

Northeast Site Solutions Victoria Masse 420 Main Street #2, Sturbridge, MA 01566 860-306-2326 victoria@northeastsitesolutions.com

April 29, 2022

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

RE: Notice of Exempt Modification 319 New Britain Ave, Farmington CT 06032 Latitude: 41.74971000 Longitude: -72.87251100 T-Mobile Site#: CTHA149A \_NHP

Dear Ms. Bachman:

T-Mobile currently has nine (9) antennas at the 160-foot mount on the existing 190-foot monopole located at 319 New Britain Ave, Farmington CT 06032. The 190-foot monopole and property are owned by the Town of Farmington. T-Mobile now intends to add a 48Kw generator to a new 9'x14' raised steel platform within the existing compound.

Planned Modifications: Ground work only-Install New: (1) GENERAC RD 48KW AC DIESEL GENERATOR – 233-gallon double walled self-contained tank with fuel sensor. Requires two (2) 12-minute run cycles bi-weekly. 9'x14' raised steel platform



This facility was approved by the CT Siting Council Petition No.423 on August 16, 1999. Please see attached.

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.S.C.A. § 16-50j-73, a copy of this letter is being sent to Kathleen A. Blonski, Town Manager and Shannon P.E. Rutherford, Town Planner as the property and tower 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, T-Mobile 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).

Sincerely,

Victoria Masse Mobile: 860-306-2326 Fax: 413-521-0558 Office: 420 Main Street, Unit 2, Sturbridge MA 01566 Email: victoria@northeastsitesolutions.com



Attachments cc: Kathleen A. Blonski –Town Manager - also as property and tower owner Town of Farmington 1 Monteith Drive Farmington CT 06032

Shannon P.E. Rutherford, Town Planner Town of Farmington 1 Monteith Drive Farmington CT 06032

# Exhibit A

#### Petition No. 423 Omnipoint Communications Inc. Staff Report August 16, 1999

On July 9, 1999, Connecticut Siting Council (Council) member Pamela B. Katz and Council staff Joel M. Rinebold and Paul M. Aresta met Omnipoint Communications Inc (Omnipoint) representatives J. Brendan Sharkey, Chetan Dhaduk, and Joe Rollins for a site inspection of a proposed modification to a Connecticut Light and Power (CL&P) high-voltage electric transmission line support structure located approximately 90 feet east of Maple Ridge Road in Farmington, Connecticut. Omnipoint is petitioning the Council for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need (Certificate) is required for the proposed modification to a CL&P high-voltage electric transmission line support structure.

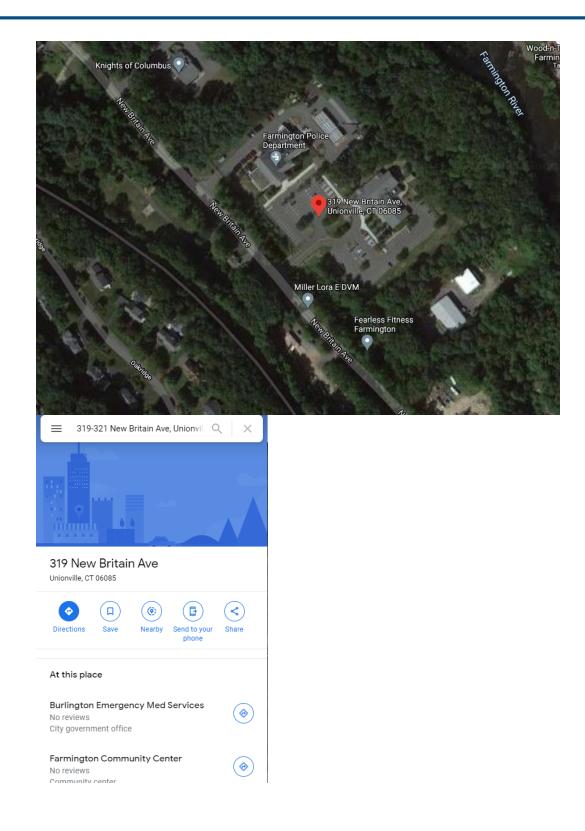
Omnipoint proposes to replace a 65-foot H-frame transmission line structure with a new laminated wood structure. CL&P has requested the replacement of the H-frame structure in anticipation of its having to make similar replacements to handle increased weight loads in the future. Omnipoint proposes to construct one of the poles of the new H-frame structure 15 feet taller than is existing for a total height of 80 feet above ground level (AGL). Omnipoint proposes to install two approximately five-foot by four-inch PCS antennas in a cluster configuration onto the proposed laminated wood pole with a centerline at 77.5 feet AGL. In addition, Omnipoint would install an equipment cabinet at the base of the proposed new structure enclosed by a 6-foot high chain link fence, 10-foot by 15-foot in area. Access to the proposed equipment would be from Maple Ridge Road along an 8-foot wide footpath within the existing easement.

The proposed equipment and utility routing would be located within the existing CL&P transmission line easement. The proposed site is zoned Industrial CR Zone. Land uses surrounding the area include residential homes to the north and south, commercial retail to the east and northeast, and a limited access highway to the west. The closest residences are located approximately 250 feet north and south of the proposed structure. The surrounding properties currently have an obscured view of the transmission line support structure due to dense overgrowth and mature trees. Omnipoint has agreed to maintain the existing mature vegetation within the easement. The associated equipment compound would be obscured from the view of adjacent properties.

Omnipoint contends that although one pole of the H-frame transmission line support structure would be 15 feet taller than the existing pole, the new structure would remain in scale with the existing structure and the surrounding landscape and would not materially affect the view from surrounding properties. Omnipoint further contends there would be no damage to existing scenic, historical or recreational values; the proposed PCS equipment would not meet or exceed the ANSI Standard for worst case radio-frequency power density levels at the base of the proposed structure; and therefore, the proposed modification would not result in a substantial adverse environmental effect.

# Exhibit B

Date Recipient Page 5 of 10



The Assessor's office is responsible for the maintenance of records on the ownership of properties. Assessments are computed at 70% of the estimated market value of real property at the time of the last revaluation which was 2017.



Information on the Property Records for the Municipality of Farmington was last updated on 2/8/2021.

## Parcel Information

Location:	319 NEW BRITAIN AV UNIT 321	Property Use:	Public Use	Primary Use:	Governmental Building
Unique ID:	13200319321	Map Block Lot:	0035 1-8	Acres:	13.20
490 Acres:	0.00	Zone:	CR	Volume / Page:	0571/0159
Developers Map / Lot:		Census:	4603-00		

## Value Information

	Appraised Value	Assessed Value
Land	1,278,240	894,770
Buildings	17,520,375	12,264,260
Detached Outbuildings	45,322	31,730
Total	18,843,937	13,190,760

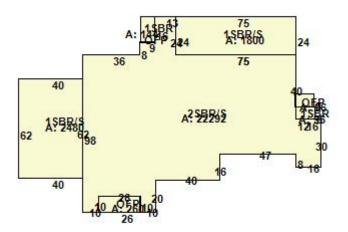
## **Owner's Information**

#### Owner's Data

FAMINGTON TOWN OF NEW POLICE/COMMUNITY CENTER 1 MONTEITH DR FARMINGTON, CT 06032

# Building 1





Category:	Public Use	Use:	Jail - Police Station	GLA:	26,812
Stories:	2.00	Construction:	Fire Proof	Year Built:	2001

Heating:	FHA	Fuel:	Natural Gas	Cooling Percent:	100
Siding:	Brick	Roof Material:	Slate	Beds/Units:	0

## Special Features

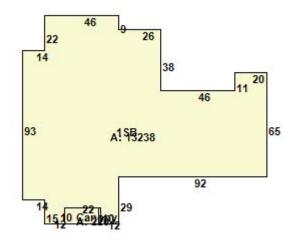
Elevator, Comm Elec Pass	1
Wet Sprinklers	26887

# Attached Components

Туре:	Year Built:	Area:
Open Frame Porch	2002	260
Open Frame Porch	2002	144
Open Frame Porch	2002	96

Building	2
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Category:	Public Use	Use:	Community Recreation Center	GLA:	13,238
Stories:	1.00	Construction:	Fire Proof	Year Built:	2001
Heating:	FHA	Fuel:	Natural Gas	Cooling Percent:	100
Siding:	Brick	Roof Material:	Arch Shingles	Beds/Units:	0

# Special Features

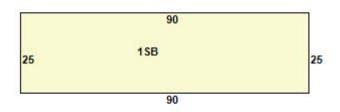
Wet Sprinklers	13238
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## Attached Components

Туре:	Year Built:	Area:
Commercial Canopy	2001	220

Building 3





Category:	Industrial	Use:	Utility Building	GLA:	2,250
Stories:	1.00	Construction:	Fire Proof	Year Built:	2002
Heating:	FHA	Fuel:	Natural Gas	Cooling Percent:	0
Siding:	Brick	Roof Material:	Arch Shingles	Beds/Units:	0

## Special Features

## Attached Components

## Detached Outbuildings

Туре:	Year Built:	Length:	Width:	Area:
Commercial Canopy	2001	0.00	0.00	626
Steel Overhead Door	2001	0.00	0.00	2
Steel Overhead Door	2001	0.00	0.00	2
Paving	2001	0.00	0.00	30,000
Frame Shed	2016	0.00	0.00	336

## **Owner History - Sales**

Owner Name	Volume	Page	Sale Date	Deed Type	Valid Sale	Sale Price
FAMINGTON TOWN OF	0571	0159			No	\$0

Information Published With Permission From The Assessor

# Exhibit C

MODIFICATION OF EXISTING WIRELESS FACILITY BY

**T** · · Mobile · **T-MOBILE NORTHEAST LLC** 

**PROJECT TITLE: NATIONAL HARDENING** SITE NUMBER: CTHA149A SITE NAME: FARMINGTON PD MP

SITE ADDRESS: 319 NEW BRITAIN AVENUE FARMINGTON, CT 06032

#### **PROJECT NOTES:**

THIS IS AN UNMANNED TELECOMMUNICATION FACILITY AND NOT FOR HUMAN HABITATION HANDICAPPED ACCESS IS NOT REQUIRED. POTABLE WATER OR SANITARY SERVICE IS NOT REQUIRED.

NO OUTDOOR STORAGE OR ANY SOLID WASTE RECEPTACLES REQUIRED.

DEVELOPMENT AND USE OF THE SITE WILL CONFORM TO ALL APPLICABLE CODES, ORDINANCES AND SPECIFICATIONS.

#### CODE COMPLIANCE:

ALL WORK SHALL COMPLY WITH THE CURRENT NATIONAL AND CONNECTICUT STATE BUILDING AND LIFE SAFETY CODES, SUPPLEMENTS AND AMENDMENTS INCLUDING BUT NOT LIMITED TO THE LATEST EDITION OF

CONNECTICUT STATE BUILDING CODE (CSBC)

ANSI/TIA-222-G STRUCTURAL STANDARD FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNAS

NATIONAL ELECTRICAL CODE (NEC) FOR POWER AND GROUNDING REQUIREMENTS.

OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA).

NFPA - NATIONAL FIRE PROTECTION ASSOCIATION



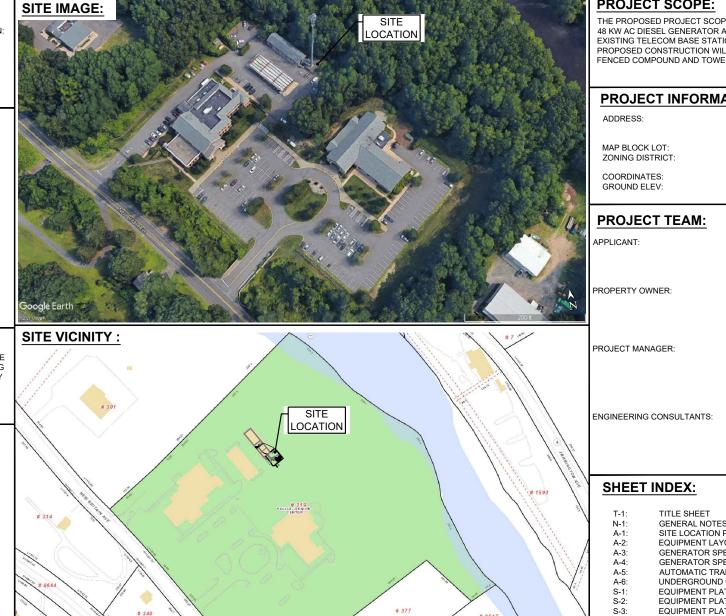
#### cticut - Call Before You Dig Advance Notice

Minimum of 2 working days in advance, no more than 30 days in advance

#### **CONTRACTOR'S NOTES:**

CONTRACTOR SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS, AND CONDITIONS ON THE JOB SITE. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK. FAILURE TO NOTIFY THE ARCHITECT/ENGINEER PLACES THE RESPONSIBILITY ON THE CONTRACTOR TO CORRECT THE DISCREPANCIES AT THE CONTRACTOR'S EXPENSE

A Incol Million	APPROVALS:		
	FSA CM	DATE	
	RF ENGINEER	DATE	
		DATE	
) III AIII O	T-MOBILE ENGINEERING AND DEVELOPMENT	DATE	
5000		DATE	
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#### **PROJECT SCOPE:**

