GDIT

May 23, 2023

VIA ELECTRONIC AND FEDERAL EXPRESS

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

New Cingular Wireless PCS, LLC ("AT&T")
Notice of Exempt Modification
Emergency Back-up Generator
1050 Buckley Highway, Stafford Springs, CT 06076
Lat.: 41.99909190; Long.: -072.15219890

Dear Ms. Bachman:

This letter and enclosures are respectfully submitted on behalf of New Cingular Wireless PCS, LLC ("AT&T"). AT&T currently maintains its wireless telecommunications facility on the existing tower located at 1050 Buckley Highway in the Town of Union, Connecticut. The underlying property is owned by Wayne and Kathy-Lee Kemp and the tower is owned by SBA. AT&T submits this letter and enclosures to the Connecticut Siting Council ("Council") to notify the Council of AT&T's intent to perform modifications to the existing facility that do not have substantial adverse environmental effects and thus do not require a certificate pursuant to Section 16-50k of the Connecticut General Statutes.

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

AT&T's proposed generator will also advance the State's goal of natural disaster and emergency preparedness. As discussed in the Council's Docket 432 Findings and Report and Docket 440 proceedings and Findings of Fact (Nos. 76- 77), in response to two significant storm events in 2011, the State formed a Two Storm Panel (the "Panel") that evaluated Connecticut's approach to planning and mitigation of impacts associated with emergencies and natural disasters. The Panel found that "wireless telecommunications service providers were not prepared to serve residential and business customers during a power outage" because certain companies had limited backup generator capacity.

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The Panel also noted that "[t]he failure of a large portion of Connecticut's telecommunications system during the two storms is a life safety issue." The Panel recommended that State regulatory bodies review "telecommunications services currently in place to verify that the vendors have sufficient generator and backhaul capacity to meet the emergency needs of consumers and businesses" and that the "Connecticut Siting Council should require continuity of service plans for any cellular tower to be erected." The planned modifications will ensure continuity of services by reinforcing AT&T's backup power and backhaul capacity to meet the emergency needs of first responders, consumers, and businesses in the event of a power outage.

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

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

This modification complies with the aforementioned approval. AT&T's proposed modification will maintain compliance with any relevant conditions these original approvals and any other subsequent approvals. The proposed modifications will have no impact on the existing tower structure itself or the radiofrequency emissions as the proposed modifications only consist of the addition of one new generator within the grade-level equipment compound. Thus, AT&T respectfully requests a waiver from submission of information relating to the existing tower structure or the radio-frequency emissions.

Please accept this letter as notification pursuant to R.C.S.A. § 16-50j-73 for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-73. In accordance with R.C.S.A.

§ 16-50j-73, a copy of this letter and enclosure are being sent to David D. Eaton, Town of Union First Selectman, Lee Ann Fitzgerald, Planning/Zoning Chairman and Property and Tower Owner as stated above. Certification of Service is enclosed as Attachment 3.

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

Very truly yours

Catherine Conklin

Catherine Conklin, Site Acquisition Specialist General Dynamics Wireless Services 2586 Industry Lane, Suite 100 Norristown, PA 19403 (202) 568-0437 catherine.conklin@gdit.com

GENERAL DYNAMICS

Information Technology

CC:

David D. Eaton, First Selectman Union Town Hall 1043 Buckley Highway Union, CT 06076 (860) 684-3812

Lee Ann Fitzgerald, Planning/Zoning Chairman Union Town Hall 1043 Buckley Highway Union, CT 06076 (860) 684-3812

Wayne & Kathy-Lee Kemp 1050 Buckley Highway Union, CT 06076 (860) 684-7105

SBA, Property Owner via email

ATTACHMENT 1



at&t Mobility

SITE NAME: UNION CENTRAL FA LOCATION CODE: 10071287 **SBA SITE I.D. #: CT24369**

GENERATOR PROJECT 30KW GENERAC DIESEL GENERATOR 200A GENERAC ATS

1050 BUCKLEY HIGHWAY STAFFORD SPRINGS, CT 06076

1 VICINITY MAP SITE LOCATION

SCOPE OF WORK

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.

FACILITIES BEFORE YOU DIG IN CONNECTICUT CALL BEFORE YOU DIG

811 OR 1-800-922-4455

TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND

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

APPLICABLE BUILDING CODE & STANDARDS

NI 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 N THESE PLANS ARE TO BE CONSTRUCTED TO PERMIT WORK NOT CONFORMING TO THESE CODES:

- INTERNATIONAL BUILDING CODE 2021
- . NATIONAL ELECTRIC CODE 2020
- . AMERICAN CONCRETE INSTITUTE (ACI) 3 I 8. 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 TOWER AND ANTENNA SUPPORTING STRUCTURES
- 5. TIA 607, COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR

1 AERIAL VIEW OF SITE



PROJECT INFORMATION

PROJECT MANAGER

MATTHEW HIGGINS GENERAL DYNAMICS WIRELESS SERVICES

WESTWOOD, MA 02090 Matthew.Higgins@GDIT.com

ENGINEER:

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

APPLICANT INFORMATION: 150 STANDARD DR HANOVER, MD 21076

SITE NAME: UNION CENTRAL FA NUMBER: 10071287

PROPERTY OWNER:

1050 BUCKLEY HIGHWAY UNION, CT 06076

ADDRESS:

1050 BUCKLEY HIGHWAY STAFFORD SPRINGS, CT 06076

COUNTY: TOLLAND

41.999199° LONG.: -72.1525089

GROUND ELEVATION: 995 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

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- -4.2 GENERAC GENERATOR SPECIFICATIONS
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SIGNATURE BLOCK

AT¢T MGR. DATE

DATE GENERAL DYNAMICS

CONSTRUCTION MGR.

SITE ACQUISITION DATE

RAMAKER (608) 643-4100 www.ramaker.com

PREPARED FOR:



CONSULTANT:

GENERAL DYNAMICS

Information Technology, Inc.

GENERAL DYNAMICS 101 STATION DR WESTWOOD, MA 02090

hereby certify that this plan, specification, or report was prepare y 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>.



ARK DATE DESCRIPTION

UNION CENTRAL FA ID # 10071287

DATE 05/19/2023

050 BUCKLEY HIGHWAY STAFFORD SPRINGS, CT 06076

TITLE SHEET

SCALE: NONE

55405

T-1

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 OF THE WORK
- 4. CONSTRUCTION SUBCONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION SUBCONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS AND CONSTRUCTION SUBCONTRACTOR FURTHER AGREES TO 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 ERECTION OF TOWER.
- 3. ALL WORK SHALL COMPLY WITH OSHA AND STATE SAFETY REQUIREMENTS. PROCEDURES FOR HE PROTECTION OF EXCAVATIONS, EXISTING CONSTRUCTION AND UTILITIES SHALL BE ESTABLISHED PRIOR TO FOUNDATION INSTALLATION, IF TEMPORARY LIGHTING AND MARKING IS REQUIRED BY THE FEDERAL AVIATION ADMINISTRATION (FAA), IT IS THE SUBCONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE NECESSARY LIGHTS AND NOTIFY THE PROPER AUTHORITIES IN THE EVENT OF A PROBLEM
- 7. ALL WORK SHALL BE ACCOMPLISHED IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL CODES OR ORDINANCES. THE MOST STRINGENT CODE WILL APPLY IN THE CASE OF DISCREPANCIES OR DIFFERENCES IN THE CODE REQUIREMENTS.
- 8. ANY DAMAGE TO THE ADJACENT PROPERTIES WILL BE CORRECTED AT THE SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE LANDOWNER AND THE ENGINEER
- THE COMPLETE BID PACKAGE INCLUDES THESE CONSTRUCTION DRAWINGS ALONG WITH THE SPECIFICATIONS. SUBCONTRACTOR IS RESPONSIBLE FOR REVIEW OF TOTAL BID PACKAGE PRIOR TO BID SUBMITTAL
- IO. SUBCONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES WITHIN CONSTRUCTION LIMITS PRIOR TO CONSTRUCTION.
- I. 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 SUBCONTRACTOR
- 3. ALL SUITABLE BORROW MATERIAL FOR BACK FILL OF THE SITE SHALL BE INCLUDED IN THE BID. EXCESS TOPSOIL AND UNSUITABLE MATERIAL SHALL BE DISPOSED OF OFF SITE AT LOCATIONS APPROVED BY GOVERNING AGENCIES PRIOR TO DISPOSAL.
- 4. SEEDING AND MULCHING OF THE SITE WILL BE ACCOMPLISHED AS SOON AS POSSIBLE AFTER COMPLETION OF THE SITE DEVELOPMENT. THE SUBCONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAIN AN ADEQUATE COVER OF VEGETATION OVER THE SITE FOR A ONE YEAR PERIOD
- 15. PERMITS: THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND INCURRING THE COST OF ALL REQUIRED PERMITS, INSPECTIONS, CERTIFICATES, ETC.
- 6. RECORD DRAWINGS: MAINTAIN A RECORD OF ALL CHANGES, SUBSTITUTIONS BETWEEN WORK AS SPECIFIED AND INSTALLED. RECORD CHANGES ON A CLEAN SET OF CONTRACT DRAWINGS WHICH SHALL BE TURNED OVER TO THE CONSTRUCTION MANAGER UPON COMPLETION OF THE PROJECT
- 7. 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.

