



August 30, 2017

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

Regarding: Notice of Exempt Modification – Swap of 3 Antennas and addition of 3 Remote Radios
Property Address: 419 Broad Street, Windsor, CT (the “Property”)
Applicant: AT&T Mobility (“AT&T”, Site # CT1026)

Dear Ms. Bachman:

AT&T currently maintains a wireless telecommunications facility on an existing 100 foot Monopole tower (“tower”) at the above-referenced address, latitude 41.84589167, longitude - 72.6462361. AT&T’s facility consists of nine (9) wireless telecommunications antennas at 100 feet. The tower is controlled and owned by Frontier Communications. Assessor’s information is attached hereto.

AT&T desires to modify its existing telecommunications facility by swapping (3) antennas and adding (3) remote radios. The centerline height of said antennas is and will remain at 100 feet.

Please accept this application as notification pursuant to R.C.S.A. § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72 (b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to the Mayor of the Town of Windsor, The Building Official of the Town of Windsor and the Town Planner of the Town of Windsor. A copy of this letter is also being sent to Frontier Communications, the owner of the structure that AT&T is located.

The planned modifications to AT&T’s facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2).

1. The planned modifications will not result in an increase in the height of the existing structure. AT&T’s antennas and associated lines will be installed at the 100 foot level of the 100 foot Monopole tower.
2. The proposed modifications will not involve any changes to ground-mounted equipment and, therefore will not require an extension of the site boundary.
3. The proposed modification will not increase the noise level at the facility by six decibel or more, or to levels that exceed state and local criteria.
4. The operation of the modified facility will not increase radio frequency (RF) emissions at the facility to a level at or above the Federal Communications Commission (FCC) safety standard. An RF emissions calculation is attached.



5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.
6. The tower and its foundation can support AT&T's proposed modifications. (Please see attached Structural Analysis completed by Malouf Engineering Intl., Inc. dated August 21, 2017).

For the foregoing reasons AT&T respectfully requests that the proposed swap of antennas and addition of radios be allowed within the exempt modifications under R.C.S.A. § 16-50j-72(b)(2).

Sincerely,

Nicole Caplan
Site Acquisition Specialist
Empire Telecom

CC: The Honorable Donald S. Trinks, Mayor, Town of Windsor
Robert Ruzzo, Building Official, Town of Windsor
Eric Barz, Town Planner, Town of Windsor
Frontier Communications, c/o Kelley Stewart

16 Esquire Road, Billerica, MA 01862 Phone 978-284-3906 Email: ncaplan@empiretelecomm.com



Hartford County, Connecticut

Horizontal Datum is Connecticut State Plane Feet, NAD83

1 inch = 123 feet



Property Boundaries not legally binding for title or zoning purposes.

The Town of Windsor makes no warranty as to the accuracy, reliability, or completeness of the information and is not responsible for any error or omissions for results obtained from the use of the information.

Property Cards

Address Search : [Clear Search](#)

419 Broad St

Property Owner:
Southern New England

Property Co-Owner:
C/O Frontier Communications Tax Dept

Mailing Address:
406 Merritt 7
Norwalk, CT
06851

File Code:
3407

Map:
77

Block:
65

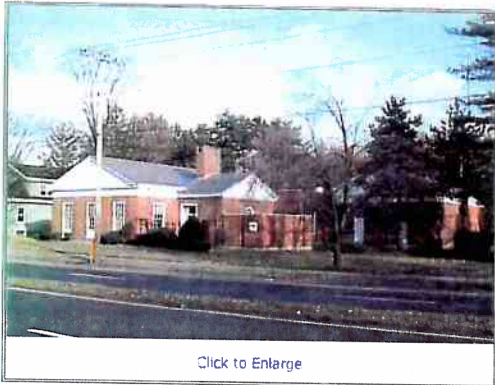
Lot:
19

Census Tract:
4734.00

Property Type:
Tel X Station

Land Area (Acres):
0.47

Zone:
R11



[Click to Enlarge](#)

Construction Details

Year Built: 1955	Total Rooms:
Building Style: Telephone Bldg	Bedrooms:
Stories: 1	Bathrooms:
Living Area: 0 Sq/Ft	Half Baths:
Building ID: 10739	Heating Type: Forced Air
Grade: Average	Heating Fuel: Oil
Exterior Wall: Brick Veneer	AC Type: Central

Valuation
Assessed Land Value: \$100,450
Assessed Building Value: \$179,900
Total Assessed Value: \$280,350
Appraised Land Value: \$143,500
Appraised Building Value: \$257,000
Total Appraised Value: \$400,500

Last Sale
Last Sale Date: Friday, June 30th, 1944
Last Sale Price: \$0
Qualified Sale:
Book/Page: 124/0030

Prior Owners			
Sale Date	Owner Name	Sale Price	Book / Page

Parcel Sketch

Sub Area Detail

Code	Gross Area (Sq Ft)	Living Area (Sq Ft)
BAS	8253	8253
PTO	184	0
UBM	4598	0

Outbuildings & Extra Features

Code	Description	Appraised Value	Assessed Value
PAV1	PAVING-ASPHALT	\$6900.00	\$4830.00

Legend:

AOF Office Area	APT Apartment	BAS First Floor
CAN Canopy	CDN Canopy (Det)	CLP Loading Platform (Finished)
EAF Attic (Expan)(Finished)	EAU Attic (Expan)(Unfinished)	FAT Attic (Finished)
FBM Basement (Finished)	FCB Cabana (Encl)(Finished)	FCP Carport (Framed)
FDC Carport (Det)(Framed)	FDS Porch (Scrn)(Det)(Finished)	FDU Utility (Det)(Finished)
FEP Porch (Encl)(Finished)	FGR Garage (Framed)	FHS Half-Story (Finished)

FL Lower Level (Finished)	FOP Porch (Open)(Finished)	FSP Porch (Screen)(Finished)
FST Utility (Finished)	FUS Upper-Story (Finished)	PTO Patio
SDA Store Display Area	SFB Base (Semi-Finished)	SPA Service Prod Area
TQS Three-Qtr Story	UAT Attic (Unfinished)	UBM Basement (Unfinished)
UCB Cabana (Encl)(Unfinished)	UDS Porch (Scrn)(Dedt)(Unfinished)	UDU Utility (Det)(Unfinished)
UEP Porch (Encl)(Unfinished)	UHS Half-Story (Unfinished)	ULP Loading Platform (Unfinished)
UOP Porch (Open)(Unfinished)	USP Porch (Scrn)(Unfinished)	UST Utility (Strg)(Unfinished)
UUS Upper-Story (Unfinished)	WDK Wood Deck	



WIRELESS COMMUNICATIONS FACILITY

CT1026 - LTE 2C

WINDSOR

419 BROAD STREET

WINDSOR, CT 06095

REV.	DATE	BY	CHK'D BY	DESCRIPTION
0	04/17/17	LSL	QAG	CONSTRUCTION DRAWINGS - ISSUED FOR CONSTRUCTION



www.Center.com
 888.444.4444
 122 North Main Street
 Fairfield, CT 06424

AT&T MOBILITY
 WIRELESS COMMUNICATIONS FACILITY
 WINDSOR
 CT1026 - LTE 2C
 419 BROAD STREET
 WINDSOR, CT 06095

DATE: 01/29/17
 SCALE: AS NOTED
 JOB NO.: 100000

TITLE SHEET
 T-1
 Sheet No. 1 of 2

PROJECT SUMMARY

- THE PROPOSED SCOPE OF WORK CONSISTS OF A MODIFICATION INCLUDING THE FOLLOWING:
 - REMOVE EXISTING ANTENNA POSITION 3, (1) PER SECTOR, (3) TOTAL.
 - INSTALL NEW REDORTY ANTENNA IN POSITION 2, (1) PER SECTOR, (3) TOTAL.
 - INSTALL NEW REDORTY ANTENNA IN POSITION 1, (1) PER SECTOR, (3) TOTAL.
 - REMOVE AND REPLACE EXISTING LITE BULB FOR NEW BUSE#1 WITHIN EQUIPMENT ROOM AND ADD NEW.

PROJECT INFORMATION

AT&T SITE NUMBER: CT1026
 AT&T SITE NAME: WINDSOR
 SITE ADDRESS: 419 BROAD STREET, WINDSOR, CT 06095

LESSEE/APPLICANT: AT&T MOBILITY
 500 ENTERPRISE DRIVE, SUITE 3A, WINDSOR, CT 06095

ENGINEER: COTEX ENGINEERING, INC.
 63-2 NORTH WATFORD RD., BRANTFORD, CT 06025

PROJECT COORDINATES: LATITUDE: 41°50'45.17" N
 LONGITUDE: 72°50'45.17" W
 SITE COORDINATES AND GROUND ELEVATION: AS SHOWN ON GOOGLE EARTH.

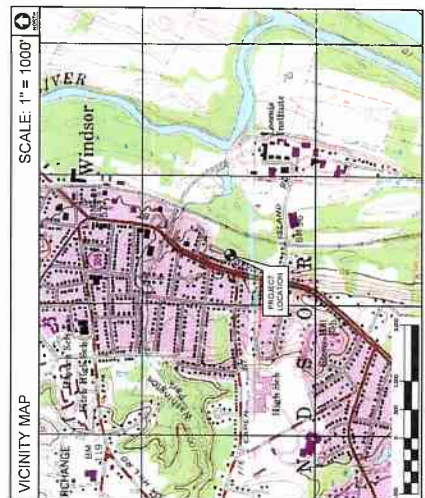
SHEET INDEX

SHEET NO.	DESCRIPTION	REV.
T-1	TITLE SHEET	0
N-1	NOTES, SPECIFICATIONS AND DETAILS	0
C-1	PLANS AND ELEVATION	0
C-2	LITE 2C EQUIPMENT DETAILS	0
E-1	LITE SCHEMATIC DIAGRAM AND NOTES	0
E-2	LITE WIRING DIAGRAM	0
E-3	TYPICAL ELECTRICAL DETAILS	0

SITE DIRECTIONS

FROM: 500 ENTERPRISE DRIVE, SUITE 3A, WINDSOR, CT 06095
 TO: 419 BROAD STREET, WINDSOR, CT 06095

- HEAD WESTWARD ON ENTERPRISE DR TOWARD CAPITAL BLVD
- TURN LEFT ONTO CAPITAL BLVD
- TURN LEFT ONTO WINDSOR ST
- TURN LEFT TO MERGE ONTO I-91 N TOWARD HARTFORD
- TAKE EXIT FOR CT-178 E / PARK AVE TOWARD BLOOMFIELD
- TURN LEFT ONTO CT-159
- TURN LEFT ONTO CT-159
- DESTINATION WILL BE ON THE RIGHT



