Verizon Site: Belmar North Location Code: 461626

Attorney/Date: Richard L. Schneider, Esq./9-23-22

AMENDMENT NO. 1 TO LEASE AGREEMENT

THIS AMENDMENT NO. 3 TO LEASE AGREEMENT ("Amendment") made this day of ______, 20___, between the Borough of Belmar, with its principal offices located at 601 Main Street, Belmar, New Jersey 07719, hereinafter designated as "Lessor", and New York SMSA Limited Partnership d/b/a Verizon Wireless, with its principal offices located at One Verizon Way, Mail Stop 4AW100, Basking Ridge, New Jersey 07920, hereinafter designated as "Lessee". Lessor and Lessee are at time collectively referred to hereinafter as the "Parties" or individually as the "Party".

WITNESSETH

WHEREAS, on or about August 5, 2016, Lessor and Lessee entered into a certain Lease Agreement ("Lease Agreement") pursuant to which Lessor leased to Lessee certain Premises, as defined therein, for the operation by Lessee of a wireless communications facility and uses incidental thereto; and

WHEREAS, Lessee has sought the approval of Lessor to modify its wireless communications facility as more particularly set forth herein; and

WHEREAS, Lessor has consented to Lessee's modification of its wireless communications facility pursuant to the specific terms and conditions herein set forth.

NOW, THEREFORE, with the foregoing recitals incorporated herein by reference and for other good and valuable consideration, it is agreed by and between the Lessor and Lessee as follows:

- 1. Lessee is hereby granted the right to modify its wireless communications facility in accordance with Exhibit A-1 attached hereto and made a part hereof. Upon completion of the authorized modification, Exhibit A-1 amends Exhibit A to the Lease Agreement.
- 2. In consideration for the right granted to Lessee to effectuate its authorized modification in accordance with Exhibit A-1, commencing October 1, 2022, the annual rent shall be amended from its current rent of Thirteen Thousand, Two Hundred Dollars (\$13,200.00) to the sum of Fifteen Thousand, Eight Hundred Dollars (\$15,800.00). The additional annual rent due, representing an increase in the amount of Two Thousand, Six Hundred Dollars (\$2,600.00), shall be paid within sixty (60) days of execution of this Amendment.
- 3. The second paragraph of Paragraph 5 of the Lease Agreement shall be amended to address the annual rent for the second, third, and fourth extension terms to provide as follows:
 - A. The annual rent for the second five-year extension term shall be increased to Eighteen Thousand, Nine Hundred Sixty Dollars (\$18,960.00).

Verizon Site: Belmar North Location Code: 461626

Attorney/Date: Richard L. Schneider, Esq./9-23-22

- B. The annual rent for the third five-year extension shall be increased to Twenty-Two Thousand, Seven Hundred Fifty-Two Dollars (\$22,752.00).
- C. The annual rent for the fourth five-year extension term shall be increased to Twenty-Seven Thousand, Three Hundred Two Dollars and Forty Cents (\$27,302.40).
- 4. Except to the extent modified herein, all terms and conditions of the Lease Agreement shall otherwise remain in full force and effect.

IN WITNESS WHEREOF, the Parties hereto have set their hands and affixed their respective seals the day and year first above written.

	LESSOR
	Borough of Belmar
	By:
Witness	Print Name:
	Title:
Print Name	Date:
	LECCEE
	LESSEE
	New York SMSA Limited Partnership d/b/a Verizon Wireless
	By Cellco Partnership, Its General Partner
	R_{V}
Witness	By:Print Name:
	Title:
Print Name	Date:

Verizon Site: Belmar North Location Code: 461626

Attorney/Date: Richard L. Schneider, Esq./9-23-22

EXHIBIT A-1 SEE ATTACHED



SITE NAME: BELMAR NORTH SC - A

601 MAINSTREET BELMAR, NJ 07719 BELMAR TOWNSHIP MONMOUTH COUNTY

SITE INFORMATION

SCOPE OF WORK:

PROJECT CONSISTS OF INSTALLING ADDITIONAL EQUIPMENT AND/OR ANTENNAS TO AN EXISTING WIRELESS TELECOMMUNICATIONS FACILITY.

SITE ADDRESS:

601 MAINSTREET BELMAR, NJ 07719

JURISDICTION:

BELMAR TOWNSHIP MONMOUTH COUNTY

LATITUDE (NAD 83): LONGITUDE (NAD 83): 40-10-59.05N (40.18306944°) 74-01-29.14W (-74.02476111°)

BLOCK NUMBER LOT NUMBER:

PARCEL NUMBER: 07-00066-0000-00001

PROPERTY OWNER:

BOROUGH OF BELMAR P.O. BOX A BELMAR, NJ 07719

VZW SITE ID:

STRUCTURE TYPE:

N/A

16318741

FUZE PROJECT ID:

ROOFTOP

CONSTRUCTION TYPE

GROUND ELEVATION:

11.0' (AMSL)

SITE ACQ:

USE GROUP:

KRISTY BURKHOLDER

CONTRACTOR PMI REQUIRMENTS

PMI DOCUMENTATION:

VZWMOUNTS@NBCLLC.COM

PROJECT NUMBER:

100574

VERIZON LOCATION CODE (PSLC):

461626

*** PMI AND REQUIREMENTS ALSO EMBEDDED IN MOUNT ANALYSIS REPORT

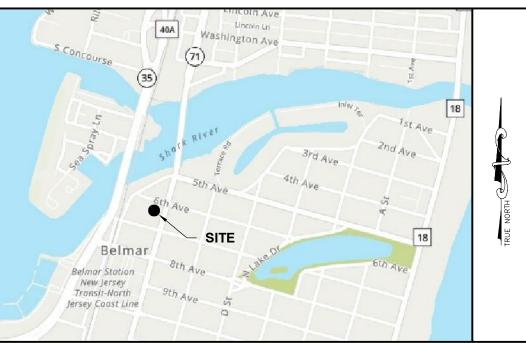
MOUNT MODIFICATION REQUIRED

NO

VERIZON APPROVED VENDORS

* REFER TO MOUNT MODIFICATION DRAWINGS

VICINITY MAP



DIRECTIONS

FROM WARREN, NJ: HEAD NORTH ON PARK VIEW DR TOWARD DUBOIS RD, TURN RIGHT ONTO DUBOIS RD, TURN LEFT ONTO MT BETHEL RD, CONTINUE ONTO WARRENVILLE RD, TURN LEFT ONTO US-22 E., CONTINUE ONTO WASHINGTON AVE, CONTINUE STRAIGHT TO STAY ON STELTON RD, MERGE WITH I-287 S, KEEP LEFT TO CONTINUE ON NJ-440 N, TAKE THE GARDEN STATE PARKWAY SOUTH EXIT, KEEP LEFT AT THE Y JUNCTION TO STAY ON GARDEN STATE PKWY FOLLOW SIGNS FOR 117, 105/ASBURY PARK/SOUTH JERSEY, KEEP LEFT TO STAY ON GARDEN STATE PKWY, TAKE EXIT 100 A TO MERGE WITH N.I-33 E TOWARD OCEAN GROVE, MERGE WITH N.I-33 E, TURN RIGHT ONTO RIVER RD. SHARP LEFT ONTO 6TH AVE. TURN RIGHT, DESTINATION WILL BE ON THE LEFT, LEADS TO LATITUDE 40,183243° AND LONGITUDE -74.025097°. (FRONT OF BUILDING)

CODE COMPLIANCE

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 THE LATEST EDITIONS OF THE FOLLOWING CODES.

- 2018 INTERNATIONAL BUILDING CODE(N.I EDITION) MANUAL OF STEEL CONSTRUCTION 15TH EDITION
- 2014 NATIONAL ELECTRICAL CODE ANSI/TIA-222-H
- 2015 NATIONAL STANDARD PLUMBING CODE
- 2009 NEPA 101 LIFE SAFETY CODE
- AMERICAN CONCRETE INSTITUTE

- INSTITUTE FOR ELECTRICAL & ELECTRONICS ENGINEER 81
- IEEE C2 NATIONAL ELECTRIC SAFETY CODE LATEST EDITION
- TELECORDIA GR-1275
- AMERICAN INSTITUTE OF STEEL CONSTRUCTION ANSI/T 311

DRAWING INDEX

I-1	TITLE SHEET
C-1	COMPOUND PLAN
C-2	ELEVATION
A-1	EXISTING ANTENNA PLAN AND SCHEDULE
A-2	PROPOSED ANTENNA PLAN AND SCHEDULE
A-3	ANTENNA DETAILS & PLUMBING DIAGRAM
A-4	EQUIPMENT SPECIFICATIONS
A-5	ALARM WIRING DIAGRAM & COLOR CODING
A-6	SCOPE OF WORK
G-1	SCHEMATIC AND GROUNDING DIAGRAM
GN-1	PMI REQUIREMENTS
I	

DO NOT SCALE DRAWINGS

THESE DRAWINGS ARE FORMATTED TO BE FULL-SIZE AT 22"X34". CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE DESIGNER / ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR MATERIAL ORDERS OR BE RESPONSIBLE FOR THE SAME CONTRACTOR SHALL LISE BEST MANAGEMENT PRACTICE TO PREVENT STORM WATER POLLUTION DURING CONSTRUCTION.

