

Newington Historic District Commission – AGENDA

February 20, 2019 – THIRD WEDNESDAY OF EACH MONTH

10:00 a.m.

TOWN OFFICES

Members	<ul style="list-style-type: none">• Ted Connors Member (2020)• Christopher Cross Member (2020)• John Lamson Member (2021)• Lulu Pickering Member (2020)• Maxine Mintz Pottier Member (2020)• NellAnn Hiatt Alternate (2020)
Edna Gove Resignation	<ul style="list-style-type: none">• January 30, 2019 – Hi Lulu, After last night's meeting it confirmed my belief that the HDC is not a good place for me. I really don't enjoy or feel comfortable with the snarky remarks. Consider this my resignation. All my best, Edna
Sprague Energy Silo Proposal	<ul style="list-style-type: none">• Discuss AT&T Mobility Section 106 request relative to a proposed cell tower on the twin silos at Sprague.
Minutes	<ul style="list-style-type: none">• Discuss and approve January 16, 2019 regular HDC minutes.
All Interested Parties Meeting	<ul style="list-style-type: none">• Discuss and approve January 29, 2019 minutes.

Lulu Pickering
HDC Member
February 18, 2019

January 10, 2019

Newington Town Offices
c/o Gail Pare
205 Nimble Hill Rd
Newington, NH 03801
(603) 436-6415

REC'D JAN 17 2018

Subject: Invitation to Comment
NH2064 / 10073237 / Sprague Energy Silo
126 River Road, Newington, Rockingham County, NH, 03801
EBI Project #6118002121

Dear Ms. Pare:

Pursuant to Section 106 of the National Historic Preservation Act, the regulations promulgated thereunder and interagency agreements developed thereto, EBI Consulting, Inc. on behalf of AT&T Mobility, LLC provides this notice of a proposed telecommunications facility installation at the address listed above.

EBI would like to inquire if you would be interested in commenting on this proposed project. Please refer to the attached project plans for complete details regarding this proposed project.

Please note that we are requesting your review of the attached information as part of the Section 106 process only and not as part of the local zoning process. We are only seeking comments related to the proposed project's potential effect to historic properties. You are receiving this second notice due to updated project drawings.

Please submit your comments regarding the proposed project's potential effect on historic properties to EBI Consulting, to my attention at 21 B Street, Burlington, MA 01803 or contact me via telephone at the number listed below. Please reference the EBI project number. We would appreciate your comments as soon as possible within the next 30 days. Please do not hesitate to contact me if you have any questions or concerns about the proposed project.

Respectfully Submitted,



Tara Cubie
Senior Architectural Historian
tcubie@ebiconsulting.com
(339) 234-2597

Attachments - Drawings and Maps





Legend

- ★ Project Site
- Site Radius at 250', 500', 1000' and 1/2 mile

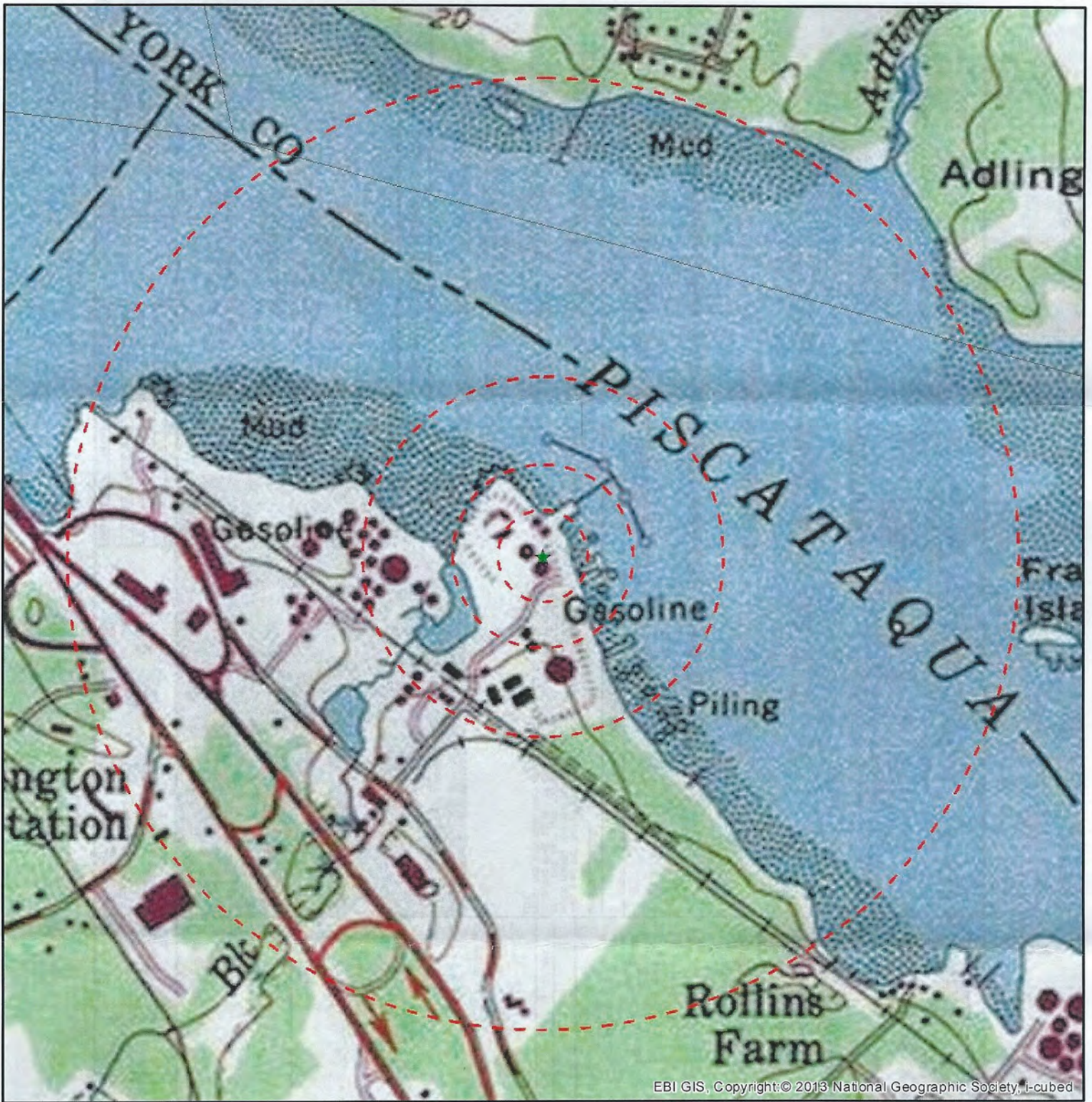
Date: 3/9/2018

Figure 1: Site Location Map

**NH2064 / 10073237 SPRAGUE ENERGY SILO
162 RIVER ROAD
NEWINGTON, NH 03801**

PN: 6118002121





Legend

- ★ Project Site
- Site Radius at 250', 500', 1000' and 1/2 mile

USGS 24K Quad: Portsmouth, NH 1986

Date: 3/9/2018

Figure 2 - Topographic Map

NH2064 / 10073237 SPRAGUE ENERGY SILO
162 RIVER ROAD
NEWINGTON, NH 03801

PN: 6118002121



PROJECT INFORMATION

ITEMS TO BE MOUNTED ON THE EXISTING SILO

- NEW AT&T ANTENNA (900-10965)
- (TYP. OF 1 PER ALPHA & BETA SECTORS, TOTAL OF 2)
- NEW AT&T ANTENNA (1700-10965) (TYP. OF 1 PER ALPHA SECTOR)
- NEW AT&T ANTENNA (1700-10965) (TYP. OF 1 PER BETA SECTOR)
- NEW AT&T ANTENNA (1700-10965) (TYP. OF 1 PER SECTOR, TOTAL OF 3)
- NEW AT&T ANTENNA (1700-10965) (TYP. OF 1 PER SECTOR, TOTAL OF 3)
- NEW SURGE ARRESTOR DCS-48-60-18-8C (TYP. OF 1 PER SECTOR, TOTAL OF 3)
- NEW SURGE ARRESTOR DCS-48-60-18-8C (TYP. OF 1 PER SECTOR, TOTAL OF 3)
- NEW DC POWER, & (3) FIBER RUNS.

