



CRAIG CODY

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Foxboro, MA 02035
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Melanie Bachman
Executive Director
Connecticut Siting Counsel
10 Franklin Square
New Britain, CT 06051

Re: **Notice of Exempt Modification - Shared Emergency Backup Generator
181-1 Research Drive, Milford, CT**

Dear Ms. Roberts:

American Tower Corporation ("ATC") currently maintains a wireless telecommunications facility at the above referenced address. ATC's tower and ground facility is host to multiple existing tenants within a lease area maintained by ATC. ATC does not currently maintain a generator at this cell site.

In an effort to further enhance multiple tenants' network reliability, ATC intends to modify its facility by moving an existing diesel-fueled generator to the east side of the compound in a designated 8'x14' ground space within the lease area. The generator incorporates a built-in fuel tank as part of the unit. The diesel fuel tanks are double walled for added safety and will be filled by a licensed fuel filling company. (See Facility Compound Plan attached).

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 City of Milford. A copy of this submission is also being sent to American Tower, the property owner on which the tower is located.

ATCs' Proposed Wireless Modifications Constitutes An "Exempt Modification"

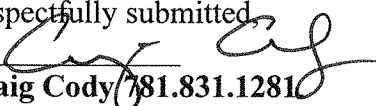
The proposed modification to the above mentioned Facility constitutes an exempt modification of an existing facility provided for in R.C.S.A Section 16-50j-72(b)(2) and Council regulations promulgated pursuant thereto.

- 1) The proposed modification will not result in an increase in the height of the existing tower.
- 2) The generator and attached fuel tank will remain entirely within the limits of the leased area. The modifications therefor, will not require the extension of the 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.
- 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) The facility has received all municipal zoning approvals and building permits. (Regs., Conn. State Agencies Section 16-50j-72))

For all the foregoing reasons, American Tower Corporation 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)

Respectfully submitted



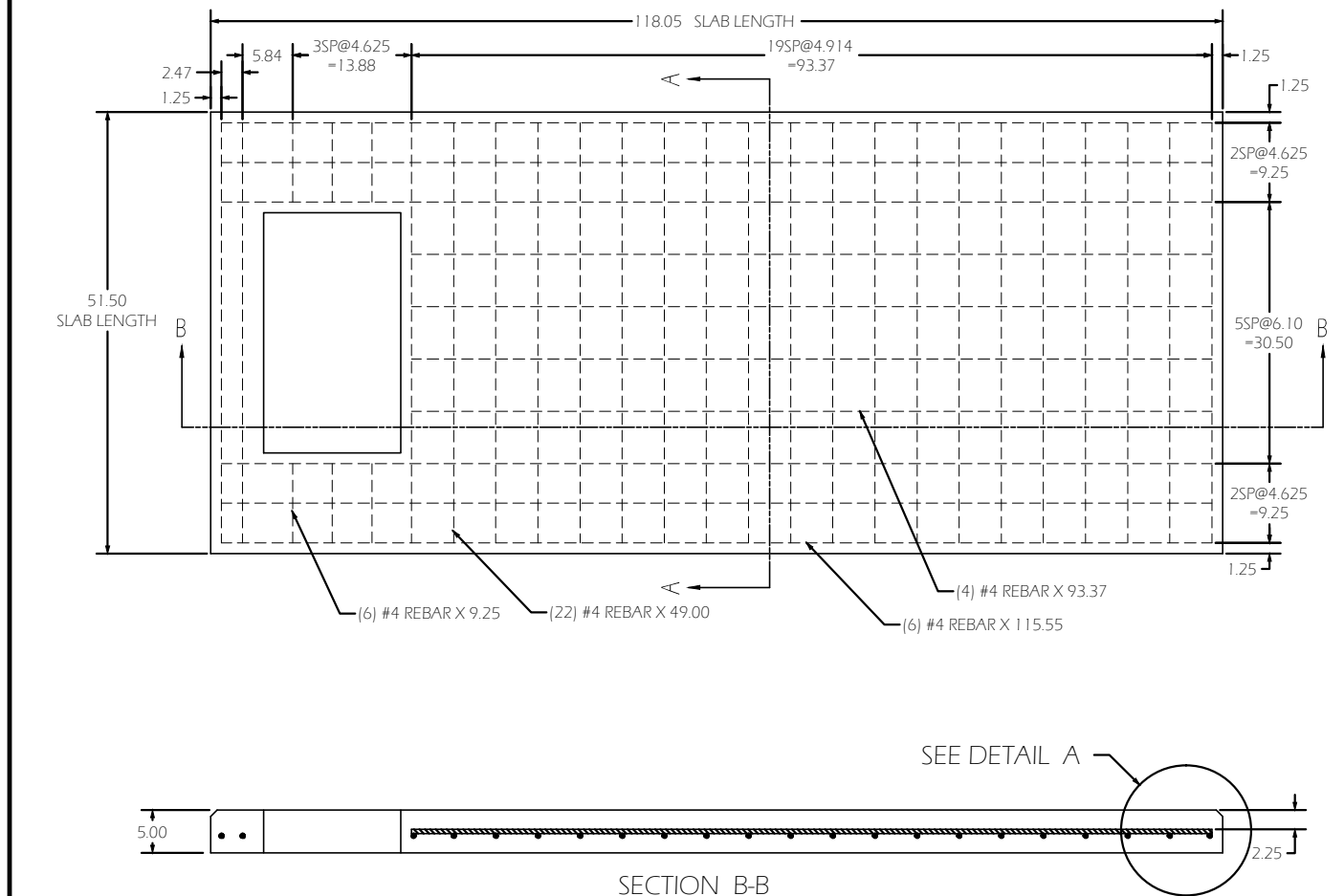
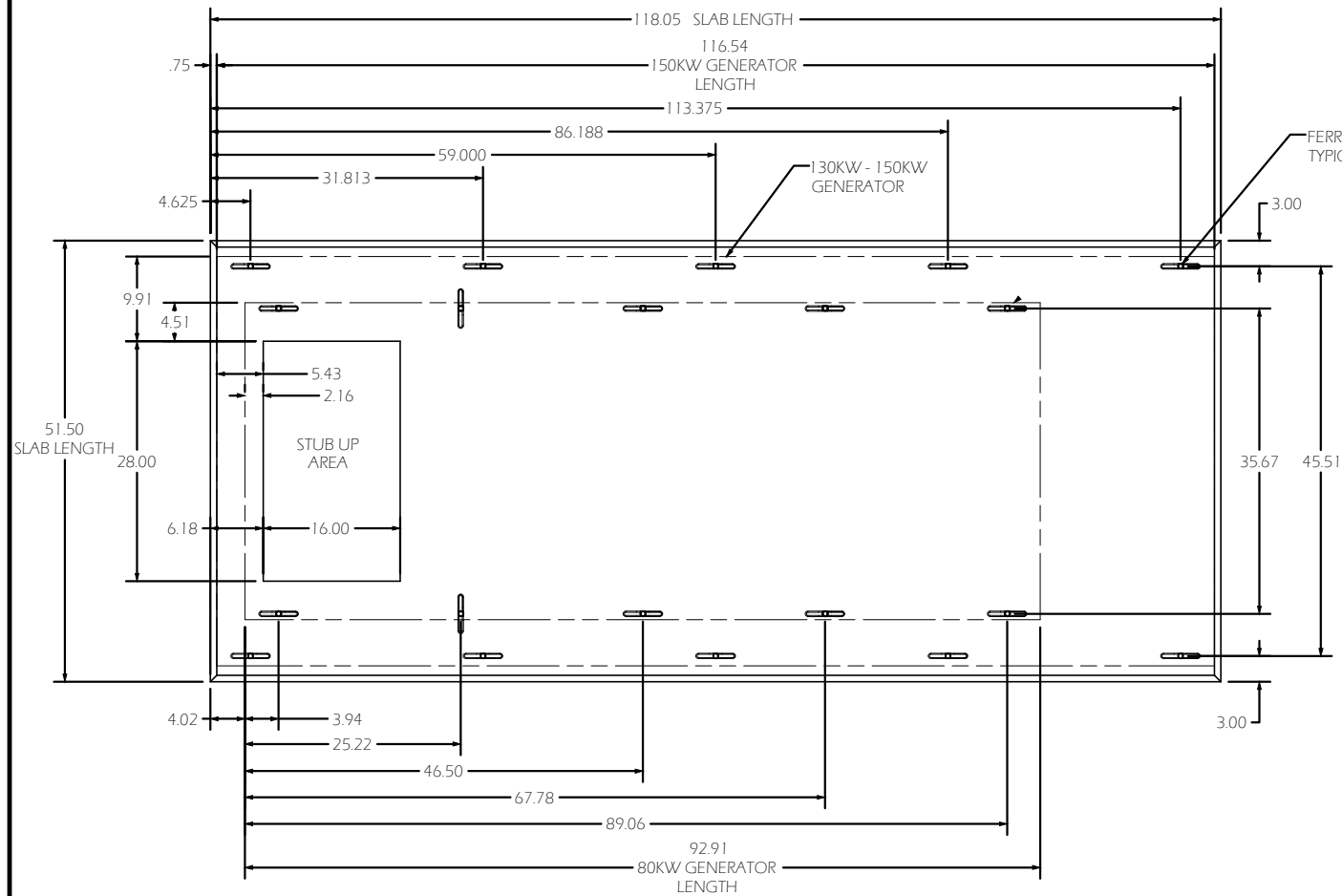
Craig Cody (781.831.1281)

On behalf of American Tower Corporation
c/o Tower Resource Management, Inc.
16 Chestnut Street, Suite 420
Foxboro, MA 02035

cc: **City of Milford, CT**
American Tower Corporation

Exhibit 1

Site Plan

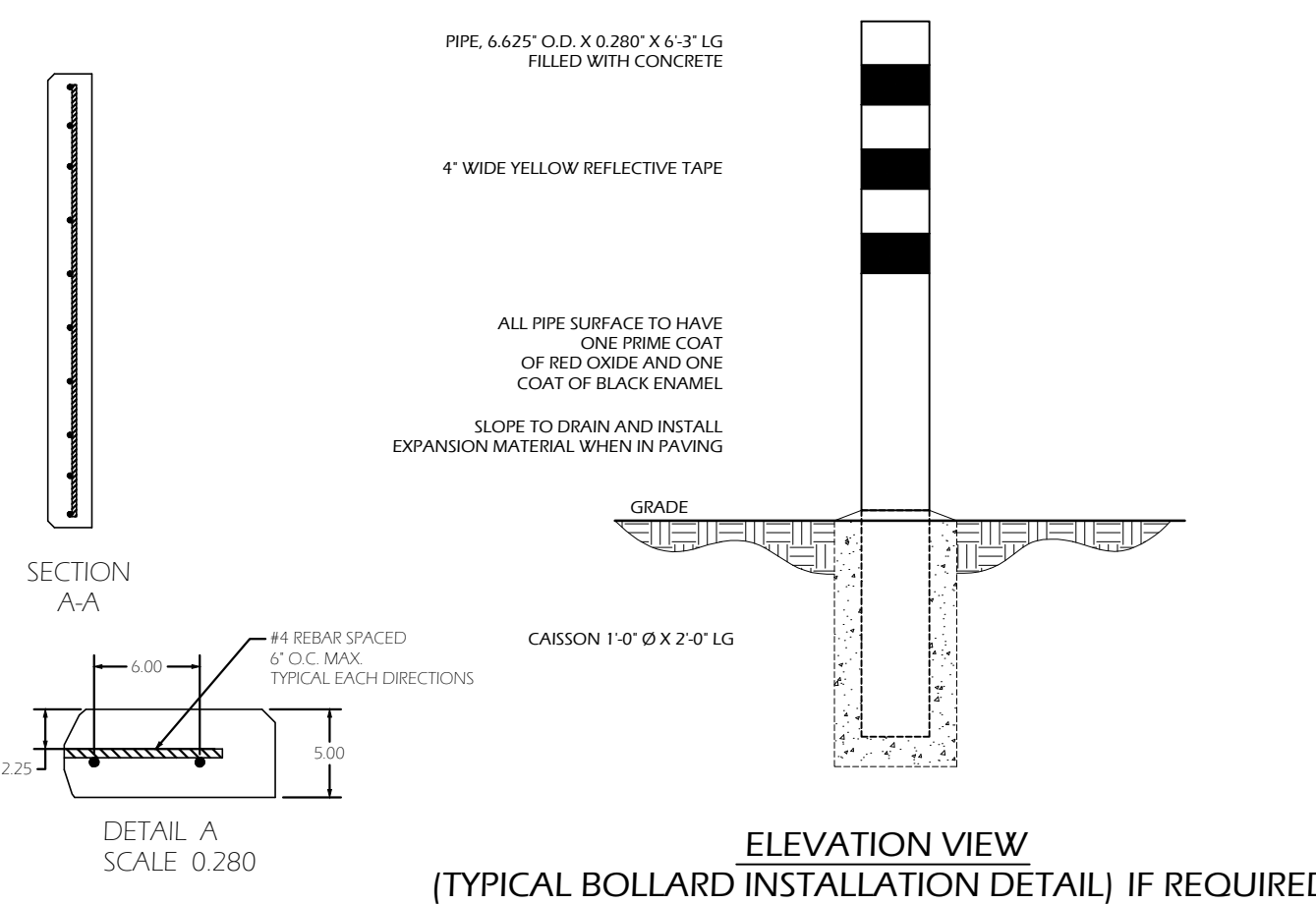


MATERIALS LIST (FOR ONE CONCRETE PAD)						
QTY REQ'D.	SIZE	TOTAL LENGTH	TOTAL WEIGHT	TYPE	BENDING DIAGRAM	
					DIMENSION	
20	1/2"	0'-5"	-	FERRULE WING		
6	#4	115.55'	39 #	STRAIGHT	A= 115.55'	
4	#4	93.37'	21 #		A= 93.37'	
22	#4	49.00'	60 #		A= 49.00'	
6	#4	9.25'	3 #		A= 9.25'	
STANDARD REBAR SIZES & WEIGHTS						
BAR NO	LBS PER FT.	DIA. INCHES	GRADE			
4	.6676	.500	40			

- CONCRETE PAD CONSTRUCTION NOTES**
1. ALL REBAR (HORIZONTAL & VERTICAL) SHALL BE SECURELY WIRE TIED TO PREVENT DISPLACEMENT DURING POURING OF CONCRETE.
 2. CONCRETE TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS.
 3. REINFORCED CONCRETE CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH ACI STANDARDS 318.
 4. MINIMUM CONCRETE COVER OVER REBAR IS 1 1/4".
 5. REINFORCING MATERIAL SHALL BE IN ACCORDANCE WITH ASTM SPECIFICATION A615-85.

- CONCRETE PAD AND EMBEDMENT TOLERANCES**
1. EMBEDMENTS: PLUS OR MINUS 1/16"
 2. CONCRETE DIMENSIONS: PLUS OR MINUS 1/4"
 3. REINFORCING STEEL PLACEMENT: PLUS OR MINUS 1/4" INCLUDING CONCRETE COVER.