GENERAL NOTES

- ALL WORK SHALL BE IN ACCORDANCE WITH THE 2012 INTERNATIONAL BUILDING CODE, INCLUDING THE FM-327 REVISION, "A" STRUCTURAL STANDARDS FOR CONDUCTIVE FIBER SAFETY CODE AND NATIONAL ELECTRICAL CODE AND LOCAL CODES.
- THE COMPANY, TRUCK, PRIMARY GROUND RING, ELECTRICAL, MECHANICAL, AND PLUMBING SHALL BE PROVIDED BY THE OWNER. AS BEST PRACTICE, THE CONTRACTOR SHOULD ANY FIELD CONDITIONS PRELIMINARY TO THE WORK. THE ENGINEER AND SHALL NOT PROCEED WITH ANY AFFECTED WORK.
- CONTRACTOR SHALL REVIEW ALL DRAWINGS AND SPECIFICATIONS IN ACCORDANCE WITH THE 2012 INTERNATIONAL BUILDING CODE AND ALL WORK SHOWN IN THE SET OF DRAWINGS. THE CONTRACTOR SHALL EXAMINE ALL THE DRAWINGS AND SPECIFICATIONS FOR THE SUBCONTRACTORS AND ALL RELATED PARTIES. THE SUBCONTRACTORS SHALL EXAMINE ALL THE DRAWINGS AND SPECIFICATIONS FOR THE FINISHES, STRUCTURAL, MECHANICAL AND ELECTRICAL COMPONENTS AND IN THE WRITTEN FORM AS SHOWN OR INDICATED ON THE DRAWINGS.
- CONTRACTOR SHALL OBTAIN ALL MATERIAL, LABOR AND EQUIPMENT TO COMPLETE THE WORK AND FURNISH A COMPLETED JOB ALL IN ACCORDANCE WITH THE 2012 INTERNATIONAL BUILDING CODE AND ALL OTHER APPLICABLE REGULATIONS, ORDINANCES, AND SPECIFICATIONS. PERMITS SHALL BE OBTAINED BY THE CONTRACTOR.
- CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS AND ALL INSPECTIONS REQUIRED AND SHALL ALSO PAY FEES REQUIRED FOR PERMITS AND INSPECTIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INSPECTIONS.
- CONTRACTOR SHALL MAINTAIN A CURRENT SET OF DRAWINGS TO SPECIFICATIONS ON SITE AT ALL TIMES AND INSURE DISTRIBUTION OF DRAWINGS TO ALL PERSONNEL INVOLVED IN THE WORK. ALL DRAWINGS SHALL BE MARKED AND REMOVED FROM THE CONTRACT AREA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SET OF DRAWINGS TO OWNER UPON COMPLETION OF PROJECT.
- LOCATION OF EQUIPMENT, AND WORK SUPPLIED BY OTHERS THAT IS DETERMINED TO BE NECESSARY FOR THE PROJECT SHALL BE DETERMINED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND DIMENSIONS SUBJECT TO STRUCTURAL CONDITIONS AND WORK OF THE SUBCONTRACTORS.
- CONTRACTOR SHALL SUBMIT AND TO ENGINEER THE NECESSARY CONSTRUCTION DETAILS AND ITS COMPONENT PARTS DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE NECESSARY MATERIALS AND EQUIPMENT THAT MAY BE NECESSARY. MAINTAIN EXISTING BUILDING'S/PROPERTY'S OPERATIONS, COORDINATE WORK WITH BUILDING/PROPERTY OWNER.

10. DRAWINGS INDICATE THE MINIMUM STANDARDS, BUT IF ANY WORK IS TO BE DONE IN ACCORDANCE WITH THE 2012 INTERNATIONAL BUILDING CODES, RULES, OR REGULATIONS BEARING ON THE WORK, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INSPECTIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INSPECTIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INSPECTIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INSPECTIONS.

11. ALL UTILITY WORK SHALL BE IN ACCORDANCE WITH LOCAL UTILITY COMPANY REQUIREMENTS AND SPECIFICATIONS. AS TO BE PROVIDED BY THE CONTRACTOR AND ALL APPLICABLE SUBCONTRACTORS FOR ANY CONDITION PER MFR'S RECOMMENDATIONS. CONTRACTOR TO SUPPLY ALL MATERIALS AND EQUIPMENT TO COMPLETE THE WORK AND FURNISH A COMPLETED JOB ALL IN ACCORDANCE WITH THE 2012 INTERNATIONAL BUILDING CODE AND ALL OTHER APPLICABLE REGULATIONS, ORDINANCES, AND SPECIFICATIONS. THESE ITEMS ARE TO BE INCLUDED IN THE BID. NO EXTRA WILL BE ALLOWED FOR MISSED ITEMS.

12. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ON-SITE SAFETY FROM THE START TO THE END OF THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INSPECTIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INSPECTIONS.

13. ANY AND ALL ERRORS, OMISSIONS, AND MISSED ITEMS ARE TO BE BROUGHT TO THE ATTENTION OF THE ASK'S CONSTRUCTION MANAGER FOR REVIEW. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INSPECTIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INSPECTIONS.

14. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ON-SITE SAFETY FROM THE START TO THE END OF THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INSPECTIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INSPECTIONS.

15. CONTRACTOR TO REVIEW ALL SHOP DRAWINGS AND SUBMIT COPY TO ENGINEER FOR APPROVAL. DRAWINGS MUST BEAR THE CONTRACTOR'S SEAL AND SIGNATURE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INSPECTIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INSPECTIONS.

16. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, ELEVATIONS, AND LOCATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INSPECTIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INSPECTIONS.

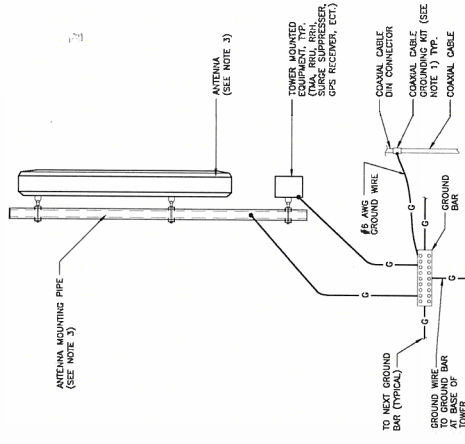
17. COORDINATION, LAYOUT, FINISHES AND INSTALLATION OF CONDUIT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INSPECTIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INSPECTIONS.

18. ALL EQUIPMENT AND PRODUCTS PURCHASED ARE TO BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INSPECTIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INSPECTIONS.

19. ALL DAMAGE CAUSED TO ANY EXISTING STRUCTURE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INSPECTIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INSPECTIONS.

20. 48 HOURS PRIOR TO ANY DEMONSTRATIONS AT 1-800-922-4445, ALL EXCAVATION WORK CONTRACTOR SHALL MAINTAIN AND PROTECT MARKED UTILITIES THROUGHOUT PROJECT CONSTRUCTION.

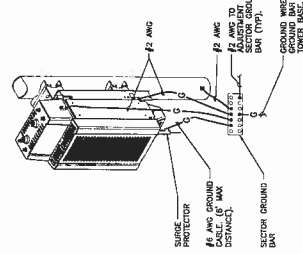
21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INSPECTIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INSPECTIONS.



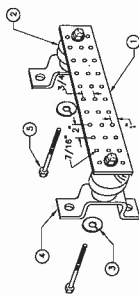
- NOTES:**
1. BOND COAXIAL CABLE GROUND WIRE TO EACH OWNER'S GROUND BAR ALONG ENTIRE COAX RUN FROM ANTENNA TO SHELTER.
 2. BOND ALL EQUIPMENT TO GROUND PER NEC AND MANUFACTURER'S SPECIFICATIONS.
 3. INCLUDE ALL ANTENNA SECTORS, INCLUDING GPS ANTENNA.
- 1 TYPICAL ANTENNA GROUNDING DETAIL**
 E-3 NOT TO SCALE

EACH IRON CABINET SHALL BE GROUND IN THE FOLLOWING MANNER:

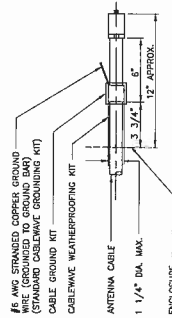
1. AT THE FRONT SIDE OF THE CABINET.
2. AT THE RIGHT SIDE OF THE CABINET.



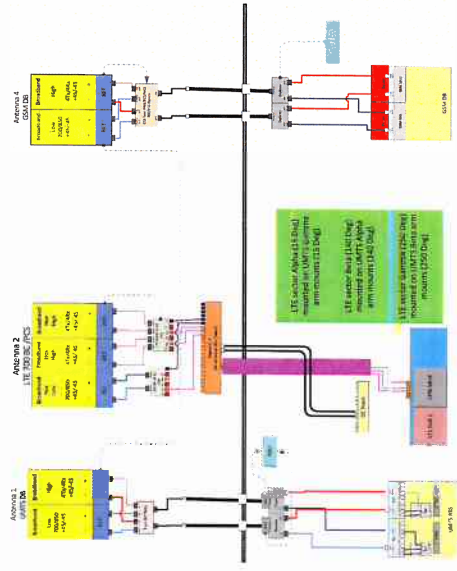
- 2 RRU POLE MOUNT GROUNDING**
 E-3 NOT TO SCALE



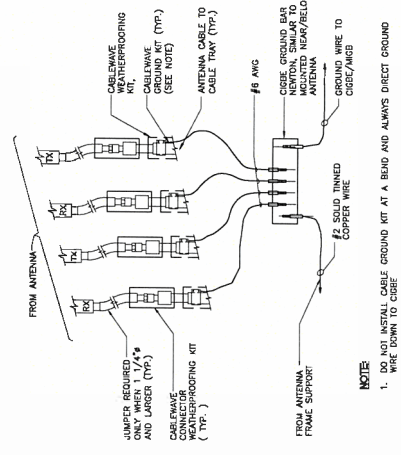
- LEGEND**
1. TINED COPPER GROUND BAR, 1/4" x 4" x .037" NEWTON INSTRUMENT CO. HOLE CENTERS TO MATCH.
 2. INSULATORS, NEWTON INSTRUMENT CAT. NO. 2, JCS11-4.
 3. 1/8" HEX WASHERS, NEWTON INSTRUMENT CO. CAT. NO. 3015.
 4. WALL MOUNTING BRACKET, NEWTON INSTRUMENT CO. CAT. NO. 11-6556.
 5. STAINLESS STEEL SECURITY SCREWS.
- 3 GROUND BAR DETAIL**
 E-3 NOT TO SCALE



- NOTE:**
1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
- 4 ANTENNA CABLE GROUNDING DETAIL**
 E-3 NOT TO SCALE



- 5 RF PLUMBING DIAGRAM**
 E-3 NOT TO SCALE



- NOTE:**
1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO CIBIE.
- 6 CONNECTION OF GROUND WIRES TO GROUND BAR**
 E-3 NOT TO SCALE

Rigorous Structural Analysis Report



AT&T - Windsor CT1026 /FA #10035043
Owner: Frontier Communications – Windsor CO Site
Windsor, Connecticut

August 21, 2017

MEI PROJECT ID: CT00873M-17V0

MALOUF ENGINEERING INTL., INC.



STRUCTURAL CONSULTANTS

17950 PRESTON ROAD, SUITE 720 ■ DALLAS, TEXAS 75252 ■ TEL. 972-783-2578 FAX 972-783-2583
www.maloufengineering.com





August 21, 2017

Ms. Nicole Caplan
Empire Telecom
 Windsor, CT 06095

RIGOROUS STRUCTURAL ANALYSIS

Structure/Make/Model:	100 ft Monopole	Engineered Endeavors Inc. / 18-Sided
Client/Site Name/#:	Empire Telecom/AT&T	Windsor CT1026 /FA#10035043
Owner/Site Name/#:	Frontier Communications	Windsor CO
MEI Project ID:	CT00873M-17V0	
Location:	419 Broad Street Windsor, Connecticut 06095	Hartford County FCC #N/A
	LAT 41-50-45.2 N	LON 72-38-46.1 W

EXECUTIVE SUMMARY:

Malouf Engineering Int'l (MEI), as requested, has performed a tower mapping & rigorous structural analysis of the above mentioned structure to assess the impact of the changed condition as noted in Table 1.

