

brownrudnick

THOMAS J. REGAN

March 23, 2021

**VIA E-MAIL (SITING.COUNCIL@CT.GOV) & (MELANIE.BACHMAN@CT.GOV)
& OVERNIGHT MAIL**

Connecticut Siting Council
Attn: Melanie A. Bachman, Esq., Executive Director
Ten Franklin Square
New Britain, CT 06051

RE: Petition for Declaratory Ruling – 11 Lake Ave. Ext., Danbury

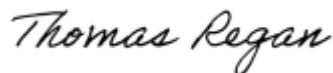
Dear Executive Director Bachman:

Please find enclosed for filing one copy of New Cingular Wireless PCS LLC d/b/a AT&T's ("AT&T") Petition for Declaratory Ruling that no certificate of environmental compatibility and public need is required for AT&T to locate its antennas on the proposed pole located at 11 Lake Avenue Extension, Danbury, Connecticut. Also enclosed is a check in the amount of \$625.00 representing the required filing fee.

A complete copy of the filing will be provided in PDF format electronically via One Drive.

Sincerely,

BROWN RUDNICK LLP



THOMAS J. REGAN



Cc: Joseph M. Cavo, Mayor
City of Danbury
155 Deer Hill Avenue
Danbury, CT 06810
j.cavo@danbury-ct.gov

Sharon B. Calitro, AICP, Director of Planning & Zoning
City of Danbury
155 Deer Hill Avenue
Danbury, CT 06810

Janice R. Giegler, City Clerk
City of Danbury
155 Deer Hill Avenue
Danbury, CT 06810

AT&T

Centerline Communications

Edward D. Pare, Jr., Esq.

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

IN RE:
NEW CINGULAR WIRELESS PCS, LLC (AT&T)
PETITION FOR A DECLARATORY RULING,
PURSUANT TO CONNECTICUT GENERAL
STATUTES SECTION 4-176 AND SECTION 16-50K,
FOR THE TELECOMMUNICATIONS FACILITY ON
PROPERTY LOCATED AT
11 LAKE AVENUE EXTENSION, DANBURY,
CONNECTICUT.

PETITION NO. _____

March 23, 2021

**PETITION FOR A DECLARATORY RULING:
INSTALLATION HAVING
NO SUBSTANTIAL ADVERSE ENVIRONMENTAL EFFECT**

I. INTRODUCTION

Pursuant to Sections 16-50j-38 and 39 of the Regulations of Connecticut State Agencies (hereafter “R.C.S.A.”), New Cingular Wireless PCS LLC d/b/a AT&T (“AT&T”) respectfully submits this petition (the “Petition”) to the Connecticut Siting Council (the “Council”) for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need (“Certificate”) is required pursuant to Connecticut General Statutes, Section 16-50k(a) to install a new small cell wireless telecommunications facility on a proposed twenty-five foot (25’) above ground level (“AGL”) light pole (the “Pole”), extending to 30’ AGL to the top of a proposed cylindrical antenna, on property located at 11 Lake Avenue Extension, Danbury, CT (the “Site”). The Site is owned by Eleven Lake Ave Ext, LLC. **Attachment 1** contains the owner’s authorization permitting AT&T to file this Petition.

II. BACKGROUND

a. Need for the Facility

AT&T’s Radio Frequency Engineers have identified a need for additional wireless telecommunications coverage and/or capacity in AT&T’s network in this area of Danbury. AT&T’s existing macro telecommunication cell sites are not providing adequate data capacity in this area due to population, vehicular and foot traffic, multiple wireless devices used by customers and other contributing factors. This small cell wireless telecommunications facility will work to offload the demand on AT&T’s macro cell sites and allow for increased data capacity and speed within the immediate vicinity of the proposed facility. By addressing network capacity, the small cell wireless telecommunications facility will aid in reaching AT&T’s goal of providing reliable wireless telecommunications services in and around the City of Danbury and to all of Connecticut.

b. Design and Equipment Details

AT&T proposes to install a new small cell wireless telecommunications facility upon a proposed 25' AGL light Pole, extending to 30' AGL to the top of a proposed cylindrical antenna. The Site is located within the CA-80 (Arterial Commercial) zoning district. The surrounding area is a mix of commercial and residential uses, with a municipal use immediately adjacent to the Site. The nearest residence is approximately 300' to the north-northwest and the nearest wetlands are over 400' away from the Site to the northeast. The nearest existing utility distribution lines are approximately 20' from the proposed Pole. The existing wooden utility poles near the Site were considered as a location for the proposed antenna, but it was determined that they were not feasible due to existing equipment loading, transformers or top crossmembers which the utility company will not approve for use as a small cell facility. The Site is not within a quarter mile of a Department of Energy and Environmental Protection Natural Diversity Database buffered area.

AT&T's proposed facility is illustrated on the site plans submitted herewith at **Attachment 2**. Please also refer to the Structural Analysis at **Attachment 3** verifying the proposed Pole's structural capability to support AT&T's small cell wireless telecommunications facility and the proposed light fixture. AT&T's proposed antenna will measure 24.7" high with a 10" diameter and will be mounted on top of the Pole. AT&T will also install three (3) antennas with integrated remote radio heads inside a shroud located at a centerline height of 22' 6" AGL on the Pole. The Pole will be equipped with a proposed LED light fixture at the 24' AGL level on the Pole. AT&T's small cell wireless telecommunications facility will not have emergency backup power. The electrical and telecommunications interconnection route will be determined by the utility company upon the completion of a field visit. The Pole will be located on the portion of the Site fronting on Mill Ridge Road, approximately 15' from the sidewalk along Mill Ridge Road. Once AT&T receives all required approvals, the installation of the small cell wireless telecommunications facility will take approximately ten days and will be constructed during normal business hours.

c. Jurisdiction

The Council is authorized to hear this Petition pursuant to Connecticut General Statutes Section 16-50i(a)(6), as a communication tower. R.C.S.A Section 16-50j-2a(30(A)) defines a "tower" as "a structure, whether free standing or attached to a building or another structure...used principally to support one or more antennas for receiving or sending radio frequency signals..." We note that the Connecticut Public Utilities Regulatory Authority has jurisdiction over small cell attachments to utility poles within the public Right of Way. This proposed facility is not within the public Right of Way, and therefore the Council has jurisdiction in this particular matter.

III. NO SUBSTANTIAL ENVIRONMENTAL IMPACT

AT&T respectfully asserts that the proposed small cell wireless telecommunications facility will not adversely impact the environment and that a Certificate pursuant to Connecticut General Statutes, Section 16-50k(a) is not required.

a. Physical Effects

The proposed unmanned facility will not produce any excessive noise, smoke, odors, waste, glare or significant amounts of traffic. The proposed facility will not require the removal of trees on the Site. The small cell wireless telecommunications facility will be incorporated into a proposed light pole with equipment concealed in shrouds and will have minimal impact on the surrounding area based on the small footprint of the Pole.

b. Visual Effects

The Pole will be designed to support a light fixture, which will illuminate a portion of the existing parking area on the Site. As evidenced by the photo simulations submitted herewith as **Attachment 4**, the proposed facility will not adversely impact the area. AT&T's equipment will be contained and concealed in shrouds.

c. Compliance with FCC

Please refer to the Radio Frequency Emissions Analysis Report submitted as **Attachment 5**. The total radio frequency power density will comply with the standards adopted by the Connecticut Department of Environmental Protection and the Maximum Permissible Exposure limits of the Federal Communications Commission.

IV. NOTICE TO MUNICIPAL OFFICIALS AND ADJOINING PROPERTY OWNERS

AT&T sent notice of its intent to file this Petition pursuant to R.C.S.A, Section 16-50j-40(a), to all municipal officials and government agencies entitled to such notice pursuant to Connecticut General Statutes, Section 16-50l (**Attachment 6**), as well as to each person identified as an owner of record of the parcels adjoining the Site, as listed in the City of Danbury's Assessor records (**Attachment 7**).

V. CONCLUSION

AT&T respectfully asserts that its proposed small cell wireless telecommunications facility will not result in any adverse environmental impacts. For the foregoing reasons, AT&T respectfully requests that the Council render a determination that no Certificate is required and that the Council issue an order approving AT&T's proposed small cell wireless telecommunications facility.

Respectfully submitted,

/s/ Thomas J. Regan
Thomas J. Regan

ATTACHMENT 1



LETTER OF AUTHORIZATION

RE: AT&T Small Cell Installation // cRAN_danbury_15 - 14864510

ADDRESS: 11 Lake Avenue Extension, Danbury, CT

Eleven Lake Ave Ext, LLC, owners of the above described property, authorize New Cingular Wireless PCS, LLC ("AT&T") and/or their agent, to act as our nonexclusive agent for the sole purpose of filing and consummating any land use or building permit application(s) necessary to obtain approval of the applicable jurisdiction for AT&T's proposed small cell communications facility at the above described property.

We understand that this application may be denied, modified or approved with conditions, and that any such conditions of approval or modifications will be the sole responsibility of the carrier and will be complied with prior to issuance of a building permit.

Eleven Lake Ave Ext, LLC

By: _____  _____

Its: _____ Sole Member _____

Date: _____ 2/15/2021 _____

ATTACHMENT 2



AT&T SITE ID: CRAN_DANBURY_15
11 LAKE AVENUE EXT.
DANBURY, CT 06811

FOR ZONING (NOT FOR CONSTRUCTION)



CHECKED BY: AT

APPROVED BY: DPH

SUBMITTALS			
REV.	DATE	DESCRIPTION	BY
1	02/22/21	ISSUED FOR REVIEW	MR
A	01/27/21	ISSUED FOR REVIEW	MR

CLUSTER AND NODE NUMBER:
CRAN_DANBURY_15

SITE ID:
CRAN_DANBURY_15

SITE ADDRESS:
11 LAKE AVENUE EXT.
DANBURY, CT 06811
FAIRFIELD COUNTY

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1

SHEET INDEX

SHEET NO.	DESCRIPTION	REV.
T-1	TITLE SHEET	1
C-1	SITE PLAN	1
A-1	KEY PLAN AND ELEVATION	1
A-2	EQUIPMENT DETAILS	1

VICINITY MAP (NOT TO SCALE)



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.

Daniel P. Hamm

PROJECT DESCRIPTION

1. INSTALLATION OF ANTENNA AND ASSOCIATED EQUIPMENT ON PROPOSED UTILITY POLE.
2. THIS IS AN UNMANNED AND RESTRICTED ACCESS EQUIPMENT SITE AND WILL BE USED FOR THE TRANSMISSION OF RADIO SIGNALS FOR THE PURPOSE OF IMPROVING CELLULAR AND WIRELESS INTERNET SERVICE.

