



ATC SITE NAME: ANDOVER-BUNKER HILL ROAD

ATC SITE NUMBER: 302472

VERIZON SITE NAME: COLUMBIA CT

VERIZON SITE NUMBER:470979

SITE ADDRESS: 104 BUNKER HILL RD. ANDOVER, CT 06232



LOCATION MAP

VERIZON 5G L-SUB6 - CARRIER ADD ANTENNA AMENDMENT DRAWINGS

COMPLIANCE CODE	PROJECT S	SUMMARY	PROJECT DESCRIPTION		SHEET INDEX	(
ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE	SITE AD		THE PROPOSED PROJECT INCLUDES MODIFYING GROUND BASED AND TOWER MOUNTED EQUIPMENT AS INDICATED PER BELOW:	SHEET NO:	DESCRIPTION:	REV:	DATE:	BY:
FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNMENT AUTHORITIES. NOTHING IN THESE PLANS IS	104 BUNKE		TOWER WORK:	G-001	TITLE SHEET	0	11/11/21	BR
TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.	ANDOVER COUNTY:	•	REMOVE (6) RRH(s), (2) OVP(s), (2) 1-5/8" HYBRID CABLE(s)	G-002	GENERAL NOTES	0	11/11/21	BR
1. 2018 CONNECTICUT STATE BUILDING CODE-AMENDMENTS	GEOGRAPHIC C		INSTALL (1) PLATFORM MOUNT, (3) ANTENNA(s), (9) RRH(s), (1) OVP	C-101	DETAILED SITE PLAN	0	11/11/21	BR
TO IBC 2015 2. INTERNATIONAL BUILDING CODE 2015, INTERNATIONAL	LATITUDE:		AND (2) 1-5/8" 6X12 HYBRID CABLE(s) EXISTING (12) ANTENNA(s), (1) GPS ANTENNA, (6) 1-5/8" COAX	C-201	TOWER ELEVATION	0	11/11/21	BR
CODE COUNCIL	LONGITUDE		CABLE(s) AND (1) 1/2" COAX CABLE TO REMAIN	C-401	ANTENNA INFORMATION & SCHEDULE	0	11/11/21	BR
TIA-222-G-4, STRUCTURAL STANDARD FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNAS	GROUND ELEVA	TION: 547' AMSL		C-501	CONSTRUCTION DETAILS	0	11/11/21	BR
ASCE 7-10 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES, AMERICAN SOCIETY OF CIVIL			PROJECT NOTES	E-501	GROUNDING DETAILS	0	11/11/21	BR
ENGINEERS			THE FACILITY IS UNMANNED.	R-601	R-601 SUPPLEMENTAL			
STEEL CONSTRUCTION MANUAL 14TH EDITION, AMERICAN INSTITUTE OF STEEL CONSTRUCTION CITY/COUNTY ORDINANCES			A TECHNICIAN WILL VISIT THE SITE APPROXIMATELY ONCE A MONTH FOR ROUTINE INSPECTION AND MAINTENANCE.	R-602	SUPPLEMENTAL			
	PROJECT TEAM		THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT LAND DISTURBANCE OR EFFECT OF STORM WATER DRAINAGE. 4. NO SANITARY SEWER, POTABLE WATER OR TRASH					
	TOWER OWNER:	APPLICANT:	DISPOSAL IS REQUIRED. 5. HANDICAP ACCESS IS NOT REQUIRED.					
	10 PRESIDENTIAL WAY 118 FLANDER:	VERIZON WIRELESS	6. THE PROJECT DEPICTED IN THESE PLANS QUALIFIES AS					
		118 FLANDERS ROAD WESTBOROUGH, MA 01581	EXPEDITED REVIEW UNDER 47 U.S.C. 1455(A) AS A MODIFICATION OF AN EXISTING WIRELESS TOWER THAT					
UTILITY COMPANIES	ENGINEER: DEWBERRY ENGINEERS, INC.		INVOLVES THE COLLOCATION REMOVAL AND/OR REPLACEMENT OF TRANSMISSION EQUIPMENT THAT IS					
POWER COMPANY: N/A PHONE: N/A			NOT A SUBSTANTIAL CHANGE UNDER CFR 1.61000 (B)(7).					
TELEPHONE COMPANY: N/A PHONE: N/A	99 SUMMER STREET SUITE 700 BOSTON, MA 02110							
000	PROPERTY OWNER:		PROJECT LOCATION DIRECTIONS					
Know what's below. Call before you dig.	PRICE LEON & BENJAMIN 104 BUNKER HILL RD ANDOVER, CT 06232		I-287 EAST TO I-684 NORTH TO I-284 EAST INTO CONNECTICUT. FOLLWO I-84 THROUGH HARTFORD TO I-384 SOUTH/EAST. FOLLOW I-384 TO END THEN EAST ON ROUTE 6. FOLLOW ROUTE 6 THROUGH COLUMBIA AND INTO THE TOWN OF ANDOVER. TURN LEFT (NORTH) ONTO BUNKER HILL ROAD. THE SITE WILL BE ON YOUR RIGHT (#104).					





Dewberry Engineers Inc.
99 SUMMER STREET
SUITE 700
BOSTON, MA 02110
PHONE: 617.695.3400
FAX: 617.695.3310

REV.	DESCRIPTION	BY	DATE
<u> </u>	PRELIM	<u>PP</u>	05/27/21
<u> </u>	FINAL	BR_	11/11/21
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SEAL:





DATE DRAWN:	05/27/21
ATC JOB NO:	13668768
CUSTOMER ID:	COLUMBIA CT
CUSTOMER #:	470979

TITLE SHEET

SHEET NUMBER:

G-001

REVISION:

GENERAL CONSTRUCTION NOTES:

- OWNER FURNISHED MATERIALS, VERIZON "THE COMPANY" WILL PROVIDE AND THE CONTRACTOR WILL INSTALL
- A. BTS EQUIPMENT FRAME (PLATFORM) AND ICEBRIDGE SHELTER (GROUND BUILD/CO-LOCATE ONLY)
 - AC/TELCO INTERFACE BOX (PPC)
- D. TOWERS, MONOPOLES
- TOWER LIGHTING
- GENERATORS & LIQUID PROPANE TANK
- ANTENNA STANDARD BRACKETS, FRAMES AND PIPES FOR MOUNTING
- ANTENNAS (INSTALLED BY OTHERS)
- TRANSMISSION LINE
- TRANSMISSION LINE JUMPERS
- TRANSMISSION LINE CONNECTORS WITH WEATHERPROOFING KITS
- TRANSMISSION LINE GROUND KITS
- HANGERS
- HOISTING GRIPS
- O. BTS EQUIPMENT
- THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL OTHER MATERIALS FOR THE COMPLETE INSTALLATION OF THE SITE INCLUDING, BUT NOT LIMITED TO, SUCH MATERIALS AS FENCING, STRUCTURAL STEEL SUPPORTING SUB-FRAME FOR PLATFORM, ROOFING LABOR AND MATERIALS GROUNDING RINGS GROUNDING WIRES COPPER-CLAD OR XIT CHEMICAL GROUND ROD(S), BUSS BARS, TRANSFORMERS AND DISCONNECT SWITCHES WHERE APPLICABLE, TEMPORARY ELECTRICAL POWER, CONDUIT, LANDSCAPING COMPOUND STONE, CRANES, CORE DRILLING, SLEEPERS AND RUBBER MATTING, REBAR, CONCRETE CAISSONS, PADS AND/OR AUGER MOUNTS, MISCELLANEOUS FASTENERS, CABLE TRAYS, NON-STANDARD ANTENNA FRAMES AND ALL OTHER MATERIAL AND LABOR REQUIRED TO COMPLETE THE JOB ACCORDING TO THE DRAWINGS AND SPECIFICATIONS. IT IS THE POSITION OF VERIZON TO APPLY FOR PERMITTING AND CONTRACTOR RESPONSIBLE FOR PICKUP AND PAYMENT OF REQUIRED
- ALL WORK SHALL CONFORM TO ALL CURRENT APPLICABLE FEDERAL, STATE, AND LOCAL CODES, INCLUDING ANSI/EIA/TIA-222, AND COMPLY WITH ATC CONSTRUCTION
- CONTRACTOR SHALL CONTACT LOCAL 811 FOR IDENTIFICATION OF UNDERGROUND
- CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED INSPECTIONS.
- ALL DIMENSIONS TO, OF, AND ON EXISTING BUILDINGS, DRAINAGE STRUCTURES, AND SITE IMPROVEMENTS SHALL BE VERIFIED IN FIELD BY CONTRACTOR WITH ALL DISCREPANCIES REPORTED TO THE ENGINEER.
- DO NOT CHANGE SIZE OR SPACING OF STRUCTURAL ELEMENTS
- DETAILS SHOWN ARE TYPICAL; SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS
- THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR
- CONTRACTOR SHALL BRACE STRUCTURES UNTIL ALL STRUCTURAL ELEMENTS NEEDED FOR STABILITY ARE INSTALLED. THESE ELEMENTS ARE AS FOLLOWS: LATERAL BRACING,
- CONTRACTOR SHALL DETERMINE EXACT LOCATION OF EXISTING UTILITIES. GROUNDS DRAINS, DRAIN PIPES, VENTS, ETC, BEFORE COMMENCING WORK
- INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE VERIZON REP PRIOR TO REMEDIAL OR CORRECTIVE ACTION, ANY SUCH REMEDIAL ACTION SHALL REQUIRE WRITTEN APPROVAL BY THE VERIZON REP PRIOR TO PROCEEDING.
- EACH CONTRACTOR SHALL COOPERATE WITH THE VERIZON REP, AND COORDINATE HIS WORK WITH THE WORK OF OTHERS.
- CONTRACTOR SHALL REPAIR ANY DAMAGE CAUSED BY CONSTRUCTION OF THIS PROJECT TO MATCH EXISTING PRE-CONSTRUCTION CONDITIONS TO THE SATISFACTION
- ALL CABLE/CONDUIT ENTRY/EXIT PORTS SHALL BE WEATHERPROOFED DURING 15. INSTALLATION LISING A SILICONE SEALANT
- WHERE EXISTING CONDITIONS DO NOT MATCH THOSE SHOWN IN THIS PLAN SET. CONTRACTOR SHALL NOTIFY THE VERIZON REP AND ENGINEER OF RECORD
- CONTRACTOR SHALL ENSURE ALL SUBCONTRACTORS ARE PROVIDED WITH A COMPLETE AND CURRENT SET OF DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT
- CONTRACTOR SHALL REMOVE ALL RUBBISH AND DEBRIS FROM THE SITE AT THE END OF
- CONTRACTOR SHALL COORDINATE WORK SCHEDULE WITH AMERICAN TOWER CORPORATION (ATC) AND TAKE PRECAUTIONS TO MINIMIZE IMPACT AND DISRUPTION OF OTHER OCCUPANTS OF THE FACILITY.
- CONTRACTOR SHALL FURNISH VERIZON AND AMERICAN TOWER CORPORATION (ATC) /ITH A PDF MARKED UP AS-BUILT SET OF DRAWINGS UPON COMPLETION OF WORK
- PRIOR TO SUBMISSION OF BID. CONTRACTOR SHALL COORDINATE WITH VERIZON REP TO DETERMINE WHAT, IF ANY, ITEMS WILL BE PROVIDED. ALL ITEMS NOT PROVIDED SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR. CONTRACTOR WILL INSTALL

- 22. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH VERIZON REP TO DETERMINE IF ANY PERMITS WILL BE OBTAINED BY CONTRACTOR. ALL REQUIRED PERMITS NOT OBTAINED BY VERIZON MUST BE OBTAINED, AND PAID FOR, BY THE
- 23. CONTRACTOR SHALL INSTALL ALL SITE SIGNAGE IN ACCORDANCE WITH VERIZON SPECIFICATIONS AND REQUIREMENTS.
- ICE BRIDGE (CABLE TRAY WITH COVER) (GROUND BUILD/CO-LOCATE ONLY, GC TO FURNISH AND INSTALL FOR ROOFTOP INSTALLATION)