APPROVAL BLOCK

7(111(0)7)	IL DLOOK			
		APPROVED	APPROVED AS NOTED	DISAPPROVED/ REVISE
CONSTRUCTION MANAGER	DATE			
SITE ACQUISITION	DATE			
RF ENGINEER	DATE			
LESSOR/LESSOR REP	DATE			



NB+C ENGINEERING SERVICES, LLC.

NEW YORK SMSA

LIMITED PARTNERSHIP d/b/a VERIZON WIRELESS

400 WARREN CORPORATE CENTER DRIVE BUILDING D

WARREN, NJ 07059

BELMAR NORTH SC - A **601 MAIN STREET** BELMAR, NJ 07719 **BELMAR TOWNSHIP** MONMOUTH COUNTY

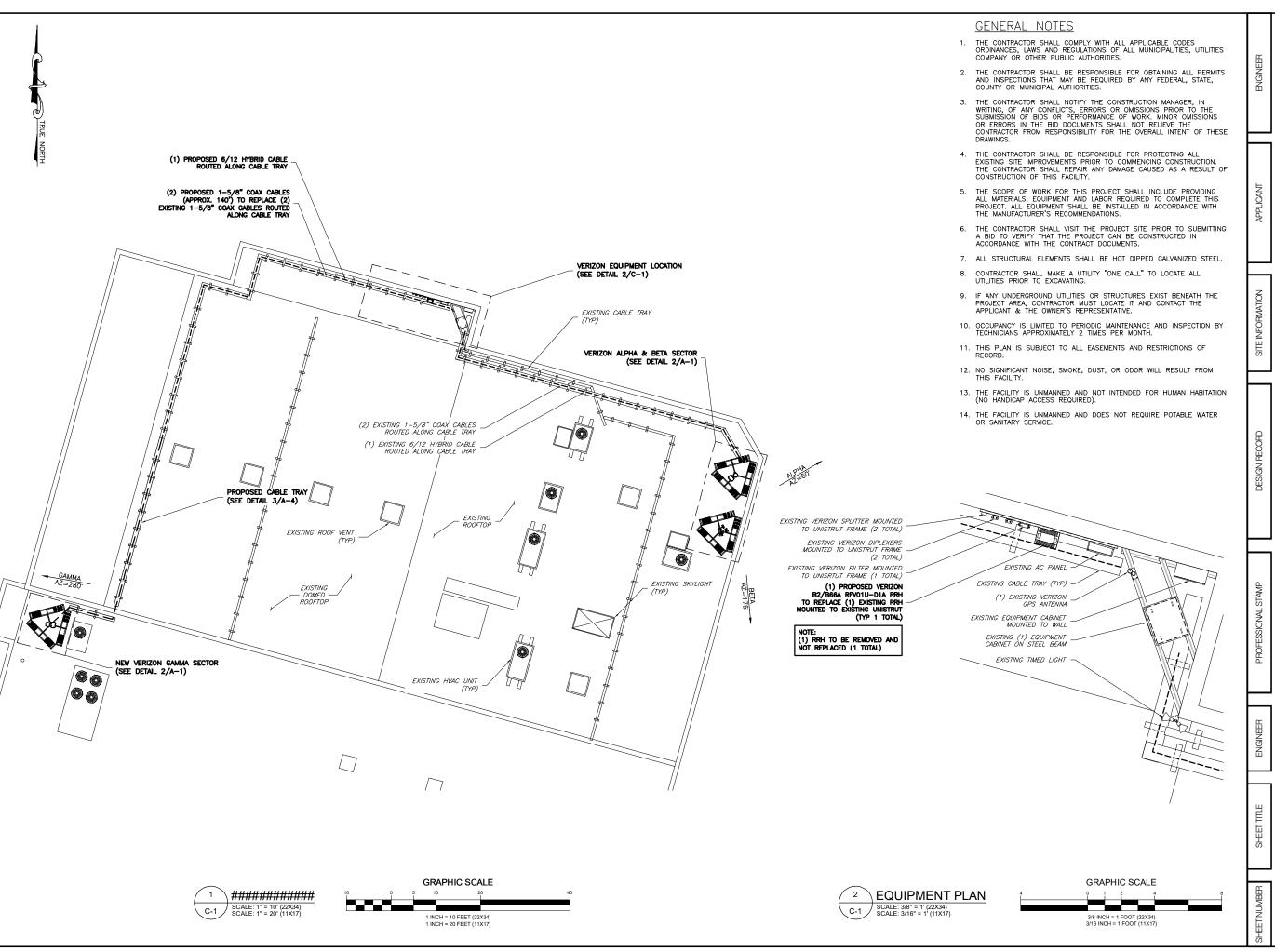
REVISIONS FINAL CDs REV DATE DESCRIPTION

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Ш	RAISED SEAL
Ш	AVAILABLE UPON
Ш	REQUEST
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STATE OF NEW JERSEY CERTIFICATE OF AUTHORIZATION #246GA28226400 EXP 08/31/2

KRUPAKARAN KOLANDAIVELU PE STATE OF NEW JERSEY PROFESSIONAL ENGINEER LICENSE #24GE04945200

TITLE SHEET



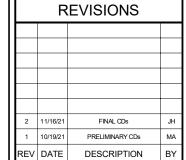
TOTALLY COMMITTED.

NB+C ENGINEERING SERVICES, LLC.

NEW YORK SMSA LIMITED PARTNERSHIP d/b/a **VERIZON WIRELESS**

400 WARREN CORPORATE CENTER DRIVE BUILDING D WARREN, NJ 07059

BELMAR NORTH SC - A **601 MAIN STREET** BELMAR, NJ 07719 **BELMAR TOWNSHIP** MONMOUTH COUNTY



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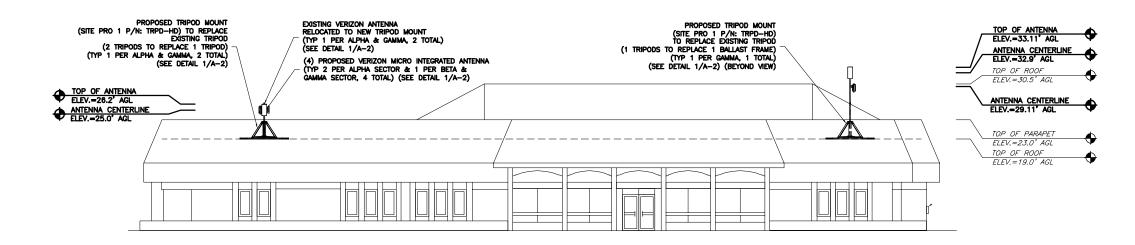
STATE OF NEW JERSEY CERTIFICATE OF AUTHORIZATION #246GA28226400 EXP 08/31/22

KRUPAKARAN KOLANDAIVELU, P.E. STATE OF NEW JERSEY PROFESSIONAL ENGINEER LICENSE #24GE04945200

ROOFTOP & EQUIPMENT PLAN

NOTE:
POST-MODIFICATION INSPECTION (PMI) REQUIRED ON ALL
SITES. REFER TO SHEET GN-1 OF THESE CONSTRUCTION
DRAWINGS, AS WELL AS THE MOUNT ANALYSIS PREPARED
BY NB+C, LLC DATED 10/22/21 FOR ADDITIONAL
DETAILS.

NOTE:
TOP OF PROPOSED ANTENNAS WILL NOT EXCEED TOP OF EXISTING ANTENNAS.



ELEVATION

GRAPHIC SCALE 1 INCH = 5 FEET (22X34) 1 INCH = 10 FEET (11X17)

TOTALLY COMMITTED.

NB+C ENGINEERING SERVICES, LLC.

