

Exhibit H: Alternative Site Analysis



2018 MAY -3 PM 4:47
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PLANNING DEPARTMENT

Alternative Site Analysis

**Verizon Wireless Telecommunications Facility
"Lake Forest Park"**

Colocation on El Dorado Irrigation District (EID) Water Tank
1835 Francisco Drive, El Dorado Hills, CA 95762
APN: 110-020-29-100

Summary of Site Selection and Technical Evidence
Conducted by On Air, LLC (agent for Verizon Wireless)

APPROVED
EL DORADO COUNTY
PLANNING COMMISSION
DATE August 23, 2018
BY Roger Trout/CMA
EXECUTIVE SECRETARY

Exhibit H: Alternative Site Analysis

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Exhibit H: Alternative Site Analysis

I. Coverage Objective

On Air, LLC has been contracted by Verizon Wireless to find an appropriate site location that will provide coverage and capacity to the network in the Lake Forest Park community in El Dorado Hills.

II. Published Search Ring Information

The search ring is centered over an affluent, residential area that consists mostly of newer development homes and a few small parks. There are no transmission towers or existing co-locatable cell towers in this area. Therefore, we have targeted the El Dorado Irrigation District (EID) water tank facility which is central to the search ring.

Originally, AT&T had a lease option with EID to build this cell site. AT&T received zoning approval (#S13-0015) and building permit approval (#226868) from El Dorado County with Verizon as a subtenant. However, AT&T let their permits expire as well as their lease option with EID. EID has now leased directly to Verizon and Verizon will build the site.

