From: Tim Hughes <thughes@swartley.com>
Sent: Thursday, June 3, 2021 8:33 AM
To: CSC-DL Siting Council <Siting.Council@ct.gov>
Cc: Hochman, William <William.Hochman@GDIT.com>
Subject: AT&T Generator add/156 Sterling city road, Old Lyme, CT 06371

To whom it may concern,

Swartley Bros will be installing the 30 KW emergency generator at the above mentioned address for the AT&T communications site. We plan on starting construction on 6/7/21 and completing (tentatively) 7/9/21. I apologize for the short notice but we just had a crew become available, please let me know if we can proceed with these dates. Attached you will find are the construction drawings and generator permit for reference. Please let me know if there is any further information needed.

Thanks,

Tim Hughes Construction Manager Swartley Bros. Engineers, Inc. (C) 267-275-5752 (O) 215-368-7400 (F) 215-799-0895 www.swartley.com



CONNOF LIA	TOWN OF LYME Town Hall, Route 156 Lyme, Connecticut
В	UILDING PERMIT
PROPERTY ADDRESS <u>156 Sterling City Road Ly</u> OWNER OF RECORD: <u>Estate of John Tiffany II (</u> MAILING ADDRESS <u>156 Sterling City Road Lym</u> TYPE OF IMPROVEMENT 1. New Building 2. Pool 3. Addition 4. Alteration 5. Repair/replace	C/O Susan Tiffany
Wood frame	e <u>10'</u> long 8 inches high
Attached garage Detached garage	Outdoor parking spaces (Commercial) Open deck Enclosed porch
ALTERATIONS AND REPAIRS TO EXISTING STR Describe: Installing 4'x10' Concrete pa	UCTURE ad for 30 kw emergency generator. No change to existing tower.
CONTRACTOR Name <u>Swartley Bros. Engineers, Inc</u> . A <u>TOTAL COST OF IMPROVEMENT</u> <u>\$ 5,000</u>	ddress <u>10 Schoolhouse Rd. #1</u> Tel. <u>(215) 647-9626</u> HIC <u>MCO.0904273</u> # cu yds to LANDFILL
(I herby certify that the proposed wor authorized by the owner to make this applicable laws of this jurisdiction.)	k is authorized by the owner of record and that I have been application as his authorized agent and we agree to conform to all
FEES NOT REFUNDA	BLE PERMIT VALID SIX (6) MONTHS
Signature of Applicant Steven VolkertMa	illing Address Application date 4/6/2021
Steven Volkert	2586 Industry Lane, Ste. 100 Norristown PA 19403 318 642-6190 Plans have been reviewed and found to generally be in compliance with Connecticut Codes which are made a part of this permit and shall take precedence over the drawings. Permit Number

PERMIT NO. 20518 LICENSE NO. MCO 090	0/2/ 4273 AP		FOR ELECTRICAL		ΙΤ ΤΟν	TOWN OF	
LOCATION OF JOB (NO. & STREET) 156 Sterling City Road					MAP 26	LOT	NCUT
OWNER	TT		ADDRESS (NO. STREET, TOWN, S	STATE, ZIP)		57	
Estate of John J. Tiff			156 Sterling City	Road Ly	me CT 06371	PHONE	
Swartley Bros Engineers	INC		ADDRESS (NO. STREET, TOWN, S 10 Schoolhouse Rd	STATE, ZIP)	ton PA 18964	PHONE 215 647	7.0/2/
REMARKS laurie@swartley.com					101111110904	213 04/	/-9020
APPLICANT					Town Fee: \$1:	5.00 for 1st \$1,	000.00
General Dynamics for ADDRESS (NO. STREET)	AT&T Mo	bility (Steve	en Volkert)		\$10	.00 for each ad	
2586 Industry Lane Ste 1 TOWN, STATE, ZIP	00				Chata Ta and	\$1,000 or p	
Norristown PA 19403	steven.volk	ert@gdit.co	m (318) 642-6190		State Fee: \$0.2	26 per \$1,000.0	)0
HEAT			TYPE OF WORK BEING DONE				
TYPE						<b>*</b> ***	FEE
MANUFACTURER			TION DEMOLI	ITION	ESTIMATED	\$18,000 \$	185
MOTOR NO	HP		CLASSIFICATION		ACTUAL		
		USE GROUP	U	1	DIFFERENCE		
		SPECIFIC US	ION TYPE IIB		Pd. ch 1999	74/ \$ 2 Total \$1896	4.68
All Permits	Must	Be Po	sted And V	isible	From TI		
PANELS			BRANCH CIRCUITS			ITLETS	L.
NO. CAPACITY AMPS	INSPECTED		NO CAPACITY AM	APS	00	NO	
0013		HEAT			LIGHTS	NO	
MAIN		LG APPLIANC	CE		RECEPTICAL		
HEAT		GENERAL			SWITCH ATS	1	
GENERAL					SM APPLIANCE		
APPLIANCES		INDIVIDUAL			LG. APPLIANCE		
					30 kw Generat	or1	
WIRE			н	HEAT LOSS S	CHEDULE		
SIZE TYPE	INSPECTED		om or Area	piete for all job	s. Work sheets may be at	tached.	
GROUNDING			REA (Sq. Ft.)				
BRANCH CIRCUITS		OUTSIDE	WALL(Lin Ft)				
HEAT		E BOOM 4	DODRS (Sq. FL.) REA LOSS				
APPLIANCE		OUTSIDE	WALL LOSS				
		0	ND DOOR LOSS				
GENERAL		ADJUSTM	DSS — SUB TOTAL				
		TUEDUCC	ROOM LOSS				
INDIVIDUAL		HEATERS					
		WATTS IN	the second se				
		TOTAL WAT	TS CALCULATED		TOTAL WATTS INSTAL		
All work covered by this application has been according to state regulations. This permit shall	authorized by the	(owner) or (agent)	of this property and will be done	TAE	PROVED		
4/6/2021		Steven Vo		451	18/212		_
Date			cants Signature	14	010-2	DUD	

Applicants Signature



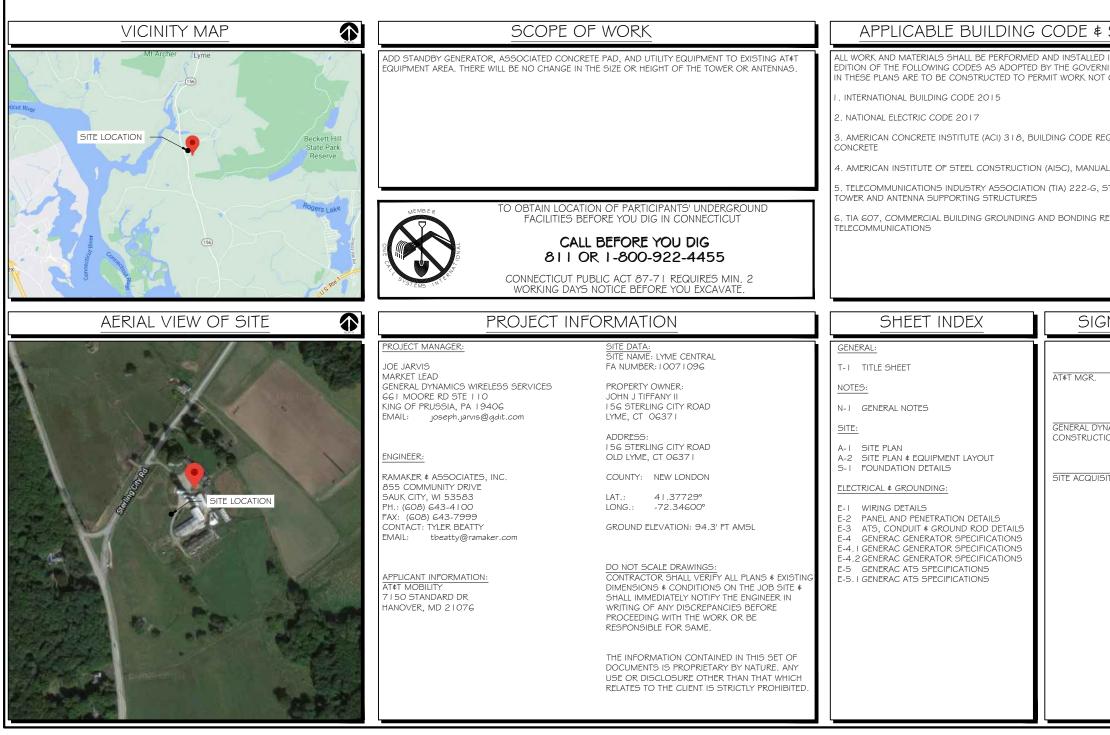
## SITE NAME: LYME CENTRAL FA LOCATION CODE: 10071096