PROJECT SUMMARY

SITE ADDRESS: 11 LAKE AVENUE EXT. DANBURY, CT 06811

COUNTY: FAIRFIELD

LATITUDE: 41.387386° N

LONGITUDE: 73.478627° W

ARCHITECT/ENGINEER: HUDSON DESIGN GROUP LLC
 45 BEECHWOOD DRIVE
 NORTH ANDOVER, MA 01845

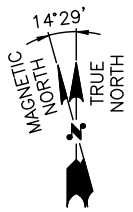
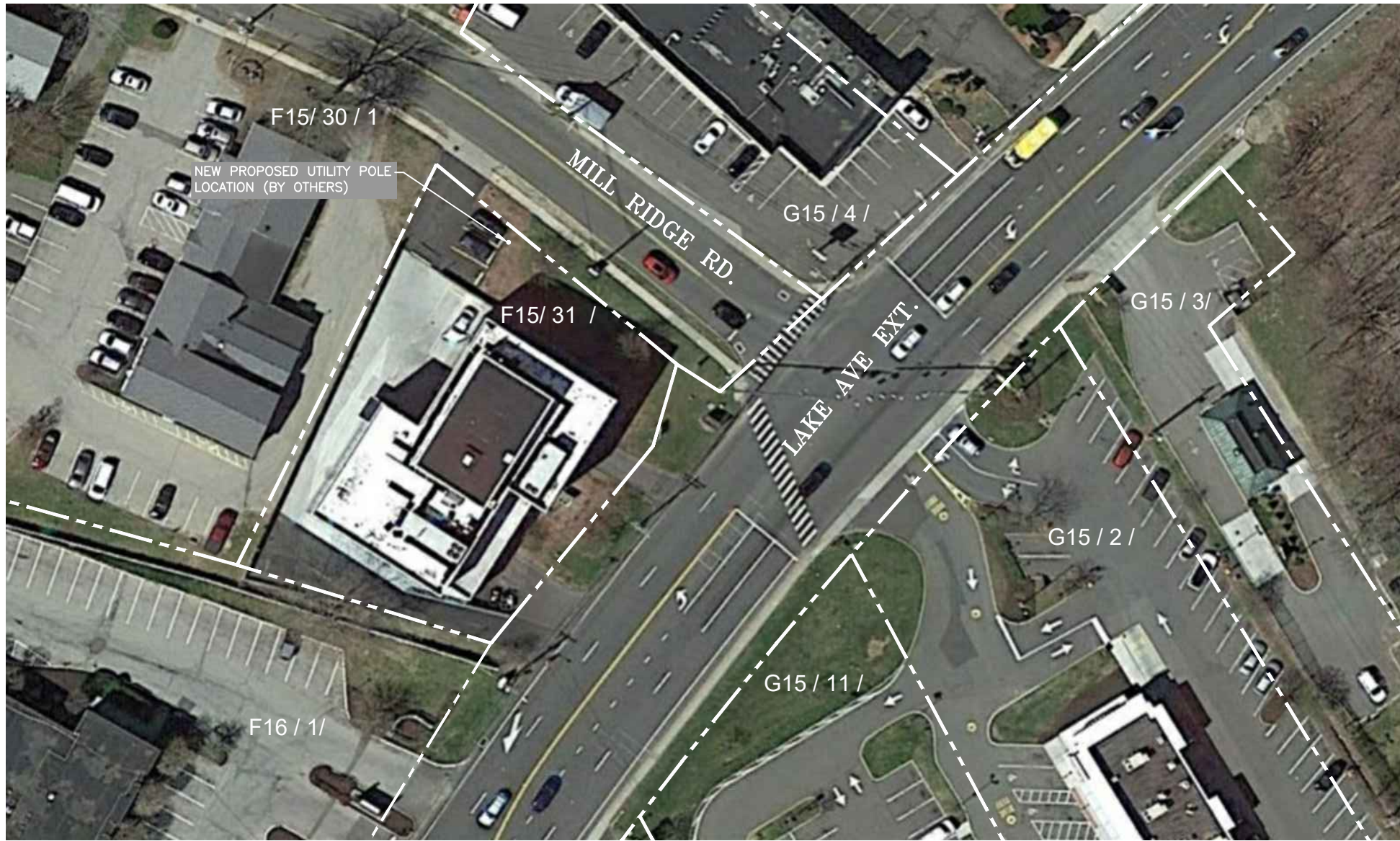
DRIVING DIRECTIONS

FROM ROCKY HILL, CT:
 HEAD SOUTHEAST TOWARD CAPITAL BLVD. TURN LEFT ONTO CAPITAL BLVD. TURN LEFT ONTO STATE HWY 411. TURN LEFT TO MERGE ONTO I-91 S. MERGE ONTO I-91 S. KEEP RIGHT TO STAY ON I-91 S. TAKE EXIT 18 FOR I-691 W TOWARD MERIDEN/WATERBURY, CONTINUE ONTO I-691 W. TAKE EXIT 1 ON THE LEFT FOR I-84 W TOWARD WATERBURY/DANBURY MERGE ONTO I-84. TAKE EXIT 4 FOR US-6 W/US-202 W TOWARD LAKE AVE. TURN RIGHT ONTO US-202 W/US-6 W/LAKE AVE EXT. TURN RIGHT ONTO MILL RIDGE RD.

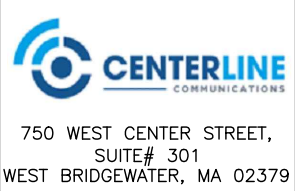
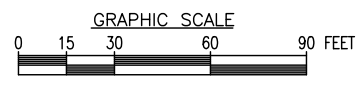
IMMEDIATE ADJOINING PROPERTY OWNER INFORMATION

PARCEL	OWNER	PHYSICAL ADDRESS	MAILING ADDRESS
F15/ 30 / 1	FAIRFIELD RIDGE/MILL RIDGE C/O LIMITED PARTNERSHIP	LAKE AVE. DANBURY, CT 06811	2 MILL RIDGE RD. DANBURY, CT 06811
F15/ 31 /	EVELYN LAKE AVE EXT LLC	11 LAKE AVE. DANBURY, CT 06811	11 LAKE AVE. DANBURY, CT 06811
G15/ 4 /	E W BATISTA FLP	2 LAKE AVE. DANBURY, CT 06811	21 EQUESTRIAN RIDGE NEWTON, CT 06470
G15/ 11 /	MCDONALD'S CORPORATION (6-267) C/O ERNEST TREFZ-TREFZ CORP	8 LAKE AVE. DANBURY, CT 06811	10 MIDDLE STREET 17TH FL. BRIDGEPORT, CT 06604
G15/ 2 /	MCDONALD'S CORPORATION (6-267) C/O ERNEST TREFZ-TREFZ CORP	8 LAKE AVE. DANBURY, CT 06811	10 MIDDLE STREET 17TH FL. BRIDGEPORT, CT 06604
G15/ 3 /	E W BATISTA FAMILY LIMITED PARTNERSHIP	2 LAKE AVE. DANBURY, CT 06811	21 EQUESTRIAN RIDGE NEWTON, CT 06470
F6/ 1 /	LAKE AVENUE ASSOCIATES INC. C/O ETHAN ALLEN-C WHITELY	21 LAKE AVE. DANBURY, CT 06811	21 LAKE AVE. DANBURY, CT 06811

APPROXIMATE COORDINATES: LAT: 41.387386° N LONG: 73.478627° W



SITE PLAN
22x34 SCALE: 1"=30'
11x17 SCALE: 1"=60'



Daniel P. Hamm

CHECKED BY: AT

APPROVED BY: DPH

SUBMITTALS			
REV.	DATE	DESCRIPTION	BY
1	02/22/21	ISSUED FOR REVIEW	MR
A	01/27/21	ISSUED FOR REVIEW	MR

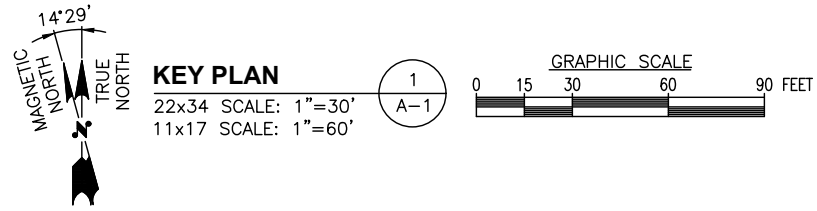
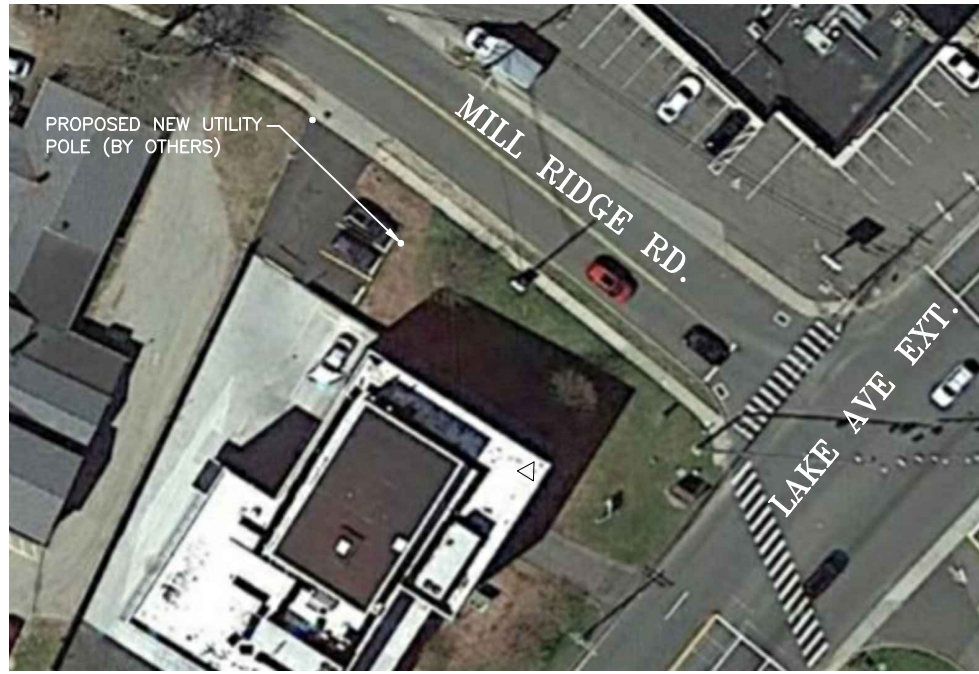
CLUSTER AND NODE NUMBER:
CRAN_DANBURY_15

SITE ID:
CRAN_DANBURY_15

SITE ADDRESS:
11 LAKE AVENUE EXT.
DANBURY, CT 06811
FAIRFIELD COUNTY

SHEET TITLE
SITE PLAN

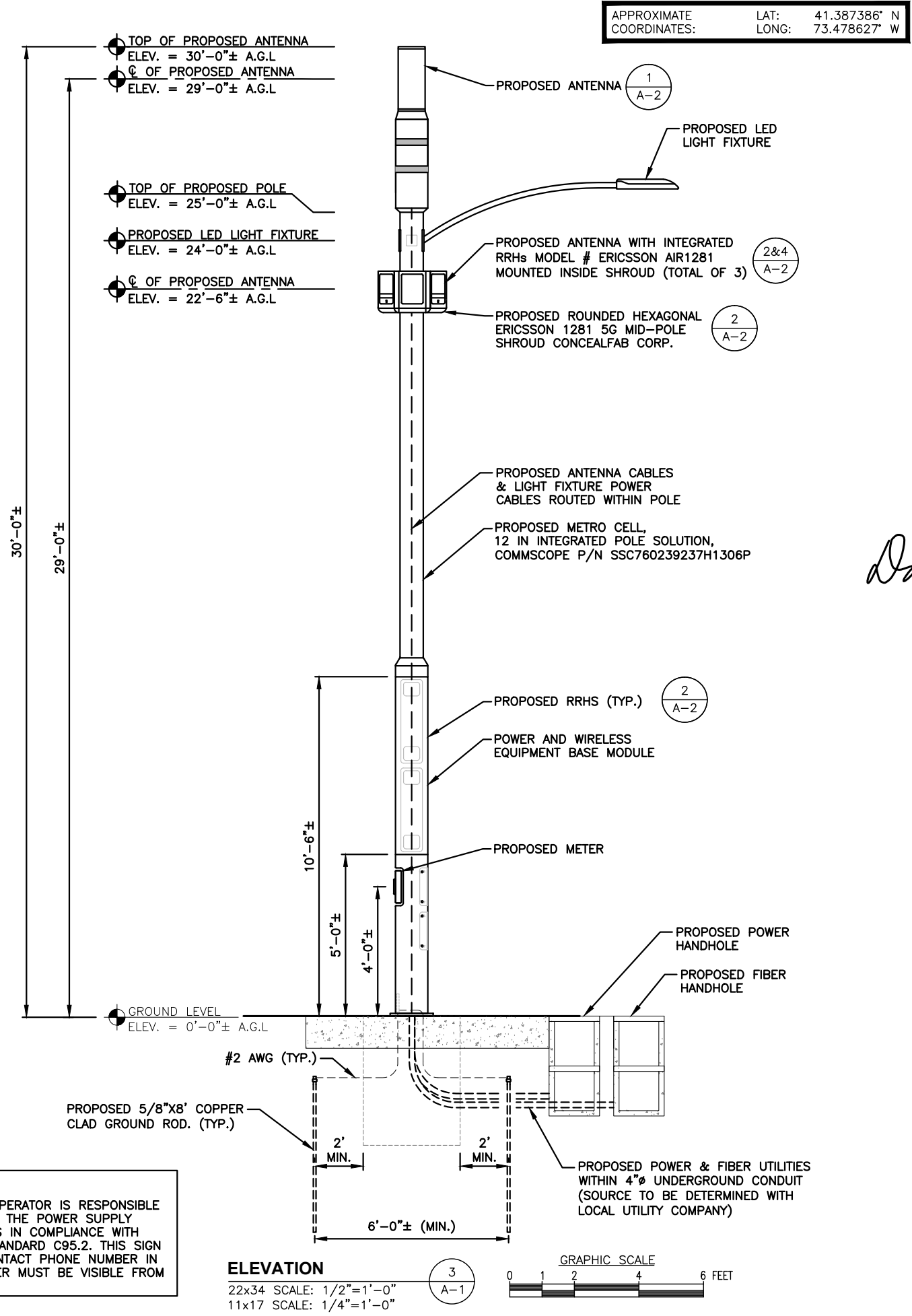
SHEET NUMBER
C-1



EXISTING CONDITIONS PHOTO DETAIL
SCALE: N.T.S.