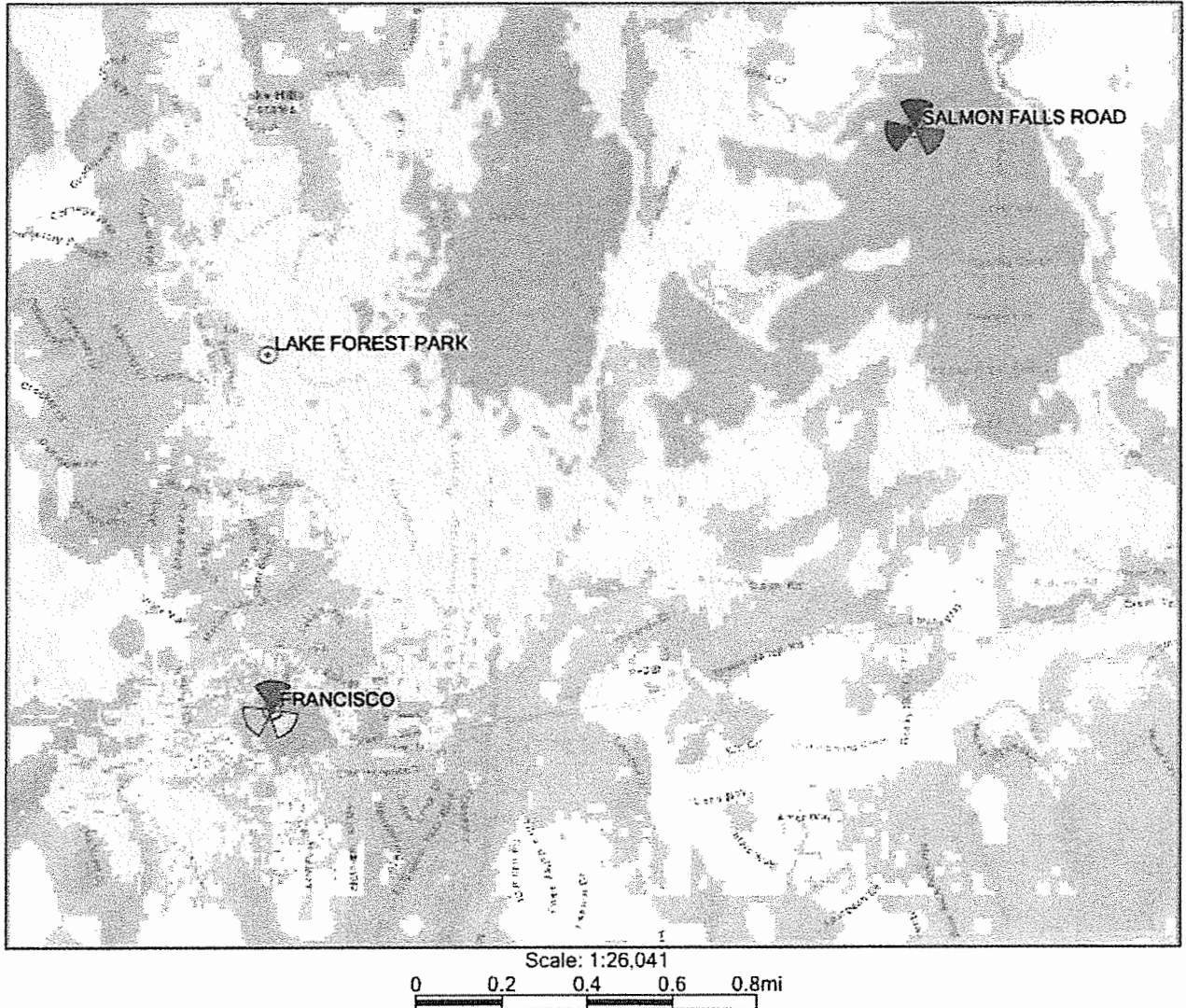


Exhibit H: Alternative Site Analysis

III. Service Gap Summary

The “Before Coverage” map below shows the existing coverage for El Dorado Hills neighborhoods.

Before Coverage



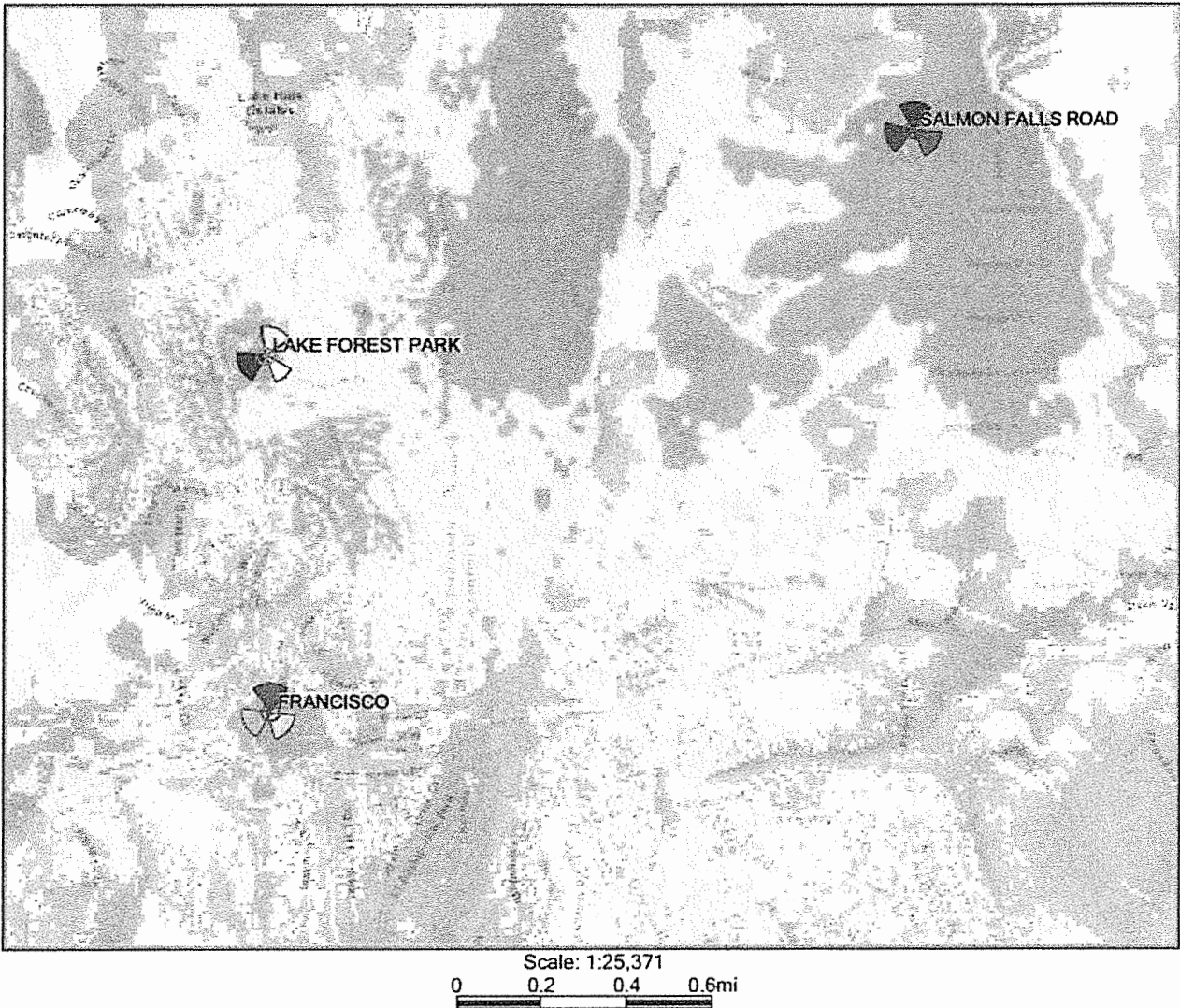
In the depiction “Before Coverage” above:

- The gray “bullseye” with the note “Lake Forest Park” indicates the proposed site location.
- The Green areas indicate strong outdoor coverage and in-building service.
- The Yellow indicates outdoor coverage and almost no in-building service.
- The Gray indicates little to no coverage.

