



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@ct.gov

www.ct.gov/csc

September 20, 2018

Donna Love
Site Acquisition Manager
General Dynamics Information Technology Inc.
8053 Princess Path
Liverpool, NY 13090

RE: **EM-AT&T-164-180830** - AT&T Mobility notice of intent to modify an existing telecommunications facility located at 340 Bloomfield Avenue, Windsor, Connecticut.

Dear Ms. Love:

The Connecticut Siting Council (Council) received a notice of intent to modify the above-referenced facility on August 30, 2018. On August 31, 2018, the Council issued a letter (enclosed) stating that your request for exempt modification was incomplete because it contained conflicting information on generator capacity and fuel type. The Council requested that General Dynamics provide clarification on the conflicting information highlighted.

On September 18, 2018, the Council received a cover letter and Site Plans, which refer to the proposed installation of a 20kW natural gas fueled generator. However, the generator specifications attached to the Site Plans are for a 25kW generator.

Therefore, the exempt modification filing remains incomplete at this time. The Council recommends that General Dynamics provide a generator specification sheet for a 20kW generator and if the request is for a 25kW natural gas-fueled generator then provide the corresponding cover letter and site plans, on or before October 22, 2018. If additional time is needed to gather the requested information, please submit a written request for an extension of time prior to October 22, 2018.

This notice of incompleteness shall have the effect of tolling the Federal Communications Commission (FCC) 60-day timeframe in accordance with Paragraph 217 of the FCC Wireless Infrastructure Report and Order issued on October 21, 2014 (FCC 14-153).

Thank you for your attention to this matter. Should you have any questions, please feel free to contact me at 860-827-2951.

Sincerely,

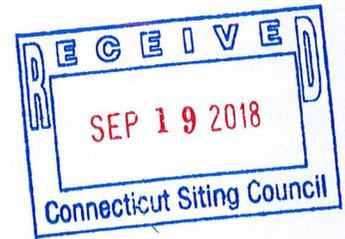
Melanie Bachman
Executive Director

MAB/FOC/in

- c: The Honorable Donald Trinks, First Selectman, Town of Windsor
Peter Souza, Town Manager, Town of Windsor
Eric Barz, AICP, Town Planner, Town of Windsor



em-att-164-180830



September 17, 2018

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

Re: Notice of Exempt Modification – Resubmission - Emergency Backup Generator
340 Bloomfield Avenue, Windsor, CT 06095

Dear Melanie,

AT&T Mobility currently maintains a wireless telecommunications facility at the above referenced address. The monopole and AT&T's shelter are surrounded by buildings and a chain link fence. The shelter houses AT&T's equipment. AT&T currently does not maintain a generator at this cell site.

In an effort to further enhance the network reliability for the First Responder Network Authority (FirstNet), AT&T intends to modify its facility by installing a new 20KW natural gas fueled generator in a designated 4' x 5' lease area near AT&T's in close proximity to the ground equipment. The proposed generator will be placed on a 4' x 5' concrete pad. Construction Drawings are attached and approved by the landowner – Town of Windsor.

Please accept this letter as notification pursuant to R.C.S.A. Section 16-50j-73, for construction that constitutes modification pursuant to R.C.S.A Section 16-50j-72(b)(2). In accordance with R.C.S.A Section 16-50j-73, a copy of this submission is being sent to the Town of Windsor as property owner, Pete Souza, Town Manager, Eric Barz - Town Planner, the tower owner – Paul Pedicone of Crown Castle. Evidence of notifications are attached hereto.

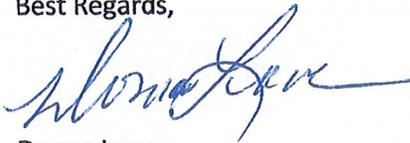
AT&T's proposed Wireless Modifications Constitute An "Exempt Modification"

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- 1) The proposed modification will not result in an increase in the height of the existing tower.
- 2) The generator and attached fuel tank will remain entirely within the limits of the leased area. The modifications therefore, will not require the extension of the existing boundary.
- 3) The proposed modification does not increase the noise levels at the boundary by six (6) decibels or more under normal conditions. Proposed modification is only used during emergency power failure of the commercial power.
- 4) The installation of a new generator and attached fuel tank will not change, in any way, radio frequency (RF) emissions at the facility.
- 5) Site Plan Approval by the Town of Windsor dated October 25, 2000 for the telecommunications tower is provided herewith.

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

Best Regards,



Donna Love
Site Acquisition Manager, exclusive agent of AT&T Mobility
General Dynamics IT, Inc.
Mobile #315-480-5529

Enc.

Cc: Town of Windsor – Pete Souza, Town Manager
Town of Windsor – Eric Barz, Town Planner
Crown Castle – Paul Pedicone, Tower Owner



First in Connecticut. First for its citizens.

October 25, 2000

Cuddy & Feder & Worby LLP
ATTN: Daniel F. Leary
90 Maple Avenue
White Plains, NY 10601-5196

Subject: Special Use #546 - Wireless Telecommunications Tower, 340 Bloomfield Avenue, Zoning Regulations Sections 12.2 & 2.2.19E(1), NZ Zone, Town of Windsor/AT&T Wireless PCS, LLC

Site Plan #308E - Revision, Wireless Telecommunications Tower, 340 Bloomfield Avenue, NZ Zone, Town of Windsor/AT&T Wireless PCS, LLC

Dear Mr. Leary:

At its meeting on October 10, 2000 the Windsor Town Planning & Zoning Commission took the following action on the subject applications:

Approved subject to the following condition:

- 1) Final approval of the Fire Marshal regarding fire safety issues**

Approval includes the following distance waiver:

- 1) 83 feet for Bloomfield Avenue south of site**

Very truly yours,

Town Planning & Zoning Commission

/mm

I, Anita M. Mips, Chairperson of the Windsor Town Planning and Zoning Commission, hereby certify that on October 10, 2000 the Planning and Zoning Commission of the Town of Windsor granted approval of Special Use Application #546 for a Wireless Telecommunications Tower with a monopole height of 150 feet plus 20-foot Town public service whip antennas for a total height of 170 feet, under Zoning Regulations Sections 12.2 & 2.2.19E(1), subject to the following condition:

- 1) Final approval of the Fire Marshal regarding fire safety issues.

This approval also includes the following waiver in accordance with Zoning Regulations Section 12.1:

- 1) a waiver of the fall zone distance requirement for 83 feet in relation to the distance of the tower from Bloomfield Avenue, 340 feet being required, 257 feet being proposed.

Said Special Use was granted for the property located at: 340 Bloomfield Avenue

The owner of record of said parcel is: Town of Windsor

Dated at Windsor, Connecticut, this 30th day of November, 2000



Chairperson

Public Act #75-317

Received for Record this _____ day of _____, 2000

Attest: Town Clerk

GENERAL DYNAMICS
Wireless Services

September 17, 2018

Melanie Bachman
Executive Director
Connecticut Siting Council
10 Franklin Square
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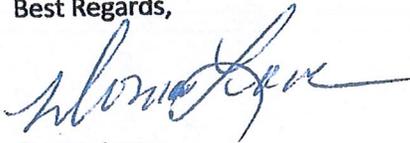
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General Dynamics IT, Inc.
Mobile #315-480-5529

Enc.

