

STATE OF CONNECTICUT CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051 Phone: (860) 827-2935 Fax: (860) 827-2950 E-Mail: siting.council@ct.gov Web Site: portal.ct.gov/csc

VIA ELECTRONIC MAIL

August 7, 2020

Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103-3597

RE:

PETITION NO. 1331 – Cellco Partnership d/b/a Verizon Wireless declaratory ruling, pursuant to Connecticut General Statutes §4-176 and §16-50k, for the proposed installation of two small cell wireless telecommunications facilities located at Lime Rock Park, 497 Lime Rock Road, Lakeville (Salisbury), Connecticut.

Dear Attorney Baldwin:

The Connecticut Siting Council (Council) is in receipt of your correspondence dated August 3, 2020 regarding the minor project changes to the above-referenced declaratory ruling that was issued by the Council on December 7, 2017.

Pursuant to Condition No. 3 of the Council's Decision on December 7, 2017, your request to change the antenna model to be installed at the two approved small cell facilities at Lime Rock Park is hereby approved.

This approval applies only to the minor project changes dated August 3, 2020. Any significant changes to the project require advance Council notification and approval.

Thank you for your attention and cooperation.

Sincerely,

s/Melanie A. Bachman

Melanie A. Bachman Executive Director

MB/FC/lm



KENNETH C. BALDWIN

280 Trumbull Street Hartford, CT 06103-3597 Main (860) 275-8200 Fax (860) 275-8299 kbaldwin@rc.com Direct (860) 275-8345

Also admitted in Massachusetts and New York

August 3, 2020

Melanie A. Bachman, Esq. Executive Director/Staff Attorney Connecticut Siting Council 10 Franklin Square New Britain, CT 06051

Re: Petition No. 1331 – Cellco Partnership d/b/a Verizon Wireless Lime Rock Park, 497 Lime Rock Road, Lakeville, Connecticut

Request for Staff Approval of Minor Project Changes

Dear Attorney Bachman:

On December 7, 2017, the Siting Council approved Cellco's Petition for a Declaratory Ruling to establish two small cell wireless facilities at Lime Rock Park in Lakeville, Connecticut. Recently, Cellco decided to change the model of the antenna it intends to use at each of the approved small cell locations. A copy of the new antenna model specification sheet is included in Attachment 1.

The location of the two approved facilities will not change and the overall height of each structure, to the top of the cannister antenna, will remain the same. The proposed antenna centerline height will be 24.3' above grade at the Lime Rock Park SC 1 facility and 29' above grade at the Lime Rock Park SC 2 facility. Project plans for both small cell facilities are included in Attachment 2.

Radio frequency ("RF") emissions from both proposed facilities, with the new antenna models, will continue to comply with the standards adopted by the Federal Communications Commission ("FCC"). Included in <u>Attachment 3</u> are General Power Density tables that demonstrate that Lime Rock Park SC1 or Lime Rock Park SC2 Facilities will operate well within the FCC safety standard.

21003850-v1

Robinson+Cole

August 3, 2020 Page 2

Cellco respectfully submits that, pursuant to Condition No. 3 of the Council's December 7, 2017 approval, the proposed modifications described above are "minor project changes" that can be approved by Council staff. A copy of this correspondence was sent to Salisbury's First Selectman Curtis Rand; Abby Conroy, Land Use Administrator; and Lime Rock Park LLC, the owner of the Property.

If you have any questions or need any additional information regarding this matter, please do not hesitate to contact me.

Sincerely,

Kenneth C. Baldwin

Copy to:

Corey Vaccaro

ATTACHMENT 1



PSEUDO OMNI | CANISTER ANTENNA | X-POL | FIXED TILT | 610 MM (24.0 IN)

Features

- Pseudo Omni configuration with 16 connectors
- Ideal for Small Cell / DAS applications
- Available with 4.3-10 connectors
- This antenna meets the requirements of the U-NII
- Available for order with a grey, brown or black radome

Connector Description							
The antenna has 16 connectors located at the bottom.							
Mid Band #1	<u>Y</u> 1	Pseudo Omni	1695-2700 MHz	(2x) 4.3-10 Female			
Mid Band #2	Y2	Pseudo Omni	1695-2700 MHz	(2x) 4.3-10 Female			
Mid Band #3	Y3	Pseudo Omni	1695-2700 MHz	(2x) 4.3-10 Female			
Mid Band #4	Y4	Pseudo Omni	1695-2700 MHz	(2x) 4.3-10 Female			
Mid Band #5	Y5	Pseudo Omni	3550-3700 MHz	(2x) 4.3-10 Female			
Mid Band #6	<u>Y</u> 6	Pseudo Omni	3550-3700 MHz	(2x) 4.3-10 Female			
High Band #1	■ V1	Pseudo Omni	5150-5925 MHz	(2x) 4.3-10 Female			
High Band #2	■ V2	Pseudo Omni	5150-5925 MHz	(2x) 4.3-10 Female			



Electrical Characteristics			Y1, Y2,	Y3, Y4		Y5 Y6	V1 V2	
Frequency Bands (MHz)			(4x) 1695-2700			(0.) 2550 2700	(0.) 5450 5005	
		1695-1880	1850-1990	1920-2200	2300-2700	(2x) 3550-3700	(2x) 5150-5925	
Polarization			(4x)	±45°		(2x) ±45°	(2x) ±45°	
Horizontal Beamv	vidth	360°	360°	360°	360°	360°	360°	
Vertical Beamwidt	th	23.4° ± 4.2°	21.7° ± 4.3°	20.9° ± 4.3°	17.1° ± 3.2°	37.1° ± 10.6°	22.9° ± 5.1°	
Gain		9.1 ± 0.5 dBi	8.9 ± 0.4 dBi	9.1 ± 0.7 dBi	9.6 ± 0.6 dBi	5.2 ± 0.5 dBi	Avg. 5.1 dBi Max. 5.8 dBi	
Electrical Downtilt (°)		(x) 2, 4, 6				(y) 0	(y) 0	
Impedance		50Ω				50Ω	50Ω	
VSWR		≤ 1.5:1				≤ 1.5:1	≤ 1.5:1	
Upper Sidelobe S	uppression	> 14 dB				N/A	> 13 dB	
Isolation	Intraband		25 dB			25 dB	25 dB	
Isolation	Interband		28	28 dB	28 dB			
IM3 (2x20W carrie	er)	< -153 dBc				N/A	N/A	
Input Power			(8x) 3	(4x) 100W	(4x) 50W			
U-NII Compliant			-		Yes			
Number of Sectors, Pattern Shape		3 Sectors / Pseudo Omni						
Lightning Protection				Direct	Direct Ground			

