

December 14, 2022

Frank Gladwin, Building Official **Building Department** 355 Main Street, First Floor West Haven, CT 06516

Construction Closeout Letter

ATC Site Name: West Haven & RT162 CT

ATC Asset#: 243036 AT&T Site#: CTL02899

Site Address: 668 Jones Hill Road West Haven, CT 06516

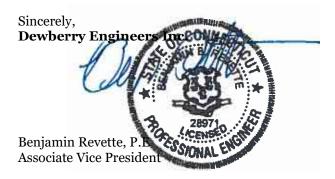
To Whom It May Concern:

In accordance with the requirements of the 2018 Connecticut State Building Code, Dewberry Engineers Inc. (Dewberry) reviewed the completed installation at the above location based on Rev-o Construction Drawings dated 03/16/22. A structural analysis report dated 11/23/21 was completed by American Tower Corporation, and an antenna mount analysis dated 03/11/22 was completed by Telamon Tower Engineering, PLLC.

Please see the attached reports and documentation for the completed site.

- December 14, 2022 Contractor Report
- December 1, 2022 As-Built drawings

Based on visual observations, it appears that the project is constructed in general conformance with the applicable plans and specifications. If you have any questions, please do not hesitate to contact Dewberry Engineers Inc.





Statement of Special Inspections

Contractor Report #1

Attn: Mr. Blake Paynter

Project Manager

American Tower Corporation

10 Presidential Way Woburn, MA 01801

ATC Site Name:	West Haven & RT162 CT
ATC Site#/Project#:	243036 / 13682841
Site Address:	668 Jones Hill Road West Haven, CT 06516
Contractor:	Centerline Communications

Dewberry Engineers Inc. (Dewberry) has reviewed the photos and as-built drawings provided by the general contractor of the recently completed site improvements at the aforementioned location. The site review was performed based on Rev-o Construction Drawings dated 03/16/22. A structural analysis report dated 11/23/21 was completed by American Tower Corporation, and an antenna mount analysis dated 03/11/22 was completed by Telamon Tower Engineering, PLLC.

The following are on-site photos from the inspection:

Figure 1: View(s) of installed alpha sector antennas and RRUs on new mount.

Figure 2: View(s) of installed beta sector antennas and RRUs on new mount.

Figure 3: View(s) of installed gamma sector antennas and RRUs on new mount.

Figure 4: View(s) of installed DC and Fiber trunk cables.

All notes and items in this field report are a record of observations provided by the photos. Please notify Dewberry Engineers Inc. in writing of any discrepancies, errors or misinterpretations. Please find attached to this report, the figures and photos of construction and items observed.

Prepared By:

Joseph Mazzeo Engineer



Contractor Photos:



Figure 1: View(s) of installed alpha sector antennas and RRUs on new mount.



Figure 2: View(s) of installed beta sector antennas and RRUs on new mount.

Dewberry



Figure 3: View(s) of installed gamma sector antennas and RRUs on new mount.



Figure 4: View(s) of installed DC and Fiber trunk cables.

GENERAL CONSTRUCTION NOTES:

- OWNER FURNISHED MATERIALS, AT&T "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)
- C. ICE BRIDGE (CABLE TRAY WITH COVER) (GROUND BUILD/CO-LOCATE ONLY, GC TO FURNISH AND INSTALL FOR ROOFTOP INSTALLATION)
- 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 AT&T 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
- 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 AT&T REP PRIOR TO REMEDIAL OR CORRECTIVE ACTION, ANY SUCH REMEDIAL ACTION SHALL REQUIRE WRITTEN APPROVAL BY THE AT&T REP PRIOR TO PROCEEDING.
- EACH CONTRACTOR SHALL COOPERATE WITH THE AT&T 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 OF THE AT&T CONSTRUCTION MANAGER.
- ALL CABLE/CONDUIT ENTRY/EXIT PORTS SHALL BE WEATHERPROOFED DURING 15. INSTALLATION USING A SILICONE SEALANT
- WHERE EXISTING CONDITIONS DO NOT MATCH THOSE SHOWN IN THIS PLAN SET. CONTRACTOR SHALL NOTIFY THE AT&T REP AND ENGINEER OF RECORD IMMEDIATELY
- 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 AT&T AND AMERICAN TOWER CORPORATION (ATC) WITH A PDF MARKED UP AS-BUILT SET OF DRAWINGS UPON COMPLETION OF WORK.
- PRIOR TO SUBMISSION OF BID. CONTRACTOR SHALL COORDINATE WITH AT&T 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 ALL
- 22. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH AT&T REP TO

- DETERMINE IF ANY PERMITS WILL BE OBTAINED BY CONTRACTOR. ALL REQUIRED PERMITS NOT OBTAINED BY AT&T MUST BE OBTAINED, AND PAID FOR, BY TH
- CONTRACTOR SHALL INSTALL ALL SITE SIGNAGE IN ACCORDANCE WITH AT&T SPECIFICATIONS AND REQUIREMENTS
- CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS TO AT&T FOR REVIEW AND
- ALL EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND LOCATED ACCORDING TO AT&T SPECIFICATIONS, AND AS SHOWN
- 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 AT&T 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 AT&T REP. ANY WORK FOUND BY THE AT&T REP TO BE OF INFERIOR QUALITY AND/OR WORKMANSHIP SHALL BE REPLACED AND/OR REWORKED AT CONTRACTOR EXPENSE UNTIL APPROVAL IS OBTAINED.
- 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
- 32 AT&T FURNISHED FOLIPMENT SHALL BE PICKED-LIP AT THE AT&T 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 ESPONSIBLE FOR THE EQUIPMENT AFTER PICKING IT UP
- 33. AT&T OR HIS ARCHITECT/ENGINEER RESERVES THE RIGHT TO REJECT ANY 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 AT&T OR THEIR

