

### **NEW CINGULAR WIRELESS PCS, LLC (AT&T)**

## Application to the State of Connecticut Siting Council

For a Certificate of Environmental Compatibility and Public Need

-MIDDLETOWN FACILITY-

Docket No. \_\_\_\_

NEW CINGULAR WIRELESS PCS, LLC (AT&T)
500 ENTERPRISE DRIVE
ROCKY HILL, CONNECTICUT 06067

Exhibit A



445 Hamilton Avenue, 14th Floor White Plains, New York 10601 T 914 761 1300 F 914 761 5372 cuddyfeder.com

Christopher B. Fisher, Esq. cfisher@cuddyfeder.com

October 5, 2021

#### VIA ELECTRONIC & OVERNIGHT MAIL

Members of the Connecticut Siting Council Connecticut Siting Council 10 Franklin Square New Britain, Connecticut 06051

Re:

Petition No. 1465

New Cingular Wireless PCS, LLC ("AT&T")

499 Mile Lane, Middletown, CT

Conversion to Certificate Application - Docket Number 506 & Waivers

Dear Members of the Connecticut Siting Council:

New Cingular Wireless PCS LLC ("AT&T") (the "Applicant") hereby converts its tower site sharing request and petition for a declaratory ruling, as filed with the Council on September 30, 2021 (the "Petition"), into an Application for a Certificate of Environmental Compatibility and Public Need ("Certificate"). The project involves the installation of a second tower at an existing municipal tower facility on property owned by the City of Middletown located at 499 Mile Lane, Middletown, Connecticut (the "Existing Facility" or the "Site"). A copy of the as-filed Petition assigned No. 1465 is hereby incorporated by reference as the Application and the Applicant requests assignment of Docket Number 506 and review as an application for a Certificate of Environmental Compatibility and Public Need and processing as a contested case in accordance with the Public Utility Environmental Standards and Uniform Administrative Procedure Acts.

#### AT&T Tower Project & Proposed Municipal Site Sharing

The approximately 23.72-acre City owned property is located on the southern side of Mile Lane and was previously part of a U.S. Army Reserve Center which now serves in part as a fire training site. The existing public safety municipal communications facility consists of an approximately 180' lattice tower constructed in 2017 with associated equipment located at grade within a fenced equipment compound. AT&T proposes shared use of the existing public safety tower facility site by installing a 150' monopole with nine (9) antennas at a centerline height of approximately 150' AGL. The second tower will be located immediately adjacent to the City's 180' lattice tower. Associated unmanned equipment will be located at grade within a 50-foot by 50-foot expanded fenced equipment compound. Access and utilities will remain the same along the existing paved access drive that extends south of Mile Lane. AT&T will own the tower subject to a ground lease with the City. The monopole and expanded equipment compound are being designed to accommodate future collocations by additional wireless carriers.



October 5, 2021 Page 2

#### Public Comment on the Petition and 16-50l(f) Consultations with City Officials

Upon receiving legal notices of the Petition, several nearby property owners expressed an interest in the Siting Council's review of the proposed AT&T project. The City, as the property owner, thereafter requested that AT&T convert its Petition into a Certificate Application to ensure a Council public hearing on the project and to give its constituents the fullest opportunity to have their comments considered by the State. Notably and as detailed in the Application, the City of Middletown Planning and Zoning Commission, Common Council and various other City agencies conducted a review of the proposed Facility as part of the C.G.S. § 8-24 process for improvements of municipal land and approval of a lease over a period of time exceeding 90 days in duration, as required by C.G.S. § 16-50*l*(f). Enclosed in Attachment 1 is a copy of the City's September 4, 2021 acknowledgment of same and requesting AT&T to convert, which forms the basis of AT&T's conversion of the Petition into a Certificate Application herein.

#### Request for Waiver of Certain Certificate Application Requirements

AT&T requests waivers in furtherance of Chapter 277a, § 16-50g et seq. of the Connecticut General Statutes (C.G.S.), as amended and § 16-50j-1 et seq. of the Regulations of Connecticut State Agencies (R.C.S.A.), as amended. Specifically, pursuant to R.C.S.A. § 16-50j-3, the Applicant respectfully requests waivers on the exact form of the application, which is not specified by statute, and its contents as might otherwise be required by R.C.S.A. § 16-50j-74 or the Council's application guides. AT&T's waiver requests are respectfully submitted given the quality and quantity of data in the original Petition, the nature of this specific project involving an already developed tower site and are made to the greatest extent possible to effectuate conversion for procedural purposes and the intent to invoke UAPA for the benefit of City residents as request by the City.

Notably in this context, AT&T is not proposing a feasibility proceeding¹ on the existing City-owned lattice tower as permitted by Section 16-50aa and corresponding Council regulations given the City's proprietary concerns with modifying and sharing the existing public safety tower. As such, collocation on the existing tower is not a viable alternative. Moreover, the proposed AT&T Facility is in furtherance of state policy to the greatest extent possible which promotes tower site sharing to avoid the proliferation of tower sites to other properties in this area of Middletown. As such, AT&T respectfully submits that form and content waivers are appropriate as related to alternative sites and that the documents on file with the Council facilitate the public's interest in ascertaining the need for, lack of practical alternatives to and absence of substantial adverse environmental effects associated with AT&T's proposed Facility.

<sup>&</sup>lt;sup>1</sup> Often referred to colloquially as a "hostile tower sharing request".



October 5, 2021 Page 3

#### Docket Number 506, Determination of Completeness & Scheduling of a Public Hearing

We understand this matter will be assigned Docket Number 506 and AT&T is coordinating further notices in accordance with statutory requirements by forwarding this letter to and also attaching an Application Title Page on top of the original Petition where service of a copy of the "application" is otherwise required. The Applicant respectfully requests that the Council accept this conversion of Petition 1465 to an Application for review of a Certificate in Docket No. 506. Further that the Council consider waivers at its next meeting and set a schedule for interrogatories and a public hearing. Thank you for your consideration.

Respectfully Submitted,

Christopher B. Fisher, Esq.

cc: Mayor Benjamin Florsheim, City of Middletown

Christopher J. Forte, Esq., City of Middletown Office of the Attorney General

AT&T, Smartlink, Kristen Motel, Esq.

Exhibit B

### STATE OF CONNECTICUT CONNECTICUT SITING COUNCIL

IN RE:

NEW CINGULAR WIRELESS PCS, LLC (AT&T) TOWER SHARING REQUEST AND PETITION FOR A DECLARATORY RULING, PURSUANT TO CONNECTICUT GENERAL STATUTES §16-5000, 4-176 AND §16-50K FOR THE INSTALLATION OF A SECOND WIRELESS TELECOMMUNICATIONS TOWER AT A CITY OWNED PROPERTY/TOWER SITE FACILITY LOCATED AT 499 MILE LANE, MIDDLETOWN, CT.

PETITION NO. 1465

September 30, 2021

TOWER SHARING REQUEST & PETITION FOR A DECLARATORY RULING ADDITION OF A SECOND TOWER AT A MUNICIPAL TOWER FACILITY HAVING NO SUBSTANTIAL ADVERSE ENVIRONMENTAL EFFECT

#### I. Introduction

Pursuant to Section 16-50j-38, 16-50j-39 and 16-50j-89(a) of the regulations of Connecticut State Agencies (RCSA) and Section 16-50aa of the Connecticut General Statutes (CGS), New Cingular Wireless PCS LLC ("AT&T") hereby files this tower site sharing request and petitions the Connecticut Siting Council (the "Council") for a declaratory ruling ("Petition") that no Certificate of Environmental Compatibility and Public Need ("Certificate") is required under CGS Section 16-50k(a) to modify and add a second tower at an existing municipal communications tower site located on property owned by the City of Middletown located at 499 Mile Lane, Middletown, Connecticut (the "Existing Facility" or the "Site"). AT&T's project was considered by the City of Middletown Planning & Zoning Commission as required by CGS Section 8-24 for any improvements of municipal land, reviewed by various City agencies and approved by the City's Common Council. Included in Attachment 1 are copies of an August 11, 2021 Legal Notice from the Middletown Planning and Zoning Commission issuing an affirmative 8-24 report and the Common Council's resolution of approval for the project.

#### II. Factual Background

#### a. The City's Land and Existing Public Safety Communications Facility

The approximately 23.72-acre City owned property is located on the southern side of Mile Lane. The property was previously part of a U.S. Army Reserve Center now serving in part as a

fire training site. Surrounding parcels are primarily single family residential or also owned by the City as part of the public school system. The existing municipal tower site facility is located central to the property with surrounding wooded lands and buffer areas. The existing public safety municipal communications facility consists of an approximately 180' lattice tower constructed in 2017 with associated equipment located at grade within a fenced equipment compound. Existing tower site access and utilities utilize the property's drives and extend from Mile Lane. No commercial wireless carriers are currently operating wireless facilities from the City's facility site.

#### b. AT&T's Proposed Shared Use of the Existing City Public Safety Tower Site

AT&T approached the City a few years ago proposing to share use of the existing 180' lattice tower site to provide its services in an area of Middletown in need of wireless network improvements. A 2019 structural report by a Professional Engineer revealed that the City's tower would require major structural modifications to the tower legs, bolts, diagonal steel and anchor rods to accommodate AT&T's proposed antenna loading. Attachment 2 includes the first four pages of that structural report and summary results.

In continued discussions with the City, AT&T proposed implementing the tower modifications outlined in the 2019 report at its cost and to enable the company's proposed collocation on the City's tower. As part of various City agency reviews of that proposal, the City identified its own concerns with such a plan and that modifications to the tower itself might impact its existing public safety communications during construction and this tower site's integration into the citywide public safety network and importance to serving the public.

As such, AT&T and the City discussed installation of a second tower immediately adjacent to the existing tower at a lower height to meet AT&T's, and potentially other wireless carriers', needs for a location to serve the community including the nearby Middletown high school which has over 2,000 students. A ground lease was negotiated for a 150' tower which would support AT&T and other commercial carriers. The project was reviewed by numerous City agencies and committees, including recent public meetings before the Planning & Zoning Commission and City's Common Council where the project was approved.

#### c. AT&T's Proposed Monopole Addition to the City's Public Safety Tower Site

AT&T proposes shared use of the existing public safety tower facility site by installing a 150' monopole with nine (9) antennas on a platform at a centerline height of approximately 150' AGL. The second tower will be located immediately adjacent to the City's 180' lattice tower.

Associated unmanned equipment will be located at grade within a 50-foot by 50-foot expanded fenced equipment compound. A diesel generator will also be installed as an emergency back-up power source and located on a concrete pad within the equipment area. Access and utilities will remain the same along the existing paved access drive that extends south of Mile Lane. AT&T will own the tower subject to a ground lease with the City. The monopole and expanded equipment compound are being designed to accommodate future collocations by additional wireless carriers. Specifications and details of AT&T's proposed tower site modifications are shown on the drawings included in Attachment 3.

#### d. AT&T's Need to Share the City's Tower Site to Provide Reliable Service

AT&T is licensed by the Federal Communications Commission ("FCC") to provide wireless services in this area of the State of Connecticut. AT&T identified a need for additional coverage and/or capacity relief in its network, as well as the need for first responder public safety communications as part of FirstNet, in the northern part of Middletown. The proposed project is designed to assure reliable wireless service to AT&T customers and first responders in the northern area of Middletown, particularly along Mile Lane, State Highway 3, Ridgewood Road and the surrounding roads, businesses, schools and neighborhoods. A RF Report detailing AT&T's need and coverage objectives for the proposed sharing of the tower site are included in Attachment 4 and highlights the thousands of people in the coverage area that can benefit from the AT&T facility.

#### III. Council Jurisdiction, Tower Sharing & This Petition for a Declaratory Ruling

Connecticut law confers original tower siting jurisdiction to the Council over certain "facilities" which are defined to include cellular telecommunication towers. C.G.S. §16-50i(a)(6). The existing City-owned 180' lattice tower, fenced equipment compound and surrounding area is not specifically a facility under the Council's original tower jurisdiction pursuant to C.G.S. §16-50i(a)(6). However, Section 16-50aa of the Connecticut General Statutes, which has a much more expansive definition of "facility" for purposes of tower site sharing, grants the Council subsequent jurisdiction to approve tower sharing requests by cellular carriers for any tower site including sites owned by a public agency like the City that were not under the Council's original jurisdiction. See CGS § 16-50aa(b). Additionally, the Council has authority to render declaratory rulings and make determinations that even standalone cellular tower facilities do not present substantial adverse environmental effects that might otherwise require a Certificate process as expressly provided by statute. See CGS § 16-50k(a)(only facilities deemed to have a "substantial adverse effect" require

a Certificate). AT&T's request for tower site sharing approval of a City owned facility site and petition for a declaratory ruling that the addition of second tower to this site falls squarely within the Council's jurisdiction and is in furtherance of the State Legislature's express findings that whenever "technically, legally, environmentally and economically feasible, and meeting public safety concerns" tower sharing should be approved to avoid the unnecessary proliferation of towers and is in the public interest.

## IV. A Second Tower at the City of Middletown's Existing Public Safety Tower Site Meets all the Criteria for 16-50aa Tower Sharing and a Declaratory Ruling In Order to Avoid the Proliferation of Towers in Nearby Areas of the City

For purposes of CGS Section 16-50aa it is important to note that the City raised its proprietary and public safety concerns with sharing the existing public safety tower once it was determined that major structural modifications to the existing tower would be required to accommodate AT&T. As part of a collaborative effort between AT&T and the City over the course of several years, this project evolved to one approved by the City which best meets the parties needs for a technically, legally, environmentally and economically feasible tower site sharing solution including the City's public safety concerns. As such, AT&T is not invoking that aspect of the Council's authority that has been exercised in other proceedings and involving other municipal tower sites overriding local objections or seeking a feasibility proceeding in this matter. See e.g. TS-Sprint-159-030630 and 16-50j-89(b). Rather and because the City and AT&T have consented to all aspects of the proposed tower site sharing which will be governed by a ground lease, subject to the Council's approval of the project, this tower sharing request and petition for a declaratory ruling is being filed with the City's assent.

For the reasons set forth below, AT&T respectfully submits that its proposed modification to the existing City facility through the addition of a second tower will have no substantial environmental effects, that a Certificate pursuant to C.G.S. Section 16-50k(a) is not required and that it promotes tower site sharing avoiding the potential need for entirely new tower sites in this part of Middletown.

#### a. Minor Physical & Environmental Effects of Compound Expansion

AT&T's proposed facility modifications will not result in any significant physical or environmental changes to the City's property. The installation of the second monopole and expanded equipment compound will result in a limited disturbance and improvement of a 2,500 square foot expanded compound on the 20+ acre site in an area immediately adjacent to and

already improved with the existing City public safety tower facility. The second monopole will, like the existing tower, be located central to the parcel and well setback from the nearest property boundaries, with the second monopole maintaining a 150' height to setback ratio. AT&T's unmanned site will have no sanitary facilities and would generate on average 1 vehicle trip per month by a service technician in a light duty van or truck using the existing access drives. Access to the expanded equipment compound would utilize the existing access road and utilities which will remain unchanged. Enclosed as Attachment 5 is a U.S. Fish and Wildlife Service National Wetlands Inventory Map demonstrating that there are no wetlands on the site or immediately offsite. Included in Attachment 6 is the Connecticut Natural Diversity Data Base area map for Middletown highlighting that the tower project site is not within or adjacent to a critical habitat or area likely to have state and federally listed species. As such, it is respectfully submitted that there are no potential adverse environmental effects associated with the proposed tower compound expansion.

## b. <u>The Incremental Visual Effects of a Shorter Second Tower</u> at the City's Facility Site are Not Significant

The facility site is already improved with a 180' tall lattice tower facility that already has a visual footprint in the community. AT&T's proposed addition of a second 150' monopole tower at a lower tower height will not increase any areas of visibility in the community. Enclosed as Attachment 7 is a letter from the State Historic Preservation Office ("SHPO") concluding that the added tower and proposed site modifications will have no impact on historic properties. Additionally, the addition of the second structure and the incremental effects on general visibility in the community are not significant as depicted in the visual report included in Attachment 8.

In this regard, the Council will note from the photosimulations that AT&T was asked by the City to study two forms of tower structures, a monopole or a monopine. During the CGS 8-24 process and a public meeting, members of the City's Planning & Zoning Commission (P&Z) were invited by AT&T to comment on the two options and generally concurred that the monopole was the better option. Their opinions were consistent with the professional opinion of AT&T's visual consultant, All-Points Technologies, that a monopine was not needed nor an appropriate form of visual mitigation at this tower location and would be significantly more apparent visually than a simple galvanized monopole consistent with the existing lattice tower at the site. It was noted by AT&T that the tower's final design would be up to the Siting Council to decide as part of ruling on this petition.

As part of its scope of review, the City's P&Z concluded that the City and AT&T's tower site sharing project were consistent with the City's Plan of Conservation and Development (POCD) and gave a positive report to the City's Common Council. The Common Council thereafter approved a ground lease for the project noting its overall objectives to make space at City owned tower sites available for wireless carrier leasing to offset the taxpayer incurred costs in building the City's public safety communications network. See Common Council Resolution 12C included in Attachment 1. For the Siting Council's and community's purposes, the proposed sharing of this tower site will enable AT&T to avoid the proliferation of towers on other parcels within this area of the City for not just AT&T but other carriers since the facility is designed to support colocation.

#### c. FCC MPE and Cumulative Compliance

The operation of AT&T's antennas will not increase the total radio frequency electromagnetic power density at the site to a level at or above applicable standards. A cumulative power density report is included in Attachment 9. The total radio frequency power density will be 8.19% of the allowable FCC established general public limit at ground level and well within standards adopted by the Connecticut Department of Energy & Environmental Protection as set forth in C.G.S. Section 22a-162.

#### d. Notice to Municipal Officials and Adjoining Landowners

Pursuant to RCSA Section 16-50j-40(a), notice of AT&T's intent to file this Tower Sharing Request and Petition was sent to each person appearing of record as an owner of property that abuts the site, as well as the appropriate municipal officials and government agencies as listed in Section 16-50l of the C.G.S. Certification of such notice, a copy of the notice and the list of property owners is included in Attachment 10 along with the map from the City's GIS website used to identify abutting property owners. Attachment 10 also includes a certification of service to municipal officials and government agencies to whom notice was sent.

#### V. Conclusion

As set forth above, AT&T's proposed expansion of the City's public safety communications facility compound and addition of a second shorter monopole tower at the site will not result in any adverse environmental effects. Moreover, the project is in furtherance of state policy to the greatest extent possible which promotes tower site sharing to avoid the proliferation of tower sites to other properties in this area of Middletown and meet the need of AT&T and other carriers in providing wireless services to the public. For all the foregoing reasons, AT&T petitions the Council

providing wireless services to the public. For all the foregoing reasons, AT&T petitions the Council for a declaratory ruling that the proposed modification of the City's site and tower sharing does not require a Certificate of Environmental Compatibility and Public Need and that the Council issue an order approving same.

Respectfully submitted,

Christopher B. Fisher, Esq.

On behalf of the Petitioner

cc: Mayor Benjamin Florsheim, City of Middletown

Christopher J. Forte, Esq., City of Middletown Office of the Attorney General Wayne Bartolotta, City of Middletown Director of Central Communications

Marek Kozikowski, AICP, City of Middletown Director of Land Use & City Planning

AT&T Smartlink

Kristen Motel, Esq.

## ATTACHMENT 1

#### LEGAL NOTICE

## NOTICE OF DECISION BY THE MIDDLETOWN PLANNING AND ZONING COMMISSION AT ITS REGULAR MEETING OF AUGUST 11, 2021

- 1) Approved Special Exception for a childcare facility in an R-15 Zone at 170 Long Lane. Applicant/agent Wesleyan University SE2021-9
- Approved zoning text amendment to Sections 44 and 60 of the Middletown Zoning Code regarding permanent year round farm markets and seasonal farm stands. Applicant/agent City of Middletown/ LU Dept. Z2021-5
- Approved zoning text amendment to Sections 16, 40, 44 and 61 regarding adult-use cannabis microcultivation and cannabis retail uses. Applicant/agent City of Middletown/ City of Middletown/ LU Dept. Z2021-7
- 4) Approved zoning text amendment to Section 61 of the Middletown Zoning Code to include brewpubs as permitted uses in the RF zone. Applicant/agent City of Middletown Z2021-8
- 5) Granted an affirmative G.S. 8-24 report for a lease agreement on a new cell tower to be constructed at 499 Mile Lane. Applicant/agent City of Middletown/Central Communications G.S. 8-24 2021-19
- 6) Granted an affirmative G.S. 8-24 report for a parking lot expansion at 311 Hunting Hill Avenue (Beman Middle School). Applicant/agent Middletown Public Schools G.S. 8-24 2021-21

Stephen Devoto, Chair Planning and Zoning Commission

P. O. No. 2003-01785, Account No. 067419

The above legal notice to appear in the Hartford Courant ONCE

Thursday, August 19, 2021

Resolution No.

Date: August 13, 2021

#### RESOLUTION



**Whereas,** the City of Middletown as part of its 2019 radio upgrade project entered into leasing City space for commercial communications networks; and

**Whereas**, the intent of such agreements is to offset the costs incurred by the City to lease towers for its Public Safety Radio System; and

**Whereas,** if such approval of the Common Council is obtained for this lease the City will have generated over half the cost of its yearly expenditures for leasing communications towers by such leasing of City properties; and

**Whereas,** the agreement between the City of Middletown and New Cingular Wireless, PCS LLC includes a rental payment of \$30,000 per year with five year incremental 2% escalators based on lease renewal; and

**Whereas**, the Office of General Council has entered in the lease process and approved the lease on behalf of the City; and

Whereas, all concerns of interference and other liabilities have been addressed in the lease agreement; and

Whereas, all tower facilities such as this are subject to approval of the Connecticut Siting Council; and

**Whereas**, all proper committee procedures have been followed including approval at the Public Safety Telecommunications Commission, Planning and Zoning Commission and Finance and Government Operations Committee; and

Now, therefore, be it resolved by the Common Council of the City of Middletown: pending CT Siting Council approval, the Mayor of the City of Middletown is hereby authorized to execute a lease agreement between the City of Middletown and New Cingular Wireless, PCS LLC, a Delaware limited liability company for the lease of specific ground space at 499 Mile Lane in Middletown, CT for the purpose of erecting a communications tower, subject to approval as to content and form by the Office of the General Counsel.

**FISCAL IMPACT STATEMENT:** Annual revenue to the City per year is \$30,000/year for 5 years and an escalator of 2% at each 5 year renewal. This brings annual leasing total of Communications tower and ground space to \$54,000/year. Annual leasing cost the City pays out annually is estimated at \$98,000. This and previous lease covers 55% of that cost.

Submitted by: Councilman Eugene Nocera

Committee Reviewed: Finance and Government approved on June 30, 2021

Planning and Zoning Commission approved on August 11, 2021

Status:

By Common Council, City of Middletown At its meeting held on:

K: submit/ resolution/ CComm Mile Lane tower - Sept 2021

## ATTACHMENT 2

### STRUCTURAL CALCULATIONS

Prepared for: Smartlink / AT&T

## New Antenna and Equipment Installation on Self-Support Tower

Site No: CT3470A FA No: 10578361 USID: 221794

Site Name: Mile LN\_Middletown 499 Mile Lane Middletown, CT 06457

January 7, 2019

Tower Modification Required

Henry M. Bellagamba, P.E.



#### Summary

A structural analysis was performed by Fullerton, as requested by the client, to determine the conformance of existing structure with the governing building code, 2018 Connecticut State Building Code (2015 International Building Code) and the industry standard, ANSI/TIA-222-G (Structural Standard for Steel Antenna Supporting Structures and Antennas). The analysis considers the tower properties, existing and proposed appurtenances and the required loading criteria.

#### Conclusion

- The tower member stresses are NOT in conformance for the loading considered.
- The tower foundation was not analyzed due to a lack of geotechnical information.

#### Analysis Data

The following is based on information provided by the client, field investigation, and other determination by Fullerton Engineering Consultants or third parties.

**Configuration** 180 ft. Self-Support tower with a 5' top and 13' bottom face width.

**References** RF Design Sheet by AT&T, dated 10/3/2018.

Original Tower Construction Drawings by Valmont Structures, Eng. File No. 337273,

Drawings No. 276371T & 276371F, dated 9/18/2017.

Site No: CT3470A January 7, 2019

### Appurtenance Loading Schedule

ELEV. (FT.=AGL)	APPURTENANCE	TRANSMISSION LINES
	Proposed AT&T	
180'	(6) KMW EPBQ-654L8H8-L2 antennas (3) CCI HPA65R-BU8A antennas (3) Ericsson RRUS-4478 B14 units (3) Ericsson RRUS-4415 B30 units (3) Ericsson RRUS-4449 B5/B12 units (3) Ericsson RRUS-8843 B2/B66A units (3) Ericsson RRUS-E2 units (3) Ericsson RRUS-E2 units (3) Raycap DC6-48-60-18-8F units Mounted on proposed (3) Sector Frames	(2) 3/8" Fiber (6) 3/4" DC Power
	Existing (to remain)	
182'	(1) Lightning Rod Mounted on tower leg	
157.225' 150'	(1) Sinclair SC479-HF1LDF RX antenna (1) Motorola TTA (DS428E83I01T) unit Mounted on existing (1) 6' Standoff Mount Frame with Stiff Arm	(1) 1/2" coax (1) 7/8" coax
137.225' 130'	(1) Sinclair SC479-HF1LDF TX antenna Mounted on existing (1) 6' Standoff Mount Frame with Stiff Arm	(1) 7/8" coax
130'	(1) Radiowaves HP3-11 dish Mounted on existing (1) Pipe Mount to Tower Leg	(1) EW90
121.58' 110'	(1) Sinclair SC229-DFLN VHF antenna Mounted on existing (1) 6' Standoff Mount Frame with Stiff Arm	(1) 7/8" coax
95'	(1) Radiowaves HP3-11 dish Mounted on existing (1) Pipe Mount to Tower Leg	(1) EW90

Site No: CT3470A January 7, 2019

#### Results

The results of the structural analysis are summarized as follows:

#### **Tower mast**

The tower leg members are **NOT adequate** for new loads, with a maximum stress ratio of 252.3% @ Elev. 120'-140' AGL.

The tower leg bolts are **NOT adequate** for new loads, with a maximum stress ratio of 120.2% @ Elev. 80' AGL.

The tower main diagonal members are **NOT adequate** for new loads, with a maximum stress ratio of 111.5% @ Elev. 80'-100' AGL.

The tower diagonal bolts are **NOT adequate** for new loads, with a maximum stress ratio of 124.9% @ Elev. 140'-160' AGL.

The tower top girt members are **adequate** for new loads, with a maximum stress ratio of 14.8% @ Elev. 180' AGL.

#### **Anchor Rods**

The anchor rods are **NOT adequate** for new loads, with a maximum stress ratio of 109.73%.

#### **Foundation**

The tower foundations were **NOT analyzed** due to a lack of geotechnical information.