- NOTES**
1. FOUNDATION WAS DESIGNED BY ASSUMING ALLOWABLE SOIL BEARING CAPACITY OF 1000 PSI. FOR SOFT OR WEAK SOILS, FOUNDATION WILL BE DESIGNED BASED ON THE GEOTECH SOIL REPORT.
 2. GENERAL CONTRACTOR TO ADD STONE UNDER THE GENERATOR AS WARRANTED PER SOIL CONDITIONS INCLUDING DITCHES WITH PROPER COMPACTION AND REFERENCE THE 2012 SOW. THE SOIL UNDERNEATH THE CONCRETE PADS MUST BE COMPACTED AND LEVELED BEFORE PLACING THE FOUNDATION.
 3. THIS CONCRETE PAD WILL BE PRE CASTED IN SHOP.
 4. CONCRETE SLUMPS: 1" ~ 3".
 5. CONCRETE VOLUME = 0.78 CUBIC YARDS
 6. THE DIMENSIONS BETWEEN EACH EMBEDMENT ARE OBTAINED FROM GENERAL POWER SYSTEMS DRAWINGS (DWG NO: ATC150PAD DATED 7/8/08, AND ATC125PAD DATED 7/10/08.)
 7. GENERAL CONTRACTOR WILL PULL BACK EXISTING COMPOUND STONE AND CUT FABRIC BEFORE DITCH DIGGING AND WILL COMPACT ALL SOILS AND COMPOUND STONE AFTER CONSTRUCTION AS STANDARD TELECOM PRACTICE ON ATC TOWER SITES. GENERAL CONTRACTOR WILL INFORM THE PROJECT MANAGER IF ADDITIONAL STONE IS REQUIRED BEFORE SITE COMPLETION AND REFERENCE THE 2012 SOW.
 8. GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL CLEANUP AND TRASH REMOVAL AFTER GENERATOR INSTALLATION.



THESE DRAWINGS AND/OR THE ACCOMPANYING SPECIFICATION AS INSTRUMENTS OF SERVICE ARE THE EXCLUSIVE PROPERTY OF ATC TOWER SERVICES, INC. THEIR USE AND PUBLICATION SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY ARE PREPARED. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO ATC TOWER SERVICES, INC. OR THE SPECIFIED CARRIER IS STRICTLY PROHIBITED. TITLE TO THESE DOCUMENTS SHALL REMAIN THE PROPERTY OF ATC TOWER SERVICES, INC. WHETHER OR NOT THE PROJECT IS EXECUTED. NEITHER THE ARCHITECT NOR THE ENGINEER WILL BE PROVIDING ON-SITE CONSTRUCTION REVIEW OF THIS PROJECT. CONTRACTOR(S) MUST VERIFY ALL DIMENSIONS AND ADVISE ATC TOWER SERVICES, INC. OF ANY DISCREPANCIES. ANY PRIOR ISSUANCE OF THIS DRAWING IS SUPERSEDED BY THE LATEST VERSION ON FILE WITH ATC TOWER SERVICES, INC.

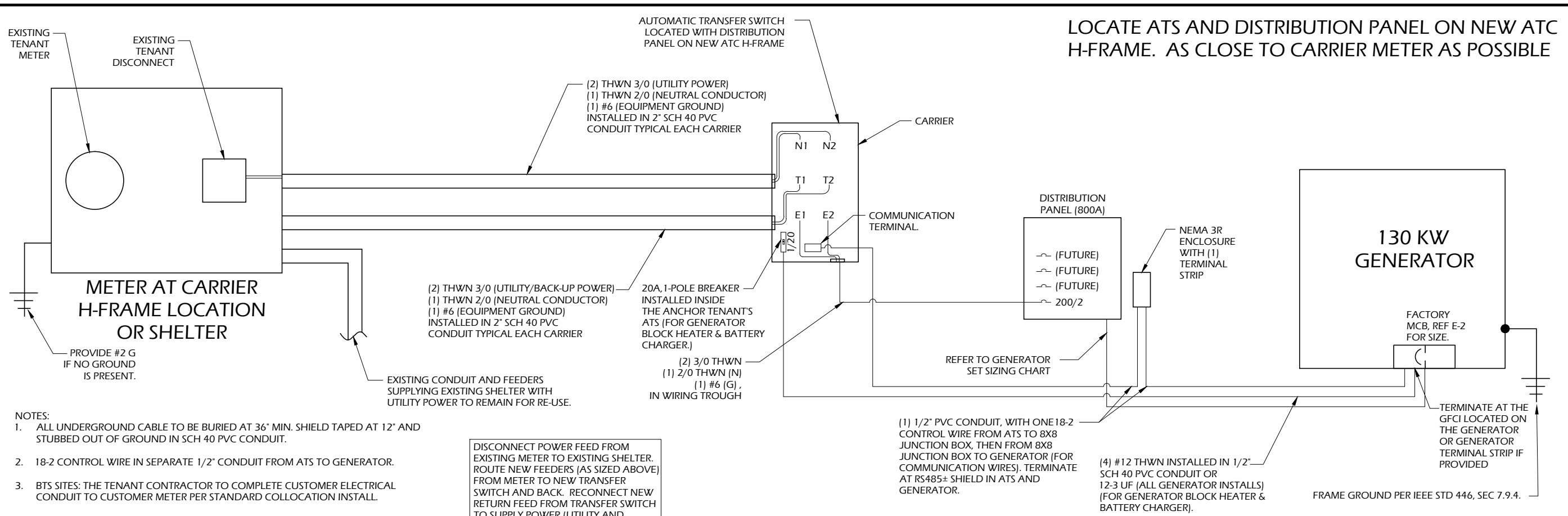
AMERICAN TOWER
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 SITE ADDRESS:
 185 RESEARCH DRIVE
 MILFORD, CT 06460-7733



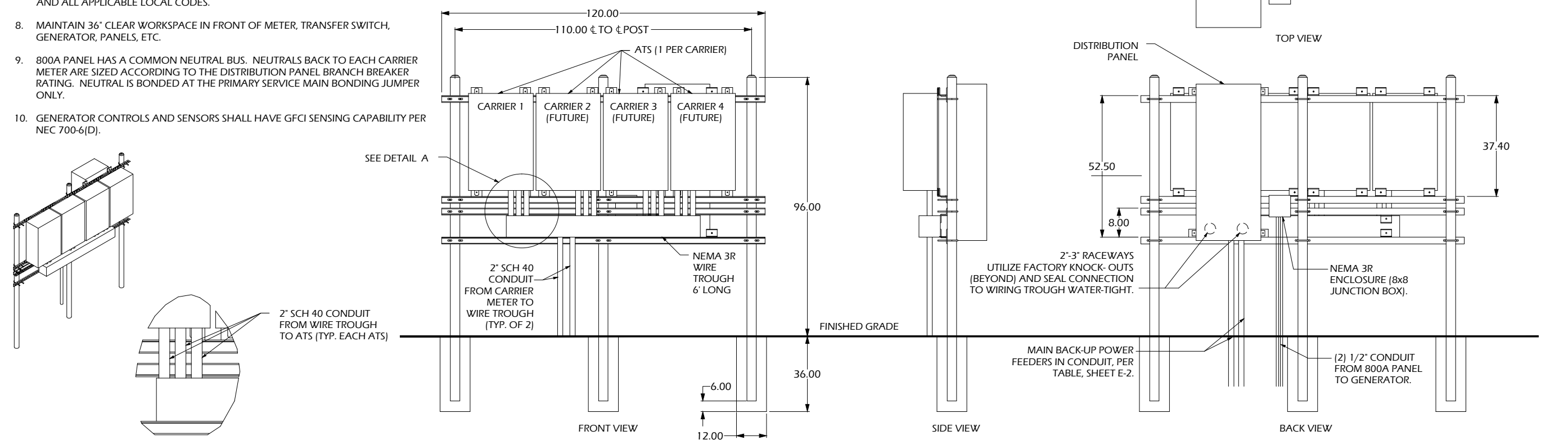
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 DRAWN BY: JMA
 CHECKED BY: SAE
 DATE DRAWN: 08/26/15
 JOB NO: 465126K1

SHEET TITLE:
CONCRETE PAD DETAILS
 SHEET NUMBER: **A-2** REV. # **0**



- NOTES:
- ALL UNDERGROUND CABLE TO BE BURIED AT 36" MIN. SHIELD TAPED AT 12" AND STUBBED OUT OF GROUND IN SCH 40 PVC CONDUIT.
 - 18-2 CONTROL WIRE IN SEPARATE 1/2" CONDUIT FROM ATS TO GENERATOR.
 - BTS SITES: THE TENANT CONTRACTOR TO COMPLETE CUSTOMER ELECTRICAL CONDUIT TO CUSTOMER METER PER STANDARD COLLOCATION INSTALL.
 - TENANT CONTRACTOR HAS NOTHING TO INSTALL OR COMPLETE FOR ATC SHARED GEN DURING CUSTOMER COLLOCATION ON ATC TOWER.
 - ATC SHARED GEN INSTALL IS COMPLETED AFTER CUSTOMER TOWER COLLOCATION IS COMPLETE WITH LOAD ON CUSTOMER METER.
 - ALL CONDUCTORS ARE COPPER, BUT ALUMINUM CONDUCTORS ARE ALLOWED FOR FEEDERS PROVIDED THEY ARE UPSIZED PER NEC TABLE 310.16.
 - ALL ELECTRICAL WORK SHALL BE PER THE NATIONAL ELECTRICAL CODE (NFPA 70) AND ALL APPLICABLE LOCAL CODES.
 - MAINTAIN 36" CLEAR WORKSPACE IN FRONT OF METER, TRANSFER SWITCH, GENERATOR, PANELS, ETC.
 - 800A PANEL HAS A COMMON NEUTRAL BUS. NEUTRALS BACK TO EACH CARRIER METER ARE SIZED ACCORDING TO THE DISTRIBUTION PANEL BRANCH BREAKER RATING. NEUTRAL IS BONDED AT THE PRIMARY SERVICE MAIN BONDING JUMPER ONLY.
 - GENERATOR CONTROLS AND SENSORS SHALL HAVE GFCI SENSING CAPABILITY PER NEC 700-6(D).

1 SINGLE CARRIER WIRING DIAGRAM
SCALE: NOT TO SCALE



NOTE:
THE FOUNDATION DESIGNS ARE BASED ON NORMAL SOILS WITH THE DESIGN PARAMETERS (SOIL UNIT WEIGHT 100 LB/CU.FT. AND COHESION C=2000 PSF.)

2 H-FRAME LAYOUT
SCALE: NOT TO SCALE



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CHECKED BY:	SAE
DATE DRAWN:	08/26/15
JOB NO:	465126K1

SHEET TITLE:
WIRING DIAGRAM & H-FRAME LAYOUT

SHEET NUMBER:	REV. #
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CONTRACTOR TO TERMINATE BLOCK HEATER POWER SUPPLY AT THE GFCI ON THE GENERATOR.

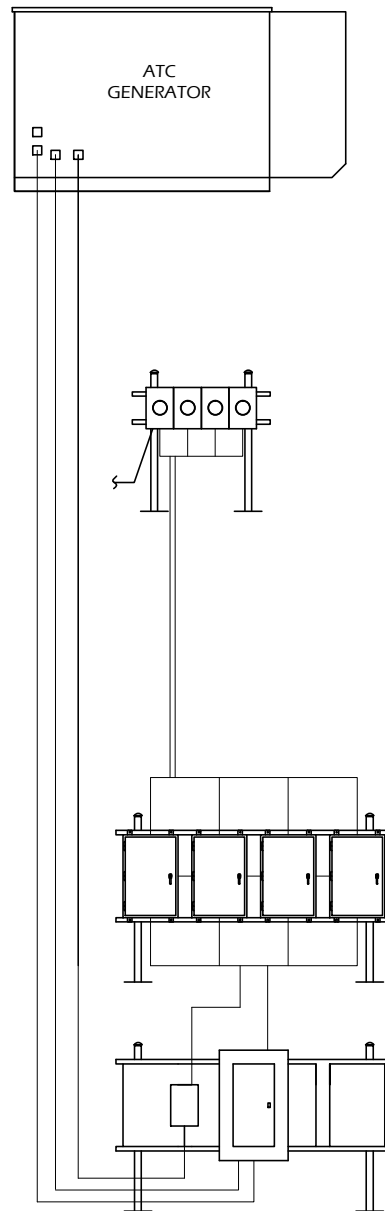
REFER TO GENERATOR SET SIZING CHART

REPRESENTS EXISTING FEED FROM METER TO SHELTER TO REMAIN FOR RE-USE. CONNECT VIA POLARIS TAP.

(1) 1/2" PVC CONDUIT, WITH ONE 18-2 CONTROL WIRE FROM 8X8 JUNCTION BOX TO GENERATOR (FOR COMMUNICATION WIRES). TERMINATE AT RS485± SHIELD IN ATS AND GENERATOR.

(4) #12 THWN WIRE IN 1/2" PVC CONDUIT OR 12-3 UF FOR BLOCK HEATER AND BATTERY CHARGER.

NEMA 3R ENCLOSURE 8X8 JUNCTION BOX WITH (1) TERMINAL STRIP



1 4-GANG MULTI - METER CONFIGURATION

4 GANG MULTI-METER CENTER ON H-FRAME (BY OTHERS). USE ONE METER SOCKET FOR PRIMARY TENANT'S METER, REMAINING THREE METERS ARE FOR FUTURE TENANTS.

DISCONNECT POWER FEED FROM EXISTING METER TO EXISTING SHELTER. ROUTE NEW FEEDERS (SIZED BELOW) FROM METER TO NEW TRANSFER SWITCH AND BACK. RECONNECT NEW RETURN FEED FROM TRANSFER SWITCH TO SUPPLY POWER (UTILITY AND BACK-UP POWER) TO EXISTING SHELTER.

TWO SETS OF:
(2) THHN 3/0 (UTILITY POWER)
(1) THHN 2/0 (NEUTRAL CONDUCTOR)
(1) #6 (EQUIPMENT GROUND)
INSTALLED IN PARALLEL 2" SCH 40 PVC [TYPICAL TWO (2) PARALLEL SETS PER INSTALL].

AUTOMATIC TRANSFER SWITCHES
(1) ATS SHOWN FOR ANCHOR (TENANT INSTALL).

REMAINING (3) ATS SHOWN ARE PROJECTED FOR FUTURE TENANTS AND INSTALLED DURING THESE FUTURE INSTALLS PER CUSTOMER.

(1) 1/2" PVC CONDUIT, WITH ONE 18-2 CONTROL WIRE FROM ATS TO 8X8 JUNCTION BOX (FOR COMMUNICATION WIRES). TERMINATE AT RS485± SHIELD IN ATS AND GENERATOR.

