sealed Ball
Coupling	Flexible Disc
Prototype Short Circuit Test	Yes
Voltage Regulator Type	Full Digital
Number of Sensed Phases	All
Regulation Accuracy (Steady State)	±0.25%

**OPERATING DATA**

**POWER RATINGS**

		Natural Gas	Propane Vapor
Single-Phase 120/240 VAC @1.0pf	35 kW	Amps: 146	Amps: 146
Three-Phase 120/208 VAC @0.8pf	35 kW	Amps: 121	Amps: 121
Three-Phase 120/240 VAC @0.8pf	35 kW	Amps: 105	Amps: 105
Three-Phase 277/480 VAC @0.8pf	35 kW	Amps: 53	Amps: 53
Three-Phase 347/600 VAC @0.8pf	35 kW	Amps: 42	Amps: 42

**STARTING CAPABILITIES (sKVA)**

**sKVA vs. Voltage Dip**

	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
Upsize 3	60	42	63	83	104	125	146	32	47	62	78	94	110

**FUEL CONSUMPTION RATES\***

Natural Gas - ft <sup>3</sup> /hr (m <sup>3</sup> /hr)			Propane Vapor - ft <sup>3</sup> /hr (m <sup>3</sup> /hr)		
Percent Load	Standby		Percent Load	Standby	
25%	239 (6.8)		25%	79.7 (2.3)	
50%	409 (11.6)		50%	136.6 (3.9)	
75%	553 (15.7)		75%	184.4 (5.2)	
100%	682 (19.3)		100%	227.7 (6.4)	

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

**COOLING**

		Standby
Air Flow (inlet air combustion and radiator)	ft <sup>3</sup> /min(m <sup>3</sup> /min)	2460 (69.7)
Coolant Flow per Minute	gal/min (l/min)	38 (144)
Coolant System Capacity	gal (l)	3 (11.36)
Heat Rejection to Coolant	BTU/hr	144,000
Max. Operating Air Temp on Radiator	°F (°C)	122 (50)
Max. Operating Ambient Temperature (before derate)	°F (°C)	110 (43.3)
Maximum Radiator Backpressure	in H <sub>2</sub> O	0.5

**COMBUSTION AIR REQUIREMENT**

	Standby
Flow at Rated Power cfm (m <sup>3</sup> /min)	87 (2.5)

**ENGINE**

		Standby
Rated Engine Speed	rpm	1800
Horsepower at Rated kW**	hp	54
Piston Speed	ft/min	1251
BMEP	psi	72

**EXHAUST**

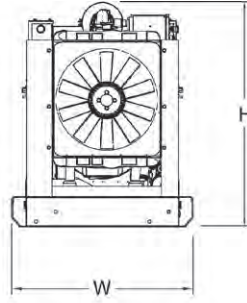
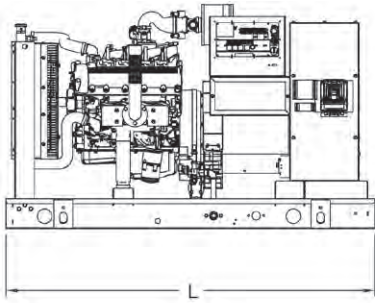
		Standby
Exhaust Flow (Rated Output)	cfm (m <sup>3</sup> /min)	260 (7.4)
Max. Backpressure (Post Turbo)	inHg (Kpa)	1.5 (5.1)
Exhaust Temp (Rated Output - post silencer)	°F (°C)	900 (482)
Exhaust Outlet Size (Open Set)	mm (in)	63.5 (2.5)

\*\* 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.

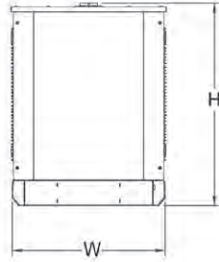
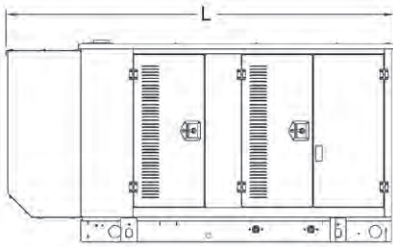


**DIMENSIONS AND WEIGHTS**



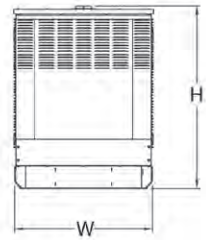
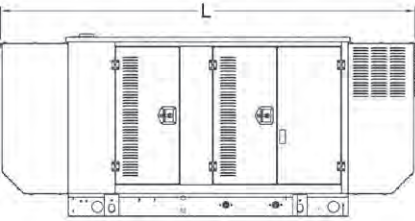
**OPEN SET (Includes Exhaust Flex)**

L x W x H in (mm)	76 (1930) x 37.4 (949.9) x 46 (1176)
Weight lbs (kg)	2199 (997)



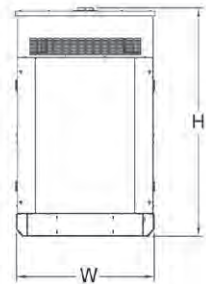
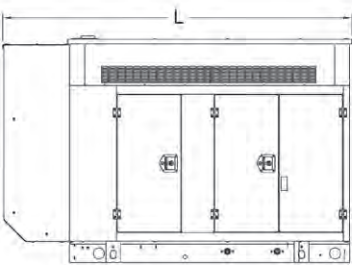
**STANDARD ENCLOSURE**

L x W x H in (mm)	94.8 (2408.9) x 38 (965.1) x 49.5 (1258.1)
Weight lbs (kg)	Steel: 2639 (1197) Aluminum: 2417 (1096)



**LEVEL 1 ACOUSTIC ENCLOSURE**

L x W x H in (mm)	112.5 (2857.1) x 38 (965.1) x 49.5 (1258.1)
Weight lbs (kg)	Steel: 2719 (1233) Aluminum: 2451 (1112)



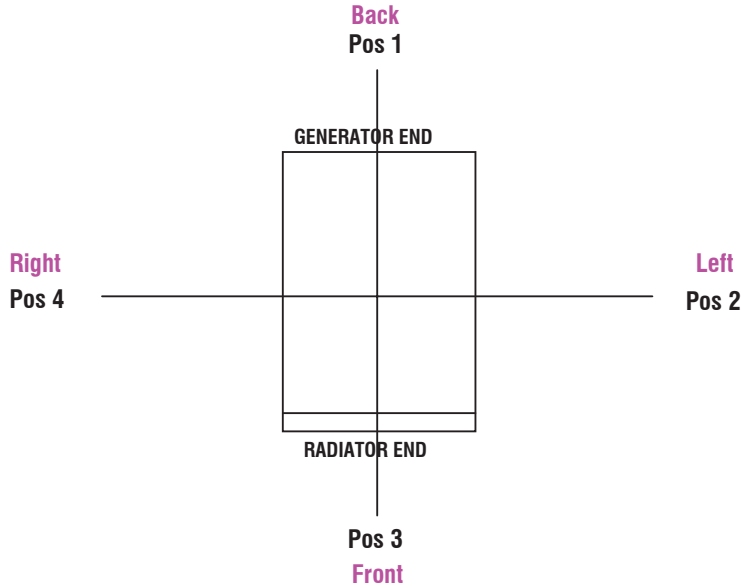
**LEVEL 2 ACOUSTIC ENCLOSURE**

L x W x H in (mm)	94.8 (2408.9) x 38 (965.1) x 62 (1573.9)
Weight lbs (kg)	Steel: 2871 (1302) Aluminum: 2517 (1142)

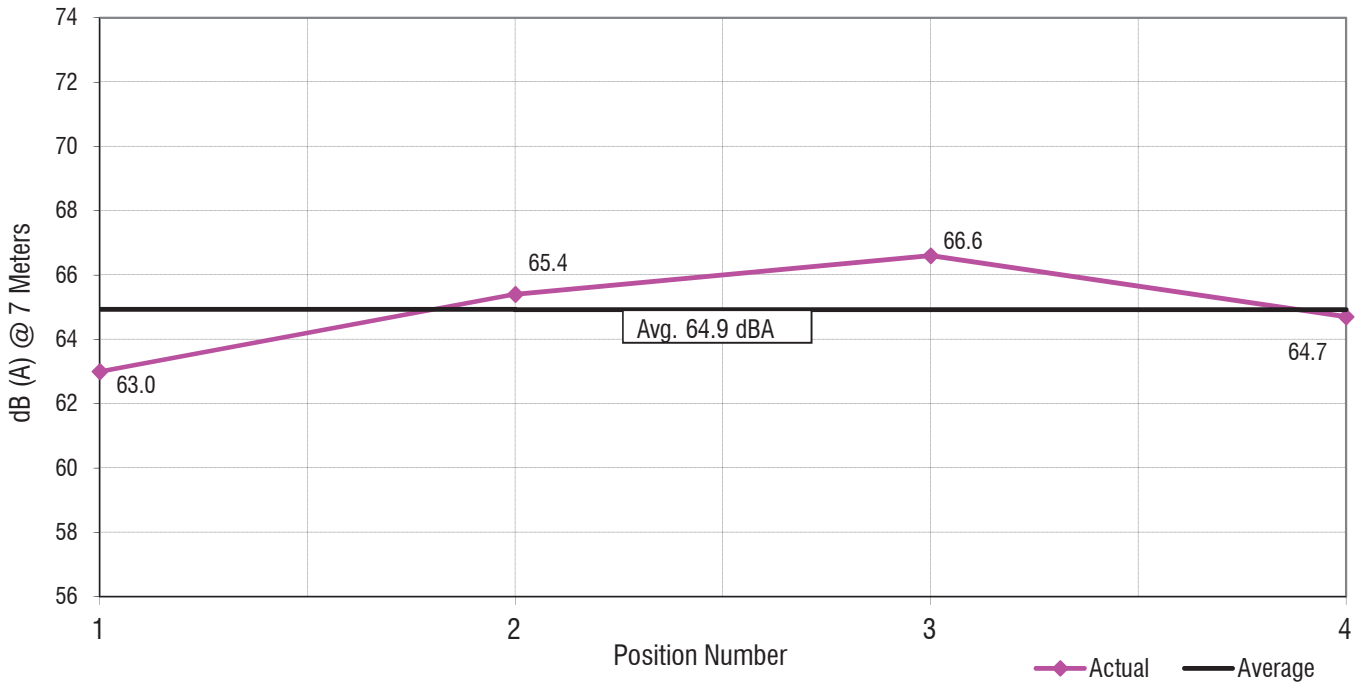
**YOUR FACTORY RECOGNIZED GENERAC INDUSTRIAL DEALER**

Specification characteristics may change without notice. Please consult a Generac Power Systems Industrial Dealer for detailed installation drawings.

# LEVEL 2 ACOUSTIC ENCLOSURE SG35 5.4L



Measured Sound Levels - 60 Hz



Notes:

1. All positions 23 ft (7M) from side faces of generator set.
2. Generator operating at full load.
3. Test conducted on a 100 foot diameter asphalt surface.
4. Non-enclosed sets do not include exhaust sound during testing.

**EXHAUST EMISSIONS DATA**

**STATEMENT OF EXHAUST EMISSIONS  
2016 SPARK-IGNITED GENERATORS  
INDUSTRIAL SERIES**

NON-SCAQMD												
Model	Engine	EPA Engine Family	Fuel	CATALYST Req'd	Comb Cat or Separate Cat	EPA Cert #	Grams/bhp-hr.			Rated RPM	BHP	Fuel Flow (lb/hr)
							THC	NOx	CO			
SG035	5.4	GGNXB05.42NN	NG	No	NR	GGNXB05.42NN-049	1.60	2.52	95.32	1800	82.10	36.91
SG035	5.4	GGNXB05.42NL	LPG	No	NR	GGNXB05.42NL-048	1.24	3.45	112.01	1800	82.30	34.60
SG050	5.4	GGNXB05.42NN	NG	No	NR	GGNXB05.42NN-049	1.60	2.52	95.32	1800	82.10	36.91
SG050	5.4	GGNXB05.42NL	LPG	No	NR	GGNXB05.42NL-048	1.24	3.45	112.01	1800	82.30	34.60
SG050	6.8	GGNXB06.82NL	LPG	No	NR	GGNXB06.82NL-010	1.86	2.67	172.30	1800	84.66	46.55

NR: Not Required

Refer to page 2 for definitions and advisory notes.

