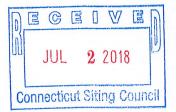
EM-AT&T-100-180702



June 28, 2018

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





Re: Notice of Exempt Modification – Emergency Backup Generator 38 Lower Road, North Canaan, CT

Dear Melanie,

AT&T Mobility currently maintains a wireless telecommunications facility at the above referenced address. The tower and AT&T's shelter are located within an existing, fenced-in compound area. The shelter houses AT&T's equipment. AT&T currently does not maintain a generator at this cell site.

In an effort to further enhance the network reliability, AT&T intends to modify its facility by installing a new 30KW diesel fueled generator in a designated 10' x 5' lease area. The generator incorporates a built-in fuel tank as part of the unit. The diesel fuel tank is double walled for added safety and will be filled by a licensed fuel filling company. The proposed modification will remain within the existing, fenced-in compound that is surrounded by a security fence and gate. This generator will be placed on a 10' x 4' concrete pad. Construction Drawings are attached and approved by the property and tower owner Litchfield County Dispatch, Inc.

Please accept this letter as notification pursuant to R.C.S.A. Section 16-50j-73, for construction that constitutes modification pursuant to R.C.S.A Section 16-50j-72(b)(2). In accordance with R.C.S.A Section 16-50j-73, a copy of this submission is being sent to the Town of North Canaan, CT — The Honorable Charles P. Perotti, First Selectman, Ruth Mulcahy, Zoning Enforcement Officer, Robin Denny, Deputy Fire Marshall who requested be formally notified. Evidence of notifications is attached hereto. A copy of this submission is also being sent to Litchfield County Dispatch, Inc., Daniel Soule, Executive Director who is the property and tower owner on which the telecommunications facility is located.

## AT&T's proposed Wireless Modifications Constitute An "Exempt Modification"

The proposed modification to the above mentioned Facility constitutes an exempt modification of an existing facility provided for R.C.S.A Section 16-50j-72(b)(2) and Council regulations promulgated pursuant thereto.

- 1) The proposed modification will not result in an increase in the height of the existing tower.
- The generator and attached fuel tank will remain entirely within the limits of the leased area. The modifications therefore, will not require the extension of the existing boundary.
- 3) The proposed modification does not increase the noise levels at the boundary by six (6) decibels or more under normal conditions. Proposed modification is only used during emergency power failure of the commercial power.
- 4) The installation of a new generator and attached fuel tank will not change, in any way, radio frequency (RF) emissions at the facility.
- 5) The facility has received local municipal approval and was issued a Building Permit dated April 24, 1998 which was obtained from the property owner and is attached. Also provided by the property owner is a Certificate of Use and Occupancy dated October 24, 2000. The Town of Canaan searched records for the original zoning approval as did the land owner and was unable to obtain such a document. It is assumed that the facility was built prior to any zoning regulations.

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

Best Regards,

Donna Love

Site Acquisition Manager, exclusive agent of AT&T Mobility

General Dynamics IT, Inc.

Mobile #315-480-5529

Enc.

Cc: Town of North Canaan – The Honorable Charles P. Perotti, First Selectman

Town of North Canaan – Ruth Mulcahy, Zoning Enforcement Officer

Town of North Canaan – Robin Denny, Deputy Fire Marshall

Litchfield County Dispatch, Inc. – Property and Tower Owner – Daniel Soule, Exec. Director

# **GENERAL DYNAMICS**

Wireless Services

# RE: General Dynamics Vendor/Jurisdiction Check(s)

To whom it may concern,

Please note that if the attached check(s) is not deposited/paid within **270 days** it will need to be returned to my attention at the address below for voiding purposes.

I will need to know if the check(s) needs to be "void/cancel" or "void/reissue". Please do not destroy, shred, rip, dispose of any check(s) that you feel are no longer needed. All checks are accounted for and have to be processed backwardly if not being used due to cost or service changes.

The attached check(s) that need to be returned for any reason are to be sent overnight to my attention at:

General Dynamics

ATTN: Allison Hoffman

661 Moore Rd. Ste 110

King of Prussia, PA 19406

If you have any additional questions please feel free to contact me at <u>Allison.Hoffman@GDIT.com</u> or by phone 610-233-2368.

Thank you in advance for your cooperation.