LIMITED PARTNERSHIP d/b/a VERIZON WIRELESS

NEW YORK SMSA

400 WARREN CORPORATE CENTER DRIVE BUILDING D WARREN, NJ 07059

BELMAR NORTH SC - A **601 MAIN STREET** BELMAR, NJ 07719 **BELMAR TOWNSHIP** MONMOUTH COUNTY

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	REV	DATE	DESCRIPTION	BY

RAISED SEAL **AVAILABLE UPON** REQUEST

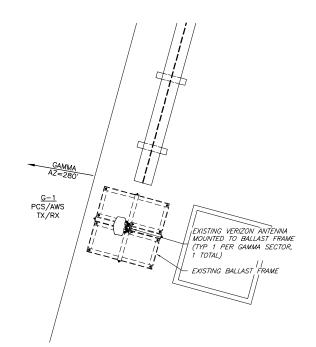
STATE OF NEW JERSEY CERTIFICATE OF AUTHORIZATION #246GA28226400 EXP 08/31/22

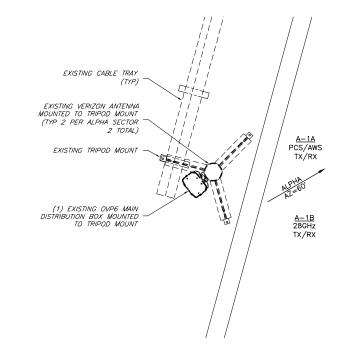
KRUPAKARAN KOLANDAIVELU, P.E. STATE OF NEW JERSEY PROFESSIONAL ENGINEER LICENSE #24GE04945200

ELEVATION

GENERAL ANTENNA NOTES

- ALL ANTENNAS TO BE FURNISHED WITH DOWNTILT BRACKETS. CONTRACTOR IS TO COORDINATE AND VERIFY THE PROPOSED DOWNTILTS WITH VERIZON MANAGER PRIOR TO CONSTRUCTION.
- ANTENNA CENTERLINE HEIGHT IS IN REFERENCE TO ELEVATION 0.0'. (EXISTING GRADE)
- 3. CHECK WITH RF ENGINEER FOR LATEST ANTENNA TYPE & AZIMUTH.
- CONTRACTOR SHALL VERIFY ANTENNA TYPE AND AZIMUTH WITH CONSTRUCTION MANAGER PRIOR TO CONSTRUCTION.
- 5. ALL CABLE LENGTHS ARE ESTIMATED AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR.
- 6. COLOR TAPE MARKINGS MUST BE 3/4" WIDE AND UV RESISTANT, SUCH AS SCOTCH 35 VINYL ELECTRICAL COLOR CODING TAPE.
- 7. CONTRACTOR SHALL COORDINATE COLOR CODINGS IN THE FIELD WITH VERIZON REPRESENTATIVE.
- 8. PRIOR TO THE INSTALLATION OF THE PROPOSED EQUIPMENT OR MODIFICATION OF THE EXISTING STRUCTURE, A STRUCTURAL ANALYSIS SHALL BE PERFORMED BY THE OWNER'S AGENT TO CERTIFY THAT THE EXISTING/PROPOSED COMMUNICATION STRUCTURE AND COMPONENTS ARE STRUCTURALLY ADEQUATE TO SUPPORT ALL EXISTING AND PROPOSED ANTENNAS, COAXIAL CABLES AND OTHER APPURTENANCES. THE OWNER'S AGENT SHALL FURNISH A CERTIFICATION LETTER SEALED BY A REGISTERED PROFESSIONAL ENGINEER STATING THAT THIS STRUCTURAL ANALYSIS WAS PREPARED IN ACCORDANCE WITH ALL APPLICABLE CODES AND STANDARDS.









	EXISTING ANTENNA INFORMATION											
ANTENNA		ANTENNA	RAD	AZIMUTH	DOV	DOWN TILT RRH QUANTITY		TECHNOLOGY	CABLE SIZE, LENGTH			
POSTION	MANUFACTURER	MODEL	CENTER		MEC	н	EL	EC	& MODEL	TEOTINOLOGI	& QUANTITY	
A-1	COMMSCOPE	NH180QS-DG-F0M	25.00'	60.	0. 0	2.	0.	0.	B25-PCS 4x30-4R (IN EQUIPMENT AREA)	PCS/AWS	(2) 1-5/8" COAX (95')	
A-2	NOKIA	AEUB W/ASOD	22.00'	60°	0.		(2.	(IN EQUIPMENT AREA) B66A-AWS 4x45-4R	28GHz	(1) 1.43"ø HYBRID CABLE(95')	
						(IN EQUIPMENT AREA)						
G-1	COMMSCOPE	NH65S-DG-FOM	36.00'	280	0. 0	· T	0.	0.		PCS/AWS	(2) 1-5/8" COAX (75')	



NB+C ENGINEERING SERVICES, LLC.
1777 SENTRY PARKWAY WEST

NEW YORK SMSA LIMITED PARTNERSHIP d/b/a VERIZON WIRELESS

verizon

400 WARREN CORPORATE CENTER DRIVE BUILDING D WARREN, NJ 07059

TE INFORMATION

BELMAR NORTH SC - A 601 MAIN STREET BELMAR, NJ 07719 BELMAR TOWNSHIP MONMOUTH COUNTY

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1	10/19/21	PRELIMINARY CDs	MA
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STATE OF NEW JERSEY CERTIFICATE OF AUTHORIZATION #246GA28226400 EXP 08/31/23

NGINEER

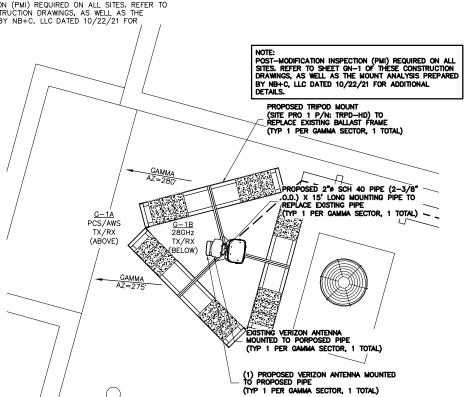
KRUPAKARAN KOLANDAIVELU, P.E. STATE OF NEW JERSEY PROFESSIONAL ENGINEER LICENSE #24GE04945200

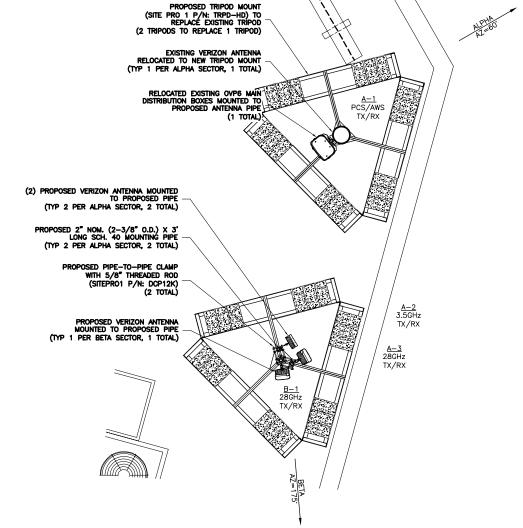
EXISTING
ANTENNA PLAN
& SCHEDULE

GENERAL ANTENNA NOTES

- ALL ANTENNAS TO BE FURNISHED WITH DOWNTILT BRACKETS. CONTRACTOR TO COORDINATE REQUIRED MECHANICAL DOWNTILT FOR EACH ANTENNA WITH RF ENGINEER.
- 2. ANTENNA CENTERLINE HEIGHT IS IN REFERENCE TO ELEVATION 0.0'.
- 3. CHECK WITH RF ENGINEER FOR LATEST ANTENNA TYPE & AZIMUTH.
- 4. CONTRACTOR SHALL VERIFY ANTENNA TYPE AND AZIMUTH WITH CONSTRUCTION MANAGER PRIOR TO CONSTRUCTION.
- 5. ALL CABLE LENGTHS ARE ESTIMATED AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR.
- 6. COLOR TAPE MARKINGS MUST BE 3/4" WIDE AND UV RESISTANT, SUCH AS SCOTCH 35 VINYL ELECTRICAL COLOR CODING TAPE.
- 7. CONTRACTOR SHALL COORDINATE COLOR CODINGS IN THE FIELD WITH VERIZON REPRESENTATIVE
- 8. A STRUCTURAL ANALYSIS REPORT HAS BEEN ISSUED BY NB+C, LLC. DATED 10/20/21 TO CERTIFY THAT THE EXISTING/PROPOSED COMMUNICATION STRUCTURE AND COMPONENTS ARE STRUCTURALLY ADEQUATE TO SUPPORT ALL EXISTING AND PROPOSED ANTENNAS, COAXIAL CABLES AND OTHER APPURTENANCES.
- 9. A MOUNT MODIFICATION REPORT HAS BEEN ISSUED BY NB+C, LLC DATED 10/22/21 TO CERTIFY THAT THE EXISTING/PROPOSED COMMUNICATION STRUCTURE AND COMPONENTS ARE STRUCTUTALLY ADEQUATE TO SUPPORT ALL EXISTING AND PROPOSED ANTENNAS, COAXIAL CABLES AND OTHER APPURTENANCES.

