Market: RWSH
Cell Site Number: 0289
Cell Site Name: PURCELLVILLE
Fixed Asset Number: 10004917

FIRST AMENDMENT TO WATER TOWER COMMUNICATIONS SITE LEASE AGREEMENT

THIS FIRST AMENDMENT TO WATER TOWER COMMUNICATIONS SITE LEASE AGREEMENT dated as of the latter of the signature dates below, is by and between TOWN OF PURCELLVILLE, having a mailing address of 221 South Nursery Avenue, Purcellville, Virginia 20132 ("**Lessor**") and New Cingular Wireless PCS, LLC, a Delaware limited liability company, having a mailing address of 1025 Lenox Park Blvd NE, Atlanta, GA 30319-5309 ("**Lessee**").

WHEREAS, Lessor and Lessee entered into a Water Tower Communications Site Lease Agreement signed on August 19, 2020, with a Commencement Date of June 1, 2019, whereby Lessor leased to Lessee certain Premises, therein described, that are a portion of the Property located at 311 North Maple Avenue, Purcellville, Virginia 20132 ("Agreement"); and

WHEREAS, Lessor and Lessee desire, in their mutual interest, to amend the Agreement as set forth below.

NOW THEREFORE, in consideration of the foregoing and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Lessor and Lessee agree as follows:

1. **New Premises Area.** Lessor agrees to increase the size of the Premises leased to Lessee to accommodate Lessee's needs. Upon the execution of this Amendment, Lessor leases to Lessee the additional premises described on Exhibit A-1 ("New Premises Area") attached hereto. The New Premises Area has a total area of forty (40) square feet, plus space to be occupied by cabling connecting the Generator Facilities (as defined below) to the existing equipment shelter. Lessor's execution of this Amendment will signify Lessor's approval of Exhibit A-1. The Premises under the Agreement prior to this Amendment in addition to the New Premises Area under this Amendment shall be the Premises under the Agreement.

2. **Generator.** Lessee shall have the right to install, repair, maintain, modify, replace, remove, utilize and operate equipment within the New Premises Area, consisting of a concrete pad, generator installed thereon, a back-up power supply, and electrical cables connecting the generator and back-up power supply to Lessee's existing Facilities, as shown on the drawing attached as Exhibit C-1 (the "Generator Facilities"). The area occupied by the Generator Facilities has a total area of forty (40) square feet. Lessee shall have the right to access the New Premises Area for the purpose of installing, constructing, operating, and maintaining the Generator Facilities, and any provisions in the Agreement governing access shall apply to such access. The Generator Facilities

shall remain the property of Lessee, and Lessee shall have the right to remove or modify them at any time. Lessee shall at all times install, construct, operate, and maintain the Generator Facilities in accordance with all applicable state and local codes and ordinances. The term "Equipment," as defined in the Agreement, includes the Generator Facilities.

3. **Rent.** Commencing the first day of the month following commencement of installation within the New Premises Area ("Increase Commencement Date"), Rent shall be increased by Two Hundred Fifty and No/100 Dollars ($250.00) per month, subject to further adjustments, as provided in the Agreement; provided that the first such increased payment shall not be due until sixty (60) days after such commencement date and provided further that, any partial month occurring after the Increase Commencement Date, the increased Rent amount shall be pro-rated.

4. **Access to Electrical Panel.** In addition to the Rent, as consideration for the rights granted by Landlord under this Amendment, Tenant shall (i) install and reserve for Landlord's use an electrical outlet with a ground fault circuit interrupter within Tenant's equipment shelter (the "GFCI Outlet"), to be used to deliver electrical power to the radio communications equipment operated by Landlord ("Public Safety Equipment"); (ii) install and reserve for Landlord's use a twenty (20) ampere circuit breaker in the electrical power panel to be installed as part of the Generator Facilities (the "Circuit Breaker"), which shall be used to supply power to the GFCI Outlet; and (iii) supply electrical power to Landlord's Public Safety Equipment by means of the GFCI Outlet, at no cost or charge to Landlord. The GFCI Outlet and the Circuit Breaker are designated on Exhibit C-1.

5. Lease Term. Section 3 of the Agreement is hereby deleted in its entirety and replaced with the following:

Lease Term. This Agreement shall be effective as of the Effective Date. The term of the Lease shall be five years commencing on the Effective Date and ending at 11:59 p.m. on the day immediately preceding the fifth (5th) anniversary of the Effective Date (the "Term").

6. Other. Lessor authorizes Lessee to prepare, execute and file all required applications to obtain any government approvals for Lessee's use of the New Premises Area under this Agreement and agrees, at Lessee's request, to reasonably assist Lessee with such applications and with obtaining and maintaining the government approvals. Lessee may terminate this Amendment by written notice to Lessor at any time, and the rent increase set forth in Section 3 shall not take effect or shall be cancelled, as applicable, following any such termination. Within sixty (60) days after termination of this Amendment, Lessee shall remove its equipment from the New Premises Area. Lessee shall repair any damage to the New Premises Area caused by its installation, construction, maintenance, or removal activities.

7. Notices. Section 15 of the Agreement is hereby deleted in its entirety and replaced with the following:

Notices. All notices, requests, demands and communications hereunder will be given by first class certified or registered mail, return receipt requested, or by a nationally recognized overnight courier, postage prepaid, to be effective when properly sent and received, refused or returned undelivered. Notices will be addressed to the parties as follows.

If to LESSOR: Town of Purcellville
Attn: Town Manager
221 South Nursery Avenue
Purcellville, VA 20132

If to LESSEE: New Cingular Wireless PCS, LLC
Attn: TAG - LA
Re: Cell Site # 0289
Cell Site Name: Purcellville
Fixed Asset #: 10004917
1025 Lenox Park Blvd NE
3rd Floor
Atlanta, GA 30319

With copy to: New Cingular Wireless PCS, LLC
Attn: Legal Department
Re: Cell Site # 0289
Cell Site Name Purcellville
Fixed Asset #: 10004917
208 S. Akard Street
Dallas, Texas, 75202-4206

The copy sent to the Legal Department is an administrative step which alone does not constitute legal notice. Either party hereto may change the place for the giving of notice to it by thirty (30) days prior written notice to the other as provided herein.

8. Memorandum of Lease. Either party will, at any time upon fifteen (15) days prior written notice from the other, execute, acknowledge and deliver to the other a recordable Memorandum of Lease substantially in the form of the Attachment 3. Either party may record this memorandum at any time, in its absolute discretion.

9. Other Terms and Conditions Remain. In the event of any inconsistencies between the Agreement and this First Amendment, the terms of this First Amendment shall control. Except as expressly set forth in this First Amendment, the Agreement otherwise is unmodified and remains in full force and effect. Each reference in the Agreement to itself shall be deemed also to refer to this First Amendment. The rights granted to Lessee herein are in addition to and not intended to limit any rights of Lessee in the Agreement. Unless otherwise specified herein or unless the context requires otherwise, the terms in the Agreement shall apply to the New Premises Area.

10. Capitalized Terms. All capitalized terms used but not defined herein shall have the same meanings as defined in the Agreement.

11. Representations. Each of the signatories hereto hereby represents that such person has the power to execute this First Amendment and that the execution and delivery of this First Amendment (a) has been authorized by proper action, (b) has been executed by a duly authorized officer or partner of such party and (c) constitutes the valid and binding obligation of the party.

IN WITNESS WHEREOF, the parties have caused their properly authorized representatives to execute and seal this First Amendment on the dates set forth below.

LESSOR:
Town of Purcellville

By: _____
Print Name: _____
Its: _____
Date: _____

LESSEE:
New Cingular Wireless PCS, LLC,
a Delaware limited liability company

By: AT&T Mobility Corporation
Its: Manager

By: _____
Print Name: Jesse Bird
Its: Principal Tech Vendor Mgmt
Date: 4/26/23

LESSEE ACKNOWLEDGEMENT

STATE OF Maryland)
)ss:
COUNTY OF Baltimore City)

On the 26 day of April, 2023 before me personally appeared Jesse Bird, and acknowledged under oath that he is the Project Manager of AT&T of Washington Baltimore, the Executor named in the attached instrument, and as such was authorized to execute this instrument on behalf of the Company.

SHANTIE LEE
Notary Public
Harford County
Maryland
My Commission Expires May 06, 2023

Notary Public: Shantie Lee
My Commission Expires: 05/06/2023

LESSOR ACKNOWLEDGEMENT

INDIVIDUAL ACKNOWLEDGEMENT

STATE OF _____)
) ss:
COUNTY OF _____)

BE IT REMEMBERED, that on this _____ day of _____, 20___ before me, the subscriber, a person authorized to take oaths in the State of _____, personally appeared _____ who, being duly sworn on his/her/their oath, deposed and made proof to my satisfaction that he/she/they is/are the person(s) named in the within instrument; and I, having first made known to him/her/them the contents thereof, he/she/they did acknowledge that he/she/they signed, sealed and delivered the same as his/her/their voluntary act and deed for the purposes therein contained.

