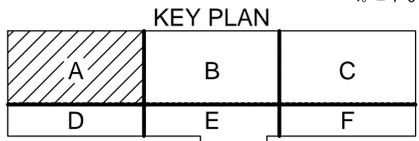
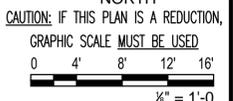


A1 FIRST FLOOR NEW WORK PLAN - AREA A
SCALE: 1/8" = 1'-0"

KEY NOTES

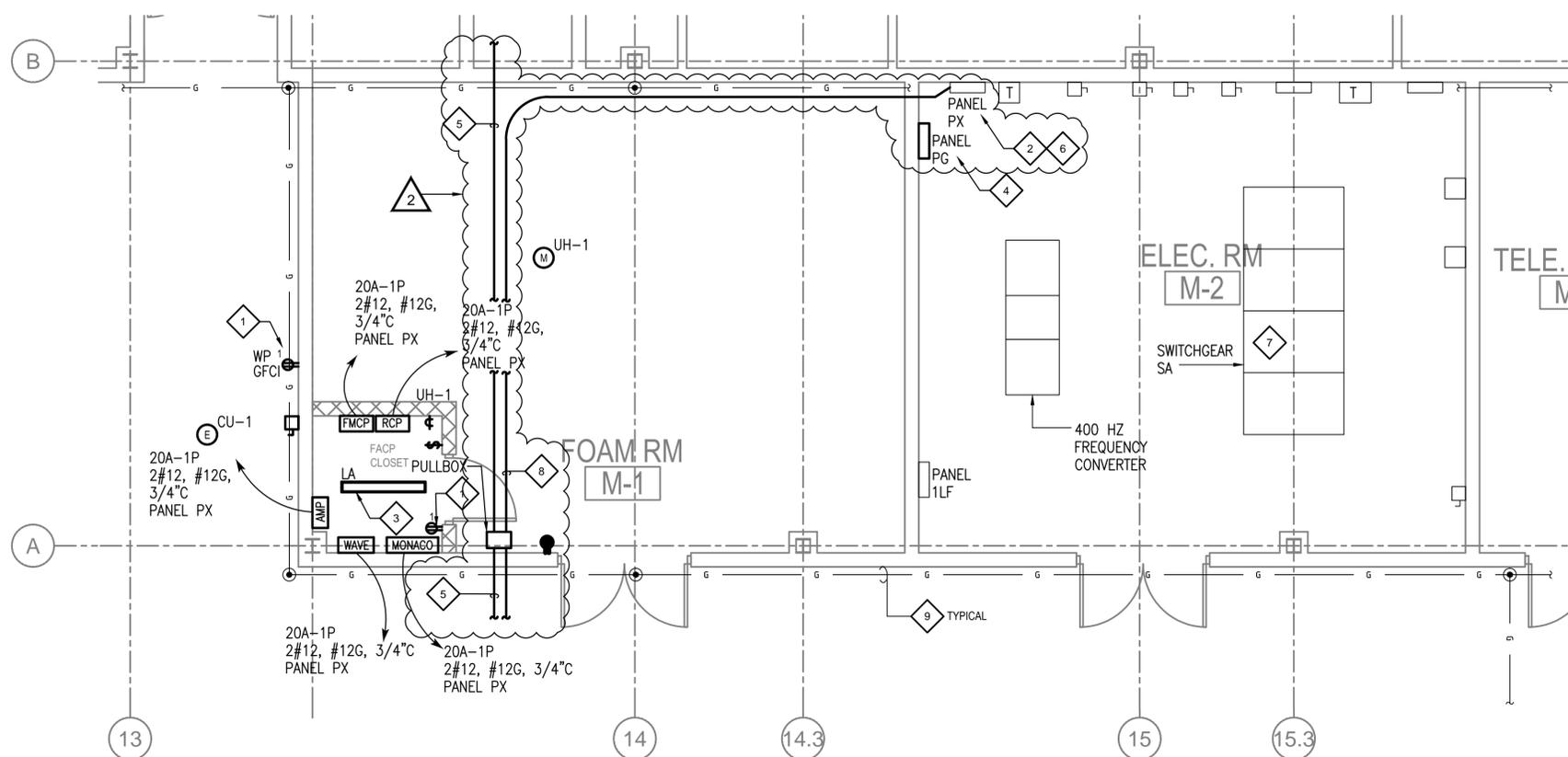
- 1 PROVIDE MOLDED FUSION WELD CONNECTION FROM GROUNDING CONDUCTORS TO EXISTING SYSTEM CONDUCTOR.
- 2 PROVIDE #2 AWG BARE COPPER GROUNDING CONDUCTORS AND AIRCRAFT STATIC GROUNDING POINTS BEYOND THE LIMITS OF THE FIRE PROTECTION AFF TRENCH SYSTEM. REFER TO AFF AND STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION. WORK MUST NOT DISTURB AREA BELOW THE DOOR TRACKS.
- 3 HANGAR BAY DOOR AND PERSONNEL DOOR INTERLOCK SCOPE:
 - PROVIDE TROLLEY DUCT BUS BAR SYSTEMS, SAFETY EDGES, CONTROLS, BRAKING SYSTEM, PUSHBUTTON STATIONS, MOTOR/GEAR BOXES, AUDIBLE DEVICES, CONTROL PANEL ENCLOSURE, MOTOR/GEAR BOX ENCLOSURES, AND PERSONNEL DOOR INTERLOCK.
 - PROVIDE WIRING FROM BUS BARS TO DEVICES.
 - PROVIDE DEVICES, CONTROLS, AND CIRCUITRY FOR A COMPLETE SYSTEM.