10. POST-MODIFICATION INSPECTION (PMI) REQUIRED ON ALL SITES. REFER TO SHEET GN-1 OF THESE CONSTRUCTION DRAWINGS, AS WELL AS THE MOUNT ANALYSIS PREPARED BY NB+C, LLC DATED 10/22/21 FOR ADDITIONAL DETAILS



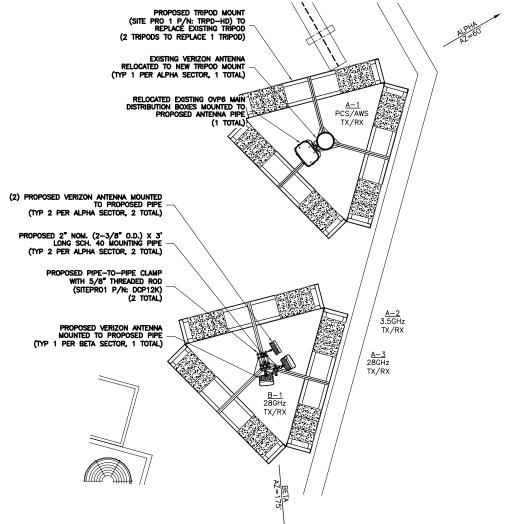


PROPOSED ANTENNA ORIENTATION PLAN A-2



	PROPOSED ANTENNA & RRH SCHEDULE											
ANTENNA	ANTENNA	ANTENNA	RAD	AZIMUTH	DOW	N TILT	RRH QUANTITY	TECHNOLOGY	CABLE SIZE, LENGTH			
POSITION	MANUFACTURER	MODEL	CENTER	,	MECH	ELEC	& MODEL		& QUANTITY			
A-1	COMMSCOPE	NH180QS-DG-FOM	25.00′	60*	0. 0.	0. 0.	B2/B66A RFV01DU-D1A (EQUIPMENT LOCATION)	PCS/AWS	(0) 4 5 (0"			
A-2	SAMSUNG	CBRS RT4401-48A	25.00*	60.	0.	8.	-	3.5GHz	(2) 1-5/8" COAX (75')			
A-3	SAMSUNG	VZ-AT1K01	25.00°	60.	5'	0.	•	28GHZ	(1) 1.43"ø HYBRID CABLE			
									(75')			
B-1	SAMSUNG	VZ-AT1K01	25.00*	175°	5	ò	-	28GHZ				
G-1A	COMMSCOPE	NH65S-DG-FOM	32.90'	280*	0. 0.	0. 0.	_	PCS/AWS	(2) 1-5/8" COAX (140')			
G-1B	SAMSUNG	VZ-AT1K01	29.11'	275 ⁻	5'	o.	-	28GHZ	(1) 1.43"ø HYBRID CABLE(140')			

NOTES:
1. CONTRACTOR TO VERIFY PROPOSED ANTENNA INFORMATION IS THE MOST CURRENT DATA AT TIME OF CONSTRUCTION.
2. CONTRACTOR TO CONFIRM CABLE LENGTHS PRIOR TO CONSTRUCTION.
3. CONTRACTOR IS RESPONSIBLE TO BUILD FROM THE LATEST RF SHEET.



TOTALLY COMMITTED.

NB+C ENGINEERING SERVICES, LLC.

NEW YORK SMSA LIMITED PARTNERSHIP d/b/a VERIZON WIRELESS

400 WARREN CORPORATE CENTER DRIVE BUILDING D WARREN, NJ 07059

BELMAR NORTH SC - A **601 MAIN STREET** BELMAR, NJ 07719 **BELMAR TOWNSHIP** MONMOUTH COUNTY

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	1	10/19/21	PRELIMINARY CDs	MA
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RAISED SEAL **AVAILABLE UPON** REQUEST

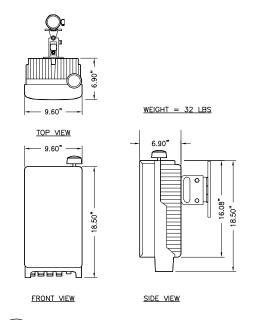
STATE OF NEW JERSEY CERTIFICATE OF AUTHORIZATION #246GA28226400 EXP 08/31/2

KRUPAKARAN KOLANDAIVELU, P.E. STATE OF NEW JERSEY PROFESSIONAL ENGINEER LICENSE #24GE04945200

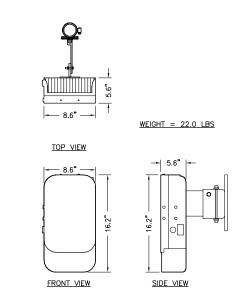
PROPOSED ANTENNA PLAN & SCHEDULE

STRUCTURAL NOTES

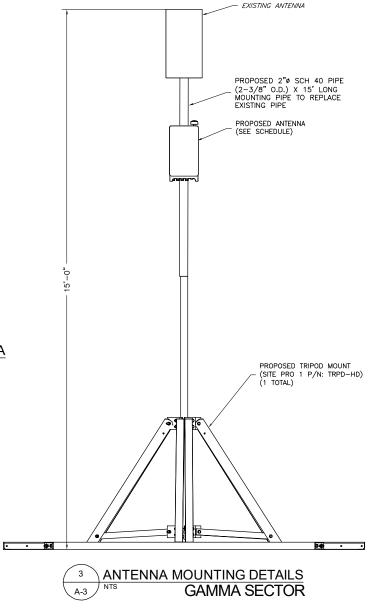
- DESIGN REQUIREMENTS PER INTERNATIONAL BUILDING CODE 2018 AND THE ANSI/TIA-222-H STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES.
- 2. INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED BY FIELD MEASUREMENT AND FROM THE EXISTING STRUCTURAL DRAWINGS. THE GENERAL CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIALS OR PROCEEDING WITH CONSTRUCTION.
- STRUCTURAL STEEL SHALL CONFORM TO THE LATEST EDITION OF THE AISC SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS — ALLOWABLE STRESS DESIGN AND PLASTIC DESIGN INCLUDING THE COMMENTARY AND THE AISC CODE FOR STANDARD PRACTICE.
- 4. STRUCTURAL STEEL PLATES AND SHAPES SHALL CONFORM TO ASTM A992. ALL STRUCTURAL STEEL PIPES SHALL CONFORM TO ASTM A53 GRADE B. ALL STRUCTURAL STEEL COMPONENTS AND FABRICATED ASSEMBLIES SHALL BE HOT DIP GALVANIZED AFTER FABRICATION.
- 5. WELDING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF AMERICAN WELDING SOCIETY (AWS) STRUCTURAL WELDING CODE STEEL WELD ELECTRODES SHALL BE E70XX.
- 6. ALL COAXIAL CABLE CONNECTORS AND TRANSMITTER EQUIPMENT SHALL BE AS SPECIFIED BY THE OWNER AND IS NOT INCLUDED IN THESE CONSTRUCTION DOCUMENTS. THE CONTRACTOR SHALL FURNISH ALL CONNECTION HARDWARE REQUIRED TO SECURE THE CABLES. CONNECTION HARDWARE SHALL BE STAINLESS STEEL.
- 7. ALL THREADED STRUCTURAL FASTENERS FOR ANTENNA SUPPORT ASSEMBLIES SHALL CONFORM TO ASTM A307 OR ASTM A36. ALL STRUCTURAL FASTENERS FOR STRUCTURAL STEEL FRAMING SHALL CONFORM TO ASTM A325. FASTENERS SHALL BE 5/8" MIN. DIAMETER BEARING TYPE CONNECTIONS WITH THREADS INCLUDED IN THE SHEAR PLANE. ALL EXPOSED FASTENERS, NUTS AND WASHERS SHALL BE GALVANIZED UNLESS OTHERWISE NOTED. CONCRETE EXPANSION ANCHORS SHALL BE HILTI KWIK BOLTS UNLESS OTHERWISE NOTED.
- 8. NORTH ARROW SHOWN ON PLANS REFERS TO TRUE NORTH.
 CONTRACTOR SHALL VERIFY TRUE NORTH AND INFORM CONSTRUCTION
 MANAGER OF ANY DISCREPANCY BEFORE STARTING CONSTRUCTION.

