



Turnkey Wireless Development

Northeast Site Solutions Denise Sabo 4 Angela's Way Burlington CT 06013 860-209-4690 denise@northeastsitesolutions.com

March 6, 2019

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

RE: Notice of Exempt Modification 74 Goodrich Lane, Portland CT 06480

Latitude: 41.608306 Longitude: -72.591544

T-Mobile Site#: CT11252A_NHP18

Dear Ms. Bachman:

T-Mobile currently maintains six (6) antennas at the 137-foot level of the existing 160-foot monopole tower at 74 Goodrich Lane, Portland CT. The 160-foot tower and property are both owned by Crown Castle. T-Mobile now intends to add a 15Kw generator to the existing $15'-0'' \times 10'-0''$ concrete pad within existing compound.

Planned Modifications: Ground work only:

Install New:

(1) Polar 15Kw DC Generator – 220 gallon double walled self-contained tank with fuel sensor. Requires two (2) 20 minute run cycles annually.

This facility was approved by the CT Siting Council Docket No.58—on July 11, 1986. This modification complies with this original approval.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies § 16- SOj-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-SOj-73, a copy of this letter is being sent to Ms. Susan S. Bransfield, First Selectwoman and Dan Bourret, Zoning Enforcement Officer for the Town of Portland, as well as the property owner and the tower owner.

The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S;A. \S 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,

Denise Sabo

Mobile: 860-209-4690 Fax: 413-521-0558

Office: 4 Angela's Way Burlington, CT 06013 Email: denise@northeastsitesolutions.com

Attachments

cc: Ms. Susan S. Bransfield, First Selectwoman Dan Bourret –Zoning Enforcement Officer Crown Castle - as property and tower owner

Exhibit A

Portland, CT: Commercial Property Record Card

[Back to Search Results]

[Start a New Search][Help with Printing]

Search For Properties

Parcel ID

Street Name GOODRICH LANE V

Search Reset Search

Parcel ID 00354100 Card

Map-Block-Lot 084/0009

Location 74 GOODRICH LANE Zoning R25

State Class 431 - n/a

Validity

Acres 0.083

Owner Information

Hale Joan J Crown Atlantic Llc Pmb 353 4017 Washington Rd Mcmurray PA 15317

Deed Information

284/47 Book/Page: 1992/12/23 Deed Date:

Building Information

Building No: 0 Year Built: 0 No of Units: 0

Structure Type:

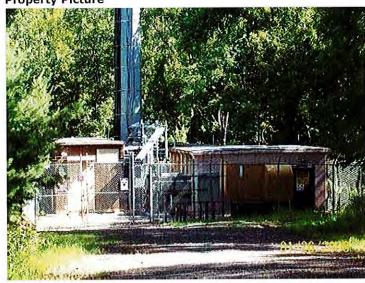
Grade:

0 **Living Units:** 0 **Identical Units:** Net Leasable Area: 0

Valuation

\$68,300 Land: **Building:** \$161,950 \$230,250 \$161,180 **Net Assessment:**

Property Picture



Type

Sales History Book/Page

2014/11/19

Permit History Price Date Purpose REPLC ANTN \$15,000 2015/11/12 \$15,000

Date

ADD REPLA 3 ANT

Out Building Information

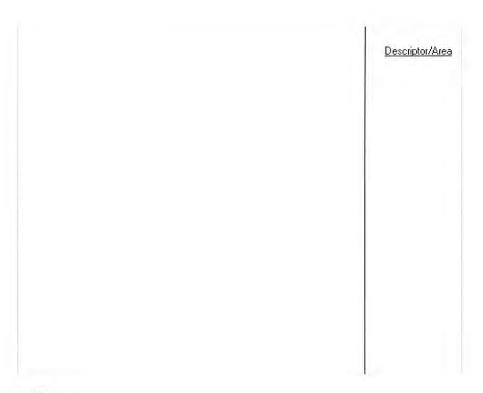
Lgth/SqFt Year RCNLD Width **Structure Code** 1996 \$4,050 8 260 Fence Chain 1978 \$140,400 160 Cell Tower 1 \$6,930 200 1978 Shed Frame 1 2000 \$1,300 96 1 Shed Frame \$9,270 1996 Paving Conc Slab 2640

Exterior/Interior Information

Levels Size Use Type Ext. Walls Const. Type Partitions Heating A/C Plumbing Condition Func. Utility Unadj. RCNLD

Price

Building Sketch



Notice

The information delivered through this on-line database is provided in the spirit of open access to government information and is intended as an enhanced service and convenience for citizens of Portland, CT.

The providers of this database: Tyler/CLT, Big Room Studios, and Portland, CT assume no liability for any error or omission in the information provided herein.

Revaluation October 1, 2011. Data is updated in February, April, July and October.

Comments regarding this service should be directed to: assessor@portlandct.org



Google Maps 74 Goodrich Ln



Imagery ©2017 Google, Map data ©2017 Google 100 ft



Exhibit B

T··Mobile·

T-MOBILE NORTHEAST LLC

SITE NUMBER: CT11252A **SITE NAME: 806382**

SITE ADDRESS: 74 GOODRICH LANE

PORTLAND, CT 06010

PROJECT SCOPE:

THE PROPOSED PROJECT SCOPE WILL CONSIST OF INSTALLING NEW DIESEL GENERATOR AND TANK FOR AN EXISTING TELECOM BASE STATION. NO SIGNIFICANT GRADING IS REQUIRED. ALL PROPOSED CONSTRUCTION WILL BE CONTAINED WITHIN THE LIMITS OF THE EXISTING FENCED COMPOUND AND TOWER SITE LEASE AREA

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

APPLICABLE CODES AND STANDARDS:

2018 CONNECTICUT STATE BUILDING CODE (CSBC)

ANSI/TIA-222-G-2005 STRUCTURAL STANDARD FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNAS.