- ITEMS TO BE MOUNTED ON EXISTING EQUIPMENT PLATFORM:
- ADD 2ND XAU
 - ADD (1) 6630.

ITEMS TO REMAIN:

- (6) ANTENNAS; (3) RRU'S, (3) TWIN TMA'S, 12 LINES OF 1-5/8" COAX.
- SQUID ALARMING (NOT TO BE DASH CHANGED).
- THE 1ST SQUID INSTALLED WILL BE ALARMED TO THE LOWEST BAND (OR FIRST INSTALLED RRU/RRU ON THE ALPHA SECTOR, IN THE EVENT THE ALARM CABLE CANNOT BE CONNECTED TO ALPHA IT WILL BE ACCEPTABLE TO THE CLOSEST PHYSICAL SECTOR ON AN EXCEPTION BASIS).
- SQUID ALARMING TO BE ALARMED TO THE LOWEST BAND (OR FIRST INSTALLED RRU/RRU ON THE BETA SECTOR).
- SQUID INSTALLED WILL BE ALARMED TO THE LOWEST BAND (OR FIRST INSTALLED RRU/RRU ON THE GAMMA SECTOR).

SITE ADDRESS: 126 RIVER ROAD
NEWINGTON, NH 03801

LANDLORD: SPRAGUE OPERATING RESOURCES, LLC

COORDINATES: 43.115268 N 43° 06' 54.96" N
70.812775 W 70° 48' 45.99" W

TYPE OF SITE: SILO, OUTDOOR EQUIPMENT

SLO HEIGHT: 190'-0"± A.G.L.

RAD CENTER: 194'-0"± A.G.L.

CURRENT USE: TELECOMMUNICATIONS FACILITY

PROPOSED USE: TELECOMMUNICATIONS FACILITY

DRAWING INDEX

SHEET NO.	DESCRIPTION	REV.
T-1	TITLE SHEET	A
GN-1	GENERAL NOTES	A
A-1	COMPOUND & EQUIPMENT PLANS	A
A-2	ANTENNA LAYOUTS	A
A-3	ELEVATION	A
A-4	DETAILS	A
SN-1	STRUCTURAL NOTES	A
S-1	STRUCTURAL DETAILS	A
RF-1	RF PLUMBING DIAGRAM	A
G-1	GROUNDING DETAILS	A



SITE NUMBER: NH2064

SITE NAME: SPRAGUE ENERGY

FA CODE: 10073237

PACE ID: MRCTB033966, MRCTB034279, MRCTB034041

PROJECT: LTE 4C/5C/RETRO 2019 UPGRADE

VICINITY MAP

DIRECTIONS TO SITE:
TAKE I-93 EAST TOWARD BOSTON/I-95, TOLL ROAD. 6.7 MI. AT EXIT 14, TAKE RAMP RIGHT FOR I-95 NORTH TOWARD PORTSMOUTH NH/WALTHAM. 26.0 MI. KEEP RIGHT TO STAY ON I-95N. 40.2 MI. AT EXIT 16, TAKE RAMP LEFT FOR I-93. MAKE CHANGES TO US HWY-10N. TAKE RAMP RIGHT TO STAY ON I-93N. TAKE RAMP RIGHT TO STAY ON I-93N. TAKE RAMP RIGHT, AND THEN TURN RIGHT ONTO SHATTUCK WAY. 0.2 MI. 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 ACCESSIBLE 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.
4. CONSTRUCTION DRAWINGS ARE VALID FOR SIX MONTHS AFTER ENGINEER OF RECORD'S STAMPED AND SIGNED SUBMITTAL DATE LISTED HEREIN.

UNDERGROUND SERVICE ALERT



WWW.DIGSAFE.COM
72 HOURS PRIOR

<p>550 COCHUILLATE ROAD FRAMINGHAM, MA 01701</p>		<p>SITE NUMBER: NH2064</p> <p>SITE NAME: SPRAGUE ENERGY</p> <p>126 RIVER ROAD NEWINGTON, NH 03801 ROCKINGHAM COUNTY</p>		<p>AT&T</p> <p>TITLE SHEET (LTE 4C/5C/RETRO)</p> <p>SITE NUMBER: NH2064</p> <p>DRAWING NUMBER: T-1</p>	
<p>DESIGNED BY: AT</p> <p>DESIGNED BY: ET</p>	<p>REVISIONS</p> <p>ET</p> <p>BY: []</p>	<p>DATE</p> <p>11/07/18</p>	<p>SCALE</p> <p>AS SHOWN</p>	<p>DATE</p> <p>11/07/18</p>	<p>SCALE</p> <p>AS SHOWN</p>

REVIEWED
By David Ford at 2:17 pm, Nov 08, 2018

HUDSON Design Group LLC
45 BEECHWOOD DRIVE NORTH ANDOVER, MA 01854 TEL: 978.555.5553 FAX: 978.555.5558

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

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) LIGHTNING 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 GE'S) SHALL BE BONDED TOGETHER, AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDED 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 BITS EQUIPMENT.
5. EACH BITS 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 BITS 2 AWG STRANDED COPPER FOR OUTDOOR BITS.
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 BONDED CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO GROUND EAR.
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 BONDED FITTINGS OR BY BONDED 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 AND/OR GROUNDING BAR USING #2 AWG SOLID BARE TINNED COPPER GROUND WIRE, PER NEC 250.59.

GENERAL NOTES

1. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:
CONTRACTOR - CENTERLINE
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 APPLICABLE ORDINANCES, RULES, REGULATIONS, AND ORDINANCES. THE SUBCONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS. 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, INSTALLATION, TESTING, 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 ROUTINGS OF CONDUIT, POWER AND T. CABLES, COORDINATING CABLES AS SHOWN ON THE POWER AND COMMUNICATIONS PLANS 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. ALL DAMAGED PARTS 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 SHALL BE GALVANNEAL. ALL STRUCTURAL STEEL SHALL BE GALVANNEAL. GALVANNEAL 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 CELL 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 HOURS.
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 TO PREVENT RADIATION EXPOSURE. PERSONS WHO WORK IN THE VICINITY OF ANY DANGEROUS EXPOSURE LEVELS.
20. APPLICABLE BUILDING CODES:
SUBCONTRACTOR SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION OVER 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 2009 WITH NEW HAMPSHIRE AMENDMENTS
ELECTRICAL 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) 222-6,
STRUCTURAL STANDARDS FOR STEEL.

FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING CONSTRUCTION, THE MOST RECENT EDITION SHALL GOVERN. WHERE THERE IS CONFLICT BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.