CALIFORNIA SCAQMD CERTIFIED												
Model	Engine	EPA Engine Family	Fuel	CATALYST Req'd	SCAQMD CEP #	EPA Cert #	Grams/bhp-hr.			Rated RPM	BHP	Fuel Flow (lb/hr)
							THC	NOx	CO			
SG035	5.4	GGNXB05.42L1	NG	Yes	530212	GGNXB05.42L1-017	0.38	0.22	0.64	1800	81.95	24.91
SG035	5.4	GGNXB05.42L2	LPG	Yes	530215	GGNXB05.42L2-018	0.04	0.10	0.70	1800	81.70	29.13
SG050	5.4	GGNXB05.42L1	NG	Yes	530212	GGNXB05.42L1-017	0.38	0.22	0.64	1800	81.95	24.91
SG050	5.4	GGNXB05.42L2	LPG	Yes	530215	GGNXB05.42L2-018	0.04	0.10	0.70	1800	81.70	29.13
SG050	6.8	GGNXB06.82L6	LPG	Yes	470347	GGNXB06.82L6-024	0.01	0.05	0.50	1800	85.92	34.14

Refer to page 2 for definitions and advisory notes.

18-10151-82 of 141

**EXHAUST EMISSIONS  
DATA****STATEMENT OF EXHAUST EMISSIONS  
2016 SPARK-IGNITED GENERATORS****2016 EPA SPARK-IGNITED EXHAUST EMISSIONS DATA**

Effective since 2009, the EPA has implemented exhaust emissions regulations on stationary spark-ignited (gaseous) engine generators for emergency applications. All Generac spark-ignited gensets, including SG, MG, QTA and QT series gensets, that are built with engines manufactured in 2009 and later meet the requirements of 40CFR part 60 subpart JJJJ and are EPA certified. These generator sets are labeled as EPA Certified with decals affixed to the engines' valve covers.

The attached documents summarize the general information relevant to EPA certification on these generator sets. This information can be used for submittal data and for permitting purposes, if required. These documents include the following information:

**EPA Engine Family**

The EPA Engine Family is assigned by the Manufacturer under EPA guidelines for certification purposes and appears on the EPA certificate.

**Catalyst Required**

Indicates whether an exhaust catalyst and Air/Fuel Ratio control system are required on the generator set to meet EPA certification requirements. Generally, units rated 80kW and smaller do not require a catalyst to meet EPA certification requirements. Please note that some units that do not require a catalyst to meet EPA requirements do need a catalyst if the California SCAQMD option is selected. Please see "California SCAQMD" below for additional information on this option.

**Combination Catalyst or Separate Catalyst**

SG and MG series generator sets typically utilize a single combination catalyst/silencer as part of meeting EPA certification requirements. Many QT and QTA series generator sets use the same engines as SG and MG series units, but have different exhaust configurations that require the use of conventional silencers with additional separate catalysts installed.

**EPA Certificate Number**

Upon certification by the EPA, a Certificate Number is assigned by the EPA.

**Emissions Actuals - Grams/bhp-hr**

Actual exhaust emission data for Total Hydrocarbons (THC), Nitrogen Oxides (NO<sub>x</sub>) and Carbon Monoxide (CO) that were submitted to EPA and are official data of record for certification. This data can be used for permitting if necessary. Values are expressed in grams per brake horsepower-hour; to convert to grams/kW-hr, multiply by 1.341. Please see advisory notes below for further information.

**California Units, SCAQMD CEP Number**

A separate low-emissions option is available on many Generac gaseous-fueled generator sets to comply with the more stringent South Coast Air Quality Management District requirements that are recognized in certain areas in California. Gensets that include this option are also EPA Certified.

**General Advisory Note to Dealers**

The information provided here is proprietary to Generac and its' authorized dealers. This information may only be disseminated upon request, to regulatory governmental bodies for emissions permitting purposes or to specifying organizations as submittal data when expressly required by project specifications, and shall remain confidential and not open to public viewing. This information is not intended for compilation or sales purposes and may not be used as such, nor may it be reproduced without the expressed written permission of Generac Power Systems, Inc.

**Advisory Notes on Emissions Actuals**

- The stated values are actual exhaust emission test measurements obtained from units representative of the generator types and engines described.
- Values are official data of record as submitted to the EPA and SCAQMD for certification purposes. Testing was conducted in accordance with prevailing EPA protocols, which are typically accepted by SCAQMD and other regional authorities.
- No emission values provided are to be construed as guarantees of emissions levels for any given Generac generator unit.
- Generac Power Systems reserves the right to revise this information without prior notice.
- Consult state and local regulatory agencies for specific permitting requirements.
- The emissions performance data supplied by the equipment manufacturer is only one element required toward completion of the permitting and installation process. State and local regulations may vary on a case-by-case basis and must be consulted by the permit applicant/equipment owner prior to equipment purchase or installation. The data supplied herein by Generac Power Systems cannot be construed as a guarantee of installability of the generator set.
- The emission values provided are the result of multi-mode, weighted scale testing in accordance with EPA testing regulations, and may not be representative of any specific load point.
- The emission values provided are not to be construed as emission limits.



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
2016 MODEL YEAR  
CERTIFICATE OF CONFORMITY  
WITH THE CLEAN AIR ACT**

**OFFICE OF TRANSPORTATION  
AND AIR QUALITY  
ANN ARBOR, MICHIGAN 48105**

**Certificate Issued To:** Generac Power Systems, Inc.  
(U.S. Manufacturer or Importer)

**Certificate Number:** GGNXB05.42NL-048

**Effective Date:**  
10/20/2015  
**Expiration Date:**  
12/31/2016

  
Byron J. Bunker, Division Director  
Compliance Division

**Issue Date:**  
10/20/2015  
**Revision Date:**  
N/A

**Manufacturer:** Generac Power Systems, Inc.  
**Engine Family:** GGNXB05.42NL  
**Mobile/Stationary Certification Type:** Stationary

**Fuel:** LPG/Propane

**Emission Standards:**

Part 90 Phase 1

CO ( g/kW-hr ) : 519

HC + NOx ( g/kW-hr ) : 13.4

**Emergency Use Only :** Y

Pursuant to Section 213 of the Clean Air Act (42 U.S.C. section 7547) and 40 CFR Part 60, 1065, 1068, and 60 ( stationary only and combined stationary and mobile ) and subject to the terms and conditions prescribed in those provisions, this certificate of conformity is hereby issued with respect to the test engines which have been found to conform to applicable requirements and which represent the following nonroad engines, by engine family, more fully described in the documentation required by 40 CFR Part 60 and produced in the stated model year.

This certificate of conformity covers only those new nonroad spark-ignition engines which conform in all material respects to the design specifications that applied to those engines described in the documentation required by 40 CFR Part 60 and which are produced during the model year stated on this certificate of the said manufacturer, as defined in 40 CFR Part 60. This certificate of conformity does not cover nonroad engines imported prior to the effective date of the certificate.

It is a term of this certificate that the manufacturer shall consent to all inspections described in 40 CFR 1068.20 and authorized in a warrant or court order. Failure to comply with the requirements of such a warrant or court order may lead to revocation or suspension of this certificate for reasons specified in 40 CFR Part 60. It is also a term of this certificate that this certificate may be revoked or suspended or rendered void *ab initio* for other reasons specified in 40 CFR Part 60.

This certificate does not cover large nonroad engines sold, offered for sale, or introduced, or delivered for introduction, into commerce in the U.S. prior to the effective date of the certificate.



5/23/2017

NCIC File No.: ELD-17-37

Jared Kearsley  
Epic Wireless Group  
8700 Auburn Folsom Road, Suite 400  
Granite Bay, CA 95746

Records Search Results for  
AT&T/Epic Wireless/El Dorado County Resource Record Search Request – APN: 104-370-24

Jared Kearsley:

Per your request received by our office on 5/5/2017, a complete records search was conducted by searching California Historic Resources Information System (CHRIS) maps for cultural resource site records and survey reports in El Dorado County within a 1/4-mile radius of the proposed project area.

Review of this information indicates that the proposed project area contains zero (0) prehistoric-period resource(s) and zero (0) historic-period cultural resource(s). Additionally, one (1) cultural resources study reports on file at this office cover a portion of the proposed project area: 9460.

Outside the proposed project area, but within the 1/4-mile radius, the broader search area contains one (1) prehistoric-period resource(s) and three (3) historic-period cultural resource(s): P-9-54, P-9-55, P-9-818, and P-9-819. Additionally, zero (0) cultural resources study reports on file at this office cover a portion of the broader search area.

In this part of El Dorado County, archaeologists locate prehistoric-period habitation sites “along streams or on ridges or knolls, especially those with southern exposure.” (Moratto 1984:290) This region is known as the ethnographic-period territory of the Nisenan, also called the Southern Maidu. The Nisenan maintained permanent settlements along major rivers in the Sacramento Valley and foothills; they also periodically traveled to higher elevations (Wilson and Towne 1978:387-389). The proposed project search area is situated in the Sierra Nevada about a quarter mile south of Norton Ravine. Given the extent of known cultural resources and the environmental setting, there is moderate potential for locating prehistoric-period cultural resources in the immediate vicinity of the proposed project area.

Within the search area, the 1866 GLO plat of T11N, R9E shows no evidence of nineteenth-century historical activity. The 1954 Pilot Hill 7.5' USGS topographical map shows no evidence of twentieth-century historical activity. Given the extent of known cultural resources and patterns of local history, there is moderate potential for locating historic-period cultural resources in the immediate vicinity of the proposed project area.

### SENSITIVITY STATEMENT:

- 1) With respect to cultural resources, it appears that the proposed project area **is sensitive**.
- 2) Should the lead agency/authority require a cultural resources survey, a list of qualified local consultants can be found at <http://chrisinfo.org>.
- 3) If cultural resources are encountered during the project, avoid altering the materials and their context until a qualified cultural resources professional has evaluated the project area. Project personnel should not collect cultural resources. Prehistoric-period resources include: chert or obsidian flakes, projectile points, and other flaked-stone artifacts; mortars, grinding slicks, pestles, and other groundstone tools; and dark friable soil containing shell and bone dietary debris, heat-affected rock, or human burials. Historic-period resources include: stone or adobe foundations or walls; structures and remains with square nails; mine shafts, tailings, or ditches/flumes; and refuse deposits or bottle dumps, often located in old wells or privies.
- 4) Identified cultural resources should be recorded on DPR 523 (A-J) historic resource recordation forms, available at [http://ohp.parks.ca.gov/?page\\_id=1069](http://ohp.parks.ca.gov/?page_id=1069).
- 5) Review for possible historic-period cultural resources has included only those sources listed in the referenced literature and should not be considered comprehensive. The Office of Historic Preservation has determined that buildings, structures, and objects 45 years or older may be of historical value. If the area of potential effect contains such properties not noted in our research, they should be assessed by an architectural historian before commencement of project activities.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the California Historical Resources Information System (CHRIS) Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

Thank you for using our services. Please contact North Central Information Center at (916) 278-6217 if you have any questions about this record search. An invoice is enclosed.

Sincerely,

Dr. Nathan Hallam, Coordinator  
North Central Information Center



## SYCAMORE ENVIRONMENTAL CONSULTANTS, INC.

6355 Riverside Blvd., Suite C, Sacramento, CA 95831  
916/ 427-0703 Fax 916/ 427-2175  
www.sycamoreenv.com

11 August 2017

Mr. Jared Kearsley  
Leasing / Zoning Manager  
Epic Wireless Group  
8700 Auburn Folsom Road, Suite 400  
Granite Bay, CA 95746  
Phone: 916-755-1326

**Subject:** *AT&T Zee Estates Site CVL03629 Project in El Dorado County, CA*

Dear Mr. Kearsley:

Sycamore Environmental prepared a Biological Resources Evaluation (BRE) for the AT&T Zee Estates Site CVL03629 Project in El Dorado County, CA. The BRE is a baseline document. This letter identifies potential biological resource issues and recommended avoidance and minimization measures.

### **Trees**

The 2004 El Dorado County General Plan Policy 7.4.4.4 requires all new development projects adhere to tree canopy retention and replacement standards. For parcels greater than one acre in size with 1 percent oak tree canopy cover or greater, 90 percent of the canopy must be retained.