2
A-1

NOTE:
1. THE WIRELESS COMMUNICATIONS OPERATOR IS RESPONSIBLE FOR PLACING A WARNING SIGN ON THE POWER SUPPLY COMMUNICATING THE RF EMISSIONS IN COMPLIANCE WITH THE CURRENT EDITION OF IEEE STANDARD C95.2. THIS SIGN MUST ALSO HAVE A 24-HOUR CONTACT PHONE NUMBER IN CASE OF EMERGENCY. THIS NUMBER MUST BE VISIBLE FROM THE GROUND.



500 ENTERPRISE DRIVE, SUITE 3A
ROCKY HILL, CT 06067

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

45 BEECHWOOD DRIVE
N. ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586

Daniel P. Hamm

CHECKED BY: AT

APPROVED BY: DPH

SUBMITTALS			
REV.	DATE	DESCRIPTION	BY
1	02/22/21	ISSUED FOR REVIEW	MR
A	01/27/21	ISSUED FOR REVIEW	MR

CLUSTER AND NODE NUMBER:
CRAN_DANBURY_15

SITE ID:
CRAN_DANBURY_15

SITE ADDRESS:
11 LAKE AVENUE EXT.
DANBURY, CT 06811
FAIRFIELD COUNTY

SHEET TITLE
KEY PLAN AND ELEVATION

SHEET NUMBER
A-1



500 ENTERPRISE DRIVE, SUITE 3A
ROCKY HILL, CT 06067



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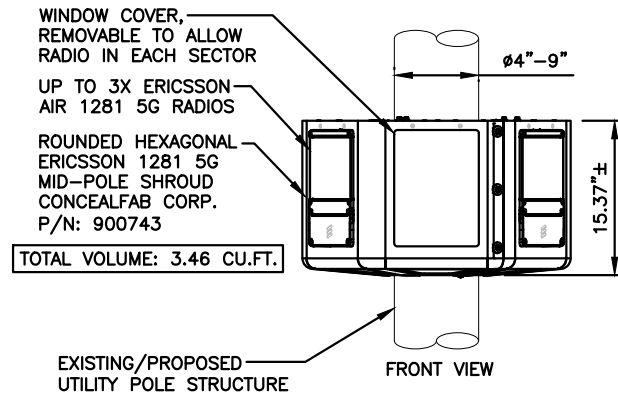
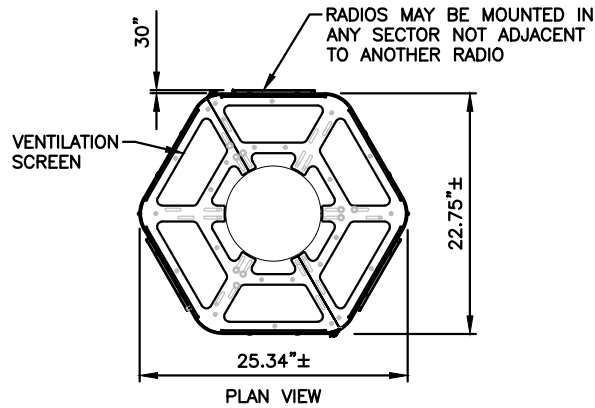
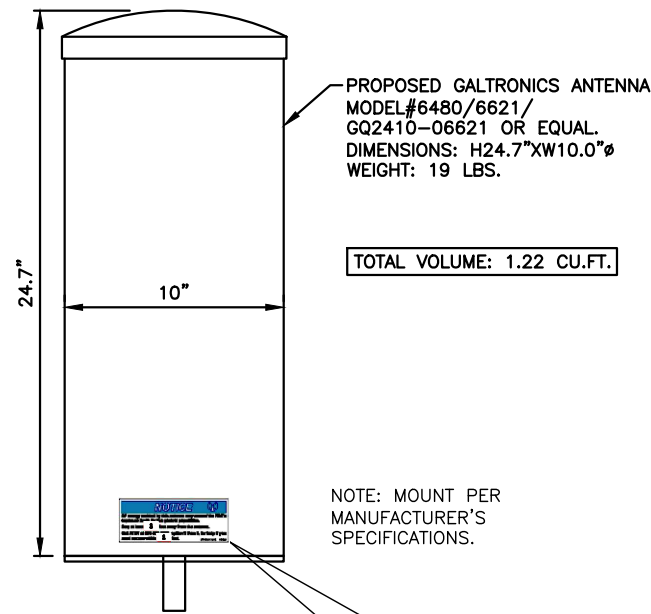
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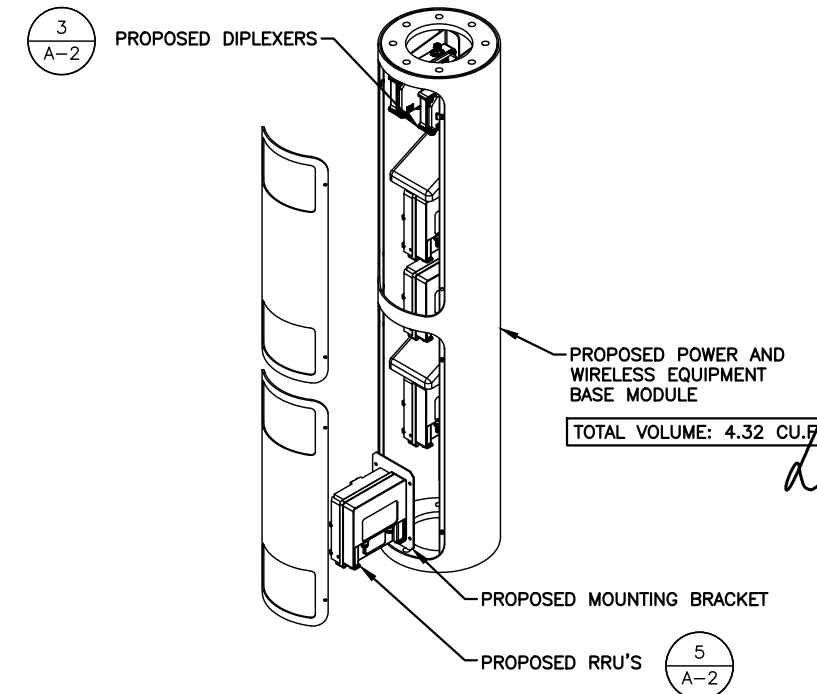
SITE ADDRESS:
11 LAKE AVENUE EXT.
DANBURY, CT 06811
FAIRFIELD COUNTY

SHEET TITLE
EQUIPMENT DETAILS

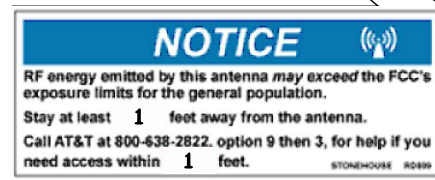
SHEET NUMBER
A-2



NOTE: MOUNT PER MANUFACTURER'S SPECIFICATIONS.



Daniel P. Hamm

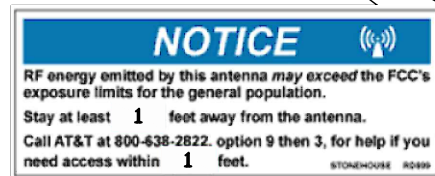
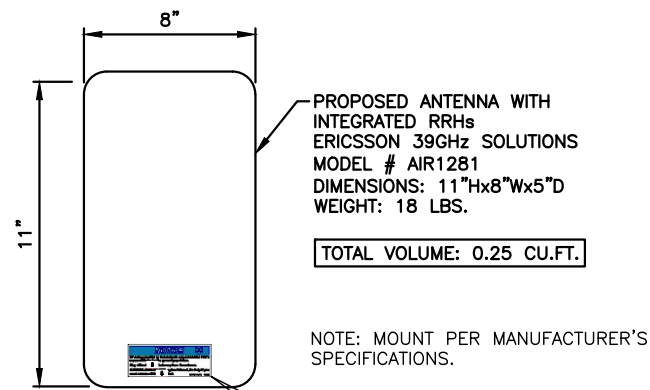


STONEHOUSE SIGNS INC. P/N RD899
SIGN DIMENSIONS 2.5"x6.5"
TWO NOTICE STICKERS MUST BE PLACED OPPOSITE EACH OTHER ON THE ANTENNA

ANTENNA DETAIL

SCALE: N.T.S

1
A-2

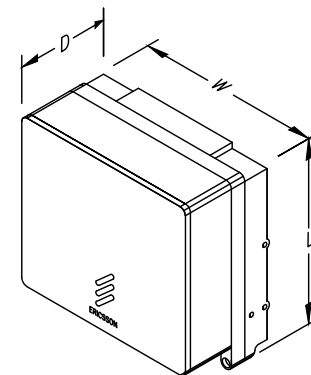


STONEHOUSE SIGNS INC. P/N RD899
SIGN DIMENSIONS 2.5"x6.5"
TWO NOTICE STICKERS MUST BE PLACED OPPOSITE EACH OTHER ON THE ANTENNA

ANTENNA DETAIL

SCALE: N.T.S

4
A-2



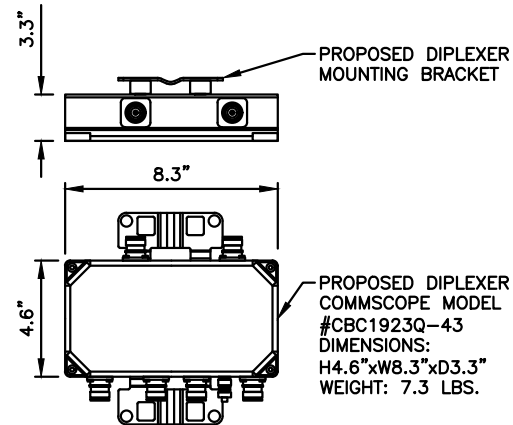
MODEL	QTY.	L	W	D	WGT.
4402	2	8.0"	8.0"	4.0"	11 LBS
2205	1	8.0"	8.0"	4.0"	11 LBS

NOTE: MOUNT PER MANUFACTURER'S SPECIFICATIONS.

