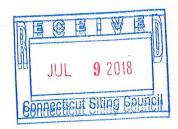
GENERAL DYNAMICS Wireless Services

June 29, 2018

EM-AT&T-025-180709

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

Re: Notice of Exempt Modification – Emergency Backup Generator 500 Highland Avenue, Cheshire, 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 in a non-fenced 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 for the First Responder Network Authority (FirstNet), 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 generator will be placed on a 10' x 4' concrete pad. Construction Drawings are attached and approved by the site manager, SBA Site Management and the Town of Cheshire.

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 Cheshire, Robert Oris, Jr. - Town Council Chairman, William Voelker - Town Planner, James Fasano - Zoning Enforcement Officer, James Jaskot - Finance Director and designated point of contact as property owner, SBA Site Management - Benjamin Walsh, Regional Site Manager. Evidence of notifications are attached hereto.

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.
- 2) 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) I have spoken to William Voelker who is the Town of Cheshire Town Planner. He is unable to find the original zoning approval for the facility.

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 Cheshire - Robert Oris, Jr., Town Council Chairman

Town of Cheshire - William S. Voelker, Town Planner

Town of Cheshire - James Fasano, Zoning Enforcement Officer

Town of Cheshire – James Jaskot, Finance Director and designated as the Point of Contact as Property and Facility Owner

SBA Site Management – Benjamin Walsh, Regional Site Manager

Love, Donna

From:

Mathews, Lisa A < Lisa.A.Mathews@ct.gov>

Sent:

Monday, July 02, 2018 11:28 AM

To:

Love, Donna

Cc:

CSC-DL Siting Council

Subject:

AT&T 500 Highland Avenue, Cheshire Exempt Modification

Good morning Donna.

We just received the hard copies for your AT&T Cheshire Exempt Mod but the filing is missing the check. Please send us the filing fee check as soon as possible so that we may begin processing this Exempt Mod. Please note for future filings, we need the original with two copies of <u>all</u> items. Thank you.

Lisa A. Mathews
Office Assistant
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051
Lisa.A.Mathews@ct.gov
(860) 827-2957

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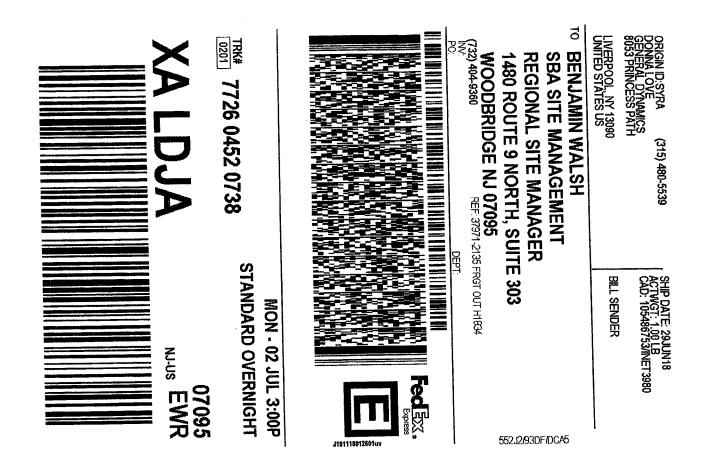
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SBA Site Management – Benjamin Walsh, Regional Site Manager



After printing this label:

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2. Fold the printed page along the horizontal line.

3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

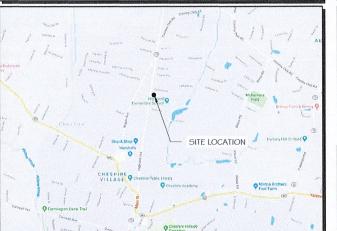
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SITE NAME: CHESHIRE CENTRAL **FA LOCATION CODE: 10050935** GENERATOR PROJECT

VICINITY MAP





SCOPE OF WORK

equipment area. There will be no change in the Size or Height of the Tower or antennas

TAKE 1-95 S. TAKE EXIT 18 TO MERGE ONTO 1-69 I W TOWARD MERIDEN/WATERBURY. TAKE EXIT 3 FOR CT-10 TOWARD MILLDALE/CHESHIRE. TURN LEFT ONTO CT-10 S/HIGHLAND AVE. DESTINATION WILL BE

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

DIG SAFE SYSTEM, INC. 811 OR 1-888-344-7233

MASSACHUSETTS STATUTE CHAPTER 82, SECTION 40 REQUIRES MIN. : WORK DAYS NOTICE BEFORE YOU EXCAVATE.