Cc: Town of Windsor – Pete Souza, Town Manager
Town of Windsor – Eric Barz, Town Planner
Crown Castle – Paul Pedicone, Tower Owner

ORIGIN ID:SYRA (315) 480-5339
DONNA LOVE
GENERAL DYNAMICS
8053 PRINCESS PATH
LIVERPOOL, NY 13090
UNITED STATES US

SHIP DATE: 18SEP18
ACTWGT: 1.00 LB
CAD: 105486753MINET4040

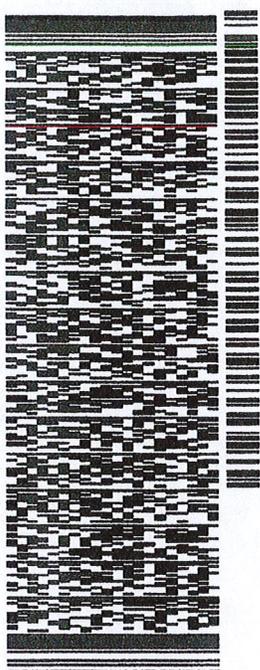
BILL SENDER

TO PETE SOUZA, TOWN MANAGER
TOWN OF WINDSOR
275 BROAD STREET

WINDSOR CT 06095

(860) 285-1980 REF: 507406-1018

PO: DEPT:



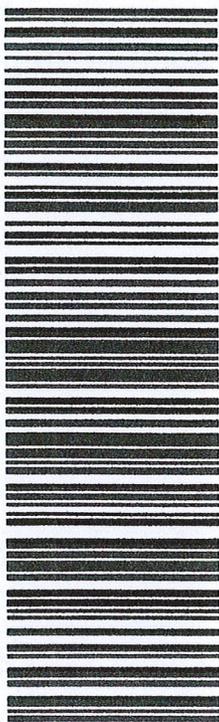
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TRK# 7732 6523 3233
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STANDARD OVERNIGHT

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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.

GENERAL DYNAMICS
Wireless Services

September 17, 2018

Melanie Bachman
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10 Franklin Square
New Britain, CT 06051

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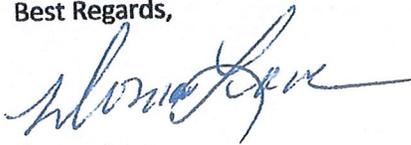
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UNITED STATES US

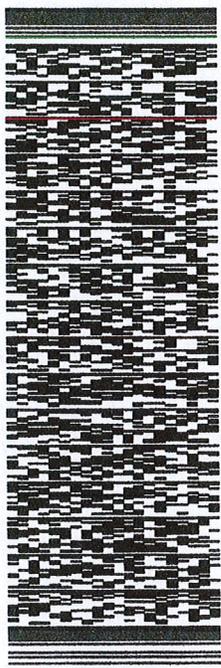
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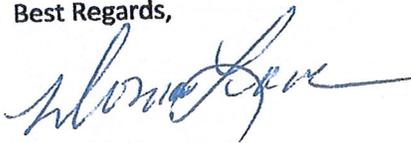
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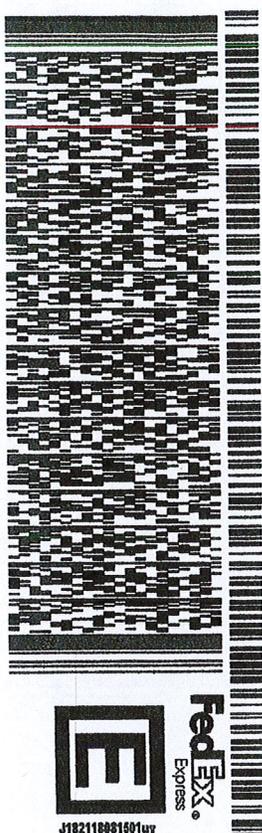
ORIGIN ID:SYRA (315) 480-5539
DONNA LOVE
GENERAL DYNAMICS
8053 PRINCESS PATH
LIVERPOOL, NY 13090
UNITED STATES US

SHIP DATE: 18SEP18
ACTWGT: 1.00 LB
CAD: 105486753IN/NET4040
BILL SENDER

TO PAUL PEDICONE
CROWN CASTLE
3 CORPORATE PARK DRIVE, SUTIE 101

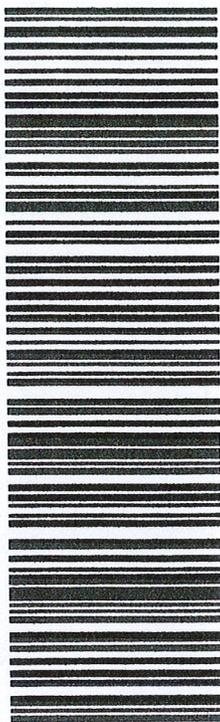
CLIFTON PARK NY 12065
(518) 373-3530 REF: 507406-1018
INV: DEPT:

552J1F78C/DCA5



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at&t Mobility

SITE NAME: WINDSOR CENTRAL
FA LOCATION CODE: 10092835
GENERATOR PROJECT



100% EMPLOYEE-OWNED
 855 Community Dr, Sauk City, WI 53583
 608-643-4100 www.Ramaker.com
 Sauk City, WI • Willmar, MN
 Woodcliff Lake, NJ • Bayamon, PR

PREPARED FOR:



CONSULTANT:

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

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



James R. Skowronski 9/18/2018
 Signature: Date:

MARK	DATE	DESCRIPTION
B	09/18/18	REVISION B
A	09/02/18	REVISION A

ISSUE PHASE: FINAL DATE ISSUED: 08/02/2018

PROJECT TITLE:
WINDSOR CENTRAL
FA ID # 10092835

PROJECT INFORMATION:
 340 BLOOMFIELD AVENUE
 WINDSOR, CT 06095

SHEET TITLE:
TITLE SHEET

SCALE: NONE

PROJECT NUMBER: 38599
 SHEET NUMBER: T-1

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.

DIRECTIONS:
 START HEADING NORTHEAST ON I-95 N. TAKE EXIT 38 TOWARD STATE 15/MERRIT PKWY/WILBUR CROSS PKWY. MERGE ONTO MILFORD PKWY. TAKE THE CT-15 NW CROSS PKWY EXIT TOWARD NEW HAVEN/HARTFORD. MERGE ONTO CT-15 N. TAKE EXIT 68 N-E TO MERGE ONTO I-91 N TOWARD CT-66 E/HARTFORD/MIDDLETOWN. CONTINUE STRAIGHT TO STAY ON I-91 N. TAKE EXIT 37 FOR CT-305/BLOOMFIELD AVENUE TOWARD WINDSOR CENTER. TURN RIGHT ONTO CT-305 E/BLOOMFIELD AVENUE. DESTINATION WILL BE ON THE LEFT.

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

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

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

APPLICABLE BUILDING CODE & STANDARDS

- ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE 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:
- INTERNATIONAL BUILDING CODE 2009
 - NATIONAL ELECTRIC CODE (NEEC)
 - AMERICAN CONCRETE INSTITUTE (ACI) 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
 - 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
 - TIA 607, COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS

PROJECT INFORMATION

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

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

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

SITE DATA:
 SITE NAME: WINDSOR CENTRAL
 SITE ID: 855662
 FA NUMBER: 10092835

TOWER OWNER:
 CROWN CASTLE INTERNATIONAL
 12 GILL STREET, SUITE 5800
 WOBURN, MA 01801

ADDRESS:
 340 BLOOMFIELD AVENUE
 WINDSOR, CT 06095

COUNTY: HARTFORD

LAT.: 41.852492° N
LONG.: 72.660599° W

GROUND ELEVATION: 118 FT AMSL

DO NOT SCALE DRAWINGS:
 CONTRACTOR SHALL VERIFY ALL PLANS & EXISTING DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

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

SHEET INDEX

- GENERAL:**
 T-1 TITLE SHEET
- NOTES:**
 N-1 GENERAL NOTES
- SITE:**
 A-1 SITE PLAN & EQUIPMENT LAYOUT
 S-1 FOUNDATION DETAILS
- ELECTRICAL & GROUNDING:**
 E-1 WIRING DETAILS
 E-2 PANEL AND PENETRATION DETAILS
 E-3 ATS, CONDUIT & GROUND ROD DETAILS
 E-4 GENERAC GENERATOR SPECIFICATIONS
 E-4.1 GENERAC GENERATOR SPECIFICATIONS
 E-4.2 GENERAC GENERATOR SPECIFICATIONS
 E-5 GENERAC ATS SPECIFICATIONS

SIGNATURE BLOCK

AT&T MGR.	DATE
GENERAL DYNAMICS CONSTRUCTION MGR.	DATE
SITE ACQUISITION	DATE

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 DRAWN BY: MDP
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 1:3650036599CADIGD_ATT_GENERATOR_ADD_CD5_WINDSOR_CENTRAL_10092835.dwg
 Printed by: tbeaty on Sep 18, 2018 - 1:47pm

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. ASTM (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 (UNDERWRITERS 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.