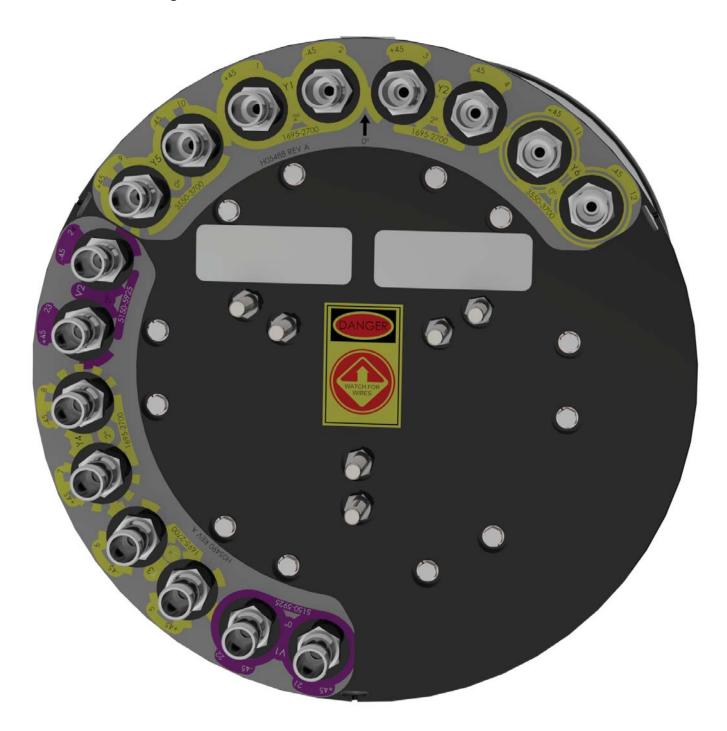
Mechanical Characteristics				
Antenna Dimensions (Height x Diameter)	610 x 371	mm	24.0 x 14.6	in
Weight without Mounting Bracket Kit	12.7	kg	28	lbs
Antenna Volume	0.07	m^3	2.3	ft ³
Survival Wind Speed	241	km/hr	150	mph
Wind Area	0.22	m ²	2.4	ft²
Wind Load (160 km/hr or 100 mph)	191	N	43	lbf

Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to products may be made without notice.



PSEUDO OMNI | CANISTER ANTENNA | X-POL | FIXED TILT | 610 MM (24.0 IN)

Bottom View - Labeling

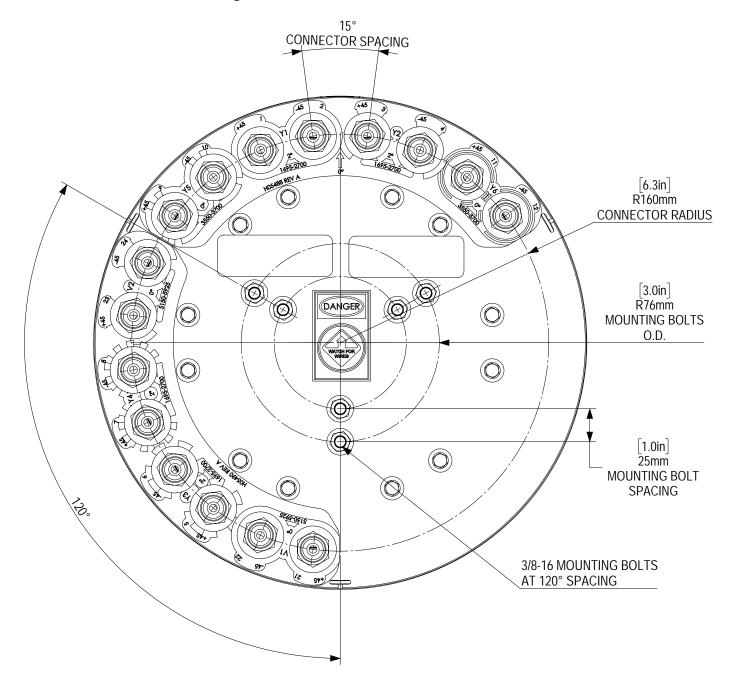


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PSEUDO OMNI | CANISTER ANTENNA | X-POL | FIXED TILT | 610 MM (24.0 IN)

Bottom View - Connector Diagram



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PSEUDO OMNI | CANISTER ANTENNA | X-POL | FIXED TILT | 610 MM (24.0 IN)

Ordering Options

When ordering, select the Radome Color and Degree of Electrical Downtilt (xy) for the Mid and High Bands.

Radome Color	Electrical Do	wntilt Degree	Connector Type
Radome Color	Mid Band (x)	High Band (y)	4.3-10 Female
	2°	0°	4U4MT360X06F 20 s0
	4°	0°	4U4MT360X06F 40 s0
Grey	6°	0°	4U4MT360X06F 60 s0
Pantone 420 C	Y1 and Y2 = 2° Y3 and Y4 = 6°	0°	4U4MT360X06F AA s0
	Y1 and Y2 = 2° Y3 and Y4 = 4°	0°	4U4MT360X06FBBs0
	2°	0°	4U4MT360X06F 20 s0 BR
	4°	0°	4U4MT360X06F 40 s0 BR
Brown	6°	0°	4U4MT360X06F 60 s0 BR
Pantone 476 C	Y1 and Y2 = 2° Y3 and Y4 = 6°	0°	4U4MT360X06F AA s0 BR
	Y1 and Y2 = 2° Y3 and Y4 = 4°	0°	4U4MT360X06FBBs0BR
	2°	0°	4U4MT360X06F 20 s0 BK
	4°	0°	4U4MT360X06F 40 s0 BK
Black	6°	0°	4U4MT360X06F 60 s0 BK
RAL 9011	Y1 and Y2 = 2° Y3 and Y4 = 6°	0°	4U4MT360X06F AA s0 BK
	Y1 and Y2 = 2° Y3 and Y4 = 4°	0°	4U4MT360X06F BB s0 BK

Mounting Kits

This antenna can be mounted using any of the following mounting kits. Mounting kits must be ordered separately.

Side Mounting Bracket Kit	Top Mounting Bracket Kit	Utility Pole Mounting Bracket Kit	Wide Diameter Pole Top Mounting Bracket Kit
CWT-MKS-SIDE	CWT-MKS-TOP	WB3X-MKS-01	CWT-MKS-BASE-xx