 - PROVIDE RIGID THERMAL INSULATION BETWEEN THE EXTERIOR DOOR SKIN AND BACK OF CONTROL PANEL ENCLOSURE. REFER TO KEY NOTES ON DRAWINGS A-111, A-112, AND A-113 FOR ADDITIONAL INFORMATION.
- 4 PROVIDE POWER CONNECTION TO ENVIRONMENTAL PANEL. PROVIDE 20A-1P CIRCUIT BREAKER IN DESIGNATED PANEL TO MATCH EXISTING PANELBOARD CHARACTERISTICS. PROVIDE 1" CONDUIT WITH PULL STRING FROM ENVIRONMENTAL PANEL TO EXTERIOR SUMP PIT LOCATED SOUTH OF FOAM ROOM. CONDUIT SERVES CONTROL WIRING. REFER TO E-401 FOR ADDITIONAL REQUIREMENTS AND CONDUIT STUB-OUT LOCATION FROM BUILDING. REFER TO CS101 FOR CONTINUATION OF CONDUIT SYSTEM TO THE SUMP PIT.
- 5 REFER TO THE POWER ONE-LINE DIAGRAM FOR FEEDER REQUIREMENTS.
- 6 REFER TO HANGAR BAY POWER SERVICE POINT TYPE "A" DIAGRAM FOR LAYOUT OF EQUIPMENT.
- 7 PROVIDE ELECTRICAL INTERLOCK SWITCH FOR EXISTING PERSONNEL DOOR TO PREVENT MOTOR OPERATION OF THE LEAF WHEN THE PERSONNEL DOOR IS OPEN.