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The “After Coverage” map below shows the improvement in coverage and capacity for the Lake Forest Park community in El Dorado Hills and improvement south of Green Valley Road.

After Coverage



In the depiction “After Coverage” above:

- The light blue/purple/yellow star with the note “Lake Forest Park” indicates a new cell tower in place at EID’s water treatment facility.
- The new coverage to the area is indicated as follows:
 - The Green areas indicate strong outdoor coverage and in-building service.
 - The Yellow indicates outdoor coverage and almost no in-building service.
 - The Gray indicates little to no coverage.

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IV. Methodology

On Air and Verizon Wireless always look to the local zoning codes and general plans to identify the sites that will have the least impact to the community while still providing the wireless communication services that the public desires. Per the zoning code of El Dorado County, and discussions with Planners, co-locations on existing infrastructure are valued above building new towers on raw land. Visual impact is also a primary concern, and Verizon Wireless always cooperates with the local jurisdiction and the community to mitigate a site's impact, if possible, through stealthing techniques and careful site selection. In addition to these considerations a viable site candidate must have a willing land owner, feasibility of construction, road access, and available telephone and electrical utilities.

EID's water tank facility fits the provisions discussed above. **Verizon has no other alternate candidates for this search ring for the following reasons:**

1. This is an affluent, residential area which consists mostly of newer development homes and a few small parks.
2. CC&Rs in this area make it difficult to find cell site candidates. EID's water treatment facility is not subject to CC&Rs.
3. There are no transmission or other co-locatable cell towers in this area.
4. The only schools in the area are middle schools, elementary schools, or a combination of the two, which are not ideal candidates for cell sites.
5. **AT&T already received zoning approval (#S13-0015) and building permit approval (#226868) for this site with Verizon as a subtenant.** However, AT&T never built the site. Verizon's design is very similar to AT&T's approved design except VZW has reduced the number of poles co-locating to the EID water tank from 3 poles (originally planned) to 2 poles (currently planned). Verizon has also relocated the ground equipment location to an area that better accommodates EID.
6. EID's water tank facility is in the center of the search ring which allows VZW to meet the coverage objective.

V. Site Design

Verizon Wireless is proposing to co-locate two 45.42' poles with magnetic mounts to an EID water tank to hold antennas and ancillary equipment. On the poles, Verizon proposes to install six (6) antennas (2 per sector), nine (9) RRUS (3 per sector), and two (2) Raycap surge protectors. The proposed center line for VZW's antennas is 42.42' above ground level.

In a 235 SF leased ground equipment area, Verizon proposes install four (4) ground mounted equipment cabinets, a utility panel for fiber, electric, and GPS antennas, plus an additional H-frame for three (3) surge protectors. The ground equipment area will be partially enclosed with a CMU block retaining wall.

No generator is planned for this site. The site is backed up with batteries installed in a purpose built cabinet. For extended power outages, provisions are made to support a portable generator to maintain site operations.

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The poles will be painted to match the color of the water tank. The antenna and ancillary components will be light grey. Since this is a co-location on a water tank, by design, the poles are unable to be further camouflaged.

VI. Benefits to the Community

1. The increased coverage from the site will improve emergency communications services to residents in El Dorado Hills and to travelers throughout the area.
2. The site will provide the El Dorado Hills residents, schools, local businesses, and their customers with reliable in-building voice, high-speed data, and internet service capabilities.
3. The new tower will allow for co-location opportunities that may attract other wireless carriers to this location providing enhanced coverage from multiple carriers.