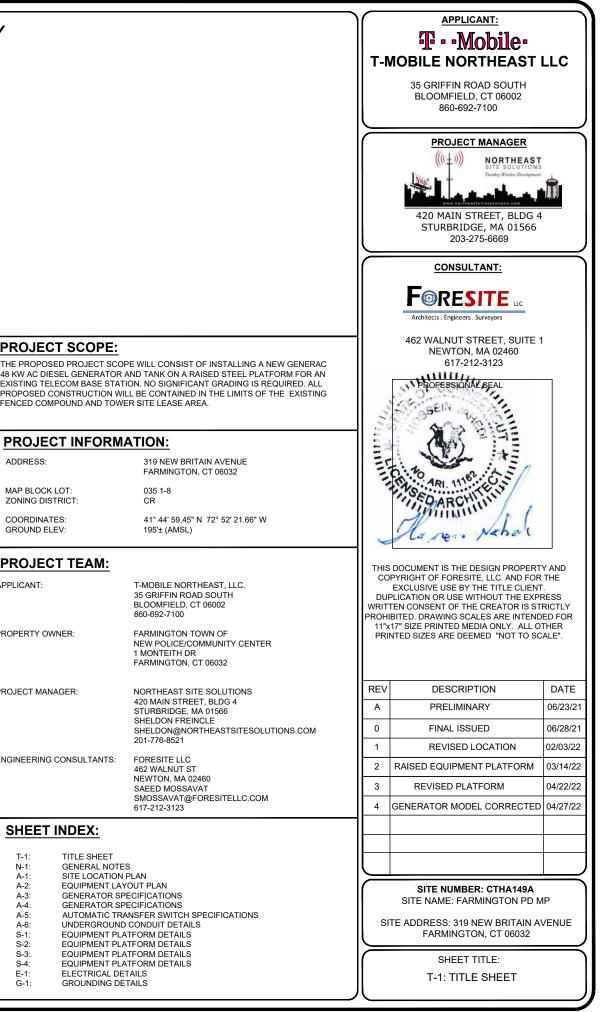
48 KW AC DIESEL GENERATOR AND TANK ON A RAISED STEEL PLATFORM FOR AN EXISTING TELECOM BASE STATION. NO SIGNIFICANT GRADING IS REQUIRED. ALL PROPOSED CONSTRUCTION WILL BE CONTAINED IN THE LIMITS OF THE EXISTING FENCED COMPOUND AND TOWER SITE LEASE AREA

DJECT INFORMA	TION:
RESS:	319 NEW BR FARMINGTO
BLOCK LOT:	035 1-8
NG DISTRICT:	CR
RDINATES:	41° 44' 59.45'
JND ELEV:	195'± (AMSL)

35 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002 860-692-7100 FARMINGTON TOWN OF 1 MONTEITH DR FARMINGTON, CT 06032 STURBRIDGE MA 01566 SHELDON FREINCLE 201-776-8521 FORESITE LLC

462 WALNUT ST NEWTON, MA 02460 SAEED MOSSAVAT 617-212-3123

T-1:	TITLE SHEET
N-1:	GENERAL NOTES
A-1:	SITE LOCATION PLAN
A-2:	EQUIPMENT LAYOUT PLAN
A-3:	GENERATOR SPECIFICATIONS
A-4:	GENERATOR SPECIFICATIONS
A-5:	AUTOMATIC TRANSFER SWITCH
A-6:	UNDERGROUND CONDUIT DETAI
S-1:	EQUIPMENT PLATFORM DETAILS
S-2:	EQUIPMENT PLATFORM DETAILS
S-3:	EQUIPMENT PLATFORM DETAILS
S-4:	EQUIPMENT PLATFORM DETAILS
E-1:	ELECTRICAL DETAILS
G-1:	GROUNDING DETAILS



#### **GENERAL NOTES:**

1. THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK. THE WORK PERFORMED ON THE PROJECT AND THE MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES.

2. THE ARCHITECT/ENGINEER HAS MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK. THE CONTRACTOR BIDDING THE JOB IS NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS.

3. THE CONTRACTOR OR BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) THE CLIENT'S REPRESENTATIVE OF ANY CONFLICTS, ERRORS, OR OMISSIONS PRIOR TO THE SUBMISSION OF CONTRACTOR'S PROPOSAL OR PERFORMANCE OF WORK.

5. THE CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO THE SUBMISSION OF BIDS OR PERFORMING WORK TO FAMILIARIZE HIMSELF WITH THE FIELD CONDITIONS AND TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS.

6. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO THE MANUFACTURER'S / VENDOR'S SPECIFICATIONS UNLESS NOTED OTHERWISE OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.

7. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS DURING CONSTRUCTION.

8. THE CONTRACTOR SHALL COMPLY WITH ALL PERTINENT SECTIONS OF THE BASIC STATE BUILDING CODE, LATEST EDITION, AND ALL OSHA REQUIREMENTS AS THEY APPLY TO THIS PROJEC

9. THE CONTRACTOR SHALL NOTIFY THE CLIENT'S REPRESENTATIVE IN WRITING WHERE A CONFLICT OCCURS ON ANY OF THE CONTRACT DOCUMENTS. THE CONTRACTOR IS NOT TO ORDER MATERIAL OR CONSTRUCT ANY PORTION OF THE WORK THAT IS IN CONFLICT UNTIL CONFLICT IS RESOLVED BY THE CLIENT'S REPRESENTATIVE.

10. THE WORK SHALL CONFORM TO THE CODES AND STANDARDS OF THE FOLLOWING AGENCIES AS FURTHER CITED HEREIN:

A. ASTM: AMERICAN SOCIETY FOR TESTING AND MATERIALS, AS PUBLISHED IN "COMPILATION OF ASTM STANDARDS BUILDING CODES" OR LATEST EDITION.

B. AWS: AMERICAN WELDING SOCIETY INC. AS PUBLISHED IN "STANDARD D1.1-08, STRUCTURAL WELDING CODE" OR LATEST EDITION.

C. AISC: AMERICAN INSTITUTE FOR STEEL CONSTRUCTION AS PUBLISHED IN "CODE FOR STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES"; "SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" (LATEST EDITION).

11. BOLTING:

A. BOLTS SHALL BE CONFORMING TO ASTM A325 HIGH STRENGTH, HOT DIP GALVANIZED WITH ASTM A153 HEAVY HEX TYPE NUTS.

B. BOLTS SHALL BE 3/4" MINIMUM (UNLESS OTHERWISE NOTED)

C. ALL CONNECTIONS SHALL BE 2 BOLTS MINIMUM.

12. FABRICATION:

A. FABRICATION OF STEEL SHALL CONFORM TO THE AISC AND AWS STANDARDS AND CODES (LATEST EDITION).

B. ALL STRUCTURAL STEEL SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123 (LATEST EDITION), UNLESS OTHERWISE NOTED.

13. ERECTION OF STEEL:

A. PROVIDE ALL ERECTION EQUIPMENT, BRACING, PLANKING, FIELD BOLTS, NUTS, WASHERS, DRIFT PINS, AND SIMILAR MATERIALS WHICH DO NOT FORM A PART OF THE COMPLETED CONSTRUCTION BUT ARE NECESSARY FOR ITS PROPER ERECTION.

B. ERECT AND ANCHOR ALL STRUCTURAL STEEL IN ACCORDANCE WITH AISC REFERENCE STANDARDS. ALL WORK SHALL BE ACCURATELY SET TO ESTABLISHED LINES AND ELEVATIONS AND RIGIDLY FASTENED IN PLACE WITH SUITABLE ATTACHMENTS TO THE CONSTRUCTION OF THE BUILDING.

C. TEMPORARY BRACING, GUYING AND SUPPORT SHALL BE PROVIDED TO KEEP THE STRUCTURE SAFE AND ALIGNED AT ALL TIMES DURING CONSTRUCTION, AND TO PREVENT DANGER TO PERSONS AND PROPERTY. CHECK ALL TEMPORARY LOADS AND STAY WITHIN SAFE CAPACITY OF ALL BUILDING COMPONENTS.

14. RELATED WORK, FURNISH THE FOLLOWING WORK AS SPECIFIED UNDER CONSTRUCTION DOCI COORDINATE WITH OTHER TRADES PRIOR TO BID:

A. FLASHING OF OPENING INTO OUTSIDE WALLS

- B. SEALING AND CAULKING ALL OPENINGS
- C. PAINTING
- D. CUTTING AND PATCHING

15. REQUIREMENTS OF REGULATORY AGENCIES:

A. FURNISH U.L. LISTED EQUIPMENT WHERE SUCH LABEL IS AVAILABLE. INSTALL IN CONFORM, STANDARDS WHERE APPLICABLE.

B. INSTALL ANTENNA, ANTENNA CABLES, GROUNDING SYSTEM IN ACCORDANCE WITH DRAWING SPECIFICATION IN EFFECT AT PROJECT LOCATION AND RECOMMENDATIONS OF STATE AND LOCAL CODES, AND SPECIAL CODES HAVING JURISDICTION OVER SPECIFIC PORTIONS OF WORK. THIS WO BUT IS NOT LIMITED TO THE FOLLOWING:

C. TIA-EIA - 222 (LATEST EDITION). STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS SUPPORTING STRUCTURES.

D. FAA - FEDERAL AVIATION ADMINISTRATION ADVISORY CIRCULAR AC 70/7460-IH, OBSTRUC AND LIGHTING.

E. FCC – FEDERAL COMMUNICATIONS COMMISSION RULES AND REGULATIONS FORM 715, OBSTR MARKING AND LIGHTING SPECIFICATION FOR ANTENNA STRUCTURES AND FORM 715A, HIGH INTEN OBSTRUCTION LIGHTING SPECIFICATIONS FOR ANTENNA STRUCTURES.

F. AISC – AMERICAN INSTITUTE OF STEEL CONSTRUCTION SPECIFICATION FOR STRUCTURAL JC A325 BOLTS (LATEST EDITION).

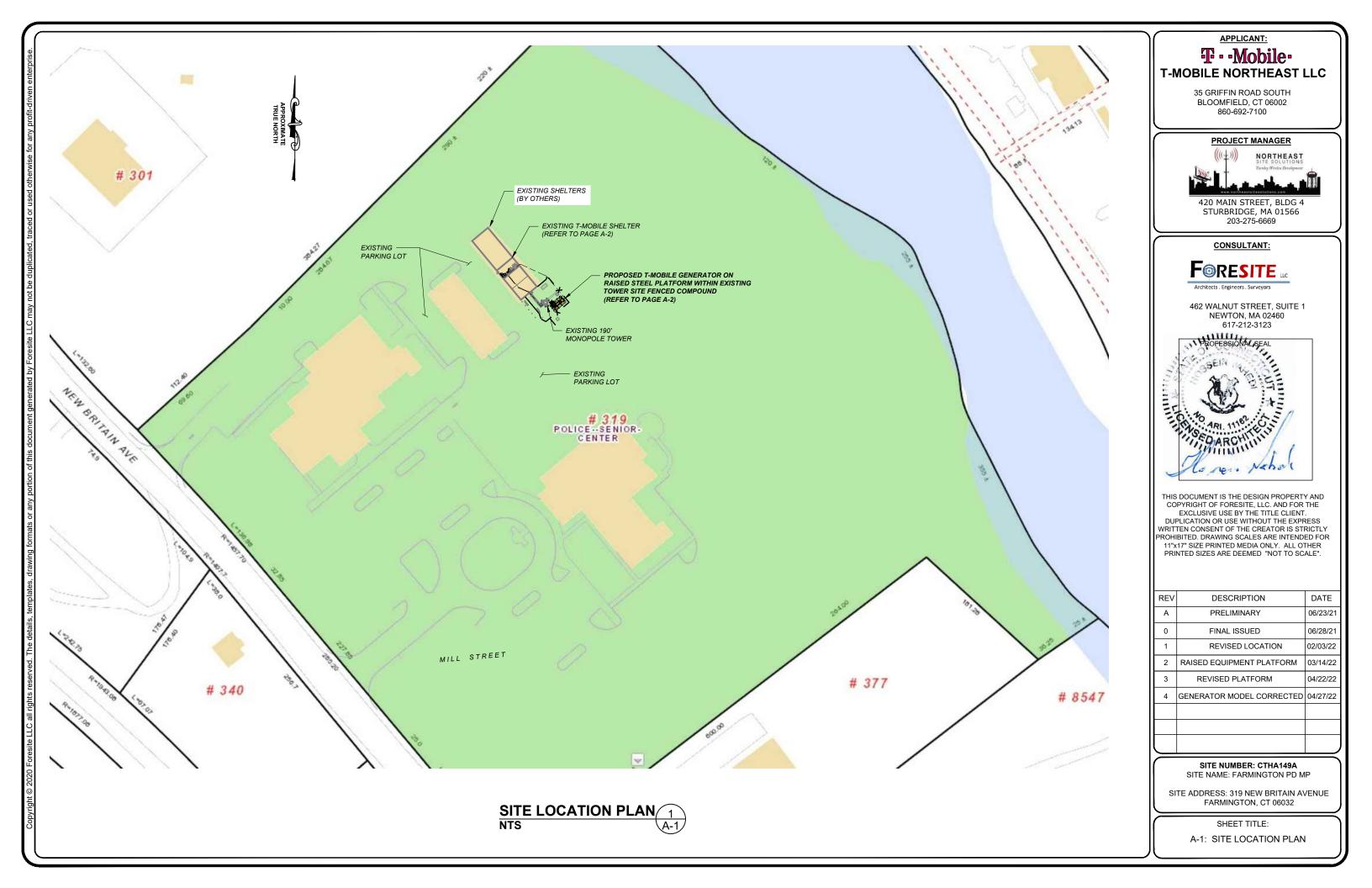
G. NEC - NATIONAL ELECTRICAL CODE - ON TOWER LIGHTING KITS.