APPLICABLE BUILDING CODE \$ STANDARDS

ALL 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
- TIA 607, COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR





PROJECT INFORMATION

ROJECT MANAGER:

IOSEPH JARVIS MARKET LEAD GENERAL DYNAMICS WIRELESS SERVICES 7150 STANDARD DRIVE

HANOVER, MD 21076 MAIL: joseph.jarvis@gdit.com

ENGINEER:

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

APPLICANT INFORMATION: 150 STANDARD DRIVE IANOVER MD 21076

SITE NAME: CHESHIRE CENTRAL FA NUMBER: 10050935

TOWER OWNER: TOWN OF CHESHIRE, CT

500 HIGHLAND AVENUE CHESHIRE, CT 06410

COUNTY: NEW HAVEN

41.511111°N LONG .: .-72.898611° W

GROUND ELEVATION: 193 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

SHEET INDEX

GENERAL:

T-1 TITLE SHEET

NOTES:

N-1 GENERAL NOTES

A-I SITE PLAN \$ EQUIPMENT LAYOUT S-I FOUNDATION DETAILS

ELECTRICAL & GROUNDING:

- WIRING DETAILS 2 PANEL AND PENETRATION DETAILS
- ATS, CONDUIT & GROUND ROD DETAILS GENERAC GENERATOR SPECIFICATIONS

5-5 GENERAC ATS SPECIFICATIONS

SIGNATURE BLOCK

AT¢T MGR.	DATE

GENERAL DYNAMICS DATE:

SITE ACQUISITION DATE.

CHESHIRE CENTRAL

SCALE: NONE

3742

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 p onal Engineer under the laws of the State of Connecticut RK DATE DESCRIPTION DATE 06/15/2018 FA ID # 10050935 PROJECT INFORMATION: 500 HIGHLAND AVE CHESHIRE, CT 06410 TITLE SHEET

855 Community Dr, Sauk City, WI 53583

AERIAL VIEW OF SITE

NOTES TO SUBCONTRACTOR:

- THE GENERAL SUBCONTRACTOR MUST VERIFY ALL DIMENSIONS, CONDITIONS AND FLEVATIONS 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
- 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 INDEMNIFY 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
- G. 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.
- S. 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. SUBCONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES WITHIN 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
- 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
- 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
- 5. PERMITS: THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND INCURRING THE COST OF ALL REQUIRED PERMITS, INSPECTIONS, CERTIFICATES, ETC.
- I G. 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 VERIPY ALL UTILITIES, PIPELINES AND OTHER STRUCTURES SHOWN OR IOT 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.
- 2. THE PROPOSED FACILITY WILL BE UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR
- 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.
- G. 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

. GENERAL

- 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
- 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, I 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
- 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.
- 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)
 - 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)
 - UL (UNDERWRITER'S LABORATORY)
- 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 MATERIA ISTS 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.
- 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

- 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.
- 4 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.
- 6. PHASE MARKINGS TO BE USED AT POWER CONDUCTOR TERMINATIONS.
- 7. CONTRACTOR SHALL ENSURE INTEGRITY IS MAINTAINED WHEN INSTALLING CONDUIT AND
- INSTALL PULL STRING IN ALL CONDUIT.
- 9. FOR ROOFTOP INSTALLS AND BUILD-OUTS, CONDUITS INSIDE BUILDING AND ON ROOF BHALL BE RGS, UNLESS OTHERWISE NOTED. FOR RAW LAND SITES AND CO-LOCATES, PV SCHEDULE 80 SHALL BE UTILIZED UNLESS NOTED OTHERWISE.
- 10. MAINTAIN MINIMUM 1'-0" VERTICAL AND 1'-0" HORIZONTAL SEPARATIONS FROM ANY MECHANICAL GAS PIPING.
- 11. 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.