RRH DETAIL

SCALE: N.T.S

5
A-2

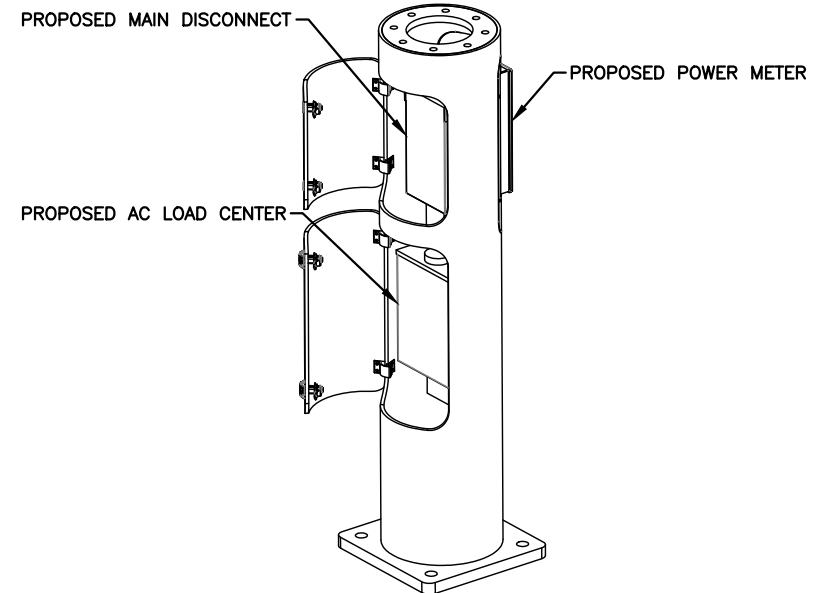


NOTE: MOUNT PER MANUFACTURER'S SPECIFICATIONS.

DIPLEXER DETAIL (AS REQUIRED)

SCALE: N.T.S

3
A-2



NOTE: MOUNT PER MANUFACTURER'S SPECIFICATIONS.

POWER AND EQUIPMENT BASE MODULE DETAIL

SCALE: N.T.S

6
A-2

ATTACHMENT 3

STRUCTURAL ANALYSIS REPORT

For

CRAN_DANBURY_15

11 Lake Avenue Extension
Danbury, CT 06811

Equipment Mounted on Light Pole



Prepared for:



at&t

Dated: January 22, 2021

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 proposed metal pole supporting the proposed AT&T equipment.

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

CONCLUSION SUMMARY:

Based on our evaluation, we have determined that the proposed metal pole is in conformance with the National Electric Safety Code 2017 (NESC). The metal pole structure is rated at 2.0%.

APPURTENANCES CONFIGURATION:

Appurtenances	Elev.	Mount
(1) GQ2410-06621 Antenna	29'-0"	Top of Pole Concealment
(3) AIR1281 Antennas	22'-6"	Equipment Enclosure
(2) CBC1923Q-43 Diplexers	10'-0"	Power Module
(2) 4402 RRH's	8'-0"	Power Module
(1) 2205 RRH	7'-0"	Power Module
(1) Disconnect Switch	3'-0"	Base Module
(1) Electric Meter	4'-0"	Base Module
(1) Load Center	2'-0"	Base Module

ANALYSIS RESULTS SUMMARY:

Component	Max. Stress Ratio	Elev. of Component (ft.)	Pass/Fail
12" Metal Pole (Proposed)	2.0%	0 - 25.0	PASS



DESIGN CRITERIA:

National Electric Safety Code 2017 (NESC) and the 2018 Connecticut State Building Code Amendments		
Wind		
City/Town:	Danbury	
County:	Fairfield	
NESC Rule	Rule 250B	NESC Section 25
Construction Grade	C	NESC Section 25
Wind Load:	39.53 mph	NESC Table 230-2
Ice		
Loading District	Heavy	NESC Figure 250-1
Radial Ice Thickness:	0.50 in	NESC Table 230-1

1. Approximate height above grade to center of the proposed antennas: 29'-0" +/- and 22'-6" +/-.

***Calculations and referenced documents are attached.**



PROPOSED STRUCTURE:

The proposed 25'-0" +/- light pole is assumed to have a 12" diameter. If field conditions differ from what is assumed in this report, then the engineer of record is to be notified as soon as possible.

ANTENNA SUPPORT RECOMMENDATIONS:

- The new Galtronics antenna is proposed to be installed on a mounting bracket secured to the top of the pole concealment using the approved manufacturer's mounts.
- The new Ericsson antennas are proposed to be installed within the equipment enclosure using the approved manufacturer's mounts.

EQUIPMENT SUPPORT RECOMMENDATIONS:

The new equipment is proposed to be installed on the proposed metal pole within the power module using thru bolts.

Limitations and assumptions:

1. Reference the latest HDG construction drawings for all the equipment locations details.
2. Mount all equipment per manufacturer's specifications.
3. 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. Contractor to perform pre-inspection prior to construction.
4. All antennas and waveguide cables are assumed to be properly installed and supported as per the manufacturer requirements.
5. HDG is not responsible for any modifications completed prior to and hereafter which HDG was not directly involved.
6. If field conditions differ from what is assumed in this report, then the engineer of record is to be notified as soon as possible.
7. HDG did not perform any geotechnical analysis / or / investigation. Soil Information is unknown.

FIELD PHOTOS:

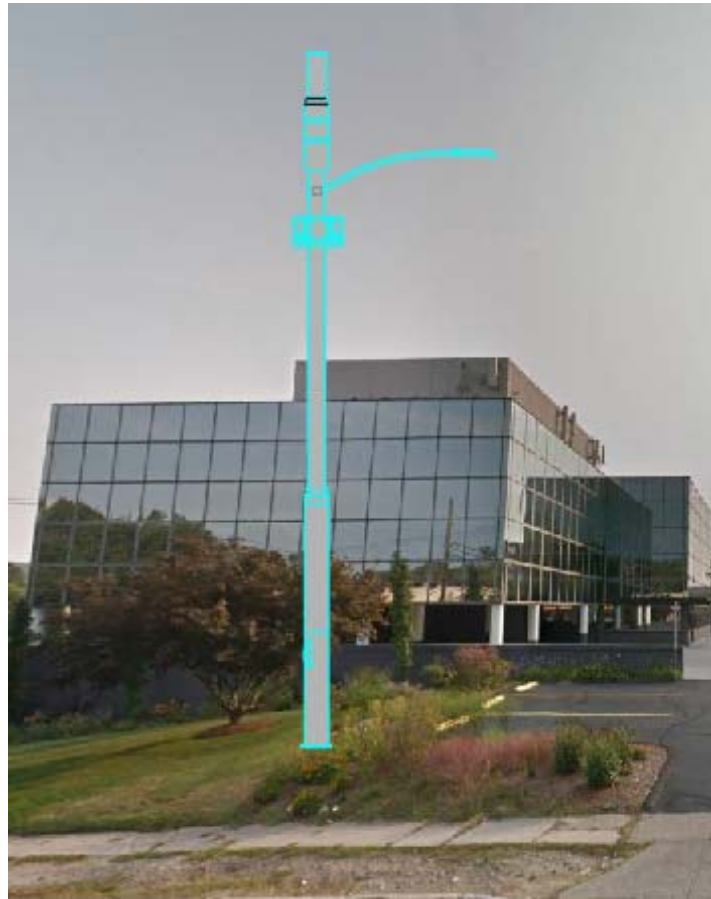


Photo 1: Sample photo illustrating the proposed location of metal light pole.



HUDSON
Design Group LLC

Calculations

Date: 1/21/2021
Project Name: CRAN_DANBURY_15
Designed By: ID **Checked By:** MSC



Wind Analysis → Antenna Enclosure

Reference Codes:

-Connecticut State Building Code 2018

-International Building Code 2015 (IBC 2015)

-Minimum Design Loads for Buildings and Other Structures (ASCE 7-10)

Structure Classification	II	(ASCE 7-10 Table 1.5-1)
Basic Wind Speed, V	39.53 mph	(ASCE 7-10 Figure 26.5-1)
Exposure Category	B	(ASCE 7-10 Section 26.7)
Height Above Ground Level, z	22.5 ft	(Center of Enclosure)
Exposure Coefficient, K_z	0.64	(ASCE 7-10 Table 29.3-1)
Wind Directionality Coef., K_d	0.90	(ASCE 7-10 Table 26.6-1)
Topographic Factor, K_{zt}	1.00	(ASCE 7-10 Section 26.8.2)
Velocity Pressure, q_z	$= 0.00256K_zK_{zt}K_dV^2$ $= \underline{\underline{2.30 \text{ psf}}}$	(ASCE 7-10 Equation 29.3-1)
Gust Factor, G	0.85	(ASCE 7-10 Section 26.9)
Enclosure Shape:	Square	
Net Force Coefficient, C_f	1.35	(ASCE 7-10 Figure 29.5-1)
Wind Force, F	$= q_zGC_f$ $= \underline{\underline{2.64 \text{ psf}}}$	(ASCE 7-10 Equation 29.5-2)

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GALTRONICS ANTENNA

2.6.5.2 Velocity Pressure Coeff:

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

$K_z =$ **0.975**

$z =$ 29 (ft)
 $z_g =$ 900 (ft)
 $\alpha =$ 9.5

$K_{zmin} \leq K_z \leq 2.01$

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

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

$K_{zt} =$ **1**

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

Category = **1**

$$K_h = e^{(fz/H)}$$

$K_h =$ 1
 $K_c =$ **1** (from Table 2-4)
 $K_t =$ **0** (from Table 2-5)
 $f =$ **0** (from Table 2-5)
 $z =$ 29
 $z_s =$ **475** (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)
 $K_e =$ 0.98 (from 2.6.8)

2.6.10 Design Ice Thickness

Max Ice Thickness = $t_i =$ **0.50** in
 Importance Factor = $I =$ **1.0** (from Table 2-3)
 $K_{iz} =$ **0.99** (from Sec. 2.6.10)

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

$t_{iz} =$ **0.49** in

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

$h =$ 25

$G_h =$ 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

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

$G_h =$ 1.35

$G_h =$ 1.00

2.6.11.2 Design Wind Force on Appurtenances

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

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

$q_z =$	3.64
$q_{z(ice)} =$	3.73
$q_{z(30)} =$	2.10

$K_z =$	0.975 (from 2.6.5.2)
$K_{zt} =$	1.0 (from 2.6.6.2.1)
$K_s =$	1.0 (from 2.6.7)
$K_e =$	0.98 (from 2.6.8)
$K_d =$	0.95 (from Table 2-2)
$V_{max} =$	39.53 mph (Ultimate Wind Speed)
$V_{max(ice)} =$	40 mph
$V_{30} =$	30 mph

Table 2-2

Structure Type	Wind Direction Probability Factor, K_d
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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 Project Name: CRAN_DANBURY_15
 Designed By: ID Checked By: MSC



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 = **0.49 in** Angle = **0 (deg)** Equivalent Angle = **180 (deg)**

<u>Appurtenances</u>	<u>Height</u>	<u>Width</u>	<u>Depth</u>	<u>Flat Area</u>	<u>Aspect Ratio</u>	<u>Ca</u>	<u>Force (lbs)</u>	<u>Force (lbs) (w/ Ice)</u>	<u>Force (lbs) (30 mph)</u>
GQ2410-06621 Antenna	24.7	10.0	10.0	1.72	2.47	1.20	7	9	4
AIR1281 Antenna	11.0	8.0	5.0	0.61	1.38	1.20	3	3	2
Street Light	18.0	12.0	12.0	1.50	1.50	1.20	7	8	4
16" Pipe	12.0	16.0		1.33	0.75	1.20	6	7	3
12" Pipe	12.0	12.9		1.07	0.93	2.00	8	9	5

Date: 1/21/2021

Project Name: CRAN_DANBURY_15

Designed By: ID Checked By: MSC



HUDSON
Design Group LLC

**GALTRONICS ANTENNAS
ICE WEIGHT CALCULATIONS**

Thickness of ice: 0.49 in.

