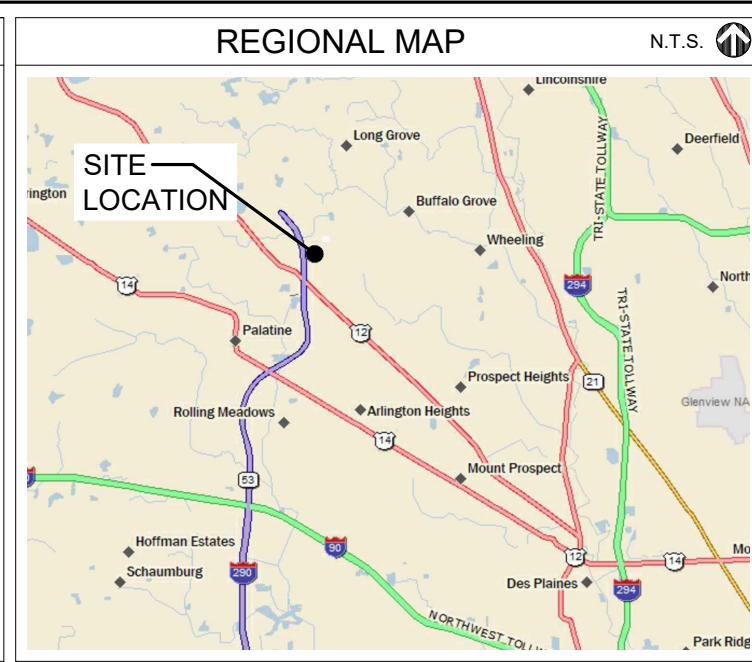
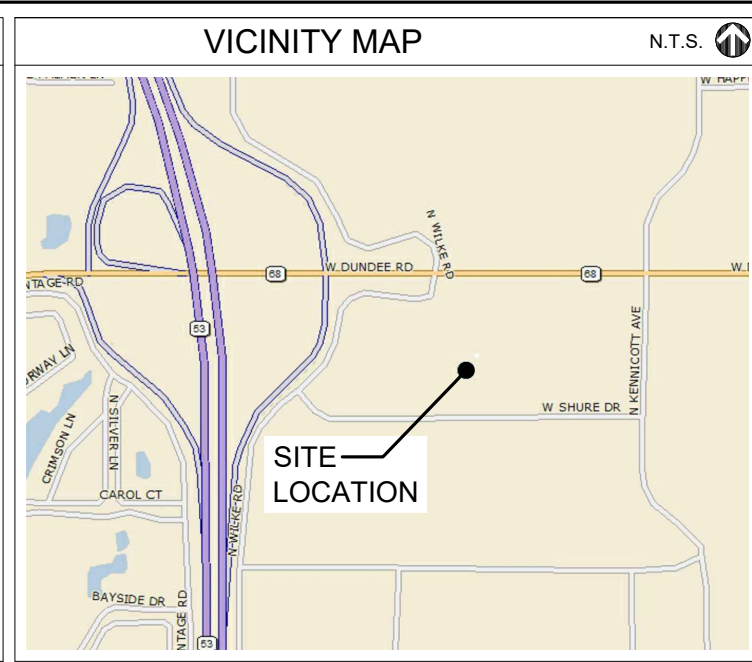


CONSULTANT TEAM	
PROJECT CONSULTANT:	TERRA CONSULTING GROUP, LTD. 600 BUSSE HIGHWAY PARK RIDGE, IL 60068 (847) 698-6400
STRUCTURAL: (TOWER ANALYSIS)	HUTTER FRANKINA ENGINEERING 32 W 273 ARMY TRAIL RD, SUITE #100 WAYNE, IL 60184 (630) 513-6711
STRUCTURAL ANALYSIS DATE:	06/20/2023



PROJECT TYPE	
PROPOSED VERIZON ANTENNAS TO BE MOUNTED ON TEMPORARY COLT.	
PROJECT INFORMATION	
SITE COORDINATES:	LATITUDE: 42° 08' 15.57" N LONGITUDE: 87° 59' 58.81" W
ADDRESS:	1500 SHURE DRIVE ARLINGTON HEIGHTS, IL 60004
JURISDICTION:	VILLAGE OF ARLINGTON HEIGHTS
OCCUPANCY:	UNINHABITED
CONSTRUCTION TYPE:	COLT
PROPERTY OWNER:	VILLAGE OF ARLINGTON HEIGHTS
TOWER OWNER:	VERIZON WIRELESS 1701 GOLF ROAD, TOWER 2 SUITE 400 ROLLING MEADOWS, IL 60008
APPLICANT:	VERIZON WIRELESS 1701 GOLF ROAD, TOWER 2 SUITE 400 ROLLING MEADOWS, IL 60008
REAL ESTATE MANAGER:	ALLEN WAITES (630) 291-7845
CONSTRUCTION MANAGER:	JEREMIAH SAURIOL (847) 706-1765





1701 GOLF ROAD, TOWER 2, SUITE 400
ROLLING MEADOWS, ILLINOIS 60008
PHONE: (847) 619-5397 FAX: (847) 706-7415

MGD LOCATION NUMBER: 5000926022
SITE NAME: RAND & 53_TEMP_ASSET

1500 SHURE DRIVE
ARLINGTON HEIGHTS, IL 60004



22" x 34" IS FULL SCALE | 11" x 17" IS HALF SCALE

SHEET	DRAWING INDEX	REVISION
T-1	TITLE SHEET	1,2,3
A-1	SITE PLAN	1
A-2	ENLARGED SITE PLAN	1
ANT-1	SITE ELEVATION	-
ANT-1A	ANTENNA ORIENTATION (PLAN VIEWS)	-
ANT-2	ANTENNA INFORMATION	3
E-1	GROUNDING DETAILS	-
ATTACHMENTS		
	RFFS (BY OTHERS)	

REVISIONS	
NO.	DESCRIPTION
1	ISSUED FOR REVIEW
2	UPDATE PER REVISED COMPOUND SIZE/DISCONNECT LOCATION
3	ISSUED FOR FINAL
	REVISED PER NEW RFFS