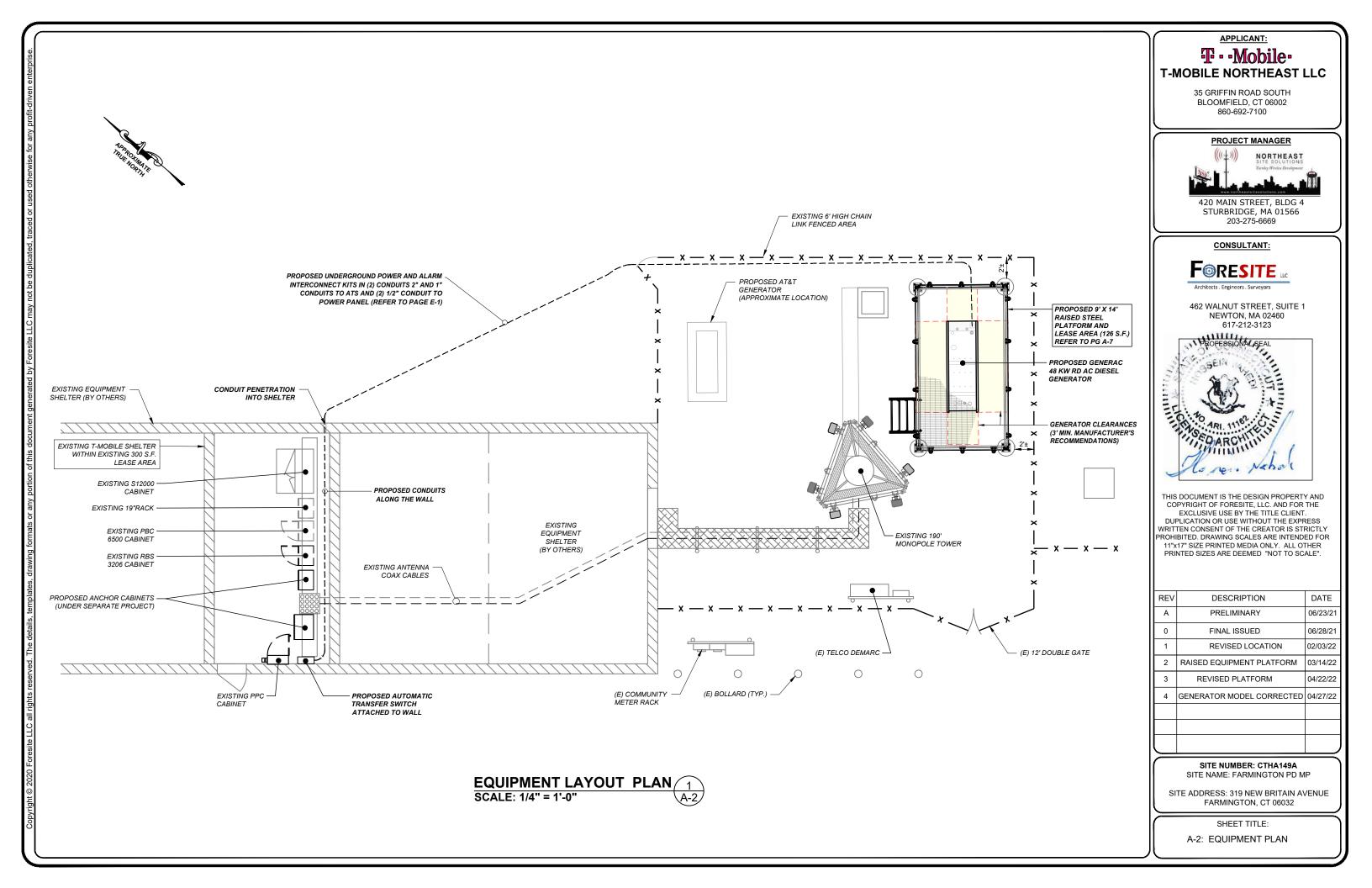
H. UL - UNDERWRITER'S LABORATORIES APPROVED ELECTRICAL PRODUCTS.

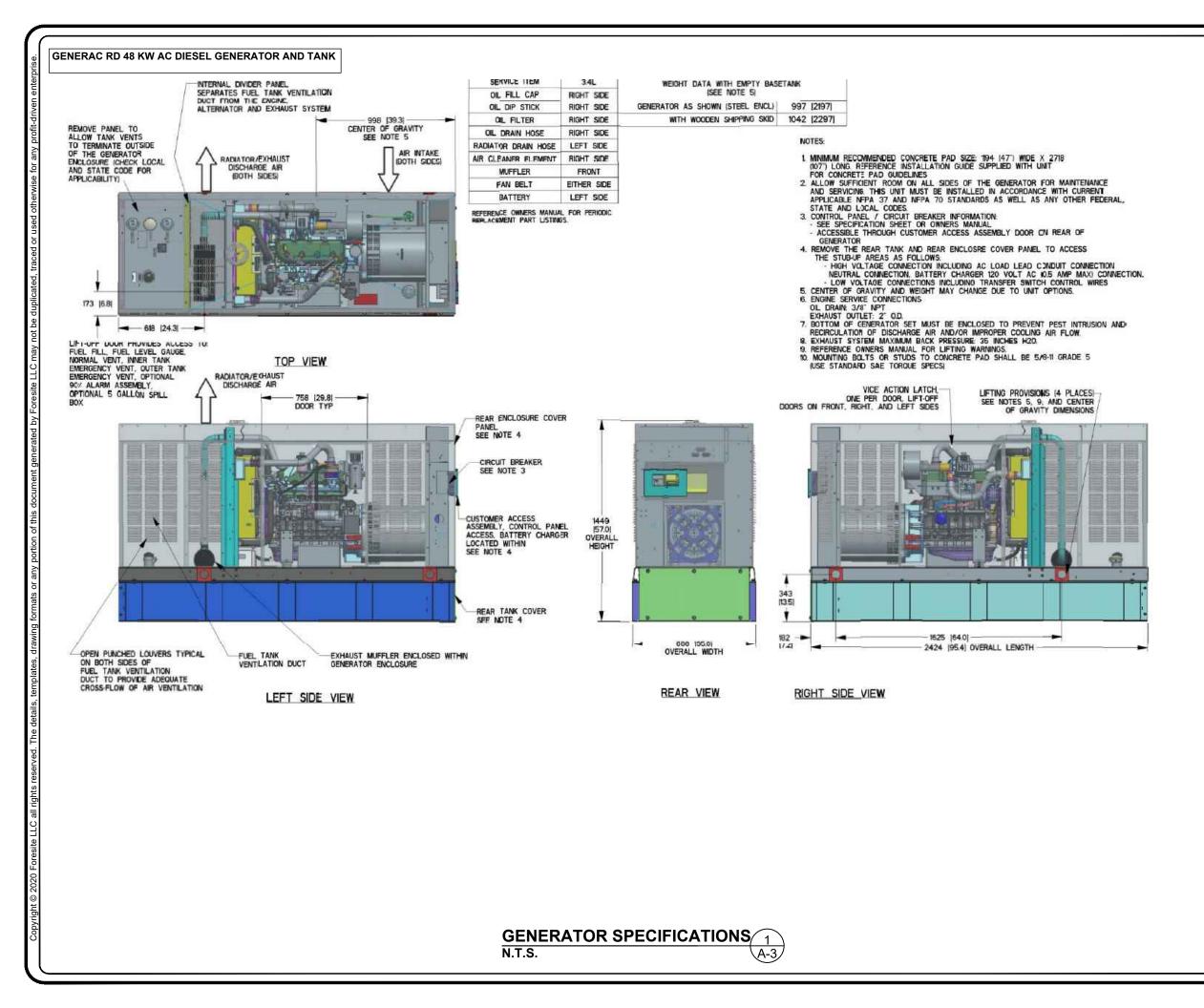
I. IN ALL CASES, PART 77 OF THE FAA RULES AND PARTS 17 AND 22 OF THE FCC RULES AND IN THE EVENT OF CONFLICT, SUPERSEDE ANY OTHER STANDARDS OR SPECIFICATIONS.

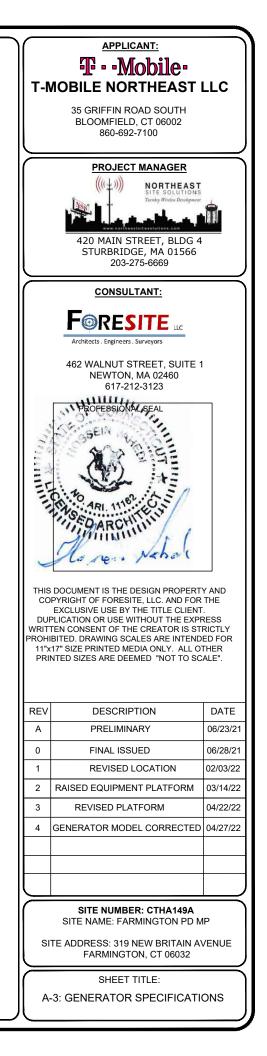
J. 2018 LIFE SAFETY CODE NFPA - 101.

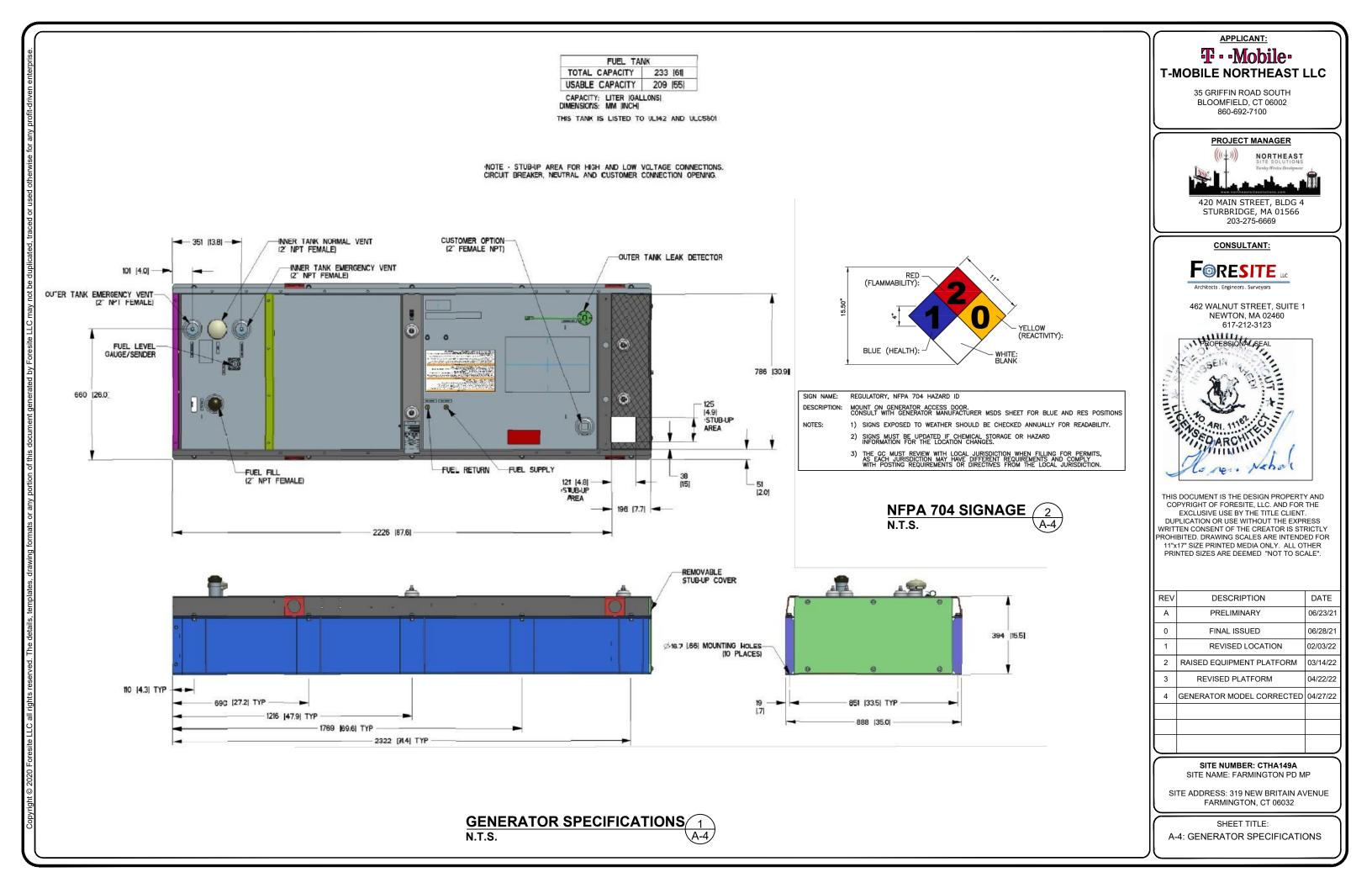
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	Т-М	MOBILE NORTHEAST	LLC
CUMENTS, BUT		35 GRIFFIN ROAD SOUTH	
		BLOOMFIELD, CT 06002 860-692-7100	
	$\square$	PROJECT MANAGER	
		(((+))) NORTHEAST	
		Turnhey Wireless Development	1
		www.northeastsitesolutions.com	1 章 章 (
		420 MAIN STREET, BLDG 4 STURBRIDGE, MA 01566	
IANCE WITH U.L.		203-275-6669	
		CONSULTANT:	
NGS AND AL BUILDING			
VORK INCLUDES		F@RESITE	
		Architects . Engineers . Surveyors	
RS AND ANTENNA		462 WALNUT STREET, SUITE 1 NEWTON, MA 02460	
		617-212-3123	
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TRUCTION	111	S SEIN S	
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	COPYRIGHT OF FORESITE, LLC. AND FOR THE EXCLUSIVE USE BY THE TITLE CLIENT. DUPLICATION OR USE WITHOUT THE EXPRESS		
	WRITTEN CONSENT OF THE CREATOR IS STRICTLY PROHIBITED. DRAWING SCALES ARE INTENDED FOR		
	11"x17" SIZE PRINTED MEDIA ONLY. ALL OTHER PRINTED SIZES ARE DEEMED "NOT TO SCALE".		
	REV	DESCRIPTION	DATE
	A	PRELIMINARY	06/23/21
	0	FINAL ISSUED	06/28/21
	1	REVISED LOCATION	02/03/22
	2	RAISED EQUIPMENT PLATFORM	03/14/22
	3	REVISED PLATFORM	04/22/22
	4	GENERATOR MODEL CORRECTED	04/27/22
			$\square$
	ſ	SITE NUMBER: CTHA149A SITE NAME: FARMINGTON PD N	
	SITE NAME: FARMINGTON PD MP SITE ADDRESS: 319 NEW BRITAIN AVENUE FARMINGTON, CT 06032 SHEET TITLE:		
		N-1: GENERAL NOTES	