2017 NATIONAL ELECTRICAL CODE (NFPA 70) FOR POWER AND GROUNDING REQUIREMENTS.

NEC - 2014 NATIONAL ELECTRICAL CODE OSHA - OCCUPATIONAL

SAFETY AND HEALTH ACT

NFPA - NATIONAL FIRE PROTECTION ASSOCIATION OSHA - OCCUPATIONAL SAFETY AND HEALTH ACT



1-800-922-4455

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

T-MOBILE APPROVAL:

FSA CM DATE RF ENGINEER DATE DATE

T-MOBILE ENGINEERING AND DEVELOPMENT DATE

DATE

DATE



OCATION

Strickland Hill

PROJECT INFORMATION:

74 GOODRICH LANE PORTLAND, CT 06010

41° 36' 29.9" N ,-72° 35' 29.56" W COORDINATES:

STRUCTURE TYPE: MONOPOLE

JURISDICTION: TOWN OF PORTLAND, CT CURRENT USE: TELECOMMUNICATIONS FACILITY PROPOSED USE TELECOMMUNICATIONS FACILITY

TOWER OWNER CROWN CASTLE

PROJECT TEAM:

APPLICANT:

T-MOBILE NORTHEAST, LLC. 35 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002

LANDLORD: **CROWN CASTLE**

3 CORPORATE PARK DRIVE, SUITE 101, CLIFTON PARK, NY 12065 CROWNCASTLE.COM

PROJECT MANAGER:

NORTHEAST SITE SOLUTIONS 420 MAIN STREET, BLDG 4 STURBRIDGE, MA 01566 SHELDON FREINCLE SHELDON@NORTHEASTSITE SOLUTIONS.COM

201-776-8521

FORESITE LLC CONSULTANTS:

462 WALNUT ST NEWTON, MA 02460 SAEED MOSSAVAT

SMOSSAVAT@FORESITELLC.COM

617-212-3123

SHEET INDEX:

TITLE SHEET **GENERAL NOTES**

GENERATOR DETAILS

GROUNDING AND ELECTRICAL DETAILS

T - Mobile -T-MOBILE NORTHEAST LLC

35 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002 860-692-7100



203-275-6669

CONSULTANT:



462 WALNUT STREET NEWTON, MA 02460

617-212-3123



THIS DOCUMENT IS THE DESIGN PROPERT 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 |
|-----|-------------------------|----------|
| Α | PRELIMINARY | 05/15/18 |
| 0 | ISSUED FOR PERMIT | 05/15/18 |
| 1 | DIMENSIONS ADDED | 05/21/18 |
| 2 | LEASE AREA REVISED | 06/20/18 |
| 3 | APPLICABLE CODES UPDATE | 03/06/19 |
| | | |
| | | |
| | | |

SITE NUMBER: CT11252A SITE NAME: 806382 SITE ADDRESS: 74 GOODRICH LANE PORTLAND, CT 06010

SHEET TITLE:

T-1: TITLE SHEET

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"ø 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 DOCUMENTS, BUT 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 CONFORMANCE WITH U.L. STANDARDS WHERE APPLICABLE.
- B. INSTALL ANTENNA, ANTENNA CABLES, GROUNDING SYSTEM IN ACCORDANCE WITH DRAWINGS AND SPECIFICATION IN EFFECT AT PROJECT LOCATION AND RECOMMENDATIONS OF STATE AND LOCAL BUILDING CODES, AND SPECIAL CODES HAVING JURISDICTION OVER SPECIFIC PORTIONS OF WORK. THIS WORK INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING:
- C. TIA-EIA 222 (LATEST EDITION). STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES.
- D. FAA FEDERAL AVIATION ADMINISTRATION ADVISORY CIRCULAR AC 70/7460-IH, OBSTRUCTION MARKING AND LIGHTING.
- E. FCC FEDERAL COMMUNICATIONS COMMISSION RULES AND REGULATIONS FORM 715, OBSTRUCTION MARKING AND LIGHTING SPECIFICATION FOR ANTENNA STRUCTURES AND FORM 715A, HIGH INTENSITY OBSTRUCTION LIGHTING SPECIFICATIONS FOR ANTENNA STRUCTURES.
- F. AISC AMERICAN INSTITUTE OF STEEL CONSTRUCTION SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM 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 ARE APPLICABLE AND IN THE EVENT OF CONFLICT, SUPERSEDE ANY OTHER STANDARDS OR SPECIFICATIONS.
- J. 2009 LIFE SAFETY CODE NFPA 101.

APPLICANT:

T - Mobile -

35 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002 860-692-7100



CONSULTANT:



Architects . Engineers . Surveyors
462 WALNUT STREET

PROMESSIONAUSEAL

ARI, 11167.