MGD LOC. #
5000926022

RAND & 53
TEMP_ASSET

1500 SHURE DR.
ARLINGTON HEIGHTS, IL 60004

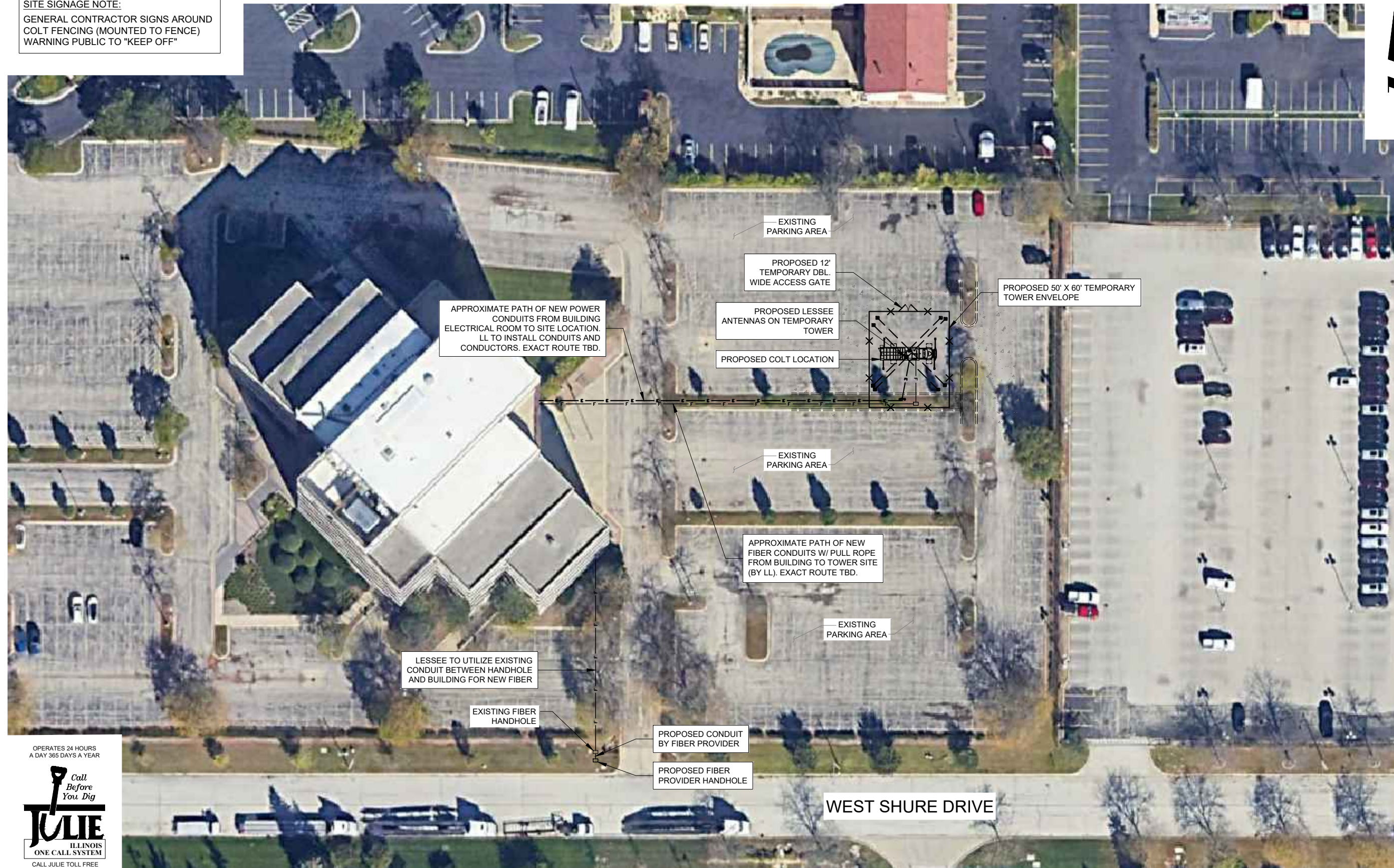
DRAWN BY:	JJR
CHECKED BY:	DS
DATE:	04/19/23
PROJECT #:	194-072

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1



SITE SIGNAGE NOTE:
 GENERAL CONTRACTOR SIGNS AROUND
 COLT FENCING (MOUNTED TO FENCE)
 WARNING PUBLIC TO "KEEP OFF"



verizon
 1701 GOLF ROAD,
 TOWER 2, SUITE 400
 ROLLING MEADOWS, IL 60008
 PHONE: (847) 619-5397
 FAX: (847) 706-7415

TERRA
 CONSULTING ENGINEERS, LTD.
 600 BUSSE HIGHWAY
 PARK RIDGE, IL 60068
 PH: 847-698-6400
 FAX: 847-698-6401

REVISIONS		DATE	BY
NO.	DESCRIPTION		JR
1	ISSUED FOR REVIEW	06/06/23	JR
2	ISSUED FOR FINAL	08/22/23	APD
3	REVISED PER NEW RFPD	08/30/23	TJS

MGD LOC. #
 5000926022

RAND & 53
 TEMP_ASSET

1500 SHURE DR.
 ARLINGTON HEIGHTS, IL 60004

DRAWN BY: JRJ
 CHECKED BY: DS
 DATE: 04/19/23
 PROJECT #: 194-072

SHEET TITLE
 SITE PLAN

SHEET NUMBER

A-1

OPERATES 24 HOURS
 A DAY 365 DAYS A YEAR

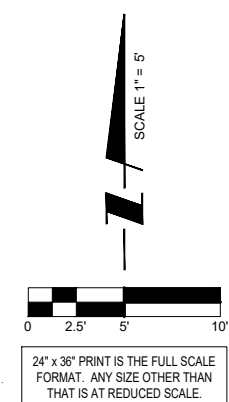
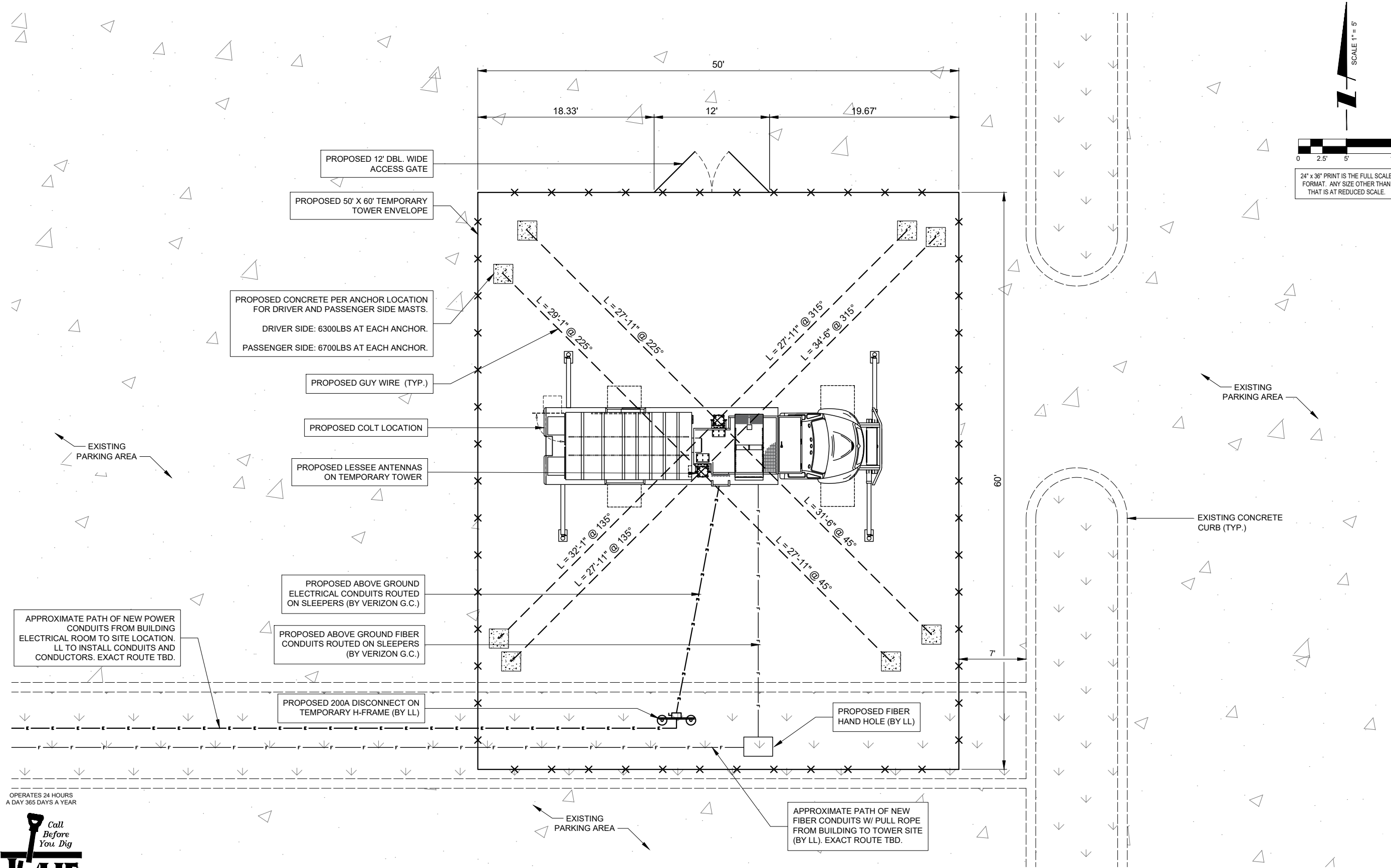


THIS SITE PLAN WAS CREATED OFF OF
 FIELD MEASUREMENTS BY THE DESIGNER,
 AS BOUNDARY SURVEY WAS NOT SUPPLIED
 FOR PURPOSES OF SITE LAYOUT.