SPECIAL CONSTRUCTION ANTENNA INSTALLATION NOTES:

- WORK INCLUDED
 - ANTENNA AND COAXIAL CABLES ARE FURNISHED BY AT&T UNDER A SEPARATE CONTRACT. THE CONTRACTOR SHALL ASSIST ANTENNA INSTALLATION CONTRACTOR IN TERMS OF COORDINATION AND SITE ACCESS. ERECTION
 - B. INSTALL ANTENNAS AS INDICATED ON DRAWINGS AND AT&T 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 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 GREEN GROUND WIRE "DAISY CHAIN" CONNECTIONS ARE TO BE WEATHER SEALED WITH RFS CONNECTORS/SPLICE WEATHER PROOFING KIT #221213 OR
- ALL COAXIAL CABLE GROUNDING KITS ARE TO BE INSTALLED ON STRAIGHT RUNS OF

AS BUILT **Centerline Communications** Tristen Spear 12/1/22 8:31 AM





99 SUMMER STREET SUITE 700 BOSTON, MA 02110 PHONE: 617.695.3400 FAX: 617.695.3310

REV.	DESCRIPTION	BY	DATE
A.	PRELIM	BR	11/18/21
<u>6</u>	FINAL	_VL_	03/16/22
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ATC SITE NUMBER: 243036

ATC SITE NAME: WEST HAVEN & RT 162 CT

AT&T SITE NAME:

WEST HAVEN JONES HILL ROAD SITE ADDRESS:

668 JONES HILL ROAD WEST HAVEN.CT 06516





DATE DRAWN: | 11/18/21 ATC JOB NO: 13682841 G5 CUSTOMER ID: CTL02899 CUSTOMER #: 10578274

GENERAL NOTES

SHEET NUMBER:

ALL DISCREPANCIES FROM WHAT IS SHOWN ON THESE

CONSTRUCTION DRAWINGS SHALL BE COMMUNICATED TO ATC ENGINEERING IMMEDIATELY FOR CORRECTION OR RE-DESIGN.

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.

G-002

REVISION

SITE PLAN NOTES:

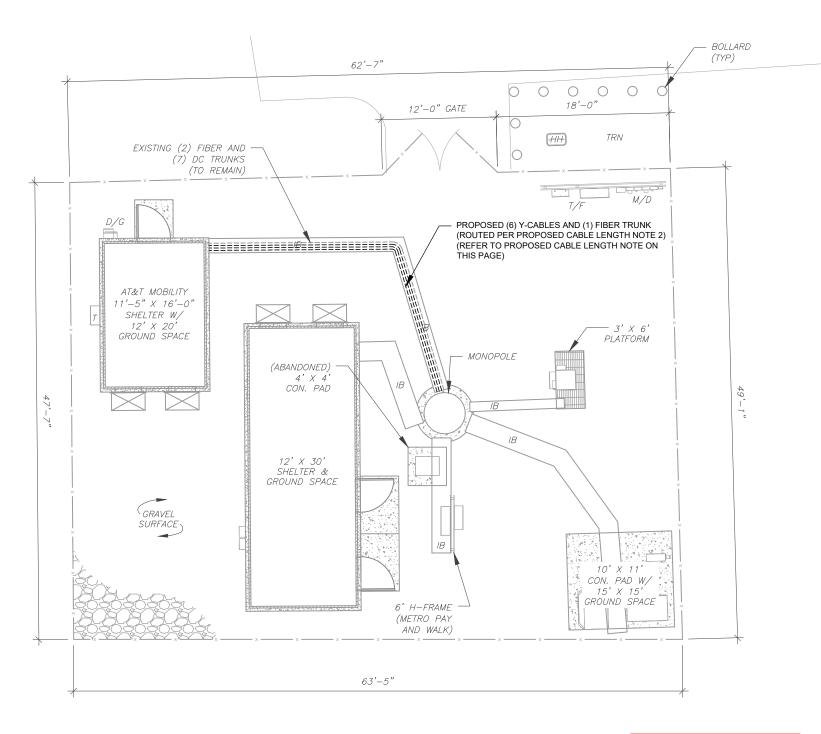
- 1. THIS SITE PLAN REPRESENTS THE BEST PRESENT KNOWLEDGE AVAILABLE TO THE ENGINEER AT THE TIME OF THIS DESIGN. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO CONSTRUCTION AND VERIFY ALL EXISTING CONDITIONS RELATED TO THE SCOPE OF WORK FOR THIS PROJECT.
- 2. ICE BRIDGE, CABLE LADDER, COAX PORT, AND COAX 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.
- 3. THIS PROJECT INCLUDES NO INSTALL OR MODIFICATION AT GRADE.

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

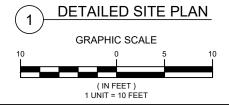
CHAINLINK FENCE

PROPOSED CABLE LENGTH:

- ESTIMATED LENGTH OF PROPOSED CABLE IS 186'.
 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.
- 2. 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).