E E E

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# GENERATOR PROJECT 30KW GENERAC DIESEL GENERATOR 200A GENERAC ATS

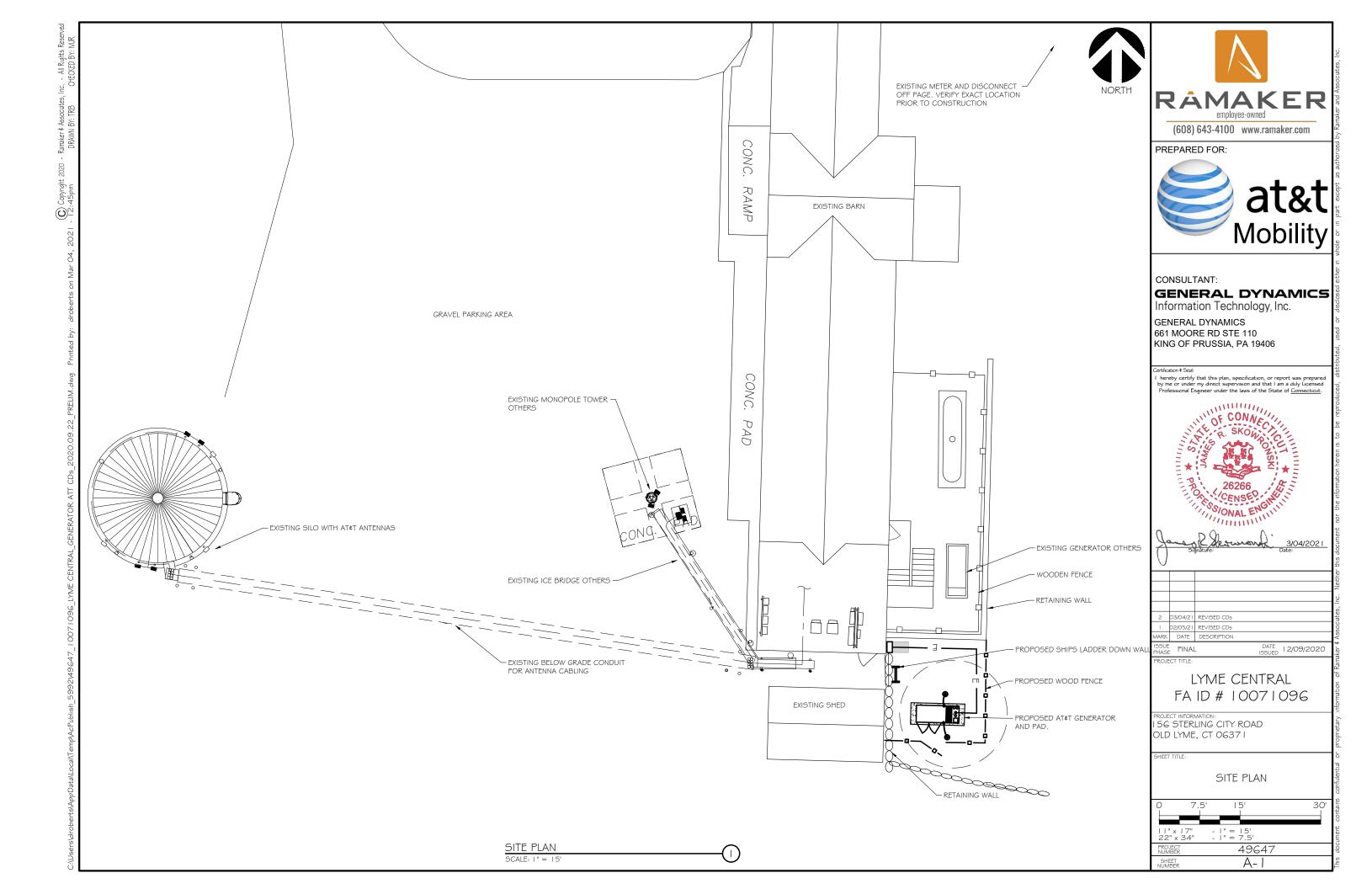
# 156 STERLING C OLD LYME, C

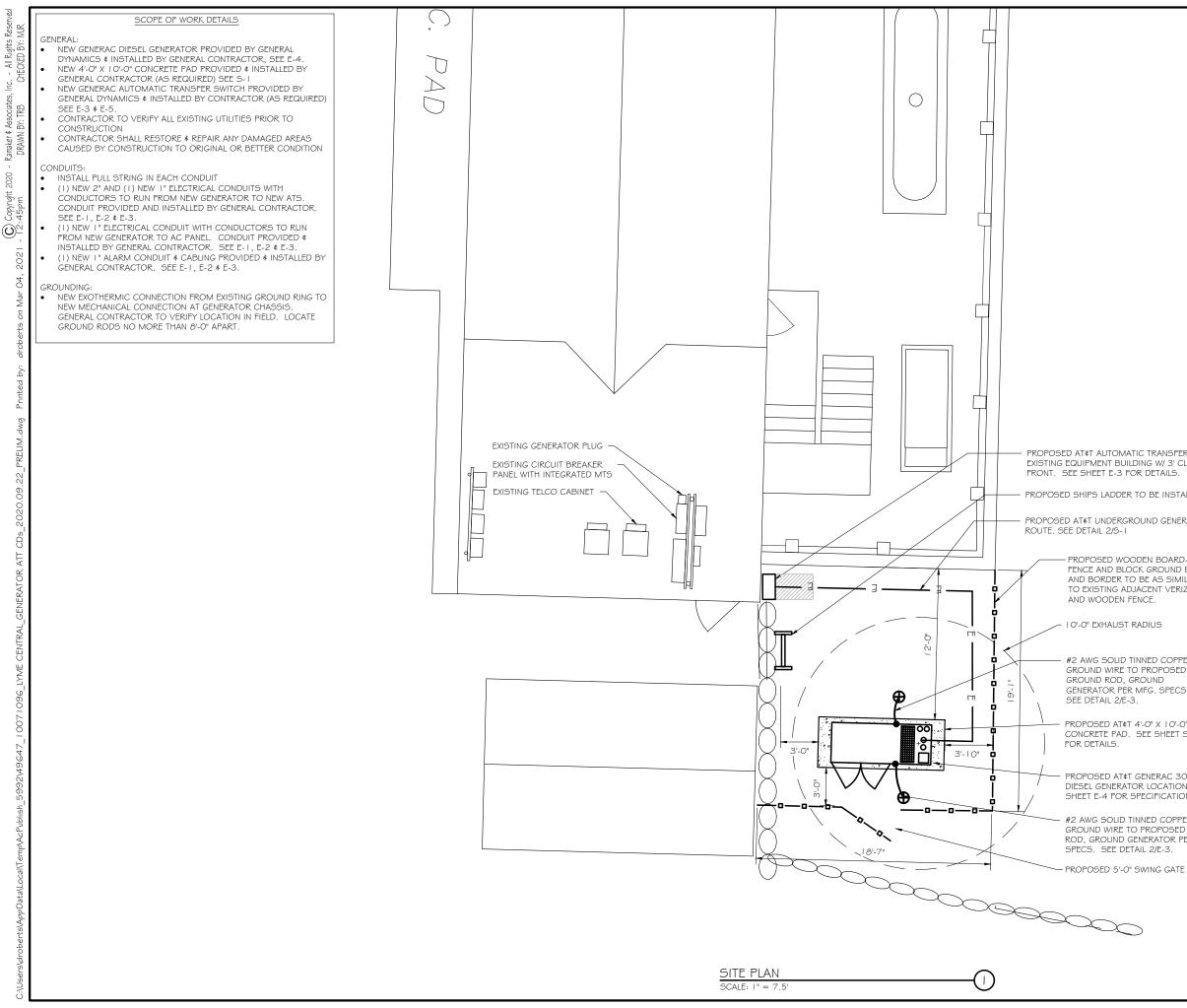


CITY ROAD CT 06371	RARACER employee-owned (608) 643-4100 www.ramaker.com PREPARED FOR: atat by by b
GTANDARDG	CONSULTANT:
STANDARDS	GENERAL DYNAMICS
IN ACCORDANCE WITH THE CURRENT ING LOCAL AUTHORITIES. NOTHING CONFORMING TO THESE CODES:	Information Technology, Inc. GENERAL DYNAMICS 661 MOORE RD STE 110 KING OF PRUSSIA, PA 19406
QUIREMENTS FOR STRUCTURAL	Certification 4 Seal: 1. hereby certify that this plan, specification, or report was prepared
L OF STEEL CONSTRUCTION	by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of <u>Connecticut</u> .
TRUCTURAL STANDARDS FOR STEEL	STATE CONNE
EQUIREMENTS FOR	* SKOW OCHINE SKOW OCHINE SKO
NATURE BLOCK	
	Signature: 3/04/2021 Signature: Date:
	V
DATE	
IAMICS DATE ON MGR.	2         03/04/21         REVISED CD₅           1         02/05/21         REVISED CD₅
	MARK DATE DESCRIPTION
ITION DATE	PROJECT TITLE: LYME CENTRAL FA ID # 10071096
	PROJECT INFORMATION: I 56 STERLING CITY ROAD OLD LYME, CT 0637 I
	SHEET TITLE:
	SCALE: NONE
	PROJECT 49647
	SHEET T-I