OARCHIIII

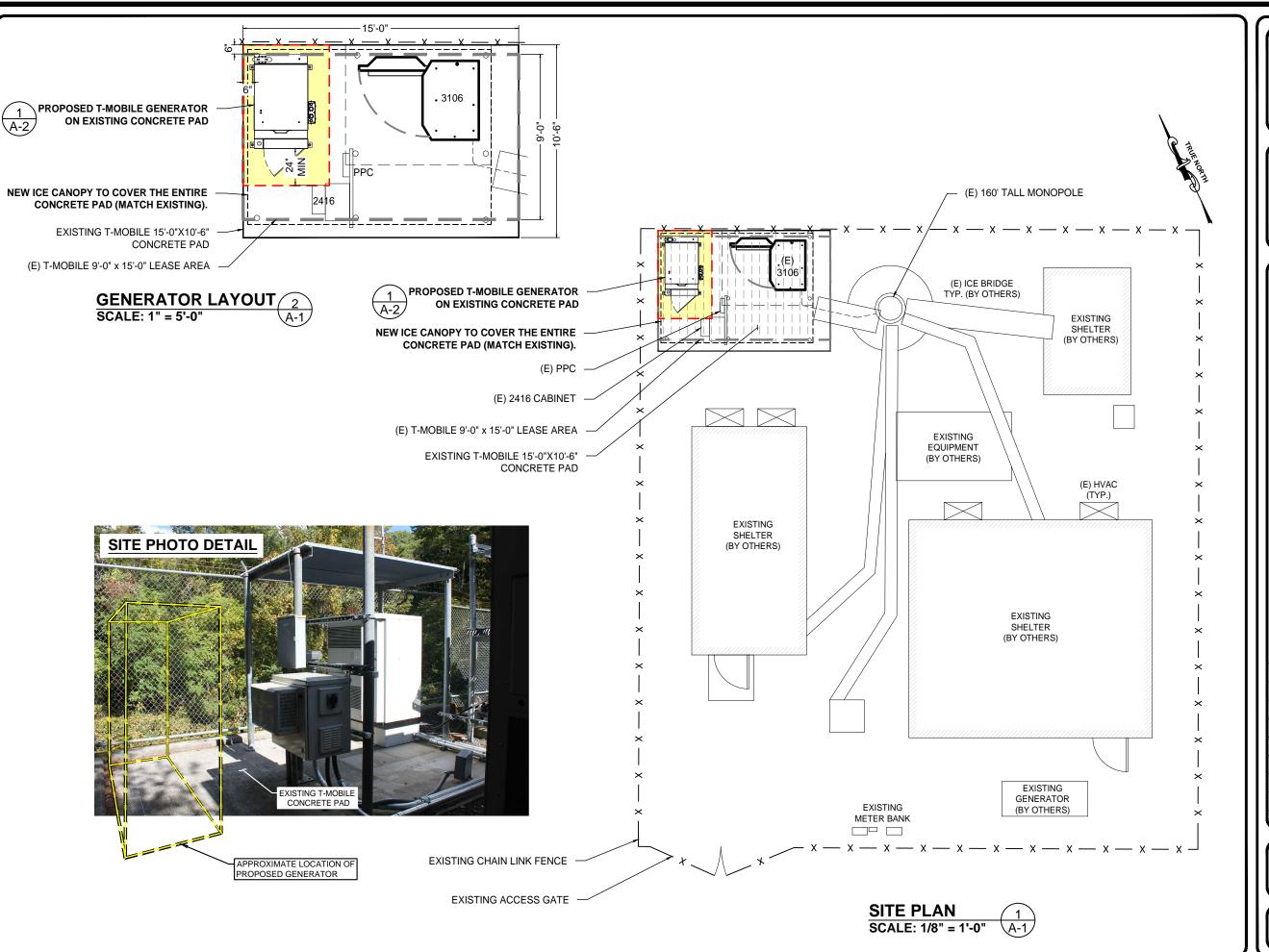
THIS DOCUMENT IS THE DESIGN PROPERTY AND COPYRIGHT OF FORESITE, LLC. AND FOR THE EXCLUSIVE USE BY THE TITLE CLIENT. DUPLICATION OR USE WITHOUT THE EXPRESS WRITTEN CONSENT OF THE CREATOR IS STRICTLY PROHIBITED. DRAWING SCALES ARE INTENDED FOR 11"x17" SIZE PRINTED MEDIA ONLY. ALL OTHER PRINTED SIZES ARE DEEMED "NOT TO SCALE".

| REV | DESCRIPTION | DATE |
|-----|-------------------------|----------|
| Α | PRELIMINARY | 05/15/18 |
| 0 | ISSUED FOR PERMIT | 05/15/18 |
| 1 | DIMENSIONS ADDED | 05/21/18 |
| 2 | LEASE AREA REVISED | 06/20/18 |
| 3 | APPLICABLE CODES UPDATE | 03/06/19 |
| | | |
| | | |
| | | |

SITE NUMBER: CT11252A SITE NAME: 806382 SITE ADDRESS: 74 GOODRICH LANE PORTLAND, CT 06010

SHEET TITLE:

N-1: NOTES AND DISCLAIMERS



APPLICANT:

T - Mobile - T-MOBILE NORTHEAST LLC

35 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002 860-692-7100

(((†))) PROJECT MANAGER

SS NORTHE ST

420 MAIN STREET, BLDG 4 STURBRIDGE, MA 01566 203-275-6669

CONSULTANT:



Architects . Engineers . Surveyors

462 WALNUT STREET NEWTON, MA 02460 617-212-3123



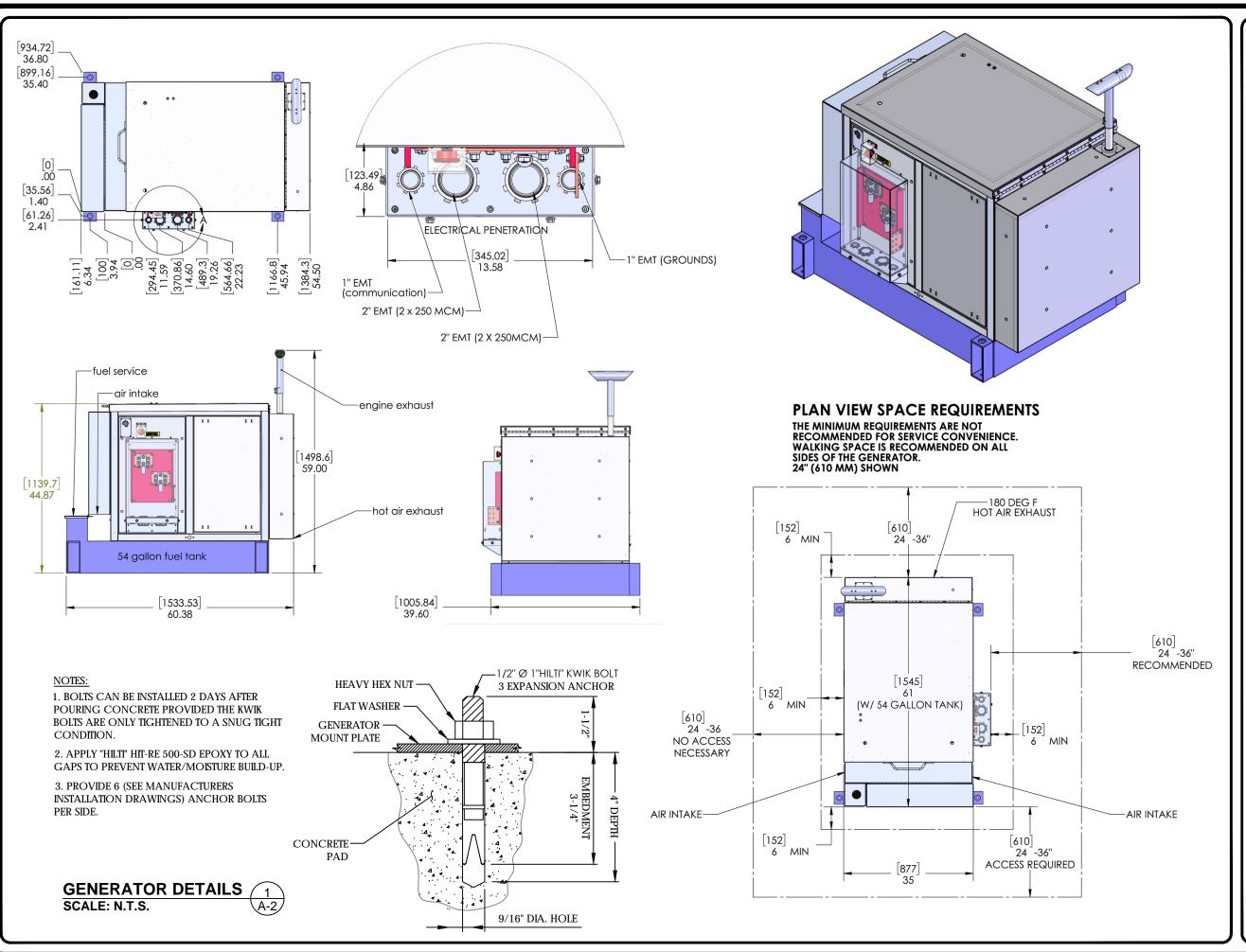
THIS DOCUMENT IS THE DESIGN PROPERTY AND COPYRIGHT OF FORESITE, LLC. AND FOR THE EXCLUSIVE USE BY THE TITLE CLIENT. DUPLICATION OR USE WITHOUT THE EXPRESS WRITTEN CONSENT OF THE CREATOR IS STRICTLY PROHIBITED. DRAWING SCALES ARE INTENDED FOR 11"x17" SIZE PRINTED MEDIA ONLY. ALL OTHER PRINTED SIZES ARE DEEMED "NOT TO SCALE".

| REV | DESCRIPTION | DATE |
|-----|-------------------------|----------|
| Α | PRELIMINARY | 05/15/18 |
| 0 | ISSUED FOR PERMIT | 05/15/18 |
| 1 | DIMENSIONS ADDED | 05/21/18 |
| 2 | LEASE AREA REVISED | 06/20/18 |
| 3 | APPLICABLE CODES UPDATE | 03/06/19 |
| | | |
| | | |
| | | |

SITE NUMBER: CT11252A SITE NAME: 806382 SITE ADDRESS: 74 GOODRICH LANE PORTLAND, CT 06010

SHEET TITLE:

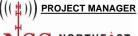
A-1: PLAN



APPLICANT:

T - Mobile - T-MOBILE NORTHEAST LLC

35 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002 860-692-7100



SS NORTHE ST SITE SOLUTIONS Turnkey Wireless Development

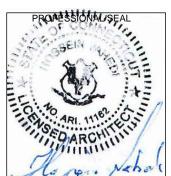
420 MAIN STRÉET, BLDG 4 STURBRIDGE, MA 01566 203-275-6669

CONSULTANT:



Architects . Engineers . Surveyors

462 WALNUT STREET NEWTON, MA 02460 617-212-3123



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 |
|-----|-------------------------|----------|
| Α | PRELIMINARY | 05/15/18 |
| 0 | ISSUED FOR PERMIT | 05/15/18 |
| 1 | DIMENSIONS ADDED | 05/21/18 |
| 2 | LEASE AREA REVISED | 06/20/18 |
| 3 | APPLICABLE CODES UPDATE | 03/06/19 |
| | | |
| | | |
| | | |