### **Recommendation:**

For existing oaks to remain on site, the following tree protection measure should be implemented to minimize impacts:

- Tree Protection Fencing, consisting of four-foot tall, brightly-colored, high-visibility plastic fencing, shall be placed around the perimeter of the oak protection zone (OPZ) (dripline radius + 1 foot) on the project side of existing oak trees;
- Tree protection fencing shall not be moved without prior authorization from the Project Arborist or El Dorado County;
- No parking, portable toilets, dumping or storage of any construction materials, grading, excavation, trenching, or other infringement by workers or domesticated animals is allowed in the OPZ;
- No signs, ropes, cables, or any other item shall be attached to a protected tree, unless recommended by an International Society of Arboriculture (ISA) Certified Arborist;
- Underground utilities should be avoided in the OPZ, but unnecessary shall be bored or drilled. If boring is impossible, all trenching will be done by hand under the supervision of an ISA-Certified Arborist;
- Cut or fill within the dripline of existing native oak trees should be avoided to the greatest extent possible; and
- Any work that takes place within the dripline of protected trees., including pruning of living limbs or roots over two inches in diameter shall be done under the supervision of an ISA-Certified Arborist.



### **Migratory Birds and Birds of Prey**

Under the MBTA, nests that contain eggs or unfledged young are not to be disturbed during the breeding season. Nesting or attempted nesting by migratory birds and birds-of-prey is anticipated from 15 February through 31 August.

### **Recommendation:**

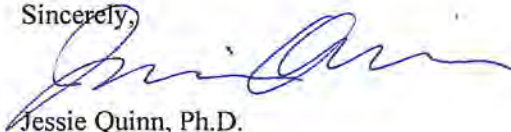
- Tree and vegetation removal shall occur outside of the nesting season (15 January through 31 August annually). All tree removal shall occur between 1 September and 14 January, which is outside of nesting season for MBTA and Fish and Game Code protected birds. If work occurs outside the nesting season, there will be no need to conduct a preconstruction survey for active nests.
- If project work occurs during the nesting season, a qualified biologist shall conduct a pre-construction survey for nesting birds of prey and other birds protected by the MBTA and Fish and Game Code within 15 days prior to the start of construction. The survey area shall cover the Project, a 500 ft radius for nesting birds of prey, and a 100 ft radius for all other MBTA and Fish and Game Code protected birds. If no active nest of a bird of prey, MBTA bird, or other Fish and Game Code-protected bird is found, then no further mitigation measures are necessary.
- Should an active nest of a protected bird be identified, an exclusion zone of 500 feet shall be established around the nest if it is a bird of prey, and 100 feet if it is a protected bird other than a bird of prey. Buffer sizes may be adjusted at the discretion of the biologist depending on the species of bird, the location of the nest relative to the project, the existing level of disturbance, and other site-specific conditions. No work will be allowed in the exclusion zone until the biologist determines that the nest is no longer active, or monitoring determines that a smaller ESA will protect the active nest.
- From 15 February through 31 August, if additional trees or shrubs need to be trimmed and/or removed after construction has started, a survey will be conducted for active nests in the area to be affected. If an active nest is found, the above measures will be implemented.
- If an active nest is identified in or adjacent to the construction zone after construction has started, the above measures will be implemented to ensure construction is not causing disturbance to the nest.

### **Special-Status Plants**

No special-status plants were found during the biological survey conducted during the evident and identifiable period. No avoidance and minimization measures are necessary for special-status plants.

Please contact me with any questions.

Sincerely,



Jessie Quinn, Ph.D.  
Ecologist

Enclosure: Biological Resources Evaluation

---

Biological Resources Evaluation  
for the  
AT&T Zee Estates Site CVL03629 Project  
El Dorado County, CA

---

Prepared by:

***Sycamore Environmental Consultants, Inc.***

6355 Riverside Blvd., Suite C

Sacramento, CA 95831

Phone: 916/ 427-0703

Contact: Jessie Quinn

Prepared for:

***Epic Wireless Group, LLC***

8700 Auburn Folsom Road, Suite 400

Granite Bay, CA 95746

Phone: 916/ 755-1326

Contact: Jared Kearsley

August 2017

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Biological Resources Evaluation  
for the  
AT&T Zee Estates Site CVL03629

El Dorado County, CA

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## I. SUMMARY OF FINDINGS AND CONCLUSIONS

---

This Biological Resources Evaluation report was prepared for the AT&T Zee Estates Site CVL03629 Project (Project) to document baseline biological conditions. The approximately 0.413-acre (ac) Biological Study Area (BSA) is located off of Salmon Falls Road in the community of Pilot Hill, in unincorporated El Dorado County, CA. The BSA consists of blue oak woodland and disturbed habitat. The BSA is located on assessor's parcel number (APN) 104-370-24-100.

There is no habitat for federal- or state-listed wildlife or California Department of Fish and Wildlife (CDFW) species of special concern in the BSA. Trees and vegetation in and adjacent to the BSA provide habitat for nesting birds protected by the Migratory Bird Treaty Act (MBTA) and Fish and Game Code. The nesting bird season is generally defined as 15 February through 31 August. Impacts to nesting birds are considered during project review under the California Environmental Quality Act (CEQA).

The BSA provides habitat for the following five federal-listed and state-listed plants:

- Stebbins' morning-glory: Federal Endangered, State Endangered, California Native Plant Society (CNPS) Rank 1B.1
- Pine Hill ceanothus: Federal Endangered, State Rare, CNPS Rank 1B.1
- Pine Hill flannelbush: Federal Endangered, State Rare, CNPS 1B.2
- El Dorado bedstraw: Federal Endangered, State Rare, CNPS 1B.2
- Layne's Butterweed: Federal Threatened, State Rare, CNPS 1B.2

The BSA provides habitat for an additional four special-status plants ranked by the California Native Plant Society (CNPS): big-scale balsamroot, chaparral sedge, Red Hill soaproot, and El Dorado County mule ears; and one plant protected by the El Dorado County General Plan: Bisbee Peak rush-rose. No federal-listed, state-listed, or special-status plant species were found during a biological survey conducted during the evident and identifiable period.

The BSA is in a previously disturbed area within an Important Biological Corridor. The BSA is located in Rare Plant Mitigation Area 1. The BSA is not in an Ecological Preserve, or within Important Habitat for Migratory Deer Herds. Based on aerial images in Google Earth from October 2016, the 60-acre parcel on which the BSA is located contains more than one percent canopy cover of oak woodlands. Projects that occur on parcels that contain more than one percent oak canopy must adhere to General Plan Policy 7.4.4.4. The County expects to adopt a new Oak Resources Management Plan (ORMP) in September 2017 that replaces Policy 7.4.4.4 and 7.4.5.2. The ORMP regulates both oak woodlands and individual oak trees outside of oak woodlands. The project does not require the removal or pruning of oak trees.

There are no wetlands or waters in the BSA.

## II. INTRODUCTION

---

### A. Purpose of Report

The purpose of this Biological Resources Evaluation (BRE) report is to document baseline biological resources in the AT&T Zee Estates Site CVL03629 Project (Project) Biological Study Area (BSA).

### B. Project Location

The approximately 0.413-ac BSA is located in the western foothills of the Sierra Nevada Mountains in unincorporated El Dorado County, California. The BSA is located in a rural residential area, and is surrounded by undeveloped mixed oak woodland. The BSA is on the Pilot Hill USGS topographic quad (T11N R9E, Section 18, Mt. Diablo Base & Meridian; Figure 1), and is in the North Fork American Hydrologic Unit (Hydrologic Unit Code 18020128). The geographic coordinates of the BSA are 38.810093° north, 121.020286° west (WGS84), and the UTM coordinates (Zone 10 North) are 671,894 meters east, 4,297,562 meters north. Elevation in the BSA ranges from approximately 1,566 ft to 1,575 ft above sea level. The BSA is located on the northeast facing slope of a hill. Figure 2 is a July 2016 aerial photo of the BSA and surrounding area.

### C. Project Applicant

**Applicant:**

AT&T Mobility  
2600 Camino Ramon  
San Ramon, CA 94583

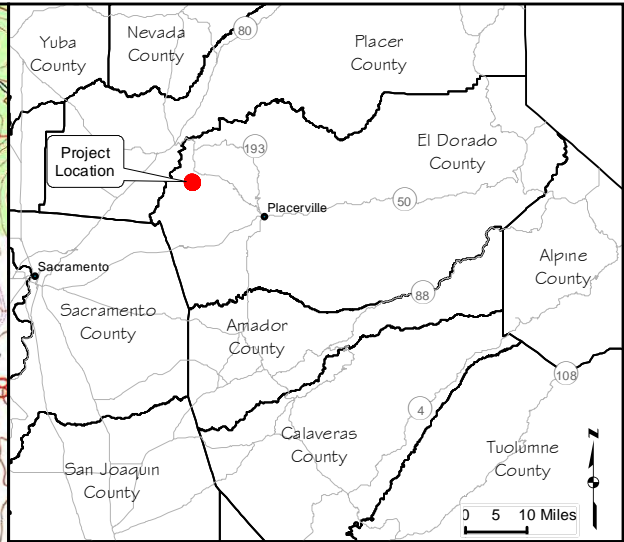
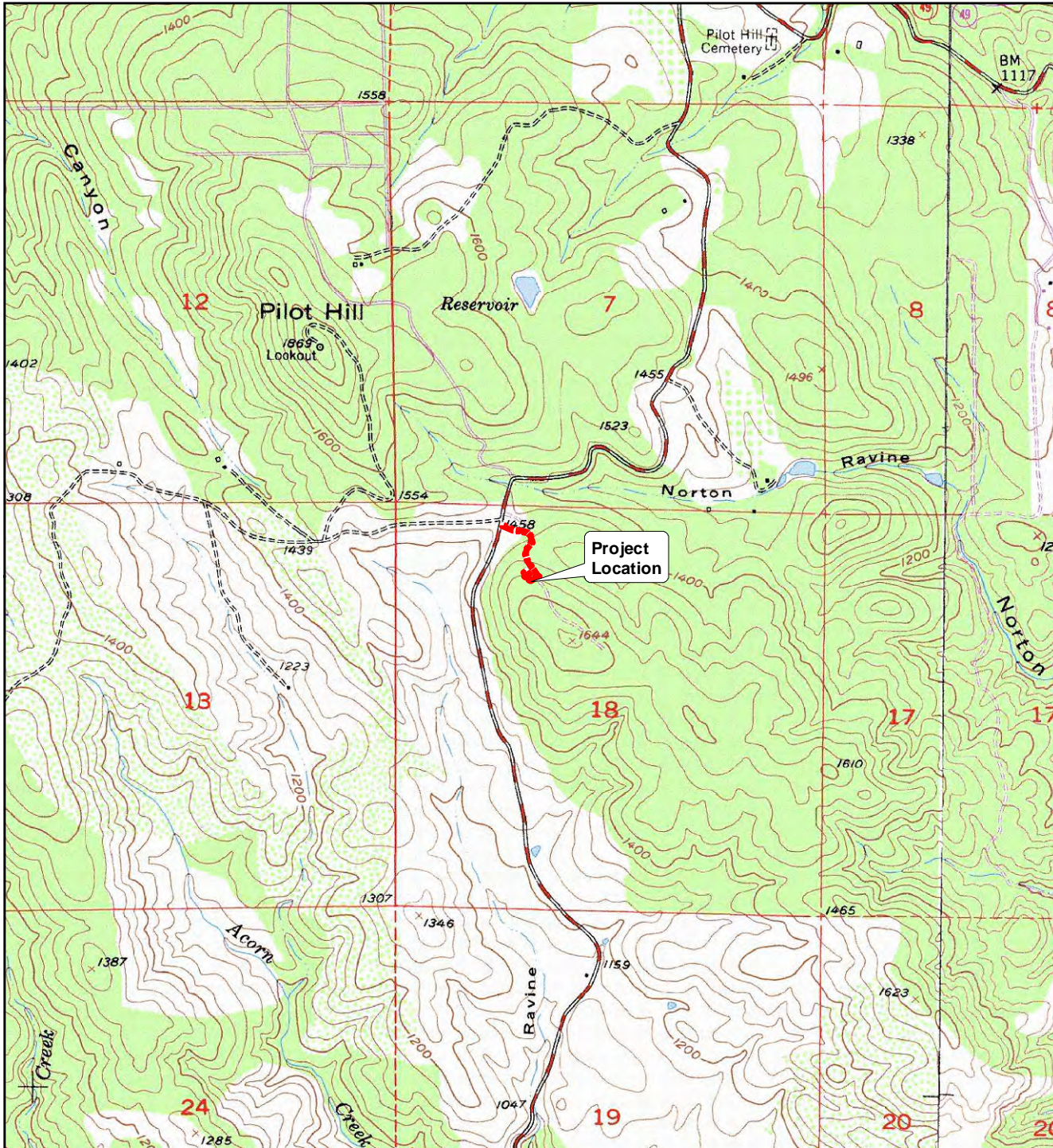
**Consulting Planner**

Epic Wireless Group, LLC  
8700 Auburn Folsom Road, Suite 400  
Granite Bay, CA 95746  
Phone: 916/ 755-1326  
Contact: Mr. Jared Kearsley

### D. Project Description

The proposed AT&T Zee Estates Site CVL03629 Project (Project) facility tower will be a new 153-ft monopole tower with a new GPS antenna, six wireless antennas and 14 remote radio units (RRUs) mounted at 150 ft; six wireless antennas, one surge protector, and six RRUs mounted at 140 ft; and 21 RRUs and three surge protectors on a collar mount directly below the sectors. In the future, the tower can also accommodate two 4-ft diameter microwave dishes mounted at 92.5 ft. Future antennas can be mounted by other carriers at approximately 132, 125, and 110 ft. The tower has been designed with pine foliage to match the existing surrounding trees. The foliage would extend horizontally approximately 7 ft above the top of the structure to an overall structure height of approximately 160 ft. Antennas will be concealed with socks. The monopole “trunk” and RRUs will be painted brown.