NEW 800A CUTLER HAMMER DISTRIBUTION PANEL W/ 4-200 AMP BREAKERS ON NEW H-FRAME

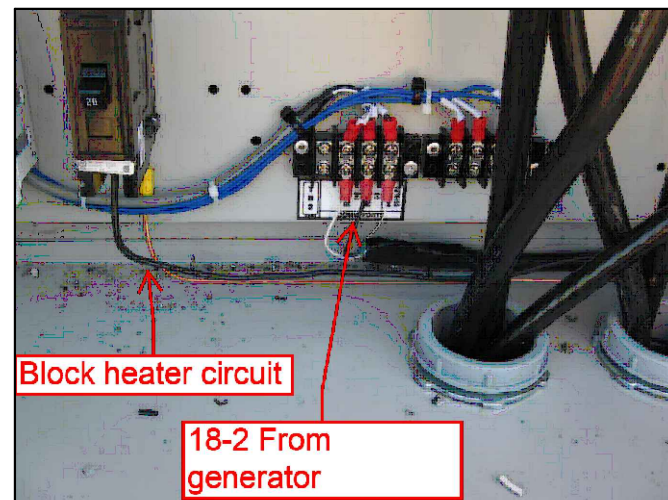
GENERATOR SET SIZING CHART & DESIGN NOTES:

GEN SET SIZE	VOLTS - PHASE	PRIME RATING KW - AMPS	SIZE OF INLINE BREAKER (AT GENERATOR)	MAIN BREAKER SIZE SERVING ANCHOR TENANT:	FEEDER SIZES FROM GEN SET BREAKER TO DISTRIBUTION PANEL / ATS.
50KW	120/240V - 1-PH	48KW - 200A	200A	200A C/B INTEGRAL TO GEN SET.	(3#3/0, 1#4G, IN 2" C<OR> (1#1/0 G-GC CABLE)
80KW	120/240V - 1-PH	72KW - 300A	400A	200A C/B INTEGRAL TO 800A MLO DISTRIBUTION PANEL.	2 SETS OF 3#350KCMIL, 1#2/0G, IN (2) 3" C<OR> (2#250 G-GC CABLE)
130KW	120/240V - 1-PH	113KW - 469A	600A	200A C/B INTEGRAL TO 800A MLO DISTRIBUTION PANEL.	2 SETS OF 3#350KCMIL, 1#2/0G, IN (2) 3" C<OR> (2#250 G-GC CABLE)
150KW	120/240V - 1-PH	135KW - 563A	700A	200A C/B INTEGRAL TO 800A MLO DISTRIBUTION PANEL.	2 SETS OF 3#500KCMIL, 1#2/0G, IN (2) 4" C<OR> (2#250 G-GC CABLE)

NOTES:

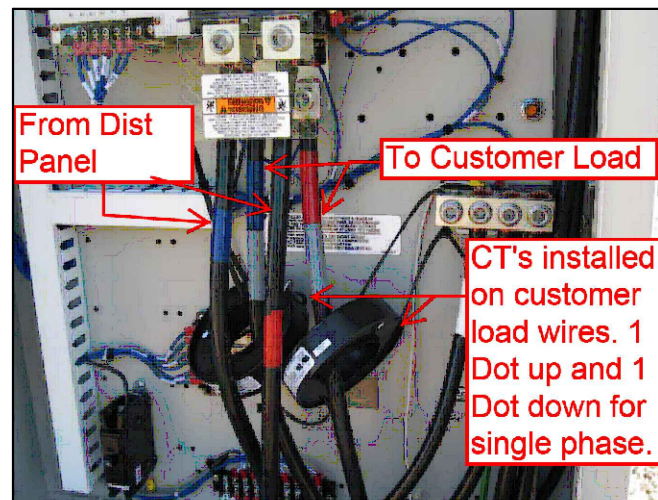
- SERVICE VOLTAGE FOR EACH CARRIER IS 120/240 1-PHASE, AND SERVICE SIZES ARE TYPICALLY 200A PER CARRIER.
- DISTRIBUTION PANEL IS 800A, 120/240, 1-PHASE, 22KAIC WITH 200A C/B FOR THE LISTED CARRIER OUTPUT. PANEL HAS (3) 200A BREAKER SPACES FOR FUTURE CARRIERS.
- AUTOMATIC TRANSFER SWITCH (ATS) ARE 200A 2-POLES, 120/240V 1-PHASE PER CARRIER.
- ALL ELECTRICAL EQUIPMENT IS NEMA 3R RATED.
- THE GENERATOR ELECTRICAL LOADS ARE ADEQUATE FOR THE CONNECTED LOADS.
- ALL EQUIPMENT FURNISHED SHALL BE PROVIDED WITH EQUIPMENT RATED TO WITHSTAND FAULT CURRENT AVAILABLE AT PROJECT SITE.
- ALL WIRE AND PANEL BUSSING SHALL BE COPPER UNLESS ALLOWED ELSEWHERE IN THIS DOCUMENT SET, WIRE SIZES ARE BASED ON COPPER.
- A NEW SET OF PLANS WILL BE PROVIDED AND SUBMITTED FOR ADDITIONAL CARRIERS.
- ALL WORK SHALL CONFORM WITH THE CURRENT VERSION OF THE NEC.
- FIRST OVER-CURRENT PROTECTION DEVICE IS INTEGRAL TO GENERATOR. FEEDER SIZES INDICATED IN TABLE ABOVE ARE DOWNSTREAM OF THE FIRST OVER-CURRENT PROTECTION DEVICE.
- INLINE BREAKER AT GENERATOR IS FACTORY INSTALLED, AND IS THE MANUFACTURER'S RECOMMENDED SIZE.

2 GENERATOR SET SIZING CHART



Block heater circuit

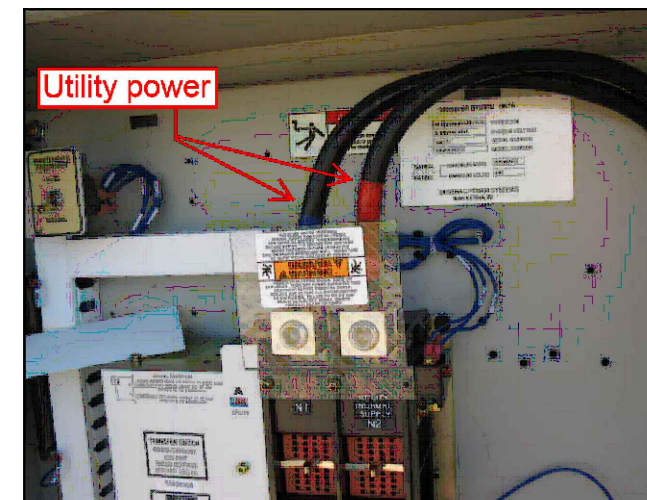
18-2 From generator



From Dist Panel

To Customer Load

CT's installed on customer load wires. 1 Dot up and 1 Dot down for single phase.



Utility power

3 PHOTO REFERENCES FOR WIRE CONNECTIONS



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ATC SITE NUMBER:

302535

ATC SITE NAME:

MILFORD

CT 2

SITE ADDRESS:

185 RESEARCH DRIVE
MILFORD, CT 06460-7733



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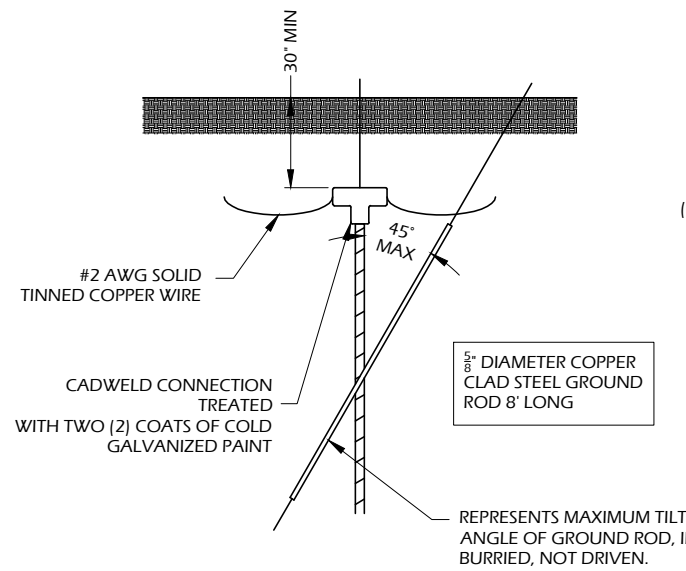
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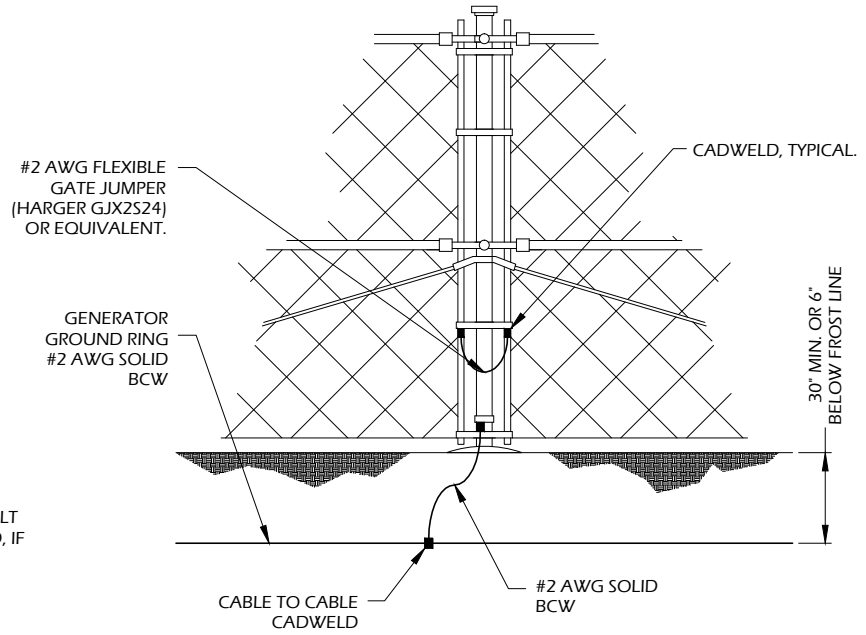
ELECTRICAL
DETAILS

SHEET NUMBER: REV. #

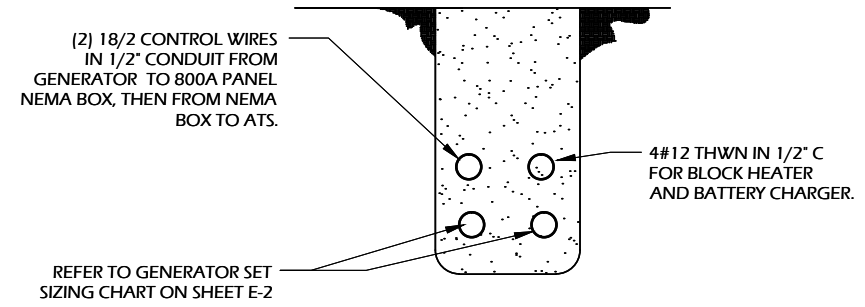
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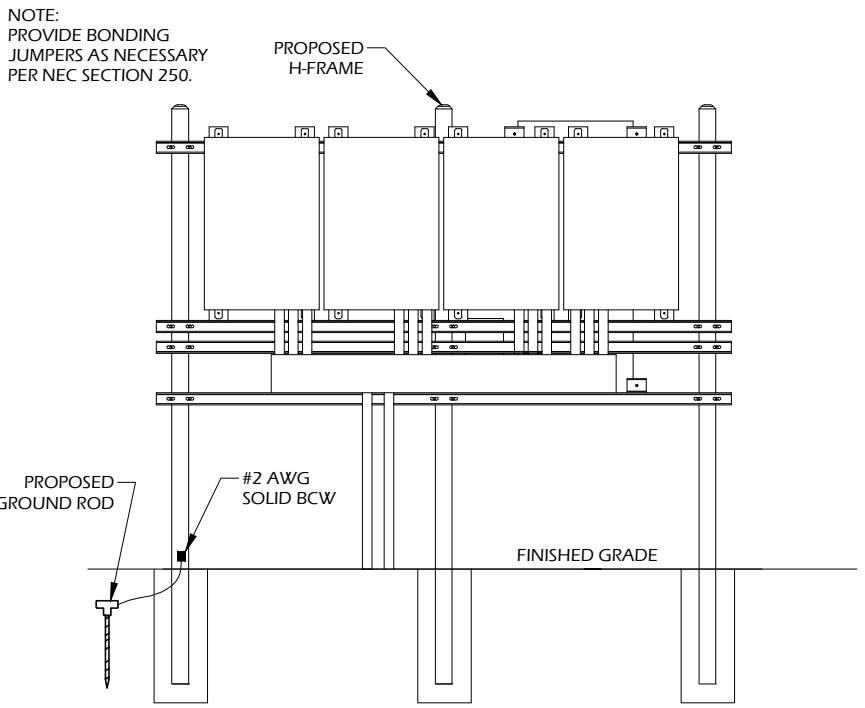
1 GROUND ROD DETAIL



2 VERTICAL POST CONNECTED TO RING



4 CONDUIT TRENCH DETAIL



5 H-FRAME ELEVATION

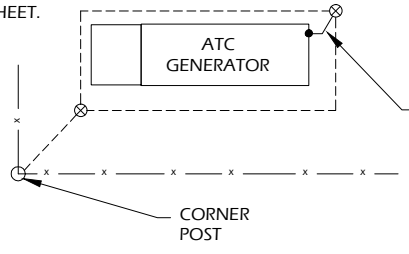
EQUIVALENT WIRE GROUND CHART:

THE ELECTRICAL CONTRACTOR MAY ELECT TO USE MULTIPLE #2 TINNED COPPER GROUND WIRES IN PARALLEL, IN LIEU OF A SINGLE LARGER GROUND WIRE. THIS TABLE PROVIDES THE EQUIVALENCY:

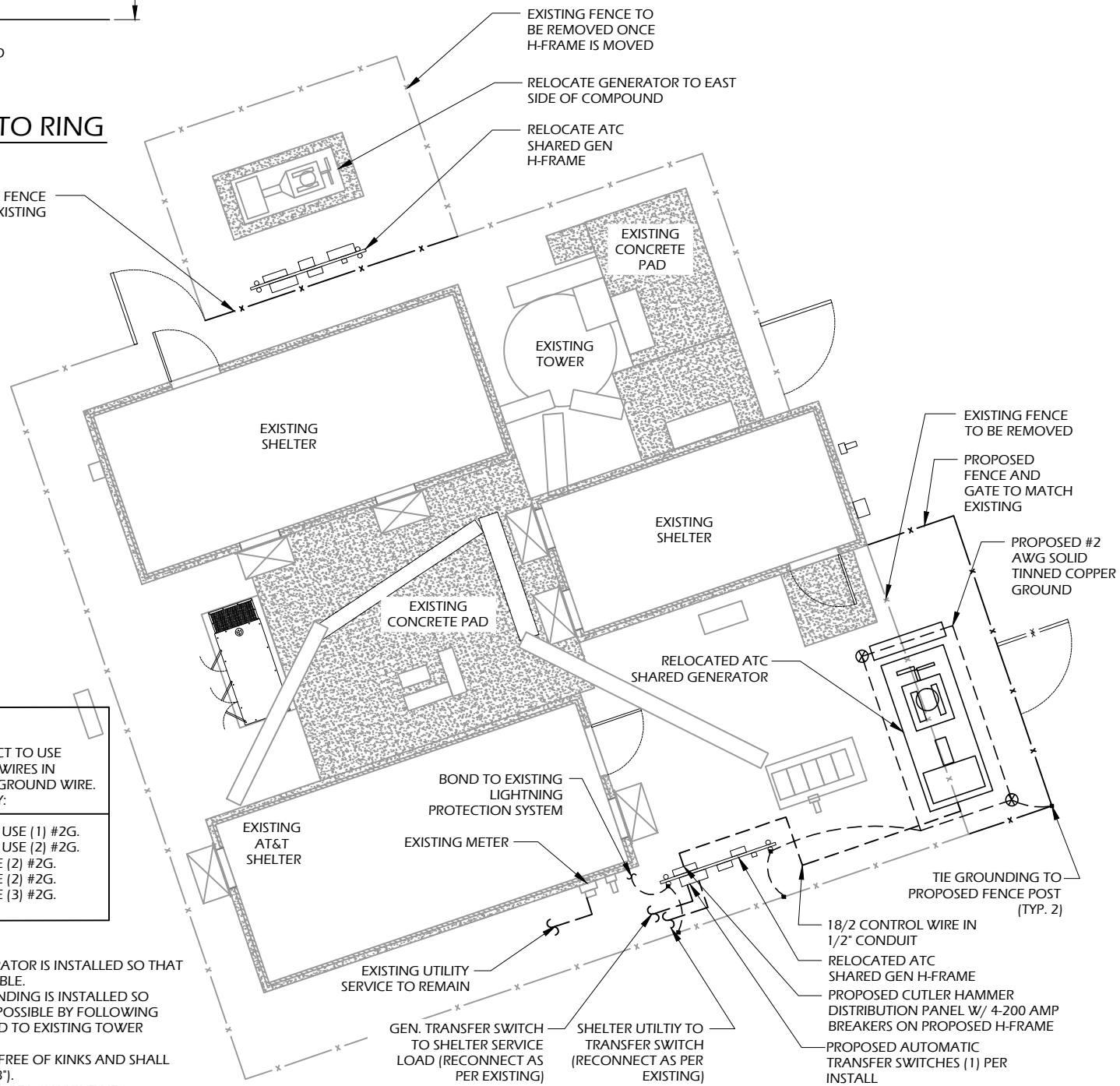
#2 AWG = 66.36 KCMIL = 0.0521 SQ. IN. = USE (1) #2G.
#1 AWG = 83.69 KCMIL = 0.0657 SQ. IN. = USE (2) #2G.
#1/0 = 105.6 KCMIL = 0.0829 SQ. IN. = USE (2) #2G.
#2/0 = 133.1 KCMIL = 0.1045 SQ. IN. = USE (2) #2G.
#3/0 = 167.8 KCMIL = 0.1318 SQ. IN. = USE (3) #2G.
250 KCMIL = 0.1964 SQ. IN. = USE (4) #2G.

- NOTES:**
- ELECTRICIAN SHALL VERIFY THAT GENERATOR IS INSTALLED SO THAT ELECTRICAL BACK-FEEDS ARE NOT POSSIBLE.
 - ELECTRICIAN SHALL VERIFY THAT GROUNDING IS INSTALLED SO THAT NO CIRCULATING CURRENTS ARE POSSIBLE BY FOLLOWING DETAIL 3 SO GROUNDING IS CONNECTED TO EXISTING TOWER GROUND FIELD.
 - ALL LIGHTNING GROUNDING SHALL BE FREE OF KINKS AND SHALL HAVE LONG RADIUS BENDS (MINIMUM 8").
 - ALL GROUNDING SHOULD BE INSTALLED PER CURRENT NEC, SECTION 250.
 - USE #2 AWG SOLID TINNED COPPER WIRE TO EXISTING (2) FENCE POSTS AND CADWELD FROM GENERATOR GROUND RING

NOTE:
GENERATOR GROUND RING TO VERTICAL FENCE POST, PER DETAIL 2, THIS SHEET.



3 GENERATOR GROUND RING DETAIL



6 COMPOUND GROUNDING
SCALE
NOT TO SCALE

GROUNDING SYMBOLS:

--- #2 AWG SOLID TINNED COPPER GROUND CABLE RUN 30" BELOW GRADE OR 6" BELOW FROST LINE WHICHEVER IS GREATER.

⊗ GROUND ROD

CONNECT GROUNDING ELECTRODE FROM GENERATOR FRAME TO NEAREST CORNER GROUND ROD.

- NOTES:**
- GENERATOR SYSTEM SHALL BE SOLIDLY GROUND PER NEC 250.20.
 - CAD WELD CONNECTION FOR GROUNDING CONDUCTORS BETWEEN PROPOSED AND EXISTING SECTIONS OF FENCE.



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STATE OF CONNECTICUT
KENNETH D. BIERLEY
20234
LICENSED PROFESSIONAL ENGINEER

[Signature]

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SHEET TITLE:
COMPOUND GROUNDING

SHEET NUMBER: **G-1** REV. # **0**

GENERAC 130KW

GENERAL ASSEMBLY AND INSTALLATION SUPPLEMENT

**100 - 400 Amps,
600 VAC HTS**

Automatic Transfer Switches

100 - 400 Amps, 600 VAC

1 of 2



200 Amp HTS NEMA 1

Description

- The Generac HTS Transfer Switch is a “State of the Art” Smart Switch designed to operate in conjunction with the Generac H100 Series generator controller.
- The HTS Transfer Switch has a 2 wire RS485 communication link to the generator controller.
- The utility voltage is monitored by the HTS along with signal before transfer timing, time delay neutral and inphase transfer.
- Switch operation is instigated by the generator controller.
- All timers and voltage setpoints are programmable through GenLink® Communications Software.
- Time delay neutral and inphase monitor are included.

Standard Features

- Single coil design, electrically operated and mechanically held
- Programmable exercise time
- SPDT aux contacts
- Main contacts are silver alloy
- Conformal coating protects the printed circuit board
- UL1008 Listed
- Indicating LED's for switch position, standby operating, utility available
- 3 position test switch: Fast Test, Auto, Normal Test
- Arc shutes on main contacts
- Signal before transfer contacts
- Rated to all classes of loads
- Remote start, stop and transfer through GenLink® Communications Software
- Up to four transfer switches per generator
- 50/60 hertz operation

Optional Accessories

- NEMA 12 enclosure (100-400 Amps)
- NEMA 3R enclosure (All)
- NEMA 4 and 4x enclosure
- 4 pole for separately derived systems

100 - 400 Amps, 600 VAC

2 of 2

HTS 100-400 Amp

Interconnections

Switches and Indicators:

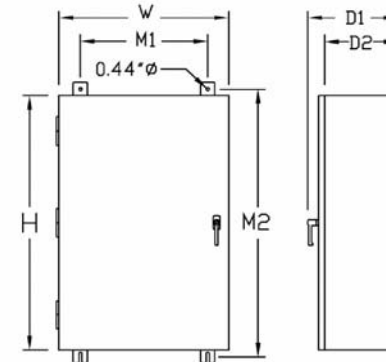
- System Ready LED
- Switch Position LED's
- Test Switch
- Return to Normal Switch
- Standby Operating LED
- Utility Available LED
- Fast Test Switch
- Safety Disconnect Switch

Standby Accept Voltage	85-95%
Standby Accept Frequency	85-95%
Nominal Voltage	1 Volt Increments
Allowable Deviation of Utility	1-100%
Line Interruption Delay	1-10 Seconds
Engine Warmup Time	1-300 Seconds
Minimum Run Time	5-60 Minutes
Return to Utility Timer	1-30 Minutes
Engine Cooldown Timer	1-30 Minutes
Signal Before Transfer Timer	1-30 Seconds
Transfer Type	Inphase Time Delay Neutral
Phase Difference for Inphase Transfer	-7 +0 Degrees

Withstand Current - 600 Volt HTS Series

HTS RATED AMPS	100	150	200	300	400
FUUSE PROTECTED					
Maximum RMS Symmetrical Fault Current – Amps	200,000	200,000	200,000	200,000	200,000
Maximum Fuse Size – Amps	200	400	400	600	600
Fuse Class	J,T	J,T	J,T	J,T	J,T
CIRCUIT BREAKER PROTECTED					
Maximum RMS Symmetrical Fault Current – Amps	14,000	25,000	25,000	35,000	35,000
Protective Device Continuous Rating (Max.) – Amps	150	300	300	600	600

- Tested in accordance with the withstand and closing requirements of UL 1008 and CSA Standards.
- Current ratings are listed @ 480 VAC.



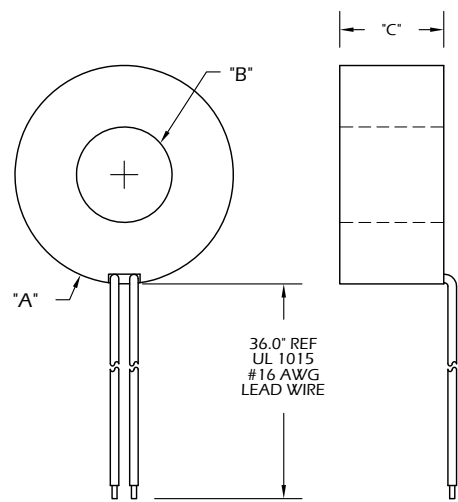
Unit Dimensions

HTS RATED AMPS	VOLTAGE	ENCLOSURE HEIGHT H	ENCLOSURE WIDTH W	WALL MOUNT BOLT PATTERN		ENCLOSURE DEPTH		WEIGHT (lbs.)
				M1	M2	D1	D2	
100	ALL	36	24	18	37.5	12.7	10	180
150-200	120/240	36	24	18	37.5	12.7	10	185
150-200	120/208	36	24	18	37.5	12.7	10	185
150-200	277/480	48*	30*	24	49.5	14.8	12	265
300-400	120/240	36	24	18	37.5	12.7	10	245
300-400	120/208	36	24	18	37.5	12.7	10	245
300-400	277/480	48*	30*	24	49.5	14.8	12	325

Terminal Lug Wire Ranges

HTS RATED AMPS	CONTACTOR TERMINALS (1 LUG PER POLE) LUG WIRE RANGE	NEUTRAL BAR*		GROUND LUG (1 PROVIDED) LUG WIRE RANGE
		# LUGS	LUG WIRE RANGE	
100	2/0 – 14 AWG	4	2/0 – 14 AWG	2/0 – 14 AWG
150	400MCM – 4 AWG	4	350MCM – 6 AWG	350MCM – 6 AWG
200	400MCM – 4 AWG	4	350MCM – 6 AWG	350MCM – 6 AWG
300	600MCM – 4 AWG or 2 – [250MCM – 1/0 AWG]	4	600MCM – 4 AWG [250MCM – 1/0 AWG]**	350MCM – 6 AWG
400	600MCM – 4 AWG or 2 – [250MCM – 1/0 AWG]	4	600MCM – 4 AWG [250MCM – 1/0 AWG]**	350MCM – 6 AWG

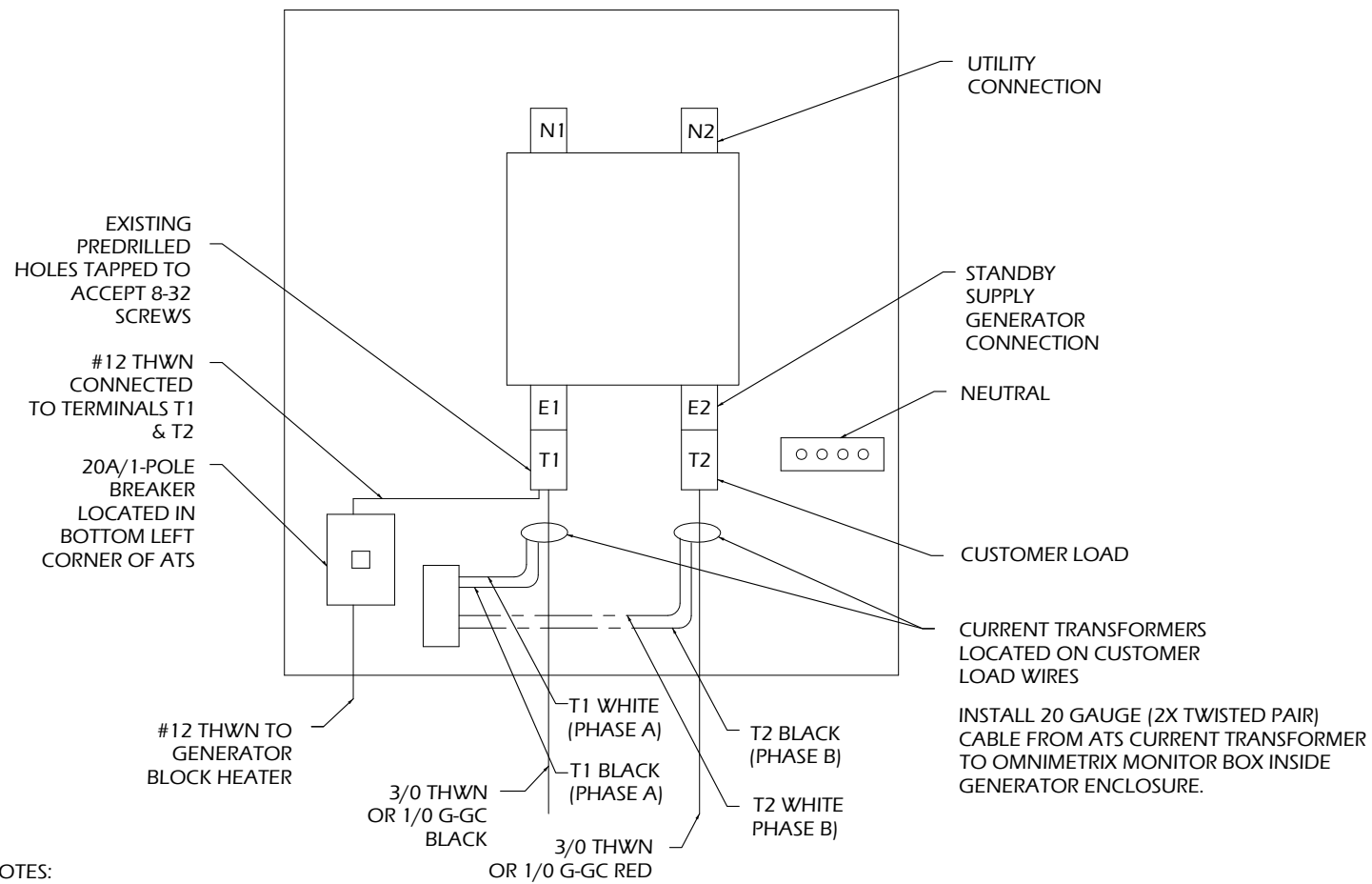
* Not included in HTS with switched neutral. ** Allowable wire range in brackets is for 2 wires per lug.