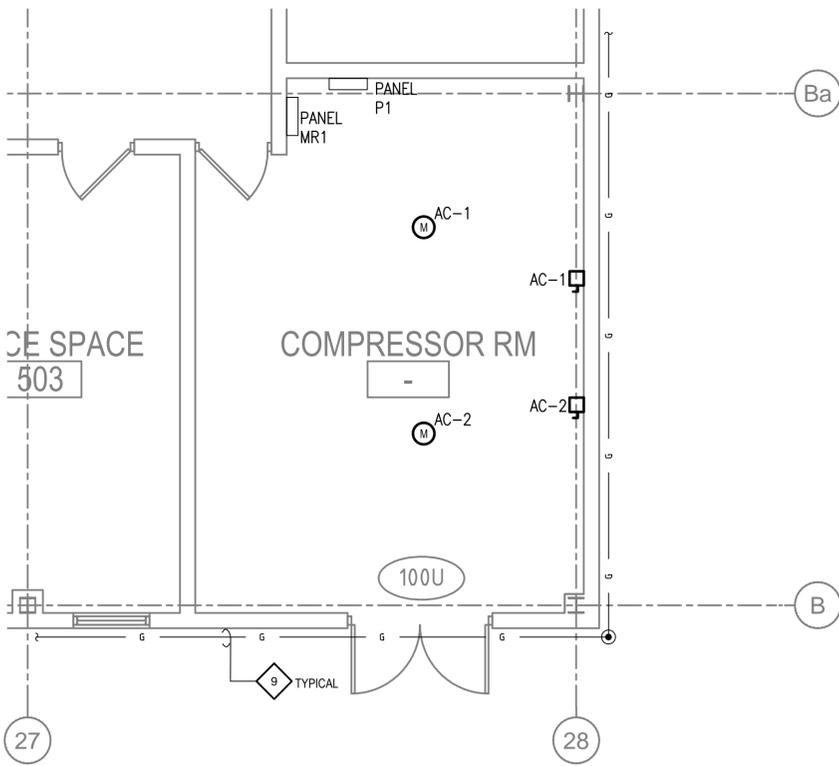
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">ENVIRONMENTAL PANEL</td> <td style="width: 50%; text-align: center;">DATE</td> </tr> <tr> <td style="width: 50%; text-align: center;">1 FINAL SUBMISSION</td> <td style="width: 50%; text-align: center;">5/22/2016</td> </tr> <tr> <td style="width: 50%; text-align: center;">SMV DESCRIPTION</td> <td style="width: 50%; text-align: center;">APPR</td> </tr> </table>	ENVIRONMENTAL PANEL	DATE	1 FINAL SUBMISSION	5/22/2016	SMV DESCRIPTION	APPR				
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PM/DM: KPL/IAS	FIRE PROTECTION										
<p>NAVAL FACILITIES ENGINEERING COMMAND ~ MID-ATLANTIC 14555 Avon Parkway, Suite 150 Charlottesville, Virginia 20151 www.FEGGroup-inc.com</p>											
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<p>NAVAL AIR STATION OCEANA VIRGINIA BEACH, VIRGINIA</p>											
<p>HANGAR 111 FIRE PROTECTION AND STRUCTURAL REPAIRS</p>											
<p>1st FLOOR NEW WORK PLAN - ELECTRICAL - AREA A</p>											
<p>SCALE: AS SHOWN PROJECT NO.: 1372146 CONSTR. CONTR. NO.: NAFAC DRAWING NO.: 12716381 SHEET 159 OF 170</p>											
<p>E-101</p>											