AS BUILT Centerline Communications Tristen Spear 12/1/22 8:31 AM









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

FAX: 617.695.3310

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<u> </u>	PRELIM	BR_	11/18/21
<u> </u>	FINAL	VL	03/16/22
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ATC SITE NAME:
WEST HAVEN & RT 162 CT

AT&T SITE NAME:

WEST HAVEN JONES HILL ROAD

SITE ADDRESS: 668 JONES HILL ROAD WEST HAVEN.CT 06516

SEAL:





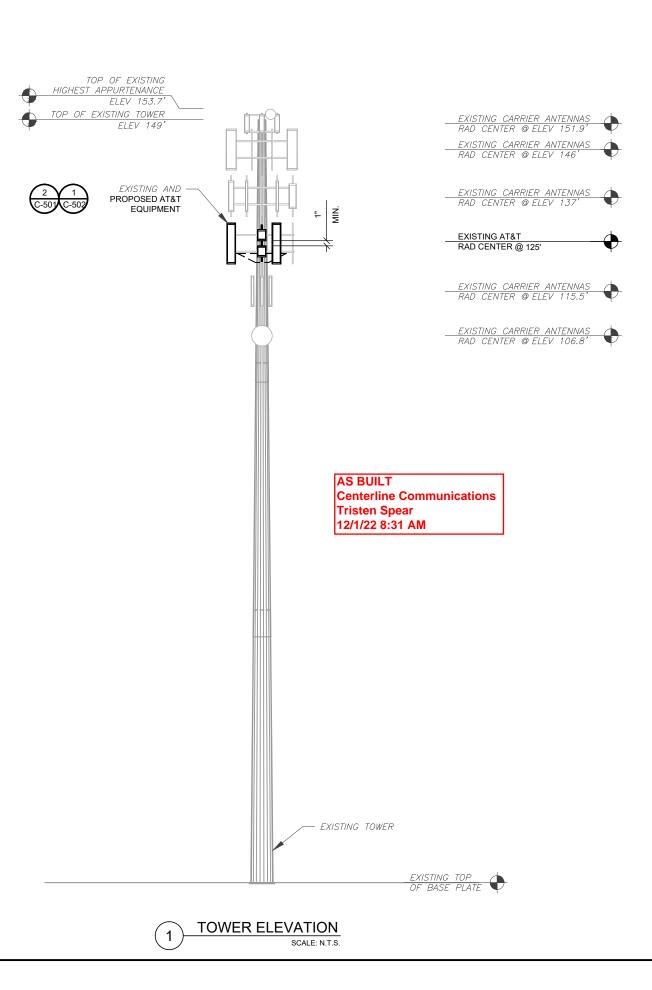
	DATE DRAWN:	11/18/21
	ATC JOB NO:	13682841_G5
	CUSTOMER ID:	CTL02899
	CUSTOMER #:	10578274

DETAILED SITE PLAN

SHEET NUMBER:

C-101

REVISION



PER MOUNT ANALYSIS COMPLETED BY TELAMON TOWER ENGINEERING PLLC, DATED 03/11/22, THE EXISTING MOUNT CAN NOT ADEQUATELY 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

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

3. 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

MANUFACTURER.
TOWER ELEVATIONS ARE MEASURED FROM TOP

TOWER ELEVATION DEPICTION MAY NOT REFLECT

ANALYSIS. REFER TO STRUCTURAL ANALYSIS FOR

ALL EQUIPMENT INCLUDED IN STRUCTURAL

BRACKETS AS SPECIFIED BY CABLE

ABOVE GROUND LEVEL (A.G.L.)

FULL TOWER LOADING.

OF BASE PLATE TO MATCH STRUCTURAL ANALYSIS. ELEVATIONS DO NOT REFLECT TRUE

OTHER LOCAL REQUIREMENTS.

SUPPORT THE PROPOSED LOADING. THE MOUNT AND OTHER EQUIPMENT.





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

REV.	DESCRIPTION	BY	DATE
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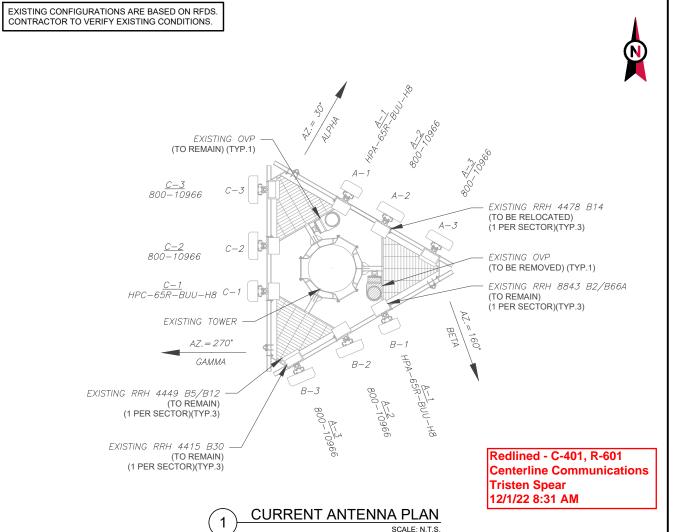
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l		DATE DRAWN:	11/18/21
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l	- 1	CUSTOMER ID:	CTL02899
L		CUSTOMER #:	10578274
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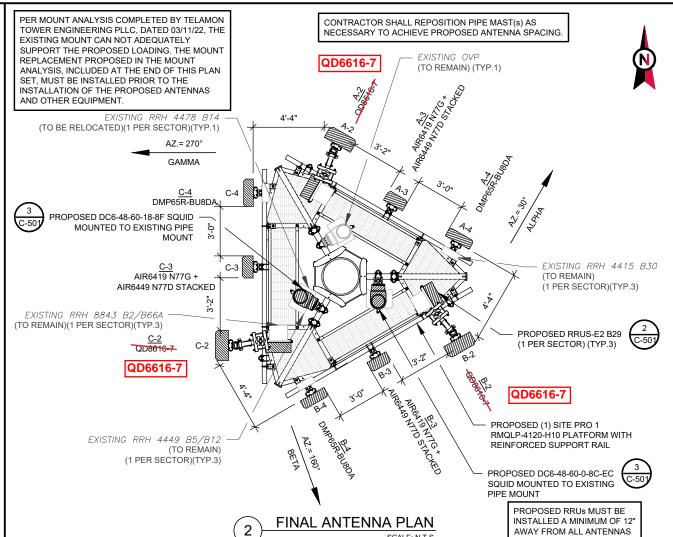
TOWER ELEVATION