PART NO.	RATIO	MODEL NO.	±%	VA	OHMS	"A"	"B"	"C"
0F7784A	100:1A	635-100-01-L36	1	1	.31	65	28	30.5
0F7784B	200:1A	635-200-01-L36	1	5	.95	65	28	30.5
0F7784C	300:1A	A-300-01-L36	1	4.5	.06	112	57.1	27.4
0F7784D	400:1A	A-400-01-L36	1	4	.11	112	57.1	27.4
0F7784E	500:1A	A-500-01-L36	1	6.5	.13	112	57.1	27.4
0F7784F	600:1A	A-600-01-L36	1	7.5	.15	112	57.1	27.4
0F7784G	800:1A	MW-800-01-L36	1	10	.20	143.5	89	29.2
0F7784H	1000:1A	MW-1000-01-L36	1	12	.22	143.5	89	29.2
0F7784J	1500:1A	MW-1500-01-L36	1	15	.50	143.5	89	29.2
0F7784K	2000:1A	MW-2000-01-L36	1	12	.67	143.5	89	29.2
0F7784L	3000:1A	MW-3000-01-L36	1	25	1.0	143.5	89	29.2

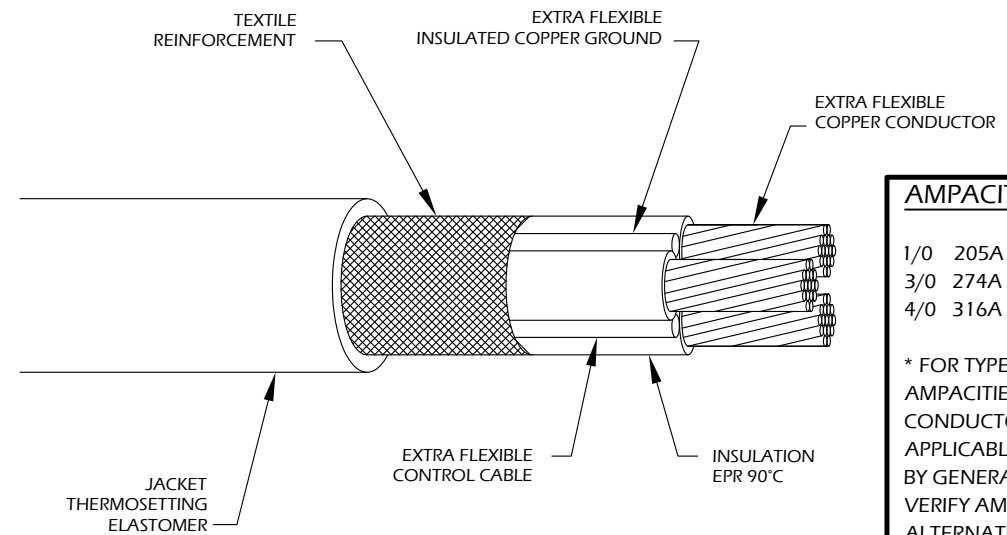
NOTE:
1. ORIGINAL CURRENT TRANSDUCERS.

2 CURRENT FLOW METER IN ATS



- NOTES:
1. CONNECT TO TENANT BREAKER AT METER.
2. CONNECT TO DISTRIBUTION CENTER BRANCH BREAKER

1 ATS



DETAIL DESCRIPTION OR CONSTRUCTION

- CONDUCTOR:**
EXTRA FLEXIBLE COPPER CONDUCTOR, ACCORDING ATSM B3.
- INSULATION:**
100% INSULATION LEVEL OIL, OZONE AND WATER RESISTANT ETHYLENE PROPYLENE RUBBER (EPR) 90°C NORMAL TEMPERATURE OPERATION, 130°C EMERGENCY OVERLOAD CONDITION, 250° SHORT CIRCUIT CONDITION.
- PHASES IDENTIFICATION:**
NEUTRAL OR SINGLE COLORS COMPOUNDS WITH SURFACE PRINTING COLOR DESIGNATIONS, ACCORDING ICEA S-75-381.
IDENTIFICATION PHASE BY PRINTED COLORS: BLACK, WHITE AND RED.
- GROUND WIRES:**
TWO ROPE-LAY FLEXIBLE STRANDED, COPPER CONDUCTORS.
- GROUND CHECK:**
ONE YELLOW INSULATED, ROPE-LAY FLEXIBLE STRANDED, COPPER CONDUCTOR.
- CORE ASSEMBLY:**
THREE PHASE CONDUCTORS, TWO BARE GROUND AND ONE GROUND CHECK CONDUCTORS ARE CABLED TOGETHER WITH A LEFT HAND LAY.
- REINFORCEMENT:**
AN OPEN REINFORCEMENT IS APPLIED OVER THE CORE FOR MECHANICAL STRENGTH.
- JACKET:**
EXTRA HEAVY OR HEAVY DUTY ELASTOMER JACKET HIGHLY RESISTANT TO CUTTING, TEAR, SUNLIGHT, OZONE AND FLAME. IT HAS AN EXCELLENT RESISTANCE TO HEAT, MOISTURE, WATER, OIL AND MOST CHEMICALS COMMONLY PRESENT AT MINING FIELD OPERATIONS. THE STANDARD JACKET IS BLACK AND MEETS OR EXCEEDS ALL THE REQUIREMENTS OF ICEA S75-381. ALTERNATE JACKET COLORS ARE AVAILABLE AS REQUESTED.
- PACKAGING:**
NON-RETURNABLE WOODEN DRUMS.
- OPTIONS:**
THERMOPLASTIC POLYURETHANE (TPU)
JACKET COLORS
PUT-UP LENGTH (300 m)
- APPLICATION**

TYPE G-GC CABLE IS SUITABLE FOR USE WITH MOBILE MINING EQUIPMENT SUCH AS CONTINUOUS MINERS, DRILLS, CUTTERS, LOADING MACHINES, CONVEYORS, PUMPS AND AC SHUTTLE CARS; WHERE GROUNDING AND A GROUND CHECK CONTROL CABLES ARE REQUIRED.

STANDARDS/TESTING SPECIFICATIONS

G-GC CABLES MEETS OR EXCEEDS THE REQUIREMENTS OF ICEA S-75-381, ICEA S-68-516 & UL1277

MARKING

G-GC (3-CONDUCTOR CABLES)

INSTALLATION

G-GC CAN BE USED INDOORS AND OUTDOORS LOCATIONS UNDER VERY SECURE ENVIRONMENTAL CONDITIONS SUCH AS THE ONE COMMONLY PRESENT AT MINING PLACES. CONDUCTOR DESIGN AND RAW MATERIALS USED, ALLOWS THE CABLE TO BE INSTALLED DIRECTLY ON ROUGH MINING FIELDS, NOT REQUIRING ANY PREVIOUS PREPARATION. THE G-GC CABLES, AS MANUFACTURED BY GENERAL CABLE HAVE BEEN TESTED AND APPROVED FOR DIRECT BURIAL PER STANDARD UL 1277 "ELECTRICAL POWER AND CONTROL TRAY CABLES WITH OPTIONAL OPTICAL-FIBER MEMBERS" BY TEL-FONIKA KABLE LABORATORIES. DOCUMENTATION IS AVAILABLE UPON REQUEST.

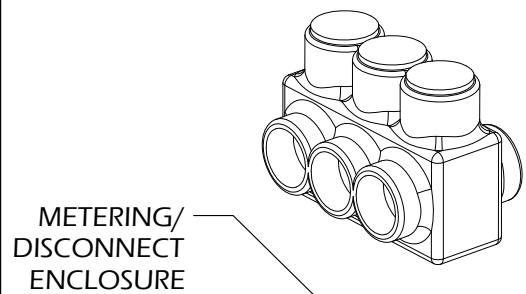
AMPACITY TABLE: G-GC CABLES *

1/0	205A	250	352A
3/0	274A	350	433A
4/0	316A		

* FOR TYPE 'G' CABLES, DERATE THE ABOVE AMPACITIES BY 20% UNLESS ONE PHASE CONDUCTOR IS LEFT UNUSED. VALUES ARE APPLICABLE FOR PRODUCT MANUFACTURED BY GENERAL CABLE. ELECTRICIAN SHALL VERIFY AMPACITIES IF CABLES ARE FROM AN ALTERNATE MANUFACTURER.

AMPACITIES IN THIS TABLE FOLLOW THE 75° COLUMN OF TABLE 400.5(A)(2), G-GC CABLES,, N.E.C..

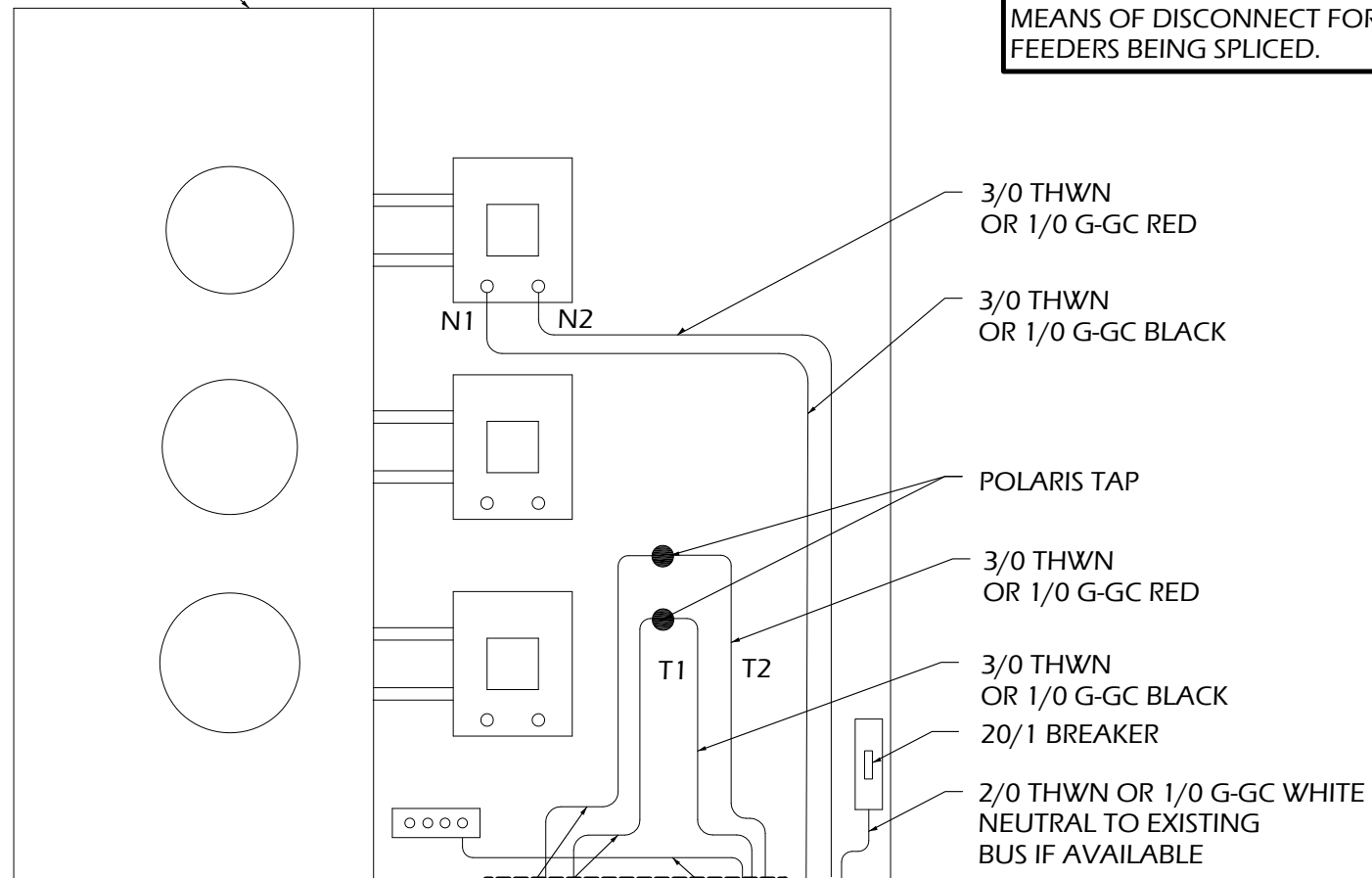
1 G-GC CABLE SPECS
SCALE: NOT TO SCALE



NOTE: POLARIS TAP MUST BE SECURELY WRAPPED WITH COMMERCIAL GRADE NYLON ELECTRICAL TAPE AFTER INSTALLATION IS COMPLETE

NOTE: BONDING JUMPER/ GROUNDING ELECTRODE CONDUCTOR SHALL BE #4 CU FOR 200A, PER NEC TABLE 250.66.

PER NEC 312.8(3), PROVIDE WARNING LABEL (PHENOLIC PLATE) ON ENCLOSURE CONTAINING POLARIS TAP SPECIFYING LOCATION OF MEANS OF DISCONNECT FOR FEEDERS BEING SPLICED.



3/0 THWN OR 1/0 G-GC RED

3/0 THWN OR 1/0 G-GC BLACK

POLARIS TAP

3/0 THWN OR 1/0 G-GC RED

3/0 THWN OR 1/0 G-GC BLACK

20/1 BREAKER
2/0 THWN OR 1/0 G-GC WHITE NEUTRAL TO EXISTING BUS IF AVAILABLE

NOTE: SEE ALTERNATE NEUTRAL CONNECTION DRAWING IF NEUTRAL IS NOT AVAILABLE

EQUIPMENT GROUND #6 WIRE

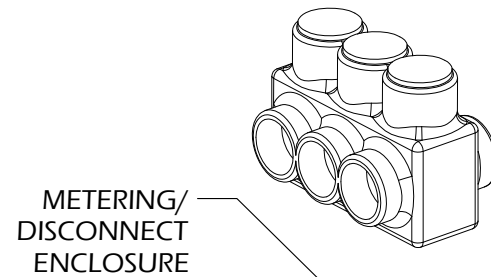
TWO (2) NEW 2" CONDUITS OR (2) 1/0 G-GC TO ATC H-FRAME AND BACK

EXISTING CUSTOMER WIRES (REMOVED FROM TENANT BREAKER)

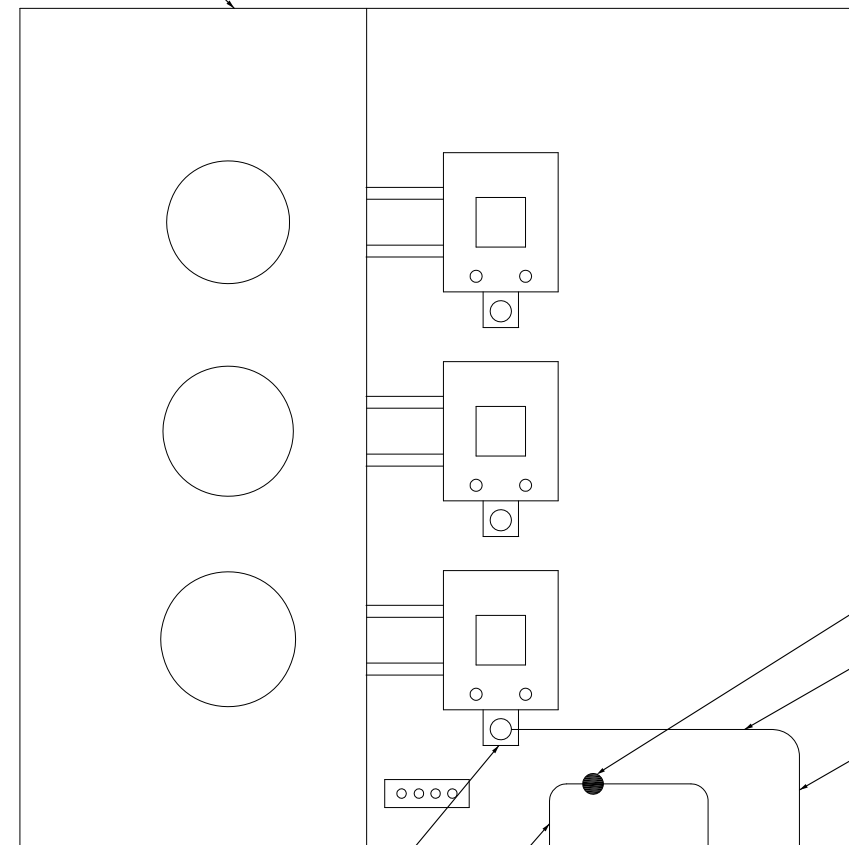
PROVIDE OPTIONAL PULL/ JUNCTION BOX TO HOUSE POLARIS TAB WHERE ENCLOSURE IS NOT LISTED TO HOUSE TAPS, OR WHERE REQUIRED BY AHJ. NEC 2011 ALLOWS POLARIS TYPE TAPS, PER 312.8, PROVIDED ENCLOSURE HAS SUFFICIENT SPACE, PER REQUIREMENTS OF NEC 312.8(1) AND (2).

