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Lucia Chiocchio lchiocchio@cuddyfeder.com

3/25/20

BY ELECTRONIC MAIL

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

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

Notice of Exempt Modification Emergency Back-up Generator

181 A Norman Rd, Griswold, CT 06351

Lat.: 41.60127500° Long.: 71.95385000°

Dear Ms. Bachman:

This letter and enclosures are respectfully submitted on behalf of New Cingular Wireless PCS, LLC ("AT&T"). AT&T currently maintains its wireless telecommunications facility at 181 A Norman Road in the Town of Griswold, Connecticut. Ernest R & Stuart R Norman are the owners of the underlying property and SBA Towers, LLC is the owner of the tower. AT&T submits this letter and enclosures to the Connecticut Siting Council ("Council") to notify the Council of AT&T's intent to perform modifications to the existing facility that do not have substantial adverse environmental effects and thus do not require a certificate pursuant to Section 16-50k of the Connecticut General Statutes.

AT&T intends to install one (1) new Generac 30kW Diesel Generator within the existing grade-level fenced equipment compound as demonstrated on the plans enclosed as Attachment 1. AT&T's existing facility supports its FirstNet program which provides first responders with priority access to AT&T's network to ensure adequate communication capabilities in the event of emergency. AT&T's proposed generator will ensure that critical communication capability for first responders and the public are not lost in the event of a loss of power.

AT&T's proposed generator will also advance the State's goal of natural disaster and emergency preparedness. As discussed in the Council's Docket 432 Findings and Report and Docket 440 proceedings and Findings of Fact (Nos. 76-77), in response to two significant storm events in 2011, the State formed a Two Storm Panel (the "Panel") that evaluated Connecticut's approach to

planning and mitigation of impacts associated with emergencies and natural disasters. The Panel found that "wireless telecommunications service providers were not prepared to serve residential and business customers during a power outage" because certain companies had limited backup generator capacity.¹ The Panel also noted that "[t]he failure of a large portion of Connecticut's telecommunications system during the two storms is a life safety issue." The Panel recommended that State regulatory bodies review "telecommunications services currently in place to verify that the vendors have sufficient generator and backhaul capacity to meet the emergency needs of consumers and businesses" and that the "Connecticut Siting Council should require continuity of service plans for any cellular tower to be erected."² The planned modifications will ensure continuity of services by reinforcing AT&T's back-up power and backhaul capacity to meet the emergency needs of first responders, consumers and businesses in the event of a power outage.

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

- Will not result in an increase in the height of the existing structure;
- Will not require the extension of the site boundary;
- Will not increase noise levels at the facility by more than six decibels or more, or to levels that exceed state or local criteria since emergency backup generators are exempt from noise regulations as "noise created as a result of, or relating to, an emergency";<sup>3</sup>
- Will not increase radio frequency emission at the facility to a level at or above the Federal Communications Commission safety standards;
- Will not cause a change or alteration in the physical or environmental characteristics of the site; and
- Will not impair the structural integrity of the facility.

This facility was originally approved by the Town of Griswold's Planning and Zoning Commission in 1998 by Case No: ZP 12-98 as indicated on the letter from the Tower Owner to the Council dated March 3, 2017 enclosed as Attachment 2. This modification complies with the conditions of the aforementioned approval.

The proposed modifications will have no impact on the existing tower structure itself or the radiofrequency emissions as the proposed modifications only consist of the addition of one new generator within the grade-level fenced equipment compound. Thus, AT&T respectfully requests a waiver from submission of information relating to the existing tower structure or the radiofrequency emissions.

Please accept this letter as notification pursuant to R.C.S.A. § 16-50j-73 for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-73. In accordance with R.C.S.A. § 16-50j-73, a copy of this letter and enclosure are being sent by email to the Town First Selectman

<sup>&</sup>lt;sup>1</sup> See Council Administrative Notice Item No. 39

<sup>&</sup>lt;sup>2</sup> See Council Administrative Notice Item No. 39.

<sup>&</sup>lt;sup>3</sup> R.C.S.A. § 22a-69-1.8.

Todd Babbitt and Planning & Zoning Department as well as by first class mail to the property owner and structure owner identified above. Certificate of mailing is enclosed as Attachment 3.

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

Very truly yours,

Lucia Chiocchio

Attachments

cc: First Selectman Todd Babbitt, Town of Griswold
Mario J. Tristany, Jr., Town Planner
SBA Towers, LLC, Tower Owner
Ernest R & Stuart R Norman, Property Owner
AT&T
General Dynamics Information Technology

Daniel Patrick, Esq. & Julie Durkin, Cuddy & Feder, LLP

Lucia Chrocchio

## ATTACHMENT 1



#### **GENERATOR PROJECT 30KW GENERAC DIESEL GENERATOR** 200A GENERAC ATS

#### **181 A NORMAN ROAD JEWETT CITY, CT 06351**

# VICINITY MAP

SITE NAME: GRISWOLD WEST

FA LOCATION CODE: 10071049

#### SCOPE OF WORK

ADD STANDBY GENERATOR, ASSOCIATED CONCRETE PAD, AND UTILITY EQUIPMENT TO EXISTING AT&T QUIPMENT AREA. THERE WILL BE NO CHANGE IN THE SIZE OR HEIGHT OF THE TOWER OR ANTENNAS.

TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN CONNECTICUT

#### CALL BEFORE YOU DIG 811 OR 1-800-922-4455

CONNECTICUT PUBLIC ACT 87-71 REQUIRES MIN, 2 WORKING DAYS NOTICE BEFORE YOU EXCAVATE.

#### APPLICABLE BUILDING CODE \$ STANDARDS

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURREN' EDITION OF THE FOLLOWING CODES AS ADOPTED BY THE GOVERNING LOCAL AUTHORITIES. NOTHING N THESE PLANS ARE TO BE CONSTRUCTED TO PERMIT WORK NOT CONFORMING TO THESE CODES:

- INTERNATIONAL BUILDING CODE 2015
- . NATIONAL ELECTRIC CODE 2017
- 3. AMERICAN CONCRETE INSTITUTE (ACI) 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL
- 4. AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), MANUAL OF STEEL CONSTRUCTION
- . TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-G, STRUCTURAL STANDARDS FOR STEEL OWER AND ANTENNA SUPPORTING STRUCTURES
- . TIA 607, COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR

#### 1 PROJECT INFORMATION

#### PROJECT MANAGER:

JOF JARVIS

MARKET LEAD

GENERAL DYNAMICS WIRELESS SERVICES 661 MOORE RD STE 110

KING OF PRUSSIA, PA 19406 joseph.jarvis@gdit.com

#### ENGINEER:

855 COMMUNITY DRIVE SAUK CITY, WI 53583 PH.: (608) 643-4100 FAX: (608) 643-7999 CONTACT: TYLER BEATTY tbeatty@ramaker.com

RAMAKER & ASSOCIATES, INC.

APPLICANT INFORMATION: 7150 STANDARD DR HANOVER, MD 21076

SITE NAME: GRISWOLD WEST FA NUMBER: 1007 1049

TOWER OWNER: SBA TOWERS, LLC 805 I CONGRESS AVE BOCA RATON, FL 33487

PROPERTY OWNER NORMAN ERNEST R & STUART R & 257 MORMAN RD GRISWOLD, 0635 I

181 A NORMAN ROAD

JEWETT CITY, CT 0635 I COUNTY: NEW LONDON

41.60127500° -71.95385000°

GROUND ELEVATION: 335 FT AMSL

DO NOT SCALE DRAWINGS:

CONTRACTOR SHALL VERIFY ALL PLANS & EXISTIN DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

THE INFORMATION CONTAINED IN THIS SET OF DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO THE CLIENT IS STRICTLY PROHIBITED

#### SHEET INDEX

#### GENERAL:

T-I TITLE SHEET

#### NOTES:

N-I GENERAL NOTES

- A-I SITE PLAN
  A-2 SITE PLAN & EQUIPMENT LAYOUT
  S-I FOUNDATION DETAILS

#### ELECTRICAL & GROUNDING:

- E- I WIRING DETAILS
- PANEL AND PENETRATION DETAILS

  ATS, CONDUIT # GROUND ROD DETAILS
- GENERAC GENERATOR SPECIFICATIONS
- E-4. I GENERAC GENERATOR SPECIFICATIONS
- E-4.2 GENERAC GENERATOR SPECIFICATIONS GENERAC ATS SPECIFICATIONS
- E-5. I GENERAC ATS SPECIFICATIONS

#### SIGNATURE BLOCK

AT¢T MGR. DATE

GENERAL DYNAMICS

DATE CONSTRUCTION MGR.

SITE ACQUISITION

#### GRISWOLD WEST FA ID # 10071049

DATE 3/18/2020

855 Community Dr, Sauk City, WI 53583 608-643-4100 www.Ramaker.com Sauk City, WI • Willmar, MN

Woodcliff Lake, NJ · Bayamon, PR

GENERAL DYNAMICS

hereby certify that this plan, specification, or report was prepare by me or under my direct supervision and that I am a duly Licensec Professional Engineer under the laws of the State of Connecticut.

Information Technology, Inc.

PREPARED FOR:

CONSULTANT:

GENERAL DYNAMICS

661 MOORE RD STE 110

KING OF PRUSSIA, PA 19406

181 A NORMAN ROAD JEWETT CITY, CT 0635 I

FINAL

TITLE SHEET

SCALE: NONE

45823

#### NOTES TO SUBCONTRACTOR:

- I. THE GENERAL SUBCONTRACTOR MUST VERIFY ALL DIMENSIONS, CONDITIONS AND ELEVATIONS BEFORE PROCEEDING WITH THE WORK. ALL WORK SHALL BE PERFORMED IN A WORKMANLIKE MANNER IN ACCORDANCE WITH ACCEPTED CONSTRUCTION PRACTICES.
- 2. IT IS THE INTENTION OF THESE DRAWINGS TO SHOW THE COMPLETED INSTALLATION. THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY BRACING, SHORING, TIES, FORM WORK, ETC. IN ACCORDANCE WITH ALL NATIONAL, STATE, AND LOCAL ORDINANCES, TO SAFELY EXECUTE ALL WORK AND SHALL BE RESPONSIBLE FOR SAME. ALL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES.
- 3. THE SUBCONTRACTOR SHALL USE ADEQUATE NUMBER OF SKILLED WORKMAN WHO ARE THOROUGHLY TRAINED AND EXPERIENCED IN THE NECESSARY CRAFTS AND WHO ARE COMPLETELY FAMILIAR WITH THE SPECIFIED REQUIREMENTS AND METHOD NEEDED FOR PROPER PERFORMANCE OF THE WORK
- 4. CONSTRUCTION SUBCONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION SUBCONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS AND CONSTRUCTION SUBCONTRACTOR FURTHER AGREES TO INDEMNIPY AND HOLD DESIGN ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH PERFORMANCE OF WORK ON THIS PROJECT.
- 5. SITE GROUNDING SHALL COMPLY WITH AT&T WIRELESS SERVICES TECHNICAL SPECIFICATIONS FOR FACILITY GROUNDING FOR CELL SITE STANDARDS, LATEST EDITION, AND COMPLY WITH AT&T TOWERS GROUNDING CHECKLIST, LATEST VERSION. WHEN NATIONAL AND LOCAL GROUNDING CODES ARE MORE STRINGENT THEY SHALL GOVERN. GROUNDING SHALL BE COMPLETED BEFORE ERECTION OF TOWER.
- 6. ALL WORK SHALL COMPLY WITH OSHA AND STATE SAFETY REQUIREMENTS. PROCEDURES FOR THE PROTECTION OF EXCAVATIONS, EXISTING CONSTRUCTION AND UTILITIES SHALL BE ESTABLISHED PRIOR TO FOUNDATION INSTALLATION, IF TEMPORARY LIGHTING AND MARKING IS REQUIRED BY THE FEDERAL AVIATION ADMINISTRATION (FAA), IT IS THE SUBCONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE NECESSARY LIGHTS AND NOTIFY THE PROPER AUTHORITIES IN THE EVENT OF A PROBLEM.
- 7. ALL WORK SHALL BE ACCOMPLISHED IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL CODES OR ORDINANCES. THE MOST STRINGENT CODE WILL APPLY IN THE CASE OF DISCREPANCIES OR DIFFERENCES IN THE CODE REQUIREMENTS.
- 8. ANY DAMAGE TO THE ADJACENT PROPERTIES WILL BE CORRECTED AT THE SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE LANDOWNER AND THE ENGINEER.
- 9. THE COMPLETE BID PACKAGE INCLUDES THESE CONSTRUCTION DRAWINGS ALONG WITH THE SPECIFICATIONS. SUBCONTRACTOR IS RESPONSIBLE FOR REVIEW OF TOTAL BID PACKAGE PRIOR TO BID SUBMITTAL
- IO. SUBCONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES WITHIN CONSTRUCTION LIMITS PRIOR TO CONSTRUCTION.
- I I. THE SUBCONTRACTOR IS RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE ON THE SITE AT ALL TIMES. SILT AND EROSION CONTROL SHALL BE MAINTAINED ON THE DOWNSTREAM SIDE OF THE SITE AT ALL TIMES. ANY DAMAGE TO ADJACENT PROPERTIES WILL BE CORRECTED AT THE SUBCONTRACTOR'S EXPENSE.
- I 2. CLEARING OF TREES AND VEGETATION ON THE SITE SHOULD BE HELD TO A MINIMUM. ONLY THE TREES NECESSARY FOR CONSTRUCTION OF THE FACILITIES SHALL BE REMOVED. ANY DAMAGE TO THE PROPERTY OUTSIDE THE LEASED PROPERTY SHALL BE REPAIRED BY THE SUBCONTRACTOR.
- I 3. ALL SUITABLE BORROW MATERIAL FOR BACK FILL OF THE SITE SHALL BE INCLUDED IN THE BID. EXCESS TOPSOIL AND UNSUITABLE MATERIAL SHALL BE DISPOSED OF OFF SITE AT LOCATIONS APPROVED BY GOVERNING AGENCIES PRIOR TO DISPOSAL.
- I 4. SEEDING AND MULCHING OF THE SITE WILL BE ACCOMPLISHED AS SOON AS POSSIBLE AFTER COMPLETION OF THE SITE DEVELOPMENT. THE SUBCONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAIN AN ADEQUATE COVER OF VEGETATION OVER THE SITE FOR A ONE YEAR PERIOD.
- 15. PERMITS: THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND INCURRING THE COST OF ALL REQUIRED PERMITS, INSPECTIONS, CERTIFICATES, ETC.
- I 6. RECORD DRAWINGS: MAINTAIN A RECORD OF ALL CHANGES, SUBSTITUTIONS BETWEEN WORK AS SPECIFIED AND INSTALLED. RECORD CHANGES ON A CLEAN SET OF CONTRACT DRAWINGS WHICH SHALL BE TURNED OVER TO THE CONSTRUCTION MANAGER UPON COMPLETION OF THE PROJECT.
- 17. THE PLANS SHOW SOME KNOWN SUBSURFACE STRUCTURES, ABOVE GROUND STRUCTURES AND/OR EXISTING UTILITIES BELIEVED TO BE IN THE WORKING AREA. IT 19 THE RESPONSIBILITY OF THE SUBCONTRACTOR TO VERIFY ALL UTILITIES, PIPELINES AND OTHER STRUCTURES SHOWN OR NOT SHOWN ON THESE PLANS. THE SUBCONTRACTOR SHALL CONTACT THE LOCAL JURISDICTION'S DIGGER'S HOTLINE BEFORE DIGGING OR DRILLING. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER AND ENGINEER AT THE SUBCONTRACTOR'S EXPENSE.