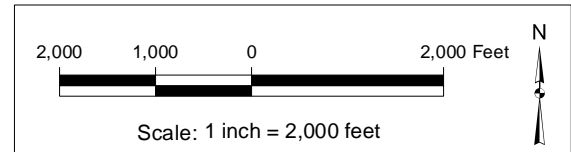
The facility will include a new, approximately 200-ft-long, 12-ft-wide asphalt concrete access road and paired gravel-filled drainage ditch, a new 35 Kw propane generator with a 500-gallon propane tank, and a pre-fabricated equipment shelter. The facility will be located on a 30-ft by 45-ft lease area enclosed with a new 6-ft chain link fence and 12-ft wide double access gate. Connecting the facility with existing power and fiber lines will require excavation of an approximately 1,200-ft long, 5-ft wide linear utility trench along the proposed access road and Gate Lane through which to run cables. The approximately 400 cubic yards of excavated material will be replaced. The cables will be connected to an existing utility pole on Salmon Falls Road at the intersection with Gate Lane. New splice boxes, each for power and fiber, will be installed approximately every 300 ft along the new utility trenches.



AT&T Zee Estates Site  
 CVL03629 Project  
 El Dorado County, CA  
 9 August 2017

Figure 1. Project Location Map

 Project Location



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 Consultants, Inc.

Pilot Hill, CA (Revised 1973)  
 CASIL California USGS Digital Raster Graphics (DRG),  
 7.5 Minute (C) Series, Albers Nad83 Mosaics (MrSID)  
 o\_nw0202.sid



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AT&T Zee Estates Site  
 CVL03629 Project  
 El Dorado County, CA  
 9 August 2017

 Biological Study Area (BSA)



**SYCAMORE**  
 Environmental  
 Consultants, Inc.

Aerial Photograph: 11 July 2016  
 NAIP2016 USDA FSA Imagery  
 ESRI ArcGIS Basemap Layer

Figure 2. Aerial Photograph

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### III. STUDY METHODS

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#### A. Studies Conducted

An evaluation of biological resources was conducted to determine whether any special-status plant or wildlife species, their habitat, or sensitive habitats occur in the BSA. Data on known special-status species and habitats in the area was obtained from state and federal agencies. Maps and aerial photographs of the BSA and surrounding area were reviewed. The field survey, map review, and a review of the biology of evaluated species and habitats were used to determine the special-status species and sensitive habitats that could occur in the BSA.

Special-status species in this report are those listed under the federal or state endangered species acts, under the California Native Plant Protection Act, as a California species of special concern or fully protected by the California Department of Fish and Wildlife (CDFW), that are California Rare Plant Rank 1 or 2 (CNPS 2017), or are protected under the El Dorado County General Plan EIR (2004). Special-status natural communities are waters, wetlands, riparian communities, and any natural community ranked S1, S2, or S3 by CDFW (2010). Special-status species and communities may also include those considered locally important or sensitive. El Dorado County identifies Important Biological Corridors, Ecological Preserve, and Important Habitat for Migratory Deer Herds in its General Plan (2016), and Rare Plan Mitigation areas per the Board of Supervisors Resolution No. 205-98. General Plan Policy 7.4.4.4 requires all new development projects adhere to tree canopy retention and replacement standards. The County expects to adopt a new ORMP in September 2017 that replaces Policy 7.4.4.4 and 7.4.5.2. El Dorado County Zoning Code §130.30.030(G) establishes standards for avoidance and minimization of impacts to wetlands and sensitive riparian habitat as provided in General Plan Policies 7.3.3.4 and 7.4.2.5.

Data received from USFWS, CNDDDB, and CNPS records (Appendices B and C) were used to evaluate species and habitats of concern with potential to occur within the BSA. The CNDDDB tracks other species that have not been designated by CDFW as a California species of special concern; these species were not evaluated as special-status species in this BRE.

#### B. Survey Dates, Personnel, and Coverage

Fieldwork for this BRE, covering the 0.413-ac BSA, was conducted by Juan Mejia, Biologist, and Adrienne Levoy, Biologist, on 13 July 2017.

#### C. Problems Encountered and Limitations That May Influence Results

No problems or limitations were encountered.

#### D. Literature Search

An official letter and list was obtained from the U.S. Fish and Wildlife Service (USFWS), Sacramento Field Office on 4 August 2017 (Appendix B). The list identifies federal-listed, candidate, and proposed species that potentially occur in, or could be affected by, the Project.

The California Natural Diversity Database (CNDDDB) was queried prior to field surveys for known occurrences of special-status species in or near the BSA (Pilot Hill Quad and the eight surrounding quads; data dated 4 August 2017; Appendix C). The California Native Plant Society (CNPS) inventory of rare and endangered plants was queried prior to field surveys for known occurrences of special-status plants in

or near the BSA (Pilot Hill Quad and the eight surrounding quads; Appendix C). The list was updated most recently on 8 August 2017. Table 1 lists the USGS quads evaluated.

Table 1. USGS Quads Evaluated for the AT&T Zee Estates Site CVL03629 Project

Gold Hill	Auburn	Greenwood
Rocklin	<b>Pilot Hill</b>	Coloma
Folsom	Clarksville	Shingle springs

## E. Field Survey Methods

Biological surveys conducted for this report consisted of biologists walking through the BSA to determine if any special-status species or their habitat were present. Areas adjacent to the BSA were also inspected for important habitat features such as wetlands/waters. Plant and wildlife species and natural communities were identified and recorded. Potential habitat for special-status species was evaluated. Appendix A is a list of plant and wildlife species observed.

The survey coincided with the evident and identifiable period for all special-status plant species with potential to occur. Plant species observed were either identified on-site or collected and identified later using Baldwin et al. (2012). Nomenclature and taxonomy used in this document follow Baldwin et al. (2012).

A reconnaissance survey for potential wetlands and waters of the U.S. was conducted during the survey. Potential wetland and water features within and adjacent to the BSA were mapped using a sub-meter accurate GPS. A formal jurisdictional delineation of wetlands and waters, using U.S. Army Corps of Engineers standards (USACE 1987; USACE 2008), was not conducted. Photographs of the BSA are in Appendix D.

## F. Mapping

Biological communities observed by Sycamore Environmental were mapped using a Trimble GeoXT sub-meter accurate GPS. The 6 July 2016 aerial photo in Figures 2 and 4 was downloaded from ESRI World Imagery. Biological communities were mapped based on GPS data, field observations, and interpretation of the aerial photographs available on Google Earth (Google 2017).

## IV. ENVIRONMENTAL SETTING

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The BSA is located in the western foothills of the Sierra Nevada Mountains, approximately 1.7 miles south-southwest from the community of Pilot Hill. Land use adjacent to the BSA consists of undeveloped blue oak woodland and dispersed rural residential properties. Folsom Lake is approximately 7 miles southwest. The parcel on which the BSA is located is approximately 60 acres in size.

### A. Soils

Mapped soil units in the BSA were determined using the Soil Survey of El Dorado Area (NRCS 1974). Mapped soil units in the BSA are Rescue very stony sandy loam, 15-30% slopes, and Rescue very stony sandy loam, 30-50% slopes (Figure 3; NRCS 2017). Figure 3 is a soils map.

#### **Rescue very stony sandy loam, 15-30% Percent Slopes:**

The Rescue series consists of well-drained soils underlain by gabbrodiorite rocks at a depth of more than 40 inches. A typical profile of Rescue sandy loam, 2-9% slopes, has dark reddish-brown (5YR 3/4) medium acidic sandy loam from 0 to 5 inches, dark reddish brown (5YR 3/4) slightly acidic sandy loam from 5 to 10 inches, yellowish red (5YR 3/6) slightly acidic heavy sandy loam from 10 to 14 inches, dark red (2.5YR 3/6) slightly acidic sandy clay loam from 14 to 26 inches, variegated reddish brown and reddish yellow (5YR 4/4, 6/6) slightly acidic heavy sandy loam from 26 to 34 inches, yellowish red (5YR 5/6) slightly acidic coarse sandy loam from 34 to 55 inches, strong brown (7.5YR 5/6) slightly acidic loamy coarse sand from 55 to 66 inches, and weathered gabbrodiorite at 66 inches. Permeability is moderately slow, surface runoff is slow to medium, and the erosion hazard is slight to moderate.

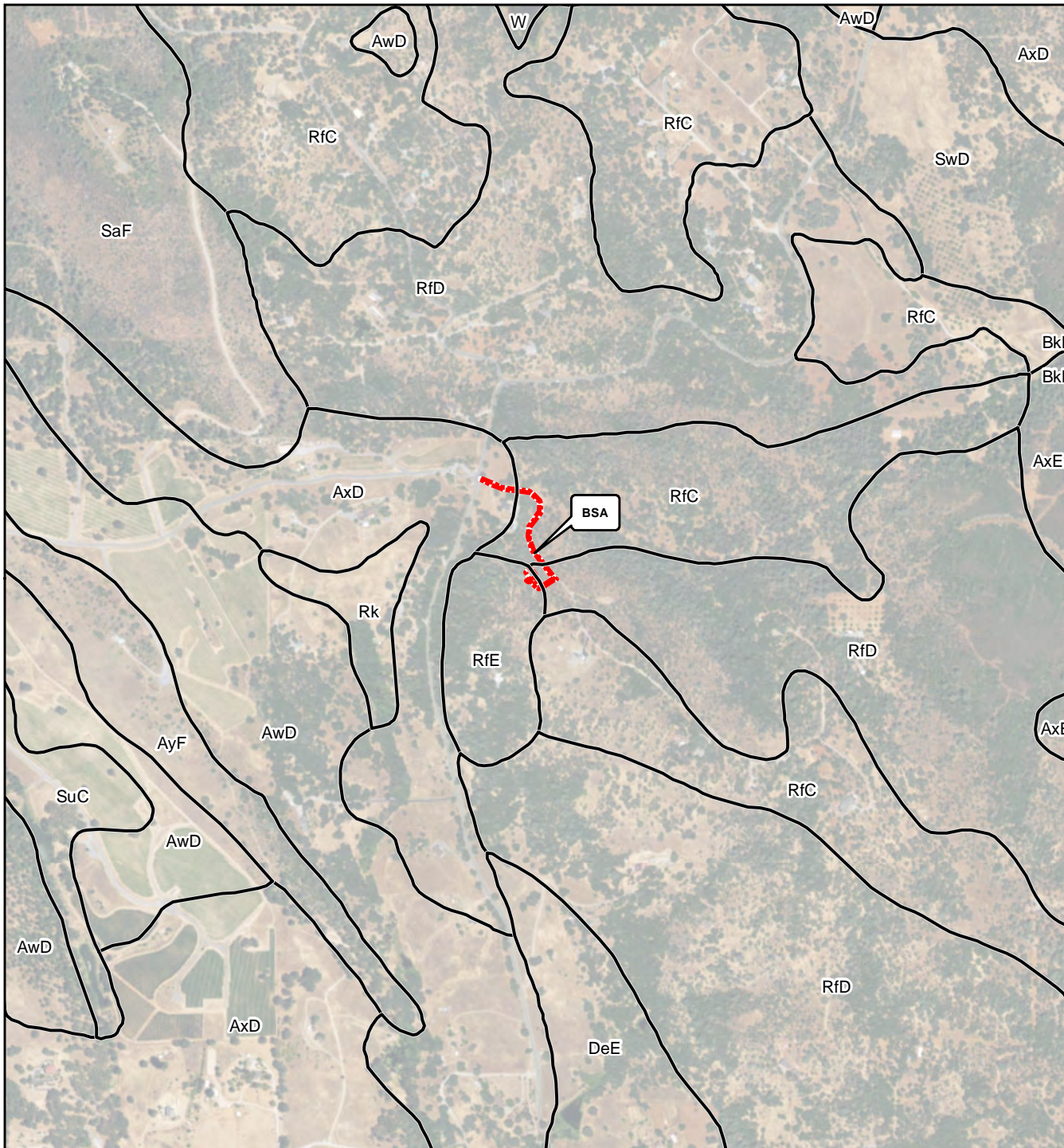
#### **Rescue very stony sandy loam, 30-50% Percent Slopes:**

This series is similar to the profile described above, except stones cover 3-15% of the surface and the thickness of the surface layer is only 3 to 8 inches.