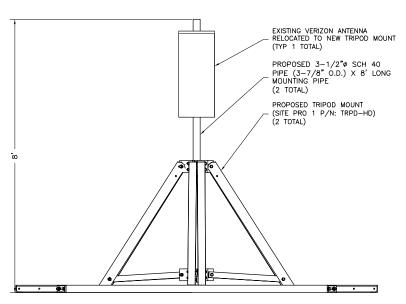


AT1K01 INTEGRATED ANTENNA

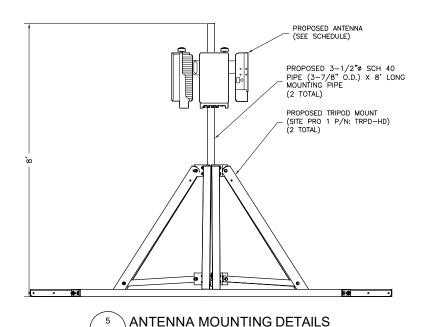


CBRS RT4401-48A INTEGRATED ANTENNA









ALPHA/BETA SECTOR

A-2

PROPOSED ANTENNA SPECIFICATIONS ANTENNA ANTENNA QUANTITY HEIGHT WIDTH DEPTH WEIGHT

ANTENNA MANUFACTURER	ANTENNA MODEL	QUANTITY	HEIGHT	WIDTH	DEPTH	WEIGHT
SAMSUNG	AT1K01	3	18.50"	9.60"	6.90"	32.0 LBS
SAMSUNG	CBRS RT4401-48A	1	16.20"	8.60"	5.60"	22.0 LBS

Ε>	EXISTING ANTENNA SPECIFICATIONS										
ANTENNA MANUFACTURER	ANTENNA MODEL	QUANTITY	HEIGHT	WIDTH	DEPTH	WEIGHT					
NOKIA	* AEUB W/ ASOD	1	24.0"	12.0"	4.7"	22.0 LBS					
COMMSCOPE	NH180QS-DG-FOM	1	28.66"	12.0"	-	25.35 LBS					
COMMSCOPE	NH65S-DG-FOM	1	28.66"	11.85"	7.12"	16.75 LBS					

* TO BE REMOVED

TOTALLY COMMITTED.

NB+C ENGINEERING SERVICES, LLC.
1777 SENTRY PARKWAY WEST
VEVA 17, SUITE 400

NEW YORK SMSA LIMITED PARTNERSHIP d/b/a VERIZON WIRELESS

VERIZON 400 WARREN CORPORATE

400 WARREN CORPORATE CENTER DRIVE BUILDING D WARREN, NJ 07059

BELMAR NORTH SC - A 601 MAIN STREET BELMAR, NJ 07719 BELMAR TOWNSHIP MONMOUTH COUNTY

RAISED SEAL AVAILABLE UPON REQUEST

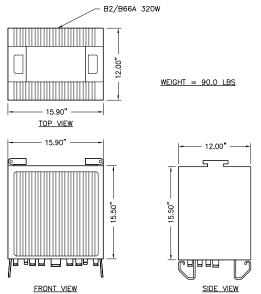
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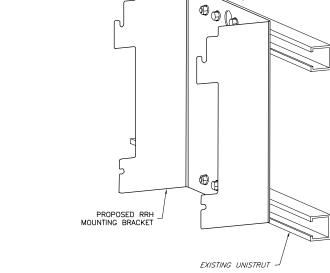
KRUPAKARAN KOLANDAIVELU, P.E. STATE OF NEW JERSEY PROFESSIONAL ENGINEER LICENSE #24GE04945200

ANTENNA SPECIFICATION

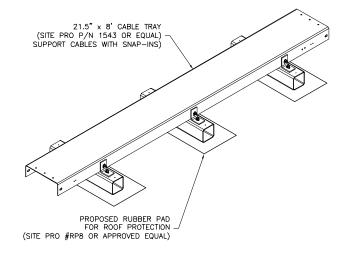
STRUCTURAL NOTES

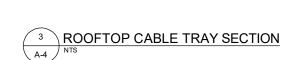
- 1. DESIGN REQUIREMENTS PER INTERNATIONAL BUILDING CODE 2018 AND THE ANSI/TIA-222-H STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES.
- 2. INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED BY FIELD MEASUREMENT AND FROM THE EXISTING STRUCTURAL DRAWINGS. THE GENERAL CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIALS OR PROCEEDING WITH CONSTRUCTION.
- STRUCTURAL STEEL SHALL CONFORM TO THE LATEST EDITION OF THE AISC SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS ALLOWABLE STRESS DESIGN AND PLASTIC DESIGN INCLUDING THE COMMENTARY AND THE AISC CODE FOR STANDARD PRACTICE.
- 4. STRUCTURAL STEEL PLATES AND SHAPES SHALL CONFORM TO ASTM A992. ALL STRUCTURAL STEEL PIPES SHALL CONFORM TO ASTM A53 GRADE B. ALL STRUCTURAL STEEL COMPONENTS AND FABRICATED ASSEMBLIES SHALL BE HOT DIP GALVANIZED AFTER FABRICATION.
- 5. WELDING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF AMERICAN WELDING SOCIETY (AWS) STRUCTURAL WELDING CODE STEEL WELD ELECTRODES SHALL BE E70XX.
- 6. ALL COAXIAL CABLE CONNECTORS AND TRANSMITTER EQUIPMENT SHALL BE AS SPECIFIED BY THE OWNER AND IS NOT INCLUDED IN THESE CONSTRUCTION DOCUMENTS. THE CONTRACTOR SHALL FURNISH ALL CONNECTION HARDWARE REQUIRED TO SECURE THE CABLES. CONNECTION HARDWARE SHALL BE STAINLESS STEEL.
- 7. ALL THREADED STRUCTURAL FASTENERS FOR ANTENNA SUPPORT ASSEMBLIES SHALL CONFORM TO ASTM A307 OR ASTM A36. ALL STRUCTURAL FASTENERS FOR STRUCTURAL STEEL FRAMING SHALL CONFORM TO ASTM A325. FASTENERS SHALL BE 5/8" MIN. DIAMETER BEARING TYPE CONNECTIONS WITH THREADS INCLUDED IN THE SHEAR PLANE. ALL EXPOSED FASTENERS, NUTS AND WASHERS SHALL BE GALVANIZED UNLESS OTHERWISE NOTED. CONCRETE EXPANSION ANCHORS SHALL BE HILTI KWIK BOLTS UNLESS OTHERWISE NOTED.
- 8. NORTH ARROW SHOWN ON PLANS REFERS TO TRUE NORTH.
 CONTRACTOR SHALL VERIFY TRUE NORTH AND INFORM CONSTRUCTION
 MANAGER OF ANY DISCREPANCY BEFORE STARTING CONSTRUCTION.





RRH MOUNTING DETAIL





B2/B66A RFV01U-D1A (REMOTE RADIO HEAD)

PROPOSED RRH EQUIPMENT SPECIFICATIONS									
MANUFRACUTRER	MODEL #	LOCATION	QUANTITY	HEIGHT	WIDTH	DEPTH	WEIGHT		
SAMSUNG	B2/B66A RFV01DU-D1A	ROOFTOP	1	15.50"	15.90"	12.00"	90.0 LBS		

EXISTING RRH EQUIPMENT SPECIFICATIONS									
MANUFRACUTRER	MODEL #	LOCATION	QUANTITY	HEIGHT	WIDTH	DEPTH	WEIGHT		
LUCENT	* B25-PCS 4x30-4R	ROOFTOP	1	21.4"	12.0"	7.20"	51.0 LBS		
LUCENT	* B66A-AWS 4x45-4R	ROOFTOP	1	25.8"	11.8"	7.2"	67.0 LBS		

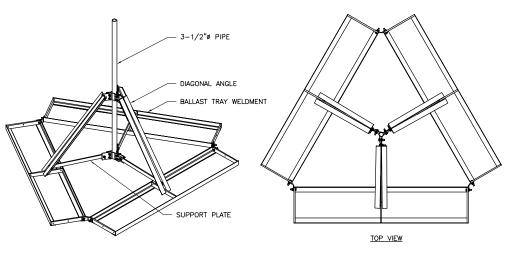
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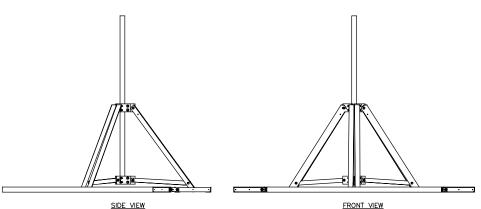
EXISTING DISTRIBUTION EQUIPMENT SPECIFICATIONS								
MANUFRACUTRER	MODEL #	LOCATION	QUANTITY	HEIGHT	WIDTH	DEPTH	WEIGHT	
RAYCAP	RC2DC-3315-PF-48	ROOFTOP	1	28.93"	15.73"	10.3"	32.0 LBS	

EXISTING ANTENNA SPECIFICATIONS									
ANTENNA MANUFACTURER									
NOKIA	* AEUB W/ ASOD	1	24.0"	12.0"	4.7"	22.0 LBS			
COMMSCOPE	NH180QS-DG-FOM	1	28.66"	12.0"	-	25.35 LBS			
COMMSCOPE	NH65S-DG-FOM	1	28.66"	11.85"	7.12"	16.75 LBS			

* TO BE REMOVED

EXISTING COMBINER EQUIPMENT SPECIFICATIONS								
MANUFRACUTRER	MODEL #	LOCATION	QUANTITY	HEIGHT	WIDTH	DEPTH	WEIGHT	
CSS	CSS DBC-AP-EXT	ROOFTOP	2	12.5"	4.5"	2.5"	5.5 LBS	
VERDIUM	1520075	ROOFTOP	2	8.7"	11.6"	4.5"	27.25 LBS	





NON-PENETRATING TRIPOD SITE PRO 1 P/N: TRPD-HD A-4



NB+C ENGINEERING SERVICES, LLC.