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 800V RATED 75 DEGREES CELSIUS, UNLESS NOTED OTHERWISE.

3. CONDUIT BENDS SHALL BE MADE IN ACCORDANCE WITH NEC TABLE 346-1.0. NO RIGHT ANGLE DEVICE OTHER THAN STANDARD CONDUIT ELBOWS WITH 1 2" MINIMUM INSIDE SWEEPS FOR ALL CONDUITS 2" OR LARGER.
4. POWER WIRING SIZE SHALL NOT BE SMALLER THAN #12 AWG.
5. ALL WIRING SHALL BE COPPER. ALUMINUM WILL NOT BE ACCEPTABLE ALL POWER CIRCUITS SHALL CONTAIN A GROUND WIRE.
6. PHASE MARKINGS TO BE USED AT POWER CONDUCTOR TERMINATIONS.
7. CONTRACTOR SHALL ENSURE INTEGRITY IS MAINTAINED WHEN INSTALLING CONDUIT AND WIRING.
8. INSTALL PULL STRING IN ALL CONDUIT.
9. 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.
10. MAINTAIN MINIMUM 1'-0" VERTICAL AND 1'-0" HORIZONTAL SEPARATIONS FROM ANY MECHANICAL GAS PIPING.
11. ALL WIRING ROUTED IN PLENUM TO BE RATED OR IN METALLIC FLEX (LIQUIDITE) CONDUIT.

C. EQUIPMENT

1. EQUIPMENT/PARTS CONNECTED TO EXISTING PANELS, DUCTS, ETC. SHALL MATCH THE CHARACTERISTICS (VC, 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 (1999) AND THE CURRENT EDITION OF THE NATIONAL ELECTRICAL SAFETY CODE. BONDING JUMPERS WITH APPROVED GROUND FITTINGS SHALL BE INSTALLED AT ALL RACEWAYS, EQUIPMENT ENCLOSURES, PULL BOXES, ETC. TO MAINTAIN GROUND CONTINUITY WHERE REQUIRED BY CODE.
8. ALL EQUIPMENT GROUND CONDUCTORS SHALL BE TIN COATED, #2 AWG COPPER UNLESS NOTED OTHERWISE ON THE DRAWINGS.

E. INSPECTION/DOCUMENTATION

1. THE CONTRACTOR, UPON COMPLETION OF HIS WORK, SHALL PROVIDE AS-BUILT 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.

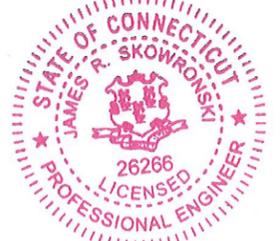
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PREPARED FOR:



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 Connecticut.



Signature: *James P. Skowronski* Date: 9/18/2018

REV	DATE	DESCRIPTION
B	09/18/18	REVISION B
A	08/02/18	REVISION A
MARK	DATE	DESCRIPTION
ISSUE	FINAL	DATE ISSUED 08/02/2018

PROJECT TITLE:
**WINDSOR CENTRAL
 FA ID # 10092835**

PROJECT INFORMATION:
 340 BLOOMFIELD AVENUE
 WINDSOR, CT 06095

SHEET TITLE:
GENERAL NOTES

SCALE: NONE

PROJECT NUMBER: 38599
 SHEET NUMBER: N-1

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SCOPE OF WORK DETAILS

GENERAL:

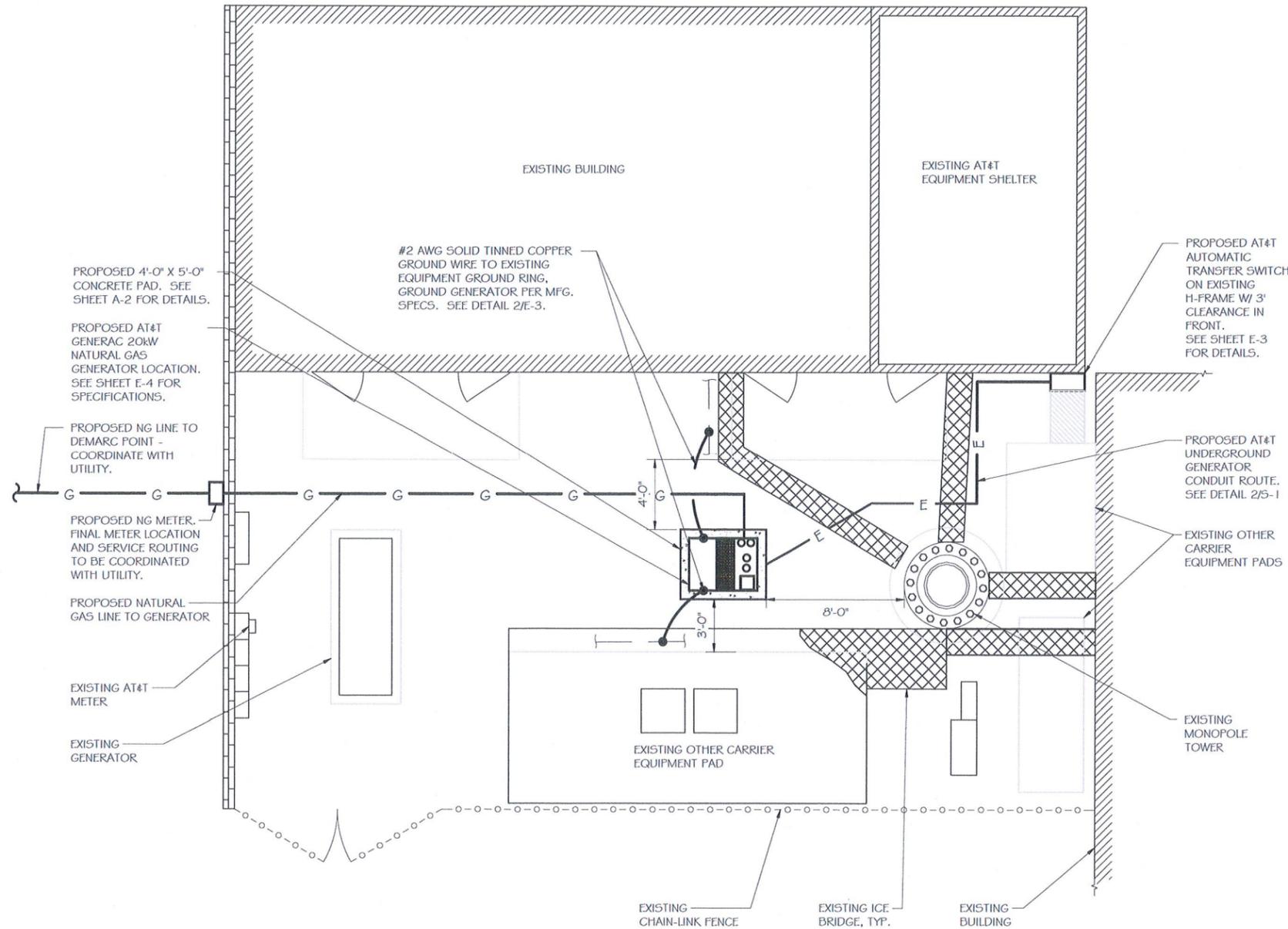
- NEW GENERAC DIESEL GENERATOR PROVIDED BY GENERAL DYNAMICS & INSTALLED BY GENERAL CONTRACTOR, SEE E-4.
- NEW 4'-0" X 10'-0" CONCRETE PAD PROVIDED & INSTALLED BY GENERAL CONTRACTOR (AS REQUIRED) SEE S-1
- NEW GENERAC AUTOMATIC TRANSFER SWITCH PROVIDED BY GENERAL DYNAMICS & INSTALLED BY CONTRACTOR (AS 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.
- (2) NEW 1" ELECTRICAL CONDUIT WITH CONDUCTORS TO RUN FROM NEW GENERATOR TO AC PANEL. CONDUIT PROVIDED & INSTALLED BY GENERAL CONTRACTOR. SEE E-1, E-2 & E-3.
- (1) NEW 1" ALARM CONDUIT & CABLING PROVIDED & INSTALLED BY GENERAL CONTRACTOR. SEE E-1, E-2 & E-3.