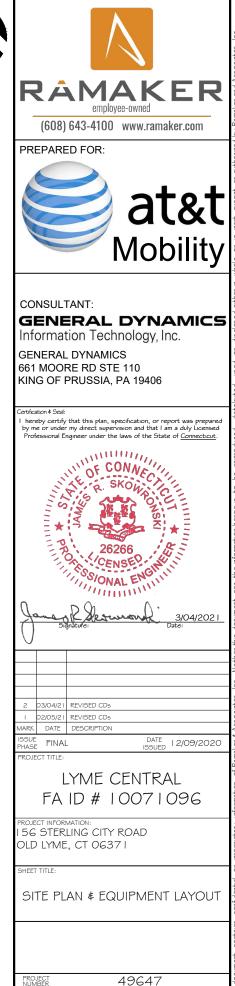
JOTES TO SUBCONTRACTOR.		
NOTES TO SUBCONTRACTOR:	ACCESS IS REQUIRED)	<ol> <li>SCHEDULE 80 PVC CONDUIT SHALL BE USED ABOVE GRO DEFINED AS THE GROUND OF THE TURN-UP</li> </ol>
A THE GENERAL SUBCONTRACTOR MIGHT VERY TALL DIMENSIONS, CONDITIONS AND ELEVATIONS BEFORE PROCEEDING WITH THE WORK. ALL WORK SHALL BE PERFORMED IN A WORKMANLIKE MANNER IN ACCORDANCE WITH ACCEPTED CONSTRUCTION PRACTICES.	<ol> <li>5. OUTDOOR STORAGE AND SOLID WASTE CONTAINERS ARE NOT PROPOSED.</li> </ol>	<ol> <li>BELL END OR TERMINAL ADAPTER MUST BE INSTALLED ON 352.46. 300.4 F, (3)</li> </ol>
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	6. ALL MATERIAL SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.	<ol> <li>CONDUIT BENDS SHALL BE MADE IN ACCORDANCE WITH ANGLE DEVICE OTHER THAN STANDARD CONDUIT ELBOW: SWEEPS FOR ALL CONDUITS 2" OR LARGER.</li> </ol>
EXECUTE ALL WORK AND SHALL BE RESPONSIBLE FOR SAME. ALL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES.	7. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE CAUSED BY THE CONSTRUCTION OPERATION.	G. POWER WIRING SIZE SHALL NOT BE SMALLER THAN #12 A
3. THE SUBCONTRACTOR SHALL USE ADEQUATE NUMBER OF SKILLED WORKMAN WHO ARE HOROUGHLY TRAINED AND EXPERIENCED IN THE NECESSARY CRAFTS AND WHO ARE COMPLETELY AMILIAR WITH THE SPECIFIED REQUIREMENTS AND METHOD NEEDED FOR PROPER PERFORMANCE	8. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTION REQUIRED FOR CONSTRUCTION.	7. ALL WIRING SHALL BE COPPER. ALUMINUM WILL NOT BE SHALL CONTAIN A GROUND WIRE.
AMILIAR WITH THE STEELINED REQUIREMENTS AND METHOD NEEDED TORT ROTER TEN ORVIANCE OF THE WORK.	9. SUBCONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.	8. PHASE MARKINGS TO BE USED AT POWER CONDUCTOR T
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	ELECTRICAL NOTES: A. GENERAL	<ol> <li>CONTRACTOR SHALL ENSURE INTEGRITY IS MAINTAINED V WIRING.</li> </ol>
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		IO. INSTALL PULL STRING IN ALL CONDUIT.
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.	EQUIPMENT SUPPLIER PRIOR TO INSTALLATION. 2. COORDINATE LOCATION AND REQUIREMENTS FOR ELECTRICAL AND TELEPHONE SERVICES	I I. FOR ROOFTOP INSTALLS AND BUILD-OUTS, CONDUITS IN SHALL BE RGS, UNLESS OTHERWISE NOTED. FOR RAW L SCHEDULE 80 SHALL BE UTILIZED UNLESS NOTED OTHER
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	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.	12. MAINTAIN MINIMUM 1'-0" VERTICAL AND 1'-0" HORIZONTA MECHANICAL GAS PIPING.
OWERS GROUNDING CHECKLIST, LATEST VERSION. WHEN NATIONAL AND LOCAL GROUNDING CODES ARE MORE STRINGENT THEY SHALL GOVERN. GROUNDING SHALL BE COMPLETED BEFORE RECTION OF TOWER.	3. ALL WIRING AND EQUIPMENT SHOWN ON ELECTRICAL SHEETS SHALL BE FURNISHED AND INSTALLED UNDER ELECTRICAL PORTION OF CONTRACT UNLESS OTHERWISE NOTED	I 3. ALL WIRING ROUTED IN PLENUM TO BE RATED OR IN MET
. ALL WORK SHALL COMPLY WITH OSHA AND STATE SAFETY REQUIREMENTS. PROCEDURES FOR HE PROTECTION OF EXCAVATIONS, EXISTING CONSTRUCTION AND UTILITIES SHALL BE	<ol> <li>UNINTERRUPTED ELECTRICAL SERVICE FOR EXISTING EQUIPMENT SHALL BE MAINTAINED DURING THE INSTALLATION OF THE WORK DESCRIBED UNDER THESE DOCUMENTS.</li> </ol>	C. EQUIPMENT/PARTS CONNECTED TO EXISTING PANELS, DU
ESTABLISHED PRIOR OF EXCAVATIONS, EXISTING CONSTRUCTION AND DITITLES STABLISHED 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	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	<ol> <li>2. ALL ELECTRICAL EQUIPMENT OUTSIDE SHALL BE NEMA OF</li> </ol>
THE EVENT OF A PROBLEM.	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.	D. GROUNDING
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.	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.	<ol> <li>ALL GROUND CONNECTIONS TO BUILDING SHALL BE MAD PROVIDE STAINLESS STEEL BOLTS AND LOCK WASHERS ( CONNECTIONS.</li> </ol>
ANY DAMAGE TO THE ADJACENT PROPERTIES WILL BE CORRECTED AT THE SUBCONTRACTOR'S XPENSE TO THE SATISFACTION OF THE LANDOWNER AND THE ENGINEER.	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	<ol> <li>ALL EQUIPMENT SURFACES TO BE BONDED TO GROUNDI ALL PAINT AND DIRT. CONNECTIONS TO VARIOUS METAL</li> </ol>
. THE COMPLETE BID PACKAGE INCLUDES THESE CONSTRUCTION DRAWINGS ALONG WITH THE PECIFICATIONS. SUBCONTRACTOR IS RESPONSIBLE FOR REVIEW OF TOTAL BID PACKAGE PRIOR O BID SUBMITTAL	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	CAUSE A GALVANIC OR CORROSIVE REACTION. AREA SH BONDING.
O. SUBCONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES WITHIN CONSTRUCTION	AND REGULATIONS. 7. THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF	<ol><li>ANY METALLIC ITEM WITHIN G' OF GROUND CONDUCTORS GROUNDING SYSTEM.</li></ol>
I . THE SUBCONTRACTOR IS RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE ON THE SITE T ALL TIMES. SILT AND EROSION CONTROL SHALL BE MAINTAINED ON THE DOWNSTREAM SIDE	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.	<ol> <li>EXTERIOR, ABOVE GRADE GROUND CONNECTIONS SHALL PROTECTIVE COATING OF ANTI-OXIDE COMPOUND.</li> </ol>
OF THE SITE AT ALL TIMES. ANY DAMAGE TO ADJACENT PROPERTIES WILL BE CORRECTED AT THE SUBCONTRACTOR'S EXPENSE.	8. CONTRACTOR SHALL PAY ALL PERMITS AND FEES REQUIRED.	<ol> <li>ALL MATERIALS AND LABOR REQUIRED FOR THE GROUND PLANS AND DETAILS, AND AS DESCRIBED HEREIN SHALL I CONTRACTOR UNLESS OTHERWISE NOTED.</li> </ol>
<ol> <li>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.</li> </ol>	<ul> <li>9. ALL MATERIALS SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE STANDARDS REFERENCED BELOW:         <ul> <li>a. ANSI (AMERICAN NATIONAL STANDARDS INSTITUTE)</li> <li>b. ASTIM (AMERICAN SOCIETY FOR TESTING MATERIALS)</li> <li>c. ETL (ELECTRICAL TESTING LABORATORY)</li> </ul> </li> </ul>	6. EXACT LOCATION OF GROUND CONNECTION POINTS SHA ADJUST LOCATIONS INDICATED ON PLANS ACCORDING TO TO KEEP THE GROUND CONNECTION CABLES AS SHORT A
3. ALL SUITABLE BORROW MATERIAL FOR BACK FILL OF THE SITE SHALL BE INCLUDED IN THE BID. XCESS TOPSOIL AND UNSUITABLE MATERIAL SHALL BE DISPOSED OF OFF SITE AT LOCATIONS IPPROVED BY GOVERNING AGENCIES PRIOR TO DISPOSAL.	<ul> <li>c. LITE (LELECTRICAL TESTING LADORATORT)</li> <li>d. ICEA (INSULATED CABLE ENGINEERS ASSOCIATION)</li> <li>e. IEEE (INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS)</li> <li>f. MBFU (NATIONAL BOARD OF FIRE UNDERWRITERS)</li> <li>a. NESC (NATIONAL ELECTRICAL SAFETY CODE)</li> </ul>	<ol> <li>PROVIDE ALL ELECTRICAL SYSTEM AND EQUIPMENT GROL CURRENT EDITION OF THE NATIONAL ELECTRIC CODE (19) THE NATIONAL ELECTRICAL SAFETY CODE. BONDING JUN FITTINGS SHALL BE INSTALLED AT ALL RACEWAYS. EQUIPM</li> </ol>
4. SEEDING AND MULCHING OF THE SITE WILL BE ACCOMPLISHED AS SOON AS POSSIBLE AFTER OMPLETION OF THE SITE DEVELOPMENT. THE SUBCONTRACTOR IS RESPONSIBLE FOR ROVIDING AND MAINTAIN AN ADEQUATE COVER OF VEGETATION OVER THE SITE FOR A ONE YEAR	<ul> <li>h. NEMA (NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION)</li> <li>h. NFPA (NATIONAL FIRE PROTECTION ASSOCIATION)</li> <li>j. UL (UNDERWRITER'S LABORATORY)</li> </ul>	ETC. TO MAINTAIN GROUND CONTINUITY WHERE REQUIRE 8. ALL EQUIPMENT GROUND CONDUCTORS SHALL BE TIN CO
PERIOD.	I O. CONTRACTOR SHALL REVIEW PLANS, DETAILS AND SPECIFICATIONS IN DETAIL AND ADJUST	NOTED OTHERWISE ON THE DRAWINGS.
5. PERMITS: THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND INCURRING THE COST OF ALL REQUIRED PERMITS, INSPECTIONS, CERTIFICATES, ETC.	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	<ol> <li>PROVIDE PRE AND POST GROUND TEST RESULTS, USING SHALL BE PHOTOS WITH DIGITAL TIME AND GPS STAMPED</li> </ol>
G. RECORD DRAWINGS: MAINTAIN A RECORD OF ALL CHANGES, SUBSTITUTIONS BETWEEN WORK AS SPECIFIED AND INSTALLED. RECORD CHANGES ON A CLEAN SET OF CONTRACT	HIS OWN TAKEOFF FOR MATERIAL QUANTITY AND TYPES BASED ON ACTUAL SITE CONDITIONS, IN ADDITION, CONTRACTOR SHALL PROVIDE ALL NECESSARY MATERIALS TO	
RAWINGS WHICH SHALL BE TURNED OVER TO THE CONSTRUCTION MANAGER UPON COMPLETION F THE PROJECT.	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.	<ol> <li>THE CONTRACTOR, UPON COMPLETION OF HIS WORK, SI INFORMATION SHOULD BE GIVEN TO THE GENERAL CONT AS-BUILT SURVEY DOCUMENTS TO BE GIVEN TO THE OW</li> </ol>
. THE PLANS SHOW SOME KNOWN SUBSURFACE STRUCTURES, ABOVE GROUND STRUCTURES D/OR EXISTING UTILITIES BELIEVED TO BE IN THE WORKING AREA. IT IS THE RESPONSIBILITY OF E SUBCONTRACTOR TO VERIFY ALL UTILITIES, PIPELINES AND OTHER STRUCTURES SHOWN OR IT SHOWN ON THESE PLANS. THE SUBCONTRACTOR SHALL CONTACT THE LOCAL	II. THE CONTRACTOR OR BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) AT&T'S REPRESENTATIVE OF ANY CONFLICTS PRIOR TO THE SUBMISSION OF CONTRACTOR'S PROPOSAL OR PERFORMANCE OF WORK, IN THE EVENT OF DISCREPANCIES THE	<ol> <li>CONTRACTOR SHALL SUPPLY DOCUMENTATION ATTESTIN SYSTEM'S RECEPTIVITY (MAX. 5 OHMS).</li> </ol>
UISDICTIONS DIGGERS HOTLINE BEFORE DIGGING OR DRILLING. ANY DAMAGE TO EXISTING UNISDICTIONS DIGGERS HOTLINE BEFORE DIGGING OR DRILLING. ANY DAMAGE TO EXISTING TILITIES SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER AND ENGINEER AT THE UBCONTRACTOR'S EXPENSE.	CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED IN WRITING OTHERWISE.	<ol> <li>AN ELECTRICAL INSPECTION SHALL BE MADE BY AND INSI AT\$T'S REPRESENTATIVE. CONTRACTOR SHALL COORDIN POWER COMPANY APPROVAL.</li> </ol>
ENERAL NOTES:	12. ALL FLOORS WHERE PENETRATIONS ARE REQUIRED IN BUILDING ARE TO BE CORE DRILLED AND THEN FIREPROOFED.	<ol> <li>CONTRACTOR SHALL HAVE ATS AND GENERATOR RELAY I INSPECTED BY OTHERS TO ENSURE THAT UL LISTING FOR</li> </ol>
THIS PROPOSAL IS FOR THE ADDITION OF A NEW GENERATOR ON A CONCRETE PAD TO AN ISTING UNMANNED TELECOMMUNICATIONS FACILITY CONSISTING OF AN EQUIPMENT SHELTER ND TOWER.	B. WIRING/CONDUIT	INSTRUCTO DI OTTENS TO ENSURE ITTAL DE LISTING FUR
	SUCH THAT NO MORE THAN THE EQUIVALENT OF FOUR QUARTER BENDS (380 DEGREES TOTAL) EVIST IN A CONDUIT RUN.	
2. THE PROPOSED FACILITY WILL BE UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SERVICE.		