EXISTING CONDUIT TO CUSTOMER

1 MULTI TENANT METER OPTION
SCALE: NOT TO SCALE



NOTE: POLARIS TAP MUST BE SECURELY WRAPPED WITH COMMERCIAL GRADE NYLON ELECTRICAL TAPE AFTER INSTALLATION IS COMPLETE



THE ALTERNATE NEUTRAL CONNECTION DETAIL IS INTENDED TO SHOW NEUTRAL CONNECTIONS ONLY. ALL OTHER (NON-NEUTRAL) CONNECTIONS SHOWN ON THE MULTI TENANT METER DETAIL TO THE LEFT ARE OMITTED FOR CLARITY.

POLARIS TAP

2/0 THWN

2/0 THWN OR 1/0 G WHITE

NEUTRAL LUG

EXISTING

EXISTING CONDUIT TO CUSTOMER

NEW 2" CONDUITS TO ATC H-FRAME

2 ALTERNATE NEUTRAL CONNECTION FOR MULTI-TENANT METER OPTION
SCALE: NOT TO SCALE

GENERAL INFORMATION (SECTION 1 OF 1)

SERVICE VOLTAGE: 120/240V 1PH 3W ENCLOSURE: TYPE 3R
 BUS RATING & TYPE: 800A ALUMINUM NEUTRAL RATING: 800A
 GROUND BAR: SLD. BOLTED ALUMINUM, AI OR Cu CABLE
 S.C. RATING: 22K A.I.C. FULLY RATED

MAIN DEVICE TYPE: MAIN LUGS ONLY - BOTTOM CABLE ENTRY
 MAIN TERMINALS: MECHANICAL - (3) #2-500 kcmil (Cu/AI)
 NEUTRAL TERMINALS: MECHANICAL - (3) #2-500 kcmil (Cu/AI)
 BOOK CATALOG NO: RPG2457
 TRIM: COMPLETE ENCLOSURE (INCLUDES TRIM)

SURFACE MOUNTED

BOX DIMENSIONS: 57" (1447.8mm)H X 24" (609.6mm)W X 12.65" (326.4mm)D
 MIN. GUTTER SIZE: TOP=10.625" (269.9mm) BOTTOM=10.625" (269.9mm)
 LEFT=5" (127.0mm) RIGHT=5" (127.0mm)

FINAL ID NAMEPLATE: (1) 800A
 TYPE: PLASTIC ADHESIVE-BACKED (2) 120/240V 1PH 3W
 COLOR: WHITE WITH BLACK LETTERS (3)

UL SERVICE ENTRANCE LABEL

TRIM LOOK T-HANDLE LOCK ASSEMBLY
 CIRCUIT DIRECTORY PLASTIC SLEEVE WITH CARD
 PAINTED BOX ANSI 61

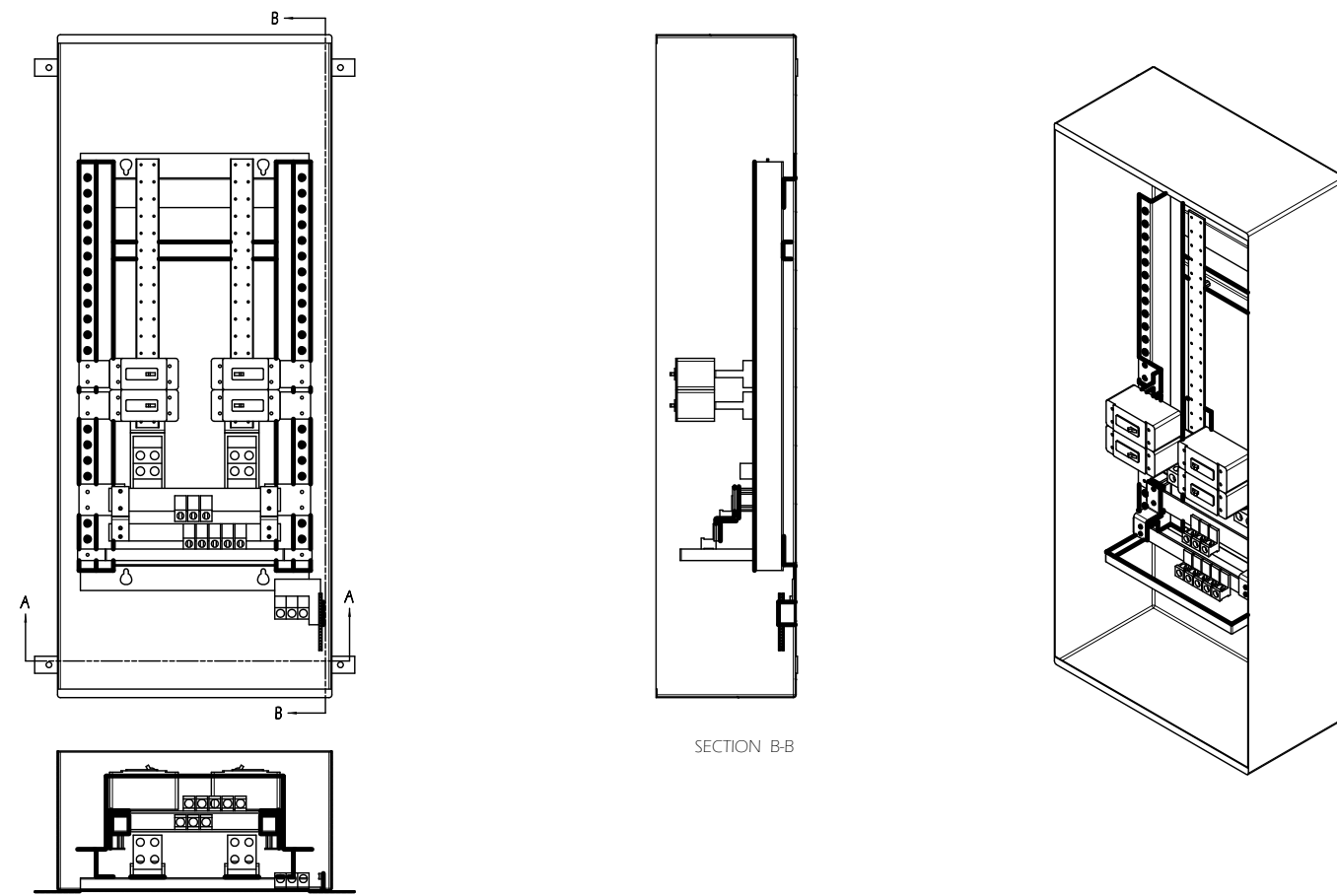
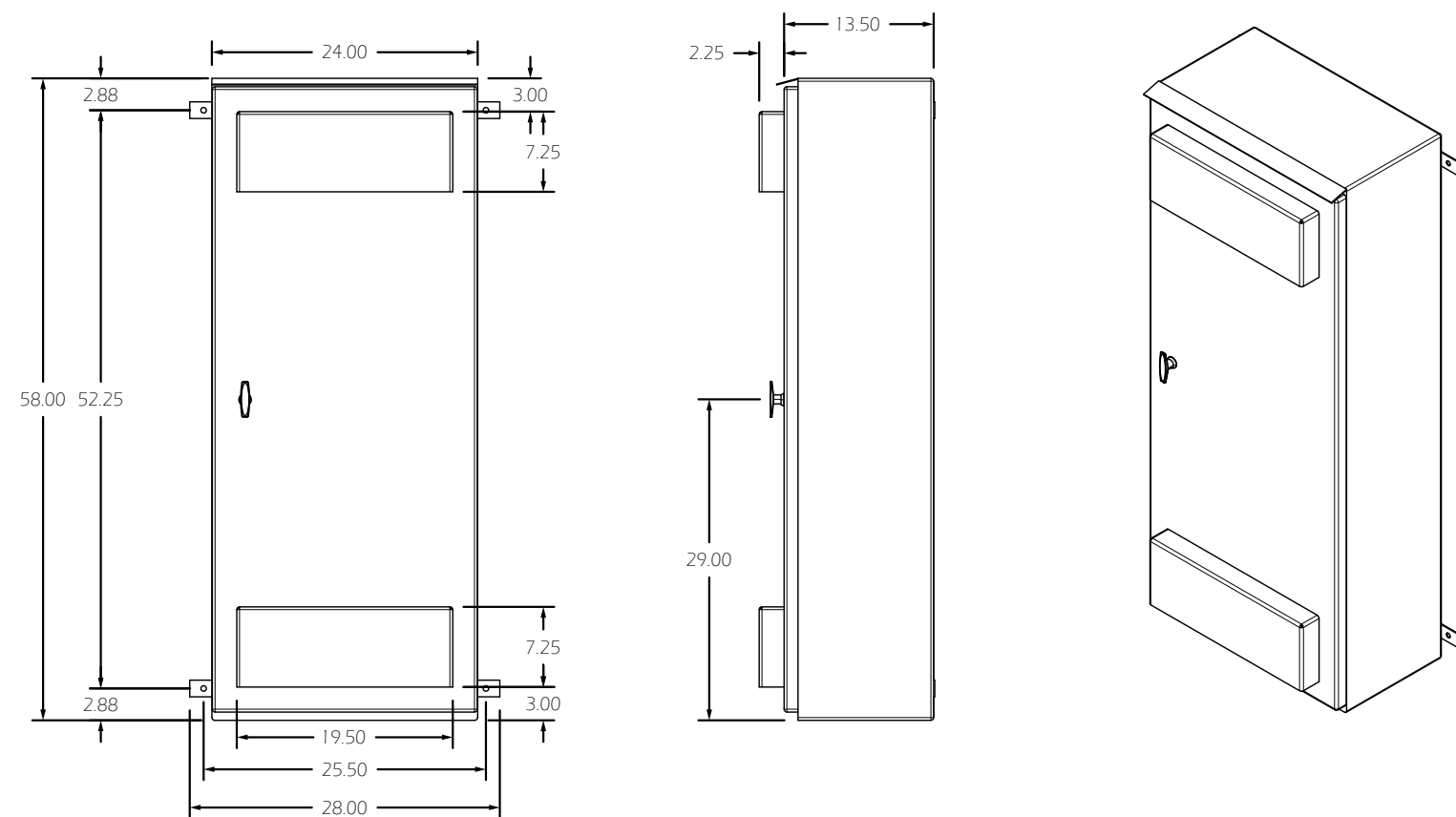
PLANT INFORMATION

	PART NUMBER	QTY	PART NUMBER	QTY
UL LABEL:	7494A06H01	1	EOB2200	4
BUS CUTTING:	6563C06H01	2		
NEUTRAL:	6672C66G03	1		
GROUND BAR, AL/CU:	6572C78G03	1		
CHASSIS ASSEMBLY:	6572C25G06	1		
LUG ASSEMBLY:	6572C52G06	1		
BREAKER ASSY:	6572C87G04	2		
DEAD FRONT COVER:	5554C11801	2		
COVER PACKAGING:	4177B06G02	1		
DEAD FRONT COVER ASSEMBLY:	6574C74G02	1		
PACKAGING:	50C5330G01	1		

Spot _____ Final Inspection _____

DEVICE MODIFICATIONS:

REF #	DESCRIPTION:
BELL TEST	_____
HI-POT	_____
S/T	_____



1 **DISTRIBUTION PANEL**
SCALE: NOT TO SCALE

2 **DISTRIBUTION PANEL DETAILS**
SCALE: NOT TO SCALE

SD130

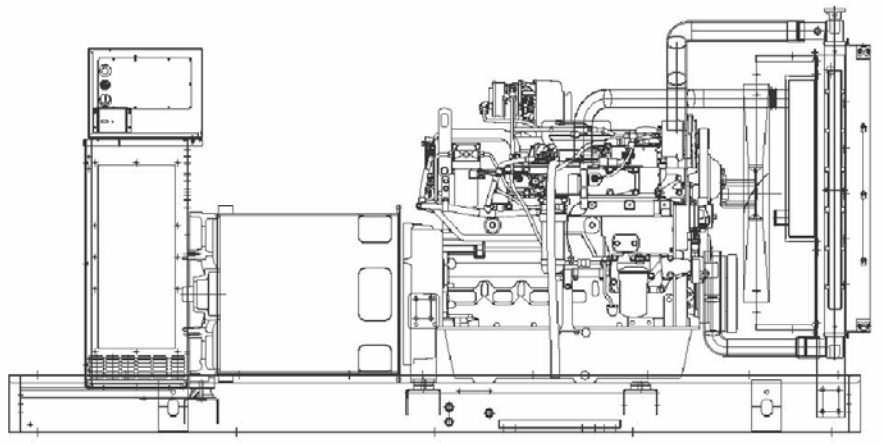
Industrial Diesel Generator Set

EPA Emissions Certification: Tier III

130 kW Diesel
1 of 5

Standby Power Rating
130KW 60 Hz

Prime Power Rating
117KW 60 Hz



features

Generator Set

- PROTOTYPE & TORSIONALLY TESTED
- UL2200 TESTED
- RHINOCOAT PAINT SYSTEM
- WIDE RANGE OF ENCLOSURES AND TANKS
- ▶ PROVIDES A PROVEN UNIT
- ▶ ENSURES A QUALITY PRODUCT
- ▶ IMPROVES RESISTANCE TO ELEMENTS
- ▶ PROVIDES A SINGLE SOURCE SOLUTION

Engine

- EPA TIER COMPLIANT
- INDUSTRIAL TESTED, GENERAC APPROVED
- POWER-MATCHED OUTPUT
- INDUSTRIAL GRADE
- ▶ ENVIRONMENTALLY FRIENDLY
- ▶ ENSURES INDUSTRIAL STANDARDS
- ▶ ENGINEERED FOR PERFORMANCE
- ▶ IMPROVES LONGEVITY AND RELIABILITY

