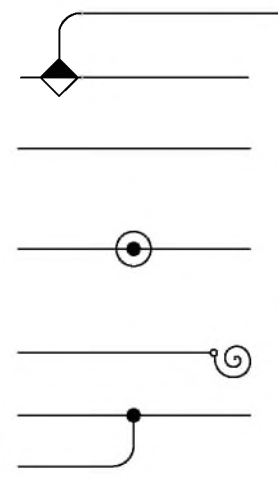


GENERAL ELECTRICAL NOTES:

1. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING, INSTALLING AND CONNECTING ALL LINE AND LOW VOLTAGE CONDUIT, CONDUCTORS, SWITCHES, DISCONNECTS, JUNCTION BOXES, AND FIXTURES FOR POWER, TELECOMMUNICATIONS, AND LIGHTING SYSTEMS.
2. THE ELECTRICAL CONTRACTOR SHALL SUPPLY, RIG AND MOUNT THE ELECTRICAL GENERATORS, TRANSFER SWITCHES AND ASSOCIATED COMPONENTS.
3. THE ELECTRICAL CONTRACTOR SHALL SUPPLY AND INSTALL CONDUIT, CONDUCTORS, AND ASSOCIATED ITEMS TO CONNECT THE GENERATORS TO THE BUILDING ELECTRICAL SYSTEM.
4. THE ELECTRICAL CONTRACTOR SHALL PROVIDE GENERATOR START UP, TESTING, AND OWNER TRAINING PER THE CONSTRUCTION SPECIFICATIONS, AND SHALL ENSURE CORRECT FUNCTIONING OF THE INTERCONNECTION OF THE GENERATOR TO THE BUILDING ELECTRICAL SYSTEM.
5. PROVIDE A TYPEWRITTEN CIRCUIT DIRECTORY IN ALL NEW PANEL BOXES.
6. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ARRANGING AND SCHEDULING ALL ELECTRICAL INSPECTIONS, PAY ALL FEES, AND SUBMIT A FINAL INSPECTION REPORT TO THE ENGINEER.
7. THE ELECTRICAL CONTRACTOR SHALL INSTALL ALL GROUNDING IN ACCORDANCE WITH NEC ARTICLE 250 AND ACCORDING TO THE REQUIREMENTS INDICATED ON THE DRAWINGS. EQUIPMENT GROUNDING CONDUCTORS SHALL BE USED. GROUNDING THROUGH RACEWAY AND CONDUITS IS NOT PERMITTED.
8. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL GROUND CONDUCTORS TO BOND THE FIRE HOUSE GROUNDING SYSTEM TOGETHER.
9. THE LOCATIONS AND ROUTES OF CONDUITS AND RACEWAYS SHOWN ON THESE DRAWINGS ARE SCHEMATIC. ALL CONDUITS ABOVE THE SLAB SHALL BE INSTALLED PARALLEL OR PERPENDICULAR TO THE BUILDING. CONDUITS ABOVE THE CEILING SHALL BE MOUNTED AS HIGH AS POSSIBLE. ALL BELOW GROUND CONDUITS SHALL BE INSTALLED USING THE MOST DIRECT ROUTE WITH CONSIDERATION OF PROPER COORDINATION WITH OTHER UTILITIES – UNDERGROUND OR ABOVE GROUND.
10. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL CONDUIT AND CONDUCTORS FOR TELEPHONE AND LAN SYSTEMS. ALL CONDUCTORS SHALL BE COPPER WITH TYPE THHN/THWN OR XHHW INSULATION UNLESS OTHERWISE NOTED. ALL CONDUCTORS SHALL BE SIZED PER NEC.
11. THE ELECTRICAL CONTRACTOR SHALL PROVIDE LAMPS FOR ALL LIGHTING FIXTURES.
12. ALL DUPLEX RECEPTACLES SHALL BE MOUNTED VERTICALLY AND 18" NOMINALLY AFF TO BOTTOM OF BOX UNLESS OTHERWISE INDICATED.
13. FASTENING OF HANGERS TO THE ROOF WILL NOT BE PERMITTED. ANY CONTRACTOR RESPONSIBLE FOR PUNCTURING THE ROOF STRUCTURE WILL REPAIR THE ROOF AT THEIR EXPENSE.
14. ALL DISCONNECT SWITCHES AND SAFETY SWITCHES ARE TO BE HEAVY DUTY TYPE.
15. MC CABLE MAY BE USED FOR LIGHTS AND RECEPTACLES WHEN RUN IN A WALL CAVITY. THE MC CABLE SHALL NOT BE RUN SURFACE MOUNTED. WHEN LEAVING A WALL CAVITY, A BOX SHALL BE USED TO TRANSITION FROM MC CABLE TO CONDUIT AND CONDUCTORS. MC CABLE SHALL NOT BE ALLOWED TO LEAVE A PANEL BOX. ALL PANEL BOX ENTRIES SHALL BE MADE WITH CONDUIT AND CONDUCTORS.
16. "GREENFIELD" AND LIQUID TIGHT FLEX CONDUIT MAY BE USED IN LENGTHS NOT TO EXCEED 72".
17. THE ELECTRICAL CONTRACTOR SHALL CAULK ALL PENETRATIONS,RELATED TO ELECTRICAL WORK, IN 1 & 2 RATED HR FIRE WALL WITH 3M FIRE CAULK. SEAL LARGER OPENINGS WITH WIREMOLD "FLAMESTOPPER" KIT.
18. ALL EXTERIOR EXPOSED CONDUIT SHALL BE GRC.
19. ALL CONDUIT IN THE FIRE HOUSE SHALL BE EMT.
20. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL EQUIPMENT CONDUIT AND CONDUCTORS FOR THE HVAC EQUIPMENT. THIS SHALL INCLUDE LINE AND LOW VOLTAGE EQUIPMENT. REVIEW HVAC AND PLUMBING DRAWINGS FOR EQUIPMENT LOCATIONS AND ELECTRICAL REQUIREMENTS.
21. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL ETHERNET CONDUIT AND CONDUCTORS.
22. ALL JUNCTION BOXES AND DISCONNECTS SHALL BE MOUNTED ABOVE THE FLOOD ELEVATION.
23. NO CONDUITS SHALL BE INSTALLED WITHIN THE UNCONDITIONED SPACE.