GENERAL NOTES:

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

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

ELECTRICAL NOTES: A. GENERAL

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

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

- 3. SCHEDULE 80 PVC CONDUIT SHALL BE USED ABOVE GROUND, WHERE ABOVE GRADE IS DEFINED AS THE GROUND OF THE TURN-UP
- 4. BELL END OR TERMINAL ADAPTER MUST BE INSTALLED ON END OF PVC CONDUIT PER NEC 352.46, 300.4 F. (3)
- CONDUIT BENDS SHALL BE MADE IN ACCORDANCE WITH NEC TABLE 346-10. NO RIGHT ANGLE DEVICE OTHER THAN STANDARD CONDUIT ELBOWS WITH 12" MINIMUM INSIDE SWEEPS FOR ALL CONDUITS 2" OR LARGER
- 6. POWER WIRING SIZE SHALL NOT BE SMALLER THAN #12 AWG.
- 7. ALL WIRING SHALL BE COPPER. ALUMINUM WILL NOT BE ACCEPTABLE ALL POWER CIRCUITS SHALL CONTAIN A GROUND WIRE.
- 8. PHASE MARKINGS TO BE USED AT POWER CONDUCTOR TERMINATIONS.
- 9. CONTRACTOR SHALL ENSURE INTEGRITY IS MAINTAINED WHEN INSTALLING CONDUIT AND
- 10. INSTALL PULL STRING IN ALL CONDUIT.
- II. FOR ROOFTOP INSTALLS AND BUILD-OUTS, CONDUITS INSIDE BUILDING AND ON ROOF SHALL BE RGS. UNLESS OTHERWISE NOTED. FOR RAW LAND SITES AND CO-LOCATES. PVC SCHEDULE 80 SHALL BE UTILIZED UNLESS NOTED OTHERWISE.
- 12. MAINTAIN MINIMUM 1'-0" VERTICAL AND 1'-0" HORIZONTAL SEPARATIONS FROM ANY MECHANICAL GAS PIPING.
- 1.3 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 CONNECTORS PROVIDE STAINLESS STEEL BOLTS AND LOCK WASHERS ON ALL MECHANICAL GROUND CONNECTIONS.
- ALL EQUIPMENT SURFACES TO BE BONDED TO GROUNDING SYSTEM SHALL BE STRIPPED OF ALL PAINT AND DIRT. CONNECTIONS TO VARIOUS METALS SHALL BE OF A TYPE AS TO CAUSE A GALVANIC OR CORROSIVE REACTION. AREA SHALL BE REPAINTED FOLLOWING
- 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 THE PLANS AND DETAILS, AND AS DESCRIBED HEREIN SHALL BE FURNISHED BY THIS CONTRACTOR UNLESS OTHERWISE NOTED
- EXACT LOCATION OF GROUND CONNECTION POINTS SHALL BE DETERMINED IN FIELD. ADJUST LOCATIONS INDICATED ON PLANS ACCORDING TO ACTUAL EQUIPMENT LOCATIONS TO KEEP THE GROUND CONNECTION CABLES AS SHORT AS PRACTICAL
- PROVIDE ALL ELECTRICAL SYSTEM AND EQUIPMENT GROUNDS AS REQUIRED BY THE CURRENT EDITION OF THE NATIONAL ELECTRIC CODE AND THE CURRENT EDITION OF THE NATIONAL ELECTRICAL SAFETY CODE. BONDING JUMPERS WITH APPROVED GROUND FITTINGS SHALL BE INSTALLED AT ALL RACEWAYS, EQUIPMENT ENCLOSURES, PULL BOXES ETC. TO MAINTAIN GROUND CONTINUITY WHERE REQUIRED BY CODE
- 8. ALL EQUIPMENT GROUND CONDUCTORS SHALL BE TIN COATED, #2 AWG COPPER UNLESS NOTED OTHERWISE ON THE DRAWINGS
- PROVIDE PRE AND POST GROUND TEST RESULTS, USING CLAMP-ON TESTER. TEST RESULTS SHALL BE PHOTOS WITH DIGITAL TIME AND GPS STAMPED/EMBEDDED.

E. INSPECTION/DOCUMENTATION

- THE CONTRACTOR, UPON COMPLETION OF HIS WORK, SHALL PROVIDE AS-BUILT DRAWINGS INFORMATION SHOULD BE GIVEN TO THE GENERAL CONTRACTOR FOR INCLUSION IN FINAL AS-BUILT SURVEY DOCUMENTS TO BE GIVEN TO THE OWNER.
- CONTRACTOR SHALL SUPPLY DOCUMENTATION ATTESTING TO THE COMPLETE GROUND SYSTEM'S RECEPTIVITY (MAX. 5 OHMS).
- 3. 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 ULLISTING FOR THAT EQUIPMENT IS NOT VOIDED



PREPARED FOR:



CONSULTANT:

GENERAL DYNAMICS

Information Technology, Inc.

GENERAL DYNAMICS 101 STATION DR WESTWOOD, MA 02090

hereby certify that this plan, specification, or report was prei me or under my direct supervision and that I am a duly License ional Engineer under the la vs of the State of Connecticut.



5/19/2023

DATE DESCRIPTION DATE 05/19/2023

UNION CENTRAL FA ID # 10071287

050 BUCKLEY HIGHWAY STAFFORD SPRINGS, CT 06076

GENERAL NOTES

SCALE: NONE

55405 N- I

0



PREPARED FOR:



CONSULTANT:

GENERAL DYNAMICS

Information Technology, Inc.

GENERAL DYNAMICS 101 STATION DR WESTWOOD, MA 02090

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 Connecticut.

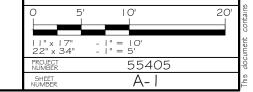


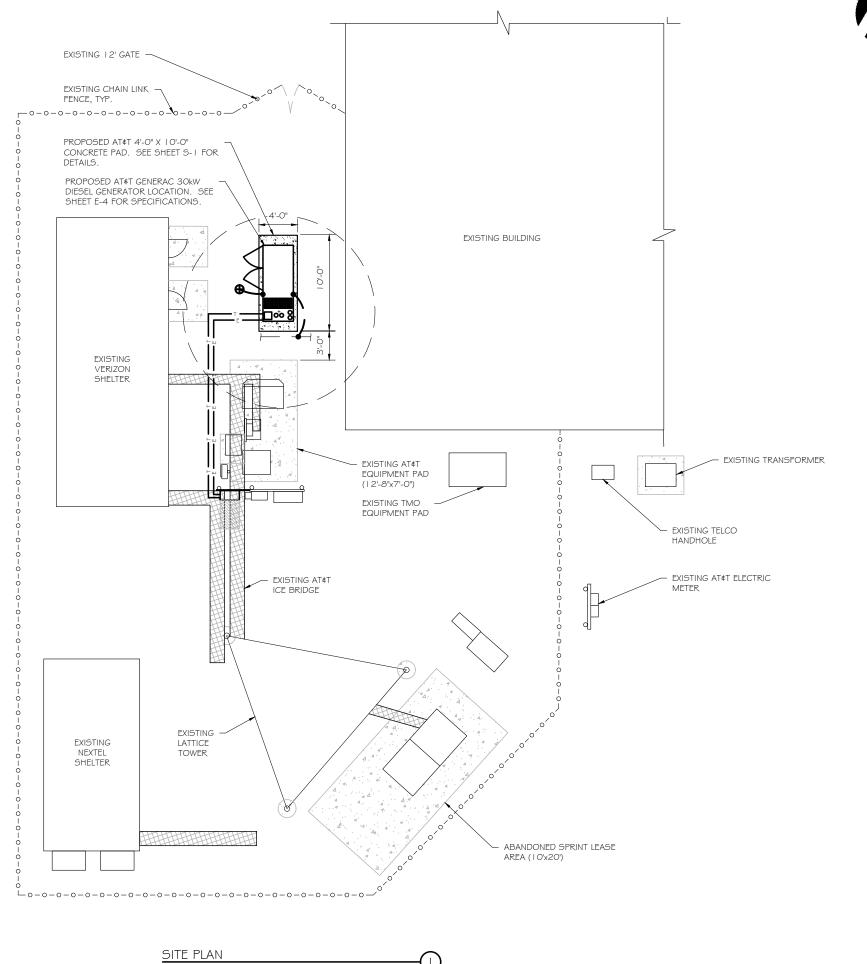
MARK DATE DESCRIPTION DATE 05/19/2023

UNION CENTRAL FA ID # 10071287

PROJECT INFORMATION 1050 BUCKLEY HIGHWAY STAFFORD SPRINGS, CT 06076

SITE PLAN





SCALE: | " = | 0'