Allison Hoffman
Business Operations Administrator
General Dynamics Wireless Services
661 Moore Rd, Ste 110
King of Prussia, PA 19406
(610) 233-2368
allison.hoffman@gdit.com
www.gdwireless.com

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POST THIS CARD AT BUIL AREA AVAILABLE TO TH  Where applicable, separate electrical, plumbing and melectrical proceed until the inspector has a	AR FROM DATE OF 1550E LDING SIGHT IN A DRY E BUILDING OFFICIAL permits are required for echanical installations. approved the various stages of construction.  Date Inspected  Plumbing Rough-In  HVAC Rough-In  Electric Rough-In  Fireplace & Masonry Chimneys Insulation Inspection  Sheetrock or Plaster

This Structure is Not to be Used in Whole or Part Until a Certificate of Occupancy is issued

CERTIFICATE OF U	
2000	SE AND OCCUPANCY N, CONNECTICUT
Letchfield County Will	the building owned by:
located at 38 Lower Rd - Cans	ien of
Under permit no	s substantially to the requirements of the Building es of the Town and is hereby approved for occupancy
The use group is: 5-1 Storage	Rousing Commette + Cleation Company
The fire grading is: 3 B.	
The maximum live load per floor is: 1st Slad	on grand 3rd
Occupancy load for places of assembly is:	The state of the s
Date 10-2412000	William Enra Building Official
Any change or extension of the use herein ap	proved requires a new certificate of occupancy.
Remarks:	
CC:	Signed:
	David Lucibello



# SITE NAME: NORTH CANAAN-LOWER COUNTY RD **FA LOCATION CODE: 10035410** GENERATOR PROJECT

VICINITY MAP

1



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

TEAD NORTHEAST ON ENTERPRISE DR TOWARD CAPITAL BLVD. TURN LEFT ONTO CAPITOL BLVD. TURN LET ONTO WEST ST. TURN LEFT TO MERGE ONTO I-9 I S TOWARD NEW HAVEN. TAKE EXIT 22N TO MERGE ONTO CT-9 N TOWARD NEW BRITAIN. TAKE EXIT 32 ON THE LEFT TO MERGE ONTO I-84 W FOWARD WATERBURY, TAKE EXIT 39 TOWARD CT-4/FARMINGTON. MERGE ONTO STATE HWY 508 LIGHT LEFT ONTO CT-4 W. TURN RIGHT ONTO CT-177 N/CT-4 W/ MAIN ST. SLIGHT LEFT ONTO CT-4 W MAIN ST. CONTINUE TO FOLLOW CT-4 W. CONTINUE ONTO CT-179 N/ CANTON RD. CONTINUE TO OLLOW CT-179 N. TURN RIGHT ONTO BRIDGE ST. SLIGHT LEFT ONTO CT-179 N/ RIVER RD. TURN LEF ONTO US 44 W/ ALBANY TURNPIKE. CONTINUE TO FOLLOW US 44 W. TURN LEFT TOWARD LOWER RD. CONTINUE STRAIGHT ONTO LOWER RD. SLIGHT LEFT TO STAY ON LOWER RD. DESTINATION WILL BE ON

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

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

- INTERNATIONAL BUILDING CODE 2009
- NATIONAL ELECTRIC CODE (IEEE)
- AMERICAN CONCRETE INSTITUTE (ACI) 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL
- 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
- 6. TIA 607, COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR

SITE LOCATION

PROJECT MANAGER

JOE NAGLE MARKET LEAD GENERAL DYNAMICS WIRELESS SERVICES GG1 MOORE RD STE 110 KING OF PRUSSIA, PA 19406 EMAIL: joseph.nagle@gdit.com

ENGINEER:

RAMAKER & ASSOCIATES, INC. 855 COMMUNITY DRIVE SAUK CITY, WI 53583 PH.: (608) 643-4100 FAX: (608) 643-7999 CONTACT: MIKE REEVE EMAIL: mreeve@ramaker.com

APPLICANT INFORMATION: 7150 STANDARD DR IANOVER, MD 21076

SITE DATA: SITE NAME: NORTH CANAAN-LOWER COUNTY RD

PROPERTY OWNER: LITCHFIELD COUNTY PHONE: (860) 626-7525

42.014661° N 73.326305° W SHEET INDEX

GENERAL. T-1 TITLE SHEET

N-1 GENERAL NOTES

A-I SITE PLAN & EQUIPMENT LAYOUT

S-1 FOUNDATION DETAILS

ELECTRICAL & GROUNDING:

- E-I WIRING DETAILS
- E-2 PANEL AND PENETRATION DETAILS
- GENERAC GENERATOR SPECIFICATIONS
- E-5 GENERAC ATS SPECIFICATIONS

E-3 ATS, CONDUIT & GROUND ROD DETAILS

SIGNATURE BLOCK

DATE AT¢T MGR.