Based on the stress analysis performed, the existing structure **is in conformance** with the Int'l Building Code (IBC) / ANSI/TIA **222-G** Standard for the loading considered under the criteria listed and referenced in the report sections – tower rated at 92.1% - Pole.

The installation of the proposed changed condition as noted in Table 1 is structurally acceptable. Please refer to Appendix 1 for Schematic Lines Layout.

MEI appreciates the opportunity of providing our continuing professional services to you. If you have any questions or need further assistance on this or other projects please contact us.

Respectfully submitted,

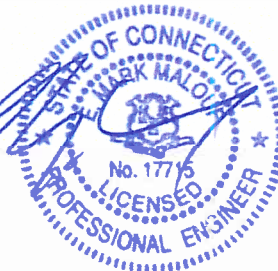
MALOUF ENGINEERING INT'L, INC.

Analysis performed by:

Krishna Manda, PE
 Sr. Project Engineer

Reviewed & Approved by:


 E. Mark Malouf, PE
 Connecticut #17715
 972-783-2578 ext. 106
 mmalouf@maloufengineering.com



8/21/2017

TABLE OF CONTENTS

1. INTRODUCTION & SCOPE _____ **4**

2. SOURCE OF DATA _____ **4**
Background Information: ----- 4

3. ANALYSIS CRITERIA _____ **5**
Appurtenances Configuration ----- 5

4. ANALYSIS PROCEDURE _____ **6**
Analysis Program ----- 6
Assumptions ----- 6

5. ANALYSIS RESULTS _____ **7**

6. FINDINGS & RECOMMENDATIONS _____ **8**

7. REPORT DISCLAIMER _____ **9**

APPENDIX 1 - ANALYSIS PRINTOUT & GRAPHICS _____ **10**

APPENDIX 2 – SOURCE / CHANGED CONDITION _____ **11**



1. INTRODUCTION & SCOPE

A tower mapping & rigorous structural analysis were performed by Malouf Engineering Int'l (MEI), as requested and authorized by Ms. Nicole Caplan, Empire Telecom, on behalf of AT&T, to determine the acceptance of the proposed changed conditions in conformance with the IBC / ANSI/TIA-222-G Standard, "Structural Standard for Antenna Supporting Structures and Antennas". The scope of this independent analysis is to determine the overall stability and the adequacy of structural members, foundations, and member connections, as available and stated. This analysis considers the structure to have been properly installed and maintained with no structural defects. Installation procedures and related loading are not within the scope of this analysis and should be performed and evaluated by a competent person of the erection contractor.

The different report sections detail the applicable information used in this evaluation, relating to the tower data, the appurtenances configuration and the wind and ice loading considered.

2. SOURCE OF DATA

The following information has been used in this evaluation as source data that accurately represent the existing structure and the related appurtenances:

	Source	Information	Reference
STRUCTURE			
Tower	Empire Telecom / Ms. Nicole Caplan	Original Design Dwgs / EEI	Job #GS 50930 Dated 10/14/1998
		Modification Drawings / GPD Associates	Project #2009- 262.22 Dated 05/12/2009
	MEI	Tower Mapping Report/HTS	Dated 08/15/2017
Foundation	Empire Telecom / Ms. Nicole Caplan	Foundation Mapping Report/Wilkerson Engr.	Job # 2009-758 Dated 03/12/2009
		Geotechnical Report/ Wilkerson Engineering	Job # 2009-758 Dated 03/12/2009
Material Grade	Available from supplied documents noted above-refer to Appendix		
CURRENT APPURTENANCES			
	MEI	Tower Mapping Report/HTS	Dated 08/15/2017
CHANGED CONDITION			
	Empire Telecom / Ms. Nicole Caplan	PDQ Data Sheet	Dated 06/15/2017

Background Information:

Based on available information, the following is known regarding this structure:

DESIGNER / FABRICATOR	Engineered Endeavors Inc. / 18-Sided
ORIGINAL DESIGN CRITERIA	TIA/EIA 222-F – 70 Mph + 0.50" Ice
PRIOR STRUCTURAL MODIFICATIONS	Mods as per GPD Association 2009-262.22 Dated 05/12/2009 considered properly installed & effective.



3. ANALYSIS CRITERIA

The structural analysis performed used the following criteria:

CODE / STANDARD	2016 CT Building Code / 2012 IBC / NDS / ANSI/TIA-222-G-2 Standard	
LOADING CASES	Full Wind:	122 Mph Ult. Gust [equiv. 94.5 Mph (3-sec gust)] w/No Radial Ice**
	Iced Case:	40 Mph + 1" Radial Ice
	Service:	60 Mph
	Seismic:	S _s = 0.179 / S ₁ = 0.064 / Site Class: D – Stiff Soil
STRUCTURE CRITERIA	Risk Category (Structural Class): Class II	
	Exposure Category: 'C' – Topographic Category: 1	

Appurtenances Configuration

The following appurtenances configuration is denoted by the summation of Tables 1 & 2:

Table 1: Tenant with Changed Condition Appurtenances Configuration[^]

Elev (ft)	Tenant	Ants Qty	Appurtenance Model / Description	Mount Description	Lines Qty	Line size & Location
103	AT&T	3	HPA-65R-BUU-H6 Panel Antennas			
100		3	RRUS-32 B2 Boxes			
Current Appurtenances To Remain						
103	AT&T	6	7770.00 Panel Antennas	Platform without Rails with Ladder / (3) Empty Pipe Mounts	12	1 1/4"
100		3	DTMABP7819VG12A Twin TMA Boxes			
		3	TT19-08BP111-001 TMA Boxes			
		3	RRUS-11 Boxes			
		1	Raycap OVP Box			
Current Appurtenances To Be Removed						
103	AT&T	3	AM-X-CD-16-65-00T-RET Panel Ants.			

Table 2: Remaining Tenants Current and Reserved/Future Appurtenances

Elev (ft)	Tenant	Ants Qty	Appurtenance Model / Description	Mount Description	Lines Qty	Line size & Location
100.5		1	Lightning Rod			
94	T-Mobile	3	AIR21 B2A B4P Panel Antennas	LP Platform without Rails / (3) Empty Pipe Mount	18	7/8" – (I) Huber-Suhner Hybrid – (E)
		3	AIR21 B4A B2P Panel Antennas			
		3	KRY 112 71/2 TMA Boxes			
10.5	AT&T	1	GPS		1	1/2" – (E)

Notes:

- **As per 2012 IBC for ultimate 3-sec gust wind speed converted to nominal 3-sec gust wind speed as per Sect. 1609.3.1 as required to be used in ANSI/TIA-222-G Standard per exception 5 of Sect. 1609.1.1.
- [^] AT&T configuration is considered as per the approved PDQ – existing appurtenances not listed are to be removed/replaced such as to match above listing.
- All elevations are measured from tower base.
- Please note appurtenances not listed above are to be removed/not present as per data supplied.
- (I) = Internal; (E) = External; (FZ) = Within Face Zone; (OFZ) = Outside Face Zone - as per TIA-222-G.
- The above appurtenances represent MEI's understanding of the appurtenances configuration. If different than above, the analysis is invalid. Please contact MEI if any discrepancies are found.



4. ANALYSIS PROCEDURE

The subject structure is analyzed for feasibility of the installation of the proposed changed condition previously noted. The data records furnished were reviewed and a computer stress analysis was performed in accordance with the TIA-222 Standard provisions and with the agreed scope of work terms and the results of this analysis are reported.

Analysis Program

The computer program used to model the structure is a rigorous Finite Element Analysis program, InxTower (ver. 7.07), a commercially available program by Tower Numerics Inc. The latticed structures members are modeled using beam/truss and cable members and the pole members using tubular beam elements. The structural parameters and geometry of the members are included in the model. The dead and temperature loads and the wind loads are internally calculated by the program for the different wind directions and then applied as external loads on the structure. Any applicable exemptions, as per Section 15.6 of the TIA-222-G Standard for existing structures originally designed in accordance with a previous revision of the TIA-222 Standard, have been taken.

Assumptions

This engineering study is based on the theoretical capacity of the members and is not a condition assessment of the structure. This analysis is based on information supplied, and therefore, its results are based on and as accurate as that supplied data. MEI has made no independent determination, nor is it required to, of its accuracy. The following assumptions were made for this structural stress analysis:

- This existing tower is assumed, for the purpose of this analysis, to have been properly maintained and to be in good condition with no structural defects and with no deterioration to its member capacities ('as-new' condition).
- The tower member sizes and configuration are considered accurate as supplied. The material grade is as per data supplied and/or as assumed and as stated.
- The appurtenances configuration is as supplied and/or as stated in the report. It is assumed to be complete and accurate. All antennas, mounts, coax and waveguides are assumed to be properly installed and supported as per manufacturer requirements.
- Some assumptions are made regarding antennas and mounts sizes and their projected areas based on best interpretation of data supplied and of best knowledge of antenna type & industry practice.
- Mounts/Platforms are considered adequate to support the loading. No actual analysis of the platform/mount itself is performed, with the analysis being limited to analyzing the structure.
- The soil parameters are as per data supplied or as assumed and stated in the calculations. Refer to the Appendix. If no data is available, the foundation system is assumed to support the structure with its new reactions.
- All welds and connections are assumed to develop at least the member capacity, unless determined otherwise and explicitly stated in this report.
- All prior structural modifications, if any, are assumed to be as per data supplied/available, and to have been properly installed and to be fully effective.

If any of the above assumptions are not valid or have been made in error, this analysis results may be invalidated, MEI should be contacted to review any contradictory information to determine its effect.

5. ANALYSIS RESULTS

The results of the structural stress analysis based on data available and with the previous listed criteria, indicated the following:

Note: The Wind loading controls over the Seismic loading as per TIA Section 2.7.

Table 3: Stress Analysis Results

Component Type	Maximum Stress Ratio	Controlling Elev. (ft) / Component	Pass/Fail	Comment
POLE	68.5%	45.39 - 0	Pass	
REINFORCING	92.1%	45.33 - 0	Pass	
BASE PLATE	44.0%	Bending	Pass	
ANCHOR RODS	36.0%	Tension	Pass	
FOUNDATION	71.3%		Pass	

Table 4: Serviceability Requirements

	Maximum Value	TIA Requirement (10dB)	Pass/Fail	Comment
TWIST/SWAY	1.3317 Deg.	4 Deg. from Vert. or Horiz. Axis	Pass	
HORIZONTAL DISPLACEMENT	15.274 In./ 1.27% of Ht.	3.0% of Height	Pass	

Notes:

1. The Maximum Stress Ratio is the percentage that the maximum load in the member is relative to the allowable load as determined by Code requirements.
2. Refer to the Appendix 1 for more details on the member loads.
3. A maximum stress ratio between 100% and 105% may be considered as *Acceptable* according to industry standard practice.

6. FINDINGS & RECOMMENDATIONS

- Based on the rigorous stress analysis results, the subject structure is **rated at 92.1%** of its support capacity (controlling component: Pole) with the proposed changed condition considered. Please refer to Table 3 and to Appendix 1 for more details of the analysis results.
- Based on the stress analysis performed, the existing structure **is in conformance** with the IBC / ANSI/TIA **222-G** Standard for the loading considered under the criteria listed and referenced in the report sections.
- **The installation of the proposed changed condition as noted in Table 1 is structurally acceptable.** Please refer to Appendix 1 for Schematic Lines Layout.
- The limited tower mapping was performed for the sole purpose of obtaining the data required for the tower structural analysis modeling. No unusual condition was noted.
- This structure is at its support capacity for the appurtenances and loading criteria considered. Therefore, no changes to the configuration considered should be made without performing a new proper evaluation.