GENERAL:

- NEW GENERAC DIESEL GENERATOR PROVIDED BY GENERAL DYNAMICS \$ INSTALLED BY GENERAL CONTRACTOR, SEE E-4.
- NEW 4'-0" X 10'-0" CONCRETE PAD PROVIDED € INSTALLED BY
- GENERAL CONTRACTOR (AS REQUIRED) SEE S-1 NEW GENERAC AUTOMATIC TRANSFER SWITCH PROVIDED BY GENERAL DYNAMICS \$ INSTALLED BY CONTRACTOR (AS REQUIRED)

SCOPE OF WORK DETAILS

- CONTRACTOR TO VERIFY ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION
- CONTRACTOR SHALL RESTORE & REPAIR ANY DAMAGED AREAS CAUSED BY CONSTRUCTION TO ORIGINAL OR BETTER CONDITION

PROPOSED 4" Ø STD. PIPE -

#2 AWG GROUND WIRE -

PROPOSED CONCRETE

TO EXISTING GROUND

(TYP.)

FOOTING

- INSTALL PULL STRING IN EACH CONDUIT

 (1) NEW 2" AND (1) NEW 1" 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.
- (I) NEW I " 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.
- (I) NEW I" ALARM CONDUIT & CABLING PROVIDED & INSTALLED BY GENERAL CONTRACTOR. SEE E-I, E-2 & E-3.

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

3'-6"

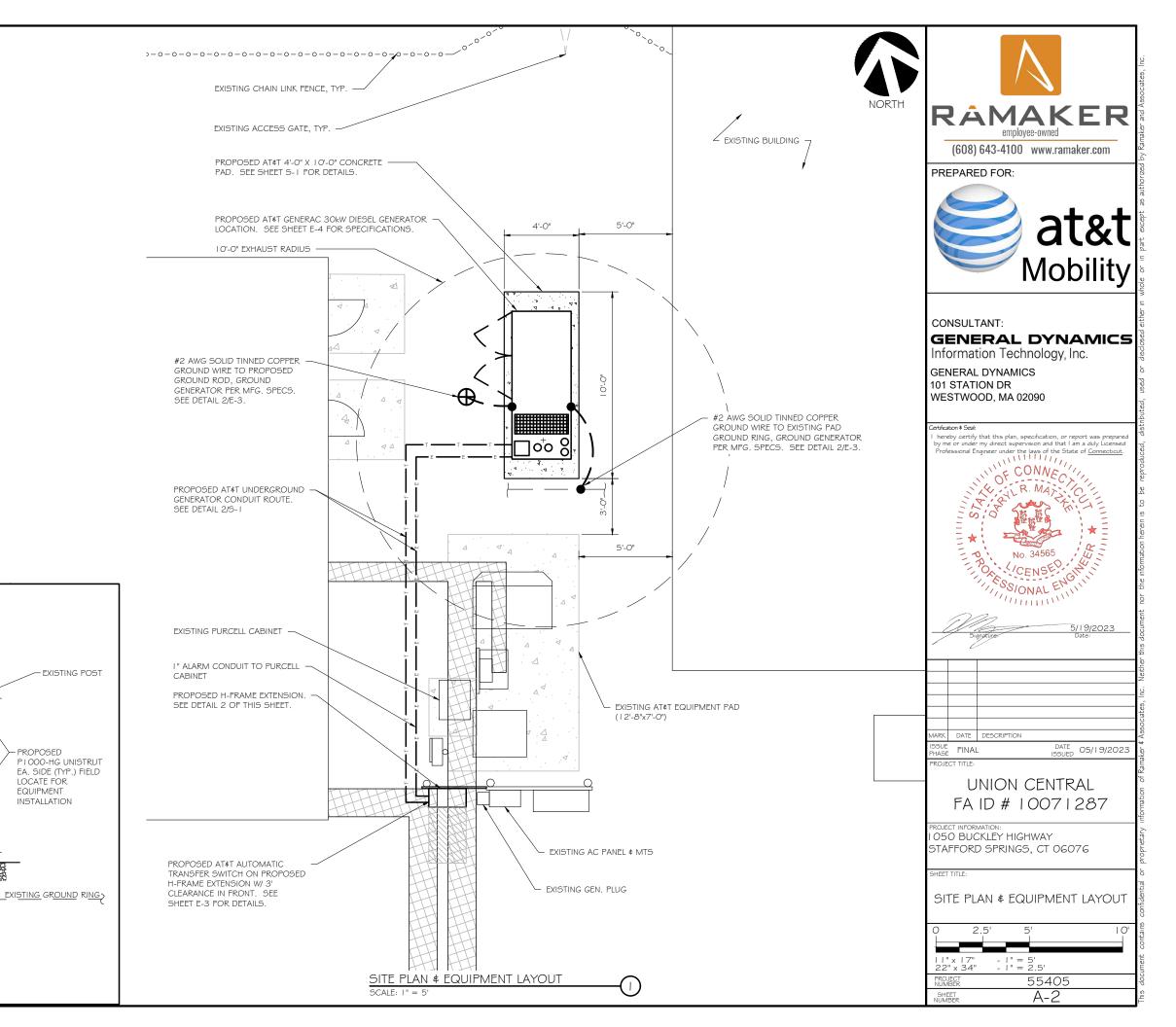
18"

H-FRAME EXTENSION DETAIL (2)

PROPOSED

LOCATE FOR

EQUIPMENT INSTALLATION





(0)

SEAMS

PER UL-142 STANDARDS

40% REMAINING FOR ALARM

20% REMAINING FOR SHUT-DOWN

FACTORY PRE-SET AT 95% FULL FOR ALARM

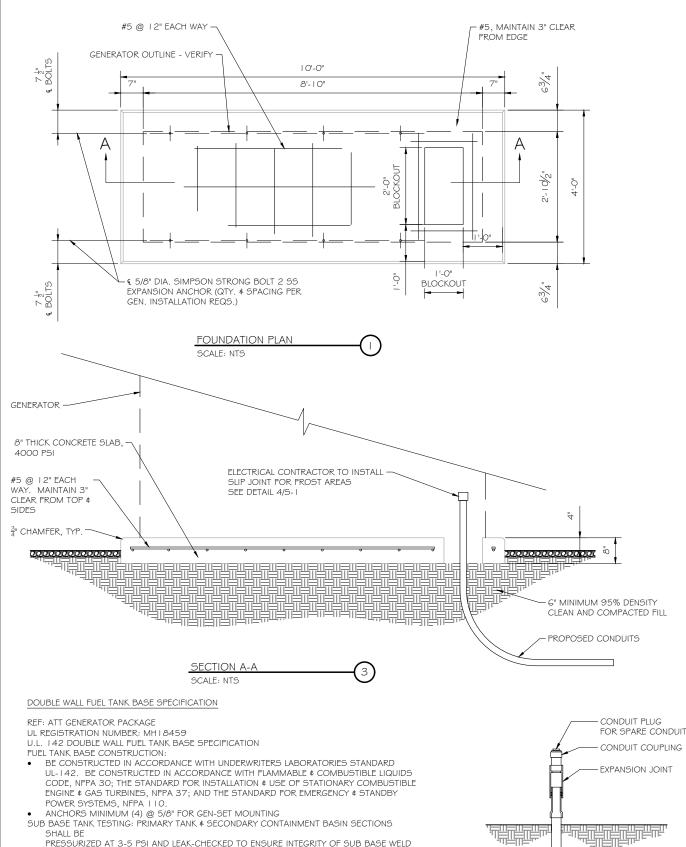
FUEL FILL: 5 GALLON SPILL CONTAINMENT WITH ALARM

BASIN LEAK DETECTOR SWITCH SHALL BE PROVIDED.