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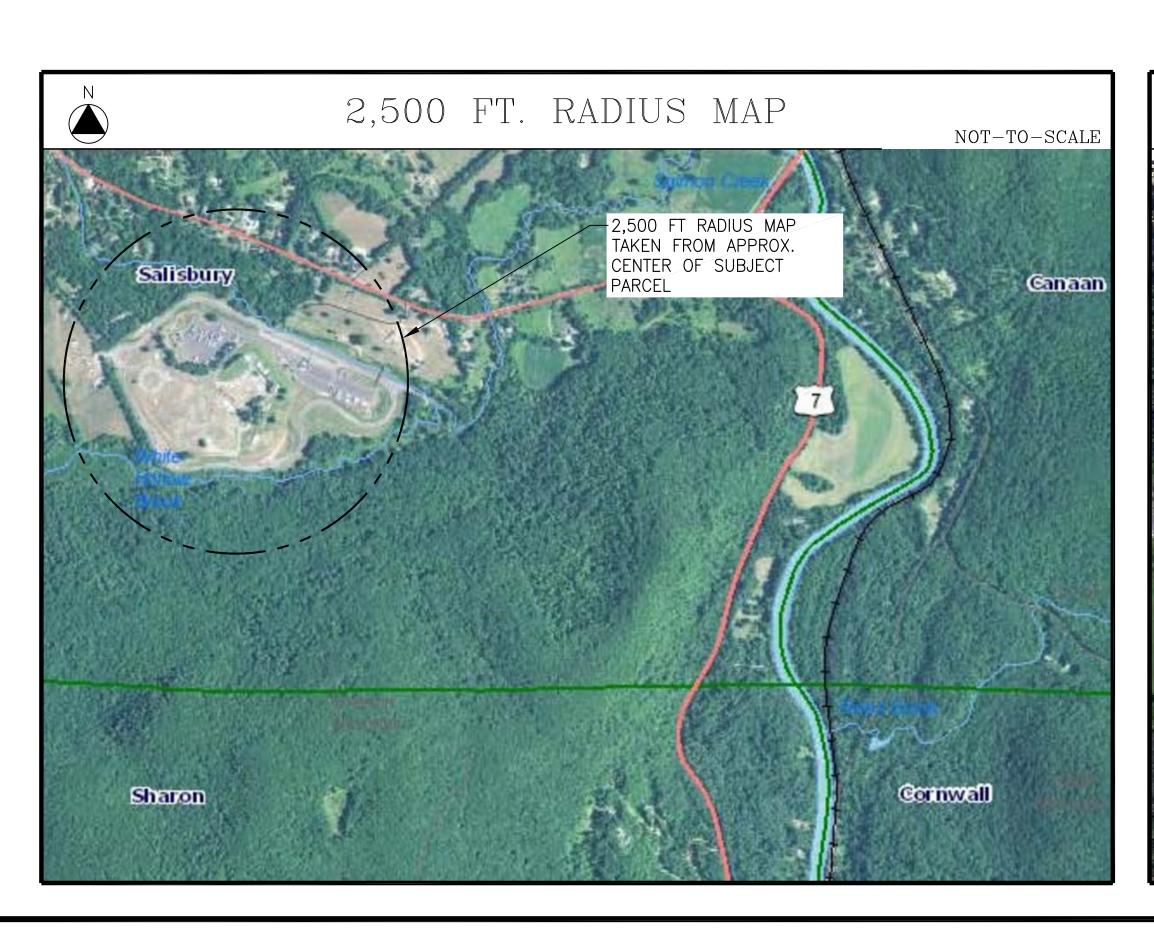
ATTACHMENT 2

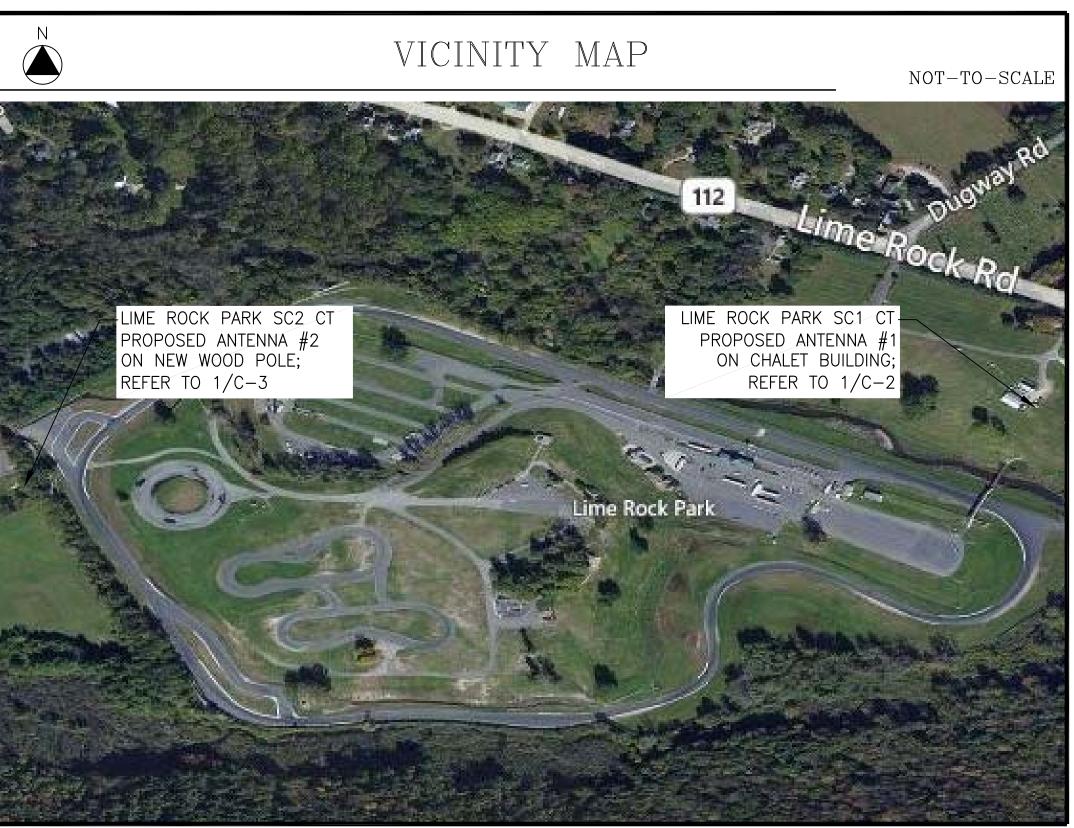


WIRELESS COMMUNICATIONS FACILITY

LIME ROCK PARK SC1 CT LIME ROCK PARK SC2 CT

LIME ROCK PARK
497 LIME ROCK RD.
LAKEVILLE, CT 06039
TOWN OF SALISBURY





	1
SITE NAME(S):	LIME ROCK PARK SC1 CT LIME ROCK PARK SC2 CT
SITE ADDRESS:	497 LIME ROCK RD. LAKEVILLE, CT 06039 TOWN OF SALISBURY
PROPERTY OWNER & MAILING ADDRESS:	LIME ROCK PARK LLC 497 LIME ROCK RD. LAKEVILLE, CT 06039
SMALL CELL SC1: COORDINATES/AMSL:	41° 55' 40.468" N 73° 22' 37.634" W 570.2' AMSL
SMALL CELL SC2: COORDINATES/AMSL:	41° 55' 41.425" N 73° 23' 20.837" W 592.0' AMSL
APPLICANT:	CELLCO PARTNERSHIP d.b.a. VERIZON WIRELESS 99 EAST RIVER DR., 9TH FL. EAST HARTFORD, CT 06108
VERIZON WIRELESS CONTACTS:	BRYON MORAWSKI - CONSTR. (860) 604-91 ALEKSEY TYURIN - SAC (860) 933-1534
LEGAL/REGULATORY COUNSEL:	KENNETH C. BALDWIN, ESQ. ROBINSON & COLE, LLP (860) 275-8345

