September 21, 2022

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

Regarding: Notice of Exempt Modification – AT&T Site CT2177 / FA# 10035098
Address: 7 Broadway Avenue Extension, Mystic, CT 06355

Dear Ms. Bachman:

New Cingular Wireless, PCS, LLC ("AT&T") currently maintains a wireless telecommunications facility on an existing +/- 149' water tank at the above-referenced address, latitude 41.3495750, longitude -71.9637500. Said water tank is operated by SBA Properties, LLC.

AT&T desires to modify its existing telecommunications facility by swapping three (3) antennas, swapping six (6) remote radio units (RRUS), and adding three (3) remote radio units (RRUS), as more particularly detailed and described on the enclosed Construction Drawings prepared by Hudson Design Group, LLC, last revised August 31, 2022. The centerline height of the existing antennas is and will remain at 140 feet. This modification may include B2, B5, B17, B14, B29, B30, B66, & n77 hardware that is 4G(LTE) and/or 5GNR capable through remote software configuration and either or both services may be turned off at various times.

Please accept this letter as notification pursuant to R.C.S.A §16-50j-73 for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to the following individuals: The Honorable Danielle Chesebrough, First Selectwoman of the Town of Stonington, as elected official, Candace Palmer, Zoning Enforcement Officer of the Town of Stonington, Keith Brynes, Town Planner of the Town of Stonington, SBA Properties, LLC., as tower operator, and Planeta Properties as property owner.

The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2). Specifically:

1. The proposed modifications will not result in an increase in the height of the existing structure.

2. The proposed modifications will not require an extension of the site boundary.

3. The proposed modifications will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.

4. The operation of the modified facility will not increase radio frequency emissions at the facility to a level at or above the Federal Communications Commission safety standard. *Please see the RF emissions calculation for AT&T's modified facility enclosed herewith.*

5. The proposed modifications will not cause an ineligible change or alteration in the physical or environmental characteristics of the site.

6. The existing structure and its foundation can support the proposed loading. *Please see the structural analysis dated May 6, 2022, and prepared by Hudson Design Group, LLC, enclosed herewith.*

For the foregoing reasons, AT&T respectfully submits that the proposed modifications to the above referenced telecommunications facility constitute an exempt modification under R.C.S.A. § 16-50j-72(b)(2).

Sincerely,

Evan Renwick

Evan Renwick
Site Acquisition Specialist
Centerline Communications, LLC
750 West Center Street, Suite 301
West Bridgewater, MA 02379
erenwick@clinellc.com

Enclosures:
Exhibit 1 – Construction Drawings
Exhibit 2 – Property Card and GIS
Exhibit 3 – Structural Analysis
Exhibit 4 – RF Emissions Analysis Report Evaluation
Exhibit 5 – Original Tower Approval
Exhibit 6 – Notice Delivery Confirmations

cc: The Honorable Danielle Chesebrough, First Selectwoman, Town of Stonington, elected official
Candace Palmer, Zoning Enforcement Officer, Town of Stonington
Keith Brynes, Town Planner, Town of Stonington
SBA Properties, LLC., as tower operator
Planeta Properties, as property owner

EXHIBIT 1

PROJECT INFORMATION

SCOPE OF WORK:	ITEMS TO BE MOUNTED IN THE EXISTING SILO: • NEW AT&T ANTENNAS: DMP65R-BU4DA IN POS. 2 (TYP. OF 1 PER SECTOR, TOTAL OF 3). • NEW AT&T RRUS: 4426 B66 (AWS) (TYP. OF 1 PER SECTOR, TOTAL OF 3). • NEW AT&T RRUS: 4415 B30 (WCS) (TYP. OF 1 PER SECTOR, TOTAL OF 3). • NEW AT&T RRUS: 4449 B5/B12 (850/700) (TYP. OF 1 PER SECTOR, TOTAL OF 3). • NEW AT&T (3) Y-CABLES ITEMS TO BE MOUNTED IN EQUIPMENT LOCATION: • ADD (1) 6630 + IDLe. FINAL=1x5216, 1xXMU, 1x6630 + IDLe ITEMS TO BE REMOVED: • EXISTING AT&T ANTENNA: SBNHH-1D65A (TYP. OF 1 PER SECTOR, TOTAL OF 3). • EXISTING AT&T RRUS: RRUS-11 B12 (700) (TYP. OF 1 PER SECTOR, TOTAL OF 3). • EXISTING AT&T RRUS: RRUS-11 B4 (AWS) (TYP. OF 1 PER SECTOR, TOTAL OF 3). ITEMS TO REMAIN: • (6) ANTENNAS, (6) RRU'S, (6) TMAS, (6) LOW BAND COMBINERS, (5) SURGE ARRESTOR'S, (12) COAX CABLES, (6) DC POWER CABLES & (3) FIBER TRUNK.
SITE ADDRESS:	7 BROADWAY AVENUE EXTENSION MYSTIC, CT 06355
LATITUDE:	41.3495750° N, 41° 20' 58.47" N
LONGITUDE:	71.963750° W, 71° 57' 49.5" W
TYPE OF SITE:	WATER TANK / OUTDOOR EQUIPMENT
STRUCTURE HEIGHT:	156'-0"±
RAD CENTER:	140'-0"±
CURRENT USE:	TELECOMMUNICATIONS FACILITY
PROPOSED USE:	TELECOMMUNICATIONS FACILITY

SITE NUMBER: CTL02177
SITE NAME: SITE CT-305
FA CODE: 10035098
PACE ID: MRCTB057055, MRCTB056938, MRCTB056959, MRCTB056997
PROJECT: LTE 5C, 5G NR RADIO, BWE, ANTENNA MODIFICATIONS UPGRADE

ISSUED FOR PERMITTING

DRAWING INDEX

SHEET NO.	DESCRIPTION	REV.
T-1	TITLE SHEET	B
GN-1	GENERAL NOTES	B
A-1	COMPOUND & EQUIPMENT PLANS	B
A-2	ANTENNA LAYOUT PLANS	B
A-3	ELEVATION	B
A-4	DETAILS	B
G-1	GROUNDING DETAILS	B
RF-1	RF PLUMBING DIAGRAM	B

VICINITY MAP

DIRECTIONS TO SITE:

START OUT GOING NORTHEAST ON ENTERPRISE DR TOWARD CAPITOL BLVD. TURN LEFT ONTO CAPITOL BLVD. TURN LEFT ONTO WEST ST. MERGE ONTO I-91 S VIA THE RAMP ON THE LEFT TOWARD NEW HAVEN. MERGE ONTO CT-9 S VIA EXIT 22S ON THE LEFT TOWARD MIDDLETOWN/OLD SAYBROOK. MERGE ONTO I-95 N VIA THE EXIT ON THE LEFT TOWARD NEW LONDON/PROVIDENCE. TAKE THE ALLYN STREET EXIT, EXIT 89. TAKE THE RAMP TOWARD MYSTIC. TURN RIGHT ONTO ALLYN ST. TURN LEFT ONTO NEW LONDON RD/US-1. CONTINUE TO FOLLOW US-1. TURN RIGHT ONTO BROADWAY AVE/US-1. CONTINUE TO FOLLOW BROADWAY AVE. BROADWAY AVE BECOMES BROADWAY AVE EXT. 7 BROADWAY AVE EXT IS ON THE LEFT.

GENERAL NOTES

1. THIS DOCUMENT IS THE CREATION, DESIGN, PROPERTY AND COPYRIGHTED WORK OF AT&T. ANY DUPLICATION OR USE WITHOUT EXPRESS WRITTEN CONSENT IS STRICTLY PROHIBITED. DUPLICATION AND USE BY GOVERNMENT AGENCIES FOR THE PURPOSES OF CONDUCTING THEIR LAWFULLY AUTHORIZED REGULATORY AND ADMINISTRATIVE FUNCTIONS IS SPECIFICALLY ALLOWED.
2. THE FACILITY IS AN UNMANNED PRIVATE AND SECURED EQUIPMENT INSTALLATION. IT IS ONLY ACCESSED BY TRAINED TECHNICIANS FOR PERIODIC ROUTINE MAINTENANCE AND THEREFORE DOES NOT REQUIRE ANY WATER OR SANITARY SEWER SERVICE. THE FACILITY IS NOT GOVERNED BY REGULATIONS REQUIRING PUBLIC ACCESS PER ADA REQUIREMENTS.
3. CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE AT&T MOBILITY REPRESENTATIVE IN WRITING OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.
4. CONSTRUCTION DRAWINGS ARE VALID FOR SIX MONTHS AFTER ENGINEER OF RECORD'S STAMPED AND SIGNED SUBMITTAL DATE LISTED HEREIN.

72 HOURS

CALL
BEFORE YOU DIG
CALL TOLL FREE 1-800-922-4455
OR CALL 811

UNDERGROUND SERVICE ALERT

HUDSON Design Group LLC
45 BEECHWOOD DRIVE
NORTH ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586

CENTERLINE COMMUNICATIONS
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SCALE: AS SHOWN | DESIGNED BY: AT | DRAWN BY: TR

STATE OF CONNECTICUT · DANIEL P. HAMM · No. 24178 · LICENSED PROFESSIONAL ENGINEER

AT&T

TITLE SHEET
LTE 5C, 5G NR RADIO, BWE, ANTENNA MODIFICATIONS

SITE NUMBER	DRAWING NUMBER	REV
CTL02177	T-1	B

GROUNDING NOTES

1. THE SUBCONTRACTOR SHALL REVIEW AND INSPECT THE EXISTING FACILITY GROUNDING SYSTEM AND LIGHTNING PROTECTION SYSTEM (AS DESIGNED AND INSTALLED) FOR STRICT COMPLIANCE WITH THE NEC (AS ADOPTED BY THE AHJ), THE SITE-SPECIFIC (UL, LPI, OR NFPA) LIGHTING PROTECTION CODE, AND GENERAL COMPLIANCE WITH TELCORDIA AND TIA GROUNDING STANDARDS. THE SUBCONTRACTOR SHALL REPORT ANY VIOLATIONS OR ADVERSE FINDINGS TO THE CONTRACTOR FOR RESOLUTION.

2. ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION, AND AC POWER GES'S) SHALL BE BONDED TOGETHER, AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.

3. THE SUBCONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81 STANDARDS) FOR NEW GROUND ELECTRODE SYSTEMS. THE SUBCONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.

4. METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO BTS EQUIPMENT.

5. EACH BTS CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, #6 AWG STRANDED COPPER OR LARGER FOR INDOOR BTS AND #2 AWG STRANDED COPPER FOR OUTDOOR BTS.

6. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.

7. APPROVED ANTIOXIDANT COATINGS (I.E., CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.

8. ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO GROUND BAR.

9. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.

10. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.

11. METAL CONDUIT SHALL BE MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH #6 AWG COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.

12. ALL NEW STRUCTURES WITH A FOUNDATION AND/OR FOOTING HAVING 20 FT. OR MORE OF 1/2 IN. OR GREATER ELECTRICALLY CONDUCTIVE REINFORCING STEEL MUST HAVE IT BONDED TO THE GROUND RING USING AN EXOTHERMIC WELD CONNECTION USING #2 AWG SOLID BARE TINNED COPPER GROUND WIRE, PER NEC 250.50

GENERAL NOTES

1. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:

   CONTRACTOR – CENTERLINE
   SUBCONTRACTOR – GENERAL CONTRACTOR (CONSTRUCTION)
   OWNER – AT&T MOBILITY

2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR.

3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.

4. DRAWINGS PROVIDED HERE ARE NOT TO BE SCALED AND ARE INTENDED TO SHOW OUTLINE ONLY.

5. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.

6. "KITTING LIST" SUPPLIED WITH THE BID PACKAGE IDENTIFIES ITEMS THAT WILL BE SUPPLIED BY CONTRACTOR. ITEMS NOT INCLUDED IN THE BILL OF MATERIALS AND KITTING LIST SHALL BE SUPPLIED BY THE SUBCONTRACTOR.

7. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.

8. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE CONTRACTOR.

9. SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND T1 CABLES, GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWING. SUBCONTRACTOR SHALL UTILIZE EXISTING TRAYS AND/OR SHALL ADD NEW TRAYS AS NECESSARY. SUBCONTRACTOR SHALL CONFIRM THE ACTUAL ROUTING WITH THE CONTRACTOR.

10. THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.

11. SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.

12. SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.

13. ALL CONCRETE REPAIR WORK SHALL BE DONE IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE (ACI) 301.

14. ANY NEW CONCRETE NEEDED FOR THE CONSTRUCTION SHALL BE AIR-ENTRAINED AND SHALL HAVE 4000 PSI STRENGTH AT 28 DAYS. ALL CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH ACI 318 CODE REQUIREMENTS.

15. ALL STRUCTURAL STEEL WORK SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH AISC SPECIFICATIONS. ALL STRUCTURAL STEEL SHALL BE ASTM A36 (Fy = 36 ksi) UNLESS OTHERWISE NOTED. PIPES SHALL BE ASTM A53 TYPE E (Fy = 36 ksi). ALL STEEL EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED. TOUCH UP ALL SCRATCHES AND OTHER MARKS IN THE FIELD AFTER STEEL IS ERECTED USING A COMPATIBLE ZINC RICH PAINT.

16. CONSTRUCTION SHALL COMPLY WITH SPECIFICATIONS AND "GENERAL CONSTRUCTION SERVICES FOR CONSTRUCTION OF AT&T SITES."

17. SUBCONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS MUST BE VERIFIED. SUBCONTRACTOR SHALL NOTIFY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.

18. THE EXISTING CELL SITE IS IN FULL COMMERCIAL OPERATION. ANY CONSTRUCTION WORK BY SUBCONTRACTOR SHALL NOT DISRUPT THE EXISTING NORMAL OPERATION. ANY WORK ON EXISTING EQUIPMENT MUST BE COORDINATED WITH CONTRACTOR. ALSO, WORK SHOULD BE SCHEDULED FOR AN APPROPRIATE MAINTENANCE WINDOW USUALLY IN LOW TRAFFIC PERIODS AFTER MIDNIGHT.

19. SINCE THE CELL SITE IS ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE ADVISED TO BE WORN TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.

20. **APPLICABLE BUILDING CODES:**
    SUBCONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION. THE EDITION OF THE AHJ ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.

    BUILDING CODE: IBC 2015 WITH 2018 CT STATE BUILDING CODE AMENDMENTS
    ELECTRICAL CODE: 2017 NATIONAL ELECTRICAL CODE (NFPA 70-2017)

    SUBCONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS:

    AMERICAN CONCRETE INSTITUTE (ACI) 318; BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE;

    AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) MANUAL OF STEEL CONSTRUCTION, ASD, FOURTEENTH EDITION;

    TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-H, STRUCTURAL STANDARDS FOR STEEL

FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING MATERIAL, METHODS OF CONSTRUCTION, OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE REQUIREMENT SHALL GOVERN. WHERE THERE IS CONFLICT BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.

ABBREVIATIONS

AGL	ABOVE GRADE LEVEL	EQ	EQUAL	REQ	REQUIRED
AWG	AMERICAN WIRE GAUGE	GC	GENERAL CONTRACTOR	RF	RADIO FREQUENCY
BBU	BATTERY BACKUP UNIT	GRC	GALVANIZED RIGID CONDUIT	TBD	TO BE DETERMINED
BTCW	BARE TINNED SOLID COPPER WIRE	MGB	MASTER GROUND BAR	TBR	TO BE REMOVED
BGR	BURIED GROUND RING	MIN	MINIMUM	TBRR	TO BE REMOVED AND REPLACED
BTS	BASE TRANSCEIVER STATION	P	PROPOSED	TYP	TYPICAL
E	EXISTING	NTS	NOT TO SCALE	UG	UNDER GROUND
EGB	EQUIPMENT GROUND BAR	RAD CL	RADIATION CENTER LINE (ANTENNA)	VIF	VERIFY IN FIELD
EGR	EQUIPMENT GROUND RING	REF	REFERENCE		

HUDSON Design Group LLC
45 BEECHWOOD DRIVE
NORTH ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586

CENTERLINE COMMUNICATIONS
750 WEST CENTER STREET, SUITE #301
WEST BRIDGEWATER, MA 02379

SITE NUMBER: CTL02177
SITE NAME: SITE CT-305

7 BROADWAY AVENUE EXTENSION
MYSTIC, CT 06355
NEW LONDON COUNTY

at&t
500 ENTERPRISE DRIVE, SUITE 3A
ROCKY HILL, CT 06067

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SCALE: AS SHOWN | DESIGNED BY: AT | DRAWN BY: TR

STATE OF CONNECTICUT · DANIEL P. HAMM · No. 24178 · LICENSED PROFESSIONAL ENGINEER

AT&T

GENERAL NOTES
LTE 5C, 5G NR RADIO, BWE, ANTENNA MODIFICATIONS

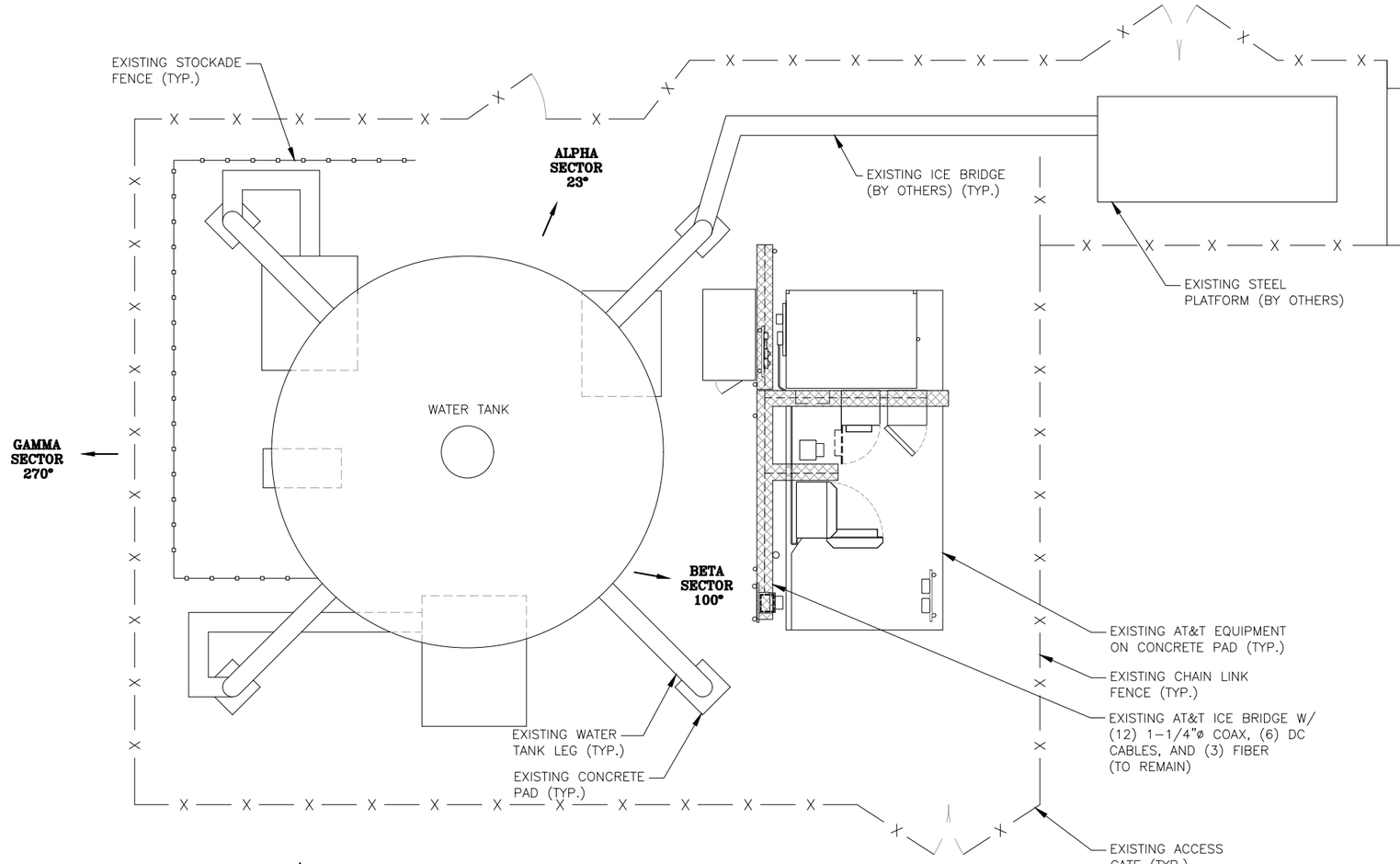
SITE NUMBER	DRAWING NUMBER	REV
CTL02177	GN-1	B

NOTE:

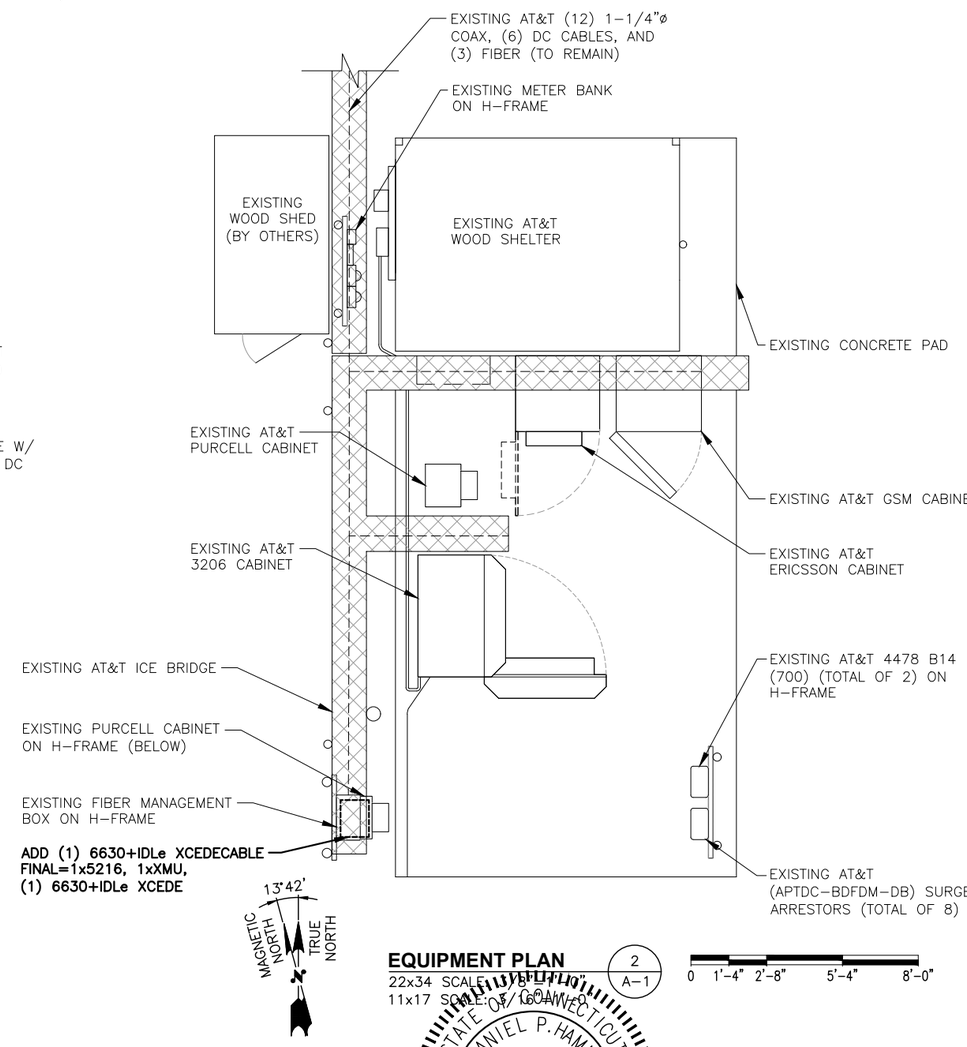
REFER TO THE FINAL RF DATA SHEET FOR FINAL ANTENNA SETTINGS.

NOTE:

AN ANALYSIS FOR THE CAPACITY OF THE EXISTING STRUCTURES TO SUPPORT THE PROPOSED EQUIPMENT SHALL BE DETERMINED PRIOR TO CONSTRUCTION.



COMPOUND PLAN (1 / A-1)
22x34 SCALE: 3/16"=1'-0"
11x17 SCALE: 3/32"=1'-0"
0 2'-8" 5'-4" 10'-8" 16'-0"



EQUIPMENT PLAN (2 / A-1)
22x34 SCALE: 3/8"=1'-0"
11x17 SCALE: 3/16"=1'-0"
0 1'-4" 2'-8" 5'-4" 8'-0"

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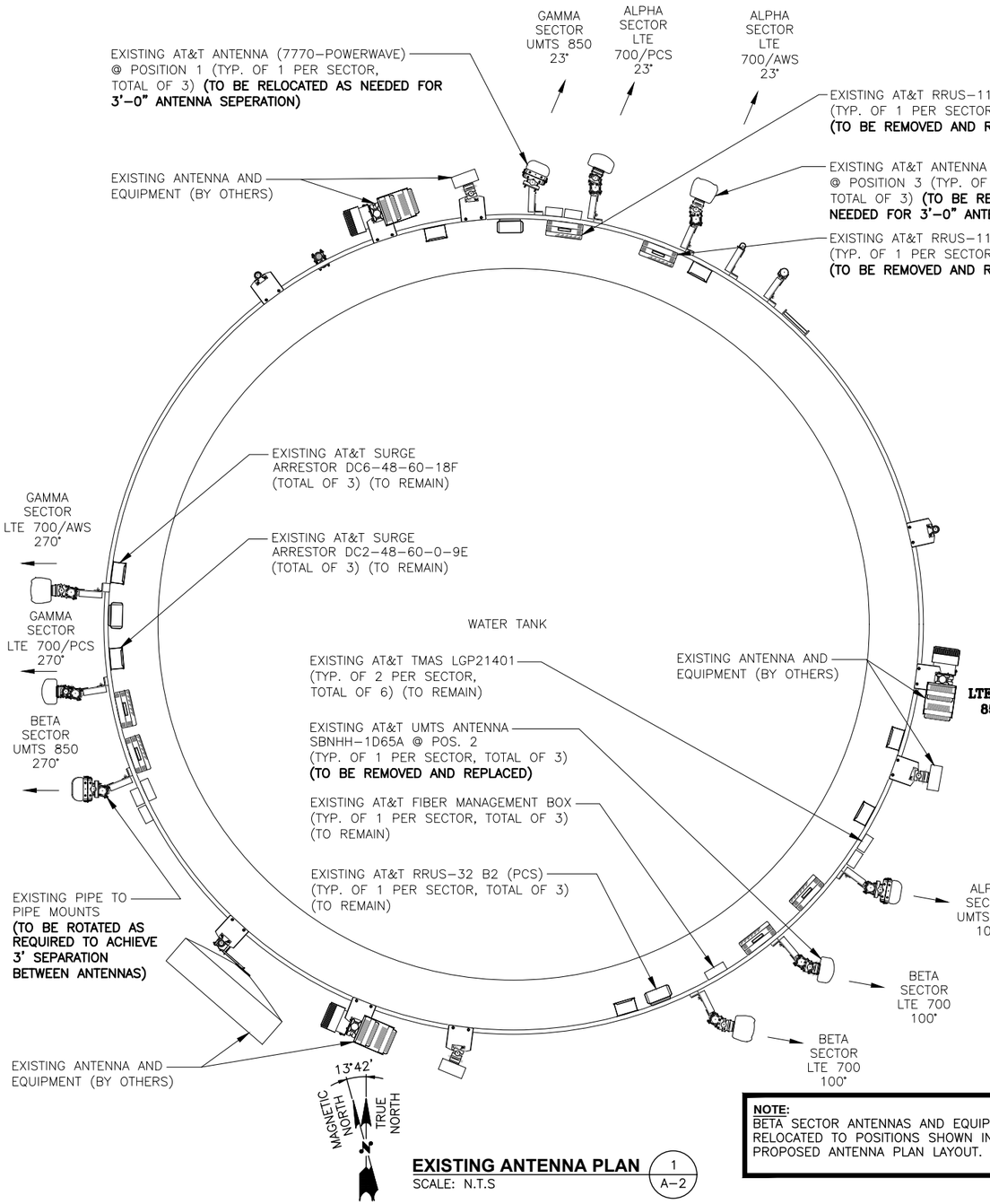
COMPOUND & EQUIPMENT PLANS
FOR LTE 5C, 5G NR RADIO, BWE, ANTENNA MODIFICATIONS

SITE NUMBER	DRAWING NUMBER	REV
CTL02177	A-1	B



EXISTING ANTENNA PLAN

1
A-2

SCALE: N.T.S

NOTE:
BETA SECTOR ANTENNAS AND EQUIPMENT TO BE RELOCATED TO POSITIONS SHOWN IN THE PROPOSED ANTENNA PLAN LAYOUT.

NOTE:
ANTENNAS AND MOUNTS TO BE ADJUSTED AS REQUIRED TO ACHIEVE A 3'-0" MINIMUM SEPARATION BETWEEN ANTENNAS

NOTE:
REFER TO THE FINAL RF DATA SHEET FOR FINAL ANTENNA SETTINGS.

NOTE:
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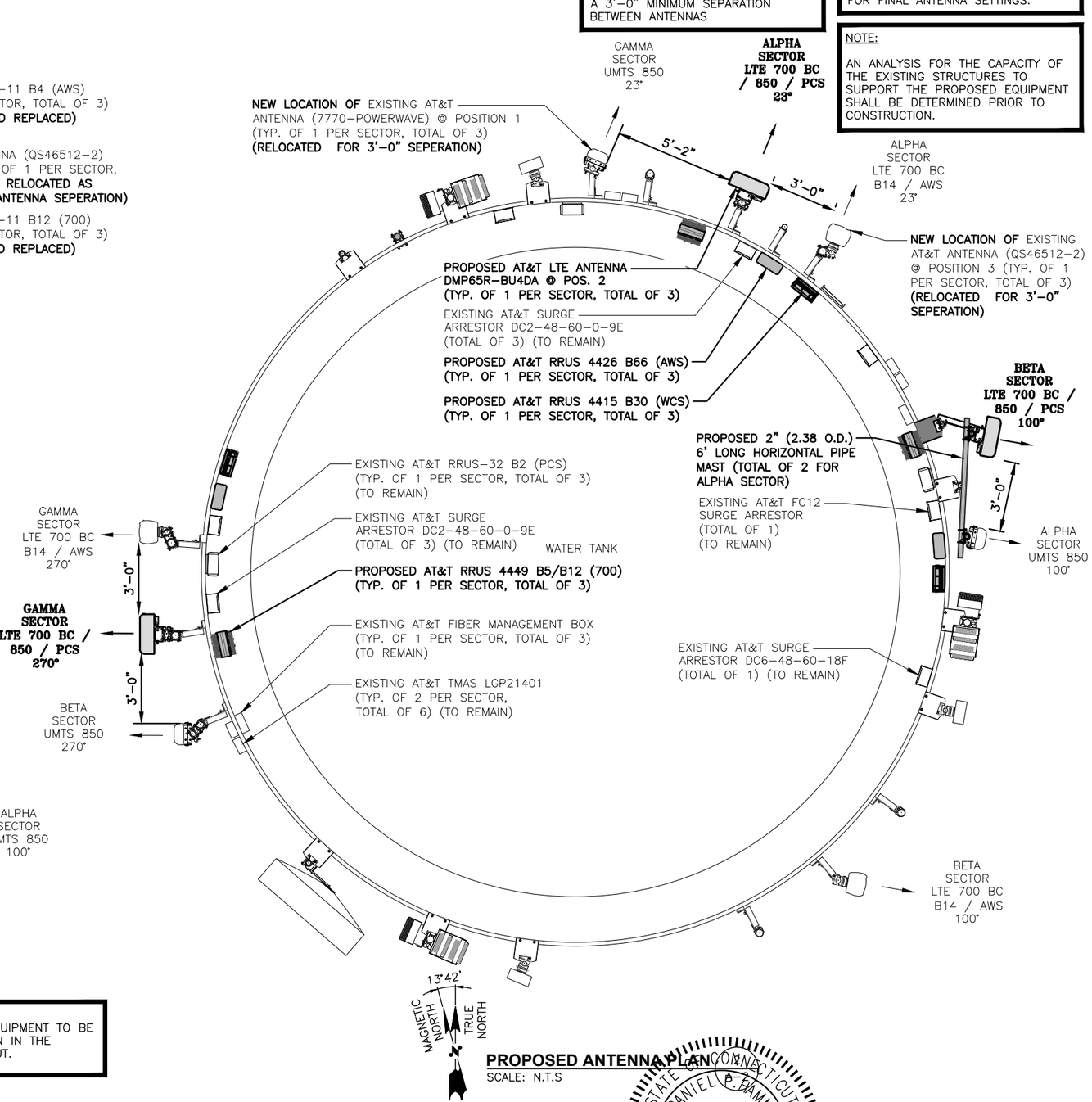

PROPOSED ANTENNA PLAN

2
A-2

SCALE: N.T.S

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45 BEECHWOOD DRIVE
NORTH ANDOVER, MA 01845
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ANTENNA LAYOUT PLANS
FOR LTE 5C, 5G NR RADIO, BWE, ANTENNA MODIFICATIONS

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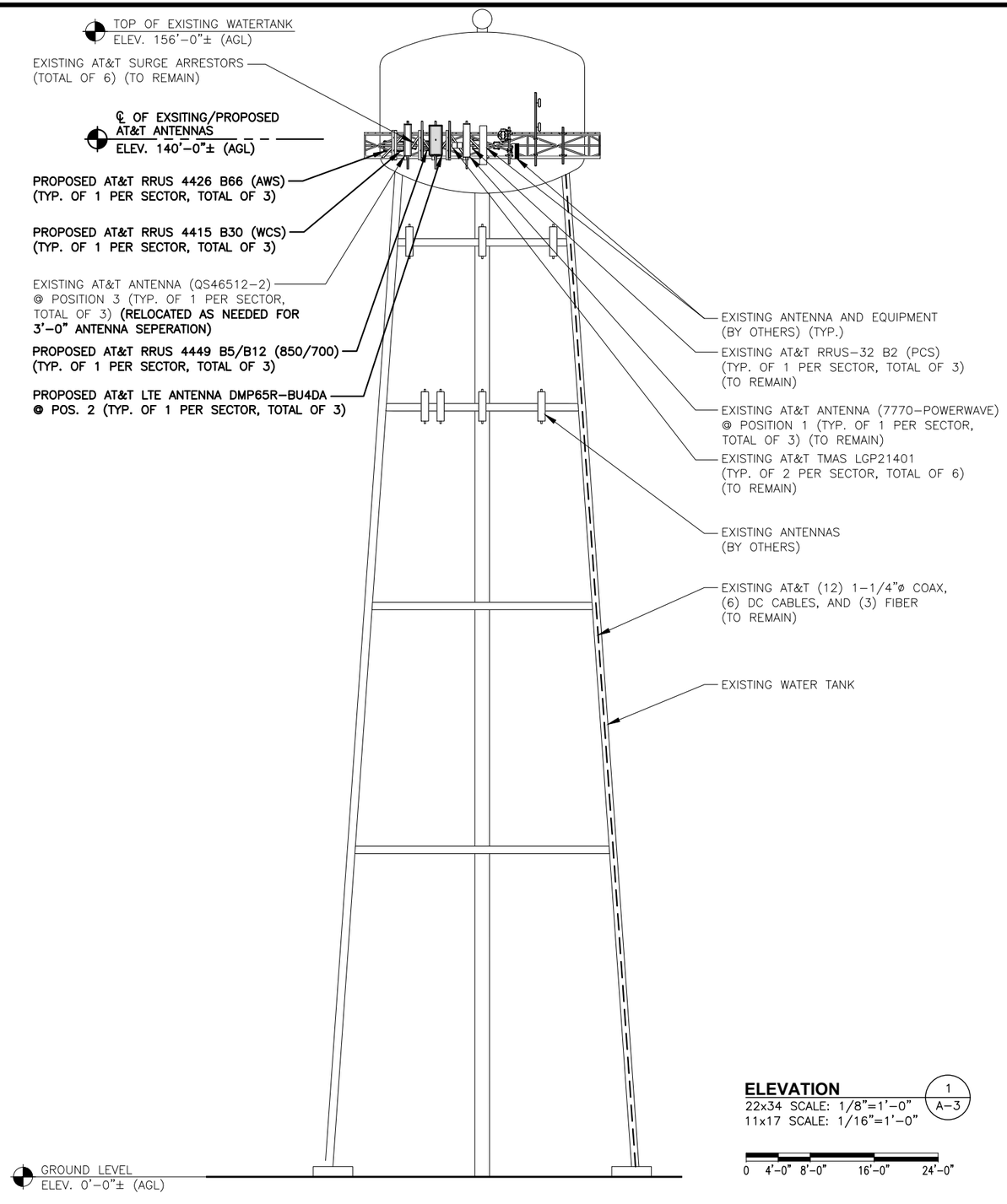
CTL02177	A-2	B



ELEVATION 1 / A-3
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11x17 SCALE: 1/16"=1'-0"

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NOTE:
ANTENNAS AND MOUNTS TO BE ADJUSTED AS REQUIRED TO ACHIEVE A 3'-0" MINIMUM SEPARATION BETWEEN ANTENNAS

HUDSON Design Group LLC
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CENTERLINE COMMUNICATIONS
750 WEST CENTER STREET, SUITE #301
WEST BRIDGEWATER, MA 02379

SITE NUMBER: CTL02177
SITE NAME: SITE CT-305

7 BROADWAY AVENUE EXTENSION
MYSTIC, CT 06355
NEW LONDON COUNTY

at&t
500 ENTERPRISE DRIVE, SUITE 3A
ROCKY HILL, CT 06067

NO.	DATE	REVISIONS	BY	CHK	APP'D
B	08/31/22	ISSUED FOR PERMITTING	KW	AT	DPH
A	04/26/22	ISSUED FOR REVIEW	TR	AT	DPH

SCALE: AS SHOWN | DESIGNED BY: AT | DRAWN BY: TR

STATE OF CONNECTICUT
DANIEL P. HAMM
No. 24178
LICENSED PROFESSIONAL ENGINEER

AT&T

LTE 5C, 5G NR RADIO, BWE, ANTENNA MODIFICATIONS

ELEVATION

SITE NUMBER	DRAWING NUMBER	REV
CTL02177	A-3	B

ANTENNA SCHEDULE

SECTOR	EXISTING/ PROPOSED	BAND	ANTENNA	SIZE (INCHES) (L x W x D)	ANTENNA ℄ HEIGHT	AZIMUTH	TMA/ DIPLEXER	RRU	SIZE (INCHES) (L x W x D)	FEEDER	RAYCAP
A1	EXISTING	UMTS 850	7770	55x11x5	140'-0"±	100°	(E)(2) LGP21401	–	–	(E)(2) 1-1/4 COAX	(E) (1) RAYCAP DC2-48-60-0-9E
A2	**PROPOSED**	**LTE 700 BC / 850 / PCS**	**DMP65R-BU4DA**	**48x20.7x7.7**	**140'-0"±**	**23°**	–	(E)(1) RRUS-32 B2 (PCS) **(P)(1) RRUS-4449 B5/B12 (850/700)**	**– 17.9X13.2X10.4**	(E)(1) FIBER (E)(1) DC POWER **(P)(1) Y-CABLES**	
A3	EXISTING	LTE 700 BC B14 / AWS	QS46512-2	52x12x10.8	140'-0"±	23°	(E)(G)(1) DBC0061F1V51-2 (E)(1) DBC0061F1V51-2	**(P)(1) 4426 B66 (AWS)** **(P)(1) 4415 B30 (WCS)** (E)(G)(1) RRUS-4478 B14 (700)	**14.9X13.2X5.8** **16.5X13.4X5.9** **–**	(E)(2) 1-1/4 COAX	
A4	–	–	–	–	–	–	–	–	–	–	
B1	EXISTING	UMTS 850	7770	55x11x5	140'-0"±	270°	(E)(2) LGP21401	–	–	(E)(2) 1-1/4 COAX	(E) (1) RAYCAP DC6-48-60-18F (E) (1) DC2-48-60-0-9E (E) (1) FC12-PC6-10E
B2	**PROPOSED**	**LTE 700 BC / 850 / PCS**	**DMP65R-BU4DA**	**48x20.7x7.7**	**140'-0"±**	**100°**	–	(E)(1) RRUS-32 B2 (PCS) **(P)(1) RRUS-4449 B5/B12 (850/700)**	–	(E)(1) FIBER (E)(1) DC POWER **(P)(1) Y-CABLES**	
B3	EXISTING	LTE 700 BC B14 / AWS	QS46512-2	52x12x10.8	140'-0"±	100°	(E)(G)(1) DBC0061F1V51-2 (E)(1) DBC0061F1V51-2	**(P)(1) 4426 B66 (AWS)** **(P)(1) 4415 B30 (WCS)** (E)(G)(1) RRUS-4478 B14 (700)	**14.9X13.2X5.8** **16.5X13.4X5.9** **–**	(E)(2) 1-1/4 COAX	
B4	–	–	–	–	–	–	–	–	–	–	
C1	EXISTING	UMTS 850	7770	55x11x5	140'-0"±	23°	(E)(2) LGP21401	–	–	(E)(2) 1-1/4 COAX	(E) (1) RAYCAP DC2-48-60-0-9E
C2	**PROPOSED**	**LTE 700 BC / 850 / PCS**	**DMP65R-BU4DA**	**48x20.7x7.7**	**140'-0"±**	**270°**	–	(E)(1) RRUS-32 B2 (PCS) **(P)(1) RRUS-4449 B5/B12 (850/700)**	–	(E)(1) FIBER (E)(1) DC POWER **(P)(1) Y-CABLES**	
C3	EXISTING	LTE 700 BC B14 / AWS	QS46512-2	52x12x10.8	140'-0"±	270°	(E)(G)(1) DBC0061F1V51-2 (E)(1) DBC0061F1V51-2	**(P)(1) 4426 B66 (AWS)** **(P)(1) 4415 B30 (WCS)** (E)(G)(1) RRUS-4478 B14 (700)	**14.9X13.2X5.8** **16.5X13.4X5.9** **–**	(E)(2) 1-1/4 COAX	
C4	–	–	–	–	–	–	–	–	–	–	

RRU CHART

QUANTITY	MODEL	SIZE (L x W x D)
(E)(3)	RRUS-32 B2 (PCS)	27.2"X12.1"X7.0"
(E)(G)(3)	4478 B14 (700)	18.1"x13.4"x8.3"
(P)(3)	**4449 B5/B12 (850/700)**	**17.9"x13.2"x10.4"**
(P)(3)	**4426 B66 (AWS)**	**14.9"x13.2"x5.8"**
P(3)	**4415 B30 (WCS)**	**16.5"x13.4"x5.9"**

NOTE:
MOUNT PER MANUFACTURER'S SPECIFICATIONS

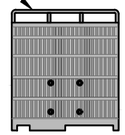
NOTE:

REFER TO THE FINAL RF DATA SHEET FOR FINAL ANTENNA SETTINGS.