NEW #5/6 AWG GROUND GRID EXOTHERMIC CONNECTION TO BUILDING FOUNDATION REINFORCING BAR

NEW #4/0 AWG MAIN GROUND GRID CONDUCTOR BELOW GRADE (BURY 30" BELOW GRADE THROUGHOUT)

3/4"x 10' COPPER CLAD GROUND ROD WITH EXOTHERMIC CONNECTION TO MAIN GROUND GRID CONDUCTOR

GROUND GRID RISER CONDUCTOR THROUGH SLAB FOR CONNECTION TO COLUMN, EQUIPMENT, ETC.

EXOTHERMIC CONNECTION BETWEEN GROUND GRID CONDUCTOR

NEW PANEL

HOMERUN  
GP = GENERAL PURPOSE PANEL 'GP'  
2 = CIRCUIT No.

CONDUIT DOWN

CONDUIT UP

FLEXIBLE CONDUIT CONNECTION

SPECIAL USE RECEPTACLE  
REFER TO INFORMATION ON INDIVIDUAL DRAWINGS

NEW RECEPTACLE  
GF = GROUND FAULT  
WP = WEATHERPROOF  
LPA1-2 = FEED FROM PANEL LPA1 CIRCUIT 2

EXISTING SINGLE RECEPTACLE  
42" AFF = 42 INCHES ABOVE FINISHED FLOOR

SWITCH –  
A = SWITCHING SCHEME  
3 = 3 WAY  
4 = 4 WAY  
M = MOTOR STARTER TYPE

NEW TELEPHONE JACK

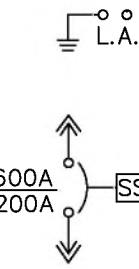
NEW ETHERNET JACK

EQUIPMENT CONTROLLER

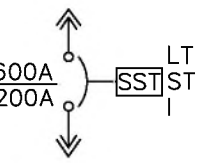
WATT STOPPER

OCCUPANCY SENSOR

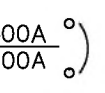
SYMBOLS



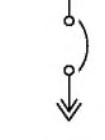
L.A. LIGHTNING ARRESTOR



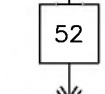
DRAW-OUT TYPE SOLID STATE CIRCUIT BREAKER  
1600A = FRAME SIZE  
1200A = TRIP SENSOR  
LT = LONG TIME TRIP FUNCTION  
ST = SHORT TIME TRIP FUNCTION  
I = INSTANTANEOUS TRIP FUNCTION  
SST = SOLID STATE TRIP UNIT