 24. CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS TO VERIZON FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
 - ALL EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND LOCATED ACCORDING TO VERIZON SPECIFICATIONS, AND AS SHOWN IN THESE PLANS
 - 26. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
 - CONTRACTOR SHALL NOTIFY VERIZON REP A MINIMUM OF 48 HOURS IN ADVANCE OF POURING CONCRETE OR BACKFILLING ANY UNDERGROUND UTILITIES, FOUNDATIONS OR SEALING ANY WALL, FLOOR OR ROOF PENETRATIONS FOR ENGINEERING REVIEW AND
 - CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SAFETY INCLUDING COMPLIANCE WITH ALL APPLICABLE OSHA STANDARDS AND RECOMMENDATIONS AND SHALL PROVIDE ALL NECESSARY SAFETY DEVICES INCLUDING PPE AND PPM AND CONSTRUCTION DEVICES SUCH AS WELDING AND FIRE PREVENTION, TEMPORARY SHORING, SCAFFOLDING, TRENCH BOXES/SLOPING, BARRIERS, ETC.
 - THE CONTRACTOR SHALL PROTECT AT HIS OWN EXPENSE ALL EXISTING FACILITIES AND SUCH OF HIS NEW WORK LIABLE TO INJURY DURING THE CONSTRUCTION PERIOD. ANY DAMAGE CAUSED BY NEGLECT ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, OR BY THE ELEMENTS DUE TO NEGLECT ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, EITHER TO THE EXISTING WORK, OR TO HIS WORK OR THE WORK OF ANY OTHER CONTRACTOR, SHALL BE REPAIRED AT HIS EXPENSE TO THE OWNER'S SATISFACTION.
 - ALL WORK SHALL BE INSTALLED IN A FIRST CLASS, NEAT AND WORKMANLIKE MANNER BY MECHANICS SKILLED IN THE TRADE INVOLVED. THE QUALITY OF WORKMANSHIP SHALL BE SUBJECT TO THE APPROVAL OF THE VERIZON REP. ANY WORK FOUND BY THE VERIZON REP TO BE OF INFERIOR QUALITY AND/OR WORKMANSHIP SHALL BE REPLACED AND/OR REWORKED AT CONTRACTOR EXPENSE UNTIL APPROVAL IS
 - 31. IN ORDER TO ESTABLISH STANDARDS OF QUALITY AND PERFORMANCE, ALL TYPES OF MATERIALS LISTED HEREINAFTER BY MANUFACTURER'S NAMES AND/OR
 MANUFACTURER'S CATALOG NUMBER SHALL BE PROVIDED BY THESE MANUFACTURERS
 - VERIZON FURNISHED EQUIPMENT SHALL BE PICKED-UP AT THE VERIZON WAREHOUSE. NO LATER THAN 48HR AFTER BEING NOTIFIED INSURED, STORED, UNCRATE, PROTECTED AND INSTALLED BY THE CONTRACTOR WITH ALL APPURTENANCES REQUIRED TO PLACE THE EQUIPMENT IN OPERATION, READY FOR USE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE EQUIPMENT AFTER PICKING IT UP.
 - VERIZON OR HIS ARCHITECT/ENGINEER RESERVES THE RIGHT TO REJECT ANY 33. EQUIPMENT OR MATERIALS WHICH, IN HIS OWN OPINION ARE NOT IN COMPLIANCE WITH THE CONTRACT DOCUMENTS, EITHER BEFORE OR AFTER INSTALLATION AND THE EQUIPMENT SHALL BE REPLACED WITH EQUIPMENT CONFORMING TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS BY THE CONTRACTOR AT NO COST TO VERIZON OR THEIR ARCHITECT/ENGINEER

SPECIAL CONSTRUCTION ANTENNA INSTALLATION NOTES:

- WORK INCLUDED:
 - ANTENNA AND COAXIAL CABLES ARE FURNISHED BY VERIZON UNDER A SEPARATE CONTRACT. THE CONTRACTOR SHALL ASSIST ANTENNA INSTALLATION CONTRACTOR IN TERMS OD COORDINATION AND SITE ACCESS.
 ERECTION SUBCONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF
 - B. INSTALL ANTENNA AS INDICATE ON DRAWINGS AND VERIZON SPECIFICATIONS
 - C. INSTALL GALVANIZED STEEL ANTENNA MOUNTS AS INDICATED ON DRAWINGS
 - D. INSTALL FURNISHED GALVANIZED STEEL OR ALUMINUM WAVEGUIDE
 - CONTRACTOR SHALL PROVIDE FOUR (4) SETS OF SWEEP TESTS USING ANRITZU-PACKARD 8713B RF SCALAR NETWORK ANALYZER, SUBMIT FREQUENCY DOMAIN REFLECTOMETER(FDR) TESTS RESULTS TO THE PROJECT MANAGER. SWEEP TESTS SHALL BE AS PER ATTACHED RFS "MINIMUM FIELD TESTING RECOMMENDED FOR ANTENNA AND HELIAX COAXIAL CABLE SYSTEMS" DATED 10/5/93 TESTING SHALL BE PERFORMED BY AN INDEPENDENT TESTING SERVICE AND BE BOUND AND SUBMITTED WITHIN ONE WEEK OF WORK COMPLETION.
 - INSTALL COAXIAL CABLES AND TERMINATING BETWEEN ANTENNAS AND EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS, WEATHERPROOF ALL CONNECTIONS BETWEEN THE ANTENNA AND EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. TERMINATE ALL COAXIAL CABLE THREE (3) FEET IN EXCESS OF ENTRY PORT LOCATION UNLESS OTHERWISE STATED.
 - G ANTENNA AND COAXIAL CABLE GROUNDING:
- ALL EXTERIOR #6 GREED GROUND WIRE "DAISY CHAIN" CONNECTIONS ARE TO BE WEATHER SEALED WITH RFS CONNECTORS/SPLICE WEATHERPROOFING KIT #221213 OR
- ALL COAXIAL CABLE GROUNDING KITS ARE TO BE INSTALLED ON STRAIGHT RUNS OF

AMERICAN TOWER®



Dewberry Engineers Inc. 99 SUMMER STREET SUITE 700 BOSTON, MA 02110 PHONE: 617.695.3400 FAX: 617.695.3310

DESCRIPTION BY DATE **PRELIM** PP 05/27/21 FINAL BR 11/11/21

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ALL DISCREPANCIES FROM WHAT IS SHOWN ON THESE

CONSTRUCTION DRAWINGS SHALL BE COMMUNICATED TO ATC

FAILURE TO COMMUNICATE DIRECTLY WITH ATC ENGINEERING OR

ANY CHANGES FROM THE DESIGN CONDUCTED WITHOUT PRIOR

APPROVAL FROM ATC ENGINEERING SHALL BE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

ENGINEERING IMMEDIATELY FOR CORRECTION OR RE-DESIGN.





