



**QC Development**

PO Box 916

Storrs, CT 06268

860-670-9068

Mark.Roberts@QCDevelopment.net

March 23, 2017

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

**Notice of Exempt Modification – New Cingular Wireless PCS, LLC (AT&T) – CT2490**  
**886 Main Street, East Hartford, CT 06108**  
**N 41-46-10**  
**W 72-38-34**

Dear Ms. Bachman:

AT&T currently maintains twelve (6) antennas at the rooftop level (112' and 120' AGL) of the 11-story apartment building at 886 Main Street, East Hartford, CT. The property is owned by Hartford East Associates. AT&T now intends to install three (3) Ericsson remote radio units (RRUS-11) to the existing antenna mount frames.

This facility was approved by the Connecticut Siting Council in Petition # 324 on August 9, 1994 and AT&T's shared use of the facility was approved on September 19, 2014 (IS-CING-043-140822). These approvals included no conditions that could feasibly be violated by this proposed modification, including total facility height and mounting restrictions. This modification therefore complies with the aforementioned approvals.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies § 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 Ms. Marcia LeClerc, Mayor of the Town of East Hartford, and the East Hartford Development & Planning Department as well as the property owner.

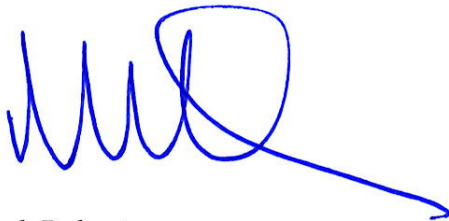
The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2).

1. The proposed modifications will not result in an increase in the height of the existing structure.
2. The proposed modifications will not require the extension of the site boundary.
3. The proposed modifications will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.
4. The operation of the replacement antennas will not increase radio frequency emissions at the facility to a level at or above the Federal Communications Commission safety standard.
5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.
6. The existing structure and its foundation can support the proposed loading.

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

Please feel free to call me at (860) 670-9068 with any questions regarding this matter. Thank you for your consideration.

Sincerely,



Mark Roberts  
QC Development  
Consultant for AT&T

#### Attachments

cc: The Honorable Marcia LeClerc - as elected official (via e-mail)  
Jeffrey Cormier - as Town Planner (via e-mail)  
Hartford East Associates - as property owner (via e-mail)

## Power Density

### Existing Loading on Tower

Carrier	# of Channels	ERP/Ch (W)	Antenna Centerline Height (ft)	Power Density (mW/cm <sup>2</sup> )	Freq. Band (MHz <sup>**</sup> )	Limit S (mW/cm <sup>2</sup> )	%MPE
Other Carriers*							5.85%
AT&T UMTS	2	500	107	0.0353	850	0.5667	0.62%
AT&T UMTS	2	500	107	0.0353	1900	1.0000	0.35%
AT&T LTE	2	500	107	0.0353	700	0.4667	0.76%
AT&T LTE	1	500	107	0.0176	850	0.5667	0.31%
AT&T LTE	2	500	107	0.0353	1900	1.0000	0.35%
AT&T LTE	1	500	107	0.0176	2300	1.0000	0.18%
Site Total							8.42%

\*Per CSC Records (available upon request, includes calculation formulas)

\*\* If a range of frequencies are used, such as 880-894, enter the lowest value, i.e. 880

### Proposed Loading on Tower

Carrier	# of Channels	ERP/Ch (W)	Antenna Centerline Height (ft)	Power Density (mW/cm <sup>2</sup> )	Freq. Band (MHz <sup>**</sup> )	Limit S (mW/cm <sup>2</sup> )	%MPE
Other Carriers*							5.85%
AT&T UMTS	2	500	107	0.0353	850	0.5667	0.62%
AT&T UMTS	2	500	107	0.0353	1900	1.0000	0.35%
AT&T LTE	2	1476	107	0.1041	700	0.4667	2.23%
AT&T LTE	1	1000	107	0.0353	850	0.5667	0.62%
AT&T LTE	2	2421	107	0.1707	1900	1.0000	1.71%
AT&T LTE	1	1285	107	0.0453	2300	1.0000	0.45%
Site Total							11.84%

\*Per CSC Records (available upon request, includes calculation formulas)

\*\* If a range of frequencies are used, such as 880-894, enter the lowest value, i.e. 880

**PROJECT INFORMATION**

SCOPE OF WORK: TELECOMMUNICATIONS FACILITY UPGRADE (LTE 4C 2017 UPGRADE):

SITE ADDRESS: 886 MAIN ST  
EAST HARTFORD, CT 06108

LATITUDE: 41.769444° N 41° 46' 09.99" N

LONGITUDE: 72.642777° W 72° 38' 34.00" W

TYPE OF SITE: ROOFTOP / INDOOR EQUIPMENT

ROOF HEIGHT: 100'±

RAD CENTER: 109'± (BETA SECTOR)  
117'± (ALPHA & GAMMA SECTORS)

CURRENT USE: TELECOMMUNICATIONS FACILITY

PROPOSED USE: TELECOMMUNICATIONS FACILITY



**SITE NUMBER: CT2490**

**SITE NAME: EAST HARTFORD MAIN STREET**

**PROJECT: LTE 4C 2017 UPGRADE**

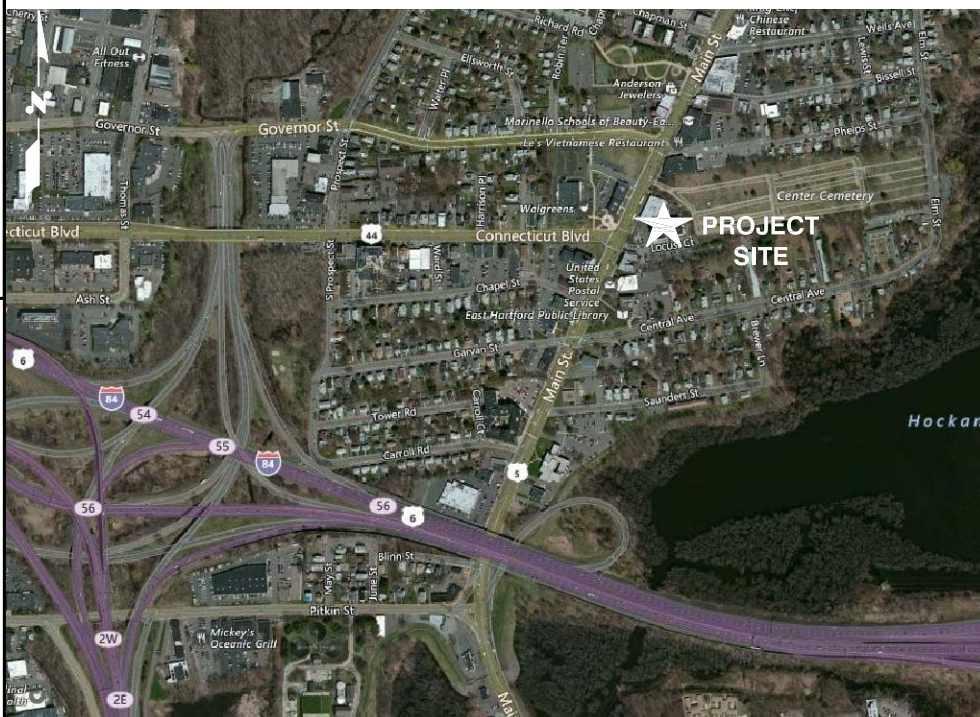
**DRAWING INDEX**

SHEET NO.	DESCRIPTION	REV.
T-1	TITLE SHEET	1
GN-1	GENERAL NOTES	1
A-1	ROOF PLAN	1
A-2	ANTENNA LAYOUTS & ELEVATION	1
A-3	DETAILS	1
RF-1	RF-PLUMBING DIAGRAM	1
G-1	GROUNDING DETAILS	1

**VICINITY MAP**

**DIRECTIONS TO SITE:**

DEPART ENTERPRISE DR TOWARD CAPITOL BLVD. 0.1 MI. TURN LEFT ONTO CAPITOL BLVD. 0.2 MI. TURN LEFT ONTO WEST ST. 0.2 MI. TAKE RAMP LEFT FOR I-91 N. 7.8 MI. AT EXIT 29, TAKE RAMP RIGHT FOR US-5 NORTH / CT-15 NORTH TOWARD BOSTON / E. HARTFORD. 0.6 MI. AT EXIT 90, TAKE RAMP RIGHT FOR US-5 NORTH TOWARD E. RIVER DR / NORWICH. 0.5 MI. TURN LEFT ONTO US-5 / MAIN ST. 0.9 MI. TURN RIGHT ONTO LOCUST CT. 161 FT. ARRIVE AT ENTRANCE TO SITE ON THE LEFT.