Notary Public: _____
My Commission Expires: _____

EXHIBIT A-1

Additional Premises Area

See attached

EXHIBIT C-1

Generator

See attached

ATTACHMENT 3

MEMORANDUM OF LEASE

Prepared by:
Michael Bowden
General Dynamics
2586 Industry Lane, Suite 100
Norristown, PA 19403

Return to:
New Cingular Wireless PCS, LLC
Attn: Legal Department
208 S. Akard Street
Dallas, Texas, 75202-4206

Re: Cell Site #: 54903
Cell Site Name: Purcellville
Fixed Asset Number: 10004917
State: Commonwealth of Virginia
County: Loudoun

MEMORANDUM
OF
LEASE

This Memorandum of Lease is entered into on this ____ day of _____, 20___, by and between The Town of Purcellville having a mailing address of 221 South Nursery Avenue, Purcellville, Virginia 20132 ("**Lessor**") and New Cingular Wireless PCS, LLC, a Delaware limited liability company, having a mailing address of 1025 Lenox Park Blvd NE, 3rd Floor, Atlanta, GA 30319 ("**Lessee**").

1. Lessor and Lessee entered into a certain Water Tower Communications Site Lease Agreement dated August 19, 2020, as amended by that certain First Amendment to Water Tower Communications Site Lease Agreement dated _____, ____ 202___ (hereinafter, collectively referred to as the "**Agreement**") for the purpose of installing, operating and maintaining a communications facility and other improvements, including without limitation, a generator and backup power supply. All of the foregoing are set forth in the Agreement.

2. The Agreement is amended to provide that the lease term will be five (5) years ("**Initial Term**") commencing on June 1, 2019.

3. Lessor has agreed to increase the size of the of the Premises leased to Lessee to accommodate the placement of a generator and back-up power supply. The portion of the land being leased to Lessee (the "**Premises**") is described in **Exhibit 1** annexed hereto.

4. This Memorandum of Lease is not intended to amend or modify, and shall not be deemed or construed as amending or modifying, any of the terms, conditions or provisions of the Agreement, all of which are hereby ratified and affirmed. In the event of a conflict between the provisions of this Memorandum of Lease and the provisions of the Agreement, the provisions of the Agreement shall control. The Agreement shall be binding upon and inure to the benefit of the parties and their respective heirs, successors, and assigns, subject to the provisions of the Agreement.

IN WITNESS WHEREOF, the parties have executed this Memorandum of Lease as of the day and year first above written.

LESSOR:
Town of Purcellville

By: _____

Print Name: _____
Its: _____
Date: _____

LESSEE:
New Cingular Wireless PCS, LLC,
a Delaware limited liability company

By: AT&T Mobility Corporation
Its: Manager

By: _____

Print Name: Jesse Bird
Its: Principal Tech, Vendor Mgmt
Date: 4/26/23

LESSEE ACKNOWLEDGEMENT

STATE OF Maryland)
) ss:
COUNTY OF Baltimore City)

On the 26 day of April, 2023 before me personally appeared Jesse Bird, and acknowledged under oath that he is the Project Manager of AT&T, the Executor named in the attached instrument, and as such was authorized to execute this instrument on behalf of the Company.

SHANTIE LEE
Notary Public
Harford County
Maryland
My Commission Expires May 06, 2023

Notary Public: Shantie Lee
My Commission Expires: 05/06/2023

LESSOR ACKNOWLEDGEMENT

INDIVIDUAL ACKNOWLEDGEMENT

STATE OF _____)
) ss:
COUNTY OF _____)

BE IT REMEMBERED, that on this _____ day of _____, 20___ before me, the subscriber, a person authorized to take oaths in the State of _____, personally appeared _____ who, being duly sworn on his/her/their oath, deposed and made proof to my satisfaction that he/she/they is/are the person(s) named in the within instrument; and I, having first made known to him/her/them the contents thereof, he/she/they did acknowledge that he/she/they signed, sealed and delivered the same as his/her/their voluntary act and deed for the purposes therein contained.

Notary Public: _____
My Commission Expires: _____

EXHIBIT 1

DESCRIPTION OF PREMISES

Page _____ of _____

to the Memorandum of Lease dated _____, 20___, by and between _____, as Lessor, and New Cingular Wireless PCS LLC, a Delaware liability company, as Lessee.

The Premises are described and/or depicted as follows:

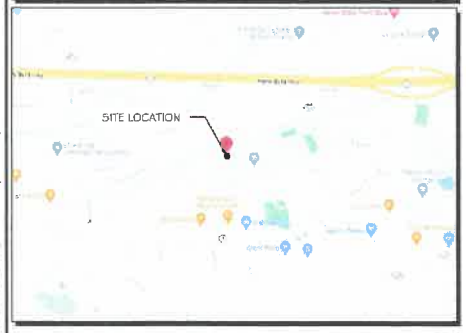
at&t Mobility

SITE NAME: PURCELLVILLE
FA LOCATION CODE: 10004917

GENERATOR PROJECT
30KW GENERAC DIESEL GENERATOR
200A GENERAC ATS

500 FT NORTH OF MAIN STREET/N
MAPLE AVENUE
PURCELLVILLE, VA 20132

VICINITY MAP



AERIAL VIEW OF SITE

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.

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

MISS UTILITY OF VIRGINIA
811 OR 1-800-552-7001

MISS UTILITY LAW VIRGINIA UNDERGROUND UTILITY DAMAGE PREVENTION ACT REQUIRES MIN. 3 WORKING 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 IN THESE PLANS ARE TO BE CONSTRUCTED TO PERMIT WORK NOT CONFORMING TO THESE CODES:

1. INTERNATIONAL BUILDING CODE 2018
2. NATIONAL ELECTRIC CODE 2017
3. AMERICAN CONCRETE INSTITUTE (ACI) 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
4. AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), MANUAL OF STEEL CONSTRUCTION
5. TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-G, STRUCTURAL STANDARDS FOR STEEL TOWER AND ANTENNA SUPPORTING STRUCTURES
6. TIA 607, COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS

PROJECT INFORMATION

PROJECT MANAGER:

BRIAN K. SILBERT
SR. REGIONAL MANAGER
GENERAL DYNAMICS WIRELESS SERVICES
101 STATION DR.
WESTWOOD, MA 02090
EMAIL: Brian.Silbert@gdit.com

ENGINEER:

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

APPLICANT INFORMATION:
AT&T MOBILITY
7150 STANDARD DR
HANOVER, MD 21076

SITE DATA:
SITE NAME: PURCELLVILLE
FA NUMBER: 10004917

PROPERTY OWNER:
TOWN OF PURCELLVILLE
221 S NURCERY AVENUE
PURCELLVILLE, VA 20132

ADDRESS:
500 FT NORTH OF MAIN STREET/N MAPLE AVENUE
PURCELLVILLE, VA 20132

COUNTY: LOUDOUN

LAT.: 39.1408528°
LONG.: -77.7039278°

GROUND ELEVATION: 545 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.

SHEET INDEX

SIGNATURE BLOCK

AT&T MGR. DATE

GENERAL DYNAMICS CONSTRUCTION MGR. DATE

SITE ACQUISITION DATE

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

PREPARED FOR:

at&t Mobility

CONSULTANT:
GENERAL DYNAMICS
Information Technology, Inc.
GENERAL DYNAMICS
101 STATION DR
WESTWOOD, MA 02090

Certification & Seal:
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the State of Virginia.

COMMONWEALTH OF VIRGINIA
DARYL R. MATZKE
Lic. No. 402056307
PROFESSIONAL ENGINEER

Signature 12/13/2022 Date

MARK	DATE	DESCRIPTION
C		
B		
A		

ISSUE PHASE: FINAL DATE: 12/13/2022

PROJECT TITLE:
PURCELLVILLE
FA ID # 10004917

PROJECT INFORMATION:
500 FT NORTH OF MAIN STREET/N
MAPLE AVENUE
PURCELLVILLE, VA 20132

SHEET TITLE:
TITLE SHEET

SCALE: NONE

PROJECT NUMBER: 52736
SHEET NUMBER: T-1

NOTES TO SUBCONTRACTOR:

1. THE GENERAL SUBCONTRACTOR MUST VERIFY ALL DIMENSIONS, CONDITIONS AND ELEVATIONS BEFORE PROCEEDING WITH THE WORK. ALL WORK SHALL BE PERFORMED IN A WORKMANLIKE MANNER IN ACCORDANCE WITH ACCEPTED CONSTRUCTION PRACTICES.

2. IT IS THE INTENTION OF THESE DRAWINGS TO SHOW THE COMPLETED INSTALLATION. THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY BRACING, SHORING, TIES, FORM WORK, ETC. IN ACCORDANCE WITH ALL NATIONAL, STATE, AND LOCAL ORDINANCES, TO SAFELY EXECUTE ALL WORK AND SHALL BE RESPONSIBLE FOR SAME. ALL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES.