NOTE:

AN ANALYSIS FOR THE CAPACITY OF THE EXISTING STRUCTURES TO SUPPORT THE PROPOSED EQUIPMENT SHALL BE DETERMINED PRIOR TO CONSTRUCTION.

PROPOSED RRU REFER TO THE FINAL RFDS AND CHART FOR QUANTITY, MODEL AND DIMENSIONS



NOTE:

SEE RFDS FOR RRH FREQUENCY AND MODEL NUMBER

NOTE:
MOUNT PER MANUFACTURER'S SPECIFICATIONS.

PROPOSED RRUS DETAIL

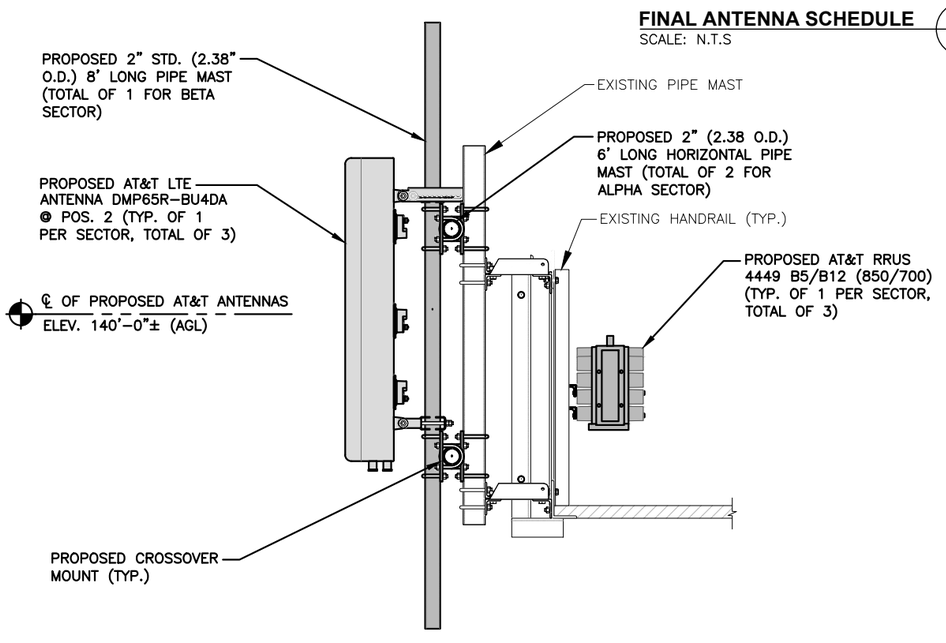
2 / A-4

SCALE: N.T.S

FINAL ANTENNA SCHEDULE

1 / A-4

SCALE: N.T.S



PROPOSED ANTENNA @ POS. 2

3 / A-4

22x34 SCALE: 1"=1'-0"
11x17 SCALE: 1/2"=1'-0"

0 0'-6" 1'-0" 2'-0" 3'-0"

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SCALE: AS SHOWN | DESIGNED BY: AT | DRAWN BY: TR

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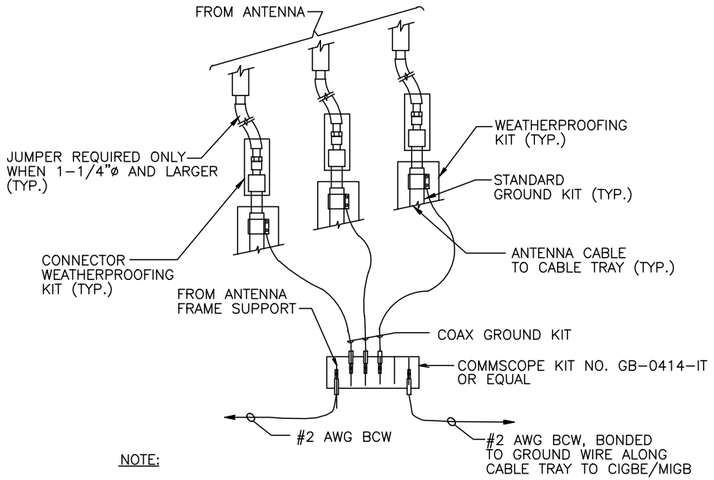
DETAILS
~~4~~ LTE 5C, 5G NR RADIO, BWE, ANTENNA MODIFICATIONS

SITE NUMBER	DRAWING NUMBER	REV
CTL02177	A-4	B

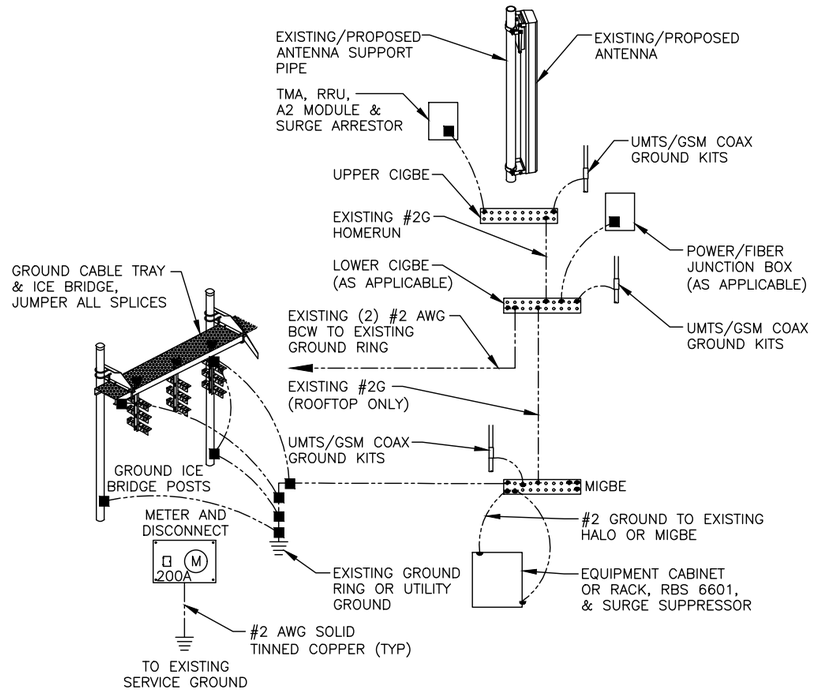


NOTE:

1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO CIGBE.

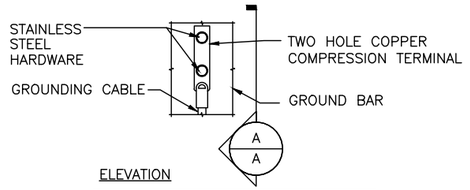
GROUND WIRE TO GROUND BAR CONNECTION DETAIL (1 / G-1)

SCALE: N.T.S



GROUNDING RISER DIAGRAM (2 / G-1)

SCALE: N.T.S



NOTES:

1. "DOUBLING UP" OR "STACKING" OF CONNECTION IS NOT PERMITTED.
2. OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATION.
3. CADWELD DOWNLEADS FROM UPPER EGB, LOWER EGB, AND MGB

TYPICAL GROUND BAR CONNECTION DETAIL (3 / G-1)

SCALE: N.T.S

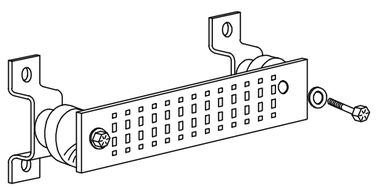
EACH GROUND CONDUCTOR TERMINATING ON ANY GROUND BAR SHALL HAVE AN IDENTIFICATION TAG ATTACHED AT EACH END THAT WILL IDENTIFY ITS ORIGIN AND DESTINATION.

SECTION "P" – SURGE PRODUCERS

CABLE ENTRY PORTS (HATCH PLATES) (#2 AWG)
GENERATOR FRAMEWORK (IF AVAILABLE) (#2 AWG)
TELCO GROUND BAR
COMMERCIAL POWER COMMON NEUTRAL/GROUND BOND (#2 AWG)
+24V POWER SUPPLY RETURN BAR (#2 AWG)
-48V POWER SUPPLY RETURN BAR (#2 AWG)
RECTIFIER FRAMES.

SECTION "A" – SURGE ABSORBERS

INTERIOR GROUND RING (#2 AWG)
EXTERNAL EARTH GROUND FIELD (BURIED GROUND RING) (#2 AWG)
METALLIC COLD WATER PIPE (IF AVAILABLE) (#2 AWG)
BUILDING STEEL (IF AVAILABLE) (#2 AWG)



GROUND BAR - DETAIL (AS REQUIRED)

SCALE: N.T.S

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SCALE: AS SHOWN | DESIGNED BY: AT | DRAWN BY: TR

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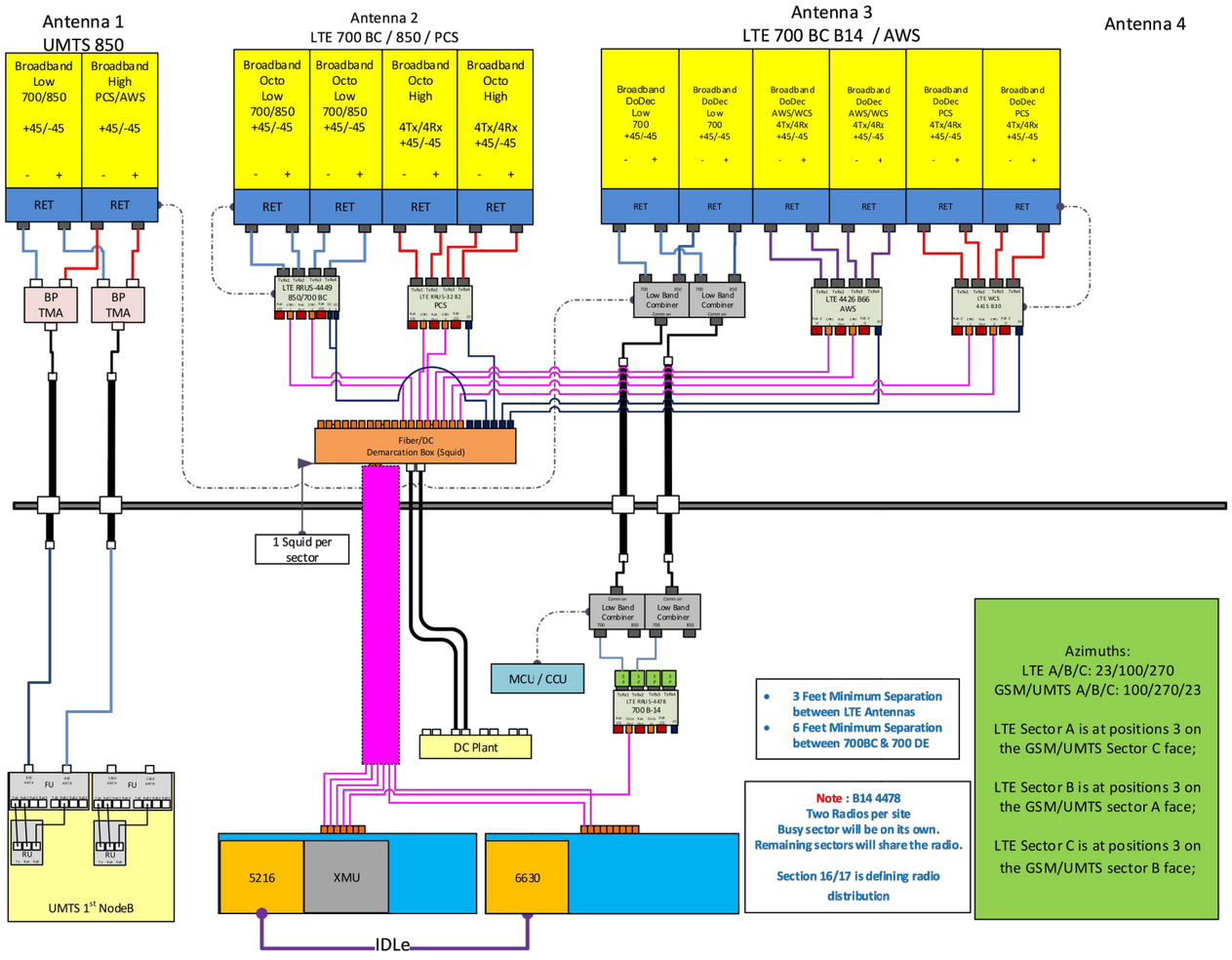
GROUNDING DETAILS
FOR LTE 5C, 5G NR RADIO, BWE, ANTENNA MODIFICATIONS

SITE NUMBER	DRAWING NUMBER	REV
CTL02177	G-1	B



RF PLUMBING DIAGRAM (1 / RF–1)
SCALE: N.T.S

NOTE:
1. CONTRACTOR TO CONFIRM ALL PARTS.
2. INSTALL ALL EQUIPMENT TO MANUFACTURER'S RECOMMENDATIONS

NOTE:
REFER TO THE FINAL RF DATA SHEET FOR FINAL ANTENNA SETTINGS.

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SCALE: AS SHOWN | DESIGNED BY: AT | DRAWN BY: TR

AT&T

RF PLUMBING DIAGRAM
LTE 5C, 5G NR RADIO, BWE, ANTENNA MODIFICATIONS

SITE NUMBER	DRAWING NUMBER	REV
CTL02177	RF–1	B

EXHIBIT 2

Town of Stonington, CT

Property Listing Report

Map Block Lot	174-22-1	Building #	1	PID	8983	Account	00664600

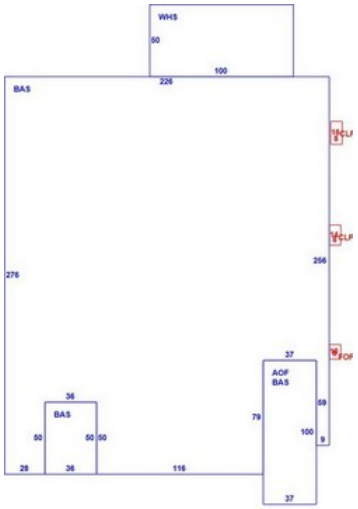
Property Information

Property Location	7 BROADWAY AVE EXT
Owner	PLANETA PROPERTIES
Co-Owner	
Mailing Address	PO BOX 218 MYSTIC CT 06355-0218
Land Use	4000 INDUSTRIAL M-96
Land Class	I
Zoning Code	M-1
Census Tract	7053

Neighborhood	3500
Acreage	4.3
Utilities	
Lot Setting/Desc	Suburban Level
Book / Page	0409/0933
Additional Info	

Photo

Sketch



Primary Construction Details

Year Built	1950
Building Desc.	INDUSTRIAL M-96
Building Style	Industrial
Building Grade	Ave/Good
Stories	1
Occupancy	1
Exterior Walls	Brick/Masonry
Exterior Walls 2	Pre-finsh Metl
Roof Style	Flat
Roof Cover	Tar & Gravel
Interior Walls	Minim/Masonry
Interior Walls 2	Drywall/Sheet
Interior Floors 1	Concr Abv Grad
Interior Floors 2	Carpet

Heating Fuel	Oil
Heating Type	Steam
AC Type	None
Bedrooms	0
Full Bathrooms	0
Half Bathrooms	0
Extra Fixtures	
Total Rooms	0
Bath Style	NA
Kitchen Style	NA
Fin Bsmt Area	
Fin Bsmt Quality	
Bsmt Gar	
Fireplaces	

(*Industrial / Commercial Details)

Building Use	Ind/Comm
Building Condition	AV
Sprinkler %	
Heat / AC	NONE
Frame Type	MASONRY
Baths / Plumbing	AVERAGE
Ceiling / Wall	CEIL & MIN WL
Rooms / Prtns	AVERAGE
Wall Height	14
First Floor Use	4000
Foundation	

Report Created On 3/23/2022

Town of Stonington, CT

Property Listing Report | Map Block Lot 174-22-1 | Building # 1 | PID 8983 | Account 00664600

Valuation Summary

(Assessed value = 70% of Appraised Value)

Item	Appraised	Assessed
Buildings	2529700	1770800
Extras	49900	35000
Improvements		
Outbuildings	259000	181200
Land	740300	518200
Total	3578900	2505200

Sub Areas

Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
Office, (Average)	3700	3700
First Floor	62973	62973
Loading Platform, Finished	240	0
Porch, Open	80	0
Warehouse	5000	3250
Total Area	71993	69923

Outbuilding and Extra Features

Type	Description
PAVING-ASPHALT	48000.00 S.F.
ELEVATED TANK	75000.00 GALS
FENCE-8' CHAIN	218.00 L.F.
W/LIGHTS ETC	64.00 S.F.
FENCE-6' CHAIN	288.00 L.F.
SHED FRAME	42.00 S.F.
SPRINKLERS-WET	64683.00 S.F.
WET/CONCEALED	6786.00 S.F.
DRY	777.00 S.F.
LOAD LEVELERS	2.00 UNITS