#### GENERAL NOTES:

- I. THIS PROPOSAL IS FOR THE ADDITION OF A NEW GENERATOR ON A CONCRETE PAD TO AN EXISTING UNMANNED TELECOMMUNICATIONS FACILITY CONSISTING OF AN EQUIPMENT SHELTER AND TOWER
- 2. THE PROPOSED FACILITY WILL BE UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SEWER SERVICE
- 3. THE PROPOSED FACILITY IS UNMANNED AND IS NOT FOR HUMAN HABITAT. (NO HANDICAP

- ACCESS IS REQUIRED)
- 4. OCCUPANCY IS LIMITED TO PERIODIC MAINTENANCE AND INSPECTION, APPROXIMATELY 2 TIMES PER MONTH BY AT&T TECHNICIANS.
- 5. OUTDOOR STORAGE AND SOLID WASTE CONTAINERS ARE NOT PROPOSED.
- 6. ALL MATERIAL SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
- 7. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE CAUSED BY THE CONSTRUCTION OPERATION.
- 8. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTION REQUIRED FOR CONSTRUCTION.
- 9. SUBCONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.

#### ELECTRICAL NOTES A. GENERAL

- I. COORDINATE LOCATION AND POWER REQUIREMENTS OF ALL EQUIPMENT WITH AT&T AND EQUIPMENT SUPPLIER PRIOR TO INSTALLATION.
- COORDINATE LOCATION AND REQUIREMENTS FOR ELECTRICAL AND TELEPHONE SERVICES
  WITH THE PROPERTY REPRESENTATIVE, AT&T AND UTILITY COMPANIES. ROUTING OF
  CONDUITS MAY BE MODIFIED TO MEET SITE REQUIREMENTS. EXACT CONDUIT ROUTING TO
  BE DETERMINED IN THE FIELD.
- 3. ALL WIRING AND EQUIPMENT SHOWN ON ELECTRICAL SHEETS SHALL BE FURNISHED AND INSTALLED UNDER ELECTRICAL PORTION OF CONTRACT UNLESS OTHERWISE NOTED
- 4. UNINTERRUPTED ELECTRICAL SERVICE FOR EXISTING EQUIPMENT SHALL BE MAINTAINED DURING THE INSTALLATION OF THE WORK DESCRIBED UNDER THESE DOCUMENTS. TEMPORARY EQUIPMENT, CABLES AND WHATEVER ELSE IS NECESSARY SHALL BE PROVIDED AS REQUIRED TO MAINTAIN ELECTRICAL SERVICE. TEMPORARY SERVICE FACILITIES, IF REQUIRED AT ANY TIME, SHALL NOT BE DISCONNECTED OR REMOVED UNTIL NEW SERVICE EQUIPMENT IS IN PROPER OPERATION. IF ANY SERVICE OR SYSTEM MUST BE INTERRUPTED, THE CONTRACTOR SHALL REQUEST PERMISSION IN WRITING STATING THE DATE, TIME, ETC. THE SERVICE WILL BE INTERRUPTED AND THE AREAS AFFECTED. THIS REQUEST SHALL BE MADE IN SUPFICIENT TIME FOR PROPER ARRANGEMENTS TO BE MADE. WRITTEN PERMISSION SHALL BE OBTAINED FROM THE OWNER BEFORE INTERRUPTING ELECTRICAL SERVICE.
- 5. COORDINATE NEW WORK WITH OTHER TRADES AND VERIFY EXISTING CONDITIONS TO AVOID INTERFERENCE. IN CASE OF INTERFERENCE, AT&T'S REPRESENTATIVE WILL DECIDE WHICH WORK IS TO BE RELOCATED, REGARDLESS OF WHICH WAS FIRST INSTALLED.
- 6. THE INSTALLATION MUST COMPLY WITH NEC AND ALL FEDERAL, STATE AND LOCAL RULES AND REGULATIONS.
- 7. THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND EQUIPMENT UNLESS OTHERWISE DEFINED BY DIMENSIONS OR DETAILS, EXACT EQUIPMENT LOCATIONS AND RACEWAY ROUTING SHALL BE GOVERNED BY ACTUAL FIELD CONDITIONS AND/OR DIRECTIONS FROM AT\$T'S REPRESENTATIVE.
- 8. CONTRACTOR SHALL PAY ALL PERMITS AND FEES REQUIRED.
- 9. ALL MATERIALS SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE STANDARDS REFERENCED BELOW:
  - ANSI (AMERICAN NATIONAL STANDARDS INSTITUTE)
     ASTIM (AMERICAN SOCIETY FOR TESTING MATERIALS)
  - ETL (ELECTRICAL TESTING LABORATORY)
  - d. ICEA (INSULATED CABLE ENGINEERS ASSOCIATION)
  - E. IEEE (INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS)
  - MBFU (NATIONAL BOARD OF FIRE UNDERWRITERS)
  - a. NESC (NATIONAL ELECTRICAL SAFETY CODE)
  - . NEMA (NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION)
  - NFPA (NATIONAL FIRE PROTECTION ASSOCIATION)
  - J. UL (UNDERWRITER'S LABORATORY)
- IO. CONTRACTOR SHALL REVIEW PLANS, DETAILS AND SPECIFICATIONS IN DETAIL AND ADJUST WORK TO CONFORM WITH ACTUAL SITE CONDITIONS SO THAT ELECTRICAL DEVICES AND EQUIPMENT WILL BE LOCATED AND READILY ACCESSIBLE. QUANTITIES LISTED IN MATERIAL LISTS ON THE DRAWINGS ARE FOR INFORMATION ONLY. THE CONTRACTOR SHALL PROVIDE HIS OWN TAKEOFF FOR MATERIAL QUANTITY AND TYPES BASED ON ACTUAL SITE CONDITIONS, IN ADDITION, CONTRACTOR SHALL PROVIDE ALL NECESSARY MATERIALS TO INSTALL EQUIPMENT FURNISHED BY AT&T OR ITS SUPPLIERS. ALL ITEMS NOT SPECIFICALLY MENTIONED HEREIN OR SHOWN ON THE DRAWINGS, BUT WHICH ARE OBVIOUSLY NECESSARY TO MAKE A COMPLETE WORKING INSTALLATION, SHALL BE INCLUDED.
- II. THE CONTRACTOR OR BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) AT\$T'S REPRESENTATIVE OF ANY CONFLICTS PRIOR TO THE SUBMISSION OF CONTRACTOR'S PROPOSAL OR PERFORMANCE OF WORK, IN THE EVENT OF DISCREPANCIES THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED IN WRITING OTHERWISE.
- I 2. ALL FLOORS WHERE PENETRATIONS ARE REQUIRED IN BUILDING ARE TO BE CORE DRILLED AND THEN FIREPROOFED.

#### B. WIRING/CONDUIT

- PROVIDE PULL BOXES AND JUNCTION BOXES WHERE SHOWN OR AS REQUIRED BY CODE SUCH THAT NO MORE THAN THE EQUIVALENT OF FOUR QUARTER BENDS (380 DEGREES TOTAL) EXIST IN A CONDUIT RUN.
- 2. ALL POWER AND CONTROL/INDICATION WIRING SHALL BE TYPE THHN/THWN 800V RATED 75 DEGREES CELSIUS, UNLESS NOTED OTHERWISE.

- 3. SCHEDULE 80 PVC CONDUIT SHALL BE USED ABOVE GROUND, WHERE ABOVE GRADE IS DEFINED AS THE GROUND OF THE TURN-UP
- 4. BELL END OR TERMINAL ADAPTER MUST BE INSTALLED ON END OF PVC CONDUIT PER NEC 352.46, 300.4 F. (3)
- CONDUIT BENDS SHALL BE MADE IN ACCORDANCE WITH NEC TABLE 346-10. NO RIGHT ANGLE DEVICE OTHER THAN STANDARD CONDUIT ELBOWS WITH 12" MINIMUM INSIDE SWEEPS FOR ALL CONDUITS 2" OR LARGER.
- 6. POWER WIRING SIZE SHALL NOT BE SMALLER THAN #12 AWG.
- ALL WIRING SHALL BE COPPER. ALUMINUM WILL NOT BE ACCEPTABLE ALL POWER CIRCUITS SHALL CONTAIN A GROUND WIRE.
- 8. PHASE MARKINGS TO BE USED AT POWER CONDUCTOR TERMINATIONS.
- CONTRACTOR SHALL ENSURE INTEGRITY IS MAINTAINED WHEN INSTALLING CONDUIT AND WIRING.
- 10. INSTALL PULL STRING IN ALL CONDUIT.
- II. FOR ROOFTOP INSTALLS AND BUILD-OUTS, CONDUITS INSIDE BUILDING AND ON ROOF SHALL BE RGS, UNLESS OTHERWISE NOTED. FOR RAW LAND SITES AND CO-LOCATES, PVC SCHEDULE 80 SHALL BE UTILIZED UNLESS NOTED OTHERWISE.
- MAINTAIN MINIMUM I'-O" VERTICAL AND I'-O" HORIZONTAL SEPARATIONS FROM ANY MECHANICAL GAS PIPING.
- 13. ALL WIRING ROUTED IN PLENUM TO BE RATED OR IN METALLIC FLEX (LIQUIDITE) CONDUIT.

#### C. EQUIPMENT

- I. EQUIPMENT/PARTS CONNECTED TO EXISTING PANELS, DUCTS, ETC. SHALL MATCH THE CHARACTERISTICS (A/C,  $\vee$ , A) OF THAT EQUIPMENT.
- 2. ALL ELECTRICAL EQUIPMENT OUTSIDE SHALL BE NEMA OR 3R RATED.