FUEL CONTAINMENT BASIN: SUB BASE TANK SHALL INCLUDE A WELDED STEEL CONTAINMENT

BASIN, SIZED AT A MINIMUM OF 110% OF THE TANK CAPACITY TO PREVENT ESCAPE OF

FUEL INTO THE ENVIRONMENT IN THE EVENT OF A TANK RUPTURE. A FUEL CONTAINMENT



CONDUIT ELBOW

SLIPJOINT DETAIL

SCALE: NTS

PROPOSED

CONDUIT

NOTE: VERIFY WIRE AND CONDUIT QUANTITY & SIZES WITH GENERATOR MAKE \$ MODEL # PRIOR TO INSTALLATION. VERIFY ELECTRICAL RESTORE SURFACE TO MATCH REQUIREMENTS WITH LOCAL UTILITY PROVIDER. ORIGINAL CONDITION UNDISTURBED SOIL COMPACTED BACKFILL (SUITABLE ON SITE MATERIAL) 6" WARNING TAPE ELECTRICAL CONDUIT(S) WHERE APPLICABLE * 6" TYF

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

- I. PROVIDE PVC CONDUIT BELOW GRADE EXCEPT AS NOTED BELOW. 2. PROVIDE RGS CONDUIT AND ELBOWS AT STUB UP LOCATIONS (I.E. SERVICE POLE, BTS EQUIPMENT, ETC.)
- 3. INSTALL UTILITY PULLBOXES PER NEC.

UTILITY CONDUIT TRENCH SCALE: NTS

STRUCTURAL GENERAL NOTES

- I.I 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.
- I.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 VERIPY ALL EQUIPMENT MOUNTING DIMENSIONS PER MANUFACTURER DRAWINGS 1.5 DESIGN LOADS ARE (GENERAC):

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

EQUIPMENT SIZE WEIGHT WITH WOODEN SHIPPING SKID

ENCLOSED GENERATOR

- : 3974 LBS 2.0 FOR DESIGN \$ ANALYSIS OF THE FOUNDATION, THE MINIMUM NET SOIL BEARING CAPACITY SHALL BE ASSUMED TO BE 2000 PSF 3.0 CONCRETE
- 3.1 MEET OR EXCEED THE FOLLOWING CODES & STANDARDS:

DESIGN : ACI3 | 8- | | CONSTRUCTION : ACI301

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

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

- 3.2 CONCRETE STRENGTH AT 28 DAYS SHALL BE 4000 PSI MINIMUM 3.3 DO NOT FIELD BEND OR WELD TO GRADE 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 & FXCAVATION NOTES
- 4.1 SLAB SHALL BE CONSTRUCTED UPON UNDISTURBED. NATURAL SUBGRADE OR COMPACTED GRANULAR FILL WITH AN ASSUMED MINIMUM NET ALLOWABLE BEARING CAPACITY OF 1800 PSF.
- 4.2 ALL ORGANIC AND/OR OTHER UNSUITABLE MATERIAL SHALL BE REMOVED FRO FOUNDATION \$ SLAB SUBGRADE \$ BACKFILL AREAS \$ THEN BACKFILLED WITH ACCEPTABLE GRANULAR FILL COMPACTED TO 95% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE
- 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.



PREPARED FOR:



CONSULTANT:

GENERAL DYNAMICS

Information Technology, Inc.

GENERAL DYNAMICS 101 STATION DR WESTWOOD, MA 02090

hereby certify that this plan, specification, or report was preme or under my direct supervision and that I am a duly License sional Engineer under the laws of the State of <u>Connecticut</u>.



IARK DATE DESCRIPTION

DATE 05/19/2023

UNION CENTRAL FA ID # 10071287

050 BUCKLEY HIGHWAY STAFFORD SPRINGS, CT 06076

FOUNDATION DETAILS

SCALE: NONE

55405 5-1

 \odot

DIAGRAM CIRCUIT SCHEDULE

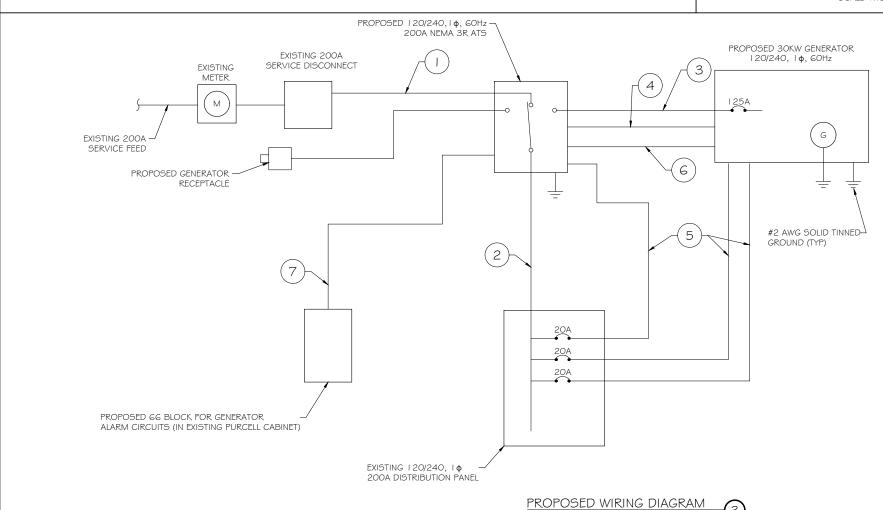
NO.	FROM	TO	WIRES	GROUND	CONDUIT SIZE	FUNCTION
	NORMAL POWER SOURCE	AUTOMATIC TRANSFER SWITCH	(3) 3/0	(1) #4	2"	NORMAL POWER FEEDER TO ATS (CUT BACK EXISTING)
2	AUTOMATIC TRANSFER SWITCH	LOAD CENTER	(3) 3/0	(1) #4	2"	POWER FEEDER FROM ATS TO PANEL
3	GENERATOR	AUTOMATIC TRANSFER SWITCH	(3) #1	(1) #6	1-1/2"	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	(I) #I2 (I) #I2 (I) #I2	n n n	CIRCUIT FOR GENERATOR BLOCK HEATER \$ BATTERY HEATER CIRCUIT FOR BATTERY CHARGER CIRCUIT FOR ATS
6	GENERATOR	AUTOMATIC TRANSFER SWITCH	I 2-PAIR 24 AWG OR 2EA G-PAIR CAT5	N/A	Ι"	ALARM CABLES (I) I 2 PAIR 24 AWG. PROVIDE 24" OF SLACK CABLE. FINAL PUNCH DOWN IS BY AT\$T TECH. LABEL ALL WIRES
7	AUTOMATIC TRANSFER SWITCH	ALARM BLOCK	I 2-PAIR 24 AWG OR 2EA G-PAIR CAT5	N/A	1"	ALARM CABLES (I) I 2 PAIR 24 AWG (RUN TO PURCELL CABINET & INTO ALARM BOX). PROVIDE 24" OF SLACK CABLE. FINAL PUNCH DOWN IS BY AT&T TECH. LABEL ALL WIRES

ALARM WIRE IDENTIFICATION CHART

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

CIRCUIT DETAIL

ALARM WIRING IDENTIFICATION CHART (2) SCALE: NTS



SCALE: NTS



PREPARED FOR:



CONSULTANT:

GENERAL DYNAMICS

Information Technology, Inc.

