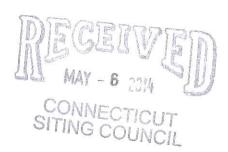




May 5, 2014

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



Re:

Notice of Exempt Modification – Addition of Three (3) Remote

Radio Units

Property Address: 338 Oxford Road, Oxford, CT 06478 (the "Property")

Applicant:

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

Dear Ms. Bachman:

AT&T currently maintains a wireless telecommunications facility on an existing 150-foot tower owned by Crown Castle International and located on the Property ("Tower"). AT&T's facility consists of nine (9) wireless telecommunication antennas at a height of 140-feet. The Connecticut Siting Council (the "Council") approved AT&T's use of the tower in the following prior decisions; EM-SCLP-108-010118, EM-AT&T-108-020729, EM-CING-084-167-062-108-060809, EM-CING-108-081006, EM-CING-108-120730 and EM-AT&T-108-140206 In its 08/17/12 decision (the "Decision"), the Council approved for AT&T to install six (6) Remote Radio Units (" RRU"s) but AT&T installed only three (3). AT&T now intends to install the remaining three (3) RRUs to complete the installation. This Exempt Modification Application is necessary because the 08/17/12 decision is over one year old. Please refer to Tab 1 for further specifications of the new RRUs.

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. §16-50i-72(b) (2), In accordance with R.C.S.A. §16-50j-73, a copy of this letter is being sent to George Temple, First Selectman, Town of Oxford, 486 Oxford Road, Oxford, CT 06478-1298. A copy of this letter is also being sent to Crown Castle International, 500 W Cummings Park # 3600, Woburn, MA 01801, owner of the property where the tower 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).

Connecticut Siting Council AT&T Exempt Mod Application Oxford, CT May 5, 2014

- 1. The proposed modifications will not result in an increase in the height of the existing tower. AT&T's new RRUs will be installed at the 140-foot level of the 150-foot tower.
- 2. The proposed modifications will not involve any changes to ground-mounted equipment and, therefore, will not require and extension of the site boundary.
- 3. The proposed modifications will not increase the noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.
- 4. The operation of the modified facility will not increase radio frequency (RF) emissions at the facility to a level at or above the Federal Communications Commission (FCC) safety standard. A RF emissions calculation for AT&T's modified facility was provided in the application which led to the 08/17/12 Decision. Further, attached as Tab 3 please find an RF Emissions Compliance Report and the Power Density calculations provided by the Council.
- 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 were approved for the addition of six (6) RRUs by structural analysis provided to the Council in the 2012 application which resulted in the 08/17/12 decision. For confirmation that only three (3) RRUs were installed, please see As-Built Plans dated 12/26/12 included in Tab 2.

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

Sincerely,

Adam F. Braillard

CC:

George Temple, First Selectman, Town of Oxford, CT. Crown Castle International, owner of the property

Enclosures

. **				

PROJECT INFORMATION ITEMS TO BE MOUNTED ON THE MONOPOLE: • NEW AT&T RRU'S: (1) RRU'S PER SECTOR WITH (3) SECTORS, FOR A TOTAL OF SCOPE OF WORK: ITEMS TO BE INSTALLED INSIDE THE EXISTING AT&T EQUIPMENT AREA: • (1) 850 RXAIT & (1) 850 LLC . (6) NEW AT&T DIPLEXERS TO REPLACE EXISTING (12) DIPLEXERS • (6) GSM/UMTS ANTENNAS, (3) LTE ANTENNAS, (3) RRU'S, (1) SURGE SUPRESSOR & (3) TMA'S TO REMAIN SITE ADDRESS: 338 OXFORD ROAD OXFORD, CT 06478 41' 25' 40.87" N LATITUDE: 41.42802 N LONGITUDE: -73.1086 W 73° 6' 30.96" W USID: 27032 FRITZ WILLIAM E JR & ELLEN S 338 OXFORD ROAD OXFORD, CT 06478 PROPERTY OWNER: TOWER MANAGER: CROWN CASTLE INTERNATIONAL 500 WEST CUMMINGS PARK #3600 WOBURN, MA 01801 TYPE OF SITE: MONOPOLE/INDOOR EQUIPMENT TOWER HEIGHT: RAD CENTER; 140'-0"± TELECOMMUNICATIONS FACILITY TELECOMMUNICATIONS FACILITY CURRENT USE: PROPOSED USE:



FA NUMBER: 10035376 SITE NUMBER: CT2090 SITE NAME: **OXFORD-338 OXFORD RD**

PROJECT TEAM

CLIENT REPRESENTATIVE

COMPANY: SMARTLINK, LLC 1997 ANNAPOLIS EXCHANGE PARKWAY, SUITE 200 ADDRESS:

CITY, STATE, ZIP: ANNAPOLIS, MD 21401 CONTACT: (980) 333-3640 E-MAIL: tboyce@smartlinklic.com