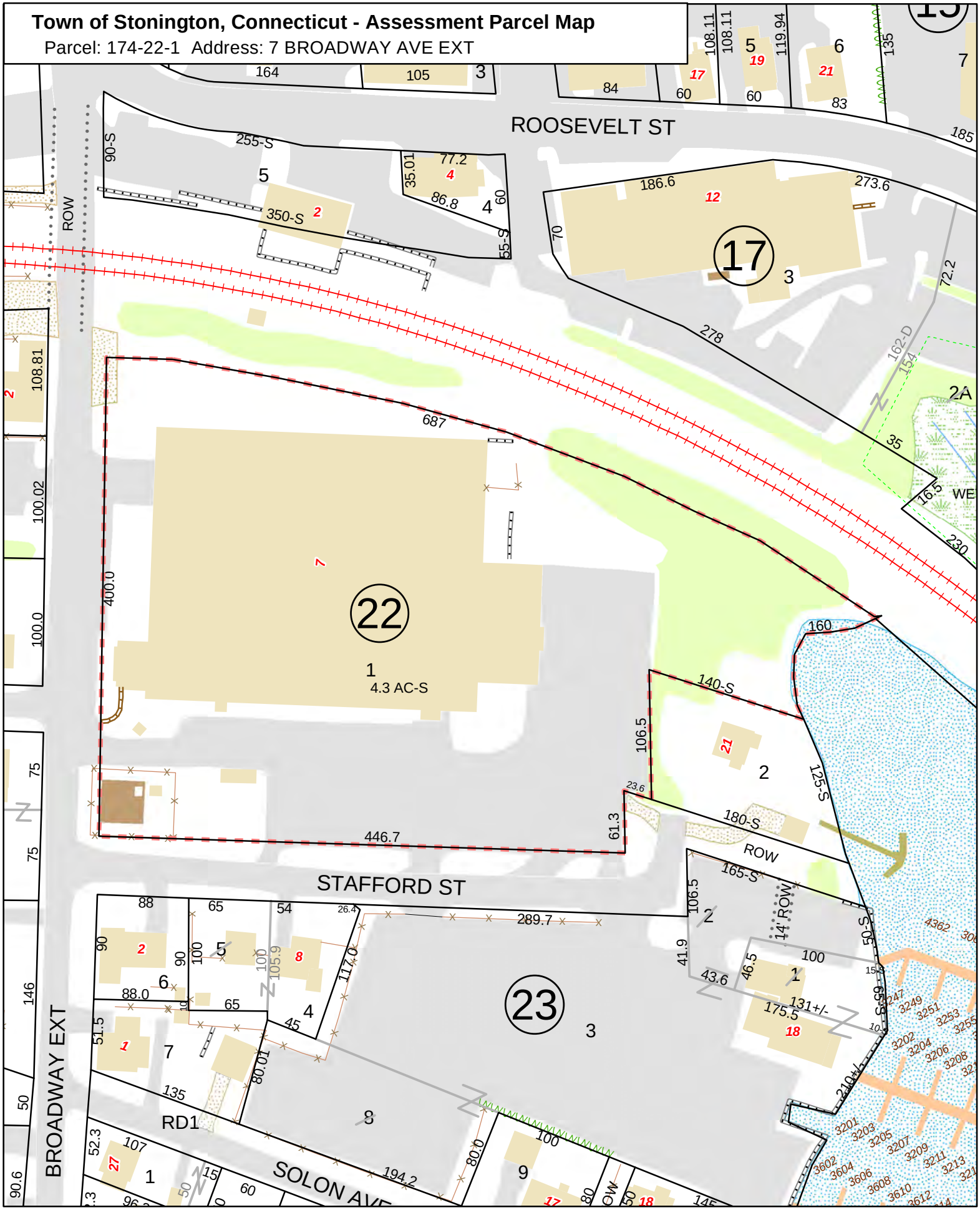
Sales History

Owner of Record	Book/ Page	Sale Date	Sale Price
PLANETA PROPERTIES	0409/0933	10/20/1997	0
PLANETA EDWARD J	0221/0680	12/29/1978	0

Report Created On 3/23/2022

Town of Stonington, Connecticut - Assessment Parcel Map

Parcel: 174-22-1 Address: 7 BROADWAY AVE EXT



Approximate Scale:

1 inch = 100 feet

0 60 120 180 240 Feet

Revised To Grand List: October 2021 Map Produced: February 2022

EXHIBIT 3

STRUCTURAL ANALYSIS REPORT

For

CT2177

SITE CT-305

7 Broadway Avenue Extension
Mystic, CT 06355

Antennas Mounted on Water Tank Catwalk Handrail; Equipment on Concrete Slab on Grade

Prepared for:

CENTERLINE COMMUNICATIONS

at&t

Dated: May 6, 2022

Prepared by:

HUDSON Design Group LLC

45 Beechwood Drive
North Andover, MA 01845
Phone: (978) 557-5553
www.hudsondesigngroupllc.com

SCOPE OF WORK:

Hudson Design Group LLC (HDG) has been authorized by AT&T to conduct a structural evaluation of the structure supporting the proposed AT&T equipment located in the areas depicted in the latest HDG construction drawings.

This report represents this office's findings, conclusions and recommendations pertaining to the support of AT&T's proposed equipment.

This office conducted an on-site visual survey of the above areas on January 3, 2022.

The following documents were used for our reference:

- Previous HDG Structural Analysis Report dated April 17, 2018.

CONCLUSION SUMMARY:

Based on our evaluation, we have determined that the existing structure **IS CAPABLE** of supporting the proposed equipment loading.

	Member	Controlling Load Case	Stress Ratio	Pass/Fail
Antenna Mount	15	LC1	83%	**PASS**

HUDSON Design Group LLC

APPURTENANCE CONFIGURATION:

Appurtenances	Dimensions	Weight	**Elevation	Mount
(3) 7770 Antennas	55.0"x11.0"x5.0"	35 lbs	140'	Catwalk Handrail
(3) QS46512-2 Antennas	52.0"x12.0"x10.8"	75 lbs	140'	Catwalk Handrail
(3) RRUS-32 B2 RRH's	27.2"x12.1"x7.0"	60 lbs	-	Catwalk Handrail
(6) LGP21401 TMA's	14.4"x9.0"x2.7"	19 lbs	-	Catwalk Handrail
(6) DBC0061F1V51-2 Diplexers	8.0"x6.2"x6.5"	26 lbs	-	Catwalk Handrail
(3) DC6-48-60-18F Surge Arrestors	20.1"x18.2"x6.4"	44 lbs	-	Catwalk Handrail
(3) DC2-48-60-0-9E Surge Arrestors	11.8"x10.0"x6.5"	16 lbs	-	Catwalk Handrail
(3) Fiber Management Boxes	18"x18.0"x8.0"	50 lbs	-	Catwalk Handrail
(3) DMP65R-BU4DA Antennas	48.0"x20.7"x7.7"	68 lbs	140'	Catwalk Handrail
(3) B5/B12 4449 RRH's	17.9"x13.2"x9.4"	73 lbs	-	Catwalk Handrail
(3) 4426 B66 RRH's	14.9"x13.2"x5.8"	49 lbs	-	Catwalk Handrail
(3) 4415 B30 RRH's	16.5"x13.4"x5.9"	46 lbs	-	Catwalk Handrail

** Proposed equipment shown in bold.*
*** Elevation to antenna centerline.*

HUDSON Design Group LLC

DESIGN CRITERIA:

International Building Code (IBC) 2015 with 2018 Connecticut State Building Code Amendments, and ASCE 7-10 (Minimum Design Loads for Buildings and Other Structures).		
Wind		
Reference Wind Speed:	145 mph	(2018 CSBC Appendix N)
Exposure Category:	D	(ASCE 7-10 Chapter 26)
Risk Category:	IV	(ASCE 7-10 Table 1.5-1)
Snow		
Ground Snow, P_g:	30	(2018 CSBC Appendix N)
Importance Factor (I_s):	1.2	(ASCE 7-10 Table 1.5-2)
Exposure Factor (C_e):	0.9	(Partially Exposed, Table 7-2)
Thermal Factor (C_t):	1.0	(ASCE 7-10 Table 7-3)
Flat Roof Snow Load:	23 psf	(ASCE 7-10 Equation 7.3-1)
Min. Flat Roof Snow Load:	30 psf	(2018 CSBC Appendix N)
EIA/TIA-222-H Structural Standards for Steel Antenna Towers and Antenna Supporting Structures		
Wind		
City/Town:	Mystic	
County:	New London	
Wind Load:	145 mph	(TIA-222-H Figure B-2)
Ice		
Design Ice Thickness (t_i):	1.0 in	(TIA-222-H Figure B-9)
Structure Class:	II	(TIA-222-H Table 2-1)
Importance Factor (I_i):	1.0	(TIA-222-H Table 2-3)
Factored Thickness of Radial Ice (t_{iz}):	1.44 in	(TIA-222-H Sec. 2.6.10)

ANTENNA SUPPORT RECOMMENDATIONS:

The new antennas are proposed to be mounted on existing pipe masts installed on existing steel frames secured to the existing catwalk handrail.

RRH SUPPORT RECOMMENDATIONS:

The new RRH's are proposed to be mounted on new unistrut components secured to the existing catwalk handrail.

Limitations and assumptions:

1. Reference the latest HDG construction drawings for all the equipment locations and details.
2. All structural members and their connections are assumed to be in good condition and are free from defects with no deterioration to its member capacities.
3. All antennas, coax cables and waveguide cables are assumed to be properly installed and supported as per the manufacturer requirements.
4. HDG is not responsible for any modifications completed prior to and hereafter which HDG was not directly involved.
5. If field conditions differ from what is assumed in this report, then the engineer of record is to be notified as soon as possible.
6. A condition assessment on the existing water tank was not part of the scope of work.

FIELD PHOTOS:

Photo 1: Sample photo illustrating the existing antennas and RRH's.

Photo 2: Sample photo illustrating the existing antennas and RRH's.

HUDSON
Design Group LLC

Wind & Ice
Calculations

Date: 5/4/2022
Project Name: SITE CT-305
Project No.: CT2177
Designed By: KM **Checked By:** MSC

HUDSON Design Group LLC

2.6.5.2 Velocity Pressure Coeff:

$K_z = 2.01\,(z/z_g)^{2/\alpha}$

z=	140	(ft)
z_g=	700	(ft)
α=	11.5	

K_z= 1.519

Kzmin ≤ Kz ≤ 2.01

Table 2-4

Exposure	Z_g	α	K_{zmin}	K_c
B	1200 ft	7.0	0.70	0.9
C	900 ft	9.5	0.85	1.0
D	700 ft	11.5	1.03	1.1

2.6.6.2 Topographic Factor:

Table 2-5

Topo. Category	K_t	f
2	0.43	1.25
3	0.53	2.0
4	0.72	1.5

$K_{zt} = [1+(K_c K_t/K_h)]^2$

$K_h = e^{(f*z/H)}$

K_{zt}= 1

K_h=	1	
K_c=	1.1	(from Table 2-4)
K_t=	0	(from Table 2-5)
f=	0	(from Table 2-5)
z=	140	
z_s=	10	(Mean elevation of base of structure above sea level)
H=	0	(Ht. of the crest above surrounding terrain)
K_{zt}=	1.00	(from 2.6.6.2.1)
K_e=	1.00	(from 2.6.8)

(If Category 1 then K_{zt}=1.0)

Category= **1**

2.6.10 Design Ice Thickness

Max Ice Thickness = t_i =	1.00	in
Importance Factor = I=	1.25	(from Table 2-3)
K_{iz} =	1.16	(from Sec. 2.6.10)

$t_{iz} = t_i * I * K_{iz} * (K_{zt})^{0.35}$

t_{iz} = 1.44 in

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2.6.9 Gust Effect Factor

2.6.9.1 Self Supporting Lattice Structures

G_h = 1.0 Latticed Structures > 600 ft

G_h = 0.85 Latticed Structures 450 ft or less

G_h = 0.85 + 0.15 [h/150 - 3.0] h= ht. of structure

h=	156	G_h=	0.85

2.6.9.2 Guyed Masts G_h= 0.85

2.6.9.3 Pole Structures G_h= 1.1

2.6.9 Appurtenances G_h= 1.0

2.6.9.4 Structures Supported on Other Structures

(Cantilivered tubular or latticed spines, pole, structures on buildings (ht. : width ratio > 5)

G_h=	1.35	**Gh=**	**1.00**

2.6.11.2 Design Wind Force on Appurtenances

$F = q_z * G_h * (EPA)_A$

q_z= $0.00256 * K_z * K_{zt} * K_s * K_e * K_d * V_{max}^2$

		K_z=	1.519	(from 2.6.5.2)
		K_{zt}=	1.0	(from 2.6.6.2.1)
		K_s=	1.0	(from 2.6.7)
q_z=	**77.66**	K_e=	1.00	(from 2.6.8)
$q_{z\ (ice)}$=	**9.23**	K_d=	0.95	(from Table 2-2)
$q_{z\ (30)}$=	**3.32**	V_{max}=	145	mph (Ultimate Wind Speed)
		$V_{max\ (ice)}$=	50	mph
		V_{30}=	30	mph

Table 2-2

Structure Type	Wind Direction Probability Factor, Kd
Latticed structures with triangular, square or rectangular cross sections	0.85
Tubular pole structures, latticed structures with other cross sections, appurtenances	0.95
Tubular pole structures supporting antennas enclosed within a cylindrical shroud	1.00

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Determine Ca:

Table 2-9

Force Coefficients (Ca) for Appurtenances				
Member Type		Aspect Ratio ≤ 2.5	Aspect Ratio = 7	Aspect Ratio ≥ 25
		Ca	Ca	Ca
Flat		1.2	1.4	2.0
Square/Rectangular HSS		1.2 - 2.8(r_s) ≥ 0.85	1.4 - 4.0(r_s) ≥ 0.90	2.0 - 6.0(r_s) ≥ 1.25
Round	C < 39 (Subcritical)	0.7	0.8	1.2
	39 ≤ C ≤ 78 (Transitional)	$4.14/(C^{0.485})$	$3.66/(C^{0.415})$	$46.8/(C^{1.0})$
	C > 78 (Supercritical)	0.5	0.6	0.6

Aspect Ratio is the overall length/width ratio in the plane normal to the wind direction.
(Aspect ratio is independent of the spacing between support points of a linear appurtenance,

Note: Linear interpolation may be used for aspect ratios other than those shown.

Ice Thickness = 1.44 in | **Angle =** 0 (deg) | **Equivalent Angle =** 180 (deg)

Appurtenances	Height	Width	Depth	Flat Area	Aspect Ratio	Ca	Force (lbs)	Force (lbs) (w/ Ice)	Force (lbs) (30 mph)
7770 Antenna	55.0	11.0	5.0	4.20	5.00	1.31	428	68	18
DMP65R-BU4DA Antenna	48.0	20.7	7.7	6.90	2.32	1.20	643	92	28
QS46512-2 Antenna	52.0	12.0	10.8	4.33	4.33	1.28	431	67	18
RRUS-32 B2 RRH	27.2	12.1	7.0	2.29	2.25	1.20	213	35	9
B5/B12 4449 RRH	17.9	13.2	9.4	1.64	1.36	1.20	153	26	7
4426 B66 RRH	14.9	13.2	5.8	1.37	1.13	1.20	127	22	5
4415 B30 RRH	16.5	13.4	5.9	1.54	1.23	1.20	143	24	6
LGP21401 TMA	14.4	2.7	9.0	0.27	5.33	1.33	28	8	1
DBC0061F1V51-2 Diplexer	8.0	6.2	6.5	0.34	1.29	1.20	32	8	1
DC6-48-60-18F Surge Arrestor	21.1	18.2	6.4	2.67	1.16	1.20	249	39	11
DC2-48-60-0-9E Surge Arrestor	11.8	10.0	6.5	0.82	1.18	1.20	76	15	3
Fiber Management Box	18.0	18.0	8.0	2.25	1.00	1.20	210	34	9
PL 2x1/4	2.0	12.0	-	0.17	0.17	1.25	16		
L 2x2 Angle	2.0	12.0	-	0.17	0.17	1.25	16		
L 3x3 Angle	3.0	12.0	-	0.25	0.25	1.25	24		
L 4x4 Angle	4.0	12.0	-	0.33	0.33	1.25	32		
L 5x3 Angle	5.0	12.0	-	0.42	0.42	1.25	40		
L 6x4 Angle	4.0	12.0	-	0.33	0.33	1.25	32		
Unistrut	1.7	12.0	-	0.14	0.14	0.70	8		
2" Pipe	2.4	12.0	-	0.20	0.20	0.70	11		
2-1/2" Pipe	2.9	12.0	-	0.24	0.24	0.70	13		
3" Pipe	3.5	12.0	-	0.29	0.29	0.70	16		

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WIND LOADS

Angle =	90	(deg)	Ice Thickness =	1.44	in.	Equivalent Angle =	270	(deg)

WIND LOADS WITH NO ICE:

Appurtenances	Height	Width	Depth	Flat Area (normal)	Flat Area (side)	Ratio (normal)	Ratio (side)	Ca (normal)	Ca (side)	Force (lbs) (normal)	Force (lbs) (side)	Force (lbs) (angle)
7770 Antenna	55.0	11.0	5.0	4.20	1.91	5.00	11.00	1.31	1.53	428	227	227
DMP65R-BU4DA Antenna	48.0	20.7	7.7	6.90	2.57	2.32	6.23	1.20	1.37	643	272	272
QS46512-2 Antenna	52.0	12.0	10.8	4.33	3.90	4.33	4.81	1.28	1.30	431	395	395
RRUS-32 B2 RRH	27.2	12.1	7.0	2.29	1.32	2.25	3.89	1.20	1.26	213	130	130
B5/B12 4449 RRH	17.9	13.2	9.4	1.64	1.17	1.36	1.90	1.20	1.20	153	109	109
4426 B66 RRH	14.9	13.2	5.8	1.37	0.60	1.13	2.57	1.20	1.20	127	56	56
4415 B30 RRH	16.5	13.4	5.9	1.54	0.68	1.23	2.80	1.20	1.21	143	64	64
LGP21401 TMA	14.4	2.7	9.0	0.27	0.90	5.33	1.60	1.33	1.20	28	84	84
DBC0061F1V51-2 Diplexer	8.0	6.2	6.5	0.34	0.36	1.29	1.23	1.20	1.20	32	34	34
DC6-48-60-18F Surge Arrestor	21.1	18.2	6.4	2.67	0.94	1.16	3.30	1.20	1.24	249	90	90
DC2-48-60-0-9E Surge Arrestor	11.8	10.0	6.5	0.82	0.53	1.18	1.82	1.20	1.20	76	50	50
Fiber Management Box	18.0	18.0	8.0	2.25	1.00	1.00	2.25	1.20	1.20	210	93	93

WIND LOADS WITH ICE:

7770 Antenna	57.9	13.9	7.9	5.58	3.17	4.17	7.34	1.27	1.41	66	41	41
DMP65R-BU4DA Antenna	50.9	23.6	10.6	8.34	3.74	2.16	4.81	1.20	1.30	92	45	45
QS46512-2 Antenna	54.9	14.9	13.7	5.68	5.22	3.69	4.01	1.25	1.27	66	61	61
RRUS-32 B2 RRH	30.1	15.0	9.9	3.13	2.07	2.01	3.04	1.20	1.22	35	23	23
B5/B12 4449 RRH	20.8	16.1	12.3	2.32	1.77	1.29	1.69	1.20	1.20	26	20	20
4426 B66 RRH	17.8	16.1	8.7	1.99	1.07	1.11	2.05	1.20	1.20	22	12	12
4415 B30 RRH	19.4	16.3	8.8	2.19	1.18	1.19	2.21	1.20	1.20	24	13	13
LGP21401 TMA	17.3	5.6	11.9	0.67	1.43	3.09	1.45	1.23	1.20	8	16	16
DBC0061F1V51-2 Diplexer	10.9	9.1	9.4	0.69	0.71	1.20	1.16	1.20	1.20	8	8	8
DC6-48-60-18F Surge Arrestor	24.0	21.1	9.3	3.51	1.55	1.14	2.58	1.20	1.20	39	17	17
DC2-48-60-0-9E Surge Arrestor	14.7	12.9	9.4	1.31	0.96	1.14	1.56	1.20	1.20	15	11	11
Fiber Management Box	20.9	20.9	10.9	3.03	1.58	1.00	1.92	1.20	1.20	34	18	18

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ICE WEIGHT CALCULATIONS

Thickness of ice: 1.44 in.
Density of ice: 56 pcf

7770 Antenna

Weight of ice based on total radial SF area:

Height (in):	55.0	
Width (in):	11.0	
Depth (in):	5.0	
Total weight of ice on object:		109 lbs
Weight of object:	35.0	lbs
Combined weight of ice and object:		144 lbs

DMP65R-BU4DA Antenna

Weight of ice based on total radial SF area:

Height (in):	48.0	
Width (in):	20.7	
Depth (in):	7.7	
Total weight of ice on object:		166 lbs
Weight of object:	68.0	lbs
Combined weight of ice and object:		234 lbs

QS46512-2 Antenna

Weight of ice based on total radial SF area:

Height (in):	52.0	
Width (in):	12.0	
Depth (in):	10.8	
Total weight of ice on object:		134 lbs
Weight of object:	75.0	lbs
Combined weight of ice and object:		209 lbs

RRUS-32 B2 RRH

Weight of ice based on total radial SF area:

Height (in):	27.2	
Width (in):	12.1	
Depth (in):	7.0	
Total weight of ice on object:		61 lbs
Weight of object:	60.0	lbs
Combined weight of ice and object:		121 lbs

B5/B12 4449 RRH

Weight of ice based on total radial SF area:

Height (in):	17.9	
Width (in):	13.2	
Depth (in):	9.4	
Total weight of ice on object:		46 lbs
Weight of object:	73.0	lbs
Combined weight of ice and object:		119 lbs

4426 B66 RRH

Weight of ice based on total radial SF area:

Height (in):	14.9	
Width (in):	13.2	
Depth (in):	5.8	
Total weight of ice on object:		35 lbs
Weight of object:	49.0	lbs
Combined weight of ice and object:		84 lbs

4415 B30 RRH

Weight of ice based on total radial SF area:

Height (in):	16.5	
Width (in):	13.4	
Depth (in):	5.9	
Total weight of ice on object:		39 lbs
Weight of object:	46.0	lbs
Combined weight of ice and object:		85 lbs

LGP21401 TMA

Weight of ice based on total radial SF area:

Height (in):	14.4	
Width (in):	2.7	
Depth (in):	9.0	
Total weight of ice on object:		23 lbs
Weight of object:	19.0	lbs
Combined weight of ice and object:		42 lbs

DBC0061F1V51-2 Diplexer

Weight of ice based on total radial SF area:

Height (in):	8.0	
Width (in):	6.2	
Depth (in):	6.5	
Total weight of ice on object:		12 lbs
Weight of object:	26.0	lbs
Combined weight of ice and object:		38 lbs

DC6-48-60-18F Surge Arrestor

Weight of ice based on total radial SF area:

Height (in):	21.1	
Width (in):	18.2	
Depth (in):	6.4	
Total weight of ice on object:		64 lbs
Weight of object:	44.0	lbs
Combined weight of ice and object:		108 lbs

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DC2-48-60-0-9E Surge Arrestor

Weight of ice based on total radial SF area:

Height (in):	11.8	
Width (in):	10.0	
Depth (in):	6.5	
Total weight of ice on object:	23	lbs
Weight of object:	16.0	lbs
Combined weight of ice and object:	39	lbs

Fiber Management Box

Weight of ice based on total radial SF area:

Height (in):	18.0	
Width (in):	18.0	
Depth (in):	8.0	
Total weight of ice on object:	56	lbs
Weight of object:	50.0	lbs
Combined weight of ice and object:	106	lbs

PL 2x1/4

Weight of ice based on total radial SF area:

Height (in):	2	
Width (in):	0.25	
Per foot weight of ice on object:	6	plf

PL 11-1/2x3/16

Weight of ice based on total radial SF area:

Height (in):	11	
Width (in):	0.1875	
Per foot weight of ice on object:	22	plf

L 2x2 Angles

Weight of ice based on total radial SF area:

Height (in):	2	
Width (in):	2	
Per foot weight of ice on object:	8	plf

L 3x3 Angles

Weight of ice based on total radial SF area:

Height (in):	3	
Width (in):	3	
Per foot weight of ice on object:	10	plf

L 4x4 Angles

Weight of ice based on total radial SF area:

Height (in):	4	
Width (in):	4	
Per foot weight of ice on object:	12	plf

L 5x3 Angles

Weight of ice based on total radial SF area:

Height (in):	5	
Width (in):	3	
Per foot weight of ice on object:	13	plf

L 6x4 Angles

Weight of ice based on total radial SF area:

Height (in):	6	
Width (in):	4	
Per foot weight of ice on object:	15	plf

Unistrut

Per foot weight of ice:

diameter (in):	1.66	
Per foot weight of ice on object:	5	plf

2" pipe

Per foot weight of ice:

diameter (in):	2.38	
Per foot weight of ice on object:	7	plf

3" Pipe

Per foot weight of ice:

diameter (in):	3.5	
Per foot weight of ice on object:	9	plf

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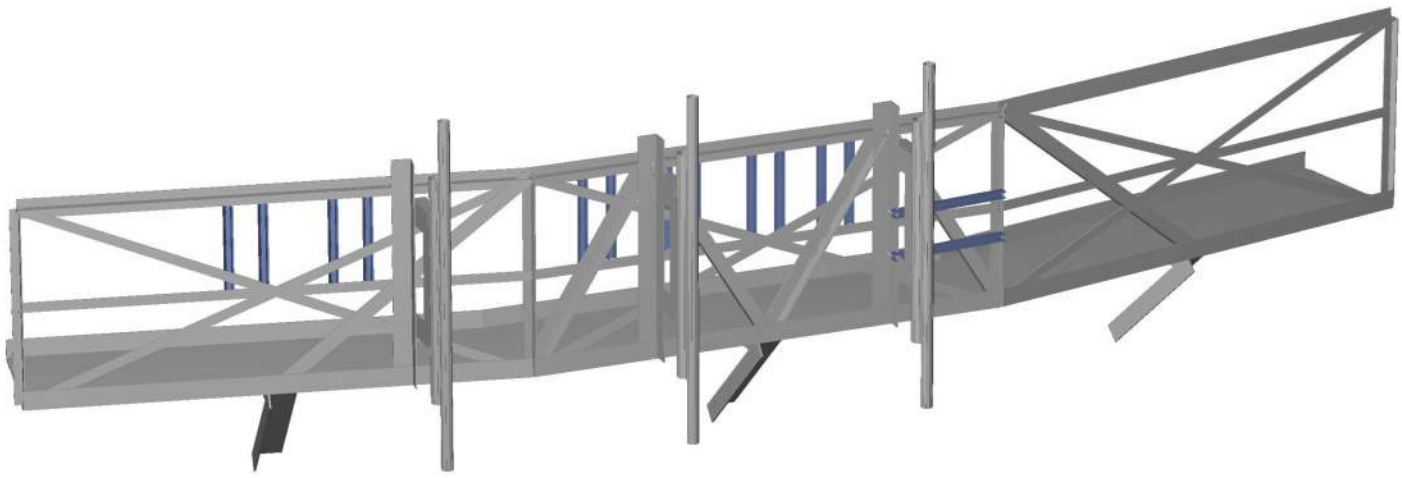
Antenna Mount
Calculations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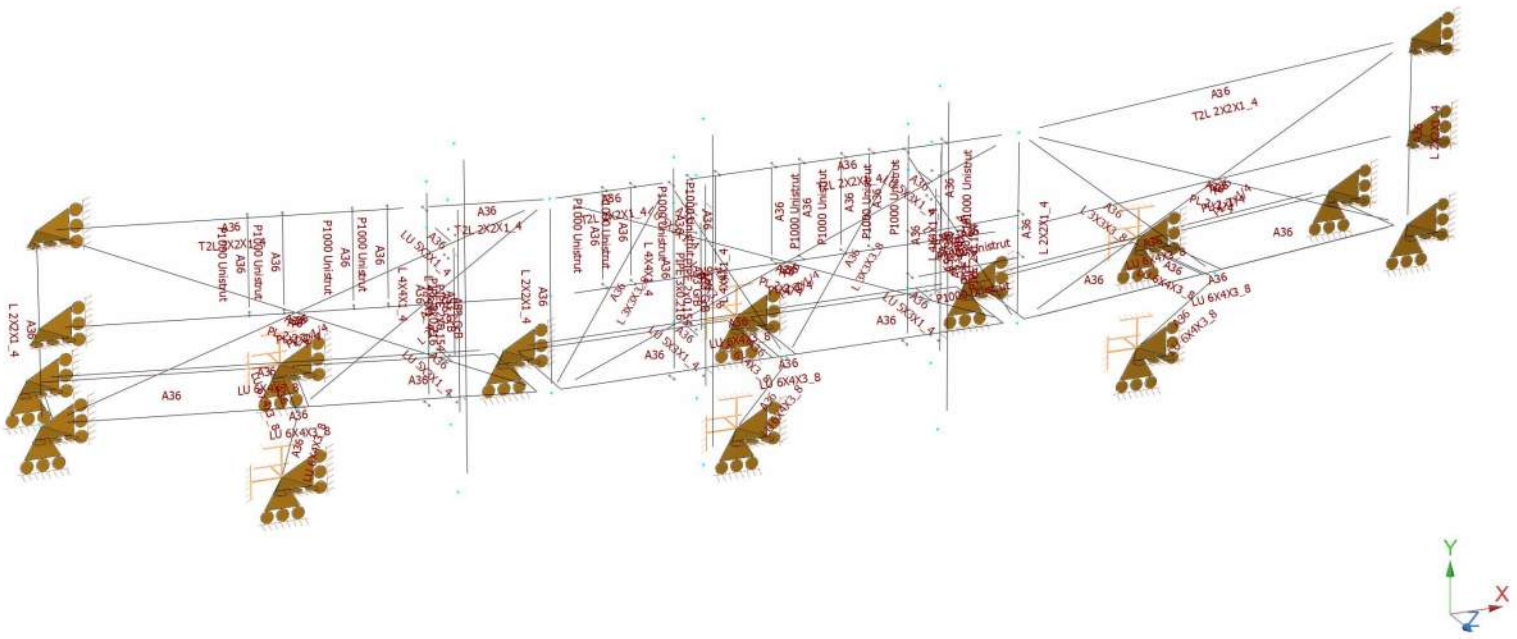
X
Z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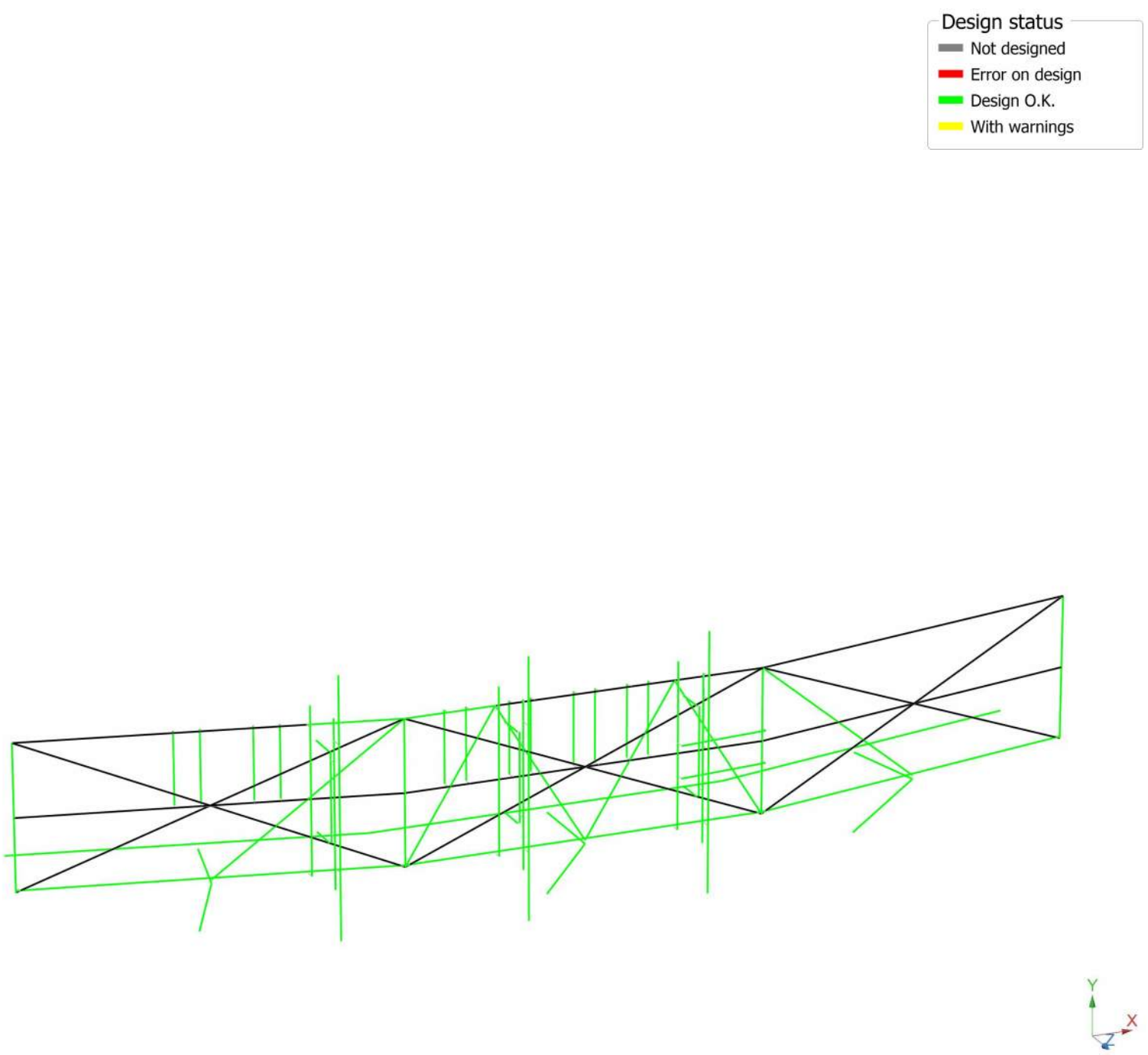
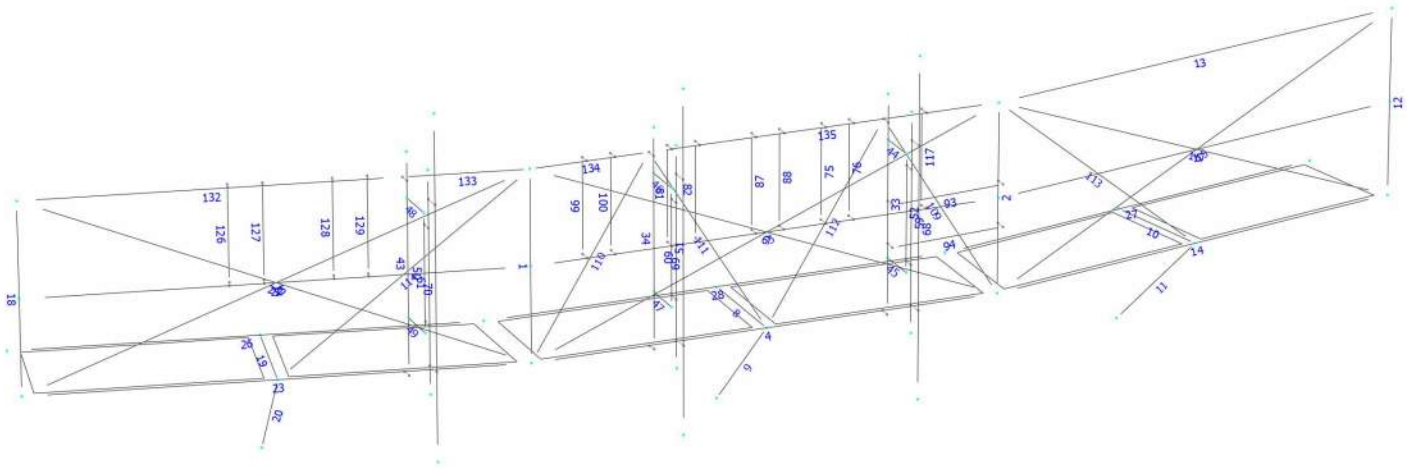
P1000 Unistrut
L 2X2X1_4
L 3X3X3_8
LU 6X4X3_8
L 4X4X1_4
LU 5X3X1_4
L 2X2X1_4
Y
X
Z


Design status
Not designed
Error on design
Design O.K.
With warnings
Y
X
Z


Y
X

Current Date: 5/5/2022 5:53 PM
Units system: English

Load data

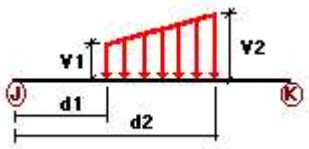
GLOSSARY

Comb : Indicates if load condition is a load combination

Load Conditions

Condition	Description	Comb.	Category
DL	Dead Load	No	DL
Wf	Wind Load (FRONT)	No	WIND
Ws	Wind Load (SIDE)	No	WIND
Wfice	Wind ICE (FRONT)	No	WIND
Wsice	Wind ICE (SIDE)	No	WIND
Di	Ice Load	No	LL

Distributed force on members

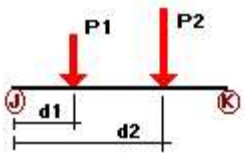


Condition	Member	Dir1	Val1 [Kip/ft]	Val2 [Kip/ft]	Dist1 [ft]	%	Dist2 [ft]	%
Wf	1	z	-0.016	-0.016	0.00	No	100.00	Yes
	2	z	-0.016	-0.016	0.00	No	100.00	Yes
	4	z	-0.032	-0.032	0.00	No	100.00	Yes
	5	z	-0.016	-0.016	0.00	No	100.00	Yes
	6	z	-0.016	-0.016	0.00	No	100.00	Yes
	7	z	-0.016	-0.016	0.00	No	100.00	Yes
	9	z	-0.032	-0.032	0.00	No	100.00	Yes
	11	z	-0.032	-0.032	0.00	No	100.00	Yes
	12	z	-0.016	-0.016	0.00	No	100.00	Yes
	13	z	-0.016	-0.016	0.00	No	100.00	Yes
	14	z	-0.032	-0.032	0.00	No	100.00	Yes
	15	z	-0.016	-0.016	0.00	No	100.00	Yes
	16	z	-0.016	-0.016	0.00	No	100.00	Yes
	17	z	-0.016	-0.016	0.00	No	100.00	Yes
	18	z	-0.016	-0.016	0.00	No	100.00	Yes
	20	z	-0.032	-0.032	0.00	No	100.00	Yes
	22	z	-0.016	-0.016	0.00	No	100.00	Yes
	23	z	-0.032	-0.032	0.00	No	100.00	Yes
	24	z	-0.016	-0.016	0.00	No	100.00	Yes
	25	z	-0.016	-0.016	0.00	No	100.00	Yes
	109	z	-0.024	-0.024	0.00	No	100.00	Yes
	110	z	-0.024	-0.024	0.00	No	100.00	Yes
	111	z	-0.024	-0.024	0.00	No	100.00	Yes
	112	z	-0.024	-0.024	0.00	No	100.00	Yes

	113	z	-0.024	-0.024	0.00	No	100.00	Yes
	114	z	-0.024	-0.024	0.00	No	100.00	Yes
	132	z	-0.016	-0.016	0.00	No	100.00	Yes
	133	z	-0.016	-0.016	0.00	No	100.00	Yes
	134	z	-0.016	-0.016	0.00	No	100.00	Yes
	135	z	-0.016	-0.016	0.00	No	100.00	Yes
Ws	1	x	-0.016	-0.016	0.00	No	100.00	Yes
	2	x	-0.016	-0.016	0.00	No	100.00	Yes
	4	x	-0.032	-0.032	0.00	No	100.00	Yes
	9	x	-0.032	-0.032	0.00	No	100.00	Yes
	11	x	-0.032	-0.032	0.00	No	100.00	Yes
	12	x	-0.016	-0.016	0.00	No	100.00	Yes
	14	x	-0.032	-0.032	0.00	No	100.00	Yes
	18	x	-0.016	-0.016	0.00	No	100.00	Yes
	20	x	-0.032	-0.032	0.00	No	100.00	Yes
	23	x	-0.032	-0.032	0.00	No	100.00	Yes
	33	x	-0.032	-0.032	0.00	No	100.00	Yes
	34	x	-0.032	-0.032	0.00	No	100.00	Yes
	43	x	-0.032	-0.032	0.00	No	100.00	Yes
	44	x	-0.04	-0.04	0.00	No	100.00	Yes
	45	x	-0.04	-0.04	0.00	No	100.00	Yes
	46	x	-0.04	-0.04	0.00	No	100.00	Yes
	47	x	-0.04	-0.04	0.00	No	100.00	Yes
	48	x	-0.04	-0.04	0.00	No	100.00	Yes
	49	x	-0.04	-0.04	0.00	No	100.00	Yes
	50	x	-0.032	-0.032	0.00	No	100.00	Yes
	51	x	-0.032	-0.032	0.00	No	100.00	Yes
	52	x	-0.032	-0.032	0.00	No	100.00	Yes
	59	x	-0.016	-0.016	0.00	No	100.00	Yes
	60	x	-0.016	-0.016	0.00	No	100.00	Yes
	61	x	-0.016	-0.016	0.00	No	100.00	Yes
	68	x	-0.011	-0.011	0.00	No	100.00	Yes
	69	x	-0.011	-0.011	0.00	No	100.00	Yes
	70	x	-0.011	-0.011	0.00	No	100.00	Yes
	75	x	-0.008	-0.008	0.00	No	100.00	Yes
	76	x	-0.008	-0.008	0.00	No	100.00	Yes
	81	x	-0.008	-0.008	0.00	No	100.00	Yes
	82	x	-0.008	-0.008	0.00	No	100.00	Yes
	87	x	-0.008	-0.008	0.00	No	100.00	Yes
	88	x	-0.008	-0.008	0.00	No	100.00	Yes
	93	x	-0.008	-0.008	0.00	No	100.00	Yes
	94	x	-0.008	-0.008	0.00	No	100.00	Yes
	99	x	-0.008	-0.008	0.00	No	100.00	Yes
	100	x	-0.008	-0.008	0.00	No	100.00	Yes
	109	x	-0.024	-0.024	0.00	No	100.00	Yes
	110	x	-0.024	-0.024	0.00	No	100.00	Yes
	111	x	-0.024	-0.024	0.00	No	100.00	Yes
	112	x	-0.024	-0.024	0.00	No	100.00	Yes
	113	x	-0.024	-0.024	0.00	No	100.00	Yes
	114	x	-0.024	-0.024	0.00	No	100.00	Yes
	117	x	-0.008	-0.008	0.00	No	100.00	Yes
	126	x	-0.008	-0.008	0.00	No	100.00	Yes
	127	x	-0.008	-0.008	0.00	No	100.00	Yes
	128	x	-0.008	-0.008	0.00	No	100.00	Yes
	129	x	-0.008	-0.008	0.00	No	100.00	Yes
Di	1	y	-0.008	-0.008	0.00	No	100.00	Yes
	2	y	-0.008	-0.008	0.00	No	100.00	Yes
	4	y	-0.015	-0.015	0.00	No	100.00	Yes
	9	y	-0.015	-0.015	0.00	No	100.00	Yes
	11	y	-0.015	-0.015	0.00	No	100.00	Yes