#### D. GROUNDING

- ALL GROUND CONNECTIONS TO BUILDING SHALL BE MADE USING TWO-HOLE CONNECTORS
  PROVIDE STAINLESS STEEL BOLTS AND LOCK WASHERS ON ALL MECHANICAL GROUND
  CONNECTIONS.
- ALL EQUIPMENT SURFACES TO BE BONDED TO GROUNDING SYSTEM SHALL BE STRIPPED OF ALL PAINT AND DIRT. CONNECTIONS TO VARIOUS METALS SHALL BE OF A TYPE AS TO CAUSE A GALVANIC OR CORROSIVE REACTION. AREA SHALL BE REPAINTED FOLLOWING BONDING.
- 3. ANY METALLIC ITEM WITHIN 6' OF GROUND CONDUCTORS MUST BE CONNECTED TO THE GROUNDING SYSTEM.
- 4. EXTERIOR, ABOVE GRADE GROUND CONNECTIONS SHALL BE FURNISHED WITH A LIBERAL PROTECTIVE COATING OF ANTI-OXIDE COMPOUND.
- 5. ALL MATERIALS AND LABOR REQUIRED FOR THE GROUNDING SYSTEM AS INDICATED ON THE PLANS AND DETAILS, AND AS DESCRIBED HEREIN SHALL BE FURNISHED BY THIS CONTRACTOR LINESS OTHERWISE NOTED.
- EXACT LOCATION OF GROUND CONNECTION POINTS SHALL BE DETERMINED IN FIELD.
   ADJUST LOCATIONS INDICATED ON PLANS ACCORDING TO ACTUAL EQUIPMENT LOCATIONS
   TO KEEP THE GROUND CONNECTION CABLES AS SHORT AS PRACTICAL.
- 7. PROVIDE ALL ELECTRICAL SYSTEM AND EQUIPMENT GROUNDS AS REQUIRED BY THE CURRENT EDITION OF THE NATIONAL ELECTRIC CODE (1999) AND THE CURRENT EDITION OF THE NATIONAL ELECTRICAL SAFETY CODE. BONDING JUMPERS WITH APPROVED GROUND FITTINGS SHALL BE INSTALLED AT ALL RACEWAYS, EQUIPMENT ENCLOSURES, PULL BOXES, ETC. TO MAINTAIN GROUND CONTINUITY WHERE REQUIRED BY CODE.
- 8. ALL EQUIPMENT GROUND CONDUCTORS SHALL BE TIN COATED, #2 AWG COPPER UNLESS NOTED OTHERWISE ON THE DRAWINGS.
- PROVIDE PRE AND POST GROUND TEST RESULTS, USING CLAMP-ON TESTER. TEST RESULTS SHALL BE PHOTOS WITH DIGITAL TIME AND GPS STAMPED/EMBEDDED.

#### E. INSPECTION/DOCUMENTATION

- THE CONTRACTOR, UPON COMPLETION OF HIS WORK, SHALL PROVIDE AS-BUILT DRAWINGS INFORMATION SHOULD BE GIVEN TO THE GENERAL CONTRACTOR FOR INCLUSION IN FINAL AS-BUILT SURVEY DOCUMENTS TO BE GIVEN TO THE OWNER.
- CONTRACTOR SHALL SUPPLY DOCUMENTATION ATTESTING TO THE COMPLETE GROUND SYSTEM'S RECEPTIVITY (MAX. 5 OHMS).
- AN ELECTRICAL INSPECTION SHALL BE MADE BY AND INSPECTING AGENCY APPROVED BY
  AT&T'S REPRESENTATIVE. CONTRACTOR SHALL COORDINATE ALL INSPECTIONS AND OBTAIN
  POWER COMPANY APPROVAL.
- 4. CONTRACTOR SHALL HAVE ATS AND GENERATOR RELAY INSTALLATION AND CONNECTIONS INSPECTED BY OTHERS TO ENSURE THAT UL LISTING FOR THAT EQUIPMENT IS NOT VOIDED



855 Community Dr, Sauk City, WI 53583 608-643-4100 www.Ramaker.com

Sauk City, WI • Willmar, MN Woodcliff Lake, NJ • Bayamon, PR

#### PREPARED FOR:



#### CONSULTANT:

#### GENERAL DYNAMICS

Information Technology, Inc.

GENERAL DYNAMICS 661 MOORE RD STE 110 KING OF PRUSSIA, PA 19406

#### Certification \$ Seal

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Connecticut.



MARK DATE DESCRIPTION

PHASE FINAL

GRISWOLD WEST FA ID # 10071049

DATE 3/18/2020

181 A NORMAN ROAD JEWETT CITY, CT 06351

SHEET TITLE:

GENERAL NOTES

SCALE: NONE

PROJECT 45823

855 Community Dr, Sauk City, WI 53583 608-643-4100 www.Ramaker.com

Sauk City, WI • Willmar, MN Woodcliff Lake, NJ • Bayamon, PR

#### PREPARED FOR:



#### CONSULTANT:

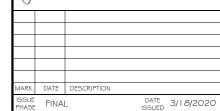
#### GENERAL DYNAMICS

Information Technology, Inc.

GENERAL DYNAMICS 661 MOORE RD STE 110 KING OF PRUSSIA, PA 19406

hereby certify that this plan, specification, or report was prepare by me or under my direct supervision and that I am a duly Licensec Professional Engineer under the laws of the State of <u>Connecticut</u>.





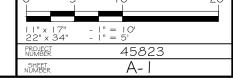
HASE FINAL

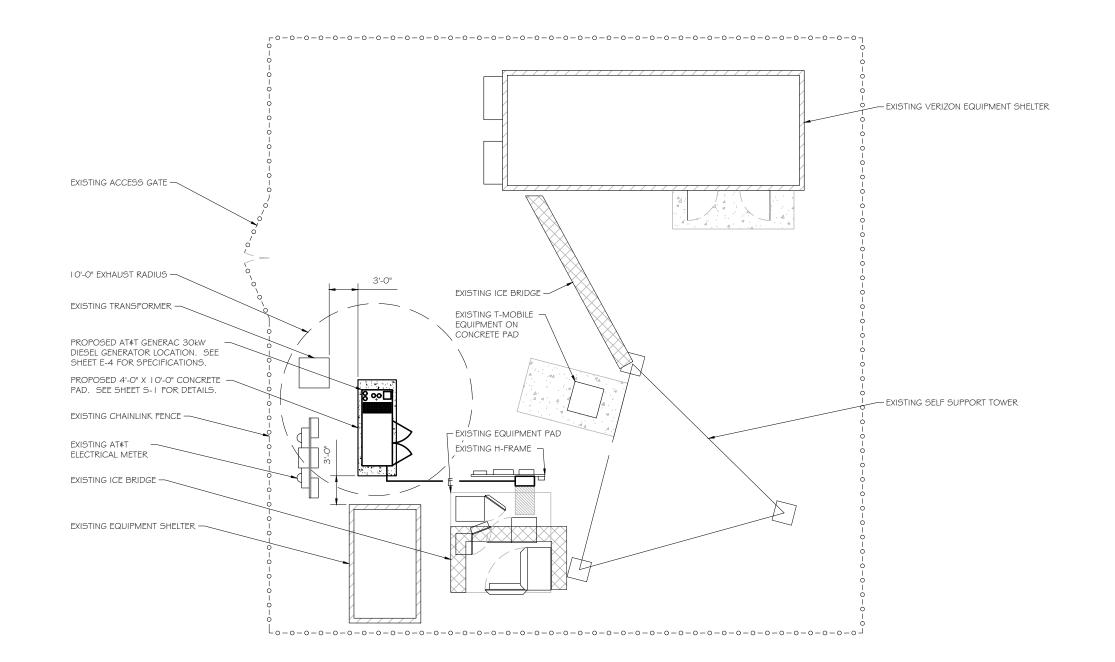
#### GRISWOLD WEST FA ID # 10071049

PROJECT INFORMATION: |8| A NORMAN ROAD JEWETT CITY, CT 06351

SHEET TITLE:

SITE PLAN





SITE PLAN SCALE: | " = | 0'

#### GENERAL:

- NEW GENERAC DIESEL GENERATOR PROVIDED BY GENERAL
- DYNAMICS & INSTALLED BY GENERAL CONTRACTOR, SEE E-4.

  NEW 4'-0" X 10'-0" CONCRETE PAD PROVIDED & INSTALLED BY GENERAL CONTRACTOR (AS REQUIRED) SEE S-1

SCOPE OF WORK DETAILS

- NEW GENERAC AUTOMATIC TRANSFER SWITCH PROVIDED BY GENERAL DYNAMICS & INSTALLED BY CONTRACTOR (AS REQUIRED) SEE E-3 & E-5
- CONTRACTOR TO VERIFY ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION
- CONTRACTOR SHALL RESTORE & REPAIR ANY DAMAGED AREAS
   CAUSED BY CONSTRUCTION TO ORIGINAL OR BETTER CONDITION

#### CONDUITS:

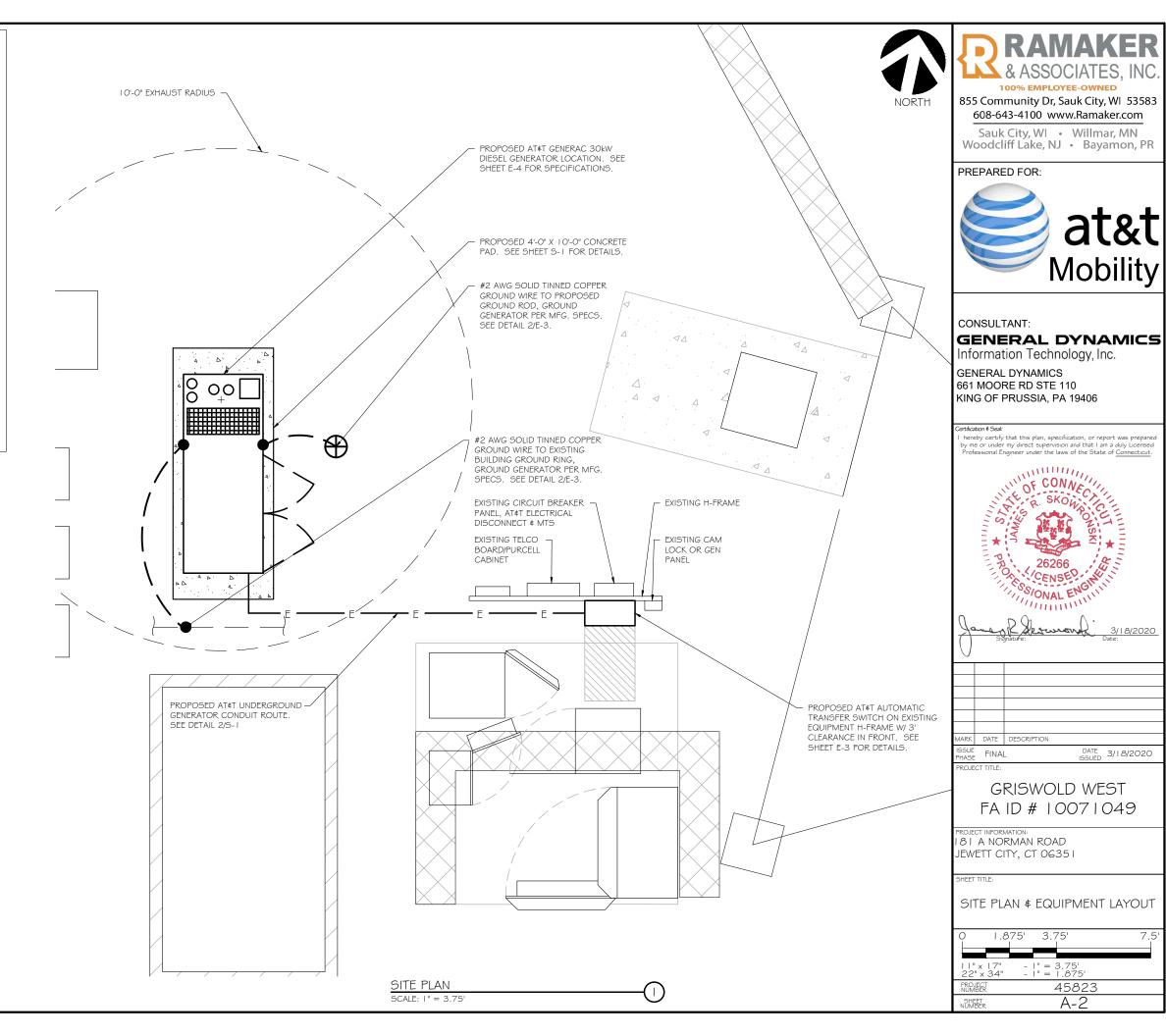
- INSTALL PULL STRING IN EACH CONDUIT
- (I) NEW 2" AND (I) NEW I" ELECTRICAL CONDUITS WITH CONDUCTORS TO RUN FROM NEW GENERATOR TO NEW ATS. CONDUIT PROVIDED AND INSTALLED BY GENERAL CONTRACTOR. SEE E-I, E-2 & E-3.
- (2) NEW | "ELECTRICAL CONDUIT WITH CONDUCTORS TO RUN FROM NEW GENERATOR TO AC PANEL. CONDUIT PROVIDED \$ INSTALLED BY GENERAL CONTRACTOR. SEE E-1, E-2 \$ E-3.
- (1) NEW 1" ALARM CONDUIT & CABLING PROVIDED & INSTALLED BY GENERAL CONTRACTOR. SEE E-1, E-2 & E-3.