GROUNDING:

- NEW EXOTHERMIC CONNECTION FROM 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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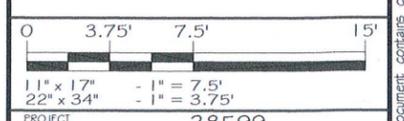
Signature: *James R. Skowronski* Date: 9/18/2018

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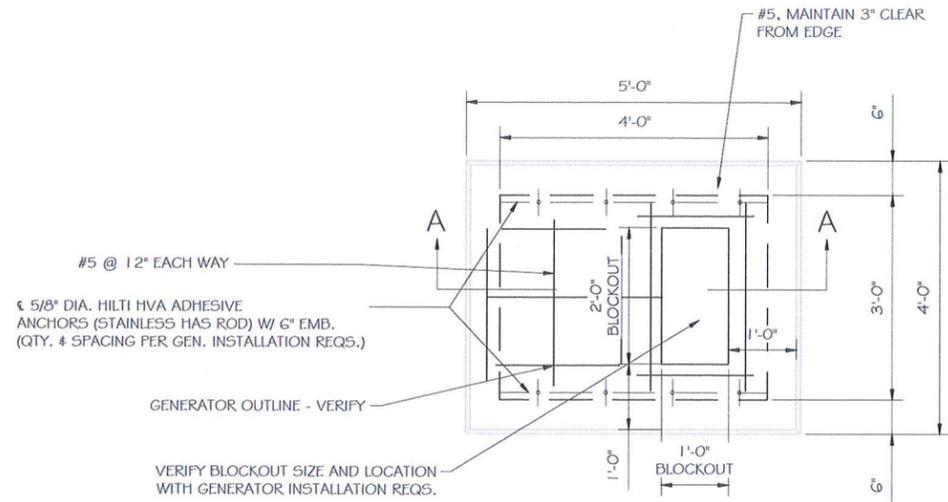
SHEET TITLE:
SITE PLAN & EQUIPMENT LAYOUT



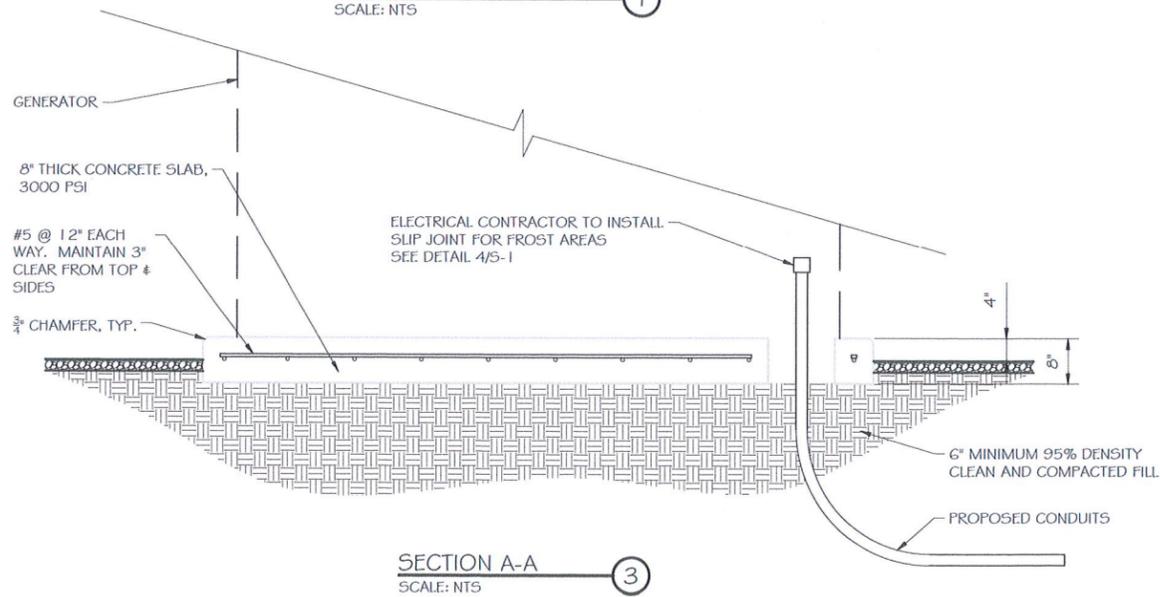
PROJECT NUMBER: 38599
 SHEET NUMBER: A-1

SITE PLAN
 SCALE: 1" = 7'-6" 1

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FOUNDATION PLAN
 SCALE: NTS



SECTION A-A
 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:

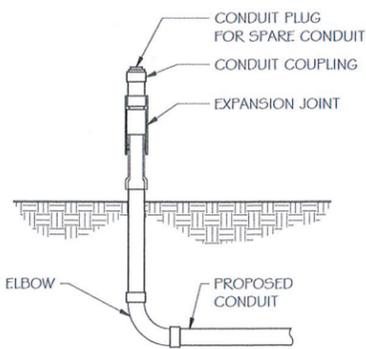
- BE CONSTRUCTED IN ACCORDANCE WITH UNDERWRITERS LABORATORIES STANDARD UL-142. BE CONSTRUCTED IN ACCORDANCE WITH FLAMMABLE & COMBUSTIBLE LIQUIDS CODE, NFPA 30; THE STANDARD FOR INSTALLATION & USE OF STATIONARY COMBUSTIBLE ENGINE & GAS TURBINES, NFPA 37; AND THE STANDARD FOR EMERGENCY & STANDBY POWER 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

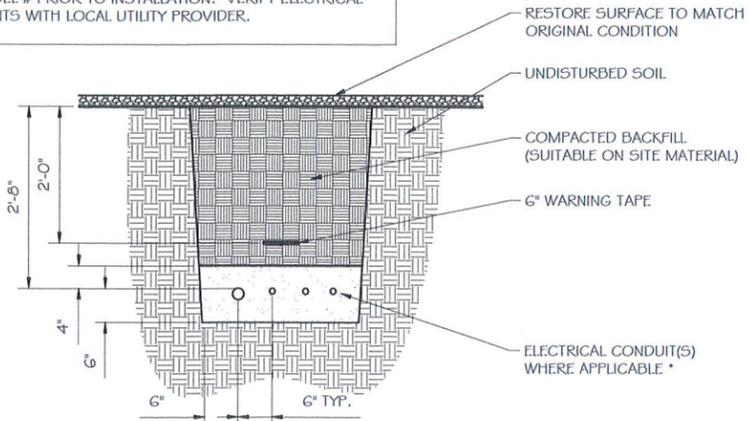
- 40% REMAINING FOR ALARM
- 20% REMAINING FOR SHUT-DOWN