SITE ACQUISITION

COMPANY: SMARTLINK, LLC ADDRESS: 33 BOSTON POST ROAD WEST,

SUITE 210 CITY, STATE, ZIP: MARLBOROUGH, MA 01752 TODD OLIVER

(774) 369-3618 E-MAIL: todd.oliver@smartlinkllc.com

ENGINEERING

COMPANY: HUDSON DESIGN GROUP, LLC. 1600 OSGOOD STREET BUILDING 20 NORTH, SUITE 3090

CITY, STATE, ZIP: NORTH ANDOVER, MA 01845 DANIEL P. HAMM, PE CONTACT: PHONE: (978) 557-5553 X222 l.hamm@hudsondesigngrouplic.cor RF ENGINEER

PHONE:

E-MAIL:

COMPANY: AT&T MOBILITY -NEW ENGLAND ADDRESS: 550 COCHITUATE ROAD SUITE 550 13 AND 14

CITY, STATE, ZIP: FRAMINGHAM, MA 01701 CAMERON SYME CONTACT: (508) 596-7146 cs6970@att.com

CONSTRUCTION MANAGER

SMARTLINK, LLC. 33 BOSTON POST ROAD WEST COMPANY: ADDRESS

SUITE 210 CITY, STATE, ZIP: MARLBOROUGH, MA 01752

CONTACT: JERRY BRUNO PHONE: (508) 920-7349

jerry.bruno@smartlinkllc.com

E-MAIL:

	DRAWING INDEX	REV
T-1	TITLE SHEET	1
GN-1	GENERAL NOTES	1
A-1	COMPOUND & SHELTER PLANS	1
A-2	ANTENNA LAYOUTS & ELEVATIONS	1
A-3	DETAILS	1
		I

DIRECTIONS TO SITE FROM 550 COCHITUATE RD, FRAMINGHAM, MA:

HEAD WEST ON RT-30 W/COCHITUATE RD TOWARD CALDOR RD. D.3 MI. KEEP RIGHT ONTO RT-30 W/COCHITUATE RD. 0.5 MI. BEAR RIGHT ONTO RT-9 W/RT-30 W/ WORCESTER RD. 0.8 MI. KEEP LEFT ONTO RT-9 W/WORCESTER RD. 2.4 MI. TAKE RAMP RIGHT FOR I-90 WEST TOWARD WORCESTER/SPRINGFIELD. 33.5 MI. AT EXIT 9, TAKE RAMP RIGHT FOR I-84 TOWARD NY CITY/HARTFORD. 81.3 MI. AT EXIT 16, TAKE RAMP RIGHT FOR CT-188 TOWARD SOUTHFORD, 0.2 MI, TURN LEFT ONTO CT-188/STRONGTOWN RD, 2.3 MI, REAR LEFT ONTOCT-67/CT-188/SOUTHFORD RD. 0.1 MI. KEEP STRAIGHT ONTO CT-67/SOUTHFORD RD. 3.7 MI. ARRIVE AT CT-67/ OXFORD RD, THE SITE WILL BE ON YOUR LEFT. IF YOU REACH BROOKLAWN TERRACE, YOU HAVE GONE TOO FAR.

VICINITY MAP



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
- 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 REPRESENTATIVE IN WRITING OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.



APPROVALS

876362

THE FOLLOWING PARTIES HEREBY APPROVE AND ACCEPT THESE DOCUMENTS & AUTHORIZE THE SUBCONTRACTOR TO PROCEED WITH CONSTRUCTION DESCRIBED HEREIN. ALL DOCUMENTS ARE SUBJECT TO REVIEW BY THE LOCAL BUILDING DEPARTMENT & MAY IMPOSE CHANGES OR MODIFICATIONS

DISCIPLINE:	SIGNATURE:	DATE:
SMARTLINK SITE ACQUISITION:		
SMARTLINK CONSTRUCTION MANAGER:		
AT&T PROJECT MANAGER:		



72 HOURS

BEFORE YOU DIG



CALL TOLL FREE 0. 800-922-4455



CROWN SITE ID:

CROWN SITE NAME:

smartlink

OXFORD/FRITZ PROPERTY

1997 ANNAPOLIS EXCHANGE PKWY SUITE 200 ANNAPOLIS, MD 21401

SITE NUMBER: CT2090 **SITE NAME: OXFORD-338** OXFORD RD

> 338 OXFORD ROAD OXFORD, CT 06478 NEW HAVEN COUNTY



550 COCHITUATE RD. FRAMINGHAM, MA, 01701

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AT&T TITLE SHEET (LTE-2C) 2090.01 T-1

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) FOR NEW GROUND ELECTRODE SYSTEMS. THE SUBCONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.
- 4. METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO BTS EQUIPMENT.
- 5. EACH BTS CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, 6 AWG STRANDED COPPER OR LARGER FOR INDOOR BTS 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 THE BRIDGE AND THE TOWER 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 AWS COPPER WIRE UI. 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
- 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.
- THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY
- 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.
- 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
- 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

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. TOUCHUP 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 MOBILITY 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: 2003 IBC WITH 2005 CT SUPPLEMENT & 2009 CT AMENDMENTS ELECTRICAL CODE: REFER TO ELECTRICAL DRAWINGS

LIGHTENING CODE: REFER TO ELECTRICAL DRAWINGS

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

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

AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)

MANUAL OF STEEL CONSTRUCTION, ASD, NINTH EDITION;

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

ANTENNA TOWER AND ANTENNA SUPPORTING STRUCTURES; REFER TO ELECTRICAL DRAWINGS FOR SPECIFIC ELECTRICAL STANDARDS.