Site No: CT3470A January 7, 2019

## ATTACHMENT 3

PROJECT INFORMATION

SCOPE OF WORK: TELECOMMUNICATIONS FACILITY (NSB A PROPOSED 150'-0" A.G.L. TALL MONOPOLE. PROPOSED WALK-IN CABINET, AND GENERATOR WILL BE INSTALLED AT GRADE INSIDE A

PROPOSED WALK-IN CABINET, AND GENERATOR WILL BE INSTALLED AT GRADE INSIDE A EXISTING FENCED-IN COMPOUND. PROPOSED (3) TPA65R-BUBDA-K ANTENNAS, (3) HPA65R-BUBDA-K ANTENNAS, (3) 4478-B14 RRH'S, (3) FUTURE E2 RRH'S, (3) 4415 B30 RRH'S, (3) 4449 B5/B12 RRH'S, (3) 8843 B2/B66A RRH'S, (2) DC6-48-60-18-8C-EV SURGE ARRESTORS, & (1) DC6-48-60-0-8C-EV

WILL BE INSTALLED AT A HEIGHT OF 150'-0" A.G.L.):

SITE ADDRESS: 499 MILE LANE

MIDDLETOWN, CT 06457

APPLICANT: AT&T 550 COCHITUATE ROAD

FRAMINGHAM, MA 01701 SITE OWNER: CITY OF MIDDLETOWN

245 DEKOVEN DRIVE MIDDLETOWN, CT 06457

LATITUDE: 41.58000 N, 41° 34' 48.0" N

LONGITUDE: 72.68579 W, 72° 41' 8.9" W

TYPE OF SITE: MONOPOLE/ WALK-IN CABINET

TOWER HEIGHT: 150'-0"±

RAD CENTER: 150'-0"±

APPLICABLE ALL NATIO

ALL WORK SHALL CONFORM TO ALL CURRENT APPLICABLE CT STATE BUILDING CODE, NATIONAL ELECTRIC CODE (NEC 2017), ANSI/EIA/TIA-222 H & COMPLY WITH AT&T

MOBILITY SPECIFICATIONS



**SITE NUMBER: CT3470A** 

SITE NAME: MIDDLETOWN\_MILE LANE

FA CODE:10578361

PACE ID: MRCTB033524, MRCTB036341, MRCTB036593, MRCTB036513, MRCTB036367, MRCTB047889

**PROJECT: NSB** 

	DRAWING INDEX						
SHEET NO.	DESCRIPTION	REV.					
T-1	TITLE SHEET	2					
GN-1	GENERAL NOTES	2					
SN-1	STRUCTURAL NOTES	2					
C-1	PLOT PLAN	2					
A-1	COMPOUND & EQUIPMENT PLAN	2					
A-2	ELEVATION & ANTENNA PLAN	2					
A-3	DETAILS & ANTENNA SCHEDULE	2					
A-4	EQUIPMENT DETAILS	2					
A-5	EQUIPMENT DETAILS	2					
E-1	ELECTRICAL NOTES & ONE-LINE DIAGRAM	2					
G-1	GROUNDING DETAILS	2					
RF-1	RF PLUMBING DIAGRAM	2					

DRAWING INDEX

### VICINITY MAP

DEPART NORTHEAST, TURN RIGHT AND THEN IMMEDIATELY TURN LEFT ONTO LEGGATT MCCALL CONNECTOR ROAD, BEAR LEFT ONTO BURR ST, TURN LEFT ONTO MA-30 / COCHITUATE RD, TAKE RAMP RIGHT FOR I-90 EAST / I-90 WEST TOWARD BOSTON / SPRINGFIELD, AT EXIT 9 TAKE RAMP RIGHT FOR I-84 TOWARD HARTFORD / NEW YORK CITY, KEEP LEFT ONTO CT-15 S / WILBUR CROSS HWY S, KEEP STRAIGHT ONTO US-5 S / CT-15 S / WILBUR CROSS HIGHWAY S, AT EXIT 86 TAKE RAMP RIGHT FOR I-91 SOUTHBOUND, AT EXIT 21 TAKE RAMP RIGHT FOR CT-372 TOWARD CROMWELL / MIDDLETOWN, TURN LEFT ONTO CT-372 / BERLIN ROAD TOWARD CROMWELL / MIDDLETOWN, TURN LEFT ONTO CT-372 / BERLIN ROAD TOWARD CROMWELL / MIDDLETOWN, TURN RIGHT ONTO CT-217 / EAST STREET, TURN LEFT ONTO RIDGEWOOD RD, ARRIVE AT RIDGEWOOD ROAD



#### **GENERAL NOTES**

- 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.
- 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.
- . 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**



NORTH ANDOVER, MA 01845

TEL: (978) 557-5553 FAX: (978) 336-5586 smartlink

1997 ANNAPOLIS EXCHANGE PKWY SUITE 200 ANNAPOLIS, MD 21401 SITE NUMBER: CT3470A
SITE NAME: MIDDLETOWN\_MILE LANE

499 MILE LANE MIDDLETOWN, CT 06457 MIDDLESEX COUNTY



FRAMINGHAM MA 0170

										Г
2	09/24/21	ISSUED FOR REVIEW				AR	JC	DPH		
	09/22/21	ISSUED FOR REVIEW				AR	JC	DPH		
)	04/07/21	ISSUED FOR REVIEW				VP	JC	DPH		
٥.	DATE	REVISIONS			BY	снк	APP'D			
CALE: AS SHOWN			DESIGNE	D BY:	JC	DRAWN	N BY:	CC/VF	•	

AT&T					
TITLE SHEET (NSB)					
NUMBER	DRAWING NUMBER	REV			
Γ3470A	T-1	2			

#### **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 FOUIPMENT.
- 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 - SMARTLINK 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.
- "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
втсм	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	Р	PROPOSED	TYP	TYPICAL
E	EXISTING	NTS	NOT TO SCALE	UG	UNDER GROUND
EGB	EQUIPMENT GROUND BAR	RAD	RADIATION CENTER LINE (ANTENNA)	VIF	VERIFY IN FIELD
EGR	EQUIPMENT GROUND RING	REF	REFERENCE		



FAX: (978) 336-5586

45 BEECHWOOD DRIVE

ORTH ANDOVER, MA 01845



1997 ANNAPOLIS EXCHANGE PKWY

SUITE 200 ANNAPOLIS, MD 21401 SITE NUMBER: CT3470A SITE NAME: MIDDLETOWN\_MILE LANE

> 499 MILE LANE MIDDLETOWN, CT 06457 MIDDLESEX COUNTY



FRAMINGHAM MA 01701

2	09/24/21	ISSUED FOR REVIEW				AR	JC	DPH	
1	09/22/21	ISSUED FOR	ISSUED FOR REVIEW					JC	DPH
0	04/07/21	ISSUED FOR	ISSUED FOR REVIEW					JC	DPH
NO.	DATE	REVISIONS			BY	СНК	APP'D		
SCALE: AS SHOWN			DESIGNE	D BY:	JC	DRAWN	BY:	CC/VF	,

AT&T

GENERAL NOTES
(NSB)

SITE NUMBER DRAWING NUMBER RI

CT3470A GN-1 2

#### STRUCTURAL NOTES:

- DESIGN REQUIREMENTS ARE PER STATE BUILDING CODE AND APPLICABLE SUPPLEMENTS, INTERNATIONAL BUILDING CODE, EIA/TIA-222-H STRUCTURAL STANDARDS FOR STEEL ANTENNA, TOWERS AND ANTENNA SUPPORTING STRUCTURES
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO FABRICATION AND ERECTION OF ANY MATERIAL. ANY UNUSUAL CONDITIONS SHALL BE REPORTED TO THE ATTENTION OF THE CONSTRUCTION MANAGER AND ENGINEER OF RECORD.
- DESIGN AND CONSTRUCTION OF STRUCTURAL STEEL SHALL CONFORM TO THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS".
- STRUCTURAL STEEL SHALL CONFORM TO ASTM A992 (Fv=50 ksi). MISCELLANEOUS STEEL SHALL CONFORM TO ASTM A36 UNLESS OTHERWISE
- STEEL PIPE SHALL CONFORM TO ASTM A500 "COLD-FORMED WELDED & SEAMLESS CARBON STEEL STRUCTURAL TUBING", GRADE B, OR ASTM A53 PIPE STEEL BLACK AND HOT-DIPPED ZINC-COATED WELDED AND SEAMLESS TYPE E OR S, GRADE B. PIPE SIZES INDICATED ARE NOMINAL. ACTUAL OUTSIDE DIAMETER IS LARGER.
- STRUCTURAL CONNECTION BOLTS SHALL BE HIGH STRENGTH BOLTS (BEARING TYPE) AND CONFORM TO ASTM A325 TYPE-X "HIGH STRENGTH BOLTS FOR STRUCTURAL JOINTS, INCLUDING SUITABLE NUTS AND PLAIN HARDENED WASHERS". ALL BOLTS SHALL BE 3/4" DIA UON.
- ALL STEEL MATERIALS SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123 "ZINC (HOT-DIP GALVANIZED) COATINGS ON IRON AND STEEL PRODUCTS". UNLESS OTHERWISE NOTED.
- ALL BOLTS, ANCHORS AND MISCELLANEOUS HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 "ZINC-COATING (HOT-DIP) ON IRON AND STEEL HARDWARE", UNLESS OTHERWISE NOTED.
- FIELD WELDS, DRILL HOLES, SAW CUTS AND ALL DAMAGED GALVANIZED SURFACES SHALL BE REPAIRED WITH AN ORGANIC ZINC REPAIR PAINT COMPLYING WITH REQUIREMENTS OF ASTM A780. GALVANIZING REPAIR PAINT SHALL HAVE 65 PERCENT ZINC BY WEIGHT, ZIRP BY DUNCAN GALVANIZING, GALVA BRIGHT PREMIUM BY CROWN OR EQUAL. THICKNESS OF APPLIED GALVANIZING REPAIR PAINT SHALL BE NOT NOT LESS THAN 4 COATS (ALLOW TIME TO DRY BETWEEN COATS) WITH A RESULTING COATING THICKNESS REQUIRED BY ASTM A123 OR A153 AS APPLICABLE.
- 10. CONTRACTOR SHALL COMPLY WITH AWS CODE FOR PROCEDURES, APPEARANCE AND QUALITY OF WELDS, AND FOR METHODS USED IN CORRECTING WELDING. ALL WELDERS AND WELDING PROCESSES SHALL BE QUALIFIED IN ACCORDANCE WITH AWS "STANDARD QUALIFICATION PROCEDURES". ALL WELDING SHALL BE DONE USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC AND DI.I. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "STEEL CONSTRUCTION MANUAL". 14TH EDITION.
- INCORRECTLY FABRICATED. DAMAGED OR OTHERWISE MISFITTING OR NON-CONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE CONSTRUCTION MANAGER PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH ACTION SHALL REQUIRE CONSTRUCTION MANAGER APPROVAL.
- 12. UNISTRUT SHALL BE FORMED STEEL CHANNEL STRUT FRAMING AS MANUFACTURED BY UNISTRUT CORP., WAYNE, MI OR EQUAL. STRUT MEMBERS SHALL BE 1 5/8"x1 5/8"x12GA, UNLESS OTHERWISE NOTED, AND SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION.
- 13. EPOXY ANCHOR ASSEMBLY SHALL CONSIST OF STAINLESS STEEL ANCHOR ROD WITH NUTS & WASHERS. AN INTERNALLY THREADED INSERT, A SCREEN TUBE AND A EPOXY ADHESIVE. THE ANCHORING SYSTEM SHALL BE THE HILTI-HIT HY-270 AND OR HY-200 SYSTEMS (AS SPECIFIED IN DWG.) OR ENGINEERS
- 14. EXPANSION BOLTS SHALL CONFORM TO FEDERAL SPECIFICATION FF-S-325, GROUP II, TYPE 4, CLASS I, HILTI KWIK BOLT III OR APPROVED EQUAL. INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- 15. LUMBER SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION AND THE NATIONAL FOREST PRODUCTS ASSOCIATION'S NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION. ALL LUMBER SHALL BE PRESSURE TREATED AND SHALL BE STRUCTURAL GRADE NO. 2 OR BETTER.
- 16. WHERE ROOF PENETRATIONS ARE REQUIRED, THE CONTRACTOR SHALL CONTACT AND COORDINATE RELATED WORK WITH THE BUILDING OWNER AND THE EXISTING ROOF INSTALLER. WORK SHALL BE PERFORMED IN SUCH A MANNER AS TO NOT
- VOID THE EXISTING ROOF WARRANTY. ROOF SHALL BE WATERTIGHT.

  17. ALL FIBERGLASS MEMBERS USED ARE AS MANUFACTURED BY STRONGWELL COMPANY OF BRISTOL, VA 24203. ALL DESIGN CRITERIA FOR THESE MEMBERS IS BASED ON INFORMATION PROVIDED IN THE DESIGN MANUAL. ALL REQUIREMENTS PUBLISHED IN SAID MANUAL MUST BE STRICTLY ADHERED TO.
- 18. NO MATERIALS TO BE ORDERED AND NO WORK TO BE COMPLETED UNTIL SHOP DRAWINGS HAVE BEEN REVIEWED AND APPROVED IN WRITING
- 19. SUBCONTRACTOR SHALL FIREPROOF ALL STEEL TO PRE-EXISTING CONDITIONS.

#### **SPECIAL INSPECTIONS (REFERENCE IBC CHAPTER 17):**

GENERAL: WHERE APPLICATION IS MADE FOR CONSTRUCTION, THE OWNER OR THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE ACTING AS THE OWNER'S AGENT SHALL EMPLOY ONE OR MORE APPROVED AGENCIES TO PERFORM INSPECTIONS DURING CONSTRUCTION ON THE TYPES OF WORK LISTED IN THE INSPECTION CHECKLIST ABOVE.

THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE AND ENGINEERS OF RECORD INVOLVED IN THE DESIGN OF THE PROJECT ARE PERMITTED TO ACT AS THE APPROVED AGENCY AND THEIR PERSONNEL ARE PERMITTED TO ACT AS THE SPECIAL INSPECTOR FOR THE WORK DESIGNED BY THEM, PROVIDED THOSE PERSONNEL MEET THE

STATEMENT OF SPECIAL INSPECTIONS: THE APPLICANT SHALL SUBMIT A STATEMENT OF SPECIAL INSPECTIONS PREPARED BY THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE IN ACCORDANCE WITH SECTION 107.1 AS A CONDITION FOR ISSUANCE. THIS STATEMENT SHALL BE IN ACCORDANCE WITH SECTION 1705.

REPORT REQUIREMENT: SPECIAL INSPECTORS SHALL KEEP RECORDS OF INSPECTIONS. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. REPORTS SHALL INDICATE THAT WORK INSPECTED WAS OR WAS NOT COMPLETED IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THEY ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE BUILDING OFFICIAL AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE, A FINAL REPORT DOCUMENTING REQUIRED SPECIAL INSPECTIONS SHALL BE SUBMITTED.

#### NOTES:

- ALL CONNECTIONS TO BE SHOP WELDED & FIELD BOLTED USING 3/4"Ø A325-X BOLTS, UNLESS OTHERWISE NOTIFIED.
- SHOP DRAWING ENGINEER REVIEW & APPROVAL REQUIRED BEFORE ORDERING MATERIAL
- SHOP DRAWING ENGINEER REVIEW & APPROVAL REQUIRED PRIOR TO STEEL FARRICATION
- VERIFICATION OF EXISTING ROOF CONSTRUCTION IS REQUIRED PRIOR TO THE INSTALLATION OF THE ROOF PLATFORM. ENGINEER OF RECORD IS TO APPROVE EXISTING CONDITIONS IN ORDER TO MOVE FORWARD.
- CENTERLINE OF PROPOSED STEEL PLATFORM SUPPORT COLUMNS TO BE CENTRALLY LOCATED OVER THE EXISTING BUILDING COLUMNS.
- EXISTING BRICK MASONRY COLUMNS/BEARING TO BE REPAIRED/REPLACED AT ALL PROPOSED PLATFORM SUPPORT POINTS. ENGINEER OF RECORD TO REVIEW AND APPROVE.

#### NOTES:

- HIGH WIND ZONE INSPECTION CATB 120MPH OR CAT C,D 110MPH INSPECT FRAMING OF WALLS. ANCHORING. FASTENING SCHEDULE.
- ADHESIVE FOR REBAR AND ANCHORS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ACI 355.4 AND ICC-ES AC308 FOR CRACKED CONCRET AND SEISMIC APPLICATIONS. DESIGN ADHESIVE BOND STRENGTH HAS BEEN BASED ON ACI 355.4 TEMPERATURE CATEGORY B WITH INSTALLATIONS INTO DRY HOLES DRILLED USING A CARBIDE BIT INTO CRACKED CONCRETE THAT HAS CURED FOR AT LEAST 21 DAYS. ADHESIVE ANCHORS REQUIRING CERTIFIED INSTALLATIONS SHALL BE INSTALLED BY A CERTIFIED ADHESIVE ANCHOR INSTALLER PER ACI 318-11 D.9.2.2. INSTALLATIONS REQUIRING CERTIFIED INSTALLERS SHALL BE INSPECTED PER ACI 318-11 D.8.2.4. AS REQUIRED; FOR ANY FIELD CHANGES TO THE ITEMS IN THIS TABLE

- REQUIRED FOR ANY  ${\hbox{\scriptsize NEW}}$  SHOP FABRICATED FRP OR STEEL. PROVIDED BY MANUFACTURER,
- REQUIRED IF HIGH STRENGTH BOLTS OR STEEL.
- PROVIDED BY GENERAL CONTRACTOR; PROOF OF MATERIALS.
- - ENGINEER OF RECORD)

#### CONSTRUCTION/INSTALLATION INSPECTIONS AND TESTING REPORT ITEM REQUIRED (COMPLETED BY ENGINEER OF RECORD) ENGINEER OF RECORD APPROVED REQUIRED MATERIAL SPECIFICATIONS REQUIRED FABRICATOR NDE INSPECTION N/A REQUIRED PACKING SLIPS ADDITIONAL TESTING AND INSPECTIONS: **DURING CONSTRUCTION** CONSTRUCTION/INSTALLATION INSPECTIONS AND TESTING REPORT ITEM REQUIRED (COMPLETED BY FNGINFER OF RECORD) REQUIRED STEEL INSPECTIONS HIGH STRENGTH BOLT INSPECTIONS N/A HIGH WIND ZONE INSPECTIONS 4 FOUNDATION INSPECTIONS N/A CONCRETE COMP. STRENGTH N/A SLUMP TESTS AND PLACEMENT POST INSTALLED ANCHOR VERIFICATION N/A GROUT VERIFICATION N/A CERTIFIED WELD INSPECTION N/A EARTHWORK: LIFT AND DENSITY ON SITE COLD GALVANIZING N/A VERIFICATION N/A GUY WIRE TENSION REPORT ADDITIONAL TESTING AND INSPECTIONS: AFTER CONSTRUCTION CONSTRUCTION /INSTALLATION INSPECTIONS AND TESTING REPORT ITEM REQUIRED (COMPLETED BY MODIFICATION INSPECTOR REDLINE REQUIRED OR RECORD DRAWINGS POST INSTALLED ANCHOR N/A REQUIRED PHOTOGRAPHS ADDITIONAL TESTING AND INSPECTIONS:

SPECIAL INSPECTION CHECKLIST

BEFORE CONSTRUCTION



45 BEECHWOOD DRIVE

ORTH ANDOVER, MA 01845

TEL: (978) 557-5553 FAX: (978) 336-5586



1997 ANNAPOLIS EXCHANGE PKWY SUITE 200 ANNAPOLIS, MD 21401

SITE NUMBER: CT3470A SITE NAME: MIDDLETOWN MILE LANE

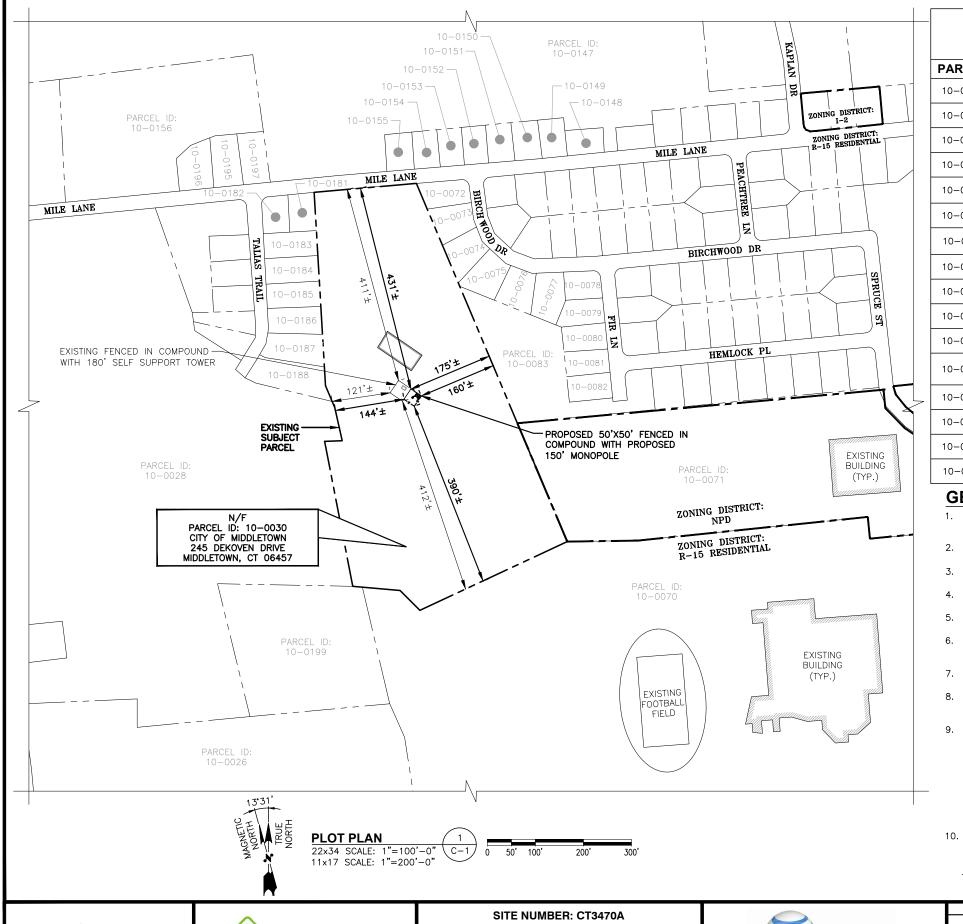
> 499 MILE LANE MIDDLETOWN, CT 06457 MIDDLESEX COUNTY



FRAMINGHAM MA 0170

2	09/24/21	ISSUED FOR	ISSUED FOR REVIEW					DPH
1	09/22/21	ISSUED FOR	ISSUED FOR REVIEW				JC	DPH
0	04/07/21	ISSUED FOR	REVIEW			VP	JC	DPH
NO.	DATE	REVISIONS			BY	снк	APP'D	
SCALE: AS SHOWN			DESIGNED B	Y: JC	DRAW	N BY:	CC/VF	,

AT&T							
STRUCTURAL NOTES (NSB)							
SITE NUMBER	DRAWING NUMBER	REV					
CT3470A	SN-1	2					



## IMMEDIATE ADJOINING PROPERTY OWNER INFORMATION

PARCEL OWNER		ADDRESS
10-0072	MAURA THEODORE JR	5 BIRCHWOOD DR MIDDLETOWN, CT 06457
10-0073	MORGAN RYAN & WILES EMILY M	15 BIRCHWOOD DR MIDDLETOWN, CT 06457
10-0074	LAMB DORIS L	25 BIRCHWOOD DR MIDDLETOWN, CT 06457
10-0075	ZADROGA ANTHONY F TRUSTEE	35 BIRCHWOOD DR MIDDLETOWN, CT 06457
10-0083	BENNETT RHODA (1/4 INT) ETALS	65 HOLLYBERRY LN BRISTOL, CT 06010
10-0070	CITY OF MIDDLETOWN	245 DEKOVEN DR MIDDLETOWN, CT 06457
10-0071	CITY OF MIDDLETOWN C/O KEIGWIN SCHOOL	245 DEKOVEN DR MIDDLETOWN, CT 06457
10-0199	CITY OF MIDDLETOWN	245 DEKOVEN DR MIDDLETOWN, CT 06457
10-0028	OLD COLONY OF WALLINGFORD LLC	273 NORTH COLONY ST UNIT 2 WALLINGFORD, CT 06492
10-0188	SZCZERBICKI ADAM & RAZEL MELISSA	70 TALIAS TRAIL MIDDLETOWN, CT 06457
10-0187	LAVIGNE CHRISTOPHER J & ALONSO LISA C	60 TALIAS TRAIL MIDDLETOWN, CT 06457
10-0186	PUGLIARES ROBERTO & KENEFICK-PUGLIARES KELLY	50 TALIAS TRAIL MIDDLETOWN, CT 06457
10-0185	CONNER MICHAEL T & VIVIANA	40 TALIAS TRAIL MIDDLETOWN, CT 06457
10-0184	LOMBARDO GIUSEPPE & DIANA	30 TALIAS TRAIL MIDDLETOWN, CT 06457
10-0183 LAMANIVONG MICHAEL & YI LIANA JIEUN		20 TALIAS TRAIL MIDDLETOWN, CT 06457
10-0181	GAINES PALMER L	509 MILE LA MIDDLETOWN, CT 06457

PLOT PLAN PREPARED BY HUDSON DESIGN GROUP LLC. FROM GIS, ASSESSORS DATA AND OTHER SOURCES, ACCESSED 04/08/21, AND DOES NOT REPRESENT AN ACTUAL FIELD OR BOUNDARY

SURVEY.

ZONING INFORMATION							
ZONING DISTRICT:	R-15 (RE	ESIDENTIAL)					
DIMENSIONS REQUIREMENTS:	EXISTING	PROPOSED					
ANTENNA SETBACKS							
FRONT YARD SETBACK:	411'	431'±					
SIDE YARD SETBACK:	121'	144'±					
REAR YARD SETBACK:	412'	390'±					
(ALL MEASUREMENTS ARE IN FEET ± UNLESS							
	SE NOTED)						
(SETBACK TO EXISTING EQ	DUIPMENT SHE	LTER UNLESS					

OTHERWISE NOTED)

SETBACK TO EXISTING EQUIPMENT SHELTER UNLES:

OTHERWISE NOTED)

PROJECT INFORMATION & DIMENSIONS						
TEMPORARY GROUND DISTURBANCE	300± SF					
PERMANENT IMPERVIOUS GROUND SURFACE ADDITIONS	125± SF					
NOTE:						

RRU & ASSOCIATED EQUIPMENT LOCATED BEHIND ANTENNAS, CALCULATION IS FOR PORTION OF RRU & ASSOCIATED EQUIPMENT THAT EXTENDS BEYOND ANTENNAS.

#### **GENERAL NOTES:**

- 1. PROPERTY LINE INFORMATION (WHEN APPLICABLE) WAS PREPARED USING TAX MAPS, AND PLANS OF RECORD AND SHOULD NOT BE CONSTRUCTED AS A BOUNDARY SURVEY.
- 2. NO NOISE, SMOKE, DUST, OR ODOR WILL RESULT FROM THIS FACILITY.
- 3. THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION (THERE IS NO HANDICAP ACCESS REQUIRED).
- 4. THE FACILITY IS UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SANITARY SERVICE.
- 5. CONNECTION TO ELECTRICAL & TELEPHONE UTILITIES TO BE DETERMINED BY THE APPROPRIATE UTILITY COMPANY.
- 6. SUBCONTRACTOR TO VERIFY ANTENNA ELEVATION AND AZIMUTH WITH RF ENGINEER PRIOR TO INSTALLATION. SEE ANTENNA CONFIGURATION SHEETS FOR SITE SPECIFIC DETAILS.
- 7. SUBCONTRACTOR SHALL LOCATE ALL UTILITIES PRIOR TO EXCAVATING.
- 8. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS REQUIRED FOR CONSTRUCTION.
- 9. THE MAXIMUM AREA OF DISTURBANCE IS LESS THAN 1 ACRE. THE PROJECT IMPACT AREA IS BELOW THE EXEMPTION THRESHOLD OF 43,560 SQUARE FEET IN 40 CFR PARTS 9, 122-124 AND THEREFORE IS NOT SUBJECT TO REGULATION UNDER THE EPA OR STATE-MANAGED NPDES GENERAL CONSTRUCTION PERMIT PROGRAM. THE PROJECT OWNER'S GENERAL CONTRACTOR SHALL CONDUCT ALL SITE DEVELOPMENT IN ACCORDANCE WITH THE "LOW RISK SITE HANDBOOK FOR EROSION PREVENTION AND SEDIMENT CONTROL" ISSUED BY THE VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION. ADDITIONALLY, THE PROJECT OWNERS GENERAL CONTRACTOR SHALL CONDUCT ALL CONSTRUCTION ACTIVITIES IN A MANNER THAT DOES NOT RESULT IN STORM WATER DISCHARGES WITH AN ADVERSE IMPACT ON ANY STORM WATER COLLECTION/CONVEYANCE SYSTEM, WETLAND, WATER BODY, OR OTHER WATER RESOURCE AREAS.
- 10. THE PROJECT WILL COMPLY WITH THE LOW RISK HANDBOOK FOR EROSION PREVENTION AND SEDIMENT CONTROL BY THE VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION.

#### HANDICAP REQUIREMENTS

FACILITY IS UNMANNED & NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS REQUIREMENTS NOT REQUIRED.

HUDSON Design Group LLC

NORTH ANDOVER, MA 01845

TEL: (978) 557-5553 FAX: (978) 336-5586 smartlink

1997 ANNAPOLIS EXCHANGE PKWY

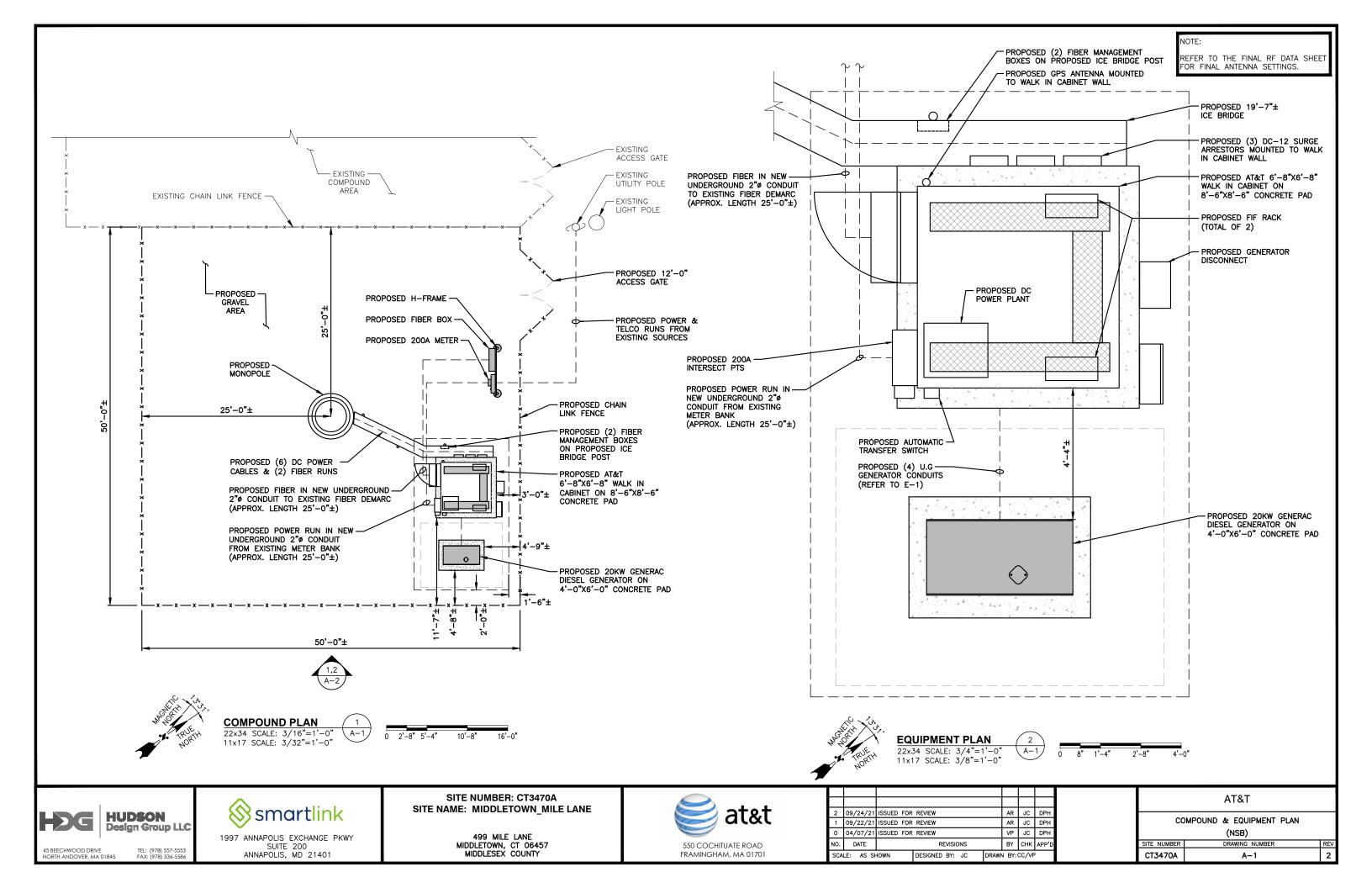
SUITE 200 ANNAPOLIS, MD 21401 SITE NUMBER: CT3470A
SITE NAME: MIDDLETOWN\_MILE LANE

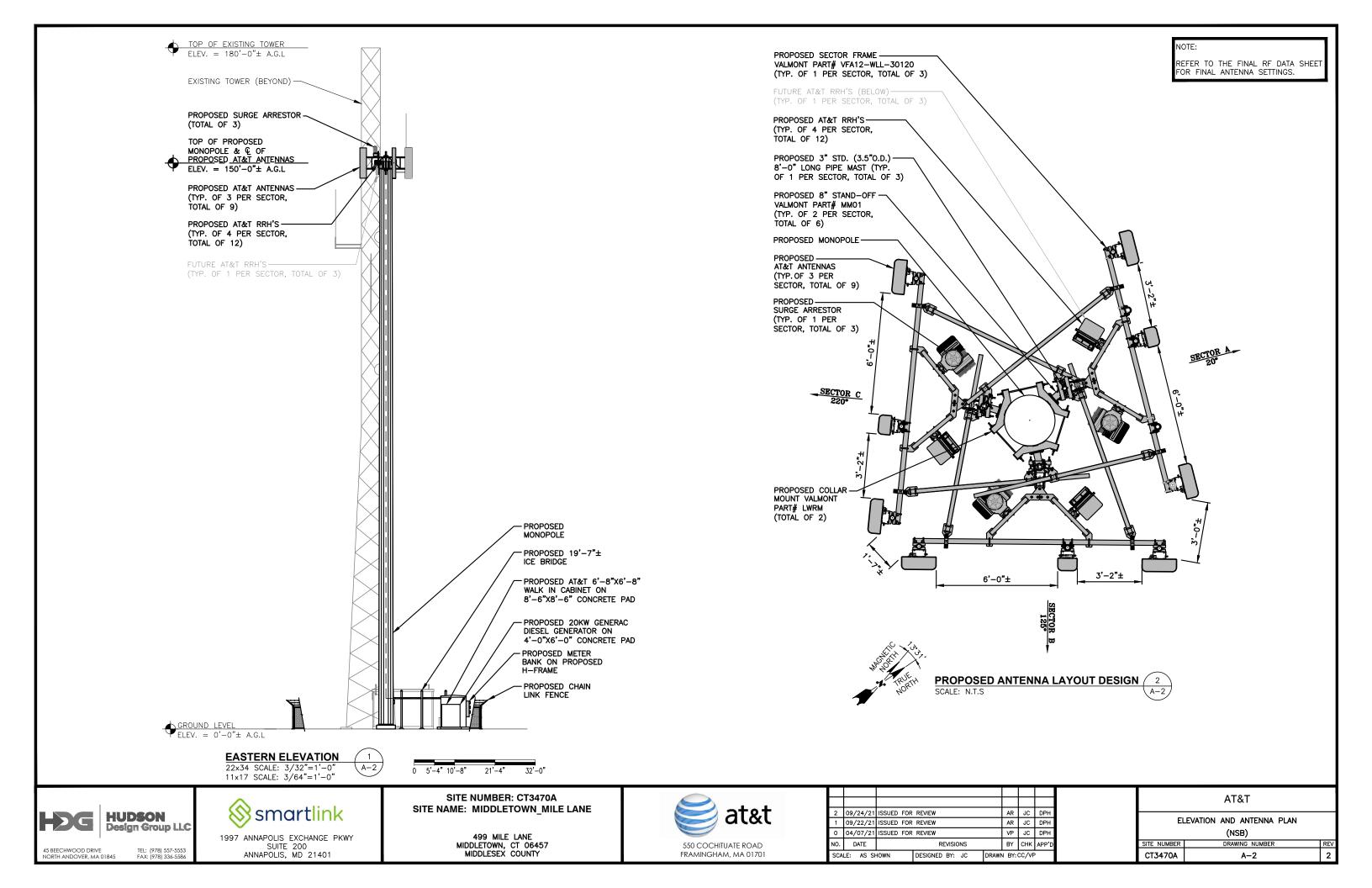
499 MILE LANE MIDDLETOWN, CT 06457 MIDDLESEX COUNTY



2	09/24/21	ISSUED FOR	REVIEW				AR	S	DPH	
1	09/22/21	ISSUED FOR	REVIEW				AR	JC	DPH	
0	04/07/21	ISSUED FOR	SSUED FOR REVIEW					JC	DPH	
NO.	DATE		REVISIONS				BY	СНК	APP'D	
SCA	LE: AS SH	HOWN	DESIGNE	D BY:	JC	DRAW	N BY:	CC/VF	,	

	AT&T	
	PLOT PLAN	
	(NSB)	
SITE NUMBER	DRAWING NUMBER	REV
CT3470A	C-1	2





# NOTE:

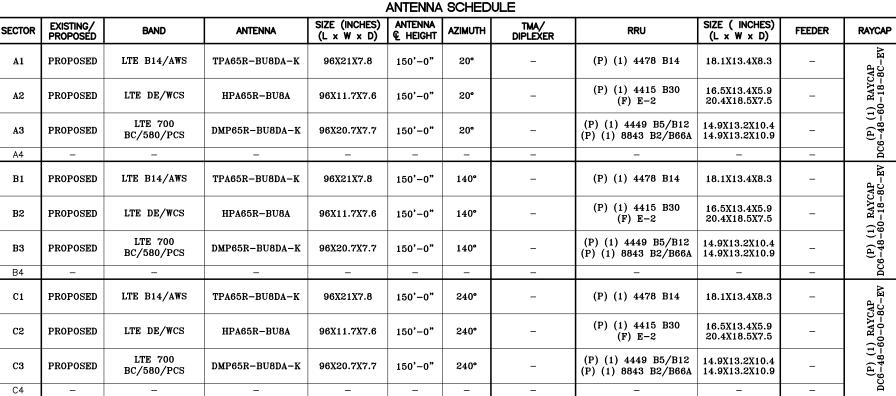
HDG RECOMMENDS THE PROPOSEL ANTENNA MOUNT BE MAPPED IN ITS ENTIRETY & A STRUCTURAL ANALYSIS BE PERFORMED PRIOR TO THE ANTENNA INSTALLATION.