ABBREVIATIONS

ACL	ABOVE GRADE LEVEL	EQ	EQUAL	REQ	REQUIRED
AWG	AMERICAN WIRE GAUGE	CC	GENERAL CONTRACTOR	RF	RADIO FREQUENCY
BBU	BATTERY BACKUP UNIT	GRG	GALVANIZED RIGID CONDUIT	TBD	TO BE DETERMINED
BTW	BARE TINNED SOLID COPPER WIRE	MCB	MASTER GROUND BAR	TBR	TO BE REMOVED
BGR	BURIED GROUND RING	MIN	MINIMUM	TBR	TO BE REMOVED AND REPLACED
BTS	BASE TRANSCENDER STATION	P	PROPOSED	TYP	TYPICAL
E	EXISTING	NTS	NOT TO SCALE	UC	UNDER GROUND
EOB	EQUIPMENT GROUND BAR	RAD	RADIATION CENTER LINE (ANTENNA)	VF	VERIFY IN FIELD
EOB	EQUIPMENT GROUND RING	REF	REFERENCE		



SITE NUMBER: NH2064
SITE NAME: SPRAGUE ENERGY
126 RIVER ROAD
NEWINGTON, NH 03261
ROCKINGHAM COUNTY



750 WEST CENTER STREET, SUITE #301
WEST BROOKFIELD, MA 02379
TEL: 978-335-5555
FAX: 978-335-5558

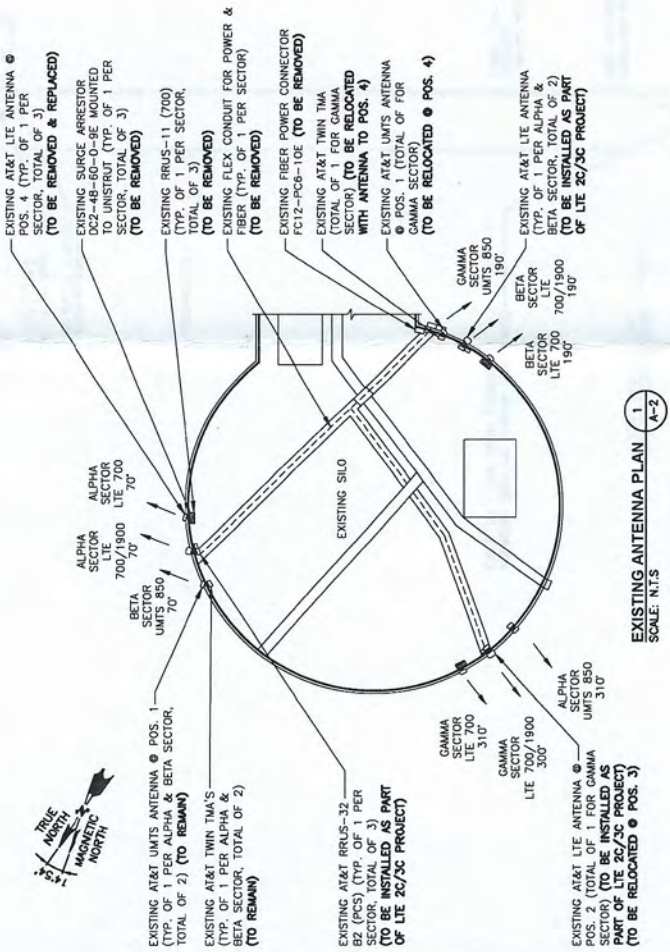


AT&T	
GENERAL NOTES (LITE AC/SC/RETRO)	
SHEET NUMBER	DRAWING NUMBER
NH2064	GN-1
REV	A

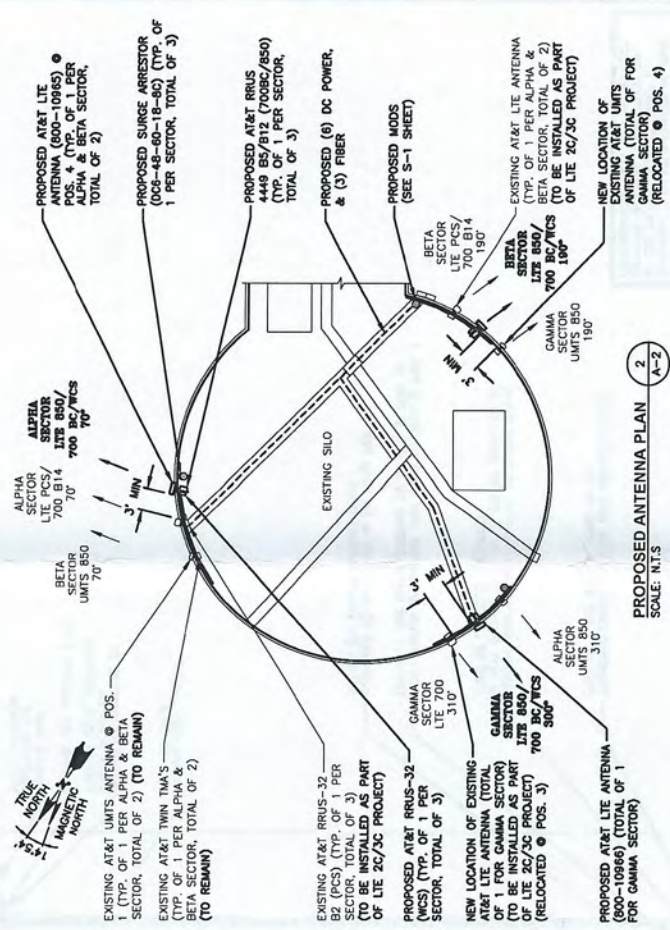
SPECIAL CONSTRUCTION/PLANNING NOTE:
 EQUIPMENT SHOWN AS TO BE INSTALLED AS PART OF LITE 2C/3C PROJECT. REFER TO RECORD DRAWINGS AND NOT ACTUAL FIELD CONDITIONS. DEPLOYMENT OF EQUIPMENT TO BE INSTALLED AS PART OF LITE 2C/3C PROJECT UNDER A SEPARATE BUILDING PERMIT PRIOR TO CONSTRUCTION START OF THIS PROJECT.

NOTE:
 REFER TO STRUCTURAL ANALYSIS BY: HUDSON DESIGN GROUP, LLC, PROJECT NUMBER: 2018-001, DATED: OCTOBER 23, 2018, FOR THE LOCATION OF EXISTING STRUCTURES TO SUPPORT THE PROPOSED EQUIPMENT.

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



EXISTING ANTENNA PLAN (1)
 SCALE: N.T.S.



PROPOSED ANTENNA PLAN (2)
 SCALE: N.T.S.

