CUMBERLAND COUNTY EMERGENCY SHELTER GENERATORS





VICINITY MAP



WESTOVER RECREATION CENTER 267 BONANZA DRIVE FAYETTEVILLE, NC 28303 CUMBERLAND COUNTY, NC

CUMBERLAND COUNTY

NORTH CAROLINA

DRAWING INDEX

TOO1 COVER SHEET

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REVISIONS		
	Nooten	120 North Boylan Avenue • Raleigh, NC 27603-1423 (919) 828-0531 • thewootencompany.com License Number : F-0115
CUMBERLAND COUNTY	FAYETTEVILLE EMERGENCY SHELTER GENERATORS	COVER SHEET
DES	DATE: FEE	ROJ 65 65 65 65 65 65 65 65 65 65
CHE	DJECT NO.	TCM REE 2877-N

ABBREVIAT	IONS:
AF	AMPERE FRAME
AFE	ACTIVE FRONT END
AIC	AMPERE INTERRUPTING CAPACITY
AIT	ANALYSIS INDICATING TRANSMITTER
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS
AT	AMPERE TRIP
ATS	AUTOMATIC TRANSFER SWITCH
BKR	BREAKER
DB	DUCTBANK
DSW	DISCONNECT SWITCH
EPO	EMERGENCY POWER OFF
ETU	ELECTRONIC TRIP UNIT
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GND	GROUND
HH	HANDHOLE
IEEE	INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS
ISO	INTERNATIONAL ORGANIZATION FOR STANDARDIZATION
MCC	MOTOR CONTROL CENTER
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NO	NORMALLY OPEN
NTS	NOT TO SCALE
PNL	PANEL
RM	ROOM
RTU	REMOTE TELEMETRY UNIT
SE	SERVICE ENTRANCE
SST	STAINLESS STEEL
ТХ	TRANSFORMER
TYP	TYPICAL
VFD	VARIABLE FREQUENCY DRIVE
XFMR	TRANSFORMER



MINNESOTA MINING & MFG. CO. - CP 25WB+.

*BEARING THE UL CLASSIFICATION MARKING.

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GENERAL NOTES

1. EXISTING ELECTRICAL CONDITIONS IN DRAWINGS ARE BASED ON RECORD DRAWINGS BY STANFORD WHITE ASSOCIATES, DATED FEBRUARY 13, 2004, AS WELL AS LIMITED OBSERVATIONS MADE DURING SITE VISIT AND PHOTOS. ADDITIONAL CONDITIONS MAY EXIST THAT ARE NOT SHOWN IN THIS PLAN. CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS PRIOR TO NEW WORK.

120/208 VOLTS		EXISTING PANEL DP										TYPE: NEMA 1				
3 PHASE, 4 WIRE						ſ	MAIN CIRCU	JIT BREAKE	R					MOUNT: S	SURFACE	
		_		, ,			800	A <u>3P</u>			-			1		
	\\//IPE	TPIP		No	VO	LT-AMPE	RES	VO	LT-AMPER	ES	No				DESCRIPTION	
Descrit field				NO.	А	В	С	A	В	С				VVIIXE	Descrit non	
				1							2					
RTU #5	3#8, #10G, 3/4"C	40	3	3							4	3	50	3#6, #10G, 1"C	RTU #2A	
				5							6					
				7							8					
RTU #3	3#6, #10G, 1"C	50	3	9							10	3	50	3#6, #10G, 1"C	RTU #2B	
				11							12					
				13							14					
SPACE			3	15							16	3	80	3#4, #8G, 1.25"C	RTU #4	
				17							18					
				19							20					
RTU #1	3#1, #6G, 2.5"C	125	3	21							22	3			SPACE	
				23							24					
				25							26					
PANEL 'K'	4#3/0, #6G, 2.5"C	200	3	27							28	3	200	4#3/0, #6G, 2.5"C	PANEL 'L'	
				29							30					
				31							32					
PANEL 'P2'	4#1, #6G, 2.5"C	125	3	33							34	3	200	4#3/0, #6G, 2.5"C	PANEL 'P'	
				35							36					
				T		1						-				
				TOTAL	0	0	0	0	0	0	TOTAL					
OW-R-LINE C					Pł	HASE TOT	TAL	T	OTAL LOAI	D	_				<u>TOTAL LOAD (AMP</u>	
BUSSING					0	0	0		0						0.0	
MINIMUM INTEGRATED INTERF	RUPTING CAPACITY														0.0%	