12	y	-0.008	-0.008	0.00	No	100.00	Yes
13	y	-0.008	-0.008	0.00	No	100.00	Yes
14	y	-0.015	-0.015	0.00	No	100.00	Yes
18	y	-0.008	-0.008	0.00	No	100.00	Yes
20	y	-0.015	-0.015	0.00	No	100.00	Yes
23	y	-0.015	-0.015	0.00	No	100.00	Yes
26	y	-0.015	-0.015	0.00	No	100.00	Yes
27	y	-0.015	-0.015	0.00	No	100.00	Yes
28	y	-0.015	-0.015	0.00	No	100.00	Yes
33	y	-0.012	-0.012	0.00	No	100.00	Yes
34	y	-0.012	-0.012	0.00	No	100.00	Yes
43	y	-0.012	-0.012	0.00	No	100.00	Yes
44	y	-0.013	-0.013	0.00	No	100.00	Yes
45	y	-0.013	-0.013	0.00	No	100.00	Yes
46	y	-0.013	-0.013	0.00	No	100.00	Yes
47	y	-0.013	-0.013	0.00	No	100.00	Yes
48	y	-0.013	-0.013	0.00	No	100.00	Yes
49	y	-0.013	-0.013	0.00	No	100.00	Yes
50	y	-0.012	-0.012	0.00	No	100.00	Yes
51	y	-0.012	-0.012	0.00	No	100.00	Yes
52	y	-0.012	-0.012	0.00	No	100.00	Yes
59	y	-0.09	-0.09	0.00	No	100.00	Yes
60	y	-0.09	-0.09	0.00	No	100.00	Yes
61	y	-0.09	-0.09	0.00	No	100.00	Yes
68	y	-0.007	-0.007	0.00	No	100.00	Yes
69	y	-0.007	-0.007	0.00	No	100.00	Yes
70	y	-0.007	-0.007	0.00	No	100.00	Yes
75	y	-0.005	-0.005	0.00	No	100.00	Yes
76	y	-0.005	-0.005	0.00	No	100.00	Yes
81	y	-0.005	-0.005	0.00	No	100.00	Yes
82	y	-0.005	-0.005	0.00	No	100.00	Yes
87	y	-0.005	-0.005	0.00	No	100.00	Yes
88	y	-0.005	-0.005	0.00	No	100.00	Yes
93	y	-0.005	-0.005	0.00	No	100.00	Yes
94	y	-0.005	-0.005	0.00	No	100.00	Yes
99	y	-0.005	-0.005	0.00	No	100.00	Yes
100	y	-0.005	-0.005	0.00	No	100.00	Yes
109	y	-0.01	-0.01	0.00	No	100.00	Yes
110	y	-0.01	-0.01	0.00	No	100.00	Yes
111	y	-0.01	-0.01	0.00	No	100.00	Yes
112	y	-0.01	-0.01	0.00	No	100.00	Yes
113	y	-0.01	-0.01	0.00	No	100.00	Yes
114	y	-0.01	-0.01	0.00	No	100.00	Yes
117	y	-0.005	-0.005	0.00	No	100.00	Yes
126	y	-0.005	-0.005	0.00	No	100.00	Yes
127	y	-0.005	-0.005	0.00	No	100.00	Yes
128	y	-0.005	-0.005	0.00	No	100.00	Yes
129	y	-0.005	-0.005	0.00	No	100.00	Yes
132	y	-0.008	-0.008	0.00	No	100.00	Yes
133	y	-0.008	-0.008	0.00	No	100.00	Yes
134	y	-0.008	-0.008	0.00	No	100.00	Yes
135	y	-0.008	-0.008	0.00	No	100.00	Yes

Concentrated forces on members



Condition	Member	Dir1	Value1 [Kip]	Dist1 [ft]	%
DL	68	y	-0.018	1.00	No
		y	-0.018	5.00	No
	69	y	-0.034	1.50	No
		y	-0.034	4.50	No
	70	y	-0.038	1.00	No
		y	-0.038	5.00	No
	75	y	-0.037	1.00	No
	76	y	-0.037	1.00	No
	81	y	-0.03	1.00	No
	82	y	-0.03	1.00	No
	87	y	-0.008	1.00	No
	88	y	-0.008	1.00	No
	93	y	-0.019	0.50	No
		y	-0.026	1.50	No
	94	y	-0.019	0.50	No
		y	-0.026	1.50	No
	99	y	-0.022	1.00	No
	100	y	-0.022	1.00	No
	117	y	-0.05	1.00	No
	126	y	-0.023	1.00	No
	127	y	-0.023	1.00	No
	128	y	-0.025	1.00	No
	129	y	-0.025	1.00	No
Wf	68	z	-0.214	1.00	No
		z	-0.214	5.00	No
	69	z	-0.322	1.50	No
		z	-0.322	4.50	No
	70	z	-0.216	1.00	No
		z	-0.216	5.00	No
	75	z	-0.077	1.00	No
	76	z	-0.077	1.00	No
	81	z	-0.107	1.00	No
	82	z	-0.107	1.00	No
	87	z	-0.038	1.00	No
	88	z	-0.038	1.00	No
	93	z	-0.028	0.50	No
		z	-0.032	1.50	No
	94	z	-0.028	0.50	No
		z	-0.032	1.50	No
	99	z	-0.125	1.00	No
	100	z	-0.125	1.00	No
	117	z	-0.21	1.00	No
	126	z	-0.072	1.00	No
	127	z	-0.072	1.00	No
	128	z	-0.064	1.00	No
	129	z	-0.064	1.00	No
Ws	68	x	-0.114	1.00	No
		x	-0.114	5.00	No
	69	x	-0.136	1.50	No
		x	-0.136	4.50	No
	70	x	-0.198	1.00	No
		x	-0.198	5.00	No
	75	x	-0.055	1.00	No
	76	x	-0.055	1.00	No

	81	x	-0.065	1.00	No
	82	x	-0.065	1.00	No
	87	x	-0.025	1.00	No
	88	x	-0.025	1.00	No
	93	x	-0.084	0.50	No
		x	-0.034	1.50	No
	94	x	-0.084	0.50	No
		x	-0.034	1.50	No
	99	x	-0.045	1.00	No
	100	x	-0.045	1.00	No
	117	x	-0.093	1.00	No
	126	x	-0.032	1.00	No
	127	x	-0.032	1.00	No
	128	x	-0.028	1.00	No
	129	x	-0.028	1.00	No
Wfice	68	z	-0.034	1.00	No
		z	-0.034	5.00	No
	69	z	-0.046	1.50	No
		z	-0.046	4.50	No
	70	z	-0.034	1.00	No
		z	-0.034	5.00	No
	75	z	-0.013	1.00	No
	76	z	-0.013	1.00	No
	81	z	-0.018	1.00	No
	82	z	-0.018	1.00	No
	87	z	-0.008	1.00	No
	88	z	-0.008	1.00	No
	93	z	-0.008	0.50	No
		z	-0.008	1.50	No
	94	z	-0.008	0.50	No
		z	-0.008	1.50	No
	99	z	-0.02	1.00	No
	100	z	-0.02	1.00	No
	117	z	-0.034	1.00	No
	126	z	-0.012	1.00	No
	127	z	-0.012	1.00	No
	128	z	-0.011	1.00	No
	129	z	-0.011	1.00	No
Wsice	68	x	-0.021	1.00	No
		x	-0.021	5.00	No
	69	x	-0.023	1.50	No
		x	-0.023	4.50	No
	70	x	-0.031	1.00	No
		x	-0.031	5.00	No
	75	x	-0.01	1.00	No
	76	x	-0.01	1.00	No
	81	x	-0.012	1.00	No
	82	x	-0.012	1.00	No
	87	x	-0.006	1.00	No
	88	x	-0.006	1.00	No
	93	x	-0.008	0.50	No
		x	-0.004	1.50	No
	94	x	-0.008	0.50	No
		x	-0.004	1.50	No
	99	x	-0.009	1.00	No
	100	x	-0.009	1.00	No
	117	x	-0.018	1.00	No
	126	x	-0.007	1.00	No
	127	x	-0.007	1.00	No
	128	x	-0.006	1.00	No

	129	x	-0.006	1.00	No
Di	68	y	-0.055	1.00	No
		y	-0.055	5.00	No
	69	y	-0.083	1.50	No
		y	-0.083	4.50	No
	70	y	-0.067	1.00	No
		y	-0.067	5.00	No
	75	y	-0.023	1.00	No
	76	y	-0.023	1.00	No
	81	y	-0.031	1.00	No
	82	y	-0.031	1.00	No
	87	y	-0.012	1.00	No
	88	y	-0.012	1.00	No
	93	y	-0.023	0.50	No
		y	-0.012	1.50	No
	94	y	-0.023	0.50	No
		y	-0.012	1.50	No
	99	y	-0.032	1.00	No
	100	y	-0.032	1.00	No
	117	y	-0.056	1.00	No
	126	y	-0.02	1.00	No
	127	y	-0.02	1.00	No
	128	y	-0.018	1.00	No
	129	y	-0.018	1.00	No

Self weight multipliers for load conditions

Condition	Description	Self weight multiplier			
		Comb.	MultX	MultY	MultZ
DL	Dead Load	No	0.00	-1.00	0.00
Wf	Wind Load (FRONT)	No	0.00	0.00	0.00
Ws	Wind Load (SIDE)	No	0.00	0.00	0.00
Wfice	Wind ICE (FRONT)	No	0.00	0.00	0.00
Wsice	Wind ICE (SIDE)	No	0.00	0.00	0.00
Di	Ice Load	No	0.00	0.00	0.00

Earthquake (Dynamic analysis only)

Condition	a/g	Ang. [Deg]	Damp. [%]
DL	0.00	0.00	0.00
Wf	0.00	0.00	0.00
Ws	0.00	0.00	0.00
Wfice	0.00	0.00	0.00
Wsice	0.00	0.00	0.00
Di	0.00	0.00	0.00

Current Date: 5/5/2022 5:53 PM
Units system: English

Steel Code Check

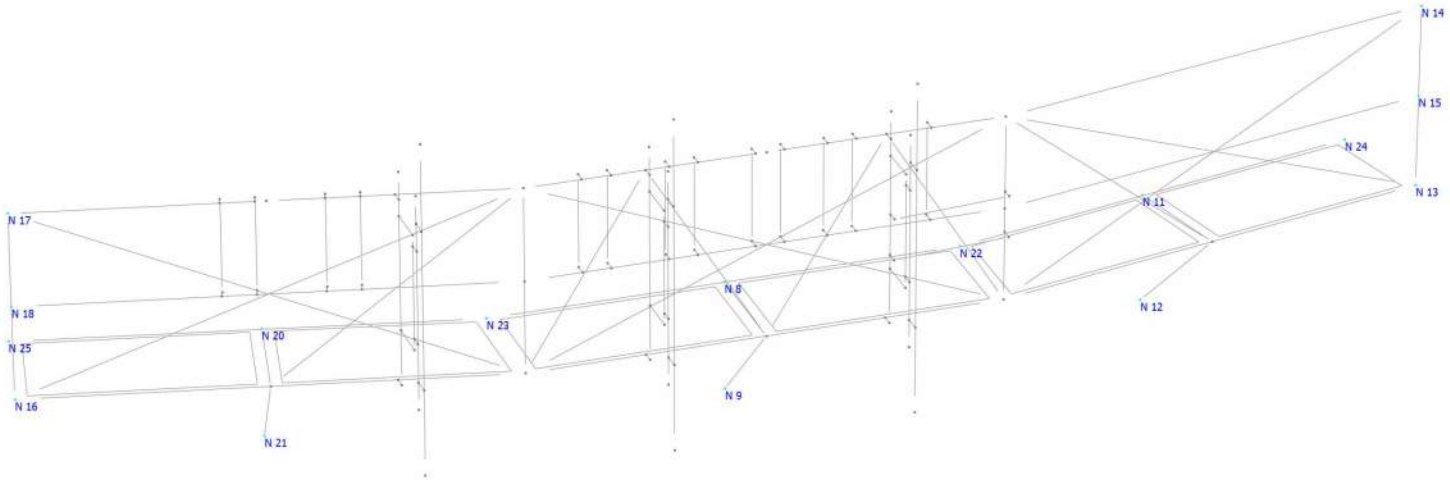
Report: Summary - Group by member

Load conditions to be included in design :

LC1=1.2DL+Wf
LC2=1.2DL+Ws
LC3=0.9DL+Wf
LC4=0.9DL+Ws
LC5=1.2DL+Wfice+Di
LC6=1.2DL+Wsice+Di
LC7=1.4DL
LC8=0.9DL

Description	Section	Member	Ctrl Eq.	Ratio	Status	Reference
	L 2X2X1_4	**1**	LC1 at 46.88%	0.07	OK	
		2	LC3 at 59.38%	**0.16**	**OK**	
		12	LC6 at 100.00%	0.05	OK	
		18	LC1 at 100.00%	0.11	OK	
	L 3X3X3_8	**109**	LC3 at 0.00%	0.14	OK	
		110	LC3 at 0.00%	0.13	OK	
		111	LC3 at 100.00%	**0.41**	**OK**	
		112	LC3 at 0.00%	0.34	OK	
		113	LC3 at 0.00%	0.09	OK	
		114	LC3 at 100.00%	0.22	OK	
	L 4X4X1_4	**33**	LC1 at 75.00%	0.06	OK	
		34	LC4 at 73.44%	0.10	OK	
		43	LC4 at 73.44%	0.12	OK	
		50	LC2 at 100.00%	**0.14**	**OK**	
		51	LC2 at 100.00%	0.10	OK	
		52	LC2 at 91.67%	0.02	OK	
	LU 5X3X1_4	**44**	LC4 at 0.00%	0.15	OK	
		45	LC2 at 100.00%	0.17	OK	
		46	LC4 at 0.00%	0.24	OK	
		47	LC2 at 100.00%	0.12	OK	
		48	LC4 at 0.00%	**0.29**	**OK**	
		49	LC2 at 100.00%	0.16	OK	
	LU 6X4X3_8	**4**	LC3 at 50.00%	0.05	OK	
		8	LC1 at 0.00%	**0.17**	**OK**	
		9	LC3 at 0.00%	0.16	OK	
		10	LC1 at 0.00%	0.04	OK	
		11	LC1 at 0.00%	0.05	OK	
		14	LC3 at 0.00%	0.06	OK	
		19	LC1 at 0.00%	0.05	OK	
		20	LC6 at 0.00%	0.04	OK	
		23	LC6 at 50.00%	0.06	OK	
		26	LC1 at 0.00%	0.02	OK	
		27	LC1 at 100.00%	0.02	OK	
		28	LC1 at 100.00%	0.02	OK	
	P1000 Unistrut	**75**	LC3 at 100.00%	0.06	OK	Eq. H1.2-1
		76	LC1 at 0.00%	0.13	OK	Eq. H1.1-1
		81	LC1 at 0.00%	0.16	OK	Eq. H1.1-1

	82	LC3 at 100.00%	0.11	OK	Eq. H1.1-1
	87	LC1 at 62.50%	0.05	OK	Eq. H1.2-1
	88	LC1 at 62.50%	0.05	OK	Eq. H1.2-1
	93	LC2 at 0.00%	0.14	OK	Eq. H1.1-1
	94	LC2 at 0.00%	**0.33**	**OK**	Eq. H1.1-1
	99	LC1 at 0.00%	0.07	OK	Eq. H1.1-1
	100	LC1 at 0.00%	0.13	OK	Eq. H1.1-1
	117	LC1 at 0.00%	0.16	OK	Eq. H1.1-1
	126	LC3 at 0.00%	0.18	OK	Eq. H1.1-1
	127	LC1 at 100.00%	0.25	OK	Eq. H1.2-1
	128	LC3 at 0.00%	0.27	OK	Eq. H1.2-1
	129	LC3 at 0.00%	0.33	OK	Eq. H1.2-1
PIPE 2x0.154	**68**	LC1 at 25.00%	0.06	OK	
	69	LC3 at 25.00%	0.03	OK	
	70	LC2 at 25.00%	**0.06**	**OK**	
PIPE 3x0.216	**59**	LC2 at 70.00%	0.03	OK	
	60	LC1 at 70.00%	0.03	OK	
	61	LC2 at 70.00%	**0.04**	**OK**	
PL 2x1/4	**5**	LC1 at 0.00%	0.22	With warnings	
	6	LC1 at 100.00%	0.22	With warnings	
	7	LC3 at 12.50%	0.25	With warnings	
	15	LC1 at 64.58%	**0.83**	**With warnings**	
	16	LC1 at 100.00%	0.69	With warnings	
	17	LC1 at 0.00%	0.57	With warnings	
	22	LC3 at 25.89%	0.66	With warnings	
	24	LC3 at 50.00%	0.72	With warnings	
	25	LC1 at 100.00%	0.65	With warnings	
T2L 2X2X1_4	**13**	LC3 at 0.00%	0.62	With warnings	
	132	LC3 at 53.75%	**0.77**	**With warnings**	
	133	LC3 at 100.00%	0.40	OK	
	134	LC3 at 0.00%	0.40	OK	
	135	LC3 at 100.00%	0.69	With warnings	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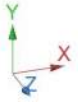
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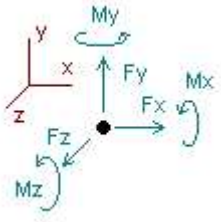
Current Date: 5/5/2022 5:53 PM
Units system: English

Analysis result

Reactions



Direction of positive forces and moments

	Forces [Kip]			Moments [Kip*ft]		
Node	**FX**	**FY**	**FZ**	**MX**	**MY**	**MZ**
Condition **LC1=1.2DL+Wf**						
8	0.07473	0.77813	1.69120	-0.47008	0.25248	0.02248
9	0.29558	-0.75024	-1.36504	-0.31655	0.17998	-0.16177
11	-0.41377	0.30038	-0.51748	-0.15255	0.06127	0.04908
12	0.23492	1.35275	1.45544	-0.02108	-0.05604	0.05601
13	-0.30260	0.09184	0.14087	0.00000	0.00000	0.00000
14	-2.38388	0.00000	0.59539	0.00000	0.00000	0.00000
15	0.01510	0.00000	0.11778	0.00000	0.00000	0.00000
16	0.10939	0.25028	0.13229	0.00000	0.00000	0.00000
17	4.26545	0.00000	1.07799	0.00000	0.00000	0.00000
18	0.06112	0.00000	0.14591	0.00000	0.00000	0.00000
20	0.27636	0.33280	0.19322	-0.19008	0.08499	-0.04158
21	0.02039	0.61028	0.54496	-0.07967	0.09642	-0.10663
22	-0.64338	0.17789	-0.09918	0.00000	0.00000	0.00000
23	0.10631	0.20508	0.09947	0.00000	0.00000	0.00000
24	-0.11322	0.03047	0.12276	0.00000	0.00000	0.00000
25	0.07536	0.03060	0.05610	0.00000	0.00000	0.00000
FEM: 197	0.07938	0.01549	-0.05983	0.00000	0.00000	0.00000
FEM: 200	-0.00901	0.02363	0.20176	0.00000	0.00000	0.00000
FEM: 213	-0.08984	-0.01394	0.06080	0.00000	0.00000	0.00000
FEM: 216	0.05706	-0.01917	0.71594	0.00000	0.00000	0.00000
FEM: 224	-0.84210	-0.01067	0.69652	0.00000	0.00000	0.00000
FEM: 231	-0.48394	-0.01156	-0.07722	0.00000	0.00000	0.00000
FEM: 235	-0.11498	0.02464	0.25641	0.00000	0.00000	0.00000
FEM: 236	-0.27445	0.01590	0.09067	0.00000	0.00000	0.00000
SUM	0.00000	3.43458	6.27671	-1.23001	0.61910	-0.18241
Condition **LC2=1.2DL+Ws**						
8	0.53860	0.16412	-0.91249	-0.07354	0.11292	0.00680
9	-0.02985	1.22025	1.37423	0.00163	-0.01968	0.01721
11	0.20699	0.13269	-0.06466	-0.03234	0.11529	0.02154
12	0.02450	-0.13600	-0.19665	-0.02339	0.03251	-0.02480
13	0.21823	0.14338	-0.00112	0.00000	0.00000	0.00000
14	0.25685	0.00000	-0.05183	0.00000	0.00000	0.00000
15	0.23367	0.00000	-0.04185	0.00000	0.00000	0.00000
16	0.31255	0.19847	0.06843	0.00000	0.00000	0.00000
17	-0.97802	0.00000	-0.19527	0.00000	0.00000	0.00000
18	-0.06005	0.00000	-0.02495	0.00000	0.00000	0.00000
20	0.46930	0.14689	-0.54868	-0.06664	0.09303	-0.02012