### B. Weather and Climate Conditions



Fieldwork was conducted on 13 July 2017. Precipitation in California is typically reported for the period from 1 July through 30 June of the next calendar year. The historic average precipitation from 1 July 2016 through 12 July for the nearby Placerville gauge is 38.24 inches (CDEC 2017). From 1 July 2016 through 12 July 2017, the Placerville Gauge received 72.45 inches of rain, or 190% of the average precipitation. The BSA had wetter than average hydrologic conditions during the water year preceding the fieldwork. Weather during the survey was sunny, calm, and dry.

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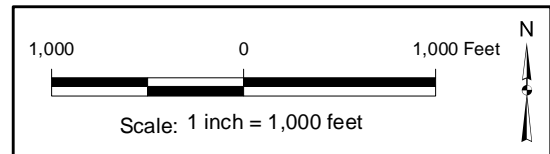
AT#T Zee Estates Site  
 CVL03629 Project  
 El Dorado County, CA  
 9 August 2017

Figure 3. Soils Map

-  Biological Study Area (BSA)
-  Soil Boundary

Soil Mapping Unit  
 Symbol Name

- AxD Auburn very rocky silt loam,  
2 to 30 percent slopes
- RfC Rescue very stony sandy loam,  
3 to 15 percent slopes
- RfD Rescue very stony sandy loam,  
15 to 30 percent slopes
- RfE Rescue very stony sandy loam,  
30 to 50 percent slopes



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Soil Survey Geographic (SSURGO) database for  
 El Dorado Area, California, USDA, NRC5  
 URL: <http://SoilDataMart.nrcs.usda.gov/>

Aerial Photograph: 20 June 2016  
 NAIP2016 USDA FSA Imagery  
 ESRI ArcGIS Basemap Layer



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## C. Biological Communities

Biological communities are defined by species composition and relative abundance. Biological communities correlate where applicable with the list of California terrestrial natural communities recognized by CDFW (2010). Descriptions of biological communities present in the BSA are included below. Biological community descriptions include plant species identified during the field surveys. Biological communities are mapped in Figure 4 and their acreages are in Table 2. Photographs of the BSA are in Appendix D.

Table 2. Biological Communities in the BSA

Biological Community	Vegetation Alliances and CDFW Alliance Codes <sup>1</sup>	Rarity Rank <sup>2</sup>	Acreage <sup>3</sup>
Blue oak woodland	<i>Quercus douglasii</i> woodland 71.020.00	G4 S4	0.100
Disturbed	--	--	0.313
<b>Total:</b>			0.413

<sup>1</sup> Vegetation alliances based on descriptions and classification methods in Sawyer et al. (2009). Alliance codes from CDFW (2010). Some communities may lack recognized vegetation alliances or contain multiple alliances.

<sup>2</sup> Rarity ranking follows NatureServe’s Heritage Methodology and is based on degree of imperilment as measured by rarity, trends, and threats. State (S) ranks of 1-3 are considered highly imperiled by CDFW (2010). Nonnative vegetation has no rarity rank.

<sup>3</sup> Acreages were calculated using ArcMap functions.

### 1. Blue Oak Woodland

A total of 0.100 acre of Blue Oak Woodland occurs in the BSA. The canopy of this community is dominated by Blue oak (*Quercus douglasii*). The understory shrub layer is sparse. Where present, it is dominated by honeysuckle (*Lonicera* sp.) and poison oak (*Toxicodendron diversilobus*). The herb layer is dominated by nonnative grasses and forbs including slender wild oat (*Avena barbata*), tall sock destroyer (*Torilis arvensis*), nit grass (*Gastridium phleoides*), and bristly dogtail grass (*Cynosurus echinatus*).

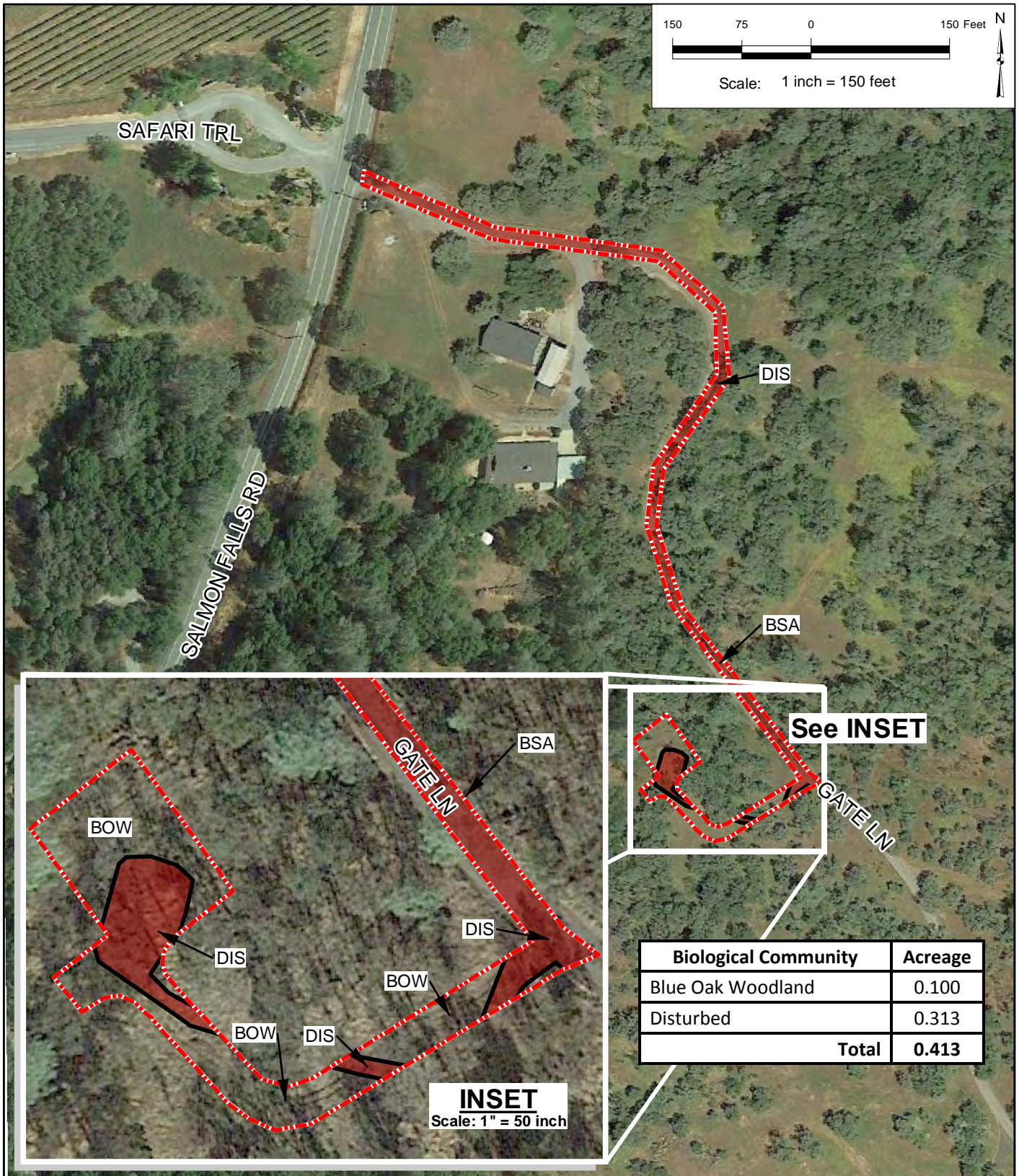
### 2. Disturbed

A total of 0.313 acre of disturbed land occurs in the BSA. The disturbed area appears to have been cleared using a bulldozer at least one month prior. The majority of this community is bare ground. Where present, vegetation is similar to the herbaceous layer in the blue oak woodland. The disturbed area includes Gate Lane, a paved road that extends north to the intersection with Salmon Falls Road.




## D. The Existing Level of Disturbance

The majority of the BSA has a medium level of existing disturbance from the bulldozer disturbance and paved Gate Lane.

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AT&T Zee Estates Site  
 CVL03629 Project  
 El Dorado County, CA  
 9 August 2017

-  Biological Study Area (BSA)
-  Blue Oak Woodland (BOW)
-  Disturbed (DIS)



**SYCAMORE**  
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Aerial Photograph: 25 October 2016  
 Google Earth Imagery

Figure 4.  
 Biological Resources Map

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## **V. BIOLOGICAL RESOURCES IN THE BIOLOGICAL STUDY AREA**

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### **A. Determination of Special-Status Species in the Biological Study Area**

Field surveys were conducted by Sycamore Environmental biologists to determine if individuals or habitat for special-status species identified in the file data were present in the BSA. Special-status species for which suitable habitat is present are discussed below.

Special-status wildlife species, plant species, and communities for which suitable habitat is not present, or whose distributional limits preclude the possibility of their occurrence in the BSA, are not discussed in Section V of this report.

### **B. Evaluation of Special-Status Natural Communities**

Descriptions of the special-status natural communities are in section IV.C above. The BSA is not located within an Ecological Preserve or Important Habitat for Migratory Deer Herds. The BSA is located within an Important Biological Corridor (IBC), in a previously disturbed and developed area. The BSA is in El Dorado County Rare Plant Mitigation Area 1. Mitigation Areas 0 and 1 include areas of gabbro soils that may support the Pine Hill plants. The eight Pine Hill plants are Stebbins' morning-glory, Pine Hill ceanothus, Red Hills soaproot, Pine Hill flannelbush, El Dorado bedstraw, Bisbee Peak rush-rose, Layne's butterweed, and El Dorado County mule ears. The BSA is not in the USFWS recommended preserve area for the gabbro soil (Pine Hill) plants (USFWS 2002). Development on lands in Rare Plant Mitigation Area 1 must mitigate impacts by one of two options:

- A. Pay the appropriate fee in lieu of Ecological Preserve Mitigation for the direct or indirect impacts caused by development on rare plants and rare plant habitat; or
- B. Participate in the Rare Plant Off-Site Mitigation Program.

### **Blue Oak Woodland (*Quercus douglasii* forest alliance; CDFW 071.020.00)**

The blue oak woodland community in the BSA is regulated by El Dorado County General Plan Policy 7.4.4.4. All new developments must adhere to the retention standards of the policy. Based on aerial images in Google Earth from October 2016, APN 104-370-24-100 in which the BSA is located contains more than one percent canopy cover of oak woodlands. El Dorado County requires minimum retention standards for oak canopy under the Policy 7.4.4.4 on parcels that contain more than one percent oak canopy. An arborist report was not prepared as part of this Biological Resource Evaluation.

The County expects to adopt a new Oak Resources Management Plan (ORMP) in September 2017 that replaces Policy 7.4.4.4. The ORMP regulates both oak woodlands and individual trees outside of oak woodlands. Mitigation ratios will be based on the percent of oak woodland impacted.

### **C. Evaluation of Special-Status Wildlife Species**

#### **Nesting Birds Listed Under the MBTA or Regulated by CA Fish and Game Code**

**STATUS:** Fish and Game Code 3503.5 protects all birds in the orders Falconiformes and Strigiformes (collectively known as birds of prey). Birds of prey include raptors, falcons, and owls. Migratory birds are protected under the federal Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. 703-711). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR Part 10 including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). All migratory bird species are protected by the MBTA. Any

disturbance that causes direct injury, death, nest abandonment, or forced fledging of migratory birds, is restricted under the MBTA. Any removal of active nests during the breeding season or any disturbance that results in the abandonment of nestlings is considered a 'take' of the species under federal law.

**HABITAT PRESENT IN THE BSA:** Bird species observed are listed in Appendix A. The BSA provides habitat for birds listed under the Migratory Bird Treaty Act (MBTA) and/or regulated by the CA Fish and Game Code. Birds may nest in trees, shrubs, on the ground, and on structures within and adjacent to the BSA.

