

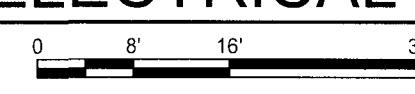
PLOTTED BY: anesht

PRINTED: 10/18/2016 @ 4:17PM

FILE NAME: U:\391020-167A\W\B306 MH\Working Drawings\AutoCAD\3910-20-E-101.dwg



1 FIRST FLOOR PLAN - ELECTRICAL
 SCALE: 1/16"=1'-0"



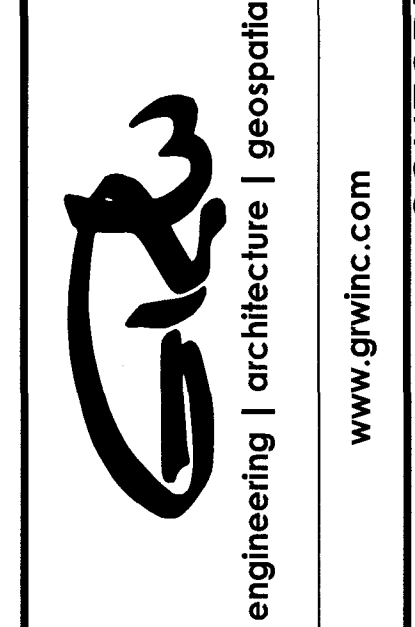
SHEET KEYNOTES:

- NEW 100 KW/125 KVA, 400 HERTZ CONVERTER FURNISHED BY THE GOVERNMENT AND INSTALLED BY THIS CONTRACT. REMOVE EXISTING 50 KW/62.5 KVA, 400 HERTZ CONVERTER AND STORE AT A LOCATION AS DESIGNATED BY THE KO.
- NEW 400 AMPERE, 600 VOLT, THREE (3) POLE, NON-FUSIBLE, HEAVY DUTY, DISCONNECT SWITCH IN NEMA 4X STAINLESS STEEL ENCLOSURE. REMOVE EXISTING 100 AMPERE, 600 VOLT, THREE (3) POLE, NON-FUSIBLE, HEAVY DUTY, DISCONNECT SWITCH IN NEMA 4X STAINLESS STEEL ENCLOSURE. PATCH AND PAINT WALL.
- NEW REMOTE SERVICE POINT SHALL BE RATED FOR CLASS 1, DIVISION 1, HAZARDOUS LOCATIONS AND FURNISHED AND INSTALLED BY THIS CONTRACT. MOUNT REMOTE SERVICE POINT AS PER MANUFACTURER RECOMMENDATIONS. NEW REMOTE SERVICE POINT SHALL HAVE AN EMERGENCY STOP AND LIGHT TO INDICATE WHEN CONVERTER IS ENERGIZED. MAKE ALL NECESSARY CONNECTIONS BOTH FEEDER CONDUCTORS AND AIRCRAFT SERVICE CABLE. CONTRACTOR SHALL FOLLOW ALL MANUFACTURER INSTALLATION RECOMMENDATIONS. SEE SHEET E-501 FOR REMOTE SERVICE POINT DETAILS. REMOVE ALL EXISTING REMOTE SERVICE POINT EQUIPMENT, CONDUITS, AND CONDUCTORS. PATCH & PAINT WALL.
- NEW CONDUIT AND CONDUCTORS FURNISHED AND INSTALLED BY THIS CONTRACT AS PER 400 HERTZ CONVERTER MANUFACTURER RECOMMENDATIONS. USE ALUMINUM CONDUIT WITH SPECIALTY CABLE. TERMINATE CABLE ON BOTH ENDS AS PER MANUFACTURER RECOMMENDATIONS. USE TWO (2) 1 1/2" ALUMINUM CONDUITS WITH FOUR (4) #1/0 AWG COPPER CABLES (SPECIALTY) AND #6 AWG COPPER GROUND.
- FURNISH AND INSTALL NEW 300 AMPERE, 480/277 VOLT FEEDER CIRCUIT - THREE (3) INCH ALUMINUM RIGID CONDUIT WITH FOUR (4) 400 KCMIL THHN/THWN COPPER CONDUCTORS AND #1/0 AWG COPPER GROUND - FROM MAIN DISTRIBUTION SWITCHBOARD IN ROOM 103 TO 400 HZ CONVERTER DISCONNECT IN ROOM 120. COLOR CODE CONDUCTORS BROWN, ORANGE, YELLOW, GRAY, AND GREEN. REMOVE EXISTING 100 AMPERE FEEDER CONDUIT AND CONDUCTORS. PATCH AND PAINT WALL.
- NEW AIRCRAFT SERVICE CABLE CONNECTION POINT, CLASS 1, DIVISION 1 RATED, FURNISHED AND INSTALLED BY THIS CONTRACT.
- EXISTING MAIN DISTRIBUTION SWITCHBOARD (MDS) TO REMAIN. FURNISH AND INSTALL A NEW 300 AMPERE, THREE POLE, 480 VOLT, MOLDED CASE CIRCUIT BREAKER. REMOVE EXISTING 100 AMPERE, THREE POLE BREAKER THAT FED THE OLD 50 KW/62.5 KVA, 400 HERTZ CONVERTER.
- MAKE CONNECTION FROM NEW DISCONNECT SWITCH TO NEW 400HZ CONNECTOR. USE THREE (3) INCH ALUMINUM RIGID CONDUIT WITH FOUR (4) 400 KCMIL THHN/THWN COPPER CONDUCTORS AND #1/0 AWG COPPER GROUND.