25 KAIC MINIMUM INTEGRATED INTEF

120/208 VOLTS							EXISTIN	PANEL P2	2				
3 PHASE 4 WIRE							MAINIU	JGS ONLY					
							22	5A 3P					
					VO	LT-AMPEF	RES	V	OLT-AMPER	RES			
DESCRIPTION	WIRE	TRIP	POLE	No.	Α	В	С	A	В	С	No.	POLE	TRIP
SCOREBOARD		20	1	1							2	1	20
SCOREBOARD		20	1	3							4	1	20
SCOREBOARD CONTROL		20	1	5							6	1	20
AMPLIFIER		20	1	7							8	1	20
SPARE		20	1	9							10	1	20
SPARE		20	1	11							12	1	20
SPACE			1	13							14	1	20
SPACE			1	15							16	1	
SPACE			1	17							18	1	
SPACE			1	19							20	1	
SPACE			1	21							22	1	
SPACE			1	23							24	1	
SPACE			1	25							26	1	
SPACE			1	27							28	1	
SPACE			1	29							30	1	
SPACE			1	31							32	1	
SPACE			1	33							34	1	
SPACE			1	35							36	1	
SPACE			1	37							38	1	
SPACE			1	39							40	1	
SPACE			1	41							42	1	
									-1				
NOTES:				TOTAL	0	0	0	0	0	0	TOTAL		
SQUARE D TYPE NQOD					PI	HASE TOT	AL		TOTAL LOA	D			
225 AMP BUSSING					0	0	0		0				
25 KAIC MINIMUM INTEGRATED INTERRUPTIN	IG CAPACITY												

KEY NOTES

- $\left< 1 \right>$ PROVIDE STANDBY GENERATOR AS SHOWN.
- $\langle 2 \rangle$ provide automatic transfer switch as shown.
- PROVIDE WIRE AND CONDUIT AS SHOWN TO CONNECT THE TRANSFORMER,
 GENERATOR, ATS, AND PANEL DP; INTERCEPT THE EXISTING SERVICE ENTRANCE CONDUITS AS SHOWN; PROVIDE HANDHOLE IF NECESSARY.

AND EPO; 9841 BELDEN, #14G, 3/4"C. TO REMOTE ANNNUNCIATOR.

- PROVIDE WIRE AND CONDUIT TO SUPPLY POWER TO THE BATTERY CHARGER, BLOCK HEATER, AND SERVICE RECEPTACLE AT THE GENERATOR. ADD 120V, 20A CIRCUIT $\left(4\right)$ BREAKERS TO PANEL 'P2' AS NEEDED. PROVIDE 10#14, #14G FOR CONTROLS TO ATS
- EXISTING NEUTRAL TO GROUND BAR BONDING CONNECTION TO BE LIFTED
- EXISTING #3/0 GROUND CONDUCTORS WILL BE REPLACED WITH 1#1
- 6 EXISTING #3/0 GROUND CONDUCTORS WILL DE REFLACED WITT 171 EQUIPMENT GROUND PER CONDUIT AFTER THE SERVICE ENTRANCE HAS BEEN RECONNECTED THROUGH THE ATS.
- 7PROVIDE 2#12, #1
POWER SUPPLY. PROVIDE 2#12, #12G, IN 3/4"C. TO NEAREST RECEPTACLE FOR AC TO DC

-RRI IPT	ING	CAP	ACITY
	1140	0/ 1	

TYPE:	NEMA 1
MOUNT:	FLUSH
WIRE	DESCRIPTION
	MOTORIZED BACKBOARD
	MOTORIZED PARTITION
	SPACE

Total Load (AMPS) 0.0 0.0%

	120/208 VOLTS							REVISED	PANEL P2
	3 PHASE, 4 WIRE							MAIN LL	JGS ONLY
								225	A 3P
	DESCRIPTION				No	VC	LT-AMPE	RES	VO
	DESCRIPTION	VVINE		FOLE	INO.	А	В	С	А
	SCOREBOARD		20	1	1				
	SCOREBOARD		20	1	3				
	SCOREBOARD CONTROL		20	1	5				
	AMPLIFIER		20	1	7				
_	GENERATOR BLOCK HEATER		20	1	9				
$\langle 4 \rangle$	GENERATOR BATTERY CHARGER	6#12, #12G, 1"C	20	1	11				
	GENERATOR SERVICE RECEPTACLE		20	1	13				
	SPACE			1	15				
	SPACE			1	17				
	SPACE			1	19				
	SPACE			1	21				
	SPACE			1	23				
	SPACE			1	25				
	SPACE			1	27				
	SPACE			1	29				
	SPACE			1	31				
	SPACE			1	33				
	SPACE			1	35				
	SPACE			1	37				
	SPACE			1	39				
	SPACE			1	41				
	NOTES:				TOTAL	0	0	0	0
	SQUARE D TYPE NQOD	Р	HASE TOT	AL	Т				
	225 AMP BUSSING					0	0	0	
	25 KAIC MINIMUM INTEGRATED INTERRUPTI	NG CAPACITY							

5 EXISTING NEUTRAL TO GROUND BAR BUILDING CONNECTION TO BE LETTER AFTER THE SERVICE ENTRANCE HAS BEEN RECONNECTED THROUGH THE ATS.