VII. Conclusion:

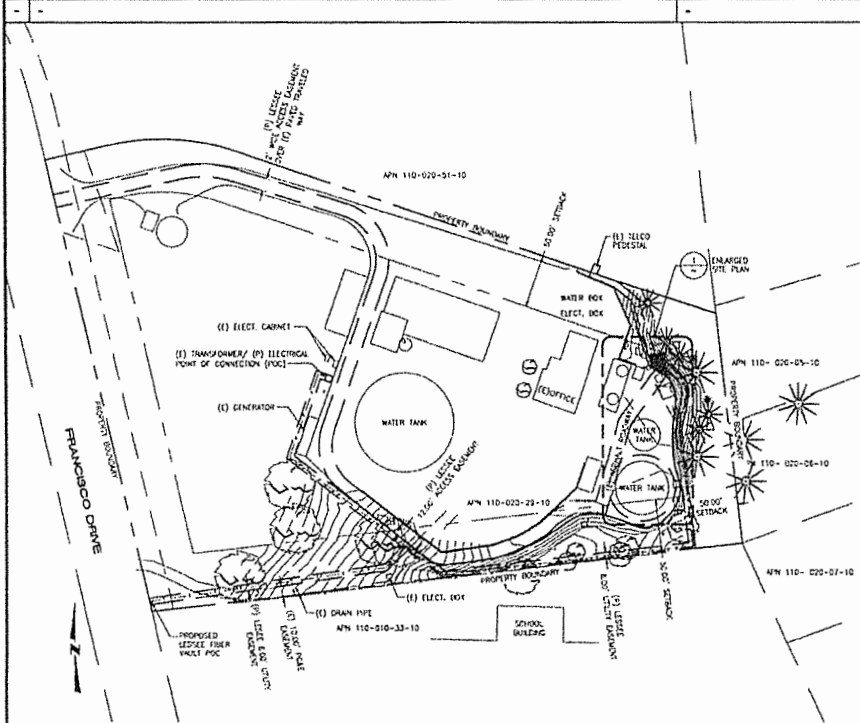
The location of the proposed site is right in the middle of the search ring and because of this, the site offers excellent coverage benefits for portions of El Dorado Hills which have not had access to higher quality wireless communications services. Verizon is complying with El Dorado County's Development Code which prefers carriers co-locate on existing infrastructure first, before building new towers on raw land. The ground equipment will be hidden from the public's view since it will be located inside the security gated, locked EID facility. On Air believes this proposed facility will have the least impact to the community since it is a co-location on existing water tank, which is utility-type infrastructure.

Exhibit K: Site Plans and Antennas

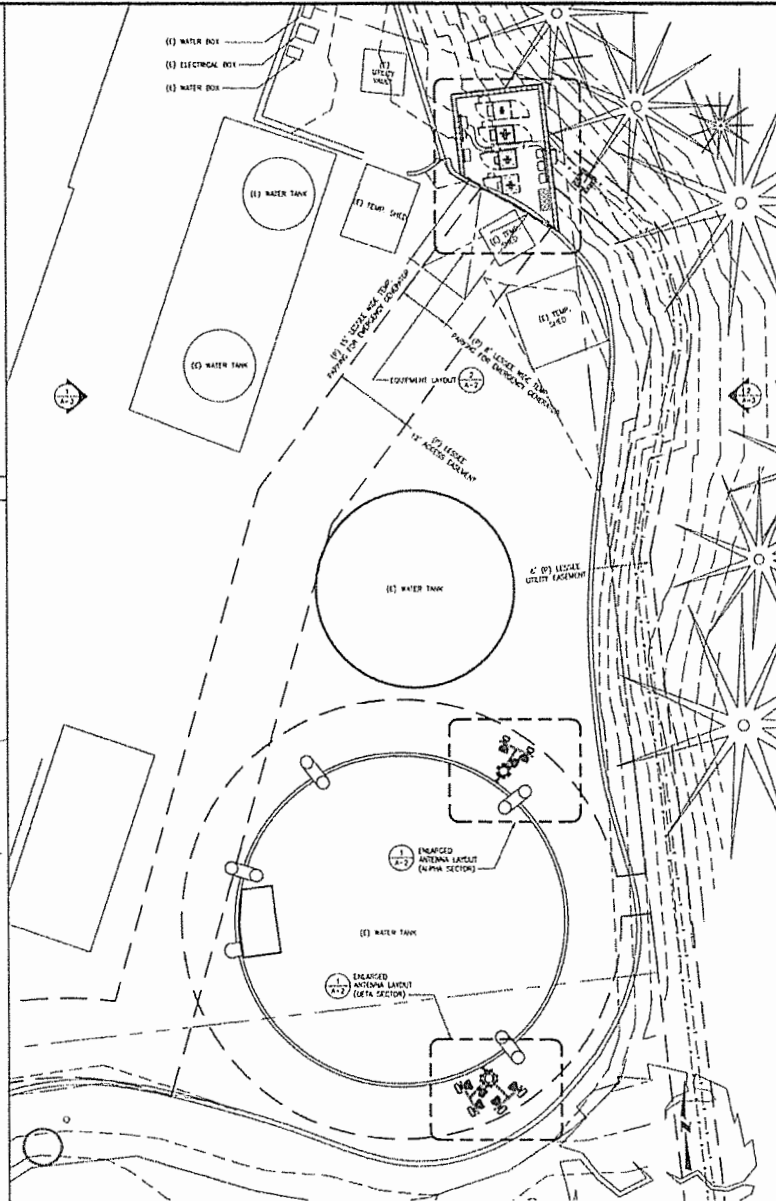
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EL DORADO COUNTY
PLANNING COMMISSION