3. THE SUBCONTRACTOR SHALL USE ADEQUATE NUMBER OF SKILLED WORKMAN WHO ARE THOROUGHLY TRAINED AND EXPERIENCED IN THE NECESSARY CRAFTS AND WHO ARE COMPLETELY FAMILIAR WITH THE SPECIFIED REQUIREMENTS AND METHOD NEEDED FOR PROPER PERFORMANCE OF THE WORK.

4. CONSTRUCTION SUBCONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION SUBCONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY. THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS AND CONSTRUCTION SUBCONTRACTOR FURTHER AGREES TO 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.

6. ALL WORK SHALL COMPLY WITH OSHA AND STATE SAFETY REQUIREMENTS. PROCEDURES FOR THE PROTECTION OF EXCAVATIONS, EXISTING CONSTRUCTION AND UTILITIES SHALL BE ESTABLISHED PRIOR TO FOUNDATION INSTALLATION, IF TEMPORARY LIGHTING AND MARKING IS REQUIRED BY THE FEDERAL AVIATION ADMINISTRATION (FAA), IT IS THE SUBCONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE NECESSARY LIGHTS AND NOTIFY THE PROPER AUTHORITIES IN THE EVENT OF A PROBLEM.

7. ALL WORK SHALL BE ACCOMPLISHED IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL CODES OR ORDINANCES. THE MOST STRINGENT CODE WILL APPLY IN THE CASE OF DISCREPANCIES OR DIFFERENCES IN THE CODE REQUIREMENTS.

8. ANY DAMAGE TO THE ADJACENT PROPERTIES WILL BE CORRECTED AT THE SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE LANDOWNER AND THE ENGINEER.

9. THE COMPLETE BID PACKAGE INCLUDES THESE CONSTRUCTION DRAWINGS ALONG WITH THE SPECIFICATIONS. SUBCONTRACTOR IS RESPONSIBLE FOR REVIEW OF TOTAL BID PACKAGE PRIOR TO BID SUBMITTAL.

10. SUBCONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES WITHIN CONSTRUCTION LIMITS PRIOR TO CONSTRUCTION.

11. 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.

12. 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.

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.

14. 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.

16. RECORD DRAWINGS: MAINTAIN A RECORD OF ALL CHANGES, SUBSTITUTIONS BETWEEN WORK AS SPECIFIED AND INSTALLED. RECORD CHANGES ON A CLEAN SET OF CONTRACT DRAWINGS WHICH SHALL BE TURNED OVER TO THE CONSTRUCTION MANAGER UPON COMPLETION OF THE PROJECT.

17. THE PLANS SHOW SOME KNOWN SUBSURFACE STRUCTURES, ABOVE GROUND STRUCTURES AND/OR EXISTING UTILITIES BELIEVED TO BE IN THE WORKING AREA. IT 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:

1. 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

1. 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:
   a. ANSI (AMERICAN NATIONAL STANDARDS INSTITUTE)
   b. ASTIM (AMERICAN SOCIETY FOR TESTING MATERIALS)
   c. ETL (ELECTRICAL TESTING LABORATORY)
   d. ICEA (INSULATED CABLE ENGINEERS ASSOCIATION)
   e. IEEE (INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS)
   f. MBFU (NATIONAL BOARD OF FIRE UNDERWRITERS)
   g. NESC (NATIONAL ELECTRICAL SAFETY CODE)
   h. NEMA (NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION)
   i. NFPA (NATIONAL FIRE PROTECTION ASSOCIATION)
   j. 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 MATERIAL LISTS ON THE DRAWINGS ARE FOR INFORMATION ONLY. THE CONTRACTOR SHALL PROVIDE HIS OWN TAKEOFF FOR MATERIAL QUANTITY AND TYPES BASED ON ACTUAL SITE CONDITIONS, IN ADDITION, CONTRACTOR SHALL PROVIDE ALL NECESSARY MATERIALS TO INSTALL EQUIPMENT FURNISHED BY AT&T OR ITS SUPPLIERS. ALL ITEMS NOT SPECIFICALLY MENTIONED HEREIN OR SHOWN ON THE DRAWINGS, BUT WHICH ARE OBVIOUSLY NECESSARY TO MAKE A COMPLETE WORKING INSTALLATION, SHALL BE INCLUDED.

11. THE CONTRACTOR OR BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) AT&T'S REPRESENTATIVE OF ANY CONFLICTS PRIOR TO THE SUBMISSION OF CONTRACTOR'S PROPOSAL OR PERFORMANCE OF WORK, IN THE EVENT OF DISCREPANCIES THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED IN WRITING OTHERWISE.

12. ALL FLOORS WHERE PENETRATIONS ARE REQUIRED IN BUILDING ARE TO BE CORE DRILLED AND THEN FIREPROOFED.

B. WIRING/CONDUIT

1. PROVIDE PULL BOXES AND JUNCTION BOXES WHERE SHOWN OR AS REQUIRED BY CODE SUCH THAT NO MORE THAN THE EQUIVALENT OF FOUR QUARTER BENDS (360 DEGREES TOTAL) EXIST IN A CONDUIT RUN.

2. ALL POWER AND CONTROL/INDICATION WIRING SHALL BE TYPE THHN/THWN 600V 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)

5. 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 WIRING.

10. INSTALL PULL STRING IN ALL CONDUIT.

11. 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.

13. ALL WIRING ROUTED IN PLENUM TO BE RATED OR IN METALLIC FLEX (LIQUIDITE) CONDUIT.

C. EQUIPMENT

1. EQUIPMENT/PARTS CONNECTED TO EXISTING PANELS, DUCTS, ETC. SHALL MATCH THE CHARACTERISTICS (A/C, V, A) OF THAT EQUIPMENT.

2. ALL ELECTRICAL EQUIPMENT OUTSIDE SHALL BE NEMA OR 3R RATED.

D. GROUNDING

1. ALL GROUND CONNECTIONS TO BUILDING SHALL BE MADE USING TWO-HOLE CONNECTORS. PROVIDE STAINLESS STEEL BOLTS AND LOCK WASHERS ON ALL MECHANICAL GROUND CONNECTIONS.

2. ALL EQUIPMENT SURFACES TO BE BONDED TO GROUNDING SYSTEM SHALL BE STRIPPED OF ALL PAINT AND DIRT. CONNECTIONS TO VARIOUS METALS SHALL BE OF A TYPE AS TO CAUSE A GALVANIC OR CORROSIVE REACTION. AREA SHALL BE REPAINTED FOLLOWING BONDING.

3. ANY METALLIC ITEM WITHIN 6' OF GROUND CONDUCTORS MUST BE CONNECTED TO THE GROUNDING SYSTEM.

4. EXTERIOR, ABOVE GRADE GROUND CONNECTIONS SHALL BE FURNISHED WITH A LIBERAL PROTECTIVE COATING OF ANTI-OXIDE COMPOUND.

5. ALL MATERIALS AND LABOR REQUIRED FOR THE GROUNDING SYSTEM AS INDICATED ON THE PLANS AND DETAILS, AND AS DESCRIBED HEREIN SHALL BE FURNISHED BY THIS CONTRACTOR UNLESS OTHERWISE NOTED.

6. 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 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.

9. 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

1. 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.

2. CONTRACTOR SHALL SUPPLY DOCUMENTATION ATTESTING TO THE COMPLETE GROUND SYSTEMS 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 UL LISTING FOR THAT EQUIPMENT IS NOT VOIDED.

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CONSULTANT:
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Certification & Seal
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the State of Virginia.