GROUND, WHERE ABOVE GRADE IS	
O ON END OF PVC CONDUIT PER NEC	
(ITH NEC TABLE 346-10, NO RIGHT SOWS WITH 12" MINIMUM INSIDE	RAMAKER
I 2 AWG.	employee-owned
BE ACCEPTABLE ALL POWER CIRCUITS	(608) 643-4100 www.ramaker.com
OR TERMINATIONS.	PREPARED FOR:
ED WHEN INSTALLING CONDUIT AND	
S INSIDE BUILDING AND ON ROOF W LAND SITES AND CO-LOCATES, PVC	at&t
HERWISE.	Mobility
DNTAL SEPARATIONS FROM ANY	
METALLIC FLEX (LIQUIDITE) CONDUIT.	CONSULTANT:
	GENERAL DYNAMICS
, DUCTS, ETC. SHALL MATCH THE	Information Technology, Inc. GENERAL DYNAMICS
A OR 3R RATED.	661 MOORE RD STE 110 KING OF PRUSSIA, PA 19406
WADE USING TWO-HOLE CONNECTORS. RS ON ALL MECHANICAL GROUND	Certification 4 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 <u>Connecticut</u> .
NDING SYSTEM SHALL BE STRIPPED OF ETALS SHALL BE OF A TYPE AS TO A SHALL BE REPAINTED FOLLOWING	OF CONNECTION SKOW
ORS MUST BE CONNECTED TO THE	S S S S S S S S S S S S S S S S S S S
HALL BE FURNISHED WITH A LIBERAL	
UNDING SYSTEM AS INDICATED ON THE ALL BE FURNISHED BY THIS	Di 26266 CENSED NULLI SSIONAL ENGINITI
SHALL BE DETERMINED IN FIELD. IG TO ACTUAL EQUIPMENT LOCATIONS )RT AS PRACTICAL.	Jane R. Skowow 3/04/2021 Signature: Date:
ROUNDS AS REQUIRED BY THE (1999) AND THE CURRENT EDITION OF JUMPERS WITH APPROVED GROUND UIPMENT ENCLOSURES, PULL BOXES,	
UIRED BY CODE. N COATED, #2 AWG COPPER UNLESS	2 03/04/21 REVISED CD5
	I 02/05/21 REVISED CD₅
ING CLAMP-ON TESTER. TEST RESULTS MPED/EMBEDDED.	MARK DATE DESCRIPTION ISSUE FINAL DATE 12/09/2020
,,	PROJECT TITLE:
	LYME CENTRAL
SHALL PROVIDE AS-BUILT DRAWINGS. ONTRACTOR FOR INCLUSION IN FINAL OWNER.	FA ID # 10071096
BTING TO THE COMPLETE GROUND	PROJECT INFORMATION: I 56 STERLING CITY ROAD
INSPECTING AGENCY APPROVED BY RDINATE ALL INSPECTIONS AND OBTAIN	OLD LYME, CT 06371
	SHEET TITLE:
AY INSTALLATION AND CONNECTIONS FOR THAT EQUIPMENT IS NOT VOIDED.	GENERAL NOTES
	SCALE: NONE
	PROJECT 49647
	SHEET NUMBER N-1









PROPOSED AT&T AUTOMATIC TRANSFER SWITCH ON EXISTING EQUIPMENT BUILDING W/ 3' CLEARANCE IN

PROPOSED SHIPS LADDER TO BE INSTALLED DOWN WALL

PROPOSED AT&T UNDERGROUND GENERATOR CONDUIT

PROPOSED WOODEN BOARD-ON-BOARD FENCE AND BLOCK GROUND BORDER. FENCE AND BORDER TO BE AS SIMILAR AS AVAILABLE TO EXISTING ADJACENT VERIZON COMPOUND

#2 AWG SOLID TINNED COPPER GROUND WIRE TO PROPOSED GENERATOR PER MFG. SPECS.

PROPOSED AT&T 4'-0" X 10'-0" CONCRETE PAD. SEE SHEET S-I

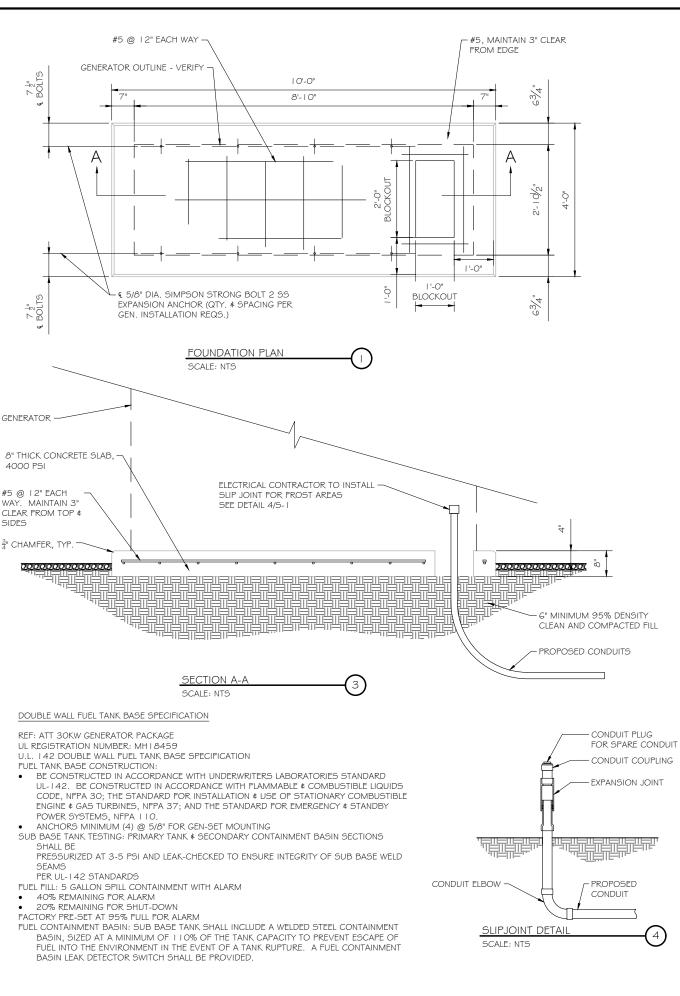
PROPOSED AT&T GENERAC 30kW DIESEL GENERATOR LOCATION. SEE SHEET E-4 FOR SPECIFICATIONS.