DATE CONSTRUCTION MGR.

> SITE ACQUISITION DATE

NORTH CANAAN-LOWER COUNTY RD FAID # 10035410

DATE 03/30/2018

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 nformation Technology, Inc.

PREPARED FOR:

CONSULTANT:

GENERAL DYNAMICS

661 MOORE RD STE 110

KING OF PRUSSIA, PA 19406

ereby certify that this plan, specification, or report w

onal Engineer under the laws of the State of Connecticut

38 LOWER ROAD LITCHFIELD, CT 06018

TITLE SHEET

SCALE: NONE

37514

AERIAL VIEW OF SITE

PROJECT INFORMATION

SITE ID: CT 1134 FA NUMBER: 10035410

> DISPATCH, INC. 111 WATER STREET, TORRINGTON, CT 06018 CONTACT: DAN SOULE

ADDRESS: 38 LOWER ROAD NORTH CANAAN, CT 06018

GROUND ELEVATION: 970 FT AMSL

DO NOT SCALE DRAWINGS: CONTRACTOR SHALL VERIFY ALL PLANS & EXISTING 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

#### NOTES TO SUBCONTRACTOR

- 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
- 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 INDEMNIFY AND HOLD DESIGN ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH PERFORMANCE OF WORK ON THIS PROJECT
- . 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.
- . 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
- 3. ANY DAMAGE TO THE ADJACENT PROPERTIES WILL BE CORRECTED AT THE SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE LANDOWNER AND THE ENGINEER.
- . THE COMPLETE BID PACKAGE INCLUDES THESE CONSTRUCTION DRAWINGS ALONG WITH THE SPECIFICATIONS. SUBCONTRACTOR IS RESPONSIBLE FOR REVIEW OF TOTAL BID PACKAGE PRIOR O BID SUBMITTAL.
- O. SUBCONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES WITHIN CONSTRUCTION LIMITS PRIOR TO CONSTRUCTION.
- 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.
- 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
- 13. 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.
- 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
- 15. PERMITS: THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND INCURRING THE COST OF ALL REQUIRED PERMITS, INSPECTIONS, CERTIFICATES, ETC.
- 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
- 17. THE PLANS SHOW SOME KNOWN SUBSURFACE STRUCTURES, ABOVE GROUND STRUCTURES AND/OR EXISTING UTILITIES BELIEVED TO BE IN THE WORKING AREA. IT IS 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.

- . 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

- I. COORDINATE LOCATION AND POWER REQUIREMENTS OF ALL EQUIPMENT WITH AT&T AND EQUIPMENT SUPPLIER PRIOR TO INSTALLATION.
- 2. 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
- 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 SUFFICIENT TIME FOR PROPER ARRANGEMENTS TO BE MADE. WRITTEN PERMISSION SHALL BE OBTAINED FROM THE OWNER BEFORE INTERRUPTING ELECTRICAL SERVICE.
- 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 FOUIPMENT 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.
- 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)
  - ICEA (INSULATED CABLE ENGINEERS ASSOCIATION)
  - IEEE (INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS) MBFU (NATIONAL BOARD OF FIRE UNDERWRITERS)
  - NESC (NATIONAL ELECTRICAL SAFETY CODE)
  - NEMA (NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION)
  - NFPA (NATIONAL FIRE PROTECTION ASSOCIATION)
- 10. 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
- 11. 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
- 12. 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. 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 SWFFPS FOR ALL CONDUITS 2" OR LARGER.
- POWER WIRING SIZE SHALL NOT BE SMALLER THAN #12 AWG.
- 5. ALL WIRING SHALL BE COPPER. ALUMINUM WILL NOT BE ACCEPTABLE ALL POWER CIRCUITS SHALL CONTAIN A GROUND WIRE.
- 6. PHASE MARKINGS TO BE USED AT POWER CONDUCTOR TERMINATIONS.
- 7. CONTRACTOR SHALL ENSURE INTEGRITY IS MAINTAINED WHEN INSTALLING CONDUIT AND
- 8. INSTALL PULL STRING IN ALL CONDUIT.
- 9. FOR ROOFTOP INSTALLS AND BUILD-OUTS, CONDUITS INSIDE BUILDING AND ON ROOF SHALL BEIRGS, UNLESS OTHERWISE NOTED. FOR RAW LAND SITES AND CO-LOCATES, PV SCHEDULE 80 SHALL BE UTILIZED UNLESS NOTED OTHERWISE
- LO MAINTAIN MINIMUM L'-O" VERTICAL AND L'-O" HORIZONTAL SEPARATIONS FROM ANY
- LL ALL WIRING ROUTED IN PLENUM TO BE RATED OR IN METALLIC FLEX (LIQUIDITE) CONDUIT.