COMMONWEALTH OF VIRGINIA
DARYL R. MATZKE
Lic No. 402056307
PROFESSIONAL ENGINEER

Signature Date: 12/13/2022

MARK	DATE	DESCRIPTION

ISSUE PHASE: FINAL — DATE ISSUED: 12/13/2022

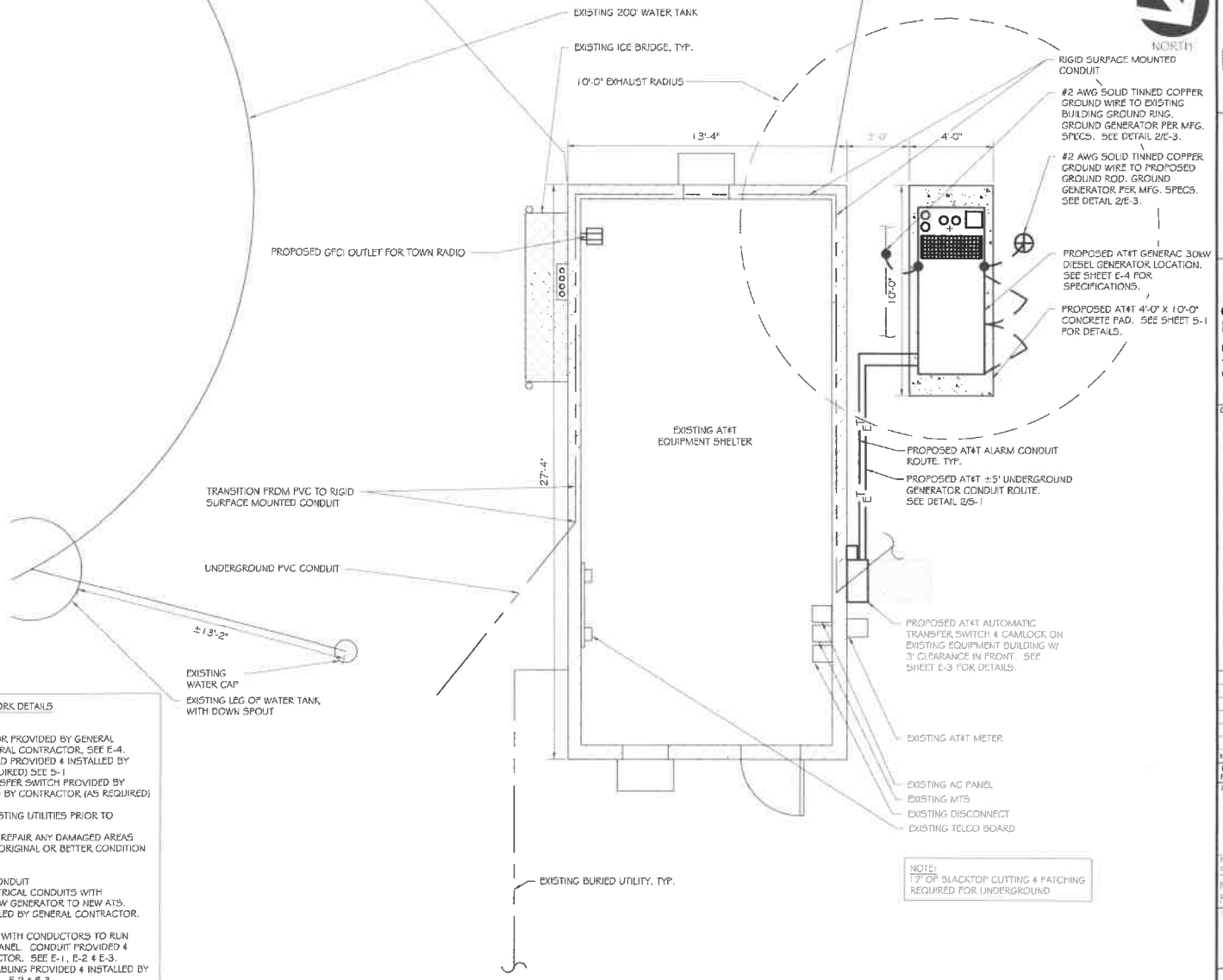
PURCELLVILLE
FA ID # 10004917

PROJECT INFORMATION:
500 FT NORTH OF MAIN STREET/N MAPLE AVENUE
PURCELLVILLE, VA 20132

SHEET TITLE: GENERAL NOTES

SCALE: NONE

PROJECT NUMBER: 52736
SHEET NUMBER: N-1



SITE PLAN
SCALE: 1" = 5'

SCOPE OF WORK DETAILS

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) SEE E-3 & E-5.
- CONTRACTOR TO VERIFY ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION
- CONTRACTOR SHALL RESTORE & REPAIR ANY DAMAGED AREAS CAUSED BY CONSTRUCTION TO ORIGINAL OR BETTER CONDITION

CONDUITS:
- INSTALL PULL STRING IN EACH CONDUIT
- (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.
- (1) 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 EXISTING GROUND RING TO NEW MECHANICAL CONNECTION AT GENERATOR CHASSIS. GENERAL CONTRACTOR TO VERIFY LOCATION IN FIELD. LOCATE GROUND RODS NO MORE THAN 8'-0" APART.

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COMMONWEALTH OF VIRGINIA
DARYL R. MATZKE
Lic. No. 402056307
PROFESSIONAL ENGINEER
Signature 12/13/2022 Date

MARK	DATE	
A		REVISED PCDs

ISSUE PHASE: FINAL 12/13/2022

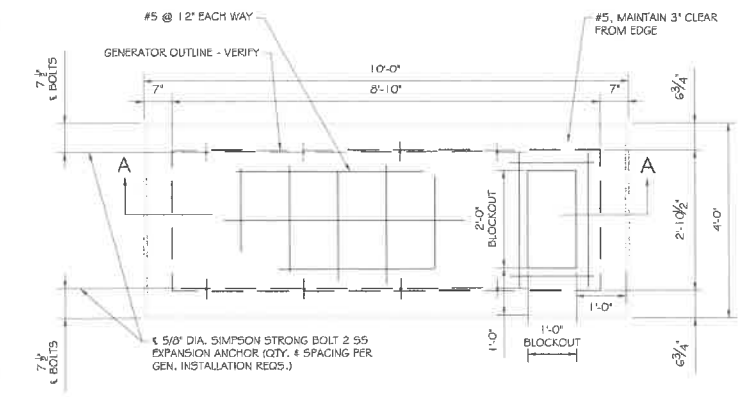
PROJECT TITLE:
PURCELLVILLE
FA ID # 10004917

PROJECT INFORMATION:
500 FT NORTH OF MAIN STREET/N MAPLE AVENUE
PURCELLVILLE, VA 20132

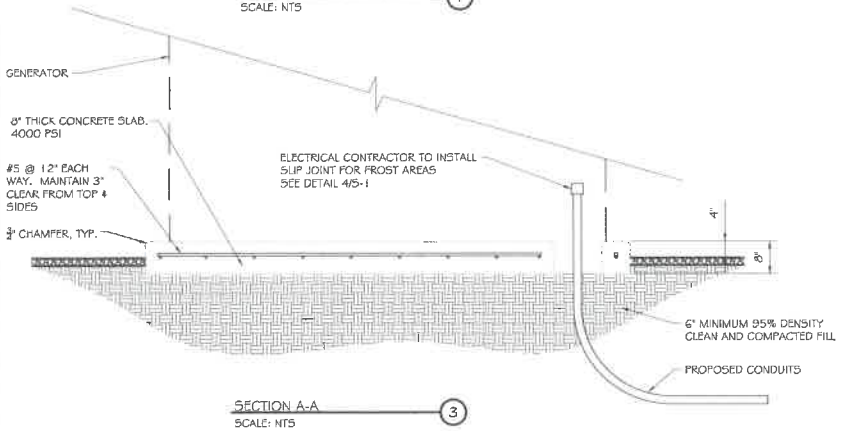
SHEET TITLE:
SITE PLAN & EQUIPMENT LAYOUT

0 2.5' 5' 10'
11" x 17" 1" = 5'
22" x 34" 1" = 2.5'

PROJECT NUMBER: 52736
SHEET NUMBER: A-1



FOUNDATION PLAN ①
SCALE: NTS



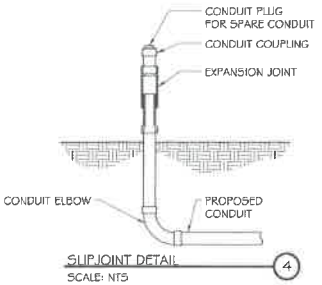
SECTION A-A ③
SCALE: NTS

DOUBLE WALL FUEL TANK BASE SPECIFICATION

REF: ATT 30KW GENERATOR PACKAGE
UL REGISTRATION NUMBER: MH18459
U.L. 142 DOUBLE WALL FUEL TANK BASE SPECIFICATION
FUEL TANK BASE CONSTRUCTION:
- BE CONSTRUCTED IN ACCORDANCE WITH UNDERWRITERS LABORATORIES STANDARD UL-142. BE CONSTRUCTED IN ACCORDANCE WITH FLAMMABLE & COMBUSTIBLE LIQUIDS CODE, NFPA 30; THE STANDARD FOR INSTALLATION & USE OF STATIONARY COMBUSTIBLE ENGINE & GAS TURBINES, NFPA 37; AND THE STANDARD FOR EMERGENCY & STANDBY POWER SYSTEMS, NFPA 110.
- ANCHORS MINIMUM (4) @ 5/8" FOR GEN-SET MOUNTING

SUB BASE TANK TESTING: PRIMARY TANK & SECONDARY CONTAINMENT BASIN SECTIONS SHALL BE PRESSURIZED AT 3-5 PSI AND LEAK-CHECKED TO ENSURE INTEGRITY OF SUB BASE WELD SEAMS PER UL-142 STANDARDS
FUEL FILL: 5 GALLON SPILL CONTAINMENT WITH ALARM
- 40% REMAINING FOR ALARM
- 20% REMAINING FOR SHUT-DOWN

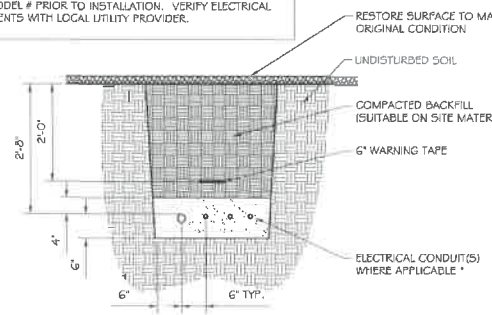
FACTORY PRE-SET AT 95% FULL FOR ALARM
FUEL CONTAINMENT BASIN: SUB BASE TANK SHALL INCLUDE A WELDED STEEL CONTAINMENT BASIN, SIZED AT A MINIMUM OF 110% OF THE TANK CAPACITY TO PREVENT ESCAPE OF FUEL INTO THE ENVIRONMENT IN THE EVENT OF A TANK RUPTURE. A FUEL CONTAINMENT BASIN LEAK DETECTOR SWITCH SHALL BE PROVIDED.