- ALL GROUND CONNECTIONS TO BUILDING SHALL BE MADE USING TWO-HOLE CONNECTOR: PROVIDE STAINLESS STEEL BOLTS AND LOCK WASHERS ON ALL MECHANICAL GROUND
- 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
- 3. ANY METALLIC ITEM WITHIN 6' OF GROUND CONDUCTORS MUST BE CONNECTED TO THE GROUNDING SYSTEM.
- 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.
- G. 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.

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 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

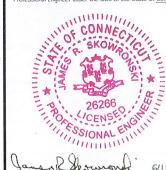
Information Technology, Inc. **GENERAL DYNAMICS** 661 MOORE RD STE 110 KING OF PRUSSIA, PA 19406

bureach vees.

Hereby certify that this plan, specification, or report was prepary

me or under my direct supervision and that I am a duly Licens

Professional Engineer under the laws of the State of Connecticu



DATE DESCRIPTION

DATE SSUED 06/15/201 FINAL

CHESHIRE CENTRAL FA ID # 10050935

OO HIGHLAND AVE CHESHIRE, CT 06410

GENERAL NOTES

SCALE: NONE

37421 N-

SCOPE OF WORK DETAILS

- 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 5-1 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
- CONTRACTOR SHALL RESTORE & REPAIR ANY DAMAGED AREAS CAUSED BY CONSTRUCTION TO ORIGINAL OR BETTER

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-1, E-2 & E-3.
 (2) NEW 1" 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 EXITING 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.

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 THE FORM.





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PREPARED FOR:



CONSULTANT:

GENERAL DYNAMICS

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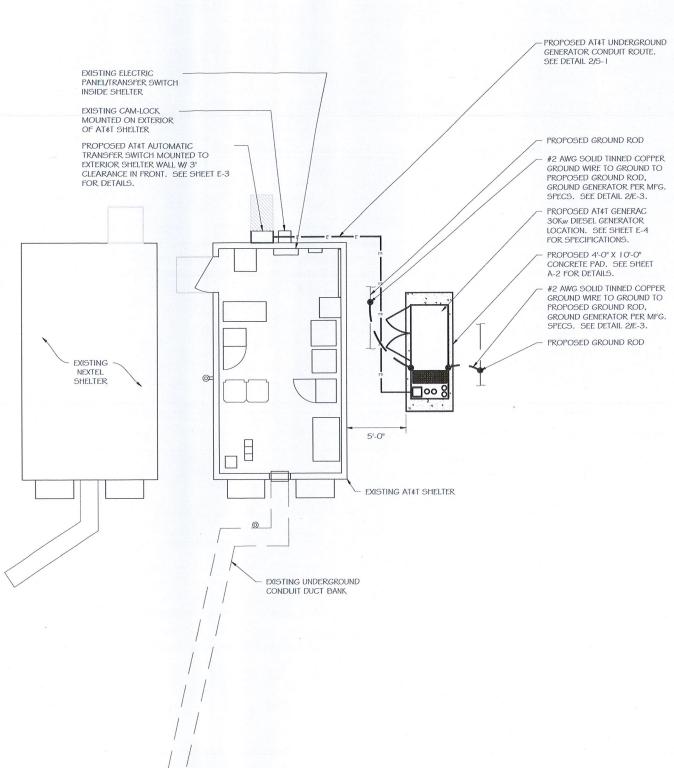
DATE DESCRIPTION FINAL DATE 06/15/2018