#### C. EQUIPMENT

- EQUIPMENT/PARTS CONNECTED TO EXISTING PANELS, DUCTS, ETC. SHALL MATCH THE CHARACTERISTICS (A/C, V, 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
- ALL EQUIPMENT SURFACES TO BE BONDED TO GROUNDING SYSTEM SHALL BE STRIPPED O 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
- 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.
- ALL MATERIALS AND LABOR REQUIRED FOR THE GROUNDING SYSTEM AS INDICATED ON TH PLANS AND DETAILS, AND AS DESCRIBED HEREIN SHALL BE FURNISHED BY THIS CONTRACTOR UNLESS OTHERWISE NOTED.
- 6. EXACT LOCATION OF GROUND CONNECTION POINTS SHALL BE DETERMINED IN FIELD. AD JUST 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
- ALL EQUIPMENT GROUND CONDUCTORS SHALL BE TIN COATED, #2 AWG COPPER UNLESS NOTED OTHERWISE ON THE DRAWINGS.

## E. INSPECTION/DOCUMENTATION

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



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PREPARED FOR:

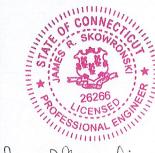


#### CONSULTANT:

#### GENERAL DYNAMICS

Information Technology, Inc. GENERAL DYNAMICS 661 MOORE RD STE 110 KING OF PRUSSIA, PA 19406

ereby certify that this plan, specification, or report w ional Engineer under the laws of the State of Connecticut



3/30/2018

DATE DESCRIPTION FINAL CDs

> NORTH CANAAN-LOWER COUNTY RD FAID # 10035410

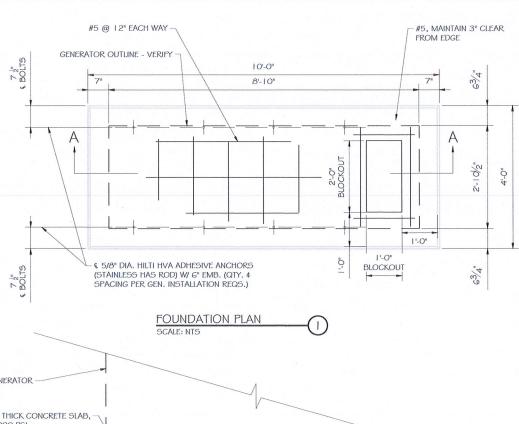
DATE 03/30/2018

38 LOWER ROAD LITCHFIELD, CT 06018

GENERAL NOTES

SCALE: NONE

37514 N-1



GENERATOR 8" THICK CONCRETE SLAB, -3000 PSI ELECTRICAL CONTRACTOR TO INSTALL -#5 @ 12" EACH **BLIP JOINT FOR FROST AREAS** WAY. MAINTAIN 3" CLEAR FROM TOP \$ 3" CHAMFER, TYP. 6" MINIMUM 95% DENSITY CLEAN AND COMPACTED FILL PROPOSED CONDUITS SECTION A-A SCALE: NTS

#### DOUBLE WALL FUEL TANK BASE SPECIFICATION

REF: ATT SOKW GENERATOR PACKAGE UL REGISTRATION NUMBER: MH18459 U.L. 142 DOUBLE WALL FUEL TANK BASE SPECIFICATION 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
- ANCHORS MINIMUM (4) @ 5/8" FOR GEN-SET MOUNTING

SUB BASE TANK TESTING: PRIMARY TANK & SECONDARY CONTAINMENT BASIN SECTIONS SHALL BE PRESSURIZED AT 3-5 PSI AND LEAK-CHECKED TO ENSURE INTEGRITY OF SUB BASE WELD SEAMS PER UL-142 STANDARDS

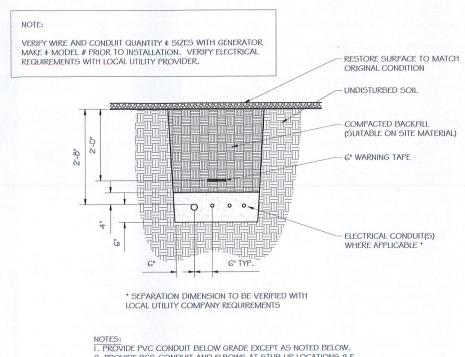
FUEL FILL: 5 GALLON SPILL CONTAINMENT WITH ALARM

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 10% 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.