SLIPJOINT DETAIL ④
SCALE: NTS

NOTE:

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



* SEPARATION DIMENSION TO BE VERIFIED WITH LOCAL UTILITY COMPANY REQUIREMENTS

NOTES:
1. 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 ②
SCALE: NTS

STRUCTURAL GENERAL NOTES

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

LIVE LOAD	: 100 PSF
EQUIPMENT SIZE	: 88.1" H, 106" W, 38" D
WEIGHT WITH WOODEN SHIPPING SKID	
ENCLOSED GENERATOR	: 3974 LBS

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

DESIGN	: ACI318-11
CONSTRUCTION	: ACI301
DETAILING	: CRSI MANUAL OF STANDARD PRACTICE
REINF. STEEL	: ASTM A 615 GRADE 60, DEFORMED
MIXING	: ASTM C 94, READY MIX CONCRETE
AIR ENTRAINMENT	: ACI 318 AND ASTM C-260
AGGREGATE	: ASTM C 33 AND C 330 (FOR LIGHT WEIGHT)

3.2 CONCRETE STRENGTH AT 28 DAYS SHALL BE 4000 PSI MINIMUM
3.3 DO NOT FIELD BEND OR WELD TO GRADE 60 REINFORCED STEEL
3.4 PROVIDE AIR ENTRAINED CONCRETE WITH AIR CONTENT OF 5 TO 7% FOR ALL CONCRETE EXPOSED TO EARTH OR WEATHER.
3.5 MAXIMUM AGGREGATE SIZE: 3/4"
3.6 DO NOT USE IN ADMIXTURE, WATER OR OTHER CONSTITUENTS OF CONCRETE WHICH HAS CALCIUM CHLORIDE.
3.7 MINIMUM COVER FOR REINFORCING STEEL SHALL BE AS SHOWN ON PLAN.
4.0 FOUNDATION & EXCAVATION NOTES
4.1 SLAB SHALL BE CONSTRUCTED UPON UNDISTURBED, NATURAL SUBGRADE OR COMPACTED GRANULAR FILL WITH AN ASSUMED MINIMUM NET ALLOWABLE BEARING CAPACITY OF 1500 PSF.
4.2 ALL ORGANIC AND/OR OTHER UNSUITABLE MATERIAL SHALL BE REMOVED FRO FOUNDATION & SLAB SUBGRADE & BACKFILL AREAS, & THEN BACKFILLED WITH ACCEPTABLE GRANULAR FILL COMPACTED TO 95% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT (ASTM D1557).
4.3 THE CONTRACTOR SHALL PROVIDE ALL NECESSARY MEASURES TO PREVENT ANY WATER, FROST, OR ICE FROM PENETRATING ANY FOOTING OR STRUCTURAL SUBGRADE BEFORE & AFTER PLACING OF CONCRETE, AND UNTIL SUCH CONCRETE HAS FULLY CURED.

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COMMONWEALTH OF VIRGINIA
DARYL R. MATZKE
Lic No. 402056307
PROFESSIONAL ENGINEER
12/13/2022

MARK	DATE	DESCRIPTION
ISSUE PHASE	FINAL	12/13/2022

PURCELLVILLE
FA ID # 10004917

PROJECT INFORMATION:
500 FT NORTH OF MAIN STREET/N MAPLE AVENUE
PURCELLVILLE, VA 20132

SHEET TITLE
FOUNDATION DETAILS

SCALE: NONE

PROJECT NUMBER: 52736
SHEET NUMBER: S-1

DIAGRAM CIRCUIT SCHEDULE

NO.	FROM	TO	WIRES	GROUND	CONDUIT SIZE	FUNCTION
1	NORMAL POWER SOURCE	AUTOMATIC TRANSFER SWITCH	(3) 3/0	(1) #4	2"	NORMAL POWER FEEDER TO ATS (CUT BACK EXISTING)
2	AUTOMATIC TRANSFER SWITCH	LOAD CENTER	(3) 3/0	(1) #4	2"	POWER FEEDER FROM ATS TO PANEL
3	GENERATOR	AUTOMATIC TRANSFER SWITCH	(3) 3/0	(1) #4	2"	EMERGENCY POWER FEEDER TO ATS
4	AUTOMATIC TRANSFER SWITCH	GENERATOR	(2) #10	(1) #10	1"	START CIRCUIT
5	LOAD CENTER (DISTRIBUTION CENTER)	GENERATOR, ATS	(2) #12 (2) #12 (2) #12	(1) #12 (1) #12 (1) #12	1" 1" 1"	CIRCUIT FOR GENERATOR BLOCK HEATER & BATTERY HEATER CIRCUIT FOR BATTERY CHARGER CIRCUIT FOR ATS
6	GENERATOR	AUTOMATIC TRANSFER SWITCH	12-PAIR 24 AWG OR 2EA 6-PAIR CAT5	N/A	1"	ALARM CABLES (1) 12 PAIR 24 AWG. PROVIDE 24" OF SLACK CABLE. FINAL PUNCH DOWN IS BY AT&T TECH. LABEL ALL WIRES
7	AUTOMATIC TRANSFER SWITCH	ALARM BLOCK	2-PAIR 24 AWG OR 2EA 6-PAIR CAT5	N/A	1"	ALARM CABLES (1) 12 PAIR 24 AWG (RUN TO PURCELL CABINET & INTO ALARM BOX). PROVIDE 24" OF SLACK CABLE. FINAL PUNCH DOWN IS BY AT&T TECH. LABEL ALL WIRES
8	LOAD CENTER (DISTRIBUTION CENTER)	PROPOSED RECEPTACLE	(2) #12	(1) #12	1"	CIRCUIT FOR TOWN'S RADIO

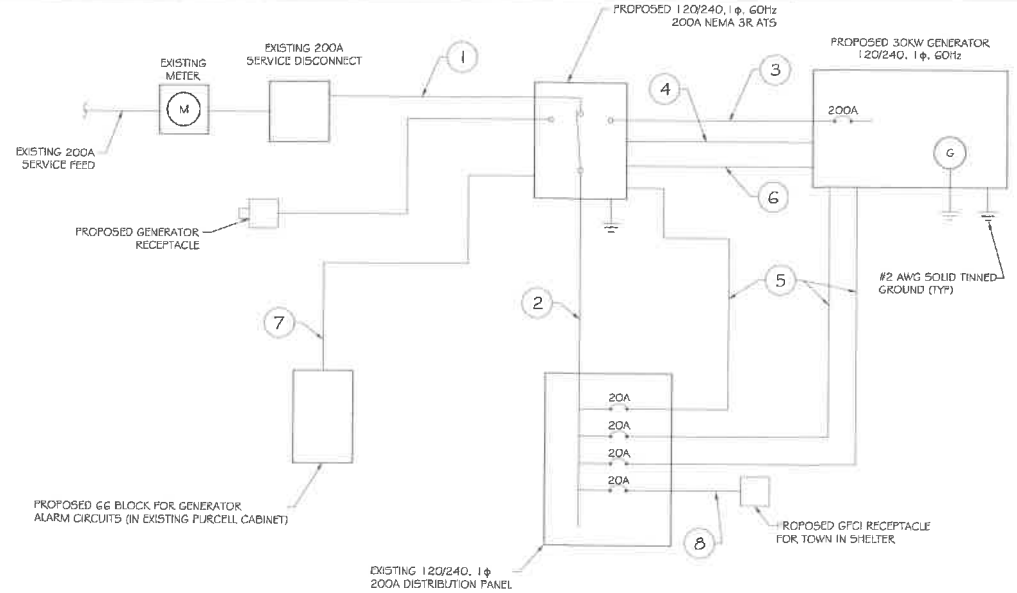
CIRCUIT DETAIL (1)
SCALE: NTS

ALARM WIRE IDENTIFICATION CHART

WIRE	ALARM
BROWN BROWN / WHITE	GENERATOR RUNNING
GREEN GREEN / WHITE	CRITICAL FAULT
BLUE BLUE / WHITE	MINOR FAULT
ORANGE ORANGE / WHITE	LOW FUEL
BROWN * BROWN / WHITE *	FUEL LEAK