DATE DRAWN: 05/27/21 ATC JOB NO: 13668768 CUSTOMER ID: | COLUMBIA CT CUSTOMER #: 470979

GENERAL NOTES

SHEET NUMBER:

G-002

REVISION

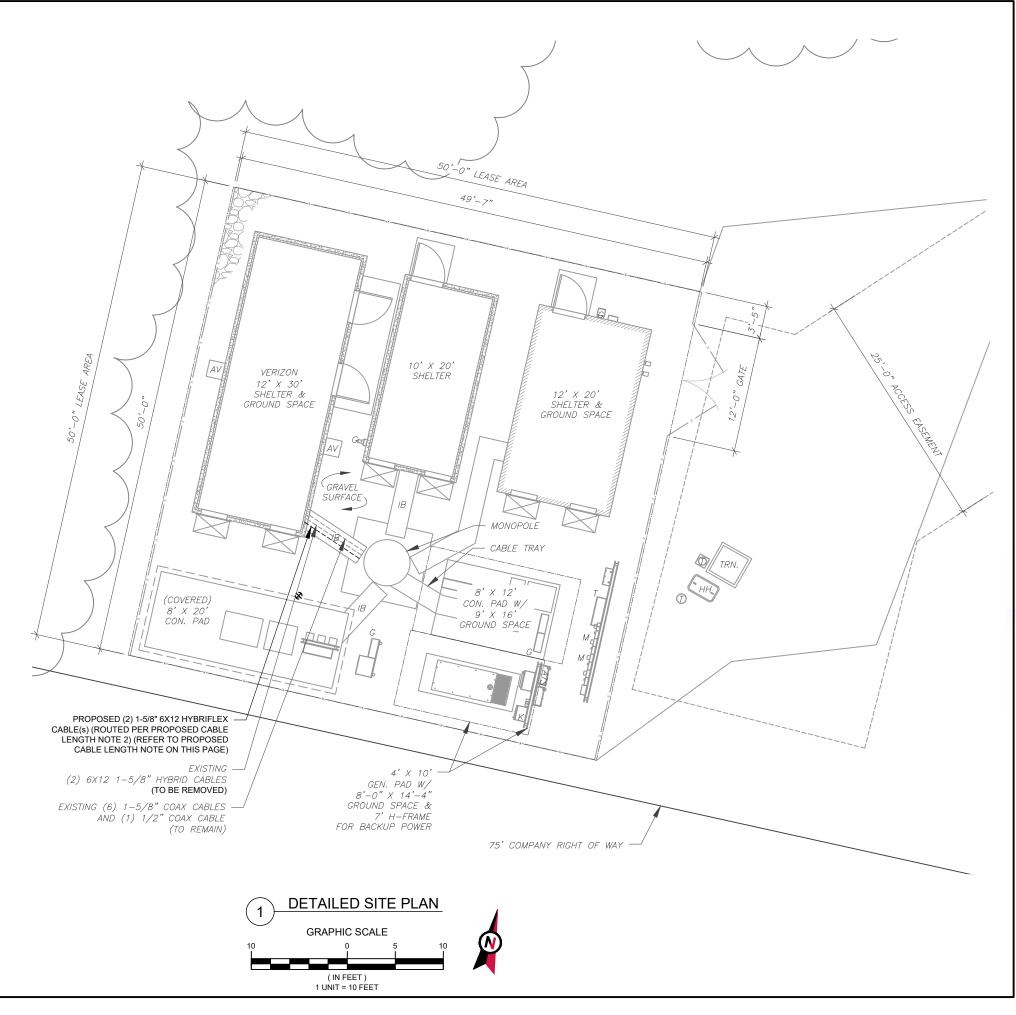
SITE PLAN NOTES:

- THIS SITE PLAN REPRESENTS THE BEST PRESENT KNOWLEDGE AVAILABLE TO THE ENGINEER AT THE TIME OF THIS DESIGN. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO CONSTRUCTION AND VERIFY ALL EXISTING CONDITIONS RELATED TO THE SCOPE OF WORK FOR THIS PROJECT.
- ICE BRIDGE, CABLE LADDER, COAX PORT, AND COAX CABLE ARE SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL CONFIRM THE EXACT LOCATION OF ALL PROPOSED AND EXISTING EQUIPMENT AND STRUCTURES DEPICTED ON THIS PLAN. BEFORE UTILIZING EXISTING CABLE SUPPORTS, COAX PORTS, INSTALLING NEW PORTS OR ANY OTHER EQUIPMENT, CONTRACTOR SHALL VERIFY ALL ASPECTS OF THE COMPONENTS MEET THE ATC SPECIFICATIONS.
- NO ELECTRICAL SCOPE IS INCLUDED IN THIS PROJECT.

LEGEND GROUNDING TEST WELL ATS AUTOMATIC TRANSFER SWITCH BOLLARD CSC CELL SITE CABINET DISCONNECT D ELECTRICAL **FIBER** GEN GENERATOR GENERATOR RECEPTACAL HH, V HAND HOLE, VAULT ICE BRIDGE KENTROX BOX LC LIGHTING CONTROL METER РΒ PULL BOX PP POWER POLE TELCO TRN TRANSFORMER CHAINLINK FENCE

PROPOSED CABLE LENGTH:

- ESTIMATED LENGTH OF PROPOSED CABLE IS <u>192'</u>. ESTIMATED LENGTH OF CABLE WAS PROVIDED BY CUSTOMER OR CALCULATED BY ADDING THE RAD CENTER AND THE DISTANCE FROM THE SHELTER ENTRY PLATE TO THE TOWER (ALONG THE ICE BRIDGE) AND A SAFETY FACTOR MEASUREMENT OF 15% (OF THE TWO PREVIOUS VALUES), CDS DEFER TO GREATEST CABLE LENGTH.
- ROUTE PROPOSED CABLES ALONG SAME PATH AS EXISTING CABLES AND IN ACCORDANCE WITH STRUCTURAL ANALYSIS. WHERE POSSIBLE UTILIZE EXISTING CABLE SUPPORT STRUCTURES AS PROVIDED FOR CARRIER TO ADEQUATELY SECURE CABLES, USING EITHER APPROPRIATELY SIZED STAINLESS STEEL SNAP-INS OR MOUNTING HARDWARE AND BRACKETS AS SPECIFIED BY CABLE MANUFACTURER. OTHERWISE, ATTACH CABLES TO HORIZONTAL OR DIAGONAL TOWER MEMBERS USING PROPOSED STAINLESS STEEL ADAPTERS (DO NOT ATTACH TO TOWER LEG).