HUDSON Design Group LLC
 100 WOODDAVE DRIVE
 NEWTON, MASSACHUSETTS 02459
 TEL: (781) 552-5559
 FAX: (781) 552-9999

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

550 COCHUWATE ROAD
 FRAMINGHAM, MA 01701

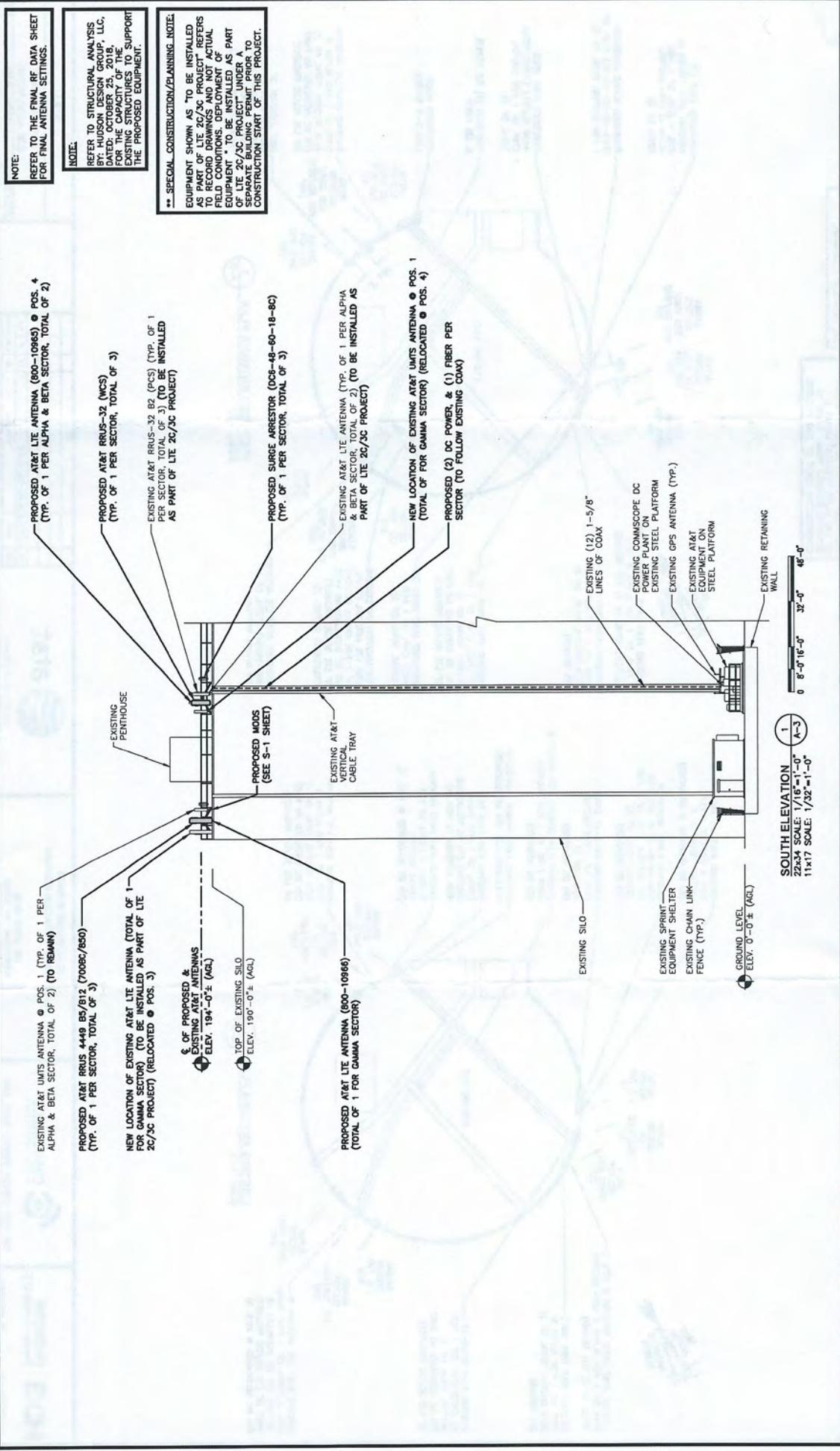
SITE NUMBER: NH2064
 SITE NAME: SPRAGUE ENERGY
 108 BAKER ROAD
 NEWINGTON, NH 03801
 ROCKINGHAM COUNTY

REVISIONS		DATE	BY	CHK	APP
A	11/07/18	ISSUED FOR REVIEW	ET	AT	DAC

SCALE: AS SHOWN LOCATED BY: AT DRAWN BY: ET

ANTENNA LAYOUTS		DATE	BY	CHK	APP
AT&T					
ANTENNA LAYOUTS (LITE 4C/5C/RETRIO)					

SITE NUMBER	NH2064	A-2
DATE		



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

NOTE:
REFER TO STRUCTURAL ANALYSIS BY THE STRUCTURAL DESIGN GROUP, LLC, FOR THE CAPACITY OF THE EXISTING STRUCTURES TO SUPPORT THE PROPOSED EQUIPMENT.

** SPECIAL CONSTRUCTION/PLANNING NOTE:
EQUIPMENT SHOWN AS TO BE INSTALLED AS PART OF LITE 2C/3C PROJECT REFERS TO RECORD DRAWINGS AND NOT ACTUAL EQUIPMENT TO BE INSTALLED AS PART OF LITE 2C/3C PROJECT UNDER A SEPARATE BUILDING PERMIT PRIOR TO CONSTRUCTION START OF THIS PROJECT.

SITE NUMBER		NH2064	
DRAWING NUMBER		A-3	
ELEVATION		(LITE 4C/5C/RETRO)	
REV	DATE	BY	CHK APP'D
A	11/07/18	ISSUED FOR REVIEW	

NO.	DATE	REVISIONS	BY	CHK APP'D
1	11/07/18	ISSUED FOR REVIEW		

DESIGNED BY:	AT
DRAWN BY:	ET

at&t
550 COCHICHEUA ROAD
FRAMINGHAM, MA 01701

SITE NUMBER: NH2064
SITE NAME: SPRAGUE ENERGY
106 PRATER ROAD
NEWINGTON, NH 03801
ROCKINGHAM COUNTY

CENTERLINE
750 WEST CENTER STREET, SUITE #301
WEST BROOKFIELD, MA 02379

HUDSON
Design Group LLC
45 BECHWOOD DRIVE
NORTH ANDOVER, MA 01854
TEL: 978.557.5553
FAX: 978.557.5554

AT&T

ANTENNA SCHEDULE

SECTOR	EXISTING/PROPOSED	BAND	ANTENNA	SIZE (INCHES) (L x W x D)	ANTENNA E HEIGHT	AZIMUTH	T/M/ D-EXPLER	RRU	SIZE (INCHES) (L x W x D)	FEEDER	RAYCAP
A1	EXISTING	UMTS 850	7770	55X11X5	±194'	310°	(E)(1) POWERWAVE TT19-08BP111-001	-	-	(2) 1-5/8 COAX	(P)(1) RAYCAP DC8-48-60-18-8C
A2	-	-	-	-	-	-	-	-	-	-	-
A3	EXISTING	LTE PCS/700 B14	0566512-2 **	72X12X9.6	±194'	70°	(E)(1) V51-2 DB0061FV51-2	(E)(1) RRU5-32 B2 (PCS) ** (P)(1) 4478 B14 (700)	-	(2) 1-5/8 COAX	(P)(1) RAYCAP DC8-48-60-18-8C
A4	PROPOSED	LTE 850/700 BC/WCS	800-10985	78.7X20X8.9	±194'	70°	(E)(1) V51-2 DB0061FV51-2	(P)(1) RRU5-32 (WCS) ** (P)(1) 4449 B5/B12 (700BC/850)	27.2X12.1X7.0 18.1X13.4X8.3	-	-
B1	EXISTING	UMTS 850	7770	55X11X5	±194'	70°	(E)(1) POWERWAVE TT19-08BP111-001	-	-	(2) 1-5/8 COAX	(P)(1) RAYCAP DC8-48-60-18-8C
B2	-	-	-	-	-	-	-	-	-	-	-
B3	EXISTING	LTE PCS/700 B14	0566512-2 **	72X12X9.6	±194'	190°	(E)(1) V51-2 DB0061FV51-2	(E)(1) RRU5-32 B2 (PCS) ** (P)(1) 4478 B14 (SHARED)	-	(2) 1-5/8 COAX	(P)(1) RAYCAP DC8-48-60-18-8C
B4	PROPOSED	LTE 850/700 BC/WCS	800-10985	78.7X20X8.9	±194'	190°	(E)(1) V51-2 DB0061FV51-2	(P)(1) RRU5-32 (WCS) ** (P)(1) 4449 B5/B12 (700BC/850)	27.2X12.1X7.0 18.1X13.4X8.3	-	-
C1	PROPOSED	LTE 850/700 BC/WCS	800-10986	90X20X8.9	±194'	300°	(E)(1) V51-2 DB0061FV51-2	(P)(1) RRU5-32 B2 (PCS) ** (P)(1) 4478 B14 (700)	-	(2) 1-5/8 COAX	(P)(1) RAYCAP DC8-48-60-18-8C
C2	EXISTING	LTE PCS/700 B14	TPA-65R-LCHUUU-H8 **	98X14.4X8.6	±194'	300°	(E)(1) POWERWAVE TT19-08BP111-001	-	-	(2) 1-5/8 COAX	(P)(1) RAYCAP DC8-48-60-18-8C
C3	-	-	-	-	-	-	-	-	-	-	-
C4	EXISTING	UMTS 850	7770	55X11X5	±194'	190°	(E)(1) POWERWAVE TT19-08BP111-001	-	-	(2) 1-5/8 COAX	(P)(1) RAYCAP DC8-48-60-18-8C

FINAL ANTENNA SCHEDULE (A-4)
SCALE: N.T.S.

