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.

SYMBOLS

- NEW #⅝ 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
- G — GROUND GRID RISER CONDUCTOR THROUGH SLAB FOR CONNECTION TO COLUMN, EQUIPMENT, ETC.
- EXOTHERMIC CONNECTION BETWEEN GROUND GRID CONDUCTOR
- NEW PANEL
- GP-2 — 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
- GF LPA1-2 — NEW RECEPTACLE; GF = GROUND FAULT; WP = WEATHERPROOF; LPA1-2 = FEED FROM PANEL LPA1 CIRCUIT 2
- 42"AFF — EXISTING SINGLE RECEPTACLE; 42" AFF = 42 INCHES ABOVE FINISHED FLOOR
- $ A 4 — SWITCH – A = SWITCHING SCHEME; 3 = 3 WAY; 4 = 4 WAY; M = MOTOR STARTER TYPE
- NEW TELEPHONE JACK
- NEW ETHERNET JACK
- EC — EQUIPMENT CONTROLLER
- WS — WATT STOPPER
- OC — OCCUPANCY SENSOR
- L.A. — LIGHTNING ARRESTOR
- 1600A 1200A SST LT ST I — 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
- 400A 300A — CIRCUIT BREAKER. 400A = FRAME SIZE; 300A = TRIP RATING
- DRAW OUT TYPE CIRCUIT BREAKER
- 52 — DRAW-OUT TYPE POWER CIRCUIT BREAKER
- DELTA-WYE TRANSFORMER. SIZE AS INDICATED ON DRAWINGS.
- POTENTIAL TRANSFORMER
- CURRENT TRANSFORMER
- SSS — SOLID STATE SOFT STARTER
- LOCAL START/LOCK STOP CONTROLLER
- TVSS — TRANSIENT VOLTAGE SURGE SUPPRESION
- FACP — FIRE ALARM CONTROL PANEL
- RADIO — RADIO TRANSCEIVER
- OMNI DIRECTIONAL ANTENNA/WITH MODULE
- SOUNDER STROBE
- TM — 60 MIN TIMER
- NORMALLY OPEN CONTACT
- NORMALLY CLOSED CONTACT
- DISCONNECT SWITCH
- DISCONNECT SWITCH
- X — MOTOR. SIZE AS INDICATED ON DRAWINGS. X = HORSEPOWER
- K — KEY INTERLOCK
- J — JUNCTION BOX. SIZE AS SHOWN ON DRAWINGS.
- 80E — FUSE; 80E = RATING
- GENERATOR SIZE AS INDICATED ON DRAWINGS
- $ A LPM-9 J — LIGHTING FIXTURE CONTROLLED BY SWITCHING SCHEME A AND FED FROM LIGHTING PANEL LPM CIRCUIT 9
- VFD — VARIABLE FREQUENCY DRIVE
- E — EMERGENCY STOP
- A A — COMBINATION DISCONNECT SWITCH MOTOR STARTER; A = STARTER SIZE
- M — METHANE SENSOR
- O — OXYGEN SENSOR
- F — STROBE LIGHT
- F — PULL STATION WITH KEY RESET
- S — SMOKE DETECTOR PHOTO ELECTRIC
- H X — HEAT DETECTOR X=135 FOR 135DEG RATE OF RISE AND X=190 FOR 190DEG RATE OF RISE
- ANSUL — SUPPRESSION SYSTEM SUPERVISION
- DR — DOOR HOLDER WALL MOUNT
- NMM — ADDRESSABLE MINI MODULE
- XS — EXPLOSION PROOF SMOKE DETECTOR
- XF — EXPLOSION PROOF PULL STATION WITH KEY RESET
- XF — EXTERIOR STROBE LIGHT WITH HORN
- ANN — ANNUNCIATOR

WARNING - IT IS A VIOLATION OF NEW YORK EDUCATION LAW SECTION 7209.2, 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.

BID PLANS

DATE: 6/16/2023
DRAWN BY: A.F.A.
SCALE: AS SHOWN
REVIEWED BY: RF
PROJECT NO.: 212343
FILE:

HESNOR ENGINEERING, P.C. — WWW.HESNOR.COM
KEYSTONE ASSOCIATES — WWW.KEYSTONE.COM
DELAWARE ENGINEERING, D.P.C. — WWW.DELAWAREENGINEERING.COM
STATE OF NEW YORK — ALFRED F. AMOD — 092255 — LICENSED PROFESSIONAL ENGINEER

REVISIONS

NO.	DATE	DESCRIPTION
1	6/16/23	CONSTRUCTION

PORT EWEN FIRE DEPARTMENT
ULSTER COUNTY, NY

ELECTRICAL NOTES

SHEET: E001

H:\Drawings\Port Ewen\PE_ONE_LINE REV1.dwg