**GENERAL NOTES**

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

**72 HOURS**



**CALL BEFORE YOU DIG**



CALL TOLL FREE 1-800-922-4455

OR CALL 811

**UNDERGROUND SERVICE ALERT**

*David P. Hamm*  
No. 24178



AT&T

TITLE SHEET  
(LTE 4C)

**Hudson Design Group, Inc.**  
1600 OSGOOD STREET  
BUILDING 20 NORTH, SUITE 3090  
N. ANDOVER, MA 01845  
TEL: (978) 557-5553  
FAX: (978) 336-5586

**SAI**  
27 NORTHWESTERN DR.  
SALEM, NH 03079

SITE NUMBER: CT2490  
SITE NAME: EAST HARTFORD MAIN STREET

886 MAIN ST  
EAST HARTFORD, CT 06108  
HARTFORD COUNTY

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

NO.	DATE	REVISIONS	BY	CHK	APP'D
1	02/28/17	ISSUED FOR CONSTRUCTION	SB	AT	DJC
A	02/07/17	ISSUED FOR REVIEW	SB	AT	DJC

SCALE: AS SHOWN    DESIGNED BY: AT    DRAWN BY: SB

SITE NUMBER	DRAWING NUMBER	REV
CT2490	T-1	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 GROUND BAR.
9. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
10. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
11. METAL CONDUIT SHALL BE MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH 6 AWG COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
12. ALL NEW STRUCTURES WITH A FOUNDATION AND/OR FOOTING HAVING 20 FT. OR MORE OF 1/2 IN. OR GREATER ELECTRICALLY CONDUCTIVE REINFORCING STEEL MUST HAVE IT BONDED TO THE GROUND RING USING AN EXOTHERMIC WELD CONNECTION USING #2 AWG SOLID BARE TINNED COPPER GROUND WIRE, PER NEC 250.50

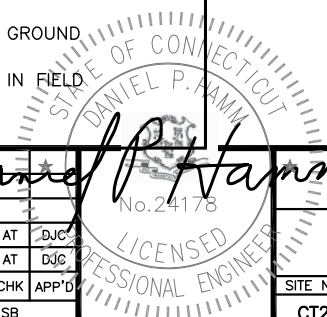
**GENERAL NOTES**

1. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:  
 CONTRACTOR – SAI  
 SUBCONTRACTOR – GENERAL CONTRACTOR (CONSTRUCTION)  
 OWNER – AT&T MOBILITY
2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR.
3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
4. DRAWINGS PROVIDED HERE ARE NOT TO BE SCALED AND ARE INTENDED TO SHOW OUTLINE ONLY.
5. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
6. "KITTING LIST" SUPPLIED WITH THE BID PACKAGE IDENTIFIES ITEMS THAT WILL BE SUPPLIED BY CONTRACTOR. ITEMS NOT INCLUDED IN THE BILL OF MATERIALS AND KITTING LIST SHALL BE SUPPLIED BY THE SUBCONTRACTOR.
7. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
8. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE CONTRACTOR.
9. SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND T1 CABLES, GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWING. SUBCONTRACTOR SHALL UTILIZE EXISTING TRAYS AND/OR SHALL ADD NEW TRAYS AS NECESSARY. SUBCONTRACTOR SHALL CONFIRM THE ACTUAL ROUTING WITH THE CONTRACTOR.
10. THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
11. SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
12. SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.
13. ALL CONCRETE REPAIR WORK SHALL BE DONE IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE (ACI) 301.

14. ANY NEW CONCRETE NEEDED FOR THE CONSTRUCTION SHALL BE AIR-ENTRAINED AND SHALL HAVE 4000 PSI STRENGTH AT 28 DAYS. ALL CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH ACI 318 CODE REQUIREMENTS.
15. ALL STRUCTURAL STEEL WORK SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH AISC SPECIFICATIONS. ALL STRUCTURAL STEEL SHALL BE ASTM A36 (Fy = 36 ksi) UNLESS OTHERWISE NOTED. PIPES SHALL BE ASTM A53 TYPE E (Fy = 36 ksi). ALL STEEL EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED. TOUCHUP ALL SCRATCHES AND OTHER MARKS IN THE FIELD AFTER STEEL IS ERECTED USING A COMPATIBLE ZINC RICH PAINT.
16. CONSTRUCTION SHALL COMPLY WITH LTE SPECIFICATIONS AND "GENERAL CONSTRUCTION SERVICES FOR CONSTRUCTION OF AT&T SITES."
17. SUBCONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS MUST BE VERIFIED. SUBCONTRACTOR SHALL NOTIFY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
18. THE EXISTING CELL SITE IS IN FULL COMMERCIAL OPERATION. ANY CONSTRUCTION WORK BY SUBCONTRACTOR SHALL NOT DISRUPT THE EXISTING NORMAL OPERATION. ANY WORK ON EXISTING EQUIPMENT MUST BE COORDINATED WITH CONTRACTOR. ALSO, WORK SHOULD BE SCHEDULED FOR AN APPROPRIATE MAINTENANCE WINDOW USUALLY IN LOW TRAFFIC PERIODS AFTER MIDNIGHT.
19. SINCE THE CELL SITE IS ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE ADVISED TO BE WORN TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.
20. APPLICABLE BUILDING CODES:  
 SUBCONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION. THE EDITION OF THE AHJ ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.  
 BUILDING CODE: IBC 2012 WITH 2016 CT BUILDING CODE 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:  
  
 AMERICAN CONCRETE INSTITUTE (ACI) 318; BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE;  
  
 AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)  
 MANUAL OF STEEL CONSTRUCTION, ASD, FOURTEENTH EDITION;  
  
 TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-G,  
 STRUCTURAL STANDARDS FOR STEEL  
  
 EQUIPMENT 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.

**ABBREVIATIONS**

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



**Hudson Design Group, Inc.**  
 1600 OSGOOD STREET  
 BUILDING 20 NORTH, SUITE 3090  
 N. ANDOVER, MA 01845  
 TEL: (978) 557-5553  
 FAX: (978) 336-5586

**SAI**  
 27 NORTHWESTERN DR.  
 SALEM, NH 03079

**SITE NUMBER: CT2490**  
**SITE NAME: EAST HARTFORD MAIN STREET**  
  
 886 MAIN ST  
 EAST HARTFORD, CT 06108  
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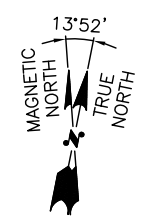
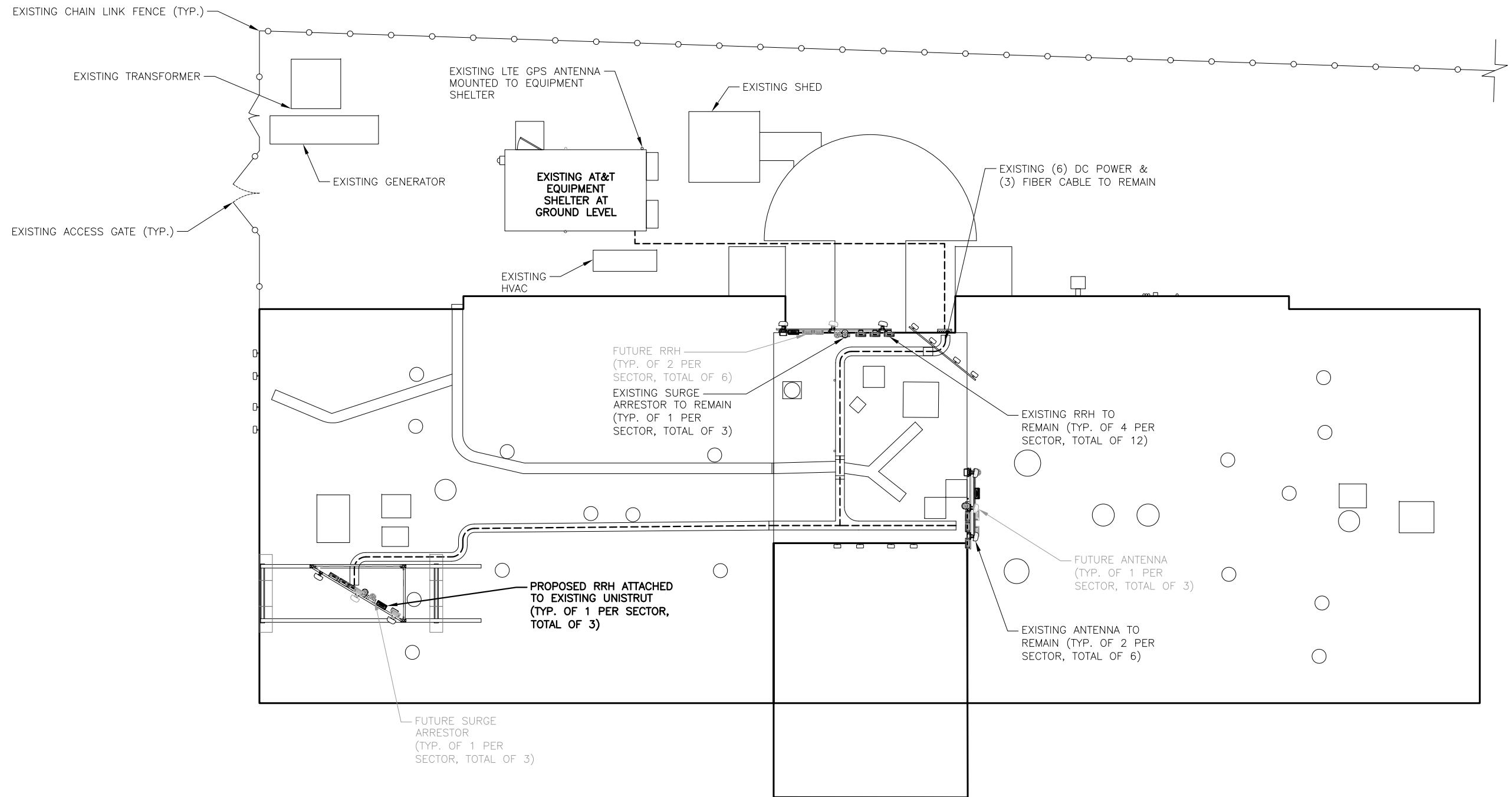
**at&t**  
 500 ENTERPRISE DRIVE, SUITE 3A  
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NO.	DATE	REVISIONS	BY	CHK	APP'D
SCALE: AS SHOWN		DESIGNED BY: AT	DRAWN BY: SB		