GENERAL DYNAMICS 101 STATION DR WESTWOOD, MA 02090



MARK DATE DESCRIPTION DATE 05/19/2023

UNION CENTRAL FA ID # 10071287

1050 BUCKLEY HIGHWAY STAFFORD SPRINGS, CT 06076

WIRING DETAILS

SCALE: NONE

55405 E- I

Breaker

Position

Breaker

Type

1P

2P

2P

2P

23

On/Off

ON

ON

ON

ON

Size

20

50

50

50

NOTE: 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

AC Distribution Panel - Layout Diagram

Position

Circuit Label

BOARD GFCI

RECT. #1

RECT. #2

RECT. #3

EXISTING PANEL SCHEDULE

Breaker Breaker

Type

3P

1P

2P

1P

/ 1P

/ 1P

24 1P

20

On/Off

ON

ON

ON

OFF

ON

ON

ON

Size

50

20

50

40

20

20

20

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

Circuit Label

SURGE

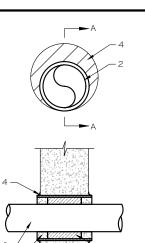
LIGHT

RECT. #4

NUSS 120V

ATS BLOCK HEATER

BATTERY CHARGER



NOTE:

- . IF EXISTING CONSTRUCTION VARIES FROM THIS DETAIL, AN EQUAL 3-HR U.L. PENETRATION APPROPRIATE FOR THE EXISTING WALL TYPE SHALL BE CONSTRUCTED
- 2. 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 HR
T RATING = 0 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 CPGO IS OR CPGO 4 SEALANT IS LISTO

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC. : CP60 I S, CP604, CP606, OR FS-ONE SEALANT.

* BEARING THE UL CLASSIFICATION MARK

OUTER WALL PENETRATION DETAIL (IF APPLICABLE)

SCALE: NTS





Type VN

TAP TO VERTICAL STEEL

SURFACE OR

THE SIDE OF

HORIZONTAL PIPE

HORIZONTAL CABLE

Type GR

CABLE TAP TO
TOP OF GROUND



Type GT
THROUGH CABLE
TO TOP OF
GROUND ROD.



Type VS

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



THROUGH VERTICAL

SURFACE OR TO THE

VERTICAL STEEL

SIDE OF EITHER HORIZONTAL OR

VERTICAL PIPE

GROUND ROD

Type VV

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





Type TA

TEE OF
HORIZONTAL RUN
AND TAP CABLES.



Type GR

CABLE TAP TO
TOP OF
GROUND ROD





PREPARED FOR:



CONSULTANT:

GENERAL DYNAMICS

Information Technology, Inc.

GENERAL DYNAMICS 101 STATION DR WESTWOOD, MA 02090

Certification # Sea

I 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>.



MARK DATE DESCRIPTION

ISSUE FINAL

OJECT TITLE:

UNION CENTRAL FA ID # 10071287

DATE 05/19/2023

PROJECT INFORMATION:
I 050 BUCKLEY HIGHWAY
STAFFORD SPRINGS, CT 06076

SHEET TITLE:

PANEL AND PENETRATION DETAILS

SCALE: NONE

PROJECT 55405
SHEET NUMBER E-2

CONDUIT (TYP)

2

BUTTERFLY CLAMP AS REQUIRED

(3)

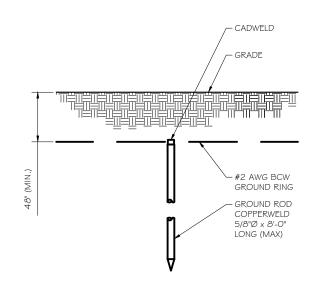
EXISTING WALL/CEILING

(4

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

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

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



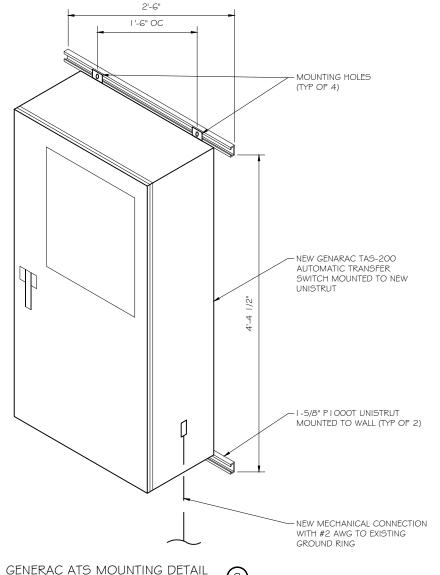
- GROUND RODS MAY BE: - COPPER CLAD STEEL
- SOLID COPPER GROUND RODS SHALL HAVE A MAXIMUM SPACING TWICE THE LENGTH OF ROD
- SEE RESISTIVITY REPORT FOR VERIFICATION AS AVAILABLE
- A LARGER CONDUCTOR SHALL BE REQUIRED IN AREAS HIGHLY PRONE TO LIGHTNING AND/OR AREAS WITH HIGHLY ACIDIC SOIL
- GROUND RODS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

GROUND ROD DETAIL SCALE: NTS

CONDUIT WALL MOUNT SCALE: NTS

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

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





PREPARED FOR:



CONSULTANT:

GENERAL DYNAMICS

Information Technology, Inc.

GENERAL DYNAMICS 101 STATION DR WESTWOOD, MA 02090



MARK DATE DESCRIPTION DATE 05/19/2023

UNION CENTRAL FA ID # 10071287

050 BUCKLEY HIGHWAY STAFFORD SPRINGS, CT 06076

ATS, CONDUIT & GROUND ROD DETAILS

SCALE: NONE

55405 SHEET E-3



SCALE: NTS

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

EPA Certified Stationary Emergency

Standby Power Rating 30 kW, 38 kVA, 60 Hz

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



*EPA Certified Prime ratings are not available in the US or its Territories



Image used for illustration purposes only

Codes and Standards

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



UL2200, UL508, UL489, UL142



CSA C22.2



BS5514 and DIN 6271



SAE J1349



NFPA 37, 70, 99, 110



NEC700, 701, 702, 708



ISO 3046, 7637, 8528, 9001



NEMA ICS10, MG1, 250, ICS6, AB1



ANSI C62.41

Powering Ahead

For over 50 years, Generac has provided innovative design and superior manufacturing.

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

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

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

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

SD030 | 2.2L | 30 kW INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

STANDARD FEATURES

ENGINE SYSTEM

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

· Engine Coolant Heater

- Fuel Lockoff Solenoid
- Primary Fuel Filter

Fuel System

Cooling System

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

Electrical System

· Battery Charging Alternator

CONTROL SYSTEM

GENERAC

Program Functions

Programmable Crank Limiter

• 7-Day Programmable Exerciser

RS-232/485 Communications

2-Wire Start Capability

Digital H Control Panel- Dual 4x20 Display

Special Applications Programmable Logic Controller

· All Phase Sensing Digital Voltage Regulator

Date/Time Fault History (Event Log)

· Isochronous Governor Control

· Waterproof/Sealed Connectors

- Battery Cables
- Battery Tray
- Rubber-Booted Engine Electrical Connections
- Solenoid Activated Starter Motor

ALTERNATOR SYSTEM

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

GENERATOR SET

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

- Rust-Proof Fasteners with Nylon Washers to Protect Finish
- High Performance Sound-Absorbing Material (Sound Attenuation Enclosures)
- Gasketed Doors
- Upward Facing Discharge Hoods (Radiator and Exhaust)
- Stainless Steel Lift Off Door Hinges
- RhinoCoat™ Textured Polyester Powder Coat Paint

FUEL TANKS (If Selected)

- UL 142/ULC S601
- Double Wall
- Normal and Emergency Vents
- Sloped Top
- Factory Pressure Tested
- Rupture Basin Alarm
- Fuel Level
- RhinoCoat™ Textured Polyester Powder Coat Paint

· 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
- 16 Channel Remote Trending
- 0.2 msec High Speed Remote Trending
- Alarm Information Automatically Annunciated on the Display

Full System Status Display

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

- Coolant Temperature
- Engine Speed

- Coolant Temperature
- Engine Overspeed

ENCLOSURE (If Selected)

GENERAC | INDUSTRIAL

- Stamped Air-Intake Louvers
- Stainless Steel Lockable Handles

- Sloped Bottom
- Check Valve In Supply and Return Lines
- Stainless Steel Hardware

· Oil Pressure

- Coolant Level
- · Battery Voltage Frequency

Alarms and Warnings

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

CONSULTANT:

PREPARED FOR:

GENERAL DYNAMICS Information Technology, Inc.