2. PROVIDE RGS CONDUIT AND ELBOWS AT STUB UP LOCATIONS (I.E. SERVICE POLE, BTS EQUIPMENT, ETC.)

UTILITY CONDUIT TRENCH

### STRUCTURAL GENERAL NOTES

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

1.3 DO NOT SCALE DRAWINGS

1.4 VERIFY ALL EQUIPMENT MOUNTING DIMENSIONS PER MANUFACTURER DRAWINGS

1.5 DESIGN LOADS ARE (GENERAC):

: 100 PSF

LIVE LOAD : 889.1" H, 106" W, 38" D EQUIPMENT SIZE

WEIGHT WITH WOODEN SHIPPING SKID

ENCLOSED GENERATOR WITH EMPTY FUEL TANK : 3974 LBS : 190 GAL TANK SIZE

2.0 FOR DESIGN # ANALYSIS OF THE FOUNDATION, THE MINIMUM NET SOIL BEARING CAPACITY SHALL BE ASSUMED TO BE 2000 PSF. 3.0 CONCRETE

3.1 MEET OR EXCEED THE FOLLOWING CODES & STANDARDS:

ACI318-11

CONSTRUCTION : ACI301

DETAILING : CRSI MANUAL OF STANDARD PRACTICE

REINF. STEEL ASTM A 615 GRADE 60, DEFORMED MIXING

: ASTM C 94 READY MIX CONCRETE AIR ENTRAINMENT : ACI 318 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 GO 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.

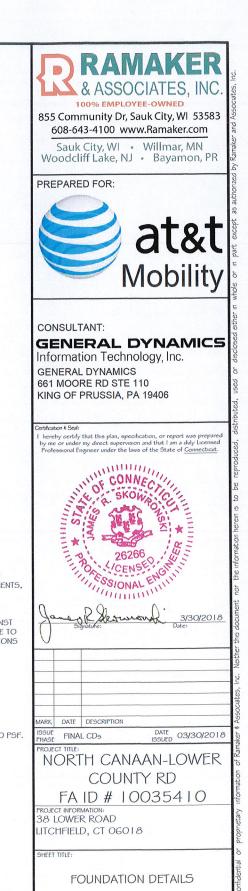
3.7 MINIMUM COVER FOR REINFORCING STEEL SHALL BE AS SHOWN ON PLAN.

4 O 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 2000 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

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.



SCALE: NONE

37514 5-

#### 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	ALARM BLOCK	GENERATOR	12-PAIR 24 AWG OR 2EA G-PAIR CAT5	N/A	I.	ALARM CABLES (1) 12 PAIR 24 AWG (RUN THRU INTERIOR OF SHELTER \$ INTO ALARM BOX, PROVIDE 24" OF SLACK CABLE. FINAL PUNCH DOWN IS BY AT\$T TECH. LABEL ALL WIRES