VOLT-AMPERES		RES	No		TRIP		
	В	С	INU.			VVINE	DESCRIPTION
-			2	1	20		MOTORIZED BACKBOARD
			4	1	20		MOTORIZED BACKBOARD
			6	1	20		MOTORIZED BACKBOARD
-			8	1	20		MOTORIZED BACKBOARD
			10	1	20		MOTORIZED BACKBOARD
			12	1	20		MOTORIZED BACKBOARD
-			14	1	20		MOTORIZED PARTITION
			16	1			SPACE
			18	1			SPACE
-			20	1			SPACE
			22	1			SPACE
			24	1			SPACE
-			26	1			SPACE
			28	1			SPACE
			30	1			SPACE
-			32	1			SPACE
			34	1			SPACE
			36	1			SPACE
-			38	1			SPACE
			40	1			SPACE
			42	1			SPACE
				1			
)	0	0	TOTAL				
TOTAL LOAD TOTAL LOAD (AMPS)							
	0						0.0
							0.0%

TYPE: NEMA 1

MOUNT: FLUSH

REVISIONS					
			120 North Boylan Avenue • Raleigh, NC 27603-1423	(919) 828-0531 • thewootencompany.com	
CUMBERLAND COUNTY	FAYETTEVILLE NORTH CAROLINA	EMERGENCY SHELTER GENERATORS	WESTOVER RECREATIONAL CENTER	POWER RISER AND PANEL SCHEDLILES	
	i communication and international and internatio	H CA 1670 Docus 2/21/ ISSUEL	ROL SION Signed by: 2024		
DES DRA CHE PRO		E FEB D BY BY: D BY:	21, 2 : : : 2	024 T 1 2877	REE CM REE 7-N





ROD " - BONDING BUSHING < 5 >

SECTION A-A GENERATOR PAD GROUNDING DETAIL

SCALE: N.T.S.

E-103

GENERAL NOTES

- 1. CONCRETE MOUNTING PAD NOT TO SCALE. SHOWN FOR CLARITY OF GROUNDING COMPONENTS.
- 2. PAD DIMENSIONS TO BE 6'-10" x 6'-10" FOR RELOCATED GENERATOR.
- 3. SECURE EQUIPMENT TO PAD USING DRILLED IN PLACE 5/8" DIAMETER ANCHOR BOLTS. PROVIDE MOUNTING AS RECOMMENDED BY THE MANUFACTURER. A MINIMUM OF 4 ANCHORS ARE REQUIRED FOR EACH ITEM OF PAD MOUNTED EQUIPMENT.
- 4. GROUND ROD CLAMP DETAIL IS TYPICAL FOR ALL GROUND RODS. KEY NOTES
- TYPICAL OPENING IN PAD FOR CONDUIT ENTRY. COORDINATE EXACT SIZE 1 AND LOCATION WITH EQUIPMENT TO BE SUPPORTED AND UNDERGROUND CONDUIT REQUIRED.
- 2 / #4 Solid Bare Copper Continuous Grounding Loop.
- 3 \rangle GROUND ROD CLAMP LISTED FOR DIRECT BURIAL.
- (4) TYPICAL EXPOSED LOOP FOR CABLE AND EQUIPMENT CONNECTIONS.
- CONDUIT ENTRY. USE RMC FOR ELBOW AND STUB-UP. TOP END OF RMC
- 5 SHOULD EXTAND 2" ABOVE EQUIPMENT PAD. PROVIDE BONDING BUSHING CONNECTED TO GROUND LOOP WITH #4 SOLID BARE COPPER CONDUCTOR. TYPICAL FOR ALL CONDUIT ENTRIES.
- ↑ #2/0 BARE COPPER GROUND CONDUCTOR. THIS CONDUCTOR IS CONTINUOUS 6 FROM ROD "Y" THROUGH ROD "X", THE ROD "Z" AND THEN BACK TO ROD "Y".
- TOP OF ROD IS TO BE 18" BELOW FINISHED GRADE. LOOP TO BE BURIED WITH 24" COVER.

WARNING

EXTREME CAUTION IS ENJOINED WITH REGARD TO THE INSTALLATION OF GROUND RODS. FIELD VERIFY THAT PROPOSED LOCATIONS DO NOT CONFLICT WITH EXISTING UNDERGROUND UTILITIES. DO NOT USE POWER ASSISTED TOOL(S) TO DRIVE GROUND RODS.

CONTRACTOR SHALL COORDINATE ALL SIDE WORK WITH EXISTING STRUCTURES, UNDERGROUND UTILITIES, AND OBSTRUCTIONS. LOCATION OF UNDERGROUND UTILITIES IS APPROXIMATE. CONTRACTOR SHALL ALLOW TIME FOR UTILITIES TO BE SPOTTED AND MARKED BY THE UTILITY COMPANIES. THE SITE PLAN IS PRESENTED IN GOOD FAITH AND IS BELIEVED TO BE ACCURATE, HOWEVER THE PRESENCE OF UNDOCUMENTED UNDERGROUND UTILITIES OR OBSTRUCTIONS SHALL ALWAYS BE ASSUMED.

CONTRACTOR IS ADVISED TO TAKE DUE CARE IN ANY SITE DISTURBANCE ACTIVITY. IN THE EVENT THAT THE CONTRACTOR'S ACTIVITY CAUSES A DISRUPTION OF AN EXISTING SERVICE, THE CONTRACTOR WILL BE REQUIRED TO REPAIR OR REPLACE THE DAMAGE, AT NO EXTRA COST TO THIS PROJECT, TO THE SATISFACTION OF THE UTILITY PROVIDED, OWNER, AND/OR ENGINEER.