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.

RADIO FREQUENCY ABOVE GRADE LEVEL G.C. GENERAL CONTRACTOR RF MGB AWG AMERICAN WIRE GAUGE MASTER GROUND BUS TO BE DETERMINED BCW BARE COPPER WIRE MIN MINIMUM BTS BASE TRANSCEIVER STATION PROPOSED TBR TO BE REMOVED NEW TO BE REMOVED EXISTING EXISTING N.T.S. NOT TO SCALE TRRR AND REPLACED EQUIPMENT GROUND REF REFERENCE FG TYP TYPICAL FOLIPMENT GROUND RING REQUIRED SITE NUMBER: CT2090 AT&T **SITE NAME: OXFORD-338**





1997 ANNAPOLIS EXCHANGE PKWY SUITE 200 ANNAPOLIS, MD 21401

OXFORD RD 338 OXFORD ROAD OXFORD, CT 06478 NEW HAVEN COUNTY

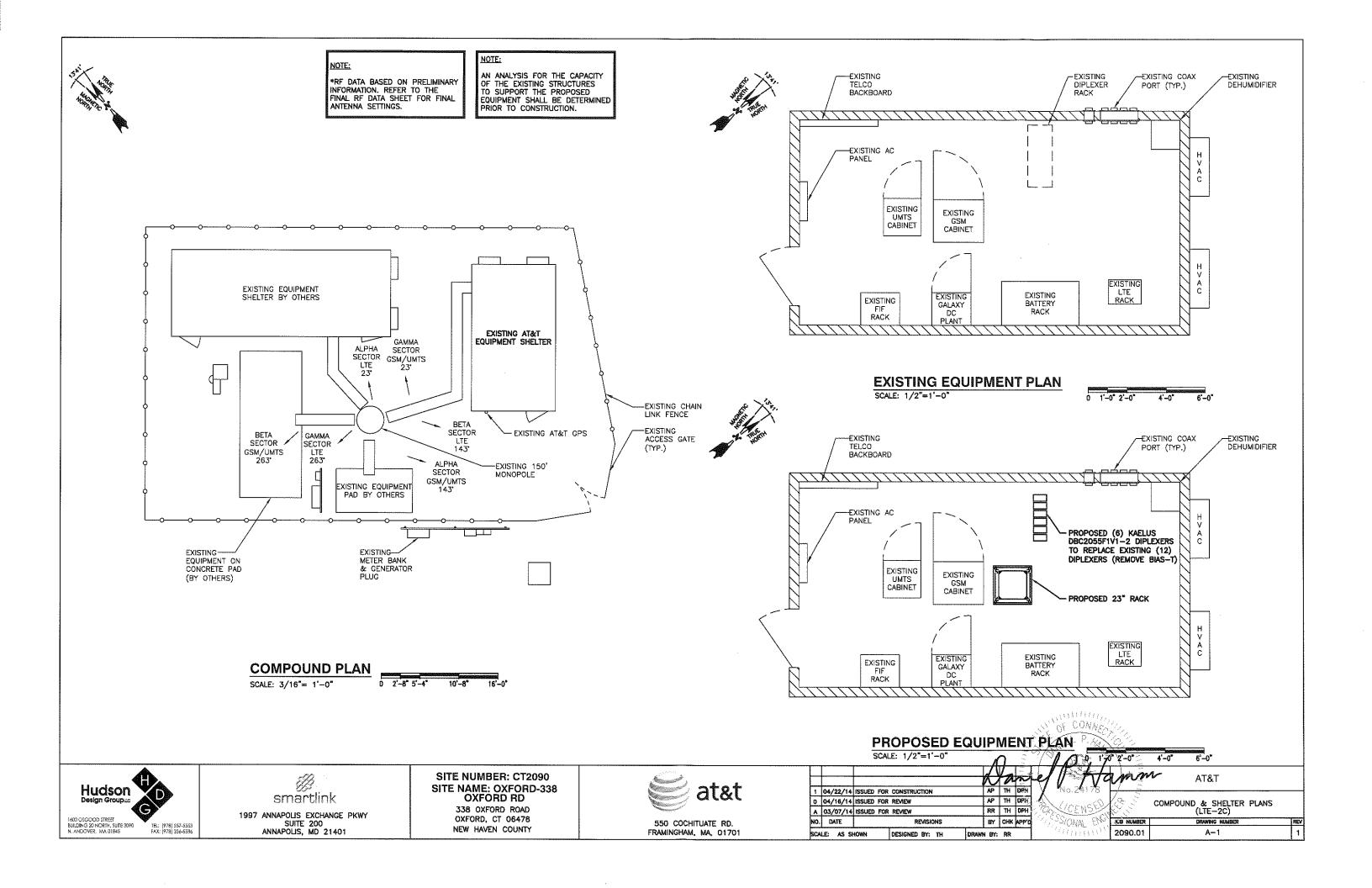


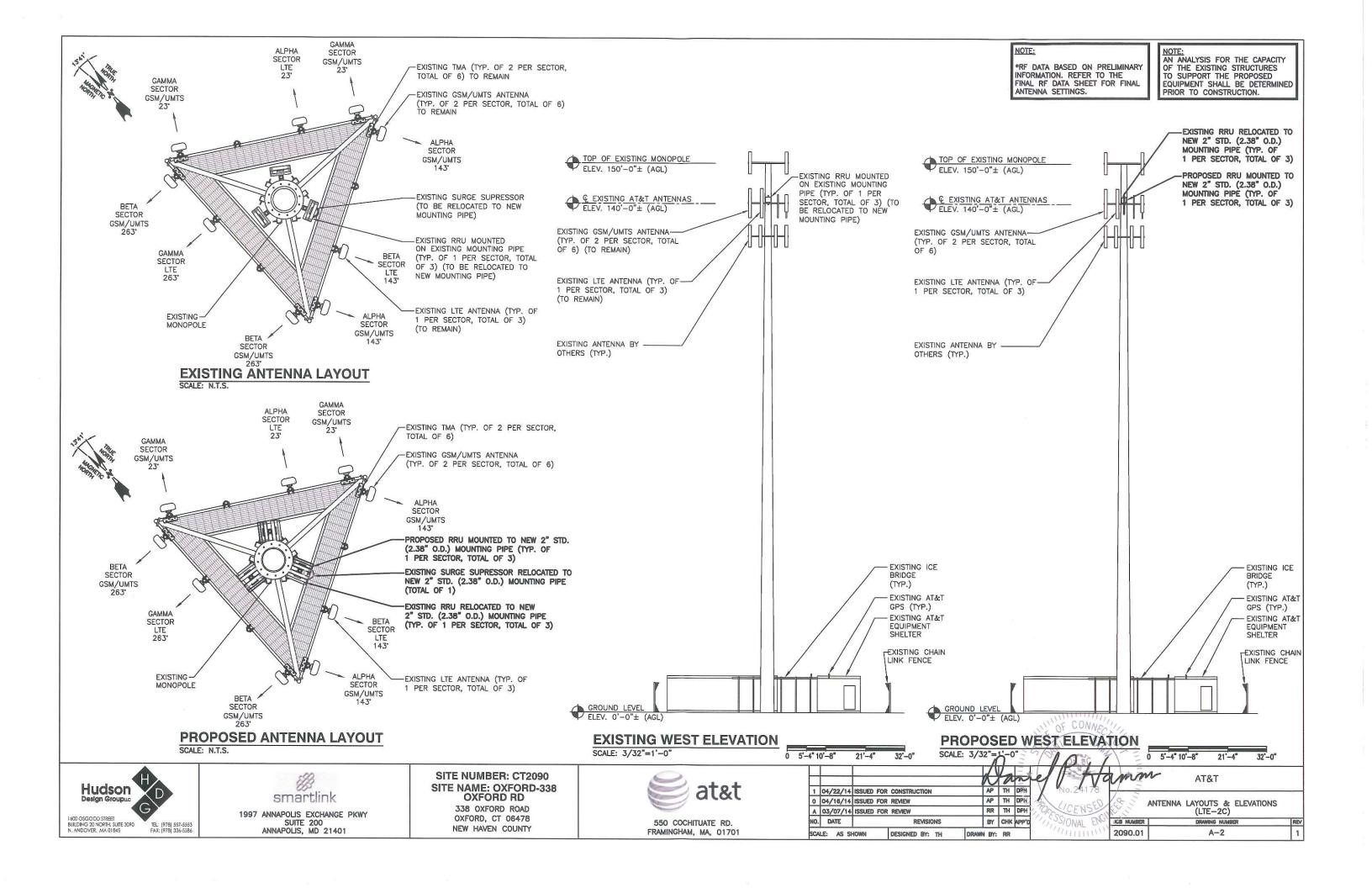
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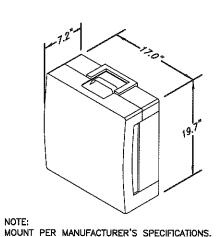
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Α	03/07/14	ISSUED FOR	REVIEW			RR	TH	DPH
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GENERAL NOTES (LTE-2C) JCB NUMBER 9/0MM 2090.01 GN-1