**AT&T**  
**GENERAL NOTES**  
**(LTE 4C)**  
 SITE NUMBER: **CT2490**  
 DRAWING NUMBER: **GN-1**  
 REV: **1**

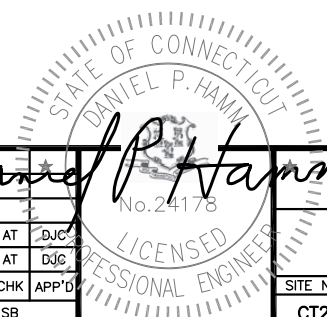
**NOTE:**  
AN ANALYSIS FOR THE CAPACITY OF THE EXISTING STRUCTURES TO SUPPORT THE PROPOSED EQUIPMENT SHALL BE DETERMINED PRIOR TO CONSTRUCTION.

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



**ROOF PLAN**  
22x34 SCALE: 1/8"=1'-0"  
11x17 SCALE: 1/16"=1'-0"

1  
A-1



*Daniel P. Hamm*

**Hudson Design Group, Inc.**  
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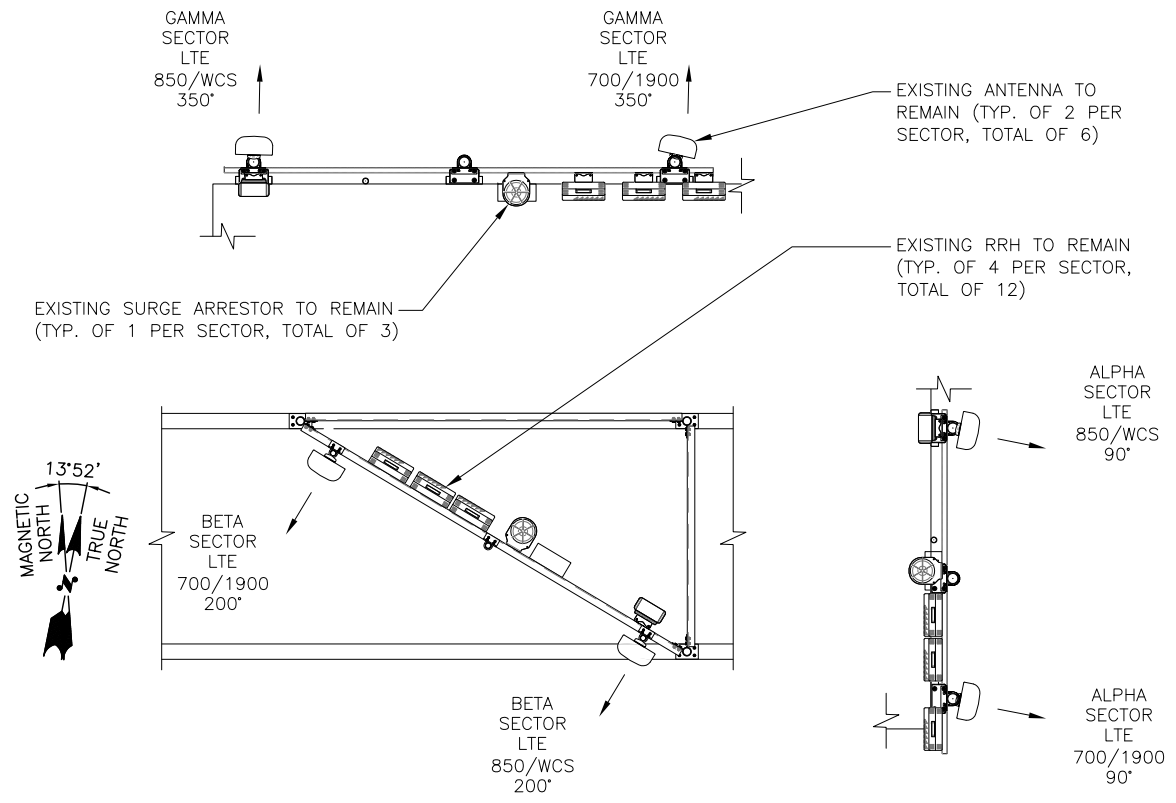
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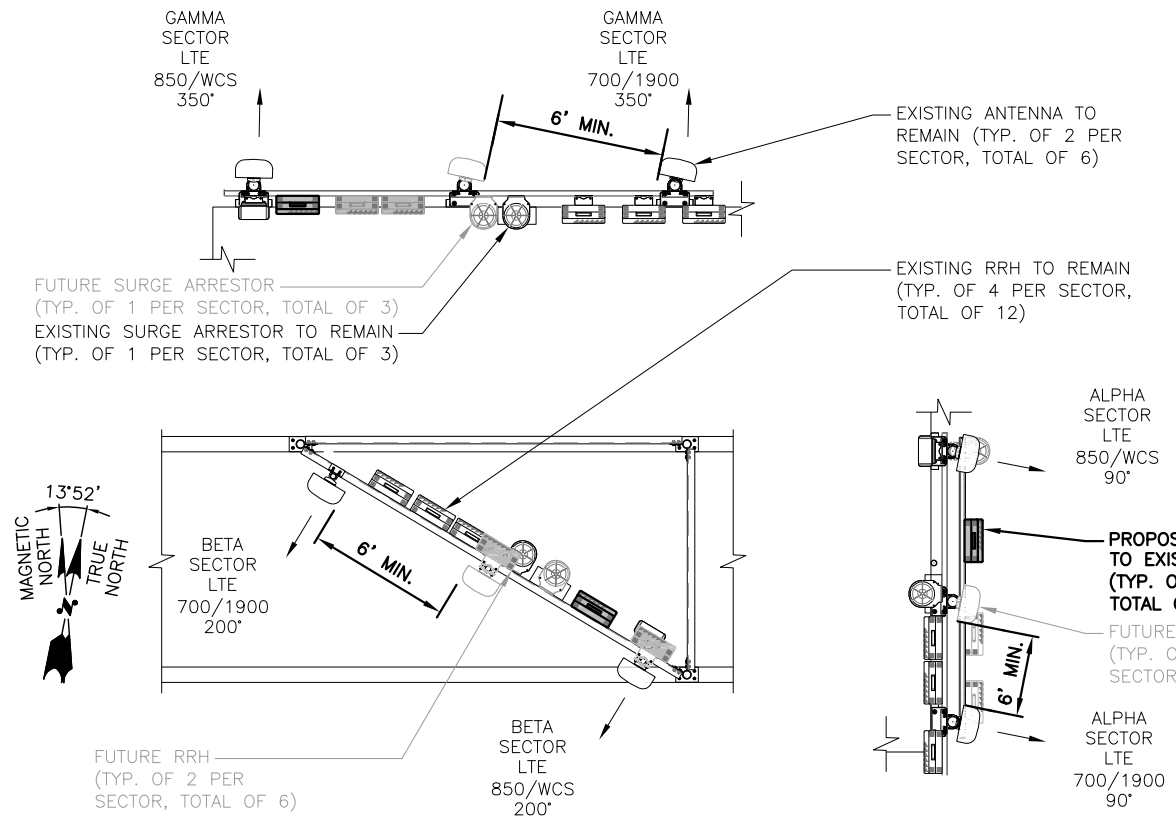
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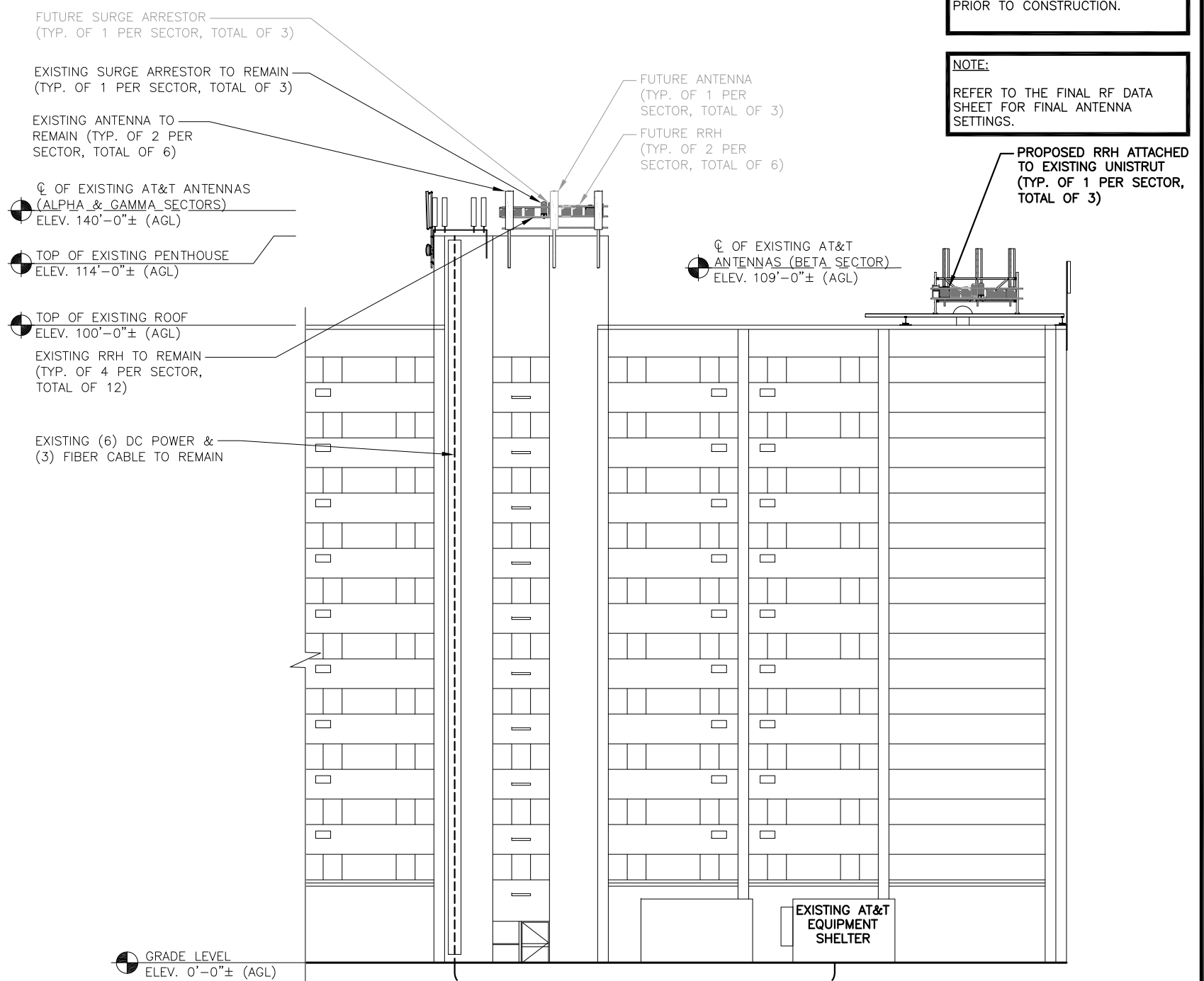
AT&T	
ROOF PLAN (LTE 4C)	
SITE NUMBER	DRAWING NUMBER
CT2490	A-1
REV	1