Rigging and temporary supports required for the erection/modification shall be determined, documented, furnished and installed by the erector/contractor accounting for the loads imposed on the structure due to the proposed construction method.

7. REPORT DISCLAIMER

The engineering services rendered by Malouf Engineering International, Inc. ('MEI') in connection with this Structural Analysis are limited to a computer analysis of the tower structure, size and capacity of its members. MEI does not analyze the fabrication, including welding and connection capacities, except as included in this Report.

The analysis performed and the conclusions contained herein are based on the assumption that the tower has been properly installed and maintained, including, but not limited to the following:

1. Proper alignment and plumbness.
2. Correct guy tensions, as applicable.
3. Correct bolt tightness or slip jacking of sleeved connections.
4. No significant deterioration or damage to any structural component.

Furthermore, the information and conclusions contained in this Report were determined by application of the current "state-of-the-art" engineering and analysis procedures and formulae. MALOUF ENGINEERING INTERNATIONAL, INC. assumes no obligation to revise any of the information or conclusions contained in this Report in the event that such engineering and analysis procedures and formulae are hereafter modified or revised. In addition, under no circumstances will MALOUF ENGINEERING INTERNATIONAL, INC. have any obligation or responsibility whatsoever for or on account of consequential or incidental damages sustained by any person, firm or organization as a result of any information or conclusions contained in the Report, and the maximum liability of MALOUF ENGINEERING INTERNATIONAL, INC., if any, pursuant to this Report shall be limited to the total funds actually received by MALOUF ENGINEERING INTERNATIONAL, INC. for preparation of this Report.

Customer has requested MALOUF ENGINEERING INTERNATIONAL, INC. to prepare and submit to Customer an engineering analysis with respect to the Subject Tower and has further requested MALOUF ENGINEERING INTERNATIONAL, INC. to make appropriate recommendations regarding suggested structural modifications and changes to the Subject Tower. In making such request of MALOUF ENGINEERING INTERNATIONAL, INC., Customer has informed MALOUF ENGINEERING INTERNATIONAL, INC. that Customer will make a determination as to whether or not to implement any of the changes or modifications which may be suggested by MALOUF ENGINEERING INTERNATIONAL, INC. and that Customer will have any such changes or modifications made by riggers, erectors and other subcontractors of Customer's choice. MALOUF ENGINEERING INTERNATIONAL, INC. shall have the right to rely upon the accuracy of the information supplied by the customer and shall not be held responsible for the Customer's misrepresentation or omission of relevant fact whether intentional or otherwise.

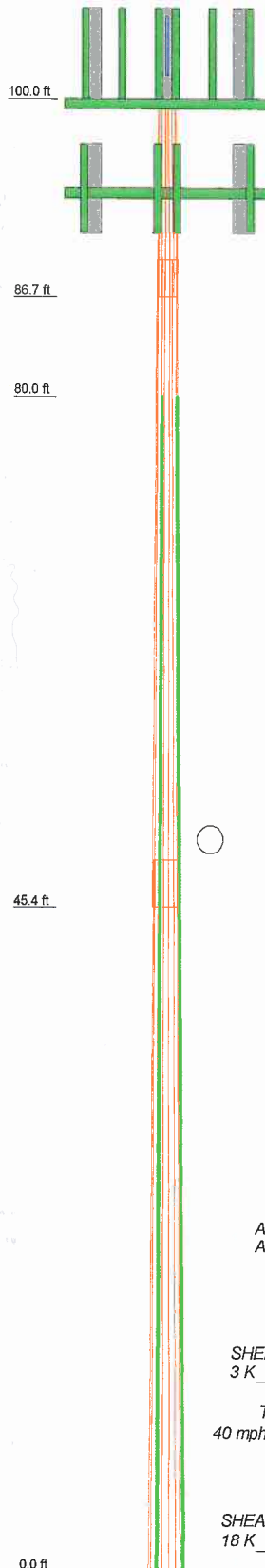
Customer hereby agrees and acknowledges that MALOUF ENGINEERING INTERNATIONAL, INC. shall have no liability whatsoever to Customer or to others for any work or services performed by any persons other than MALOUF ENGINEERING INTERNATIONAL, INC. in connection with the implementation of services including but not limited to any services rendered for Customer or for others by riggers, erectors or other subcontractors. Customer acknowledges and agrees that any riggers, erectors or subcontractors retained or employed by Customer shall be solely responsible to Customer and to others for the quality of work performed by them and that MALOUF ENGINEERING INTERNATIONAL, INC. shall have no liability or responsibility whatsoever as a result of any negligence or breach of contract by any such rigger, erector or subcontractor and that Customer and rigger, erector, or subcontractor will provide MALOUF ENGINEERING INTERNATIONAL, INC. with a Certificate of Insurance naming MALOUF ENGINEERING INTERNATIONAL, INC. as additional insured.



APPENDIX 1 - ANALYSIS PRINTOUT & GRAPHICS



Section	1	2	3
Length (ft)	13.27	43.88	48.61
Number of Sides	18	18	18
Thickness (in)	0.1875	0.2500	0.3125
Socket Length (ft)	2.54	3.21	20.7717
Top Dia (in)	14.5000	15.6163	27.5000
Bot Dia (in)	16.3438	21.7188	45.33
Grade	A572-65	A572-65	A572-65
Tube Length (ft)		34.67	45.33
Reinf Size		AERO MP305	AERO MP306
Reinf Grade		A572-65	A572-65
Weight (K)	0.4	2.2	3.9



DESIGNED APPURTENANCE LOADING

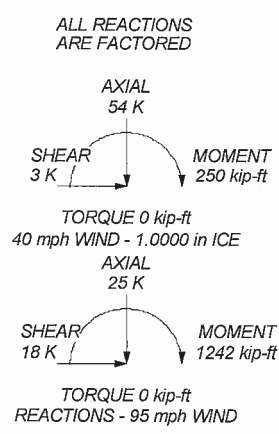
TYPE	ELEVATION	TYPE	ELEVATION
(2) 7770.00 Panels w/ Pipe Mount (ATT / E)	103	Raycap OVP Box (ATT / E)	100
(2) 7770.00 Panels w/ Pipe Mount (ATT / E)	103	Empty Pipe Mount (ATT / E)	100
(2) 7770.00 Panels w/ Pipe Mount (ATT / E)	103	Empty Pipe Mount (ATT / E)	100
(2) 7770.00 Panels w/ Pipe Mount (ATT / E)	103	Empty Pipe Mount (ATT / E)	100
HPA-65R-BUU-H6 w/ Pipe Mounts (ATT / P)	103	Platform w/o Rails with Ladder (ATT / E)	100
HPA-65R-BUU-H6 w/ Pipe Mounts (ATT / P)	103	AIR21 B2A B4P w/ pipe Mount (T-Mobile / E)	94
HPA-65R-BUU-H6 w/ Pipe Mounts (ATT / P)	103	AIR21 B2A B4P w/ pipe Mount (T-Mobile / E)	94
HPA-65R-BUU-H6 w/ Pipe Mounts (ATT / P)	103	AIR21 B2A B4P w/ pipe Mount (T-Mobile / E)	94
Lightning Rod (E)	100.5	AIR21 B4A B2P w/ pipe Mount (T-Mobile / E)	94
RRUS-32 B2 (ATT / P)	100	AIR21 B4A B2P w/ pipe Mount (T-Mobile / E)	94
RRUS-32 B2 (ATT / P)	100	AIR21 B4A B2P w/ pipe Mount (T-Mobile / E)	94
RRUS-32 B2 (ATT / P)	100	AIR21 B4A B2P w/ pipe Mount (T-Mobile / E)	94
RRUS-11 (ATT / E)	100	AIR21 B4A B2P w/ pipe Mount (T-Mobile / E)	94
RRUS-11 (ATT / E)	100	KRY 112 71/2 (T-Mobile / E)	94
RRUS-11 (ATT / E)	100	KRY 112 71/2 (T-Mobile / E)	94
TT19-08BP111-001 (ATT / E)	100	KRY 112 71/2 (T-Mobile / E)	94
TT19-08BP111-001 (ATT / E)	100	Empty Pipe Mount (T-Mobile / E)	94
TT19-08BP111-001 (ATT / E)	100	Empty Pipe Mount (T-Mobile / E)	94
DTMABP7819VG12A Twin TMA (ATT / E)	100	Empty Pipe Mount (T-Mobile / E)	94
DTMABP7819VG12A Twin TMA (ATT / E)	100	LP Platform w/o Rails (T-Mobile / E)	94
DTMABP7819VG12A Twin TMA (ATT / E)	100	GPS (E)	10.5
DTMABP7819VG12A Twin TMA (ATT / E)	100	2.25ft Standoff (E)	9.5


MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-65	65 ksi	80 ksi			

TOWER DESIGN NOTES

1. Tower is located in Hartford County, Connecticut.
2. Tower designed for Exposure C to the TIA-222-G Standard.
3. Tower designed for a 95 mph basic wind in accordance with the TIA-222-G Standard.
4. Tower is also designed for a 40 mph basic wind with 1.00 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60 mph wind.
6. Tower Structure Class II.
7. Topographic Category 1 with Crest Height of 0.00 ft
8. OWNER: FRONTIER COMMUNICATIONS - WINDSOR CO SITE
9. 2016 CT SBC / 2012 IBC / ULTIMATE WIND 122 MPH / RISK CAT. 2
10. TOWER RATING: 92.1%



 Malouf Engineering Int'l Inc. 17950 Preston Road, STE 720 Dallas, Texas 75252 Phone: (972) 783 2578 FAX: (972) 783 2583 maloufengineering.com	Job: 100ft Monopole, Windsor Site #CT1026	
	Project: CT00873M-17V0	
	Client: EMPIRE TELECOM / AT&T Code: TIA-222-G	Drawn by: KM Date: 08/21/17
	Path:	App'd. Scale: NTS
	Dwg No. E-1	

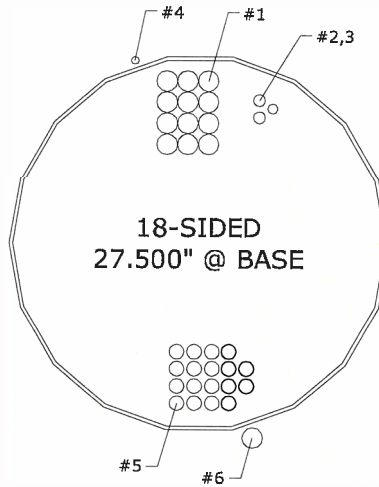
ALL RIGHTS RESERVED. THIS DRAWING SHALL REMAIN THE PROPERTY OF MALOUF ENGINEERING INTERNATIONAL, INC. NO PART HEREOF SHALL BE REPRODUCED, COPIED, ADAPTED, DISCLOSED, OR DISTRIBUTED TO OTHERS WITHOUT WRITTEN PERMISSION OF MEI, INC.

No.	QTY.	DESCRIPTION	ELEV.	TENANT
1	12	1 1/4"	100'	ATT / E
2	2	3/4" DC Power Cable	100'	ATT / E
3	1	5/8" Fiber Cable	100'	ATT / E
4	1	1/2"	10'	ATT / E
5	18	7/8"	94'	T-Mobile / E / F
6	1	Huber-Suhner Hybrid Cable	94'	T-Mobile / E

LEGEND:

- E = EXISTING #X
- P = PROPOSED #X
- F = FUTURE #X
- R = REMOVE #X
- TO RELOCATE #X

CONTACT MEI IF LINE LAYOUT IS DIFFERENT FROM WHAT IS SHOWN BELOW.