OTE:

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

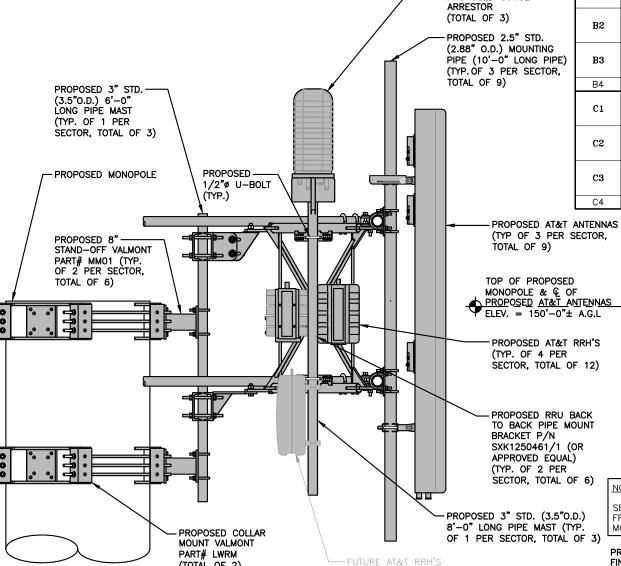
#### NOTE:

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



FINAL ANTENNA SCHEDULE

SCALE: N.T.S



SEE RFDS FOR RRH FREQUENCY AND MODEL NUMBER

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

NOTE:

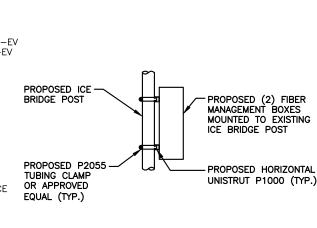
MOUNT PER MANUFACTURER'S SPECIFICATIONS.

PROPOSED RRUS DETAIL SCALE: N.T.S A-3

PROPOSED SURGE SUPPRESSOR MODEL NUMBERS: DC6-48-60-18-8C-EV DC6-48-60-0-8C-EV DIMENSIONS: H24.0"x9.7"ø WITH BRACKET H31.25"X9.7"ø -STRIKESORB 30-V1 SURGE PROTECTIVE DEVICE

MOUNT PER MANUFACTURER'S SPECIFICATIONS.

DC SURGE SUPPRESSOR DETAIL SCALE: N.T.S



PROPOSED FIBER MANAGEMENT **BOX MOUNTING DETAIL** SCALE: N.T.S

HUDSON **Design Group LLC** 

TEL: (978) 557-5553 FAX: (978) 336-5586 NORTH ANDOVER, MA 01845



ANNAPOLIS, MD 21401

(TOTAL OF 2)

PROPOSED SECTOR FRAME, ANTENNA, SURGE SUPPRESSOR

& RRH'S MOUNTING DETAIL

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

SITE NUMBER: CT3470A SITE NAME: MIDDLETOWN\_MILE LANE

(TYP. OF 1 PER SECTOR, TOTAL OF 3)

SEE RFDS FOR RRH

FREQUENCY AND

MODEL NUMBER

NOTE:

PROPOSED SURGE

499 MILE LANE MIDDLETOWN, CT 06457 MIDDLESEX COUNTY

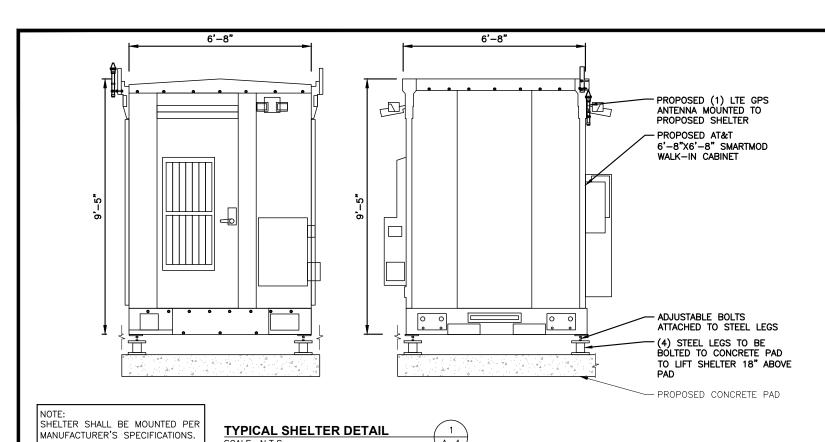


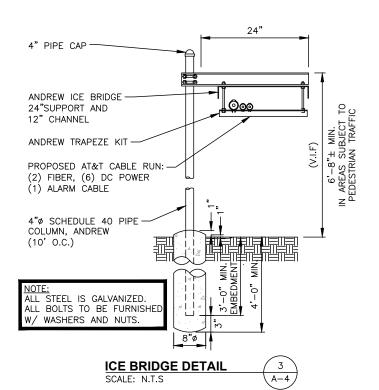
FRAMINGHAM, MA 01701

2	09/24/21	ISSUED FOR	REVIEW				AR	JC	DPH
1	09/22/21	ISSUED FOR	REVIEW				AR	JC	DPH
0	04/07/21	ISSUED FOR	REVIEW				VP	JC	DPH
NO.	DATE	REVISIONS					BY	снк	APP'D
SCALE: AS SHOWN			DESIGNE	D BY:	JC	DRAWN	N BY:	CC/VF	,

AT&T DETAILS & ANTENNA SCHEDULE (NSB) CT3470A A-3

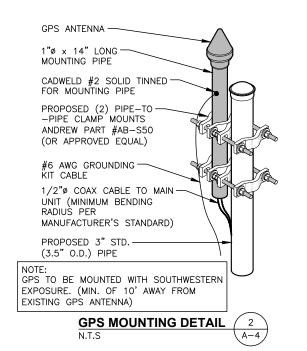
A-3,





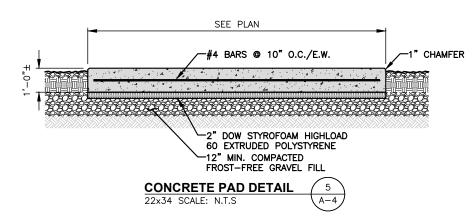
	ENERATOR NSIONS
MODEL #	G007098-0
MANUF.	GENERAC
HEIGHT	90"
WIDTH	36"
LENGTH	48"





#### FOUNDATION NOTES & CONCRETE SPECIFICATIONS:

- 1. FOUNDATION AREA SHALL BE EXCAVATED TO THE DEPTH AND DIMENSIONS SHOWN ON THE PLANS. EXISTING LEDGE AND ALL OTHER EXISTING UNSUITABLE MATERIAL SHALL BE REMOVED AND LEGALLY DISPOSED OF OFF-SITE. THE SUBGRADE SHALL BE ROLLED WITH A 1-TON, VIBRATORY, WALK-BEHIND ROLLER AT A SPEED OF LESS THAN 2 FPS, 6 PASSES MINIMUM, TO PROVIDE UNYIELDING SURFACE.
- 2. UNDERCUT SOFT OR "WEAVING" AREAS A MINIMUM OF 12 INCHES DEEP. BACKFILL UNDERCUT AREA WITH FILL MEETING THE SPECIFICATIONS OF STRUCTURAL FILL.
- CONCRETE TO HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH (f'c)=4000 psi. CONCRETE TO BE AIR ENTRAINED, DESIRED AIR CONTENT TO BE 6% (PLUS OR MINUS 2%)
- 4. REINFORCING BAR TO BE ASTM A615 GRADE 60.
- 5. WELDED WIRE FABRIC TO CONFORM TO THE REQUIREMENTS OF ASTM A185. WIRES FOR FABRIC TO CONFORM TO THE REQUIREMENTS OF ASTM A82.
- 6. COORDINATE WITH MANUFACTURER OF PREFABRICATED SHELTER FOR LOCATION OF ATTACHMENTS TO BASE SLAB.
- 7. ALL REINFORCING TO HAVE MINIMUM CONCRETE COVER PER ACI SPECIFICATIONS.
- 8. ALL CONCRETE MATERIALS AND WORKMANSHIP SHALL CONFORM TO LATEST EDITION OF ACI 318 AND APPLICABLE STATE BUILDING CODE.





NORTH ANDOVER, MA 01845

TEL: (978) 557-5553 FAX: (978) 336-5586



1997 ANNAPOLIS EXCHANGE PKWY SUITE 200 ANNAPOLIS, MD 21401 SITE NUMBER: CT3470A SITE NAME: MIDDLETOWN\_MILE LANE

> 499 MILE LANE MIDDLETOWN, CT 06457 MIDDLESEX COUNTY



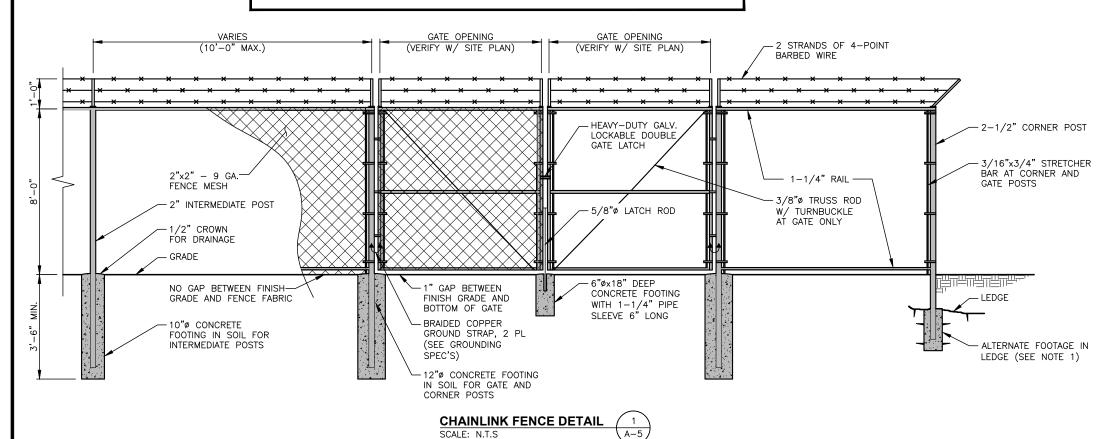
2	09/24/21	ISSUED FOR	REVIEW				AR	JC	DPH
1	09/22/21	ISSUED FOR	REVIEW				AR	JC	DPH
0	04/07/21	ISSUED FOR	ISSUED FOR REVIEW					JC	DPH
NO.	DATE	REVISIONS					BY	снк	APP'D
SCALE: AS SHOWN			DESIGNE	D BY:	JC	DRAWN	BY:	CC/VF	•

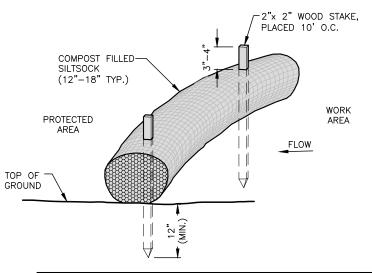
	AT&T	
	EQUIPMENT DETAILS (NSB)	
SITE NUMBER	DRAWING NUMBER	REV
CT3470A	A-4	2

#### **FENCE NOTES**

1. ALTERNATE FOOTINGS FOR ALL FENCE POSTS IN LEDGE: IF LEDGE IS ENCOUNTERED AT GRADE, OR AT A DEPTH SHALLOWER THAN 3'-6", CORE DRILL AN 8" DIA HOLE 18" INTO THE LEDGE. CENTER POST IN THE HOLE AND FILL WITH CONCRETE OR GROUT. IF LEDGE IS BELOW FINISH GRADE, COAT BACKFILLED SECTION OF POST WITH COAL TAR, AND BACKFILL WITH WELL—DRAINING GRAVEL.

2. ATTACH EACH GATE WITH 1-1/2 PAIR OF NON-LIFT-OFF TYPE, MALLEABLE IRON OR FORGING, PIN-TYPE HINGES. ASSEMBLIES SHALL ALLOW FOR 180° OF GATE TRAVEL.





#### NOTES:

- 1. SILTSOCK SHALL BE FILTREXX SILTSOXX, OR APPROVED EQUAL.
- 2. COMPOST MATERIAL SHALL BE DISPERSED ON SITE, AS DETERMINED BY THE ENGINEER.
- 3. SILTSOCK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS, AND REPAIR OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED.
- 4. SEE SPECIFICATIONS FOR SOCK SIZE, AND COMPOST FILL, REQUIREMENTS.







1997 ANNAPOLIS EXCHANGE PKWY SUITE 200 ANNAPOLIS, MD 21401 SITE NUMBER: CT3470A
SITE NAME: MIDDLETOWN\_MILE LANE

499 MILE LANE MIDDLETOWN, CT 06457 MIDDLESEX COUNTY



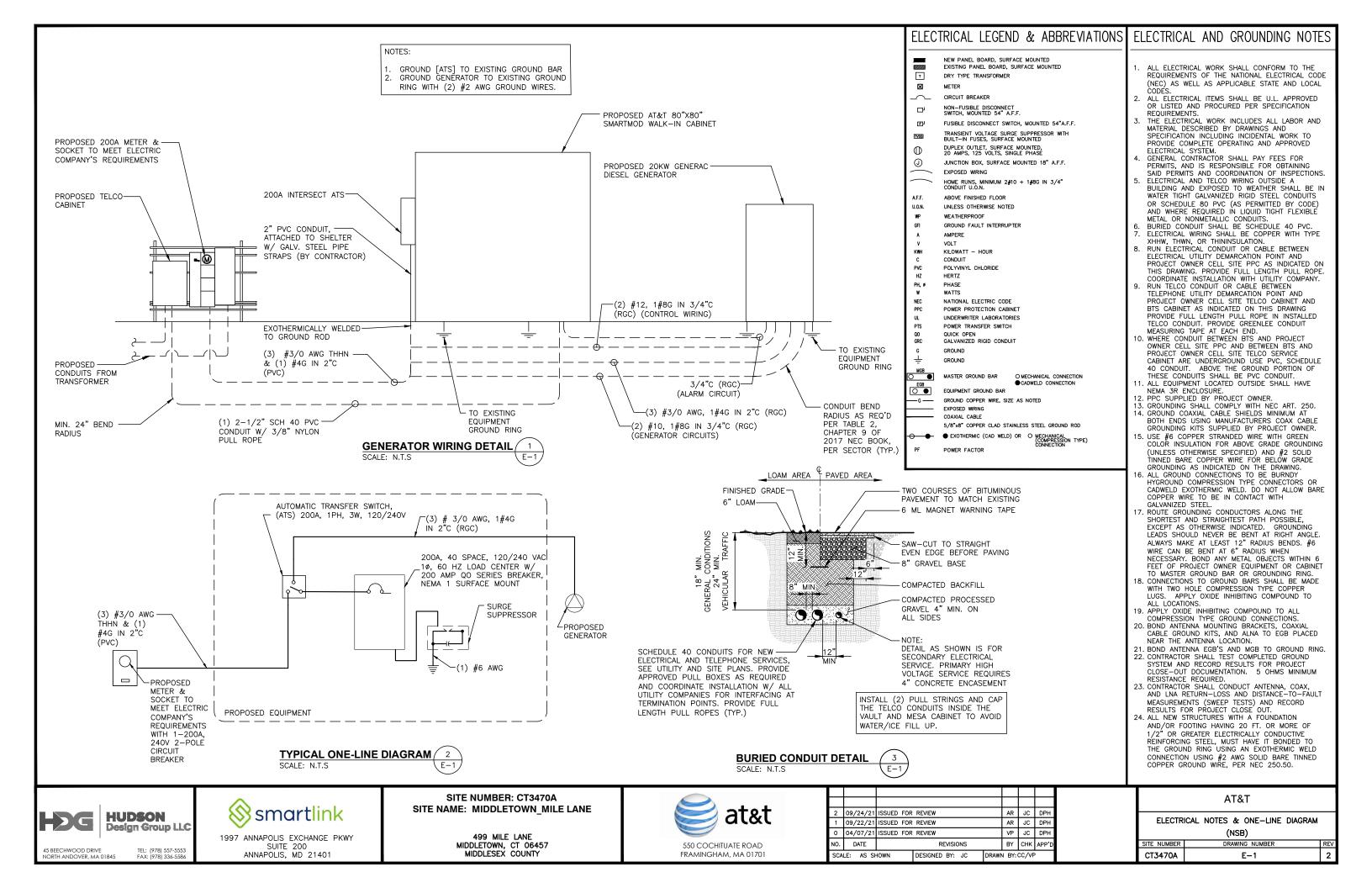
										_
										ı
2	09/24/21	ISSUED FOR	REVIEW				AR	JC	DPH	
1	09/22/21	ISSUED FOR	REVIEW				AR	JC	DPH	ı
0	04/07/21	ISSUED FOR	SSUED FOR REVIEW					JC	DPH	l
NO.	DATE		REVISIONS					снк	APP'D	
SCA	LE: AS SI	HOWN	DESIGNE	D BY:	JC	DRAWN	N BY:	CC/VF	,	

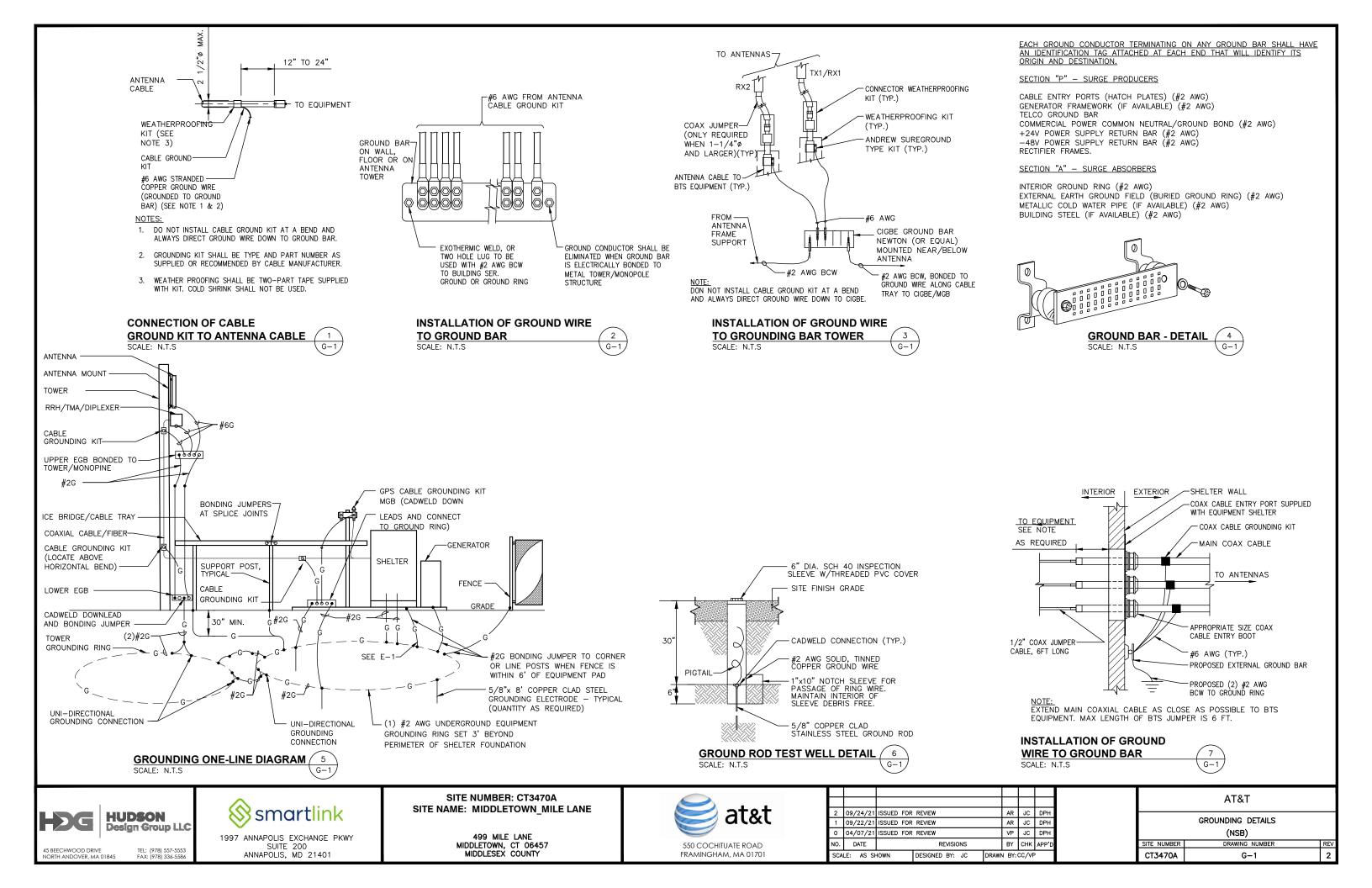
AT&T

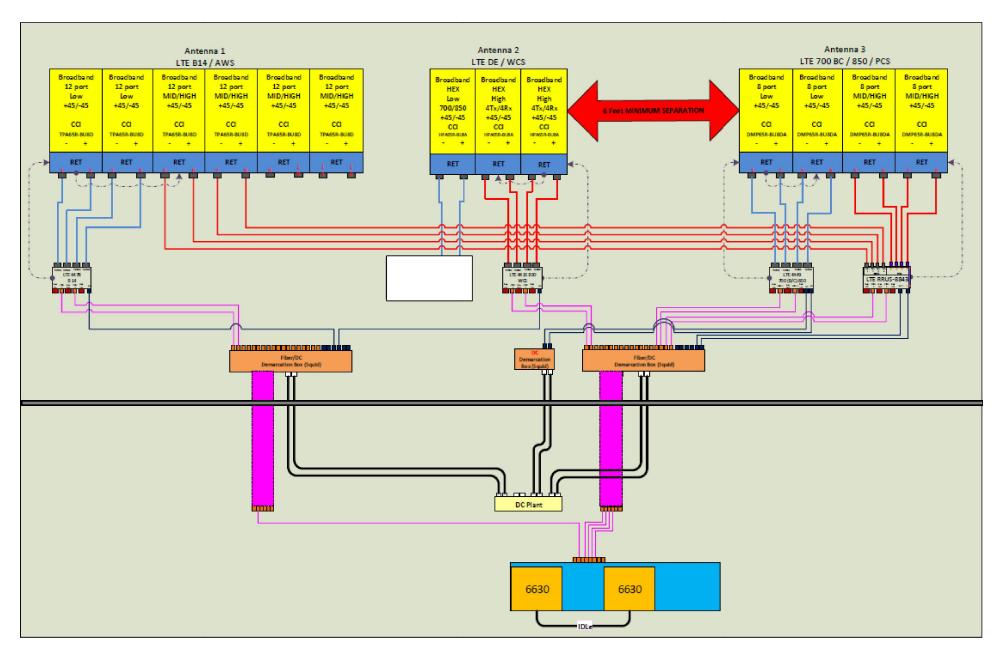
EQUIPMENT DETAILS
(NSB)

SITE NUMBER | DRAWING NUMBER | RE

CT3470A | A-5 | 2









NOTE:

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

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





SITE NUMBER: CT3470A SITE NAME: MIDDLETOWN\_MILE LANE

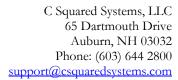
499 MILE LANE MIDDLETOWN, CT 06457 MIDDLESEX COUNTY



2	09/24/21	ISSUED FOR	REVIEW				AR	JC	DPH
1	09/22/21	ISSUED FOR	REVIEW				AR	JC	DPH
0	04/07/21	ISSUED FOR REVIEW VP JC						DPH	
NO.	DATE	REVISIONS						снк	APP'D
SCALE: AS SHOWN			DESIGNE	D BY:	JC	DRAWN	I BY:	CC/VF	,

AT&T RF PLUMBING DIAGRAM (NSB) SITE NUMBER CT3470A RF-1

## ATTACHMENT 4





### RF Report Proposed Wireless Facility



CT3470 499 Mile Lane Middletown, CT 06457

### TABLE OF CONTENTS

1.	Overview	2
2.	Introduction	2
3.	AT&T Mobility Coverage and Capacity Objectives	3
4.	Pertinent Site Data	5
5.	Coverage Analysis and Propagation Plots	6
6.	Summary	7
7.	Statement of Certification	7
8.	Attachments	8
	LIST OF TABLES ble 1: Coverage Summaryble 2: AT&T Mobility Site Information Used in Coverage Analysis	
	ATTACHMENTS	
At	tachment 1: CT3470 – Existing 700 MHz LTE Coverage	9
At	tachment 2: CT3470 – 700 MHz LTE Coverage with Proposed Site	.10
At	tachment 3: CT3470 – Area Terrain Map	.11
At	tachment 4: CT3470 – Neighbor Sites & Radial Distances	.12

#### 1. Overview

This RF Report has been prepared on behalf of AT&T Mobility in support of its application to the Connecticut Sitting Council for the installation and operation of a wireless facility located at 499 Mile Lane in Middletown, CT. The proposed facility consists of ground-based equipment cabinets, and antennas mounted to a proposed 150' monopole.

This report concludes that the proposed site will provide additional capacity and coverage improvement to Middletown in order to improve deficient service areas along Mile Lane, State Highway 3, Ridgewood Road, and the surrounding roads, businesses, and neighborhoods in the proximity of the proposed site.

Included in this report is: a brief summary of the site's objectives, maps showing AT&T's neighboring sites, and predicted Radio Frequency coverage maps of the subject site and the surrounding sites in AT&T's network.

#### 2. Introduction

To maintain a reliable and robust communications system for the individuals, businesses, public safety workers and others who use its network, AT&T deploys a network of cell sites (also called wireless communications facilities) throughout the areas in which it is licensed to provide service. These cell sites consist of antennas mounted on structures, such as buildings and towers, supported by radio and power equipment. The receivers and transmitters at each of these sites process signals within a limited geographic area known as a "cell."

Mobile subscriber handsets and wireless devices operate by transmitting and receiving low power radio frequency signals to and from these cell sites. Handset signals that reach the cell site are transferred through land lines (or other means of backhaul transport) and routed to their destinations by sophisticated electronic equipment. In order for AT&T's network to function effectively, there must be adequate overlapping coverage between the "serving cell" and adjoining cells. This not only allows a user to access the network initially, but also allows for the transfer or "hand-off" of calls and data transmissions from one cell to another, and prevents unintended disconnections or "dropped calls."

AT&T's antennas also must be located high enough above ground level to allow transmission (a.k.a. propagation) of the radio frequency signals above trees, buildings, and other natural or man-made structures that may obstruct or diminish the signals. Areas without adequate radio frequency coverage have substandard service, characterized by dropped and blocked calls, slow data connections, or no wireless service at all, and are commonly referred to as coverage gaps.

The size of the area potentially served by each cell site depends on several factors including the number of antennas used, the height at which the antennas are deployed, the topography of the surrounding land, vegetative cover, and natural or man-made obstructions in the area. The actual service area at any given time also depends on the number of customers who are on the network in range of that cell site. As customers move throughout the service area, the transmission from the phone or other device is automatically transferred to the AT&T facility with the best reception, without interruption in service, provided that there is overlapping coverage between the cells.

Each cell site must be primarily designed to strike a balance between the overall geographic coverage area it will serve, and the site's capacity to support the usage within the coverage footprint. In rural areas, cell sites are generally

designed to have broader coverage footprints because the potential traffic is sparser and distributed over a larger area. In more densely populated suburban and urban environments, the capacity to handle calls and data transmissions is of increasing concern, and cell sites must limit their coverage footprint to an area where the offered network traffic can be supported by the radio equipment and resources. Due to the aggressive historical and projected growth of mobile usage, particularly for mobile data (42% in 2016-2017, 35% CAGR 2016-2021 in North America)<sup>1</sup>, instances arise where the usage demand can no longer be supported by the site(s) serving an area, and new facilities must be integrated to provide capacity relief to the overloaded sites.

We have concluded that by installing the proposed wireless communication facility on the proposed monopole tower at 499 Mile Lane at an antenna centerline height of 176' AGL (above ground level), AT&T will be able to provide additional capacity and coverage improvement to residents, businesses, and traffic corridors within Middletown that are currently located within deficient service areas of AT&T's network.

### 3. AT&T Mobility Coverage and Capacity Objectives

In order to expand and enhance their wireless services throughout New England, AT&T must fill in existing coverage gaps and address capacity, interference, and high-speed broadband issues. As part of this effort, AT&T has determined that significant gaps in service exist in and around sections of the Town of Middletown, CT, as described further below.