ABBREVIATIONS







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

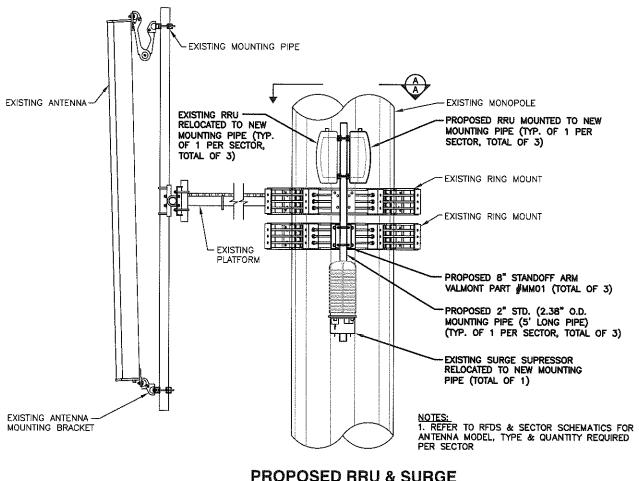
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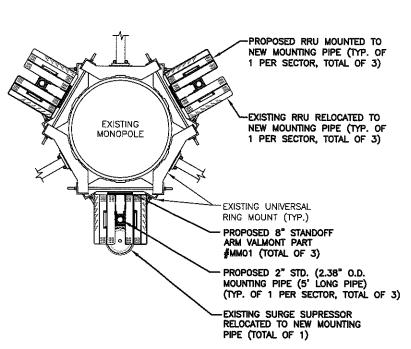
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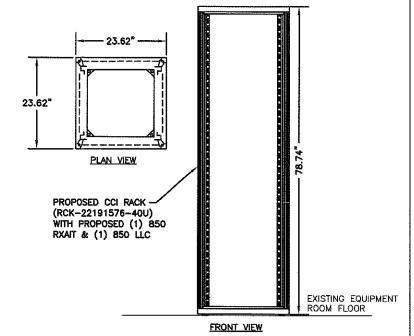
*RF DATA BASED ON PRELIMINARY INFORMATION. REFER TO THE FINAL RF DATA SHEET FOR FINAL ANTENNA SETTINGS.

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BETA:	ERICSSON	RRUS-11	19.7X17.0X7.2		ANDREW	SBNH-106565C	96.4X11.9X7.1
GAMMA:	ERICSSON	RRUS-11	19.7X17.0X7.2	BETA:	POWERWAVE ANDREW KMW	7770 SBNH-1D6565C AM-X-CD-16-65-00T-RET	55x11x5 96.4x11.9x7.1 72x11.8x5.9
				GAMMA:	POWERWAVE KMW ANDREW	7770 AM-X-CD-16-65-00T-RET SBNH-1D6565C	55x11x5 72x11.8x5.9 96.4X11.9X7.1

RRUS-11 DETAIL SCALE: N.T.S.







PROPOSED RRU & SURGE ARRESTOR MOUNTING DETAIL

SECTION A-A

PROPOSED EQUIPMENT RACK DETAIL SCALE: N.T.S.

Hudson 1600 OSGOOD STREET BUILDING 20 NORTH, SUITE 3090 N. ANDOVER, MA 01845



1997 ANNAPOLIS EXCHANGE PKWY SUITE 200 ANNAPOLIS, MD 21401

SITE NUMBER: CT2090 SITE NAME: OXFORD-338 OXFORD RD

338 OXFORD ROAD OXFORD, CT 06478 NEW HAVEN COUNTY

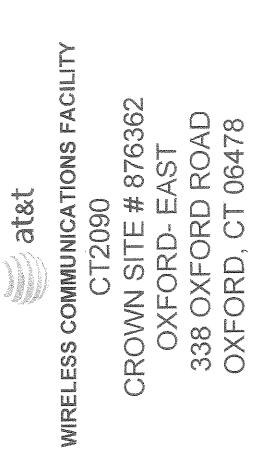


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AT&T DETAILS (LTE-2C)