SHEET NUMBER:

REVISION:

C-201





EXISTING ANTENNA SCHEDULE									
LO	CATION			ANTENNA	SUMMARY		NON ANTENNA SUMMA	RY	1.
SECTOR	RAD	AZ	POS	ANTENNA	BAND	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS	
			A1	HPA-65R-BUU-H8	LTE1900	RMV	RRH 8843 B2/B66A	RMN	2.
ALPHA	LPHA 125' 30°	.30°	A2	800-10966	LTE700, AWS	RMV	RRH 4478 B14	REL	12.
7127777	720	00	A.3	800-10966	LTE700, 850, WCS,	RMV	RRH 4449 B5/B12	RMN]
			710	000 70300	5G 850	TXIVIV	RRH 4415 B30	RMN	3.
			B1	HPA-65R-BUU-H8	LTE1900	RMV	RRH 8843 B2/B66A	RMN	3.
BETA	125'	160°	B2	800-10966	LTE700, AWS	RMV	RRH 4478 B14	REL	1
	720		B3	800-10966	LTE700, 850, WCS, 5G 850	RMV	RRH 4449 B5/B12 RRH 4415 B30	RMN RMN	-
			C1	HPA-65R-BUU-H8	LTE1900	RMV	RRH 8843 B2/B66A	RMN	1
GAMMA 125'	270°	C2	800-10966	LTE700, AWS	RMV	RRH 4478 B14	REL	1	
<i>5,,</i>	120	2,0	СЗ	800-10966	LTE700, 850, WCS, 5G 850	RMV	RRH 4449 B5/B12 RRH 4415 B30	RMN RMN	

NOTES CONFIRM WITH AT&T REP FOR APPLICABLE UPDATES/REVISIONS AND MOST RECENT RFDS FOR NSN CONFIGURATION (CONFIG). GC TO CAP ALL UNUSED PORTS CONFIRM SPACING OF PROPOSEI EQUIP DOES NOT CAUSE TOWER CONFLICTS NOR IMPEDE TOWER CLIMBING PEGS. THE ANTENNA ORIENTATION PLA IS A SCHEMATIC. ATC DID NOT CONFIRM EXISTING SITE
CONDITIONS INCLUDING, BUT NO LIMITED TO, ANTENNA AZIMUTHS, MOUNT CONFIGURATIONS AND TOWER ORIENTATION. SCALES SHOWN ARE FOR REFERENCE ONLY AND EXISTING DIMENSIONS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO INSTALLATION AND NOTIFY ATC OF ANY DISCREPANCIES.
CONTRACTOR TO ENSURE PROPER SEPARATION IN ACCORDANCE WITH AT&T'S FIRSTNET REQUIREMENTS (SEE SHEET R-602)

					\bigcirc			•		
					FINAL	L ANTENNA SCHEDULE				
	LC	CATION			ANTENNA	A SUMMARY		NON ANTENNA SUMM	ARY	
NS	SECTOR	RAD	AZ	POS	ANTENNA	BAND	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS	
ED R				A2	QD6616-7	LTE700, 1900, AWS, 5G 1900, AWS	ADD	RRH 4478 B14 RRH 8843 B2/B66A RRUS-E2 B29	RMN RMN ADD	
R .AN	ALPHA	125'	30°	А3	AIR6449 N77D AIR6419 N77G	5G CBAND	ADD ADD	-	-	
					A4	DMP65R-BU8DA	LTE700, WCS, 5G850	ADD	RHH 4449 B5/B12 RRH 4415 B30	RMN RMN
OT S,				B2	QD6616-7	LTE700, 1900, AWS, 5G 1900, AWS	ADD	RRH 4478 B14 RRH 8843 B2/B66A RRUS-E2 B29	RMN RMN ADD	
NS	BETA	125'	125'	160°	В3	AIR6449 N77D AIR6419 N77G	5G CBAND	ADD ADD	-	-
L				B4	DMP65R-BU8DA	LTE700, WCS, 5G850	ADD	RHH 4449 B5/B12 RRH 4415 B30	RMN RMN	
0				C2	QD6616-7	LTE700, 1900, AWS, 5G 1900, AWS	ADD	RRH 4478 B14 RRH 8843 B2/B66A RRUS-E2 B29	RMN RMN ADD	
	GAMMA	125'	270°	С3	AIR6449 N77D AIR6419 N77G	5G CBAND	ADD ADD	-	-	
				C4	DMP65R-BU8DA	LTE700, WCS, 5G850	ADD	RHH 4449 B5/B12 RRH 4415 B30	RMN RMN	