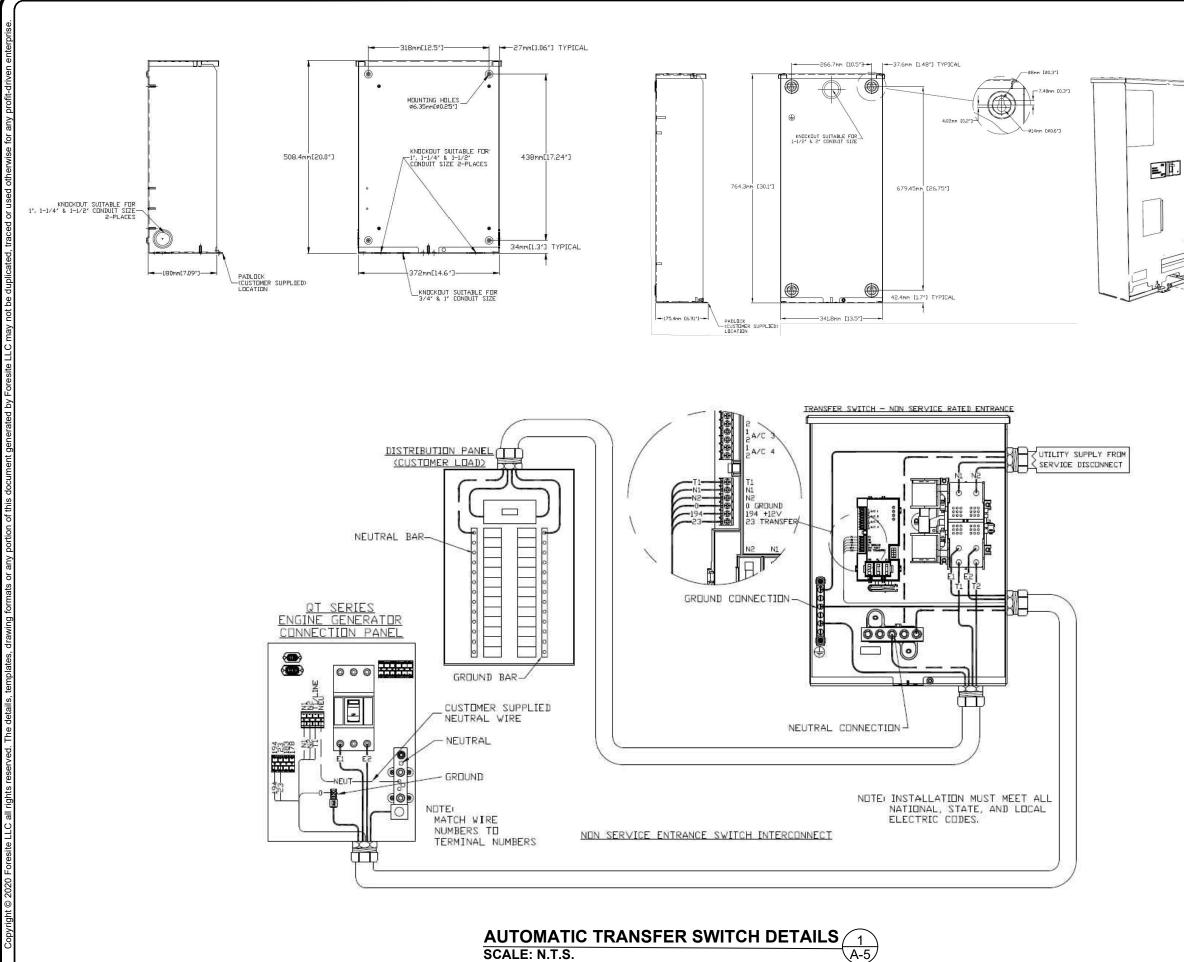










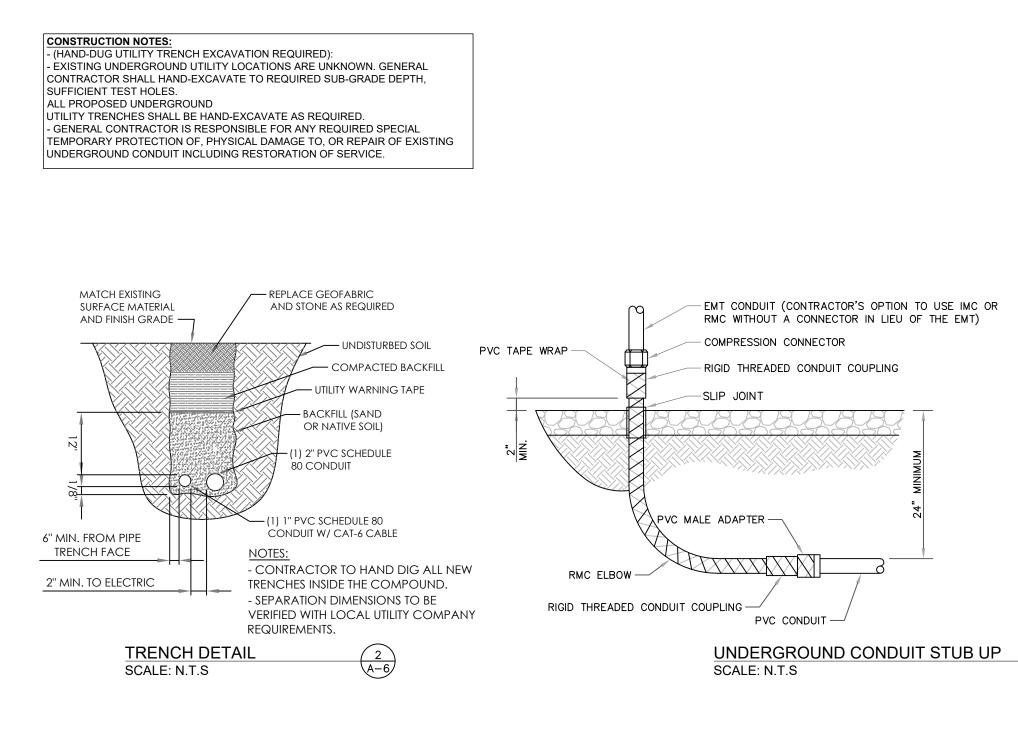


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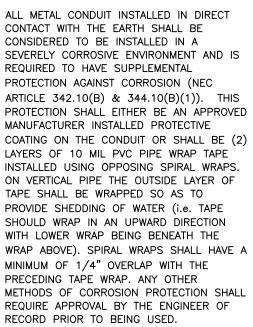
APPLICANT: **T** - Mobile T-MOBILE NORTHEAST LLC 35 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002 860-692-7100 PROJECT MANAGER NORTHEAST 420 MAIN STREET, BLDG 4 STURBRIDGE, MA 01566 203-275-6669 CONSULTANT: Architects . Engineers . Surveyors 462 WALNUT STREET, SUITE 1 NEWTON, MA 02460 617-212-3123 PROFESSIONALSEAL ARI. 11 SEDARCH 150 ARCHIN ner. Neha THIS DOCUMENT IS THE DESIGN PROPERTY AND COPYRIGHT OF FORESITE, LLC. AND FOR THE EXCLUSIVE USE BY THE TITLE CLIENT. DUPLICATION OR USE WITHOUT THE EXPRESS WRITTEN CONSENT OF THE CREATOR IS STRICTLY PROHIBITED. DRAWING SCALES ARE INTENDED FOR 11"x17" SIZE PRINTED MEDIA ONLY. ALL OTHER PRINTED SIZES ARE DEEMED "NOT TO SCALE". DESCRIPTION DATE PRELIMINARY 06/23/21 FINAL ISSUED 06/28/21 REVISED LOCATION 02/03/22 RAISED EQUIPMENT PLATFORM 03/14/22 REVISED PLATFORM 04/22/22 GENERATOR MODEL CORRECTED 04/27/22 SITE NUMBER: CTHA149A SITE NAME: FARMINGTON PD MP SITE ADDRESS: 319 NEW BRITAIN AVENUE FARMINGTON, CT 06032

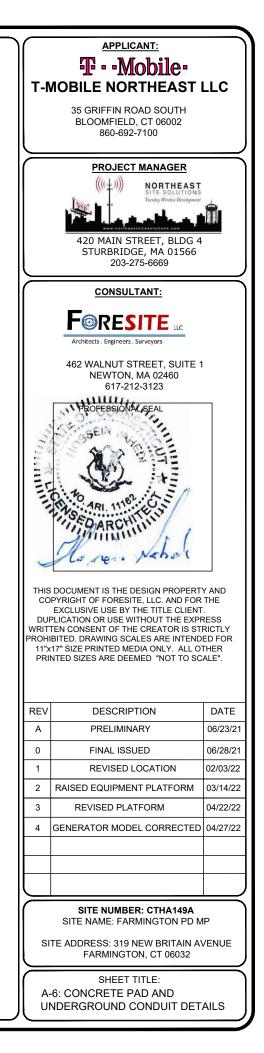
SHEET TITLE: A-5: AUTOMATIC TRANSFER SWITCH DETAILS



ALL METAL CONDUIT INSTALLED IN DIRECT CONTACT WITH THE EARTH SHALL BE CONSIDERED TO BE INSTALLED IN A REQUIRED TO HAVE SUPPLEMENTAL PROTECTION AGAINST CORROSION (NEC MANUFACTURER INSTALLED PROTECTIVE LAYERS OF 10 MIL PVC PIPE WRAP TAPE INSTALLED USING OPPOSING SPIRAL WRAPS. ON VERTICAL PIPE THE OUTSIDE LAYER OF TAPE SHALL BE WRAPPED SO AS TO PROVIDE SHEDDING OF WATER (i.e. TAPE SHOULD WRAP IN AN UPWARD DIRECTION WITH LOWER WRAP BEING BENEATH THE MINIMUM OF 1/4" OVERLAP WITH THE PRECEDING TAPE WRAP. ANY OTHER REQUIRE APPROVAL BY THE ENGINEER OF RECORD PRIOR TO BEING USED.

3 A-6





#### NOTES

#### 1.0 DESIGN INFORMATION AND GENERAL REQUIREMENTS

1.0 GENERAL

2. ALL DIMENSIONS ARE APPROXIMATE, CONTRACTOR SHOULD VERIFY ALL DIMENSIONS BEFORE FABRICATION OF STEEL MEMBERS AND COMMENCEMENT OF WORK.

1.1 CODES

a. 2018 CONNECTICUT STATE BUILDING CODE,

b. MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES, ASCE/SEI 7-10, AMERICAN SOCIETY OF CIVIL ENGINEERS c. STEEL CONSTRUCTION MANUAL, 14TH EDITION, AMERICAN INSTITUTE OF STEEL CONSTRUCTION

1.2 LOADS AND DESIGN CRITERIA

 a. WIND LOADING: V: 125 MPH (ULTIMATE), EXPOSURE B, RISK CATEGORY II
 b. EQUIPMENT AS LISTED IN STRUCTURAL ANALYSIS REPORT PREPARED BY EFI GLOBAL, INC., DATED 04/21/2021.

#### 1.3 NOTES

a. PRIOR TO PURCHASE OR FABRICATION OF MATERIAL, THE CONTRACTOR SHALL PERFORM AN INSPECTION VERIFYING MEMBER AND BOLT SIZES. SHOULD THE CONTRACTOR DISCOVER ANY DAMAGED OR MISSING MEMBERS THE MEMBER OR BOLT SIZES DO NOT MATCH THOSE LISTED, EFI SHALL BE NOTIFIED IMMEDIATELY.

. CONTRACTOR TO REPLACE ALL MEMBERS AND BOLTS REMOVED WITH NEW MEMBERS AND BOLTS OF SAME TYPE, UNLESS NOTED OTHERWISE

#### 2.0 STRUCTURAL STEEL

2.1 MATERIALS a. STRUCTURAL STEEL

MICLO STEEL . . . . . . . . ASTM A992 MISC ANGLE & PLATE . . . ASTM A36 PIPE . . . . . . . . . . . ASTM A36 GR. B

- RODS . . . . . . . . . . . . . ASTM A572-50 (MINIMUM)
- b. BOLTS

d. Steel construction shall conform to "Specification for STRUCTURAL STEEL BUILDINGS, ANSI/AISC 360-10"

e. WELDING SHALL CONFORM TO AWS D1.1/D1.3/D1.7 AS APPLICABLE. f. THE FABRICATOR SHALL FURNISH CHECKED SHOP AND ERECTION DRAWINGS TO THE ENGINEER, AND OBTAIN APPROVAL PRIOR TO FABRICATING ANY STRUCTURAL STEEL. SHOP DRAWINGS SHALL CONFORM TO "DETAILING FOR STEEL CONSTRUCTION. 2ND EDITION"

g. POR MATCHING OF HOLES SHALL BE CORRECTED BY DRILLING TO THE NEXT LARGER SIZE. WELDING FOR REDRILLING WILL NOT BE PERMITTED.