1 SITE PLAN
 SCALE: 1" = 50'

POWER INFORMATION:
 PRIMARY POWER:
 PROVIDED BY LANDLORD

FIBER INFORMATION:
 FIBER:
 PROVIDED BY LANDLORD



APPROXIMATE PATH OF NEW POWER CONDUITS FROM BUILDING ELECTRICAL ROOM TO SITE LOCATION. LL TO INSTALL CONDUITS AND CONDUCTORS. EXACT ROUTE TBD.

PROPOSED 200A DISCONNECT ON TEMPORARY H-FRAME (BY LL)

APPROXIMATE PATH OF NEW FIBER CONDUITS W/ PULL ROPE FROM BUILDING TO TOWER SITE (BY LL). EXACT ROUTE TBD.

POWER INFORMATION:
PRIMARY POWER:
PROVIDED BY LANDLORD

FIBER INFORMATION:
FIBER:
PROVIDED BY LANDLORD

OPERATES 24 HOURS
A DAY 365 DAYS A YEAR

Call Before You Dig

JULIE
ILLINOIS
ONE CALL SYSTEM

CALL JULIE TOLL FREE
1(800) 892-0123
48 HOURS BEFORE
YOU DIG

1 ENLARGED SITE PLAN
SCALE: 1" = 5'

verizon
1701 GOLF ROAD,
TOWER 2, SUITE 400
ROLLING MEADOWS, IL 60008
PHONE: (847) 619-5397
FAX: (847) 706-7415

TERRA
CONSULTING ENGINEERS, LTD.
600 BUSSE HIGHWAY
PARK RIDGE, IL 60068
PH: 847-698-6400
FAX: 847-698-6401

REVISIONS		NO.	DESCRIPTION	DATE	BY
1	ISSUED FOR REVIEW	05/06/23	JJR		
2	UPDATE PER REVISED COMPOUND SIZE/DISCONNECT LOCATION	06/22/23	JJR		
3	ISSUED FOR FINAL	06/22/23	APD		
	REVISED PER NEW RFDS	06/30/23	TJS		

MGD LOC. #
5000926022

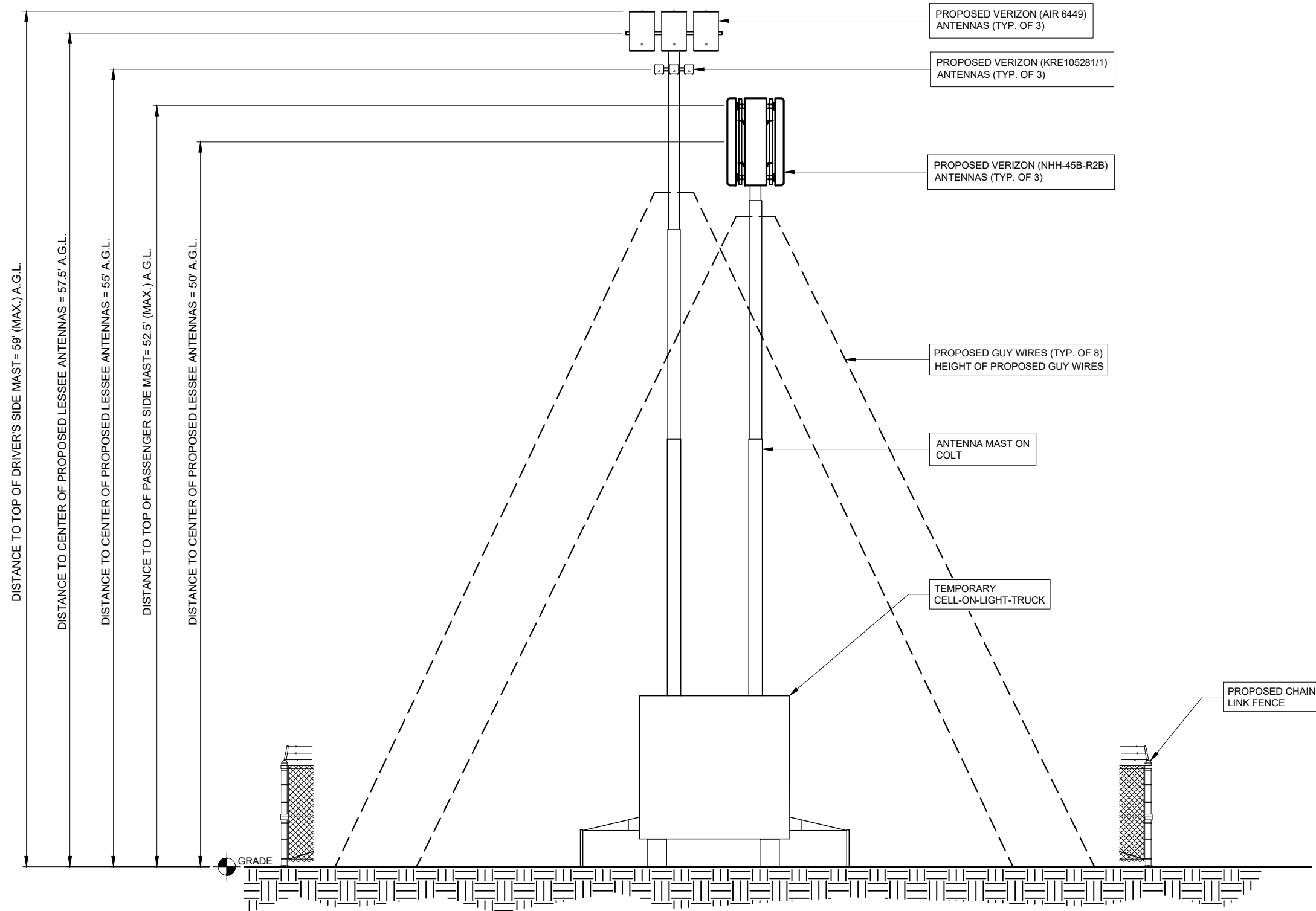
RAND & 53
TEMP_ASSET

1500 SHURE DR.
ARLINGTON HEIGHTS, IL 60004

DRAWN BY: JJR
CHECKED BY: DS
DATE: 04/19/23
PROJECT #: 194-072

SHEET TITLE
ENLARGED
SITE PLAN

SHEET NUMBER
A-2



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

verizon
1701 GOLF ROAD,
TOWER 2, SUITE 400
ROLLING MEADOWS, IL 60008
PHONE: (847) 619-5397
FAX: (847) 706-7415

TERRA
CONSULTING ENGINEERS, LTD.
600 BUSSE HIGHWAY
PARK RIDGE, IL 60068
PH: 847-698-6400
FAX: 847-698-6401

REVISIONS		NO.	DESCRIPTION	DATE	BY
	ISSUED FOR REVIEW			05/06/23	JJR
1	UPDATE PER REVISED COMPOUND SIZE/DISCONNECT LOCATION			06/22/23	JJR
2	ISSUED FOR FINAL			06/22/23	APD
3	REVISED PER NEW RFDS			06/30/23	TJS