> CHESHIRE CENTRAL FAID # 10050935

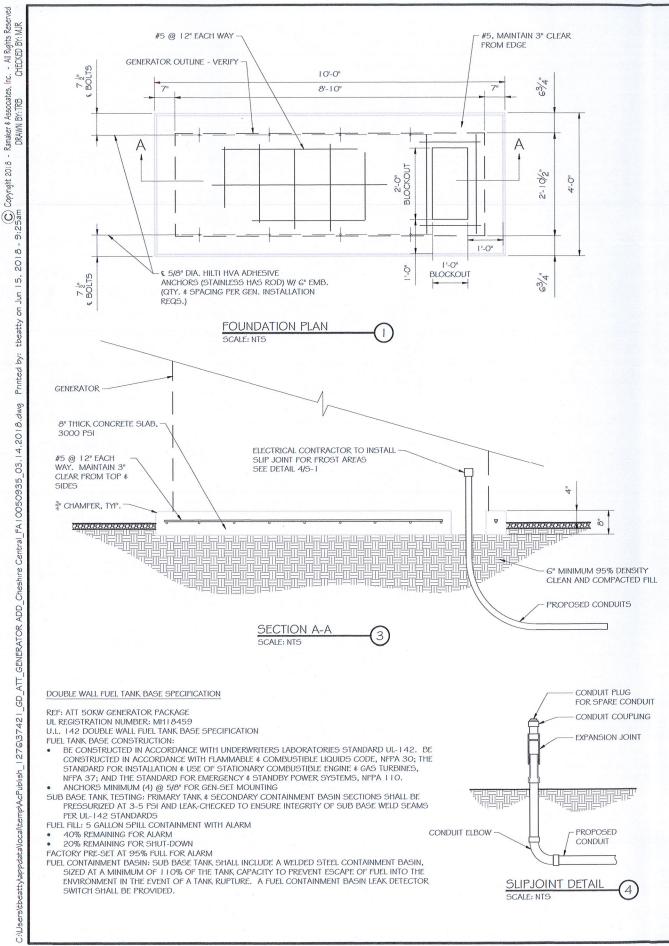
500 HIGHLAND AVE CHESHIRE, CT 06410

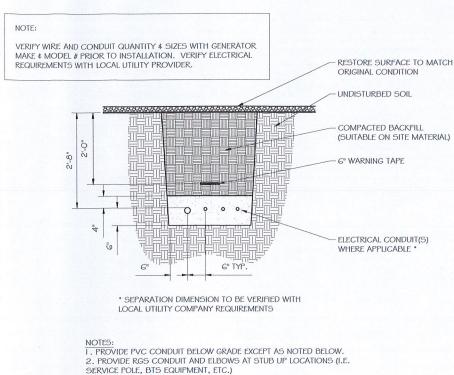
SITE PLAN & EQUIPMENT LAYOUT

0	3.75	7.5	1	15
				The best of the little
11" x 22" x		- I" = 7 - I" = 3		
PROJECT NUMBER		3	7421	
SHEET NUMBER			A-1	



SITE PLAN SCALE: I" = 7'-6"

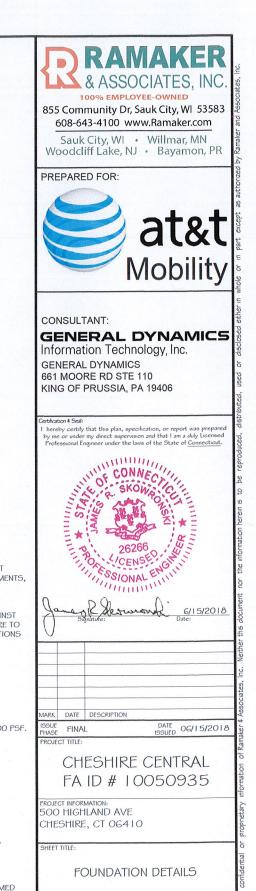




- 3. INSTALL UTILITY PULLBOXES PER NEC
 - UTILITY CONDUIT TRENCH

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, LISE 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):
- - EQUIPMENT SIZE : 889.1" H, 106" W, 38" D WEIGHT WITH WOODEN SHIPPING SKID
 - ENCLOSED GENERATOR WITH EMPTY FUEL TANK
 - : 3974 LBS
- TANK SIZE : 190 GAL
 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:
 - DESIGN : ACI318-11
 - CONSTRUCTION DETAILING
 - : CRSI MANUAL OF STANDARD PRACTICE REINE STEEL : ASTM A 615 GRADE 60, DEFORMED
 - : ASTM C 94. READY MIX CONCRETE MIXING AIR ENTRAINMENT : ACI 318 AND ASTM C-260
 - : ASTM C 33 AND C 330 (FOR LIGHT WEIGHT) AGGREGATE
- 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.
- 4.0 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 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 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.