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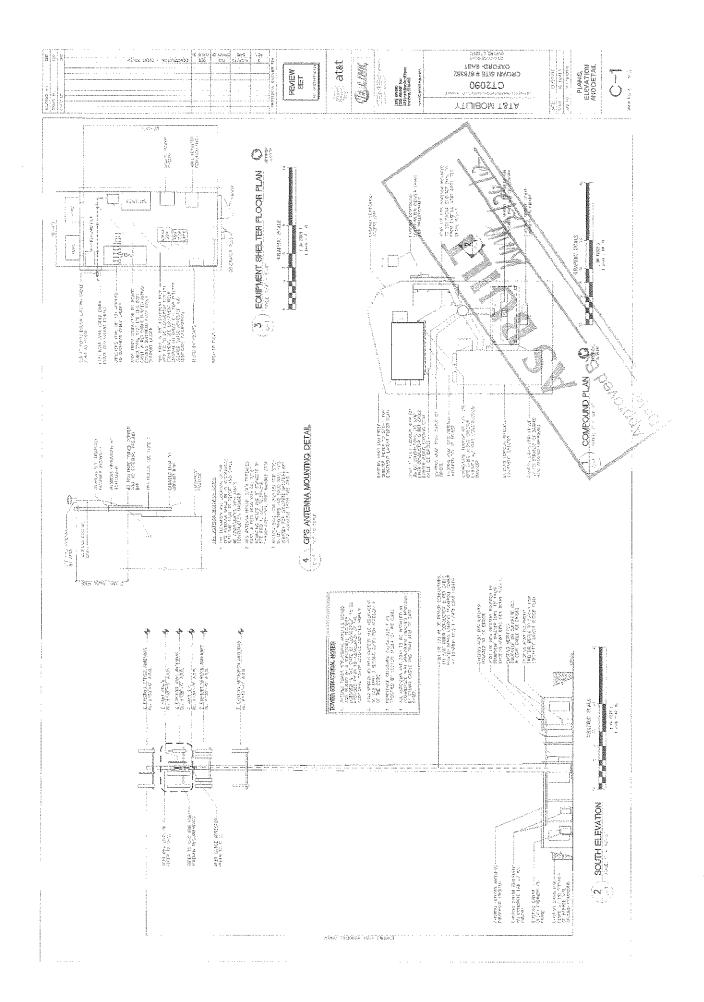
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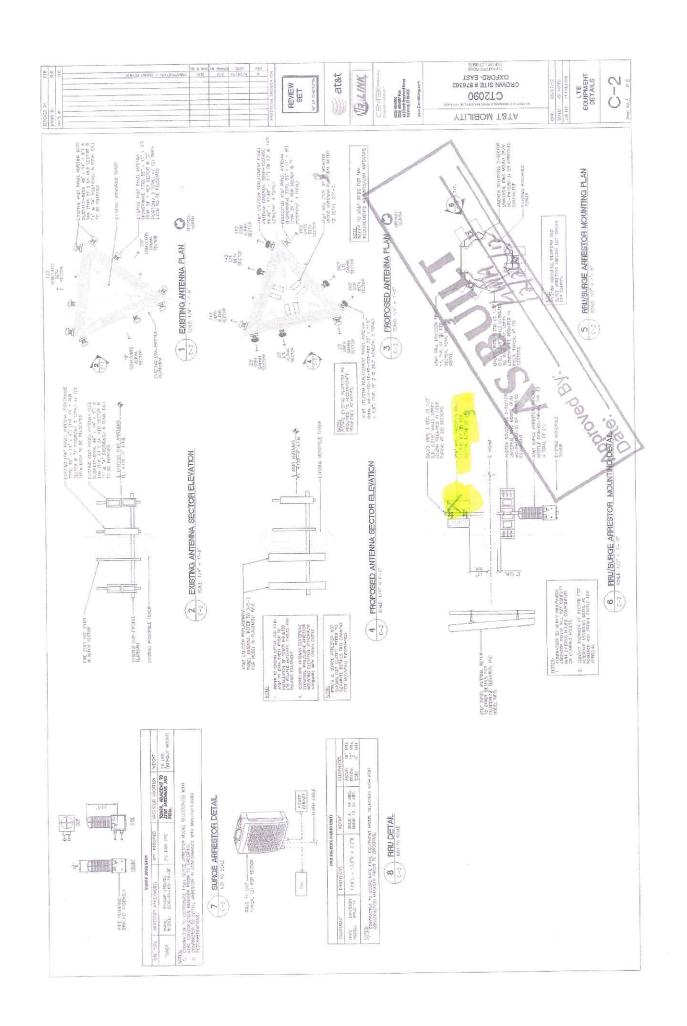
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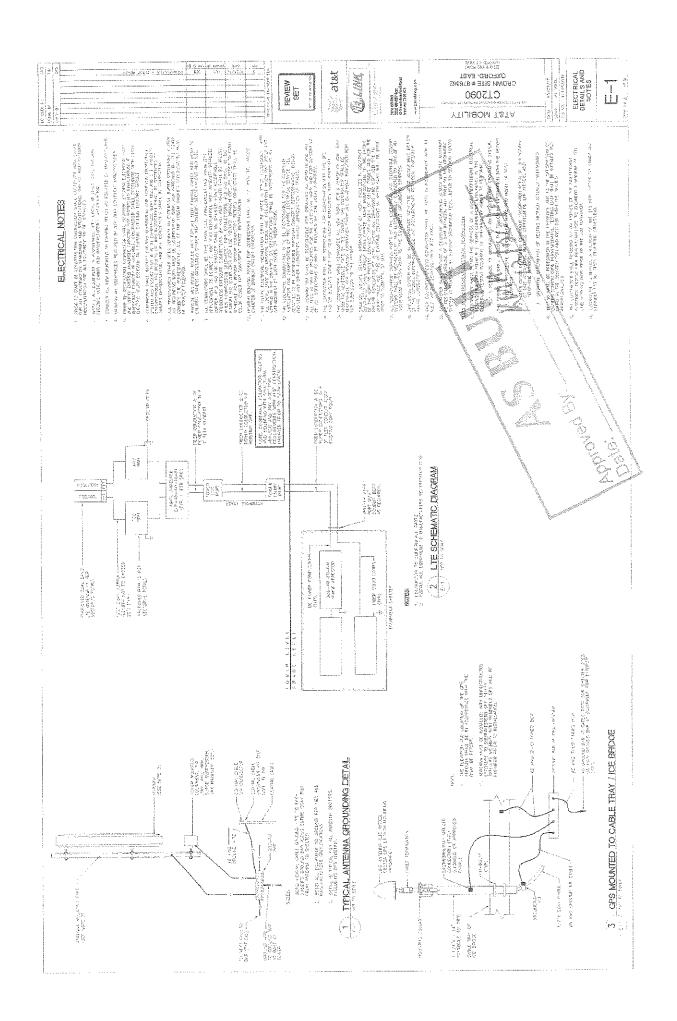
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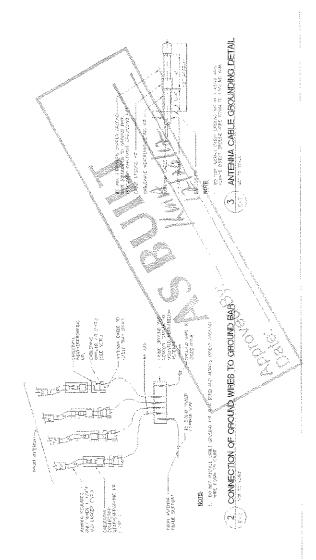