2.2 CONNECTIONS a. SHOP CONNECTIONS MAY BE BOLTED OR WELDED

D. CONNECTIONS WHERE THE BEAM SHEAR (V) IS NOT NOTED ON THE DRAWINGS, SIMPLE SHEAR CONNECTIONS SHALL BE DESIGNED TO DEVELOP 1/2 OF THE MAXIMUM TOTAL UNIFORM LOAD CAPACITY OF THE BEAM.

1/2 OF THE MAXIMUM TOTAL UNIFORM LOAD CAPACITY OF THE BEAM. C. FIELD CONNECTIONS SHALL BE MADE WITH A325 BOLTS AND HARDENED WASHERS EXCEPT AS INDICATED ON THE DESIGN DRAWINGS d. CONNECTIONS NOT SHOWN ON DRAWINGS SHALL BE DESIGNED BY THE STEEL FABRICATOR. CONNECTIONS SHALL BE DESIGNED IN ACCORDANCE WITH ASC "SPECIFICATIONS FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS" AND "AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES"

AND BRIDGES". e. DO NOT FIELD CUT OR ALTER STRUCTURAL MEMBERS WITHOUT PRIOR WRITTEN APPROVAL OF ENGINEER. f. BOLT HOLES SHALL BE CUT, DRILLED OR PUNCHED AT RIGHT ANGLES TO THE SURFACE OF THE METAL AND SHALL NOT BE MADE OR ENLARGED BY BURNING. HOLES SHALL BE CLEAN CUT WITHOUT TORN OR RAGED EDGES. OUTSIDE BURRS RESULTING FROM DRILLING OR REAMING OPERATION SHALL BE REMOVED WITH A TOOL MAKING A 1/16 INCH BEVEL. BOLT HOLES SHALL BE 1/16 INCH OVERBIL SHALL BE 1/16 INCH OVERSIZE.

#### 2.3 FINISHES

a. STRUCTURAL STEEL SHALL BE HOT DIP GALVANIZED AFTER FABRICATION PER ASTM A123

b. BOLTS AND NUTS SHALL BE HOT DIP GALVANIZED PER ASTM A153. c. ALL SURFACES DAMAGED BY FIELD WELDING OR CUTTING SHALL BE PAINTED WITH COLD GALVANIZING COMPOUND TWICE. THE PAINT SHOULD BE AT LEAST 93% PURE ZINC. RUST-OLEUM PROFESSIONAL, (MODEL# 7585838) OR SIMILAR.

2.4 WELDING a. CONTRACTOR TO TAKE ALL NECESSARY PRECAUTIONS FOR FIRE G. CONTRACTOR TO TAKE ALL NECESSARY PRECAUTIONS FOR FIRE PREVENTION DURING WELDING, SUCH AS; INSTALLING 3000 (NFPA 701) FIRE BLANKET AROUND COAX. MORE SPLATTER AND SPARKS SHOULD BE ANTICIPATED WHILE WELDING ON GALVANIZED SURFACE. COAX IS FLAMMABLE AND SHALL CATCH FIRE IF NOT PROTECTED. WATER SHALL BE ON SITE OF ADEQUATE AMOUNT AND AVAILABLE AT SHORT NOTICE AT ALL TIMES DURING WELDING ACTIVITY. CONTRACTOR SHOULD BE ABLE TO TRANSPORT THE WATER TO THE HEIGHT WELDING BEING PERFORMED.
b. WELDING ON GALVANIZED SURFACE SHOULD BE DONE WITH EXTREME CAUTION. IF THE WELD MATERIAL IS CONTAMINATED WITH ZINC, IT DOES NOT PROVIDE A STRUCTURAL WELD. GROUND GALVANIZING BEFORE WELDING. C. WELDING CERTIFICATE MUST BE PROVIDED PRIOR TO WELDING.

WELDING SHALL BE PERFORMED BY AWS QUALIFIED WELDER WHO HAS EXPERIENCE WITH GALVANIZED SURFACES.

#### 3. CONCRETE

3.1 MATERIALS

a. ALL CONCRETE DESIGN AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH ACI 318-14 AND ACI 301-10. b. CEMENT SHALL BE TYPE I OR III CONFORMING TO ASTM C-150 AND CONCRETE SHALL DEVELOP A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF

3000 PSI

C. TEST CYLINDERS SHALL BE TAKEN AS A REPRESENTATIVE SAMPLE OF CONCRETE PLACED IN THE AMOUNT ACCORDING TO THE LESSER OF THE FOLLOWING: 75 CUBIC YARDS 24 HOUR PERIOD CHANGE IN CONCRETE STRENGTH.

TEST RESULTS SHALL BE FORWARDED TO THE ARCHITECT/ENGINEER, UNLESS NOTED OTHERWISE.

e. NORMAL WEIGHT CONCRETE (150 PCF) SHALL BE USED WITH A 1" MAX COURSE AGGREGATE CONFORMING TO ASTM C 33. CUURSE AGGREGATE CONFORMING TO ASTM C35. f. CONCRETE SLUMP SHALL BE 3"-5" (MAX) FOR REGULAR MIX, WITH SUPERPLASTICIZER ADMIXTURES INCREASING SLUMP TO 8" (MAX). CONCRETE AIR-ENTRAINMENT SHALL BE 4.5% TO 7.5% FOR EXTERIOR SLABS AND 0% TO 3% FOR INTERIOR SLABS. g. UNLESS NOTED OTHERWISE, CONCRETE COVER FOR REINFORCING STEEL

SHALL BE AS FOLLOWS:

CONCRETE CAST AGAINST EARTH - 3" FORMED CONCRETE EXPOSED TO EARTH OR WEATHER - 2"

#### 3.2 FIFLD WORK

3.2 FIELD WORK a. WHERE NEW CONCRETE IS TO BE POURED ONTO EXISTING CONCRETE, ROUGHEN AND CLEAN SURFACE OF ADJOINING AREA AND COAT WITH SIKADUR 32 HI-MOD OR AN APPROVED BONDING AGENT. 6. NO ADDITIONAL WATER SHALL BE ADDED TO THE CONCRETE AT THE JOB

SITE.

SITE. C. THE RESULTS OF ALL CONCRETE COMPRESSIVE TESTS SHALL BE AT THE JOB SITE FOR REVIEW BY THE INSPECTOR. d. FLY ASH, MEETING ASTM C-618 CLASS C OR CLASS F, MAY BE USED TO REPLACE UP TO 25% OF PORTLAND CEMENT. CONTRACTOR AND BUPPLIER SHALL CONCININATE TO ENSURE THAT REQUIRED SET TIMES FOR CONCRETE ARE NOT ADVERSELY AFFECTED BY USE OF FLY ASH. CONTRACTOR AND ALL CONCRETE SUBCONTRACTORS SHALL HAVE EXPERIENCE WITH HANDLING, PLACING AND ENVIRONMENT FUT MATH AND FINISHING CONCRETE WITH FLY ASH.

#### 4. EARTHWORK

- 4.1 GENERAL
- a. THE FOUNDATION MODIFICATION HAS BEEN DEVELOPED IN ACCORDANCE WITH GENERALLY ACCEPTED PROFESSIONAL ENGINEERING PRINCIPLES AND PRACTICES
- CONTRACTOR TO UTILIZE UNDERGROUND UTILITY LOCATOR PRIOR TO ь.

- CONTRACTOR TO UTILIZE UNDERGROUND UTILITY LOCATOR PRIOR TO COMMENCEMENT OF WORK.
   IF THE CONTRACTOR DISCOVERS ANY SUBSURFACE CONDITIONS THAT ARE NOT AS REPRESENTED IN THE GEOTECHNICAL REPORT, EFI GLOBAL SHALL BE CONTACTED IMMEDIATELY TO EVALUATE THE SIGNIFICANCE OF THE DEVIATION.
   CONTRACTOR SHALL VERIFY DIMENSIONS WITH ORIGINAL DRAWINGS.
   FOUNDATION DESIGN MODIFICATIONS ASSUME SILEVEL GRADE AT THE SITE.
   THE FOUNDATION DESIGN SUMMES FILED INSPECTIONS WILL BE PERFORMED TO VERIFY THAT CONSTRUCTION MATERIALS, INSTALLATION METHODS, AND ASSUMED DESIGN PARAMETERS ARE ACCEPTABLE BASED ON THE CONDITIONS AT THE SITE. AT THE SITE.

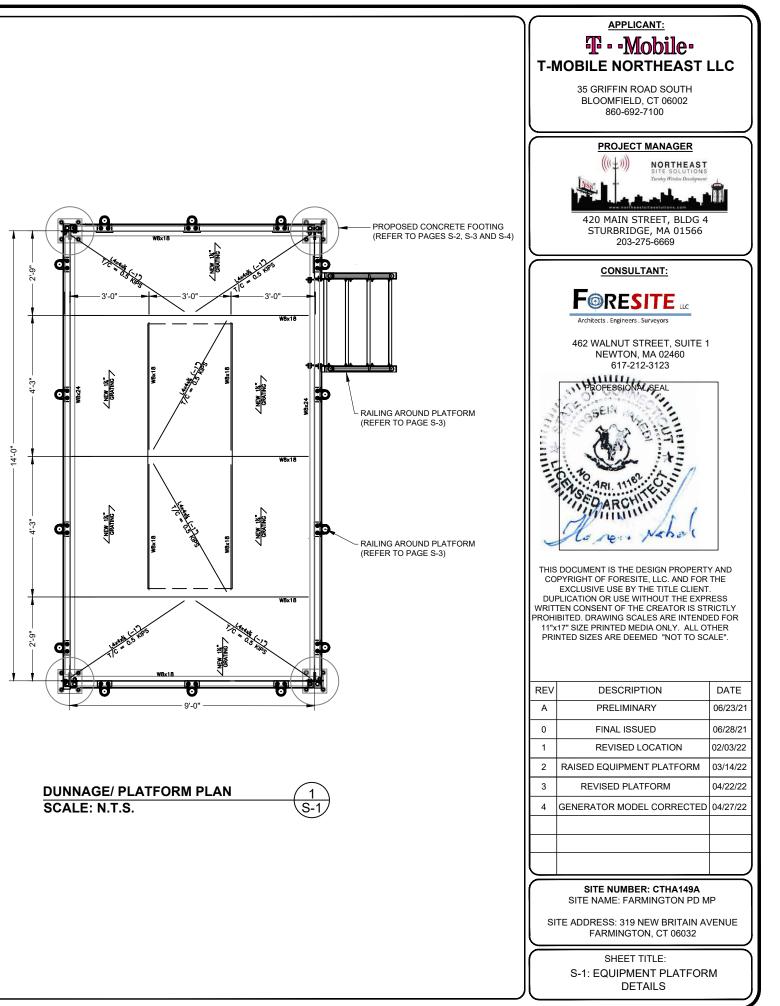
#### 4.2 EXCAVATION

- WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES AND SAFETY REGULATIONS, PROCEDURES FOR THE PROTECTION OF EXCAVATIONS, EXISTING CONSTRUCTION, AND UTILITIES SHALL BE ESTABLISHED PRIOR TO BEGINNING
- LOOSE MATERIAL TO BE REMOVED FROM THE BOTTOM OF EXCAVATION PRIOR TO CONCRETE PLACEMENT.

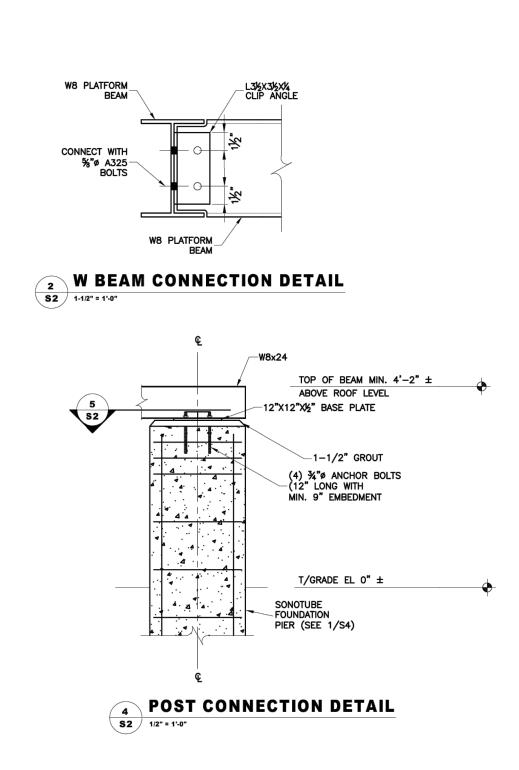
#### 4.3 COMPACTION NOTES

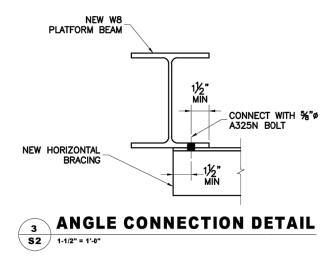
- a. FILL MATERIALS SHALL BE COMPACTED TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR METHOD (ASTM D698). MOISTURE CONTENTS SHALL BE MAINTAINED TO WITHIN 1% TO 3% OF
- THE OPTIMUM MOISTURE CONTENT. FILL MATERIAL SHOULD NOT CONTAIN MORE THAN 5% BY WEIGHT OF ORGANIC MATTERIAL SHOULD NOT CONTAIN MORE THAN 5% BY WEIGHT OF ORGANIC MATTERIAL SHOULD NOT CONTAIN MORE THAN 5% BY WEIGHT OF
- MATERIAL SHOULD HAVE MAXIMUM PARTICLE SIZE OF 4 INCHES AND 20% OR LESS OF THE MATERIAL
- SHOULD HAVE A PARTICLE SIZE BETWEEN 2 TO 4 INCHES. FILL MATERIAL SHALL BE PLACED IN LOOSE HORIZONTAL LIFTS NO GREATER THAN 9 INCHES. IF SMALL HANDHELD OR WALK-BEHIND COMPACTION EQUIPMENT IS USED, LOOSE LIFTS SHALL NOT EXCEED 6 INCHES.