DATE: August 23, 2018
BY: Roger Trout/CMT
EXECUTIVE SECRETARY



2 OVERALL SITE PLAN SCALE: 1" = 50'



1 ENLARGED SITE PLAN SCALE: 1/8" = 1'-0"

MT²
TELECOM, LP
1515-D AIRPORT RD
PO BOX 414
MOYITA, CA 94051
PH: (520) 374-5025
FAX: (520) 374-6194

verizon
225 PARKSHIRE DR
FOLSOM, CA 95630
PHONE: (916) 924-5924

LAKE FOREST PARK
PSL# 285367
PSP#: 20141015879
1835 FRANCISCO DRIVE
EL DORADO HILLS, CA 95762
CITY OF EL DORADO HILLS

STAMP:

PROJECT NO: PSL285367

DRAWN BY: DIMARJAS

CHECKED BY: SMARINIZ

NO	DATE	ISSUE
1	12.16.14	90% ZONING
2	02.05.15	90% ZONING
3	02.13.15	95% ZONING
4	03.09.15	100% ZONING
5	05.20.16	ELECT./WATER FIBER
6	08.14.17	WTR TANK ATTACHMENT
7	10.13.17	20 TH IN OIG BOX HIM
8	01.25.18	100 TH IN. RD LINES

OVERALL & ENLARGED
SITE PLAN

SHEET NUMBER
A-1

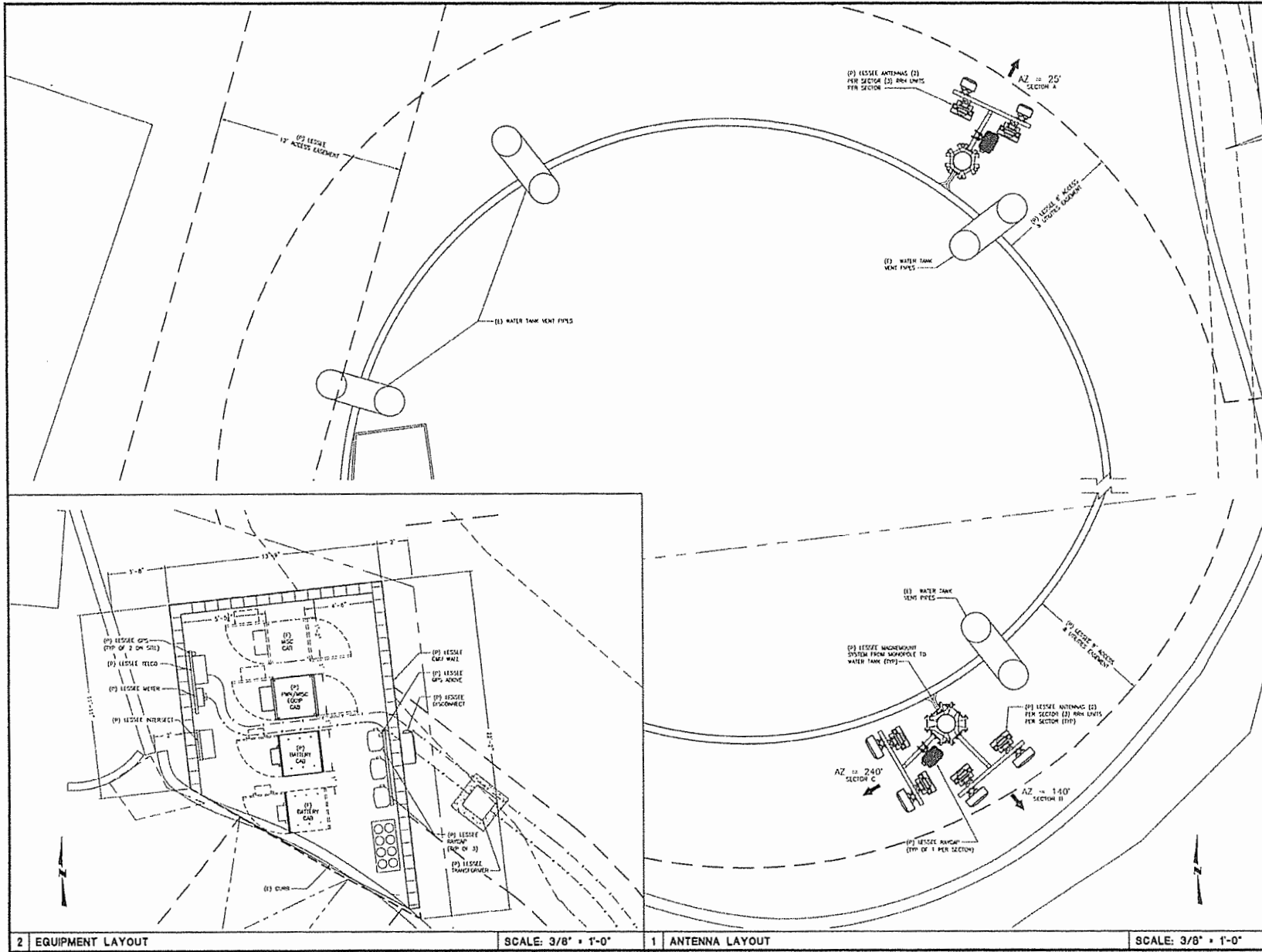
COMPANY JOB NO.: WD416D

S18-0010

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Exhibit K: Site Plans and Antennas