LIMITED PARTNERSHIP d/b/a **VERIZON WIRELESS**

NEW YORK SMSA

400 WARREN CORPORATE CENTER DRIVE BUILDING D WARREN, NJ 07059

BELMAR NORTH SC - A **601 MAIN STREET** BELMAR, NJ 07719 **BELMAR TOWNSHIP** MONMOUTH COUNTY

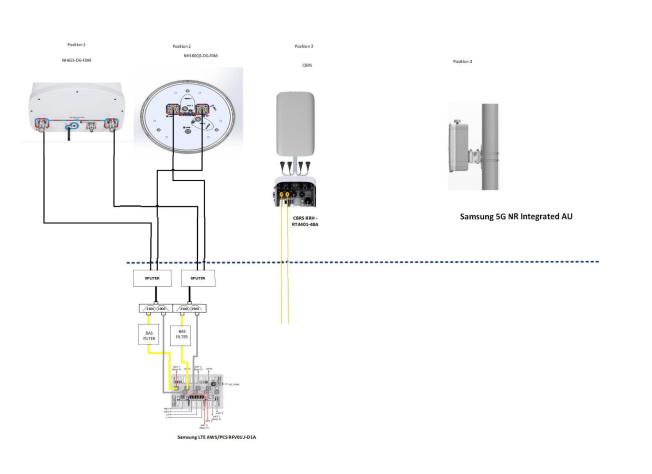
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RAISED SEAL **AVAILABLE UPON** REQUEST

STATE OF NEW JERSEY CERTIFICATE OF AUTHORIZATION #246GA28226400 EXP 08/31/2

KRUPAKARAN KOLANDAIVELU. P.E. STATE OF NEW JERSEY PROFESSIONAL ENGINEER LICENSE #24GE04945200

EQUIPMENT SPECIFICATION



RFDS DATED 03/16/21, 17:47:53

TOTALLY COMMITTED.

NB+C ENGINEERING SERVICES, LLC.

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KRUPAKARAN KOLANDAIVELU, P.E. STATE OF NEW JERSEY PROFESSIONAL ENGINEER LICENSE #24GE04945200

PLUMBING DIAGRAM

A-5

Note: Add 5G-28GHz AZ:60.175.275

VERIZON WIRELESS CONTRACTOR SCOPE OF WORK

MOP FOR RET INSTALLS

- VERIZON WIRELESS CONTRACTOR IS TO SUPPLY AND INSTALL THE PROPOSED CABLE JUMPER (WITH LC TO LC CONNECTORS) FROM THE PROPOSED FIBER TRAYS TO THE PROPOSED MAIN DISTRIBUTION BOX (BOTTOM).
- VERIZON WIRELESS CONTRACTOR IS TO SUPPLY AND INSTALL ALL MOUNTING HARDWARE AND 1/2" ANTENNA JUMPER CABLES AS REQUIRED DURING CONSTRUCTION.
- VERIZON WIRELESS CONTRACTOR IS TO INSTALL (1) RUN OF HELIAX 1/1 HYBRID CABLE FROM THE EXISTING MAIN DISTRIBUTION BOXES TO THE REMOTE RADIO HEAD UNITS.
- VERIZON WIRELESS CONTRACTOR IS TO SUPPLY AND INSTALL 1/2" ANTENNA JUMPERS FROM EACH PROPOSED REMOTE RADIO HEAD UNIT (RRH) TO THE PROPOSED ANTENNAS IN ALL SECTORS (4 TOTAL 1/2" ANTENNA JUMPERS).
- VERIZON WIRELESS CONTRACTOR IS TO INSTALL THE PROPOSED REMOTE RADIO HEAD UNIT TO EXISTING PARAPET WALL.
- VERIZON WIRELESS CONTRACTOR IS TO GROUND ALL REMOTE RADIO HEAD UNITS (RRH) TO THE EXISTING GROUND BARS AS REQUIRED DURING CONSTRUCTION.
- VERIZON WIRELESS CONTRACTOR IS TO GROUND ALL PROPOSED ANTENNAS TO THE EXISTING GROUND BARS AS REQUIRED DURING CONSTRUCTION.
- VERIZON WIRELESS CONTRACTOR IS TO COMPLETE THE INSTALLATION OF THE PROPOSED ANTENNAS.
- VERIZON WIRELESS CONTRACTOR IS TO PERFORM THE FOLLOWING OPTICAL SWEEP TESTS; OTDR AND OPTICAL LOSS. RECOMMENDED UNITS - ANRITSU MT9090, JDSU, EXFO FTB-1/FTB-720 OTDR.
- VERIZON WIRELESS CONTRACTOR IS TO PERFORM THE FOLLOWING ANTENNA SYSTEM SWEEP TESTS: SYSTEM VZWR / dB RL.
- VERIZON WIRELESS CONTRACTOR IS TO PROVIDE ALL CLOSE OUT DOCUMENTS AS REQUIRED BY VERIZON WIRELESS.

SAMSUNG RRH

• DUAL RRH B2/B66A RFVO1DU-D1A HELIAX 1/1 HYBRID CABLE CABLE MUST BE CONNECTED TO THE LO PRIMARY PORT AND (1) EXTRA PAIR OF FIBER CONNECTED TO L1 SECONDARY PORT.

INTEGRATED ANTENNA

- AT1K01 1/1 HYBRID CABLE MUST BE CONNECTED TO OPT1 PORT AND (2 OR 3) EXTRA FIBER CABLE TO THE SECONDARY OPT2 PORT.
- CBRS 1/1 HYBRID CABLE MUST BE CONNECTED TO OPT1 PORT AND (1) EXTRA FIBER CABLE TO THE SECONDARY OPT2 PORT.

ANTENNA CREW

- 1. REVIEW ANTENNA SCHEDULE WITH CELL TECH
- 2. FOR EACH SECTOR, LAY ANTENNAS OUT ON THE GROUND AS THEY WILL BE INSTALLED ACCORDING TO THE ANTENNA SCHEDULE
- 3. LABELED EACH ANTENNA WITH FACE AND POSITION WITH A SHARPIE (EX:"ALPHA-4")
- 4. LABEL ALL MOTORS WITH SHARPIE WITH BAND AND TECHNOLOGY (EX:"700LTE", "AWSLTE", "PCSLTE", "850VOICE",
- 5. CONNECT ALL AISG CABLES (INCLUDING JUMPERS THAT WILL BE USED IN FINAL ASSEMBLY) PER THE ANTENNA SCHEDULE
 - A. WHEN DAISY CHAINING IS INEVITABLE, AS A GENERAL RULE ...
 - I. KEEP LOW AND HIGH BANDS ON SEPARATE AISG CHAINS AS MUCH AS POSSIBLE
 - II. MINIMIZE AMOUNT OF MOTORS PER CHAIN AS MUCH AS POSSIBLE (MAX IS 6)
 - B. WHEN COMPLETED ALL RET MOTOR PORTS NEED TO BE CONNECTED, INCLUDING THE MOTORS NOT BEING USED YET. THE ONLY UNUSED PORT WILL BE THE LAST IN THE DAISY CHAIN, WHICH NEEDS TO BE CAPPED AND WEATHERPROOFED.
- 6. ON LAPTOP, FILL OUT THE SOFTCOPY OF THE RET DEPLOYMENT FORM AND SAVE IT, REPLACING THE "######" WITH THE 6-DIGIT ENB NUMBER IN THE FILENAME (EX: RET DEPLOYMENT FORM 0981234.XLSX")
- 7. GIVE A SOFTCOPY OF THE RET DEPLOYMENT FORM TO VZW CELL TECH AND GC/CONSULTANT (EITHER BY EMAIL OR USB STICK)
- 8. USING THE SAME LAPTOP WHICH HAS THE RET DEPLOYMENT FORM OPENED, CONNECT THE CONTROL MODULE AND PROVISION EACH MOTOR RESPECTIVELY
 - NOTE: CREWS MUST USE SOFTWARE THAT IS SPECIFIC TO THE MOTOR TYPE BEING PROVISIONED (IE- JMA SOFTWARE SHOULD ONLY BE SUED FOR JMA MOTORS)
 - A. COPY AND PASTE "RET FRIENDLY NAME" FROM SPREADSHEET (COLUMN A) TO THE "SECTOR ID" FIELD OF EACH MOTOR
 - B. POPULATE "SET RET TILT"
 - C. POPULATE "MECHANICAL TILT"
- 9. CALIBRATE ALL MOTORS
- 10. DISCONNECT NECESSARY AISG JUMPERS TO TRANSPORT ANTENNAS SAFELY TO ASSEMBLY
- 11. INSTALL ANTENNAS ACCORDING TO THE ANTENNA SCHEDULE, USING THE SHARPIE LABELS AS REFERENCE
- 12. RECONNECT ALL AISG JUMPERS
- 13. BEFORE PLUGGING INTO EACH RRH, CONNECT MAIN AISG CABLE INTO CONTROLLER TO ENSURE ALL MOTORS ARE DAISY CHAIN STILL SEEN IN THE
- 14. PLUG AISG INTO RRH AND NOTIFY VZW TECH OF COMPLETION