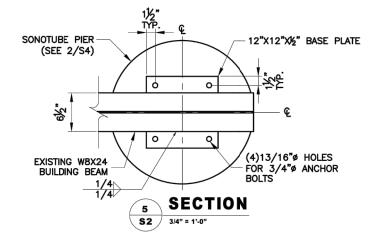
WE RECOMMEND THAT ON-SITE OBSERVATION AND TESTING OF FILL MATERIAL BE PERFORMED TO VERIFY THAT NECESSARY COMPACTION IS ARCHIVED. IN ADDITION TO THE VISUAL EVALUATION A SUFFICIENT AMOUNT OF IN-PLACE FIELD DENSITY TESTS SHOULD BE CONDUCTED TO CONFIRM THE REQUIRED COMPACTION IS BEING ATTAINED.

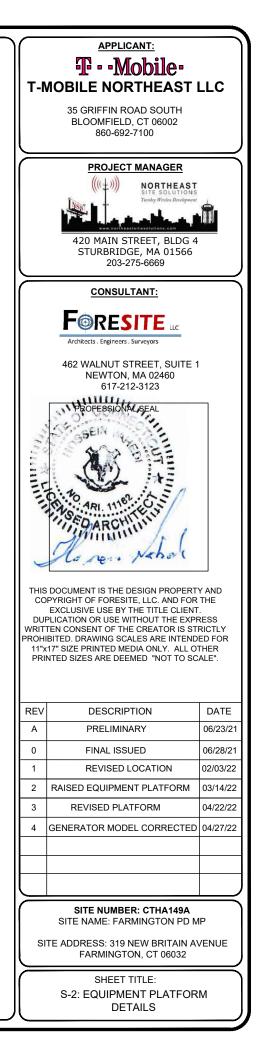


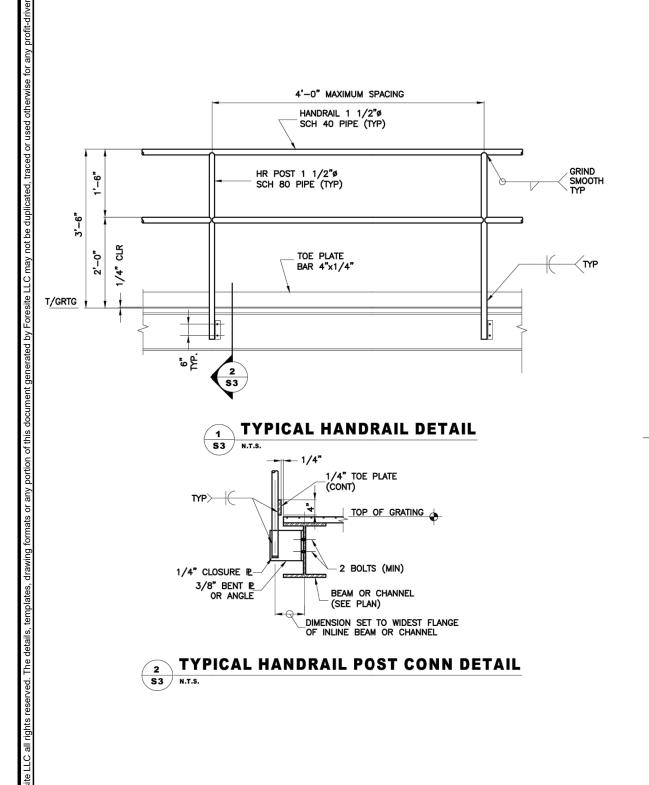


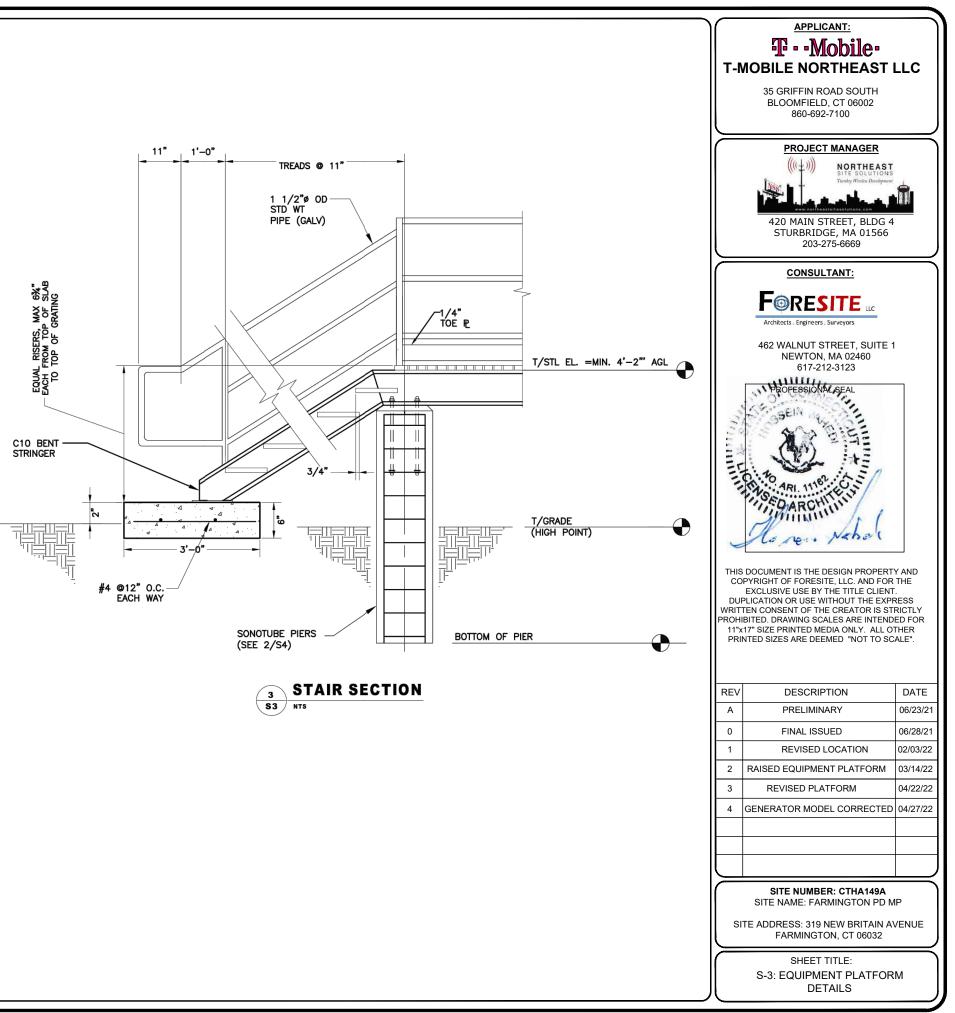


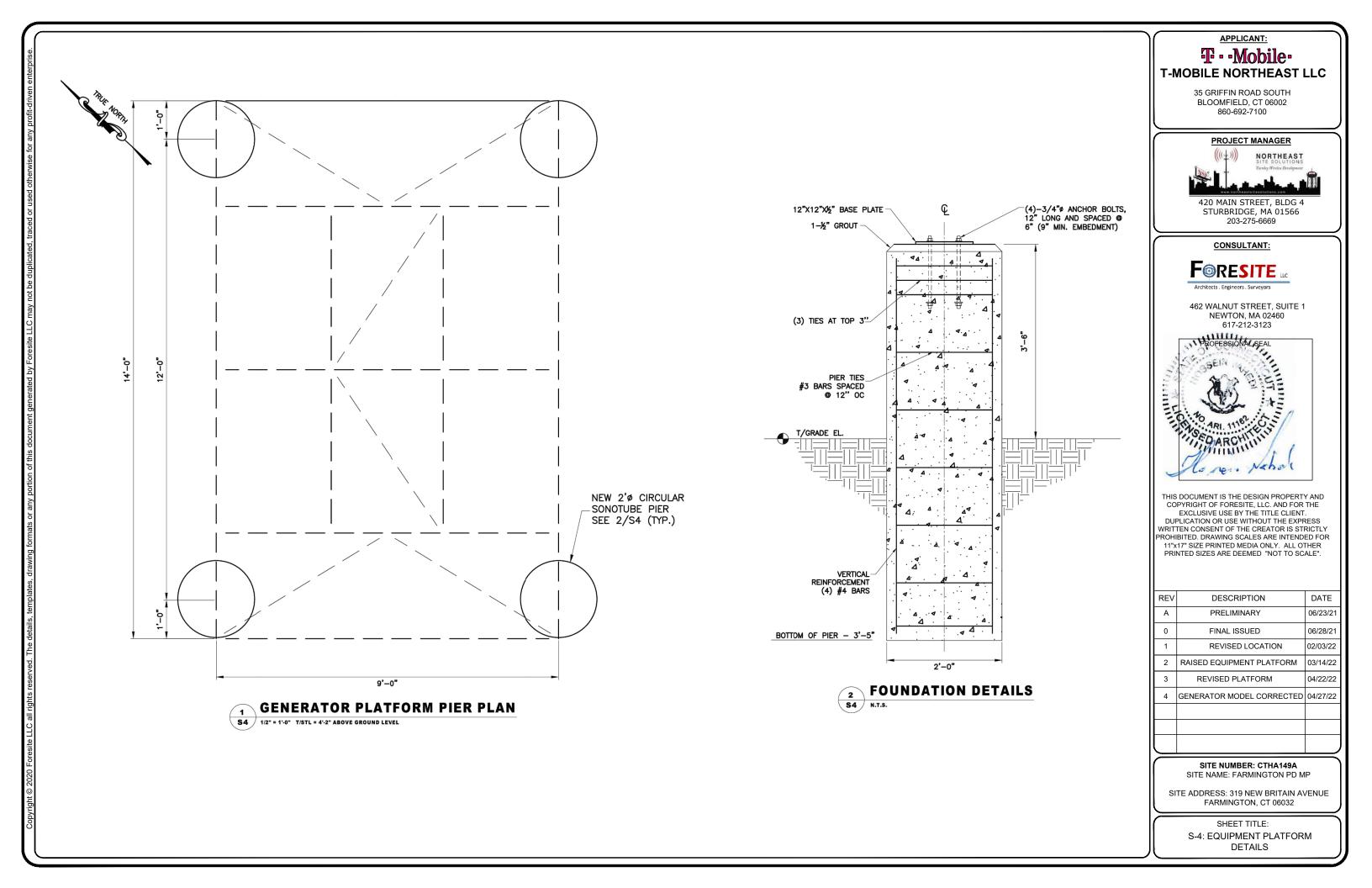












#### GENERAL ELECTRICAL NOTES

1. ALL ELECTRICAL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC) AS WELL AS APPLICABLE STATE AND LOCAL CODES INCLUDING LATEST EDITIONS OF:

NEPA - NATIONAL FIRE PROTECTION ASSOCIATION

**UL - UNDERWRITERS LABORATORIES** NEC - 2017 NATIONAL ELECTRICAL CODE NEMA - NATIONAL ELECTRIC

MANUFACTURERS ASSOCIATION

OSHA - OCCUPATIONAL SAFETY AND HEALTH ACT

IBC - 2015 INTERNATIONAL BUILDING CODE

2. ALL ELECTRICAL ITEMS SHALL BE U.L. APPROVED OR LISTED AND PRODUCED PER SPECIFICATION REQUIREMENTS.

3. THE ELECTRICAL WORK INCLUDES ALL LABOR AND MATERIAL DESCRIBED BY DRAWINGS AND SPECIFICATION INCLUDING INCIDENTAL WORK TO PROVIDE COMPLETE OPERATING AND APPROVED ELECTRICAL SYSTEM.

4. GENERAL CONTRACTOR SHALL PAY FEES FOR PERMITS, AND RESPONSIBLE FOR OBTAINING SAID PERMITS AND COORDINATION OF INSPECTIONS

5. ELECTRICAL AND TELCO WIRING OUTSIDE A BUILDING AND EXPOSED TO WEATHER SHALL BE IN WATER TIGHT GALVANIZED RIGID STEEL CONDUITS OR SCHEDULE 80 PVC (AS PERMITTED BY CODE) ND WHERE REQUIRED IN LIQUID TIGHT FLEXIBLE METAL OR NONMETALLIC CONDUITS.