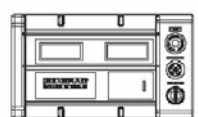
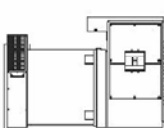
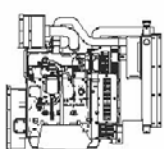
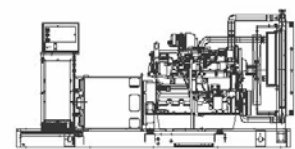
Alternator

- TWO-THIRDS PITCH
- LAYER WOUND ROTOR & STATOR
- CLASS H MATERIALS
- DIGITAL 3-PHASE VOLTAGE CONTROL
- ▶ ELIMINATES HARMFUL 3RD HARMONIC
- ▶ IMPROVES COOLING
- ▶ HEAT TOLERANT DESIGN
- ▶ FAST AND ACCURATE RESPONSE

Controls

- ENCAPSULATED BOARD W/ SEALED HARNESS
- 4-20mA VOLTAGE-TO-CURRENT SENSORS
- SURFACE-MOUNT TECHNOLOGY
- ADVANCED DIAGNOSTICS & COMMUNICATIONS
- ▶ EASY, AFFORDABLE REPLACEMENT
- ▶ NOISE RESISTANT 24/7 MONITORING
- ▶ PROVIDES VIBRATION RESISTANCE
- ▶ HARDENED RELIABILITY

benefits



primary codes and standards



application and engineering data

SD130

130 kW Diesel
2 of 5

ENGINE SPECIFICATIONS

General

Make	Iveco
EPA Emissions Compliance	Tier III
EPA Emissions Reference	See Emissions Data Sheet
Cylinder #	6
Type	In-Line
Displacement - L (cu. in.)	6.7
Bore - mm (in.)	104 (4.09)
Stroke - mm (in.)	128 (5.20)
Compression Ratio	16.5:1
Intake Air Method	Turbocharged/Aftercooled
Cylinder Head Type	2-Valve
Piston Type	Alloy Aluminum

Engine Governing

Governor	Electronic Isochronous
Frequency Regulation (Steady State)	+/- 1.0%

Lubrication System

Oil Pump Type	Gear
Oil Filter Type	Full-Flow Cartridge
Crankcase Capacity - L (gal)(qts)	17.0 (4.5)(18.0)

Cooling System

Cooling System Type	Closed Recovery
Water Pump	Centrifugal
Fan Type	Pusher
Fan Speed (rpm)	2538
Fan Diameter mm (in.)	599 (23.6)
Coolant Heater Wattage	2000
Coolant Heater Standard Voltage	240VAC

Fuel System

Fuel Type*	#2 Diesel LS or ULS
Fuel Specifications	ASTM
Fuel Filtering (microns)	5
Fuel Inject Pump Make	Standyne
Fuel Pump Type	Engine Driven Gear
Injector Type	Mechanical
Engine Type	Pre-Combustion
Fuel Supply Line - mm (in.)	12.7 (0.5) NPT
Fuel Return Line - mm (in.)	12.7 (0.5) NPT

* LS - Low Sulphur, ULS - Ultra Low Sulphur

Engine Electrical System

System Voltage	12VDC
Battery Charging Alternator	90A
Battery Size (at 0 °C)	995CCA
Battery Group	31
Battery Voltage	{1} 12VDC
Ground Polarity	Negative

ALTERNATOR SPECIFICATIONS

Standard Model	390
Poles	4
Field Type	Revolving
Insulation Class - Rotor	H
Insulation Class - Stator	H
Total Harmonic Distortion	<3%
Telephone Interference Factor (TIF)	<50
Standard Excitation	Permanent Magnet
Bearings	Single Sealed Cartridge
Coupling	Direct, Flexible Disc
Load Capacity - Standby	100%
Load Capacity - Prime	110%
Prototype Short Circuit Test	Y

Voltage Regulator Type	Digital
Number of Sensed Phases	All
Regulation Accuracy (Steady State)	+/- 0.25%

CODES AND STANDARDS COMPLIANCE (WHERE APPLICABLE)

- NFPA 99
- NFPA 110
- ISO 8528-5
- ISO 1708A.5
- ISO 3046
- BSS514
- SAE J1349
- DIN6271

Rating Definitions:

Standby - Applicable for a varying emergency load for the duration of a utility power outage with no overload capability. (Max. load factor = 70%)
 Prime - Applicable for supplying power to a varying load in lieu of utility for an unlimited amount of running time. (Max. load factor = 80%) A 10% overload capacity is available for 1 out of every 12 hours.

operating data (60Hz)

SD130

130 kW Diesel
3 of 5

POWER RATINGS (kW)

- Single-Phase 120/240VAC @1.0pf
- Three-Phase 120/208VAC @0.8pf
- Three-Phase 120/240VAC @0.8pf
- Three-Phase 277/480VAC @0.8pf
- Three-Phase 346/600VAC @0.8pf

STANDBY			PRIME		
125	Amps:	521	113	Amps:	469
130	Amps:	451	117	Amps:	406
130	Amps:	391	117	Amps:	352
130	Amps:	195	117	Amps:	176
130	Amps:	156	117	Amps:	141

STARTING CAPABILITIES (sKVA)

sKVA vs. Voltage Dip

Alternator	kW	480VAC						208/240VAC					
		10%	15%	20%	25%	30%	35%	10%	15%	20%	25%	30%	35%
Standard*	130	116	174	232	290	348	406	87	131	174	218	261	305
Upsize 1	150	133	199	265	332	398	464	100	149	199	249	299	348
Upsize 2	200	187	280	373	467	560	653	140	210	280	350	420	490

*All Generac industrial alternators utilize Class H materials. Standard alternator provides less than or equal to Class F temperature rise. Upsize 1 provides less than or equal to Class B temperature rise. Upsize 2 provides less than or equal to Class A temperature rise.

FUEL

Fuel Consumption Rates

Coolant System Capacity - Gal (L) 12.2 (46.2)	STANDBY				PRIME			
	Percent Load	gph	gpm	lph	Percent Load	gph	gpm	lph
	25%	2.9	0.05	11.0	25%	2.6	0.04	9.8
Maximum Radiator Backpressure 1.5" H ₂ O Column	50%	5.4	0.09	20.4	50%	4.8	0.08	18.2
	75%	7.7	0.13	29.1	75%	6.9	0.12	26.1
	100%	9.6	0.16	36.3	100%	8.6	0.14	32.6

COOLING

Coolant System Capacity - Gal (L) 12.2 (46.2)	Maximum Backpressure (Post-Silencer) 1.5" H ₂ O	STANDBY		PRIME	
		gpm (lpm)	BTU/min	gpm (lpm)	BTU/min
		44.6 (168.8)	2387.00	44.6 (168.8)	2387.00
Inlet Air		cfm (m ³ /hr)	°F (°C)	cfm (m ³ /hr)	°F (°C)
Max. Operating Radiator Air Temp		7900 (223.7)	122 (50)	7900 (223.7)	122 (50)
Max. Operating Ambient Temperature		104 (40)	104 (40)	104 (40)	104 (40)

COMBUSTION AIR REQUIREMENTS

Intake Flow at Rated Power	cfm (m ³ /min)	STANDBY		PRIME	
		390	(11.05)	351	(9.94)

EXHAUST

Exhaust Outlet Size (Open Set) 4.0"	Maximum Backpressure (Post-Silencer) 1.5"	STANDBY		PRIME	
		cfm (m ³ /m)	inHg (Kpa)	cfm (m ³ /m)	inHg (Kpa)
		910 (25.8)	1.5 (5.1)	819 (23.2)	1.5 (5.1)
Exhaust Temp (Rated Output)		°F (°C)	°F (°C)	°F (°C)	°F (°C)
960 (516)		864 (462)			

ENGINE

Rated Engine Speed	rpm	STANDBY	PRIME
		1800	1800
Horsepower at Rated kW	hp	198	178
Piston Speed	ft/min (m/min)	1559 (475)	1559 (475)
BMEP	psi	213	192

Deration – Operational characteristics consider maximum ambient conditions. Derate factors may apply under atypical site conditions. Please consult a Generac Power Systems Industrial Dealer for additional details. All performance ratings in accordance with ISO3046, BS5514, ISO8528 and DIN6271 standards.

standard features and options

SD130

130 kW Diesel
4 of 5

GENERATOR SET



- Genset Vibration Isolation Std
- Seismic Rated Vibration Isolators Opt
- Extended warranty Opt
- Export boxing Opt
- Gen-Link Communications Software Opt
- Steel Enclosure Opt
- Aluminum Enclosure Opt

ENGINE SYSTEM



- General**
- Oil Drain Extension Std
 - Oil Make-Up System Opt
 - Oil Heater Opt

- Fuel System**
- Fuel lockoff solenoid Std
 - Secondary fuel filter Std
 - Stainless steel flexible exhaust connection Std
 - Industrial Exhaust Silencer Std
 - Critical Exhaust Silencer Opt
 - Flexible fuel lines Opt
 - Primary fuel filter Opt
 - Single Wall Tank (Export Only) -
 - UL 142 Fuel Tank Opt
 - Internal Base Tank -

- Cooling System**
- 120VAC Coolant Heater Opt
 - 208VAC Coolant Heater Opt
 - 240VAC Coolant Heater Opt
 - Other Coolant Heater -
 - Closed Coolant Recovery System Std
 - UV/Ozone resistant hoses Std
 - Factory-Installed Radiator Std
 - Radiator Drain Extension Std

- Engine Electrical System**
- Battery charging alternator Std
 - Battery cables Std
 - Battery tray Std
 - Battery box Opt
 - Battery heater Opt
 - Solenoid activated starter motor Std
 - Air cleaner Std
 - Fan guard Std
 - Radiator duct adapter Std
 - 2A battery charger Opt
 - 10A UL float/equalize battery charger Opt
 - Rubber-booted engine electrical connections Std

ALTERNATOR SYSTEM

- UL2200 Generator Protector Std
- Main Line Circuit Breaker Opt
- 2nd Circuit Breaker Opt
- 3rd Circuit Breaker -
- Alternator Upsizing Opt
- Anti-Condensation Heater Opt
- Tropical coating Opt
- Voltage changeover switch Opt

CONTROL SYSTEM

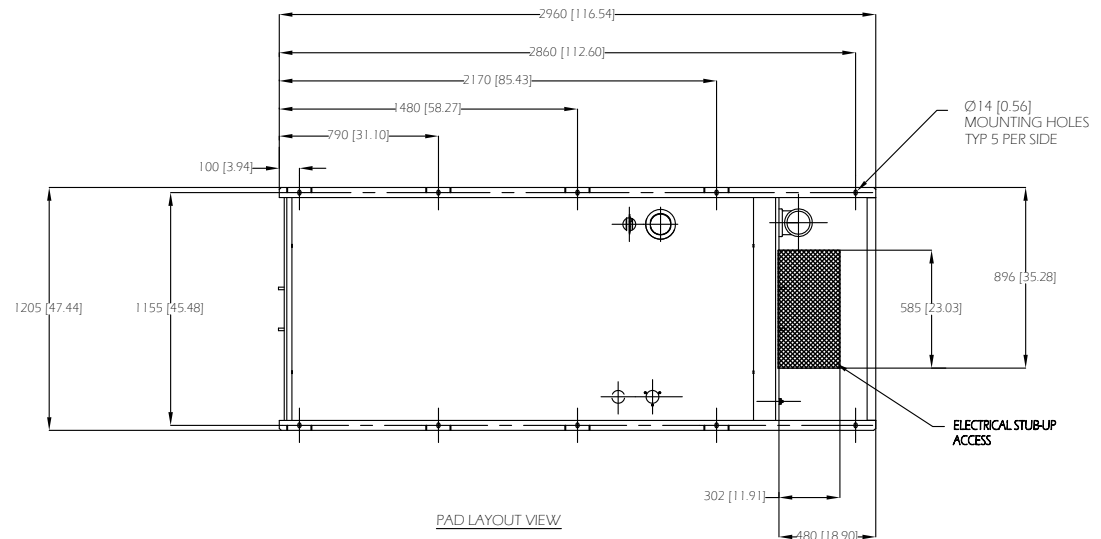
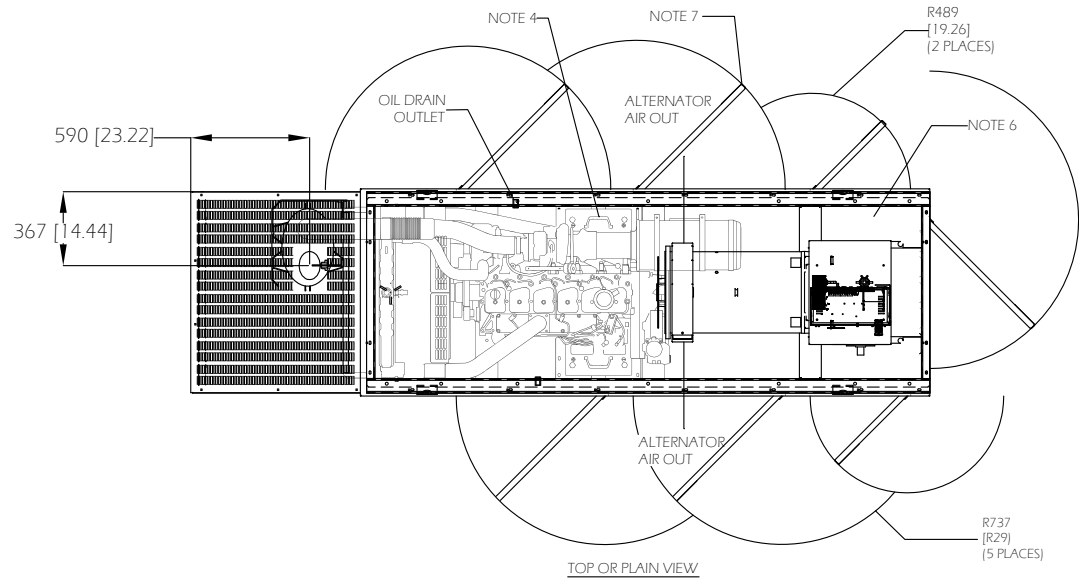