**EXISTING ANTENNA LAYOUT** 1  
SCALE: N.T.S. A-2



**PROPOSED ANTENNA LAYOUT** 2  
SCALE: N.T.S. A-2



**PARTIAL NORTH ELEVATION** 3  
22x34 SCALE: 3/32"=1'-0"  
11x17 SCALE: 3/64"=1'-0" A-2

**NOTE:**  
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**Daniel P. Hamm**  
No. 24178  
**LICENSED PROFESSIONAL ENGINEER**

**AT&T**

**ANTENNA LAYOUTS & ELEVATION (LTE 4C)**

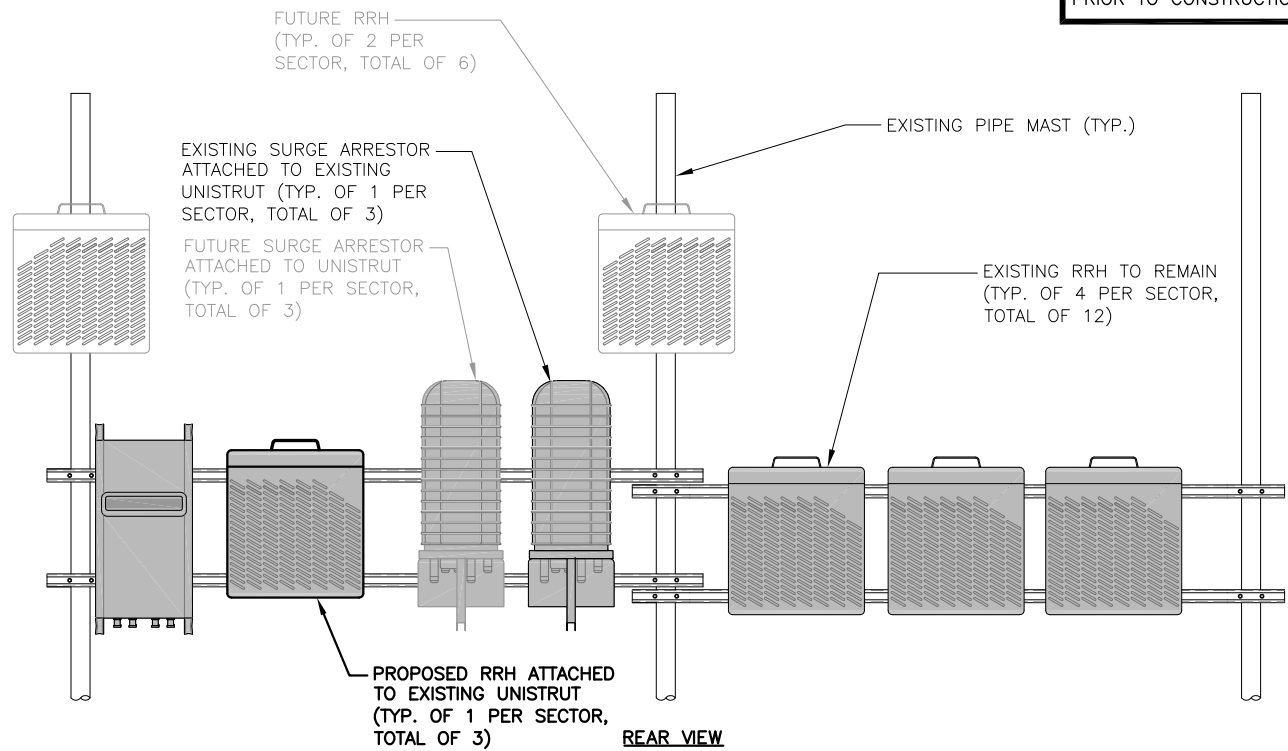
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**NOTE:**  
AN ANALYSIS FOR THE CAPACITY OF THE EXISTING STRUCTURES TO SUPPORT THE PROPOSED EQUIPMENT SHALL BE DETERMINED PRIOR TO CONSTRUCTION.