RAMAKER

(608) 643-4100 www.ramaker.com

GENERAL DYNAMICS 101 STATION DR WESTWOOD, MA 02090

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



RK DATE DESCRIPTION

DATE 05/19/2023

UNION CENTRAL FA ID # 10071287

050 BUCKLEY HIGHWAY STAFFORD SPRINGS, CT 06076

GENERAC 30KW GENERATOR **SPECIFICATIONS**

SCALE: NONE

55405 F-4

GENERAC 30KW GENERATOR SPECIFICATIONS

SD030 | 2.2L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

CONFIGURABLE OPTIONS

ENGINE SYSTEM

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

FUEL SYSTEM

NPT Flexible Fuel Line

ELECTRICAL SYSTEM

- O 10A UL Listed Battery Charger
- O Battery Warmer

ALTERNATOR SYSTEM

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

GENERATOR SET

- Extended Factory Testing
- Pad Vibration Isolation

ENGINE SYSTEM

Fluid Containment Pan

CONTROL SYSTEM

O 8 Position Load Center

ENGINEERED OPTIONS

Coolant Heater Isolation Ball Valves

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

CIRCUIT BREAKER OPTIONS 2nd Main Line Circuit Breaker

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

ENCLOSURE

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

WARRANTY (Standby Gensets Only)

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

CONTROL SYSTEM

O NFPA 110 Compliant 21-Light Remote Annunciator

GENERAC INDUSTRIAL

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

FUEL TANKS (Size On Last Page)

- O 8 in (203.2 mm) Fill Extension
- O 13 in (330.2 mm) Fill Extension
- O 19 in (482.6 mm) Fill Extension

O Fire Rated Stainless Steel Fuel Hose

- Overfill Protection Valve
- O 5 Gallon Spill Box Return Hose
- O 5 Gallon Spill Box
- Tank Risers
- O Fuel Level Switch and Alarm
- 12' Vent System
- O 7 Year Extended Limited Warranty

ALTERNATOR SYSTEM

O 3rd Breaker System

GENERATOR SET

O Special Testing

FUEL TANKS

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

SD030 | 2.2L | 30 kW INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

APPLICATION AND ENGINEERING DATA

ENGINE SPECIFICATIONS

Vlake	Perkins
EPA Emissions Compliance	Stationary Emergency
EPA Emissions Reference	See Emission Data Sheet
Cylinder #	4
Гуре	In-Line
Displacement - in ³ (L)	135 (2.22)
Bore - in (mm)	3.3 (84)
Stroke - in (mm)	3.9 (100)
Compression Ratio	23.3:1
ntake Air Method	Turbocharged
Cylinder Head	Cast Iron
Piston Type	Aluminum
Crankshaft Type	Forged Steel

Engine Governing

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

ubrication System	
il Pump Type	Gear
il Filter Type	Full-Flow
rankaana Canaaihu et (L)	11.0 (10.6)

Cooling System

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

GENERAC INDUSTRIAL

Fuel System

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

Engine Electrical System

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

ALTERNATOR SPECIFICATIONS

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

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

RAMAKER

(608) 643-4100 www.ramaker.com

CONSULTANT:

PREPARED FOR:

GENERAL DYNAMICS

Information Technology, Inc.

GENERAL DYNAMICS 101 STATION DR WESTWOOD, MA 02090

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 Connecticut.



RK DATE DESCRIPTION

DATE 05/19/2023

UNION CENTRAL FA ID # 10071287

050 BUCKLEY HIGHWAY STAFFORD SPRINGS, CT 06076

GENERAC 30KW GENERATOR **SPECIFICATIONS**

SCALE: NONE

55405 F-4 I

GENERAC 30KW GENERATOR SPECIFICATIONS

SD030 | 2.2L | 30 kW

GENERAC INDUSTRIAL INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

OPERATING DATA

POWER RATINGS

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

MOTOR STARTING CAPABILITIES (skVA)

skVA vs. Voltage Dip

		5 1	
277/480 VAC	30%	208/240 VAC	30%
K0035124Y21	61	K0035124Y21	46
K0040124Y21	76	K0040124Y21	58
K005012/IV21	0.8	K0050124V21	75

FUEL CONSUMPTION RATES*

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

COOLING

ENGINE

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

COMBUSTION AIR REQUIREMENTS

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

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

^{**} Refer to "Emissions Data Sheet" for maximum bHP for EPA and SCAQMD permitting purposes

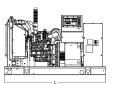
Deration – Operational characteristics consider maximum ambient conditions. Derate factors may apply under atypical site conditions. Please contact a Generac Power Systems Industrial Dealer for additional details. All performance ratings in accordance with ISO3046, BS5514, ISO8528, and DIN6271 standards. Standby - See Bulletin 0187500SSB Prime - See Bulletin 0187510SSB

SD030 | 2.2L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

DIMENSIONS AND WEIGHTS*





OPEN SET (Includes Exhaust Flex) Weight

GENERAC INDUSTRIAL

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



WEATHER PROTECTED ENCLOSURE

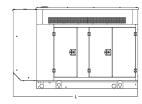
Run Time	Usable Capacity	L x W x H - in (mm)		: - Ibs (kg) sure Only
- Hours	- Gal (L)		Steel	Aluminum
No Tank	-	94.8 (2,409) x 38.0 (965) x 49.5 (1,258)		
19	54 (204)	94.8 (2,409) x 38.0 (965) x 62.5 (1,588)	070	0.44
47	132 (501)	94.8 (2,409) x 38.0 (965) x 74.5 (1,893)	- 372 - (170)	241 (110)
75	211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

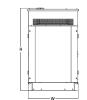




LEVEL 1 ACOUSTIC ENCLOSURE

Run Time	Usable Capacity	L x W x H - in (mm)		t - Ibs (kg) sure Only
- 110015	- Gal (L)		Steel	Aluminum
No Tank	-	112.5 (2,857) x 38.0 (965) x 49.5 (1,258)		
19	54 (204)	112.5 (2,857) x 38.0 (965) x 62.5 (1,582)	-0-	000
47	132 (501)	112.5 (2,857) x 38.0 (965) x 74.5 (1,893)	505 (230)	338 (154)
75	211 (799)	112.5 (2,857) x 38.0 (965) x 86.5 (2,198)	(200)	(134)
107	300 (1,136)	112.5 (2,857) x 38.0 (965) x 86.5 (2,198)		





LEVEL 2 ACOUSTIC ENCLOSURE

Run Time	Usable Capacity	L x W x H - in (mm)		- Ibs (kg) ure Only
- 110015	- Gal (L)		Steel	Aluminum
No Tank	-	94.8 (2,407) x 38.0 (965) x 61.1 (1,551)		
19	54 (204)	94.8 (2,407) x 38.0 (965) x 74.1 (1,881)	540	0.44
47	132 (501)	94.8 (2,407) x 38.0 (965) x 86.1 (2,186)	510 (232)	341 (155)
75	211 (799)	94.8 (2,407) x 38.0 (965) x 98.1 (2,491)	(202)	(133)
107	300 (1,136)	94.8 (2,407) x 38.0 (965) x 98.1 (2,491)		

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

Generac Power Systems, Inc. | P.O. Box 8 | Waukesha, WI 53189

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Part No. 10000024842 Rev. B 08/27/18 RAMAKER (608) 643-4100 www.ramaker.com

PREPARED FOR:



CONSULTANT:

GENERAL DYNAMICS

Information Technology, Inc.

GENERAL DYNAMICS 101 STATION DR WESTWOOD, MA 02090



RK DATE DESCRIPTION

DATE 05/19/2023

UNION CENTRAL FA ID # 10071287

050 BUCKLEY HIGHWAY STAFFORD SPRINGS, CT 06076

GENERAC 30KW GENERATOR **SPECIFICATIONS**

SCALE: NONE

55405 E-4.2

GENERAC 30KW GENERATOR SPECIFICATIONS

TTS Series Switches 200 Amps

600 VAC



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



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 standards:



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



NEC 700, 701 and 702



NEMA 250

Application and Engineering Data

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

lectrical Specifications		
Voltage/Phase/Amps	120/240 Single-Phase, 200A 120/208 3-Phase, 200A 120/240 3-Phase, 200A	
Drooker	Eaton 200 amp Utility Breaker	
Breaker	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	
Alayer Tayerinal Deavel	Generator Fail – Non Shutdown Alarm	
Alarm Terminal Board	Low Fuel Alarm	
	Generator Theft Alarm	
	AC Utility Fail Alarm	

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



PREPARED FOR:



CONSULTANT:

GENERAL DYNAMICS

Information Technology, Inc.

GENERAL DYNAMICS 101 STATION DR WESTWOOD, MA 02090



MARK DATE DESCRIPTION DATE 05/19/2023

UNION CENTRAL FA ID # 10071287

050 BUCKLEY HIGHWAY STAFFORD SPRINGS, CT 06076

GENERAC ATS SPECIFICATIONS

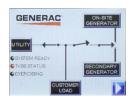
SCALE: NONE

55405 E-5



TAS200





INDICATORS AND BUTTONS

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

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

DETAILS SCREEN

System Settings:

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

Engine Settings:

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

Exercise Settings:

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

Screen Settings:

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

Diagnostics:

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

Mimic Diagram:

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

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PREPARED FOR:



CONSULTANT:

GENERAL DYNAMICS

Information Technology, Inc.