	DRAWING SCHEDULE				
SHEET NO.	SHEET DESCRIPTION				
T-1	TITLE SHEET				
C-1	SITE LAYOUT				
C-2	ANTENNA #1 PLANS & ELEVATIONS				
C-3	NTENNA #2 PLAN & ELEVATION				
C-4	DETAILS				
C-5	ABUTTERS MAP & PROPERTY OWNER LIST				

PROJECT DESCRIPTION

INSTALLATION OF (2) SMALL CELL FACILITIES ON SUBJECT PARCEL
 ANTENNA #1 TO BE LOCATED ON THE EXISTING CHALET BUILDING
 ANTENNA #2 TO BE LOCATED ON A NEW WOOD POLE
 EACH LOCATION TO ALSO INCLUDE REMOTE RADIO UNITS, DIPLEXERS AND E/T PANELS WITHIN SMALL FENCED—IN AREAS AT BASE
 INSTALLATION OF CABLING FROM EQUIP. CABINETS TO ANTENNAS
 ELECTRICAL & TELEPHONE CONNECTIONS TO EXISTING UTILITY DEMARCATION POINTS

Cellco Partnership d/b/a Verizon Wireless



WIRELESS COMMUNICATIONS FACILITY
20 ALEXANDER DRIVE
WALLINGFORD, CT 06492



88 Foundry Pond Road Cold Spring, NY 10516 onair@optonline.net 201-456-4624

LICENSURE

DAVID WEINPAHL, P.E. CT LIC. NO. 22144

NO.:	DATE:		SUBMISSIONS
0	09.05.17	REVIEW	
1	10.06.17	REVISED PER	R CLIENT COMMENTS
2	07.30.20	REVISED PER	R NEW RFDS
DRA	WN BY:		CHECKED BY:
	A	S	DW

SITE NAME

LIME ROCK PARK SC1 CT LIME ROCK PARK SC2 CT

PROJECT DESCRIPTION:

SMALL CELL

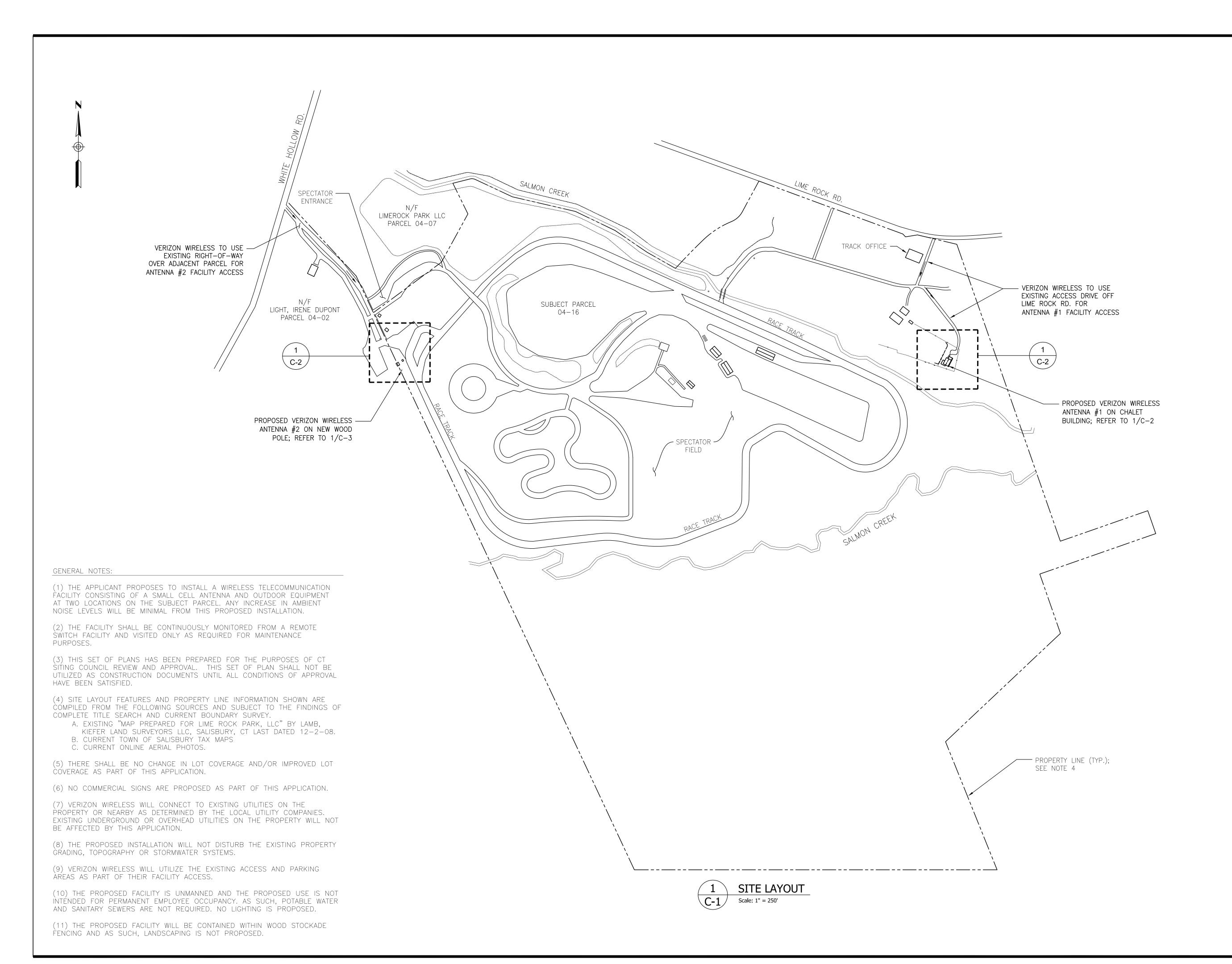
PROJECT INFORMATION:
LIME ROCK PARK
497 LIME ROCK RD.
LAKEVILLE, CT 06039
TOWN OF SALISBURY

DRAWING TITLE:

TITLE SHEET

SHEET NUMBER:

T-1



Cellco Partnership d/b/a Verizon Wireless



WIRELESS COMMUNICATIONS FACILITY 20 ALEXANDER DRIVE WALLINGFORD, CT 06492



On Air Engineering, LLC

88 Foundry Pond Road Cold Spring, NY 10516 onair@optonline.net 201-456-4624

LICENSURE

DAVID WEINPAHL, P.E. CT LIC. NO. 22144

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2	07.30.20	REVISED PER NEW RFDS

DRAWN BY: CHECKED BY:

LIME ROCK PARK SC1 CT LIME ROCK PARK SC2 CT

PROJECT DESCRIPTION:

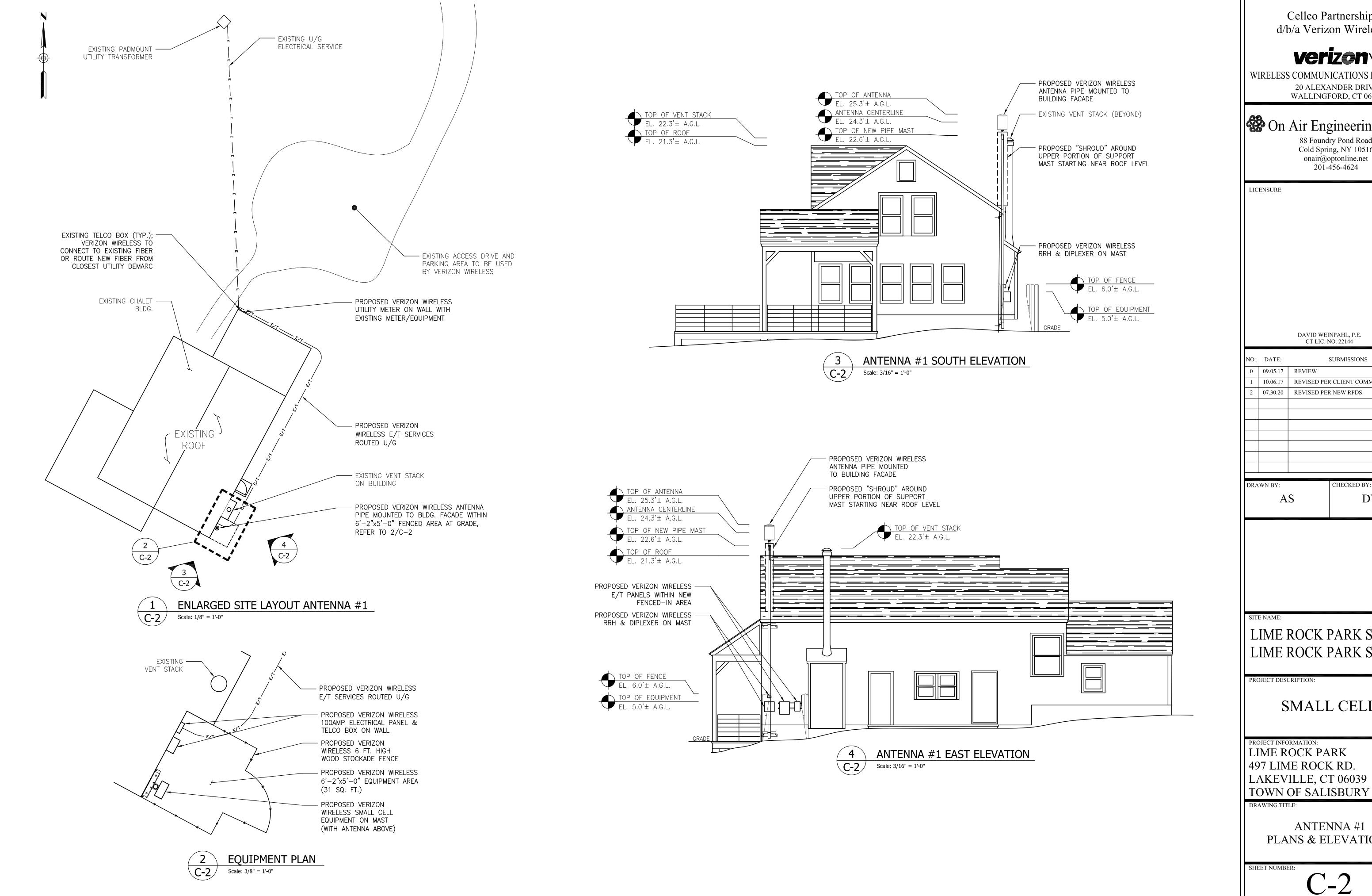
SMALL CELL

PROJECT INFORMATION: LIME ROCK PARK 497 LIME ROCK RD. LAKEVILLE, CT 06039 TOWN OF SALISBURY

DRAWING TITLE:

SITE LAYOUT

SHEET NUMBER:



Cellco Partnership d/b/a Verizon Wireless



WIRELESS COMMUNICATIONS FACILITY 20 ALEXANDER DRIVE WALLINGFORD, CT 06492

On Air Engineering, LLC

88 Foundry Pond Road Cold Spring, NY 10516 onair@optonline.net 201-456-4624

DAVID WEINPAHL, P.E. CT LIC. NO. 22144

SUBMISSIONS 1 10.06.17 REVISED PER CLIENT COMMENTS 2 07.30.20 REVISED PER NEW RFDS CHECKED BY:

DW

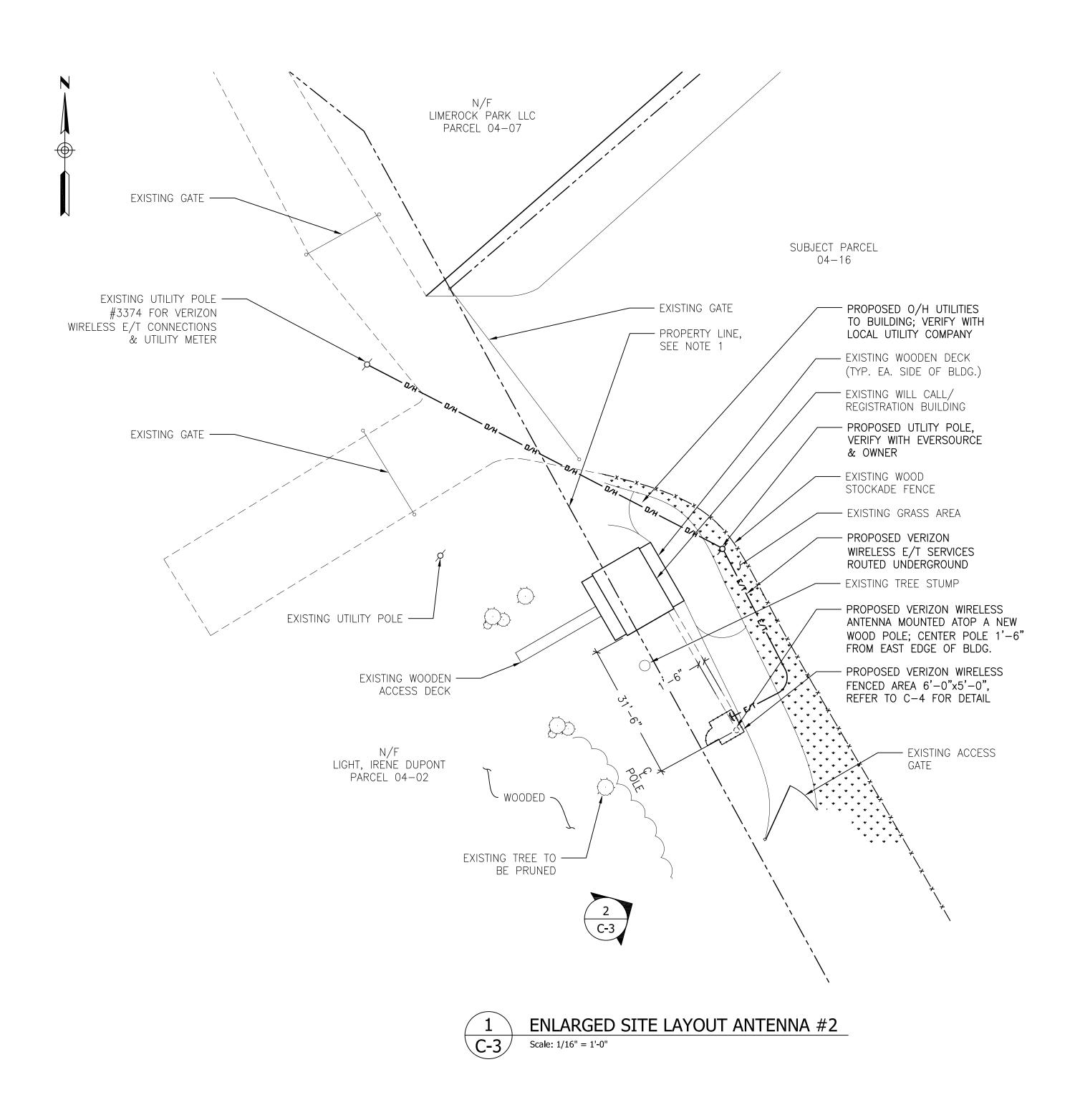
LIME ROCK PARK SC1 CT LIME ROCK PARK SC2 CT