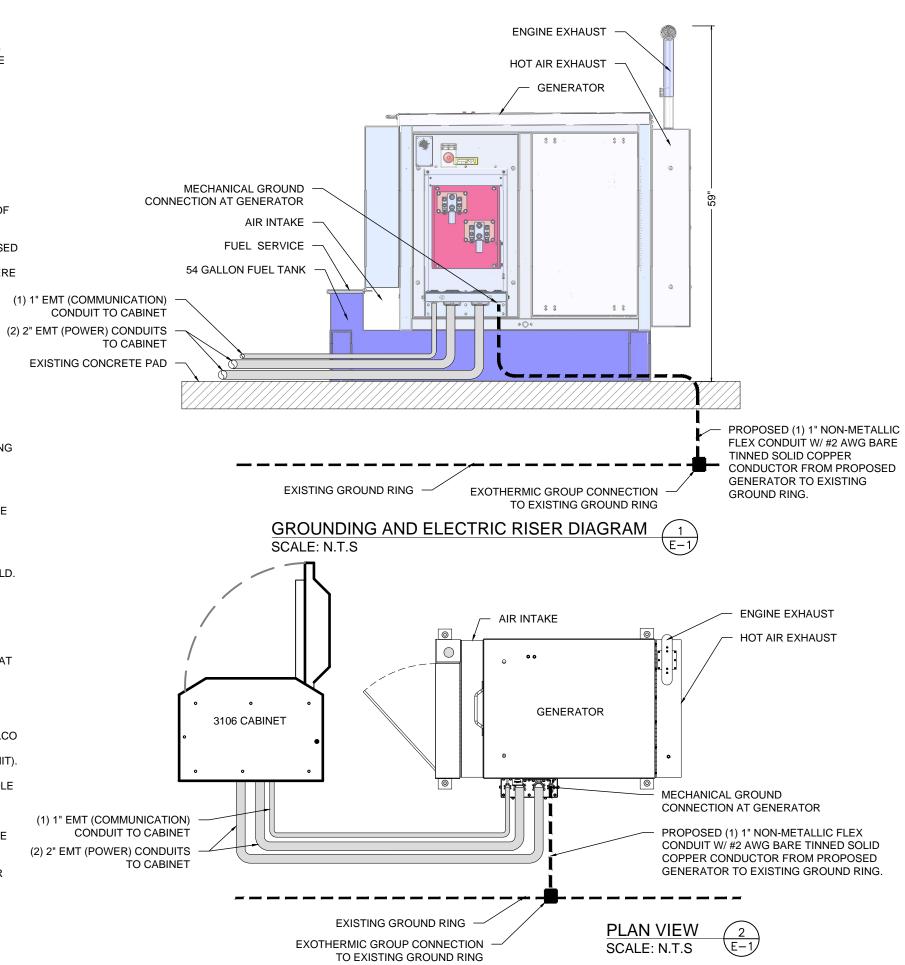
SITE NUMBER: CT11252A SITE NAME: 806382 SITE ADDRESS: 74 GOODRICH LANE PORTLAND, CT 06010

SHEET TITLE:

A-2: GENERATOR DETAILS

ELECTRICAL & GROUNDING NOTES

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



APPLICANT:

T - Mobile T-MOBILE NORTHEAST LLC

35 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002 860-692-7100



SS NORTHE ST

420 MAIN STRÉET, BLDG 4 STURBRIDGE, MA 01566 203-275-6669

CONSULTANT:



462 WALNUT STREET NEWTON, MA 02460 617-212-3123



THIS DOCUMENT IS THE DESIGN PROPERT 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 |
|-----|-------------------------|----------|
| Α | PRELIMINARY | 05/15/18 |
| 0 | ISSUED FOR PERMIT | 05/15/18 |
| 1 | DIMENSIONS ADDED | 05/21/18 |
| 2 | LEASE AREA REVISED | 06/20/18 |
| 3 | APPLICABLE CODES UPDATE | 03/06/19 |
| | | |
| | | |
| | | |

SITE NUMBER: CT11252A SITE NAME: 806382 SITE ADDRESS: 74 GOODRICH LANE PORTLAND, CT 06010

> SHEET TITLE: E-1: GROUNDING AND **ELECTRICAL DETAILS**

Exhibit C





CUTOVER APU/BATTERY REPLACEMENT PROGRAM

All APUs include:

- 16 V Supercapacitor starter
- 54 gal. UL142 rated double walled diesel tank with fuel level sensor
- Ethernet module with SNMP
- Powder coated steel enclosure
- V-belt driven radiator fan
- Standard 2 Year Warranty

Options available:

- Additional 5 year warranty
- Transitional supercap energy storage bank
- Electric radiator fans
- All-weather aluminum enclosure
- Level 2 sound enclosure
- 8-alarm relay board
- Oil refining kit