MGD LOC. #
5000926022

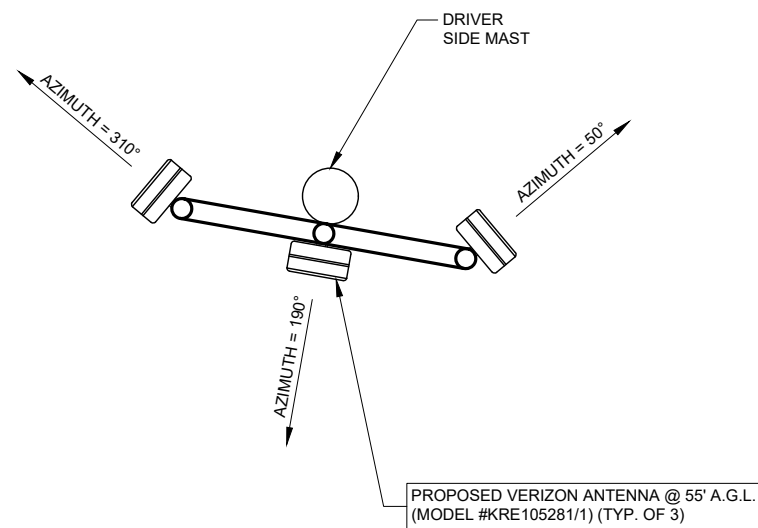
RAND & 53
TEMP_ASSET

1500 SHURE DR.
ARLINGTON HEIGHTS, IL 60004

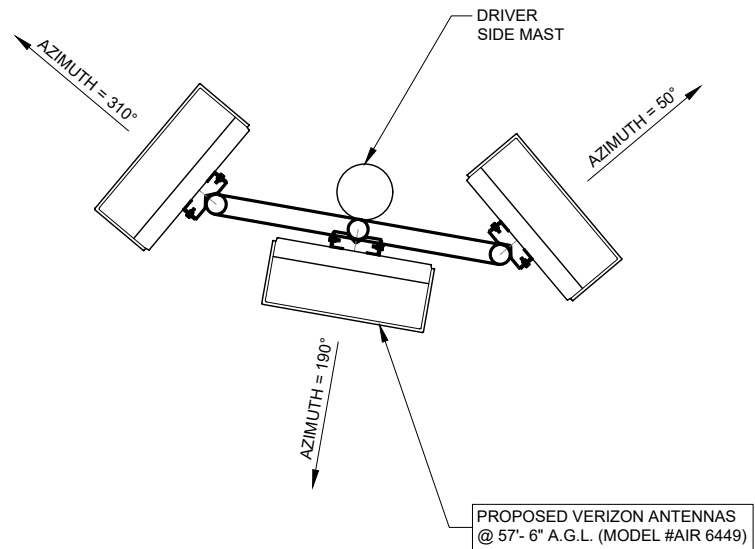
DRAWN BY: JJR
CHECKED BY: DS
DATE: 04/19/23
PROJECT #: 194-072

SHEET TITLE
SITE ELEVATION

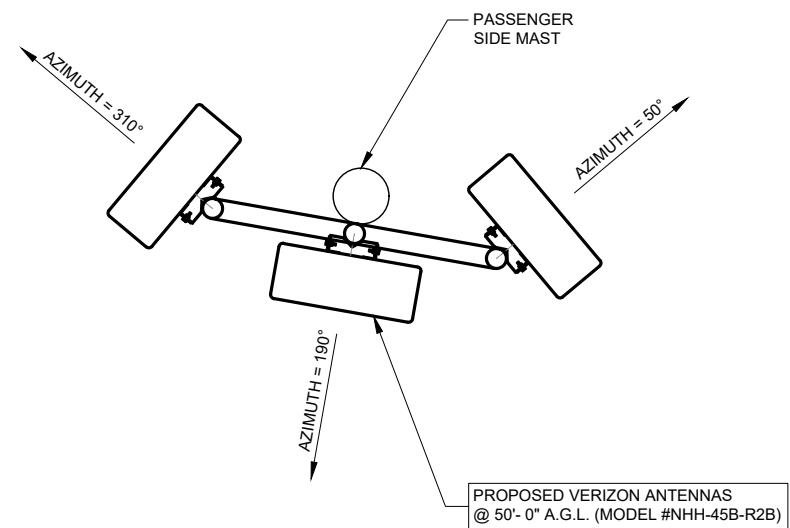
SHEET NUMBER
ANT-1



1 DRIVER SIDE MAST:
 ELEVATION @ 55'-0"
 SCALE: 1" = 1'-0"



2 DRIVER SIDE MAST:
 ELEVATION @ 57'-6"
 SCALE: 1" = 1'-0"



3 PASSENGER SIDE MAST:
 ELEVATION @ 50'-0"
 SCALE: 1" = 1'-0"

REVISIONS		DATE	BY
NO.	DESCRIPTION		
1	ISSUED FOR REVIEW	05/06/23	JJR
2	UPDATE PER REVISED COMPOUND SIZE/DISCONNECT LOCATION	06/22/23	JJR
3	ISSUED FOR FINAL	06/22/23	APD
	REVISED PER NEW RFDS	06/30/23	TJS

MGD LOC. #
 5000926022

RAND & 53
 TEMP_ASSET

1500 SHURE DR.
 ARLINGTON HEIGHTS, IL 60004

DRAWN BY:	JJR
CHECKED BY:	DS
DATE:	04/19/23
PROJECT #:	194-072

SHEET TITLE
 ANTENNA ORIENTATION
 (PLAN VIEWS)

SHEET NUMBER
ANT-1A



WEST > Upper Midwest > Illinois/Wisconsin > Elgin-1 > RAND&53_Temp_Asset
 Mcdaniel, Jessie - jessie.mcdaniel@verizonwireless.com - 20230627_102037

Project Details		Location Information	
Carrier Aggregation	N	Site Id	617386575
Ecp	N	Search Ring#	
Project Name	COW SPECIAL EVENT	E-NodeB ID#	null
Project Alt Name	COW SPECIAL EVENT	PSLC#	0
Project Id	17064021	Switch Name	Elgin-1
Designed Sector Carrier 4G	24	Tower Type	
Designed Sector Carrier 5G	6	Site Type	TEMPORARY
Additional Sector Carrier 4G	0	Street Address	1500 Shure Drive
Additional Sector Carrier 5G	0	City	Arlington Heights
Suffix		State	IL
FP Solution Type & Tech Type	MCR:4G_700,4G_850,5G_850,4G_AWS:4G_CBR5:5G_L-Sub6,4G_PCS	Zip Code	60004
		County	Cook
		Latitude	42.13765
		Longitude	-87.99967

1 RFDS TITLE SHEET
N.T.S.

Non Antenna Summary												
Equipment Type	Location	700	850	1900	AWS	CBRS	L-Sub6	Make	Model	Install Type	Quantity	
Hybrid Cable	Tower							N/A	1x1 Hybrid Jumper	PHYSICAL	6	
Diplexer	Ground (Outdoor)							Commscope	CDX1923Q-DS-43	PHYSICAL	3	
Coaxial Cables	Tower							N/A	1/2" Coax	PHYSICAL	18	
RRU	Tower							LTE	Ericsson	4408 B48 DC	PHYSICAL	3
RRU	Tower				LTE				Ericsson	8843	PHYSICAL	3
RRU	Tower	LTE	5G,LTE						Ericsson	4449	PHYSICAL	3
RRU	Tower						5G		Ericsson	AIR6449	PHYSICAL	3

Removed Non Antenna																			
Equipment Type	Location	700	850	1900	AWS	AWS3	CBRS	LAA	L-Sub	28GHz	31GHz	39GHz	Make	Model	Cable Length	Cable Size	Install Type	Quantity	

Retained Non Antenna																			
Equipment Type	Location	700	850	1900	AWS	AWS3	CBRS	LAA	L-Sub	28GHz	31GHz	39GHz	Make	Model	Cable Length	Cable Size	Install Type	Quantity	