Density of ice: 56 pcf

GQ2410-06621 Antenna

Weight of ice based on total radial SF area:

Height (in): 24.7

Width (in): 10.0

Depth (in): 10.0

Total weight of ice on object: 18 lbs

Weight of object: 19.0 lbs

Combined weight of ice and object: 37 lbs

Street Light

Weight of ice based on total radial SF area:

Height (in): 18.0

Width (in): 12.0

Depth (in): 12.0

Total weight of ice on object: 16 lbs

Weight of object: 50.0 lbs

Combined weight of ice and object: 66 lbs

AIR1281 Antenna

Weight of ice based on total radial SF area:

Height (in): 11.0

Width (in): 8.0

Depth (in): 5.0

Total weight of ice on object: 5 lbs

Weight of object: 18.0 lbs

Combined weight of ice and object: 23 lbs

12" Pipe

Per foot weight of ice:

diameter (in): 12.875

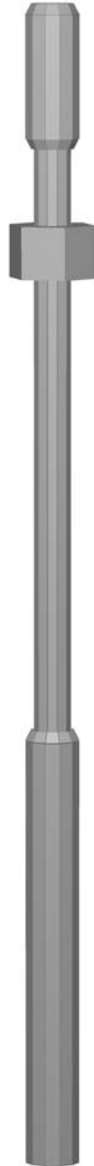
Per foot weight of ice on object: 8 plf

16" Pipe

Per foot weight of ice:

diameter (in): 16

Per foot weight of ice on object: 10 plf



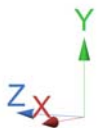
A53 GRB A53 GRB A53 GRB
PIPE 10X0.653 6X0.273 10X0.365

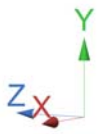


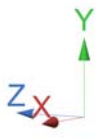
A53 GRB
PIPE 11X0.9375

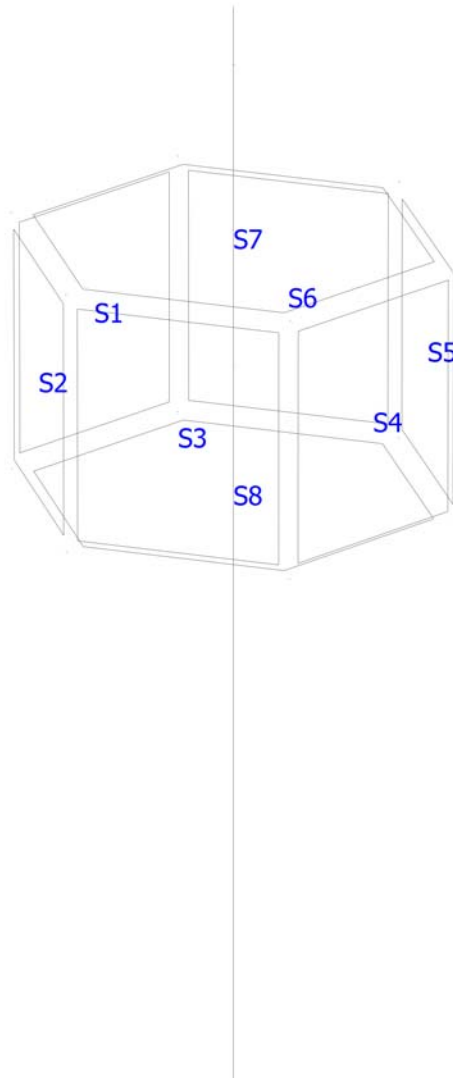
A53 GRB
PIPE 11X0.9375

A53 GRB
PIPE 16X0.375









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Load data

GLOSSARY

Comb : Indicates if load condition is a load combination

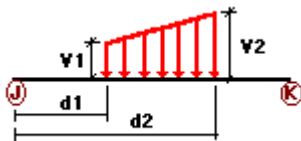
Load Conditions

Condition	Description	Comb.	Category
DL	Dead Load	No	DL
WL1	Wind Load (Side 1)	No	WIND
WL2	Wind Load (Side 2)	No	WIND
WL3	Wind Load (Side 3)	No	WIND
WL4	Wind Load (Side 4)	No	WIND
Di	Ice Load	No	LL

Load on nodes

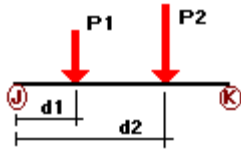
Condition	Node	FX [Kip]	FY [Kip]	FZ [Kip]	MX [Kip*ft]	MY [Kip*ft]	MZ [Kip*ft]
DL	3	0.00	-0.054	0.00	0.00	0.00	0.00
	19	0.00	-0.019	0.00	0.00	0.00	0.00
	21	0.00	-0.05	0.00	0.00	0.00	0.00
WL1	19	0.00	0.00	-0.007	0.00	0.00	0.00
	21	0.00	0.00	-0.007	0.00	0.00	0.00
WL2	19	-0.007	0.00	0.00	0.00	0.00	0.00
	21	-0.007	0.00	0.00	0.00	0.00	0.00
WL3	19	0.00	0.00	0.007	0.00	0.00	0.00
	21	0.00	0.00	0.007	0.00	0.00	0.00
WL4	19	0.007	0.00	0.00	0.00	0.00	0.00
	21	0.007	0.00	0.00	0.00	0.00	0.00
Di	3	0.00	-0.015	0.00	0.00	0.00	0.00
	19	0.00	-0.018	0.00	0.00	0.00	0.00
	21	0.00	-0.016	0.00	0.00	0.00	0.00

Distributed force on members



Condition	Member	Dir1	Val1 [Kip/ft]	Val2 [Kip/ft]	Dist1 [ft]	%	Dist2 [ft]	%
WL1	3	z	-0.006	-0.006	0.00	No	92.00	Yes
	5	z	-0.008	-0.008	0.00	No	100.00	Yes
WL2	3	x	-0.006	-0.006	0.00	No	92.00	Yes
	5	x	-0.008	-0.008	0.00	No	100.00	Yes
WL3	3	z	0.006	0.006	0.00	No	92.00	Yes
	5	z	0.008	0.008	0.00	No	100.00	Yes
WL4	3	x	0.006	0.006	0.00	No	92.00	Yes
	5	x	0.008	0.008	0.00	No	100.00	Yes
Di	3	y	-0.008	-0.008	0.00	No	92.00	Yes
	5	y	-0.01	-0.01	0.00	No	100.00	Yes

Concentrated forces on members



Condition	Member	Dir1	Value1 [Kip]	Dist1 [ft]	%
DL	1	y	-0.02	2.00	No
		y	-0.015	3.00	No
		y	-0.017	3.00	No
		y	-0.011	7.00	No
		y	-0.011	8.00	No
		y	-0.011	8.00	No
		y	-0.008	10.00	No
		y	-0.008	10.00	No

Load on shells

Condition	Shell	Pressure [Kip/ft ²]	Temp. [F]
WL1	1	-0.003	0.00
WL2	2	-0.003	0.00
	3	-0.003	0.00
WL3	4	-0.003	0.00
WL4	5	-0.003	0.00
	6	-0.003	0.00

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
WL1	Wind Load (Side 1)	No	0.00	0.00	0.00
WL2	Wind Load (Side 2)	No	0.00	0.00	0.00
WL3	Wind Load (Side 3)	No	0.00	0.00	0.00
WL4	Wind Load (Side 4)	No	0.00	-1.00	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
WL1	0.00	0.00	0.00
WL2	0.00	0.00	0.00
WL3	0.00	0.00	0.00
WL4	0.00	0.00	0.00
Di	0.00	0.00	0.00



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Steel Code Check

Report: Summary - Group by member

Load conditions to be included in design :

- LC1=1.4DL
- LC2=1.2DL+1.6Di
- LC3=1.2DL+0.5WL1
- LC4=1.2DL+0.5WL2
- LC5=1.2DL+0.5WL3
- LC6=1.2DL+0.5WL4
- LC7=1.2DL+WL1
- LC8=1.2DL+WL2
- LC9=1.2DL+WL3
- LC10=1.2DL+WL4
- LC11=1.2DL+WL1+Di
- LC12=1.2DL+WL2+Di
- LC13=1.2DL+WL3+Di
- LC14=1.2DL+WL4+Di
- LC15=0.9DL+WL1
- LC16=0.9DL+WL2
- LC17=0.9DL+WL3
- LC18=0.9DL+WL4

Description	Section	Member	Ctrl Eq.	Ratio	Status	Reference
	<i>PIPE 10x0.365</i>	4	LC14 at 0.00%	0.00	OK	
		6	LC14 at 0.00%	0.00	OK	
	<i>PIPE 11x0.9375</i>	2	LC14 at 100.00%	0.01	OK	
		3	LC14 at 0.00%	0.01	OK	
	<i>PIPE 16x0.375</i>	1	LC14 at 0.00%	0.02	OK	
		5	LC14 at 0.00%	0.00	OK	

Geometry data

GLOSSARY

- Cb22, Cb33 : Moment gradient coefficients
- Cm22, Cm33 : Coefficients applied to bending term in interaction formula
- d0 : Tapered member section depth at J end of member
- DJX : Rigid end offset distance measured from J node in axis X
- DJY : Rigid end offset distance measured from J node in axis Y
- DJZ : Rigid end offset distance measured from J node in axis Z
- DKX : Rigid end offset distance measured from K node in axis X
- DKY : Rigid end offset distance measured from K node in axis Y
- DKZ : Rigid end offset distance measured from K node in axis Z
- dL : Tapered member section depth at K end of member
- Ig factor : Inertia reduction factor (Effective Inertia/Gross Inertia) for reinforced concrete members
- K22 : Effective length factor about axis 2
- K33 : Effective length factor about axis 3
- L22 : Member length for calculation of axial capacity
- L33 : Member length for calculation of axial capacity
- LB pos : Lateral unbraced length of the compression flange in the positive side of local axis 2
- LB neg : Lateral unbraced length of the compression flange in the negative side of local axis 2
- RX : Rotation about X
- RY : Rotation about Y
- RZ : Rotation about Z
- TO : 1 = Tension only member 0 = Normal member
- TX : Translation in X
- TY : Translation in Y
- TZ : Translation in Z

Nodes

Node	X [ft]	Y [ft]	Z [ft]	Rigid Floor
1	0.00	0.00	0.00	0
2	0.00	25.00	0.00	0
3	0.00	22.50	0.00	0
4	-1.056	23.14	0.00	0
5	-0.528	23.14	0.948	0
6	-0.528	23.14	-0.948	0
7	1.056	23.14	0.00	0
8	0.528	23.14	0.948	0
9	0.528	23.14	-0.948	0
10	-1.056	21.86	0.00	0
11	-0.528	21.86	0.948	0
12	-0.528	21.86	-0.948	0
13	0.528	21.86	-0.948	0
14	1.056	21.86	0.00	0
15	0.528	21.86	0.948	0
16	0.00	10.50	0.00	0
17	0.00	10.75	0.00	0
18	0.00	25.25	0.00	0
19	0.00	28.50	0.00	0
20	0.00	28.25	0.00	0
21	0.00	24.00	0.00	0