21	-0.13716	1.16212	1.22167	-0.02897	0.09340	-0.09230
22	0.41564	0.10954	-0.05379	0.00000	0.00000	0.00000
23	0.55324	0.11310	-0.08561	0.00000	0.00000	0.00000
24	-0.02055	0.03075	-0.05408	0.00000	0.00000	0.00000
25	0.10374	0.03081	0.06658	0.00000	0.00000	0.00000
FEM: 197	0.11560	0.01319	0.08548	0.00000	0.00000	0.00000
FEM: 200	0.04180	0.02367	0.05957	0.00000	0.00000	0.00000
FEM: 213	0.45798	0.00243	-0.14215	0.00000	0.00000	0.00000
FEM: 216	0.38740	0.01691	-0.14816	0.00000	0.00000	0.00000
FEM: 224	0.47683	0.02149	-0.19474	0.00000	0.00000	0.00000
FEM: 231	0.31635	0.00392	-0.01023	0.00000	0.00000	0.00000
FEM: 235	0.13824	0.02370	-0.06633	0.00000	0.00000	0.00000
FEM: 236	0.09311	0.01314	-0.08338	0.00000	0.00000	0.00000
SUM	4.13498	3.43458	0.00000	-0.22325	0.42747	-0.09167

Condition **LC3=0.9DL+Wf**

8	0.05810	0.73884	1.92539	-0.45272	0.23744	0.02172
9	0.29954	-1.08574	-1.73296	-0.31131	0.17944	-0.16126
11	-0.40580	0.26246	-0.45315	-0.14105	0.04261	0.04340
12	0.21934	1.27584	1.38028	-0.01686	-0.05574	0.05482
13	-0.28699	0.06811	0.12867	0.00000	0.00000	0.00000
14	-2.45384	0.00000	0.61064	0.00000	0.00000	0.00000
15	0.01883	0.00000	0.11622	0.00000	0.00000	0.00000
16	0.08408	0.21428	0.12272	0.00000	0.00000	0.00000
17	4.45654	0.00000	1.12032	0.00000	0.00000	0.00000
18	0.05983	0.00000	0.14563	0.00000	0.00000	0.00000
20	0.23563	0.29909	0.30390	-0.17830	0.08133	-0.03657
21	0.04461	0.43503	0.36460	-0.07374	0.08356	-0.09350
22	-0.65260	0.15046	-0.08211	0.00000	0.00000	0.00000
23	0.09369	0.17781	0.11897	0.00000	0.00000	0.00000
24	-0.09988	0.02278	0.12421	0.00000	0.00000	0.00000
25	0.05926	0.02291	0.05317	0.00000	0.00000	0.00000
FEM: 197	0.07585	0.01215	-0.06208	0.00000	0.00000	0.00000
FEM: 200	0.00529	0.01774	0.20789	0.00000	0.00000	0.00000
FEM: 213	-0.12049	-0.01476	0.09702	0.00000	0.00000	0.00000
FEM: 216	0.07024	-0.02421	0.75619	0.00000	0.00000	0.00000
FEM: 224	-0.86705	-0.01570	0.74501	0.00000	0.00000	0.00000
FEM: 231	-0.48583	-0.01245	-0.07019	0.00000	0.00000	0.00000
FEM: 235	-0.13199	0.01869	0.26002	0.00000	0.00000	0.00000
FEM: 236	-0.27634	0.01263	0.09637	0.00000	0.00000	0.00000
SUM	0.00000	2.57593	6.27671	-1.17398	0.56863	-0.17140

Condition **LC4=0.9DL+Ws**

8	0.52248	0.12576	-0.68389	-0.05684	0.09842	0.00606
9	-0.02688	0.89543	1.01846	0.00686	-0.02078	0.01823
11	0.21649	0.09510	-0.00201	-0.02100	0.09706	0.01591
12	0.00837	-0.21309	-0.27170	-0.01900	0.03243	-0.02569
13	0.23725	0.11237	-0.01428	0.00000	0.00000	0.00000
14	0.17106	0.00000	-0.03307	0.00000	0.00000	0.00000
15	0.22744	0.00000	-0.04115	0.00000	0.00000	0.00000
16	0.28610	0.15524	0.05824	0.00000	0.00000	0.00000
17	-0.78288	0.00000	-0.15064	0.00000	0.00000	0.00000
18	-0.04239	0.00000	-0.02134	0.00000	0.00000	0.00000
20	0.42689	0.11225	-0.44311	-0.05431	0.08912	-0.01506
21	-0.11319	0.99068	1.04570	-0.02292	0.08109	-0.07965
22	0.40917	0.08206	-0.03846	0.00000	0.00000	0.00000
23	0.53790	0.08565	-0.06919	0.00000	0.00000	0.00000

24	-0.00709	0.02306	-0.05271	0.00000	0.00000	0.00000
25	0.08751	0.02312	0.06351	0.00000	0.00000	0.00000
FEM: 197	0.11184	0.00984	0.08355	0.00000	0.00000	0.00000
FEM: 200	0.05551	0.01778	0.06462	0.00000	0.00000	0.00000
FEM: 213	0.42640	0.00162	-0.11143	0.00000	0.00000	0.00000
FEM: 216	0.39745	0.01192	-0.10640	0.00000	0.00000	0.00000
FEM: 224	0.45492	0.01649	-0.14817	0.00000	0.00000	0.00000
FEM: 231	0.31663	0.00303	-0.00501	0.00000	0.00000	0.00000
FEM: 235	0.12219	0.01774	-0.06343	0.00000	0.00000	0.00000
FEM: 236	0.09183	0.00987	-0.07811	0.00000	0.00000	0.00000
SUM	4.13498	2.57593	0.00000	-0.16720	0.37733	-0.08020

Condition **LC5=1.2DL+Wfice+Di**

8	0.10390	0.27852	-1.28865	-0.13412	0.11304	0.00648
9	-0.00108	2.02943	2.17732	-0.05907	0.01746	-0.01584
11	-0.09460	0.22495	-0.41030	-0.06110	0.08223	0.03019
12	0.11738	0.57524	0.57168	-0.02617	-0.00343	0.00888
13	-0.14237	0.19183	0.07608	0.00000	0.00000	0.00000
14	0.40034	0.00000	-0.08875	0.00000	0.00000	0.00000
15	0.00873	0.00000	0.00097	0.00000	0.00000	0.00000
16	0.17271	0.26315	0.05683	0.00000	0.00000	0.00000
17	-0.91288	0.00000	-0.20327	0.00000	0.00000	0.00000
18	-0.04404	0.00000	-0.00588	0.00000	0.00000	0.00000
20	0.26787	0.21531	-0.62693	-0.07407	0.05222	-0.02745
21	-0.14716	1.11956	1.14205	-0.04296	0.08545	-0.08800
22	-0.00386	0.15159	-0.08349	0.00000	0.00000	0.00000
23	0.08214	0.15372	-0.06688	0.00000	0.00000	0.00000
24	-0.09698	0.04978	0.00359	0.00000	0.00000	0.00000
25	0.10918	0.04978	0.02456	0.00000	0.00000	0.00000
FEM: 197	0.01902	0.01335	0.01326	0.00000	0.00000	0.00000
FEM: 200	-0.08482	0.03846	-0.04134	0.00000	0.00000	0.00000
FEM: 213	0.23419	0.01141	-0.21017	0.00000	0.00000	0.00000
FEM: 216	-0.11096	0.04728	-0.21805	0.00000	0.00000	0.00000
FEM: 224	0.10886	0.04866	-0.26216	0.00000	0.00000	0.00000
FEM: 231	-0.08618	0.01230	-0.05100	0.00000	0.00000	0.00000
FEM: 235	0.09584	0.03897	-0.03100	0.00000	0.00000	0.00000
FEM: 236	0.00476	0.01281	-0.02045	0.00000	0.00000	0.00000
SUM	0.00000	5.52611	0.45800	-0.39749	0.34697	-0.08574

Condition **LC6=1.2DL+Wsice+Di**

8	0.14966	0.20701	-1.54068	-0.08810	0.09466	0.00449
9	-0.04012	2.20788	2.43941	-0.02244	-0.00546	0.00473
11	-0.02179	0.22016	-0.34412	-0.05685	0.09257	0.02942
12	0.08819	0.42550	0.40373	-0.02837	0.00176	0.00461
13	-0.07113	0.18664	0.06341	0.00000	0.00000	0.00000
14	0.58816	0.00000	-0.12757	0.00000	0.00000	0.00000
15	0.06663	0.00000	-0.01198	0.00000	0.00000	0.00000
16	0.19289	0.27568	0.05702	0.00000	0.00000	0.00000
17	-1.47381	0.00000	-0.33395	0.00000	0.00000	0.00000
18	-0.14375	0.00000	-0.03219	0.00000	0.00000	0.00000
20	0.29269	0.20327	-0.67805	-0.06643	0.05578	-0.02601
21	-0.16706	1.17788	1.21326	-0.03876	0.08406	-0.08577
22	0.10942	0.14471	-0.06439	0.00000	0.00000	0.00000
23	0.13496	0.14456	-0.06797	0.00000	0.00000	0.00000
24	-0.08723	0.04977	-0.01067	0.00000	0.00000	0.00000
25	0.11210	0.04978	0.02811	0.00000	0.00000	0.00000
FEM: 197	0.02876	0.01331	0.02773	0.00000	0.00000	0.00000

FEM: 200	-0.07819	0.03848	-0.04368	0.00000	0.00000	0.00000
FEM: 213	0.29412	0.01310	-0.20803	0.00000	0.00000	0.00000
FEM: 216	-0.06794	0.05087	-0.30683	0.00000	0.00000	0.00000
FEM: 224	0.24871	0.05191	-0.34482	0.00000	0.00000	0.00000
FEM: 231	-0.00748	0.01388	-0.03514	0.00000	0.00000	0.00000
FEM: 235	0.11543	0.03890	-0.04374	0.00000	0.00000	0.00000
FEM: 236	0.02877	0.01281	-0.03887	0.00000	0.00000	0.00000
SUM	0.29200	5.52611	0.00000	-0.30095	0.32337	-0.06853

Condition **LC7=1.4DL**

8	0.07487	0.17990	-1.06511	-0.07843	0.06800	0.00348
9	-0.01544	1.51504	1.65982	-0.02416	0.00406	-0.00375
11	-0.04437	0.17592	-0.29156	-0.05318	0.08515	0.02634
12	0.07432	0.35830	0.34891	-0.02034	-0.00009	0.00454
13	-0.07822	0.14654	0.05884	0.00000	0.00000	0.00000
14	0.40053	0.00000	-0.08763	0.00000	0.00000	0.00000
15	0.03845	0.00000	-0.00533	0.00000	0.00000	0.00000
16	0.12151	0.20138	0.04718	0.00000	0.00000	0.00000
17	-0.90830	0.00000	-0.20762	0.00000	0.00000	0.00000
18	-0.08388	0.00000	-0.01721	0.00000	0.00000	0.00000
20	0.19483	0.16143	-0.49550	-0.05732	0.01722	-0.02359
21	-0.11178	0.79962	0.82078	-0.02819	0.05740	-0.05895
22	0.03039	0.12834	-0.06942	0.00000	0.00000	0.00000
23	0.06674	0.12798	-0.07367	0.00000	0.00000	0.00000
24	-0.06292	0.03589	-0.00617	0.00000	0.00000	0.00000
25	0.07533	0.03590	0.01373	0.00000	0.00000	0.00000
FEM: 197	0.01663	0.01565	0.00856	0.00000	0.00000	0.00000
FEM: 200	-0.06524	0.02750	-0.02527	0.00000	0.00000	0.00000
FEM: 213	0.14354	0.00381	-0.14748	0.00000	0.00000	0.00000
FEM: 216	-0.05107	0.02333	-0.18780	0.00000	0.00000	0.00000
FEM: 224	0.10308	0.02332	-0.21789	0.00000	0.00000	0.00000
FEM: 231	-0.00054	0.00412	-0.02183	0.00000	0.00000	0.00000
FEM: 235	0.07523	0.02780	-0.01329	0.00000	0.00000	0.00000
FEM: 236	0.00633	0.01525	-0.02501	0.00000	0.00000	0.00000
SUM	0.00000	4.00701	0.00000	-0.26161	0.23175	-0.05192

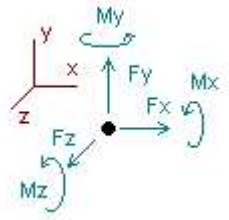
Condition **LC8=0.9DL**

8	0.04817	0.11567	-0.68468	-0.05043	0.04372	0.00224
9	-0.00993	0.97392	1.06696	-0.01555	0.00261	-0.00241
11	-0.02850	0.11309	-0.18741	-0.03419	0.05475	0.01693
12	0.04777	0.23028	0.22423	-0.01308	-0.00006	0.00292
13	-0.05027	0.09419	0.03782	0.00000	0.00000	0.00000
14	0.25728	0.00000	-0.05630	0.00000	0.00000	0.00000
15	0.02469	0.00000	-0.00342	0.00000	0.00000	0.00000
16	0.07815	0.12942	0.03033	0.00000	0.00000	0.00000
17	-0.58394	0.00000	-0.13340	0.00000	0.00000	0.00000
18	-0.05408	0.00000	-0.01111	0.00000	0.00000	0.00000
20	0.12529	0.10375	-0.31869	-0.03683	0.01109	-0.01516
21	-0.07189	0.51418	0.52780	-0.01811	0.03690	-0.03790
22	0.01957	0.08251	-0.04463	0.00000	0.00000	0.00000
23	0.04295	0.08227	-0.04739	0.00000	0.00000	0.00000
24	-0.04044	0.02307	-0.00397	0.00000	0.00000	0.00000
25	0.04843	0.02308	0.00883	0.00000	0.00000	0.00000
FEM: 197	0.01070	0.01006	0.00553	0.00000	0.00000	0.00000
FEM: 200	-0.04193	0.01768	-0.01627	0.00000	0.00000	0.00000
FEM: 213	0.09236	0.00245	-0.09483	0.00000	0.00000	0.00000
FEM: 216	-0.03281	0.01500	-0.12070	0.00000	0.00000	0.00000

FEM: 224	0.06629	0.01499	-0.14006	0.00000	0.00000	0.00000
FEM: 231	-0.00031	0.00265	-0.01403	0.00000	0.00000	0.00000
FEM: 235	0.04837	0.01787	-0.00854	0.00000	0.00000	0.00000
FEM: 236	0.00408	0.00981	-0.01609	0.00000	0.00000	0.00000
SUM	0.00000	2.57593	0.00000	-0.16819	0.14901	-0.03338

Envelope for nodal reactions

Note.- **Ic** is the controlling load condition



Direction of positive forces and moments

Envelope of nodal reactions for :

LC1=1.2DL+Wf
LC2=1.2DL+Ws
LC3=0.9DL+Wf
LC4=0.9DL+Ws
LC5=1.2DL+Wfice+Di
LC6=1.2DL+Wsice+Di
LC7=1.4DL
LC8=0.9DL

		Forces						Moments					
Node		**Fx** [Kip]	**Ic**	**Fy** [Kip]	**Ic**	**Fz** [Kip]	**Ic**	**Mx** [Kip*ft]	**Ic**	**My** [Kip*ft]	**Ic**	**Mz** [Kip*ft]	**Ic**
8	Max	0.539	LC2	0.778	LC1	1.925	LC3	-0.05043	LC8	0.25248	LC1	0.02248	LC1
	Min	0.048	LC8	0.116	LC8	-1.541	LC6	-0.47008	LC1	0.04372	LC8	0.00224	LC8
9	Max	0.300	LC3	2.208	LC6	2.439	LC6	0.00686	LC4	0.17998	LC1	0.01823	LC4
	Min	-0.040	LC6	-1.086	LC3	-1.733	LC3	-0.31655	LC1	-0.02078	LC4	-0.16177	LC1
11	Max	0.216	LC4	0.300	LC1	-0.002	LC4	-0.02100	LC4	0.11529	LC2	0.04908	LC1
	Min	-0.414	LC1	0.095	LC4	-0.517	LC1	-0.15255	LC1	0.04261	LC3	0.01591	LC4
12	Max	0.235	LC1	1.353	LC1	1.455	LC1	-0.01308	LC8	0.03251	LC2	0.05601	LC1
	Min	0.008	LC4	-0.213	LC4	-0.272	LC4	-0.02837	LC6	-0.05604	LC1	-0.02569	LC4
13	Max	0.237	LC4	0.192	LC5	0.141	LC1	0.00000	LC1	0.00000	LC1	0.00000	LC1
	Min	-0.303	LC1	0.068	LC3	-0.014	LC4	0.00000	LC1	0.00000	LC1	0.00000	LC1
14	Max	0.588	LC6	0.000	LC1	0.611	LC3	0.00000	LC1	0.00000	LC1	0.00000	LC1
	Min	-2.454	LC3	0.000	LC1	-0.128	LC6	0.00000	LC1	0.00000	LC1	0.00000	LC1
15	Max	0.234	LC2	0.000	LC1	0.118	LC1	0.00000	LC1	0.00000	LC1	0.00000	LC1
	Min	0.009	LC5	0.000	LC1	-0.042	LC2	0.00000	LC1	0.00000	LC1	0.00000	LC1
16	Max	0.313	LC2	0.276	LC6	0.132	LC1	0.00000	LC1	0.00000	LC1	0.00000	LC1

	Min	0.078	LC8	0.129	LC8	0.030	LC8	0.00000	LC1	0.00000	LC1	0.00000	LC1
17	Max	4.457	LC3	0.000	LC1	1.120	LC3	0.00000	LC1	0.00000	LC1	0.00000	LC1
	Min	-1.474	LC6	0.000	LC1	-0.334	LC6	0.00000	LC1	0.00000	LC1	0.00000	LC1
18	Max	0.061	LC1	0.000	LC1	0.146	LC1	0.00000	LC1	0.00000	LC1	0.00000	LC1
	Min	-0.144	LC6	0.000	LC1	-0.032	LC6	0.00000	LC1	0.00000	LC1	0.00000	LC1
20	Max	0.469	LC2	0.333	LC1	0.304	LC3	-0.03683	LC8	0.09303	LC2	-0.01506	LC4
	Min	0.125	LC8	0.104	LC8	-0.678	LC6	-0.19008	LC1	0.01109	LC8	-0.04158	LC1
21	Max	0.045	LC3	1.178	LC6	1.222	LC2	-0.01811	LC8	0.09642	LC1	-0.03790	LC8
	Min	-0.167	LC6	0.435	LC3	0.365	LC3	-0.07967	LC1	0.03690	LC8	-0.10663	LC1
22	Max	0.416	LC2	0.178	LC1	-0.038	LC4	0.00000	LC1	0.00000	LC1	0.00000	LC1
	Min	-0.653	LC3	0.082	LC4	-0.099	LC1	0.00000	LC1	0.00000	LC1	0.00000	LC1
23	Max	0.553	LC2	0.205	LC1	0.119	LC3	0.00000	LC1	0.00000	LC1	0.00000	LC1
	Min	0.043	LC8	0.082	LC8	-0.086	LC2	0.00000	LC1	0.00000	LC1	0.00000	LC1
24	Max	-0.007	LC4	0.050	LC5	0.124	LC3	0.00000	LC1	0.00000	LC1	0.00000	LC1
	Min	-0.113	LC1	0.023	LC3	-0.054	LC2	0.00000	LC1	0.00000	LC1	0.00000	LC1
25	Max	0.112	LC6	0.050	LC6	0.067	LC2	0.00000	LC1	0.00000	LC1	0.00000	LC1
	Min	0.048	LC8	0.023	LC3	0.009	LC8	0.00000	LC1	0.00000	LC1	0.00000	LC1

EXHIBIT 4

Radio Frequency Exposure Analysis Report

September 14, 2022

Centerline on behalf of AT&T
Centerline Communications Project Number: Internal

AT&T Site Name: SITE CT-305
Site Number: CTV2177
FA#: 10035098
USID: 26747

Site Address: 7 Broadway Avenue Extension, Mystic, CT 06355

Site Compliance Summary

AT&T Compliance Status:	Compliant
Cumulative Calculated Power Density (Ground Level):	1.19821 µW/cm^2
Cumulative General Population % MPE (Ground Level):	0.17707%

September 14, 2022

Centerline
Attn: Jennifer Iliades, Project Manager
750 W Center St, Suite 301
West Bridgewater, MA 02379

RF Exposure Analysis for Site: **SITE CT-305**

Centerline Communications, LLC ("Centerline") was contracted to analyze the proposed AT&T facility at **7 Broadway Avenue Extension, Mystic, CT 06355** for the purpose of determining whether the predictive exposure from the proposed facility is within specified federal limits.