*CAT5 CABLE ONLY, FROM 2ND CAT5 CABLE

ALARM WIRING IDENTIFICATION CHART (2)
SCALE: NTS



PROPOSED WIRING DIAGRAM (3)
SCALE: NTS

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12/13/2022

	DATE	DESCRIPTION
C	12/13/22	REVISED PER COMMENTS
B	12/09/22	REVISED PER COMMENTS
A	12/07/22	REVISED PER COMMENTS

ISSUE PHASE: FINAL 12/13/2022

PROJECT TITLE:
PURCELLVILLE
FA ID # 10004917

PROJECT INFORMATION:
500 FT NORTH OF MAIN STREET/N MAPLE AVENUE
PURCELLVILLE, VA 20132

WIRING DETAILS

SCALE: NONE

PROJECT NUMBER: 52736
SHEET NUMBER: E-1

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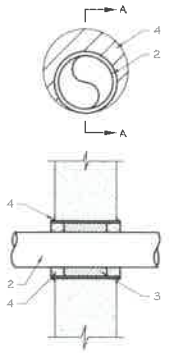
AC Distribution Panel - Layout Diagram									
Breaker Position	Breaker Type	On/Off	Size	Circuit Label	Breaker Position	Breaker Type	On/Off	Size	Circuit Label
1	2P	ON	30	RECTIFIER 1	2	2P	ON	30	RECTIFIER #2
3					4				
5	2P	ON	30	RECTIFIER 3	6	2P	ON	30	RECTIFIER #4
7					8				
9	2P	ON	30	RECTIFIER 5	10	1P	ON	20	RECEPTACLE GROUP 1
11					12	1P	ON	20	TELCO RECEPTACLE
13	1P	ON	20	LIGHTS	14	1P	ON	20	ALARM SYSTEM
15	1P	ON	20	EXT. LIGHTS	16	2P	ON	60	A/C
17	1P	ON	20	SPARE	18				
19	2P	ON	60	A/C	20	1P	ON	20	RECEPTACLE GROUP 2
21					22	1P	ON	20	RECEPTACLE GROUP 3
23	2P	ON	30	2 RECTIFIER 7	24	2P	ON	30	GPS24/24 RECTIFIER 1
25					26				
27	2P	ON	30	POWER FAR RELAY	28	2P	ON	30	GPS24/24 RECTIFIER 2
29					30				
31	2P	ON	30	RECTIFIER #11	32	2P	ON	30	GPS24/24 RECTIFIER 3
33					34				
35	2P	ON	30	RECTIFIER #13	36	2P	ON	30	GPS24/24 RECTIFIER 4
37					38				
39	1P	ON	20	ATS	40	1P	ON	20	BATTERY CHARGER
41	1P	ON	20	BLOCK HEATER	42	1P	ON	20	GFCI OUTLET (TOWN)

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

EXISTING PANEL SCHEDULE (1)
SCALE: NTS

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



NOTE:
1. 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. W902
F RATING = 3 HR
T RATING = 0 HR

1. 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 (CAZ) 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 0". (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 CP601S OR CP604 SEALANT IS USED.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC. : CP601S, CP604, CP606, OR FS-ONE SEALANT.

* BEARING THE UL CLASSIFICATION MARK

OUTER WALL PENETRATION DETAIL (IF APPLICABLE) (2)
SCALE: NTS

Type GR
CABLE TAP TO TOP OF GROUND ROD

Type GT
THROUGH CABLE TO TOP OF GROUND ROD.

Type GY
THROUGH CABLE TO SIDE OF GROUND ROD

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

Type TA
TEE OF HORIZONTAL RUN AND TAP CABLES.

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

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

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

Type GR
CABLE TAP TO TOP OF GROUND ROD

CADWELD DETAILS (3)
SCALE: NTS

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

PREPARED FOR:
at&t Mobility

CONSULTANT:
GENERAL DYNAMICS
Information Technology, Inc.
GENERAL DYNAMICS
101 STATION DR
WESTWOOD, MA 02090

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

COMMONWEALTH OF VIRGINIA
DARYL R. MATZKE
Lic. No. 402056307
PROFESSIONAL ENGINEER

Signature 12/13/2022 Date

MARK	DATE	DESCRIPTION
ISSUE PHASE	FINAL	DATE 12/13/2022

PROJECT TITLE:
PURCELLVILLE
FA ID # 10004917

PROJECT INFORMATION:
500 FT NORTH OF MAIN STREET/N MAPLE AVENUE
PURCELLVILLE, VA 20132

SHEET TITLE
PANEL AND PENETRATION DETAILS

SCALE: NONE

PROJECT NUMBER 52736
SHEET NUMBER E-2

DRAWN BY: TRB CHECKED BY: MJR

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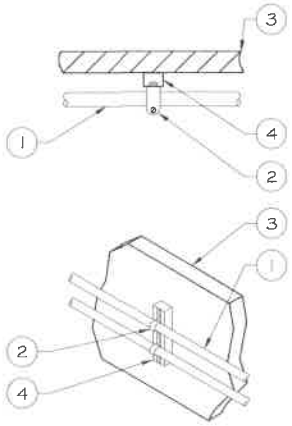
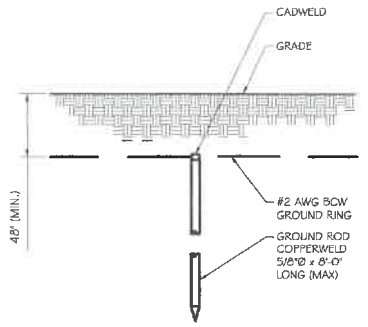
1. CONDUIT (TYP)
2. BUTTERFLY CLAMP AS REQUIRED
3. EXISTING WALL/CEILING
4. VERTICAL "UNISTRUT" P1000 "I" SERIES LENGTH BASED ON NUMBER OF CONDUIT TO BE MOUNTED

WALL CONSTRUCTION TYPE	USE
HOLLOW	3/8" DIA. TOGGLE BOLT
HOLLOW, AT STUD	3/8" DIA. LAG SCREW
CONCRETE BLOCK (HOLLOW)	3/8" DIA. HILTI HY-20 WITH SCREEN, MINIMUM EMBEDMENT 2-1/2"
CONCRETE (SOLID)	3/8" DIA. HILTI HY-150 WITH SCREEN, MINIMUM EMBEDMENT 2-1/2"
NOTE: USE GALVANIZED OR STAINLESS STEEL HARDWARE FOR WALL MOUNT & CONNECTIONS OF CHANNELS SPACE UNITS @ 5'-0" O.C. LENGTH OF RUN	



CONDUIT WALL MOUNT ①
SCALE: NTS

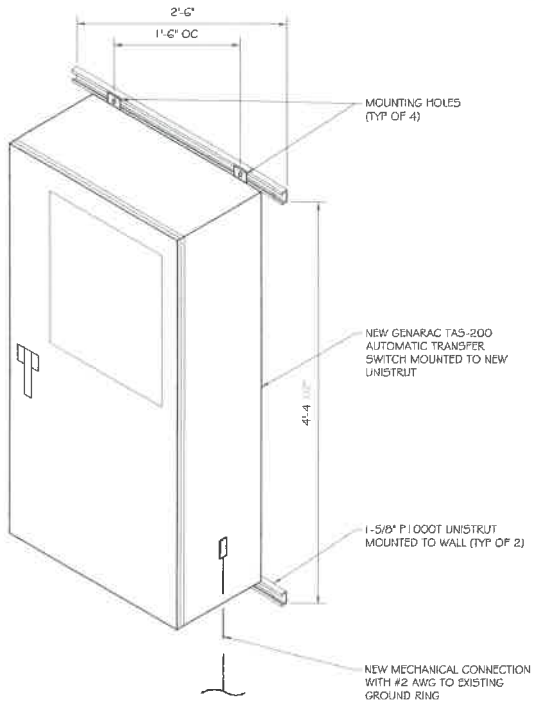


NOTE:
1. GROUND RODS MAY BE:
   - COPPER CLAD STEEL
   - SOLID COPPER
2. GROUND RODS SHALL HAVE A MAXIMUM SPACING TWICE THE LENGTH OF ROD
3. SEE RESISTIVITY REPORT FOR VERIFICATION AS AVAILABLE
4. A LARGER CONDUCTOR SHALL BE REQUIRED IN AREAS HIGHLY PRONE TO LIGHTNING AND/OR AREAS WITH HIGHLY ACIDIC SOIL
5. GROUND RODS INSTALLED WITHIN CLOSE PROXIMITY TO TOWER OR WHEN SOIL IS AT OR BELOW 2,000 OHM-CM, SHALL BE GALVANIZED TO PREVENT GALVANIC CORROSION OF TOWER. (SEE ANSI/TIA-EIA-222-G)
6. PROVIDE (1) GROUND LEAD TO EACH SIDE OF THE GENERATOR