101 PLAN: SCHEMATIC Tx-LINE LAYOUT
SCALE: NOT TO SCALE

- NOTES:**
1. Tx LINE LAYOUT IS SCHEMATIC ONLY, BASED UPON MEI MAPPING (SUB: HTS) DATED 8/15/2017 .
 2. NEW BRACKET SUPPORT SPECIFICATION BY OTHERS.



OWNER: FRONTIER COMMUNICATIONS
WINDSOR CO SITE

08/21/2017

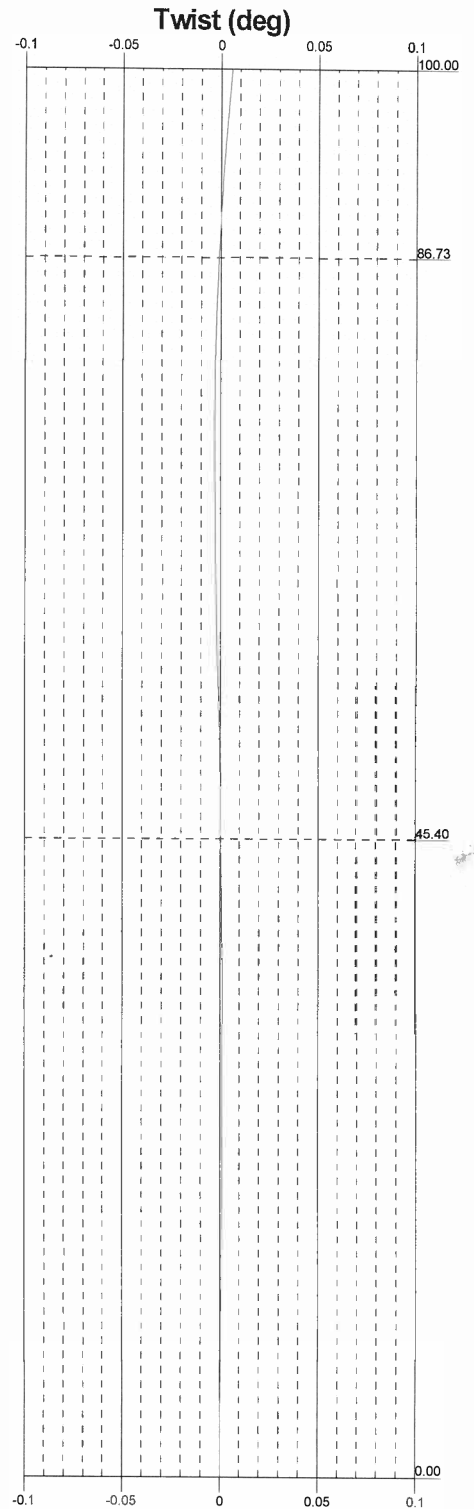
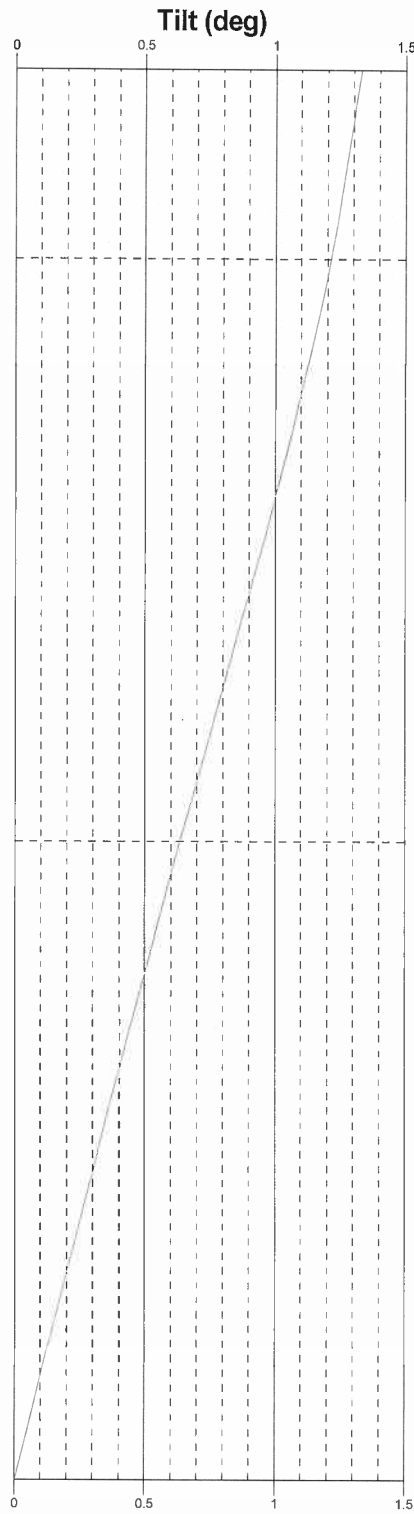
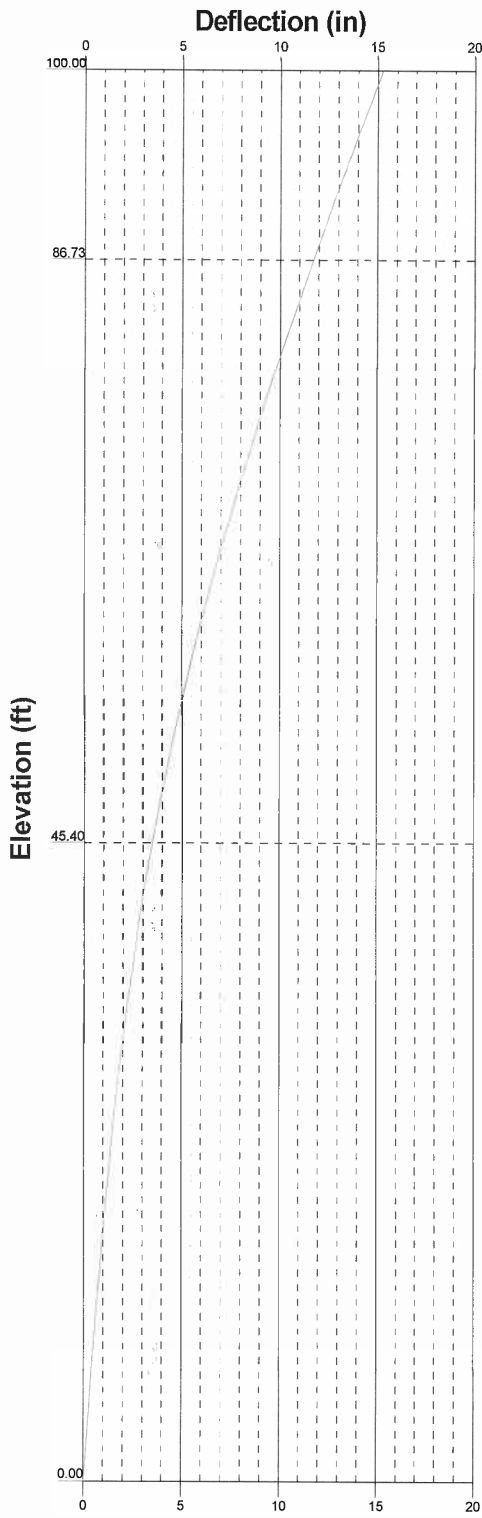
MALOUF ENGINEERING INTERNATIONAL, INC.


STRUCTURAL CONSULTANTS

17950 PRESTON ROAD SUITE 720
 DALLAS, TEXAS 75252-5635
 972-783-2578 (fax: 2583)
 www.maloufengineering.com
 © MEI, INC. 2017



100ft POLE, WINDSOR SITE #CT1026		
MONOPOLE TxLINE LAYOUT		
MEI PROJECT ID	SHEET NUMBER	REV.
CT00873M-17V0	L01	0



 MALOUF ENGINEERING INT'L, INC. STRUCTURAL CONSULTANTS maloufengineering.com	Malouf Engineering Int'l Inc. 17950 Preston Road, STE 720 Dallas, Texas 75252 Phone: (972) 783 2578 FAX: (972) 783 2583	Job: 100ft Monopole, Windsor Site #CT1026 Project: CT00873M-17V0	Client: EMPIRE TELECOM / AT&T	Drawn by: KM	App'd.
	Code: TIA-222-G	Date: 08/21/17	Scale: NTS		
	Path:				
	Dwg No. E-5				

tnxTower Malouf Engineering Int'l Inc. 17950 Preston Road, STE 720 Dallas, Texas 75252 Phone: (972) 783 2578 FAX: (972) 783 2583	Job 100ft Monopole, Windsor Site #CT1026	Page 1 of 4
	Project CT00873M-17V0	Date 17:00:54 08/21/17
	Client EMPIRE TELECOM / AT&T	Designed by KM

Tower Input Data

There is a pole section.

This tower is designed using the TIA-222-G standard.

The following design criteria apply:

- Tower is located in Hartford County, Connecticut.
- ASCE 7-10 Wind Data is used (wind speeds converted to nominal values).
- Basic wind speed of 95 mph.
- Structure Class II.
- Exposure Category C.
- Topographic Category 1.
- Crest Height 0.00 ft.
- Nominal ice thickness of 1.0000 in.
- Ice thickness is considered to increase with height.
- Ice density of 56 pcf.
- A wind speed of 40 mph is used in combination with ice.
- Temperature drop of 50 °F.
- Deflections calculated using a wind speed of 60 mph.
- OWNER: FRONTIER COMMUNICATIONS - WINDSOR CO SITE.
- 2016 CT SBC / 2012 IBC / ULTIMATE WIND 122 MPH / RISK CAT. 2.
- A non-linear (P-delta) analysis was used.
- Pressures are calculated at each section.
- Stress ratio used in pole design is 1.
- Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Placement	Total Number	Weight
	ft		plf
1/2 (ATT / E)	10.50 - 0.00	1	0.25
Huber Suhner Hybrid Cable (T-Mobile / E)	94.00 - 0.00	1	1.70

Feed Line/Linear Appurtenances - Entered As Area

Description	Placement	Total Number	Weight
	ft		plf
1 1/4 (ATT / E)	100.00 - 0.00	12	0.66
			0.66
			0.66
3/4" DC Power Cable (ATT / E)	100.00 - 0.00	2	1.00
			1.00
			1.00
5/8" Fiber Cable (ATT / E)	100.00 - 0.00	1	0.80
			0.80
			0.80
7/8 (T-Mobile / E / Reserved)	94.00 - 0.00	18	0.54
			0.54
			0.54

tnxTower Malouf Engineering Int'l Inc. 17950 Preston Road, STE 720 Dallas, Texas 75252 Phone: (972) 783 2578 FAX: (972) 783 2583	Job	100ft Monopole, Windsor Site #CT1026	Page	2 of 4
	Project	CT00873M-17V0	Date	17:00:54 08/21/17
	Client	EMPIRE TELECOM / AT&T	Designed by	KM