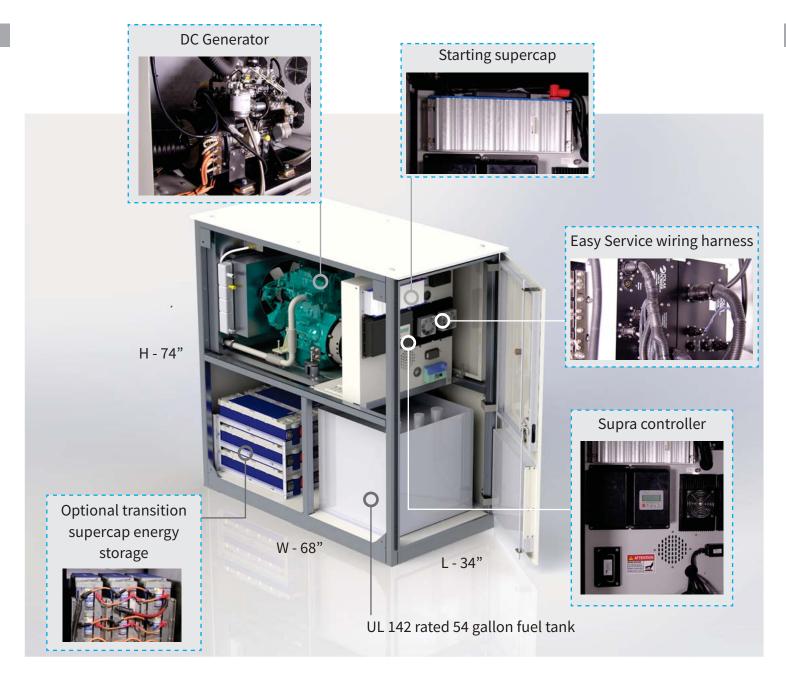




Founded in 1979 Polar Power specialized in solar photovoltaic systems, solar air conditioning and refrigeration. We developed and provided photovoltaic charging controls for telecommunications in the 1980s along with DC generators for the military. In 1994 we were first to provide DC generators with remote control and monitoring to the telecommunications industry.

Polar's success is based on engineering generators to meet the very specific needs of each application. Telecom site optimization is best met with the DC generator technology as the loads and batteries are DC. It makes no sense to install an AC generator and convert the output to DC. The AC generators are designed for a wide range of applications and they are not specifically produced for telecom applications so there are issues with reliability, space, and fuel efficiency.

Polar can save you considerable time and cost in permitting, installing, purchasing, and maintaining a backup generator. We reduce CAPEX and OPEX costs while improving backup reliability.



LOW MAINTENANCE.

LOW ACOUSTIC NOISE. <66 dBA @ 7 meters for diesel, and low vibration so as not to disturb the local residents or building landlords.

CORROSION RESISTANT. All-aluminum enclosure with stainless hardware for low maintenance, and long service life.

FUEL EFFICIENT. Up to 85% fuel savings due to smaller engine displacement, high efficiency alternator, and variable speed operation.

RODENT RESISTANT. Small animals can quickly destroy a generator set by gnawing on wires, fuel lines, radiator hoses, etc. Cooling air inlets and outlets have perforated aluminum screens to keep small rodents and large insects out. Stainless steel wire braid is placed over fuel and radiator lines to prevent damage.

SUPERCAPACITOR STARTER. Failure to start is the number one problem plaguing generator reliability and typically this is caused by a bad starting battery. Polar unique design has replaced the starting battery with a Super Capacitor. Capacitors are more reliable and last longer than batteries (10-15 year life).

LONG LIFE. Controls and wire harnesses are designed to exceed a 20 year life. Higher grade, longer life electrical wire (UL 3173), weather tight connectors, gold plated connector pins on signal circuits. No transfer switches are required.

ADVANCED MONITORING. Remote diagnostics, control, and monitoring. Ethernet and RS232 standard, with optional SNMP.

SPECIFICATIONS

Engine

| Engine Model | Perkins 403F-11 |
|----------------------|------------------------|
| Cylinders | 3 In-line |
| Displacement (L) | 1.1 |
| Bore (in./mm) | 3/77 |
| Stroke (in./mm) | 3.2/81 |
| Intake Air System | Naturally Aspirated |
| Engine HP | 18 |
| Emissions Compliance | EPA and CARB Certified |
| Variable RPM | 2300 to 2800 |

Engine lubrication system

| Oil Filter Type | Full flow spin-on canister |
|-------------------------|----------------------------|
| Oil Capacity | 4.4 L |
| Oil Pressure Switch | Yes |
| Oil Pressure Transducer | Optional |

Diesel fuel system

| Туре | Diesel |
|----------------|---------------|
| Fuel Pump Type | Electrical |
| Injector Type | Mechanical |
| Fuel Filtering | Paper element |

Engine cooling system

| Туре | Pressurized Aluminum Radiator |
|--------------------|--------------------------------------|
| Water Pump | Belt-driven, Pre-lubed, self-sealing |
| Fan Type | Belt -driven |
| Airflow CFM | 1300 |
| Fan Mode | Pusher |
| Temperature Sensor | Yes |

Environmental

| Operating Temperature (°C/°F) | -23 to 50 / -10 to 122 |
|-------------------------------|------------------------|
| Operating Humidity % | 100 |
| Cold Start Aids | Glow Plugs |

Optional: manifold heater available for temperatures < -10F

Power adjustment for conditions

| Temperature Deration | 1% derate for every 5.6 °C (10 °F) above 25 °C (77 °F) |
|----------------------|---|
| Altitude Deration | 3% derate for every 300 m (1000 ft) above 91 m (300 ft) |

Fuel tank

| UL Rated Capacity (gal/L) | 54/204 |
|---------------------------|----------------------|
| Run Time (hrs) | 50 to 60 |
| Tank Alarms | Yes |
| Visual Gages | Yes |
| Catch Basin (gal/L) | 5/19 |
| Listings | UL 142 (double wall) |

Engine cooling

| System coolant capacity (gal/L) | 2.2/8.3 |
|---|---------|
| Maximum operation air temperature on radiator (°C/°F) | 50/122 |
| Maximum ambient temperature (°C/°F) | 50/122 |

Exhaust

| Exhaust flow at rated output (cfm/cmm) | 110/3.11 |
|---|----------|
| Exhaust temperature at rated output (°C/°F) | 400/752 |