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
 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:

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

UTILITY CONDUIT TRENCH
 SCALE: NTS

STRUCTURAL GENERAL NOTES

- GENERAL CONDITIONS
 - 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.
 - 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.
 - DO NOT SCALE DRAWINGS
 - VERIFY ALL EQUIPMENT MOUNTING DIMENSIONS PER MANUFACTURER DRAWINGS
 - DESIGN LOADS ARE (GENERAL):

LIVE LOAD	: 100 PSF
EQUIPMENT SIZE	: 889.1" H, 106" W, 38" D
WEIGHT WITH WOODEN SHIPPING SKID	
ENCLOSED GENERATOR	: 3974 LBS
- FOR DESIGN & ANALYSIS OF THE FOUNDATION, THE MINIMUM NET SOIL BEARING CAPACITY SHALL BE ASSUMED TO BE 2000 PSF.
- CONCRETE
 - MEET OR EXCEED THE FOLLOWING CODES & STANDARDS:

DESIGN	: ACI 318-11
CONSTRUCTION	: ACI 301
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)
 - CONCRETE STRENGTH AT 28 DAYS SHALL BE 4000 PSI MINIMUM
 - DO NOT FIELD BEND OR WELD TO GRADE 60 REINFORCED STEEL
 - PROVIDE AIR ENTRAINMENT CONCRETE WITH AIR CONTENT OF 5 TO 7% FOR ALL CONCRETE EXPOSED TO EARTH OR WEATHER.
 - MAXIMUM AGGREGATE SIZE: 3/4"
 - DO NOT USE IN ADMIXTURE, WATER OR OTHER CONSTITUENTS OF CONCRETE WHICH HAS CALCIUM CHLORIDE.
 - MINIMUM COVER FOR REINFORCING STEEL SHALL BE AS SHOWN ON PLAN.
- FOUNDATION & EXCAVATION NOTES
 - SLAB SHALL BE CONSTRUCTED UPON UNDISTURBED, NATURAL SUBGRADE OR COMPACTED GRANULAR FILL WITH AN ASSUMED MINIMUM NET ALLOWABLE BEARING CAPACITY OF 2000 PSF.
 - ALL ORGANIC AND/OR OTHER UNSUITABLE MATERIAL SHALL BE REMOVED FROM FOUNDATION & SLAB SUBGRADE & BACKFILL AREAS, & THEN BACKFILLED WITH ACCEPTABLE GRANULAR FILL COMPACTED TO 95% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT (ASTM D 1557).
 - 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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KING OF PRUSSIA, PA 19406

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



Signature: *James R. Skowronski* Date: 9/18/2018

ISSUE	DATE	DESCRIPTION
B	09/18/18	REVISION B
A	08/02/18	REVISION A
MARK	DATE	DESCRIPTION
ISSUE	FINAL	DATE ISSUED 08/02/2018

PROJECT TITLE:
WINDSOR CENTRAL
 FA ID # 10092835

PROJECT INFORMATION:
 340 BLOOMFIELD AVENUE
 WINDSOR, CT 06095

SHEET TITLE:
FOUNDATION DETAILS

SCALE: NONE

PROJECT NUMBER	38599
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	ALARM BLOCK	GENERATOR	12-PAIR 24 AWG OR 2EA 6-PAIR CAT5	N/A	1"	ALARM CABLES (1) 12 PAIR 24 AWG (RUN THRU INTERIOR OF SHELTER & INTO ALARM BOX. PROVIDE 24" OF SLACK CABLE. FINAL PUNCH DOWN IS BY AT&T TECH. LABEL ALL WIRES

CIRCUIT DETAIL
 SCALE: NTS

1

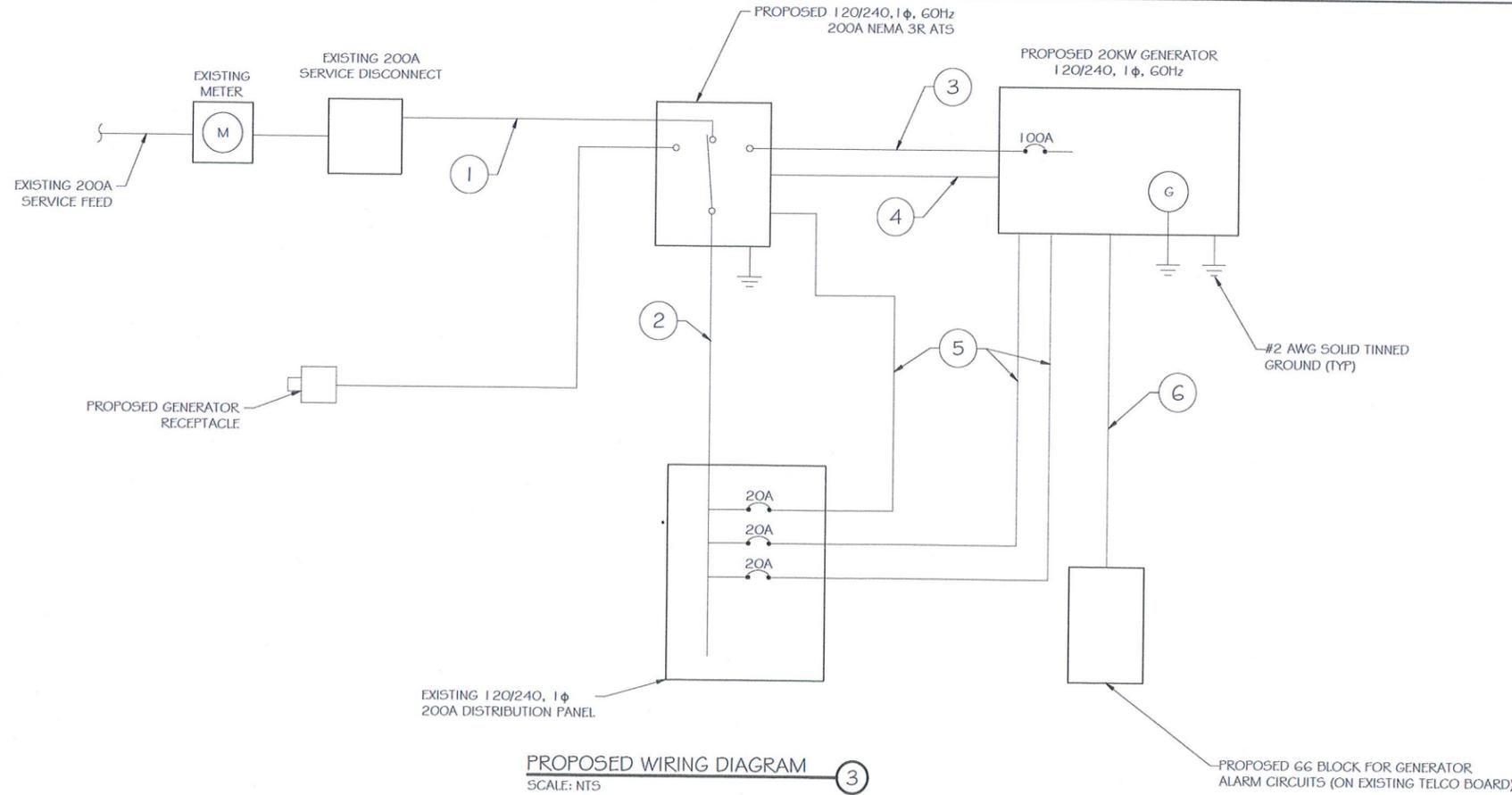
ALARM WIRE IDENTIFICATION CHART

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
 SCALE: NTS

2



PROPOSED WIRING DIAGRAM
 SCALE: NTS

3



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PREPARED FOR:



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

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MARK	DATE	DESCRIPTION
D	09/18/18	REVISION D
A	08/02/18	REVISION A

ISSUE PHASE: FINAL DATE ISSUED: 08/02/2018

PROJECT TITLE:
WINDSOR CENTRAL
 FA ID # 10092835

PROJECT INFORMATION:
 340 BLOOMFIELD AVENUE
 WINDSOR, CT 06095

SHEET TITLE:
WIRING DETAILS

SCALE: NONE

PROJECT NUMBER: 38599
 SHEET NUMBER: E-1

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 CHECKED BY:
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 Printed by: tbeaty on Sep 18, 2018 - 1:47pm

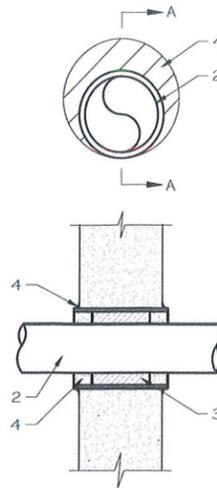
AC Distribution Panel - Layout Diagram									
Breaker Position	Breaker Type	On/Off	Size	Circuit Label	Breaker Position	Breaker Type	On/Off	Size	Circuit Label
1	2P	On	50	HVAC #2	2	1P	On	20	EXTERIOR RECEPTACLE
3					4	1P	Off	20	SPARE
5	2P	On	30	RECTIFIER #5	6	2P	On	30	RECTIFIER #8
7					8				
9	2P	On	30	RECTIFIER #9	10	2P	On	31	RECTIFIER #10
11					12				
13	2P	On	30	RECTIFIER #11	14	2P	On	32	RECTIFIER #12
15					16				
17	2P	On	30	RECTIFIER #19	18	2P	On	30	RECTIFIER #14
19					20				
21	2P	On	30	RECTIFIER #21	22	2P	On	30	RECTIFIER #16
23					24				
25	2P	Off	20	RECTIFIER #23	26	2P	On	30	RECTIFIER #18
27					28				
29	2P	On	30	NOKIA CABINET	30	1P	On	15	INTERIOR LIGHTS
31					32	2P	On	20	SPACE
33	2P	Off	20	SPACE	34				
35					36	1P	ON	20	BATTERY CHARGER
37	1P	ON	20	ATS	38	1P	ON	20	BLOCK HEATER
39	2P	Off	30	AUXILIARY SERVICES	40				
41					42	2P	Off	30	AUXILIARY SERVICES

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

EXISTING PANEL SCHEDULE
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. 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 (CATZ) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.
- THROUGH PENETRATIONS: ONE METALLIC PIPE OR CONDUIT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. THE ANNULAR SPACE SHALL BE MINIMUM 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.
- PACKING MATERIAL: MINIMUM 6" THICKNESS OF MIN 4.0 PCF MINERAL WOOL BATTING INSULATION FIRMLY PACKED INTO OPENING AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM TOP SURFACE OF FLOOR OR FROM BOTH SURFACES OF WALL AS REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL MATERIAL.
- FILL, VOID, OR GAVITY MATERIAL*: SEALANT: MINIMUM 1/4" THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH TOP SURFACE OF FLOOR AND WITH BOTH SURFACES OF WALL. AT THE POINT CONTACT LOCATION BETWEEN PIPE AND CONCRETE, A MINIMUM 1/2" DIAMETER BEAD OF FILL MATERIAL SHALL BE APPLIED AT THE CONCRETE/PIPE INTERFACE ON THE TOP SURFACE OF FLOOR AND ON BOTH SURFACES OF WALL. W RATING APPLIES ONLY WHEN CP6015 OR CP604 SEALANT IS USED.

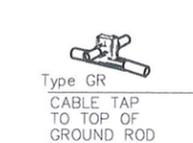
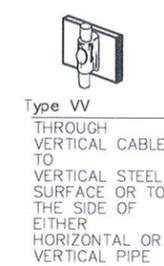
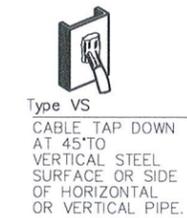
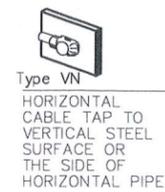
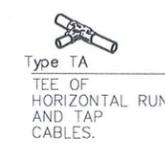
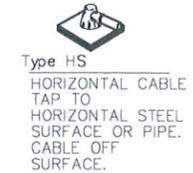
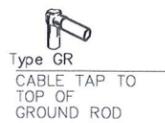
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC. : CP6015, CP604, CP606, OR F5-ONE SEALANT.

* BEARING THE UL CLASSIFICATION MARK

OUTER WALL PENETRATION DETAIL
(IF APPLICABLE)

SCALE: NTS

3



CADWELD DETAILS
SCALE: NTS

4

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PREPARED FOR:



CONSULTANT:

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Information Technology, Inc.

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PROJECT TITLE:
WINDSOR CENTRAL
FA ID # 10092835

PROJECT INFORMATION:
340 BLOOMFIELD AVENUE
WINDSOR, CT 06095

SHEET TITLE:
PANEL AND PENETRATION DETAILS

SCALE: NONE

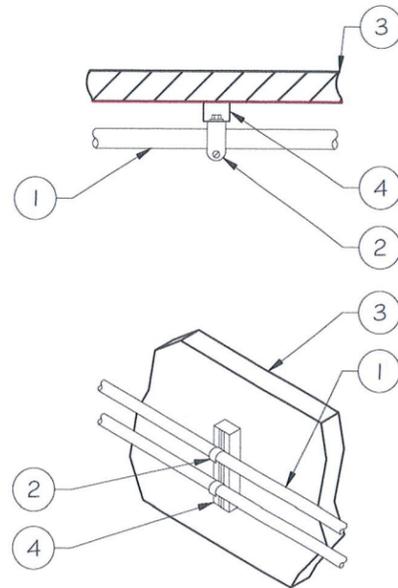
PROJECT NUMBER: 38599
SHEET NUMBER: E-2

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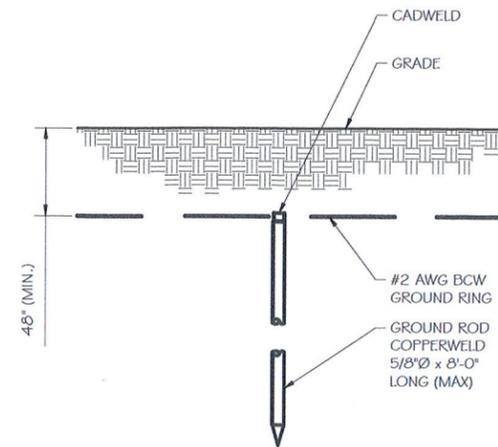
- 1 CONDUIT (TYP)
- 2 BUTTERFLY CLAMP AS REQUIRED
- 3 EXISTING WALL/CEILING
- 4 VERTICAL "UNISTRUT" P1000 'T' SERIES LENGTH BASED ON NUMBER OF CONDUIT TO BE MOUNTED