Restraints

Node	TX	TY	TZ	RX	RY	RZ
1	1	1	1	1	1	1

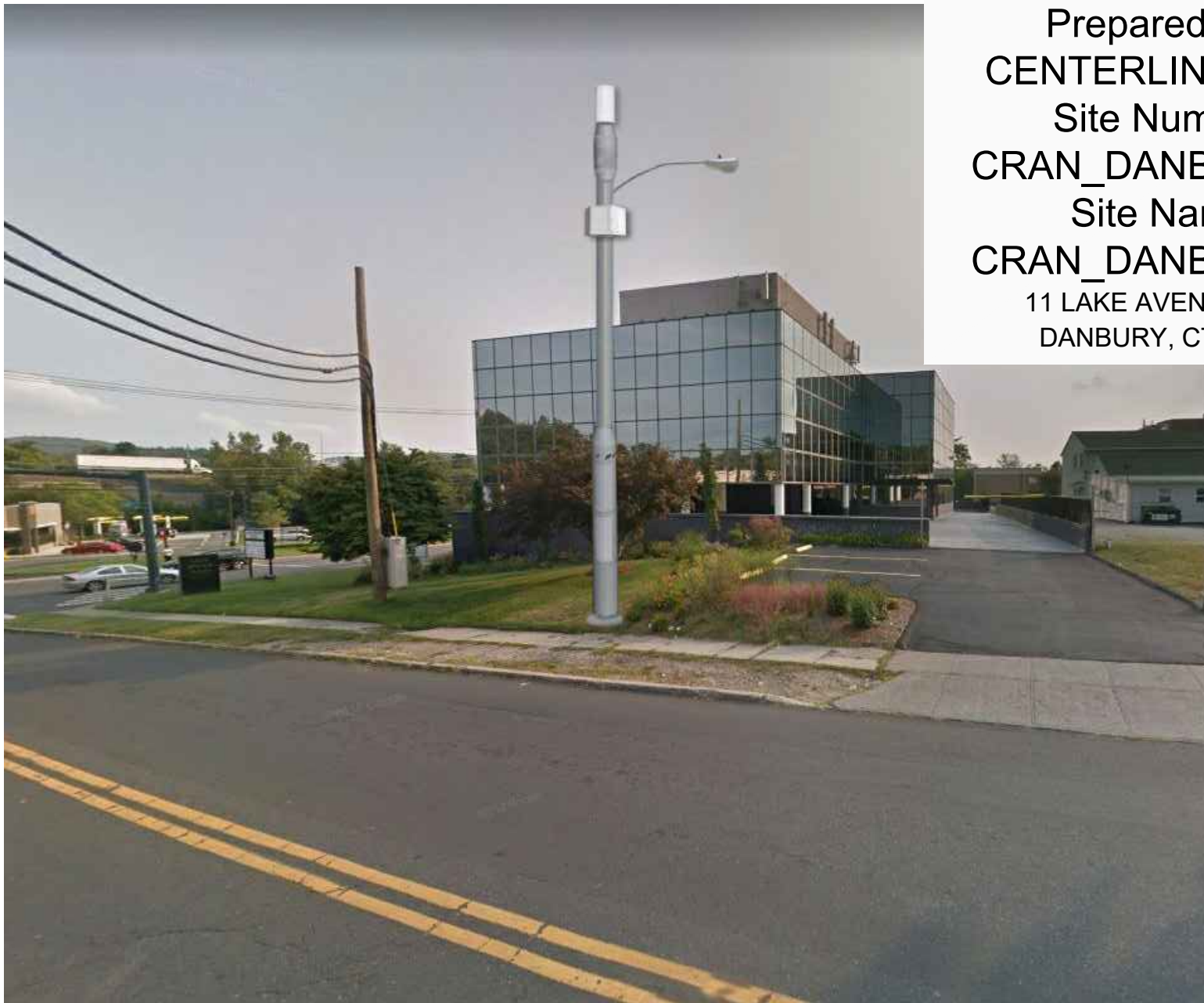
Members

Member	NJ	NK	Description	Section	Material	d0 [in]	dL [in]	Ig factor
1	1	16		PIPE 16x0.375	A53 GrB	0.00	0.00	0.00
2	16	17		PIPE 11x0.9375	A53 GrB	16.00	12.875	0.00
3	17	2		PIPE 11x0.9375	A53 GrB	0.00	0.00	0.00
4	2	18		PIPE 10x0.365	A53 GrB	12.875	16.00	0.00
5	18	20		PIPE 16x0.375	A53 GrB	0.00	0.00	0.00
6	20	19		PIPE 10x0.365	A53 GrB	16.00	12.875	0.00

Shells

Shell	Description	Material	Thickness [in]	Center of gravity [ft]	Area [ft2]	N1, N2, ..., Nn
1		A36 (weightless)	0.13	(0.00, 22.50, 0.95)	1.35	15, 8, 5, 11
2		A36 (weightless)	0.13	(0.79, 22.50, 0.47)	1.39	14, 7, 8, 15
3		A36 (weightless)	0.13	(0.79, 22.50, -0.47)	1.39	13, 9, 7, 14
4		A36 (weightless)	0.13	(0.00, 22.50, -0.95)	1.35	12, 6, 9, 13
5		A36 (weightless)	0.13	(-0.79, 22.50, -0.47)	1.39	10, 4, 6, 12
6		A36 (weightless)	0.13	(-0.79, 22.50, 0.47)	1.39	11, 5, 4, 10
7		A36 (weightless)	0.13	(0.00, 23.14, 0.00)	3.00	7, 9, 6, 4, 5, 8
8		A36 (weightless)	0.13	(0.00, 21.86, 0.00)	3.00	14, 13, 12, 10, 11, 15

ATTACHMENT 4



Prepared For:
CENTERLINE-AT&T
 Site Number:
CRAN_DANBURY_15
 Site Name:
CRAN_DANBURY_15
 11 LAKE AVENUE EXT.
 DANBURY, CT 06811

SITE NO: CRAN_DANBURY_15
SITE NAME: CRAN_DANBURY_15
ADDRESS: 11 LAKE AVENUE EXT.
 DANBURY, CT 06811



500 ENTERPRISE DRIVE, SUITE 3A
 ROCKY HILL, CT 06067

PREPARED FOR:



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



45 BEECHWOOD DRIVE
 N. ANDOVER, MA 01845
 TEL: (978) 557-5553
 FAX: (978) 336-5586

SITE TYPE: UTILITY POLE

DATE: 01/28/2021 REV: 0

DRAWN BY: VP

SCALE: N.T.S.

THIS STUDY DOES NOT CLAIM IN ANY WAY TO SHOW THE ONLY AREAS OF VISIBILITY. IT IS MEANT TO SHOW A BROAD REPRESENTATION OF AREAS WHERE THE PROPOSED INSTALLATION MAY BE VISIBLE BASED UPON THE BEST INFORMATION FOR TOPOGRAPHY AND VEGETATION LOCATIONS AVAILABLE TO DATE.

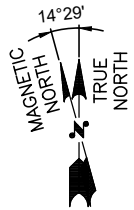


PHOTO LOCATION

SITE NO: CRAN_DANBURY_15
SITE NAME: CRAN_DANBURY_15
ADDRESS: 11 LAKE AVENUE EXT.
 DANBURY, CT 06811



500 ENTERPRISE DRIVE, SUITE 3A
 ROCKY HILL, CT 06067

PREPARED FOR:



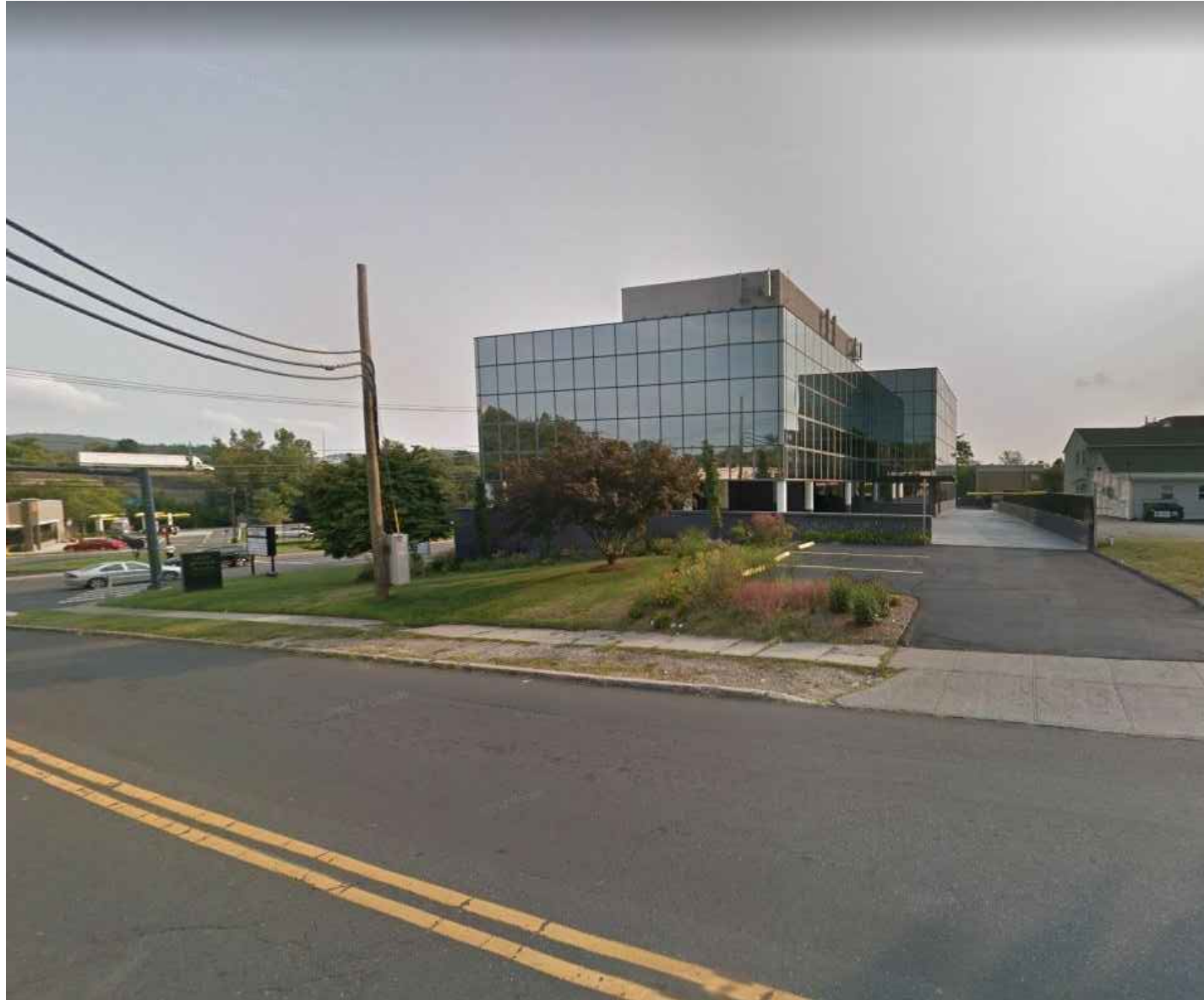
750 WEST CENTER STREET
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 DANBURY, CT 06811



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VIEW SOUTHWEST FROM MILL RIDGE RD

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 DANBURY, CT 06811



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PREPARED FOR:



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DRAWN BY: VP	
SCALE: N.T.S.	

THIS STUDY DOES NOT CLAIM IN ANY WAY TO SHOW THE ONLY AREAS OF VISIBILITY. IT IS MEANT TO SHOW A BROAD REPRESENTATION OF AREAS WHERE THE PROPOSED INSTALLATION MAY BE VISIBLE BASED UPON THE BEST INFORMATION FOR TOPOGRAPHY AND VEGETATION LOCATIONS AVAILABLE TO DATE.

ATTACHMENT 5



Radio Frequency Emissions Analysis Report

February 26, 2021

Centerline Communications on behalf of AT&T

Site Name: CRAN_DANBURY_15
Site Address: 11 Lake Ave. Ext., Danbury, CT 06811
FA#: 14864510



Site Compliance Summary

Compliance Status:	Compliant
Carrier MPE% of FCC General Population Allowable Limit:	0.30258966%
Composite MPE% of FCC General Population Allowable Limit:	0.30258966%



February 26, 2021

AT&T New England
Attn: John Benedetto, RF Manager
5050 Cochituate Road Suite 550 - 13&14
Framingham, MA 01701

Emissions Analysis for Site: **CRAN_DANBURY_15**

Centerline Communications, LLC ("Centerline") was directed to analyze the proposed AT&T facility to be located on utility pole # near **11 Lake Ave. Ext., Danbury CT 06811** for the purpose of determining whether the emissions from the proposed facility are within specified federal limits.

All information used in this report was analyzed as a percentage of current Maximum Permissible Exposure (% MPE) as listed in the FCC OET Bulletin 65 Edition 97-01 and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). The number of $\mu\text{W}/\text{cm}^2$ calculated at each sample point is called the power density. The exposure limit for power density varies depending upon the frequencies being utilized. Wireless Carriers and Paging Services use different frequency bands each with different exposure limits, therefore it is necessary to report results and limits in terms of percent MPE rather than power density.

All results were compared to the FCC (Federal Communications Commission) radio frequency exposure rules, 47 CFR 1.1307(b)(1) – (b)(3), to determine compliance with the Maximum Permissible Exposure (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.

Population exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). The general population exposure limits for the 1900 MHz (PCS), 2100 MHz (AWS), 5 GHz (B46), and 39 GHz (mmWave) bands is $1000 \mu\text{W}/\text{cm}^2$.

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.