**DISCUSSION:** No bird of prey nests or nests of other birds protected by the MBTA or Fish and Game Code were observed in the BSA during biological survey on 13 July. The nesting bird season is generally defined as 15 February to 31 August for most bird species.

## D. Evaluation of Special-Status Plants

### Big-scale balsamroot (*Balsamorhiza macrolepis* var. *macrolepis*)

**STATUS:** CNPS Rank 1B.2

**HABITAT AND BIOLOGY:** A perennial herb found in chaparral, cismontane woodland, and valley and foothill grassland, sometimes on serpentine soils, from 295 to 5,100 feet. Big-scale balsamroot blooms March through July (Baldwin et al. 2012).

**RANGE:** Known from Alameda, Butte, Colusa, El Dorado, Lake, Mariposa, Napa, Placer, Santa Clara, Solano, Sonoma, Tehama, and Tuolumne counties (CNPS 2016).

**KNOWN RECORDS:** The closest CNDDDB record for this species is from 1920 and located approximately 3.4 miles west of the BSA. The precise location of the occurrence is unknown and mapped by CNDDDB at the site of historical Rattlesnake Bar along the North Fork American River. This site was inundated by Folsom Lake. CNDDDB considers this occurrence as possibly extirpated.

**HABITAT PRESENT IN THE BSA:** The BSA provides potential habitat for big-scale balsamroot.

**DISCUSSION:** Big-scale balsamroot was not observed in the BSA during the July 2017 biological survey conducted during the evident and identifiable period.

### Stebbins' morning-glory (*Calystegia stebbinsii*)

**STATUS:** Federal Endangered, State Endangered, CNPS Rank 1B.1

**HABITAT AND BIOLOGY:** A perennial rhizomatous herb found in serpentine or gabbroic soils in chaparral openings and cismontane woodland from 600 to 2,400 feet elevation. Stebbins' morning-glory blooms April through July (CNPS 2016).

**RANGE:** Known from El Dorado and Nevada counties (CNPS 2016).

**KNOWN RECORDS:** The closest CNDDDB record for this species is 2 miles south of the BSA along the South Fork American River, from Salmon Falls Road east to Weber Creek. From 1984 to 2007, multiple occurrences of populations ranging from 20 to 15,000 plants were observed.

**HABITAT PRESENT IN THE BSA:** The BSA provides potential habitat for Stebbins' morning-glory.

**DISCUSSION:** Stebbins' morning-glory was not observed in the BSA during the July 2017 biological survey conducted during the evident and identifiable period.

### **Chaparral sedge (*Carex xerophila*)**

**STATUS:** CNPS Rank 1B.2

**HABITAT AND BIOLOGY:** Chaparral sedge is a newly described perennial, cespitose herb found on serpentine and gabbro soils (Zika et al. 2014). It occurs in uplands in full sun to partial shade, in open forest or chaparral from 1,475 to 2,525 feet. Most collections are from April, May, or June (CCH 2016, Zika et al. 2014). Zika et al. (2014) note it appears chaparral sedge is “an uncommon plant in a declining habitat, and in need of conservation attention.”

**RANGE:** Known from Butte, El Dorado, Nevada, and Yuba counties (CCH 2016, Zika et al. 2014).

**KNOWN RECORDS:** The closest CNDDDB record for this species is 3 miles south of the BSA approximately 0.6 to 1.3 air miles east of Salmon Falls Road. Approximately 300 plants were observed in 2015. Habitat consists of trails in cleared or burned areas.

**HABITAT PRESENT IN THE BSA:** The BSA provides potential habitat for chaparral sedge.

**DISCUSSION:** Chaparral sedge was not observed in the BSA during the July 2017 biological survey. Although the survey was not conducted during the blooming period for Chaparral sedge, this species is evident and identifiable year-round. Chaparral sedge does not occur in the BSA.

### **Pine Hill ceanothus (*Ceanothus roderickii*)**

**STATUS:** Federal Endangered, State Rare, CNPS Rank 1B.1

**HABITAT AND BIOLOGY:** An evergreen shrub found in serpentine or gabbroic soils in chaparral and cismontane woodland from 800 to 3,600 feet. It blooms April through June (CNPS 2016). Pine Hill ceanothus is a perennial evergreen shrub that is evident and identifiable year-round.

**RANGE:** Known only from El Dorado County (CNPS 2016).

**KNOWN RECORDS:** The closest CNDDDB record for this species is 3 miles south of the BSA along the North and South Fork American River, mostly between Salmon Falls Road and Weber Creek. Pine Hill ceanothus was observed here from 1984 to 2011, in numbers ranging from 7 to 12,000 plants. Habitat consists of Rescue gabbroic soils in chaparral.

**HABITAT PRESENT IN THE BSA:** The BSA provides potential habitat for Pine Hill ceanothus.

**DISCUSSION:** Pine Hill ceanothus was not observed in the BSA during the May 2016 biological survey. Although the survey was not conducted during the blooming period, Pine Hill ceanothus is evident and identifiable year-round. Pine Hill ceanothus does not occur in the BSA.

### **Red Hills soaproot (*Chlorogalum grandiflorum*)**

**STATUS:** CNPS Rank 1B.2

**HABITAT AND BIOLOGY:** A perennial bulbiferous herb found in serpentine or gabbroic soils in chaparral, cismontane woodland, and lower montane coniferous forest from 800 to 4,100 feet. Red Hills soaproot blooms May through June (CNPS 2016).

**RANGE:** Known from Amador, Butte, Calaveras, El Dorado, Placer, and Tuolumne counties (CNPS 2016).



**KNOWN RECORDS:** The closest CNDDDB record for this species is 3 miles south of the BSA along both sides of Highway 50 between Shingle springs and Cameron Park. The record consists 100 to 1,000s of plants growing in openings and disturbed areas in chaparral on gabbroic soils from 1984 to 2015.

**HABITAT PRESENT IN THE BSA:** The BSA provides potential habitat for Red Hills soaproot.

**DISCUSSION:** Red Hills soaproot was not found during the July 2017 biological survey. Although the survey was not conducted during the blooming period, Red Hills soaproot is evident and identifiable in July based on leaf structure.

**Bisbee Peak rush-rose (*Crocانthemum suffrutescens*)**

**STATUS:** CNPS Rank 3.2

**HABITAT AND BIOLOGY:** An evergreen shrub found in chaparral from 250 to 2,200 feet. Often found on gabbroic or lone soils; often in burned or disturbed areas in chaparral. Bisbee Peak rush-rose blooms April through August (CNPS 2016).

**RANGE:** Known from Amador, Calaveras, and El Dorado counties (CNPS 2016).

**KNOWN RECORDS:** The closest CNDDDB record for this species is 2 miles south of the BSA, north of the South Fork American River. Bisbee Peak rush-rose was observed at this location between 1981 and 1984.

**HABITAT PRESENT IN THE BSA:** The BSA provides potential habitat for Bisbee Peak rush-rose.

**DISCUSSION:** Bisbee Peak rush-rose was not found during the July 2017 biological survey conducted during the evident and identifiable period.

**Pine Hill flannelbush (*Fremontodendron californicum* ssp. *decumbens*)**

**STATUS:** Federal Endangered, State Rare, CNPS 1B.2

**HABITAT AND BIOLOGY:** An evergreen shrub found in rocky areas of serpentine or gabbroic soils in chaparral and cismontane woodland from 1,400 to 2,500 feet. Pine Hill flannelbush blooms April through July (CNPS 2016). Pine Hill flannelbush is a perennial evergreen shrub that is evident and identifiable year-round.

**RANGE:** Known from El Dorado County with possible records in Nevada and Yuba counties (CNPS 2016). In El Dorado County, Pine Hill flannelbush is only known from the Pine Hill area.

**KNOWN RECORDS:** The closest CNDDDB record for this species is approximately 5.8 miles south of the BSA along Fairview Drive. Between 1 and 10 plants were observed on a rocky outcrop on top of a ridge on Gabbro soil from 1983 to 2015.

**HABITAT PRESENT IN THE BSA:** The BSA provides potential habitat for Pine Hill flannelbush.

**DISCUSSION:** Pine Hill flannelbush was not found during the July 2017 biological survey conducted during the evident and identifiable period. Pine Hill flannelbush does not occur in the BSA.

**El Dorado bedstraw (*Galium californicum* ssp. *sierrae*)**

**STATUS:** Federal Endangered, State Rare, CNPS 1B.2

**HABITAT AND BIOLOGY:** A perennial herb found in gabbroic soils in chaparral, cismontane woodland, and lower montane coniferous forest from 300 to 1,900 feet elevation. El Dorado bedstraw blooms May through July (Baldwin 2012). El Dorado bedstraw is more likely to be found under oaks and in oak leaf litter, particularly of black oak (BLM 2010).

**RANGE:** Known only from El Dorado County (CNPS 2016).

**KNOWN RECORDS:** The closest CNDDDB record is about 3 miles south of the BSA, 0.5 mile south of New Salmon Falls Bridge. This occurrence is based on an undated collection and a 1958 observation.

**HABITAT PRESENT IN THE BSA:** The BSA provides potential habitat for El Dorado bedstraw.

**DISCUSSION:** El Dorado bedstraw was not found during the July 2017 biological survey conducted during the evident and identifiable period.

**Layne's Butterweed (*Packera layneae*; syn. *Senecio layneae*)**

**STATUS:** Federal Threatened, State Rare, CNPS 1B.2

**HABITAT AND BIOLOGY:** A perennial herb found in rocky areas with serpentine or gabbroic soils in chaparral and cismontane woodland from 650 to 3,560 feet elevation. Blooms April through August (CNPS 2016).

**RANGE:** Known from Butte, El Dorado, Placer, Tuolumne, and Yuba counties (CNPS 2016).

**KNOWN RECORDS:** The closest CNDDDB record, from 2000, is located 2.6 miles southeast of the BSA along the west side of the South Fork American River. Approximately 120 plants were observed in 2000 along a dirt road in a transition area of chaparral to Ponderosa pine forest.

**HABITAT PRESENT IN THE BSA:** The BSA provides potential habitat for Layne's butterweed.

**DISCUSSION:** Layne's butterweed was not found during the July 2017 biological survey conducted during the evident and identifiable period.

**El Dorado County mule ears (*Wyethia reticulata*)**

**STATUS:** CNPS 1B.2

**HABITAT AND BIOLOGY:** A perennial rhizomatous herb found in clay or gabbroic soils in chaparral, cismontane woodland, and lower montane coniferous forest from 600 to 2,060 feet. El Dorado County mule ears blooms April through August (CNPS 2016).

**RANGE:** Known from El Dorado County and Yuba counties (CNPS 2016).

**KNOWN RECORDS:** The closest CNDDDB record is approximately 2.2 miles south of the BSA along both sides of the South Fork American River, near the mouth of Weber Creek. Up to 100,000 plants were observed in gabbroic northern mixed chaparral from 1984 through 2007.

**HABITAT PRESENT IN THE BSA:** The BSA provides potential habitat for El Dorado County mule ears.

**DISCUSSION:** El Dorado County mule ears was not found during the July 2017 biological survey conducted during the evident and identifiable period.

## **E. Potentially Jurisdictional Waters**

Field surveys conducted by Sycamore Environmental biologists included evaluation of potential wetlands or waters within the BSA. A formal jurisdictional delineation of wetlands and waters using U.S. Army Corps of Engineers standards (USACE 1987; USACE 2008) was not conducted.

There are no potentially jurisdictional waters in the BSA.

## VI. LITERATURE CITED

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## VII. PREPARERS

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**Jeffery Little**, Vice President, Sycamore Environmental. Over 24 years experience with preparation of NES, BA, and NEPA/CEQA compliance documents, impact analysis, agency formal and informal consultations and permitting. Project management, conducts special-status species surveys, jurisdictional delineations, and prepares mitigation and monitoring plans. CAD/ GIS Manager responsible for data collection, map creation, impact analyses, and report preparation. He holds a California Department of Fish and Wildlife Rare, Threatened and Endangered Plant Voucher Collecting Permit (2081(a)-14-078-V), and is an authorized individual on the CDFW Scientific Collecting Permit (SC-7617).

Responsibilities: Principal-in-Charge, QA/QC

**Jessica Quinn, Ph.D.**, Ecology, University of California, Davis, CA. Over 8 years of experience as a professional ecologist. Conducts special-status plant and wildlife surveys; wetland delineations; and prepares CEQA/NEPA reports that document resources, identify impacts, and recommend mitigation measures. She has managed and conducted wetland functional analyses, environmental risk assessments, environmental screening evaluations, and restoration design evaluations, and has received advanced training for CA red-legged frog, NEPA and Habitat Conservation Planning. Her background includes 13 additional years of experience managing and conducting ecological research on mammals, birds, and grassland ecology. Dr. Quinn holds a CDFW Plant Voucher Collecting Permit (#2081(a)-16-053-V), and is an authorized individual on the CDFW Scientific Collecting Permit (SC-7617).