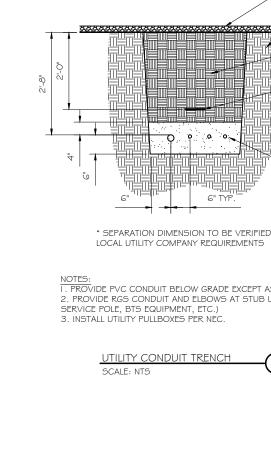
#2 AWG SOLID TINNED COPPER GROUND WIRE TO PROPOSED GROUND ROD. GROUND GENERATOR PER MFG.

SHEET

A-2







VERIFY WIRE AND CONDUIT QUANTITY ∉ SIZES WITH GENERATOR

MAKE & MODEL # PRIOR TO INSTALLATION. VERIFY ELECTRICAL

REQUIREMENTS WITH LOCAL UTILITY PROVIDER.

#### STRUCTURAL GENERAL NOTES

NOTE:

L.O. GENERAL CONDITIONS

- I.I DESIGN & CONSTRUCTION OF ALL WORK SHALL CONFORM TO LOCAL BUILDING CODES, AC BETWEEN THE CODES, STANDARDS, REGULATIONS, SPECIFICATIONS, GENERAL NOTES AND USE THE MOST STRINGENT PROVISIONS.
- I.2 IT IS THE EXPRESS INTENT OF PARTIES INVOLVED IN THIS PROJECT THAT THE CONTRACTOR INDEPENDENT CONTRACTOR OR THE RESPECTIVE EMPLOYEES SHALL EXCULPATE THE ARCH CONSTRUCTION MANAGER, THE OWNER, & THEIR AGENTS FROM ANY LIABILITY WHATSOEVE LOSS, DAMAGES, LIABILITY OR ANY EXPENSE ARISING IN ANY MATTER FROM THE WRONGFI CARRY METHODS, TECHNIQUES OR PROCEDURES OR FAILURE TO CONFORM TO THE STATI WITH THE WORK.
- 1.3 DO NOT SCALE DRAWINGS

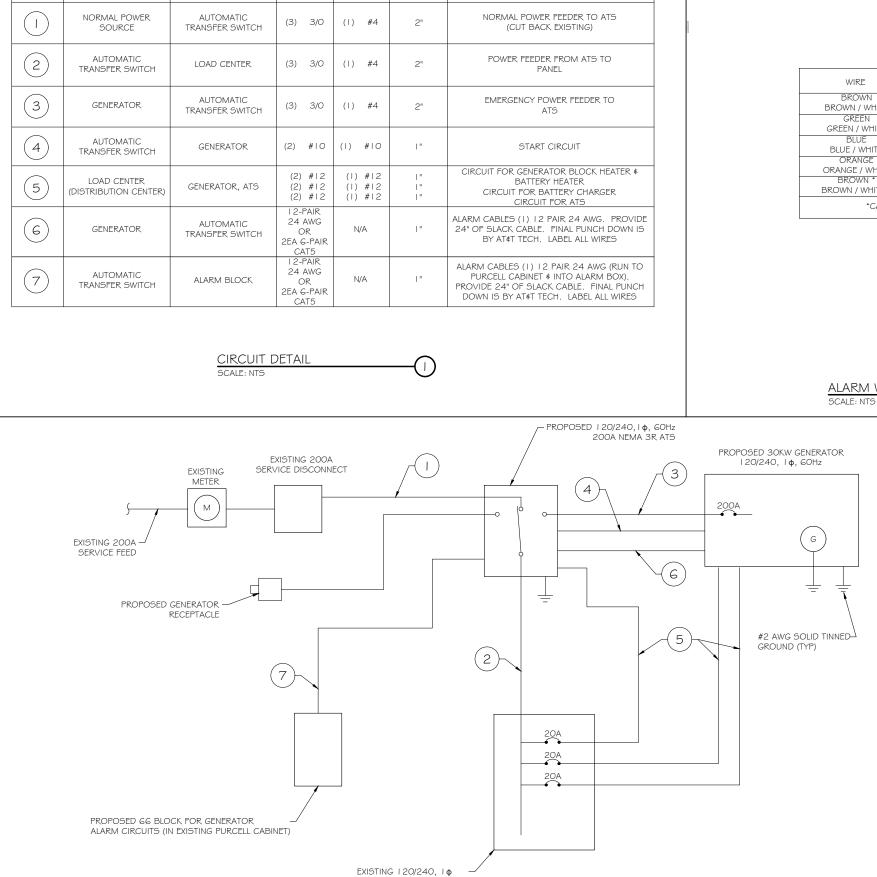
- 1.4 VERIFY ALL EQUIPMENT MOUNTING DIMENSIONS PER MANUFACTURER DRAWINGS
- 1.5 DESIGN LOAD

GN LOADS ARE (GENERAC):	
LIVE LOAD	: 100 PSF
EQUIPMENT SIZE	: 889.1" H, 106" W, 38" D
WEIGHT WITH WOODEN SHIPPING SKID	
ENCLOSED GENERATOR	: 3974 LBS
DESIGN & ANALYSIS OF THE FOUNDATION, TH	HE MINIMUM NET SOIL BEARING CAPACIT
RETE	

2.0 FOR DESIGN # 3 O CONCRETE 3. I MEET OR EXCEED THE FOLLOWING CODES & STANDARDS: DESIGN : ACI3 | 8- | | CONSTRUCTION : ACI301 CRSI MANUAL OF STANDARD PRACTICE DETAILING REINF. STEEL ASTM A 615 GRADE 60, DEFORMED MIXING ASTM C 94. READY MIX CONCRETE AIR ENTRAINMENT : ACI 3 | 8 AND ASTM C-260 ASTM C 33 AND C 330 (FOR LIGHT WEIGHT) AGGREGATE 3.2 CONCRETE STRENGTH AT 28 DAYS SHALL BE 4000 PSI MINIMUM 3.3 DO NOT FIELD BEND OR WELD TO GRADE GO REINFORCED STEEL 3.4 PROVIDE AIR ENTRAINED CONCRETE WITH AIR CONTENT OF 5 TO 7% FOR ALL CONCRETE EX 3.5 MAXIMUM AGGREGATE SIZE: 3/4" 3.6 DO NOT USE IN ADMIXTURE, WATER OR OTHER CONSTITUENTS OF CONCRETE WHICH HAS

- 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 MINIMUM NET ALLOWABLE BEARING CAPACITY OF 1800 PSF.
- 4.2 ALL ORGANIC AND/OR OTHER UNSUITABLE MATERIAL SHALL BE REMOVED FRO FOUNDATIO # THEN BACKFILLED WITH ACCEPTABLE GRANULAR FILL COMPACTED TO 95% OF MAXIMUM CONTENT (ASTM D1557).
- 4.3 THE CONTRACTOR SHALL PROVIDE ALL NECESSARY MEASURES TO PREVENT ANY WATER, FR FOOTING OR STRUCTURAL SUBGRADE BEFORE & AFTER PLACING OF CONCRETE, AND UNTI

RESTORE SURFACE TO MATCH	
ORIGINAL CONDITION	RAMAKER
ACCARA TIE TIE TIE COMPACTED BACKFILL	(608) 643-4100 www.ramaker.com
(SUITABLE ON SITE MATERIAL)	PREPARED FOR:
G" WARNING TAPE	
	at&t
	Mability
ELECTRICAL CONDUIT(5)	Mobility
WHERE APPLICABLE *	
	CONSULTANT: GENERAL DYNAMICS
WITH	Information Technology, Inc.
	GENERAL DYNAMICS 661 MOORE RD STE 110
6 NOTED BELOW. JP LOCATIONS (I.E.	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 <u>Connecticut</u> .
2)	OF CONNE
	SKOW SKOW
	New York
	26266
	SONAL ENGINE
1318-11. IN CASE OF CONFLICT	CONAL ENVIL
VOR MANUFACTURER'S REQUIREMENTS,	Jane Resurand 3/04/2021 Signature: Date:
COR SUBCONTRACTOR OR ITECT, THE ENGINEER, TECH. R & HOLD THEM HARMLESS AGAINST	
JL OR NEGLIGENT ACT, OR FAILURE TO E SCAFFOLDING ACT IN CONNECTIONS	
	2 03/04/21 REVISED CD5 1 02/05/21 REVISED CD5 MURE
	MARK DATE DESCRIPTION
SHALL BE ASSUMED TO BE 2000 PSF.	
	LYME CENTRAL FA ID # 10071096
	I 56 STERLING CITY ROAD OLD LYME, CT 0637 I
	SHEET TITLE:
XPOSED TO EARTH OR WEATHER.	FOUNDATION DETAILS
CALCIUM CHLORIDE.	
D GRANULAR FILL WITH AN ASSUMED	SCALE: NONE
N & SLAB SUBGRADE & BACKFILL AREAS, DENSITY AT OPTIMUM MOISTURE	
ROST, OR ICE FROM PENETRATING ANY	PROJECT 49647
	SHEET S-



200A DISTRIBUTION PANEL

PROPOSED WIRING DIAGRAM

SCALE: NTS

(3)