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MT²
TELECOM, LP
1615-N AIRPORT RD
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verizon
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FOLSOM, CA 95630
PHONE: (916) 984-5924

LAKE FOREST PARK
PSL#: 285367
PSP#: 20141015679
1835 FRANCISCO DRIVE
EL DORADO HILLS, CA 95762
CITY OF EL DORADO HILLS

STAMP:

PROJECT NO:	PSL285367	
DRAWN BY:	OBARAJAS	
CHECKED BY:	SMARTINEZ	
NO	DATE	ISSUE
1	12.10.14	90% ZONING
2	02.05.15	90% ZONING
3	02.13.15	95% ZONING
4	03.09.15	100% ZONING
5	05.20.16	ELECT./DASH FIBER
6	08.14.17	WTR. TANK ATTACHMENT
7	10.13.17	92.25% ANT. OPG. BOX FOR
8	01.25.18	100.25% TR. RED LINES

EQUIPMENT & ANTENNA
LAYOUT
SHEET NUMBER
A-2
COMPANY JOB NO: WD4150

2 EQUIPMENT LAYOUT

SCALE: 3/8" = 1'-0"

1 ANTENNA LAYOUT

SCALE: 3/8" = 1'-0"

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MT²
TELECOM, LP
1015-B ASPEN RD
1ST FLOOR
800 VISTA, CA 95031
PH: (925) 374-9033
FAX: (925) 374-9184

verizon
255 PARKSHORE DR
FOLSOM, CA 95633
PHONE: (916) 984-3524

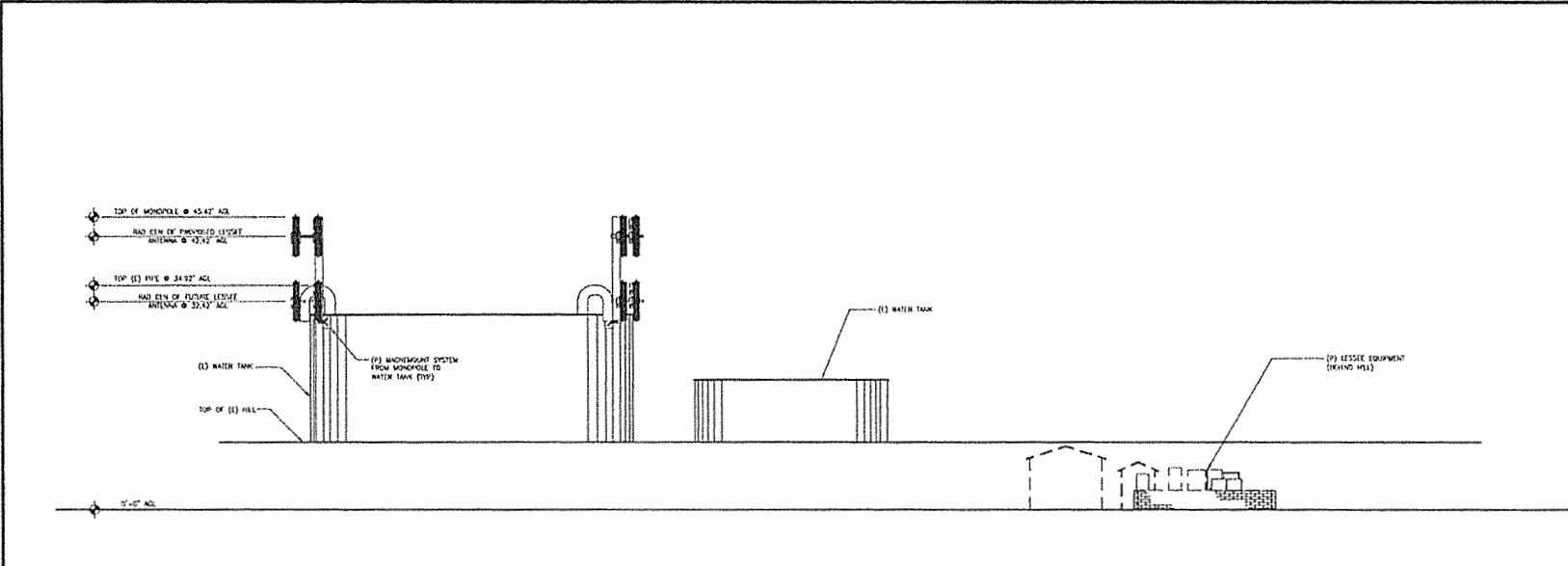
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CITY OF EL DORADO HILLS