AT&T currently operates wireless facilities similar to the proposed facility within Middletown and the surrounding cities/towns. Due in large part to the distances between the existing sites, the intervening topography, and volume of user traffic in the area, these existing facilities do not provide sufficient coverage to portions of Middletown. Specifically, AT&T determined that much of Middletown is without reliable service in the following areas and town roads<sup>2</sup>, including but not limited to:

- Mile Lane;
- State Highway 3;
- Ridgewood Road;
- The surrounding roads, businesses, and neighborhoods in the proximity of the proposed site and the above-mentioned roads.

C Squared Systems, LLC 3 August 27, 2021

<sup>&</sup>lt;sup>1</sup> "Cisco Visual Networking Index: Global Mobile Data Traffic Forecast Update, 2016-2021", February 7, 2017, Cisco Systems, Inc. <a href="http://www.cisco.com/c/en/us/solutions/collateral/service-provider/visual-networking-index-vni/mobile-white-paper-c11-520862.html">http://www.cisco.com/c/en/us/solutions/collateral/service-provider/visual-networking-index-vni/mobile-white-paper-c11-520862.html</a>

<sup>&</sup>lt;sup>2</sup> Traffic counts are sourced from the Massachusetts Department of Transportation, Transportation Data Management System.

Table 1 below lists the coverage statistics compiled for the AT&T's 700 MHz 4G LTE network with the deployment of the Proposed Site.

	Incremental Coverage from Proposed Site (700 MHz)					
Population: <sup>3</sup>	(≥ -83 dBm)	2691				
	(≥ -93 dBm)	2000				
<b>Business Pops:</b> 4	(≥ -83 dBm)	1018				
	(≥ -93 dBm)	891				
<b>A</b> ( '2)	(≥ -83 dBm)	2.12				
Area (mi²):	(≥ -93 dBm)	1.57				
Roadway (mi):	Main (-93 dBm):	1.29				
	Secondary (-93 dBm):	7.17				
	Total (-93 dBm):	8.46				

Table 1: Coverage Statistics

<sup>&</sup>lt;sup>3</sup> Population figures are based upon 2010 US Census Block Data

<sup>&</sup>lt;sup>4</sup> Employee population counts are based upon the 2015 U.S. Census Bureau LEHD database.

### 4. Pertinent Site Data

Table 2 below details the site-specific information for the on-air AT&T macro-sites used to perform the coverage analysis and generate the coverage plots provided herein.

	Address City/		Location		Antenna		
Site Name		City/State	Latitude	Longitude	Height (ft AGL)	Structure Type	Status
CT5121	51 Inwood Road	Rocky Hill/CT	41.6383	-72.6800	175	Monopole	On-Air
CT1141	9 Twin Oaks Drive	Cromwell/CT	41.6232	-72.6790	114	Lattice	On-Air
CT5375	1657 Berlin Turnpike	Berlin/CT	41.6063	-72.7496	170	Monopole	On-Air
CT5144	24 Christian Hill Road	Cromwell/CT	41.6056	-72.7019	98	Self-Support	On-Air
CT5271	101 Skyview Drive	Cromwell/CT	41.6070	-72.6771	39	Concealment Pole	On-Air
CT5381	607 Toll Gate Road	Berlin/CT	41.5888	-72.7611	28	Rooftop	On-Air
CT1044	90 Industrial Park Road	Middletown/CT	41.5856	-72.7140	174	Monopole	On-Air
CT3470	499 Mile Lane	Middletown/CT	41.5800	-72.6858	150	Lattice	Proposed
CT5272	201 Main Street	Cromwell/CT	41.5833	-72.6497	117	Monopole	On-Air
CT1066	97 High Street	Portland/CT	41.5807	-72.6239	77.5	Lattice	On-Air
CT5118	1100 Country Club Road	Middletown/CT	41.5711	-72.7283	26	Rooftop	On-Air
CT1142	290 PRESTON	Middletown/CT	41.5573	-72.7433	150	Monopole	On-Air
CT1017	231 Court Street	Middletown/CT	41.5595	-72.6511	171	Rooftop	On-Air
CT1143	228 Meriden Road	Middlefield/CT	41.5460	-72.7150	133	Monopole	On-Air
CT5437	1221-8 Washington Street	Middletown/CT	41.5494	-72.6913	64	Rooftop	On-Air
CT5280	677 Meriden Road	Middlefield/CT	41.5353	-72.7319	135	Monopole	On-Air

Table 2: AT&T Mobility Site Information Used in Coverage Analysis 5

C Squared Systems, LLC 5 August 27, 2021

<sup>&</sup>lt;sup>5</sup> Some sites listed in this table are outside the plot view but are included for completeness of information.

### 5. Coverage Analysis and Propagation Plots

The radio frequency coverage plots provided in this report were produced using deciBel Planner<sup>TM</sup>, a Windows-based RF propagation computer modeling program and network planning tool. The software takes into account the geographical features of an area, land cover, antenna models, antenna heights, RF transmitting power and receiver thresholds to predict coverage and other related RF parameters used in site design and wireless network expansion.

The plots included as attachments show coverage based on the minimum required signal strength needed to support reliable 4G LTE service in this area. All other areas (depicted in white) fall within coverage areas characterized by poor voice and data quality, slow data speeds, latency<sup>6</sup>, and the substantial likelihood of unreliable service.

While AT&T holds licenses in the 700 MHz, 850 MHz (Cellular), 1900 MHz (PCS), 2100 MHz (AWS), and 2300 MHz (WCS) bands, this report focuses on the 700 MHz layers, which are representative of the 4G LTE service most readily available to AT&T subscribers in Middletown, and are the spectrum layers that are essential to AT&T's ability to address the coverage needs for their 4G LTE service offerings. It is relevant to note that the 700 MHz coverage layer, which serves as the "base" layer for the LTE service, has a substantially larger coverage footprint due to the propagation characteristics of the frequency band. The 1900 MHz, 2100 MHz, and 2300 MHz overlay layers will have incrementally smaller footprints and are used by AT&T to manage capacity.

The following paragraphs discuss each of the AT&T maps attached hereto.

Attachment 1 titled "CT3470 - Existing 700 MHz LTE Coverage" shows the coverage provided to Middletown from the "On-Air" sites listed in Table 1. The green and yellow shaded areas represent the minimum desired level of coverage for much of this area on the 700 MHz network layers, respectively. As such, the deficient areas of 700 MHz coverage are defined by the unshaded or "white" areas. As shown in this plot, the surrounding AT&T macro-sites are unable to provide adequate coverage to Middletown.

Attachment 2 titled "CT3470 - 700 MHz LTE Coverage with Proposed Site" shows the composite coverage with the proposed "CT3470" facility. As shown by the additional areas of coverage in comparison with the Attachment 1, the proposed facility will provide coverage improvement at the 700 MHz layer in the areas of Mile Lane, State Highway 3, and Ridgewood Road.

- o 2000 additional residents<sup>7</sup> within the surrounding area at the 700 MHz frequency;
- o The surrounding roads, neighborhoods, and business areas within the proximity of the proposed site and the above-mentioned roadways.

Attachment 3 titled "CT3470 – Area Terrain Map" details the topographical features around the proposed "CT3470" site. These terrain features play a key role in dictating both the unique coverage areas served from a given location, and the coverage gaps within the network. This map is included to provide a visual representation of the terrain variations that must be considered when determining the appropriate location and design of a proposed wireless facility. The purple, blue, and green shades correspond to lower elevations, whereas the yellow, red and grey shades indicate higher elevations.

-

<sup>&</sup>lt;sup>6</sup> In data transfer it is the delay or lapse in the time between initiating a request from the wireless device and receiving the response.

<sup>&</sup>lt;sup>7</sup> Population counts are based upon 2010 U.S. Census residential data. Please note that this does not include any visitors in the area.

<u>Attachment 4</u> titled "<u>CT3470 - Neighbor Sites & Radial Distances</u>" provides a "zoomed-out" view of the subject area showing the locations of AT&T's existing sites within Middletown relative to the proposed facility, as well as other AT&T sites in neighboring cities and towns that may be contributing to the aggregate coverage in Middletown.

### 6. Summary

In undertaking its build-out of 4G LTE service in Middlesex County, AT&T has determined that an additional facility is needed to provide reliable service and additional capacity throughout Middletown, CT. AT&T determined that installing the proposed wireless communications facility at 499 Mile Lane in Middletown at an antenna centerline height of 150 feet (AGL) will provide additional capacity and coverage needed in the targeted coverage areas including key roadways such as Mile Lane, State Highway 3, Ridgewood Road and the surrounding roads, businesses and neighborhoods in the proximity of the proposed site. In addition to providing service to the targeted areas of Middletown, AT&T is providing enhanced services for Public Safety and meeting E911 compliance for the State of Connecticut. Without the installation of the proposed site, AT&T will be unable to improve and expand their existing 4G LTE wireless communication services in this area of Middletown; therefore, AT&T respectfully requests that the Connecticut Sitting Council act favorably upon the proposed facility.

### 7. Statement of Certification

I certify to the best of my knowledge that the statements in this report are true and accurate.

Martin J. Lavin

Senior RF Engineer

C Squared Systems, LLC

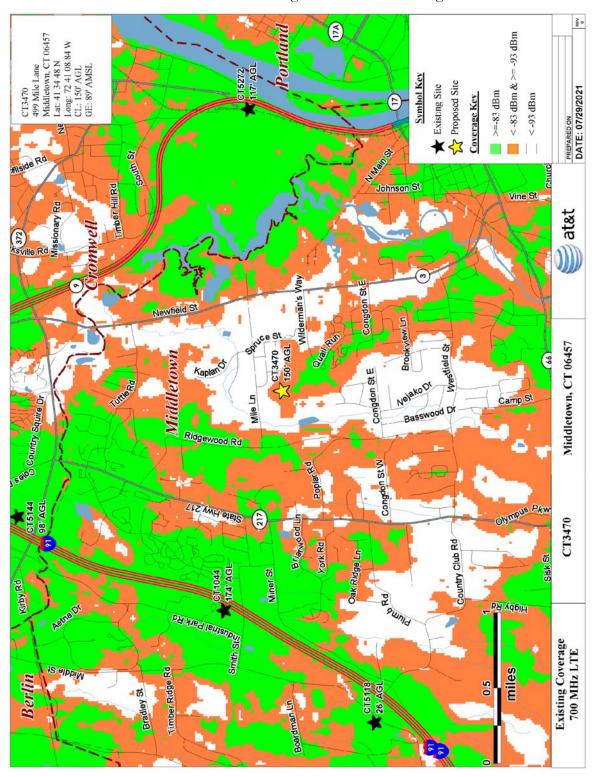
Mark Jam

August 27, 2021

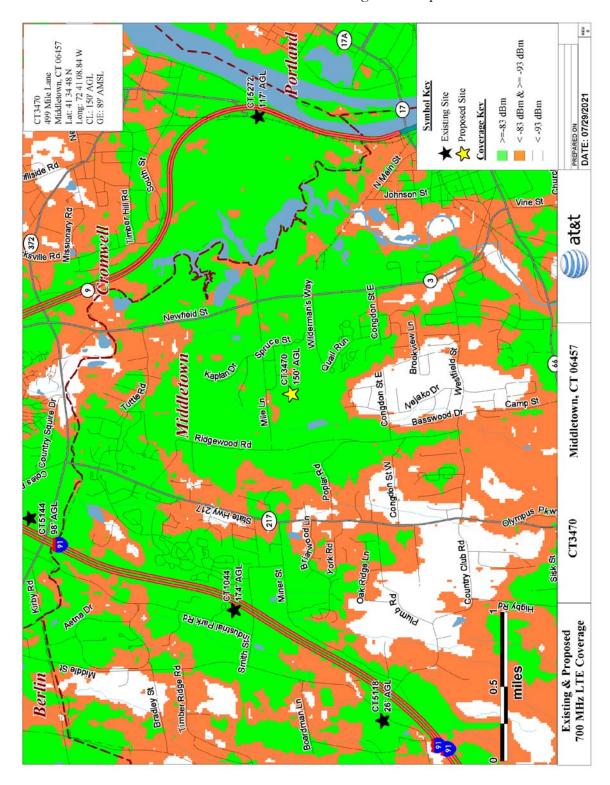
Date

### 8. Attachments

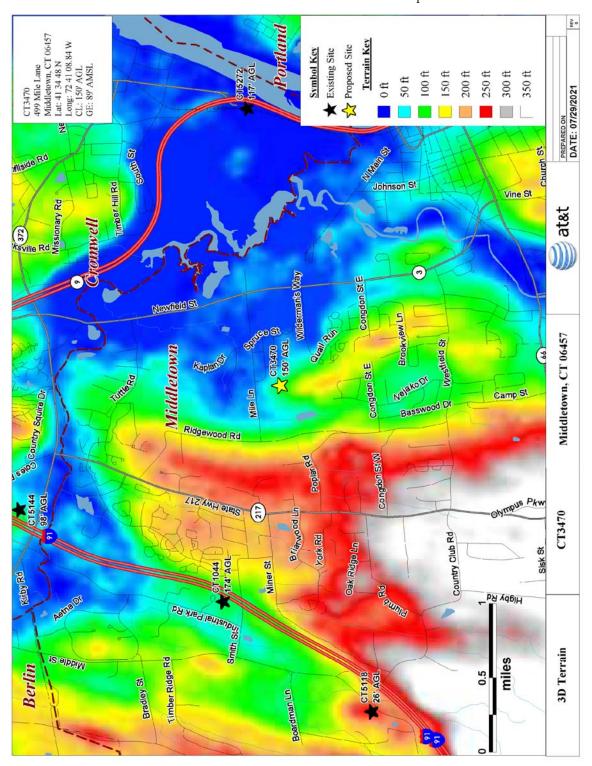
Attachment 1: CT3470 – Existing 700 MHz LTE Coverage



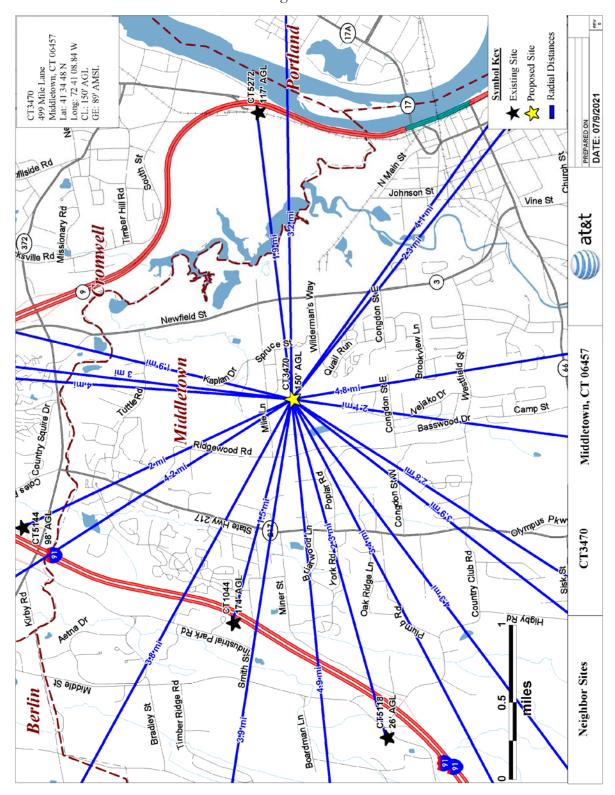
Attachment 2: CT3470 – 700 MHz LTE Coverage with Proposed Site



Attachment 3: CT3470 – Area Terrain Map



Attachment 4: CT3470 – Neighbor Sites & Radial Distances



### 6121002237



March 31, 2021

#### Wetlands

Estuarine and Marine Deepwater

Estuarine and Marine Wetland

Freshwater Emergent Wetland

Freshwater Forested/Shrub Wetland

Freshwater Pond

Lake

Other

Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

### Natural Diversity Data Base Areas

MIDDLETOWN, CT

December 2020

State and Federal Listed Species



Critical Habitat



**Town Boundary** 

NOTE: This map shows general locations of State and Federal Listed Species and Critical Habitats. Information on listed species is collected and compiled by the Natural Diversity Data Base (NDDB) from a variety of data sources. Exact locations of species have been buffered to produce the generalized locations.

This map is intended for use as a preliminary screening tool for conducting a Natural Diversity Data Base Review Request. To use the map, locate the project boundaries and any additional affected areas If the project is within a hatched area there may be a potential conflict with a listed species. For more information, complete a Request for Natural Diversity Data Base State Listed Species Review form (DEP-APP-007), and submit it to the NDDB along with the required maps and information. More detailed instructions are provided with the request form on our website.

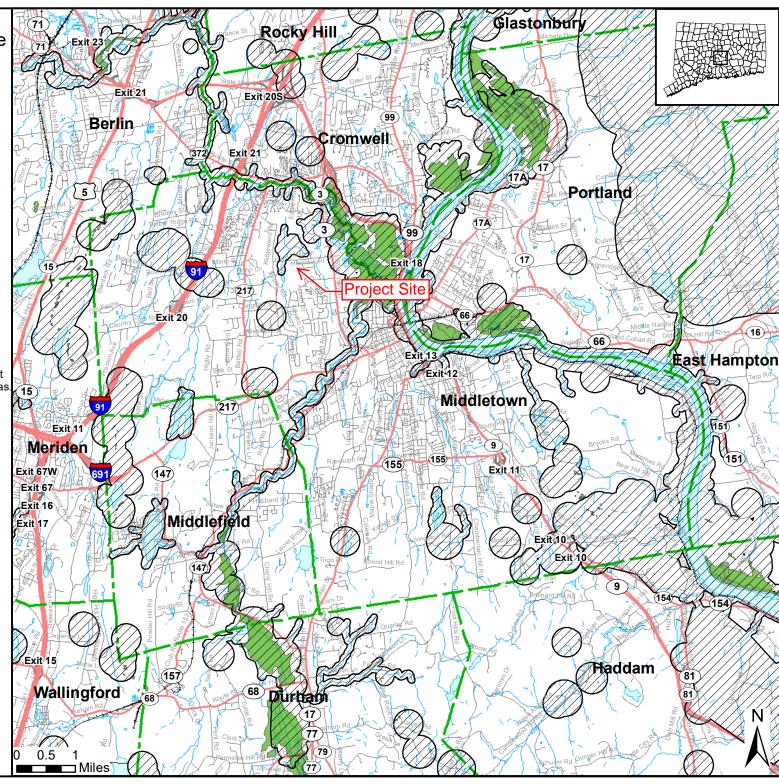
www.ct.gov/deep/nddbrequest

Use the CTECO Interactive Map Viewers at http://cteco.uconn.edu to more precisely search for and locate a site and to view aerial imagery with NDDB Areas.

QUESTIONS: Department of Energy and Environmental Protection (DEEP) 79 Elm St, Hartford, CT 06106 email: deep.nddbrequest@ct.gov Phone: (860) 424-3011



Connecticut Department of Energy & Environmental Protection Bureau of Natural Resources Wildlife Division





June 24, 2021

Mr. Matthew Holtkamp EBI Consulting 21 B Street Burlington, MA 01803

Subject: Proposed Telecommunications Facility

499 Mile Lane Middletown, CT AT&T Mobility ENV-21-0685

#### Dear Mr. Holtkamp:

The State Historic Preservation Office is in receipt of the revised proposal for the above-referenced project, submitted for review and comment pursuant to the National Historic Preservation Act and in accordance with Federal Communications Commission regulations.

The proposed undertaking includes the installation of a 154-foot self-supporting telecommunications tower (monopine) within a 50-foot by 50-foot lease area. Supporting electrical equipment, as well as a propane tank will be located within a fenced compound of the lease area, to be accessed by an existing drive, originating from Mile Lane.

While the property was previously the location of a US Military Nike Missile Launch Site, it appears that all resources related to this use have been either demolished or destroyed. Two previously identified archaeological sites are located within 1 mile of the project area; however, they will not be impacted by the proposed undertaking. Soil profiles of the compound are categorized as udorthents, and appear to have been previously disturbed by construction of the adjacent facility.

The SHPO concurs with EBI's determination that the scope of work will not impact historic resources. Based on the information provided to this office, <u>no historic</u> properties will be affected.



The State Historic Preservation Office appreciates the opportunity to review and comment upon this project. These comments are provided in accordance with the Connecticut Environmental Policy Act and Section 106 of the National Historic Preservation Act. For further information please contact Marena Wisniewski, Environmental Reviewer, at (860) 500-2357 or marena.wisniewski@ct.gov.

Sincerely,

Jonathan Kinney

Deputy State Historic Preservation Officer

Sonathan Kirry

# Photographic Documentation & Simulations

MIDDLETOWN\_MILE LANE
499 MILE LANE
MIDDLETOWN, CT

Prepared in May 2021 by: All-Points Technology Corporation, P.C. 567 Vauxhall Street Extension – Suite 311 Waterford, CT 06385

Prepared for Smartlink

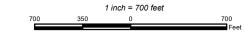






• Site ● Photographic Location ☐ Municipal Boundary





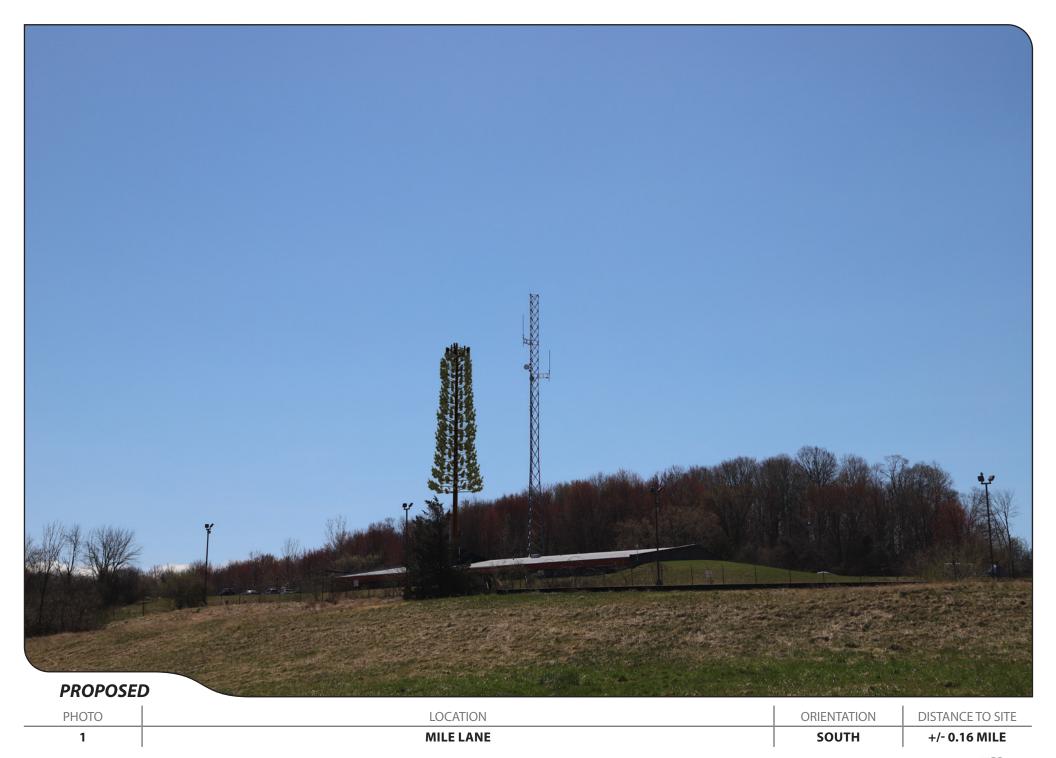




























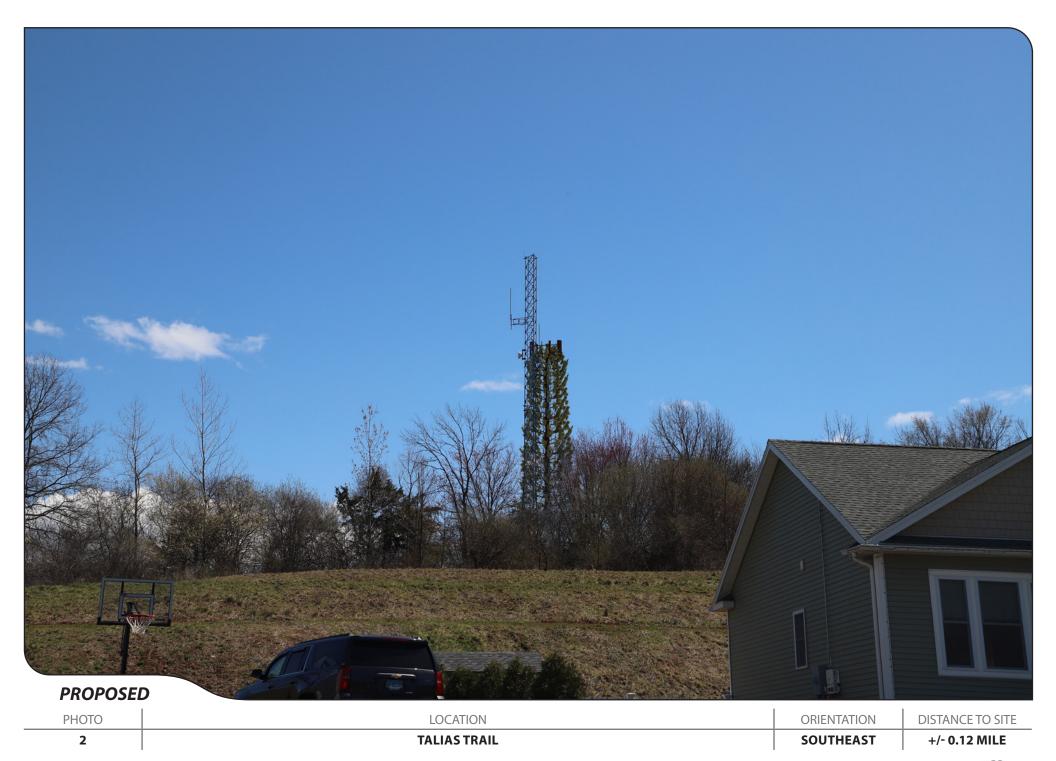








PHOTO LOCATION ORIENTATION DISTANCE TO SITE

2 TALIAS TRAIL SOUTHEAST +/- 0.12 MILE



































































































smartlink











PHOTO LOCATION ORIENTATION DISTANCE TO SITE

8 NEWFIELD STREET WEST +/- 0.68 MILE























# ATTACHMENT 9



## Calculated Radio Frequency Exposure



CT3470

499 Mile Lane, Middletown, CT 06457

## Table of Contents

1. Introduction	1
2. FCC Guidelines for Evaluating RF Radiation Exposure Limits	1
3. RF Exposure Calculation Methods	2
4. Calculation Results	3
5. Conclusion	4
6. Statement of Certification	4
Attachment A: References	5
Attachment B: FCC Limits for Maximum Permissible Exposure (MPE)	6
Attachment C: AT&T Antenna Data Sheets and Electrical Patterns	8
List of Tables	
Table 1: Carrier Information	3
Table 2: FCC Limits for Maximum Permissible Exposure (MPE)	6
List of Figures	
Figure 1: Graph of FCC Limits for Maximum Permissible Exposure (MPE)	7



#### 1. Introduction

The purpose of this report is to investigate compliance with applicable FCC regulations for the proposed installation of the AT&T antenna arrays on a new monopole tower located at 499 Mile Lane in Middletown, CT adjacent to the Town's existing tower. The coordinates of the proposed tower are 41° 34′ 48.00″ N, 72° 41′ 8.844″ W.

AT&T is proposing the following:

1) Install nine (9) multi-band antennas (two per sector) to support its commercial LTE network and the FirstNet National Public Safety Broadband Network ("NPSBN").

This report considers the planned antenna configuration for AT&T<sup>1</sup> to derive the resulting % Maximum Permissible Exposure of its proposed installation.

#### 2. FCC Guidelines for Evaluating RF Radiation Exposure Limits

In 1985, the FCC established rules to regulate radio frequency (RF) exposure from FCC licensed antenna facilities. In 1996, the FCC updated these rules, which were further amended in August 1997 by OET Bulletin 65 Edition 97-01. These new rules include Maximum Permissible Exposure (MPE) limits for transmitters operating between 300 kHz and 100 GHz. The FCC MPE limits are based upon those recommended by the National Council on Radiation Protection and Measurements (NCRP), developed by the Institute of Electrical and Electronics Engineers, Inc., (IEEE) and adopted by the American National Standards Institute (ANSI).

The FCC general population/uncontrolled limits set the maximum exposure to which most people may be subjected. General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

Public exposure to radio frequencies is regulated and enforced in units of milliwatts per square centimeter (mW/cm²). The general population exposure limits for the various frequency ranges are defined in the attached "FCC Limits for Maximum Permissible Exposure (MPE)" in Attachment B of this report.

Higher exposure limits are permitted under the occupational/controlled exposure category, but only for persons who are exposed as a consequence of their employment and who have been made fully aware of the potential for exposure, and they must be able to exercise control over their exposure. General population/uncontrolled limits are five times more stringent than the levels that are acceptable for occupational, or radio frequency trained individuals. Attachment B contains excerpts from OET Bulletin 65 and defines the Maximum Exposure Limit.

Finally, it should be noted that the MPE limits adopted by the FCC for both general population/uncontrolled exposure and for occupational/controlled exposure incorporate a substantial margin of safety and have been established to be well below levels generally accepted as having the potential to cause adverse health effects.

<sup>&</sup>lt;sup>1</sup> As referenced to AT&T's Radio Frequency Design Sheet updated 12/14/2020.



## 3. RF Exposure Calculation Methods

The power density calculation results were generated using the following formula as outlined in FCC bulletin OET 65, and Connecticut Siting Council recommendations:

Power Density = 
$$\left(\frac{1.6^2 \times 1.64 \times ERP}{4\pi \times R^2}\right)$$
 X Off Beam Loss

Where:

ERP = Effective Radiated Power

R = Radial Distance = 
$$\sqrt{(H^2 + V^2)}$$

H = Horizontal Distance from antenna

V = Vertical Distance from radiation center of antenna

Ground reflection factor of 1.6

Off Beam Loss is determined by the selected antenna pattern

These calculations assume that the antennas are operating at 100 percent capacity and power, and that all antenna channels are transmitting simultaneously. Obstructions (trees, buildings, etc.) that would normally attenuate the signal are not taken into account. The calculations assume even terrain in the area of study and do not consider actual terrain elevations which could attenuate the signal. As a result, the predicted signal levels reported below are much higher than the actual signal levels will be from the final installations.

CT3470 2 September 27, 2021



#### 4. Calculation Results

Table 1 below outlines the cumulative power density information for the AT&T installation on the proposed tower and Town of Middletown equipment on the existing tower at the site. The proposed antennas are directional in nature; therefore, the majority of the RF power is focused out towards the horizon. As a result, there will be less RF power directed below the antennas relative to the horizon, and consequently lower power density levels around the base of the tower. Please refer to Attachment C for the vertical pattern of the proposed AT&T antennas. The calculated results for AT&T in Table 1 include a nominal 10 dB off-beam pattern loss to account for the lower relative gain below the antennas. A nominal 20 dB off-beam pattern loss is applied to the microwave antennas (the first 4 Middletown antennas) to account for the highly directional antennas used in these frequency ranges.