** SPECIAL CONSTRUCTION/PLANNING NOTE:
EQUIPMENT SHOWN AS TO BE INSTALLED AS PART OF LTE 2C/3C PROJECT REFERS TO RECORD DRAWINGS AND NOT ACTUAL FIELD CONDITIONS. DEPLOYMENT OF EQUIPMENT TO BE INSTALLED AS PART OF 2C/3C PROJECT MUST BE A SEPARATE BUILDING PERMIT PRIOR TO CONSTRUCTION START OF THIS PROJECT.

RRU CHART

QUANTITY	MODEL	L	W	D
3(E)(3)(P)	RRUS-32	27.2"	12.1"	7.0"
3(P)	4449 B5/B12	18.1"	13.4"	9.5"
2(E)	4478 B14	18.1"	13.4"	8.3"

NOTE: MOUNT PER MANUFACTURER'S SPECIFICATIONS

NOTE: SEE RDS FOR RRU FREQUENCY AND MODEL NUMBER

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

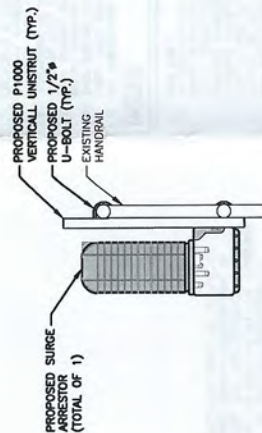
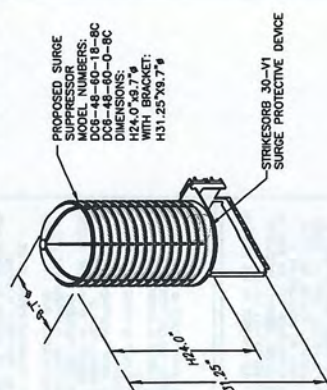
PROPOSED RRU DETAIL (A-4)
SCALE: N.T.S.

NOTE: MOUNT PER MANUFACTURER'S SPECIFICATIONS.

PROPOSED SURGE ARRESTOR MOUNTING DETAIL (A-3)
SCALE: N.T.S.

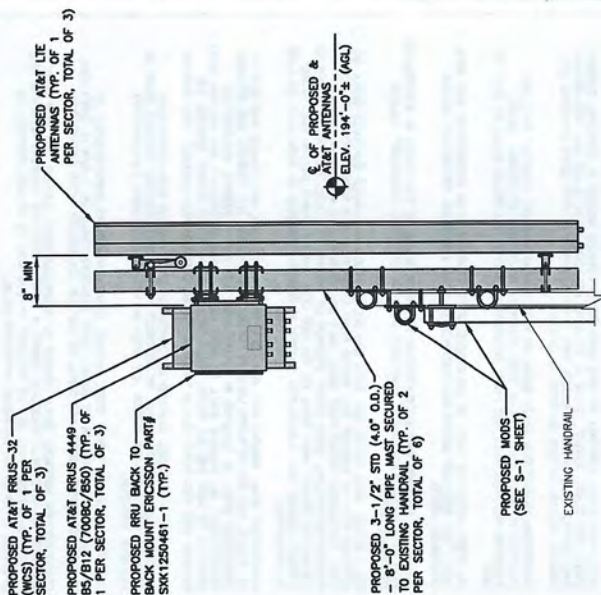
DC SURGE SUPPRESSOR DETAIL (A-3)
SCALE: N.T.S.

NOTE: MOUNT PER MANUFACTURER'S SPECIFICATIONS.



PROPOSED LTE ANTENNA & RRU MOUNTING DETAIL (A-4)
SCALE: 1/2"=1'-0"

PROPOSED AT&T LTE ANTENNAS (TYP. OF 3) PER SECTOR, TOTAL OF 9)



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

NOTE: REFER TO STRUCTURAL ANALYSIS REPORT BY HUDSON DESIGN GROUP, LLC, DATED OCTOBER 24, 2016, FOR THE CAPACITY OF THE EXISTING STRUCTURES TO SUPPORT THE PROPOSED EQUIPMENT.

<p>550 COCHITUATE ROAD FRAMINGHAM, MA 01701</p>		<p>SITE NUMBER: NH2064</p> <p>SITE NAME: SPRAGUE ENERGY</p> <p>126 RIVER ROAD NEWINGTON, NH 03301 ROCKINGHAM COUNTY</p>	
<p>NO. DATE ISSUED FOR REVIEW BY CHG APPD</p> <p>A 11/07/18</p>		<p>DESIGNED BY: AT</p> <p>DRAWN BY: ET</p>	
<p>SCALE: AS SHOWN</p>		<p>DETAILS (LTE 4C/5C/RETRO)</p> <p>DRAWING NUMBER: A-4</p>	

<p>45 RECHWOOD DRIVE MOUNTAIN BROOK, MA 01535</p>	<p>750 WEST CENTER STREET, SUITE #301 WEST BROOKFIELD, MA 02379</p>
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STRUCTURAL NOTES:

- DESIGN REQUIREMENTS ARE PER STATE BUILDING CODE AND APPLICABLE SUPPLEMENTS, INTERNATIONAL BUILDING CODE, EN71A-222-8 STRUCTURAL STANDARDS FOR STEEL ANTENNA, TOWERS AND ANTENNA SUPPORTING STRUCTURES.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO FABRICATION AND ERECTION OF ANY MATERIAL. ANY UNUSUAL CONDITIONS SHALL BE REFERRED TO THE ATTENTION OF THE CONSTRUCTION MANAGER AND ENGINEER OF RECORD.
- DESIGN AND CONSTRUCTION OF STRUCTURAL STEEL SHALL CONFORM TO THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS.
- STRUCTURAL STEEL SHALL CONFORM TO ASTM A992 (50-60 ksi), MISCELLANEOUS STEEL SHALL CONFORM TO ASTM A36 UNLESS OTHERWISE INDICATED.
- STEEL PIPE SHALL CONFORM TO ASTM A500 "C"-FORMED WELDED & SEAMLESS CARBON STEEL STRUCTURAL TUBING, GRADE B, OR ASTM A53 PIPE STEEL BLACK AND HOT-DIPPED ZINC-COATED WELDED AND SEAMLESS TYPE E OR S, GRADE B. PIPE SIZES INDICATED ARE NOMINAL. ACTUAL OUTSIDE DIAMETER IS LARGER.
- STRUCTURAL CONNECTION BOLTS SHALL BE HIGH STRENGTH BOLTS (BEARING TYPE) AND CONFORM TO ASTM A325 TYPE-X "HIGH STRENGTH BOLTS FOR STRUCTURAL JOINTS, INCLUDING SUITABLE NUTS AND PLAIN HARDENED WASHERS". ALL BOLTS SHALL BE 3/4" DIA UNLESS NOTED.
- ALL STEEL MATERIALS SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123 ZINC (HOT-DIP GALVANIZED) COATINGS ON IRON AND STEEL PRODUCTS, UNLESS OTHERWISE NOTED.
- ALL BOLTS, ANCHORS AND MISCELLANEOUS HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 ZINC-COATING (HOT-DIP) ON IRON AND STEEL HARDWARE, UNLESS OTHERWISE NOTED.
- DRILL HOLES, SAW CUTS AND ALL DAMAGED GALVANIZED SURFACES SHALL BE REPAIRS TO THE ORIGINAL SURFACE. REPAIR SHALL HAVE 85 PERCENT ZINC BY WEIGHT. ZINC BY DRY WEIGHT SHALL BE 1.5 TIMES THE WEIGHT OF THE ORIGINAL SURFACE. REPAIR SHALL BE DRY DIPPED GALVANIZING REPAIR PREMIUM BY GROUND OR EQUAL THICKNESS OF APPLIED GALVANIZING REPAIR PAINT SHALL BE NOT LESS THAN 4 COATS (ALLOW TIME TO DRY BETWEEN COATS) WITH A RESULTING COATING THICKNESS REQUIRED BY ASTM A123 OR A153 AS APPLICABLE.
- CONTRACTOR SHALL COMPLY WITH AWS CODE FOR PROCEDURES, APPEARANCE AND QUALITY OF WELDS, AND FOR METHODS USED IN CORRECTING WELDING. ALL WELDERS AND WELDING PROCESSES SHALL BE QUALIFIED IN ACCORDANCE WITH AWS "STANDARD QUALIFICATION PROCEDURES". ALL WELDING SHALL BE DONE USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO ASB AND D11. WHERE FILLER WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE 9.2.4 IN THE ASB "STEEL CONSTRUCTION MANUAL". 1/4" MINIMUM.
- INCORRECTLY FABRICATED, DAMAGED OR OTHERWISE MISFITTING OR NON-CONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE CONSTRUCTION MANAGER PRIOR TO THE NEXT WORKING DAY. CORRECTIVE ACTION. ANY SUCH ACTION SHALL REQUIRE CONSTRUCTION MANAGER APPROVAL.
- UNISTRUT SHALL BE FORMED STEEL CHANNEL STRUT FRAMING AS MANUFACTURED BY UNISTRUT CORP., WAYNE, MI OR EQUAL. STRUT MEMBERS SHALL BE 1.5/8"x1.5/8"x12GA, UNLESS OTHERWISE NOTED, AND SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION.
- EPOXY ANCHOR ASSEMBLY SHALL CONSIST OF STAINLESS STEEL ANCHOR ROD WITH NUTS & WASHERS. AN INTERNALLY THREADED INSERT, A SCREEN TUBE AND AN EPOXY ADHESIVE. THE ANCHORING SYSTEM SHALL BE THE HLT-HIT HY-270 AND OR HY-200 SYSTEMS (AS SPECIFIED IN DWG.) OR ENGINEERS APPROVED EQUAL.
- EXPANSION BOLTS SHALL CONFORM TO FEDERAL SPECIFICATION FT-S-325, GROUP II, TYPE 4, CLASS I, HLT1 KWIK BOLT III OR APPROVED EQUAL. INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- LUMBER SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION AND THE NATIONAL FOREST PRODUCTS ASSOCIATION'S NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION. ALL LUMBER SHALL BE PRESSURE TREATED AND SHALL BE STRUCTURAL GRADE NO. 2 OR BETTER.
- WHERE ROOF PENETRATIONS ARE REQUIRED, THE CONTRACTOR SHALL CONTACT AND COORDINATE RELATED WORK WITH THE BUILDING OWNER AND THE EXISTING ROOF INSTALLER. WORK SHALL BE PERFORMED IN SUCH A MANNER AS TO NOT VOID THE EXISTING ROOF WARRANTY. ROOF SHALL BE WATER-TIGHT.
- ALL PREGRESS MEMBERS USED ARE AS MANUFACTURED BY STONGWELL COMPANY OF BRISTOL, VA 24203. ALL DESIGN CRITERIA FOR THESE MEMBERS IS BASED ON INFORMATION PROVIDED IN THE DESIGN MANUAL. ALL REQUIREMENTS PUBLISHED IN SAID MANUAL MUST BE STRICTLY ADHERED TO.
- NO MATERIALS TO BE ORDERED AND NO WORK TO BE COMPLETED UNTIL SHOP DRAWINGS HAVE BEEN REVIEWED AND APPROVED IN WRITING.
- SUBCONTRACTOR SHALL FIREPROOF ALL STEEL TO PRE-EXISTING CONDITIONS.

SPECIAL INSPECTIONS (REFERENCE IBC CHAPTER 17):

GENERAL: WHERE APPLICATION IS MADE FOR CONSTRUCTION, THE OWNER OR THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE ACTING AS THE OWNER'S AGENT SHALL EMPLOY ONE OR MORE APPROVED AGENCIES TO PERFORM INSPECTIONS DURING CONSTRUCTION ON THE TYPES OF WORK LISTED IN THE INSPECTION CHECKLIST ABOVE. THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE AND ENGINEERS OF RECORD INVOLVED IN THE DESIGN OF THE PROJECT ARE PERMITTED TO ACT AS THE APPROVED AGENCY AND THEIR PERSONNEL ARE PERMITTED TO ACT AS THE SPECIAL INSPECTOR FOR THE WORK DESIGNED BY THEM. PROVIDED THOSE PERSONNEL MEET THE QUALIFICATION REQUIREMENTS.

STATEMENT OF SPECIAL INSPECTIONS: THE APPLICANT SHALL SUBMIT A STATEMENT OF SPECIAL INSPECTIONS PREPARED BY THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE IN ACCORDANCE WITH SECTION 107.1.1 AS A CONDITION FOR ISSUANCE. THIS STATEMENT SHALL BE IN ACCORDANCE WITH SECTION 1705.

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

SPECIAL INSPECTION CHECKLIST

BEFORE CONSTRUCTION	
CONSTRUCTION/INSTALLATION INSPECTIONS AND TESTING REQUIRED BY ENGINEER OF RECORD	REPORT ITEM ENGINEER OF RECORD APPROVED SHOP DRAWINGS ¹
REQUIRED	N/A
ADDITIONAL TESTING AND INSPECTIONS:	
CONSTRUCTION/INSTALLATION INSPECTIONS AND TESTING REQUIRED BY ENGINEER OF RECORD	REPORT ITEM MATERIAL SPECIFICATIONS REPORT? FABRICATOR JOE INSPECTION PACKING SLIPS ¹
REQUIRED	N/A
DURING CONSTRUCTION	
CONSTRUCTION/INSTALLATION INSPECTIONS AND TESTING REQUIRED BY ENGINEER OF RECORD	REPORT ITEM STEEL INSPECTIONS HIGH STRENGTH BOLT INSPECTIONS HIGH WIND ZONE INSPECTIONS ¹ FOUNDATION INSPECTIONS CONCRETE COMP. STRENGTH, SLUMP TESTS AND PLACEMENT POST INSTALLED ANCHOR VERIFICATION GROUT VERIFICATION CERTIFIED WELD INSPECTION EARTHWORK LIFT AND DENSITY ON SITE COLD GALVANIZING GUY WIRE TENSION REPORT
REQUIRED	N/A
ADDITIONAL TESTING AND INSPECTIONS:	
CONSTRUCTION/INSTALLATION INSPECTIONS AND TESTING REQUIRED BY ENGINEER OF RECORD	REPORT ITEM MODIFICATION INSPECTOR REQUIRE ON RECORD DRAWINGS ¹ FIELD AND ANCHOR PULL-OUT TESTING PHOTOGRAPHS
REQUIRED	N/A
AFTER CONSTRUCTION	
CONSTRUCTION/INSTALLATION INSPECTIONS AND TESTING REQUIRED BY ENGINEER OF RECORD	REPORT ITEM MODIFICATION INSPECTOR REQUIRE ON RECORD DRAWINGS ¹ FIELD AND ANCHOR PULL-OUT TESTING PHOTOGRAPHS
REQUIRED	N/A
ADDITIONAL TESTING AND INSPECTIONS:	