Discrete Tower Loads

Description	Placement ft	Weight K	Description	Placement ft	Weight K
Lightning Rod (E)	100.50	0.01	Empty Pipe Mount (ATT / E)	100.00	0.02
		0.01			0.04
		0.02			0.06
(2) 7770.00 Panels w/ Pipe Mount (ATT / E)	103.00	0.04	Empty Pipe Mount (ATT / E)	100.00	0.02
		0.09			0.04
		0.15			0.06
(2) 7770.00 Panels w/ Pipe Mount (ATT / E)	103.00	0.04	Empty Pipe Mount (ATT / E)	100.00	0.02
		0.09			0.04
		0.15			0.06
(2) 7770.00 Panels w/ Pipe Mount (ATT / E)	103.00	0.04	Platform w/o Rails with Ladder (ATT / E)	100.00	1.80
		0.09			2.45
		0.15			3.10
HPA-65R-BUU-H6 w/ Pipe Mounts (ATT / P)	103.00	0.09	AIR21 B2A B4P w/ pipe Mount (T-Mobile / E)	94.00	0.13
		0.17			0.18
		0.26			0.25
HPA-65R-BUU-H6 w/ Pipe Mounts (ATT / P)	103.00	0.09	AIR21 B2A B4P w/ pipe Mount (T-Mobile / E)	94.00	0.13
		0.17			0.18
		0.26			0.25
HPA-65R-BUU-H6 w/ Pipe Mounts (ATT / P)	103.00	0.09	AIR21 B2A B4P w/ pipe Mount (T-Mobile / E)	94.00	0.13
		0.17			0.18
		0.26			0.25
RRUS-32 B2 (ATT / P)	100.00	0.05	AIR21 B4A B2P w/ pipe Mount (T-Mobile / E)	94.00	0.13
		0.07			0.18
		0.10			0.25
RRUS-32 B2 (ATT / P)	100.00	0.05	AIR21 B4A B2P w/ pipe Mount (T-Mobile / E)	94.00	0.13
		0.07			0.18
		0.10			0.25
RRUS-32 B2 (ATT / P)	100.00	0.05	AIR21 B4A B2P w/ pipe Mount (T-Mobile / E)	94.00	0.13
		0.07			0.18
		0.10			0.25
RRUS-11 (ATT / E)	100.00	0.05	KRY 112 71/2 (T-Mobile / E)	94.00	0.01
		0.07			0.02
		0.10			0.03
RRUS-11 (ATT / E)	100.00	0.05	KRY 112 71/2 (T-Mobile / E)	94.00	0.01
		0.07			0.02
		0.10			0.03
RRUS-11 (ATT / E)	100.00	0.05	KRY 112 71/2 (T-Mobile / E)	94.00	0.01
		0.07			0.02
		0.10			0.03
TT19-08BP111-001 (ATT / E)	100.00	0.02	Empty Pipe Mount (T-Mobile / E)	94.00	0.02
		0.03			0.04
		0.03			0.06
TT19-08BP111-001 (ATT / E)	100.00	0.02	Empty Pipe Mount (T-Mobile / E)	94.00	0.02
		0.03			0.04
		0.03			0.06
TT19-08BP111-001 (ATT / E)	100.00	0.02	Empty Pipe Mount (T-Mobile / E)	94.00	0.02
		0.03			0.04
		0.03			0.06
DTMABP7819VG12A Twin TMA (ATT / E)	100.00	0.02	LP Platform w/o Rails (T-Mobile / E)	94.00	1.50
		0.03			2.02
		0.04			2.55
DTMABP7819VG12A Twin TMA (ATT / E)	100.00	0.02	GPS (E)	10.50	0.01
		0.03			0.01
		0.04			0.01
DTMABP7819VG12A Twin TMA (ATT / E)	100.00	0.02	2.25ft Standoff (E)	9.50	0.07
		0.03			0.11
		0.04			0.14
Raycap OVP Box (ATT / E)	100.00	0.03			
		0.05			
		0.08			

tnxTower Malouf Engineering Int'l Inc. 17950 Preston Road, STE 720 Dallas, Texas 75252 Phone: (972) 783 2578 FAX: (972) 783 2583	Job 100ft Monopole, Windsor Site #CT1026	Page 3 of 4
	Project CT00873M-17V0	Date 17:00:54 08/21/17
	Client EMPIRE TELECOM / AT&T	Designed by KM

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	100 - 86.7292	15.274	48	1.3317	0.0030
L2	89.2734 - 45.3958	12.362	48	1.2363	0.0021
L3	48.6094 - 0	3.931	48	0.6806	0.0012

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
103.00	(2) 7770.00 Panels w/ Pipe Mount	48	15.274	1.3317	0.0030	26732
100.50	Lightning Rod	48	15.274	1.3317	0.0030	26732
100.00	RRUS-32 B2	48	15.274	1.3317	0.0030	26732
94.00	AIR21 B2A B4P w/ pipe Mount	48	13.628	1.2805	0.0025	8911
10.50	GPS	48	0.546	0.1424	0.0003	14883
9.50	2.25ft Standoff	48	0.492	0.1288	0.0003	16449

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	100 - 86.7292	68.510	20	5.9864	0.0136
L2	89.2734 - 45.3958	55.439	20	5.5563	0.0096
L3	48.6094 - 0	17.619	20	3.0522	0.0052

tnxTower Malouf Engineering Int'l Inc. 17950 Preston Road, STE 720 Dallas, Texas 75252 Phone: (972) 783 2578 FAX: (972) 783 2583	Job 100ft Monopole, Windsor Site #CT1026	Page 4 of 4
	Project CT00873M-17V0	Date 17:00:54 08/21/17
	Client EMPIRE TELECOM / AT&T	Designed by KM

Base Plate Design Data

Plate Thickness	Number of Anchor Bolts	Anchor Bolt Size	Actual	Actual	Actual	Actual	Controlling Condition	Ratio
			Allowable Ratio Bolt Tension	Allowable Ratio Bolt Compression	Allowable Ratio Plate Stress	Allowable Ratio Stiffener Stress		
in		in	K	K	ksi	ksi		
2.5000	8	2.2500	81.52	88.10	3.671	23.870	Stiff	0.44
			223.65	371.27	54.000	54.000		
			0.36	0.24	0.07	0.44		✓

Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
L1	100 - 86.7292	Pole	TP16.3438x14.5x0.1875	1	-6.12	698.72	34.9	Pass
L2	86.7292 - 45.3958	Pole	TP21.7188x15.6153x0.25	2	8.38	975.82	58.8	Pass
L3	45.3958 - 0	Pole	TP27.5x20.7717x0.3125	3	26.52	1577.55	68.5	Pass
L3	80 - 45.333	Reinforcing	AERO MP305	8	-133.48	313.26	66.7	Pass
L3	45.333 - 0	Reinforcing	AERO MP306	5	-259.60	463.33	92.1	Pass
						Summary		
						Pole (L3)	68.5	Pass
						Reinforcing (L3)	92.1	Pass
						Base Plate	44.2	Pass
						RATING =	92.1	Pass

APPENDIX 2 – SOURCE / CHANGED CONDITION



From: McOmbler, Elissa <Elissa.McOmbler@FTR.com>
Sent: Thursday, July 13, 2017 10:17 AM
To: Mark Malouf
Subject: FW: Windsor CO - AT&T PDQ - CT1026 PDQ (Windsor CT) / FYI - tower information
Attachments: Windsor CO - AT&T - PDQ 061517.xls; Pages from Windsor CO Tower Drawings.pdf; Foundation Mapping before mods.pdf; Windsor 59344 - Geotechnical Report - Final.pdf; Windsor SA - Proposed Mods - May 2009.pdf; 2016 Windsor CO Monopole Inspection Report.pdf

Flag Status: Flagged

Mark,

This one is coming your way; it will include a structural analysis, tower mapping, and foundation mapping.....

Existing loading information per our records:

Tower Name	Owner Name	Antenna Type	AGL Antenna Mounting Height	Antenna Size	Quantity	Frontier or Known Azimuths	Notes
Windsor CO	Unknown	GPS	12'	6"	1		
Windsor CO	T-Mobile	Panels / Ericsson Air21	94'	56"x12"x8"	6	10, 130, 250	(18) 7/8" coax lines, (1) 1 5/8" hybrid line, 3 TIMAs (Ericsson KRY 112 71)
Windsor CO	AT&T	Panels	102'	55" & 72"	9	15, 140, 250	See PDQ

We have two tenants on the tower, and we don't have any reserved loading requirements.....

Thanks,
Elissa



Radio Frequency Emissions Analysis Report

AT&T Existing Facility

Site ID: CT1026

Windsor
419 Broad Street
Windsor, CT 6095

August 29, 2017

Centerline Communications Project Number: 950006-065

Site Compliance Summary	
Compliance Status:	COMPLIANT
Site total MPE% of FCC general population allowable limit:	7.44 %



August 29, 2017

AT&T Mobility – New England
Attn: John Benedetto, RF Manager
550 Cochituate Road
Suite 550 – 13&14
Framingham, MA 06040

Emissions Analysis for Site: **CT1026 – Windsor**

Centerline Communications, LLC (“Centerline”) was directed to analyze the proposed AT&T facility located at **419 Broad Street, Windsor, CT**, for the purpose of determining whether the emissions from the Proposed AT&T Antenna Installation located on this property are within specified federal limits.

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

All results were compared to the FCC (Federal Communications Commission) radio frequency exposure rules, 47 CFR 1.1307(b)(1) – (b)(3), to determine compliance with the Maximum Permissible Exposure (MPE) limits for General Population/Uncontrolled environments as defined below.

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

Population exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). The general population exposure limits for the 700 and 850 MHz Bands are approximately $467 \mu\text{W}/\text{cm}^2$ and $567 \mu\text{W}/\text{cm}^2$ respectively. The general population exposure limit for the 1900 MHz (PCS), 2100 MHz (AWS) and 2300 MHz (WCS) bands is $1000 \mu\text{W}/\text{cm}^2$. Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.



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

Additional details can be found in FCC OET 65.



CALCULATIONS

Calculations were performed for the proposed AT&T Wireless antenna facility located at **419 Broad Street, Windsor, CT**, using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. Since AT&T is proposing highly focused directional panel antennas, which project most of the emitted energy out toward the horizon, all calculations were performed assuming a lobe representing the maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was focused at the base of the tower. For this report the sample point is the top of a 6-foot person standing at the base of the tower.

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

All emissions values for additional carriers were taken from the Connecticut Siting Council (CSC) active MPE database. Values in this database are provided by the individual carriers themselves

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

Technology	Frequency Band	Channel Count	Transmit Power per Channel (W)
UMTS	850 MHz	2	30
UMTS	1900 MHz (PCS)	2	30
LTE	700 MHz	2	60
LTE	1900 MHz (PCS)	2	60
GSM	850 (Decommissioned)	0	0
GSM	1900 (Decommissioned)	0	0

Table 1: Channel Data Table



The following antennas listed in *Table 2* were used in the modeling for transmission in the 700 MHz, 850 MHz and 1900 MHz (PCS) frequency bands. This is based on feedback from the carrier with regards to anticipated antenna selection. Maximum gain values for all antennas are listed in the Inventory and Power Data table below. The maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was used for all calculations. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.