GENERAL DYNAMICS 101 STATION DR WESTWOOD, MA 02090

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 Connecticut.



MARK DATE DESCRIPTION

UNION CENTRAL FA ID # 10071287

DATE 05/19/2023

050 BUCKLEY HIGHWAY STAFFORD SPRINGS, CT 06076

GENERAC ATS SPECIFICATIONS

SCALE: NONE

55405 PROJECT NUMBER SHEET E-5.1

ATTACHMENT 2

White - Planning & Zoning Commission Yellow - Building Inspector Blue - Assessor Green - Applicant	or# 9719		
	Date 9-16-98		
<u>OCCUPA</u>	NION, CONNECTICUT NCY/USE PERMIT		
This is to certify that the Planning and Zo of the Town of Union, Connecticut, have ins	ning Commission and/or the Building Official pected the		
153' RADIO TOWER			
(sized) located and permitted under Zoning Permit No5	at 1050 Buckley Hwy issued to		
WAYNE KEMP	OF 10.50 BUCKLEY HWY		
and the location and use of this structure and premises complies with the provisions of The Town of Union Zoning Regulations and substantially complies with the Connecticut Building Code.			
Inspected for Connecticut Building Code Compliance by Edward + Stavesh;	Inspection for Zonia Compliance by: Date Inspected 11 4 9 8		
Date 9-16-98			
Use Group	PLANNING AND ZONING COMMISSION		
Type of Construction	TOWN OF UNION, CONNECTION		
Live load 1st floor	Chairman		
Live load 2nd floor	- 1 V + 1.1		
Fire Grading	Joseph Kralowal (Acct.) Secretary		

Copy Distribution:

TELEPHONE TOWER
RADIO TOWER

Copy Distribution:

White - Planning & Zoning Commission

Yellow - Building Inspector

Blue - Assessor Green - Applicant

> ZP # **Nº** 505 Date 6-4-97

TOWN OF UNION, CONNECTICUT

ZONING PERMIT

This is to certify that the Planning and Zoning Commission of the Town of Unic	n, Conn-
ecticut, acting upon the application of WAYNE KEMP	
presently residing at 1050 BUCKLEY HIGHWAY do hereby appr	ove and
grant said applicant a Zoning Permit for:	

Sized 158-fee+ High

to be located at the following location: 1050 BUCKLEY HIGHWAY

Be it understood that the requirements of the Zoning Regulations of the Town of Union Connecticut be fulfilled and that before occupancy of said structure or use of such building an Occupancy/Use Permit must be obtained from the Building Inspector and the Planning & Zoning Commission.

This document is not a Building Permit but is an approval from the Zoning Board that what you propose to do complies with the Town of Union Zoning Regulations.

A BUILDING PERMIT MUST BE OBTAINED BEFORE CONSTRUCTION BEGINS. PLEASE BE SURE TO CONTACT THE BUILDING INSPECTOR BEFORE PROCEEDING WITH ANY CONSTRUCTION.

PLANNING AND ZONING COMMISSION TOWN OF UNION, CONNECTICUT

Chairman

Secretary

PLANNING AND ZONING COMMISSION

TOWN OF UNION, CONNECTICUT

Mail Address: 1024 Buckley Highway, Union, CT 06076

SPECIAL PERMIT

Description of Premises:	1050 Buckiey DIGHWAY
	UNION CT
Nature of Special Permits	TO PERMIT THE CONSTRUCTION
	OF A TELECOMMUNICATIONS
_	FACICITY
_	<u> </u>
-	
Applicable Regulation(s):	UNION PEZ SECTION 3.11
-	
-	
-	
Owners of Record:	WAYNE & KATHY KEMIP
Owners of Record.	CORUNE O NATING REMIT
-	
-	
Date Issued:	JUNE 4/997
	lines Dires
-	Chairman Union Planning & Zoning

1050 BUCKLEY HIGHWAY

Location 1050 BUCKLEY HIGHWAY Mblu 13/18/020//

Acct# 00023000 Owner KEMP WAYNE & KATHY LEE

Assessment \$448,160 **Appraisal** \$640,230

PID 186 Building Count 3

Current Value

Appraisal				
Valuation Year	Improvements	Land	Total	
2018	\$403,770	\$236,460	\$640,230	
Assessment				
Valuation Year	Improvements	Land	Total	
2018	\$282,640	\$165,520	\$448,160	

Owner of Record

Owner KEMP WAYNE & KATHY LEE Sale Price \$135,000

Co-Owner Certificate

 Address
 1050 BUCKLEY HWY
 Book & Page
 39/384

 UNION, CT 06076
 Sale Date
 11/14/190

ION, CT 06076 Sale Date 11/14/1996 Instrument Q

.....

Ownership History

Ownership History					
Owner	Sale Price	Certificate	Book & Page	Instrument	Sale Date
KEMP WAYNE & KATHY LEE	\$135,000		39/384	Q	11/14/1996

Building Information

Building 1: Section 1

Year Built: 1959
Living Area: 1,720
Replacement Cost: \$232,042
Building Percent Good: 64

Replacement Cost

Less Depreciation: \$148,510

Building Attributes

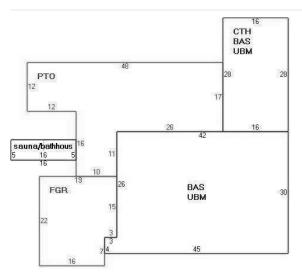
Field	Description
Style	Ranch
Model	Residential
Grade:	C+
Stories:	1 Story
Occupancy	1
Exterior Wall 1	Wood Shingle
Exterior Wall 2	
Roof Structure:	Gable or Hip
Roof Cover	Asphalt
Interior Wall 1	Drywall/Sheet
Interior Wall 2	
Interior Flr 1	Hardwood
Interior Flr 2	Quarry Tile
Heat Fuel	Oil
Heat Type:	Forced Air
AC Type:	Central
Total Bedrooms:	3 Bedrooms
Total Bthrms:	2
Total Half Baths:	0
Total Xtra Fixtrs:	
Total Rooms:	5 Rooms
Bath Style:	Modern
Kitchen Style:	Average

Building Photo



(https://images.vgsi.com/photos/UnionCTPhotos//00\00\01\12.jpg)

Building Layout



(ParcelSketch.ashx?pid=186&bid=186)

Building Sub-Areas (sq ft)			<u>Legend</u>
Code	Description	Gross Area	Living Area
BAS	First Floor	1,720	1,720
стн	Cathedral Ceiling	448	0
FGR	Garage	397	0
РТО	Patio	866	0
UBM	Unfinished Basement	1,720	0
		5,151	1,720

Building 2 : Section 1

Year Built: 1999
Living Area: 2,200
Replacement Cost: \$224,312
Building Percent Good: 77

Replacement Cost

Less Depreciation: \$172,720

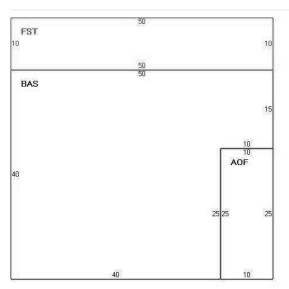
Building Attributes : Bldg 2 of 3		
Field	Description	
STYLE	Garage/Office	
MODEL	Commercial	
Grade	Average	
Stories:	1	
Occupancy	1.00	
Exterior Wall 1	Vinyl Siding	
Exterior Wall 2		
Roof Structure	Gable or Hip	
Roof Cover	Asphalt	
Interior Wall 1	Minim/Masonry	
Interior Wall 2		
Interior Floor 1	Concr-Finished	
Interior Floor 2		
Heating Fuel	Oil	
Heating Type	Gravity Air	
AC Type	None/Partial	
Bldg Use	STORE/SHOP	
Total Rooms		
Total Bedrms		
Total Baths		
1st Floor Use:		
Heat/AC	None	
Frame Type	Wood Frame	
Baths/Plumbing	Light	
Cei l ing/Wall	CEIL & WALLS	
Rooms/Prtns	Light	
Wall Height	13.00	
% Comn Wall	0.00	

Building Photo



(https://images.vgsi.com/photos/UnionCTPhotos//default.jpg)