Carrier	Antenna Height (Feet)	Operating Frequency (MHz)	Number of Trans.	ERP Per Transmitter (Watts)	Power Density (mw/cm <sup>2</sup> )	Limit	% MPE
AT&T	150	739	1	3156	0.0055	0.4927	1.11%
AT&T	150	763	1	3541	0.0061	0.5087	1.21%
AT&T	150	885	1	3883	0.0067	0.5900	1.14%
AT&T	150	1900	1	5877	0.0102	1.0000	1.02%
AT&T	150	2100	1	9890	0.0172	1.0000	1.72%
AT&T	150	2300	1	6153	0.0107	1.0000	1.07%
	Town of Middletown						
WQZR499	120	11525	1	1995	0.0006	1.0000	0.06%
WQZR491	130	11035	1	2138	0.0005	1.0000	0.05%
WQZR491	130	11075	1	2138	0.0005	1.0000	0.05%
WQZR484	75	11565	1	2399	0.0018	1.0000	0.18%
VHF	110	159.135	1	40	0.0001	0.2000	0.07%
WQYT436	110	859.6875	1	150	0.0005	0.5731	0.09%
WQYT436	110	859.5125	1	150	0.0005	0.5730	0.09%
WQYT436	110	858.5125	1	150	0.0005	0.5723	0.09%
WQYT436	110	858.1625	1	150	0.0005	0.5721	0.09%
WQYT436	110	856.6625	1	150	0.0005	0.5711	0.09%
WQYT436	110	856.0625	1	150	0.0005	0.5707	0.09%
						Total	8.19%

**Table 1: Carrier Information** 



#### 5. Conclusion

The above analysis concludes that RF exposure at ground level from the proposed site will be below the maximum power density levels as outlined by the FCC in the OET Bulletin 65 Ed. 97-01. Using conservative calculation methods, the highest expected percent of Maximum Permissible Exposure at ground level is **8.19% of the FCC General Population/Uncontrolled limit**.

As noted previously, the calculated % MPE levels are more conservative (higher) than the actual signal levels will be from the finished modifications.

## 6. Statement of Certification

I certify to the best of my knowledge that the statements in this report are true and accurate. The calculations follow guidelines set forth in FCC OET Bulletin 65 Edition 97-01, ANSI/IEEE Std. C95.1 and ANSI/IEEE Std. C95.3.

September 27, 2021
Date

Reviewed/Approved By: Martin J. Lavin

Senior RF Engineer C Squared Systems, LLC

Main & Fam

CT3470 4 September 27, 2021



#### **Attachment A: References**

OET Bulletin 65 - Edition 97-01 - August 1997 Federal Communications Commission Office of Engineering & Technology

<u>IEEE C95.1-2005, IEEE Standard Safety Levels With Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz</u> IEEE-SA Standards Board

<u>IEEE C95.3-2002 (R2008), IEEE Recommended Practice for Measurements and Computations of Radio Frequency</u>
<u>Electromagnetic Fields With Respect to Human Exposure to Such Fields, 100 kHz-300 GHz</u> <u>IEEE-SA Standards Board</u>

CT3470 5 September 27, 2021



## **Attachment B: FCC Limits for Maximum Permissible Exposure (MPE)**

## (A) Limits for Occupational/Controlled Exposure<sup>2</sup>

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (E) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time $ E ^2$ , $ H ^2$ or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	$(900/f^2)*$	6
30-300	61.4	0.163	1.0	6
300-1500	-	-	f/300	6
1500-100,000	-	-	5	6

## (B) Limits for General Population/Uncontrolled Exposure<sup>3</sup>

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (E) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time $ E ^2$ , $ H ^2$ or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	$(180/f^2)*$	30
30-300	27.5	0.073	0.2	30
300-1500	-	-	f/1500	30
1500-100,000	-	-	1.0	30

f = frequency in MHz \* Plane-wave equivalent power density

**Table 2: FCC Limits for Maximum Permissible Exposure (MPE)** 

CT3470 6 September 27, 2021

<sup>&</sup>lt;sup>2</sup> Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure

<sup>&</sup>lt;sup>3</sup> General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure



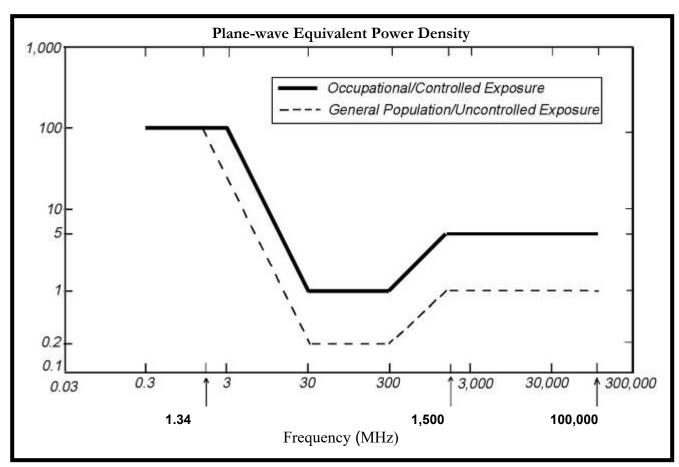


Figure 1: Graph of FCC Limits for Maximum Permissible Exposure (MPE)



#### Attachment C: AT&T Antenna Data Sheets and Electrical Patterns

## **739 MHz**

Manufacturer: CCI Products

Model #: DMP65R-BU8D

Frequency Band: 698-798 MHz

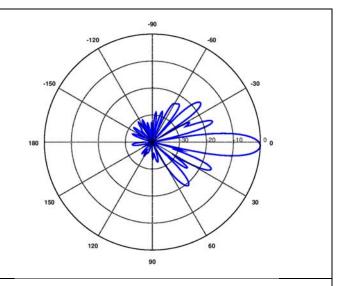
Gain: 15.1 dBi

Vertical Beamwidth: 9.5°

Horizontal Beamwidth: 75°

Polarization: Dual Linear 45°

Size L x W x D: 96.0" x 20.7" x 7.7"



## **763 MHz**

Manufacturer: CCI Products

Model #: TPA65R-BU8D

Frequency Band: 698 - 806MHz

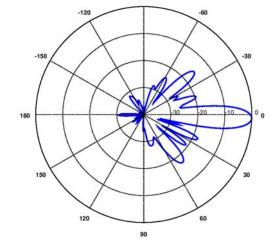
Gain: 15.6 dBi

Vertical Beamwidth: 9.5°

Horizontal Beamwidth: 74°

Polarization: Dual Linear 45°

Size L x W x D: 96.0" x 20.7" x 7.7"



#### 885 MHz

Manufacturer: CCI Products

Model #: DMP65R-BU8D

Frequency Band: 824 - 896 MHz

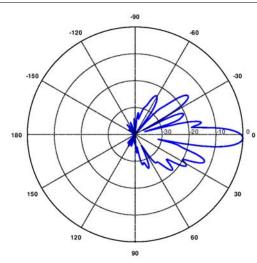
Gain: 16.0 dBi

Vertical Beamwidth: 8.0°

Horizontal Beamwidth: 64°

Polarization: Dual Linear 45°

Size L x W x D: 96.0" x 20.7" x 7.7"





#### 1900 MHz

Manufacturer: CCI Products

Model #: DMP65R-BU8D

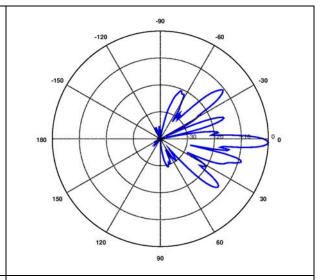
Frequency Band: 1850-1990 MHz

Gain: 17.8 dBi

Vertical Beamwidth: 5.1° Horizontal Beamwidth: 68°

Polarization: Dual Linear 45°

Size L x W x D: 96.0" x 20.7" x 7.7"



## 2100 MHz

Manufacturer: CCI Products

Model #: TPA65R-BU8D

Frequency Band: 1920-2180 MHz

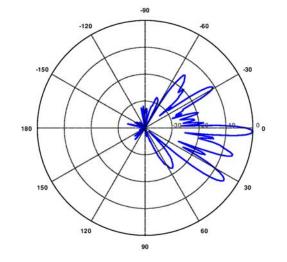
Gain: 18.3 dBi

Vertical Beamwidth: 4.7°

Horizontal Beamwidth: 67°

Polarization: Dual Linear 45°

Size L x W x D: 96.0" x 20.7" x 7.7"



#### 2300 MHz

Manufacturer: CCI Products

Model #: TPA65R-BU8D

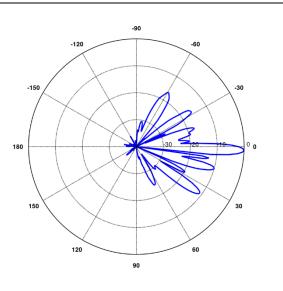
Frequency Band: 2300 - 2400 MHz

Gain: 18.0 dBi

Vertical Beamwidth: 4.1° Horizontal Beamwidth: 62°

Polarization: Dual Linear 45°

Size L x W x D: 96.0" x 20.7" x 7.7"



# ATTACHMENT 10

## **CERTIFICATION OF SERVICE**

I hereby certify that on the 28th day of September 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: 9282021

Cuddy & Feder LLP

45 Hamilton Avenue, 14<sup>th</sup> Floor White Plains, New York 10601

Attorneys for:

New Cingular Wireless PCS, LLC ("AT&T)

#### State

5	- Lucio
THE HONORABLE WILLIAM TONG ATTORNEY GENERAL OFFICE OF THE ATTORNEY GENERAL 165 CAPITOL AVENUE HARTFORD, CT 06106  DEPARTMENT OF PUBLIC HEALTH Dr. DEIDRE S. GIFFORD, MD, MPH, ACTING COMMISSIONER 410 CAPITOL AVENUE HARTFORD, CT 06134	DEPARTMENT OF ECONOMIC AND COMMUNITY DEVELOPMENT OFFICES OF CULTURE AND TOURISM DAVID LEHMAN, COMMISSIONER 450 COLUMBUS BLVD HARTFORD, CT 06103  DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION PUBLIC UTILITIES REGULATORY AUTHORITY MARISSA P. GILLETT, CHAIRMAN TEN FRANKLIN SQUARE NEW BRITAIN, CT 06051
COUNCIL ON ENVIRONMENTAL QUALITY 79 ELM STREET 6 <sup>TH</sup> 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 MCCAW, 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

DEPARTMENT OF ECONOMIC AND	SECRETARY OF STATE
COMMUNITY DEVELOPMENT	DENISE MERRILL
COMMISSIONER DAVID LEHMAN	165 CAPITOL AVENUE
450 COLUMBUS BLVD.	HARTFORD, CT 06106
HARTFORD, CT 06103	
STATE HOUSE REPRESENTATIVE-	STATE SENATOR MATTHEW L.
DISTRICT 033	LESSER- DISTRICT So9
BRANDON CHAFEE	LEGISLATIVE OFFICE BUILDING
LEGISLATIVE OFFICE BUILDING	ROOM 3300
ROOM 4014	300 CAPITOL AVENUE
300 CAPITOL AVENUE	HARTFORD, CT 06106
HARTFORD, CT 06106	
LOWER CONNECTICUT RIVER VALLEY	STATE HISTORIC PRESERVATION
COUNCIL OF GOVERNMENTS	OFFICE
145 DENNISON ROAD	450 COLUMBUS BLVD., SUITE 5
ESSEX, CT 06426	HARTFORD, CT 06103

## **Federal**

	uciui
FEDERAL COMMUNICATIONS	FEDERAL AVIATION ADMINISTRATION
COMMISSION	800 INDEPENDENCE AVENUE, SW
45 L STREET NE	WASHINGTON, DC 20591
WASHINGTON, DC 20554	
U.S. SENATOR CHRIS MURPHY	U.S. SENATOR RICHARD BLUMENTHAL
COLT GATEWAY	90 STATE HOUSE SQUARE, 10TH FLOOR
120 HUYSHOPE AVENUE	HARTFORD, CT 06103
SUITE 401	
· ·	
HARTFORD, CT 06106	
U.S. CONGRESSMAN –1st DISTRICT	
JOHN B. LARSON	
221 MAIN STREET, 2 <sup>ND</sup> FLOOR	
HARTFORD, CT 06106	

## Town of Middletown

BEN FLORSHEIM, MAYOR OFFICE OF THE MAYOR CITY OF MIDDLETOWN 245 DEKOVEN DRIVE ROOM 209 MIDDLETOWN, CT 06457	JOESEPH SAMOLIS, DIRECTOR OF PLANNING PLANNING, CONSERVATION AND DEVELOPMENT CITY OF MIDDLETOWN 245 DEKOVEN DRIVE SUITE 202 MIDDLETOWN, CT 06457
---	--

INLAND WETLANDS & WATERCOURSES AGENCY CITY OF MIDDLETOWN 245 DEKOVEN DRIVE MIDDLETOWN, CT 06457	ASHLEY FYNN-NATALE CITY & TOWN CLERK CITY OF MIDDLETOWN 245 DEKOVEN DRIVE 1st FLOOR MIDDLETOWN, CT 06457
CONSERVATION & AGRICULTURE COMMISSION CITY OF MIDDLETOWN 245 DEKOVEN DRIVE MIDDLETOWN, CT 06457	PLANNING & ZONING COMMISSION CITY OF MIDDLETOWN 245 DEKOVEN DRIVE MIDDLETOWN, CT 06457

#### **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 September 30, 2021, by New Cingular Wireless PCS, LLC ("AT&T"). AT&T seeks a declaratory ruling that sharing of an existing City of Middletown tower site and modifications to install a second shorter tower in an expanded compound adjacent thereto presents no substantial adverse effects such that a Certificate of Environmental Compatibility and Public Need ("Certificate") is not required under Section 16-50k(a) of the Connecticut General Statutes ("C.G.S.").

The proposed AT&T Facility will be located on an approximately 23.72-acre parcel located at 499 Mile Lane in Middletown, Connecticut, that was previously part of the U.S. Army Reserve Center and is now serving in part as a fire training site. The city of Middletown's existing communications facility consists of an approximately 180' lattice tower and a fenced equipment compound. AT&T proposes to share the site and modify the existing facility by installing a 150' monopole tower immediately adjacent to the existing tower, with nine (9) antennas at a centerline height of approximately 150' above ground level ("AGL"). The monopole and expanded equipment compound are being designed to accommodate future collocations by additional wireless carriers. Associated unmanned equipment will be located within a 50-foot by 50-foot expanded area of the existing fenced equipment compound. Vehicle access to AT&T's Facility would remain the same along the existing paved access drive that extends south of Mile Lane.

The Facility is proposed to allow wireless services to AT&T customers and first responders in the northern area of Middletown, particularly along Mile Lane, State Highway 3, Ridgewood Road and the surrounding roads, businesses, schools and neighborhoods.

The Petition will provide additional details of the proposal and explain why AT&T submits that the proposed shared use, modification and installation of a second tower 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 September 30, 2021 at the following:

Connecticut Siting Council 10 Franklin Square New Britain, Connecticut 06051 City & Town Clerk of Middletown Ashley Flynn-Natale City Hall 1<sup>st</sup> Floor 245 DeKoven Drive Middletown, CT 06457

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

Christopher B. Fisher, Esq. Cuddy & Feder LLP 445 Hamilton Ave, 14th Floor White Plains, New York 10601 (914) 761-1300 Attorney for the Petitioner PROJECT INFORMATION

SCOPE OF WORK: TELECOMMUNICATIONS FACILITY (NSB A PROPOSED 150'-0" A.G.L. TALL MONOPOLE. PROPOSED WALK-IN CABINET, AND GENERATOR WILL BE INSTALLED AT GRADE INSIDE A

PROPOSED WALK-IN CABINET, AND GENERATOR WILL BE INSTALLED AT GRADE INSIDE A EXISTING FENCED-IN COMPOUND. PROPOSED (3) TPA65R-BUBDA-K ANTENNAS, (3) HPA65R-BUBDA-K ANTENNAS, (3) 4478-B14 RRH'S, (3) FUTURE E2 RRH'S, (3) 4415 B30 RRH'S, (3) 4449 B5/B12 RRH'S, (3) 8843 B2/B66A RRH'S, (2) DC6-48-60-18-8C-EV SURGE ARRESTORS, & (1) DC6-48-60-0-8C-EV

WILL BE INSTALLED AT A HEIGHT OF 150'-0" A.G.L.):

SITE ADDRESS: 499 MILE LANE

MIDDLETOWN, CT 06457

APPLICANT: AT&T 550 COCHITUATE ROAD

FRAMINGHAM, MA 01701 SITE OWNER: CITY OF MIDDLETOWN

245 DEKOVEN DRIVE MIDDLETOWN, CT 06457

LATITUDE: 41.58000 N, 41° 34' 48.0" N

LONGITUDE: 72.68579 W, 72° 41' 8.9" W

TYPE OF SITE: MONOPOLE/ WALK-IN CABINET

TOWER HEIGHT: 150'-0"±

RAD CENTER: 150'-0"±

APPLICABLE ALL NATIO

ALL WORK SHALL CONFORM TO ALL CURRENT APPLICABLE CT STATE BUILDING CODE, NATIONAL ELECTRIC CODE (NEC 2017), ANSI/EIA/TIA-222 H & COMPLY WITH AT&T

MOBILITY SPECIFICATIONS



**SITE NUMBER: CT3470A** 

SITE NAME: MIDDLETOWN\_MILE LANE

FA CODE:10578361

PACE ID: MRCTB033524, MRCTB036341, MRCTB036593, MRCTB036513, MRCTB036367, MRCTB047889

**PROJECT: NSB** 

	DRAWING INDEX				
SHEET NO.	DESCRIPTION	REV.			
T-1	TITLE SHEET	2			
GN-1	GENERAL NOTES	2			
SN-1	STRUCTURAL NOTES	2			
C-1	PLOT PLAN	2			
A-1	COMPOUND & EQUIPMENT PLAN	2			
A-2	ELEVATION & ANTENNA PLAN	2			
A-3	DETAILS & ANTENNA SCHEDULE	2			
A-4	EQUIPMENT DETAILS	2			
A-5	EQUIPMENT DETAILS	2			
E-1	ELECTRICAL NOTES & ONE-LINE DIAGRAM	2			
G-1	GROUNDING DETAILS	2			
RF-1	RF PLUMBING DIAGRAM	2			

DRAWING INDEX

# VICINITY MAP

DEPART NORTHEAST, TURN RIGHT AND THEN IMMEDIATELY TURN LEFT ONTO LEGGATT MCCALL CONNECTOR ROAD, BEAR LEFT ONTO BURR ST, TURN LEFT ONTO MA-30 / COCHITUATE RD, TAKE RAMP RIGHT FOR I-90 EAST / I-90 WEST TOWARD BOSTON / SPRINGFIELD, AT EXIT 9 TAKE RAMP RIGHT FOR I-84 TOWARD HARTFORD / NEW YORK CITY, KEEP LEFT ONTO CT-15 S / WILBUR CROSS HWY S, KEEP STRAIGHT ONTO US-5 S / CT-15 S / WILBUR CROSS HIGHWAY S, AT EXIT 86 TAKE RAMP RIGHT FOR I-91 SOUTHBOUND, AT EXIT 21 TAKE RAMP RIGHT FOR CT-372 TOWARD CROMWELL / MIDDLETOWN, TURN LEFT ONTO CT-372 / BERLIN ROAD TOWARD CROMWELL / MIDDLETOWN, TURN LEFT ONTO CT-372 / BERLIN ROAD TOWARD CROMWELL / MIDDLETOWN, TURN RIGHT ONTO CT-217 / EAST STREET, TURN LEFT ONTO RIDGEWOOD RD, ARRIVE AT RIDGEWOOD ROAD



#### **GENERAL NOTES**

- 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.
- 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.
- . 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**



NORTH ANDOVER, MA 01845

TEL: (978) 557-5553 FAX: (978) 336-5586 smartlink

1997 ANNAPOLIS EXCHANGE PKWY SUITE 200 ANNAPOLIS, MD 21401 SITE NUMBER: CT3470A
SITE NAME: MIDDLETOWN\_MILE LANE

499 MILE LANE MIDDLETOWN, CT 06457 MIDDLESEX COUNTY



FRAMINGHAM MA 0170

									Г
2	09/24/21	ISSUED FOR	REVIEW			AR	JC	DPH	
	09/22/21	ISSUED FOR	REVIEW			AR	JC	DPH	
)	04/07/21	ISSUED FOR	REVIEW			VP	JC	DPH	
٥.	DATE	REVISIONS			BY	снк	APP'D		
CA	LE: AS SH	OWN DESIGNED BY: JC DRAW			N BY:	CC/VF	•		

	AT&T	
	TITLE SHEET (NSB)	
NUMBER	DRAWING NUMBER	REV
Γ3470A	T-1	2

#### **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 FOUIPMENT.
- 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 - SMARTLINK 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.
- "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
втсм	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	Р	PROPOSED	TYP	TYPICAL
E	EXISTING	NTS	NOT TO SCALE	UG	UNDER GROUND
EGB	EQUIPMENT GROUND BAR	RAD	RADIATION CENTER LINE (ANTENNA)	VIF	VERIFY IN FIELD
EGR	EQUIPMENT GROUND RING	REF	REFERENCE		



FAX: (978) 336-5586

45 BEECHWOOD DRIVE

ORTH ANDOVER, MA 01845



1997 ANNAPOLIS EXCHANGE PKWY

SUITE 200 ANNAPOLIS, MD 21401 SITE NUMBER: CT3470A SITE NAME: MIDDLETOWN\_MILE LANE

> 499 MILE LANE MIDDLETOWN, CT 06457 MIDDLESEX COUNTY



FRAMINGHAM MA 01701

2	09/24/21	ISSUED FOR	REVIEW				AR	JC	DPH
1	09/22/21	ISSUED FOR	REVIEW				AR	JC	DPH
0	04/07/21	ISSUED FOR	ISSUED FOR REVIEW					JC	DPH
NO.	DATE	REVISIONS					BY	СНК	APP'D
SCALE: AS SHOWN			DESIGNE	D BY:	JC	DRAWN	BY:	CC/VF	,

AT&T

GENERAL NOTES
(NSB)

SITE NUMBER | DRAWING NUMBER | RI

CT3470A | GN-1 | 2

#### STRUCTURAL NOTES:

- DESIGN REQUIREMENTS ARE PER STATE BUILDING CODE AND APPLICABLE SUPPLEMENTS, INTERNATIONAL BUILDING CODE, EIA/TIA-222-H STRUCTURAL STANDARDS FOR STEEL ANTENNA, TOWERS AND ANTENNA SUPPORTING STRUCTURES
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO FABRICATION AND ERECTION OF ANY MATERIAL. ANY UNUSUAL CONDITIONS SHALL BE REPORTED TO THE ATTENTION OF THE CONSTRUCTION MANAGER AND ENGINEER OF RECORD.
- DESIGN AND CONSTRUCTION OF STRUCTURAL STEEL SHALL CONFORM TO THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS".
- STRUCTURAL STEEL SHALL CONFORM TO ASTM A992 (Fv=50 ksi). MISCELLANEOUS STEEL SHALL CONFORM TO ASTM A36 UNLESS OTHERWISE
- STEEL PIPE SHALL CONFORM TO ASTM A500 "COLD-FORMED WELDED & SEAMLESS CARBON STEEL STRUCTURAL TUBING", GRADE B, OR ASTM A53 PIPE STEEL BLACK AND HOT-DIPPED ZINC-COATED WELDED AND SEAMLESS TYPE E OR S, GRADE B. PIPE SIZES INDICATED ARE NOMINAL. ACTUAL OUTSIDE DIAMETER IS LARGER.
- STRUCTURAL CONNECTION BOLTS SHALL BE HIGH STRENGTH BOLTS (BEARING TYPE) AND CONFORM TO ASTM A325 TYPE-X "HIGH STRENGTH BOLTS FOR STRUCTURAL JOINTS, INCLUDING SUITABLE NUTS AND PLAIN HARDENED WASHERS". ALL BOLTS SHALL BE 3/4" DIA UON.
- ALL STEEL MATERIALS SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123 "ZINC (HOT-DIP GALVANIZED) COATINGS ON IRON AND STEEL PRODUCTS". UNLESS OTHERWISE NOTED.
- ALL BOLTS, ANCHORS AND MISCELLANEOUS HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 "ZINC-COATING (HOT-DIP) ON IRON AND STEEL HARDWARE", UNLESS OTHERWISE NOTED.
- FIELD WELDS, DRILL HOLES, SAW CUTS AND ALL DAMAGED GALVANIZED SURFACES SHALL BE REPAIRED WITH AN ORGANIC ZINC REPAIR PAINT COMPLYING WITH REQUIREMENTS OF ASTM A780. GALVANIZING REPAIR PAINT SHALL HAVE 65 PERCENT ZINC BY WEIGHT, ZIRP BY DUNCAN GALVANIZING, GALVA BRIGHT PREMIUM BY CROWN OR EQUAL. THICKNESS OF APPLIED GALVANIZING REPAIR PAINT SHALL BE NOT NOT LESS THAN 4 COATS (ALLOW TIME TO DRY BETWEEN COATS) WITH A RESULTING COATING THICKNESS REQUIRED BY ASTM A123 OR A153 AS APPLICABLE.
- 10. CONTRACTOR SHALL COMPLY WITH AWS CODE FOR PROCEDURES, APPEARANCE AND QUALITY OF WELDS, AND FOR METHODS USED IN CORRECTING WELDING. ALL WELDERS AND WELDING PROCESSES SHALL BE QUALIFIED IN ACCORDANCE WITH AWS "STANDARD QUALIFICATION PROCEDURES". ALL WELDING SHALL BE DONE USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC AND DI.I. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "STEEL CONSTRUCTION MANUAL". 14TH EDITION.
- INCORRECTLY FABRICATED. DAMAGED OR OTHERWISE MISFITTING OR NON-CONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE CONSTRUCTION MANAGER PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH ACTION SHALL REQUIRE CONSTRUCTION MANAGER APPROVAL.
- 12. UNISTRUT SHALL BE FORMED STEEL CHANNEL STRUT FRAMING AS MANUFACTURED BY UNISTRUT CORP., WAYNE, MI OR EQUAL. STRUT MEMBERS SHALL BE 1 5/8"x1 5/8"x12GA, UNLESS OTHERWISE NOTED, AND SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION.
- 13. EPOXY ANCHOR ASSEMBLY SHALL CONSIST OF STAINLESS STEEL ANCHOR ROD WITH NUTS & WASHERS. AN INTERNALLY THREADED INSERT, A SCREEN TUBE AND A EPOXY ADHESIVE. THE ANCHORING SYSTEM SHALL BE THE HILTI-HIT HY-270 AND OR HY-200 SYSTEMS (AS SPECIFIED IN DWG.) OR ENGINEERS
- 14. EXPANSION BOLTS SHALL CONFORM TO FEDERAL SPECIFICATION FF-S-325, GROUP II, TYPE 4, CLASS I, HILTI KWIK BOLT III OR APPROVED EQUAL. INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- 15. LUMBER SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION AND THE NATIONAL FOREST PRODUCTS ASSOCIATION'S NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION. ALL LUMBER SHALL BE PRESSURE TREATED AND SHALL BE STRUCTURAL GRADE NO. 2 OR BETTER.
- 16. WHERE ROOF PENETRATIONS ARE REQUIRED, THE CONTRACTOR SHALL CONTACT AND COORDINATE RELATED WORK WITH THE BUILDING OWNER AND THE EXISTING ROOF INSTALLER. WORK SHALL BE PERFORMED IN SUCH A MANNER AS TO NOT
- VOID THE EXISTING ROOF WARRANTY. ROOF SHALL BE WATERTIGHT.

  17. ALL FIBERGLASS MEMBERS USED ARE AS MANUFACTURED BY STRONGWELL COMPANY OF BRISTOL, VA 24203. ALL DESIGN CRITERIA FOR THESE MEMBERS IS BASED ON INFORMATION PROVIDED IN THE DESIGN MANUAL. ALL REQUIREMENTS PUBLISHED IN SAID MANUAL MUST BE STRICTLY ADHERED TO.
- 18. NO MATERIALS TO BE ORDERED AND NO WORK TO BE COMPLETED UNTIL SHOP DRAWINGS HAVE BEEN REVIEWED AND APPROVED IN WRITING
- 19. SUBCONTRACTOR SHALL FIREPROOF ALL STEEL TO PRE-EXISTING CONDITIONS.

#### **SPECIAL INSPECTIONS (REFERENCE IBC CHAPTER 17):**

GENERAL: WHERE APPLICATION IS MADE FOR CONSTRUCTION, THE OWNER OR THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE ACTING AS THE OWNER'S AGENT SHALL EMPLOY ONE OR MORE APPROVED AGENCIES TO PERFORM INSPECTIONS DURING CONSTRUCTION ON THE TYPES OF WORK LISTED IN THE INSPECTION CHECKLIST ABOVE.

THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE AND ENGINEERS OF RECORD INVOLVED IN THE DESIGN OF THE PROJECT ARE PERMITTED TO ACT AS THE APPROVED AGENCY AND THEIR PERSONNEL ARE PERMITTED TO ACT AS THE SPECIAL INSPECTOR FOR THE WORK DESIGNED BY THEM, PROVIDED THOSE PERSONNEL MEET THE

STATEMENT OF SPECIAL INSPECTIONS: THE APPLICANT SHALL SUBMIT A STATEMENT OF SPECIAL INSPECTIONS PREPARED BY THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE IN ACCORDANCE WITH SECTION 107.1 AS A CONDITION FOR ISSUANCE. THIS STATEMENT SHALL BE IN ACCORDANCE WITH SECTION 1705.

REPORT REQUIREMENT: SPECIAL INSPECTORS SHALL KEEP RECORDS OF INSPECTIONS. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. REPORTS SHALL INDICATE THAT WORK INSPECTED WAS OR WAS NOT COMPLETED IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THEY ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE BUILDING OFFICIAL AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE, A FINAL REPORT DOCUMENTING REQUIRED SPECIAL INSPECTIONS SHALL BE SUBMITTED.

#### NOTES:

- ALL CONNECTIONS TO BE SHOP WELDED & FIELD BOLTED USING 3/4"Ø A325-X BOLTS, UNLESS OTHERWISE NOTIFIED.
- SHOP DRAWING ENGINEER REVIEW & APPROVAL REQUIRED BEFORE ORDERING MATERIAL
- SHOP DRAWING ENGINEER REVIEW & APPROVAL REQUIRED PRIOR TO STEEL FARRICATION
- VERIFICATION OF EXISTING ROOF CONSTRUCTION IS REQUIRED PRIOR TO THE INSTALLATION OF THE ROOF PLATFORM. ENGINEER OF RECORD IS TO APPROVE EXISTING CONDITIONS IN ORDER TO MOVE FORWARD.
- CENTERLINE OF PROPOSED STEEL PLATFORM SUPPORT COLUMNS TO BE CENTRALLY LOCATED OVER THE EXISTING BUILDING COLUMNS.
- EXISTING BRICK MASONRY COLUMNS/BEARING TO BE REPAIRED/REPLACED AT ALL PROPOSED PLATFORM SUPPORT POINTS. ENGINEER OF RECORD TO REVIEW AND APPROVE.