6. RIGID STEEL CONDUITS SHALL BE GROUNDED AT BOTH ENDS.

7. ELECTRICAL WIRING SHALL BE COPPER WITH TYPE XHHW, THWN, OR THIN INSULATION.

8. ALL EQUIPMENT LOCATED OUTSIDE SHALL HAVE NAME 3R ENCLOSURE.

9. GROUNDING SHALL COMPLY WITH NEC ART. 250.

10. GROUNDING COAX CABLE SHIELDS MINIMUM AT BOTH ENDS USING MANUFACTURES COAX CABLE GROUNDING KITS SUPPLIED BY PROJECT OWNER

11. USE #6 COPPER STRANDED WIRE WITH GREEN COLOR INSTALLATION FOR ABOVE GRADE GROUNDING (UNLESS OTHERWISE SPECIFIED) AND #2 SOLID TINNED BARE COPPER WIRE FOR BELOW GRADE GROUNDING AS INDICATED ON THE GROUND

12. ALL GROUND CONNECTION TO BE BURNDY HYGROUND COMPRESSION TYPE CONNECTORS OR CADWELD EXOTHERMIC WELD. DO NOT ALLOW BARE COPPER WIRE TO BE IN CONTACT WITH GALVANIZED STEEL

13. ROUTE GROUNDING CONDUCTORS ALONG THE SHORTEST AND STRAIGHTEST PATH POSSIBLE, EXCEPT AS OTHERWISE INDICATED. GROUNDING LEADS SHOULD NEVER BE BENT AS RIGHT ANGLE. ALWAYS MAKE AT LEAST 12" RADIUS BENDS. #6 WIRE CAN BE BENT AT 6" RADIUS WHEN NECESSARY BOND ANY METER OBJECTS WITHIN 7 FEET OF PROPOSED EQUIPMENT OR CABINET TO MASTER GROUND BAR.

14. CONNECTIONS TO MGB SHALL BE ARRANGED IN THREE MAIN GROUPS: SURGE PROCEDURES (COAXIAL CABLE GROUND KITS, TELCO AND POWER PANEL GROUND); (GROUNDING ELECTRODE RING OR BUILDING STEEL); NON-SURGING **OBJECTS (EGB GROUND IN RBS UNIT)** 

15. CONNECTIONS TO GROUND BARS SHALL BE MADE WITH TWO HOLE COMPRESSION TYPE COPPER LUGS. APPLY OXIDE INHIBITING COMPOUND TO ALL LOCATIONS.

16. APPLY OXIDE INHIBITING COMPOUND TO ALL COMPRESSION TYPE GROUND CONNECTION.

17. TEST COMPLETED GROUND SYSTEM AND RECORD RESULTS FOR PROJECT CLOSE-OUT DOCUMENTATION.

18. BOND ANY METAL OBJECTS WITHIN 7 FEET OF PROPOSED EQUIPMENT OR CABINET TO MASTER GROUND BAR.

19. VERIFY PROPOSED SERVICE UPGRADE WITH LOCAL UTILITY COMPANY PRIOR TO CONSTRUCTION

20. EXISTING UNDERGROUND UTILITY LOCATIONS ARE UNKNOWN. GENERAL CONTRACTOR SHALL HAND-EXCAVATE TO REQUIRED SUB-GRADE DEPTH, SUFFICIENT TEST HOLES OR AS DIRECTED / REQUIRED BY CONSTRUCTION MANAGER. ALL PROPOSED UNDERGROUND UTILITY TRENCHES SHALL BE HAND-EXCAVATE AS REQUIRED, GENERAL CONTRACTOR IS RESPONSIBLE FOR ANY REQUIRED SPECIAL TEMPORARY PROTECTION OF. PHYSICAL DAMAGE TO. OR REPAIR OF EXISTING UNDERGROUND CONDUIT INCLUDING RESTORATION OF SERVICE

21. PROVIDE SLIP JOINS WHERE CONDUITS TRANSITION FROM UNDERGROUND TO ABOVE GROUND.

#### NOTES:

DIAGRAM AS SHOWN, IS A GENERIC ROUTING SCHEMATIC BASED ON AVAILABLE INFORMATION AND MAY NOT REPRESENT ACTUAL FIELD CONDITIONS. CONTRACTOR SHOULD INSTALL THE GENERATOR, EQUIPMENT AND CONNECTIONS BASED ON VERIFIED ELECTRICAL AUDITS AND PER MANUFACTURER'S INSTALLATION GUIDELINES AS WELL AS ALL APPLICABLE LOCAL AND NATIONAL CODES AND REQUIREMENTS

#### GROUNDING NOTES:

GROUNDING SHALL COMPLY WITH NEC ART 250 AND MANUFACTURER'S RECOMMENDATIONS. TIE INTO THE EXISTING GROUNDING SYSTEM

2. CONTRACTOR SHALL INSTALL GROUND RODS ON ALL UNDERGROUND GROUNDING RUNS LONGER THAN 10'. GROUND RODS WILL BE INSTALLED ON 20' CENTERS MAXIMUM.

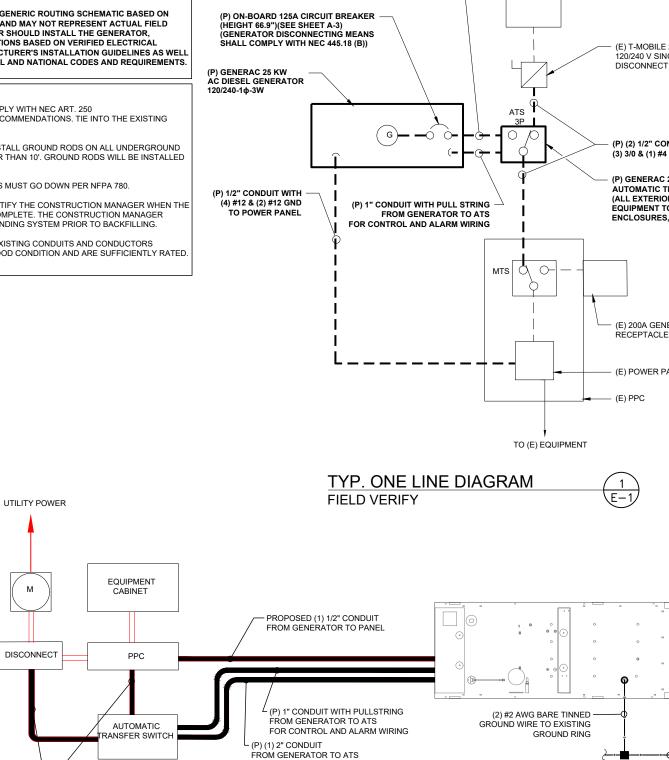
ALL DOWN CONDUCTORS MUST GO DOWN PER NFPA 780.

4. CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER WHEN THE GROUNDING SYSTEM IS COMPLETE. THE CONSTRUCTION MANAGER SHALL INSPECT THE GROUNDING SYSTEM PRIOR TO BACKFILLING.

CONTRACTOR MY USE EXISTING CONDUITS AND CONDUCTORS PROVIDED THEY ARE IN GOOD CONDITION AND ARE SUFFICIENTLY RATED.

М

DISCONNEC.



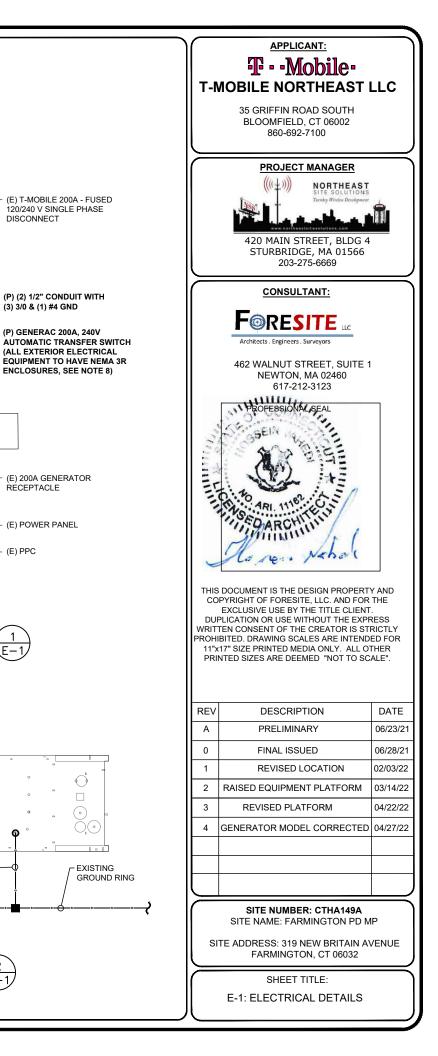
ELECTRICAL ROUTING DIAGRAM

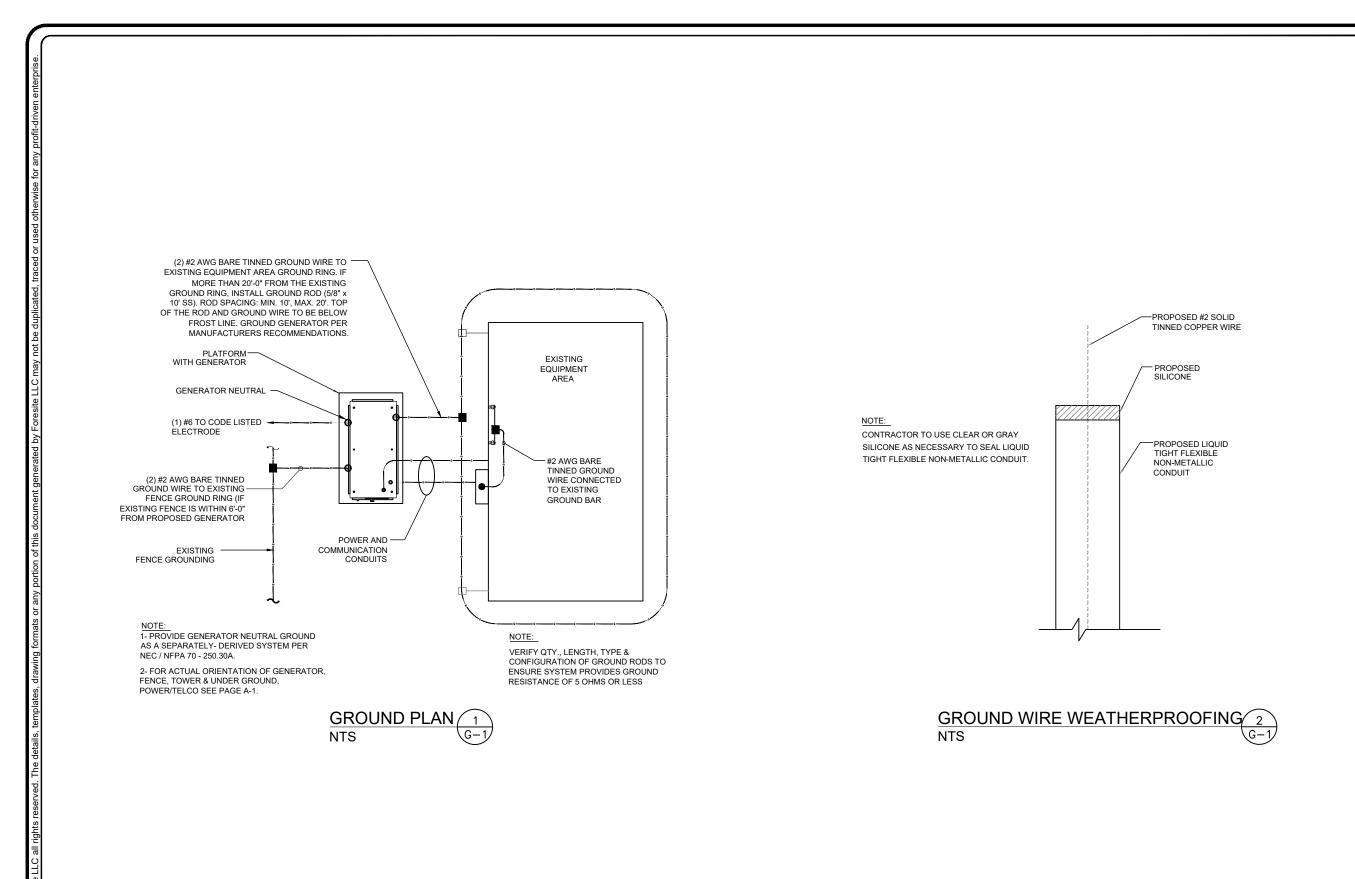
SCALE: N.T.S

(3) #1/0 & (1) #6G (CU THHN) IN 2"C

FROM DISCONNECT TO ATS PROPOSED 2-1/2" CONDUIT FROM ATS TO PANEL

PROPOSED 2-1/2" CONDUIT -





T-N	APPLICANT: <b>T</b> • • Mobile• MOBILE NORTHEAST I 35 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002 860-692-7100	LLC			
	PROJECT MANAGER ((1)) NORTHEAST SITE SOLUTIONS Tarady Window Daveloyment 420 MAIN STREET, BLDG 4 STURBRIDGE, MA 01566 203-275-6669				
=	CONSULTANT:	$\equiv$			
	FORESITE LLC Architects . Engineers . Surveyors				
	462 WALNUT STREET, SUITE 1 NEWTON, MA 02460 617-212-3123				
The states	HROPESSIONALSEAL				
CO DUF WRIT PROHI 11"x	THIS DOCUMENT IS THE DESIGN PROPERTY AND COPYRIGHT OF FORESITE, LLC. AND FOR THE EXCLUSIVE USE BY THE TITLE CLIENT. DUPLICATION OR USE WITHOUT THE EXPRESS WRITTEN CONSENT OF THE CREATOR IS STRICTLY PROHIBITED. DRAWING SCALES ARE INTENDED FOR 11"x17" SIZE PRINTED MEDIA ONLY. ALL OTHER PRINTED SIZES ARE DEEMED "NOT TO SCALE".				
REV	DESCRIPTION	DATE			
A	PRELIMINARY	06/23/21			
0	FINAL ISSUED	06/28/21			
1	REVISED LOCATION	02/03/22			
2	RAISED EQUIPMENT PLATFORM	03/14/22			
3	REVISED PLATFORM	04/22/22			
4	GENERATOR MODEL CORRECTED	04/27/22			
$ \leq$					
si	SITE NUMBER: CTHA149A SITE NAME: FARMINGTON PD MP SITE ADDRESS: 319 NEW BRITAIN AVENUE				
	FARMINGTON, CT 06032				
SHEET TITLE: G-1: GROUNDING DETAILS					

# Exhibit D

# RD048 | 3.4L | 48 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

**Standby Power Rating** 48 kW, 60 kVA, 60 Hz



GENERAC

Image used for illustration purposes only

INDUSTRIAL

## **Codes and Standards**

Not all codes and standards apply to all configurations. Contact factory for details.