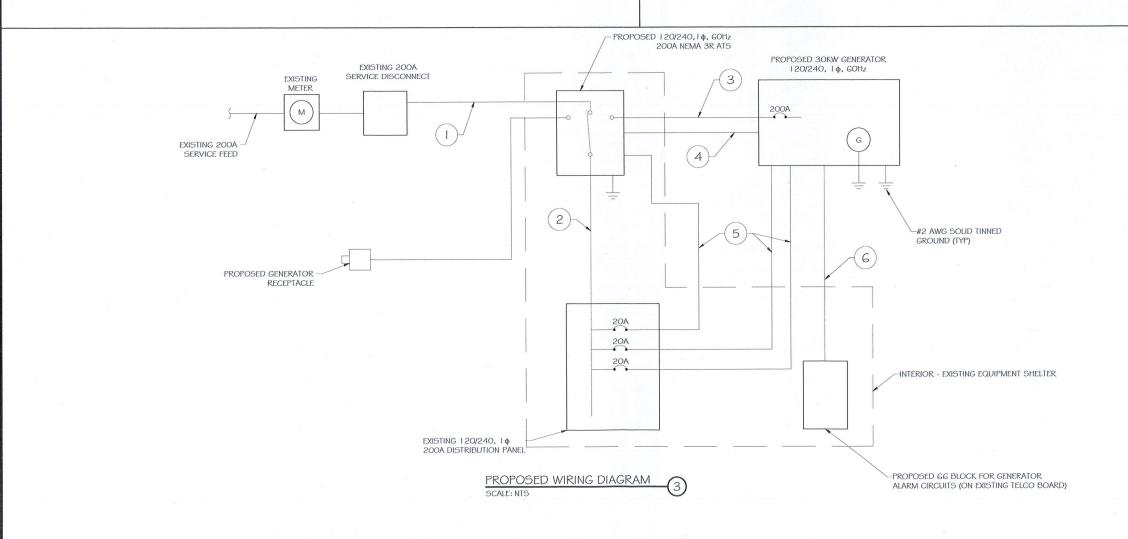
CIRCUIT DETAIL

#### 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

ALARM WIRING IDENTIFICATION

CHART





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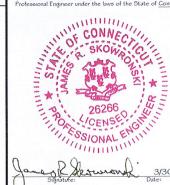


CONSULTANT:

# GENERAL DYNAMICS

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ARK DATE DESCRIPTION

SUE FINAL CDS DATE 03/30/2018

NORTH CANAAN-LOWER COUNTY RD FAID # 10035410

PROJECT INFORMATION: 38 LOWER ROAD LITCHFIELD, CT 06018

WIRING DETAILS

SCALE: NONE

37514

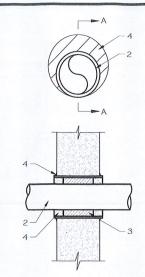
			AC DIS	TRIBUTION PAI	NEL I - LAYOUT DIA	GRAM			
BREAKER POSITION	BREAKER TYPE	ON/OFF	SIZE	LABEL	LABEL	SIZE	ON/OFF	BREAKER TYPE	BREAKER
1	2P				Lights			IP	2
3	25	ON	20	Rectifiers #1		20	ON	IP	4
5	2P	ON	20	Rectifiers #2				IP	6
7		OIV	20	RODUITOIS WE		20	ON	IP	8
9	2P	ON	20	Rectifiers #3			ON.	IP	10
11		On	20	TOOCHIOIS #6	Smoke	20	ON	IP	12
13	2P	ON	20	Rectifiers #4			OFF	IP	14
15		OIV	20	Robbinois #4	GFCI	20	ON	IP	16
17	2P	ON	20	Rectifiers #5	HVAC #1		ON	2P	18
19		0.,			110700 #1		011	21	20
21	2P	ON	20	Rectifiers #6	HVAC #2		ON	2P	22
23		0.1							24
25	2P	OFF	20	Rectifiers #7	BATTERY CHARGER	20	ON	1P	26
27		011		TOOCHIOIS II I	BLOCK HEATER	20	ON	1P	28
29	2P	OFF	20	Rectifiers #8	ATS	20	ON	1P	30
31		011	20	Nocemors #6				BLANK	32
33	2P	OFF	20	Rectifiers #9			111	BLANK	34
35		0.1		1,000,11013 110			111	BLANK	36
37	BLANK						/	BLANK	38
39	BLANK							BLANK	40

PROPOSED 20A BREAKERS FOR ATS, BLOCK HEATER -

EXISTING PANEL SCHEDULE SCALE: NTS

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

\*CONTRACTOR TO UTILIZE NEXT AVAILABLE IN 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 HR T 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.
- 2. 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.

3. 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.

4. 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 CP60 IS OR CP604 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)

SCALE: NTS



THROUGH CABLE TO TOP OF





HORIZONTAL CABLE TAP TO HORIZONTAL STEEL SURFACE OR PIPE. CABLE OFF



VERTICAL CABLE

Type GR GROUND ROD



CADWELD DETAILS



Type TA
TEE OF
HORIZONTAL RUN
AND TAP
CABLES.

DATE 03/30/2018 FINAL CD5 NORTH CANAAN-LOWER COUNTY RD FAID # 10035410

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

WILLIAM IN

Information Technology, Inc.

PREPARED FOR:

CONSULTANT:

GENERAL DYNAMICS

661 MOORE RD STE 110

KING OF PRUSSIA, PA 19406

PROJECT INFORMATION:
38 LOWER ROAD ITCHFIELD, CT 06018

RK DATE DESCRIPTION

PANEL AND PENETRATION DETAILS

SCALE: NONE

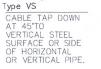
37514



HORIZONTAL CABLE TAP TO VERTICAL STEEL SURFACE OR THE SIDE OF









Type VV

VERTICAL STEEL
SURFACE OR TO
THE SIDE OF
EITHER
HORIZONTAL OR
VERTICAL PIPE



(1)CONDUIT (TYP)