Added: 39 Removed: 0 Retained: 0

3 EQUIPMENT SUMMARY
N.T.S.

Antenna Summary												
Added Antenna												
700	850	1900	AWS	CBRS	L-Sub6	Make	Model	Center line	Tip Height	Azimuth	Install Type	Quantity
LTE	5G,LTE	LTE	LTE			COMMSCOPE	NHH-45B-R2B	50	53	50(1),190(2),310(3)	PHYSICAL	3
				LTE		ERICSSON	KRE105281/1	55	55.3	50(19),190(20),310(21)	PHYSICAL	3
					5G	Ericsson	AIR6449	57.6	58.9	50(1),190(2),310(3)	PHYSICAL	3

Removed Antenna																	
700	850	1900	AWS	AWS3	CBRS	LAA	L-Sub	28GHz	31GHz	39GHz	Make	Model	Center line	Tip Height	Azimuth	Install Type	Quantity

Retained Antenna																	
700	850	1900	AWS	AWS3	CBRS	LAA	L-Sub	28GHz	31GHz	39GHz	Make	Model	Center line	Tip Height	Azimuth	Install Type	Quantity

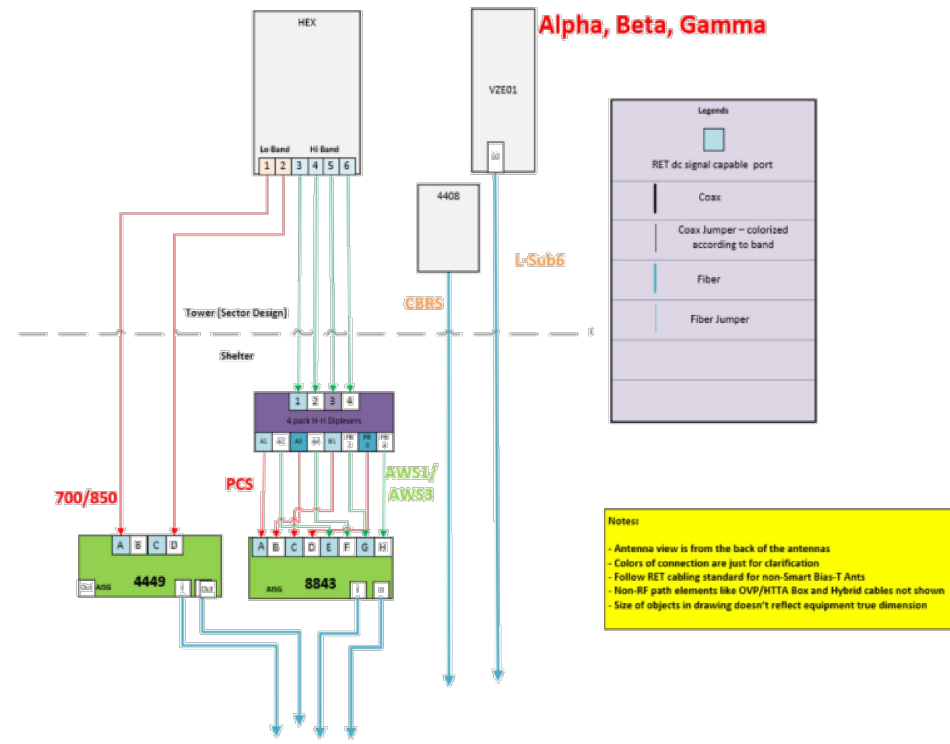
Added: 9 Removed: 0 Retained: 0

2 ANTENNA SUMMARY
N.T.S.

Non Antenna Summary												
Equipment Type	Location	700	850	1900	AWS	CBRS	L-Sub6	Make	Model	Install Type	Quantity	
Hybrid Cable	Tower							N/A	1x1 Hybrid Jumper	PHYSICAL	6	
Diplexer	Ground (Outdoor)							Commscope	CDX1923Q-DS-43	PHYSICAL	3	
Coaxial Cables	Tower							N/A	1/2" Coax	PHYSICAL	18	
RRU	Tower							LTE	Ericsson	4408 B48 DC	PHYSICAL	3
RRU	Tower				LTE				Ericsson	8843	PHYSICAL	3
RRU	Tower	LTE	5G,LTE						Ericsson	4449	PHYSICAL	3
RRU	Tower						5G		Ericsson	AIR6449	PHYSICAL	3

Added: 39 Removed: 0 Retained: 0

3 EQUIPMENT SUMMARY
N.T.S.



4 CABLE DIAGRAM
N.T.S.

verizon
 1701 GOLF ROAD,
 TOWER 2, SUITE 400
 ROLLING MEADOWS, IL 60008
 PHONE: (847) 619-5397
 FAX: (847) 706-7415

TERRA
 CONSULTING ENGINEERS, LTD.
 600 BUSSE HIGHWAY
 PARK RIDGE, IL 60068
 PH: 847-698-6400
 FAX: 847-698-6401

NO.	DESCRIPTION	DATE	BY	REVISIONS	
				JR	JR
1	ISSUED FOR REVIEW	05/06/23	JR		
2	UPDATE PER REVISED COMPOUND SIZED/DISCONNECT LOCATION	06/22/23	JR		
3	ISSUED FOR FINAL	06/22/23	APD		
	REVISED PER NEW RFDS	06/30/23	TJS		

MGD LOC. #
5000926022

RAND & 53
TEMP_ASSET

1500 SHURE DR.
ARLINGTON HEIGHTS, IL 60004

DRAWN BY: JJR
 CHECKED BY: DS
 DATE: 04/19/23
 PROJECT #: 194-072

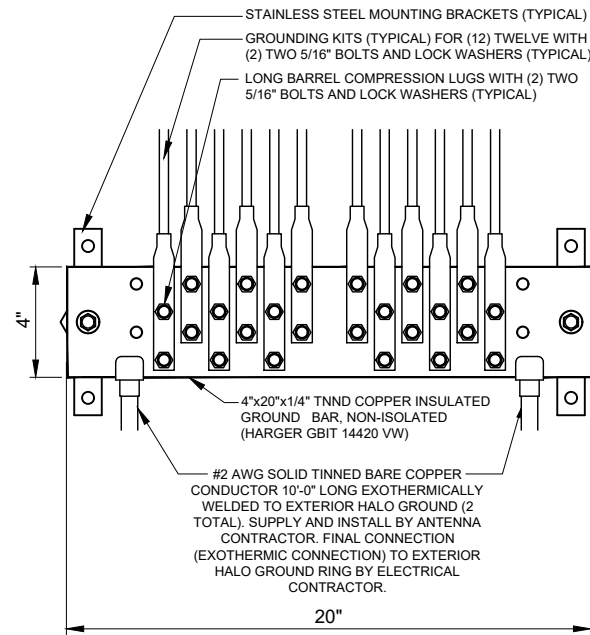
SHEET TITLE
ANTENNA
INFORMATION

SHEET NUMBER
ANT-2

GROUNDING ELECTRODE SYSTEM NOTES:

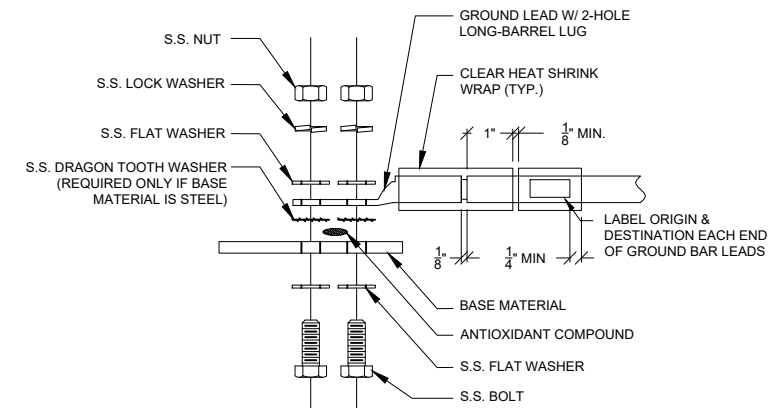
- ALL GROUNDING CONNECTIONS SHALL BE MADE BY THE EXOTHERMIC PROCESS CONNECTIONS SHALL INCLUDE ALL CABLE TO CABLE, SPLICES, ETC. ALL CABLE TO GROUND RODS, GROUND RODS SPLICES AND LIGHTNING PROTECTION SYSTEM AS INDICATED. GROUND FOUNDATION ONLY AS INDICATED BY PM. ALL MATERIALS USED (MOLDS, WELDING, METAL, TOOLS, ETC.) SHALL BE BY EXOTHERMIC PROCESS AND INSTALLED PER MANUFACTURERS RECOMMENDATIONS AND PROCEDURES. GROUND CONDUCTOR SHALL HAVE A MINIMUM 24" BENDING RADIUS.
- ALL EXOTHERMIC CONNECTIONS ON GALVANIZED SURFACES SHALL BE CLEANED THOROUGHLY AND COLORED TO MATCH SURFACE WITH (2) TWO COATS OF SHERWIN-WILLIAMS GALVITE (WHITE) PAINT B50W3 (OR EQUAL) OR SHERWIN- WILLIAMS SILVERBRITE (ALUMINUM) B59S11 (OR EQUAL). ALL ELECTRICAL & MECHANICAL GROUND CONNECTIONS SHALL HAVE ANTI-OXIDANT COMPOUND APPLIED TO CONNECTION
- FENCE/GATE: GROUND FENCE POSTS WITHIN 6 FEET OF ENCLOSURE AND 25 FEET OF TOWER AS INDICATED ON DRAWINGS. GROUND EACH GATE POST AND CORNER POST. GROUND CONNECTIONS TO FENCE POSTS SHALL BE MADE BY THE EXOTHERMIC PROCESS AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND PROCEDURES. ALL OTHER CONNECTIONS FOR THE GROUND GRID SYSTEM SHALL BE MADE BY THE EXOTHERMIC PROCESS, AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND PROCEDURES.
- AFTER INSTALLATION OF THE CANOPY AT THE DOOR, GC/EC IS TO BOND THE CANOPY TO THE DOOR FRAME WITH A #2 CONDUCTOR. USE DOUBLE-LUG CONNECTION. PREP AND PAINT SURFACE TO MATCH AFTER INSTALLATION.
- UTILITY COMPANY COORDINATION: ELECTRICAL CONTRACTOR SHALL CONFIRM THAT ALL WORK IS IN ACCORDANCE WITH THE RULES OF THE LOCAL UTILITY COMPANY BEFORE SUBMITTING THE BID, THE CONTRACTOR SHALL CHECK WITH THE UTILITY COMPANIES SUPPLYING SERVICE TO THIS PROJECT AND SHALL DETERMINE FROM THEM ALL EQUIPMENT AND CHARGES WHICH THEY WILL REQUIRE AND SHALL INCLUDE THE COST IN THE BID.
- GROUND TEST: GROUND TESTS SHALL BE PERFORMED AS REQUIRED BY LESSEE STANDARD PROCEDURES. GROUND GRID RESISTANCE SHALL NOT EXCEED 5 OHMS.
- CONTRACTOR SHALL SUBMIT THE GROUND RESISTANCE TEST REPORT AS FOLLOWS:
ONE (1) COPY TO OWNER REPRESENTATIVE
ONE (1) COPY TO ENGINEER
ONE (1) COPY TO KEEP INSIDE EQUIPMENT ENCLOSURE

NOTE:
DO NOT ATTACH GROUND BARS ON ANY OF THE TANKS COATED SURFACES



1 EXTERIOR GROUND BAR DETAIL
N.T.S.

- NOTES:
- ALL HARDWARE 18-8 STAINLESS STEEL INCLUDING BELLEVILLES. COAT ALL SURFACES WITH KOPR-SHIELD BEFORE MATING.
 - FOR GROUND BOND TO STEEL ONLY: INSERT A DRAGON TOOTH WASHER BETWEEN LUG AND STEEL, COAT ALL SURFACES WITH KOPR-SHIELD.
 - GROUND BARS, INSTALL BOLT HEAD TOWARD WALL
 - ENCLOSURES, INSTALL BOLT HEAD ON OUTSIDE OF ENCLOSURE



2 GROUND LUG INSTALLATION DETAIL
N.T.S.

verizon
1701 GOLF ROAD,
TOWER 2, SUITE 400
ROLLING MEADOWS, IL 60008
PHONE: (847) 619-5397
FAX: (847) 706-7415

TERRA
COMMERCIAL TRADING SERVICES, LTD.
600 BUSSE HIGHWAY
PARK RIDGE, IL 60068
PH: 847-698-6400
FAX: 847-698-6401

NO.	DESCRIPTION	DATE	BY				
			JR	JR	APD	TJS	
1	ISSUED FOR REVIEW	05/06/23					
2	UPDATE PER REVISED COMPOUND SIZE/DISCONNECT LOCATION	06/22/23					
3	ISSUED FOR FINAL	06/22/23					
	REVISED PER NEW RFD'S	06/30/23					

MGD LOC. #
5000926022

RAND & 53
TEMP_ASSET

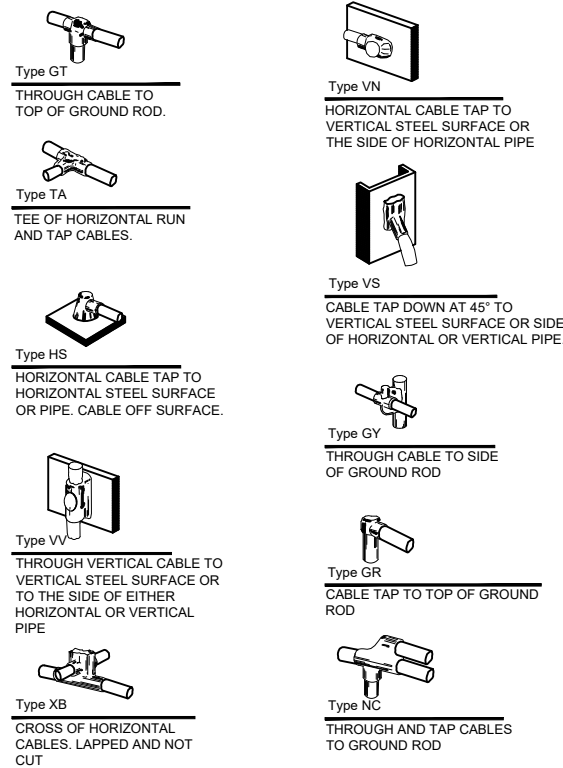
1500 SHURE DR.
ARLINGTON HEIGHTS, IL 60004

DRAWN BY: JJR
CHECKED BY: DS
DATE: 04/19/23
PROJECT #: 194-072

SHEET TITLE
GROUNDING
DETAILS

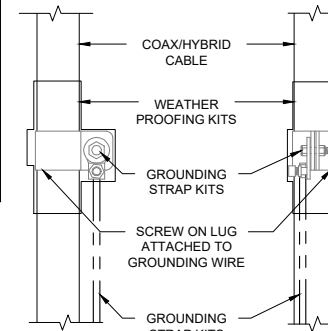
SHEET NUMBER

E-1

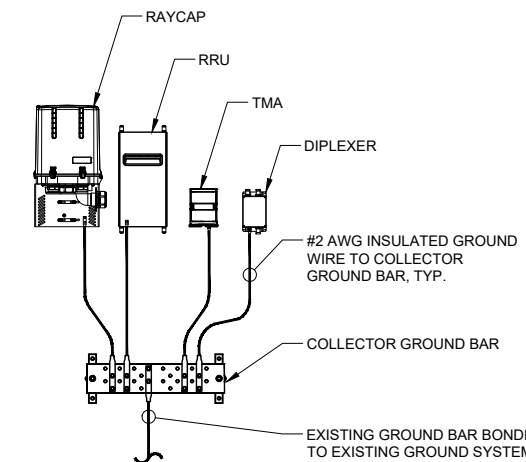


3 EXOTHERMIC WELD DETAILS
EXOTHERMIC AND HARGER ULTRAWELD OR APPROVED EQUAL

- NOTES:
- DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
 - THIS DETAIL IS TYPICAL FOR EACH COAX CABLE WHERE IT IS SPECIFIED TO BE GROUNDED
 - CABLE TO BE GROUNDED AT ANTENNA LEVEL AND PRIOR TO ENTERING SHELTER ENTRY PANEL.
 - CABLE ALSO TO BE GROUNDED TO GROUND BAR AT TOWER BASE IF APPLICABLE.
 - USE ONLY TIN PLATED GROUNDING KITS.