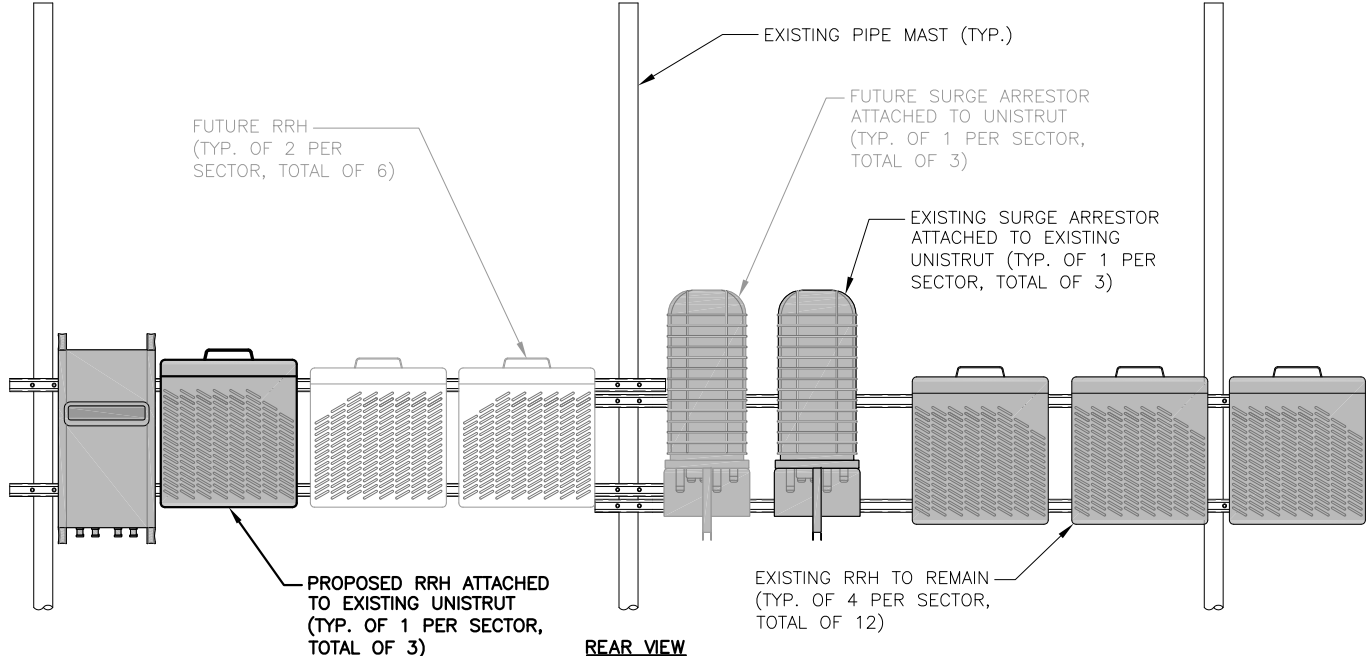
EXISTING ANTENNA SCHEDULE			
SECTOR	MAKE	MODEL#	SIZE (INCHES)
ALPHA	CCI	OPA-65R-LCUU-H6	72.0x14.8x7.4
	CCI	OPA-65R-LCUU-H6	72.0x14.8x7.4
BETA	CCI	OPA-65R-LCUU-H6	72.0x14.8x7.4
	CCI	OPA-65R-LCUU-H6	72.0x14.8x7.4
GAMMA	CCI	OPA-65R-LCUU-H6	72.0x14.8x7.4
	CCI	OPA-65R-LCUU-H6	72.0x14.8x7.4

EXISTING PROPOSED ANTENNA SCHEDULE			
SECTOR	MAKE	MODEL#	SIZE (INCHES)
ALPHA	CCI (FUTURE)	OPA-65R-LCUU-H6	72.0x14.8x7.4
	CCI	OPA-65R-LCUU-H6	72.0x14.8x7.4
	CCI	OPA-65R-LCUU-H6	72.0x14.8x7.4
BETA	CCI (FUTURE)	OPA-65R-LCUU-H6	72.0x14.8x7.4
	CCI	OPA-65R-LCUU-H6	72.0x14.8x7.4
	CCI	OPA-65R-LCUU-H6	72.0x14.8x7.4
GAMMA	CCI (FUTURE)	OPA-65R-LCUU-H6	72.0x14.8x7.4
	CCI	OPA-65R-LCUU-H6	72.0x14.8x7.4
	CCI	OPA-65R-LCUU-H6	72.0x14.8x7.4



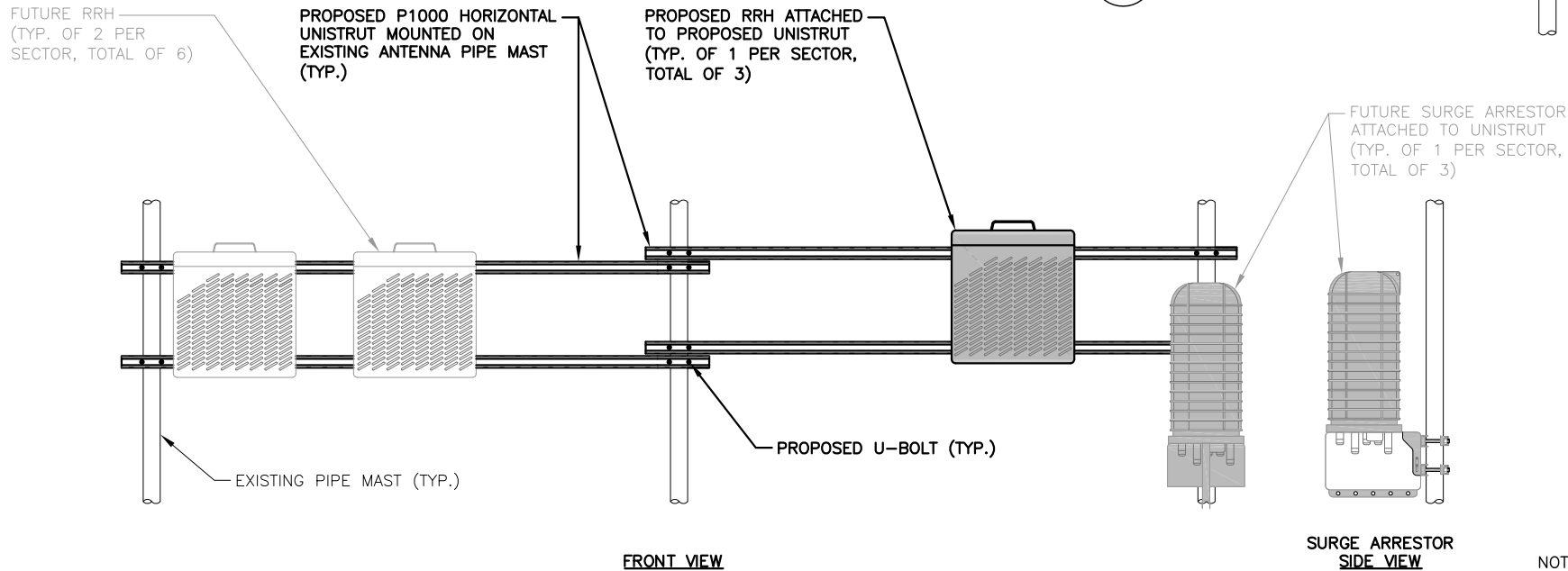
**PROPOSED RRH & SURGE ARRESTOR DETAIL (BETA SECTOR)**  
SCALE: N.T.S.

1  
A-3



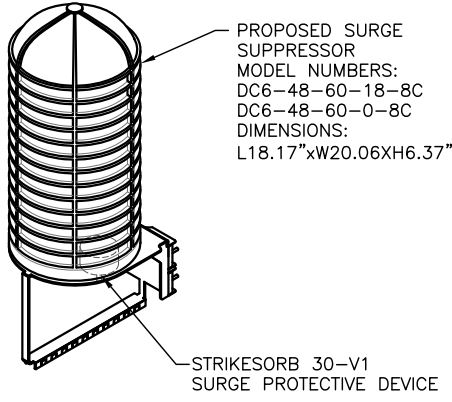
**PROPOSED RRH & SURGE ARRESTOR DETAIL (GAMMA SECTOR)**  
SCALE: N.T.S.

3  
A-3



**PROPOSED RRH & SURGE ARRESTOR DETAIL (ALPHA SECTOR)**  
SCALE: N.T.S.

2  
A-3

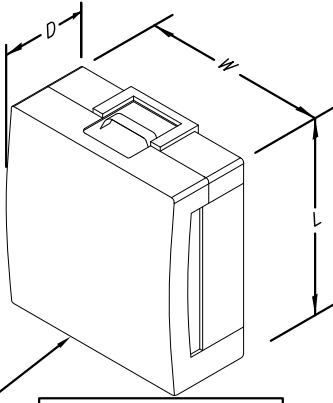


**DC SURGE SUPPRESSOR DETAIL**  
SCALE: N.T.S.

4  
A-3

RRU CHART				
QUANTITY	MODEL	L	W	D
3(E)3(P)3(F)	RRUS-11	19.7"	17.0"	7.2"
6(E)	RRUS-12	20.4"	18.5"	7.5"
3(E)	RRUS-32	27.2"	12.1"	7.0"
3(F)	RRUS-E2	20.4"	18.5"	7.5"
-	LTE-A2	16.4"	15.2"	3.4"

**NOTE:**  
MOUNT PER MANUFACTURER'S SPECIFICATIONS



**NOTE:**  
REFER TO THE FINAL RFDS AND CHART FOR QUANTITY, MODEL AND DIMENSIONS  
MOUNT PER MANUFACTURER'S SPECIFICATIONS.