VZW TECH (USER HELP GUIDE: \\WIN-VZWNET\NORTHEAST\PAPM_IMPLEMENTATION\SYSTEM PERFORMANCE\USERS\MOSERGA\RET\)

- 15. POWER ON RADIO EQUIPMENT AND RUN ANY NECESSARY WOS
- 16. "DISCOVER" THE RETS
 - A. LOG INTO SAM
 - I. VERIFY RET LICENSE ALLOCATION IN SAM
 - ENBEQUIPMENT>ENB>ACTIVATIONSERVICE>ISAISGALLOWED=CHECKED
 - B. LOG INTO NEM LOCAL
 - I. GO TO TREE VIEW AND HIGHLIGHT RET SUBUNIT
 - II. ENABLE BUS SCAN
 - CONFIGURATION> ENABLE AISG BUS SCAN
 - III. ALLOCATE CONFIG RIGHTS
 - CONFIGURATION>ALLOCATION CONFIGURATION RIGHTS
 - IV. VERIFY CORRECT NUMBER OF RETS ARE DISCOVERED
- 17. "COMMISSION" THE RETS
 - A. LOG INTO NEM LOCAL
 - I. STILL IN TREE VIEW, RIGHT CLICK ON "HW MODULES"
 - II. SELECT "CREATE RET MO"
 - II. RELEASE CONFIG RIGHTS
 - CONFIGURATION>RELEASE CONFIGURATION RIGHTS
 - IV. VERIFY RETSUBUNIT:SECTORNAME, ELECTRICAL TILT, AND MECHANICAL TILT ARE POPULATED
- 18. "PROVISION" THE RETS
 - A. LOG INTO SAM
 - I. OPEN UP THE ENB PROPERTIES AND COMPLETE A FULL RESYNC
 - II. IN THE SEARCH TEXTBOX, SEARCH FOR "RETSUBUNIT"
 - III. VERIFY ALL RETS ARE ACCOUNTED FOR AND "RETSUBUNIT:SECTORNAME", "ANTENNAELECTICALTILT", AND "RETSUBUNIT: MECHANICALTILT" ARE ACCURATE

TOTALLY COMMITTED

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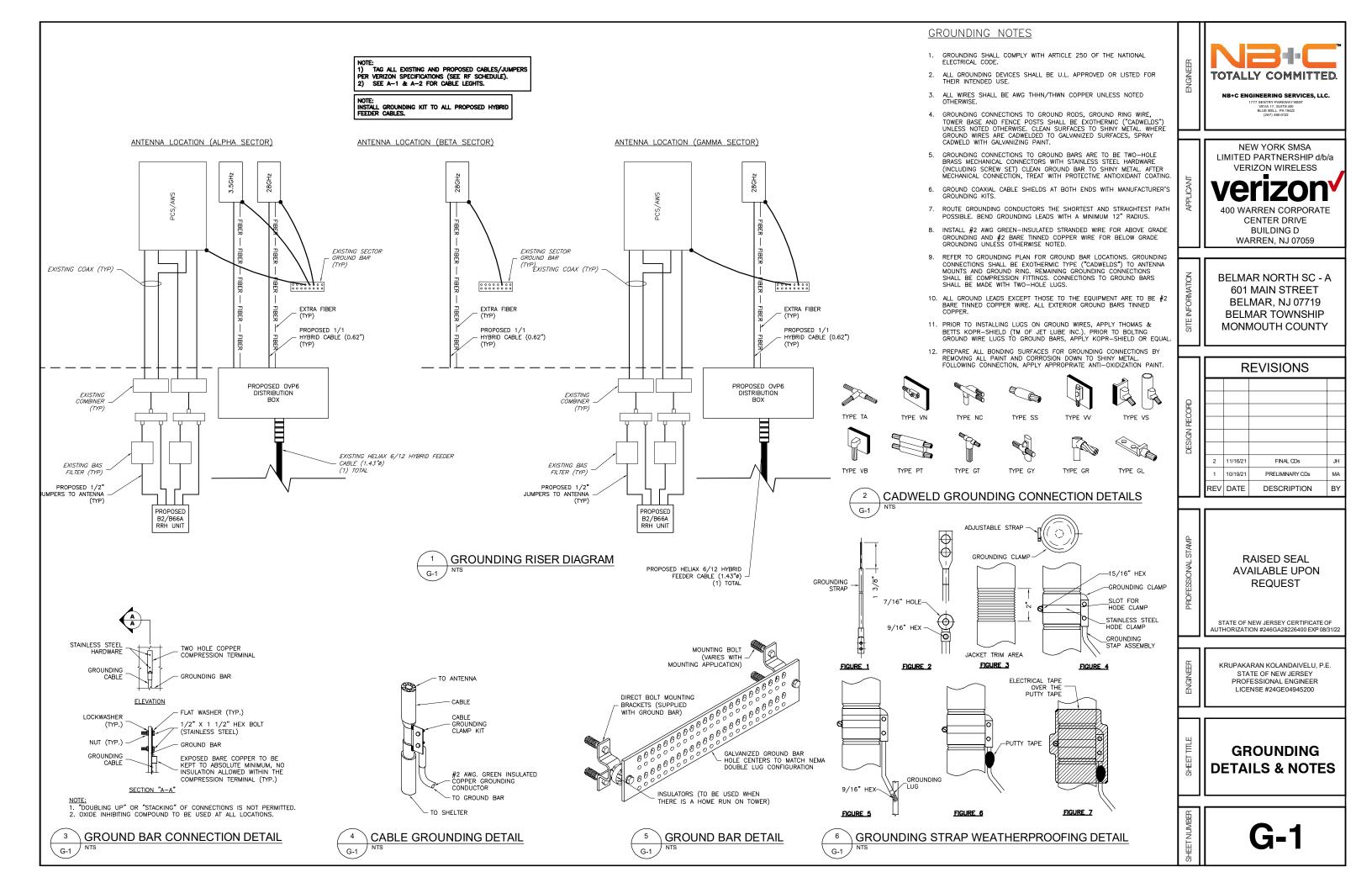
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RAISED SEAL **AVAILABLE UPON** REQUEST