BUTTERFLY CLAMP AS REQUIRED

(3) EXISTING WALL/CEILING

VERTICAL "UNISTRUT" P1000 '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'-O" O.C. LENGTH OF RUN

	_3
	4
	2
	3
2	
4	

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

GROUND ROD DETAIL

- GROUND RODS MAY BE:
   COPPER CLAD STEEL SOLID COPPER
- 2. GROUND RODS SHALL HAVE A MAXIMUM SPACING TWICE THE LENGTH OF ROD
- 3. SEE RESISTIVITY REPORT FOR VERIFICATION AS AVAILABLE
- 4. 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)
  6. PROVIDE (I) GROUND LEAD
  TO EACH SIDE OF THE GENERATOR

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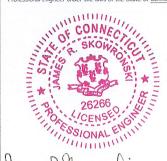
CONSULTANT:

#### GENERAL DYNAMICS

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ARK DATE DESCRIPTION

DATE 03/30/2018 FINAL CDs NORTH CANAAN-LOWER

COUNTY RD FAID # 10035410

38 LOWER ROAD LITCHFIELD, CT 06018

ATS, CONDUIT & GROUND ROD DETAILS

SCALE: NONE

PROJECT NUMBER	37514
SHEET NUMBER	E-3

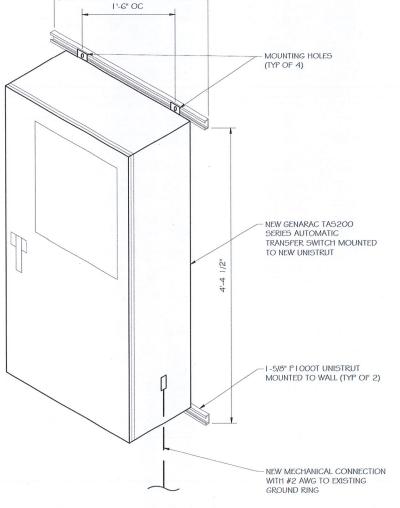
Wall Construction Type	USE
HOLLOW	3/8" DIA. TOGGLE BOLT
HOLLOW, AT STUD	3/8" DIA. LAG SCREW
CONCRETE BLOCK (HOLLOW)	7/16" DIA. HILTI HY-20 WITH SCREEN MINIMUM EMBEDMENT 2-1/2"
CONCRETE (SOLID)	7/16" DIA. HILTI HY-150 WITH SCREEN MINIMUM EMBEDMENT 2-1/2"

CONDUIT WALL MOUNT

SCALE: NTS

#### NOTE:

- 1. 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



2'-6"

INTERSECT ATS MOUNTING DETAIL 3 SCALE: NTS



2.4L

**GENERAC**° INDUSTRIAL

**Industrial Diesel Generator Set** 

**EPA Certified Stationary Emergency** 

00.

Image used for illustration ourgoses only

of 6 2 of

30 SD030

Standby Power Rating 30 kW 38 kVA 60 Hz

Prime Power Rating\* 27 kW 34 kVA 60 Hz



144114

ANSI

Codes and Standards



Generac products are designed to the following standards:

NFPA70, 99, 110, 37

NEC700, 701, 702, 708

ANSI C62.41

n National Standards Institut

ISO9001, 8528, 3046, 7637, Pluses #2b, 4

NEMA ICS10, MG1, 250, ICS6, AB1

UL2200, UL508, UL142, UL498

\*EPA Certified Prime ratings are not available in the U.S. or its Territories

# **Powering Ahead**

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

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

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

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

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

# SD030

30

SD030

#### **Standard Features**

### **ENGINE SYSTEM**

- Oil Drain Extension
- Air Cleaner
- Fan Guard
- Stainless Steel flexible exhaust connection
- Critical Exhaust Silencer (enclosed only) Factory Filled Oil
- Radiator Duct Adapter (open set only)

#### Fuel System

 Fuel lockoff solenoid Primary fuel filter

- Closed Coolant Recovery System
- UV/Ozone resistant hoses
- Factory-Installed Radiator
- Radiator Drain Extension
- 50/50 Ethylene glycol antifreeze
- 120 VAC Coolant Heater

# Engine Electrical System

- Battery charging alternator Battery cables
- Battery tray
- Solenoid activated starter motor