- NOTES:**
- FOR ANY NEW SHOP FABRICATED FRP OR STEEL BOLTS OR STEEL ANCHORS, PROOF OF MATERIALS, HIGH WIND ZONE INSPECTION CATB 120MPH OR CAT C/D FASTENING SCHEDULE AND ANCHORS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH AD 353.4 AND ICC-ES AC308 FOR CRACKED CONCRETE AND SEISMIC DESIGN REQUIREMENTS. DESIGN CONTRACTOR SHALL OBTAIN APPROVAL FROM THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE PRIOR TO INSTALLATION INTO DRY HOLES DRILLED USING A CARBIDE BIT INTO CRACKED CONCRETE THAT HAS CURED FOR 28 DAYS. THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE SHALL BE ADVISED BY A CERTIFIED ADHESIVE ANCHOR INSTALLER PER ACT 318-11 519.2.2. INSTALLATIONS REQUIRING CERTIFIED INSTALLERS AS REQUIRED; FOR ANY FIELD CHANGES TO THE ITEMS IN THIS TABLE.

NOTES:

- ALL CONNECTIONS TO BE SHOP WELDED & FIELD BOLTED USING 3/4"x9 A325-X BOLTS UNLESS OTHERWISE NOTED. SHOP DRAWING ENGINEER REVIEW & APPROVAL REQUIRED BEFORE ORDERING MATERIAL.
- ALL MATERIALS TO BE APPROVED BY THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE PRIOR TO STEEL FABRICATION.
- VERIFICATION OF EXISTING ROOF CONSTRUCTION IS REQUIRED PRIOR TO THE INSTALLATION OF THE ROOF PENETRATIONS. THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE SHALL APPROVE EXISTING CONDITIONS IN ORDER TO MOVE FORWARD.
- EXISTING BRICK MASONRY COLUMNS/BEARING TO BE REPAIRED/REPLACED AT ALL PROPOSED PLATFORM SUPPORT POINTS. ENGINEER OF RECORD TO REVIEW AND APPROVE.

AT&T	
STRUCTURAL NOTES (L.T.E. 4C/5C/REIRO)	
SITE NUMBER	NH2064
DRAWING NUMBER	SN-1
REV	A



550 COCHILUATE ROAD
FRAMINGHAM, MA 01701

SITE NUMBER: NH2064
SITE NAME: SPRAGUE ENERGY
126 RIVER ROAD
NEWINGTON, NH 03801
ROCKINGHAM COUNTY

HUDSON Design Group LLC
14 BROADWAY SUITE 400
NORTH ANDOVER, MA 01845
TEL: (978) 652-6555
FAX: (978) 358-5558

CENTERLINE
175 WEST CENTER STREET, SUITE 4301
WEST BRIDGEWATER, MA 02379

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

**** SPECIAL CONSTRUCTION/PLANNING NOTE:**
EQUIPMENT SHOWN AS TO BE INSTALLED AS PART OF LTE 2C/3C PROJECT RECORD DRAWINGS AND NOT ACTUAL FIELD CONSTRUCTION. ALL EQUIPMENT TO BE INSTALLED AS PART OF LTE 2C/3C PROJECT UNDER A SEPARATE BUILDING PERMIT PRIOR TO CONSTRUCTION START OF THIS PROJECT.

NOTE:
REFERS TO STRUCTURAL ANALYSIS BY: HUDSON DESIGN GROUP, LLC, DATED: OCTOBER 25, 2018, FOR THE CAPACITY OF THE EXISTING STRUCTURES TO SUPPORT THE PROPOSED EQUIPMENT.

NOTE:
PROPOSED HORIZONTAL PIPE MAST AND PIPE BRACE LENGTHS TO BE V.I.F.

PROPOSED 3-1/2" STD (4.0" O.D.) - 8'-0" LONG PIPE MAST SECURED TO EXISTING HANDRAIL (TYP. OF 2 PER SECTOR, TOTAL OF 6)

PROPOSED CROSSOVER PLATE KIT SITEPRO1 PART# SCX43-K (TYP.)

PROPOSED 2-1/2" STD (2.88" O.D.) PIPE BRACES SECURED TO EXISTING HANDRAIL (TYP. OF 1 PER SECTOR, TOTAL OF 3)

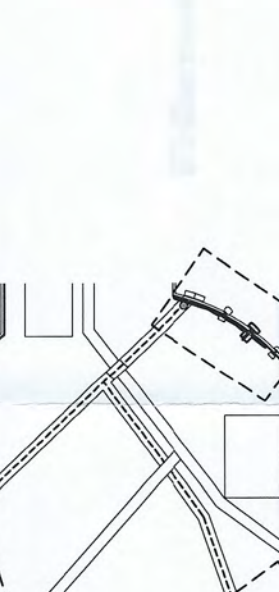
PROPOSED PIPE TO PIPE CLAMP SITEPRO1 PART# PUCK (OR APPROVED EQUAL (TYP.))

PROPOSED 2-1/2" STD (2.88" O.D.) PIPE BRACES SECURED TO EXISTING HANDRAIL (TYP. OF 2 PER SECTOR, TOTAL OF 6)

PROPOSED PIPE TO PIPE CLAMP PART# PUCK (OR APPROVED EQUAL (TYP.))

PROPOSED CROSSOVER PLATE KIT SITEPRO1 PART# SCX43-K (TYP.)

EXISTING HANDRAIL



NOTE:
PROPOSED HORIZONTAL PIPE MAST AND PIPE BRACE LENGTHS TO BE V.I.F.

PROPOSED 3-1/2" STD (4.0" O.D.) - 8'-0" LONG PIPE MAST SECURED TO EXISTING HANDRAIL (TYP. OF 2 PER SECTOR, TOTAL OF 6)

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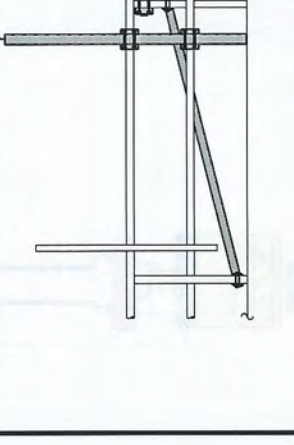
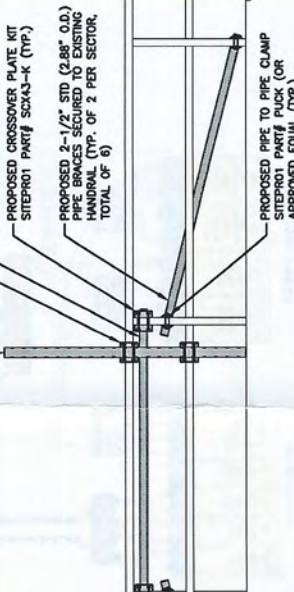
PROPOSED PIPE TO PIPE CLAMP SITEPRO1 PART# PUCK (OR APPROVED EQUAL (TYP.))