GROUND ROD DETAIL ②
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"

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



GENERAC ATS MOUNTING DETAIL ③
SCALE: NTS

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PREPARED FOR:

at&t Mobility

CONSULTANT:

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101 STATION DR
WESTWOOD, MA 02090

Certification & Seals

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COMMONWEALTH OF VIRGINIA
DARYL R. MATZKE
Lic. No. 402056307
PROFESSIONAL ENGINEER

Signature 12/13/2022 Date

MARK	DATE	DESCRIPTION
A	03/03/22	

ISSUE PHASE: FINAL 12/13/2022

PROJECT TITLE:

PURCELLVILLE
FA ID # 10004917

PROJECT INFORMATION:
500 FT NORTH OF MAIN STREET/N MAPLE AVENUE
PURCELLVILLE, VA 20132

SHEET TITLE:
ATS, CONDUIT & GROUND ROD DETAILS

SCALE: NONE

PROJECT NUMBER 52736

SHEET NUMBER E-3

SD030 | 2.2L | 30 kW
INDUSTRIAL DIESEL GENERATOR SET
EPA Certified Stationary Emergency

GENERAC | INDUSTRIAL

Standby Power Rating
30 kW, 38 kVA, 60 Hz

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

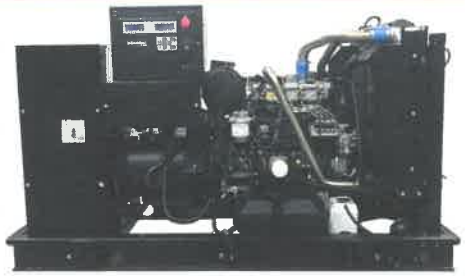

Image used for illustration purposes only

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

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.

SPEC SHEET

SD030 | 2.2L | 30 kW
INDUSTRIAL DIESEL GENERATOR SET
EPA Certified Stationary Emergency

GENERAC | INDUSTRIAL

STANDARD FEATURES

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

Fuel System
- Fuel Lockoff Solenoid
- Primary Fuel Filter

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

Electrical System
- Battery Charging Alternator
- Battery Cables
- 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)

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

FUEL TANKS (If Selected)
- UL 142/ULC S601
- Double Wall
- Normal and Emergency Vents
- Sloped Top
- Sloped Bottom
- Factory Pressure Tested
- Rupture Basin Alarm
- Fuel Level
- Check Valve In Supply and Return Lines
- RhinoCoat™ - Textured Polyester Powder Coat Paint
- Stainless Steel Hardware

CONTROL SYSTEM

Digital H Control Panel- Dual 4x20 Display

Program Functions
- Programmable Crank Limiter
- 7-Day Programmable Exerciser
- Special Applications Programmable Logic Controller
- RS-232/485 Communications
- All Phase Sensing Digital Voltage Regulator
- 2-Wire Start Capability
- Date/Time Fault History (Event Log)
- Isochronous Governor Control
- Waterproof/Sealed Connectors
- Audible Alarms and Shutdowns
- Not In Auto (Flashing Light)
- Auto/Off/Manual Switch
- E-Stop (Red Mushroom-Type)
- NFPA110 Level I and II (Programmable)
- Customizable Alarms, Warnings, and Events
- Modbus® Protocol
- Predictive Maintenance Algorithm
- Sealed Boards
- Password Parameter Adjustment Protection
- Single Point Ground
- 16 Channel Remote Trending
- 0.2 msec High Speed Remote Trending
- Alarm Information Automatically Annunciated on the Display

Full System Status Display
- Power Output (kW)
- Power Factor
- kW Hours, Total, and Last Run
- Real/Reactive/Apparent Power
- All Phase AC Voltage
- All Phase Currents
- Oil Pressure
- Coolant Temperature
- Coolant Level
- Engine Speed
- Battery Voltage
- Frequency

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

SPEC SHEET

GENERAC 30KW GENERATOR SPECIFICATIONS (1)
SCALE: NTS

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

PREPARED FOR:

at&t Mobility

CONSULTANT:
GENERAL DYNAMICS
Information Technology, Inc.
GENERAL DYNAMICS
101 STATION DR
WESTWOOD, MA 02090

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COMMONWEALTH OF VIRGINIA
DARYL R. MATZKE
Lic. No. 402056307
PROFESSIONAL ENGINEER
Signature
12/3/2022
Date

C		REVISED PODs
B		
A		
MARK	DATE	DESCRIPTION
ISSUE STATUS	FINAL	DATE 12/3/2022

PURCELLVILLE
FA ID # 10004917

PROJECT INFORMATION:
500 FT NORTH OF MAIN STREET/N MAPLE AVENUE
PURCELLVILLE, VA 20132

GENERAC 30KW GENERATOR SPECIFICATIONS

SCALE: NONE

DRAWING NUMBER 52736
SHEET NUMBER E-4

SD030 | 2.2L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

GENERAC | INDUSTRIAL

CONFIGURABLE OPTIONS

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

FUEL SYSTEM
- NPT Flexible Fuel Line

ELECTRICAL SYSTEM
- 10A UL Listed Battery Charger
- Battery Warmer

ALTERNATOR SYSTEM
- Alternator Upsizing
- Anti-Condensation Heater
- Tropical Coating
- Permanent Magnet Excitation

GENERATOR SET
- Extended Factory Testing
- 8 Position Load Center
- Pad Vibration Isolation

CIRCUIT BREAKER OPTIONS
- Main Line Circuit Breaker
- 2nd Main Line Circuit Breaker
- Shunt Trip and Auxiliary Contact
- Electronic Trip Breakers

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

WARRANTY (Standby Gensets Only)
- 2 Year Extended Limited Warranty
- 5 Year Limited Warranty
- 5 Year Extended Limited Warranty
- 7 Year Extended Limited Warranty
- 10 Year Extended Limited Warranty

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

FUEL TANKS (Size On Last Page)
- 8 in (203.2 mm) Fill Extension
- 13 in (330.2 mm) Fill Extension
- 19 in (482.6 mm) Fill Extension
- Overfill Protection Valve
- 5 Gallon Spill Box Return Hose
- 5 Gallon Spill Box
- Tank Risers
- Fuel Level Switch and Alarm
- 12' Vent System
- Fire Rated Stainless Steel Fuel Hose

ENGINEERED OPTIONS

ENGINE SYSTEM
- Coolant Heater Isolation Ball Valves
- Fluid Containment Pan

CONTROL SYSTEM
- Spare Inputs (x4) / Outputs (x4)
- Battery Disconnect Switch

ALTERNATOR SYSTEM
- 3rd Breaker System

GENERATOR SET
- Special Testing

FUEL TANKS
- UL2085 Tank
- Stainless Steel Tanks
- Special Fuel Tanks
- Vent Extensions

SPEC SHEET

SD030 | 2.2L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

GENERAC | INDUSTRIAL

APPLICATION AND ENGINEERING DATA

ENGINE SPECIFICATIONS

General

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

Engine Governing

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

Lubrication System

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

Cooling System

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

Fuel System

Fuel Type	Ultra Low Sulfur Diesel Fuel #2
Fuel Specifications	ASTM
Fuel Filtering (Microns)	2
Fuel Inject Pump	Distributor 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 Break 0281370SHV
Battery Voltage	12 VDC
Ground Polarity	Negative

ALTERNATOR SPECIFICATIONS

Standard Model	K0035124Y21
Poles	4
Field Type	Revolving
Insulation Class - Rotor	H
Insulation Class - Stator	H
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%

SPEC SHEET

GENERAC 30KW GENERATOR SPECIFICATIONS (1)

SCALE: NTS

RAMAKER
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PREPARED FOR:

at&t Mobility

CONSULTANT:

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COMMONWEALTH OF VIRGINIA
DARYL R. MATZKE
Lic. No. 402056307
PROFESSIONAL ENGINEER

12/13/2022

MARK	DATE	DESCRIPTION
C		
B		
A		REVISED PCDs

STATUS: FINAL DATE: 12/13/2022

PURCELLVILLE
FA ID # 10004917

PROJECT INFORMATION:
500 FT NORTH OF MAIN STREET/N MAPLE AVENUE
PURCELLVILLE, VA 20132

GENERAC 30KW GENERATOR SPECIFICATIONS

SCALE: NONE

PROJECT NUMBER: 52736

SHEET NUMBER: E-4.1

SD030 | 2.2L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

GENERAC | INDUSTRIAL

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: 96
Three-Phase 277/480 VAC @0.8pf	30 kW Amps: 45
Three-Phase 346/600 VAC @0.8pf	30 kW Amps: 36

MOTOR STARTING CAPABILITIES (skVA)

skVA vs. Voltage Dip

277/480 VAC	30%	208/240 VAC	30%
K0030124V21	93	K0030124V21	98
K0040124V21	76	K0040124V21	83
K0050124V21	68	K0050124V21	78

FUEL CONSUMPTION RATES*

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

* Fuel supply installation must accommodate fuel consumption rates at 100% load.