EXISTING FIBER DISTRIBUTIO	N/SQUID		EXISTING CABLI	NG SUMMARY	
MODEL NUMBER	STATUS	COAX	DC	FIBER	STATUS
DC6-48-6018-8F	RMN	_	7	2	RMN
DC6-48-6018-8F	RMV	-	_	_	-

STATUS ABBREVIATIONS

RMV: TO BE REMOVED

RMN: TO REMAIN

REL: TO BE RELOCATED

ADD: TO BE ADDED

CABLE LENGTHS FOR JUMPERS

JUNCTION BOX TO RRU: 15'

RRU TO ANTENNA: 10'

3	EQUIPMENT SCHEDULES
o j	

FINAL FIBER DISTRIBUTION		FINAL CABLING	G SUMMARY		
MODEL NUMBER	STATUS	COAX	DC	FIBER	STATUS
DC6-48-6018-8F	RMN	_	7	2	RMN
DC9-48-60-24-8C-EV	ADD				
DC6-48-60-18-8F	ADD	-	-	1	ADD





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	BR_	11/18/21
<u> </u>	FINAL	VL_	03/16/22
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ATC SITE NUMBER: 243036

ATC SITE NAME:
WEST HAVEN & RT 162 CT

AT&T SITE NAME:

WEST HAVEN JONES HILL ROAD

SITE ADDRESS: 668 JONES HILL ROAD WEST HAVEN.CT 06516

SEAL:

2897
CENS CONAL ENGINEERS



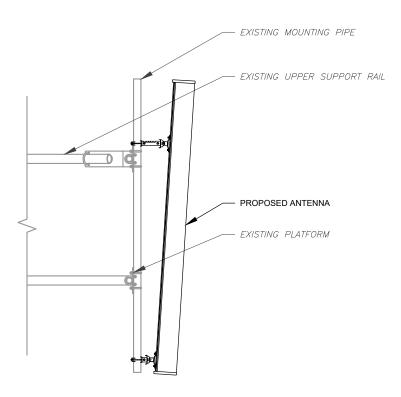
	DATE DRAWN:	11/18/21
	ATC JOB NO:	13682841_G5
	CUSTOMER ID:	CTL02899
	CUSTOMER #:	10578274

RF SCHEDULE AND ANTENNA INSTALLATION

SHEET NUMBER:

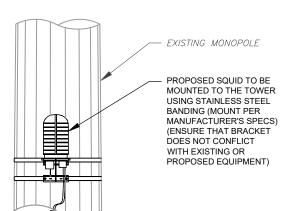
C-401

REVISION:

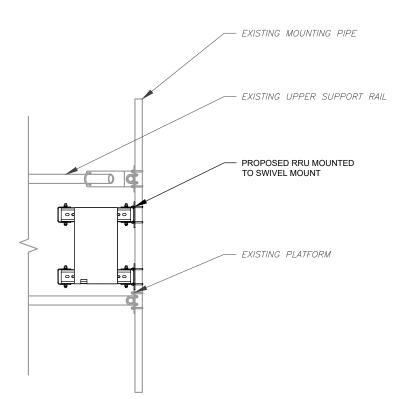


1 ANTENNA DETAIL SCALE: N.T.S.

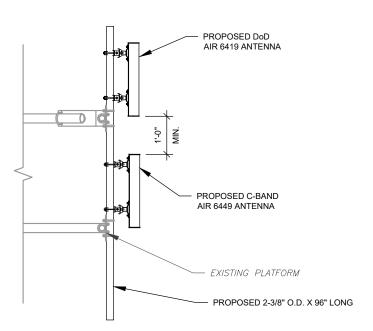
AS BUILT Centerline Communications Tristen Spear 12/1/22 8:31 AM



PROPOSED SQUID MOUNTING



PROPOSED RRU MOUNTING DETAIL - TYPICAL
SCALE: N.T.S.



PROPOSED 5G ANTENNA MOUNTING DETAIL - TYPICAL

SCALE: N.T.S.





Dewberry Engineers Inc.

99 SUMMER STREET
SUITE 700
BOSTON, MA 02110
PHONE: 617.695.3400

FAX: 617.695.3310

REV	. DESCRIPTION	BY	DATE
\triangle	PRELIM	BR	11/18/21
\Diamond	FINAL	_VL_	03/16/22
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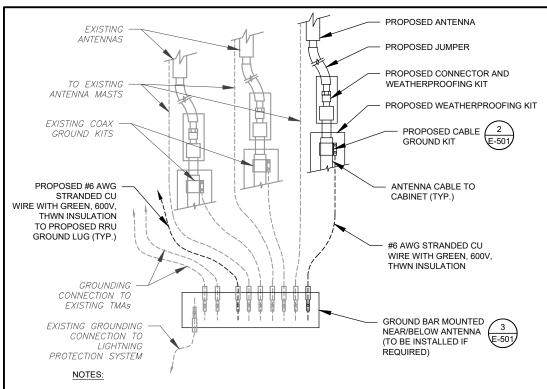
CONSTRUCTION DETAILS