**PROPOSED RRU DETAIL**  
SCALE: N.T.S.

5  
A-3



1600 OSGOOD STREET  
BUILDING 20 NORTH, SUITE 3090  
N. ANDOVER, MA 01845  
TEL: (978) 557-5553  
FAX: (978) 336-5586



27 NORTHWESTERN DR.  
SALEM, NH 03079

SITE NUMBER: CT2490  
SITE NAME: EAST HARTFORD MAIN STREET

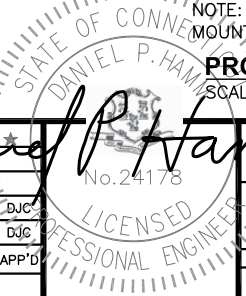
886 MAIN ST  
EAST HARTFORD, CT 06108  
HARTFORD COUNTY



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

NO.	DATE	REVISIONS	BY	CHK	APP'D
1	02/28/17	ISSUED FOR CONSTRUCTION	SB	AT	DJC
A	02/07/17	ISSUED FOR REVIEW	SB	AT	DJC

SCALE: AS SHOWN    DESIGNED BY: AT    DRAWN BY: SB

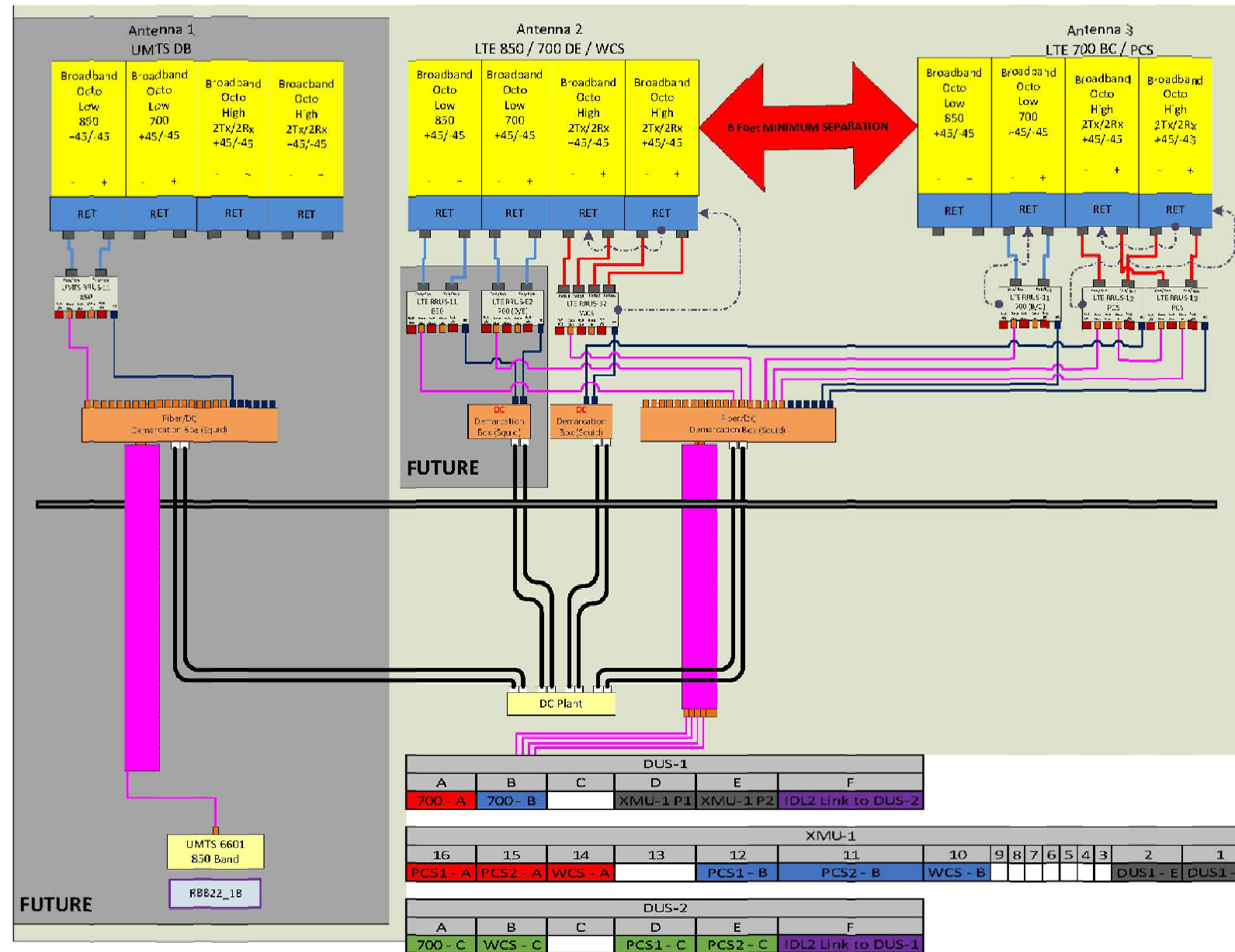


AT&T

DETAILS  
(LTE 4C)

SITE NUMBER	DRAWING NUMBER	REV
CT2490	A-3	1

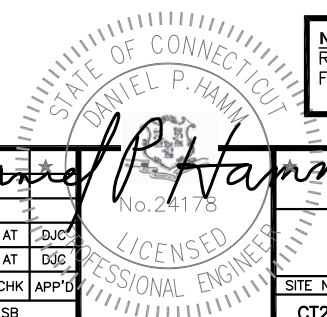




**RF PLUMBING DIAGRAM**  
SCALE: N.T.S

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

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



*Daniel P. Hamm*

**Hudson Design Group, Inc.**  
1600 OSGOOD STREET  
BUILDING 20 NORTH, SUITE 3090  
N. ANDOVER, MA 01845  
TEL: (978) 557-5553  
FAX: (978) 336-5586

**SAI**  
27 NORTHWESTERN DR.  
SALEM, NH 03079

**SITE NUMBER: CT2490**  
**SITE NAME: EAST HARTFORD MAIN STREET**  
**886 MAIN ST**  
**EAST HARTFORD, CT 06108**  
**HARTFORD COUNTY**

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

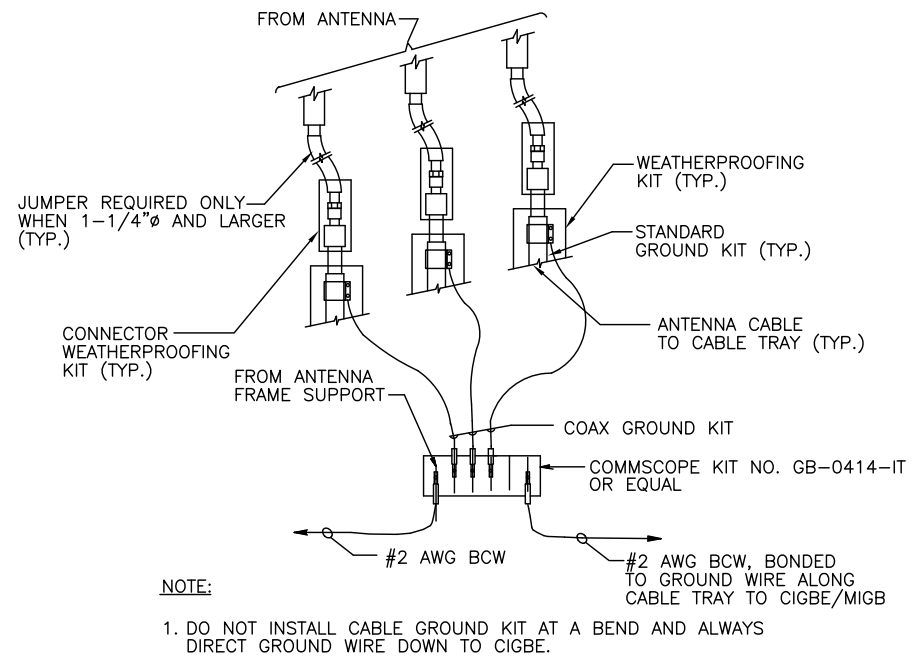
NO.	DATE	REVISIONS	BY	CHK	APP'D
1	02/28/17	ISSUED FOR CONSTRUCTION	SB	AT	DJC
A	02/07/17	ISSUED FOR REVIEW	SB	AT	DJC