Responsibilities: Project manager, report preparation.

**Adrienne Levoy, B.S.**, Conservation and Resource Studies, University of California, Berkeley, CA. Over 9 years experience as a professional biologist. Conducts wildlife surveys, yellow-billed cuckoo, burrowing owl, and Swainson's hawk protocol surveys, biological resource evaluations, worker awareness training, and construction monitoring; prepares impact/mitigation analyses, and assists with permit application preparation. She prepares reports used in the CEQA/NEPA process that document resources, identify impacts, recommends mitigation measures, and assists with permit application preparation. She holds a USFWS recovery permit for listed yellow-billed cuckoo (TE-78073B-0) and a CDFW Scientific Collecting Permit (SC-13362).

Responsibilities: Fieldwork and report preparation.

**Juan L. Mejia, B.S.**, Environmental Science and Management (emphasis Ecology, Conservation and Biodiversity), University of California, Davis, CA. Over 2 years of experience as a professional biologist. Mr. Mejia conducts plant and wildlife surveys, preconstruction and construction monitoring, and assists with preparation of biological resource evaluations, Natural Environment Study reports, permit applications, and other documents used in the CEQA/NEPA process. Serving as both field biologist and technical report writer, he conducts database research on special status species' biology, habitat and distribution. He holds a CDFW Plant Voucher Collecting Permit (2081(a)-15-067-V) and is an authorized individual on the CDFW Scientific Collecting Permit (SC-7617).

Responsibilities: Fieldwork, Report preparation

**Aramis Respoll, GIS Analyst/ CAD Operator.** Over 20 years experience in drafting and spatial analysis using AutoCAD map and ArcGIS for public and private projects. Prepares figures for biological and permitting documents, impact analysis maps, and other supporting graphics.

Responsibilities: Figure preparation and spatial analysis.

## APPENDIX A

### Plant and Wildlife Species Observed

Plant Species Observed. Taxonomy follows Baldwin et al. 2012.

Family	Scientific Name	Common Name	N/I <sup>1</sup>	CAL-IPC <sup>2</sup>
<b>GYMNOSPERMS</b>				
<b>EUDICOTS</b>				
<b>Anacardiaceae</b>	<i>Toxicodendron diversilobum</i>	Western poison oak	N	
<b>Apiaceae</b>	<i>Daucus pusillus</i>	Daucus	N	
	<i>Torilis arvensis</i>	Tall sock destroyer	I	
<b>Asteraceae</b>	<i>Carduus pycnocephalus</i> ssp. <i>Pycnocephalus</i>	Italian thistle	I	Moderate
	<i>Leontodon saxatilis</i>	Hairy hawkbit	I	
	<i>Tragopogon</i> sp.	Salsify	I	
<b>Caprifoliaceae</b>	<i>Lonicera</i> sp.	Honeysuckle	--	
<b>Fabaceae</b>	<i>Acmispon americanus</i> var. <i>americanus</i>	Deervetch	N	
	<i>Trifolium hirtum</i>	Rose clover	I	Limited
<b>Fagaceae</b>	<i>Quercus douglasii</i>	Blue oak	N	
	<i>Quercus wislizeni</i>	Interior live oak	N	
<b>Linaceae</b>	<i>Linum bienne</i>	Flax	I	
<b>Rhamnaceae</b>	<i>Ceanothus cuneatus</i>	California-lilac	N	
<b>Rubiaceae</b>	<i>Galium parisiense</i>	Wall bedstraw	I	
<b>MONOCOTS</b>				
<b>Poaceae</b>	<i>Aegilops triuncialis</i>	Barbed goat grass	I	
	<i>Avena barbata</i>	Slender wild oat	I	Moderate
	<i>Brachypodium distachyon</i>	False brome	I	Moderate
	<i>Bromus diandrus</i>	Ripgut grass	I	Moderate
	<i>Bromus hordeaceus</i>	Soft chess	I	Limited
	<i>Elymus caput-medusae</i>	Medusa head	I	
	<i>Cynosurus echinatus</i>	Bristly dogtail grass	I	Moderate
	<i>Gastidium phleoides</i>	Nit grass	I	
<b>Themidaceae</b>	<i>Brodiaea elegans</i> ssp. <i>elegans</i>	Harvest brodiaea	N	
	<i>Triteleia</i> sp.	Triteleia	N	

<sup>1</sup> N = Native to CA; I = Introduced.

<sup>2</sup> Negative ecological impact according to the California Invasive Plant Council (Cal-IPC 2006).

Wildlife Species Observed

COMMON NAME	SCIENTIFIC NAME
<b>BIRDS</b>	
Acorn woodpecker	<i>Melanerpes formicivorus</i>
American goldfinch	<i>Carduelis tristis</i>
American robin	<i>Turdus migratorius</i>
American robin	<i>Turdus migratorius</i>
Ash-throated flycatcher	<i>Myiarchus cinerascens</i>
Black-chinned hummingbird	<i>Archilochus alexandri</i>
Blue-gray gnatcatcher	<i>Polioptila caerulea</i>
Brown-headed cowbird	<i>Molothrus ater</i>
California scrub-jay	<i>Aphelocoma californica</i>
Common raven	<i>Corvus corax</i>
House finch	<i>Carpodacus mexicanus</i>
Lazuli bunting	<i>Passerina amoena</i>
Lesser goldfinch	<i>Carduelis psaltria</i>
Mourning dove	<i>Zenaida macroura</i>
Oak titmouse (Plain titmouse)	<i>Baeolophus inornatus</i>
Red-shouldered hawk	<i>Buteo lineatus</i>
Western bluebird	<i>Sialia mexicana</i>
White-breasted nuthatch	<i>Sitta carolinensis</i>

## **APPENDIX B**

### **USFWS Species List**

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# United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Sacramento Fish And Wildlife Office  
Federal Building  
2800 Cottage Way, Room W-2605  
Sacramento, CA 95825-1846  
Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To:

August 04, 2017

Consultation Code: 08ESMF00-2017-SLI-2835

Event Code: 08ESMF00-2017-E-07768

Project Name: ATT Zee Estates Wireless Tower

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, under the jurisdiction of the U.S. Fish and Wildlife Service (Service) that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

Please follow the link below to see if your proposed project has the potential to affect other species or their habitats under the jurisdiction of the National Marine Fisheries Service:

[http://www.nwr.noaa.gov/protected\\_species/species\\_list/species\\_lists.html](http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html)

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to

utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.), and projects affecting these species may require development of an eagle conservation plan ([http://www.fws.gov/windenergy/eagle\\_guidance.html](http://www.fws.gov/windenergy/eagle_guidance.html)). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

## Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

### **Sacramento Fish And Wildlife Office**

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

(916) 414-6600

## Project Summary

Consultation Code: 08ESMF00-2017-SLI-2835

Event Code: 08ESMF00-2017-E-07768

Project Name: ATT Zee Estates Wireless Tower

Project Type: COMMUNICATIONS TOWER

**Project Description:** The proposed AT&T Zee Estates Site CVL03629 Project (Project) facility tower will be a new 153-ft monopole tower with a new GPS antenna, six wireless antennas and 14 remote radio units (RRUs) mounted at 150 ft; six wireless antennas, one surge protector, and six RRUs mounted at 140 ft; and 21 RRUs and three surge protectors on a collar mount directly below the sectors. In the future, the tower can also accommodate two 4-ft diameter microwave dishes mounted at 92.5 ft. Future antennas can be mounted by other carriers at approximately 132, 125, and 110 ft. The tower has been designed with pine foliage to match the existing surrounding trees. The foliage would extend horizontally approximately 7 ft above the top of the structure to an overall structure height of approximately 160 ft. Antennas will be concealed with socks. The monopole “trunk” and RRUs will be painted brown. The facility will include a new, approximately 200-ft-long, 12-ft-wide asphalt concrete access road and paired gravel-filled drainage ditch, a new 35 Kw propane generator with a 500-gallon propane tank, and a pre-fabricated equipment shelter. The facility will be located on a 30-ft by 45-ft lease area enclosed with a new 6-ft chain link fence and 12-ft wide double access gate. Connecting the facility with existing power and fiber lines will require excavation of an approximately 1,200-ft long, 5-ft wide linear utility trench along the proposed access road and Gate Lane through which to run cables. The approximately 400 cubic yards of excavated material will be replaced. The cables will be connected to an existing utility pole on Salmon Falls Road at the intersection with Gate Lane. New splice boxes, each for power and fiber, will be installed approximately every 300 ft along the new utility trenches.

**Project Location:**

Approximate location of the project can be viewed in Google Maps:

<https://www.google.com/maps/place/38.809968162051376N121.02028867921746W>



Counties: El Dorado, CA

## Endangered Species Act Species

There is a total of 8 threatened, endangered, or candidate species on this species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

### Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> There is a <b>final critical habitat</b> designated for this species. Your location is outside the designated critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/2891">https://ecos.fws.gov/ecp/species/2891</a>	Threatened

### Fishes

NAME	STATUS
Delta Smelt <i>Hypomesus transpacificus</i> There is a <b>final critical habitat</b> designated for this species. Your location is outside the designated critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/321">https://ecos.fws.gov/ecp/species/321</a>	Threatened
Steelhead <i>Oncorhynchus</i> (=Salmo) <i>mykiss</i> Population: Northern California DPS There is a <b>final critical habitat</b> designated for this species. Your location is outside the designated critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/1007">https://ecos.fws.gov/ecp/species/1007</a>	Threatened

### Insects

NAME	STATUS
Valley Elderberry Longhorn Beetle <i>Desmocerus californicus dimorphus</i> There is a <b>final critical habitat</b> designated for this species. Your location is outside the designated critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/7850">https://ecos.fws.gov/ecp/species/7850</a>	Threatened

## Flowering Plants

NAME	STATUS
El Dorado Bedstraw <i>Galium californicum ssp. sierrae</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/5209">https://ecos.fws.gov/ecp/species/5209</a>	Endangered
Layne's Butterweed <i>Senecio layneae</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/4062">https://ecos.fws.gov/ecp/species/4062</a>	Threatened
Pine Hill Ceanothus <i>Ceanothus roderickii</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/3293">https://ecos.fws.gov/ecp/species/3293</a>	Endangered
Stebbins' Morning-glory <i>Calystegia stebbinsii</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/3991">https://ecos.fws.gov/ecp/species/3991</a>	Endangered

## Critical habitats

There are no critical habitats within your project area under this office's jurisdiction.