#### Rubber-booted engine electrical connections

### ALTERNATOR SYSTEM

- III 2200 GENnrotect\*
- 12 leads (3-phase, non 600 V) Class H insulation material
- Vented rotor
- 2/3 pitch
- Skewed stator
- Auxiliary voltage regulator power winding
- Amortisseur winding
- Brushless Excitation
- Sealed Bearings Automated manufacturing (winding, insertion,
- lacing, varnishing)
- Rotor dynamically spin balanced (get tolerance)
- Full load capacity alternator Protective thermal switch

#### GENERATOR SET

- Internal Genset Vibration Isolation
- Separation of circuits high/low voltage
- Separation of circuits multiple breakers
- Silencer Heat Shield
- Wrapped Exhaust Piping Silencer housed in discharge hood (enclosed only)
- Standard Factory Testing
- 2 Year Limited Warranty (Standby rated Units)
- 1 Year Limited Warranty (Prime rated units)
- Silencer mounted in the discharge hood (enclosed only)

#### **ENCLOSURE** (if selected)

Rust-proof fasteners with nylon washers to protect

GENERAC INDUSTRIAL

- High performance sound-absorbing material
- Gasketed doors
- Stamped air-intake louvers
- Air discharge hoods for radiator-upward pointing
- Stainless steel lift off door hinges
- Stainless steel lockable handles
- Rhino Coat™ Textured polyester powder coat

#### TANKS (if selected)

- UL 142
- Double wall
- Sloped top
- Sloped bottom
- Factory pressure tested (2 psi)
- Rupture basin alarm
- Fuel level Check valve in supply and return lines
- Rhino Coat<sup>™</sup> Textured polyester powder coat
- Stainless hardware

#### CONTROL SYSTEM



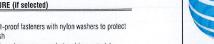
- Digital H Control Panel Dual 4x20 Display
- Programmable Crank Limiter
- 7-Day Programmable Exerciser Special Applications Programmable PLC
- RS-232/485
- All-Phase Sensing DVR
- Full System Status Utility Monitoring
- Low Fuel Pressure Indication
- 2-Wire Start Compatible
- Power Output (kW) Power Factor
- kW Hours, Total & Last Run

- Real/Reactive/Apparent Power
- All Phase AC Voltage
- All Phase Currents
- Oil Pressure Coolant Temperature
- Coolant Level Engine Speed
- Battery Voltage
- Frequency
- Date/Time Fault History (Event Log)
- Isochronous Governor Control Waterproof/sealed Connectors
- Audible Alarms and Shutdowns
- Not in Auto (Flashing Light)
- Auto/Off/Manual Switch E-Stop (Red Mushroom-Type)
- NFPA110 Level I and II (Programmable) Customizable Alarms, Warnings, and Events
- Modbus protocol
- Predictive Maintenance algorithm
- Sealed Boards
- Password parameter adjustment protection
- Single point ground

- 15 channel data logging
- 0.2 msec high speed data logging
- Alarm information automatically comes up on the

### Alarms

- Oil Pressure (Pre-programmable Low Pressure
- Coolant Temperature (Pre-programmed High Temp
- Coolant Level (Pre-programmed Low Level Shuldown) I ow Fuel Pressure Alarm
- Engine Speed (Pre-programmed Over speed) Shutdown)
- Battery Voltage Warning Alarms & warnings time and date stamped
- Alarms & warnings for transient and steady state
- Snap shots of key operation parameters during
- Alarms and warnings spelled out (no alarm codes)



CONSULTANT:

PREPARED FOR:

### GENERAL DYNAMICS

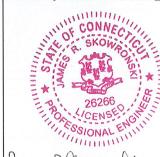
Mobility

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

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hereby certify that this plan, specification, or report was sional Engineer under the laws of the State of Connecticu



MARK DATE DESCRIPTION

NORTH CANAAN-LOWER COUNTY RD FAID # 10035410

38 LOWER ROAD LITCHFIELD, CT 06018

HASE FINAL CDs

GENERAC 30KW GENERATOR **SPECIFICATIONS** 

SCALE: NONE

37514

GENERAC 30KW GENERATOR SPECIFICATIONS

DATE 03/30/2018

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**TTS Series Switches** 200 Amps

**600 VAC** 

GENERAC' INDUSTRIAL

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



## **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



# **Application and Engineering Data**

Dimensions	24"W x 12"D x 48"H
Welght	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
Marchae Callana	Wall
Mounting Options	H-frame
Installed	Pre-wired alarm terminal strip

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

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

# CONSULTANT: GENERAL DYNAMICS

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at&t Mobility

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Certification # Seal:				
I hereby certify by me or under Professional Er	my direct	supervision ler the laws	and that I of the Sta	am a du
William Wall	JAMES		ECONOMICS OF STREET	*

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