- Control Panel**
- Digital H Control Panel - Dual 4x20 Display Std
 - Digital G-100 Control Panel - Touchscreen -
 - Digital G-200 Paralleling Control Panel - Touchscreen -
 - Programmable Crank Limiter Std
 - 21-Light Remote Annunciator Opt
 - Remote Relay Panel (8 or 16) Opt
 - 7-Day Programmable Exerciser Std
 - Special Applications Programmable PLC Std
 - RS-232 Std
 - RS-485 Std
 - All-Phase Sensing DVR Std
 - Full System Status Std
 - Utility Monitoring (Req. H-Transfer Switch) Std
 - 2-Wire Start Compatible Std
 - Power Output (kW) Std
 - Power Factor Std
 - Reactive Power Std
 - All phase AC Voltage Std
 - All phase Currents Std
 - Oil Pressure Std
 - Coolant Temperature Std
 - Coolant Level Std
 - Oil Temperature Opt
 - Fuel Pressure Std
 - Engine Speed Std
 - Battery Voltage Std
 - Frequency Std
 - Date/Time Fault History (Event Log) Std
 - UL2200 Generator Protector Std
 - Low-Speed Exercise -
 - Isochronous Governor Control Std
 - 40deg C - 70deg C Operation Std
 - Waterproof Plug-In Connectors Std
 - Audible Alarms and Shutdowns Std
 - Not in Auto (Flashing Light) Std
 - On/Off/Manual Switch Std
 - E-Stop (Red Mushroom-Type) Std
 - Remote E-Stop (Break Glass-Type, Surface Mount) Opt
 - Remote E-Stop (Red Mushroom-Type, Surface Mount) Opt
 - Remote E-Stop (Red Mushroom-Type, Flush Mount) Opt
 - NFPA 110 Level I and II (Programmable) Std
 - Remote Communication - RS232 Std
 - Remote Communication - Modem Opt
 - Remote Communication - Ethernet Opt
 - 10A Run Relay Opt

- Alarms (Programmable Tolerances, Pre-Alarms and Shutdowns)**
- Low Fuel Opt
 - Oil Pressure (Pre-programmed Low Pressure Shutdown) Std
 - Coolant Temperature (Pre-programmed High Temp Shutdown) Std
 - Coolant Level (Pre-programmed Low Level Shutdown) Std
 - Oil Temperature Std
 - Fuel Pressure Std
 - Engine Speed (Pre-programmed Overspeed Shutdown) Std
 - Voltage (Pre-programmed Overvoltage Shutdown) Std
 - Battery Voltage Std

- Other Options**
- -
 -

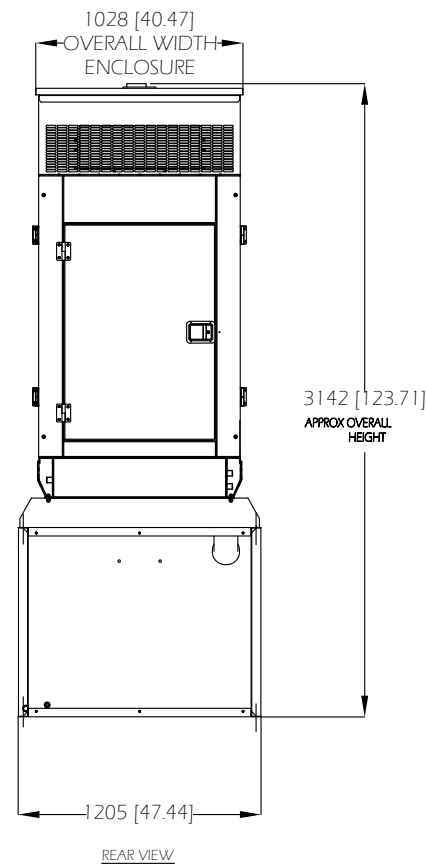
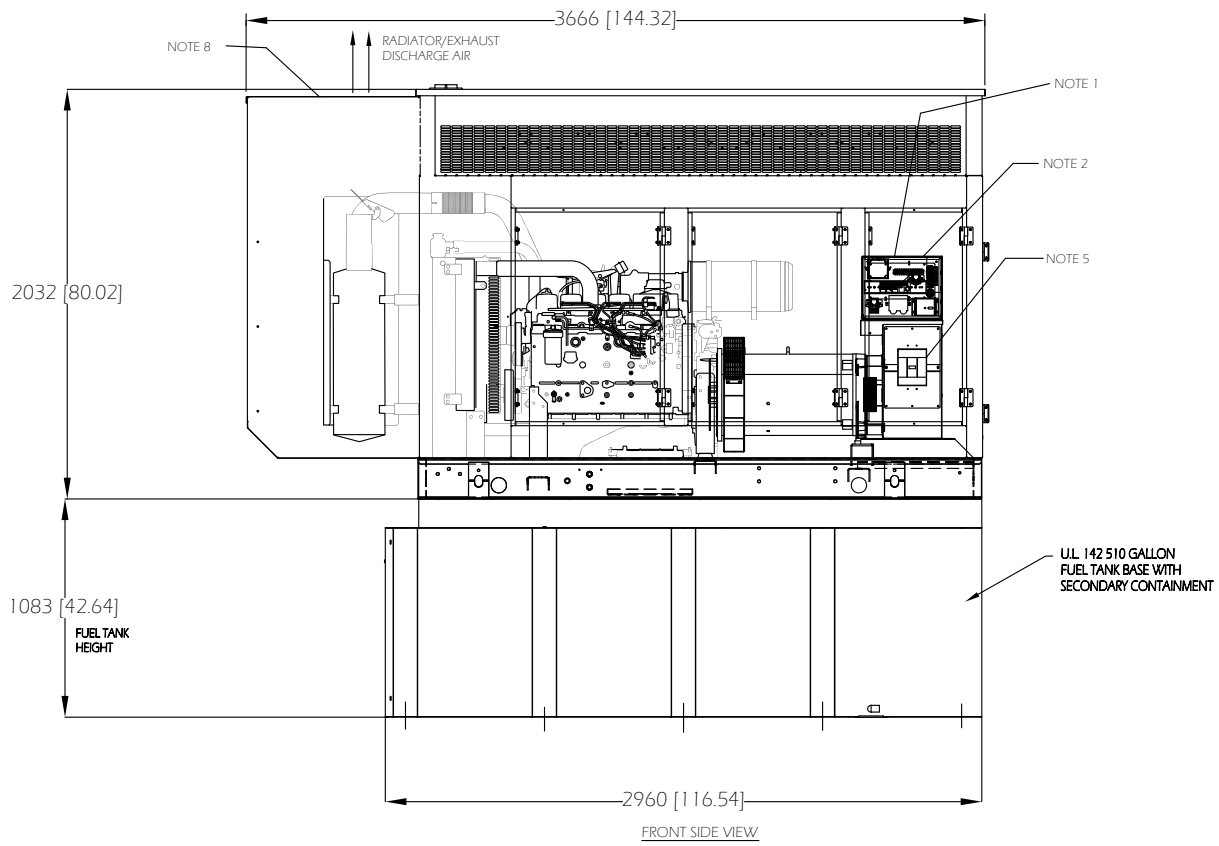
OH6293C-AT



- NOTE:
- ADJUSTABLE CONTROL PANEL ±10° FROM VERTICAL
 - 1- 20A GFCI DUPLEX OUTLET (120V BY CUSTOMER)
 - CONNECTION POINTS FOR CONTROL WIRES PROVIDED IN AC CONNECTION PANEL
 - BATTERY (12 VOLT NEGATIVE GROUND SYSTEM)
 - MAIN LINE CIRCUIT BREAKER (MLCB), (AC LOAD LEADS CONNECT DIRECTLY TO MLCB)
 - REMOVABLE BLANK PANEL FOR OPTIONAL 2nd MAIN LINE CIRCUIT BREAKER
 - DOORS MUST BE ABLE TO OPEN TO AT LEAST 90DEG. TO BE REMOVED
 - SEE DRAWING 0C3850 FOR DUCT REMOVAL. REMOVAL OF FRONT DUCT WILL PROVIDE ACCESS TO MUFFLER FOR SERVICING.
 - STANDARD BLOCK HEATER
 - FUEL LINES ARE PLUMBED TO FRAME FOR UNITS WITH NO BASE TANK
 - FUEL LINES ARE PLUMBED DIRECTLY TO BASE TANK WHEN SO EQUIPPED
 - CENTER OF GRAVITY & WEIGHT MAY SHIFT SLIGHTLY DUE TO UNIT OPTIONS

ENGINE SERVICE CONNECTIONS:

FUEL INLET - 1/2" NPT COUPLING
 FUEL RETURN - 1/2" NPT COUPLING
 OIL DRAIN - 1/2" NPT COUPLING
 EXHAUST OUTLET - 3.0" O.D. MUFFLER



RECOMMENDED ELECTRICAL STUB-UPS (SEE DETAILED VIEW & TOP VIEW)	
AC LOAD LEAD CONDUIT SEE NOTES 5 & 6 FOR CB LOCATION NOTE-A: (SEE STUB UP AREA I & II)	A
(STUB-UP II) GLAND PLATE AC LOAD LEAD CONDUIT FOR PERMANENT MAGNET EXCITATION CONNECTION BOX	
(OVERALL STUB-UP AREA) 120/240V AC TO OUTLET (SEE NOTE 2) FOR OPTIONS	

WEIGHT DATA
 APPROX. DRY WEIGHT WITHOUT FUEL GENESET PACKAGE: 5728 lbs.

REFERENCE DRAWINGS:
 PACKAGE GENERATOR OH6293C
 FUEL TANK BASE OH4970A

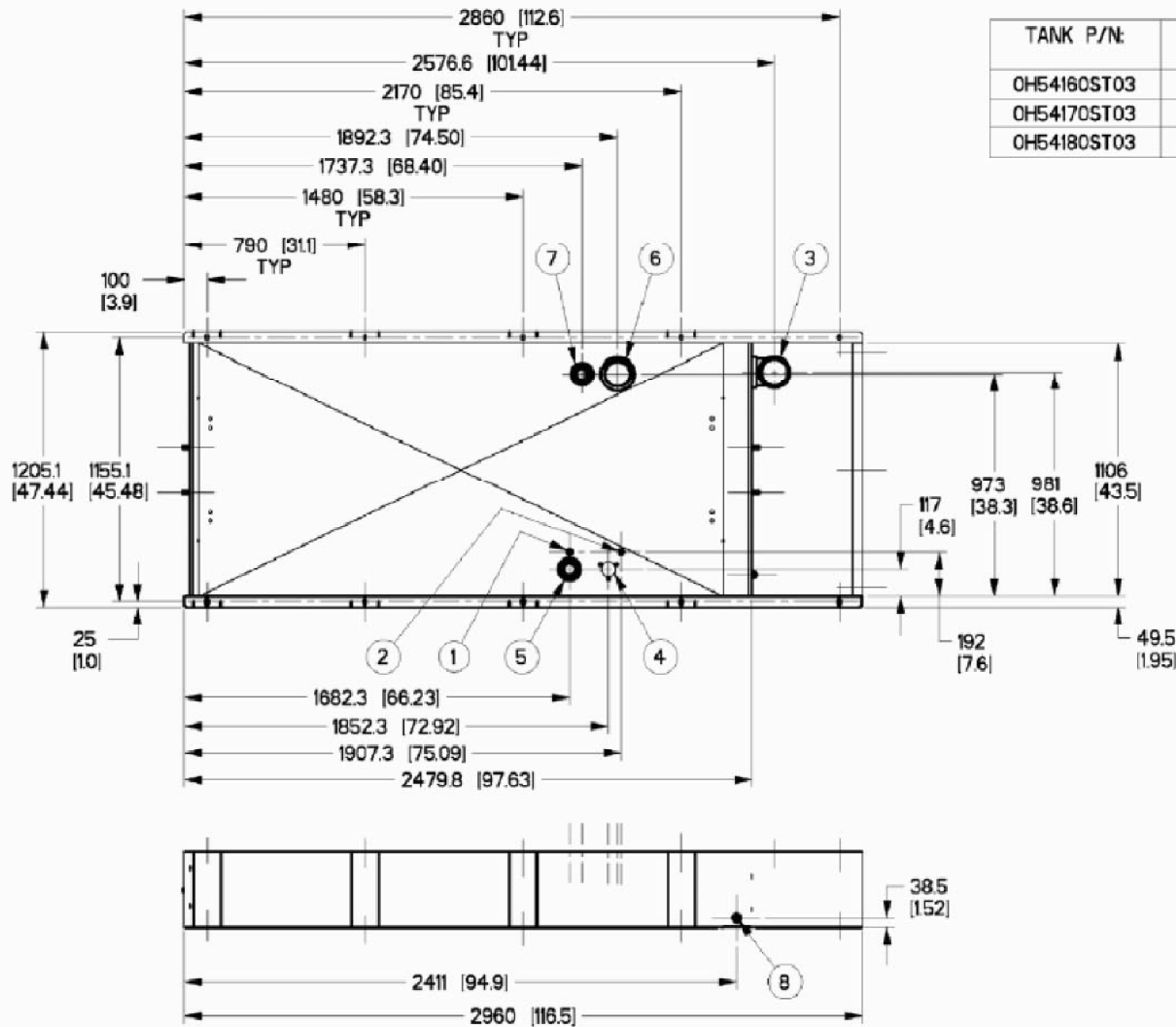
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SD130 WITH LEVEL II
 SOUND ATTENUATED
 ENCLOSURE & U.L. 142
 510 GALLON SUB BASE
 FUEL TANK

GENERAC POWER SYSTEMS
 Waukesha
 P.O. BOX 8
 WAUKESHA, WIS. 53187

FILE NAME	OH6293C-AT	SIZE	B
SCALE	NONE	FIRST USE	AMERICAN TOWER CORP.
DWG NO.	OH6293C-AT		
REV			

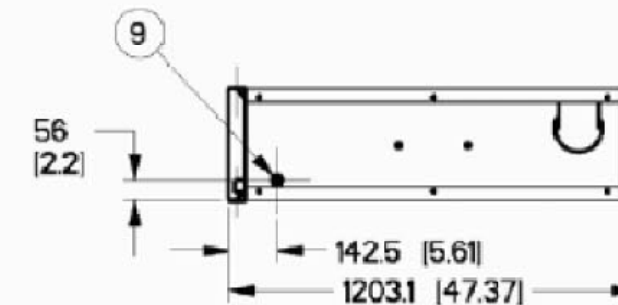
INSTALLATION DRAWING



TANK P/N:	DIM "A" MM (IN)	TOTAL CAPACITY LITERS (GAL)	USABLE CAPACITY LITERS (GAL)	DRY WEIGHT (EST) KG (LBS)
OH54160ST03	330 (13")	547 (145)	507 (134)	356 (784)
OH54170ST03	635 (25")	1260.5 (333)	1219 (322)	486 (1072)
OH54180ST03	940 (37")	1972 (521)	1930 (510)	621 (1365)

ITEM #	TANK FITTING	FUNCTION:
1	3/8" NPT COUPLING	FUEL SUPPLY
2	3/8" NPT COUPLING	FUEL RETURN
3	4" NPT 90° ELBOW	EMERGENCY VENT (OUTER)
4	FUEL SENSOR	FUEL LEVEL
5	2" NPT WELD FLANGE	FUEL FILL
6	4" NPT WELD FLANGE	EMERGENCY VENT (INNER)
7	2" NPT WELD FLANGE	VENT
8	3/4" NPT FITTING	DRAIN
9	Ø22MM HOLE	LEAK DETECTOR

NOTES:
 1) UL #142 LISTED



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GENERAC

TITLE
 D-GROUP, DW TYPE 2 TANKS

INSTALLATION DRAWING

ISSUE DATE: 10/02/09		REV A	
SIZE B	CAGE NO N/A	DWG NO OH4629A	REV A
SCALE .0468	SHEET 1 of 1		