#### GROUNDING:

 NEW EXOTHERMIC CONNECTION FROM EXISTING GROUND RING TO NEW MECHANICAL CONNECTION AT GENERATOR CHASSIS. GENERAL CONTRACTOR TO VERIFY LOCATION IN FIELD. LOCATE GROUND RODS NO MORE THAN 8'-0" APART.

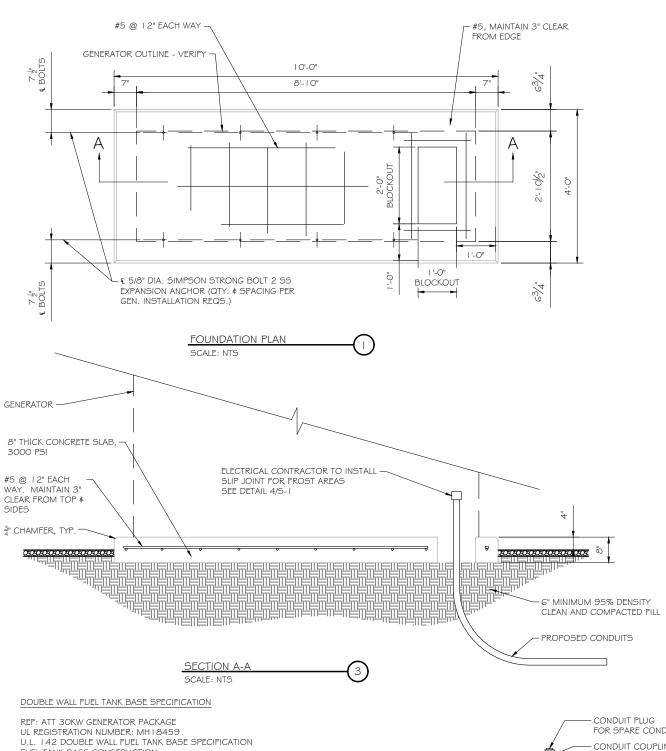
#### H\_FRAME

PROVIDE NEW H-FRAME IF REQUIRED, MATCH EXISTING H-FRAME MATERIAL FOR CONSTRUCTION OF NEW H-FRAME. USE ALL GALVANIZED COMPONENTS, WHITE PLASTIC END CAPS ON UNISTRUTS, WEATHER CAPS ON TOPS OF PIPE AND CONCRETE SUPPORTS BELOW FROST LINE. TOP OF FOOTING SHOULD BE AT LEAST 2" ABOVE EXISTING GROUND LEVEL. SLOPE THE GROUND AWAY FROM THE H-FRAME FOR POSITIVE WATER DRAINAGE OFF





 $\odot$ 



FUEL TANK BASE CONSTRUCTION.

- BE CONSTRUCTED IN ACCORDANCE WITH UNDERWRITERS LABORATORIES STANDARD UL-142. BE CONSTRUCTED IN ACCORDANCE WITH FLAMMABLE & COMBUSTIBLE LIQUIDS CODE, NFPA 30; THE STANDARD FOR INSTALLATION & USE OF STATIONARY COMBUSTIBLE ENGINE & GAS TURBINES, NFPA 37; AND THE STANDARD FOR EMERGENCY & STANDBY POWER SYSTEMS, NFPA 110.
- ANCHORS MINIMUM (4) @ 5/8" FOR GEN-SET MOUNTING
- SUB BASE TANK TESTING: PRIMARY TANK \$ SECONDARY CONTAINMENT BASIN SECTIONS

PRESSURIZED AT 3-5 PSI AND LEAK-CHECKED TO ENSURE INTEGRITY OF SUB BASE WELD

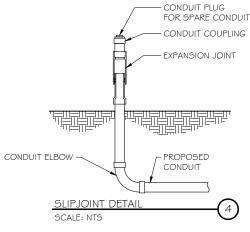
PER UL-142 STANDARDS

FUEL FILL: 5 GALLON SPILL CONTAINMENT WITH ALARM

40% REMAINING FOR ALARM

20% REMAINING FOR SHUT-DOWN FACTORY PRE-SET AT 95% FULL FOR ALARM

FUEL CONTAINMENT BASIN: SUB BASE TANK SHALL INCLUDE A WELDED STEEL CONTAINMENT BASIN, SIZED AT A MINIMUM OF 1 I 0% OF THE TANK CAPACITY TO PREVENT ESCAPE OF FUEL INTO THE ENVIRONMENT IN THE EVENT OF A TANK RUPTURE. A FUEL CONTAINMENT BASIN LEAK DETECTOR SWITCH SHALL BE PROVIDED



NOTE:

VERIFY WIRE AND CONDUIT QUANTITY ≰ SIZES WITH GENERATOR MAKE & MODEL # PRIOR TO INSTALLATION. VERIFY ELECTRICAL REQUIREMENTS WITH LOCAL UTILITY PROVIDER.

RESTORE SURFACE TO MATCH ORIGINAL CONDITION

- UNDISTURBED SOIL COMPACTED BACKFILL (SUITABLE ON SITE MATERIAL) 6" WARNING TAPE ELECTRICAL CONDUIT(S) WHERE APPLICABLE \*

> \* SEPARATION DIMENSION TO BE VERIFIED WITH LOCAL UTILITY COMPANY REQUIREMENTS

I. PROVIDE PVC CONDUIT BELOW GRADE EXCEPT AS NOTED BELOW. 2. PROVIDE RGS CONDUIT AND ELBOWS AT STUB UP LOCATIONS (I.E.

6" TYP

SERVICE POLE, BTS EQUIPMENT, ETC.) 3. INSTALL UTILITY PULLBOXES PER NEC

6"

UTILITY CONDUIT TRENCH SCALE: NTS

#### STRUCTURAL GENERAL NOTES

- LO GENERAL CONDITIONS
- 1.1 DESIGN & CONSTRUCTION OF ALL WORK SHALL CONFORM TO LOCAL BUILDING CODES, ACI 318-11. IN CASE OF CONFLICT BETWEEN THE CODES, STANDARDS, REGULATIONS, SPECIFICATIONS, GENERAL NOTES AND/OR MANUFACTURER'S REQUIREMENTS USE THE MOST STRINGENT PROVISIONS.
- 1.2 IT IS THE EXPRESS INTENT OF PARTIES INVOLVED IN THIS PROJECT THAT THE CONTRACTOR OR SUBCONTRACTOR OR INDEPENDENT CONTRACTOR OR THE RESPECTIVE EMPLOYEES SHALL EXCULPATE THE ARCHITECT, THE ENGINEER, TECH. CONSTRUCTION MANAGER, THE OWNER, & THEIR AGENTS FROM ANY LIABILITY WHATSOEVER & HOLD THEM HARMLESS AGAINST LOSS, DAMAGES, LIABILITY OR ANY EXPENSE ARISING IN ANY MATTER FROM THE WRONGFUL OR NEGLIGENT ACT, OR FAILURE TO CARRY METHODS, TECHNIQUES OR PROCEDURES OR FAILURE TO CONFORM TO THE STATE SCAFFOLDING ACT IN CONNECTIONS WITH THE WORK.
- 1.3 DO NOT SCALE DRAWINGS
- 1.4 VERIFY ALL EQUIPMENT MOUNTING DIMENSIONS PER MANUFACTURER DRAWINGS
- 1.5 DESIGN LOADS ARE (GENERAC):

LIVE LOAD

FOLJIPMENT SIZE : 889.1" H. 106" W. 38" D

WEIGHT WITH WOODEN SHIPPING SKID

ENCLOSED GENERATOR : 3974 LBS

2.0 FOR DESIGN & ANALYSIS OF THE FOUNDATION, THE MINIMUM NET SOIL BEARING CAPACITY SHALL BE ASSUMED TO BE 2000 PSF

3.1 MEET OR EXCEED THE FOLLOWING CODES & STANDARDS:

DESIGN : ACI318-11 CONSTRUCTION : ACI301

: CRSI MANUAL OF STANDARD PRACTICE DETAILING : ASTM A 615 GRADE 60, DEFORMED REINF. STEEL MIXING : ASTM C 94. READY MIX CONCRETE

AIR ENTRAINMENT : ACI 3 | 8 AND ASTM C-260 AGGREGATE ASTM C 33 AND C 330 (FOR LIGHT WEIGHT)

- 3.2 CONCRETE STRENGTH AT 28 DAYS SHALL BE 4000 PSI MINIMUM 3.3 DO NOT FIELD BEND OR WELD TO GRADE 60 REINFORCED STEEL
- 3.4 PROVIDE AIR ENTRAINED CONCRETE WITH AIR CONTENT OF 5 TO 7% FOR ALL CONCRETE EXPOSED TO EARTH OR WEATHER.
- 3.5 MAXIMUM AGGREGATE SIZE: 3/4"
- 3.6 DO NOT USE IN ADMIXTURE, WATER OR OTHER CONSTITUENTS OF CONCRETE WHICH HAS CALCIUM CHLORIDE. 3.7 MINIMUM COVER FOR REINFORCING STEEL SHALL BE AS SHOWN ON PLAN.
- 4.0 FOUNDATION \$ EXCAVATION NOTES
- 4.1 SLAB SHALL BE CONSTRUCTED UPON UNDISTURBED, NATURAL SUBGRADE OR COMPACTED GRANULAR FILL WITH AN ASSUMED MINIMUM NET ALLOWABLE BEARING CAPACITY OF 1800 PSF.

  4.2 ALL ORGANIC AND/OR OTHER UNSUITABLE MATERIAL SHALL BE REMOVED FRO FOUNDATION \$ SLAB SUBGRADE \$ BACKFILL AREAS
- \$ THEN BACKFILLED WITH ACCEPTABLE GRANULAR FILL COMPACTED TO 95% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT (ASTM D1557)
- 4.3 THE CONTRACTOR SHALL PROVIDE ALL NECESSARY MEASURES TO PREVENT ANY WATER, FROST, OR ICE FROM PENETRATING ANY FOOTING OR STRUCTURAL SUBGRADE BEFORE & AFTER PLACING OF CONCRETE, AND UNTIL SUCH CONCRETE HAS FULLY CURED.



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#### PREPARED FOR:



#### CONSULTANT:

#### **GENERAL DYNAMICS**

Information Technology, Inc.