SCALE: AS SHOWN    DESIGNED BY: AT    DRAWN BY: SB

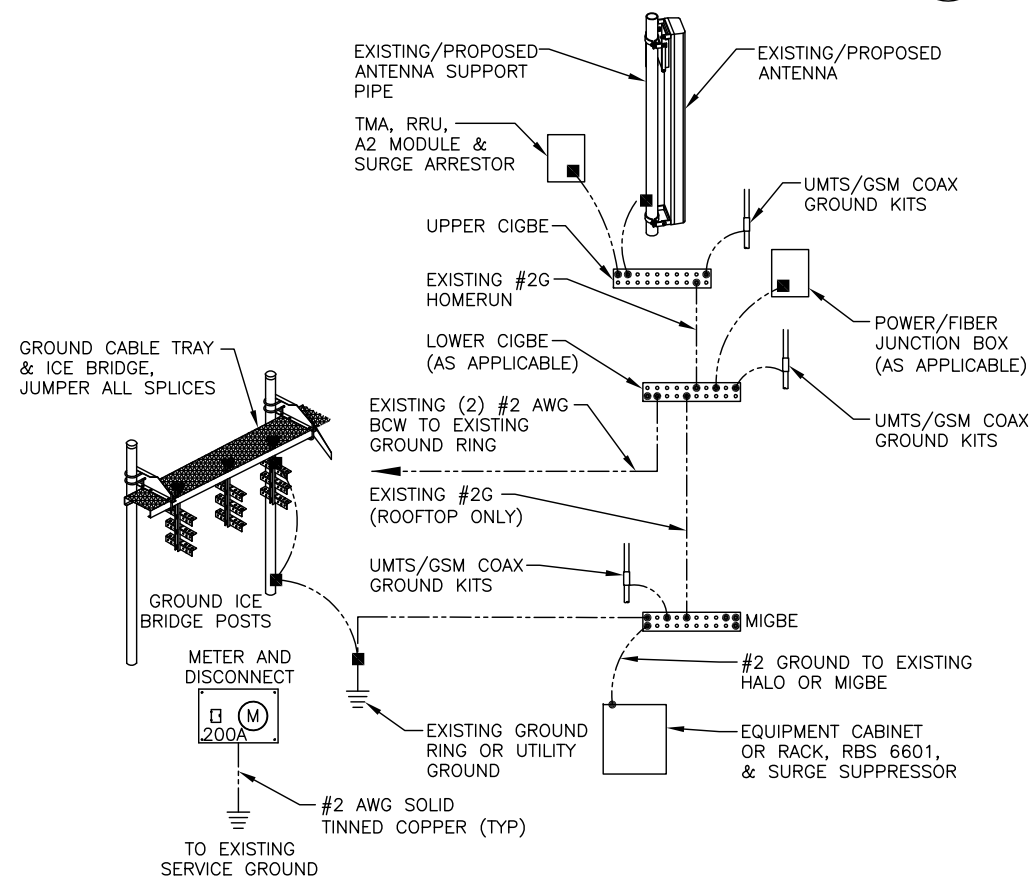
**AT&T**

**RF PLUMBING DIAGRAM (LTE 4C)**

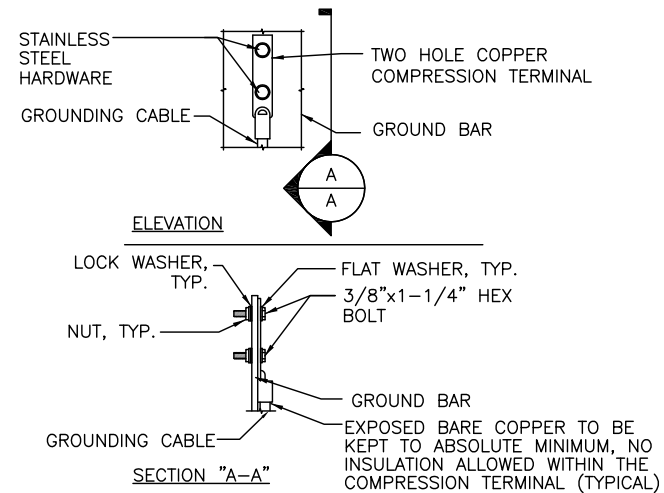
SITE NUMBER	DRAWING NUMBER	REV
CT2490	RF-1	1



**GROUND WIRE TO GROUND BAR CONNECTION DETAIL** 1  
SCALE: N.T.S. G-1



**GROUNDING RISER DIAGRAM** 2  
SCALE: N.T.S. G-1



- NOTE:
- "DOUBLING UP" OR "STACKING" OF CONNECTION IS NOT PERMITTED.
  - OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATION.
  - CADWELDED DOWNLEADS FROM UPPER EGB, LOWER EGB, AND MGB

**TYPICAL GROUND BAR CONNECTION DETAIL** 3  
SCALE: N.T.S. G-1

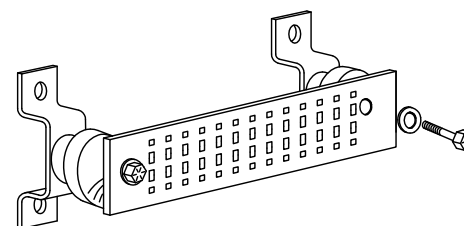
EACH GROUND CONDUCTOR TERMINATING ON ANY GROUND BAR SHALL HAVE AN IDENTIFICATION TAG ATTACHED AT EACH END THAT WILL IDENTIFY ITS ORIGIN AND DESTINATION.

**SECTION "P" - SURGE PRODUCERS**

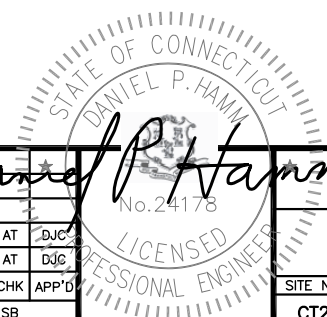
- CABLE ENTRY PORTS (HATCH PLATES) (#2)
- GENERATOR FRAMEWORK (IF AVAILABLE) (#2)
- TELCO GROUND BAR
- COMMERCIAL POWER COMMON NEUTRAL/GROUND BOND (#2)
- +24V POWER SUPPLY RETURN BAR (#2)
- 48V POWER SUPPLY RETURN BAR (#2)
- RECTIFIER FRAMES.

**SECTION "A" - SURGE ABSORBERS**

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



**GROUND BAR - DETAIL** 4  
SCALE: N.T.S. G-1



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**SAI**  
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SALEM, NH 03079

**SITE NUMBER: CT2490**  
**SITE NAME: EAST HARTFORD MAIN STREET**  
**886 MAIN ST**  
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**HARTFORD COUNTY**

**at&t**  
500 ENTERPRISE DRIVE, SUITE 3A  
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NO.	DATE	REVISIONS	BY	CHK	APP'D
SCALE: AS SHOWN		DESIGNED BY: AT	DRAWN BY: SB		

AT&T		
GROUNDING DETAILS (LTE 4C)		
SITE NUMBER	DRAWING NUMBER	REV
CT2490	G-1	1

March 20, 2017 (Rev.1)



SAI Communications  
27 Northwestern Drive  
Salem NH, 03079

**RE: Structural Assessment**

Site Number: CT2490  
Site Name: East Hartford Main Street  
Site Address: 886 Main Street  
East Hartford, CT 06108

To Whom It May Concern:

Hudson Design Group LLC (HDG) has been authorized by SAI to perform a structural assessment of the existing structure to determine its capability of supporting the AT&T equipment located at the above referenced site.

The following design criteria was used for the assessment of the existing structure:

1. International Building Code 2012 with 2016 Connecticut State Building Code Amendments; ASCE 7-10 Minimum Design Loads for Buildings and Other Structures.

Wind Analysis:

Ultimate Wind Speed, $V_{ult}$ :	125 mph	(CTSBC 2016 Appendix N)
Nominal Wind Speed, $V_{ascl}$ :	97 mph	(CTSBC 2016 Appendix N)
Category:	B	

Roof:

Ground Snow, $P_g$ :	30 psf
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2. EIA/TIA -222- G Structural Standards for Steel Antenna Towers and Antenna Supporting Structures

County:	Hartford	
Wind Load:	105 mph	(Basic Wind Speed)

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

Reference Documents:

- Structural Analysis by HDG dated February 14, 2014 (Rev.2).
- Construction Drawings by HDG dated February 28, 2017 (Rev.1).