#### NOTES:

- HIGH WIND ZONE INSPECTION CATB 120MPH OR CAT C,D 110MPH INSPECT FRAMING OF WALLS. ANCHORING. FASTENING SCHEDULE.
- ADHESIVE FOR REBAR AND ANCHORS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ACI 355.4 AND ICC-ES AC308 FOR CRACKED CONCRET AND SEISMIC APPLICATIONS. DESIGN ADHESIVE BOND STRENGTH HAS BEEN BASED ON ACI 355.4 TEMPERATURE CATEGORY B WITH INSTALLATIONS INTO DRY HOLES DRILLED USING A CARBIDE BIT INTO CRACKED CONCRETE THAT HAS CURED FOR AT LEAST 21 DAYS. ADHESIVE ANCHORS REQUIRING CERTIFIED INSTALLATIONS SHALL BE INSTALLED BY A CERTIFIED ADHESIVE ANCHOR INSTALLER PER ACI 318-11 D.9.2.2. INSTALLATIONS REQUIRING CERTIFIED INSTALLERS SHALL BE INSPECTED PER ACI 318-11 D.8.2.4. AS REQUIRED; FOR ANY FIELD CHANGES TO THE ITEMS IN THIS TABLE

- REQUIRED FOR ANY  ${\hbox{\scriptsize NEW}}$  SHOP FABRICATED FRP OR STEEL. PROVIDED BY MANUFACTURER,
- REQUIRED IF HIGH STRENGTH BOLTS OR STEEL.
- PROVIDED BY GENERAL CONTRACTOR; PROOF OF MATERIALS.
- - ENGINEER OF RECORD)

#### CONSTRUCTION/INSTALLATION INSPECTIONS AND TESTING REPORT ITEM REQUIRED (COMPLETED BY ENGINEER OF RECORD) ENGINEER OF RECORD APPROVED REQUIRED MATERIAL SPECIFICATIONS REQUIRED FABRICATOR NDE INSPECTION N/A REQUIRED PACKING SLIPS ADDITIONAL TESTING AND INSPECTIONS: **DURING CONSTRUCTION** CONSTRUCTION/INSTALLATION INSPECTIONS AND TESTING REPORT ITEM REQUIRED (COMPLETED BY FNGINFER OF RECORD) REQUIRED STEEL INSPECTIONS HIGH STRENGTH BOLT INSPECTIONS N/A HIGH WIND ZONE INSPECTIONS 4 FOUNDATION INSPECTIONS N/A CONCRETE COMP. STRENGTH N/A SLUMP TESTS AND PLACEMENT POST INSTALLED ANCHOR VERIFICATION N/A GROUT VERIFICATION N/A CERTIFIED WELD INSPECTION N/A EARTHWORK: LIFT AND DENSITY ON SITE COLD GALVANIZING N/A VERIFICATION N/A GUY WIRE TENSION REPORT ADDITIONAL TESTING AND INSPECTIONS: AFTER CONSTRUCTION CONSTRUCTION /INSTALLATION INSPECTIONS AND TESTING REPORT ITEM REQUIRED (COMPLETED BY MODIFICATION INSPECTOR REDLINE REQUIRED OR RECORD DRAWINGS POST INSTALLED ANCHOR N/A REQUIRED PHOTOGRAPHS ADDITIONAL TESTING AND INSPECTIONS:

SPECIAL INSPECTION CHECKLIST

BEFORE CONSTRUCTION



45 BEECHWOOD DRIVE

ORTH ANDOVER, MA 01845

TEL: (978) 557-5553 FAX: (978) 336-5586



1997 ANNAPOLIS EXCHANGE PKWY SUITE 200 ANNAPOLIS, MD 21401

SITE NUMBER: CT3470A SITE NAME: MIDDLETOWN MILE LANE

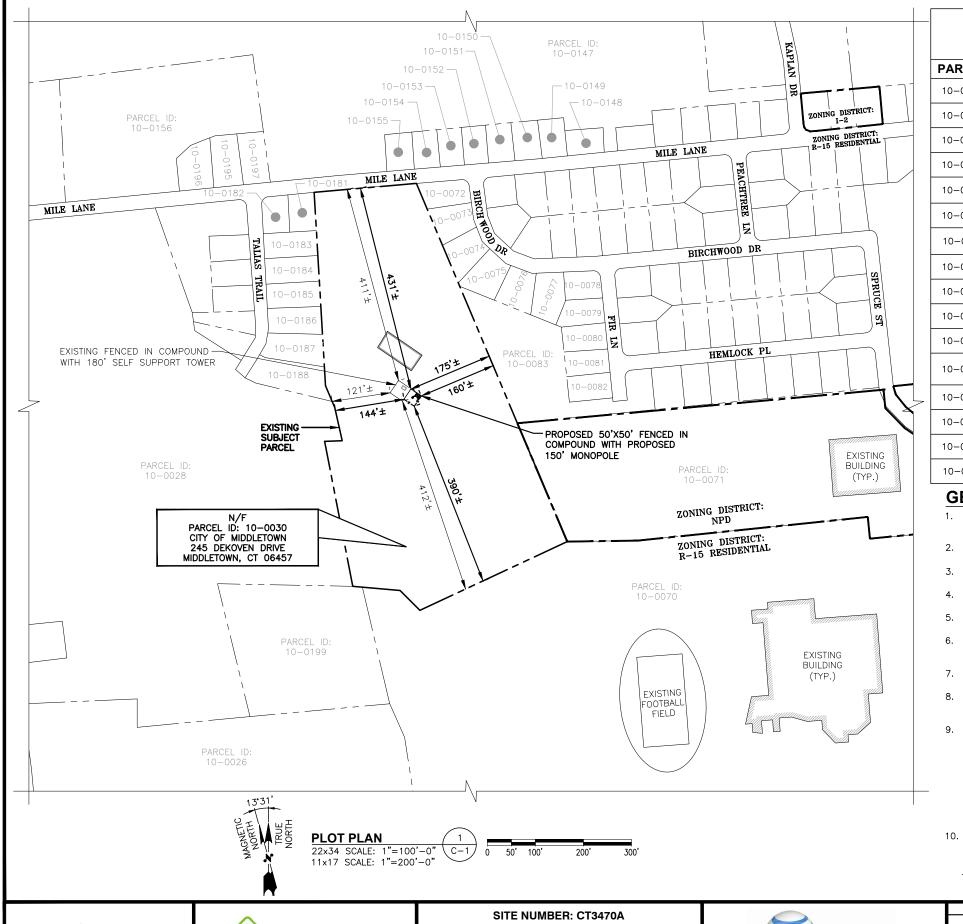
> 499 MILE LANE MIDDLETOWN, CT 06457 MIDDLESEX COUNTY



FRAMINGHAM MA 0170

2	09/24/21	ISSUED FOR	REVIEW			AR	JC	DPH
1	09/22/21	ISSUED FOR	REVIEW			AR	JC	DPH
0	04/07/21	ISSUED FOR	ISSUED FOR REVIEW				JC	DPH
NO.	DATE	REVISIONS			BY	снк	APP'D	
SCA	LE: AS SH	HOWN	DESIGNED BY	Y: JC	DRAW	N BY:	CC/VF	,

AT&T								
STRUCTURAL NOTES (NSB)								
SITE NUMBER	DRAWING NUMBER	REV						
CT3470A	SN-1	2						



# IMMEDIATE ADJOINING PROPERTY OWNER INFORMATION

PARCEL	OWNER	ADDRESS
10-0072	MAURA THEODORE JR	5 BIRCHWOOD DR MIDDLETOWN, CT 06457
10-0073	MORGAN RYAN & WILES EMILY M	15 BIRCHWOOD DR MIDDLETOWN, CT 06457
10-0074	LAMB DORIS L	25 BIRCHWOOD DR MIDDLETOWN, CT 06457
10-0075	ZADROGA ANTHONY F TRUSTEE	35 BIRCHWOOD DR MIDDLETOWN, CT 06457
10-0083	BENNETT RHODA (1/4 INT) ETALS	65 HOLLYBERRY LN BRISTOL, CT 06010
10-0070	CITY OF MIDDLETOWN	245 DEKOVEN DR MIDDLETOWN, CT 06457
10-0071	CITY OF MIDDLETOWN C/O KEIGWIN SCHOOL	245 DEKOVEN DR MIDDLETOWN, CT 06457
10-0199	CITY OF MIDDLETOWN	245 DEKOVEN DR MIDDLETOWN, CT 06457
10-0028	OLD COLONY OF WALLINGFORD LLC	273 NORTH COLONY ST UNIT 2 WALLINGFORD, CT 06492
10-0188	SZCZERBICKI ADAM & RAZEL MELISSA	70 TALIAS TRAIL MIDDLETOWN, CT 06457
10-0187	LAVIGNE CHRISTOPHER J & ALONSO LISA C	60 TALIAS TRAIL MIDDLETOWN, CT 06457
10-0186	PUGLIARES ROBERTO & KENEFICK-PUGLIARES KELLY	50 TALIAS TRAIL MIDDLETOWN, CT 06457
10-0185	CONNER MICHAEL T & VIVIANA	40 TALIAS TRAIL MIDDLETOWN, CT 06457
10-0184	LOMBARDO GIUSEPPE & DIANA	30 TALIAS TRAIL MIDDLETOWN, CT 06457
10-0183	LAMANIVONG MICHAEL & YI LIANA JIEUN	20 TALIAS TRAIL MIDDLETOWN, CT 06457
10-0181	GAINES PALMER L	509 MILE LA MIDDLETOWN, CT 06457

PLOT PLAN PREPARED BY HUDSON DESIGN GROUP LLC. FROM GIS, ASSESSORS DATA AND OTHER SOURCES, ACCESSED 04/08/21, AND DOES NOT REPRESENT AN ACTUAL FIELD OR BOUNDARY

SURVEY.

ZONING INFORMATION						
ZONING DISTRICT:	ESIDENTIAL)					
DIMENSIONS REQUIREMENTS:	EXISTING	PROPOSED				
ANTENNA SETBACKS						
FRONT YARD SETBACK:	411'	431'±				
SIDE YARD SETBACK:	121'	144'±				
REAR YARD SETBACK:	412'	390'±				
(ALL MEASUREMENTS ARE IN FEET ± UNLESS						
	SE NOTED)					
(SETBACK TO EXISTING EC	DUIPMENT SHE	LTER UNLESS				

OTHERWISE NOTED)

SETBACK TO EXISTING EQUIPMENT SHELTER UNLES:

OTHERWISE NOTED)

PROJECT INFORMATION & DIME	NSIONS
TEMPORARY GROUND DISTURBANCE	300± SF
PERMANENT IMPERVIOUS GROUND SURFACE ADDITIONS	125± SF
NOTE:	

RRU & ASSOCIATED EQUIPMENT LOCATED BEHIND ANTENNAS, CALCULATION IS FOR PORTION OF RRU & ASSOCIATED EQUIPMENT THAT EXTENDS BEYOND ANTENNAS.

## **GENERAL NOTES:**

- 1. PROPERTY LINE INFORMATION (WHEN APPLICABLE) WAS PREPARED USING TAX MAPS, AND PLANS OF RECORD AND SHOULD NOT BE CONSTRUCTED AS A BOUNDARY SURVEY.
- 2. NO NOISE, SMOKE, DUST, OR ODOR WILL RESULT FROM THIS FACILITY.
- 3. THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION (THERE IS NO HANDICAP ACCESS REQUIRED).
- 4. THE FACILITY IS UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SANITARY SERVICE.
- 5. CONNECTION TO ELECTRICAL & TELEPHONE UTILITIES TO BE DETERMINED BY THE APPROPRIATE UTILITY COMPANY.
- 6. SUBCONTRACTOR TO VERIFY ANTENNA ELEVATION AND AZIMUTH WITH RF ENGINEER PRIOR TO INSTALLATION. SEE ANTENNA CONFIGURATION SHEETS FOR SITE SPECIFIC DETAILS.
- 7. SUBCONTRACTOR SHALL LOCATE ALL UTILITIES PRIOR TO EXCAVATING.
- 8. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS REQUIRED FOR CONSTRUCTION.
- 9. THE MAXIMUM AREA OF DISTURBANCE IS LESS THAN 1 ACRE. THE PROJECT IMPACT AREA IS BELOW THE EXEMPTION THRESHOLD OF 43,560 SQUARE FEET IN 40 CFR PARTS 9, 122-124 AND THEREFORE IS NOT SUBJECT TO REGULATION UNDER THE EPA OR STATE-MANAGED NPDES GENERAL CONSTRUCTION PERMIT PROGRAM. THE PROJECT OWNER'S GENERAL CONTRACTOR SHALL CONDUCT ALL SITE DEVELOPMENT IN ACCORDANCE WITH THE "LOW RISK SITE HANDBOOK FOR EROSION PREVENTION AND SEDIMENT CONTROL" ISSUED BY THE VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION. ADDITIONALLY, THE PROJECT OWNERS GENERAL CONTRACTOR SHALL CONDUCT ALL CONSTRUCTION ACTIVITIES IN A MANNER THAT DOES NOT RESULT IN STORM WATER DISCHARGES WITH AN ADVERSE IMPACT ON ANY STORM WATER COLLECTION/CONVEYANCE SYSTEM, WETLAND, WATER BODY, OR OTHER WATER RESOURCE AREAS.
- 10. THE PROJECT WILL COMPLY WITH THE LOW RISK HANDBOOK FOR EROSION PREVENTION AND SEDIMENT CONTROL BY THE VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION.

#### HANDICAP REQUIREMENTS

FACILITY IS UNMANNED & NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS REQUIREMENTS NOT REQUIRED.

HUDSON
Design Group LLC

NORTH ANDOVER, MA 01845

TEL: (978) 557-5553 FAX: (978) 336-5586 smartlink

1997 ANNAPOLIS EXCHANGE PKWY

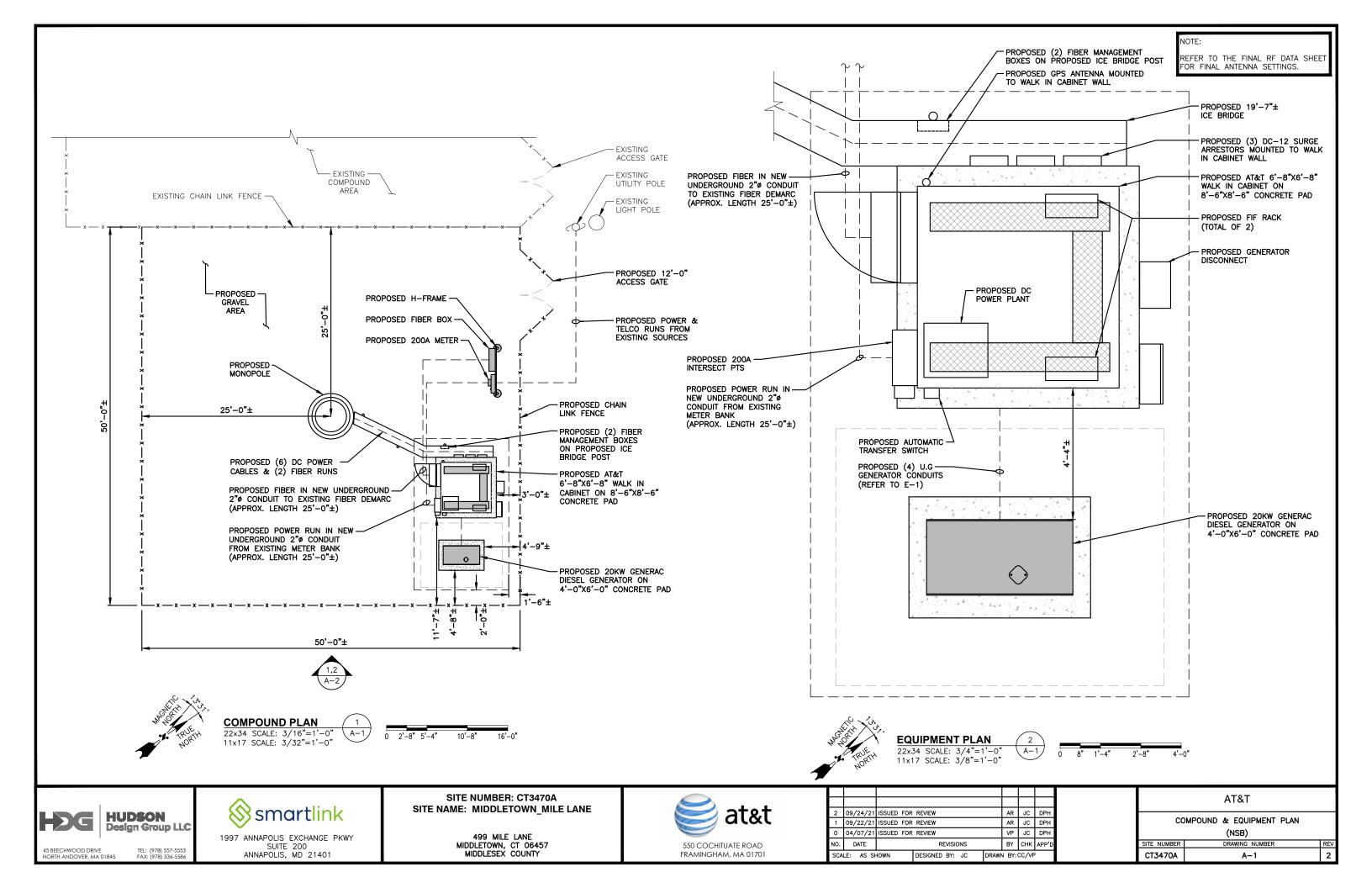
SUITE 200 ANNAPOLIS, MD 21401 SITE NUMBER: CT3470A
SITE NAME: MIDDLETOWN\_MILE LANE

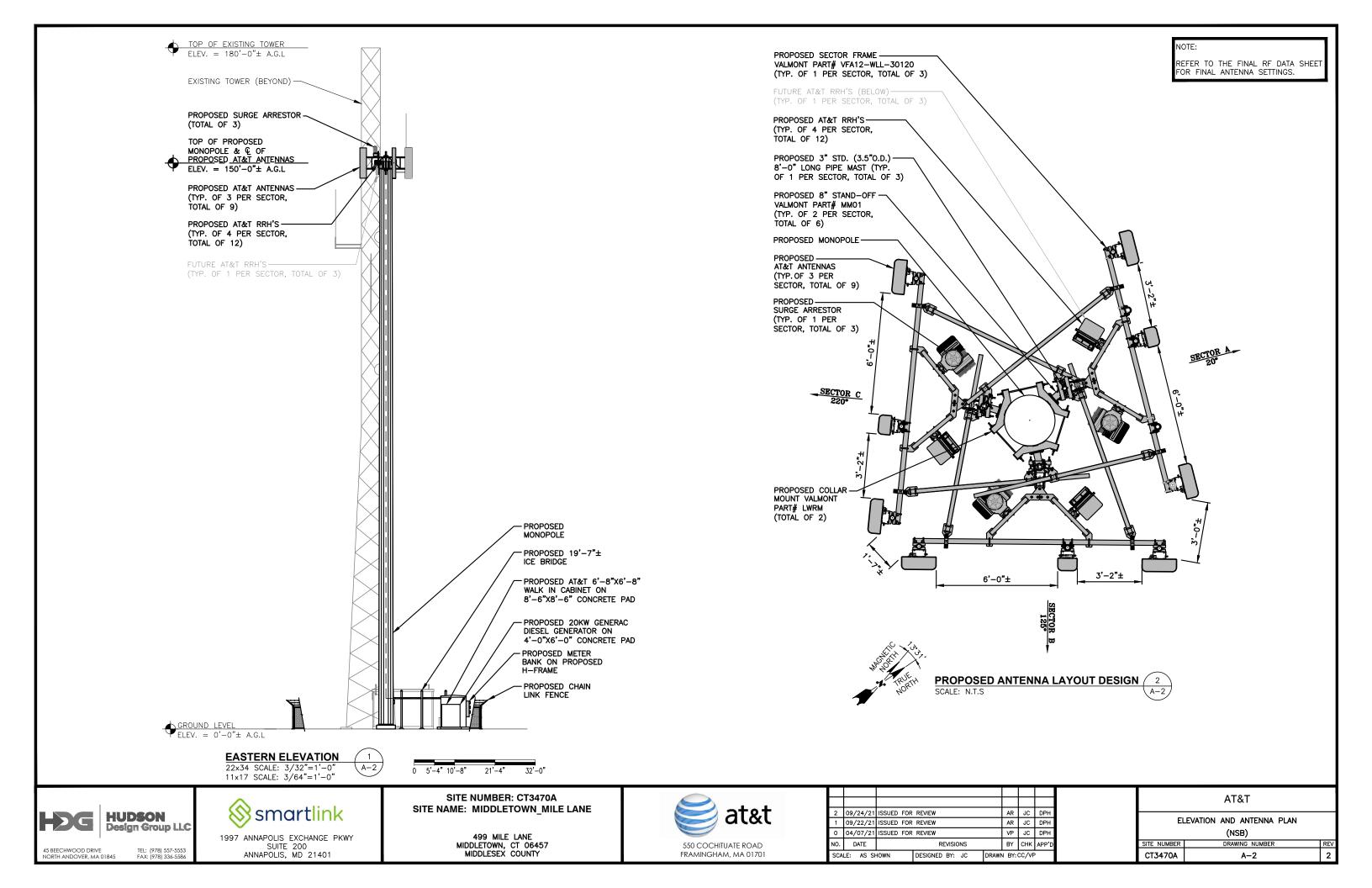
499 MILE LANE MIDDLETOWN, CT 06457 MIDDLESEX COUNTY



2	09/24/21	ISSUED FOR	REVIEW				AR	S	DPH	
1	09/22/21	ISSUED FOR	REVIEW				AR	JC	DPH	
0	04/07/21	ISSUED FOR	REVIEW				VP	JC	DPH	
NO.	DATE			REVISION	ONS		BY	СНК	APP'D	
SCALE: AS SHOWN			DESIGNE	D BY:	JC	DRAW	N BY:	CC/VF	,	

	AT&T					
PLOT PLAN						
(NSB)						
SITE NUMBER	DRAWING NUMBER	REV				
CT3470A	C-1	2				





# NOTE:

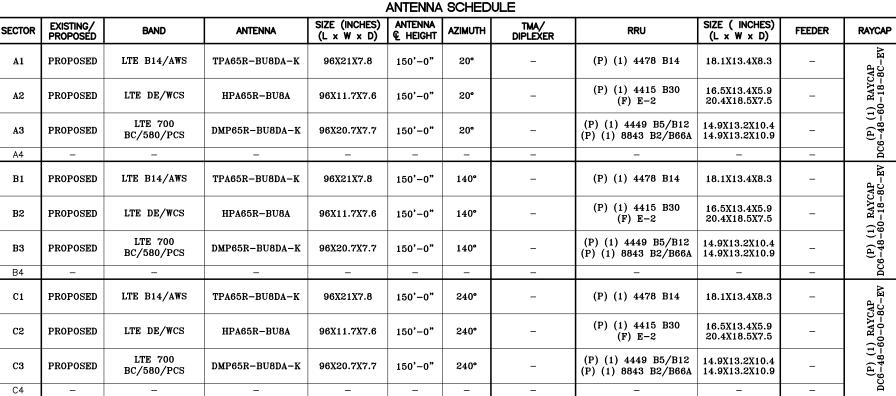
HDG RECOMMENDS THE PROPOSEL ANTENNA MOUNT BE MAPPED IN ITS ENTIRETY & A STRUCTURAL ANALYSIS BE PERFORMED PRIOR TO THE ANTENNA INSTALLATION.

OTE:

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

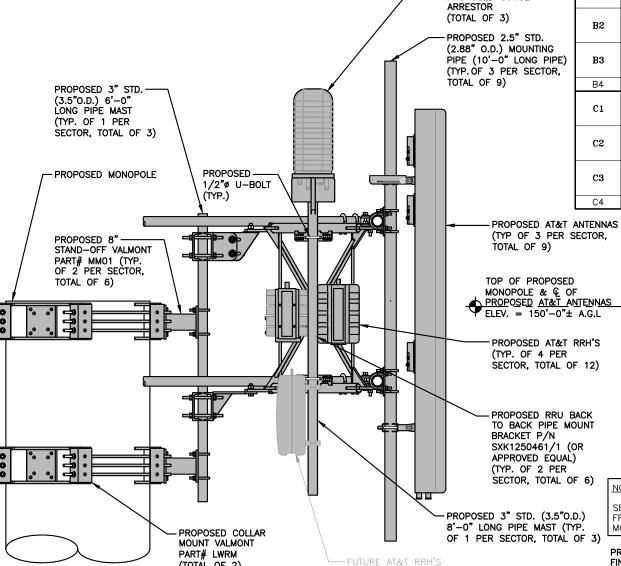
#### NOTE:

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



FINAL ANTENNA SCHEDULE

SCALE: N.T.S



SEE RFDS FOR RRH FREQUENCY AND MODEL NUMBER

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

NOTE:

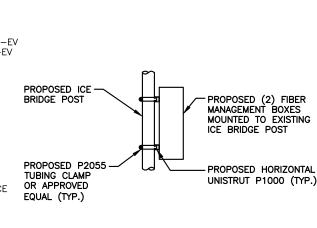
MOUNT PER MANUFACTURER'S SPECIFICATIONS.

PROPOSED RRUS DETAIL SCALE: N.T.S A-3

PROPOSED SURGE SUPPRESSOR MODEL NUMBERS: DC6-48-60-18-8C-EV DC6-48-60-0-8C-EV DIMENSIONS: H24.0"x9.7"ø WITH BRACKET H31.25"X9.7"ø -STRIKESORB 30-V1 SURGE PROTECTIVE DEVICE

MOUNT PER MANUFACTURER'S SPECIFICATIONS.

DC SURGE SUPPRESSOR DETAIL SCALE: N.T.S



PROPOSED FIBER MANAGEMENT **BOX MOUNTING DETAIL** SCALE: N.T.S

HUDSON **Design Group LLC** 

TEL: (978) 557-5553 FAX: (978) 336-5586 NORTH ANDOVER, MA 01845



ANNAPOLIS, MD 21401

(TOTAL OF 2)

PROPOSED SECTOR FRAME, ANTENNA, SURGE SUPPRESSOR

& RRH'S MOUNTING DETAIL

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

**SITE NUMBER: CT3470A** SITE NAME: MIDDLETOWN\_MILE LANE

(TYP. OF 1 PER SECTOR, TOTAL OF 3)

SEE RFDS FOR RRH

FREQUENCY AND

MODEL NUMBER

NOTE:

PROPOSED SURGE

499 MILE LANE MIDDLETOWN, CT 06457 MIDDLESEX COUNTY

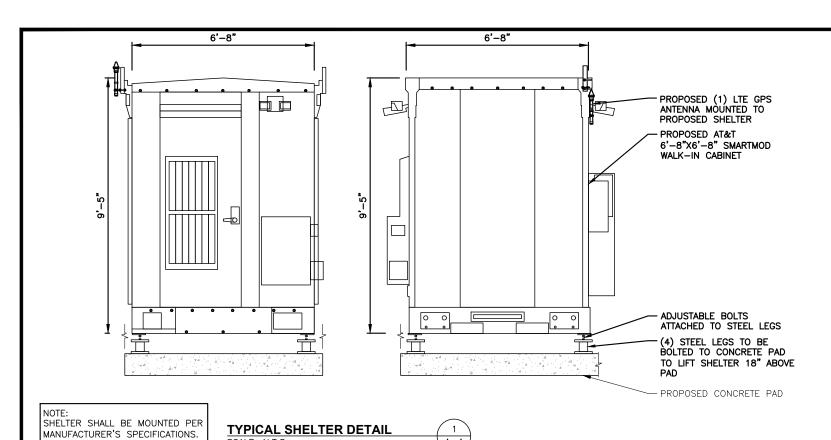


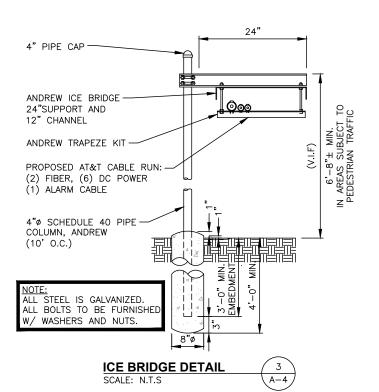
FRAMINGHAM, MA 01701

2	09/24/21	ISSUED FOR	REVIEW				AR	JC	DPH
1	09/22/21	ISSUED FOR	REVIEW				AR	JC	DPH
0	04/07/21	ISSUED FOR	REVIEW				VP	JC	DPH
NO.	DATE		REVISIONS				BY	снк	APP'D
SCALE: AS SHOWN			DESIGNE	D BY:	JC	DRAWN	N BY:	CC/VF	,

AT&T DETAILS & ANTENNA SCHEDULE (NSB) CT3470A A-3

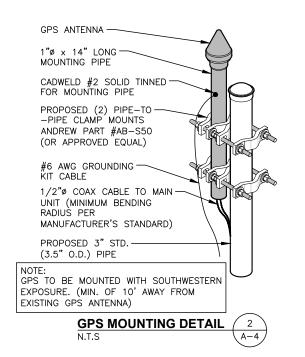
A-3,





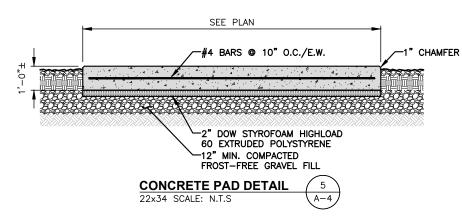
20 KW GENERATOR DIMENSIONS							
MODEL # G007098-0							
MANUF.	GENERAC						
HEIGHT	90"						
WIDTH	36"						
LENGTH	48"						





#### FOUNDATION NOTES & CONCRETE SPECIFICATIONS:

- 1. FOUNDATION AREA SHALL BE EXCAVATED TO THE DEPTH AND DIMENSIONS SHOWN ON THE PLANS. EXISTING LEDGE AND ALL OTHER EXISTING UNSUITABLE MATERIAL SHALL BE REMOVED AND LEGALLY DISPOSED OF OFF-SITE. THE SUBGRADE SHALL BE ROLLED WITH A 1-TON, VIBRATORY, WALK-BEHIND ROLLER AT A SPEED OF LESS THAN 2 FPS, 6 PASSES MINIMUM, TO PROVIDE UNYIELDING SURFACE.
- 2. UNDERCUT SOFT OR "WEAVING" AREAS A MINIMUM OF 12 INCHES DEEP. BACKFILL UNDERCUT AREA WITH FILL MEETING THE SPECIFICATIONS OF STRUCTURAL FILL.
- 3. CONCRETE TO HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH (f'c)=4000 psi. CONCRETE TO BE AIR ENTRAINED, DESIRED AIR CONTENT TO BE 6% (PLUS OR MINUS
- 4. REINFORCING BAR TO BE ASTM A615 GRADE 60.
- 5. WELDED WIRE FABRIC TO CONFORM TO THE REQUIREMENTS OF ASTM A185. WIRES FOR FABRIC TO CONFORM TO THE REQUIREMENTS OF ASTM A82.
- 6. COORDINATE WITH MANUFACTURER OF PREFABRICATED SHELTER FOR LOCATION OF ATTACHMENTS TO BASE SLAB.
- 7. ALL REINFORCING TO HAVE MINIMUM CONCRETE COVER PER ACI SPECIFICATIONS.
- 8. ALL CONCRETE MATERIALS AND WORKMANSHIP SHALL CONFORM TO LATEST EDITION OF ACI 318 AND APPLICABLE STATE BUILDING CODE.