4 COAX / HYBRID CABLE GROUND KIT DETAIL
N.T.S.



- NOTES:
- DETAIL IS CONCEPTUAL ONLY. PLEASE SEE ECR AND LAYOUT SHEETS FOR ACTUAL EQUIPMENT CONFIGURATION.
 - GROUND CONNECTIONS MUST BE DOUBLE HOLE CONNECTION. SPECIAL EXCEPTION ONLY TO EQUIPMENT THAT WILL NOT ALLOW FOR A DOUBLE HOLE CONNECTION.

5 TYPICAL APPURTENANCE GROUNDING
SCALE: N.T.S.



WEST > Upper Midwest > Illinois/Wisconsin > Elgin-1 > RAND&53_Temp_Asset
 Mcdaniel, Jessie - jessie.mcdaniel@verizonwireless.com - 20230627_102037

Project Details		Location Information	
Carrier Aggregation	N	Site Id	617386575
Ecip	N	Search Ring#	
Project Name	COW SPECIAL EVENT	E-NodeB ID#	null
Project Alt Name	COW SPECIAL EVENT	PSLC#	0
Project Id	17064021	Switch Name	Elgin-1
Designed Sector Carrier 4G	24	Tower Type	
Designed Sector Carrier 5G	6	Site Type	TEMPORARY
Additional Sector Carrier 4G	0	Street Address	1500 Shure Drive
Additional Sector Carrier 5G	0	City	Arlington Heights
Suffix		State	IL
FP Solution Type & Tech Type	MCR:4G_700;4G_850;5G_850;4G_AWS;4G_CBRS;5G_L-Sub6;4G_PCS	Zip Code	60004
		County	Cook
		Latitude	42.13765
		Longitude	-87.99967

Project Scope

Antenna Summary												
Added Antenna												
700	850	1900	AWS	CBRS	L-Sub6	Make	Model	Center line	Tip Height	Azimuth	Install Type	Quantity
LTE	5G,LTE	LTE	LTE			COMMSCOPE	NHH-45B-R2B	50	53	50(1),190(2),310(3)	PHYSICAL	3
				LTE		ERICSSON	KRE105281/1	55	55.3	50(19),190(20),310(21)	PHYSICAL	3
					5G	Ericsson	AIR6449	57.6	58.9	50(1),190(2),310(3)	PHYSICAL	3

Removed Antenna																	
700	850	1900	AWS	AWS3	CBRS	LAA	L-Sub	28GHz	31GHz	39GHz	Make	Model	Center line	Tip Height	Azimuth	Install Type	Quantity

Retained Antenna																	
700	850	1900	AWS	AWS3	CBRS	LAA	L-Sub	28GHz	31GHz	39GHz	Make	Model	Center line	Tip Height	Azimuth	Install Type	Quantity

Added: 9	Removed: 0	Retained: 0
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Non Antenna Summary												
Added Non Antenna												
Equipment Type	Location	700	850	1900	AWS	CBRS	L-Sub6	Make	Model	Install Type	Quantity	
Hybrid Cable	Tower							N/A	1x1 Hybrid Jumper	PHYSICAL	6	
Diplexer	Ground (Outdoor)							Commscope	CDX1923Q-DS-43	PHYSICAL	3	
Coaxial Cables	Tower							N/A	1/2" Coax	PHYSICAL	18	
RRU	Tower					LTE		Ericsson	4408 B48 DC	PHYSICAL	3	
RRU	Tower			LTE	LTE			Ericsson	8843	PHYSICAL	3	
RRU	Tower	LTE	5G,LTE					Ericsson	4449	PHYSICAL	3	
RRU	Tower					5G		Ericsson	AIR6449	PHYSICAL	3	

Removed Non Antenna																		
Equipment Type	Location	700	850	1900	AWS	AWS3	CBRS	LAA	L-Sub	28GHz	31GHz	39GHz	Make	Model	Cable Length	Cable Size	Install Type	Quantity

Retained Non Antenna																		
Equipment Type	Location	700	850	1900	AWS	AWS3	CBRS	LAA	L-Sub	28GHz	31GHz	39GHz	Make	Model	Cable Length	Cable Size	Install Type	Quantity

Added: 39	Removed: 0	Retained: 0
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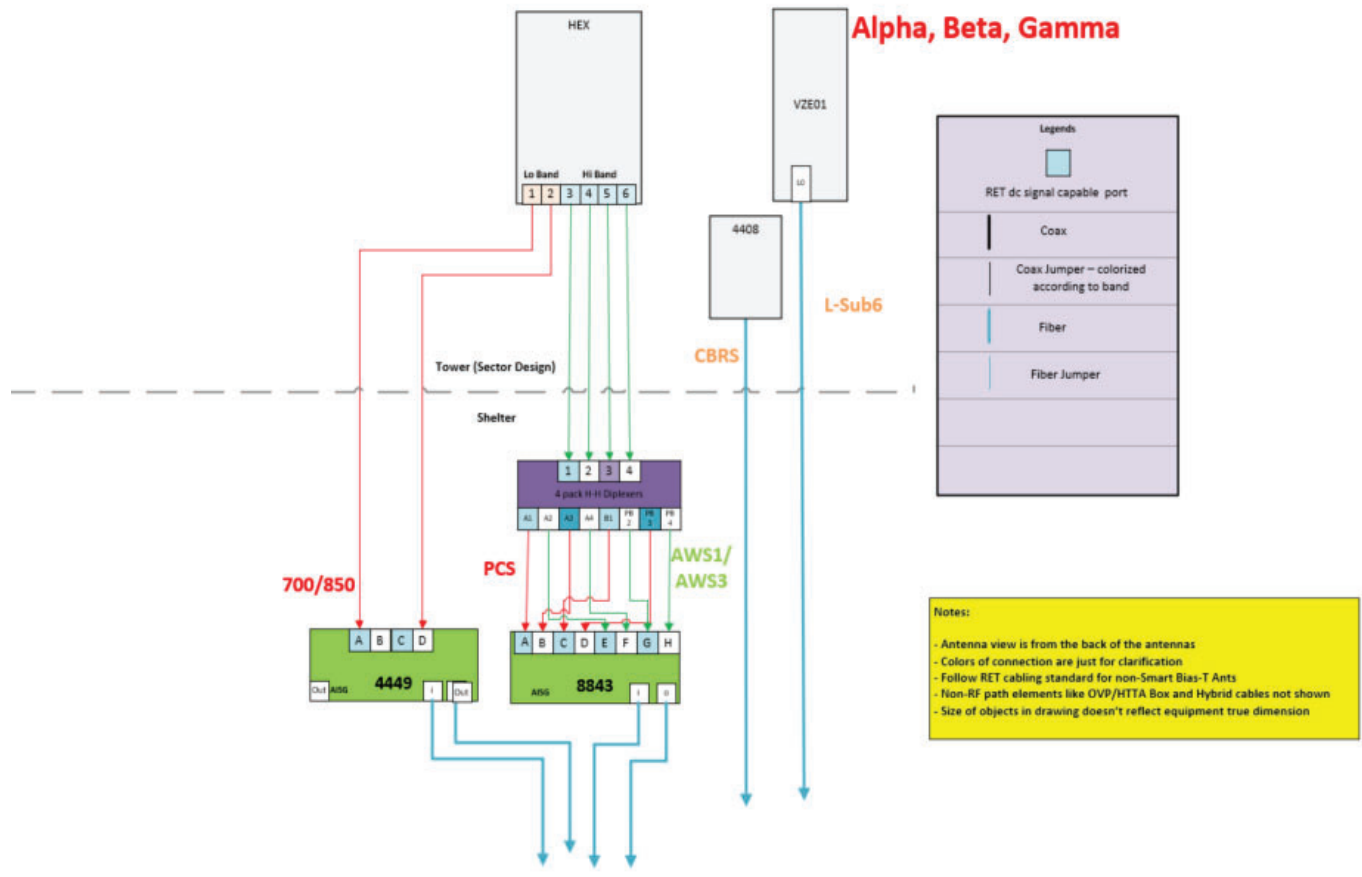
Services			
1900 LTE	CAND		
Sector	01	02	03
Azimuth	50	190	310
Cell/Enodeb-Id			
Antenna Model	NHH-45B-R2B	NHH-45B-R2B	NHH-45B-R2B
Antenna Make	COMMSCOPE	COMMSCOPE	COMMSCOPE
Centerline	50	50	50
DLEARFCN	925	925	925
Mech Down-tilt	0	0	0
Elect Down-tilt	2	1	2
Tip Height	53	53	53
Regulatory Power	1111.70 (W/MHz) EIRP	1111.70 (W/MHz) EIRP	1111.70 (W/MHz) EIRP
Cell Max Power	47.78 dBm	47.78 dBm	47.78 dBm
TMA Make			
TMA Model			
RRU Make	Ericsson	Ericsson	Ericsson
RRU Model	8843	8843	8843
Number of Tx,Rx	4, 4	4, 4	4, 4
Position			
Transmitter Id	16806590	16806593	16806596
Source	VZNPP	VZNPP	VZNPP
Bandwidth	5	5	5
Ant. Dimensions H x W x D(inch)	72.0 x 17.99 x 7.0	72.0 x 17.99 x 7.0	72.0 x 17.99 x 7.0
Weight(lb)	73.44	73.44	73.44