STATE OF NEW JERSEY CERTIFICATE OF

KRUPAKARAN KOLANDAIVELU PE STATE OF NEW JERSEY PROFESSIONAL ENGINEER LICENSE #24GE04945200

SCOPE OF **WORK**



POST-MODIFICATION INSPECTION (PMI) REQUIREMENT

- 1. PMI REQUIRED FOR ALL SITES, REFER TO VERIZON NSTD-446 SECTIONS 1.5 AND 2.3 FOR MORE INFORMATION.
- 2. REFER TO THE MOUNT ANALYSIS BY NB+C, LLC DATED 10/22/21 FOR ADDITIONAL DETAILS.
- 3. GENERAL CONTRACTOR SHALL PROVIDE THE BELOW DOCUMENTATION TO THE ENGINEER OF RECORD VIA EMAIL TO <u>VZWMOUNTS@NBCLLC.COM</u>, DROPBOX, OR OTHER FILESHARE METHOD. PROVIDE HIGH RESOLUTION PHOTOS (DO NOT COMPRESS).
- 4. ENGINEER OF RECORD WILL CONDUCT A REVIEW OF THE PROVIDED DOCUMENTS TO PREPARE A PMI REPORT. ENGINEER OF RECORD WILL NOTIFY GENERAL CONTRACTOR IF ANY ADDITIONAL DOCUMENTATION IS REQUIRED TO COMPLETE THE PMI.
- 5. PMI DOCUMENTATION SHALL BE SUFFICIENT TO CONFIRM THE UPGRADE WAS BUILT AS DESIGNED, INCLUDING EQUIPMENT CHANGES AND STRUCTURAL MODIFICATIONS, AND IS IN ADDITION TO ANY OTHER REQUIRED CLOSEOUT PACKAGE DOCUMENTATION.
- 6. REQUIRED DOCUMENTATION FOR PMI INCLUDES THE FOLLOWING AT A MINIMUM. REFER TO THE MOUNT ANALYSIS FOR POSSIBLE ADDITIONAL INFORMATION. IF STRUCTURAL MODIFICATIONS ARE REQUIRED, REFER TO THE MODIFICATION DRAWINGS FOR POSSIBLE ADDITIONAL REQUIREMENTS.
- 6A. PROVIDE PRE-AND-POST CONSTRUCTION PHOTOS OF EACH SECTOR FROM THE MOUNT ELEVATION AND THE GROUND. CONTRACTOR IS RESPONSIBLE FOR ENSURING THE PHOTOS PROVIDED PROVIDE POSITIVE CONFIRMATION THAT THE MODIFICATION/UPGRADE WAS COMPLETED IN ACCORDANCE WITH THESE CONSTRUCTION DRAWINGS AND ANY STRUCTURAL/MOUNT MODIFICATION DRAWINGS. CONTRACTOR SHALL RELAY ANY DATA THAT CAN IMPACT THE PERFORMANCE OF THE MOUNT OR MOUNT MODIFICATION, INCLUDING SAFETY ISSUES. PHOTOS SHALL HAVE A DATE/TIME STAMP IN THE PHOTO. REFER TO THE MOUNT ANALYSIS FOR FILE STRUCTURE SCHEDULE OF PHOTOS. PROVIDE PHOTOS OF THE GATE SIGNS AND CARRIER SHELTER TO IDENTIFY THE TOWER OWNER, SITE NAME, SITE NUMBER, ETC.
- 6B. VERIFICATION OF THE MEMBER CONNECTIONS, BRACING, AND RELEVANT DIMENSIONS.
- 6C. VERIFICATION OF THE ANTENNA AND OTHER EQUIPMENT CONFIGURATION (PHOTOS OF MODEL NUMBERS/TAGS FOR ALL EQUIPMENT, AS WELL AS THE FEEDLINE CONFIGURATION). TAKE PHOTOS OF THE BACK SIDE OF EACH SECTOR AS WELL AS CLOSE—UPS OF ALL EQUIPMENT. PHOTOS SHOULD CONFIRM THE HORIZONTAL AND VERTICAL POSITIONING OF THE ANTENNAS AND EQUIPMENT AND SHALL HAVE TAPE MEASURES IN THE PHOTOS TO CONFIRM.
- 6D. FOR TIE-BACKS, STRUTS, MOUNT PIPES, PHOTOS TO CONFIRM THE ANGLES AND LOCATION OF ATTACHMENT POINT AT BOTH ENDS OF MEMBER, AS WELL AS DIMENSIONS, THICKNESS, AND LENGTHS OF THE MEMBERS. REFER TO THE CHECKLIST IN THE MOUNT ANALYSIS FOR ADDITIONAL INFORMATION.
- 6E. MOUNT ATTACHMENT TO THE SUPPORTING STRUCTURE, INCLUDING ANY KICKERS OR SUPPORTS, OR TIEBACKS.
- 6F. MATERIALS USED (TYPE, STRENGTH, DIMENSIONS, ETC). PROVIDE BILL OF MATERIALS AND MATERIAL SPEC TO CONFIRM MATERIAL GRADES AND SIZES. PROVIDE DOCUMENTATION FOR GALVANIZATION OF MEMBERS WHETHER HOT—DIPPED OR COLD—GALVANIZED. IF MATERIALS DIFFER FROM THOSE SPECIFIED ON THESE DRAWINGS, PROVIDE DOCUMENTATION THAT THE "EQUIVALENT" MATERIAL HAS THE SAME SPECIFICATIONS.
- 6G. MOUNT ORIENTATION/AZIMUTH AND ELEVATION. PROVIDE TAPE DROP PHOTOS OF ANTENNA CENTERLINE(S) AND MOUNT ATTACHMENT POINTS TO THE SUPPORTING STRUCTURE. IF THERE ARE MULTIPLE RAD CENTERS, PROVIDE PHOTOS OF ALL ELEVATIONS.

POST-MODIFICATION INSPECTION (PMI) REQUIREMENT CONT.

6H. VERIFICATION THAT THE INSTALL HAS NOT CAUSED DAMAGE TO OR UNPLANNED OBSTRUCTION OF THE FOLLOWING:

- --- CLIMBING FACILITIES
- --- SAFETY CLIMB IF PRESENT, INCLUDING PHOTOS ABOVE AND BELOW THE MOUNT.
- -- LIGHTING SYSTEM
- --- OTHER INSTALLED SYSTEMS ON THE STRUCTURE.
- --- CONTRACTOR SHALL ENSURE THE SAFETY CLIMB IS SUPPORTED AND NOT ADVERSELY AFFECTED BY THE INSTALLATION OF NEW COMPONENTS. THIS MAY INVOLVE THE INSTALLATION OF WIRE ROPE GUIDES OR OTHER ITEMS TO PROTECT THE WIRE ROPE.
- 61. OTHER ITEMS DETERMINED BY THE STRUCTURAL ENGINEER TO ENSURE THE MOUNT WILL PERFORM AS DESIGNED. PHOTOS OF RELEVANT MEASUREMENTS, WITH SUFFICIENT DETAILS TO CONFIRM CONNECTION DETAILS, PLACEMENT OF EQUIPMENT, WALL ANCHOR DETAILS, BALLAST QUANTITIES, STRUCTURAL MODIFICATIONS ETC. DIAMETERS AND THICKNESSES OF BOLTS/THREADED RODS/ANGLES/TUBES ETC SHALL HAVE PHOTOS CONFIRMING CALIPER MEASUREMENTS.
- --- CONFIRMATION THAT ALL HARDWARE WAS PROPERLY INSTALLED, AND EXISTING HARDWARE WAS INSPECTED FOR ANY ISSUES.
- --- FOR BALLAST SLEDS, DOCUMENTATION OF THE WEIGHT OF BALLAST IN EACH SECTOR.
- --- FOR WALL ANCHORS, PHOTOS AND MEASUREMENTS OF OUTSIDE AND INSIDE OF CONNECTIONS. DOCUMENTATION OF ADHESIVE USED, SIZE AND LENGTH OF ANCHORS, EFFECTIVE EMBEDMENT DEPTH OF THE ANCHORS, GROUTING OF HOLLOW WALLS, SPACING AND EDGE DISTANCE MEASUREMENTS, AND ANY THROUGH-BOLTS OR BACKING PLATES.
- --- FOR STUD WELD CONNECTIONS, DOCUMENTATION TO CONFIRM SURFACE PREPARATION, STUD WELD SIZE, GRADE, LENGTH, AND SPACING.
- --- FOR FABRICATED PARTS, SHOP DRAWINGS TO BE APPROVED BY THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION.
- --- FOR WELDED PARTS, CERTIFIED WELD INSPECTION.
- --- FOR BOLTED PARTS, BOLT INSTALLATION AND TORQUE.
- 1. CONTRACTOR SHALL PROVIDE, IN ADDITION TO THE ABOVE, AS-BUILT CDS WITH REDLINES IDENTIFYING ANY CHANGES. THE AS-BUILTS SHALL THE CONTRACTOR'S NAME, PREPARER'S SIGNATURE, AND DATE.
- 2. IF THE MODIFICATION INSTALLATION WOULD FAIL THE PMI ("FAILED PMI"), THE CONTRACTOR SHALL WORK WITH THE ENGINEER OF RECORD TO COORDINATE A REMEDIATION PLAN IN ONE OF TWO WAYS:
- 8A. CORRECT FAILING ISSUES TO COMPLY WITH THE SPECIFICATIONS CONTAINED IN THE ORIGINAL CONTRACT DOCUMENTS AND COORDINATE A SUPPLEMENTAL PMI.
- 8B. OR, WITH THE EOR'S APPROVAL, THE GC MAY WORK WITH THE EOR TO RE-ANALYZE THE MODIFICATION/REINFORCEMENT/UPGRADE USING THE AS-BUILT CONDITION.
- 8. NOTE: IF LOADING IS DIFFERENT THAN THAT SHOWN IN THESE CONSTRUCTION DRAWINGS OR STRUCTURAL/MOUNT MODIFICATION DRAWINGS, CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD IMMEDIATELY FOR RESOLUTION.
- 9. THE ENGINEERING FIRM PERFORMING AN ANALYSIS SHALL PROVIDE A CONTRACTOR'S PHOTO LOG AND CHECKLIST TO BE COMPLETED BY THE INSTALLING CONTRACTOR. THE CONTRACTOR SHALL THEN PROVIDE POST—INSTALLATION INFORMATION TO THE STRUCTURAL ENGINEER. THE STRUCTURAL ENGINEER SHALL REVIEW THE DOCUMENTS FOR ANY DEFICIENCIES THAT CAN BE DETERMINED FROM THE DESKTOP REVIEW OF THE DATA. THE ENGINEERING FIRM SHALL THEN PROVIDE DOCUMENTATION TO VZW THAT THE SITE IS COMPLETED, AND THE PMI REPORT IS APPROVED.

TOTALLY COMMITTED

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PMI REQUIREMENTS

GN-