SHEET NUMBER:

C-501

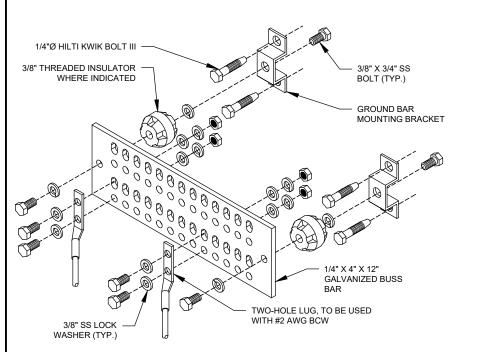
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REVISION:



- 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.
- SITE GROUNDING SHALL COMPLY WITH AT&T GROUNDING STANDARDS, LATEST EDITION, AND COMPLY WITH AT&T GROUNDING CHECKLIST, LATEST VERSION. WHEN NATIONAL AND LOCAL GROUNDING CODES ARE MORE STRINGENT THEY SHALL GOVERN.

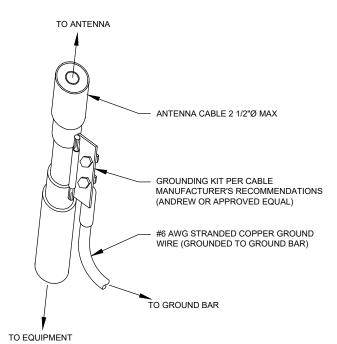




GROUND BAR NOTES

- GROUND KITS COME WITH ALL HARDWARE, NUTS, BOLTS, WASHERS, ETC. EXCEPT THE STRUCTURAL MOUNTING MEMBER(S).
- 2. GROUND BAR SHALL BE BOLTED TO STRUCTURAL MEMBER OR ANCHORED TO CONCRETE SLAB W/ HILTI KWIK BOLT III.

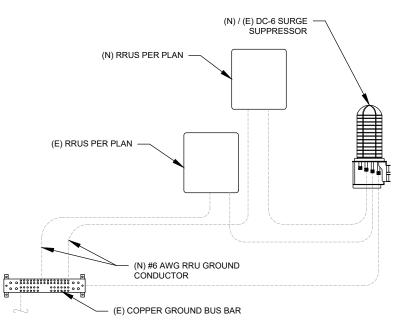


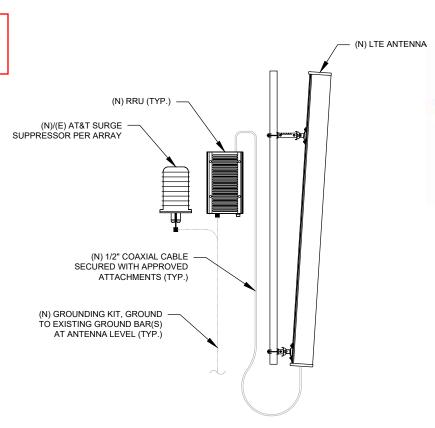


- $\frac{\text{GROUND KIT NOTES:}}{1.\quad \text{DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT}}$ GROUND WIRE DOWN TO GROUND BAR.
- 2. CONTRACTOR SHALL PROVIDE WEATHERPROOFING KIT (ANDREW PART NUMBER 221213) AND INSTALL/TAPE PER MANUFACTURER'S SPECIFICATIONS.

CABLE GROUND KIT CONNECTION DETAIL

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GROUND BAR KITS COME WITH ALL HARDWARE, NUTS, BOLTS,

TOWER GROUND BAR DETAIL

2. GROUND BAR TO BE BONDED DIRECTLY TO TOWER.

WASHERS, ETC. EXCEPT THE STRUCTURAL MOUNTING MEMBER(S).

3/8" X 1-1/2" SS BOLT

GROUND BAR NOTES:

(EACH SIDE)

3/8" SS LOCK WASHER

1/4" X 4" X 6" GROUND BAR

TWO-HOLE LUG, TO BE USED

(LOWER TOWER GROUND

WITH #2 AWG BCW

BAR ONLY)

(ERICO P/N: EGBA14406CC OR EQUAL)

ANTENNA/RRU GROUNDING



Dewberry®

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

DESCRIPTION BY DATE **PRELIM** BR 11/18/21 FINAL VL 03/16/22

> ATC SITE NUMBER: 243036

ATC SITE NAME: WEST HAVEN & RT 162 CT

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CUSTOMER #: 10578274

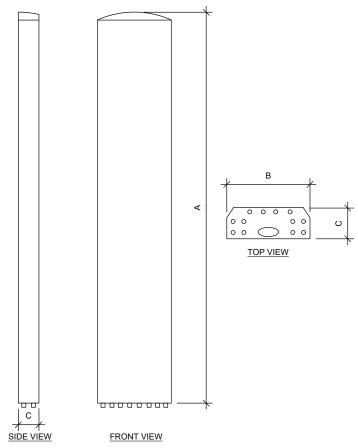
GROUNDING DETAILS

SHEET NUMBER:

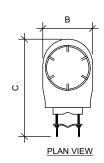
REVISION E-501

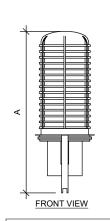


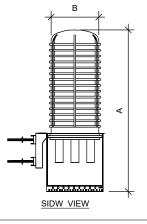
MAIN GROUND BAR DETAIL



ANTENNA SPECIFICATIONS				
				WEIGHT (LBS)
QD6616-7	96.0"	22.0"	9.6"	150.0
AIR6449 N77D	30.4"	15.9"	8.1"	81.6
AIR6419 N77G	15.7"	30.0"	6.7"	70.0
DMP65R-BU8DA	96.0"	20.7"	7.7"	95.7

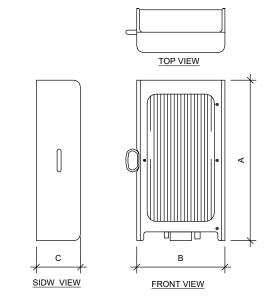






RAYCAP SPECIFICATIONS					
RAYCAP MODEL	А	В	С	WEIGHT (LBS)	
DC9-48-60-24-8C-EV	31.4"	18.3"	10.2"	16.0	
DC6-48-60-18-8F	23.5"	9.7"	9.7"	20.0	

EQUIPMENT SPECIFICATIONS
SCALE: N.T.S.



RRU SPECIFICATIONS				
RRU MODEL	А	В	С	WEIGHT (LBS)
RRUS-E2 B29	20.4"	18.5"	7.5"	60.0

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SEAL

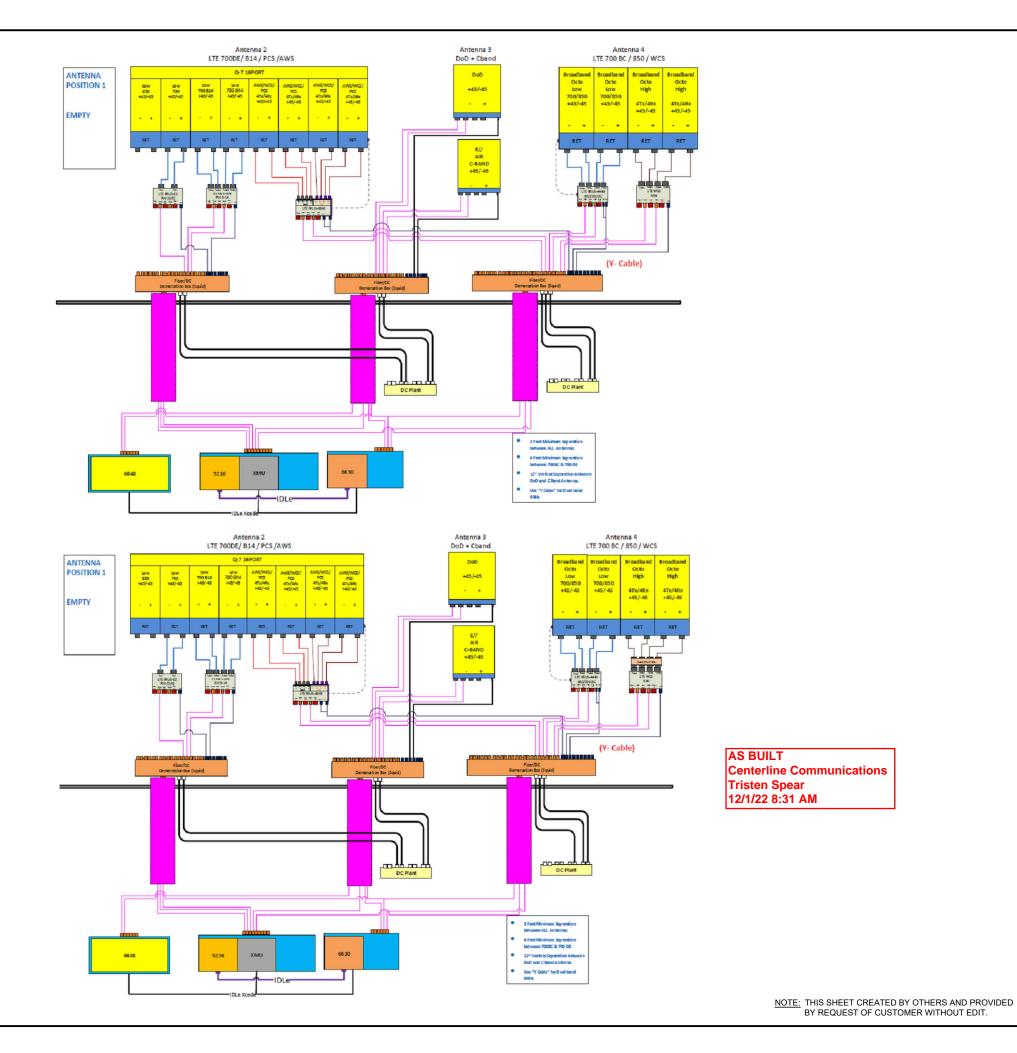


Ш	DATE DRAWN:	11/18/21
	ATC JOB NO:	13682841_G5
	CUSTOMER ID:	CTL02899
	CUSTOMER #:	10578274

SUPPLEMENTAL

SHEET NUMBER:

R-601







Dewberry Engineers Inc.
99 SUMMER STREET
SUITE 700
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SEAL:



DATE DRAWN:	11/18/21
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CUSTOMER ID:	CTL02899
CUSTOMER #:	10578274

SUPPLEMENTAL

SHEET NUMBER:

R-602



This report was prepared for American Tower Corporation by



Antenna Mount Analysis Report

ATC Site Name : West Haven & RT 162 CT

ATC Asset Number : 243036

Engineering Number : 13682841_C8_04

Mount Elevation : 125 ft

Carrier : AT&T Mobility

Carrier Site Name : MRCTB051490

Site Location : 668 Jones Hill Road

West Haven, CT 06516-6311

41.25640278, -72.97236111

County : New Haven

Date : March 11, 2022

Max Usage : 73%

Result : Contingent Pass*

*See conclusion for requirements

Prepared By:
Anudeep Meruva

Telamon Tower Engineering, PLLC

Reviewed By: William Holt, P.E.

Telamon Tower Engineering, PLLC





AS BUILT

Tristen Spear

12/1/22 8:31 AM

Centerline Communications

tclamon T • 319 Chapanoke Road, Suite 118, Raleigh, NC 27603 • Engineering@ttepllc.com

Mount Analysis for American Tower 243036 - West Haven & RT 162 CT March 11, 2022
Telamon Tower Engineering, PLLC Project #41124-13682841 C8 04-02-MA

Introduction

The proposed equipment is to be mounted to the proposed Site Pro 1 RMQLP-4120-H10 Platform w/ Reinforced Support Rail Kit & Cable. This proposed mounting configuration was analyzed using RISA-3D, a commercially available finite element analysis software package. A selection of input and output from our analysis is attached to the end of this report.

Supporting Documents

Structural Data	Site Photos dated May 11, 2020 Assembly drawings by Site Pro 1, Part Number #RMQLP-4120-H10, dated October 18, 2019 Site Pro 1 Part #SQCX4-K, dated November 12, 2018 Site Pro 1 Part #DCPxxK, dated January 22, 2013
Previous Analyses	Structural Analysis by American Tower Corporation, Eng. #13693702_C3_03, dated August 12, 2021
Loading Data	ATC Application, Project #13682841, Rev. 1 AT&T RFDS, RFDS ID #4397241, Version 3.00, dated October 25, 2021

Analysis

Codes	TIA-222-H
Basic Wind Speed	120 mph, V _{sit} (3-Second Gust)
Basic Wind Speed w/ Ice	50 mph (3-Second Gust) w/ 1" Radial Ice (Escalating)
Exposure Category	В
Topographic Factor Procedure:	Method 2
Feature:	Flat
Crest Height (H):	0 ft
Crest Length (L):	0 ft
Risk Category	II
Maintenance Live Load	L _M : 500 lb
Spectral Response	S _s : 0.20; S ₁ : 0.05; Site Class: D

Mount Analysis for American Tower

March 11, 2022

243036 - West Haven & RT 162 CT Telamon Tower Engineering, PLLC Project #41124-13682841_C8_04-02-MA

Conclusion

Based on the analysis, the antenna mount meets the requirements per the applicable codes listed above. The mounting configuration considered in this analysis will be capable of supporting the referenced loading pursuant to referenced standards once the following scope is executed:

AT&T CONMAT does not have parts which connect HSS tube to pipe and pipe to pipe threaded rod clamp kits. Hence proposing modifications parts which are not listed in the CONMAT approved list.

- Replace existing platform mount with new (1) Site Pro 1 RMQLP-4120-H10 (ANT.44987) Platform w/ Reinforced Support Rail and Cable at 125 ft elevation.
- Connect AC516-10 Air Craft cables as shown in the following assembly drawings.
- Install (4) Site Pro 1 P30120 mount pipes included in the proposed platform mount. Connect to
 platform base and support rail with Site Pro 1 SCX4 and Site Pro 1 SCX2 crossover plates included in
 the proposed mount respectively.
- Install (1) Site Pro 1 P30120 mount pipe at position 2 on each sector (3 total). Connect to proposed primary mount pipe at position 2 using proposed Site Pro 1 DCP18K threaded rod kit (3 total).
- Install (1) 6ft. long, Pipe 2 STD, A53 Gr. B, mount pipes at each sector of the platform mount (3 total) as shown. Connect to stand-off horizontal HSS tubes with (1) Site Pro 1 SQCX4-K crossover plate kits at each sector (3 total).
- Install all proposed antennas such that they are vertically centered between the support rails and face horizontal member.
- All mount pipes are to be installed as shown below in sketches.

If you have any questions or require additional information, please contact American Tower via email at Engineering@americantower.com. Please include the American Tower site name, site number, and engineering number in the subject line for any questions.

NOTE: THIS SHEET WAS CREATED BY OTHERS AND PROVIDED AT THE REQUEST OF THE CUSTOMER WITHOUT EDIT. PLEASE REFERENCE THE MOUNT ANALYSIS REPORT FOR COMPLETE MOUNT ANALYSIS CALCULATIONS AND DETAILS. SUPPLEMENTAL PAGES INCLUDED IN THE CONSTRUCTION DRAWINGS ARE FOR REFERENCE ONLY. GENERAL CONTRACTOR IS TO VERYIFY THEY HAVE THE MOST RECENT MOUNT ANALYSIS PRIOR TO CONTRUCTION.





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SUPPLEMENTAL

SHEET NUMBER:

R-603