Alternator

| Alternator Model | 8220 |
|--------------------------------------|---------------------------------------|
| Туре | Permanent Magnets, NdFeB |
| Weight (lb/kg) | 46.5/21 |
| Regulation Type | Variable engine speed |
| Stator | 3 phase/32 poles |
| Overcurrent Protection (A) | 15 kW - 500 |
| Disconnect Means | Pull fuse block or Circuit breaker |
| Voltage Range (VDC) | 44 to 62 |
| Alternator Exhaust Flow (cfm/cmm) | 130 to 180 / 3.68 to 5.1 |
| MTBF (hr) | 100,000+ |

Enclosure

| Model | 88-25-0800 |
|---------------|--|
| Туре | Weather Protective |
| Materials | Powder coated steel |
| Door Hardware | Three Point with Padlock Hasp, and Removable Side Panels |
| Mounting | Secure Mounting Tabs |
| Dims. | L 34" x W 68" x H 74" |

Optional: L2 option

Optional: Aluminum build

Starter supercapacitor

| Model | 20-16-0001 |
|-------------------------------|------------------------|
| Storage Rating (Farads) | 500 |
| Voltage (VDC) | 13-14.4 |
| Weight (lb/kg) | 12.1/5.5 |
| Operating Temperature (°C/°F) | -40 to 65 / -40 to 149 |
| Service Life (year) | 10 to 15 |

Charger

| Model | 00-10-0015 |
|--------------------------------|------------|
| Input Voltage (VDC) | 28 to 60 |
| Output Voltage (VDC) | 14 to 14.4 |
| Recharge time from 0 VDC (min) | 10 |
| Recharge time from 8 VDC (min) | 2 |
| Weight (lb/kg) | 2.2/1 |

Transition supercapacitor (optional)

| Model | 20-16-0003 |
|-------------------------------|------------------------|
| Storage Rating (Farads) | 130 |
| Stored Energy (Wh) | 57 |
| Voltage (VDC) | 56 to 62 |
| Connected in parallel | up to 9 |
| Weight (lb/kg) | 39.7/18 |
| Operating Temperature (°C/°F) | -40 to 40 / -40 to 104 |
| Service Life (year) | 10 to 15 |

Controller features

| Controller Type | Supra Model 250 |
|--|---|
| 4-Line Plain Text OLED Display | Simple user interface for ease of operation |
| Engine Run Hours Indication | Standard |
| Engine Run Hours Indication Programmable Start Delay | Standard |
| Run/Alarm/Maintenance Logs | Standard |
| Engine Start Sequence | Cyclic cranking: 5 sec on, 45 sec rest (3 attempts maximum) |
| Starter Supercapacitor Charger | |
| Automatic Voltage Regulation with Over and Under Voltage Protection | |
| Automatic Low Oil Pressure/High Oil Temperature Shutdown | |
| Overcrank/Overspeed | Standard |
| Automatic High Engine Temperature Shutdown | Standard |
| Automatic High Engine Temperature ShutdownField Upgradeable Firmware | Standard |
| Glow Plug Delay | Automatic With Temperature |
| Engine Start Delay | Adjustable, Set at 60 sec |
| Return to Utility Delay | Adjustable, Set at 60 sec |
| Engine Cool-down | Adjustable, Set at 60 sec |
| Engine Cool-down Exerciser | Programmable |

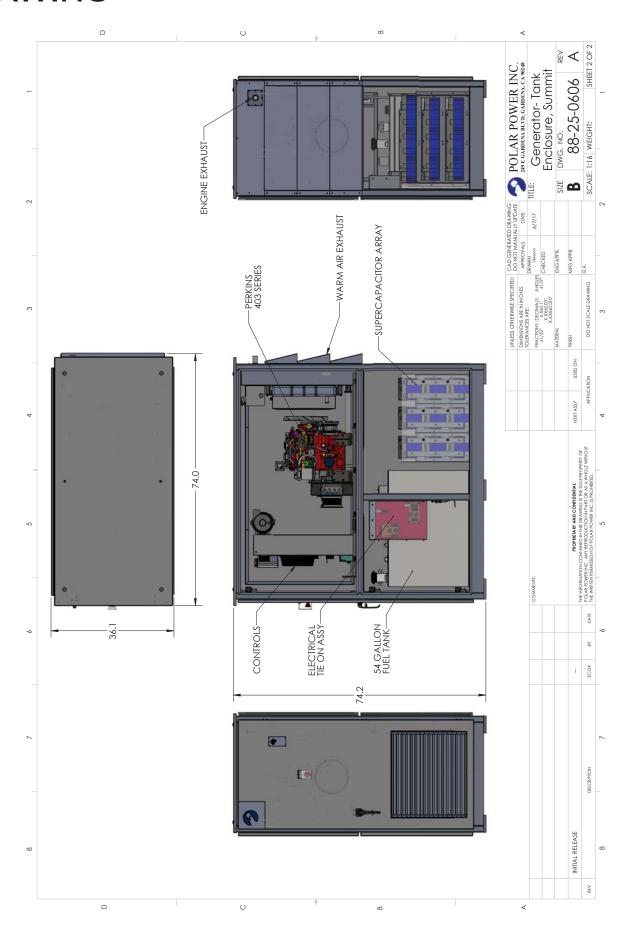
Monitoring

Alarm monitoring and remote control through Ethernet.