GENERAL DYNAMICS 661 MOORE RD STE 110 KING OF PRUSSIA, PA 19406

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FINAL DATE 3/18/2020

GRISWOLD WEST FA ID # 10071049

81 A NORMAN ROAD JEWETT CITY, CT 0635 I

FOUNDATION DETAILS

SCALE: NONE

45823

S-SHEET

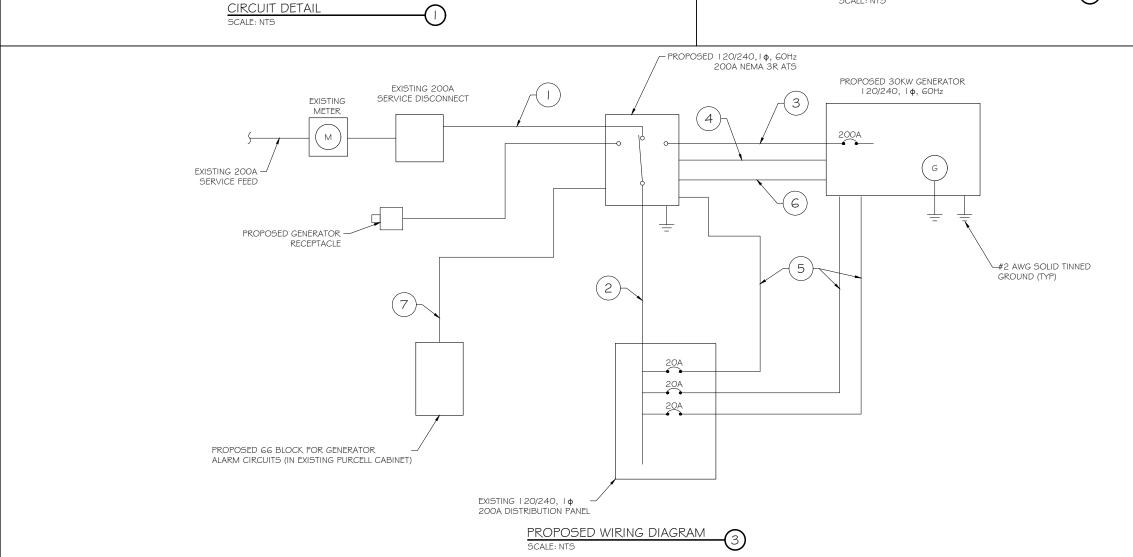
DIAGRAM CIRCUIT SCHEDULE

NO.	FROM	ТО	WIRES	GROUND	CONDUIT SIZE	FUNCTION
	NORMAL POWER SOURCE	AUTOMATIC TRANSFER SWITCH	(3) 3/0	(1) #4	2"	NORMAL POWER FEEDER TO ATS (CUT BACK EXISTING)
2	AUTOMATIC TRANSFER SWITCH	LOAD CENTER	(3) 3/0	(1) #4	2"	POWER FEEDER FROM ATS TO PANEL
3	GENERATOR	AUTOMATIC TRANSFER SWITCH	(3) 3/0	(1) #4	2"	EMERGENCY POWER FEEDER TO ATS
4	AUTOMATIC TRANSFER SWITCH	GENERATOR	(2) #10	(1) #10	1 "	START CIRCUIT
5	LOAD CENTER (DISTRIBUTION CENTER)	GENERATOR, ATS	(2) #12 (2) #12 (2) #12	(1) #12 (1) #12 (1) #12	"   "   "	CIRCUIT FOR GENERATOR BLOCK HEATER \$ BATTERY HEATER CIRCUIT FOR BATTERY CHARGER CIRCUIT FOR ATS
6	GENERATOR	AUTOMATIC TRANSFER SWITCH	I 2-PAIR 24 AWG OR 2EA G-PAIR CAT5	N/A	1"	ALARM CABLES (I) 12 PAIR 24 AWG. PROVIDE 24" OF SLACK CABLE. FINAL PUNCH DOWN IS BY AT&T TECH. LABEL ALL WIRES
7	AUTOMATIC TRANSFER SWITCH	ALARM BLOCK	I 2-PAIR 24 AWG OR 2EA G-PAIR CAT5	N/A	1"	ALARM CABLES (1) 12 PAIR 24 AWG (RUN TO PURCELL CABINET & INTO ALARM BOX). PROVIDE 24" OF SLACK CABLE. FINAL PUNCH DOWN IS BY AT&T TECH. LABEL ALL WIRES

#### ALARM WIRE IDENTIFICATION CHART

WIRE	ALARM	
BROWN BROWN / WHITE	GENERATOR RUNNING	
GREEN GREEN / WHITE	CRITICAL FAULT	
BLUE BLUE / WHITE	MINOR FAULT	
ORANGE ORANGE / WHITE	LOW FUEL	
BROWN * BROWN / WHITE *	FUEL LEAK	
*CAT5 CABLE ONLY, FROM 2ND CAT5 CABLE		

ALARM WIRING IDENTIFICATION CHART (2)





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BSUE FINAL

#### GRISWOLD WEST FA ID # 10071049

DATE 3/18/2020

PROJECT INFORMATION: |8| A NORMAN ROAD JEWETT CITY, CT 06351

SHEET TITLE:

WIRING DETAILS

SCALE: NONE

45823 SHEET E- 1

Breaker

Position

Breaker

Type

1P

1P

2P

2P

2P

2P

2P

2P

2P

2P

2P

11

13

15 2P

17

19

21

23

On/Off

OFF

OFF

ON

Size

15

30

50

50

50

50

50

50

50

50

50

50

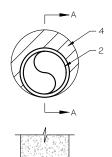
PANEL SCHEDULE

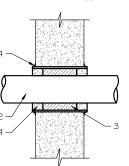
PROPOSED 20A BREAKERS FOR ATS, BLOCK HEATER AND BATTERY CHARGER ON NEW AT&T GENERATOR

SCALE: NTS

CONTRACTOR TO LABEL WIRES WITH P-TOUCH OR SIMILAR LABELS ONLY. ABSOLUTELY NO HANDWRITTEN LABELS.

SEQUENCE SINGLE BREAKER POSITION FOR GENERATOR BATTERY CHARGER BATTERY HEATER AND BLOCK HEATER





- IF EXISTING CONSTRUCTION VARIES FROM THIS DETAIL, AN EQUAL 3-HR U.L. PENETRATION APPROPRIATE FOR THE EXISTING WALL TYPE SHALL BE CONSTRUCTED
- GC SHALL USE NON-SHRINKING CAULK TO WEATHERSEAL ALL PENETRATIONS INTO OR THRU SHELTER WALL.

U.L. SYSTEM NO. C-AJ- I 150 CONDUIT THROUGH BEARING WALL SIMILAR TO U.L. DESIGN NO. U902 F RATING = 3 HRT RATING = O HR

- FLOOR OR WALL ASSEMBLY: MINIMUM 4-1/2" THICK REINFORCED LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF) CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS\*. MAX DIAMETER OF OPENING IS 4". SEE CONCRETE BLOCKS 9CATZ) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.
- THROUGH PENETRATIONS: ONE METALLIC PIPE OR CONDUIT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. THE ANNULAR SPACE SHALL BE MINIMUM O". (POINT CONTACT) TO MAXIMUM 1-3/8". THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES OR CONDUITS MAY BE USED:
  - A. STEEL PIPE-NOMINAL 6" DIAMETER (OR SMALLER) SCHEDULE 40 (OR HEAVIER) STEEL PIPE.
  - B. IRON PIPE-NOMINAL 6" DIAMETER (OR SMALLER) CAST OR DUCTILE IRON PIPE. C. CONDUIT - NOMINAL 4" DIAMETER (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING OR NOMINAL 3-1/2" DIAMETER (OR SMALLER) STEEL CONDUIT
- PACKING MATERIAL: MINIMUM 6" THICKNESS OF MIN 4.0 PCF MINERAL WOOL BATTING INSULATION FIRMLY PACKED INTO OPENING AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM TOP SURFACE OF FLOOR OR FROM BOTH SURFACES OF WALL AS REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL MATERIAL.
- FILL, VOID, OR CAVITY MATERIAL\*: SEALANT: MINIMUM 1/4" THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH TOP SURFACE OF FLOOR AND WITH BOTH SURFACES OF WALL. AT THE POINT CONTACT LOCATION BETWEEN PIPE AND CONCRETE, A MINIMUM 1/2" DIAMETER BEAD OF FILL MATERIAL SHALL BE APPLIED AT THE CONCRETE/PIPE INTERFACE ON THE TOP SURFACE OF FLOOR AND ON BOTH SURFACES OF WALL. W RATING APPLIES ONLY WHEN CPGO IS OR CPGO4 SEALANT IS

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC. : CP6015, CP604, CP606, OR FS-ONE

\* BEARING THE UL CLASSIFICATION MARK

OUTER WALL PENETRATION DETAIL (IF APPLICABLE)





**EO** 





CABLE TAP DOWN AT 45°TO VERTICAL HORIZONTAL CABLE TAP TO VERTICAL STEEL STEEL SURFACE OR SIDE OF SURFACE OR HORIZONTAL OR THE SIDE OF HORIZONTAL PIPE VERTICAL PIPE.







Type VV THROUGH VERTICAL CABLE TO VERTICAL STEEL SURFACE OR TO THE SIDE OF EITHER HORIZONTAL OR



HORIZONTAL CABLE HORIZONTAL STEEL CABLE OFF SURFACE



GROUND ROD



Type TA TFF OF ORIZONTAL RUN AND TAP CABLES

> GRISWOLD WEST FA ID # 10071049

DATE 3/18/2020

100% EMPLOYEE-OWNED

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OF CONNEC

MALTIN

Information Technology, Inc.

PREPARED FOR:

CONSULTANT:

GENERAL DYNAMICS

661 MOORE RD STE 110

KING OF PRUSSIA, PA 19406

181 A NORMAN ROAD JEWETT CITY, CT 0635 I

FINAL

SHEET TITLE:

PANEL AND PENETRATION DETAILS

SCALE: NONE

45823 SHEET E-2

AC Distribution Panel - Layout Diagram

Circuit Label

SPARE

SPARE

UMTS

GE POWER PLANT

GE POWER PLANT

GE POWER PLANT

GE POWER PLANT

Breaker

Position

Breaker

Type

2P

2P

1P

1P

1P 10

1P

2P

1P

1P//

24 //1P

12

14

16 2P

22 /10/ On/Off

ON

ON

ON

ON

OFF/

ØFF/

OFF.

ON\_

ON

ON

ON

ON / 20

Size

30

30

20

*2*0

40

40

40

20

20

20

20

Circuit Label

SURGE

ATS

**BLOCK HEATER** 

BATTERY CHARGER

SPARE

SPARE

EXT GFI LIGHT

MCU IN GE PP

TELCO GFI

PANEL GFI

\*CONTRACTOR TO UTILIZE NEXT AVAILABLE IN



(2)

BUTTERFLY CLAMP AS REQUIRED

(3)

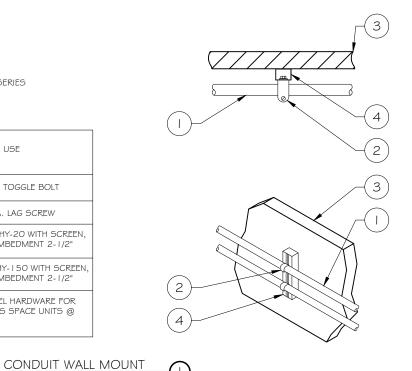
EXISTING WALL/CEILING

CONDUIT (TYP)

VERTICAL "UNISTRUT" PI 000 'T' SERIES LENGTH BASED ON NUMBER OF CONDUIT TO BE MOUNTED

WALL CONSTRUCTION TYPE	USE
HOLLOW	3/8" DIA. TOGGLE BOLT
HOLLOW, AT STUD	3/8" DIA. LAG SCREW
CONCRETE BLOCK (HOLLOW)	3/8" DIA. HILTI HY-20 WITH SCREEN, MINIMUM EMBEDMENT 2-1/2"
CONCRETE (SOLID)	3/8" DIA. HILTI HY-150 WITH SCREEN MINIMUM EMBEDMENT 2-1/2"

NOTE: USE GALVANIZED OR STAINLESS STEEL HARDWARE FOR WALL MOUNT & CONNECTIONS OF CHANNELS SPACE UNITS @ 5'-0" O.C. LENGTH OF RUN



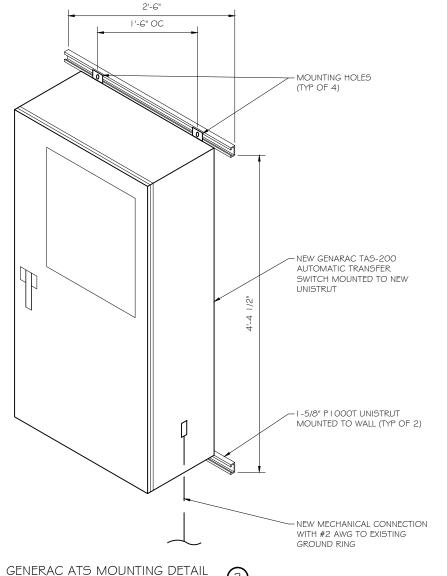
- CADWELD – GRADE #2 AWG BCW GROUND RING GROUND ROD COPPERWELD 5/8"Ø x 8'-0" LONG (MAX)

- GROUND RODS MAY BE: - COPPER CLAD STEEL SOLID COPPER
- GROUND RODS SHALL HAVE A MAXIMUM SPACING TWICE THE LENGTH OF ROD
- SEE RESISTIVITY REPORT FOR VERIFICATION AS AVAILABLE
- A LARGER CONDUCTOR SHALL BE REQUIRED IN AREAS HIGHLY PRONE TO LIGHTNING AND/OR AREAS WITH HIGHLY ACIDIC SOIL
- GROUND RODS INSTALLED WITHIN CLOSE PROXIMITY TO TOWER OR WHEN SOIL IS AT OR BELOW 2,000 OHM-CM, SHALL BE GALVANIZED TO PREVENT GALVANIC CORROSION OF TOWER, (SEE ANSI/TIA-EIA-222-G)
- PROVIDE (I) GROUND LEAD TO EACH SIDE OF THE GENERATOR

### GROUND ROD DETAIL

WALL CONSTRUCTION TYPE	USE
HOLLOW	3/8" DIA. TOGGLE BOLT
HOLLOW, AT STUD	3/8" DIA. LAG SCREW
CONCRETE BLOCK (HOLLOW)	7/16" DIA. HILTI HY-20 WITH SCREEN MINIMUM EMBEDMENT 2-1/2"
CONCRETE (SOLID)	7/16" DIA, HILTI HY-150 WITH SCREEN MINIMUM EMBEDMENT 2-1/2"

- USE GALVANIZED OR STAINLESS STEEL HARDWARE FOR WALL MOUNT AND CONNECTION OF CHANNELS
- 2. GC SHALL USE NON-SHRINKING CAULK TO WEATHER SEAL ALL PENETRATIONS INTO OR THROUGH SHELTER WALL



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FINAL DATE 3/18/2020

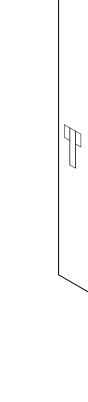
GRISWOLD WEST FA ID # 10071049

PROJECT INFORMATION:
181 A NORMAN ROAD JEWETT CITY, CT 06351

ATS, CONDUIT & GROUND ROD DETAILS

SCALE: NONE

45823 SHEET E-3



SD030 | 2.2L | 30 kW INDUSTRIAL DIESEL GENERATOR SET GENERAC\* | INDUSTRIAL

**EPA Certified Stationary Emergency** 

**Standby Power Rating** 30 kW, 38 kVA, 60 Hz

Prime Power Rating\* 27 kW, 34 kVA, 60 Hz



Image used for illustration purposes only

#### **Codes and Standards**

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



UL2200, UL508, UL489, UL142



CSA C22.2



BS5514 and DIN 6271



**SAE J1349** 



NFPA 37, 70, 99, 110



NEC700, 701, 702, 708



ISO 3046, 7637, 8528, 9001



NEMA ICS10, MG1, 250, ICS6, AB1

ANSI ANSI C62.41

#### **Powering Ahead**

For over 50 years, Generac has provided 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 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 applications under adverse conditions.