## **APPENDIX C**

### **CNDDDB Summary Report CNPS Inventory Query**

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# Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad (Gold Hill (3812182) OR Auburn (3812181) OR Greenwood (3812088) OR Rocklin (3812172) OR Pilot Hill (3812171) OR Coloma (3812078) OR Folsom (3812162) OR Clarksville (3812161) OR Shingle Springs (3812068))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Accipiter cooperii</i> Cooper's hawk	ABNKC12040	None	None	G5	S4	WL
<i>Agelaius tricolor</i> tricolored blackbird	ABPBXB0020	None	Candidate Endangered	G2G3	S1S2	SSC
<i>Allium jepsonii</i> Jepson's onion	PMLIL022V0	None	None	G2	S2	1B.2
<i>Ammonitella yatesii</i> tight coin (=Yates' snail)	IMGASB0010	None	None	G1	S1	
<i>Andrena blennospermatis</i> Blennosperma vernal pool andrenid bee	IIHYM35030	None	None	G2	S2	
<i>Andrena subapasta</i> An andrenid bee	IIHYM35210	None	None	G1G2	S1S2	
<i>Antrozous pallidus</i> pallid bat	AMACC10010	None	None	G5	S3	SSC
<i>Aquila chrysaetos</i> golden eagle	ABNKC22010	None	None	G5	S3	FP
<i>Ardea alba</i> great egret	ABNGA04040	None	None	G5	S4	
<i>Ardea herodias</i> great blue heron	ABNGA04010	None	None	G5	S4	
<i>Athene cunicularia</i> burrowing owl	ABNSB10010	None	None	G4	S3	SSC
<i>Balsamorhiza macrolepis</i> big-scale balsamroot	PDAST11061	None	None	G2	S2	1B.2
<i>Banksula californica</i> Alabaster Cave harvestman	ILARA14020	None	None	GH	SH	
<i>Banksula galilei</i> Galile's cave harvestman	ILARA14040	None	None	G1	S1	
<i>Bombus morrisoni</i> Morrison bumble bee	IIHYM24460	None	None	G4G5	S1S2	
<i>Bombus occidentalis</i> western bumble bee	IIHYM24250	None	None	G2G3	S1	
<i>Branchinecta lynchi</i> vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	
<i>Buteo swainsoni</i> Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
<i>Calystegia stebbinsii</i> Stebbins' morning-glory	PDCON040H0	Endangered	Endangered	G1	S1	1B.1



Selected Elements by Scientific Name  
California Department of Fish and Wildlife  
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<b><i>Carex xerophila</i></b> chaparral sedge	PMCYP03M60	None	None	G2	S2	1B.2
<b><i>Ceanothus roderickii</i></b> Pine Hill ceanothus	PDRHA04190	Endangered	Rare	G1	S1	1B.1
<b><i>Chlorogalum grandiflorum</i></b> Red Hills soaproot	PMLIL0G020	None	None	G2	S2	1B.2
<b><i>Clarkia biloba ssp. brandegeae</i></b> Brandegee's clarkia	PDONA05053	None	None	G4G5T4	S4	4.2
<b><i>Corynorhinus townsendii</i></b> Townsend's big-eared bat	AMACC08010	None	None	G3G4	S2	SSC
<b><i>Cosumnoperla hypocreana</i></b> Cosumnes stripetail	IIPLE23020	None	None	G2	S2	
<b><i>Crocانthemum suffrutescens</i></b> Bisbee Peak rush-rose	PDCIS020F0	None	None	G2Q	S2	3.2
<b><i>Desmocerus californicus dimorphus</i></b> valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T2	S2	
<b><i>Downingia pusilla</i></b> dwarf downingia	PDCAM060C0	None	None	GU	S2	2B.2
<b><i>Elanus leucurus</i></b> white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
<b><i>Emys marmorata</i></b> western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
<b><i>Falco columbarius</i></b> merlin	ABNKD06030	None	None	G5	S3S4	WL
<b><i>Falco peregrinus anatum</i></b> American peregrine falcon	ABNKD06071	Delisted	Delisted	G4T4	S3S4	FP
<b><i>Fremontodendron decumbens</i></b> Pine Hill flannelbush	PDSTE03030	Endangered	Rare	G1	S1	1B.2
<b><i>Fritillaria eastwoodiae</i></b> Butte County fritillary	PMLIL0V060	None	None	G3Q	S3	3.2
<b><i>Galium californicum ssp. sierrae</i></b> El Dorado bedstraw	PDRUB0N0E7	Endangered	Rare	G5T1	S1	1B.2
<b><i>Gratiola heterosepala</i></b> Boggs Lake hedge-hyssop	PDSCR0R060	None	Endangered	G2	S2	1B.2
<b><i>Haliaeetus leucocephalus</i></b> bald eagle	ABNKC10010	Delisted	Endangered	G5	S3	FP
<b><i>Hydrochara rickseckeri</i></b> Ricksecker's water scavenger beetle	IICOL5V010	None	None	G2?	S2?	
<b><i>Lasionycteris noctivagans</i></b> silver-haired bat	AMACC02010	None	None	G5	S3S4	
<b><i>Laterallus jamaicensis coturniculus</i></b> California black rail	ABNME03041	None	Threatened	G3G4T1	S1	FP



**Selected Elements by Scientific Name**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<b><i>Lathyrus sulphureus var. argillaceus</i></b> dubious pea	PDFAB25101	None	None	G5T1T2	S1S2	3
<b><i>Lepidurus packardi</i></b> vernal pool tadpole shrimp	ICBRA10010	Endangered	None	G4	S3S4	
<b><i>Linderiella occidentalis</i></b> California linderiella	ICBRA06010	None	None	G2G3	S2S3	
<b><i>Navarretia myersii ssp. myersii</i></b> pincushion navarretia	PDPLM0C0X1	None	None	G2T2	S2	1B.1
<b>Northern Hardpan Vernal Pool</b> Northern Hardpan Vernal Pool	CTT44110CA	None	None	G3	S3.1	
<b>Northern Volcanic Mud Flow Vernal Pool</b> Northern Volcanic Mud Flow Vernal Pool	CTT44132CA	None	None	G1	S1.1	
<b><i>Oncorhynchus mykiss irideus</i></b> steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	G5T2Q	S2	
<b><i>Orcuttia viscida</i></b> Sacramento Orcutt grass	PMPOA4G070	Endangered	Endangered	G1	S1	1B.1
<b><i>Packera layneae</i></b> Layne's ragwort	PDAST8H1V0	Threatened	Rare	G2	S2	1B.2
<b><i>Pandion haliaetus</i></b> osprey	ABNKC01010	None	None	G5	S4	WL
<b><i>Pekania pennanti</i></b> fisher - West Coast DPS	AMAJF01021	Proposed Threatened	Candidate Threatened	G5T2T3Q	S2S3	SSC
<b><i>Phalacrocorax auritus</i></b> double-crested cormorant	ABNFD01020	None	None	G5	S4	WL
<b><i>Phrynosoma blainvillii</i></b> coast horned lizard	ARACF12100	None	None	G3G4	S3S4	SSC
<b><i>Progne subis</i></b> purple martin	ABPAU01010	None	None	G5	S3	SSC
<b><i>Rana boylei</i></b> foothill yellow-legged frog	AAABH01050	None	Candidate Threatened	G3	S3	SSC
<b><i>Rana draytonii</i></b> California red-legged frog	AAABH01022	Threatened	None	G2G3	S2S3	SSC
<b><i>Riparia riparia</i></b> bank swallow	ABPAU08010	None	Threatened	G5	S2	
<b><i>Sagittaria sanfordii</i></b> Sanford's arrowhead	PMALI040Q0	None	None	G3	S3	1B.2
<b><i>Spea hammondi</i></b> western spadefoot	AAABF02020	None	None	G3	S3	SSC
<b><i>Taxidea taxus</i></b> American badger	AMAJF04010	None	None	G5	S3	SSC
<b>Valley Needlegrass Grassland</b> Valley Needlegrass Grassland	CTT42110CA	None	None	G3	S3.1	



**Selected Elements by Scientific Name**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**



<b>Species</b>	<b>Element Code</b>	<b>Federal Status</b>	<b>State Status</b>	<b>Global Rank</b>	<b>State Rank</b>	<b>Rare Plant Rank/CDFW SSC or FP</b>
<b><i>Viburnum ellipticum</i></b> oval-leaved viburnum	PDCPR07080	None	None	G4G5	S3?	2B.3
<b><i>Wyethia reticulata</i></b> El Dorado County mule ears	PDAST9X0D0	None	None	G2	S2	1B.2

**Record Count: 63**

## Plant List

### Inventory of Rare and Endangered Plants

27 matches found. Click on scientific name for details

#### Search Criteria

Found in Quads 3812182, 3812181, 3812088, 3812172, 3812171, 3812078, 3812162 3812161 and 3812068;

[Modify Search Criteria](#)
[Export to Excel](#)
[Modify Columns](#)
[Modify Sort](#)
[Display Photos](#)

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
<a href="#">Allium jepsonii</a>	Jepson's onion	Alliaceae	perennial bulbiferous herb	Apr-Aug	1B.2	S2	G2
<a href="#">Allium sanbornii var. sanbornii</a>	Sanborn's onion	Alliaceae	perennial bulbiferous herb	May-Sep	4.2	S4?	G3T4?
<a href="#">Balsamorhiza macrolepis</a>	big-scale balsamroot	Asteraceae	perennial herb	Mar-Jun	1B.2	S2	G2
<a href="#">Calandrinia breweri</a>	Brewer's calandrinia	Montiaceae	annual herb	(Jan)Mar-Jun	4.2	S4	G4
<a href="#">Calystegia stebbinsii</a>	Stebbins' morning-glory	Convolvulaceae	perennial rhizomatous herb	Apr-Jul	1B.1	S1	G1
<a href="#">Carex xerophila</a>	chaparral sedge	Cyperaceae	perennial herb	Mar-Jun	1B.2	S2	G2
<a href="#">Ceanothus fresnensis</a>	Fresno ceanothus	Rhamnaceae	perennial evergreen shrub	May-Jul	4.3	S4	G4
<a href="#">Ceanothus roderickii</a>	Pine Hill ceanothus	Rhamnaceae	perennial evergreen shrub	Apr-Jun	1B.1	S1	G1
<a href="#">Chlorogalum grandiflorum</a>	Red Hills soaproot	Agavaceae	perennial bulbiferous herb	May-Jun	1B.2	S2	G2
<a href="#">Clarkia biloba ssp. brandegeae</a>	Brandegee's clarkia	Onagraceae	annual herb	May-Jul	4.2	S4	G4G5T4
<a href="#">Claytonia parviflora ssp. grandiflora</a>	streambank spring beauty	Montiaceae	annual herb	Feb-May	4.2	S3	G5T3
<a href="#">Crocanthemum suffrutescens</a>	Bisbee Peak rush-rose	Cistaceae	perennial evergreen shrub	Apr-Aug	3.2	S2	G2Q
<a href="#">Downingia pusilla</a>	dwarf downingia	Campanulaceae	annual herb	Mar-May	2B.2	S2	GU
<a href="#">Eriophyllum jepsonii</a>	Jepson's woolly sunflower	Asteraceae	perennial herb	Apr-Jun	4.3	S3	G3
<a href="#">Fremontodendron decumbens</a>	Pine Hill flannelbush	Malvaceae	perennial evergreen shrub	Apr-Jul	1B.2	S1	G1
<a href="#">Fritillaria eastwoodiae</a>	Butte County fritillary	Liliaceae	perennial bulbiferous herb	Mar-Jun	3.2	S3	G3Q
<a href="#">Galium californicum ssp. sierrae</a>	El Dorado bedstraw	Rubiaceae	perennial herb	May-Jun	1B.2	S1	G5T1
<a href="#">Gratiola heterosepala</a>	Boggs Lake hedge-hyssop	Plantaginaceae	annual herb	Apr-Aug	1B.2	S2	G2
<a href="#">Horkelia parryi</a>	Parry's horkelia	Rosaceae	perennial herb	Apr-Sep	1B.2	S2	G2

		CNPS Inventory Results					
<a href="#"><u>Lathyrus sulphureus var. argillaceus</u></a>	dubious pea	Fabaceae	perennial herb	Apr-May	3	S1S2	G5T1T2
<a href="#"><u>Lilium humboldtii ssp. humboldtii</u></a>	Humboldt lily	Liliaceae	perennial bulbiferous herb	May-Jul(Aug)	4.2	S3	G4T3
<a href="#"><u>Navarretia myersii ssp. myersii</u></a>	pincushion navarretia	Polemoniaceae	annual herb	Apr-May	1B.1	S2	G2T2
<a href="#"><u>Orcuttia viscida</u></a>	Sacramento Orcutt grass	Poaceae	annual herb	Apr-Jul(Sep)	1B.1	S1	G1
<a href="#"><u>Packera layneae</u></a>	Layne's ragwort	Asteraceae	perennial herb	Apr-Aug	1B.2	S2	G2
<a href="#"><u>Sagittaria sanfordii</u></a>	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb (emergent)	May-Oct(Nov)	1B.2	S3	G3
<a href="#"><u>Viburnum ellipticum</u></a>	oval-leaved viburnum	Adoxaceae	perennial deciduous shrub	May-Jun	2B.3	S3?	G4G5
<a href="#"><u>Wyethia reticulata</u></a>	El Dorado County mule ears	Asteraceae	perennial herb	Apr-Aug	1B.2	S2	G2

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## **APPENDIX D**

### **Photographs**



Photo 1. View from the east end of the BSA up the hill towards the southwest. This photo shows the disturbed area and the site of the future gravel access road. 13 July 2017.



Photo 2. View from the southwest end of the BSA looking down the hill towards the east. This photo shows the site of the future gravel access road. 13 July 2017.



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Photo 3. View from the northwest end of the BSA looking southeast. This photo shows the disturbed area and will be the site of the double-wide access gate. 13 July 2017.



Photo 4. View facing northeast looking down the slope towards the disturbed area that will be the tower site. 13 July 2017.

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Photo 5: View from the west corner of the BSA facing north towards the blue oak woodland community at the edge of the AT&T lease area. 13 July 2017.



Photo 6: View from the northwest corner of the BSA facing north towards the blue oak woodland community outside of the lease area. 13 July 2017.

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