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verizon[/]

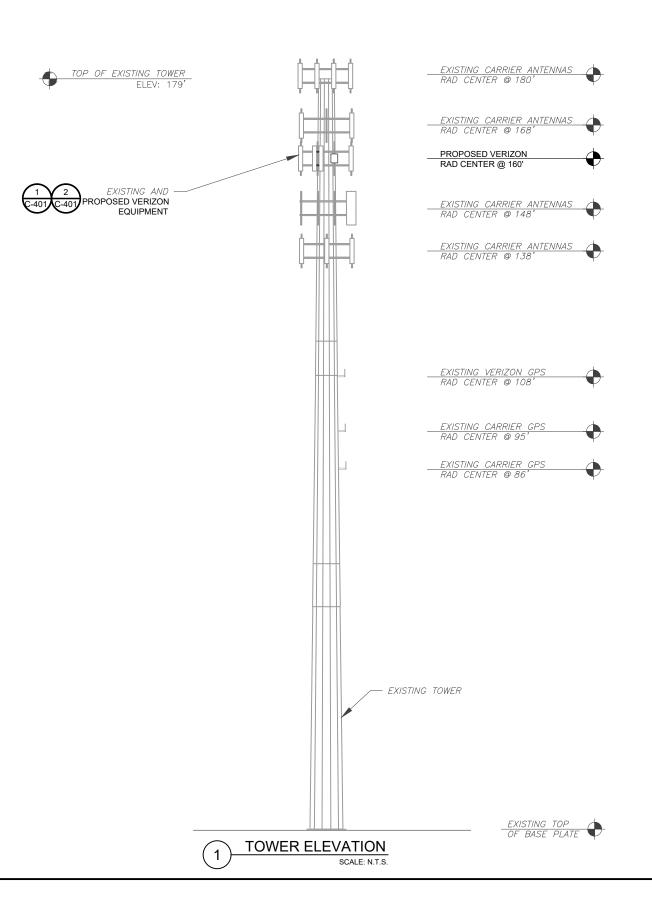
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DETAILED SITE PLAN

SHEET NUMBER:

C-101

REVISION: 0



PER MOUNT ANALYSIS COMPLETED BY MASER CONSULTING CONNECTICUT, DATED 07/28/21, THE EXISTING MOUNT CAN NOT ADEQUATELY SUPPORT THE PROPOSED LOADING. THE MOUNT REPLACEMENT PROPOSED IN THE MOUNT ANALYSIS, INCLUDED AT THE END OF THIS PLAN SET, MUST BE INSTALLED PRIOR TO THE INSTALLATION OF THE PROPOSED ANTENNAS AND OTHER EQUIPMENT.

- TOWER NOTE:

 1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM WITH THE PROJECT MANAGER THAT THEY HAVE THE MOST RECENT VERSION OF THE STRUCTURAL ANALYSIS BEFORE COMMENCING WORK. EXISTING AND PROPOSED TOWER APPURTENANCES, MOUNTS, AND ANTENNAS ARE SHOWN BASED ON THE STRUCTURAL ANALYSIS.
- 2. WHERE APPLICABLE, ALL NEW ANTENNAS, EQUIPMENT, MOUNTS, CABLING, ETC. SHALL BE PAINTED/SOCKED TO MATCH EXISTING EQUIPMENT IN ACCORDANCE WITH FAA, JURISDICTION, AND/OR OTHER LOCAL REQUIREMENTS.
- ROUTE PROPOSED CABLES ALONG SAME PATH AS EXISTING CABLES AND IN ACCORDANCE WITH STRUCTURAL ANALYSIS. IF ADEQUATE SPACE EXISTS, ROUTE CABLES THROUGH ENTRY PORT HOLE, UP INSIDE OF MONOPOLE, AND THROUGH EXIT PORT HOLE. IF ROUTING OUTSIDE THE MONOPOLE, ATTACH CABLES USING STAND-OFF ADAPTERS MOUNTED TO TOWER USING STAINLESS STEEL BANDING. ADEQUATELY SECURE CABLES USING EITHER APPROPRIATELY SIZED STAINLESS STEEL SNAP-INS OR MOUNTING HARDWARE AND BRACKETS AS SPECIFIED BY CABLE MANUFACTURER.
- 4. TOWER ELEVATIONS ARE MEASURED FROM TOP OF BASE PLATE TO MATCH STRUCTURAL ANALYSIS. ELEVATIONS DO NOT REFLECT TRUE ABOVE GROUND LEVEL (A.G.L.)





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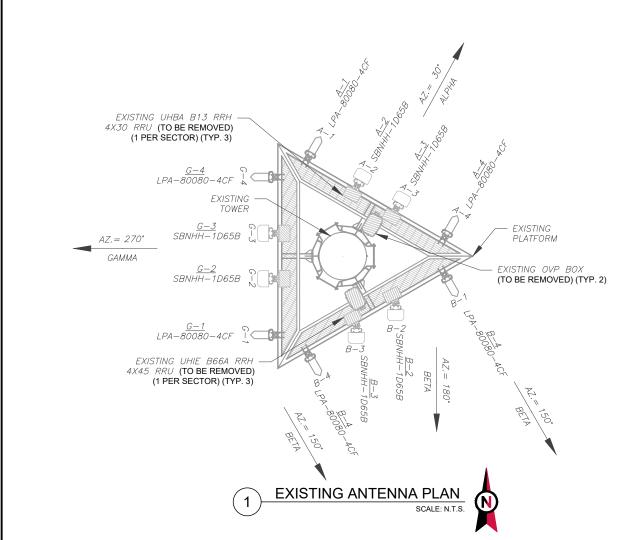
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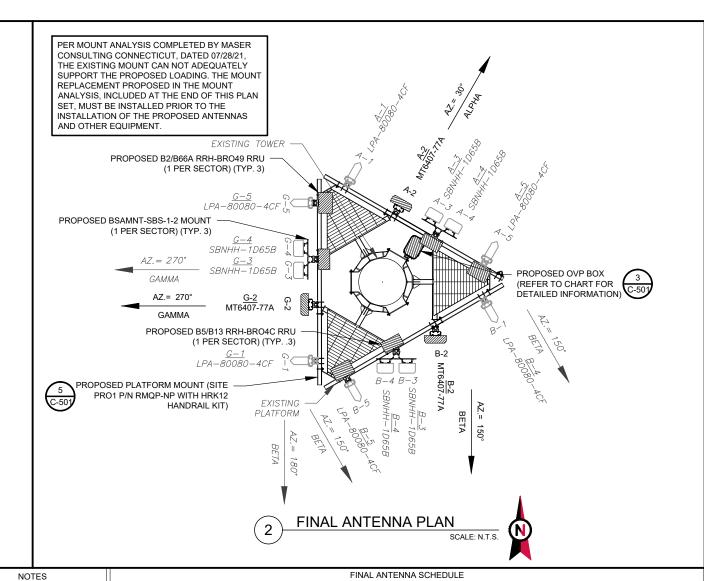
TOWER ELEVATION