NORTH ANDOVER, MA 01845



1997 ANNAPOLIS EXCHANGE PKWY SUITE 200 ANNAPOLIS, MD 21401

**SITE NUMBER: CT3470A** SITE NAME: MIDDLETOWN\_MILE LANE

> 499 MILE LANE MIDDLETOWN, CT 06457 MIDDLESEX COUNTY



2	09/24/21	ISSUED FOR	REVIEW				AR	JC	DPH
1	09/22/21	ISSUED FOR	REVIEW				AR	JC	DPH
0	04/07/21	ISSUED FOR	REVIEW				VP	JC	DPH
NO.	DATE		REVISIONS					снк	APP'D
SCA	LE: AS SH	HOWN	DESIGNE	D BY:	JC	DRAWN	N BY:	CC/VF	,

AT&T									
	EQUIPMENT DETAILS (NSB)								
SITE NUMBER	DRAWING NUMBER	REV							
CT3470A	A-4	2							

#### **CERTIFICATION OF SERVICE**

I hereby certify that on the 28th day of September 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: 9/28/2021\_\_\_\_\_

Cuddy & Feder LLP

45 Hamilton Avenue, 14<sup>th</sup> Floor White Plains, New York 10601

Attorneys for:

New Cingular Wireless PCS, LLC (AT&T)

CITY OF MIDDLETOWN	TINA P. LUN
LAWRENCE SCHOOL	468 MILE LANE
245 DEKOVEN DRIVE	MIDDLETOWN, CT 06457
MIDDLETOWN, CT 06457	
CITY OF MIDDLETOWN	THEODORE J. MAURA
LAWRENCE SCHOOL	5 BIRCHWOOD DRIVE
MILE LANE	MIDDLETOWN, CT 06457
MIDDLETOWN, CT 06457	
RYAN MORGAN	DORIS LAMB
EMILY M. WILES	25 BIRHCWOOD DRIVE
15 BIRCHWOOD DRIVE	MIDDLETOWN, CT 06457
MIDDLETOWN, CT 06457	
ANTHONY F. ZADROGA TRUSTEE	RHODA BENNETT, ET AL
35 BIRCHWOOD DRIVE	65 HOLLYBERRY LANE
MIDDLETOWN, CT 06457	BRISTOL, CT 06010
RHODA BENNETT, ET AL	CITY OF MIDDLETOWN
FIR LANE	KEIGWIN SCHOOL
MIDDLETOWN, CT 06457	245 DEKOVEN DRIVE
	MIDDLETOWN, CT 06457
CITY OF MIDDLETOWN	CITY OF MIDDLETOWN
KEIGWIN SCHOOL	200 LAROSA LANE
NEWFIELD STREET	MIDLETOWN, CT 06457
245 DEKOVEN DRIVE	
MIDDLETOWN, CT 06457	
CITY OF MIDDLETOWN	OLD COLONY ONE OF WALLINGFORD
RIDGEWOOD ROAD	LLC
MIDDLETOWN, CT 06457	RIDGEWOOD ROAD
	MIDDLETOWN, CT 06492
CITY OF MIDDLETOWN	OLD COLONY ONE OF WALLINGFORD
245 DEKOVEN DRIVE	LLC
MIDDLETOWN, CT 06457	273 NORTH COLONY STREET UNIT 2
	WALLINGFORD, CT 06492
ADAM SZCZERBICKI	CHRISTOPHER J. LAVIGNE
MELISSA RAZEL	60 TALIAS TRAIL
70 TALIAS TRAIL	MIDDLETOWN, CT 06457
MIDDLETOWN, CT 06457	

ROBERTO PUGLIARES	MICHAEL T. CONNER
KELLY KENEFICK-PUGLIARES	VIVIANA CONNER
50 TALIAS TRAIL	40 TALIAS TRAIL
MIDDLETOWN, CT 06457	MIDDLETOWN, CT 06457
GIUSEPPE LOMBARDO	MICHAEL LAMANIVONG
DIANA LOMBARDO	JIEUN LIANA YI
30 TALIAS TRAIL	20 TALIAS TRAIL
MIDDLETOWN, CT 06457	MIDDLETOWN, CT 06457
PALMER L. GAINES	CITY OF MIDDLETOWN
509 MILE LANE	ASHLEY FYNN-NATALE
MIDDLETOWN, CT 06457	CITY & TOWN CLERK
	245 DEKOVEN DRIVE
	MIDDLETOWN, CT 06457



445 Hamilton Avenue, 14th Floor White Plains, New York 10601 T 914 761 1300 F 914 761 5372 cuddyfeder.com

September 28, 2021

#### VIA CERTIFIED MAIL/ RETURN RECEIPT REQUESTED

Re:

New Cingular Wireless PCS, LLC ("AT&T")

Share City Tower Site/Install a Second Shorter Tower in Expanded Compound

499 Mile Lane, Middletown, Connecticut

Dear Sir or Madam:

We are writing to you on behalf of our client New Cingular Wireless PCS, LLC ("AT&T") 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 for approval to share an existing City-owned tower site and install a second tower in an expanded fenced compound area immediately adjacent to the existing municipal communications tower facility (the "Facility") owned by the City of Middletown. The project has been reviewed by the City's Planning & Zoning Commission and Common Council as part of an approved lease with AT&T. The project is proposed to provide reliable AT&T wireless services in this area of Middletown.

State law requires that record owners of property abutting a parcel on which a facility is proposed be sent notice of an applicant's intent to file a petition with the State Siting Council. Included with this letter please find a Notice of this submission and details of the proposal. We have also included a copy of the plans showing the project details. The location, height and other features of the Facility are subject to review and potential change by the Connecticut Siting Council under the provisions of Connecticut General Statutes §16-50g et seq.

If you have any questions concerning this petition, please contact the Connecticut Siting Council or the undersigned after September 29, 2021 which is the date that the petition is expected to be on file.

Very truly yours,

Christopher B. Fisher

Enclosure

cc: Kristen Motel, Esq., Cuddy & Feder L

#### **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 September 30, 2021, by New Cingular Wireless PCS, LLC ("AT&T"). AT&T seeks a declaratory ruling that sharing of an existing City of Middletown tower site and modifications to install a second shorter tower in an expanded compound adjacent thereto presents no substantial adverse effects such that a Certificate of Environmental Compatibility and Public Need ("Certificate") is not required under Section 16-50k(a) of the Connecticut General Statutes ("C.G.S.").

The proposed AT&T Facility will be located on an approximately 23.72-acre parcel located at 499 Mile Lane in Middletown, Connecticut, that was previously part of the U.S. Army Reserve Center and is now serving in part as a fire training site. The city of Middletown's existing communications facility consists of an approximately 180' lattice tower and a fenced equipment compound. AT&T proposes to share the site and modify the existing facility by installing a 150' monopole tower immediately adjacent to the existing tower, with nine (9) antennas at a centerline height of approximately 150' above ground level ("AGL"). The monopole and expanded equipment compound are being designed to accommodate future collocations by additional wireless carriers. Associated unmanned equipment will be located within a 50-foot by 50-foot expanded area of the existing fenced equipment compound. Vehicle access to AT&T's Facility would remain the same along the existing paved access drive that extends south of Mile Lane.

The Facility is proposed to allow wireless services to AT&T customers and first responders in the northern area of Middletown, particularly along Mile Lane, State Highway 3, Ridgewood Road and the surrounding roads, businesses, schools and neighborhoods.

The Petition will provide additional details of the proposal and explain why AT&T submits that the proposed shared use, modification and installation of a second tower 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 September 30, 2021 at the following:

Connecticut Siting Council 10 Franklin Square New Britain, Connecticut 06051 City & Town Clerk of Middletown Ashley Flynn-Natale City Hall 1<sup>st</sup> Floor 245 DeKoven Drive Middletown, CT 06457

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

Christopher B. Fisher, Esq. Cuddy & Feder LLP 445 Hamilton Ave, 14th Floor White Plains, New York 10601 (914) 761-1300 Attorney for the Petitioner PROJECT INFORMATION

SCOPE OF WORK: TELECOMMUNICATIONS FACILITY (NSB A PROPOSED 150'-0" A.G.L. TALL MONOPOLE. PROPOSED WALK-IN CABINET, AND GENERATOR WILL BE INSTALLED AT GRADE INSIDE A

PROPOSED WALK-IN CABINET, AND GENERATOR WILL BE INSTALLED AT GRADE INSIDE A EXISTING FENCED-IN COMPOUND. PROPOSED (3) TPA65R-BUBDA-K ANTENNAS, (3) HPA65R-BUBDA-K ANTENNAS, (3) 4478-B14 RRH'S, (3) FUTURE E2 RRH'S, (3) 4415 B30 RRH'S, (3) 4449 B5/B12 RRH'S, (3) 8843 B2/B66A RRH'S, (2) DC6-48-60-18-8C-EV SURGE ARRESTORS, & (1) DC6-48-60-0-8C-EV

WILL BE INSTALLED AT A HEIGHT OF 150'-0" A.G.L.):

SITE ADDRESS: 499 MILE LANE

MIDDLETOWN, CT 06457

APPLICANT: AT&T 550 COCHITUATE ROAD

FRAMINGHAM, MA 01701 SITE OWNER: CITY OF MIDDLETOWN

245 DEKOVEN DRIVE MIDDLETOWN, CT 06457

LATITUDE: 41.58000 N, 41° 34' 48.0" N

LONGITUDE: 72.68579 W, 72° 41' 8.9" W

TYPE OF SITE: MONOPOLE/ WALK-IN CABINET

TOWER HEIGHT: 150'-0"±

RAD CENTER: 150'-0"±

APPLICABLE ALL NATIO

ALL WORK SHALL CONFORM TO ALL CURRENT APPLICABLE CT STATE BUILDING CODE, NATIONAL ELECTRIC CODE (NEC 2017), ANSI/EIA/TIA-222 H & COMPLY WITH AT&T

MOBILITY SPECIFICATIONS



**SITE NUMBER: CT3470A** 

SITE NAME: MIDDLETOWN\_MILE LANE

FA CODE:10578361

PACE ID: MRCTB033524, MRCTB036341, MRCTB036593, MRCTB036513, MRCTB036367, MRCTB047889

**PROJECT: NSB** 

DRAWING INDEX						
SHEET NO.	DESCRIPTION	REV.				
T-1	TITLE SHEET	2				
GN-1	GENERAL NOTES	2				
SN-1	STRUCTURAL NOTES	2				
C-1	PLOT PLAN	2				
A-1	COMPOUND & EQUIPMENT PLAN	2				
A-2	ELEVATION & ANTENNA PLAN	2				
A-3	DETAILS & ANTENNA SCHEDULE	2				
A-4	EQUIPMENT DETAILS	2				
A-5	EQUIPMENT DETAILS	2				
E-1	ELECTRICAL NOTES & ONE-LINE DIAGRAM	2				
G-1	GROUNDING DETAILS	2				
RF-1	RF PLUMBING DIAGRAM	2				

DRAWING INDEX

### VICINITY MAP

DEPART NORTHEAST, TURN RIGHT AND THEN IMMEDIATELY TURN LEFT ONTO LEGGATT MCCALL CONNECTOR ROAD, BEAR LEFT ONTO BURR ST, TURN LEFT ONTO MA-30 / COCHITUATE RD, TAKE RAMP RIGHT FOR I-90 EAST / I-90 WEST TOWARD BOSTON / SPRINGFIELD, AT EXIT 9 TAKE RAMP RIGHT FOR I-84 TOWARD HARTFORD / NEW YORK CITY, KEEP LEFT ONTO CT-15 S / WILBUR CROSS HWY S, KEEP STRAIGHT ONTO US-5 S / CT-15 S / WILBUR CROSS HIGHWAY S, AT EXIT 86 TAKE RAMP RIGHT FOR I-91 SOUTHBOUND, AT EXIT 21 TAKE RAMP RIGHT FOR CT-372 TOWARD CROMWELL / MIDDLETOWN, TURN LEFT ONTO CT-372 / BERLIN ROAD TOWARD CROMWELL / MIDDLETOWN, TURN LEFT ONTO CT-372 / BERLIN ROAD TOWARD CROMWELL / MIDDLETOWN, TURN RIGHT ONTO CT-217 / EAST STREET, TURN LEFT ONTO RIDGEWOOD RD, ARRIVE AT RIDGEWOOD ROAD



#### **GENERAL NOTES**

- 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.
- 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.
- . 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**



NORTH ANDOVER, MA 01845

TEL: (978) 557-5553 FAX: (978) 336-5586 smartlink

1997 ANNAPOLIS EXCHANGE PKWY SUITE 200 ANNAPOLIS, MD 21401 SITE NUMBER: CT3470A
SITE NAME: MIDDLETOWN\_MILE LANE

499 MILE LANE MIDDLETOWN, CT 06457 MIDDLESEX COUNTY



FRAMINGHAM MA 0170

										Г
2	09/24/21	ISSUED FOR	REVIEW				AR	JC	DPH	
	09/22/21	ISSUED FOR	REVIEW				AR	JC	DPH	
)	04/07/21	ISSUED FOR	REVIEW				VP	JC	DPH	
٥.	DATE		REVISIONS				BY	снк	APP'D	
CA	LE: AS SH	HOWN	DESIGNE	D BY:	JC	DRAWN	N BY:	CC/VF	•	

	AT&T	
	TITLE SHEET (NSB)	
NUMBER	DRAWING NUMBER	REV
Γ3470A	T-1	2

#### **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 FOUIPMENT.
- 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 - SMARTLINK 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.
- "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
втсм	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	Р	PROPOSED	TYP	TYPICAL
E	EXISTING	NTS	NOT TO SCALE	UG	UNDER GROUND
EGB	EQUIPMENT GROUND BAR	RAD	RADIATION CENTER LINE (ANTENNA)	VIF	VERIFY IN FIELD
EGR	EQUIPMENT GROUND RING	REF	REFERENCE		



FAX: (978) 336-5586

45 BEECHWOOD DRIVE

ORTH ANDOVER, MA 01845



1997 ANNAPOLIS EXCHANGE PKWY

SUITE 200 ANNAPOLIS, MD 21401 SITE NUMBER: CT3470A SITE NAME: MIDDLETOWN\_MILE LANE

> 499 MILE LANE MIDDLETOWN, CT 06457 MIDDLESEX COUNTY



FRAMINGHAM MA 01701

2	09/24/21	ISSUED FOR	REVIEW				AR	JC	DPH
1	09/22/21	ISSUED FOR	REVIEW				AR	JC	DPH
0	04/07/21	ISSUED FOR	REVIEW				VP	JC	DPH
NO.	DATE	REVISIONS					BY	СНК	APP'D
SCALE: AS SHOWN			DESIGNE	D BY:	JC	DRAWN	BY:	CC/VF	,

AT&T

GENERAL NOTES
(NSB)

SITE NUMBER | DRAWING NUMBER | RI

CT3470A | GN-1 | 2

#### STRUCTURAL NOTES:

- DESIGN REQUIREMENTS ARE PER STATE BUILDING CODE AND APPLICABLE SUPPLEMENTS, INTERNATIONAL BUILDING CODE, EIA/TIA-222-H STRUCTURAL STANDARDS FOR STEEL ANTENNA, TOWERS AND ANTENNA SUPPORTING STRUCTURES
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO FABRICATION AND ERECTION OF ANY MATERIAL. ANY UNUSUAL CONDITIONS SHALL BE REPORTED TO THE ATTENTION OF THE CONSTRUCTION MANAGER AND ENGINEER OF RECORD.
- DESIGN AND CONSTRUCTION OF STRUCTURAL STEEL SHALL CONFORM TO THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS".
- STRUCTURAL STEEL SHALL CONFORM TO ASTM A992 (Fv=50 ksi). MISCELLANEOUS STEEL SHALL CONFORM TO ASTM A36 UNLESS OTHERWISE
- STEEL PIPE SHALL CONFORM TO ASTM A500 "COLD-FORMED WELDED & SEAMLESS CARBON STEEL STRUCTURAL TUBING", GRADE B, OR ASTM A53 PIPE STEEL BLACK AND HOT-DIPPED ZINC-COATED WELDED AND SEAMLESS TYPE E OR S, GRADE B. PIPE SIZES INDICATED ARE NOMINAL. ACTUAL OUTSIDE DIAMETER IS LARGER.
- STRUCTURAL CONNECTION BOLTS SHALL BE HIGH STRENGTH BOLTS (BEARING TYPE) AND CONFORM TO ASTM A325 TYPE-X "HIGH STRENGTH BOLTS FOR STRUCTURAL JOINTS, INCLUDING SUITABLE NUTS AND PLAIN HARDENED WASHERS". ALL BOLTS SHALL BE 3/4" DIA UON.
- ALL STEEL MATERIALS SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123 "ZINC (HOT-DIP GALVANIZED) COATINGS ON IRON AND STEEL PRODUCTS". UNLESS OTHERWISE NOTED.
- ALL BOLTS, ANCHORS AND MISCELLANEOUS HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 "ZINC-COATING (HOT-DIP) ON IRON AND STEEL HARDWARE", UNLESS OTHERWISE NOTED.
- FIELD WELDS, DRILL HOLES, SAW CUTS AND ALL DAMAGED GALVANIZED SURFACES SHALL BE REPAIRED WITH AN ORGANIC ZINC REPAIR PAINT COMPLYING WITH REQUIREMENTS OF ASTM A780. GALVANIZING REPAIR PAINT SHALL HAVE 65 PERCENT ZINC BY WEIGHT, ZIRP BY DUNCAN GALVANIZING, GALVA BRIGHT PREMIUM BY CROWN OR EQUAL. THICKNESS OF APPLIED GALVANIZING REPAIR PAINT SHALL BE NOT NOT LESS THAN 4 COATS (ALLOW TIME TO DRY BETWEEN COATS) WITH A RESULTING COATING THICKNESS REQUIRED BY ASTM A123 OR A153 AS APPLICABLE.
- 10. CONTRACTOR SHALL COMPLY WITH AWS CODE FOR PROCEDURES, APPEARANCE AND QUALITY OF WELDS, AND FOR METHODS USED IN CORRECTING WELDING. ALL WELDERS AND WELDING PROCESSES SHALL BE QUALIFIED IN ACCORDANCE WITH AWS "STANDARD QUALIFICATION PROCEDURES". ALL WELDING SHALL BE DONE USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC AND DI.I. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "STEEL CONSTRUCTION MANUAL". 14TH EDITION.
- INCORRECTLY FABRICATED. DAMAGED OR OTHERWISE MISFITTING OR NON-CONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE CONSTRUCTION MANAGER PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH ACTION SHALL REQUIRE CONSTRUCTION MANAGER APPROVAL.
- 12. UNISTRUT SHALL BE FORMED STEEL CHANNEL STRUT FRAMING AS MANUFACTURED BY UNISTRUT CORP., WAYNE, MI OR EQUAL. STRUT MEMBERS SHALL BE 1 5/8"x1 5/8"x12GA, UNLESS OTHERWISE NOTED, AND SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION.
- 13. EPOXY ANCHOR ASSEMBLY SHALL CONSIST OF STAINLESS STEEL ANCHOR ROD WITH NUTS & WASHERS. AN INTERNALLY THREADED INSERT, A SCREEN TUBE AND A EPOXY ADHESIVE. THE ANCHORING SYSTEM SHALL BE THE HILTI-HIT HY-270 AND OR HY-200 SYSTEMS (AS SPECIFIED IN DWG.) OR ENGINEERS
- 14. EXPANSION BOLTS SHALL CONFORM TO FEDERAL SPECIFICATION FF-S-325, GROUP II, TYPE 4, CLASS I, HILTI KWIK BOLT III OR APPROVED EQUAL. INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- 15. LUMBER SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION AND THE NATIONAL FOREST PRODUCTS ASSOCIATION'S NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION. ALL LUMBER SHALL BE PRESSURE TREATED AND SHALL BE STRUCTURAL GRADE NO. 2 OR BETTER.
- 16. WHERE ROOF PENETRATIONS ARE REQUIRED, THE CONTRACTOR SHALL CONTACT AND COORDINATE RELATED WORK WITH THE BUILDING OWNER AND THE EXISTING ROOF INSTALLER. WORK SHALL BE PERFORMED IN SUCH A MANNER AS TO NOT
- VOID THE EXISTING ROOF WARRANTY. ROOF SHALL BE WATERTIGHT.

  17. ALL FIBERGLASS MEMBERS USED ARE AS MANUFACTURED BY STRONGWELL COMPANY OF BRISTOL, VA 24203. ALL DESIGN CRITERIA FOR THESE MEMBERS IS BASED ON INFORMATION PROVIDED IN THE DESIGN MANUAL. ALL REQUIREMENTS PUBLISHED IN SAID MANUAL MUST BE STRICTLY ADHERED TO.
- 18. NO MATERIALS TO BE ORDERED AND NO WORK TO BE COMPLETED UNTIL SHOP DRAWINGS HAVE BEEN REVIEWED AND APPROVED IN WRITING
- 19. SUBCONTRACTOR SHALL FIREPROOF ALL STEEL TO PRE-EXISTING CONDITIONS.

#### **SPECIAL INSPECTIONS (REFERENCE IBC CHAPTER 17):**

GENERAL: WHERE APPLICATION IS MADE FOR CONSTRUCTION, THE OWNER OR THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE ACTING AS THE OWNER'S AGENT SHALL EMPLOY ONE OR MORE APPROVED AGENCIES TO PERFORM INSPECTIONS DURING CONSTRUCTION ON THE TYPES OF WORK LISTED IN THE INSPECTION CHECKLIST ABOVE.

THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE AND ENGINEERS OF RECORD INVOLVED IN THE DESIGN OF THE PROJECT ARE PERMITTED TO ACT AS THE APPROVED AGENCY AND THEIR PERSONNEL ARE PERMITTED TO ACT AS THE SPECIAL INSPECTOR FOR THE WORK DESIGNED BY THEM, PROVIDED THOSE PERSONNEL MEET THE

STATEMENT OF SPECIAL INSPECTIONS: THE APPLICANT SHALL SUBMIT A STATEMENT OF SPECIAL INSPECTIONS PREPARED BY THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE IN ACCORDANCE WITH SECTION 107.1 AS A CONDITION FOR ISSUANCE. THIS STATEMENT SHALL BE IN ACCORDANCE WITH SECTION 1705.

REPORT REQUIREMENT: SPECIAL INSPECTORS SHALL KEEP RECORDS OF INSPECTIONS. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. REPORTS SHALL INDICATE THAT WORK INSPECTED WAS OR WAS NOT COMPLETED IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THEY ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE BUILDING OFFICIAL AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE, A FINAL REPORT DOCUMENTING REQUIRED SPECIAL INSPECTIONS SHALL BE SUBMITTED.

#### NOTES:

- ALL CONNECTIONS TO BE SHOP WELDED & FIELD BOLTED USING 3/4"Ø A325-X BOLTS, UNLESS OTHERWISE NOTIFIED.
- SHOP DRAWING ENGINEER REVIEW & APPROVAL REQUIRED BEFORE ORDERING MATERIAL
- SHOP DRAWING ENGINEER REVIEW & APPROVAL REQUIRED PRIOR TO STEEL FARRICATION
- VERIFICATION OF EXISTING ROOF CONSTRUCTION IS REQUIRED PRIOR TO THE INSTALLATION OF THE ROOF PLATFORM. ENGINEER OF RECORD IS TO APPROVE EXISTING CONDITIONS IN ORDER TO MOVE FORWARD.
- CENTERLINE OF PROPOSED STEEL PLATFORM SUPPORT COLUMNS TO BE CENTRALLY LOCATED OVER THE EXISTING BUILDING COLUMNS.
- EXISTING BRICK MASONRY COLUMNS/BEARING TO BE REPAIRED/REPLACED AT ALL PROPOSED PLATFORM SUPPORT POINTS. ENGINEER OF RECORD TO REVIEW AND APPROVE.

#### NOTES:

- HIGH WIND ZONE INSPECTION CATB 120MPH OR CAT C,D 110MPH INSPECT FRAMING OF WALLS. ANCHORING. FASTENING SCHEDULE.
- ADHESIVE FOR REBAR AND ANCHORS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ACI 355.4 AND ICC-ES AC308 FOR CRACKED CONCRET AND SEISMIC APPLICATIONS. DESIGN ADHESIVE BOND STRENGTH HAS BEEN BASED ON ACI 355.4 TEMPERATURE CATEGORY B WITH INSTALLATIONS INTO DRY HOLES DRILLED USING A CARBIDE BIT INTO CRACKED CONCRETE THAT HAS CURED FOR AT LEAST 21 DAYS. ADHESIVE ANCHORS REQUIRING CERTIFIED INSTALLATIONS SHALL BE INSTALLED BY A CERTIFIED ADHESIVE ANCHOR INSTALLER PER ACI 318-11 D.9.2.2. INSTALLATIONS REQUIRING CERTIFIED INSTALLERS SHALL BE INSPECTED PER ACI 318-11 D.8.2.4. AS REQUIRED; FOR ANY FIELD CHANGES TO THE ITEMS IN THIS TABLE

- REQUIRED FOR ANY  ${\hbox{\scriptsize NEW}}$  SHOP FABRICATED FRP OR STEEL. PROVIDED BY MANUFACTURER,
- REQUIRED IF HIGH STRENGTH BOLTS OR STEEL.
- PROVIDED BY GENERAL CONTRACTOR; PROOF OF MATERIALS.
- - ENGINEER OF RECORD)

#### CONSTRUCTION/INSTALLATION INSPECTIONS AND TESTING REPORT ITEM REQUIRED (COMPLETED BY ENGINEER OF RECORD) ENGINEER OF RECORD APPROVED REQUIRED MATERIAL SPECIFICATIONS REQUIRED FABRICATOR NDE INSPECTION N/A REQUIRED PACKING SLIPS ADDITIONAL TESTING AND INSPECTIONS: **DURING CONSTRUCTION** CONSTRUCTION/INSTALLATION INSPECTIONS AND TESTING REPORT ITEM REQUIRED (COMPLETED BY FNGINFER OF RECORD) REQUIRED STEEL INSPECTIONS HIGH STRENGTH BOLT INSPECTIONS N/A HIGH WIND ZONE INSPECTIONS 4 FOUNDATION INSPECTIONS N/A CONCRETE COMP. STRENGTH N/A SLUMP TESTS AND PLACEMENT POST INSTALLED ANCHOR VERIFICATION N/A GROUT VERIFICATION N/A CERTIFIED WELD INSPECTION N/A EARTHWORK: LIFT AND DENSITY ON SITE COLD GALVANIZING N/A VERIFICATION N/A GUY WIRE TENSION REPORT ADDITIONAL TESTING AND INSPECTIONS: AFTER CONSTRUCTION CONSTRUCTION /INSTALLATION INSPECTIONS AND TESTING REPORT ITEM REQUIRED (COMPLETED BY MODIFICATION INSPECTOR REDLINE REQUIRED OR RECORD DRAWINGS POST INSTALLED ANCHOR N/A REQUIRED PHOTOGRAPHS ADDITIONAL TESTING AND INSPECTIONS:

SPECIAL INSPECTION CHECKLIST

BEFORE CONSTRUCTION



45 BEECHWOOD DRIVE

ORTH ANDOVER, MA 01845

TEL: (978) 557-5553 FAX: (978) 336-5586



1997 ANNAPOLIS EXCHANGE PKWY SUITE 200 ANNAPOLIS, MD 21401

**SITE NUMBER: CT3470A** SITE NAME: MIDDLETOWN MILE LANE

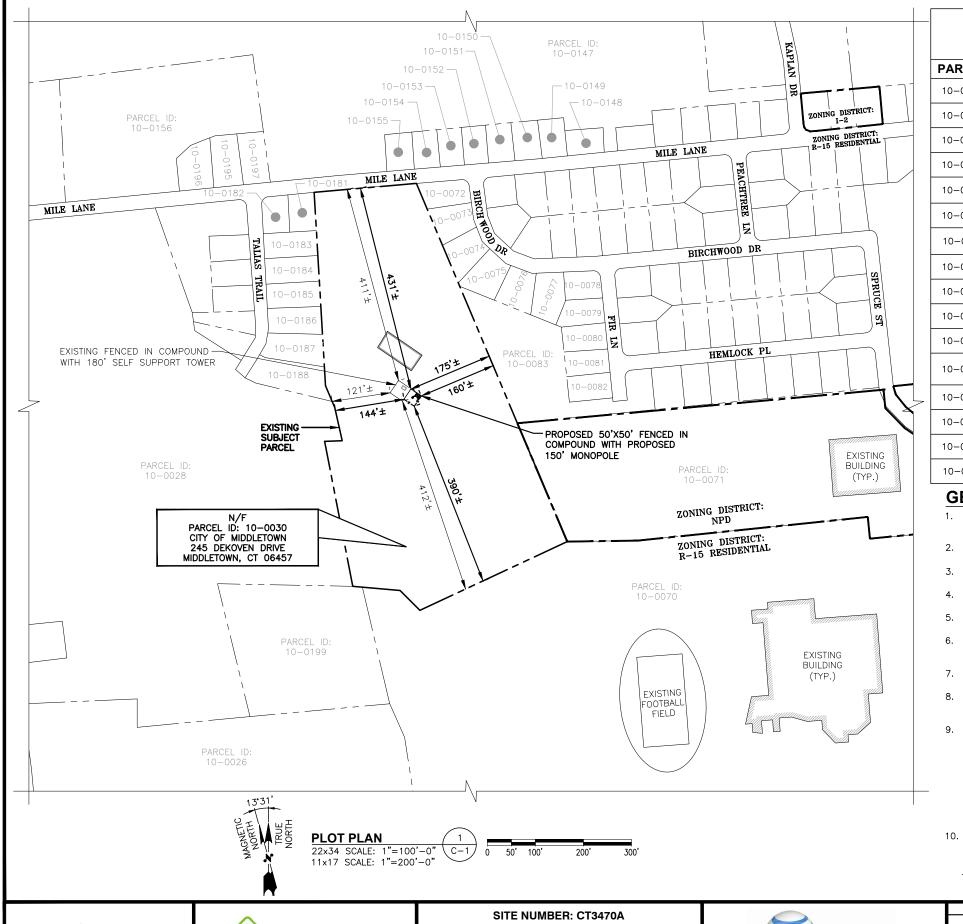
> 499 MILE LANE MIDDLETOWN, CT 06457 MIDDLESEX COUNTY



FRAMINGHAM MA 0170

2	09/24/21	ISSUED FOR	REVIEW			AR	JC	DPH
1	09/22/21	ISSUED FOR	REVIEW			AR	JC	DPH
0	04/07/21	ISSUED FOR	REVIEW			VP	JC	DPH
NO.	DATE		REVISIONS			BY	снк	APP'D
SCALE: AS SHOWN		DESIGNED B	Y: JC	DRAW	N BY:	CC/VF	,	

	AT&T	
	STRUCTURAL NOTES (NSB)	
SITE NUMBER	DRAWING NUMBER	REV
CT3470A	SN-1	2



### IMMEDIATE ADJOINING PROPERTY OWNER INFORMATION

PARCEL	OWNER	ADDRESS
10-0072	MAURA THEODORE JR	5 BIRCHWOOD DR MIDDLETOWN, CT 06457
10-0073	MORGAN RYAN & WILES EMILY M	15 BIRCHWOOD DR MIDDLETOWN, CT 06457
10-0074	LAMB DORIS L	25 BIRCHWOOD DR MIDDLETOWN, CT 06457
10-0075	ZADROGA ANTHONY F TRUSTEE	35 BIRCHWOOD DR MIDDLETOWN, CT 06457
10-0083	BENNETT RHODA (1/4 INT) ETALS	65 HOLLYBERRY LN BRISTOL, CT 06010
10-0070	CITY OF MIDDLETOWN	245 DEKOVEN DR MIDDLETOWN, CT 06457
10-0071	CITY OF MIDDLETOWN C/O KEIGWIN SCHOOL	245 DEKOVEN DR MIDDLETOWN, CT 06457
10-0199	CITY OF MIDDLETOWN	245 DEKOVEN DR MIDDLETOWN, CT 06457
10-0028	OLD COLONY OF WALLINGFORD LLC	273 NORTH COLONY ST UNIT 2 WALLINGFORD, CT 06492
10-0188	SZCZERBICKI ADAM & RAZEL MELISSA	70 TALIAS TRAIL MIDDLETOWN, CT 06457
10-0187	LAVIGNE CHRISTOPHER J & ALONSO LISA C	60 TALIAS TRAIL MIDDLETOWN, CT 06457
10-0186	PUGLIARES ROBERTO & KENEFICK-PUGLIARES KELLY	50 TALIAS TRAIL MIDDLETOWN, CT 06457
10-0185	CONNER MICHAEL T & VIVIANA	40 TALIAS TRAIL MIDDLETOWN, CT 06457
10-0184	LOMBARDO GIUSEPPE & DIANA	30 TALIAS TRAIL MIDDLETOWN, CT 06457
10-0183	LAMANIVONG MICHAEL & YI LIANA JIEUN	20 TALIAS TRAIL MIDDLETOWN, CT 06457
10-0181	GAINES PALMER L	509 MILE LA MIDDLETOWN, CT 06457

PLOT PLAN PREPARED BY HUDSON DESIGN GROUP LLC. FROM GIS, ASSESSORS DATA AND OTHER SOURCES, ACCESSED 04/08/21, AND DOES NOT REPRESENT AN ACTUAL FIELD OR BOUNDARY

SURVEY.