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 FOR LINEAR AND STORES STRANGES.







Todd Oliver Smartlink, LLC Market Manager, NE 33 Boston Post Road, Suite 210 Marlborough, MA 01752

Reference: Smartlink LLC Site, Oxford-338 Oxford Road, 338 Oxford Road Oxford, CT 06478

Date: 02 May 2014

- 1. This letter will address the additional RF impact that adding AT&T LTE antennas to the referenced site. Attached are two documents which cover the modeled RF emissions from the site.
- 2. The first report, "RF Emissions Compliance Report," for the site complied by Sitesafe, uses the antenna patterns for the antennas at the site to calculate the General Public Maximum Permissible Exposure (MPE) on the ground. The total MPE of all the carriers is 3.262% (based on the General Public MPE) based on this modeling, with AT&T antennas emitting a maximum of 0.888% of the General Public MPE on the ground.
- 3. The second attachment has the calculations, used by the Connecticut Siting Council, which assumes the maximum antenna gain transmits in a spherical pattern where the worst case results would be at the base of the tower. That calculation, based on the existing antennas, gives a result of 45.01% of the General Public MPE, with the AT&T antennas emitting 20.73% of the General Public MPE on the ground, using the modeling predictions used by Connecticut Siting Council.
- 4. In either case, the site is compliant with FCC guidelines. If you have any questions regarding this site, the compliance report, please contact me at 719-434-0700 or dcotton@sitesafe.com.

David C. Cotton, Jr.

Licensed Professional Engineer (Electrical)

State of Connecticut, PEN.0027481

Date: 2014-May-02

Director, RF Compliance

SIONAL



RF EMISSIONS COMPLIANCE REPORT

Smartlink on behalf of AT&T Mobility, LLC

Site FA: 10035376 Site ID: CT2090 Site Name: Oxford-338 Oxford Road Address: 338 Oxford Road Oxford, CT 06478 5/2/2014

Report Status:

AT&T Mobility Is Compliant.

Prepared By:

Sitesafe, Inc.

Voice 703-276-1100 Fax 703-276-1169

Engineering Statement in Re: Electromagnetic Energy Analysis AT&T Mobility Oxford, CT 06073

My signature on the cover of this document indicates:

That I am registered as a Professional Engineer in the jurisdiction indicated; and

That I have extensive professional experience in the wireless communications engineering industry; and

That I am an employee of Sitesafe, Inc. in Arlington, Virginia; and

That I am thoroughly familiar with the Rules and Regulations of the Federal Communications Commission ("the FCC" and "the FCC Rules") both in general and specifically as they apply to the FCC's Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields; and

That the technical information serving as the basis for this report was supplied by Smartlink (See attached Site Summary and Carrier documents), and that AT&T Mobility's installations involve communications equipment, antennas and associated technical equipment at a location referred to as the "Oxford-338 Oxford Road" ("the site"); and

That AT&T Mobility proposes to operate at the site with transmit antennas listed in the carrier summary and with a maximum effective radiated power as specified by AT&T Mobility and shown on the worksheet, and that worst-case 100% duty cycle have been assumed; and

That this analysis has been performed with the assumption that the ground immediately surrounding the tower is primarily flat or falling; and

That at this time, the FCC requires that certain licensees address specific levels of radio-frequency energy to which workers or members of the public might possibly be exposed (at §1.1307(b) of the FCC Rules); and

That such consideration of possible exposure of humans to radio-frequency radiation must utilize the standards set by the FCC, which is the Federal Agency having jurisdiction over communications facilities; and

That the FCC rules define two tiers of permissible exposure guidelines: 1) "uncontrolled environments," defined as situations in which persons may not be aware of (the "general public"), or may not be able to control their exposure to a transmission facility; and (2) "controlled environments," which defines situations in which persons are aware of their potential for exposure (industry personnel); and