SHEET NUMBER: C-201

REVISION:

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					EXISTING ANTENNA S	CHEDULE				NOTES
LO	CATION	1		AN	ITENNA SUMMARY			NON ANTENNA SUMMAF	RY	CONFIRM WITH VERIZON REP
SECTOR	RAD	AZ	POS	ANTENNA	BAND	MECH/ELEC D-TILT	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS	FOR APPLICABLE UPDATES/REVISIONS AND MOST RECENT RFDS FOR NSN
			A1	LPA-80080-4CF	850	0/0	RMN	_	-	CONFIGURATION (CONFIG). GC TO CAP ALL UNUSED PORTS.
ALPHA	160'	30°	A2	SBNHH-1D65B	700/AWS	0/2,0	REL	UHBA B13 RRH 4X30	RMV	2. CONFIRM SPACING OF PROPOSED EQUIP DOES NOT CAUSE TOWER CONFLICTS
ALITIA	100		A3	SBNHH-1D65B	700/AWS	0/2,0	REL	UHIE B66A RRH 4X45	RMV	NOR IMPEDE TOWER CLIMBING PEGS.
			A4	LPA-80080-4CF	850	0/0	RMN	_	-	
		150°	B1	LPA-80080-4CF	850	0/0	RMN	_	-	STATUS ABBREVIATIONS
BETA.	160'	180°	B2	SBNHH-1D65B	700/AWS	0/2,0	REL	UHBA B13 RRH 4X30	RMV	RMV: TO BE REMOVED RMN: TO REMAIN
DLIA	100	100	<i>B3</i>	SBNHH-1D65B	700/AWS	0/2,0	REL	UHIE B66A RRH 4X45	RMV	REL: TO BE RELOCATED ADD: TO BE ADDED
		150°	B4	LPA-80080-4CF	850	0/0	RMN	_	-	
			G1	LPA-80080-4CF	850	0/0	RMN	_	-	CABLE LENGTHS FOR JUMPERS
GAMMA	160'	270°	G2	SBNHH-1D65B	700/AWS	0/2,0	REL	UHBA B13 RRH 4X30	RMV	JUNCTION BOX TO RRU: 15' RRU TO COMBINER: 10'
GAMINIA	160	270	G3	SBNHH-1D65B	700/AWS	0/2,0	REL	UHIE B66A RRH 4X45	RMV	COMBINER TO ANTENNA: 10'
			G4	LPA-80080-4CF	850	0/0	RMN	-	-	
_	108'	_	-	GPS	_	_	RMN	_		

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	CONFIRM WITH VERIZON REP	l
	FOR APPLICABLE	ı
JS	UPDATES/REVISIONS AND	ı
	MOST RECENT RFDS FOR NSN	ı
	CONFIGURATION (CONFIG). GC	ı
	TO CAP ALL UNUSED PORTS.	ı
	2. CONFIRM SPACING OF	ı
,	PROPOSED EQUIP DOES NOT	ı
	CAUSE TOWER CONFLICTS	ı
,	NOR IMPEDE TOWER CLIMBING	ı
	PEGS.	ı
	FEGS.	ı
		ı
	STATUS ABBREVIATIONS	I
	GIATOGABBILLIATIONO	ı
_	RMV: TO BE REMOVED	ı
	RMN: TO BE REMAIN	ı
	REL: TO BE RELOCATED	ı
,		ı
	ADD: TO BE ADDED	ı
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		ı
	CABLE LENGTHS FOR JUMPERS	İ
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LOCATION

:P	200/111011			7.4.1.2.4.0.001.111.2.4.1				1101171111211111100111111111111			
SN	SECTOR	RAD	AZ	POS	ANTENNA	BAND	MECH/ELEC D-TILT	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS	
GC				A1	LPA-80080-4CF	850	0/0	RMN			
o.)T				A2	MT6407-77A	L-SUB6	0/6	ADD	-	-	
ING	ALPHA	160'	30°	A3	SBNHH-1D65B	700/850/1900/ AWS	0/2,2,0,0	REL	B2/B66A RRH-BR049 B5/B13 RRH-BR04C	ADD ADD	
				A4	SBNHH-1D65B	700/850/1900/ AWS	0/2,2,0,0	REL	-	-	
		ĺ		A5	LPA-80080-4CF	850	0/0	RMN	-	-	
			150°	B1	LPA-80080-4CF	850	0/0	RMN	-	-	
				B2	MT6407-77A	L-SUB6	0/6	ADD	-	-	
	BETA	160'	180°)' 180°	В3	SBNHH-1D65B	700/850/1900/ AWS	0/2,2,0,0	REL	B2/B66A RRH-BR049	ADD
		. '							B5/B13 RRH-BR04C	ADD	
		. '		B4	SBNHH-1D65B	700/850/1900/ AWS	0/2,2,0,0	REL	<u>-</u>	-	
		i '	150°	B5	LPA-80080-4CF	850	0/0	RMN	-	-	
RS				G1	LPA-80080-4CF	850	0/0	RMN	-	-	
				G2	MT6407-77A	L-SUB6	0/6	ADD	-	-	
,	GAMMA	160'	270°)' 270°	G3	SBNHH-1D65B	700/850/1900/ AWS	0/2,2,0,0	REL	B2/B66A RRH-BR049	ADD
		. '		<u> </u>	'		<u> </u>	B5/B13 RRH-BR04C	ADD		
		. '		G4	SBNHH-1D65B	700/850/1900/ AWS	0/2,2,0,0	REL	-	-	
		ĺ		G5	LPA-80080-4CF	850	0/0	RMN	-	-	
		4001			000			51414	ĺ		

ANTENNA SUMMARY

EXISTING FIBER DISTRIBUTION/O	/P BOX	EXISTIN	NG CABLING SUMMARY	
MODEL NUMBER	STATUS	COAX	HYBRID	STATUS
(2) OVP-6	RMV	_	(2) 1-5/8"	RMV
-	-	(6) 1-5/8" (1) 1/2"	_	RMN

\bigcirc	EQUIPMENT SCHEDULES
$\left(o \right)$	

FINAL FIBER DISTRIBUTION / OVP BOX		FINAL CABLING SUMMARY			
MODEL NUMBER	STATUS	COAX	HYBRID	STATUS	
(1) RCMDC-6600-PF-48	ADD	-	(2) 6X12 1-5/8"	ADD	
-	-	(6) 1-5/8" (1) 1/2"	-	RMN	





Dewberry Engineers Inc. 99 SUMMER STREET SUITE 700 BOSTON, MA 02110 PHONE: 617.695.3400 FAX: 617.695.3310

REV	. DESCRIPTION	BY	DATE
A	PRELIM	PP	05/27/21
\triangle	FINAL	BR	11/11/21
$\overline{\wedge}$			
$\overline{\wedge}$			

ATC SITE NUMBER: 302472

ATC SITE NAME: ANDOVER-BUNKER HILL ROAD

> VERIZON SITE NAME: **COLUMBIA CT**

SITE ADDRESS: 104 BUNKER HILL RD.