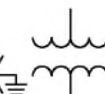
CIRCUIT BREAKER.  
400A = FRAME SIZE  
300A = TRIP RATING



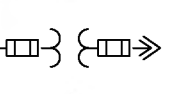
DRAW OUT TYPE CIRCUIT BREAKER



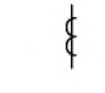
DRAW-OUT TYPE POWER CIRCUIT BREAKER



DELTA-WYE TRANSFORMER. SIZE AS INDICATED ON DRAWINGS.



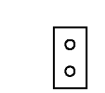
POTENTIAL TRANSFORMER



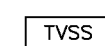
CURRENT TRANSFORMER



SOLID STATE SOFT STARTER



LOCAL START/LOCK STOP CONTROLLER



TRANSIENT VOLTAGE SURGE SUPPRESSION



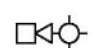
FIRE ALARM CONTROL PANEL



RADIO TRANSCEIVER



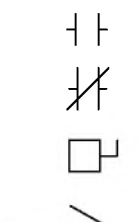
OMNI DIRECTIONAL ANTENNA/WITH MODULE



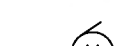
SOUNDER STROBE



60 MIN TIMER



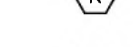
NORMALLY OPEN CONTACT



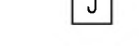
NORMALLY CLOSED CONTACT



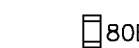
DISCONNECT SWITCH



DISCONNECT SWITCH



MOTOR. SIZE AS INDICATED ON DRAWINGS. X = HORSEPOWER



KEY INTERLOCK



JUNCTION BOX. SIZE AS SHOWN ON DRAWINGS.



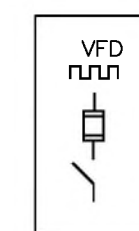
FUSE  
BOE = RATING



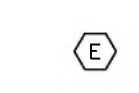
GENERATOR SIZE AS INDICATED ON DRAWINGS



LIGHTING FIXTURE CONTROLLED BY SWITCHING SCHEME A AND FED FROM LIGHTING PANEL LPM CIRCUIT 9



VARIABLE FREQUENCY DRIVE



EMERGENCY STOP



COMBINATION DISCONNECT SWITCH MOTOR STARTER  
A = STARTER SIZE



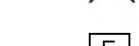
METHANE SENSOR



OXYGEN SENSOR



STROBE LIGHT



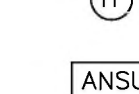
PULL STATION WITH KEY RESET



SMOKE DETECTOR PHOTO ELECTRIC



HEAT DETECTOR X=135 FOR 135DEG RATE OF RISE AND X=190 FOR 190DEG RATE OF RISE



SUPPRESSION SYSTEM SUPERVISION



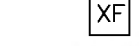
DOOR HOLDER WALL MOUNT



ADDRESSABLE MINI MODULE



EXPLOSION PROOF SMOKE DETECTOR



EXPLOSION PROOF PULL STATION WITH KEY RESET



EXTERIOR STROBE LIGHT WITH HORN



ANNUNCIATOR



WARNING - IT IS A VIOLATION OF NEW YORK EDUCATION LAW SECTION 7209.3, FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION LAW, SECTION 7209.2.

DATE: 6/16/23  
DRAWN BY: AFA  
SCALE: AS SHOWN  
REVIEWED BY: RF  
PROJECT NO.: 21243  
FILE:



REVISIONS		DESCRIPTION
NO.	DATE	CONSTRUCTION
1	6/16/23	

PORT EWEN FIRE  
DEPARTMENT  
ULSTER COUNTY, NY

ELECTRICAL NOTES

SHEET:  
E001

BID PLANS