SCALE: NONE

37421 5-1

O E

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	I.	START CIRCUIT
(5)	LOAD CENTER (DISTRIBUTION CENTER)	GENERATOR, ATS	(2) #12 (2) #12 (2) #12	(I) #I2 (I) #I2 (I) #I2	n n u	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	l u	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

SCALE: NTS

- PROPOSED 120/240,1¢, GOHz 200A NEMA 3R ATS PROPOSED 30KW GENERATOR 120/240, 1¢, GOHz EXISTING 200A SERVICE DISCONNECT EXISTING METER M 200A EXISTING 200A -SERVICE FEED 2 #2 AWG SOLID TINNED GROUND (TYP) PROPOSED GENERATOR -RECEPTACLE 20A EXISTING 120/240, 1¢ 200A DISTRIBUTION PANEL -PROPOSED 66 BLOCK FOR GENERATOR ALARM CIRCUITS (ON EXISTING TELCO BOARD) PROPOSED WIRING DIAGRAM SCALE: NTS

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PREPARED FOR:



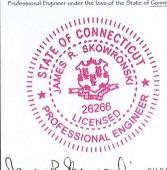
CONSULTANT:

GENERAL DYNAMICS

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

ertification \$ 5est:

I hereby certify that this plan, specification, or report was prey
by me or under my direct supervision and that I am a duly Licer
Professional Engineer under the laws of the State of Connection



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ARK DATE DESCRIPTION SOUE FINAL

DATE 06/15/2018

CHESHIRE CENTRAL FA ID # 10050935

500 HIGHLAND AVE CHESHIRE, CT 06410

WIRING DETAILS

SCALE: NONE

37421

HANDWRITTEN LABELS.

*CONTRACTOR TO UTILIZE NEXT AVAILABLE IN SEQUENCE SINGLE BREAKER POSITION FOR GENERATOR, BATTERY CHARGER, BATTERY HEATER AND BLOCK HEATER

EXISTING PANEL SCHEDULE INFORMATION WAS NOT AVAILABLE AT THE TIME

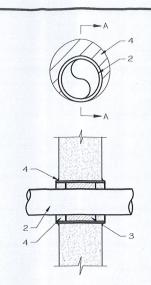
SCOPE OF WORK REQUIRES (3) PROPOSED SINGLE POLE, 20A BREAKERS, ONE EACH FOR CALLOUT NUMBER 5 ON DETAILS 1/E-1 AND 3/E-1. UTILIZE

EMPTY OR SPARE SPACES ON EXISTING PANELBOARD IF POSSIBLE. IF SUFFICIENT SPACES ARE NOT PRESENT IN MAIN PANEL, PROVIDE NEW SUBPANEL FED WITH NEW TWO-POLE, I OOA BREAKER IN MAIN PANELBOARD. RELOCATE EXISTING CIRCUITS TO SUBPANEL WHERE REQUIRED. SQUARE D

QO LOAD CENTER RECOMMENDED AS NECESSARY.

EXISTING PANEL SCHEDULE

OF DRAWING CREATION.



- I. 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-1150 CONDUIT THROUGH BEARING WALL SIMILAR TO U.L. DESIGN NO. U902 F RATING = $3~\mathrm{Hz}$ 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 U. 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)
 - 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 CP6015 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)





Type VN

Type GR
CABLE TAP TO GROUND ROD



SCALE: NTS

Type GT THROUGH CABLE TO TOP OF GROUND ROD.