COOLING

		Standby
Coolant Flow	gpm (Lpm)	14.9 (56.2)
Coolant System Capacity	gal (L)	2.5 (9.5)
Heat Rejection to Coolant	BTU/hr (kW)	128,638 (136)
Inlet Air	scfm (m^3/min)	2,600 (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_2O (kPa)	0.5 (0.12)

COMBUSTION AIR REQUIREMENTS

	Standby
Flow at Rated Power scfm (m^3/min)	66 (1.8)

ENGINE

		Standby
Rated Engine Speed	RPM	1,800
Horsepower at Rated kW**	hp	40
Engine Speed	Rated (hz/min)	1-1/8" (360)
BMEP	psi (kPa)	158 (1,089)

EXHAUST

		Standby
Exhaust Flow (Rated Output)	scfm (m^3/min)	298 (8.4)
Max. Allowable Backpressure (Post Turbo/Engine)	inHg (kPa)	1.5 (5.1)
Exhaust Temp (Rated Output)	°F (°C)	892 (478)

** 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

SPEC SHEET 1 of 6

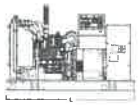
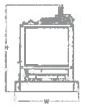
SD030 | 2.2L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

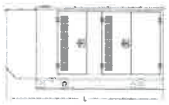
GENERAC | INDUSTRIAL

DIMENSIONS AND WEIGHTS*

OPEN SET (Includes Exhaust Flex)

Run Time - Hours	Usable Capacity - Gal (L)	L x W x H - in (mm)	Weight - lbs (kg)
No Tank	-	76.0 (1,930) x 37.4 (950) x 44.8 (1,138)	1,645 (745)
19	54 (204)	76.0 (1,930) x 37.4 (950) x 57.8 (1,468)	2,123 (963)
47	132 (501)	76.0 (1,930) x 37.4 (950) x 69.8 (1,773)	*,351 (1,067)
75	211 (799)	76.0 (1,930) x 37.4 (950) x 81.6 (2,078)	2,580 (1,182)
107	300 (1,136)	92.5 (2,350) x 37.4 (950) x 81.9 (2,076)	2,823 (1,190)

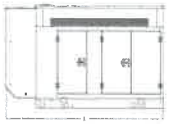



WEATHER PROTECTED ENCLOSURE

Run Time - Hours	Usable Capacity - Gal (L)	L x W x H - in (mm)	Weight - lbs (kg) Enclosure Only: Steel	Aluminum
No Tank	-	96.8 (2,459) x 38.0 (965) x 49.5 (1,256)	372 (170)	248 (113)
19	54 (204)	96.8 (2,459) x 38.0 (965) x 62.5 (1,586)		
47	132 (501)	96.8 (2,459) x 38.0 (965) x 74.5 (1,893)		
75	211 (799)	96.8 (2,459) x 38.0 (965) x 86.5 (2,196)		
107	300 (1,136)	96.8 (2,459) x 38.0 (965) x 86.5 (2,196)		


LEVEL 1 ACOUSTIC ENCLOSURE

Run Time - Hours	Usable Capacity - Gal (L)	L x W x H - in (mm)	Weight - lbs (kg) Enclosure Only: Steel	Aluminum
No Tank	-	112.5 (2,857) x 38.0 (965) x 49.5 (1,256)	503 (230)	339 (154)
19	54 (204)	112.5 (2,857) x 38.0 (965) x 62.5 (1,562)		
47	132 (501)	112.5 (2,857) x 38.0 (965) x 74.5 (1,893)		
75	211 (799)	112.5 (2,857) x 38.0 (965) x 86.5 (2,196)		
107	300 (1,136)	112.5 (2,857) x 38.0 (965) x 86.5 (2,196)		




LEVEL 2 ACOUSTIC ENCLOSURE

Run Time - Hours	Usable Capacity - Gal (L)	L x W x H - in (mm)	Weight - lbs (kg) Enclosure Only: Steel	Aluminum
No Tank	-	94.8 (2,407) x 38.0 (965) x 61.1 (1,551)	510 (232)	341 (155)
19	54 (204)	94.8 (2,407) x 38.0 (965) x 74.1 (1,881)		
47	132 (501)	94.8 (2,407) x 38.0 (965) x 86.1 (2,186)		
75	211 (799)	94.8 (2,407) x 38.0 (965) x 98.1 (2,491)		
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 53188
P: (262) 544-4811

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

SPEC SHEET 6 of 6

GENERAC 30KW GENERATOR SPECIFICATIONS (1)
SCALE: NTS

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

PREPARED FOR:

at&t Mobility

CONSULTANT:
GENERAL DYNAMICS
Information Technology, Inc.
GENERAL DYNAMICS
101 STATION DR
WESTWOOD, MA 02090

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

COMMONWEALTH OF VIRGINIA
DARYL R. MATZKE
Lic. No. 402056307
PROFESSIONAL ENGINEER
12/13/2022
date

A	ISSUED FOR PERMIT	12/13/2022
	DESCRIPTION	DATE

ISSUE PHASE: FINAL DATE: 12/13/2022

PROJECT TITLE:
PURCELLVILLE
FA ID # 10004917

PROJECT INFORMATION:
500 FT NORTH OF MAIN STREET/N MAPLE AVENUE
PURCELLVILLE, VA 20132

SHEET TITLE:
GENERAC 30KW GENERATOR SPECIFICATIONS

SCALE: NONE

PROJECT NUMBER: 52736
SHEET NUMBER: E-4.2

TTS Series Switches

200 Amps
600 VAC

GENERAC | INDUSTRIAL POWER

TAS200

200A Automatic Transfer Switch

TAS200 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 illustration purposes only.

Features

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

Optional Features

- **EXTENDED WARRANTY**
- **THREE-PHASE VOLTAGE CONFIGURATIONS**

Codes and Standards

Generac products are designed to the following standards:

c UL us LISTED — UL1008, UL508, UL50, CSA C22.2 No. 178

nec — NEC 700, 701 and 702

NEMA — NEMA 250

Application and Engineering Data

Cabinet Specifications	
Dimensions	24"W x 12"D x 49"H
Weight	210 lbs.
Construction	Single Chamber with Main Door
	Steel
	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
	H-frame
Installed	Pre-wired alarm terminal strip

Electrical Specifications	
Voltage/Phase/Amps	120/240 Single-Phase, 200A 120/208 3-Phase, 200A 120/240 3-Phase, 200A
Breaker	Eaton 200 amp Utility Breaker
	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
Alarm Terminal Board	Generator Run Alarm
	Generator Fail – Shutdown Alarm
	Generator Fail – Non Shutdown Alarm
	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	

GENERAC ATS SPECIFICATIONS (1)
SCALE: NTS

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PREPARED FOR:

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CONSULTANT:
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Information Technology, Inc.
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101 STATION DR
WESTWOOD, MA 02090

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COMMONWEALTH OF VIRGINIA
DARYL R. MATZKE
Lic No. 402056307
PROFESSIONAL ENGINEER
12/2/22

ISSUE	DATE	DESCRIPTION
B		
A		REVISED PCDS
ISSUE PHASE	FINAL	12/13/2022

PURCELLVILLE
FA ID # 10004917

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500 FT NORTH OF MAIN STREET/N
MAPLE AVENUE
PURCELLVILLE, VA 20132

GENERAC ATS SPECIFICATIONS

SCALE: NONE

PROJECT NUMBER 52736
SHEET NUMBER E-5

GENERAC | INDUSTRIAL

TAS200

3 of 3

TTS Control Systems

Touch Screen Interface

INDICATORS AND BUTTONS

• System Ready Indicator • Standby Operating Indicator • Utility Available Indicator • GEN/UTIL Switch Position Indicator • TVSS status	• Normal Test button • Fast Test button • Return to Normal button • Reset button • Exercising Indicator

DETAILS SCREEN

System Settings:

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

Engine Settings:

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

Exercise Settings:

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

Screen Settings:

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

Diagnostics:

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

Mimic Diagram:

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

Generac Power Systems, Inc. • S45 W29290 HWY. 59, Waukesha, WI 53189 • generac.com

GENERAC ATS SPECIFICATIONS
SCALE: NTS

1

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COMMONWEALTH OF VIRGINIA
DARYL R. MATZKE
Lic No. 402056307
PROFESSIONAL ENGINEER

Signature 12/13/2022 Date

B		
A		
MARK	DATE	DESCRIPTION

ISSUE PHASE: FINAL DATE ISSUED: 2/13/2022

PROJECT TITLE:
PURCELLVILLE
FA ID # 10004917

PROJECT INFORMATION:
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PURCELLVILLE, VA 20132

SHEET TITLE:
GENERAC ATS SPECIFICATIONS

SCALE: NONE

PROJECT NUMBER: 52736
SHEET NUMBER: E-5.1