DIAGRAM CIRCUIT SCHEDULE

GROUND

WIRES

TO

CONDUIT

SIZE

FUNCTION

ALARM WIRING IDENTIFICATION CHART

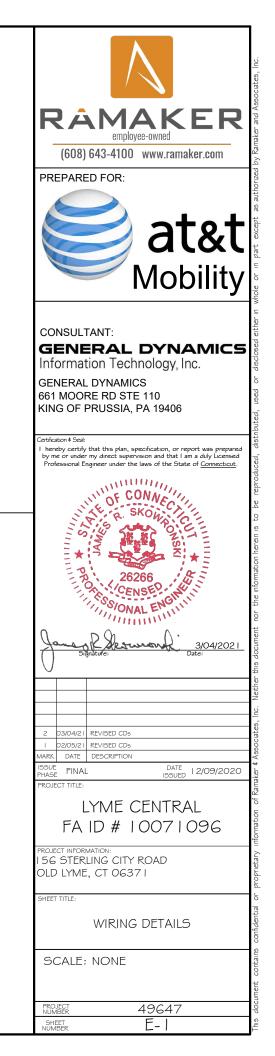
WIRF ALARM BROWN GENERATOR RUNNING BROWN / WHITE GREEN CRITICAL FAULT GREEN / WHITE BLUE MINOR FAULT BLUE / WHITE ORANGE LOW FUEL ORANGE / WHITE BROWN FUEL LEAK BROWN / WHITE \* \*CAT5 CABLE ONLY, FROM 2ND CAT5 CABLE

ALARM WIRE IDENTIFICATION CHART

훞 삶 020  $\bigcirc$ 

NO.

FROM



Breaker

Position

Breaker

Type

2P

2P

2P

1P

2P

2P

11

13

15

17

19

21

23 1P、 On/Off

On

On

On

Off

On

On

ON

Size

30

30

30

30

30

30

20

SCALE: NTS

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

HANDWRITTEN LABELS.

AC Distribution Panel - Layout Diagram

Circuit Label

POWER PLANT FEED

POWER PLANT FEED

POWER PLANT FEED

PBC-02

POWER PLANT FEED

POWER PLANT FEED

ATS

EXISTING PANEL SCHEDULE

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

Breaker

Position

Breake

Туре

2P

1P

1P

1P

1P

1P

1P,

2P \

1P

8

10

12

14

16

18

20

22

24 1R On/Off

On

\*CONTRACTOR TO UTILIZE NEXT AVAILABLE IN

SEQUENCE SINGLE BREAKER POSITION FOR GENERATOR, BATTERY CHARGER, BATTERY HEATER

AND BLOCK HEATER

Size

30

20

20

20

20

15

20

30

20

20

Circuit Label

INT INDICATOR

PROTECTION

GFI PWR PANEL

GFI TELCO AT SERVICE

FI & LIGHT AT PWR PANE

GFI TELCO BOX

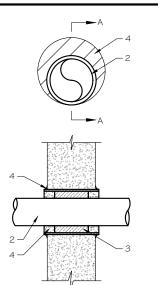
WER PURCEL 120V OUTL

BATTERY CHARGER

POWER PLANT FEED

PWR PLANT FEED

BLOCK HEATER



#### NOTE IF EXISTING CONSTRUCTION VARIES FROM THIS DETAIL, AN EQUAL 3-HR U.L. PENETRATION APPROPRIATE FOR THE EXISTING WALL TYPE SHALL BE

CONSTRUCTED GC SHALL USE NON-SHRINKING CAULK

TO WEATHERSEAL ALL PENETRATIONS INTO OR THRU SHELTER WALL.

#### U.L. SYSTEM NO. C-AJ-1150 CONDUIT THROUGH BEARING WALL SIMILAR TO U.L. DESIGN NO. U902 F RATING = 3 HR T RATING = O HR

- I. FLOOR OR WALL ASSEMBLY : MINIMUM 4-1/2" THICK REINFORCED LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF) CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS\*. MAX DIAMETER OF OPENING IS 4". SEE CONCRETE BLOCKS 9CATZ) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.
- 2. THROUGH PENETRATIONS : ONE METALLIC PIPE OR CONDUIT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. THE ANNULAR SPACE SHALL BE MINIMUM O". (POINT CONTACT) TO MAXIMUM 1-3/8". THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES OR CONDUITS MAY BE USED:

A. STEEL PIPE-NOMINAL G" DIAMETER (OR SMALLER) SCHEDULE 40 (OR HEAVIER) STEEL PIPE

B. IRON PIPE-NOMINAL G" 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 CPGOIS OR CPGO4 SEALANT IS USED

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC. : CPGOIS, CPGO4, CPGO6, OR FS-ONE SEALANT.

\* BEARING THE UL CLASSIFICATION MARK

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

R Type GR CABLE TAP TO TOP OF GROUND ROD

Type GT THROUGH CABLE TO TOP OF GROUND ROD



る堕

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

19

Type GR

CABLE TAP TO TOP OF GROUND ROD

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

69

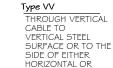
CABLE TAP DOWN AT

VERTICAL PIPE.

SIDE OF HORIZONTAL OR

Type VS 45°TO VERTICAL STEEL SURFACE OR

VERTICAL PIPE

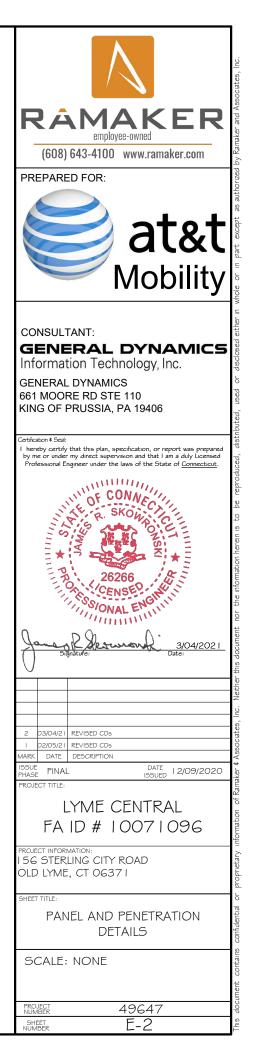


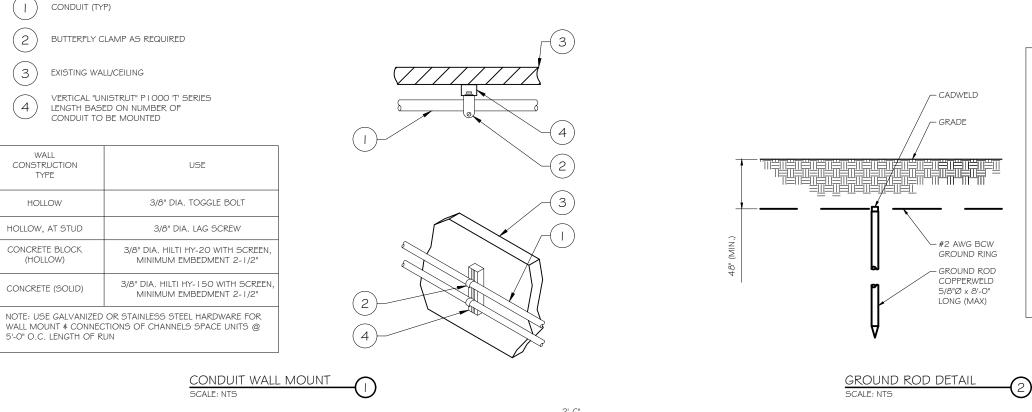




SCALE: NTS







SCALE: NTS

WALL CONSTRUCTION TYPE	USE
HOLLOW	3/8" DIA. TOGGLE BOLT
HOLLOW, AT STUD	3/8" DIA. LAG SCREW
CONCRETE BLOCK (HOLLOW)	7/1 G" 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:

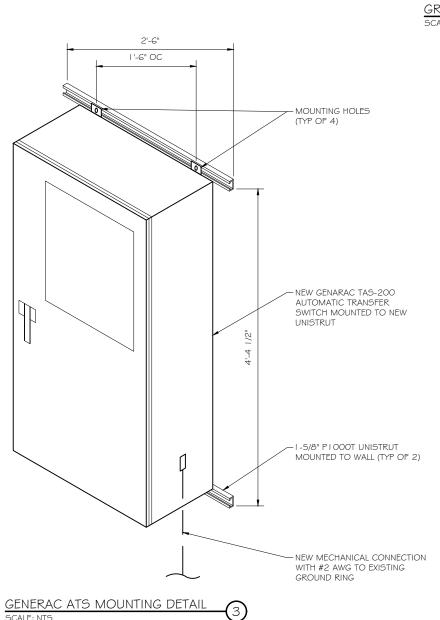
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(3

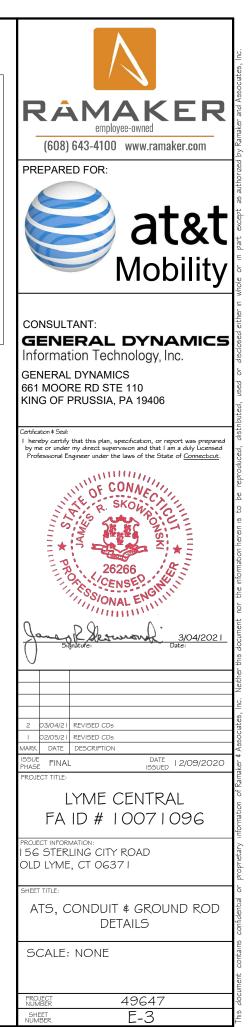
(4

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



- GROUND RODS MAY BE: - COPPER CLAD STEEL
- SOLID COPPER GROUND RODS SHALL HAVE 2 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