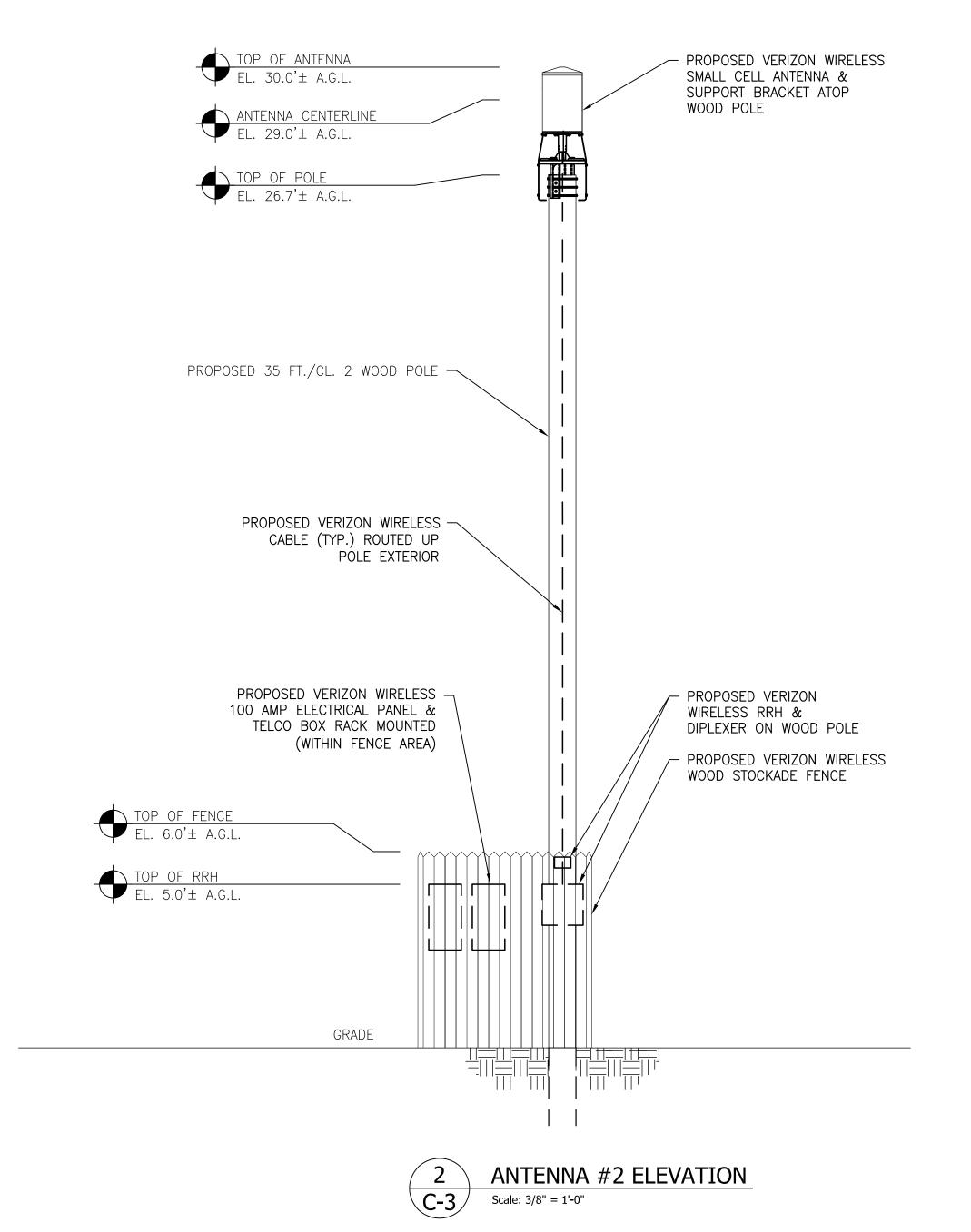
SMALL CELL

LIME ROCK PARK 497 LIME ROCK RD. LAKEVILLE, CT 06039

> ANTENNA #1 PLANS & ELEVATIONS

> > C-2





NOTES:

1. PROPERTY LINE LOCATION IS TAKEN FROM AN EXISTING "MAP PREPARED FOR LIME ROCK PARK, LLC" BY LAMB, KIEFER LAND SURVEYORS LLC, SALISBURY, CT LAST DATED 12-2-08.