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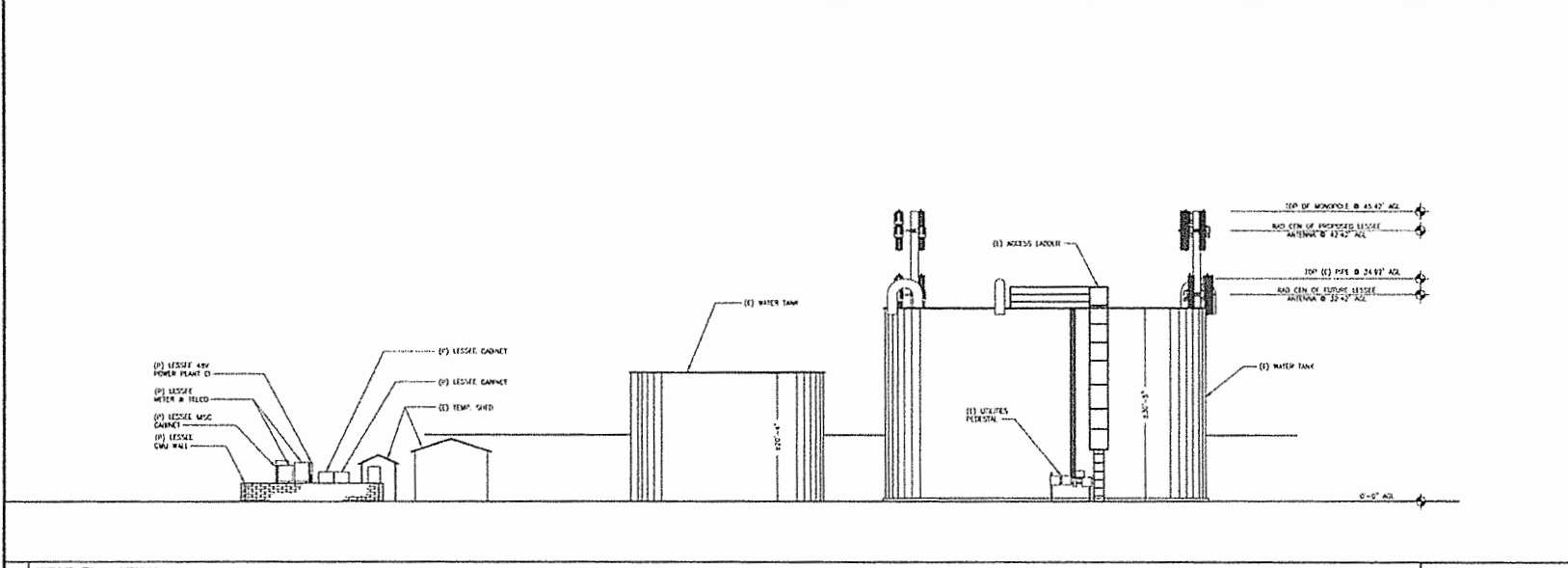
PROJECT NO: PSL285367
DRAWN BY: BBAHAJAS
CHECKED BY: SMARTINEZ

ID	DATE	ISSUE
1	12.16.14	90% ZONING
2	07.05.15	90% ZONING
3	02.13.15	95% ZONING
4	03.03.15	100% ZONING
5	05.20.16	ELECT/DARK FIBER
6	08.14.17	WTR TANK ATTCHMNT
7	10.13.17	50 THY ANT ORG ORG FIB
8	01.25.18	100 TH INL RED LINES