NON ANTENNA SUMMARY



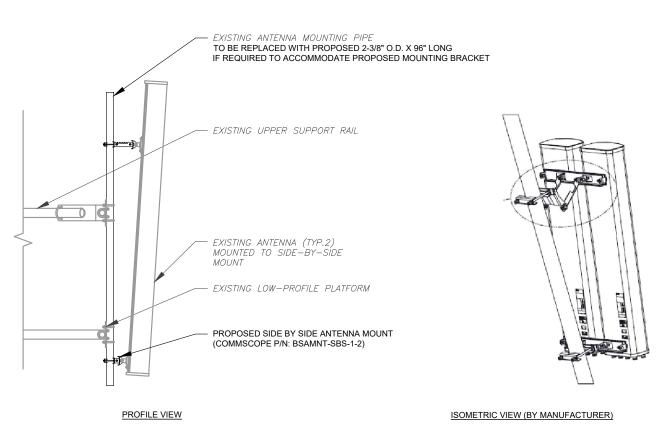
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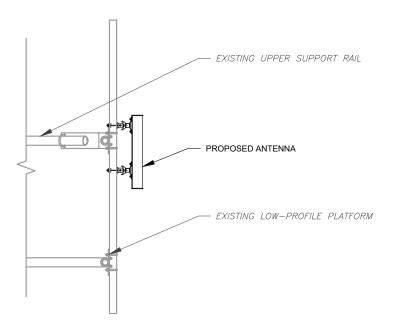
DATE DRAWN:	05/27/21
ATC JOB NO:	13668768
CUSTOMER ID:	COLUMBIA CT
CUSTOMER #:	470979

ANTENNA INFORMATION & SCHEDULE

SHEET	NUMBER:	
C-	401	

REVISION

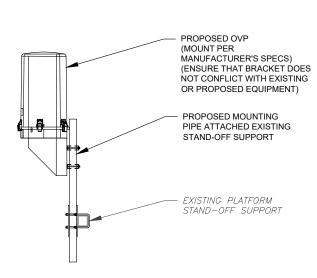


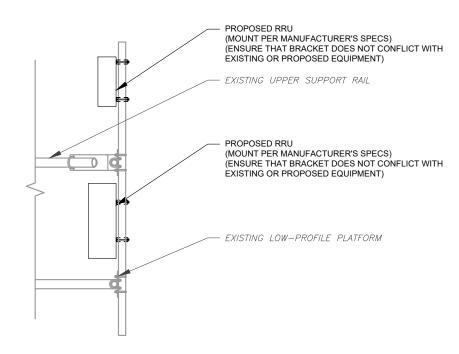


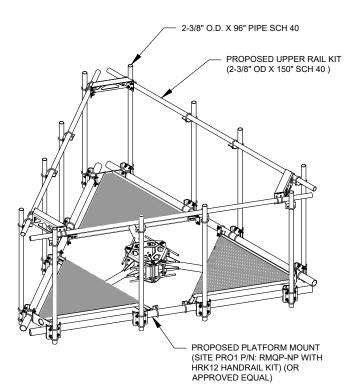
PROPOSED SIDE-BY-SIDE MOUNT
SCALE: NOT TO SCALE

PROPOSED 5G ANTENNA MOUNTING DETAIL - TYPICAL

SCALE: N.T.S.







PROPOSED OVP MOUNTING

PROPOSED RRU MOUNTING DETAIL - TYPICAL

5 ISOMETRIC PLATFORM DETAIL

SCALE: N.T.S.





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REV.	DESCRIPTION	BY	DATE
<u> </u>	PRELIM		05/27/21
<i>∕</i> 0\	FINAL	BR	11/11/21
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ATC SITE NUMBER: 302472

ATC SITE NAME:
ANDOVER-BUNKER HILL ROAD

VERIZON SITE NAME:

COLUMBIA CT

SITE ADDRESS: 104 BUNKER HILL RD. ANDOVER, CT 06232

SEAL:





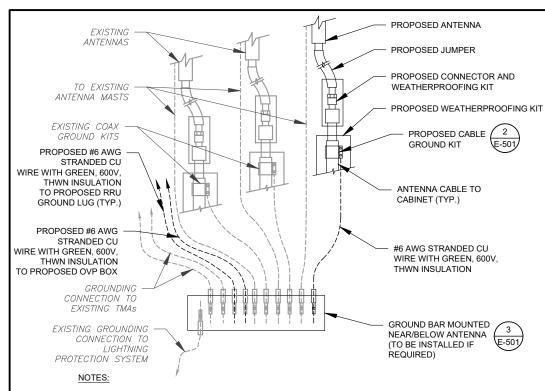
	DATE DRAWN:	05/27/21
	ATC JOB NO:	13668768
	CUSTOMER ID:	COLUMBIA CT
	CUSTOMER #:	470979
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CONSTRUCTION DETAILS

SHEET NUMBER:

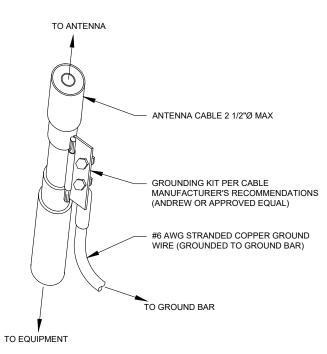
C-501

REVISION



- 1. THIS DETAIL IS INTENDED TO SHOW THE GENERAL GROUNDING REQUIREMENTS. SLIGHT ADJUSTMENTS MAY BE REQUIRED BASED ON EXISTING SITE CONDITIONS. THE CONTRACTOR SHALL MAKE FIELD ADJUSTMENTS AS NEEDED AND INFORM THE CONSTRUCTION MANAGER OF ANY CONFLICTS.
- 2. SITE GROUNDING SHALL COMPLY WITH VERIZON GROUNDING STANDARDS, LATEST EDITION, AND COMPLY WITH VERIZON GROUNDING CHECKLIST, LATEST VERSION. WHEN NATIONAL AND LOCAL GROUNDING CODES ARE MORE STRINGENT THEY SHALL GOVERN.