Services			
700 LTE	CAND		
Sector	01	02	03
Azimuth	50	190	310
Cell/Enodeb-Id			
Antenna Model	NHH-45B-R2B	NHH-45B-R2B	NHH-45B-R2B
Antenna Make	COMMSCOPE	COMMSCOPE	COMMSCOPE
Centerline	50	50	50
DLEARFCN	5230	5230	5230
Mech Down-tilt	0	0	0
Elect Down-tilt	4	2	2
Tip Height	53	53	53
Regulatory Power	167.40 (W/MHz) ERP	167.40 (W/MHz) ERP	167.40 (W/MHz) ERP
Cell Max Power	47.78 dBm	47.78 dBm	47.78 dBm
TMA Make			
TMA Model			
RRU Make	Ericsson	Ericsson	Ericsson
RRU Model	4449	4449	4449
Number of Tx,Rx	4 , 4	4 , 4	4 , 4
Position			
Transmitter Id	16806589	16806592	16806595
Source	VZNPP	VZNPP	VZNPP
Bandwidth	10	10	10
Ant. Dimensions H x W x D(inch)	72.0 x 17.99 x 7.0	72.0 x 17.99 x 7.0	72.0 x 17.99 x 7.0
Weight(lb)	73.44	73.44	73.44

Services			
850 LTE	CAND		
Sector	01	02	03
Azimuth	50	190	310
Cell/Enodeb-Id			
Antenna Model	NHH-45B-R2B	NHH-45B-R2B	NHH-45B-R2B
Antenna Make	COMMSCOPE	COMMSCOPE	COMMSCOPE
Centerline	50	50	50
DLEARFCN	2561	2561	2561
Mech Down-tilt	0	0	0
Elect Down-tilt	4	2	2
Tip Height	53	53	53
Regulatory Power	392.48 (W/MHz) ERPSD	392.48 (W/MHz) ERPSD	392.48 (W/MHz) ERPSD
Cell Max Power	44.7 dBm	44.7 dBm	44.7 dBm
TMA Make			
TMA Model			
RRU Make	Ericsson	Ericsson	Ericsson
RRU Model	4449	4449	4449
Number of Tx,Rx	4 , 4	4 , 4	4 , 4
Position			
Transmitter Id	16806610	16806611	16806612
Source	VZNPP	VZNPP	VZNPP
Bandwidth	10	10	10
Ant. Dimensions H x W x D(inch)	72.0 x 17.99 x 7.0	72.0 x 17.99 x 7.0	72.0 x 17.99 x 7.0
Weight(lb)	73.44	73.44	73.44

Services			
850 NR	CAND		
Sector	0001	0002	0003
Azimuth	50	190	310
Cell/Enodeb-Id			
Antenna Model	NHH-45B-R2B	NHH-45B-R2B	NHH-45B-R2B
Antenna Make	COMMSCOPE	COMMSCOPE	COMMSCOPE
Centerline	50	50	50
DLEARFCN	2561	2561	2561
Mech Down-tilt	0	0	0
Elect Down-tilt	4	2	2
Tip Height	53	53	53
Regulatory Power	392.48 (W/MHz) ERPSD	392.48 (W/MHz) ERPSD	392.48 (W/MHz) ERPSD
Cell Max Power	44.7 dBm	44.7 dBm	44.7 dBm
TMA Make			
TMA Model			
RRU Make	Ericsson	Ericsson	Ericsson
RRU Model	4449	4449	4449
Number of Tx,Rx	4 , 4	4 , 4	4 , 4
Position			
Transmitter Id	16806610	16806611	16806612
Source	VZNPP	VZNPP	VZNPP
Bandwidth	10	10	10
Ant. Dimensions H x W x D(inch)	72.0 x 17.99 x 7.0	72.0 x 17.99 x 7.0	72.0 x 17.99 x 7.0
Weight(lb)	73.44	73.44	73.44

Services			
AWS LTE	CAND		
Sector	01	02	03
Azimuth	50	190	310
Cell/Enodeb-Id			
Antenna Model	NHH-45B-R2B	NHH-45B-R2B	NHH-45B-R2B
Antenna Make	COMMSCOPE	COMMSCOPE	COMMSCOPE
Centerline	50	50	50
DLEARFCN	2050	2050	2050
Mech Down-tilt	0	0	0
Elect Down-tilt	2	1	2
Tip Height	53	53	53
Regulatory Power	327.21 (W/MHz) EIRP	327.21 (W/MHz) EIRP	327.21 (W/MHz) EIRP
Cell Max Power	47.78 dBm	47.78 dBm	47.78 dBm
TMA Make			
TMA Model			
RRU Make	Ericsson	Ericsson	Ericsson
RRU Model	8843	8843	8843
Number of Tx,Rx	4 , 4	4 , 4	4 , 4
Position			
Transmitter Id	16806591	16806594	16806597
Source	VZNPP	VZNPP	VZNPP
Bandwidth	20	20	20
Ant. Dimensions H x W x D(inch)	72.0 x 17.99 x 7.0	72.0 x 17.99 x 7.0	72.0 x 17.99 x 7.0
Weight(lb)	73.44	73.44	73.44



Tower (Sector Design)

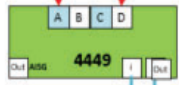
Shelter



700/850

PCS

AWS1/AWS3



CBRS

L-Sub6