All information used in this report was analyzed as a percentage of the Maximum Permissible Exposure (% MPE) limits as detailed in 47 CFR § 1.1310 as well as Federal Communications Commission (FCC) OET Bulletin 65 Edition 97-01. The FCC MPE limits are typically expressed in units of milliwatts per square centimeter (mW/cm^2) or microwatts per square centimeter ($\mu W/cm^2$). The exposure limits vary depending upon the frequencies being utilized. The General Population/Uncontrolled MPE limit (in mW/cm^2) for frequencies between 300 and 1500 is defined as frequency (in MHz) divided by 1500 ($f_{MHz}/1500$). Frequencies between 1500 and 100,000 MHz have a General Population/Uncontrolled MPE limit of 1 mW/cm^2 (1000 $\mu W/cm^2$). The calculated power density at each sample point divided by the limit at each calculated frequency provides a result in % MPE. Summing the calculated % MPE from all contributors provides a cumulative % MPE at a particular sample point. Wireless carriers use different frequency bands with varying MPE limits; therefore, it is useful to report results in terms of % MPE as opposed to power density.

All results were compared to the FCC radio frequency exposure rules as detailed in 47 CFR § 1.1307(b) to determine compliance with the MPE limits for General Population/Uncontrolled environments as defined below.

General population/uncontrolled exposure limits apply to situations in which the general population may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general population would always be considered under this category when exposure is not employment related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

Occupational/controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/ controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general population/uncontrolled limits, as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means. Additional details can be found in FCC OET 65.

Calculation Methodology

Centerline Communications, LLC has performed theoretical modeling of the site using a software tool, RoofMaster®, which incorporates calculation methodologies detailed in FCC OET 65. RoofMaster® uses a cylindrical model for conservative power density predictions within the near field of the antenna where the antenna pattern has not truly formed yet. Within this area power density values tend to decrease based upon an inverse distance function. At the point where it is appropriate for modeling to change from near-field calculations to far-field calculations, the power decreases inversely with the square of the distance. The modeling is based on worst-case assumptions in terms of transmitter power and duty cycle. No losses were included in the power calculations unless they were specifically provided for the project.

In OET 65, a far field model is presented to calculate the spatial peak power density. The RoofMaster® implementation of this model incorporates antenna manufacturer's horizontal and vertical pattern data to determine the power density in all directions. This model yields the power density at a single point in space. In order to determine the spatial power density for comparison to the FCC limits, the average of several points calculated within the human profile (0-6') must be conducted. RoofMaster® calculates seven power density values between 0-6' above the specified study plane and performs a linear spatial average.

Data & Results

The following table details the antennas and operating parameters for the AT&T antenna system as well as any other antenna systems at the site. This is based on antenna information provided by the client and data compiled from other sources where necessary. The data below was input into Roofmaster® to perform the theoretical exposure calculations at the Ground.

The theoretical calculations performed in Roofmaster® determine the cumulative exposure at all sample points at ground level (0-6' spatial average). The results from highest cumulative sample point at ground level surrounding the site are displayed in the table below. The contribution from directional antennas to the maximum cumulative totals varies greatly depending on location; therefore, the contribution from one antenna sector at the highest calculated exposure point may be greater or less than other sectors since sectorized directional antennas are pointed in different directions and there is not much overlapping exposure.

The contribution to the cumulative power density and % MPE for each antenna/frequency band is listed in the table. The cumulative power density and cumulative % MPE are displayed at the bottom of the table.

Maximum Calculated Cumulative Power Density (Location: approximately 8' East of site)

Antenna ID	Make / Model	Frequency Band (MHz)	Antenna Gain (dBd)	Antenna Centerline (ft)	Channel Count	TX Power/ Channel (watts)	ERP (watts)	Calculated Power Density (µW/cm²)	General Population MPE Limit (µW/cm²)	General Population % MPE
AT&T A 1	POWERWAVE 7770	850	11.35	140.00	1.00	30.00	409.37	0.00004	566.67	0.00001
AT&T A 2	CCI DMP65R-BU4D	700	9.95	140.00	2.00	30.00	593.13	0.00001	466.67	0.00000
AT&T A 2	CCI DMP65R-BU4D	850	10.25	140.00	2.00	30.00	635.55	0.00002	566.67	0.00000
AT&T A 2	CCI DMP65R-BU4D	1900	13.45	140.00	4.00	30.00	2655.71	0.00001	1000.00	0.00000
AT&T A 3	QUINTEL QS46512-2	700	10.85	140.00	4.00	30.00	1459.42	0.00006	466.67	0.00001
AT&T A 3	QUINTEL QS46512-2	2100	13.35	140.00	4.00	45.00	3892.89	0.00000	1000.00	0.00000
AT&T A 3	QUINTEL QS46512-2	2300	14.25	140.00	4.00	18.75	1995.54	0.00000	1000.00	0.00000
AT&T B 4	POWERWAVE 7770	850	11.35	140.00	1.00	30.00	409.37	0.00900	566.67	0.00159
AT&T B 5	CCI DMP65R-BU4D	700	9.65	140.00	2.00	30.00	553.54	0.01511	466.67	0.00324
AT&T B 5	CCI DMP65R-BU4D	850	10.25	140.00	2.00	30.00	635.55	0.01270	566.67	0.00224
AT&T B 5	CCI DMP65R-BU4D	1900	14.05	140.00	4.00	30.00	3049.17	0.02184	1000.00	0.00218
AT&T B 6	QUINTEL QS46512-2	700	10.95	140.00	4.00	30.00	1493.42	0.00919	466.67	0.00197
AT&T B 6	QUINTEL QS46512-2	2100	13.95	140.00	4.00	45.00	4469.64	0.01097	1000.00	0.00110
AT&T B 6	QUINTEL QS46512-2	2300	14.35	140.00	4.00	18.75	2042.03	0.00468	1000.00	0.00047
AT&T C 7	POWERWAVE 7770	850	11.35	140.00	1.00	30.00	409.37	0.00000	566.67	0.00000
AT&T C 8	CCI DMP65R-BU4D	700	9.95	140.00	2.00	30.00	593.13	0.00000	466.67	0.00000
AT&T C 8	CCI DMP65R-BU4D	850	10.25	140.00	2.00	30.00	635.55	0.00000	566.67	0.00000
AT&T C 8	CCI DMP65R-BU4D	1900	13.45	140.00	4.00	30.00	2655.71	0.00000	1000.00	0.00000
AT&T C 9	QUINTEL QS46512-2	700	10.85	140.00	4.00	30.00	1459.42	0.00002	466.67	0.00001
AT&T C 9	QUINTEL QS46512-2	2100	13.35	140.00	4.00	45.00	3892.89	0.00002	1000.00	0.00000
AT&T C 9	QUINTEL QS46512-2	2300	14.25	140.00	4.00	18.75	1995.54	0.00000	1000.00	0.00000
Sprint A 10	GENERIC PANEL 6FT	862	12.62	140.00	2.00	40.00	1462.48	0.00001	574.67	0.00000
Sprint A 10	GENERIC PANEL 6FT	1900	15.84	140.00	2.00	60.00	4604.49	0.00001	1000.00	0.00000
Sprint A 10	GENERIC PANEL 6FT	2500	14.49	140.00	1.00	34.70	975.73	0.00001	1000.00	0.00000
Sprint B 11	GENERIC PANEL 6FT	862	12.62	140.00	2.00	40.00	1462.48	0.04449	574.67	0.00774
Sprint B 11	GENERIC PANEL 6FT	1900	15.84	140.00	2.00	60.00	4604.49	0.06813	1000.00	0.00681
Sprint B 11	GENERIC PANEL 6FT	2500	14.49	140.00	1.00	34.70	975.73	0.01942	1000.00	0.00194
Sprint C 12	GENERIC PANEL 6FT	862	12.62	140.00	2.00	40.00	1462.48	0.00000	574.67	0.00000
Sprint C 12	GENERIC PANEL 6FT	1900	15.84	140.00	2.00	60.00	4604.49	0.00001	1000.00	0.00000
Sprint C 12	GENERIC PANEL 6FT	2500	14.49	140.00	1.00	34.70	975.73	0.00000	1000.00	0.00000
T-Mobile A 13	GENERIC PANEL 6FT	1900	15.84	123.00	2.00	60.00	4604.49	0.00002	1000.00	0.00000
T-Mobile A 14	GENERIC PANEL 6FT	600	12.33	123.00	2.00	60.00	2052.02	0.00002	400.00	0.00000
T-Mobile A 15	GENERIC PANEL 6FT	700	12.33	123.00	2.00	60.00	2052.02	0.00001	466.67	0.00000
T-Mobile A 15	GENERIC PANEL 6FT	2100	15.84	123.00	2.00	60.00	4604.49	0.00002	1000.00	0.00000

Antenna ID	Make / Model	Frequency Band (MHz)	Antenna Gain (dBd)	Antenna Centerline (ft)	Channel Count	TX Power/ Channel (watts)	ERP (watts)	Calculated Power Density (µW/cm²)	General Population MPE Limit (µW/cm²)	General Population % MPE
T-Mobile B 16	GENERIC PANEL 6FT	1900	15.84	123.00	2.00	60.00	4604.49	0.04951	1000.00	0.00495
T-Mobile B 17	GENERIC PANEL 6FT	600	12.33	123.00	2.00	60.00	2052.02	0.06605	400.00	0.01651
T-Mobile B 18	GENERIC PANEL 6FT	700	12.33	123.00	2.00	60.00	2052.02	0.08411	466.67	0.01802
T-Mobile B 18	GENERIC PANEL 6FT	2100	15.84	123.00	2.00	60.00	4604.49	0.08968	1000.00	0.00897
T-Mobile C 19	GENERIC PANEL 6FT	1900	15.84	123.00	2.00	60.00	4604.49	0.00002	1000.00	0.00000
T-Mobile C 20	GENERIC PANEL 6FT	600	12.33	123.00	2.00	60.00	2052.02	0.00001	400.00	0.00000
T-Mobile C 21	GENERIC PANEL 6FT	700	12.33	123.00	2.00	60.00	2052.02	0.00000	466.67	0.00000
T-Mobile C 21	GENERIC PANEL 6FT	2100	15.84	123.00	2.00	60.00	4604.49	0.00001	1000.00	0.00000
Verizon A 22	GENERIC PANEL 6FT	850	12.62	96.00	4.00	40.00	2924.96	0.00007	566.67	0.00001
Verizon A 23	GENERIC PANEL 6FT	1900	15.84	96.00	4.00	40.00	6139.32	0.00003	1000.00	0.00000
Verizon A 24	GENERIC PANEL 6FT	2100	16.39	96.00	4.00	40.00	6968.19	0.00002	1000.00	0.00000
Verizon A 25	GENERIC PANEL 6FT	700	12.33	96.00	4.00	40.00	2736.02	0.00003	466.67	0.00001
Verizon B 26	GENERIC PANEL 6FT	850	12.62	96.00	4.00	40.00	2924.96	0.14682	566.67	0.02591
Verizon B 27	GENERIC PANEL 6FT	1900	15.84	96.00	4.00	40.00	6139.32	0.17592	1000.00	0.01759
Verizon B 28	GENERIC PANEL 6FT	2100	16.39	96.00	4.00	40.00	6968.19	0.20648	1000.00	0.02065
Verizon B 29	GENERIC PANEL 6FT	700	12.33	96.00	4.00	40.00	2736.02	0.16317	466.67	0.03497
Verizon C 30	GENERIC PANEL 6FT	850	12.62	96.00	4.00	40.00	2924.96	0.00001	566.67	0.00000
Verizon C 31	GENERIC PANEL 6FT	1900	15.84	96.00	4.00	40.00	6139.32	0.00002	1000.00	0.00000
Verizon C 32	GENERIC PANEL 6FT	2100	16.39	96.00	4.00	40.00	6968.19	0.00000	1000.00	0.00000
Verizon C 33	GENERIC PANEL 6FT	700	12.33	96.00	4.00	40.00	2736.02	0.00007	466.67	0.00002
Unknown A 34	GENERIC OMNI	450	5.96	146.00	1.00	25.25	99.60	0.00036	300.00	0.00012
New Cingular A 35	GENERIC MICROWAVE	5600	20.85	141.00	1.00	0.10	12.16	0.00000	1000.00	0.00000
							Cumulative Power Density:	**1.19821 µW/cm²**	**Cumulative % MPE:**	**0.17707%**

Summary

The theoretical calculations performed for this analysis yielded cumulative power density totals in all areas at Ground that are within the allowable federal limits for public exposure to RF energy. Therefore, the site is **Compliant** with FCC rules and regulations.

Michelle Stone

Michelle Stone
RF EME Technical Writer II
Centerline Communications, LLC

EXHIBIT 5

ZONING PERMIT

TOWN OF STONINGTON
PLANNING & ZONING COMMISSION

Date Issued: August 14, 1997 Permit No.: #97-201 ZON

NAME OF PROPERTY OWNER: EDWARD J. PLANETA, OWNER
CFM CONSTRUCTION, APPLICANT

LOCATION OF PROPERTY: 7 BROADWAY EXTENSION, MYSTIC

MAP: 174 BLOCK: 22 LOT: 1 ZONE: M-1

PERMITTED ACTIVITY: INSTALLATION OF CELLULAR EQUIPMENT FOR SNET

STIPULATIONS OR SPECIAL CONDITIONS: As per Planning and Zoning Commission consent agenda approval.

BY: Joseph M. Lash
Zoning Enforcement Officer

CONSTRUCTION MAY NOT PROCEED UNTIL A BUILDING PERMIT HAS BEEN OBTAINED

THIS PERMIT MUST BE PROMINENTLY POSTED ON THE PREMISES

TOWN OF STONINGTON

BUILDING PERMIT

DATE: August 27, 1997 **PERMIT #:** B-97-337

This permit is hereby granted to: Edward J. Planeta

of: c/o CFM Construction Corp., 150 Sycamore St.,Glastonbury, CT

for the purpose of: constructing site improvements for cellular radio equipment (SNET)

In compliance with the provisions of the Basic Building Code of the State of Connecticut

Property Location: 7 Broadway Ext., Mystic

Assessor's Map: 174 **Block:** 22 **Lot:** 1

Special conditions or stipulations: NA

In accordance with the application dated: August 19, 1997

BUILDING OFFICIAL

DATE: 8/27/97

Building Fee: $120.00 **Paid:**

ZONING PERMIT

TOWN OF STONINGTON
PLANNING & ZONING COMMISSION

Date Issued: December 17, 2001 Permit No.: #01-319 ZON

NAME OF PROPERTY OWNER: AT&T, APPLICANT; ACME WIRE PRODUCTS, OWNER

LOCATION OF PROPERTY: 7 BROADWAY EXT., MSYTIC

MAP: 174 BLOCK: 22 LOT: 1 ZONE: M-1

PERMITTED ACTIVITY: INSTALL OUTDOOR EQUIPMENT ON RAISED PLATFORM WITH ANTENNAS INSTALLED ON THE EXISTING WATER TANK FOR TELECOMMUNICATIONS FACILITY.

STIPULATIONS OR SPECIAL CONDITIONS: DEMO BOND TO BE REVIEWED AND RENEWED IN DECEMBER 2003.

BY: Joseph M. Larkin
Zoning Enforcement Officer

CONSTRUCTION MAY NOT PROCEED UNTIL A BUILDING PERMIT HAS BEEN OBTAINED

THIS PERMIT MUST BE PROMINENTLY POSTED ON THE PREMISES

This Permit Is Valid For 1 Year.

Town of Stonington
Building Permit

Permit number: B-2001-498

Permit Date: 1/2/2002

This permit is herby granted to: **PLANETA PROPERTIES DBA ACME WIRE PRODUCTS**

Of: 345 Ardenwood Avenue

Englewood FL 34223

For the purpose of: **install telecommuncations facility outdoor equipment on a raised platform with antennas installed on existing water tank** AT&T

In compliance with the provisions of the Basic Building Code of the State of Connecticut

Property Location: 7 **Broadway Ext.** **Mystic**

Assessor's Map: 174 **Block:** 22 **Lot:** 1 **Sub Lot:** 0

Special Conditions or Stipulations: NA

In accordance with the application dated: 12/20/2001

Building Official

Date: 1/2/02

Building Fee: $710.00 **Paid:** ☐

AT&T

ZONING PERMIT

TOWN OF STONINGTON

PLANNING & ZONING COMMISSION

DATE ISSUED: **January 30, 2004** NO. **03-389 ZON**

NAME OF OWNER / APPLICANT: **AT&T Wireless / Planeta Properties**

LOCATION OF PROPERTY: **7 Broadway Ave. Ext., Mystic, CT 06355**

MAP: **174** BLOCK: **22** LOT: **1** ZONE: **M-1**

PERMITTED ACTIVITY: **Installation of a parabolic subscriber antenna**

STIPULATIONS OR SPECIAL CONDITIONS:
1. **Bond#04-001 in place & to be reviewed & renewed in January 2006.**

APPROVED BY: Joseph M. Lachini
ZONING ENFORCEMENT OFFICER

1-30-04
DATE

CONSTRUCTION MAY NOT PROCEED UNTIL
A BUILDING PERMIT HAS BEEN OBTAINED

THIS PERMIT MUST BE PROMINENTLY POSTED ON THE PREMISES

THIS PERMIT IS VALID FOR 1 YEAR

Applicant may publish **Notice** of this approval as per Public Act No. 03-144

Town of Stonington
Building Permit

Permit number: B-2004-039

Permit Date: 2/4/2004

This permit is herby granted to: **AT&T WIRELESS, APPLICANT; PLANETA PROPERTIES - OWNER**

Of: 333 Crossways Park Drive

Woodbury NY

For the purpose of: **installation of a Parabolic Subscriber antenna**

In compliance with the provisions of the Basic Building Code of the State of Connecticut

Property Location: 7 **Broadway Ext.** **Mystic**

Assessor's Map: 174 **Block:** 22 **Lot:** 1 **Sub Lot:** 0

Special Conditions or Stipulations: NA

In accordance with the application dated: 2/4/2004

Wayne Jones

Building Official

Date: 2/4/04

Building Fee: $91.00 **Paid:** ☑

EXHIBIT 6

From: UPS
To: Evan Renwick
Subject: UPS Delivery Notification, Tracking Number 1Z9Y45030339376214
Date: Tuesday, September 27, 2022 12:30:19 PM

Hello, your package has been delivered.

Delivery Date: Tuesday, 09/27/2022
Delivery Time: 12:26 PM
Signed by: MCCREY

CENTERLINE SITE ACQUISITION

Tracking Number:	1Z9Y45030339376214
Ship To:	FIRST SELECTMAN'S OFFICE 152 ELM STREET STONINGTON, CT 063781139 US
Number of Packages:	1
UPS Service:	UPS Ground
Package Weight:	1.0 LBS
Reference Number:	CT2177-CSC_FIRST SELECTWOMAN

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To: Evan Renwick
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Date: Tuesday, September 27, 2022 12:30:43 PM

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Delivery Date: Tuesday, 09/27/2022
Delivery Time: 12:28 PM
Signed by: PHOENIX

CENTERLINE SITE ACQUISITION

Tracking Number:	1Z9Y45030314573824
Ship To:	PLANNING & ZONING DEPARTMENT 152 ELM STREET STONINGTON, CT 063781139 US
Number of Packages:	1
UPS Service:	UPS Ground
Package Weight:	1.0 LBS
Reference Number:	CT2177-CSC_TOWN PLANNER

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To: Evan Renwick
Subject: UPS Delivery Notification, Tracking Number 1Z9Y45030328468823
Date: Tuesday, September 27, 2022 12:30:59 PM

Hello, your package has been delivered.

Delivery Date: Tuesday, 09/27/2022
Delivery Time: 12:28 PM
Signed by: PHOENIX

CENTERLINE SITE ACQUISITION

Tracking Number:	1Z9Y45030328468823
Ship To:	PLANNING & ZONING DEPARTMENT 152 ELM STREET STONINGTON, CT 063781139 US
Number of Packages:	1
UPS Service:	UPS Ground
Package Weight:	1.0 LBS
Reference Number:	CT2177-CSC_ZEO

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