Sector	Antenna Number	Antenna Make / Model	Antenna Centerline (ft)
A	1	Powerwave 7770	100
A	2	CCI HPA-65R-BUU-H6	100
A	3	KMW AM-X-CD-16-65-00T-RET	100
B	1	Powerwave 7770	100
B	2	CCI HPA-65R-BUU-H6	100
B	3	KMW AM-X-CD-16-65-00T-RET	100
C	1	Powerwave 7770	100
C	2	CCI HPA-65R-BUU-H6	100
C	3	KMW AM-X-CD-16-65-00T-RET	100

Table 2: Antenna Data

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



RESULTS

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

Antenna ID	Antenna Make / Model	Frequency Bands	Antenna Gain (dBd)	Channel Count	Total TX Power (W)	ERP (W)	MPE %
Antenna A1	Powerwave 7770	850 MHz / 1900 MHz (PCS)	11.4 / 13.4	4	120	2,140.89	1.13
Antenna A2	CCI HPA-65R-BUU-H6	700 MHz / 1900 MHz (PCS)	11.95 / 14.75	4	240	5,462.56	3.10
Antenna A3	KMW AM-X-CD-16-65-00T-RET	850 MHz / 1900 MHz (Decommissioned)	NA	0	0	0.00	0.00
Sector A Composite MPE%							4.22
Antenna B1	Powerwave 7770	850 MHz / 1900 MHz (PCS)	11.4 / 13.4	4	120	2,140.89	1.13
Antenna B2	CCI HPA-65R-BUU-H6	700 MHz / 1900 MHz (PCS)	11.95 / 14.75	4	240	5,462.56	3.10
Antenna B3	KMW AM-X-CD-16-65-00T-RET	850 MHz / 1900 MHz (Decommissioned)	NA	0	0	0.00	0.00
Sector B Composite MPE%							4.22
Antenna C1	Powerwave 7770	850 MHz / 1900 MHz (PCS)	11.4 / 13.4	4	120	2,140.89	1.13
Antenna C2	CCI HPA-65R-BUU-H6	700 MHz / 1900 MHz (PCS)	11.95 / 14.75	4	240	5,462.56	3.10
Antenna C3	KMW AM-X-CD-16-65-00T-RET	850 MHz / 1900 MHz (Decommissioned)	NA	0	0	0.00	0.00
Sector C Composite MPE%							4.22

Table 3: AT&T Emissions Levels



The Following table (*table 4*) shows all additional carriers on site and their MPE% as recorded in the CSC active MPE database for this facility along with the newly calculated maximum AT&T MPE contributions per this report. FCC OET 65 specifies that for carriers utilizing directional antennas that the highest recorded sector value be used for composite site MPE values due to their greatly reduced emissions contributions in the directions of the adjacent sectors. For this site, all three sectors have the same configuration yielding the same results on all three sectors. *Table 5* below shows a summary for each AT&T Sector as well as the composite MPE value for the site.

Site Composite MPE%	
Carrier	MPE%
AT&T – Max Sector Value	4.22 %
Clearwire	0.55 %
MetroPCS	2.63 %
T-Mobile	0.04 %
Site Total MPE %:	7.44 %

Table 4: All Carrier MPE Contributions

AT&T Sector A Total:	4.22 %
AT&T Sector B Total:	4.22 %
AT&T Sector C Total:	4.22 %
Site Total:	7.44 %

Table 5: Site MPE Summary



FCC OET 65 specifies that for carriers utilizing directional antennas that the highest recorded sector value be used for composite site MPE values due to their greatly reduced emissions contributions in the directions of the adjacent sectors. *Table 6* below details a breakdown by frequency band and technology for the MPE power values for the maximum calculated AT&T sector(s). For this site, all three sectors have the same configuration yielding the same results on all three sectors.

AT&T Frequency Band / Technology (All Sectors)	# Channels	Watts ERP (Per Channel)	Height (feet)	Total Power Density ($\mu\text{W}/\text{cm}^2$)	Frequency (MHz)	Allowable MPE ($\mu\text{W}/\text{cm}^2$)	Calculated % MPE
AT&T 850 MHz UMTS	2	414.12	100	3.37	850 MHz	567	0.59%
AT&T 1900 MHz (PCS) UMTS	2	656.33	100	5.34	1900 MHz (PCS)	1000	0.53%
AT&T 700 MHz LTE	2	940.05	100	7.65	700 MHz	467	1.64%
AT&T 1900 MHz (PCS) LTE	2	1,791.23	100	14.58	1900 MHz (PCS)	1000	1.46%
						Total:	4.22%

Table 6: AT&T Maximum Sector MPE Power Values



Summary

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

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

AT&T Sector	Power Density Value (%)
Sector A:	4.22 %
Sector B:	4.22 %
Sector C:	4.22 %
AT&T Maximum Total (per sector):	4.22 %
Site Total:	7.44 %
Site Compliance Status:	COMPLIANT

The anticipated composite MPE value for this site assuming all carriers present is **7.44 %** of the allowable FCC established general population limit sampled at the ground level. This is based upon values listed in the Connecticut Siting Council database for existing carrier emissions.

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

A handwritten signature in black ink, appearing to read "Scott Heffernan", is positioned above the contact information.

Scott Heffernan
RF Engineering Director
Centerline Communications, LLC
95 Ryan Drive, Suite 1
Raynham, MA 02767

USPS Tracking® Results

FAQs

Track Another Pac

Tracking Number: 70161370000047396091



Delivered

On Time

Expected Delivery On: Friday, September 1, 2017 ⓘ

Product & Tracking Information

[See Available Actions](#)

Postal Product:
First-Class Mail®

Features:
Certified Mail™

See tracking for related item:
9590940212715246890225
(/go/TrackConfirmAction?
tLabels=9590940212715246890225)

7016 1370 0000 4739 6091

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com®

WINDSOR, CT 06095

Certified Mail Fee	\$3.35	
Extra Services & Fees (check box, add fee as appropriate)		\$2.75
<input type="checkbox"/> Return Receipt (hardcopy)	\$0.00	\$0.00
<input type="checkbox"/> Return Receipt (electronic)	\$0.00	\$0.00
<input type="checkbox"/> Certified Mail Restricted Delivery	\$0.00	\$0.00
<input type="checkbox"/> Adult Signature Required	\$0.00	\$0.00
<input type="checkbox"/> Adult Signature Restricted Delivery	\$0.00	\$0.00
Postage	\$1.82	
Total Postage and Fees	\$7.92	

Postmark Here
08/30/2017

08/30/2017

OFFICIAL U.S. MAIL

Sept To
Eric Barz
Street and Apt. No., or PO Box No.
275 Broad Street
City, State, ZIP+4®
Windsor, CT 06095 CT 1026

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

DATE & TIME

STATUS OF ITEM

LOCATION

September 1, 2017, 9:16
am

Delivered, Left with
Individual

WINDSOR, CT 06095

Your item was delivered to an individual at the address at 9:16 am on September 1, 2017 in WINDSOR, CT 06095.

September 1, 2017, 6:04 am

Arrived at Unit

WINDSOR, CT 06095

DATE & TIME	STATUS OF ITEM	LOCATION
September 1, 2017, 4:38 am	Departed USPS Regional Facility	SPRINGFIELD MA NETWORK DISTRIBUTION CENTER
August 31, 2017, 9:54 am	Arrived at USPS Regional Facility	SPRINGFIELD MA NETWORK DISTRIBUTION CENTER
August 31, 2017, 8:57 am	Departed USPS Regional Facility	BOSTON MA DISTRIBUTION CENTER
August 31, 2017, 12:02 am	Arrived at USPS Regional Origin Facility	BOSTON MA DISTRIBUTION CENTER
August 30, 2017, 5:23 pm	Departed Post Office	NORTH BILLERICA, MA 01862
August 30, 2017, 1:32 pm	USPS in possession of item	NORTH BILLERICA, MA 01862

See Less ^

Available Actions

Text & Email Updates v

See Less ^

Can't find what you're looking for?

Go to our FAQs section to find answers to your tracking questions.

FAQs (<http://faq.usps.com/?articleId=220900>)

There's an easier way to keep track of your mail and packages.

Now, you can digitally preview your mail and automatically track packages from a secure, online dashboard. Sign up for Informed Delivery® to:

View grayscale images of the exterior, address side of letter-sized mailpieces scheduled to arrive soon*

Track the delivery status of packages without entering a tracking number

Schedule a package to be redelivered if you missed a delivery

Set up email and/or text notifications to track the delivery status of your package(s)

And more!

Sign Up

* Images are only provided for letter-sized mailpieces that are processed through USPS® automated equipment. (https://reg.usps.com/entreg/RegistrationAction_input?

(<https://www.usps.com/>)

[app=UspsTools&appURL=https%](#)

HELPFUL LINKS

- Contact Us
(<https://www.usps.com/help/welcome.htm>)
- Site Index
(<https://www.usps.com/globals/siteindex.htm>)
- FAQs (<http://faq.usps.com/>)

ON ABOUT.USPS.COM

- About USPS Home
(<http://about.usps.com/>)
- Newsroom
(<http://about.usps.com/news/welcome.htm>)
- USPS Service Updates
(<http://about.usps.com/news/services/alerts/welcome.htm>)
- Forms & Publications
(<http://about.usps.com/forms/publications/welcome.htm>)
- Government Services
(<https://www.usps.com/gov-services/gov-services.htm>)
- Careers
(<http://about.usps.com/careers/welcome.htm>)

OTHER USPS SITES

- Business Customer Gateway
(<https://gateway.usps.com/>)
- Postal Inspectors
(<http://www.postalinspectors.uspis.gov>)
- Inspector General
(<http://www.uspsoig.gov>)
- Postal Explorer
(<http://pe.usps.gov>)
- National Postal Museum
(<http://www.postalmuseum.si.edu>)
- Resources for Developers
(<https://www.usps.com/webtools/welcome.htm>)

LEGAL INFORMATION

- Privacy Policy
(<http://about.usps.com/who-we-are/privacy-policy/privacy-policy-highlights.htm>)
- Terms of Use
(<http://about.usps.com/termsofuse.htm>)
- FOIA
(<http://about.usps.com/who-we-are/foia/welcome.htm>)
- No FEAR Act EEO Data
(<http://about.usps.com/who-we-are/eo-12812/welcome.htm>)

Copyright © 2017 USPS. All Rights Reserved.



(<https://www.facebook.com/USPS?rf=108501355848630>)



(<https://twitter.com/usps>)



(<http://www.pinterest.com/uspsstamps/>)



(<https://www.youtube.com/usps>)

USPS Tracking® Results

FAQs >

Track Another Pack

2009 6E9L 2000 025T 5T0L

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
 Domestic Mail Only

For delivery information, visit our website at www.usps.com®

ALLEN, TX 75013

Certified Mail Fee	\$3.35
Extra Services & Fees (check box, add fee as appropriate)	\$1.75
<input type="checkbox"/> Return Receipt (hardcopy)	\$0.00
<input type="checkbox"/> Return Receipt (electronic)	\$0.00
<input type="checkbox"/> Certified Mail Restricted Delivery	\$0.00
<input type="checkbox"/> Adult Signature Required	\$0.00
<input type="checkbox"/> Adult Signature Restricted Delivery	\$0.00
Postage	\$2.45
Total Postage and Fees	\$8.55

Postmark Here: **ALLEN, TX 75013 AUG 30 2017**

Sent To: **Kelley Stewart**
 Street and Apt. No., or PO Box No.: **805 Central Expressway Swtn**
 City, State, ZIP+4®: **Allen, TX 75013**

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

Tracking Number: 70151520000276396002



Delivered

Expected Delivery By: Saturday, September 2, 2017 ⓘ

Product & Tracking Information

See Available Actions

Postal Product:
First-Class Mail®

Features:
Certified Mail™

See tracking for related item:
 9590940212715246890256
 (/go/TrackConfirmAction?
 tLabels=9590940212715246890256)

DATE & TIME	STATUS OF ITEM	LOCATION
September 2, 2017, 2:57 pm	Delivered	ALLEN, TX 75013
September 2, 2017, 2:36 pm	Arrived at Unit	ALLEN, TX 75013

Your item was delivered at 2:57 pm on September 2, 2017 in ALLEN, TX 75013.