Calculations

Calculations were performed for the proposed facility using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. Since AT&T is proposing focused omnidirectional antennas, which project most of the emitted energy out toward the horizon, all calculations were performed assuming a lobe representing the maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was focused at the base of the tower. This is a very conservative estimate since the gain reduction in actual applications is typically greater than 10 dB in the direction of ground immediately surrounding the facility. Real world emissions values from this facility are expected to be lower than values listed in this report at ground level. For this report the sample point is the top of a 6-foot person standing at the base of the tower.

Per FCC OET Bulletin No. 65 - Edition 97-01 recommendations to achieve the maximum anticipated value at each sample point, all power levels emitting from the proposed antenna installation are increased by a factor of 2.56 to account for possible in-phase reflections from the surrounding environment. All power values expressed and analyzed are maximum power levels expected to be used on all radios.

For each sector the following channel counts, frequency bands and power levels were utilized as shown in *Table 1*:

RRH #	Frequency Band	Technology	Channel Count	Transmit Power per Channel (W)
1	1900	LTE	4	5
1	2100	LTE	4	5
2	5150	LTE	2	0.316
3	39000	5G	1	0.24
3	39000	5G	1	0.24
3	39000	5G	1	0.24

Table 1: Channel Data Table



The following antennas listed in Table 2 were used in the modeling for transmission in the 1900 MHz (PCS), 2100 MHz (AWS), 5 GHz (B46), and 39 GHz (mmWave) frequency bands. This is based on information from the carrier with regard to anticipated antenna selection.

Sector	Antenna Number	Make / Model	Centerline (ft)
A	1	GALTRONICS GQ2410-06621	29
A	1	GALTRONICS GQ2410-06621	29
A	1	GALTRONICS GQ2410-06621	29
A	2	ERICSSON AIR1281	22.5
B	3	ERICSSON AIR1281	22.5
C	4	ERICSSON AIR1281	22.5

Table 2: Antenna Data

All calculations were done with respect to uncontrolled / general population threshold limits.

NOTE: The AIR1281 pattern is unavailable at the time of this report. A replacement pattern with the same performance was used for the modeling.



Results

Per the calculations completed for the proposed AT&T configurations *Table 3* shows resulting emissions power levels and percentages of the FCC's allowable general population limit.

ID	Make / Model	Frequency Band	Gain (dBd)	Centerline (ft)	Channel Count	TX Power (W)	ERP (W)	MPE %
AT&T 1	GALTRONICS GQ2410-06621	1900	6.11	29.0	4	5	81.6639	0.102203961
AT&T 1	GALTRONICS GQ2410-06621	2100	6.33	29.0	4	5	85.9073	0.092045013
AT&T 1	GALTRONICS GQ2410-06621	5150	2.15	29.0	2	0.316	1.0369	0.001350369
AT&T 2	ERICSSON AIR1281	39000	26.7	22.5	1	0.24	112.2564	0.035356010
AT&T 3	ERICSSON AIR1281	39000	26.7	22.5	1	0.24	112.2564	0.035817154
AT&T 4	ERICSSON AIR1281	39000	26.7	22.5	1	0.24	112.2564	0.035817154
AT&T MPE%								0.30258966 %

Table 3: AT&T Antenna Inventory & Power Level

NOTE: The AIR1281 pattern is unavailable at the time of this report. A replacement pattern with the same performance was used for the modeling.



FCC OET 65 specifies that for carriers utilizing directional antennas that the highest recorded sector value be used for composite site MPE values due to their greatly reduced emissions contributions in the directions of the adjacent sectors. *Table 4* below details a breakdown by frequency band and technology for the MPE power values for the maximum calculated AT&T sector(s).

Frequency Band	Centerline Technology	Centerline (ft.)	# of Channels	ERP W (Per Channel)	Total Power Density ($\mu\text{W}/\text{cm}^2$)	Allowable MPE ($\mu\text{W}/\text{cm}^2$)	MPE %
1900	LTE	29.0	4	20.41596932	0.36994282	1000	0.03699428
2100	LTE	29.0	4	21.47682134	0.34276491	1000	0.03427649
5150	LTE	29.0	2	0.518426368	0.00562165	1000	0.00056217
39000	5G	22.5	1	112.2564339	0.35356010	1000	0.03535601
AT&T Alpha Sector MPE%							0.10718895
1900	LTE	29.0	4	20.41596932	0.31834569	1000	0.03183457
2100	LTE	29.0	4	21.47682134	0.30956042	1000	0.03095604
5150	LTE	29.0	2	0.518426368	0.00381617	1000	0.00038162
39000	5G	22.5	1	112.2564339	0.35817154	1000	0.03581715
AT&T Beta Sector MPE%							0.09898938
1900	LTE	29.0	4	20.41596932	0.33375109	1000	0.03337511
2100	LTE	29.0	4	21.47682134	0.26812480	1000	0.02681248
5150	LTE	29.0	2	0.518426368	0.00406586	1000	0.00040659
39000	5G	22.5	1	112.2564339	0.35817154	1000	0.03581715
AT&T Gamma Sector MPE%							0.09641133
AT&T MPE%							0.30258966 %

Table 4: AT&T Maximum Sector MPE Power Values



Summary

All calculations performed for this analysis yielded results that were **within** the allowable limits for general population exposure to RF Emissions.

The anticipated maximum composite contributions from the AT&T facility as well as the site composite emissions value with regards to compliance with FCC's allowable limits for general population exposure to RF Emissions are shown here:

Carrier	Predicted MPE %
AT&T	0.30258966%
Composite	0.30258966%

Table 5: Total Predicted MPE(%) by Carrier

Compliance Status:

The anticipated composite MPE value for this site assuming all carriers present is **0.30258966%** of the allowable FCC established general population limit sampled at the ground level.

FCC guidelines state that if a site is found to be out of compliance (over allowable thresholds), that carriers over a 5% contribution to the composite value will require measures to bring the site into compliance. For this facility, the composite values calculated were well within the allowable 100% threshold standard per the federal government.

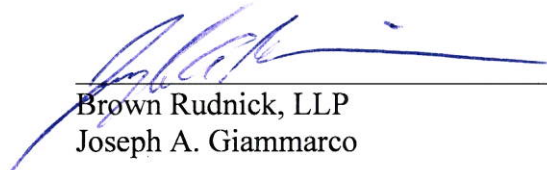
Samuel Cosgrove
RF Compliance Consultant
Centerline Communications, LLC
750 West Center St. Suite 301
West Bridgewater, MA 02379

ATTACHMENT 6

CERTIFICATE OF SERVICE

I hereby certify that on the 18th day of March 2021, a copy of the following notice of intended filing of a Petition with the Connecticut Siting Council for a declaratory ruling was sent by first class certified mail to the list below.

Dated: March 18, 2021


Brown Rudnick, LLP
Joseph A. Giammarco

State

THE HONORABLE WILLIAM TONG ATTORNEY GENERAL OFFICE OF THE ATTORNEY GENERAL 165 CAPITOL AVENUE HARTFORD, CT 06106	DEPARTMENT OF ECONOMIC AND COMMUNITY DEVELOPMENT, CULTURE AND TOURISM DAVID LEHMAN, COMMISSIONER 450 COLUMBUS BLVD, HARTFORD HARTFORD, CT 06103
DEPARTMENT OF PUBLIC HEALTH DEIDRE S. GIFFORD, MD, MPH, ACTING COMMISSIONER 410 CAPITOL AVENUE HARTFORD, CT 06134	DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION PUBLIC UTILITIES REGULATORY AUTHORITY MARISSA P. GILLET, CHAIRMAN TEN FRANKLIN SQUARE NEW BRITAIN, CT 06051
COUNCIL ON ENVIRONMENTAL QUALITY PETER B. HEARN, EXECUTIVE DIRECTOR 79 ELM STREET, 6 TH FLOOR HARTFORD, CT 06106	DEPARTMENT OF TRANSPORTATION JOSEPH GIULIETTI, COMMISSIONER 2800 BERLIN TURNPIKE P.O. BOX 317546 NEWINGTON, CT 06131
DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION KATIE DYKES, COMMISSIONER 79 ELM STREET HARTFORD, CT 06106	DEPARTMENT OF AGRICULTURE BRYAN P. HURLBURT, COMMISSIONER 450 COLUMBUS BOULEVARD SUITE 701 HARTFORD, CT 06103
OFFICE OF POLICY AND MANAGEMENT MELISSA MCCAOW, SECRETARY 450 CAPITOL AVENUE HARTFORD, CT 06106	DEPARTMENT OF EMERGENCY SERVICES & PUBLIC PROTECTION DIVISION OF EMERGENCY MANAGEMENT AND HOMELAND SECURITY JAMES C. ROVELLA, COMMISSIONER 1111 COUNTRY CLUB ROAD MIDDLETOWN, CT 06457

STATE HISTORIC PRESERVATION OFFICER DEPARTMENT OF ECONOMIC AND COMMUNITY DEVELOPMENT 450 COLUMBUS BLVD., 5 TH FLOOR, HARTFORD, CT 06103	SECRETARY OF STATE DENISE MERRILL 165 CAPITOL AVENUE HARTFORD, CT 06106
STATE HOUSE REPRESENTATIVE- DISTRICT 2 RAGHIB ALLIE-BRENNAN LEGISLATIVE OFFICE BUILDING 300 CAPITOL AVENUE, ROOM 4000 HARTFORD, CT 06106	STATE HOUSE REPRESENTATIVE- DISTRICT 109 DAVID ARCONTI, JR. LEGISLATIVE OFFICE BUILDING, 300 CAPITOL AVENUE, ROOM 4034 HARTFORD, CT 06106
STATE HOUSE REPRESENTATIVE- DISTRICT 108 PATRICK E. CALLAHAN LEGISLATIVE OFFICE BUILDING, 300 CAPITOL AVENUE, ROOM 4200 HARTFORD, CT 06106	STATE HOUSE REPRESENTATIVE- DISTRICT 110 BOB GODFREY LEGISLATIVE OFFICE BUILDING, 300 CAPITOL AVENUE, ROOM 4107 HARTFORD, CT 06106
STATE HOUSE REPRESENTATIVE- DISTRICT 138 KENNETH M. GUCKER LEGISLATIVE OFFICE BUILDING, 300 CAPITOL AVENUE, ROOM 4000 HARTFORD, CT 06106	STATE HOUSE REPRESENTATIVE- DISTRICT 107 STEPHEN G. HARDING LEGISLATIVE OFFICE BUILDING, 300 CAPITOL AVENUE, ROOM 4200 HARTFORD, CT 06106
STATE SENATOR-DISTRICT 24 Julie Kushner LEGISLATIVE OFFICE BUILDING, ROOM 3300 300 CAPITOL AVENUE HARTFORD, CT 06106	
WESTERN CONNECTICUT COUNCIL OF GOVERNMENTS JAYME STEVENSON, CHAIRMAN 1 RIVERSIDE ROAD SANDY HOOK, CT 06482	

Federal

FEDERAL COMMUNICATIONS COMMISSION 445 12 TH STREET SW WASHINGTON, DC 20554	FEDERAL AVIATION ADMINISTRATION 800 INDEPENDENCE AVENUE, SW WASHINGTON, DC 20591
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U.S. SENATOR CHRISTOPHER MURPHY COLT GATEWAY 120 HUYSHOPE AVENUE SUITE 401 HARTFORD, CT 06106	U.S. SENATOR RICHARD BLUMENTHAL 90 STATE HOUSE SQUARE, 10 TH FLOOR HARTFORD, CT 06103
U.S. CONGRESSMAN – 5 TH DISTRICT JAHANA HAYES 108 BANK STREET, 2 ND FLOOR WATERBURY, CT 06702	

City of Danbury

JOSEPH M. CAVO, MAYOR DANBURY CITY HALL 155 DEER HILL AVENUE DANBURY, CT 06810	SHARON B. CALITRO, AICP DIRECTOR OF PLANNING & ZONING DANBURY CITY HALL 155 DEER HILL ROAD DANBURY, CT 06810
CONSERVATION COMMISSION DANBURY CITY HALL 155 DEER HILL AVENUE DANBURY, CT 06810	JANICE R. GIEGLER, TOWN CLERK DANBURY CITY HALL 155 DEER HILL AVENUE DANBURY, CT 06810
DANBURY HISTORIC PROPERTIES COMMISSION DANBURY CITY HALL 155 DEER HILL AVENUE DANBURY, CT 06810	

March 18, 2021
**VIA CERTIFIED MAIL/
RETURN RECEIPT REQUESTED**

[Insert Abutter/official
Name and Address]

**Re: New Cingular Wireless PCS, LLC (“AT&T”) Installation of A Small Cell
Wireless Telecommunication Facility 11 Lake Avenue Extension, Danbury
Connecticut**

To Whom it May Concern:

On behalf of our client New Cingular Wireless PCS, LLC (“AT&T”), we are notifying you with respect to the above referenced matter and our client’s intent to file a petition for a declaratory ruling with the State of Connecticut Siting Council (the “Siting Council”) for approval of installation of a small cell wireless telecommunication facility on a new light pole (the “Facility”) to be installed at above-referenced property owned by Eleven Lake Ave Ext, LLC. Connecticut law requires that record property owners of property abutting a parcel on which a facility is proposed be notified of an applicant’s intent to file a petition with the Siting Council. A notice of this application and details of the proposal are included with this letter. The location, height and other details of the proposed Facility are subject to the review and potential alteration by the Siting Council under the provisions of Connecticut General Statutes §16-50g et seq. If you have any questions concerning this petition, please feel free to contact the Connecticut Siting Council or this office after March 22, 2021, at which time we anticipate that the petition will be on file.