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

#### SD030 | 2.2L | 30 kW INDUSTRIAL DIESEL GENERATOR SET

**EPA Certified Stationary Emergency** 

#### STANDARD FEATURES

#### **ENGINE SYSTEM**

- Oil Drain Extension Air Cleaner
- Fan Guard
- · Stainless Steel Flexible Exhaust Connection
- · Factory Filled Oil and Coolant
- · Radiator Duct Adapter (Open Set Only)
- Critical Silencer (Enclosed Unit Only)
- · Engine Coolant Heater

#### **Fuel System**

- Fuel Lockoff Solenoid
- · Primary Fuel Filter

#### **Cooling System**

- Closed Coolant Recovery System
- UV/Ozone Resistant Hoses · Factory-Installed Radiator
- Radiator Drain Extension
- 50/50 Ethylene Glycol Antifreeze

#### **Electrical System**

· Battery Charging Alternator Battery Cables

CONTROL SYSTEM

**Program Functions** 

· Programmable Crank Limiter

• 7-Day Programmable Exerciser

RS-232/485 Communications

Isochronous Governor Control

Waterproof/Sealed Connectors

· 2-Wire Start Capability

- Battery Tray
- Rubber-Booted Engine Electrical Connections

Digital H Control Panel- Dual 4x20 Display

Special Applications Programmable Logic Controller

· All Phase Sensing Digital Voltage Regulator

Date/Time Fault History (Event Log)

· Solenoid Activated Starter Motor

#### **ALTERNATOR SYSTEM**

- UL2200 GENprotect<sup>™</sup>
- · Class H Insulation Materia
- 2/3 Pitch
- · Skewed Stator Sealed Bearing
- Brushless Excitation
- · Rotor Dynamically Spin Balanced
- · Amortisseur Winding (3-Phase Only)
- Full Load Capacity Alternator Protective Thermal Switch

#### **GENERATOR SET**

- Internal Genset Vibration Isolation
- Separation of Circuits High/Low Voltage
- · Separation of Circuits Multiple Breakers
- Wrapped Exhaust Piping
- · Standard Factory Testing
- 2 Year Limited Warranty (Standby Rated Units)
- 1 Year Limited Warranty (Prime Rated Units)
- Silencer Mounted in the Discharge Hood (Enclosed Unit Only)

#### **ENCLOSURE (If Selected)**

Rust-Proof Fasteners with Nylon Washers to

GENERAC | INDUSTRIAL

- High Performance Sound-Absorbing Material (Sound Attenuation Enclosures)
- Gasketed Doors
- · Stamped Air-Intake Louvers
- Upward Facing Discharge Hoods (Radiator and Exhaust)
- Stainless Steel Lift Off Door Hinges
- Stainless Steel Lockable Handles
- RhinoCoat™ Textured Polyester Powder Coat Paint

#### **FUEL TANKS (If Selected)**

- UL 142/ULC S601
- Double Wall
- · Normal and Emergency Vents
- Sloped Top
- Sloped Bottom
- Factory Pressure Tested Rupture Basin Alarm
- Fuel Level
- Check Valve In Supply and Return Lines
- RhinoCoat<sup>™</sup> Textured Polyester Powder Coat Paint
- Stainless Steel Hardware

- Not in Auto (Flashing Light)
- Auto/Off/Manual Switch

· Audible Alarms and Shutdowns

- . E-Stop (Red Mushroom-Type)
- NFPA110 Level I and II (Programmable)
- Customizable Alarms, Warnings, and Events Modbus<sup>®</sup> Protocol
- · Predictive Maintenance Algorithm
- Sealed Boards
- Password Parameter Adjustment Protection
- · Single Point Ground
- 16 Channel Remote Trending
- 0.2 msec High Speed Remote Trending
- · Alarm Information Automatically Annunciated on the Display

#### **Full System Status Display**

- Power Output (kW)
- Power Factor
- · kW Hours, Total, and Last Run
- · Real/Reactive/Apparent Power
- All Phase AC Voltage All Phase Currents

- Oil Pressure
- Coolant Temperature
- Coolant Level Engine Speed
- Battery Voltage
- Frequency

#### **Alarms and Warnings**

- Oil Pressure
- Coolant Temperature Coolant Level
- Engine Overspeed Battery Voltage
- Alarms and Warnings Time and Date Stamped
- Snap Shots of Key Operation Parameters During Alarms and Warnings
- Alarms and Warnings Spelled Out (No Alarm Codes)



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CONSULTANT:

PREPARED FOR:

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Information Technology, Inc. **GENERAL DYNAMICS** 

661 MOORE RD STE 110

KING OF PRUSSIA, PA 19406

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FINAL

GRISWOLD WEST FA ID # 10071049

DATE 3/18/2020

8 I A NORMAN ROAD JEWETT CITY, CT 0635 I

GENERAC 30KW GENERATOR **SPECIFICATIONS** 

SCALE: NONE

45823 SHEET E-4

GENERAC 30KW GENERATOR SPECIFICATIONS SCALE: NTS

SD030 | 2.2L | 30 kW INDUSTRIAL DIESEL GENERATOR SET GENERAC | INDUSTRIAL

**EPA Certified Stationary Emergency** 

#### **CONFIGURABLE OPTIONS**

#### **ENGINE SYSTEM**

- Oil Heater
- O Critical Silencer (Open Set Only)
- O Radiator Stone Guard
- O Level 1 Fan and Belt Guards (Open Set Only)

#### **FUEL SYSTEM**

O NPT Flexible Fuel Line

#### **ELECTRICAL SYSTEM**

- O 10A UL Listed Battery Charger
- Battery Warmer

#### **ALTERNATOR SYSTEM**

- Alternator Upsizing
- O Anti-Condensation Heater
- Tropical Coating
- O Permanent Magnet Excitation

#### **GENERATOR SET**

- O Extended Factory Testing
- O 8 Position Load Center Pad Vibration Isolation

#### **ENGINEERED OPTIONS**

#### **ENGINE SYSTEM**

- Coolant Heater Isolation Ball Valves
- O Fluid Containment Pan

#### CONTROL SYSTEM

- O Spare Inputs (x4) / Outputs (x4)
- O Battery Disconnect Switch

#### **CIRCUIT BREAKER OPTIONS**

- Main Line Circuit Breaker
- O 2nd Main Line Circuit Breaker
- O Shunt Trip and Auxiliary Contact Electronic Trip Breakers

#### **ENCLOSURE**

- Weather Protected Enclosure
- Level 1 Sound Attenuation
- Level 2 Sound Attenuation
- Level 2 Sound Attenuation with Motorized Dampers
- Steel Enclosure
- Aluminum Enclosure
- O Up to 200 MPH Wind Load Rating (Contact Factory for Availability)
- AC/DC Enclosure Lighting Kit
- O Door Alarm Switch
- Enclosure Heater O Damper Alarm Contacts

#### WARRANTY (Standby Gensets Only)

- O 2 Year Extended Limited Warranty
- O 5 Year Limited Warranty
- 5 Year Extended Limited Warranty 7 Year Extended Limited Warranty
- 10 Year Extended Limited Warranty

#### CONTROL SYSTEM

- O NFPA 110 Compliant 21-Light Remote Annunciator
- O Remote Relay Assembly (8 or 16)
- Oil Temperature Indication and Alarm
- O Remote E-Stop (Break Glass-Type, Surface Mount)
- O Remote E-Stop (Red Mushroom-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Flush Mount)
- O 100 dB Alarm Horn
- Ground Fault Annunciation
- O 120V GFCI and 240V Outlets
- O Remote Communication Modem
- O 10A Engine Run Relay

#### **FUEL TANKS (Size On Last Page)**

- O 8 in (203.2 mm) Fill Extension
- O 13 in (330.2 mm) Fill Extension
- O 19 in (482.6 mm) Fill Extension
- Overfill Protection Valve
- O 5 Gallon Spill Box Return Hose
- O 5 Gallon Spill Box
- Tank Risers
- O Fuel Level Switch and Alarm
- 12' Vent System

#### O Fire Rated Stainless Steel Fuel Hose

#### **ALTERNATOR SYSTEM**

- O 3rd Breaker System
- **GENERATOR SET**
- Special Testing

#### **FUEL TANKS**

- O UL2085 Tank
- Stainless Steel Tanks
- O Special Fuel Tanks Vent Extensions

#### SD030 | 2.2L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

**EPA Certified Stationary Emergency** 

#### **APPLICATION AND ENGINEERING DATA**

#### **ENGINE SPECIFICATIONS**

$^{\circ}$	n	n	n	90	n	ı

Make	Perkins
EPA Emissions Compliance	Stationary Emergency
EPA Emissions Reference	See Emission Data Sheet
Cylinder #	4
Туре	In-Line
Displacement - in3 (L)	135 (2.22)
Bore - in (mm)	3.3 (84)
Stroke - in (mm)	3.9 (100)
Compression Ratio	23.3:1
Intake Air Method	Turbocharged
Cylinder Head	Cast Iron
Piston Type	Aluminum
Crankshaft Type	Forged Steel

#### **Engine Governing**

Governor	Electronic Isochrono
Frequency Regulation (Steady State)	±0.5%

ubrication	System

Labiloadon Oyotom			
Oil Pump Type	Gear		
Oil Filter Type	Full-Flow		
Crankcase Capacity - qt (L)	11.2 (10.6)		

#### Cooling System

Cooling System Type	Closed Recovery
Water Pump Type	Pre-Lubed, Self Sealing
Fan Type	Pusher
Fan Speed - RPM	1,980
Fan Diameter - in (mm)	18 (457)

Fuel Type	Ultra Low Sulfur Diesel Fuel #2	
Fuel Specifications	ASTM	
Fuel Filtering (Microns)	5	
Fuel Inject Pump	Distribution Injection Pump	
Fuel Pump Type	Engine Driven Gear	
Injector Type	Mechanical	
Fuel Supply Line - in (mm)	0.31 (7.9) ID	_
Fuel Return Line - in (mm)	0.2 (4.8) ID	

#### **Engine Electrical System**

System Voltage	12 VDC
Battery Charger Alternator	Standard
Battery Size	See Battery Index 0161970SBY
Battery Voltage	12 VDC
Ground Polarity	Negative

#### **ALTERNATOR SPECIFICATIONS**

Standard Model	K0035124Y21	
Poles	4	
Field Type	Revolving	
Insulation Class - Rotor	Н	
Insulation Class - Stator	Н	
Total Harmonic Distortion	<5% (3-Phase)	
Telephone Interference Factor (TIF)	< 50	

Standard Excitation	Brushless		
Bearings	Single Sealed		
Coupling	Direct via Flexible Disc		
Load Capacity - Standby	100%		
Prototype Short Circuit Test	Yes		
Voltage Regulator Type	Digital		
Number of Sensed Phases	All		
Regulation Accuracy (Steady State)	±0.25%		

Cooling System Type	Closed Recovery
Water Pump Type	Pre-Lubed, Self Sealing
an Type	Pusher
an Speed - RPM	1,980
Fan Diameter - in (mm)	18 (457)

GENERAC INDUSTRIAL

#### Fuel System

uel Type	Ultra Low Sulfur Diesel Fuel #2
uel Specifications	ASTM
uel Filtering (Microns)	5
uel Inject Pump	Distribution Injection Pump
uel Pump Type	Engine Driven Gear
njector Type	Mechanical
uel Supply Line - in (mm)	0.31 (7.9) ID
uel Return Line - in (mm)	0.2 (4.8) ID

System Voltage	12 VDC
Battery Charger Alternator	Standard
Battery Size	See Battery Index 0161970SBY
Battery Voltage	12 VDC
Ground Polarity	Negative

#### GRISWOLD WEST FA ID # 10071049

DATE 3/18/2020

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Information Technology, Inc.