Type VS



THROUGH CABLE TO SIDE OF GROUND ROD

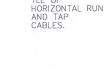
THROUGH VERTICAL CABLE VERTICAL STEEL
SURFACE OR TO
THE SIDE OF
EITHER
HORIZONTAL OR



CABLE TAP

GROUND ROD

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



Type TA

TEE OF

Mobility

100% EMPLOYEE-OWNED

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Woodcliff Lake, NJ · Bayamon, PR

CONSULTANT:

PREPARED FOR:

GENERAL DYNAMICS

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

turcation & Jeas: hereby certify that this plan, specification, or report was prepar by me or under my direct supervision and that I am a duly License Professional Engineer under the laws of the State of <u>Connecticut</u>



6/15/2018

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RK DATE DESCRIPTION FINAL DATE 06/15/2018

CHESHIRE CENTRAL FAID # 10050935

ROJECT INFORMA 500 HIGHLAND AVE CHESHIRE, CT 06410

PANEL AND PENETRATION DETAILS

SCALE: NONE

37421 SHEET E-2

HORIZONTAL
CABLE TAP TO
VERTICAL STEEL
SURFACE OR
THE SIDE OF
HORIZONTAL PIPE

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

Type VV

CADWELD DETAILS SCALE: NTS

CONDUIT (TYP)

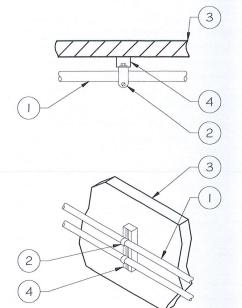
BUTTERFLY CLAMP AS REQUIRED

(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



- CADWELD - GRADE

GROUND ROD DETAIL

#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
- 2. 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

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Certification 4 Seal: I hereby certify that this plan, specification, or report was p by me or under my direct supervision and that I am a duly up. Professional Engineer under the laws of the State of Company or the state	KING OF	PRUSSIA, PA 19406
I hereby certify that this plan, specification, or report was p by me or under my direct supervision and that I am a duly Li	,	
by me or under my direct supervision and that I am a duly Li	Certification # Seal:	
	by me or unde	r my direct supervision and that I am a duly Li



DATE 06/15/2018 FINAL

> CHESHIRE CENTRAL FA ID # 10050935

PROJECT INFORMATION: 500 HIGHLAND AVE CHESHIRE, CT 06410

ATS, CONDUIT & GROUND ROD **DETAILS**

SCALE: NONE

37421

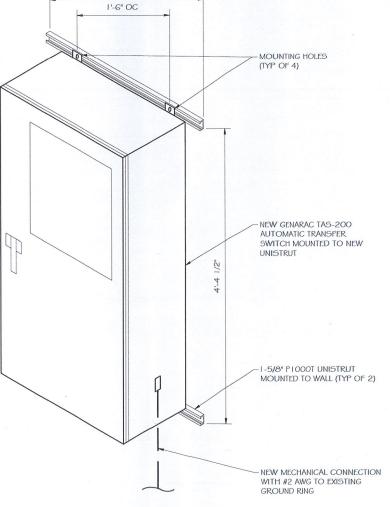
CONDUIT WALL MOUNT

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"

NOTE:

- I. 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



SD030

2.4L

Standby Power Rating

Prime Power Rating*

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

Generac products are designed to the following standards:

NFPA70, 99, 110, 37

NEC700, 701, 702, 708

ANSI C62 41

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

NEMA ICS10, MG1, 250, ICS6, AB1

UL2200, UL508, UL142, UL498

Codes and Standards

NEMA

ANSI

USA

27 kW 34 kVA 60 Hz

30 kW 38 kVA 60 Hz



Powering Ahead

application.

purchase.

For over 50 years, Generac has led the industry with

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,

meet the standby power needs of practically every

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

Generac is committed to ensuring our customers'

service support continues after their generator

application under adverse conditions.

configurations and arrangements, allowing us to

innovative design and superior manufacturing.

EPA Certified Stationary Emergency

00.