ELEVATIONS
SHEET NUMBER
A-3
COMPANY JOB NO: W04160



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

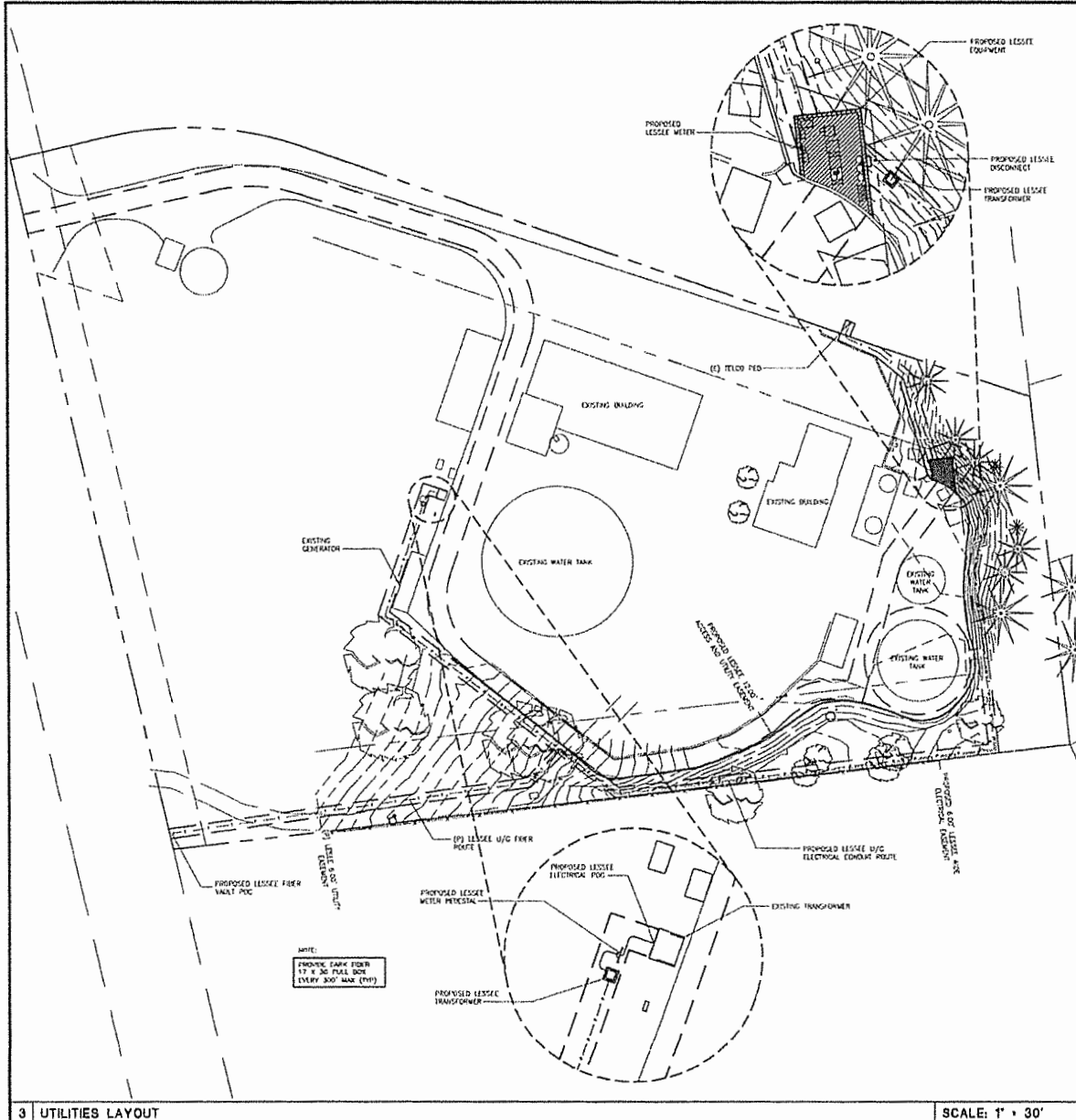


1 WEST ELEVATION SCALE: 1/8" = 1'-0"

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SPECIFICATIONS

DESCRIPTION: Hangover Proof Light. Suitable for wet/damp utility location installations.

MATERIAL: Standard finish material is E911 aluminum. H-3027 - Matchless Aluminum.

FINISH: PA - Anodized Silver Aluminum
AP - Powder Coat Aluminum
PC - Powder Coat Black
RZ - Powder Coat Bronze
WT - Powder Coat White

LEADING: LAMP Type - 12V halogen T4 lamp, G2 35 base, 50W max. Not included.

VOLTAGE: 12 - 12 VAC output transformer required and included.

MOUNTING: Fixture is designed with a 1/2 NPT adjustable mounting stem.

ACCESSORIES: Glass shades. (L) 30" - 40" x 40", aluminum. See fixture accessories for more information.

SAMPLE ORDER SPECIFICATION: 1X 3027-06-17-G2-92

RATING: Wet/damp utility location.

4 UTILITY LIGHT SPECS SCALE: N.T.S.

2 SINGLE LINE DIAGRAM SCALE: 1/4" = 1'-0"

MOUNTING DISTANCE		PANEL "A"										A I.C. 5TH	
240/208V	240/208V	1	2	3	4	5	6	7	8	9	10	11	12
3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
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3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000

MT2 TELECOM, LP

1015-B AVENUE RD
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verizon

295 PARKHURST DR
FOKSDOM, CA 95630
PHONE: (916) 984-2524

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4	03.09.15	100% ZONING
5	05.20.16	ELECTRICAL/CABLE/FIBER
6	08.14.17	WTR TRK ATTACHMENT
7	10.15.17	90 TRK AND CHG LSA 184
8	01.25.18	100 TRK FIBER LSA 235

ELECTRICAL LAYOUT AND DETAILS

SHEET NUMBER

E-1

COMPANY JOB NO.: W04160

3 UTILITIES LAYOUT

SCALE: 1" = 30'

1 PANEL SCHEDULE

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

S18-0010