PROPOSED 2-1/2" STD (2.88" O.D.) PIPE BRACES SECURED TO EXISTING HANDRAIL (TYP. OF 2 PER SECTOR, TOTAL OF 6)

PROPOSED PIPE TO PIPE CLAMP PART# PUCK (OR APPROVED EQUAL (TYP.))

PROPOSED CROSSOVER PLATE KIT SITEPRO1 PART# SCX43-K (TYP.)

EXISTING HANDRAIL



NO.		DATE	ISSUED FOR	REVISIONS	BY	CHK	APPD
A	11/07/18		ISSUED FOR REVIEW		ET	AT	DC

SCALE:	AS SHOWN	DESKTOP	BT	AT	DWGN	BT	ET
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SITE NUMBER: NH2064		DATE: 11/07/18	ISSUED FOR: REVIEW	BY: ET	CHK: AT	APPD: DC
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STRUCTURAL DETAILS (LTE 4C/5C/RETRO)		DATE: 11/07/18	ISSUED FOR: REVIEW	BY: ET	CHK: AT	APPD: DC
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SITE NUMBER: NH2064		DATE: 11/07/18	ISSUED FOR: REVIEW	BY: ET	CHK: AT	APPD: DC
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SITE NAME: SPRAGUE ENERGY		DATE: 11/07/18	ISSUED FOR: REVIEW	BY: ET	CHK: AT	APPD: DC
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750 WEST CENTER STREET, SUITE #301 WEST BRIDGEWATER, MA 02379		DATE: 11/07/18	ISSUED FOR: REVIEW	BY: ET	CHK: AT	APPD: DC
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126 RIVER ROAD NEWINGTON, NH 03801 ROCKINGHAM COUNTY		DATE: 11/07/18	ISSUED FOR: REVIEW	BY: ET	CHK: AT	APPD: DC
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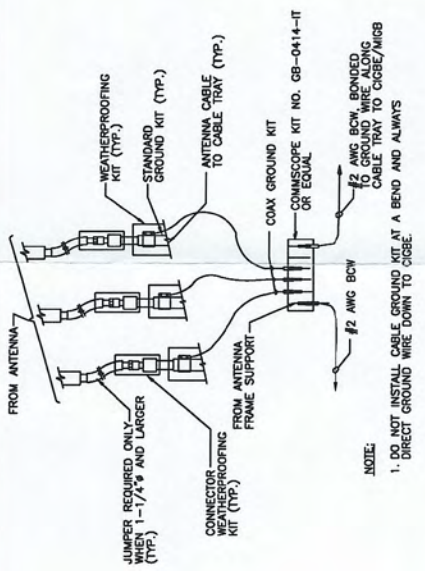
550 COCHICHEWEE ROAD FRAMINGHAM, MA 01701		DATE: 11/07/18	ISSUED FOR: REVIEW	BY: ET	CHK: AT	APPD: DC
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AT&T		DATE: 11/07/18	ISSUED FOR: REVIEW	BY: ET	CHK: AT	APPD: DC
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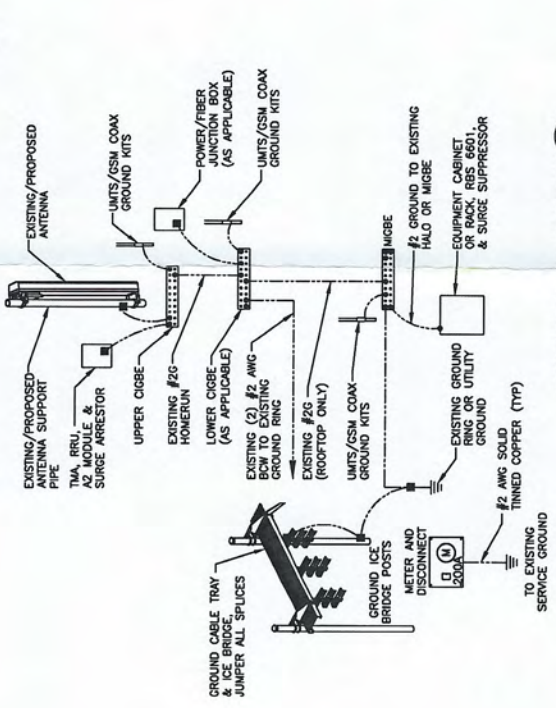
HUDSON Design Group LLC		DATE: 11/07/18	ISSUED FOR: REVIEW	BY: ET	CHK: AT	APPD: DC
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CENTERLINE		DATE: 11/07/18	ISSUED FOR: REVIEW	BY: ET	CHK: AT	APPD: DC
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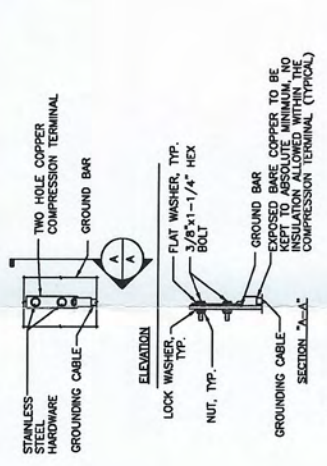
45 BRIDGEWOOD DRIVE NORTH ANDOVER, MA 01845		DATE: 11/07/18	ISSUED FOR: REVIEW	BY: ET	CHK: AT	APPD: DC
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GROUND WIRE TO GROUND BAR CONNECTION DETAIL 1
SCALE: N.T.S.



GROUNDING RISER DIAGRAM 2
SCALE: N.T.S.

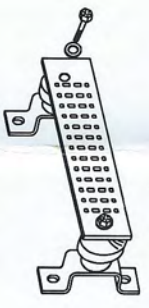


TYPICAL GROUND BAR CONNECTION DETAIL 3
SCALE: N.T.S.

NOTE:
1. "DOUBLING UP" OR "STACKING" OF CONNECTION IS NOT PERMITTED.
2. OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATIONS.
3. CABLED DOWNLEADS FROM UPPER EGB, LOWER EGB, AND MGB

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

- SECTION "D" - SURGE PRODUCERS
- CABLE ENTRY PORTS (HATCH PLATES) (#2)
 - TELEPHONE NETWORK (IF AVAILABLE) (#2)
 - TELECOM 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.

NO.		DATE		REVISIONS		DESIGNED BY: AT		DRAWN BY: ET	
A	11/07/10	ISSUED FOR REVIEW	ET	AT	DUC				
SCALE: AS SHOWN									
SITE NUMBER: NH2064									
PROJECT NUMBER: NH2064									
PROJECT NAME: SPRAGUE ENERGY									
PROJECT ADDRESS: 126 RIVER ROAD, NEWINGTON, NH 03801, ROCKINGHAM COUNTY									
PROJECT ADDRESS: 750 WEST CENTER STREET, SUITE #301, WEST BROOKFIELD, MA 02379									
PROJECT ADDRESS: 550 COCHITUATE ROAD, FRAMMINGHAM, MA 01701									
PROJECT ADDRESS: AT&T									
PROJECT ADDRESS: GROUNDING DETAILS (LIE 4C/5C/RETRO)									
PROJECT ADDRESS: EMBASE ILLUSTR									
PROJECT ADDRESS: G-1									



SITE NUMBER: NH2064
SITE NAME: SPRAGUE ENERGY
126 RIVER ROAD
NEWINGTON, NH 03801
ROCKINGHAM COUNTY



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



45 BECHWOOD DRIVE
NORTH ANDOVER, MA 01854
TEL: (978) 552-5553
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