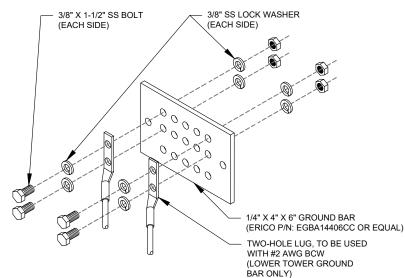




- GROUND KIT NOTES:

 1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
- 2. CONTRACTOR SHALL PROVIDE WEATHERPROOFING KIT (ANDREW PART NUMBER 221213) AND INSTALL/TAPE PER MANUFACTURER'S SPECIFICATIONS.

CABLE GROUND KIT CONNECTION DETAIL



2. GROUND BAR TO BE BONDED DIRECTLY TO TOWER.







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REV.	DESCRIPTION	BY	DATE
<u> </u>	PRELIM	PP	05/27/21
<u> </u>	FINAL	BR	11/11/21
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l	DATE DRAWN:	05/27/21
l	ATC JOB NO:	13668768
l	CUSTOMER ID:	COLUMBIA CT
l	CUSTOMER #:	470979
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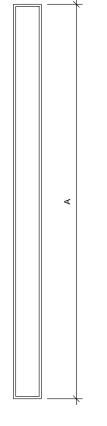
GROUNDING DETAILS

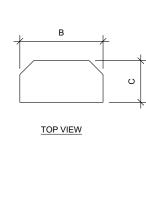
SHEET NUMBER:

REVISION: 0

E-501

GROUND BAR NOTES: GROUND BAR KITS COME WITH ALL HARDWARE, NUTS, BOLTS, WASHERS, ETC. EXCEPT THE STRUCTURAL MOUNTING MEMBER(S).

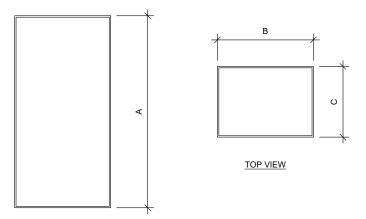




FRONT VIEW

1 ANTENNA SPECIFICATIONS FOR ILLUSTRATIVE PURPOSES ONLY - NOT TO SCALE

ANTENNA SPECIFICATIONS				
ANTENNA MODEL	А	В	С	WEIGHT (LBS)
MT6407-77A	35.1"	16.1"	5.5"	81.6



FRONT VIEW

RRU SPECIFICATIONS FOR ILLUSTRATIVE PURPOSES ONLY - NOT TO SCALE

RRU SPECIFICATIONS				
RRU MODEL	А	В	С	WEIGHT (LBS)
B2/B66A RRH-BR049	15.0"	15.0"	10.0"	84.4
B5/B13 RRH-BR04C	15.0"	15.0"	8.1"	70.3





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verizon[/]

DATE DRAWN: 05/27/21
ATC JOB NO: 13668768
CUSTOMER ID: COLUMBIA CT
CUSTOMER #: 470979

SUPPLEMENTAL

SHEET NUMBER:

R-601





Maser Consulting Connecticut 2000 Midlantic Drive, Suite 100 Mt. Laurel, NJ 08054 856.797.0412 peter.albano@colliersengineering.com

Replacement Antenna Mount Analysis Report and PMI Requirements

Mount Analysis-R

SMART Tool Project #: 10050491 Maser Consulting Connecticut Project #: 21777492A

July 28, 2021

Site Information

Site ID: Site Name: 470979-VZW / COLUMBIA CT

Carrier Name:

COLUMBIA CT Verizon Wireless

Address:

104 Bunker Hill Rd Andover, Connecticut 06232

Tolland County

Latitude: Longitude: 41.737766° -72.349997°

Structure Information

Tower Type: Mount Type: 178-Ft Monopole 12.50-Ft Platform

FUZE ID # 16271926

Analysis Results

Platform: 48.2% Pass

***Contractor PMI Requirements:
Included at the end of this MA report
Available & Submitted via portal at https://pmi.vzwsmart.com
Contractor - Please Review Specific Site PMI Requirements Upon Award

Requirements may also be Noted on A & E drawings

Report Prepared By: Jared Adkins



Mount Structural Analysis Report (1) 12.50-Ft Platform July 28, 2021 Site ID: 470979-VZW / COLUMBIA CT Page | 4

Structural Steel Grades have been assumed as follows, if applicable, unless otherwise noted in this analysis:

o Channel, Solid Round, Angle, Plate
o HSS (Rectangular)
o Pipe
ASTM 436 (Gr. 36)
ASTM 500 (Gr. B-46)
ASTM A53 (Gr. B-35)
F1554 (Gr. 36)
ASTM A325

Discrepancies between in-field conditions and the assumptions listed above may render this analysis invalid unless explicitly approved by Maser Consulting Connecticut.

Analysis Results:

Component	Utilization %	Pass/Fail
Standoff Horizontal	40.8%	Pass
Platform Crossmember	21.9%	Pass
Corner Plate	17.0%	Pass
Grating Support	13.7%	Pass
Face Horizontal	17.3%	Pass
Mount Pipe	48.2%	Pass
Support Rail	31.0%	Pass
Dual Mount Pipe	37.6%	Pass
Support Rail Connection	41.%	Pass
Connection Check	44.5%	Pass

Structure Rating – (Controlling Utilization of all Components)	48.2%

Recommendation:

The proposed antenna mount is SUFFICIENT for the final loading configuration and do not require modifications.

ANSI/ASSP rigging plan review services compliant with the requirements of ANSI/TIA 322 are available for a Construction Class IV site or other, if required. Separate review fees will apply.

Attachments:

- 1. Mount Manufacturer Drawings
- 2. Analysis Calculations
- 3. Contractor Required Post Installation Inspection (PMI) Report Deliverables
- 4. Antenna Placement Diagrams
- 5. TIA Adoption and Wind Speed Usage Letter





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verizon /

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 05/27/21

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 COLUMBIA CT

 CUSTOMER #:
 470979

SUPPLEMENTAL

SHEET NUMBER:

R-602