Image used for illustration purposes only

SD030

30 kW 30 kW SD030 **Industrial Diesel Generator Set**

ALTERNATOR SYSTEM

Vented rotor

Skewed stator

Amortisseur winding

Brushless Excitation

lacing, varnishing)

Full load capacity alternator

Protective thermal switch

Internal Genset Vibration Isolation

Separation of circuits - high/low voltage

Separation of circuits - multiple breakers

Silencer housed in discharge hood (enclosed only)

2 Year Limited Warranty (Standby rated Units)

Silencer mounted in the discharge hood (enclosed only)

1 Year Limited Warranty (Prime rated units)

Sealed Bearings

GENERATOR SET

2/3 pitch

UL2200 GENprotect "

12 leads (3-phase, non 600 V)

Auxiliary voltage regulator power winding

Automated manufacturing (winding, insertion,

Rotor dynamically spin balanced (get tolerance)

Class H insulation material

GENERAC INDUSTRIAL

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

Cooling System

- Closed Coolant Recovery System
- UV/Ozone resistant hoses
- Factory-Installed Radiator
- Badiator 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

Silencer Heat Shield

Wrapped Exhaust Piping

Standard Factory Testing

- All Phase Currents
- Oil Pressure
- Engine Speed
- Battery Voltage
- Date/Time Fault History (Event Log)
- Waterproof/sealed Connectors

- E-Stop (Red Mushroom-Type)
- NEPA110 Level Land II (Programmable)
- Customizable Alarms, Warnings, and Events
- Sealed Boards

- Single point ground

ENCLOSURE (if selected)

- Rust-proof fasteners with nylon washers to protect
- 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
- Vents
- Sloped top Sloped bottom
- Factory pressure tested (2 psi)
- Rupture basin alarm
- Fuel level
- Check valve in supply and return lines Rhino Coat™ - Textured polyester powder coat
- Stainless hardware

CONTROL SYSTEM



- Control Panel
- 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
- Coolant Temperature
- Coolant Level

- Frequency
- Isochronous Governor Control
- Audible Alarms and Shutdowns
- Not in Auto (Flashing Light)
- Auto/Off/Manual Switch
- Modbus protocol
- Predictive Maintenance algorithm
- Password parameter adjustment protection

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

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

Mobility

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PREPARED FOR:

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ARK DATE DESCRIPTION FINAL. DATE 06/15/2018

CHESHIRE CENTRAL FA ID # 10050935

500 HIGHLAND AVE CHESHIRE, CT 06410

GENERAC 30KW GENERATOR SPECIFICATIONS

SCALE: NONE

37421

GENERAC 30KW GENERATOR SPECIFICATIONS

F-4

TTS Series Switches

200 Amps

600 VAC

GENERAC' INDUSTRIAL

TAS200 TAS200

200A Automatic Transfer Switch

TAS200

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 Bustration purposes only.

Features

- STEEL CONSTRUCTION
- NEMA 3R ENCLOSURE WITH HINGED "PADLOCKING" DOORS
- STAINLESS STEEL HARDWARE
- CAMLOCK "QUICK CONNECT" CAPABILITY
- OPERATIONAL STATUS VIEW VIA
 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 standards:



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



NEC 700, 701 and 702



EMA 250

Application and Engineering Data

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

	120/240 Single-Phase, 200A	
Voltage/Phase/Amps	120/208 3-Phase, 200A	
Antia Res. tias d'Artiba	120/240 3-Phase, 200A	
D	Eaton 200 amp Utility Breaker	
Breaker	Eaton 200 arrip Generator Breaker	in the
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	
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	Garage
	Single-Phase: Black L1, Red L2, White-Neutral, Green-Ground	GENERAC
	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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PREPARED FOR:



CONSULTANT:

GENERAL DYNAMICS

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

Certification # 5

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



Signature: Onto:

MARK DATE DESCRIPTION

CHESHIRE CENTRAL FA ID # 10050935

DATE ISSUED 06/15/2018

PROJECT INFORMATION: 500 HIGHLAND AVE CHESHIRE, CT 06410

FINAL

SHEET TITL

GENERAC ATS SPECIFICATIONS

SCALE: NONE

PROJECT 37421

SHEET E-5