Building Layout



(ParcelSketch.ashx?pid=186&bid=808)

Building Sub-Areas (sq ft) <u>Leg</u>			<u>Legend</u>
Code	Description	Gross Area	Living Area
BAS	First Floor	1,750	1,750
AOF	Office	250	250
FST	Finished Utility/Storage	500	200
		2,500	2,200

Building 3 : Section 1

Year Built:

Living Area: 0
Replacement Cost: \$0

Building Percent Good: Replacement Cost

Less Depreciation: \$0

Building Attributes: Bldg 3 of 3

Field	Description
Style	Vacant Land
Model	
Grade:	
Stories:	
Occupancy	
Exterior Wall 1	
Exterior Wall 2	
Roof Structure:	
Roof Cover	
Interior Wall 1	
Interior Wall 2	
Interior Flr 1	
Interior Flr 2	
Heat Fuel	
Heat Type:	
AC Type:	
Total Bedrooms:	
Total Bthrms:	
Total Half Baths:	
Total Xtra Fixtrs:	
Total Rooms:	
Bath Style:	
Kitchen Style:	

Building Photo



(https://images.vgsi.com/photos/UnionCTPhotos//default.jpg)

Building Layout

(ParcelSketch.ashx?pid=186&bid=819)

Building Sub-Areas (sq ft)	<u>Legend</u>
No Data for Building Sub-Areas	

Extra Features

	Extra Features <u>Lege</u>				
Code Description		Description Size		Bldg #	
WHL	WHIRLPOOL	1.00 UNITS	\$2,310	1	
FPL1	FIREPLACE 1 ST	1.00 UNITS	\$1,450	1	
SNA	SAUNA	192.00 S.F.	\$9,220	1	

Land

Land Use		Land Line Value	4:
		Land Line Valuation	
Use Code	1010	Size (Acres)	5.40
Description	Single Fam MDL-01	Frontage	0
Zone	CI	Depth	0
Neighborhood	12	Assessed Value	\$165,520
Alt Land Appr	No	Appraised Value	\$236,460
Category			

Outbuildings

	Outbuildings <u>Leg</u>					Legend
Code	Description	Sub Code	Sub Description	Size	Value	Bldg#
FGR2	GARAGE-GOOD			2400.00 S.F.	\$67,200	3
PAV1	PAVING-ASPHALT			3500.00 S.F.	\$2,360	2

Valuation History

Appraisal			
Valuation Year	Valuation Year Improvements L		Total
2018	\$403,770	\$236,460	\$640,230
2017	\$334,280	\$247,630	\$581,910
2013	\$334,280	\$247,630	\$581,910

Assessment			
Valuation Year	uation Year Improvements Land Tot		Total
2018	\$282,640	\$165,520	\$448,160
2017	\$234,000	\$173,340	\$407,340
2013	\$234,000	\$173,340	\$407,340

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Ashford Brooklyn Canterbury Chaplin Eastford Hampton Killingly Plainfield Pomfret Putnam Scotland Sterling Thompson Union Voluntown Woodstock

Parcel Information: Report Generated: 7/31/2019 11:42:39 AM

GIS ID: CT-145-13-18-000020 Assessment: \$407,340.00

Owner Name: KEMP WAYNE & KATHY LEE Appraissal:

Street Address: 1050 BUCKLEY HIGHWAY Mailing Address:

Land: 5.40 Buildings:

Land Value: Improvement Value: Total Value:

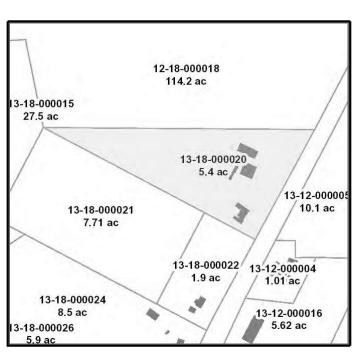
Appraised

Assessed \$407,340.00

Sale Date: Sale Price: \$135,000

Year Built: 1959 Primary Structure Area: 1,720.00 sq. ft.





Taxlot highlighted in blue

ATTACHMENT 3



After printing this label:

- 1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
- 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.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

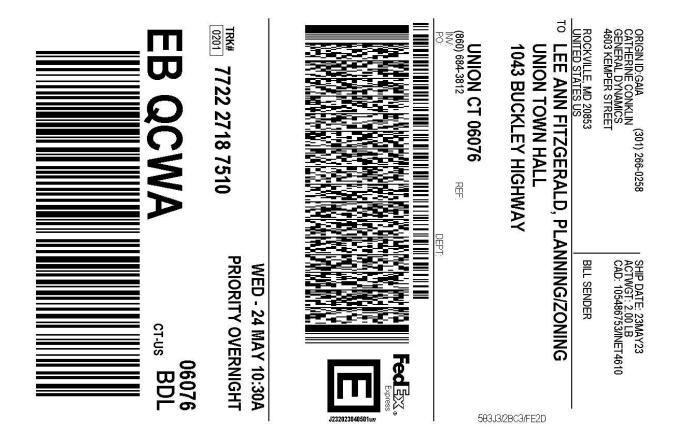
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is \$1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.



Dear Customer,

The following is the proof-of-delivery for tracking number: 772227207732

Delivery Information:				
Status:	Delivered	Delivered To:	Residence	
Signed for by:	Signature not required	Delivery Location:		
Service type:	FedEx Priority Overnight			
Special Handling:	Deliver Weekday; Residential Delivery		UNION, CT,	
		Delivery date:	May 24, 2023 12:09	
Shipping Information:				
Tracking number:	772227207732	Ship Date:	May 23, 2023	
		Weight:	1.0 LB/0.45 KG	
D. dalant		011		
Recipient:		Shipper:		
UNION, CT, US,		ROCKVILLE, MD, US,		



After printing this label:

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- 2. Fold the printed page along the horizontal line.
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Receptionist/Front Desk

1043 BUCKLEY HWY



Dear Customer,

The following is the proof-of-delivery for tracking number: 772227187510

Delivery Information:

Status: Delivered

Signed for by: M.EATON

Service type: FedEx Priority Overnight

Special Handling: Deliver Weekday

UNION, CT, 06076

Delivery date: May 24, 2023 12:10

Shipping Information:

Tracking number: 772227187510 **Ship Date:** May 23, 2023

Weight: 2.0 LB/0.91 KG

Recipient:

Lee Ann Fitzgerald, Planning/Zoning, Union Town Hall 1043 Buckley Highway UNION, CT, US, 06076

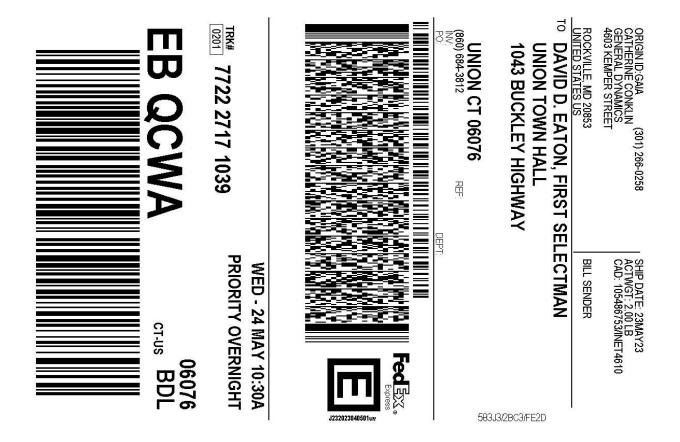
Shipper:

Delivered To:

Delivery Location:

Catherine Conklin, General Dynamics 4603 Kemper Street ROCKVILLE, MD, US, 20853





After printing this label:

- 1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
- 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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Receptionist/Front Desk

1043 BUCKLEY HWY



Dear Customer,

The following is the proof-of-delivery for tracking number: 772227171039

Delivery Information:

Status: Delivered

Signed for by: M.EATON

Service type: FedEx Priority Overnight

Special Handling: Deliver Weekday

UNION, CT, 06076

Delivery date: May 24, 2023 12:10

Shipping Information:

Tracking number: 772227171039 **Ship Date:** May 23, 2023

Weight: 1.0 LB/0.45 KG

Recipient:

David D. Eaton, First Selectman, Union Town Hall 1043 Buckley Highway UNION, CT, US, 06076

Shipper:

Delivered To:

Delivery Location:

Catherine Conklin, General Dynamics 4603 Kemper Street ROCKVILLE, MD, US, 20853