DATE & TIME	STATUS OF ITEM	LOCATION
September 2, 2017, 4:50 am	Departed USPS Regional Facility	COPPELL TX DISTRIBUTION CENTER
September 1, 2017, 9:57 am	In Transit to Destination	ON ITS WAY TO ALLEN, TX 75013

[See More](#) 

Available Actions

[Text & Email Updates](#)[See Less](#) 

Can't find what you're looking for?

Go to our FAQs section to find answers to your tracking questions.

FAQs (<http://faq.usps.com/?articleId=220900>)

There's an easier way to keep track of your mail and packages.

Now, you can digitally preview your mail and automatically track packages from a secure, online dashboard. Sign up for Informed Delivery® to:

- View grayscale images of the exterior, address side of letter-sized mailpieces scheduled to arrive soon*
- Track the delivery status of packages without entering a tracking number
- Schedule a package to be redelivered if you missed a delivery
- Set up email and/or text notifications to track the delivery status of your package(s)

And more!

Sign Up

([https://reg.usps.com/entreg/RegistrationAction_input?](https://reg.usps.com/entreg/RegistrationAction_input?app=Uspstools&appURL=https%3A%2F%2Ftools.usps.com%2Fgo%2FTrackConfirmAction%21input%3FtRef%3Dfullpage%26tLc%3D2%26text28777%3D%26tLabels%3D70151520000276396002%252C)

* Images are only provided for letter-sized mailpieces that are processed through USPS® automated equipment. [app=Uspstools&appURL=https%](https://reg.usps.com/entreg/RegistrationAction_input?app=Uspstools&appURL=https%3A%2F%2Ftools.usps.com%2Fgo%2FTrackConfirmAction%21input%3FtRef%3Dfullpage%26tLc%3D2%26text28777%3D%26tLabels%3D70151520000276396002%252C)

(<https://www.usps.com/>)

[3A%2F%2Ftools.usps.com%](https://www.usps.com/entreg/RegistrationAction_input?app=Uspstools&appURL=https%3A%2F%2Ftools.usps.com%2Fgo%2FTrackConfirmAction%21input%3FtRef%3Dfullpage%26tLc%3D2%26text28777%3D%26tLabels%3D70151520000276396002%252C)

[2Fgo%2FTrackConfirmAction%](https://www.usps.com/entreg/RegistrationAction_input?app=Uspstools&appURL=https%3A%2F%2Ftools.usps.com%2Fgo%2FTrackConfirmAction%21input%3FtRef%3Dfullpage%26tLc%3D2%26text28777%3D%26tLabels%3D70151520000276396002%252C)

[21input%3FtRef%3Dfullpage%](https://www.usps.com/entreg/RegistrationAction_input?app=Uspstools&appURL=https%3A%2F%2Ftools.usps.com%2Fgo%2FTrackConfirmAction%21input%3FtRef%3Dfullpage%26tLc%3D2%26text28777%3D%26tLabels%3D70151520000276396002%252C)

[26tLc%3D2%26text28777%3D%](https://www.usps.com/entreg/RegistrationAction_input?app=Uspstools&appURL=https%3A%2F%2Ftools.usps.com%2Fgo%2FTrackConfirmAction%21input%3FtRef%3Dfullpage%26tLc%3D2%26text28777%3D%26tLabels%3D70151520000276396002%252C)

[26tLabels%](https://www.usps.com/entreg/RegistrationAction_input?app=Uspstools&appURL=https%3A%2F%2Ftools.usps.com%2Fgo%2FTrackConfirmAction%21input%3FtRef%3Dfullpage%26tLc%3D2%26text28777%3D%26tLabels%3D70151520000276396002%252C)

[3D70151520000276396002%](https://www.usps.com/entreg/RegistrationAction_input?app=Uspstools&appURL=https%3A%2F%2Ftools.usps.com%2Fgo%2FTrackConfirmAction%21input%3FtRef%3Dfullpage%26tLc%3D2%26text28777%3D%26tLabels%3D70151520000276396002%252C)

[252C\)](https://www.usps.com/entreg/RegistrationAction_input?app=Uspstools&appURL=https%3A%2F%2Ftools.usps.com%2Fgo%2FTrackConfirmAction%21input%3FtRef%3Dfullpage%26tLc%3D2%26text28777%3D%26tLabels%3D70151520000276396002%252C)

HELPFUL LINKS

Contact Us
 (<https://www.usps.com/help/welcome.htm>)
 Site Index
 (<https://www.usps.com/globals/siteindex.htm>)
 FAQs (<http://faq.usps.com/>)

ON ABOUT.USPS.COM

About USPS Home
 (<http://about.usps.com/>)
 Newsroom
 (<http://about.usps.com/news/welcome.htm>)
 USPS Service Updates
 (<http://about.usps.com/news/services/alerts/welcome.htm>)
 Forms & Publications
 (<http://about.usps.com/forms-publications/welcome.htm>)
 Government Services
 (<https://www.usps.com/gov-services/gov-services.htm>)
 Careers
 (<http://about.usps.com/careers/welcome.htm>)

OTHER USPS SITES

Business Customer Gateway
 (<https://gateway.usps.com/>)
 Postal Inspectors
 (<https://postalinspectors.uspis.gov/>)
 Inspector General
 (<http://www.uspsoig.gov/>)
 Postal Explorer
 (<http://pe.usps.gov/>)
 National Postal Museum
 (<http://www.postalmuseum.si.edu/>)
 Resources for Developers
 (<https://www.usps.com/webtools/welcome.htm>)

LEGAL INFORMATION

Privacy Policy
 (<http://about.usps.com/who-we-are/privacy-policy/privacy-policy-highlights.htm>)
 Terms of Use
 (<http://about.usps.com/termsfuse.htm>)
 FOIA
 (<http://about.usps.com/who-we-are/foia/welcome.htm>)
 No FEAR Act EEO Data
 (<http://about.usps.com/who-we-are/foia/welcome.htm>)

Copyright © 2017 USPS. All Rights Reserved.



(<https://www.facebook.com/USPS?rf=108501355848630>)



(<https://twitter.com/usps>)



(<http://www.pinterest.com/uspsstamps/>)



(<https://www.youtube.com/usps>)

USPS Tracking® Results

FAQs >

Track Another Package

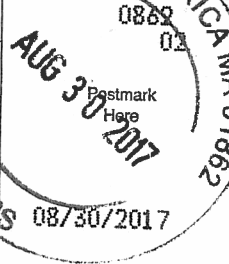
7016 1370 0000 4739 6084

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
 Domestic Mail Only

For delivery information, visit our website at www.usps.com®

WINDSOR, CT 06095

Certified Mail Fee	\$3.35
Extra Services & Fees (check box, add fee as appropriate)	\$2.75
<input type="checkbox"/> Return Receipt (hardcopy)	\$0.00
<input type="checkbox"/> Return Receipt (electronic)	\$0.00
<input type="checkbox"/> Certified Mail Restricted Delivery	\$0.00
<input type="checkbox"/> Adult Signature Required	\$0.00
<input type="checkbox"/> Adult Signature Restricted Delivery	\$0.00
Postage	\$1.82
Total Postage and Fees	\$7.92



Sent To: Robert Ruzzo
 Street and Apt. No., or PO Box No.: 275 Broad Street
 City, State, ZIP+4®: Windsor CT 06095
 PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

Tracking Number: 70161370000047396084



Delivered

On Time

Expected Delivery On: Friday, September 1, 2017 ⓘ

Product & Tracking Information

See Available Actions

Postal Product:
 First-Class Mail®


Features:
 Certified Mail™

See tracking for related item:
 9590940212715246890232
 (/go/TrackConfirmAction?
 tLabels=9590940212715246890232)

DATE & TIME	STATUS OF ITEM	LOCATION
September 1, 2017, 9:16 am	Delivered, Left with Individual	WINDSOR, CT 06095
September 1, 2017, 6:04 am	Arrived at Unit	WINDSOR, CT 06095

Your item was delivered to an individual at the address at 9:16 am on September 1, 2017 in WINDSOR, CT 06095.

DATE & TIME	STATUS OF ITEM	LOCATION
September 1, 2017, 4:38 am	Departed USPS Regional Facility	SPRINGFIELD MA NETWORK DISTRIBUTION CENTER
August 31, 2017, 9:54 am	Arrived at USPS Regional Facility	SPRINGFIELD MA NETWORK DISTRIBUTION CENTER

See More 

Available Actions

Text & Email Updates 

See Less 

Can't find what you're looking for?

Go to our FAQs section to find answers to your tracking questions.

FAQs (<http://faq.usps.com/?articleId=220900>)

3D70161370000047396084%

HELPFUL LINKS

Contact Us

(<https://www.usps.com/help/welcome.htm>)

Site Index

(<https://www.usps.com/globals/siteindex.htm>)

FAQs (<http://faq.usps.com/>)

ON ABOUT.USPS.COM

About USPS Home

(<http://about.usps.com/>)

Newsroom

(<http://about.usps.com/news/welcome.htm>)

USPS Service Updates

(<http://about.usps.com/news/servicealerts/welcome.htm>)

Forms & Publications

(<http://about.usps.com/forms-publications/welcome.htm>)

Government Services

(<https://www.usps.com/government-services/gov-services.htm>)

Careers

(<http://about.usps.com/careers/welcome.htm>)

OTHER USPS SITES

252C)

Business Customer Gateway

(<https://gateway.usps.com/>)

Postal Inspectors

(<https://postalinspectors.uspis.gov/>)

Inspector General

(<http://www.uspsoig.gov/>)

Postal Explorer

(<http://pe.usps.gov/>)

National Postal Museum

(<http://www.postalmuseum.si.edu/>)

Resources for Developers

(<https://www.usps.com/webtools/welcome.htm>)

LEGAL INFORMATION

Privacy Policy

(<http://about.usps.com/who-we-are/privacy-policy/privacy-policy-highlights.htm>)

Terms of Use

(<http://about.usps.com/termsofuse.htm>)

FOIA

(<http://about.usps.com/who-we-are/foia/welcome.htm>)

No FEAR Act EEO Data

(<http://about.usps.com/who-we-are/foia/welcome.htm>)

Copyright © 2017 USPS. All Rights Reserved.



(<https://www.facebook.com/USPS?rf=108501355848630>)



(<https://twitter.com/usps>)



(<http://www.pinterest.com/uspsstamps/>)



(<https://www.youtube.com/usps>)

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

The Honorable Donald S. Trinks
 Mayor, Town of Windsor
 275 Broad Street
 Windsor, CT 06095



9590 9402 1271 5246 8902 49

2. Article Number (Transfer from service label)

7016 1370 0000 4741 1152

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X J. Shwayburt

- Agent
- Addressee

B. Received by (Printed Name)

J. Shwayburt

C. Date of Delivery

D. Is delivery address different from item 1? Yes
 If YES, enter delivery address below: No

3. Service Type

- Adult Signature
- Adult Signature Restricted Delivery
- Certified Mail®
- Certified Mail Restricted Delivery
- Collect on Delivery
- Collect on Delivery Restricted Delivery
- Insured Mail
- Insured Mail Restricted Delivery (over \$500)
- Priority Mail Express®
- Registered Mail™
- Registered Mail Restricted Delivery
- Return Receipt for Merchandise
- Signature Confirmation™
- Signature Confirmation Restricted Delivery