PREPARED FOR:

CONSULTANT:

**GENERAL DYNAMICS** 

661 MOORE RD STE 110

KING OF PRUSSIA, PA 19406

181 A NORMAN ROAD JEWETT CITY, CT 0635 I

FINAL

GENERAC 30KW GENERATOR **SPECIFICATIONS** 

SCALE: NONE

45823 E-4. SHEET

GENERAC 30KW GENERATOR SPECIFICATIONS SCALE: NTS

SD030 | 2.2L | 30 kW

GENERAC\* | INDUSTRIAL

INDUSTRIAL DIESEL GENERATOR SET **EPA Certified Stationary Emergency** 

#### **OPERATING DATA**

#### POWER RATINGS

		Standby	
Single-Phase 120/240 VAC @1.0pf	30 kW	Amps: 125	
Three-Phase 120/208 VAC @0.8pf	30 kW	Amps: 104	
Three-Phase 120/240 VAC @0.8pf	30 kW	Amps: 90	
Three-Phase 277/480 VAC @0.8pf	30 kW	Amps: 45	
Three-Phase 346/600 VAC @0.8pf	30 kW	Amps: 36	

#### MOTOR STARTING CAPABILITIES (skVA)

#### skVA vs. Voltage Dip

277/480 VAC	30%	208/240 VAC	30%
K0035124Y21	61	K0035124Y21	46
K0040124Y21	76	K0040124Y21	58
K0050124V21	98	K0050124V21	75

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

	Diesel - gph (Lph)		
Fuel Pump Lift- ft (m)	Percent Load	Standby	
3 (1)	25%	1.0 (3.7)	
	50%	1.4 (5.2)	
Total Fuel Pump Flow (Combustion + Return) - gph (Lph)	75%	2.0 (7.5)	
16.6 (63)	100%	2.8 (10.5)	
	* Fuel supply installation m consumption rates at 100		

#### COOLING

		Standby
Coolant Flow	gpm (Lpm)	14.9 (56.2)
Coolant System Capacity	gal (L)	2.5 (9.5)
Heat Rejection to Coolant	BTU/hr (kW)	128,638 (136)
Inlet Air	scfm (m³/hr)	2,800 (4,757)
Maximum Operating Ambient Temperature	°F (°C)	122 (50)
Maximum Operating Ambient Temperature (Before Derate)	See Bulletin No. 0199280SSD	
Maximum Radiator Backpressure	in H <sub>2</sub> O (kPa)	0.5 (0.12)

#### **COMBUSTION AIR REQUIREMENTS**

	Standby
Flow at Rated Power scfm (m3/min)	88 (2.5)

ENGINE	EXHAUST

		Standby			Standby
Rated Engine Speed	RPM	1,800	Exhaust Flow (Rated Output)	scfm (m³/min)	296.6 (8.4)
Horsepower at Rated kW**	hp	49	Max. Allowable Backpressure (Post Turbocharger)	inHg (kPa)	1.5 (5.1)
Piston Speed	ft/min (m/min)	1,181 (360)	Exhaust Temp (Rated Output)	°F (°C)	892 (478)
BMEP	psi (kPa)	159 (1,096)			

<sup>\*\*</sup> Refer to "Emissions Data Sheet" for maximum bHP for EPA and SCAQMD permitting purposes.

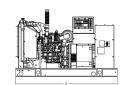
Deration – Operational characteristics consider maximum ambient conditions. Derate factors may apply under atypical site conditions. Please contact a Generac Power Systems Industrial Dealer for additional details. All performance ratings in accordance with ISO3046, BS5514, ISO8528, and DIN6271 standards. Prime - See Bulletin 0187510SSB

#### SD030 | 2.2L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

#### **EPA Certified Stationary Emergency**

**DIMENSIONS AND WEIGHTS\*** 

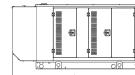




## **OPEN SET (Includes Exhaust Flex)**

GENERAC | INDUSTRIAL

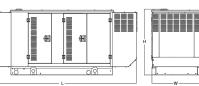
Time - Hours	Capacity - Gal (L)	L x W x H - in (mm)	- lbs (kg)
No Tank	-	76.0 (1,930) x 37.4 (950) x 44.8 (1,138)	1,641 (745)
19	54 (204)	76.0 (1,930) x 37.4 (950) x 57.8 (1,468)	2,121 (963)
47	132 (501)	76.0 (1,930) x 37.4 (950) x 69.8 (1,773)	2,351 (1,067
75	211 (799)	76.0 (1,930) x 37.4 (950) x 81.8 (2,078)	2,560 (1,162
107	300 (1,136)	92.9 (2,360) x 37.4 (950) x 81.8 (2,078)	2,623 (1,190





#### **WEATHER PROTECTED ENCLOSURE**

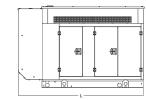
Run Time	Usable Capacity	L x W x H - in (mm)		: - Ibs (kg) sure Only
- Hours	- Gal (L)		Steel	Aluminum
No Tank	-	94.8 (2,409) x 38.0 (965) x 49.5 (1,258)		
19	54 (204)	94.8 (2,409) x 38.0 (965) x 62.5 (1,588)	070	0.44
47	132 (501)	94.8 (2,409) x 38.0 (965) x 74.5 (1,893)	- 372 - (170)	241 (110)
75	211 (799)	94.8 (2,409) x 38.0 (965) x 86.5 (2,198)	- (170)	(110)
107	300 (1,136)	94.8 (2,409) x 38.0 (965) x 86.5 (2,198)		

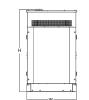


LEV
Run - H
No

LEVEL 1 ACOUSTIC ENCLOSURE		
Run Time	Usable Capacity	L x W x H - in (mm)

- Hours	Capacity	L x W x H - In (mm)	EUCIO	sure Only
- Hours	- Gal (L)		Steel	Aluminum
No Tank	-	112.5 (2,857) x 38.0 (965) x 49.5 (1,258)		
19	54 (204)	112.5 (2,857) x 38.0 (965) x 62.5 (1,582)		000
47	132 (501)	112.5 (2,857) x 38.0 (965) x 74.5 (1,893)	505 (230)	338 (154)
75	211 (799)	112.5 (2,857) x 38.0 (965) x 86.5 (2,198)	(200)	(104)
107	300 (1,136)	112.5 (2,857) x 38.0 (965) x 86.5 (2,198)		





#### **LEVEL 2 ACOUSTIC ENCLOSURE**

Run Time	Usable Capacity	L x W x H - in (mm)	Weight - Ibs (kg) Enclosure Only	
- 110015	- Gal (L)		Steel	Aluminum
No Tank	-	94.8 (2,407) x 38.0 (965) x 61.1 (1,551)		
19	54 (204)	94.8 (2,407) x 38.0 (965) x 74.1 (1,881)	E40	0.14
47	132 (501)	94.8 (2,407) x 38.0 (965) x 86.1 (2,186)	510 (232)	341 (155)
75	211 (799)	94.8 (2,407) x 38.0 (965) x 98.1 (2,491)	(202)	(100)
107	300 (1,136)	94.8 (2,407) x 38.0 (965) x 98.1 (2,491)		

\* All measurements are approximate and for estimation purposes only. Specification characteristics may change without notice. Please contact a Generac Power Systems Industrial Dealer for detailed installation drawings

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Part No. 10000024842 Rev. B 08/27/18

Weight - Ibs (kg)

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#### CONSULTANT:

#### GENERAL DYNAMICS

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GENERAL DYNAMICS 661 MOORE RD STE 110 KING OF PRUSSIA, PA 19406

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DATE 3/18/2020

#### GRISWOLD WEST FA ID # 10071049

181 A NORMAN ROAD JEWETT CITY, CT 06351

GENERAC 30KW GENERATOR SPECIFICATIONS

SCALE: NONE

PROJECT NUMBER	45823	
SHEET	F 1 2	

**TTS Series Switches 200 Amps 600 VAC** 



TAS200 TAS200

**TAS200** 

**200A Automatic Transfer Switch** 

1 of 3 2 of 3

#### The Generac TAS200 Automatic Transfer Switch

Flexibility for multiple application installations

Multiple generator support with 3 source panel

Designed with a 6 inch touch screen controller for improved user interface

Camlock functionality for mobile generator sources



Image used for illustration purposes only.

#### **Features**

- STEEL CONSTRUCTION
- NEMA 3R ENCLOSURE WITH HINGED "PADLOCKING" DOORS
- STAINLESS STEEL HARDWARE
- CAMLOCK "QUICK CONNECT" CAPABILITY
- OPERATIONAL STATUS VIEW VIA **6 INCH TOUCH SCREEN**
- TEST FUNCTION FAST TEST & NORMAL TEST
- UL1008 LISTED FOR EMERGENCY SYSTEMS

#### **Optional Features**

- EXTENDED WARRANTY
- THREE-PHASE VOLTAGE CONFIGURATIONS

#### **Codes and Standards**

Generac products are designed to the following



UL1008, UL508, UL50. CSA C22.2 No. 178



NEC 700, 701 and 702



**NEMA 250** 

#### **Application and Engineering Data**

Cabinet Specifications		
Dimensions	24"W x 12"D x 48"H	
Weight	210 lbs.	
	Single Chamber with Main Door	
	Steel	
	UL Type / NEMA 3R Rated	
Construction	Powder Coat Finish for Corrosion Resistance	
	C-UL-US Listed - Automatic Transfer Switch	
	Stainless Steel Hardware	
	3-Point Latching System with Pad-Lockable Handles	
Mounting Options	Wall	
Mounting Options	H-frame	
Installed	Pre-wired alarm terminal strip	

Electrical Specifications			
Voltage/Phase/Amps	120/240 Single-Phase, 200A 120/208 3-Phase, 200A 120/240 3-Phase, 200A		
Breaker	Eaton 200 amp Utility Breaker		
Dieanei	Eaton 200 amp Generator Breaker		
Maximum RMS Symmetrical Fault Current - Amps	25k AIC Rated		
Protective Device Continuous Rating (Max) Amp	200 350MCM - #6 AWG 350MCM - #6 AWG		
Input to Generator			
Output to Site			
Generator Annunciator Connector	Deutsch DTM04-12PA-L012		
	Generator Run Alarm		
	Generator Fail — Shutdown Alarm		
Alarma Tarmainal Danud	Generator Fail – Non Shutdown Alarm		
Alarm Terminal Board	Low Fuel Alarm		
	Generator Theft Alarm		
	AC Utility Fail Alarm		

Camlock Component		
Camlock Component	Shipped loose for multiple installation options	
Dimensions 9" W x 9.4" D x 24.25" H		GENERAC
	Single-Phase: Black L1, Red L2, White-Neutral, Green-Ground	
2004 Caralack Congretor Connection	3-Phase: Black L1, Red L2, Blue L3, White-Neutral, Green-Ground	
200A Camlock Generator Connection	Uses 4 CH E1016 Male Connectors	
	Mating Connector – CH E1016 Female	



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#### GRISWOLD WEST FA ID # 10071049

PROJECT INFORMATION:
181 A NORMAN ROAD JEWETT CITY, CT 0635 I

GENERAC ATS SPECIFICATIONS

SCALE: NONE

45823 E-5 SHEET

#### **Touch Screen Interface**





#### INDICATORS AND BUTTONS

- · System Ready indicator
- Standby Operating indicator
- Utility Available indicator
- GEN/UTIL Switch Position indicator
- TVSS status

- Normal Test button
- Fast Test button
- Return to Normal button
- Reset button
- · Exercising indicator

#### **DETAILS SCREEN**

#### System Settings:

- · System Voltage/Phases:
- 120/240V single phase (standard)
- 120/208V three phase (optional)
- 120/240V three phase (optional)
- Utility Fail Monitor:
- Under Voltage: 75-95% of nominal voltage
- Over Voltage: 105%-125% of nominal voltage
- Pickup (hysteresis): fixed at 5 volts
- Delay time: 0-60s
- Utility Interrupt Delay: 0-60s
- Return to Utility Timer: 1-30 minutes
- Transfer:
- In-phase, or
- Time-Delay-Neutral at 0.0-10.0s in 1 second increments