ZONING INFORMATION							
ZONING DISTRICT:	R-15 (RESIDENTIAL)						
DIMENSIONS REQUIREMENTS:	EXISTING	PROPOSED					
ANTENNA SETBACKS							
FRONT YARD SETBACK:	411'	431'±					
SIDE YARD SETBACK:	121'	144'±					
REAR YARD SETBACK:	412'	390'±					
(ALL MEASUREMENTS ARE IN FEET ± UNLESS							
	SE NOTED)						
(SETBACK TO EXISTING EQ	DUIPMENT SHE	LTER UNLESS					

OTHERWISE NOTED)

SETBACK TO EXISTING EQUIPMENT SHELTER UNLES:

OTHERWISE NOTED)

PROJECT INFORMATION & DIMENSIONS					
TEMPORARY GROUND DISTURBANCE	300± SF				
PERMANENT IMPERVIOUS GROUND SURFACE ADDITIONS	125± SF				
NOTE:					

RRU & ASSOCIATED EQUIPMENT LOCATED BEHIND ANTENNAS, CALCULATION IS FOR PORTION OF RRU & ASSOCIATED EQUIPMENT THAT EXTENDS BEYOND ANTENNAS.

#### **GENERAL NOTES:**

- 1. PROPERTY LINE INFORMATION (WHEN APPLICABLE) WAS PREPARED USING TAX MAPS, AND PLANS OF RECORD AND SHOULD NOT BE CONSTRUCTED AS A BOUNDARY SURVEY.
- 2. NO NOISE, SMOKE, DUST, OR ODOR WILL RESULT FROM THIS FACILITY.
- 3. THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION (THERE IS NO HANDICAP ACCESS REQUIRED).
- 4. THE FACILITY IS UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SANITARY SERVICE.
- 5. CONNECTION TO ELECTRICAL & TELEPHONE UTILITIES TO BE DETERMINED BY THE APPROPRIATE UTILITY COMPANY.
- 6. SUBCONTRACTOR TO VERIFY ANTENNA ELEVATION AND AZIMUTH WITH RF ENGINEER PRIOR TO INSTALLATION. SEE ANTENNA CONFIGURATION SHEETS FOR SITE SPECIFIC DETAILS.
- 7. SUBCONTRACTOR SHALL LOCATE ALL UTILITIES PRIOR TO EXCAVATING.
- 8. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS REQUIRED FOR CONSTRUCTION.
- 9. THE MAXIMUM AREA OF DISTURBANCE IS LESS THAN 1 ACRE. THE PROJECT IMPACT AREA IS BELOW THE EXEMPTION THRESHOLD OF 43,560 SQUARE FEET IN 40 CFR PARTS 9, 122-124 AND THEREFORE IS NOT SUBJECT TO REGULATION UNDER THE EPA OR STATE-MANAGED NPDES GENERAL CONSTRUCTION PERMIT PROGRAM. THE PROJECT OWNER'S GENERAL CONTRACTOR SHALL CONDUCT ALL SITE DEVELOPMENT IN ACCORDANCE WITH THE "LOW RISK SITE HANDBOOK FOR EROSION PREVENTION AND SEDIMENT CONTROL" ISSUED BY THE VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION. ADDITIONALLY, THE PROJECT OWNERS GENERAL CONTRACTOR SHALL CONDUCT ALL CONSTRUCTION ACTIVITIES IN A MANNER THAT DOES NOT RESULT IN STORM WATER DISCHARGES WITH AN ADVERSE IMPACT ON ANY STORM WATER COLLECTION/CONVEYANCE SYSTEM, WETLAND, WATER BODY, OR OTHER WATER RESOURCE AREAS.
- 10. THE PROJECT WILL COMPLY WITH THE LOW RISK HANDBOOK FOR EROSION PREVENTION AND SEDIMENT CONTROL BY THE VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION.

#### HANDICAP REQUIREMENTS

FACILITY IS UNMANNED & NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS REQUIREMENTS NOT REQUIRED.

HUDSON
Design Group LLC

NORTH ANDOVER, MA 01845

TEL: (978) 557-5553 FAX: (978) 336-5586 smartlink

1997 ANNAPOLIS EXCHANGE PKWY

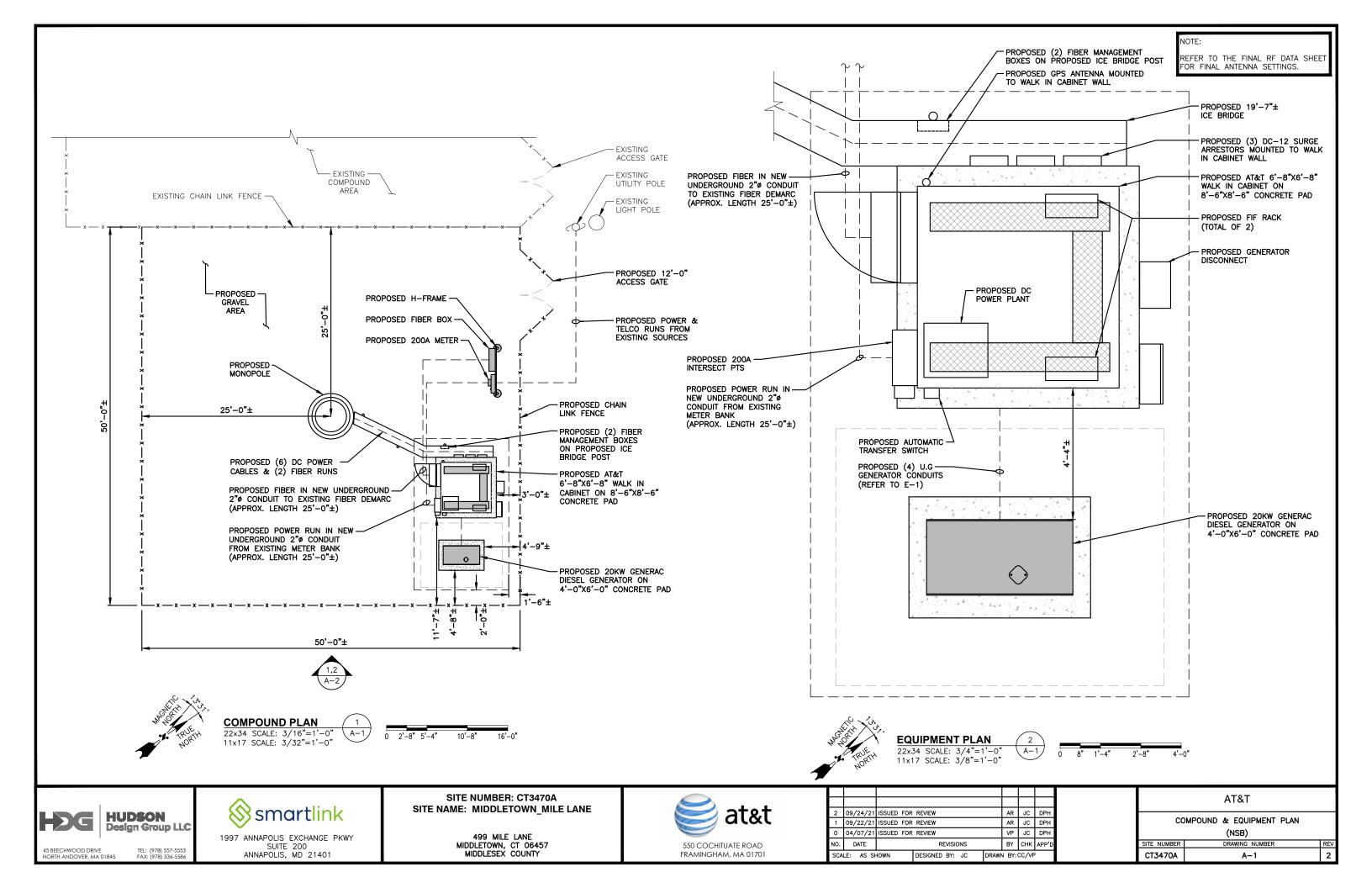
SUITE 200 ANNAPOLIS, MD 21401 SITE NUMBER: CT3470A
SITE NAME: MIDDLETOWN\_MILE LANE

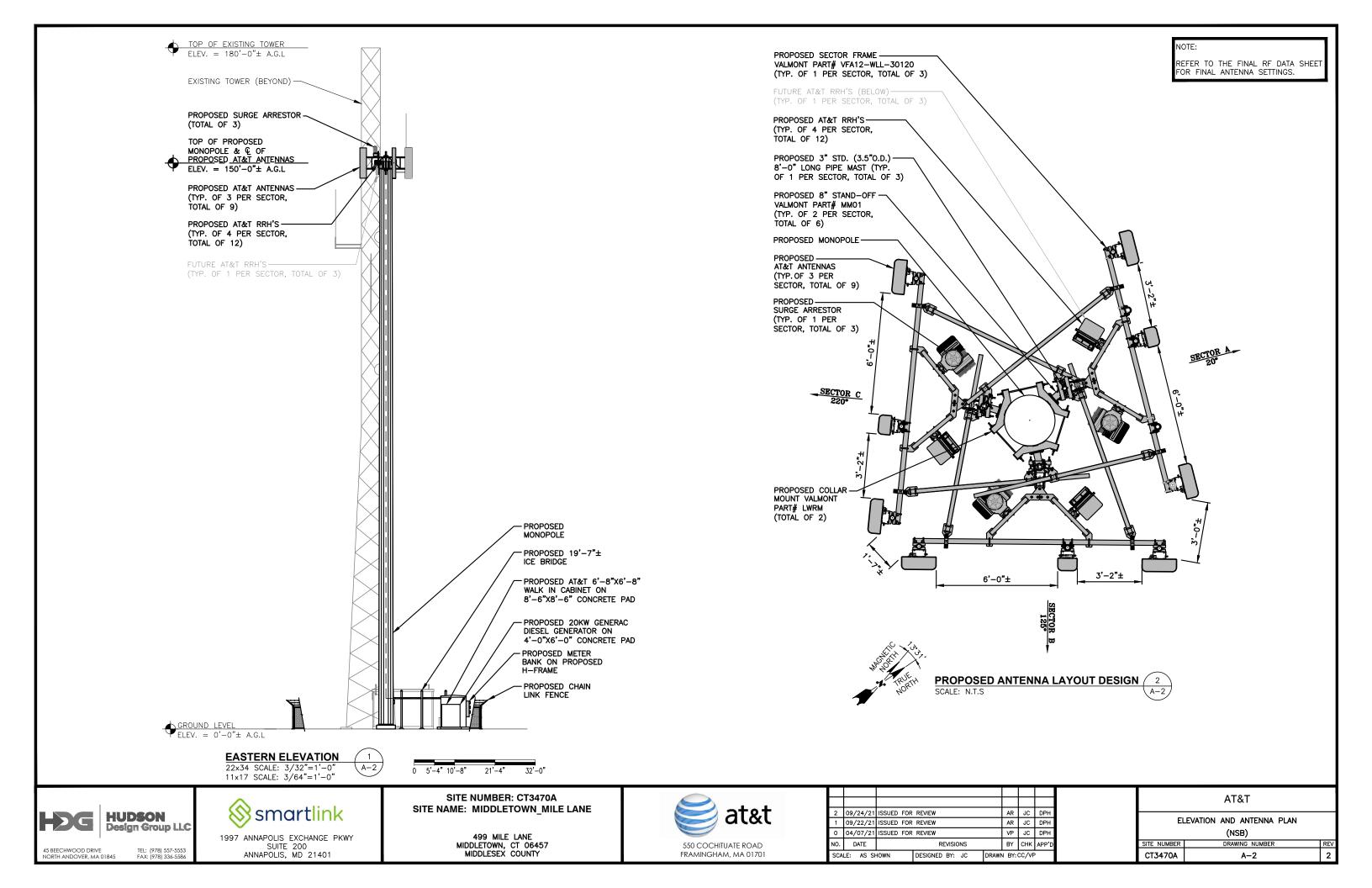
499 MILE LANE MIDDLETOWN, CT 06457 MIDDLESEX COUNTY



2	09/24/21	ISSUED FOR	REVIEW				AR	S	DPH	
1	09/22/21	ISSUED FOR	REVIEW				AR	JC	DPH	
0	04/07/21	ISSUED FOR	REVIEW				VP	JC	DPH	
NO.	DATE			REVISION	ONS		BY	СНК	APP'D	
SCA	CALE: AS SHOWN DESIGNED BY: JC DRAW				DRAW	N BY:	CC/VF	,		

AT&T					
PLOT PLAN					
(NSB)					
SITE NUMBER	DRAWING NUMBER	REV			
CT3470A	C-1	2			





# NOTE:

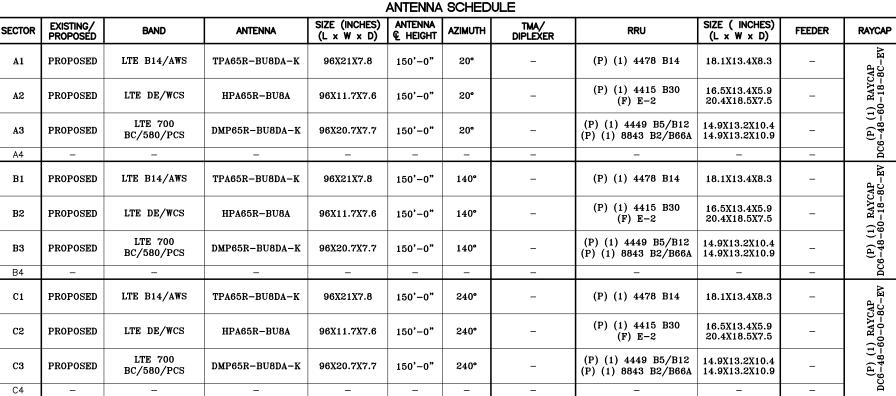
HDG RECOMMENDS THE PROPOSEL ANTENNA MOUNT BE MAPPED IN ITS ENTIRETY & A STRUCTURAL ANALYSIS BE PERFORMED PRIOR TO THE ANTENNA INSTALLATION.

OTE:

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

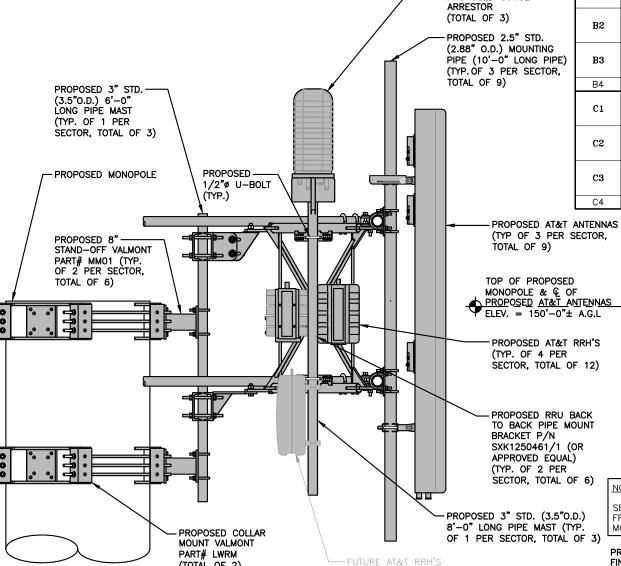
#### NOTE:

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



FINAL ANTENNA SCHEDULE

SCALE: N.T.S



SEE RFDS FOR RRH FREQUENCY AND MODEL NUMBER

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

NOTE:

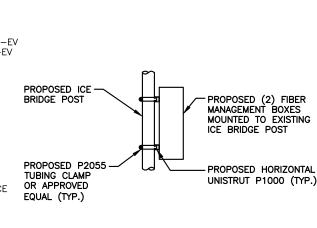
MOUNT PER MANUFACTURER'S SPECIFICATIONS.

PROPOSED RRUS DETAIL SCALE: N.T.S A-3

PROPOSED SURGE SUPPRESSOR MODEL NUMBERS: DC6-48-60-18-8C-EV DC6-48-60-0-8C-EV DIMENSIONS: H24.0"x9.7"ø WITH BRACKET H31.25"X9.7"ø -STRIKESORB 30-V1 SURGE PROTECTIVE DEVICE

MOUNT PER MANUFACTURER'S SPECIFICATIONS.

DC SURGE SUPPRESSOR DETAIL SCALE: N.T.S



PROPOSED FIBER MANAGEMENT **BOX MOUNTING DETAIL** SCALE: N.T.S

HUDSON **Design Group LLC** 

TEL: (978) 557-5553 FAX: (978) 336-5586 NORTH ANDOVER, MA 01845



ANNAPOLIS, MD 21401

(TOTAL OF 2)

PROPOSED SECTOR FRAME, ANTENNA, SURGE SUPPRESSOR

& RRH'S MOUNTING DETAIL

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

**SITE NUMBER: CT3470A** SITE NAME: MIDDLETOWN\_MILE LANE

(TYP. OF 1 PER SECTOR, TOTAL OF 3)

SEE RFDS FOR RRH

FREQUENCY AND

MODEL NUMBER

NOTE:

PROPOSED SURGE

499 MILE LANE MIDDLETOWN, CT 06457 MIDDLESEX COUNTY

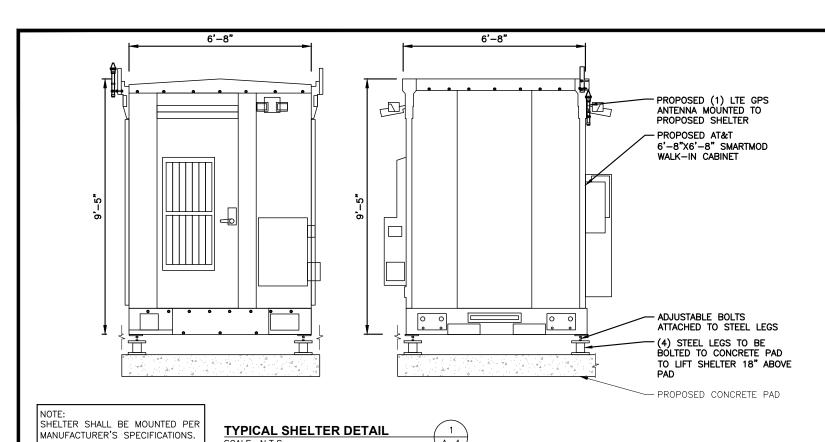


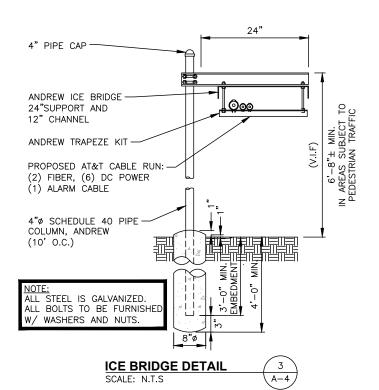
FRAMINGHAM, MA 01701

2	09/24/21	ISSUED FOR	REVIEW				AR	JC	DPH
1	09/22/21	ISSUED FOR	REVIEW				AR	JC	DPH
0	04/07/21	ISSUED FOR	REVIEW				VP	JC	DPH
NO.	DATE			REVISIO	ONS	Ţ	BY	снк	APP'D
SCALE: AS SHOWN			DESIGNE	D BY:	JC	DRAWN	N BY:	CC/VF	,

AT&T DETAILS & ANTENNA SCHEDULE (NSB) CT3470A A-3

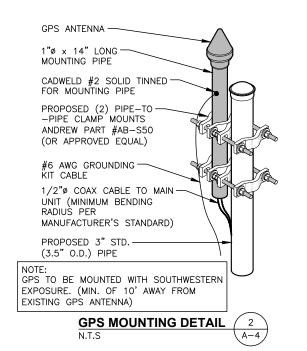
A-3,





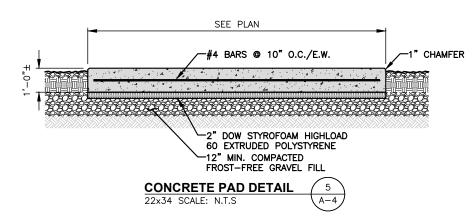
20 KW GENERATOR DIMENSIONS					
MODEL #	G007098-0				
MANUF.	GENERAC				
HEIGHT	90"				
WIDTH	36"				
LENGTH	48"				





#### FOUNDATION NOTES & CONCRETE SPECIFICATIONS:

- 1. FOUNDATION AREA SHALL BE EXCAVATED TO THE DEPTH AND DIMENSIONS SHOWN ON THE PLANS. EXISTING LEDGE AND ALL OTHER EXISTING UNSUITABLE MATERIAL SHALL BE REMOVED AND LEGALLY DISPOSED OF OFF-SITE. THE SUBGRADE SHALL BE ROLLED WITH A 1-TON, VIBRATORY, WALK-BEHIND ROLLER AT A SPEED OF LESS THAN 2 FPS, 6 PASSES MINIMUM, TO PROVIDE UNYIELDING SURFACE.
- 2. UNDERCUT SOFT OR "WEAVING" AREAS A MINIMUM OF 12 INCHES DEEP. BACKFILL UNDERCUT AREA WITH FILL MEETING THE SPECIFICATIONS OF STRUCTURAL FILL.
- CONCRETE TO HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH (f'c)=4000 psi. CONCRETE TO BE AIR ENTRAINED, DESIRED AIR CONTENT TO BE 6% (PLUS OR MINUS 2%)
- 4. REINFORCING BAR TO BE ASTM A615 GRADE 60.
- 5. WELDED WIRE FABRIC TO CONFORM TO THE REQUIREMENTS OF ASTM A185. WIRES FOR FABRIC TO CONFORM TO THE REQUIREMENTS OF ASTM A82.
- 6. COORDINATE WITH MANUFACTURER OF PREFABRICATED SHELTER FOR LOCATION OF ATTACHMENTS TO BASE SLAB.
- 7. ALL REINFORCING TO HAVE MINIMUM CONCRETE COVER PER ACI SPECIFICATIONS.
- 8. ALL CONCRETE MATERIALS AND WORKMANSHIP SHALL CONFORM TO LATEST EDITION OF ACI 318 AND APPLICABLE STATE BUILDING CODE.





NORTH ANDOVER, MA 01845

TEL: (978) 557-5553 FAX: (978) 336-5586



1997 ANNAPOLIS EXCHANGE PKWY SUITE 200 ANNAPOLIS, MD 21401 SITE NUMBER: CT3470A
SITE NAME: MIDDLETOWN\_MILE LANE

499 MILE LANE MIDDLETOWN, CT 06457 MIDDLESEX COUNTY



2	09/24/21	ISSUED FOR	REVIEW				AR	JC	DPH
1	09/22/21	ISSUED FOR	REVIEW				AR	JC	DPH
0	04/07/21	ISSUED FOR	REVIEW				VP	JC	DPH
NO.	DATE		REVISIONS				BY	снк	APP'D
SCALE: AS SHOWN			DESIGNE	D BY:	JC	DRAWN	BY:	CC/VF	•

AT&T					
EQUIPMENT DETAILS (NSB)					
SITE NUMBER	DRAWING NUMBER	REV			
CT3470A	A-4	2			



#### **ABUTTERS LIST**

Parcel ID	Site Address	Owner Name	Mailing Address	City	State	Zip
10-0147	Mile Lane	City of Middletown Lawrence School	245 Dekoven Drive	Middletown	СТ	06457
10-0155	468 Mile Lane	Tina P. Lun	468 Mile Lane	Middletown	CT	06457
10-0072	5 Birchwood Drive	Theodore J. Maura	5 Birchwood Drive	Middletown	CT	06457
10-0073	15 Birchwood Drive	Ryan Morgan Emily M. Wiles	15 Birchwood Drive	Middletown	СТ	06457
10-0074	25 Birchwood Drive	Doris L. Lamb	25 Birchwood Drive	Middletown	CT	06457
10-0075	35 Birchwood Drive	Anthony F. Zadroga Trustee	35 Birchwood Drive	Middletown	СТ	06457
10-0083	Fir Lane	Rhoda Bennett, et al	65 Hollyberry Lane	Bristol	CT	06010
10-0071	Newfield Street	City of Middletown Keigwin School	245 Dekoven Drive	Middletown	СТ	06457
10-0070	200 Larosa Lane	City of Middletown	245 Dekoven Drive	Middletown	CT	06457
10-0199	Ridgewood Road	City of Middletown	245 Dekoven Drive	Middletown	CT	06457
10-0028	Ridgewood Road	Old Colony One of Wallingford LLC	273 North Colony Street Unit 2	Wallingford	СТ	06492
10-0188	70 Talias Trail	Adam Szczerbicki Melissa Razel	70 Talias Trail	Middletown	СТ	06457
10-0187	60 Talias Trail	Christopher J. Lavigne Lisa C. Alonso	60 Talias Trail	Middletown	СТ	06457
10-0186	50 Talias Trail	Roberto Pugliares Kelly Kenefick-Pugliares	50 Talias Trail	Middletown	СТ	06457
10-0185	40 Talias Trail	Michael T. Conner Viviana Conner	40 Talias Trail	Middletown	СТ	06457
10-0184	30 Talias Trail	Giuseppe Lombardo Diana Lombardo	30 Talias Trail	Middletown	СТ	06457
10-0183	20 Talias Trail	Michael Lamanivong Jieun Liana Yi	20 Talias Trail	Middletown	СТ	06457
10-0181	509 Mile Lane	Palmer L. Gaines	509 Mile Lane	Middletown	CT	06457

## Exhibit C

#### NOTICE

Notice is hereby given, pursuant to Section 16-50g et seq. of the Connecticut General Statutes, as amended, and Section 16-50j-1 et seq. of the Regulations of Connecticut State Agencies, as amended, of New Cingular Wireless PCS, LLC ("AT&T")'s conversion of its tower site sharing request and petition for a declaratory ruling that was filed with the Connecticut Siting Council ("Council") on September 30, 2021 and assigned Petition No. 1465 ("Petition") into an Application for a Certificate of Environmental Compatibility and Public Need ("Certificate") assigned Docket No. 506.

AT&T seeks to install a second shorter tower at the existing City of Middletown tower site within an expanded compound adjacent thereto ("Facility"). The Facility is proposed on an approximately 23.72-acre parcel located at 499 Mile Lane in Middletown, Connecticut and owned by the City of Middletown that was previously part of the U.S. Army Reserve Center and is now serving in part as a fire training site. The City of Middletown's existing communications facility consists of an approximately 180' lattice tower and a fenced equipment compound. AT&T proposes to share the site and modify the existing facility by installing a 150' monopole tower immediately adjacent to the existing tower, with nine (9) antennas at a centerline height of approximately 150' above ground level ("AGL"). The monopole and expanded equipment compound are being designed to accommodate future collocations by additional wireless carriers. Associated unmanned equipment will be located within a 50-foot by 50-foot expanded area of the existing fenced equipment compound. Vehicle access to AT&T's Facility would remain the same along the existing paved access drive that extends south of Mile Lane.

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.

The Facility is proposed to allow wireless services to AT&T customers and first responders in the northern area of Middletown, particularly along Mile Lane, State Highway 3, Ridgewood Road and the surrounding roads, businesses, schools and neighborhoods. The Application materials further detail the need, purpose and benefits of the Facility and also describes the environmental impacts of the proposed Facility.

Interested parties and residents of Middletown, Connecticut are invited to review the Application materials as converted during normal business hours after October 6, 2021 at the following offices:

Connecticut Siting Council 10 Franklin Square New Britain, Connecticut 06051 City & Town Clerk of Middletown Ashley Flynn-Natale City Hall 1<sup>st</sup> Floor 245 DeKoven Drive Middletown, CT 06457

or the offices of the undersigned. A copy of the Application materials 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.

Christopher B. Fisher, Esq. Cuddy & Feder LLP 445 Hamilton Ave, 14th Floor White Plains, New York 10601 (914) 761-1300 Attorney for the Applicant Ad Order Number

**Customer Account** 

278926

Sales Rep. mhutchinas

0002660581

**Customer Information** CUDDY & FEDER LLP

Order Taker mhutchings

445 HAMILTON AVENUE WHITE PLAINS NY 106015196

USA

Ordered By

JEANENE

Phone: 9147611300 0000000000 Fax:

Order Source Phone

EMail:

Ad Cost \$390.02

Payment Amt \$0.00

Amount Due \$390.02

Blind Box

Materials

Order Notes

Ad Number 0002660581-01 External Ad #

Pick Up Number

Ad Type Legal Liners Ad Size 2 X 83 li PO Number

Color

Color Requests

\$0.00

Product and Zone Middletown Press

# Inserts

Placement

**Public Notices** 

Note: Retail Display Ads May Not End in Identified Placement

10/6/2021 10/7/2021

Product and Zone middletownpress.com # Inserts

Placement **Public Notices** 

Note: Retail Display Ads May Not End in Identified Placement

Run Dates

10/6/2021, 10/7/2021

#### Ad Content Proof

Note: Ad size does not reflect actual ad

#### NOTICE

Notice is hereby given, pursuant to Section 16-50g et seq. of the Connecticut General Statutes, as amended, and Section Agencies, as amended, of New Cingular Wireless PCS, LLC ("AT&T")'s conversion of its tower site sharing request and Connecticut Siting Council ("Council") on September 30, 2021 and assigned Petition No. 1465 ("Petition") into an Application for a Certificate of Environmental Compatibility and Public Need ("Certificate") assigned Docket No. 506.

AT&T seeks to install a second shorter tower at the existing City of Middletown tower site within an expanded compound adjacent thereto ("Facility"). The Facility is proposed on an approximately 23.72-acre parcel located at 499 Mile Lane in Middletown, Connecticut and owned by the City of Middletown that was previously part of the U.S. Army Reserve Center and is now serving in part as a fire training site. The City of Middletown's existing communications facility consists of an approximately 180' lattice tower and a fenced equipment compound. AT&T proposes to share the site and modify the existing facility by installing a 150' monopole tower immediately adjacent to the existing tower, with nine (9) antennas at a centerline height of approximately 150' above ground level ("AGL"). The monopole and expanded equipment compound are being designed to accommodate future collocations by additional wireless carriers. Associated unmanned equipment will be located within a 50-foot by 50foot expanded area of the existing fenced equipment compound. Vehicle access to AT&T's Facility would remain the same along the existing paved access drive that extends south of Mile Lane.

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. seg.

The Facility is proposed to allow wireless services to AT&T customers and first responders in the northern area of Middletown, particularly along Mile Lane, State Highway 3, Ridgewood Road and the surrounding roads, businesses. schools and neighborhoods. The Application materials further detail the need, purpose and benefits of the Facility and also describes the environmental impacts of the proposed Facility.

Interested parties and residents of Middletown, Connecticut are invited to review the Application materials as converted during normal business hours after October 6, 2021 at the following offices:

Connecticut Siting Council

10 Franklin Square New Britain, Connecticut 06051

City & Town Clerk of Middletown Ashley Flynn-Natale City Hall 1st Floor 245 DeKoven Drive Middletown, CT 06457

or the offices of the undersigned. A copy of the Application materials 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.

> Christopher B. Fisher, Esq. Cuddy & Feder LLP 445 Hamilton Ave, 14th Floor White Plains, New York 10601 (914) 761-1300 Attorney for the Applicant