This determination was based on the following limitations and assumptions:

1. Equipment and locations should not deviate from the construction drawings without written approval of the engineer.
2. HDG is not responsible for any modifications completed prior to and hereafter which HDG was not directly involved.
3. All structural members and their connections are assumed to be in good condition and are free from defects with no deterioration to its member capacities. Contractor is to perform a pre-inspection to confirm.
4. All components supporting the equipment are assumed to be designed to all applicable codes and design for identical to or larger than the current loads.

Please feel free to contact our office should you have any questions.

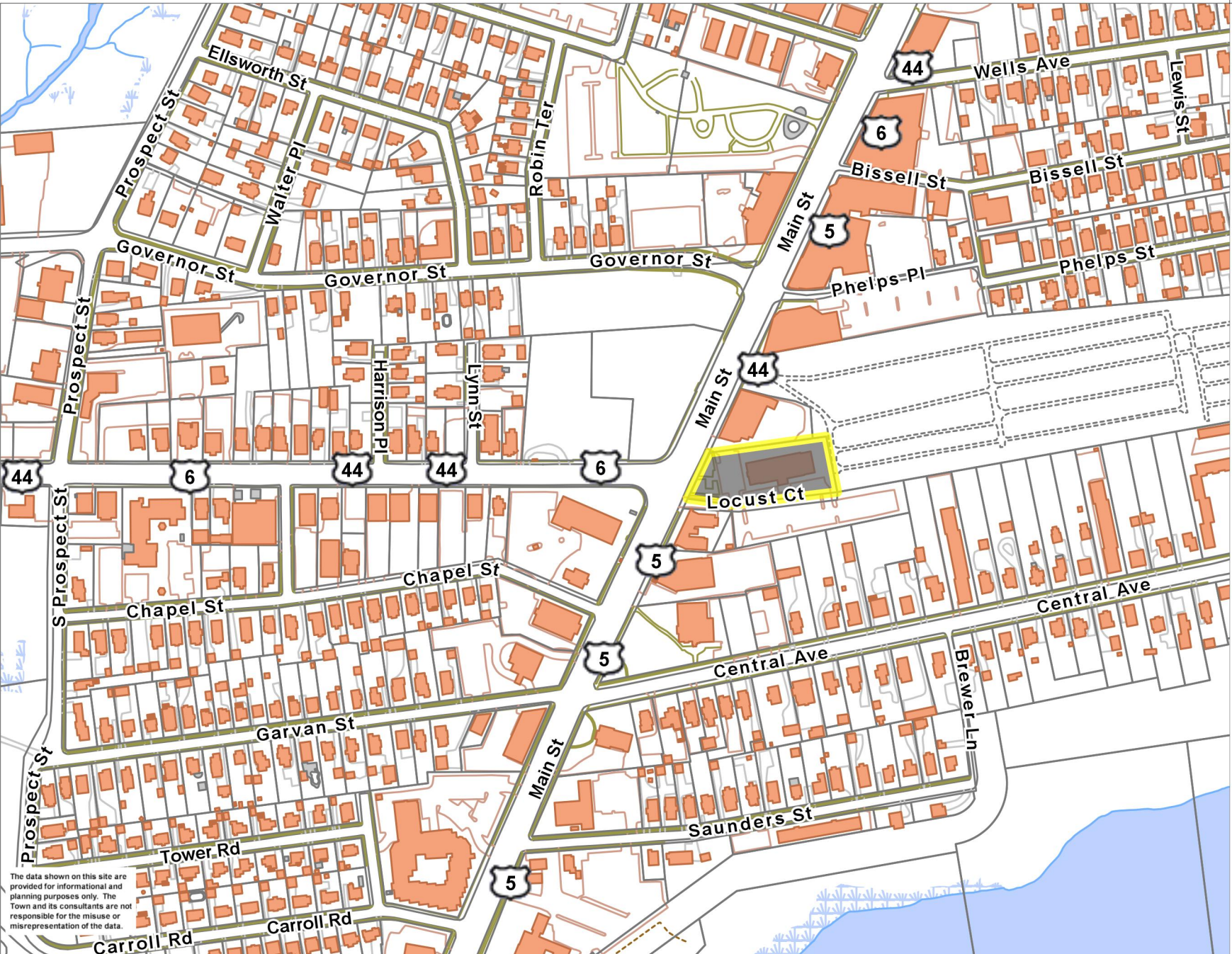
Respectfully Submitted,  
Hudson Design Group LLC



Michael Cabral  
Structural Dept. Head

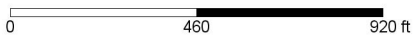


Daniel P. Hamm, PE  
Principal



- Town Boundary
- Schools
- Buildings
  - Building
  - Cement
  - Foundation
  - Greenhouse
  - Tank
- Parcels
- Paved Features
  - Driveway
  - Road Edge
  - Parking Lot
  - Sidewalk
  - Trail
  - Tunnel
  - Unpaved
  - Water Features Arc
- Water Features Poly
  - Perennial Stream
  - Draining Ditch
  - Culvert
  - Spillway
  - Headwall
  - Dam
  - Directional Flow Arrow
- Water Features Poly
  - Open Water
  - Swamp
- Pier
- CT Highways
  - Interstate
  - US Highway
  - State Highway
- Abutting Town Labels
- Az
- Abutting Towns
- Streets

The data shown on this site are provided for informational and planning purposes only. The Town and its consultants are not responsible for the misuse or misrepresentation of the data.



Printed on 03/23/2017 at 10:59 AM

# Town of East Hartford Property Summary Report

**886 MAIN ST**

<b>MAP LOT:</b>	13-332	<b>CAMA PID:</b>	8733
<b>LOCATION:</b>	886 MAIN ST		
<b>OWNER NAME:</b>	HARTFORD EAST ASSOCIATION		



8733 03/27/2016

<b>OWNER OF RECORD</b>
HARTFORD EAST ASSOCIATION
954 WARWICK AVE
WARWICK, RI 02888



<b>LIVING AREA:</b>	97981	<b>ZONING:</b>	B5	<b>ACREAGE:</b>	1.19
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## SALES HISTORY

OWNER	BOOK / PAGE	SALE DATE	SALE PRICE
HARTFORD EAST ASSOCIATION	27/ 37	01-Jan-1900	\$0.00

## CURRENT PARCEL ASSESSMENT

<b>TOTAL:</b>	\$6,213,120.00	<b>IMPROVEMENTS:</b>	\$5,849,820.00	<b>LAND:</b>	\$363,300.00
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## ASSESSING HISTORY

FISCAL YEAR	TOTAL VALUE	IMPROVEMENT VALUE	LAND VALUE
2016	\$6,213,120.00	\$5,849,820.00	\$363,300.00
2015	\$4,760,000.00	\$4,396,700.00	\$363,300.00
2014	\$5,943,560.00	\$5,580,260.00	\$363,300.00
2013	\$5,943,560.00	\$5,580,260.00	\$363,300.00
2012	\$5,943,560.00	\$5,580,260.00	\$363,300.00

# Town of East Hartford Property Summary Report

**886 MAIN ST**

<b>MAP LOT:</b>	13-332	<b>CAMA PID:</b>	8733
<b>LOCATION:</b>	886 MAIN ST		
<b>OWNER NAME:</b>	HARTFORD EAST ASSOCIATION		

## BUILDING # 1

<b>YEAR BUILT</b>	1983	<b>EXT WALL 1</b>	Brick
<b>STYLE</b>	High Rise	<b>INT WALLS 1</b>	Drywall
<b>MODEL</b>	Comm/Ind	<b>HEAT FUEL</b>	Gas
<b>STORIES</b>	11	<b>HEAT TYPE</b>	Forced Hot Air
<b>OCCUPANCY</b>	Apt w/ Elevator	<b>AC TYPE</b>	Unit
<b>ROOF</b>	Flat	<b>BEDROOMS</b>	
<b>ROOF COVER</b>	Rubber	<b>FULL BATHS</b>	0
<b>FLOOR COVER 1</b>	Mixed	<b>HALF BATHS</b>	
<b>% BSMT</b>	null	<b>TOTAL ROOMS</b>	120
<b>% FIN BSMT</b>	null	<b>% REC RM</b>	null
<b>% SEMI FIN BSMT</b>	null	<b>% ATTIC FINISH</b>	null
<b>BSMT GARAGE</b>	null	<b>FIREPLACES</b>	null



8733 03/27/2016

## EXTRA FEATURES

DESCRIPTION	CODE	UNITS
Elevator Pass	ELV1	2 UNITS
Sprinklers-Wet	SPR1	97981 S.F.

## OUTBUILDINGS

DESCRIPTION	CODE	UNITS
FR/SHED		90 SF