#### **Engine Settings:**

- Engine Warm-up timer: 0-20 minutes
- Generator Load Accept:
- Time-Delay-Neutral at 0.0-10.0s in 1 second increments
- Voltage: 85-95% of nominal
- Frequency: 85-95% of nominal
- Engine Minimum Run Timer: 5-30 minutes
- Engine Cooldown Timer: 0-20 minutes

#### **Exercise Settings:**

- Time of day
- · Day of week
- Exercise:
- Exercise with/without load
- Exercise once every 1, 2, or 4 weeks.
- Exercise time-of-day
- Exercise day of week
- Exercise duration: 15-30 minutes

#### **Screen Settings:**

- · Brightness & Contrast button
- Screen Calibration button
- Startup/Clean screen

#### Diagnostics:

- Digital I/O bits status
- Voltage A/D readings

#### Mimic Diagram:

- System Ready
- Transfer switch position
- Utility available
- Standby available
- Maintenance/Auto switch position
- Generator source TS position
- TVSS status

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#### PREPARED FOR:



CONSULTANT:

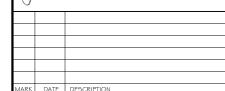
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FINAL

GRISWOLD WEST FA ID # 10071049

DATE 3/18/2020

PROJECT INFORMATION:
181 A NORMAN ROAD JEWETT CITY, CT 0635 I

GENERAC ATS SPECIFICATIONS

SCALE: NONE

45823 E-5. SHEET



#### **Summary**

Parcelld 10810 Account Number 04129801

Location Address 181 A NORMAN RD Map-Block-Lot 38 /69 /6A

Dev Lot. 7091

Use Class/Description 4310 TEL REL TW

Assessing Neighborhood0050ACensus Tract7091Acreage0.08UtilitiesWell,Septic

#### Owner

NORMAN ERNEST R & STUART R & 257 NORMAN RD GRISWOLD, CT 06351

#### **Current Appraised Value**

	2017	2016	2015
+ Building Value	\$0	\$O	\$0
+ XF Value	\$0	\$O	\$0
+ OB Value	\$126,900	\$126,900	\$121,500
+ Land Value	\$150,000	\$150,000	\$150,000
+ Special Land Value			
+ Total Appraised Value	\$276,900	\$276,900	\$271,500
+ Net Appraised Value	\$276,900	\$276,900	\$271,500
+ Current Assessment	\$193,830	\$193,830	\$190,050

#### **Assessment History**

	2017	2016	2015
+ Building Value	\$0	\$O	\$0
+ OB/Misc	\$88,830	\$88,830	\$85,050
+ Land	\$105,000	\$105,000	\$105,000
+ Total Assessment	\$193,830	\$193,830	\$190,050

#### Land

Use	Class	Zoning	Area	Value
4310 TEL REL TW	I		3600 SF	\$150,000

#### Out Buildings\Extra Features

Description	Sub Description	Area	Year Built	Value
CELL TOWER		160HEIGHT	1999	\$86,400
FENCE-6' CHAIN		240L.F.	1999	\$2,700
CELL EQUIP SHELTER		72S.F.	1999	\$5,400
CELL EQUIP SHELTER		432S.F.	1999	\$32,400

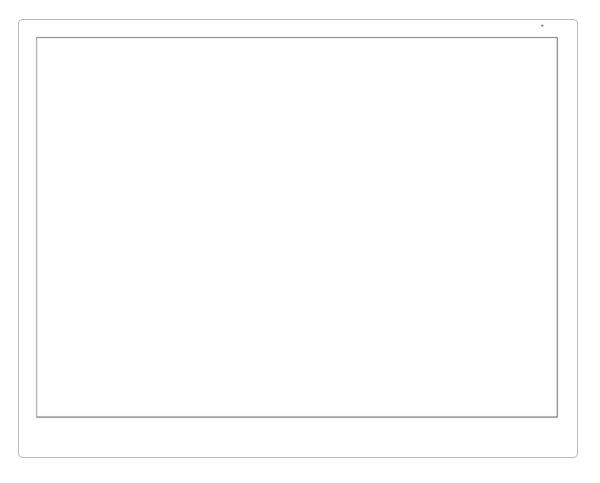
#### **Sales History**

Sales Date	Type of Document	Grantee	Vacant/Improved	Book/Page	Amount
03-27-1992		NORMAN ERNEST R & STUART R &	Improved	144/500	\$0

#### **Permit Information**

Permit ID	Issue Date	Туре	Description	Amount	Inspection Date	% Complete	Date Complete	Comments
117-19	10-29- 2018	MN	MAINTENANCE	\$10,287		0		BOLT ON REINFORCING ANGLE FROM 1' TO 10' ON EXISTING CELL TOWER
57-19	09-06- 2018	СМ	COMMERCIAL	\$25,000		0		TELECOM UPGRADE: REMOVE AND REPLACE (3) ANTENNAS AND INSTALL (6) REMOTE RADIO UNITS
224-17	04-12- 2017	СМ	COMMERCIAL	\$20,000		0		SWAP 3 EXISTING CELL ANTENNAS WITH 3 NEWER TECHNOLOGY CELL ANTENNAS AND ASSOCIATED EQUPMT AT EXISTING CELL SITE
125-13	01-23- 2013	AD	3ANT/6REMOTE RADIO	\$25,000		0		
47-99	08-27- 1999	СМ	8X11 OB	\$500		100	10-01-1999	8 X 11 QUINN VALLEY OB
8-99	07-12- 1999	СМ	24X36 OB	\$45,000	9/1/1999 12:00:00 AM	100	09-10-1999	8-99 COMP CO
242-98	04-15- 1999	СМ	TOWER/FENCE	\$170,100	7/12/1999 12:00:00 AM	100	07-12-1999	5-99 CO

#### Sketch



No data available for the following modules: Building Data, Building Data, Commercial Building, Photos.

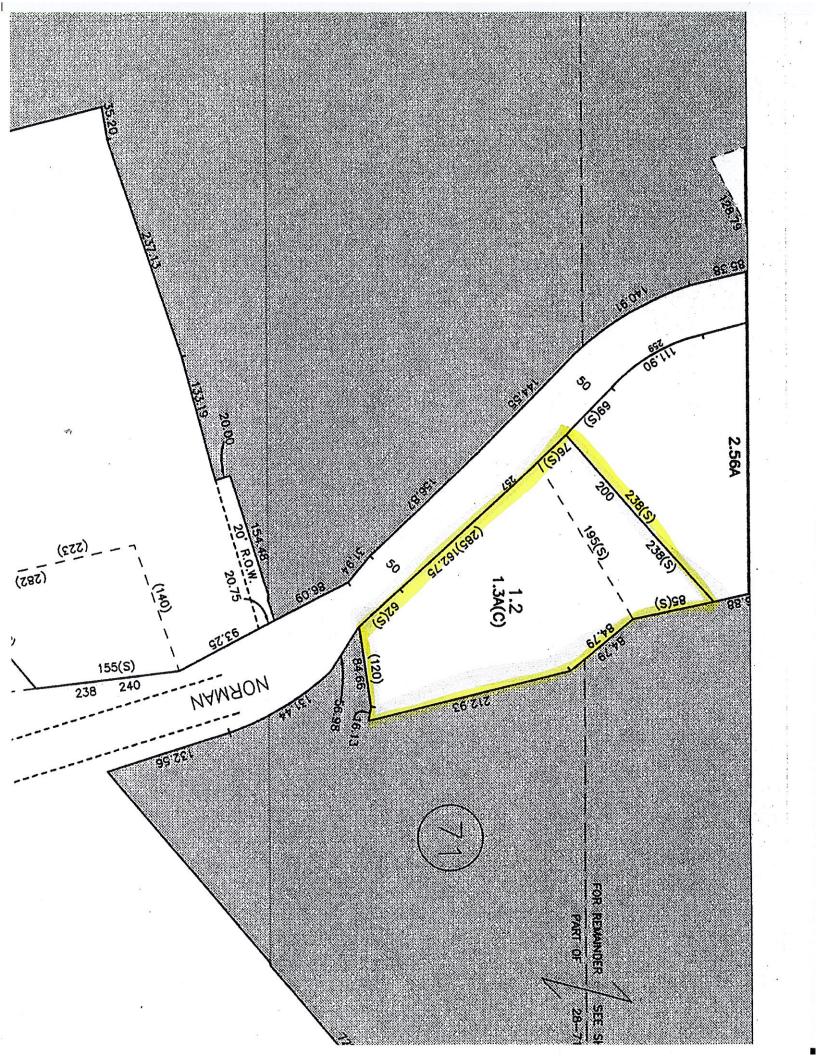
The Town of Griswold Assessor makes every effort to produce the most accurate information possible. No warranties, expressed or implied are provided for the data herein, its use or interpretation. The assessment information is from the last certified tax roll. All other data is subject to change.

<u>User Privacy Policy</u>

<u>GDPR Privacy Notice</u>

Schneider GEOSPATIAL

<u>Last Data Upload: 3/16/2020, 8:30:42 PM</u> <u>Version 2.3.46</u>



## ATTACHMENT 2



Filed by:

Kri Pelletier, Property Specialist - SBA Communications 134 Flanders Rd., Suite 125, Westborough, MA 01581 508.251.0720 x 3804 - kpelletier@sbasite.com

March 3, 2017

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

Notice of Exempt Modification 181 A Norman Road, Griswold, CT 06351 41 36 3.95 N -71 57 15.57 W T-Mobile #: CT11152C L700

Dear Ms. Bachman:

T-Mobile currently maintains six (6) antennas at the 148-foot level of the existing 160-foot Self Support Tower at 181 A Norman Road. The tower is owned by SBA Towers II LLC. The property is owned by Stuart R. Norman, Ernest Norman and Priscilla Forschler. T-Mobile intends to replace three (3) existing antennas with three (3) new L700MHz antennas. These antennas would be installed at the 148-foot level of the tower. T-Mobile's full scope of proposed work is as follows:

#### Remove:

None

#### Remove and Replace:

 Remove (3) RFS APXC18-209015C panel antennas and replace with (3) Commscope LNX-6515DS-A1M panel antennas

#### Install:

- (6) 1-1/4" lines
- (3) Commscope ATSBT-TOP-FR-4G Smart Bias Ts
- (3) RFS ATMAA1412D-1A20 TMAs

#### Existing Equipment to Remain (including entitlements):

- (3) RFS APXC18-209015C panel antennas
- (3) 10.5' T-Frames
- (6) 1-5/8 lines



This facility was originally approved by the Town of Griswold's Planning and Zoning Commission on June 8, 1998 under Case No: ZP 12-98. Approval was for a 160' tower that met all FCC and FAA regulations. There were no further conditions placed on the tower or compound. This proposed modification is in full compliance.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies §16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. §16.50j-72(b)(2). In accordance with R.C.S.A. § 16.50j-73, a copy of this letter is being sent to Kevin Skulczyck, First Selectman for the Town of Griswold, Mario J. Tristany, Jr., Town Planner for the Town of Griswold, and the property owners, Stuart R. Norman, Ernest Norman and Priscilla Forschler. (Separate notice is not being sent to tower owner, as it belongs to SBA.)

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 modification 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 modification 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 with certain modifications.

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

Sincerely.

Kri Pelletier

**Property Specialist** 

SBA COMMUNICATIONS CORPORATION

134 Flanders Rd., Suite 125

Westborough, MA 01581

508.251.0720 x3804 + T

508.366.2610 + F

203.446.7700 + C

kpelletier@sbasite.com

#### Attachments

cc: Kevin Skulczyck, First Selectman – as elected official

Town of Griswold, 28 Main Street, Jewett City, CT 06351

Mario J. Tristany, Jr., Town Planner – as representative for respective planning and zoning department Town of Griswold, 28 Main Street, Jewett City, CT 06351

Stuart R. Norman, Ernest Norman and Priscilla Forschler – as property owners 257 Norman Road Griswold CT 06351

## ATTACHMENT 3

#### **CERTIFICATION**

I hereby certify that on the 25th day of March 2020, a copy of AT&T's Exempt Modification Request to the Connecticut Siting Council was sent by electronic mail to the chief elected official and the planning and zoning department of the municipality in which the facility is located as well as by first class mail to the property owner and tower/facility owner.

Dated: March 25, 2020

Cuddy & Feder LLP 445 Hamilton Ave, 14<sup>th</sup> Floor White Plains, NY 10601 Attorneys for: New Cingular Wireless PCS, LLC (AT&T)

Lucia Chrocchio