EPA Certified Stationary Emergency

SD030 | 2.2L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

## GENERAC INDUSTRIAL

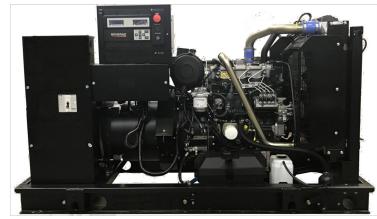


Image used for illustration purposes only

### Codes and Standards

ANSI

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

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



ANSI C62.41

**Powering Ahead** 

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

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

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

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

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

## SD030 | 2.2L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET EPA Certified Stationary Emergency

#### STANDARD FEATURES

#### ENGINE SYSTEM

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

#### 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

### ENCLOSURE (If Selected)

- Protect Finish
- Gasketed Doors

- Amortisseur Winding (3-Phase Only)
- Full Load Capacity Alternator Protective Thermal Switch

#### GENERATOR SET

Rotor Dynamically Spin Balanced

ALTERNATOR SYSTEM

Class H Insulation Material

UL2200 GENprotect<sup>™</sup>

• 2/3 Pitch

Skewed Stator

Sealed Bearing

Brushless Excitation

- 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)
  - - Oil Pressure
    - Coolant Temperature
    - Coolant Level
    - Engine Speed
- NFPA110 Level I and II (Programmable) Battery Voltage
- Customizable Alarms, Warnings, and Events
- Modbus<sup>®</sup> Protocol
- Predictive Maintenance Algorithm

· Audible Alarms and Shutdowns

• E-Stop (Red Mushroom-Type)

Not in Auto (Flashing Light)

Auto/Off/Manual Switch

- Sealed Boards
- Password Parameter Adjustment Protection
- Single Point Ground
- 16 Channel Remote Trending
- 0.2 msec High Speed Remote Trending
- Full System Status Display

Alarm Information Automatically Annunciated

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

on the Display

All Phase Currents

GENERAC 30KW GENERATOR SPECIFICATIONS SCALE: NTS





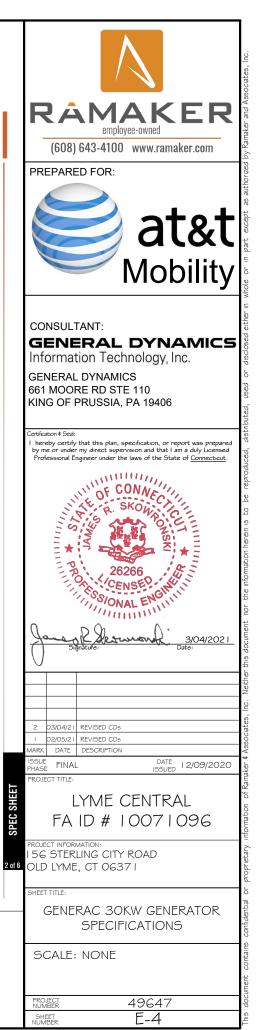
- Rust-Proof Fasteners with Nylon Washers to High Performance Sound-Absorbing Material (Sound Attenuation Enclosures) Stamped Air-Intake Louvers • Upward Facing Discharge Hoods (Badiator and Exhaust)
- Stainless Steel Lift Off Door Hinges
- Stainless Steel Lockable Handles
- RhinoCoat<sup>™</sup> Textured 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<sup>™</sup> - Textured Polyester Powder Coat Paint Stainless Steel Hardware
- 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)





EPA Certified Stationary Emergency

### **CONFIGURABLE OPTIONS**

#### ENGINE SYSTEM

TRB 2

020

 $\bigcirc$ 

- 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

O 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

#### ENGINEERED OPTIONS

#### ENGINE SYSTEM

 Coolant Heater Isolation Ball Valves Fluid Containment Pan

#### CONTROL SYSTEM

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

### CONTROL SYSTEM

• NFPA 110 Compliant 21-Light Remote Annunciator

GENERAC INDUSTRIAL

- 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,
- ENCLOSURE
- Weather Protected Enclosure

CIRCUIT BREAKER OPTIONS

• Shunt Trip and Auxiliary Contact

Main Line Circuit Breaker

○ Electronic Trip Breakers

O 2nd Main Line Circuit Breaker

- 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

### WARRANTY (Standby Gensets Only)

- O 2 Year Extended Limited Warranty
- 5 Year Limited Warranty
- O 5 Year Extended Limited Warranty
- O 7 Year Extended Limited Warranty 10 Year Extended Limited Warranty

ALTERNATOR SYSTEM

○ 3rd Breaker System

**GENERATOR SET** 

Special Testing

#### FUEL TANKS

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

### SD030 | 2.2L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET EPA Certified Stationary Emergency

#### APPLICATION AND ENGINEERING DATA

#### ENGINE SPECIFICATIONS

General		Cooling System	
Make	Perkins	Cooling System Type	Closed Recovery
EPA Emissions Compliance	Stationary Emergency	Water Pump Type	Pre-Lubed, Self Sealing
EPA Emissions Reference	See Emission Data Sheet	Fan Type	Pusher
Cylinder #	4	Fan Speed - RPM	1,980
Туре	In-Line	Fan Diameter - in (mm)	18 (457)
Displacement - in <sup>3</sup> (L)	135 (2.22)	E 10 1	
Bore - in (mm)	3.3 (84)	Fuel System	
Stroke - in (mm)	3.9 (100)	Fuel Type	Ultra Low Sulfur Diesel Fuel #2
Compression Ratio	23.3:1	Fuel Specifications	ASTM
Intake Air Method	Turbocharged	Fuel Filtering (Microns)	5
Cylinder Head	Cast Iron	Fuel Inject Pump	Distribution Injection Pump
Piston Type	Aluminum	Fuel Pump Type	Engine Driven Gear
Crankshaft Type	Forged Steel	Injector Type	Mechanical
		Fuel Supply Line - in (mm)	0.31 (7.9) ID
Engine Governing		Fuel Return Line - in (mm)	0.2 (4.8) ID
Governor	Electronic Isochronous		
Frequency Regulation (Steady State)	±0.5%	Engine Electrical System	
		System Voltage	12 VDC
Lubrication System		Battery Charger Alternator	Standard
Oil Pump Type	Gear	Battery Size	See Battery Index 0161970SBY
Oil Filter Type	Full-Flow	Battery Voltage	12 VDC
Crankcase Capacity - qt (L)	11.2 (10.6)	Ground Polarity	Negative

#### ALTERNATOR SPECIFICATIONS

Standard Model	K0035124Y21	Standard Excitation	Brus
Poles	4	Bearings	Sing
Field Type	Revolving	Coupling	Dire
Insulation Class - Rotor	н	Load Capacity - Standby	100
Insulation Class - Stator	Н	Prototype Short Circuit Test	Yes
Total Harmonic Distortion	<5% (3-Phase)	Voltage Regulator Type	Digit
Telephone Interference Factor (TIF)	< 50	Number of Sensed Phases	All
		Regulation Accuracy (Steady State)	±0.

 Remote E-Stop (Red Mushroom-Type, Flush Mount) FUEL TANKS (Size On Last Page)

- O 8 in (203.2 mm) Fill Extension
- 13 in (330.2 mm) Fill Extension
- 19 in (482.6 mm) Fill Extension Overfill Protection Valve
- O 5 Gallon Spill Box Return Hose
- O 5 Gallon Spill Box
- Tank Risers

Surface Mount)

○ 100 dB Alarm Horn

Ground Fault Annunciation

O 10A Engine Run Relay

120V GFCI and 240V Outlets

Remote Communication - Modem

- Fuel Level Switch and Alarm
- O 12' Vent System
- Fire Rated Stainless Steel Fuel Hose

#### Door Alarm Switch O Enclosure Heater

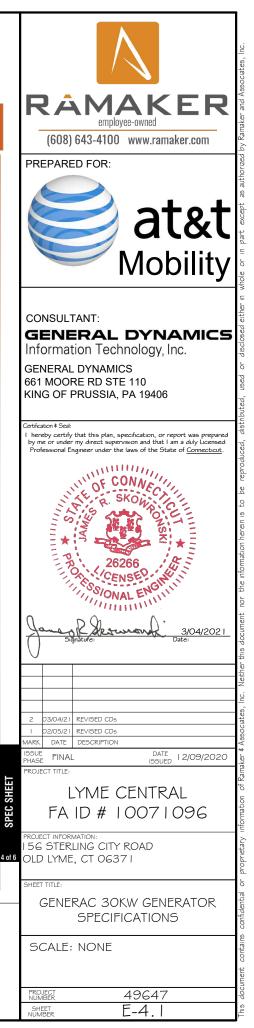
# • Damper Alarm Contacts



osed Recovery
e-Lubed, Self Sealing
sher
980
(457)

2 VDC
andard
ee Battery Index 0161970SBY
2 VDC
egative

rushless	
ingle Sealed	
lirect via Flexible Disc	
00%	
'es	
ligital	
±0.25%	





### **OPERATING DATA**

#### POWER RATINGS

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

#### MOTOR STARTING CAPABILITIES (skVA)

sk	VA vs.	Voltage Dip	
277/480 VAC	30%	208/240 VAC	30%
K0035124Y21	61	K0035124Y21	46
K0040124Y21	76	K0040124Y21	58
K0050124Y21	98	K0050124Y21	75

### FUEL CONSUMPTION RATES\*

	Diesei	- gpn (Lpn)
Fuel Pump Lift- ft (m)	Percent Load	Standby
3 (1)	25%	1.0 (3.7)
	50%	1.4 (5.2)
Total Fuel Pump Flow (Combustion + Return) - gph (Lph)	75%	2.0 (7.5)
16.6 (63)	100%	2.8 (10.5)
	* Fuel supply installation m consumption rates at 10	
		Standby

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

#### COMBUSTION AIR REQUIREMENTS

COOLING

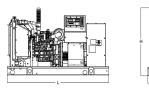
			Standby		
		Flow at Rated Pow	ver scfm (m <sup>3</sup> /min) 88 (2.5)		
ENGINE			EXHAUST		
		Standby			Standby
Rated Engine Speed	RPM	1,800	Exhaust Flow (Rated Output)	scfm (m <sup>3</sup> /min)	296.6 (8.4)
Horsepower at Rated kW**	hp	49	Max. Allowable Backpressure (Post Turbocharger)	inHg (kPa)	1.5 (5.1)
Piston Speed	ft/min (m/min)	1,181 (360)	Exhaust Temp (Rated Output)	°F (°C)	892 (478)
BMEP	psi (kPa)	159 (1,096)			
** Refer to "Emissions Data Sheet"	for maximum bHP for	EPA and SCAQMD permit	ting purposes.		