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

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



CONDUIT WALL MOUNT
 SCALE: NTS

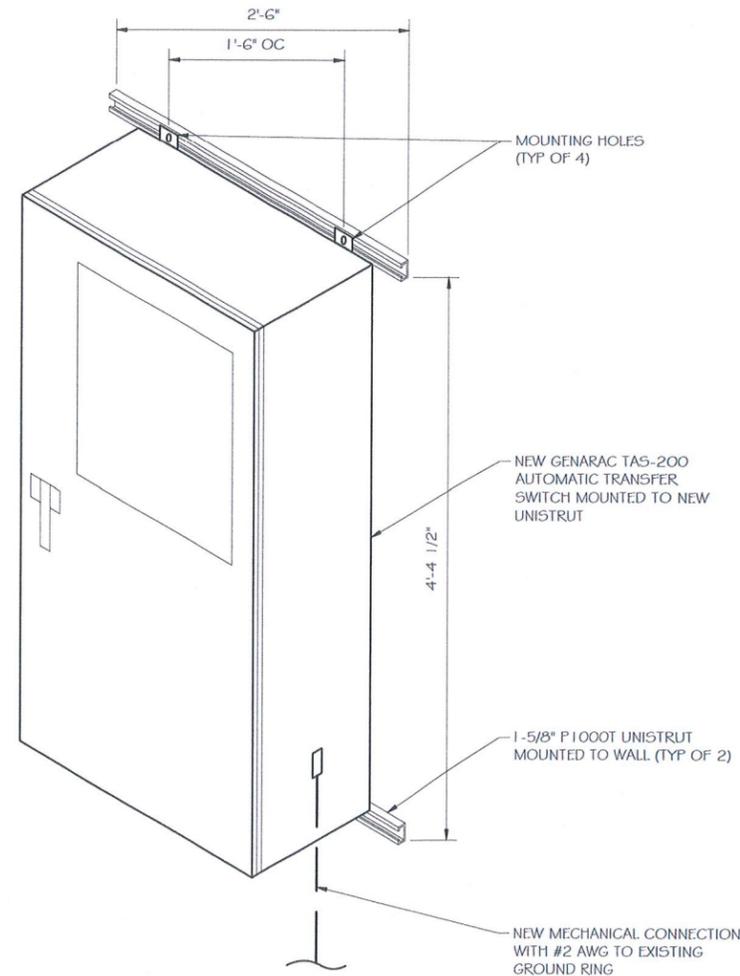


- NOTE:
- GROUND RODS MAY BE:
 - COPPER CLAD STEEL
 - SOLID COPPER
 - GROUND RODS SHALL HAVE A MAXIMUM SPACING TWICE THE LENGTH OF ROD
 - SEE RESISTIVITY REPORT FOR VERIFICATION AS AVAILABLE
 - A LARGER CONDUCTOR SHALL BE REQUIRED IN AREAS HIGHLY PRONE TO LIGHTNING AND/OR AREAS WITH HIGHLY ACIDIC SOIL
 - 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 (1) GROUND LEAD TO EACH SIDE OF THE GENERATOR

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



INTERSECT ATS MOUNTING DETAIL
 SCALE: NTS

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CONSULTANT:
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 KING OF PRUSSIA, PA 19406

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ISSUE PHASE: FINAL DATE ISSUED: 08/02/2018

PROJECT TITLE:
WINDSOR CENTRAL
 FA ID # 10092835

PROJECT INFORMATION:
 340 BLOOMFIELD AVENUE
 WINDSOR, CT 06095

SHEET TITLE:
ATS, CONDUIT & GROUND ROD
DETAILS

SCALE: NONE

PROJECT NUMBER: 38599
 SHEET NUMBER: E-3

Quantity 1 - **QT02524ANNNA** - Commercial Series: Generac QT Series; Kilowatts - 25 kW; Engine - 2.4L 1800 RPM; Voltage - 120/240, single phase; Fuel Type - Natural Gas; NO Enclosure; Additional Equipment - No Catalyst, QTA Configuration

Quantity 1 - **RRP 5466** - Surface Mount Remote Relay Panel W/O LED's and Keypad - Relays Only;

- 25 kW Rating, wired for 120/240 VAC single phase, 60 Hz
- Stationary Emergency-Standby rated
- Brushless Excitation
- UL2200
- EPA Certified
- H-100 Control Panel
 - Meets NFPA 99 and 110 requirements
 - Temp Range -40 to 70 degrees C
 - Digital microprocessor:
 - Two 4 line x 20 displays, full system status
 - All phase sensing, +/-0.25% digital voltage regulation
 - RS232, RS485 and Canbus remote ports
 - Waterproof connections

Generac Power Systems, Inc.
 945 WISCONSIN HWY. 59
 WAUKESHA, WISCONSIN 53186
 P (262) 644-4531
 F (262) 966-3791



Standby Generator and ATS Quotation

- All engine sensors are 4-20 ma for minimal interference
- Programmable I/O
- Built-in PLC for special applications
- Engine function monitoring and control:
 - Full range standby operation; Programmable crank limiter, Emergency Stop, Auto-Off-Manual switch
 - Isochronous governor, +/-0.25% frequency regulation
 - Full system status on all AC output and engine function parameters
 - Service reminders, trending, fault history (alarm log)
 - I2T function for full generator protection
 - Selectable low-speed exercise
- HTS transfer switch function monitoring and control
- 2-wire start controls for any 2-wire transfer switch
- MLCB, 100% rated thermal-magnetic
 - 150 Amp
- Natural Gas fuel system (option for propane as well)
 - Operating Fuel Pressure (Standard) 5"-14" WC
- Battery Charger, 10 Amp
- Coolant Heater, 1500W, 120VAC
- Engine Run Relay
- 8 Function alarm board option needs to be field installed (ships loose)
- Flex Fuel Line
- 5-Year Comprehensive Warranty
- Includes Factory Startup and Two Hour Load Bank (onsite)

Includes Factory Startup and ATS Transfer Test

Unit comes as NG and will need to be converted in the field to LPV

Excludes: Offloading, special access requirements (e.g. snowcats, snowmobile, ATV, 4WD), installation, alarm wire termination, storage, scheduled maintenance. These services are available from your local factory authorized Generac Power Systems dealer at additional charge. Freight is prepaid and add-to-invoice.

GENERAC 20KW GENERATOR
 SPECIFICATIONS
 SCALE: NTS



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 WINDSOR CENTRAL
 FA ID # 10092835