NOTE: THE CONVERTER CHANGES 480 VOLT, THREE (3) PHASE, THREE (3) WIRE, 60 HERTZ, UTILITY POWER TO 208/120 VOLT, THREE (3) PHASE, THREE (3) WIRE, 400 HERTZ POWER. THE UNIT CAN BE LEFT ENERGIZED WHEN NOT IN SERVICE. CONDUCTOR IMPEDANCE IS MUCH HIGHER AT 400 HERTZ. SPECIALTY CABLING, ALUMINUM CONDUIT, AND SHORT CIRCUIT LENGTHS ARE MANDATORY.

This document, originally issued, sealed, and signed by James Kyle Goddard, Jr., West Virginia Professional Engineer, No. 15845, on 7/29/2016, shall not be used in lieu of a certified document.

GRW PROJECT NO. 3910-20
 CLIENT PROJECT: PJVY142061
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FIRST FLOOR PLAN - ELECTRICAL
 WEST VIRGINIA AIR NATIONAL GUARD
 MODIFY MAINTENANCE HANGAR-167 AW B306-MH
 MARTINSBURG, WEST VIRGINIA

DESIGNED	JKG
DRAWN	JTR
REVIEWED	JKG
APPROVED	JKG

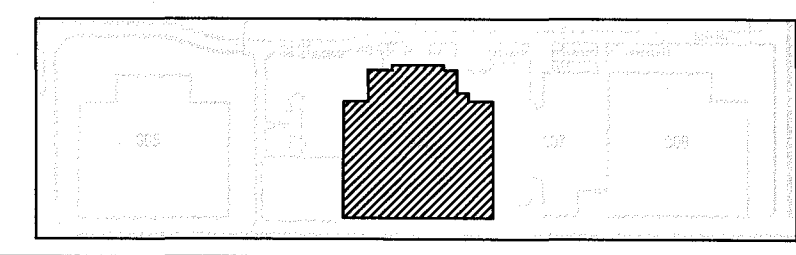
NO.	REVISIONS DESCRIPTION	DATE	BY

SCALE CHECK: _____ THIS MARK SHOULD MEASURE EXACTLY * WHEN PLOTTED

DATE: 18 OCT 2016

SCALE: 1/16" = 1'-0"

SHEET NO. E-101



CONFORMANCE SET FOR CONSTRUCTION