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

## SD030 | 2.2L | 30 kW

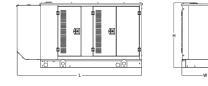
INDUSTRIAL DIESEL GENERATOR SET EPA Certified Stationary Emergency

#### **DIMENSIONS AND WEIGHTS\***



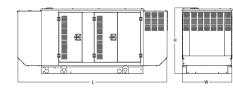
#### **OPEN SET (Includes Exhaust Flex)** Run Usable

Time - Hours	Capacity - Gal (L)	L x W x H - in
No Tank	-	76.0 (1,930) x 37.4 (950
19	54 (204)	76.0 (1,930) x 37.4 (950
47	132 (501)	76.0 (1,930) x 37.4 (950
75	211 (799)	76.0 (1,930) x 37.4 (950
107	300 (1,136)	92.9 (2,360) x 37.4 (950



### WEATHER PROTECTED ENCLOSURE

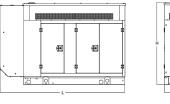
Run Time	Usable Capacity	L x W x H - in (mm)		t - Ibs (kg) sure Only
- Hours	- Gal (L)		Steel	Aluminum
No Tank	-	94.8 (2,409) x 38.0 (965) x 49.5 (1,258)		
19	54 (204)	94.8 (2,409) x 38.0 (965) x 62.5 (1,588)		
47	132 (501)	94.8 (2,409) x 38.0 (965) x 74.5 (1,893)	- 372 - (170)	241 (110)
75	211 (799)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



#### **LEVEL 1 ACOUSTIC ENCLOSURE**

LEVEL 2 ACOUSTIC ENCLOSUDE

Run Time - Hours	Usable Capacity	L x W x H - in (mm)		t - Ibs (kg) sure Only
- Hours	- Gal (L)		Steel	Aluminum
No Tank	-	112.5 (2,857) x 38.0 (965) x 49.5 (1,258)		
19	54 (204)	112.5 (2,857) x 38.0 (965) x 62.5 (1,582)		
47	132 (501)	112.5 (2,857) x 38.0 (965) x 74.5 (1,893)	- 505 - (230)	338 (154)
75	211 (799)	112.5 (2,857) x 38.0 (965) x 86.5 (2,198)	. (200)	(104)
107	300 (1,136)	112.5 (2,857) x 38.0 (965) x 86.5 (2,198)	-	



Run Time - Hours	Usable Capacity	L x W x H - in (mm)		- Ibs (kg) sure Only
- Hours	- Gal (L)		Steel	Aluminum
No Tank	-	94.8 (2,407) x 38.0 (965) x 61.1 (1,551)		
19	54 (204)	94.8 (2,407) x 38.0 (965) x 74.1 (1,881)	- 10	
47	132 (501)	94.8 (2,407) x 38.0 (965) x 86.1 (2,186)	510 (232)	341 (155)
75	211 (799)	94.8 (2,407) x 38.0 (965) x 98.1 (2,491)	(202)	(100)
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.

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GENERAC 30KW GENERATOR SPECIFICATIONS SCALE: NTS

GENERAC INDUSTRIAL Diesel - gph (Lph) Standby 1.0 (3.7)

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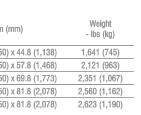
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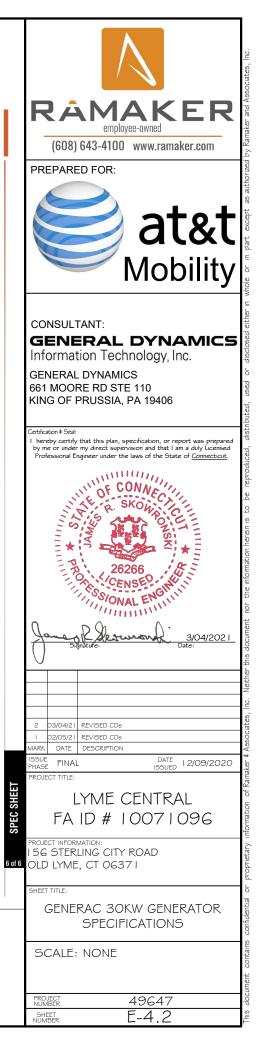
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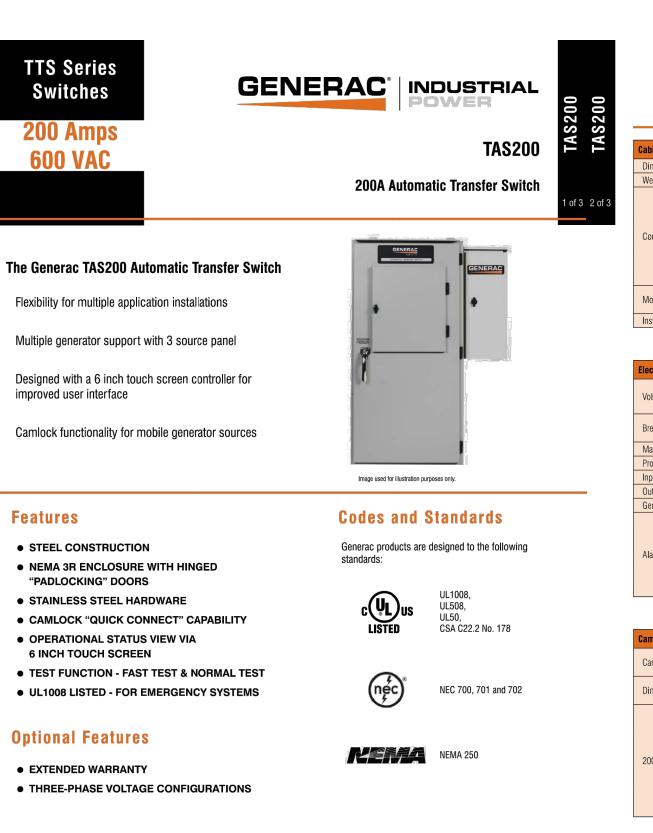
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Cabinet Specifications	
Dimensions	24"W x 12"D x 48"H
Weight	210 lbs.
	Single Chamber with Main Door
	Steel
	UL Type / NEMA 3R Rated
Construction	Powder Coat Finish for Corrosion Resist
	C-UL-US Listed - Automatic Transfer Sv
	Stainless Steel Hardware
	3-Point Latching System with Pad-Lockable
Mounting Options	Wall
Mounting Options	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
	Generator Run Alarm
	Generator Fail – Shutdown Alarm
Alarm Terminal Board	Generator Fail – Non Shutdown Aları
	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-Groun	
		3-Phase: Black L1, Red L2, Blue L3, White-Neutral, Green-Gro	
		Uses 4 CH E1016 Male Connectors	
		Mating Connector – CH E1016 Female	

GENERAC ATS SPECIFICATIONS SCALE: NTS

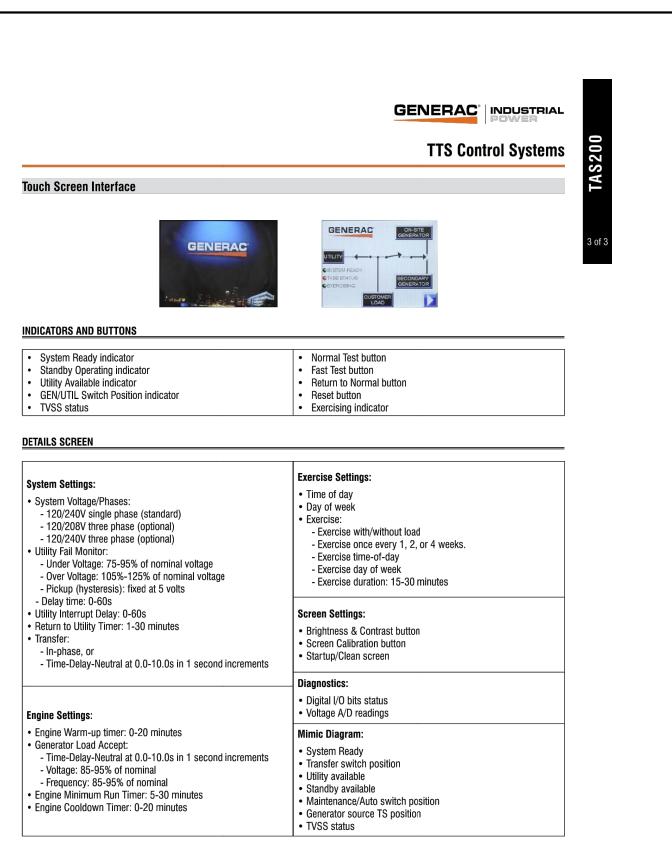
# **Application and Engineering Data**

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GENERAC ATS SPECIFICATIONS SCALE: NTS