That this statement specifically addresses the uncontrolled environment (which is more conservative than the controlled environment) and the limit set forth in the FCC rules for licensees of AT&T Mobility's operating frequency as shown on the attached antenna worksheet; and



That when applying the uncontrolled environment standards, the predicted Maximum Power Density at two meters above ground level from the proposed AT&T Mobility operation is no more than 0.888% of the maximum in any accessible area on the ground and

That it is understood per FCC Guidelines and OET65 Appendix A, that regardless of the existent radio-frequency environment, only those licenses whose contributions exceed five percent of the exposure limit pertinent to their operation(s) bear any responsibility for bringing any non-compliant area(s) into compliance; and

That when applying the uncontrolled environment standards, the cumulative predicted energy density from the proposed operation is no more than 3.262% of the maximum in any accessible area up to two meters above the ground per OET-65; and

That the calculations provided in this report are based on data provided by the client and antenna pattern data supplied by the antenna manufacturer, in accordance with FCC guidelines listed in OET-65. Horizontal and vertical antenna patterns are combined for modeling purposes to accurately reflect the energy two meters above ground level where on-axis energy refers to maximum energy two meters above the ground along the azimuth of the antenna and where area energy refers to the maximum energy anywhere two meters above the ground regardless of the antenna azimuth, accounting for cumulative energy from multiple antennas for the carrier and frequency range indicated; and

That the Occupational Safety and Health Administration has policies in place which address worker safety in and around communications sites, thus individual companies will be responsible for their employees' training regarding Radio Frequency Safety.

In summary, it is stated here that the proposed operation at the site would not result in exposure of the Public to excessive levels of radio-frequency energy as defined in the FCC Rules and Regulations, specifically 47 CFR 1.1307 and that AT&T Mobility's proposed operation is completely compliant.

Finally, it is stated that access to the tower should be restricted to communication industry professionals, and approved contractor personnel trained in radio-frequency safety; and that the instant analysis addresses exposure levels at two meters above ground level and does not address exposure levels on the tower, or in the immediate proximity of the antennas.



Note: Sitesafe has used data obtained from the "Connecticut Siting Council" to create this report. The manufacturer antenna patterns for AT&T Mobility, LLC were used to determine the RF emissions from the AT&T Mobility, LLC antennas. Generic antennas were used for the other carriers on the tower, as this information was not available, or provided at the time the study was conducted. Sitesafe has conducted FCC research on this site, and was updated in this report with the appropriate FCC call signs and Maximum ERP values. Sitesafe has also referenced the AT&T Mobility, LLC construction diagram for this site.

The following documents below were the primary sources of data used to create this report. The primary document was the "Connecticut Siting Council" document. The AT&T Mobility, LLC construction diagram was referenced when appropriate.

Connecticut Siting Council: AlphaExMPowDens 4-16-14

AT&T Mobility, LLC Construction Diagram: 10035376.AE201.140416 (CT2090) Hudson Rev 0.pdf



AT&T Mobility Oxford-338 Oxford Road Site Summary

Carrier	Area Maximum Percentage MPE	
AT&T Mobility	0.166 %	
AT&T Mobility	0.451 %	
AT&T Mobility	0.271 %	
Sprint	0.157 %	
Sprint	0.129 %	
Verizon Wireless	0.134 %	
Verizon Wireless	0.421 %	
Verizon Wireless	1.209 %	
Verizon Wireless	0.324 %	
Composite Site MPE:	3.262 %	



	Site	Carrier	#Channels	ERP/Ch	Ant Ht	Power Der	MHz	S	%MPE	Site Total
⁷ 30	Oxford - 338 Oxford Road	AT&T UMTS	2	565	139	0.0210	880	0.5867	3.58%	
⁷ 30	Oxford - 338 Oxford Road	AT&T UMTS	2	875	139	0.0326	1900	1.0000	3.26%	
730	Oxford - 338 Oxford Road	AT&T GSM	1	538	139	0.0100	880	0.5867	1.71%	
⁷ 30	Oxford - 338 Oxford Road	AT&T GSM	4	934	139	0.0695	1900	1.0000	6.95%	
⁷ 30	Oxford - 338 Oxford Road	AT&T LTE	1	1375	139	0.0256	734	0.4893	5.23%	
)2	Oxford 338 Oxford Road	Verizon cellular	9	305	130	0.0584	869	0.5793	10.08%	
38	Oxford 338 Oxford Road	Verizon PCS	7	405	130	0.0505	1.970	1.0000	6.03%	
)2	Oxford 338 Oxford Road	Verizon AWS	1,	905	130	0.0193	2145	1.0000	1.93%	
3.2	Oxford 338 Oxford Road	Verizon LTE	j.	636	130	0.0135	598	0.4653	2.91%	
1712	Oxford - 338 Oxford Road	Sprint CDMA/LTE	2	693	150	0.0221	1900	1.0000	2.21%	
1712	Oxford - 338 Oxford Road	Sprint COMA/LTE	1	390	150	0.0052	850	0.5667	1.10%	45.01%

Power Density Calculations