Contact closure alarm board (optional)

| Shutdown Alarm | Optional |
|-----------------------|----------|
| Warning Alarm | |
| Engine Run | |
| Low Diesel Fuel Level | |
| Diesel Fuel Leak | · |
| E-Stop Depressed | Optional |
| Fuel Level Over 90% | · |

DRAWING

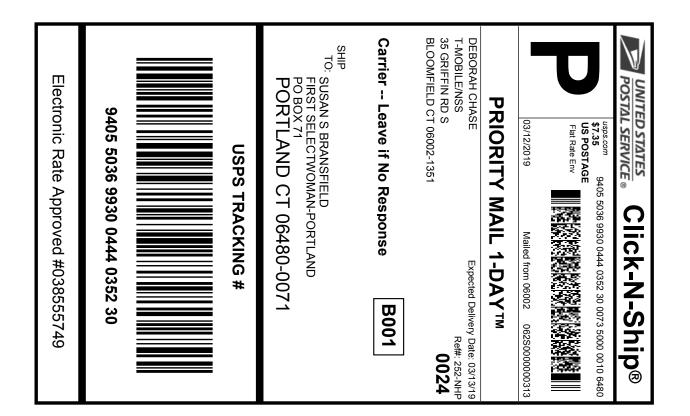




249 E. Gardena Blvd., Gardena, CA 90248

Tel.: +1(310)8309153 • Fax: +1(310)7192385 info@polarpowerinc.com • www.polarpower.com

Exhibit D





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

USPS TRACKING #: 9405 5036 9930 0444 0352 30

458868940 03/11/2019 Trans. #: Print Date: Ship Date: 03/12/2019 03/13/2019 Delivery Date:

Priority Mail® Postage: Total

From: **DEBORAH CHASE** Ref#: 252-NHP

\$7.35

T-MOBILE/NSS 35 GRIFFIN RD S

BLOOMFIELD CT 06002-1351

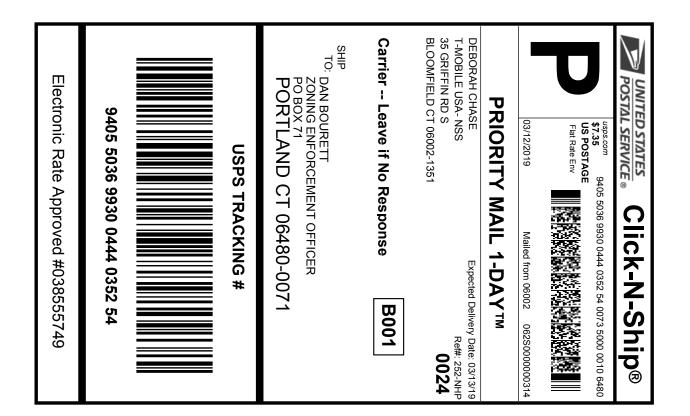
SUSAN S BRANSFIELD

FIRST SELECTWOMAN-PORTLAND

PO BOX 71

PORTLAND CT 06480-0071

Retail Pricing Priority Mail rates apply. There is no fee for USPS Tracking® service on Priority Mail service with use of this electronic rate shipping label. Refunds for unused postage paid labels can be requested online 30 days from the print date.





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

USPS TRACKING #: 9405 5036 9930 0444 0352 54

458868940 03/11/2019 Trans. #: Print Date: Ship Date: 03/12/2019 03/13/2019 Delivery Date:

Priority Mail® Postage: Total

\$7.35

Ref#: 252-NHP

From: **DEBORAH CHASE**

> T-MOBILE USA- NSS 35 GRIFFIN RD S

BLOOMFIELD CT 06002-1351

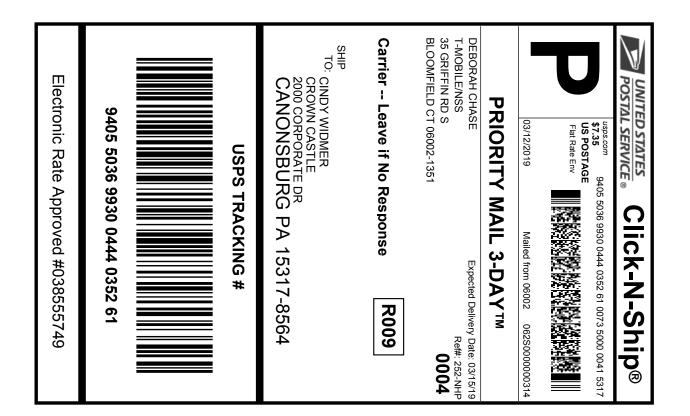
DAN BOURETT

ZONING ENFORCEMENT OFFICER

PO BOX 71

PORTLAND CT 06480-0071

Retail Pricing Priority Mail rates apply. There is no fee for USPS Tracking® service on Priority Mail service with use of this electronic rate shipping label. Refunds for unused postage paid labels can be requested online 30 days from the print date.





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

USPS TRACKING #: 9405 5036 9930 0444 0352 61

458868940 03/11/2019 Trans. #: Print Date: Ship Date: 03/12/2019 03/15/2019 Delivery Date:

Priority Mail® Postage: \$7.35 Total

Ref#: 252-NHP From: **DEBORAH CHASE**

T-MOBILE/NSS 35 GRIFFIN RD S

BLOOMFIELD CT 06002-1351

CINDY WIDMER **CROWN CASTLE**

> 2000 CORPORATE DR **CANONSBURG PA 15317-8564**

Retail Pricing Priority Mail rates apply. There is no fee for USPS Tracking® service on Priority Mail service with use of this electronic rate shipping label. Refunds for unused postage paid labels can be requested online 30 days from the print date.