Cellco Partnership d/b/a Verizon Wireless



WIRELESS COMMUNICATIONS FACILITY
20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

On Air Engineering, LLC

88 Foundry Pond Road Cold Spring, NY 10516 onair@optonline.net 201-456-4624

LICENSURE

DAVID WEINPAHL, P.E. CT LIC. NO. 22144

NO.: DATE: SUBMISSIONS

0 09.05.17 REVIEW

1 10.06.17 REVISED PER CLIENT COMMENTS

2 07.30.20 REVISED PER NEW RFDS

DRAWN BY: CHECKED BY:

DW

CITE NA

LIME ROCK PARK SC1 CT LIME ROCK PARK SC2 CT

PROJECT DESCRIPTION:

SMALL CELL

PROJECT INFORMATION:
LIME ROCK PARK
497 LIME ROCK RD.
LAKEVILLE, CT 06039
TOWN OF SALISBURY

DRAWING TITLE:

ANTENNA #2 PLAN & ELEVATION

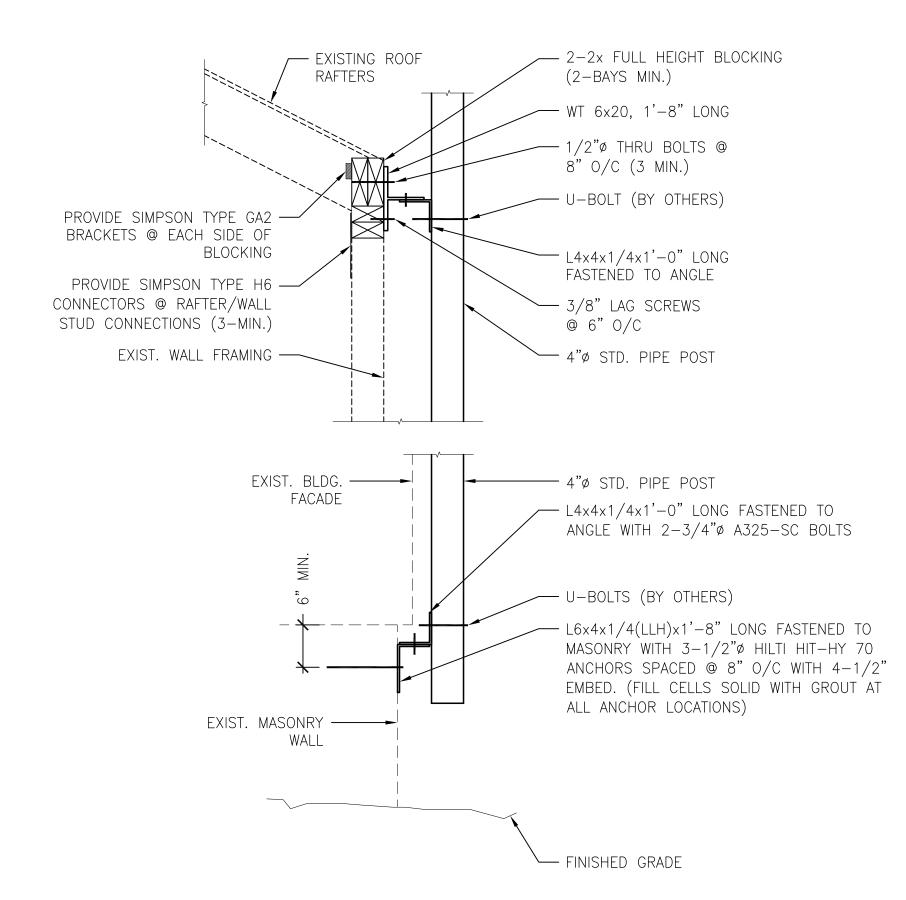
SHEET NUMBER:

C-3

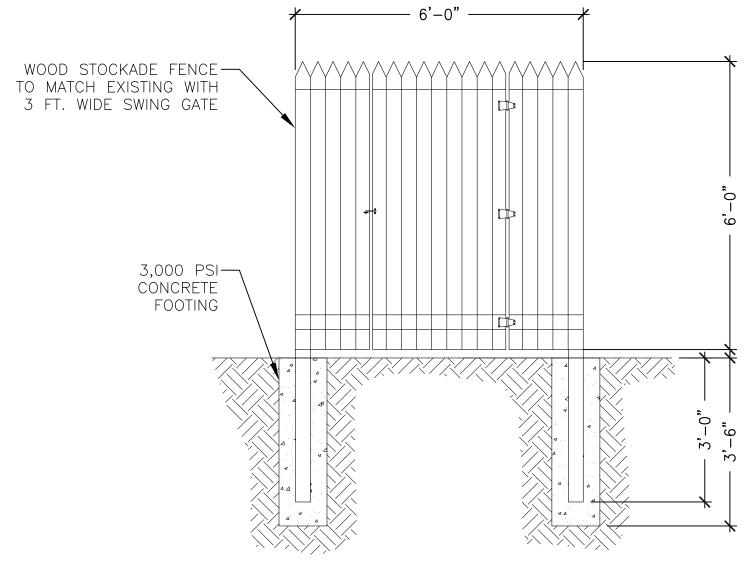


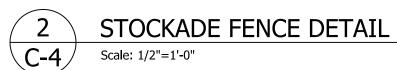
AMPHENOL ANTENNA SPECIFICATIONS						
MODEL #	HEIGHT	DIAMETER	WEIGHT			
4U4MT360X06Fxys0	24"	14.6"	28 LBS			













RRH AWS/PCS SPECIFICATIONS						
HEIGHT	WIDTH	DEPTH	WEIGHT			
15"	15"	10"	97.5 LBS			





DIPLEXER SPECIFICATIONS						
MODEL #	HEIGHT	WIDTH	DEPTH	WEIGHT		
SDX1926Q-43	4.17"	6.92"	2.91"	6.6"		



Cellco Partnership d/b/a Verizon Wireless



WIRELESS COMMUNICATIONS FACILITY 20 ALEXANDER DRIVE WALLINGFORD, CT 06492



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LICENSURE

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DRAWN BY: CHECKED BY: DW

LIME ROCK PARK SC1 CT LIME ROCK PARK SC2 CT

PROJECT DESCRIPTION:

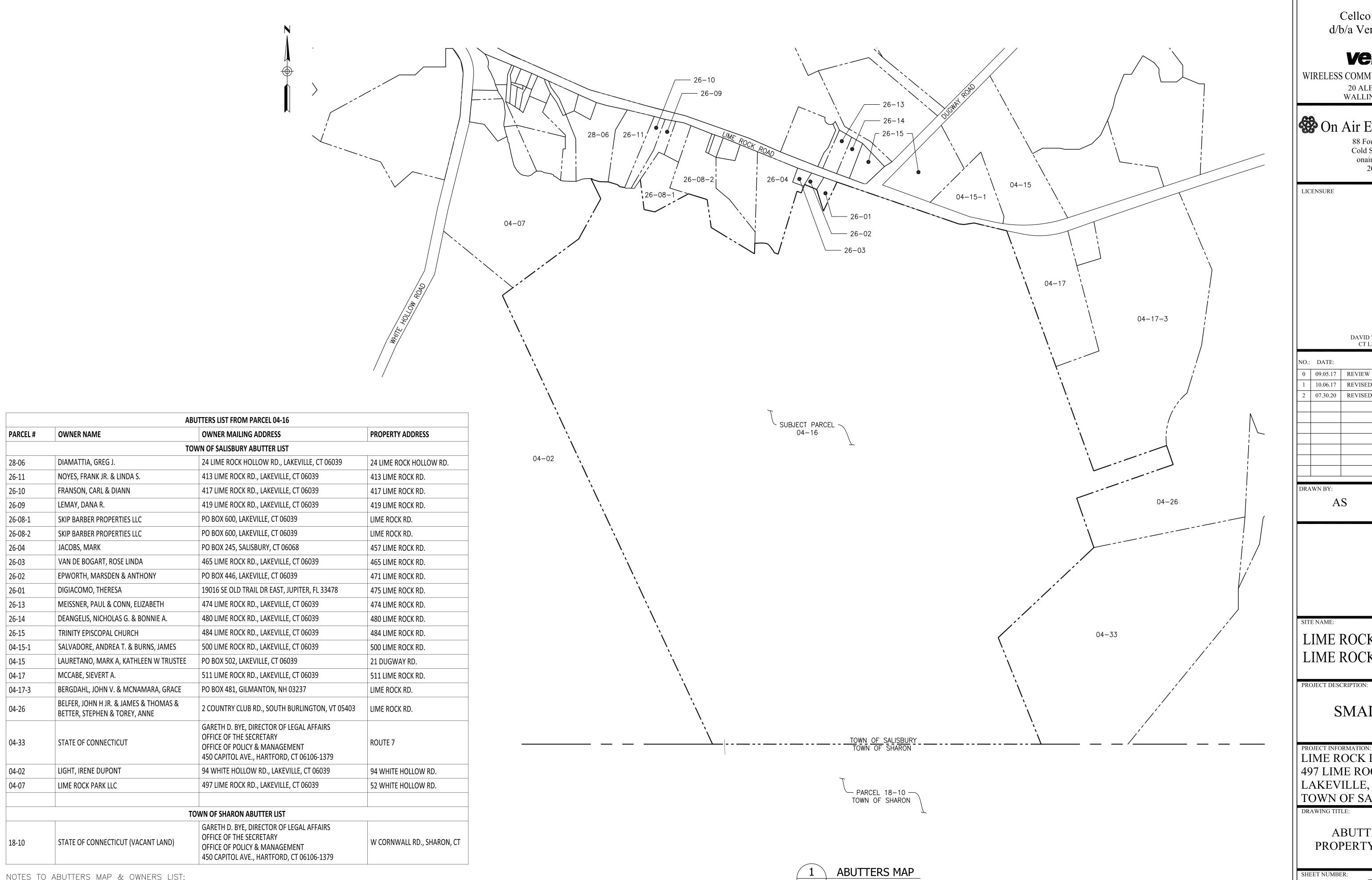
SMALL CELL

PROJECT INFORMATION: LIME ROCK PARK 497 LIME ROCK RD. || LAKEVILLE, CT 06039 TOWN OF SALISBURY

DRAWING TITLE:

DETAILS

SHEET NUMBER:



1. ABUTTERS MAP IS COMPILED FROM THE TOWN OF SALISBURY ASSESSOR MAPS AVAILABLE ONLINE, JULY 2017. 2. OWNER INFORMATION OBTAINED FROM TOWN OF SALISBURY ASSESSOR OFFICE ON JULY 22, 2017 AND REVISED

PER ATTORNEY COMMENTS, SEPT. 2017.

C-5 Scale: N.T.S.

Cellco Partnership d/b/a Verizon Wireless

verizon

WIRELESS COMMUNICATIONS FACILITY 20 ALEXANDER DRIVE WALLINGFORD, CT 06492

On Air Engineering, LLC

88 Foundry Pond Road Cold Spring, NY 10516 onair@optonline.net 201-456-4624

DAVID WEINPAHL, P.E. CT LIC. NO. 22144

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1	10.06.17	REVISED PEI	R CLIENT COMMENTS
2	07.30.20	REVISED PEI	R NEW RFDS
)RA	WN BY:		CHECKED BY:
	A	C	DW

LIME ROCK PARK SC1 CT LIME ROCK PARK SC2 CT

SMALL CELL

LIME ROCK PARK 497 LIME ROCK RD. LAKEVILLE, CT 06039 TOWN OF SALISBURY

> ABUTTERS MAP & PROPERTY OWNER LIST

SHEET NUMBER:

ATTACHMENT 3

Site Name: LIME ROCK PARK SC 1 CT

Cumulative Power Density

Operator	Operating Frequency	Number of Trans.	ERP Per Trans.	Total ERP	Distance to Target	Calculated Power Density	Maximum Permissible Exposure*	Fraction of MPE
	(MHz)		(watts)	(watts)	(feet)	(mW/cm^2)	(mW/cm^2)	(%)
5G 28GHz	28000	0	0	0	24.3	0.0000	1.0	0.00%
VZW CBRS	3600	0	0	0	24.3	0.0000	1.0	0.00%
VZW PCS	1970	1	510	510	24.3	0.3106	1.0	31.06%
VZW Cellular LTE	869	0	0	0	24.3	0.0000	0.579333333	0.00%
VZW Cellular	869	0	0	0	24.3	0.0000	0.579333333	0.00%
VZW AWS	2145	1	510.00	510	24.3	0.3106	1.0	31.06%
VZW 700	746	0	0	0	24.3	0.0000	0.497333333	0.00%

Total Percentage of Maximum Permissible Exposure

62.12%

MHz = Megahertz mW/cm^2 = milliwatts per square centimeter ERP = Effective Radiated Power

Absolute worst case maximum values used, including the following assumptions:

- 1. closest accessible point is distance from antenna to base of pole;
- 2. continuous transmission from all available channels at full power for indefinite time period; and,
- 3. all RF energy is assumed to be directed solely to the base of the pole.

^{*}Guidelines adopted by the FCC on August 1, 1996, 47 CFR Section 1.13101 based on NCRP Report 86, 1986 and generally on ANSI/IEEE C95.1

Site Name: LIME ROCK PARK SC 2 CT

Cumulative Power Density

Operator	Operating Frequency	Number of Trans.	ERP Per Trans.	Total ERP	Distance to Target	Calculated Power Density	Maximum Permissible Exposure*	Fraction of MPE
	(MHz)		(watts)	(watts)	(feet)	(mW/cm^2)	(mW/cm^2)	(%)
5G 28GHz	28000	0	0	0	29	0.0000	1.0	0.00%
VZW CBRS	3600	0	0	0	29	0.0000	1.0	0.00%
VZW PCS	1970	1	510	510	29	0.2181	1.0	21.81%
VZW Cellular LTE	869	0	0	0	29	0.0000	0.579333333	0.00%
VZW Cellular	869	0	0	0	29	0.0000	0.579333333	0.00%
VZW AWS	2145	1	510.00	510	29	0.2181	1.0	21.81%
VZW 700	746	0	0	0	29	0.0000	0.497333333	0.00%

Total Percentage of Maximum Permissible Exposure

43.62%

MHz = Megahertz mW/cm^2 = milliwatts per square centimeter ERP = Effective Radiated Power

Absolute worst case maximum values used, including the following assumptions:

- 1. closest accessible point is distance from antenna to base of pole;
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