PROJECT INFORMATION:
 340 BLOOMFIELD AVENUE
 WINDSOR, CT 06095

SHEET TITLE:
 GENERAC 20KW GENERATOR SPECIFICATIONS

SCALE: NONE

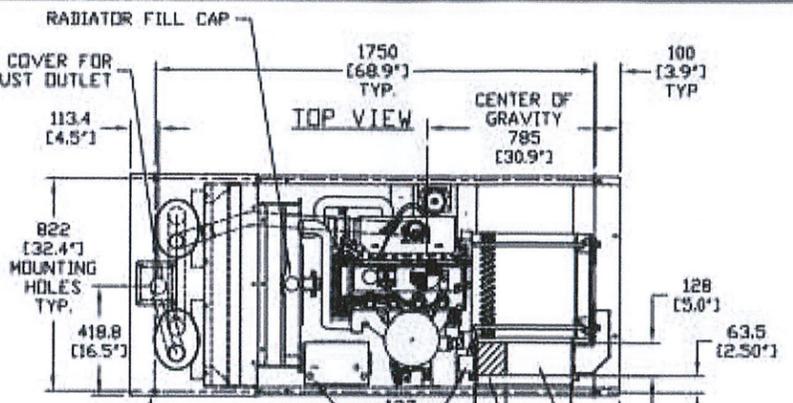
PROJECT NUMBER	38599
SHEET NUMBER	E-4

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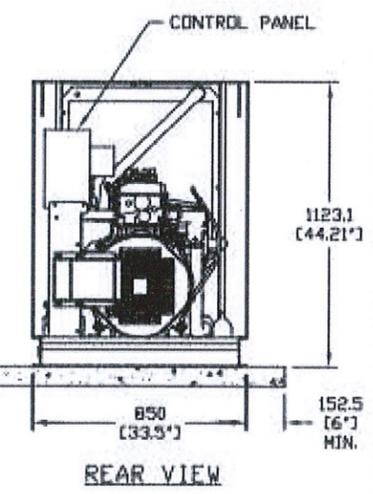
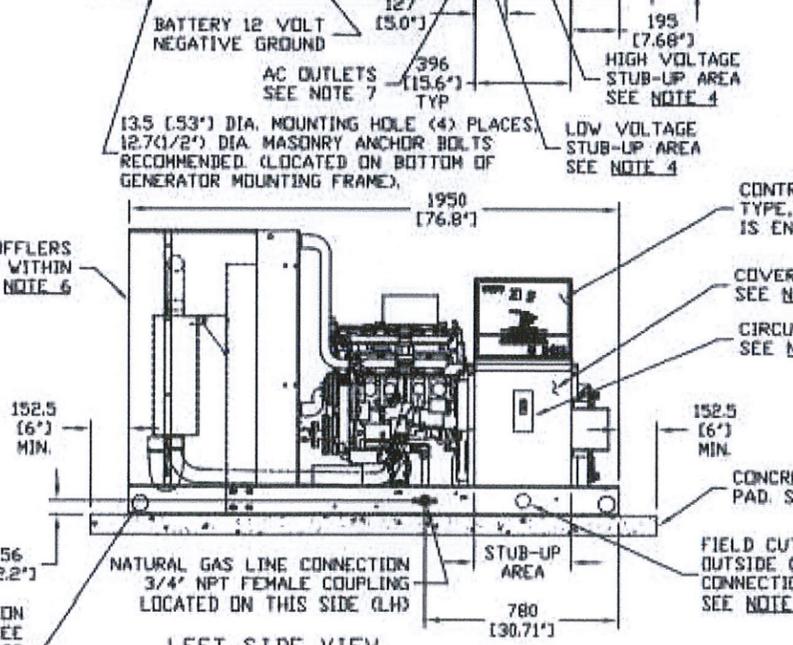
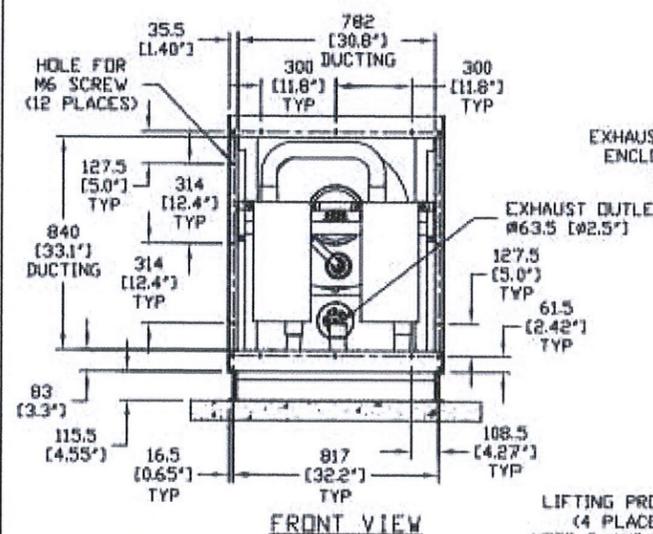
- NOTES:**
- MINIMUM RECOMMENDED CONCRETE PAD SIZE: 1195 (45.5') WIDE X 2255 (88.8') LONG.
 - ALLOW SUFFICIENT ROOM ON ALL SIDES OF THE GENERATOR FOR MAINTENANCE AND SERVICING. THIS UNIT MUST BE INSTALLED IN ACCORDANCE WITH CURRENT APPLICABLE NFPA 37 AND NFPA 70 STANDARDS AS WELL AS ANY OTHER FEDERAL, STATE AND LOCAL CODES FOR MINIMUM DISTANCES FROM OTHER STRUCTURES.
 - CIRCUIT BREAKER INFORMATION: SEE SPECIFICATION SHEET WITHIN OWNERS MANUAL.
 - REMOVE THE CIRCUIT BREAKER BOX FRONT COVER TO ACCESS THE STUB UP AREAS AS FOLLOWS:
 - HIGH VOLTAGE CONNECTION INCLUDING AC LOAD LEAD CONDUIT CONNECTION, NEUTRAL CONNECTION, BATTERY CHARGER 120 VOLT AC (0.5 AMP MAX) CONNECTION, GFCI 120 V AC OUTLET CONNECTION.
 - LOW VOLTAGE CONNECTIONS INCLUDING TRANSFER SWITCH CONTROL WIRES AND ACCESSORY RELAY CONNECTION (NOT 4).
 - FIELD CUT HOLE IS ONLY REQUIRED FOR MOUNTING OF GENERATOR ON AN EXISTING PAD.
 - REFERENCE OWNERS MANUAL FOR LIFTING WARNINGS.
 - REMOVE EITHER LEFT OR RIGHT HAND SIDE PANEL TO ACCESS EXHAUST MUFFLERS.
 - PRE-WIRED 20A GFCI OUTLET FOR ENG BLOCK HEATER.



SERVICE ITEM ACCESSIBILITY CHART

SERVICE ITEM	2.4L
OIL FILL CAP	EITHER SIDE
OIL DIP STICK	RIGHT SIDE
OIL FILTER	RIGHT SIDE
OIL DRAIN HOSE	RIGHT SIDE
RADIATOR DRAIN HOSE	LEFT SIDE
AIR CLEANER ELEMENT	EITHER SIDE
SPARK PLUGS	RIGHT SIDE
MUFFLERS	SEE NOTE 6
FAN BELT	EITHER SIDE
BATTERY	LEFT SIDE
AC OUTLET(S)	LEFT SIDE

REFERENCE OWNERS MANUAL FOR PERIODIC REPLACEMENT PART LISTINGS



WEIGHT DATA
 2.4L 25KW 520KG (1,163 LB)
 WOODEN SHIPPING SKIDS INCREASE OVERALL WEIGHT 42KG (93LB)

INSTALLATION DRAWING

GENERAC POWER SYSTEMS OWNS THE COPYRIGHT OF THIS DRAWING WHICH IS SUPPLIED IN CONFIDENCE AND MUST NOT BE USED FOR ANY PURPOSE OTHER THAN FOR WHICH IT IS SUPPLIED WITHOUT THE EXPRESS WRITTEN CONSENT OF GENERAC POWER SYSTEMS.
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2.4L C2 INDUSTRIAL QTA OPEN GENSET	GENERAC POWER SYSTEMS Waukesha P.O. BOX 8 WAUKESHA, WIS. 53187
9/21/11	FILE NAME: 0J7003A-B.DWG SCALE: 1 = 20 DWG NO.: 0J7003A
	SIZE: B REV: B

GENERAC 20KW GENERATOR SPECIFICATIONS
 SCALE: NTS

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WINDSOR CENTRAL
 FA ID # 10092835

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 340 BLOOMFIELD AVENUE
 WINDSOR, CT 06095

SHEET TITLE:
 GENERAC 20KW GENERATOR SPECIFICATIONS

SCALE: NONE

PROJECT NUMBER: 38599
 SHEET NUMBER: E-4.1

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**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:



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



NEC 700, 701 and 702



NEMA 250

Application and Engineering Data

Cabinet Specifications	
Dimensions	24"W x 12"D x 48"H
Weight	210 lbs.
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
Mounting Options	Stainless Steel Hardware
	3-Point Latching System with Pad-Lockable Handles
Installed	Wall H-frame 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



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PREPARED FOR:



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 Connecticut.



Signature: *James R. Skowronski* Date: 9/18/2018

MARK	DATE	DESCRIPTION
D	09/18/18	REVISION D
A	08/02/18	REVISION A

ISSUE PHASE: FINAL DATE ISSUED: 08/02/2018
 PROJECT TITLE:

WINDSOR CENTRAL
 FA ID # 10092835

PROJECT INFORMATION:
 340 BLOOMFIELD AVENUE
 WINDSOR, CT 06095

SHEET TITLE:
 GENERAC ATS SPECIFICATIONS

SCALE: NONE

PROJECT NUMBER: 38599
 SHEET NUMBER: E-5

GENERAC ATS SPECIFICATIONS ①
 SCALE: NTS

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