Sincerely,

/s/ Thomas J. Regan
Thomas J. Regan

Enclosure

NOTICE

Notice is hereby given, pursuant to Section 16-50j-40(a) of the Regulations of Connecticut State Agencies of a Petition being filed with the Connecticut Siting Council (“Siting Council”) on or after March 19, 2021 by New Cingular Wireless PCS, LLC (“AT&T”). AT&T seeks a declaratory ruling that no Certificate of Environmental Compatibility and Public Need (“Certificate”) is required under Section 16-50k(a) of the Connecticut General Statutes (“C.G.S.”) to install a new “small cell” wireless telecommunications facility on a new light pole.

The proposed telecommunications facility will be located on property owned by Eleven Lake Ave Ext, LLC, at 11 Lake Avenue Extension, in the City of Danbury and identified on the City of Danbury’s GIS as Parcel ID F15031-0000 (the “Site”). AT&T proposes to install a new small cell wireless telecommunications facility upon a proposed 25’AGL light Pole, extending to 30’ AGL to the top of a proposed cylindrical antenna. The Pole will be located on the portion of the Site fronting on Mill Ridge Road, approximately 15’ from the sidewalk along Mill Ridge Road adjacent to the Site’s parking area. The Pole will be equipped with a proposed LED light fixture at the 24’ AGL level on the Pole. This small cell wireless telecommunications facility will work to offload the demand on AT&T’s macro cell sites and allow for increased data capacity and speed within the immediate vicinity of the proposed facility. By addressing network capacity, the small cell wireless telecommunications facility will aid in reaching AT&T’s goal of providing reliable wireless telecommunications services in and around the City of Danbury and to all of Connecticut.

The Petition will provide additional details of the proposal and discuss AT&T’s assertion that this proposed small cell Facility presents no significant adverse environmental effects. The location, height and other features of the proposal are subject to review and potential change under the provisions of Connecticut General Statutes Sections 16-50g et. seq.

Copies of the Petition will be available for review during normal business hours on or after March 22, 2021 at the following:

**Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051**

**Town Clerk of Danbury
Janice R. Giegler
155 Deer Hill Avenue
Danbury, CT 06810**

or this office. A copy of the Petition will also be available on the Connecticut Siting Council website: <https://www.ct.gov/cSc/site/default.asp> under Pending Matters. All inquiries should be addressed to the Connecticut Siting Council or to the undersigned.


**Thomas J. Regan, Esq.
Brown Rudnick LLP
185 Asylum Street
Hartford, CT 06103**

ATTACHMENT 7

CERTIFICATE OF SERVICE

I hereby certify that on the 18th day of March, 2021, a copy of the following letter and notice of the intended filing of a Petition with the Connecticut Siting Council for a declaratory ruling was sent by certified mail, return receipt requested, to the attached list of abutting property owners:

Dated: March 18, 2021



Brown Rudnick LLP
Joseph A. Giammarco

<p>ELEVEN LAKE AVE EXT LLC 11 LAKE AVENUE EXT DANBURY, CT 06811 Subject Property: 11 Lake Ave Ext Parcel ID: F150310000 CAMA Number: F15031-0000 <i>Identified as parcel A on Abutters Map</i></p>	<p>FAIRFIELD RIDGE/MILL RIDGE C/O LIMITED PARTNERSHIP 2 MILL RIDGE ROAD DANBURY, CT 06811 Property Address: Lake Parcel ID: F150300000 CAMA Number: F15030-0001 <i>Identified as parcel B on Abutters Map</i></p>
<p>E W BATISTA FAMILY LIMITED PARTNERSHIP 21 EQUESTRIAN RIDGE NEWTON, CT 06470 Property Address: Lake Parcel ID: G150040000 CAMA Number: G15004-0000 <i>Identified as parcel D on Abutters Map</i></p>	<p>MCDONALD'S CORPORATION (6-267) C/O ERNEST TREFZ-TREFZ CORP 10 MIDDLE STREET, 17TH FLOOR BRIDGEPORT, CT 06604 Property Address : 6 Lake Ave Ext Parcel ID: G150020000 CAMA Number: G15002-0000 <i>Identified as parcel E on Abutters Map</i></p> <p>Property Address: 8 Lake Ave Ext Parcel ID: G150110000 CAMA Number: G15011-0000 <i>Identified as parcel F on Abutters Map</i></p>

CERTIFICATE OF SERVICE

I hereby certify that on the 19th day of March, 2021, a copy of the following letter and notice of the intended filing of a Petition with the Connecticut Siting Council for a declaratory ruling was sent by certified mail, return receipt requested, to the attached list of abutting property owners:

Dated: March 19, 2021



Brown Rudnick LLP
Joseph A. Giammarco

HOUSING AUTHORITY OF THE CITY OF DANBURY 2 MILL RIDGE ROAD DANBURY, CT 06811 Property Address: Lake Parcel ID: F150300000 CAMA Number: F15030-0000 <i>Identified as parcel C on Abutters Map</i>	STEVEN & MARK NARGISO 91 SULLIVAN FARM NEW MILFORD, CT 06776 Property Address: 12 Lake Ave Ext Parcel ID: F150320000 CAMA Number: F15032-0000 <i>Identified as parcel G on Abutters Map</i>
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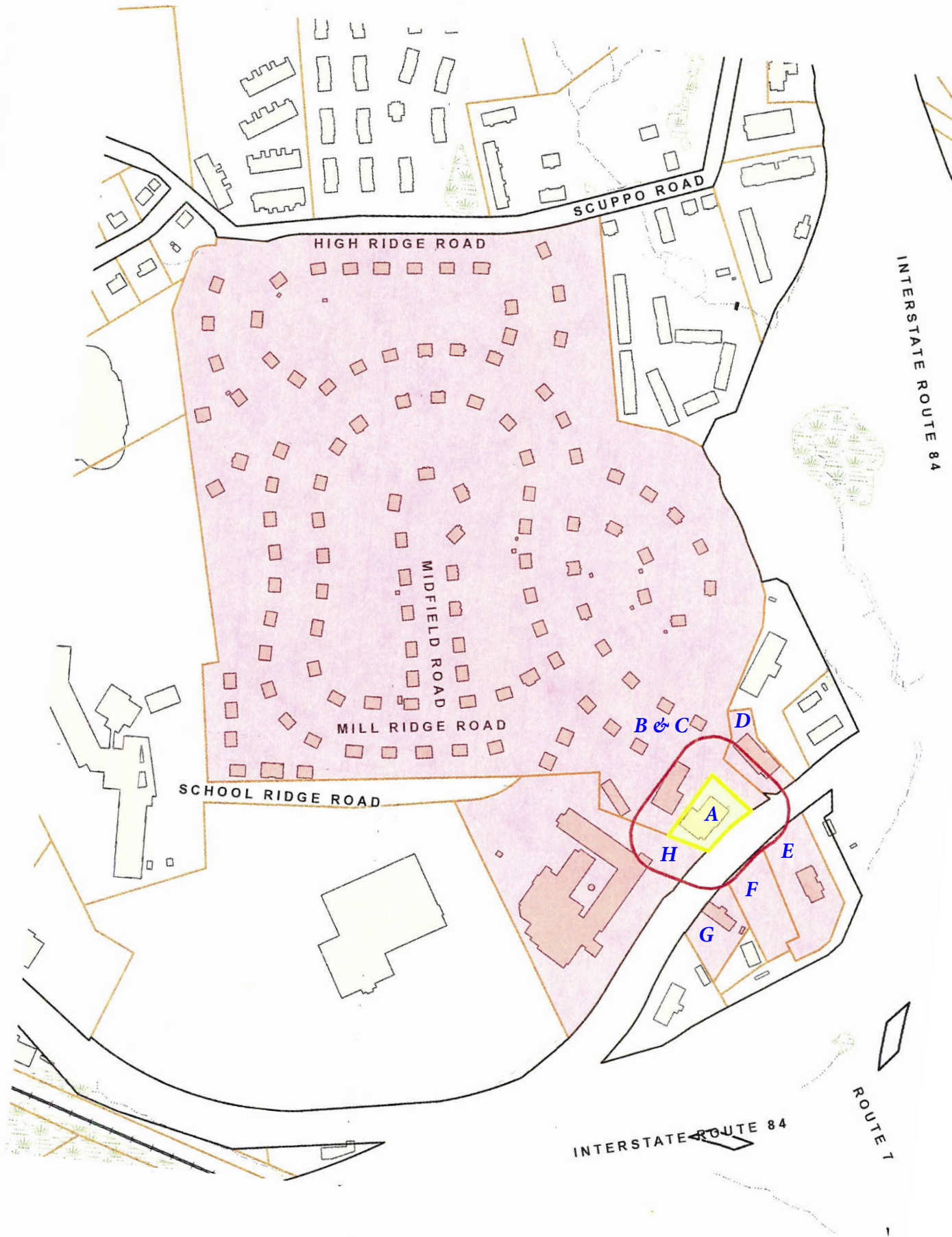
CERTIFICATE OF SERVICE

I hereby certify that on the 22nd day of March, 2021, a copy of the following letter and notice of the intended filing of a Petition with the Connecticut Siting Council for a declaratory ruling was sent by certified mail, return receipt requested, to the attached list of abutting property owners:

Dated: March 22, 2021


Brown Rudnick LLP
Joseph A. Giammarco

LAKE AVENUE ASSOCIATES INC. C/O ETHAN ALLEN-C WHITELY 25 LAKE AVENUE DANBURY, CT 06811 Property Address: 21 Lake Ave Ext Parcel ID: F160010000 CAMA Number: F16001-0000 <i>Identified as parcel H on Abutters Map</i>	
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March 18, 2021

**VIA CERTIFIED MAIL/
RETURN RECEIPT REQUESTED**

[Insert Abutter/official
Name and Address]

**Re: New Cingular Wireless PCS, LLC (“AT&T”) Installation of A Small Cell
Wireless Telecommunication Facility 11 Lake Avenue Extension, Danbury
Connecticut**

To Whom it May Concern:

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Sincerely,

/s/ Thomas J. Regan
Thomas J. Regan

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10 Franklin Square
New Britain, Connecticut 06051

Town Clerk of Danbury
Janice R. Giegler
155 Deer Hill Avenue
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or this office. A copy of the Petition will also be available on the Connecticut Siting Council website: <https://www.ct.gov/cSc/site/default.asp> under Pending Matters. All inquiries should be addressed to the Connecticut Siting Council or to the undersigned.

Thomas J. Regan, Esq.
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185 Asylum Street
Hartford, CT 06103