ANSI

## **Powering Ahead**

For over 50 years, Generac has led the industry with innovative design and superior manufacturing.

Generac ensures superior quality by designing and manufacturing most of its generator components, including alternators, enclosures and base tanks, control systems and communications software.

Generac's gensets utilize a wide variety of options, configurations and arrangements, allowing us to meet the standby power needs of practically every application.

Generac searched globally to ensure the most reliable engines power our generators. We choose only engines that have already been proven in heavy-duty industrial application under adverse conditions.

Generac is committed to ensuring our customers' service support continues after their generator purchase.

# RD048 | 3.4L | 48 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

### **Standard Features**

#### **ENGINE SYSTEM**

- Cold Weather Kit
- Oil Drain Extension
- Fan Guard
- Stainless Steel Flexible Exhaust Connection
- Factory Filled Oil & Coolant

#### **Fuel System**

Primary Fuel Filter

#### **Cooling System**

- Closed Coolant Recovery System
- Factory-Installed Radiator
- 50/50 Ethylene Glycol Antifreeze
- ۲ Radiator Drain Extension
- Can Operate at up to 122°F (50°C) Ambient • Temperature

#### **Electrical System**

- Battery Charging Alternator
- Battery Cables
- Battery Tray •
- **Rubber-Booted Engine Electrical Connections** ۲
- Solenoid Activated Starter Motor ٠
- Smart Battery Charger

#### ALTERNATOR SYSTEM

- Class H Insulation Material
- 2/3 Pitch
- Skewed Stator
- Sealed Bearings
- Low Temperature Rise (<120°C)</li>
- Low THD (<5%)</li>

#### **GENERATOR SET**

- Sound Attenuated Aluminum Enclosure
- Internal Genset Vibration Isolation
- Separation of Circuits High/Low Voltage
- Wrapped Exhaust Piping
- Standard Factory Testing
- 5 Year Limited Warranty
- Ready to Accept Full Load in <10 Seconds
- E-Stop

#### TANKS

- 48 Hour Run Time Tank
- UL 142 Listed Tank

#### **CONTROL SYSTEM**



#### Evolution <sup>™</sup> Controller

- Two-Line Plain Text LCD Display
- Programmable Start Delay Between 10-30 seconds
- 10 second Engine Start Sequence ٠
- 5 second Engine Warm Up
- 1 minute Engine Cool-Down ٠
- Starter Lock-Out
- · Smart Battery Charger
- Automatic Voltage Regulation with Over and Under Protection
- Automatic Low Oil Pressure Shutdown
- Overspeed Shutdown
- High Temperature Shutdown

- Overcrank Protection
- · Safety Fused
- · Failure to Transfer Protection
- Low Battery Protection
- 50 Even Run Log
- Future Set Capable Exerciser
- Incorrect Wiring Protection
- Internal Fault Protection
- · Common External Fault Capability
- · Governor Failure Protection

#### Optional Shipped Loose and Field Install Kits

#### **GENERATOR SET**

- Paint Kit
- Scheduled Maintance Kit

#### **CONTROL SYSTEM**

○ Mobile Link <sup>™</sup> and Adapter Kit

#### TANKS

- Spill Box
- 90% Fuel Alarm
- Tank Risers
- Spill Box Drainback Kit
- Vent Extension Support Kit
- 5 Day Run Time Tank
- Overfill Prevention Valve
- Fuel Fill Drop Tube
- Lockable Fuel Cap



GENERAC INDUSTRIAL



GENERAC

INDUSTRIAL POWER

## **APPLICATION AND ENGINEERING DATA**

### **ENGINE SPECIFICATIONS**

#### General

Make	Generac
Cylinder #	4
Туре	In-Line
Displacement - in <sup>3</sup> (L)	3.4 (207.48)
Bore - in (mm)	3.86 (98)
Stroke - in (mm)	4.45 (113)
Compression Ratio	18.5:1
Intake Air Method	Turbocharged/Aftercooled
Cylinder Head	Cast Iron OHV
Piston Type	Aluminum

#### Engine Governing

Governor Frequency Regulation (Steady State)

Electronic te) ±0.25%

#### Lubrication System

Oil Pump Type	Gear
Oil Filter Type	Full Flow Spin-On Canister
Crankcase Capacity with Filters- qt (L)	7.4 (7.0)

#### Cooling System

Cooling System Type	Closed Recovery
Fan Type	Pusher
Fan Speed- rpm	2,029
Fan Diameter - in (mm)	22 (559)

#### Fuel System

Fuel Type	Ultra Low Sulfur Diesel Fuel
Fuel Specification	ASTM
Fuel Pump Type	Mechanical Engine Driven Gear
Injector Type	Mechanical
Fuel Supply Lin (mm/in)	7.94/0.31 (ID)
Fuel Return Line (mm/in)	7.94/0.31 (ID)
Fuel Filtering (microns)	25

#### Engine Electrical System

System Voltage	12 VDC
Battery Charger Alternator	Standard
Battery Size	Group 27F
Battery Voltage	12 VDC
Ground Polarity	Negative

#### **ALTERNATOR SPECIFICATIONS**

Standard Model	Generac	Standard Excitation	Direct	
Poles	4	Bearings	Single Sealed	
Field Type	Rotating	Coupling	Flexible Disc	
Insulation Class - Rotor	Н	Prototype Short Circuit Test	Yes	
Insulation Class - Stator	Н	Voltage Regulator Type	Full Digital	
Total Harmonic Distortion	<5%	Number of Sensed Phases	2	
Telephone Interference Factor (TIF)	<50	Regulation Accuracy (Steady State)	±1.0%	

EPA Certified Stationary Emergency

#### **OPERATING DATA**

### **POWER RATINGS**

Single-Phase 120/480 VAC @0.1pf

#### Standby 48 kW

Amps: 200

#### **MOTOR STARTING CAPABILITIES (sKVA)**

#### sKVA vs. Voltage Dip at 30%

120/240 V, Single-Phase at 0.4pf 189

#### **FUEL CONSUMPTION RATES\***

Percent Load	Diesel gal/hr (L/hr)	
25%	1.35 (5.11)	
50%	2.15 (8.14)	
75%	3.06 (11.58)	
100%	3.98 (15.07)	

\* Fuel supply installation must accommodate fuel consumption rates at 100% load.

#### COOLING

		Standby		
Air Flow (Radiator and Alternator)	ft <sup>3</sup> /min (m <sup>3</sup> /min)	2824 (80)		
Coolant System Capacity	gal (L)	2.8 (10.6)		
Heat Rejection to Coolant	BTU/hr (MJ/hr)	135,900 (143.4)		
Temperature Deration	3% for every 5°C above 25°C or 1.7% for every 5°F over 77°F			
Altitude Deration	1% for every 100 m above 915 or 3% for	or every 1000 ft over 3000 ft		
Maximum Radiator Backpressure	in H <sub>2</sub> O (kPa)	0.50 (0.12)		

#### **COMBUSTION AIR REQUIREMENTS**

Horsepower at rated kW

Flow	at	Rated	Power	ft <sup>3</sup> /min	(m <sup>3</sup> /min)	

#### Standby 190 (5.38)

Exhaust Temp (Rated Output - Post Silencer)

ENGINE			EXHAUST	
		Standby		
Rated Engine Speed	rpm	1,800	Exhaust Flow (Rated Output)	ft <sup>3</sup> /min (m <sup>3</sup> /min)

Deration - Operational characteristics consider maximum ambient conditions. Derate factors may apply under atypical site conditions.

HP

Please consult a Generac Power Systems Industrial Dealer for additional details. All performance ratings in accordance with ISO3046, BS5514, ISO8528 and DIN6271 standards. Standby - See Bulletin 0187500SSB

85



Standby 448 (12.7)

°F (°C)

1120 (604.4)

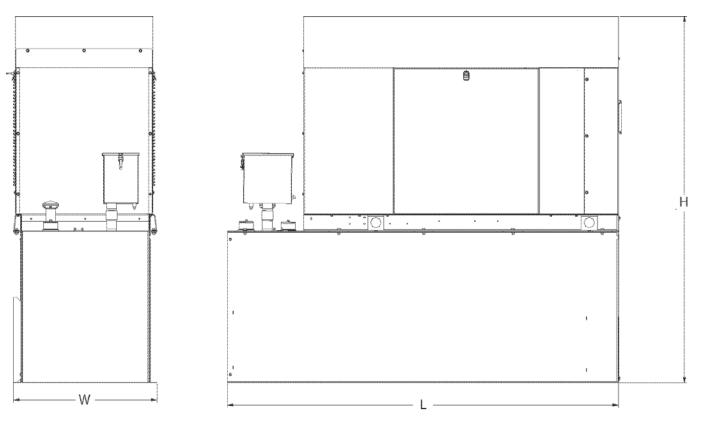


# RD048 | 3.4L | 48 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

### **DIMENSIONS AND WEIGHTS\***



## ENCLOUSED UNIT with 48hour Tank

L x W x H in (mm)	95.4 (2,422) x 35.0 (880) x 89.3 (2,269)
Sound output in dB(A) at 23ft with generator operating at normal Load	65

\* All measurements are approximate and for estimation purposes only.

YOUR FACTORY RECOGNIZED GENERAC INDUSTRIAL DEALER

Specification characteristics may change without notice. Dimensions and weights are for preliminary purposes only. Please consult a Generac Power Systems Industrial Dealer for detailed installation drawings.

5 of 5



# Exhibit E



Cut on dotted line.

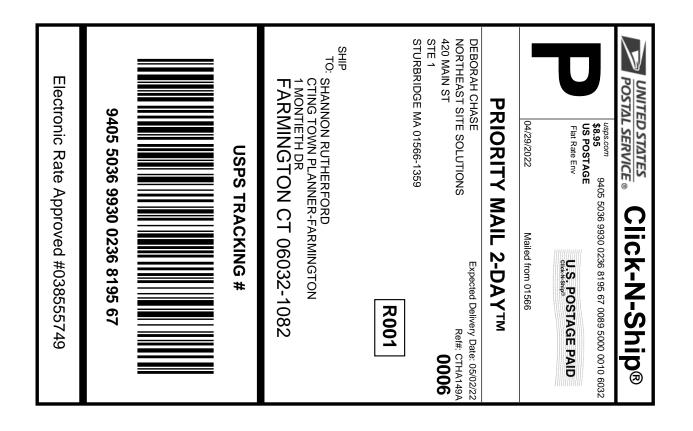
## Instructions

- 1. Each Click-N-Ship® label is unique. Labels are to be used as printed and used only once. DO NOT PHOTO COPY OR ALTER LABEL.
- 2. Place your label so it does not wrap around the edge of the package.
- 3. Adhere your label to the package. A self-adhesive label is recommended. If tape or glue is used, DO NOT TAPE OVER BARCODE. Be sure all edges are secure.
- 4. To mail your package with PC Postage®, you may schedule a Package Pickup online, hand to your letter carrier, take to a Post Office™, or drop in a USPS collection box.
- 5. Mail your package on the "Ship Date" you selected when creating this label.

## Click-N-Ship® Label Record



**UNITED STATES POSTAL SERVICE** Thank you for shipping with the United States Postal Service! Check the status of your shipment on the USPS Tracking® page at usps.com

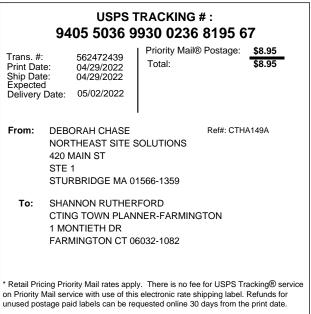


Cut on dotted line.

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UNIONVILLE 24 MILL ST UNIONVILLE, CT 06085-9998 (800)275-8777

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05/02/2022			12:42 PM
Product	Qty	Unit Price	Price
Prepaid Mail Farmington, Weight: 0 ik Acceptance [ Mon 05/0 Tracking #: 9405 503	) 4.50 oz Date:	6 8195 6	\$0.00 7
Prepaid Mail Farmington, Weight: 0 lb Acceptance D Mon 05/0 Tracking #: 9405 503	) 4.50 oz late:	5 8195 36	\$0.00
Grand Total:			\$0.00

Every household in the U.S. is now eligible to receive a second set of 4 free test kits. Go to www.covidtests.gov

> Preview your Mail Track your Packages Sign up for FREE @ https://informeddelivery.usps.com

All sales final on stamps and postage. Refunds for guaranteed services only. Thank you for your business.

Tell us about your experience. Go to: https://postalexperience.com/Pos or scan this code with your mobile device,



or call 1-800-410-7420.

UFN: 088364-0185 Receipt\_#: 840-50600059-3-4644382-1 Clerk: 5