FILE NAME: C:\BA\18793\02 BIM-CAD\02.1 Cold File\1372146_E101.dwg LAYOUT NAME: Area A PLOTTED: Wednesday, June 01, 2016 - 9:16am USER: liberry

1 2 3 4 5



C1 ENLARGED PLAN - FIRST FLOOR FOAM ROOM NEW WORK PLAN
SCALE: 1/4" = 1'-0"



A1 ENLARGED PLAN - COMPRESSOR ROOM NEW WORK
SCALE: 1/4" = 1'-0"



KEY NOTES

- 1 PROVIDE RECEPTACLES AND CIRCUIT TOGETHER FROM A 20A-1P CIRCUIT BREAKER IN PANEL PX WITH 2#12, #12G, 3/4"C. PROVIDE CIRCUIT BREAKER TO MATCH PANELBOARD CHARACTERISTICS. CIRCUIT NUMBER INDICATES ITEMS CIRCUITED TOGETHER ON THE SAME CIRCUIT AND DOES NOT REPRESENT THE POLE POSITION IN THE PANEL.
- 2 PROVIDE CIRCUIT BREAKERS IN PANEL PX TO MATCH THE PANELBOARD CHARACTERISTICS (SQUARE D, 120/208V, 3-PH, 4W).
- 3 PROVIDE LIGHT FIXTURE TYPE LA AND CIRCUIT TO FOAM ROOM LIGHTING CIRCUIT AHEAD OF CONTROLS. PROVIDE LIGHT FIXTURE TYPE LA AS FOLLOWS:
* METALUX INDUSTRIAL ILED SERIES OR EQUAL.
* NOMINAL DIMENSION OF 11"W X 46"L
* 11,000 LUMENS
* WIDE DISTRIBUTION
* FROSTED ACRYLIC LENS
* UNIVERSAL VOLTAGE
* 4000 DEG K
* PROVIDE AT 9' AFF
- 4 PROVIDE PANEL PG. REFER TO PANEL SCHEDULE AND POWER ONE-LINE DIAGRAM.
- 5 PROVIDE 1"C FROM ENVIRONMENTAL PANEL LOCATED ON DRAWING E-101 TO EXTERIOR SUMP PUMP TO SERVE CONTROL WIRING. REFER TO CS101 FOR CONTINUATION OF CONDUIT SYSTEM TO SUMP PIT. THE SUMP PIT IS CLASSIFIED AS A CLASS 1, DIVISION 1 HAZARDOUS LOCATION. PROVIDE INSTALLATION AT SUMP PER NFPA 70, ARTICLE 501
- 6 PROVIDE 15A-1P SHUNT-TRIP TYPE CIRCUIT BREAKER IN PANEL PX TO SERVE THE SUMP PUMP. CIRCUIT BREAKER SHALL SHUNT-TRIP UPON AN ALARM SIGNAL FROM THE FIRE ALARM SYSTEM.
- 7 PROVIDE CIRCUIT BREAKERS PER DRAWING E-602. REFER TO DRAWINGS ED701, E602, AND E-701 FOR SWITCHBOARD SA WORK.
- 8 PROVIDE 2#12, #12G, 1"C FROM A 15A-1P CIRCUIT BREAKER IN PANEL PX TO THE SUBMERSIBLE SUMP PUMP LOCATED SOUTH OF ELECTRICAL ROOM M-2. ROUTE BRANCH CIRCUIT THROUGH FOAM ROOM M-1 AND FOLLOW THE SUMP PUMP CONTROLS CONDUIT PATH OUT OF THE BUILDING. REFER TO DRAWING CS101 FOR CONTINUATION OF CONDUIT DUCTBANK SYSTEM TO THE SUBMERSIBLE SUMP PUMP LOCATION. THE SUMP PIT IS CLASSIFIED AS A CLASS 1, DIVISION 1 HAZARDOUS LOCATION. PROVIDE INSTALLATION AT SUMP PER NFPA 70, ARTICLE 501.
- 9 GROUNDING SHOWN FOR REFERENCE ONLY.
- 10 NOT USED.

CAUTION: IF THIS PLAN IS A REDUCTION, GRAPHIC SCALE MUST BE USED.
0 2' 4' 6' 8'
1/4" = 1'-0"

KEY PLAN

A	B	C
D	E	F

FILE NAME: C:\BA\18793\02 BIM-CADD\2.1 Cadd Files\1372146_E-401.dwg LAYOUT NAME: Area A PLOTTED: Wednesday, June 01, 2016 - 9:16am USER: liberry

DATE	6/1/2016	DATE	5/2/2016
DESCRIPTION	SUMP PUMP POWER SUPPLY	DESCRIPTION	FINAL SUBMISSION
BY	1	BY	1

the PROTECTION ENGINEERING GROUP
14585 Avon Parkway, Suite 150 703-488-9991
Charlottesville, Virginia 20151 fax: 703-488-9994
www.PEGroup-nc.com

APPROVED: _____
FOR COMMANDER NAVFAC
ACTIVITY
SATISFACTORY TO:
DES: KSD | DRW: ASZ | CHK: RPP
PM/DM: KPL/IAS
BRANCH MANAGER
CHIEF ENGR/ARCH: Mark J. Airaghi, PE
FIRE PROTECTION

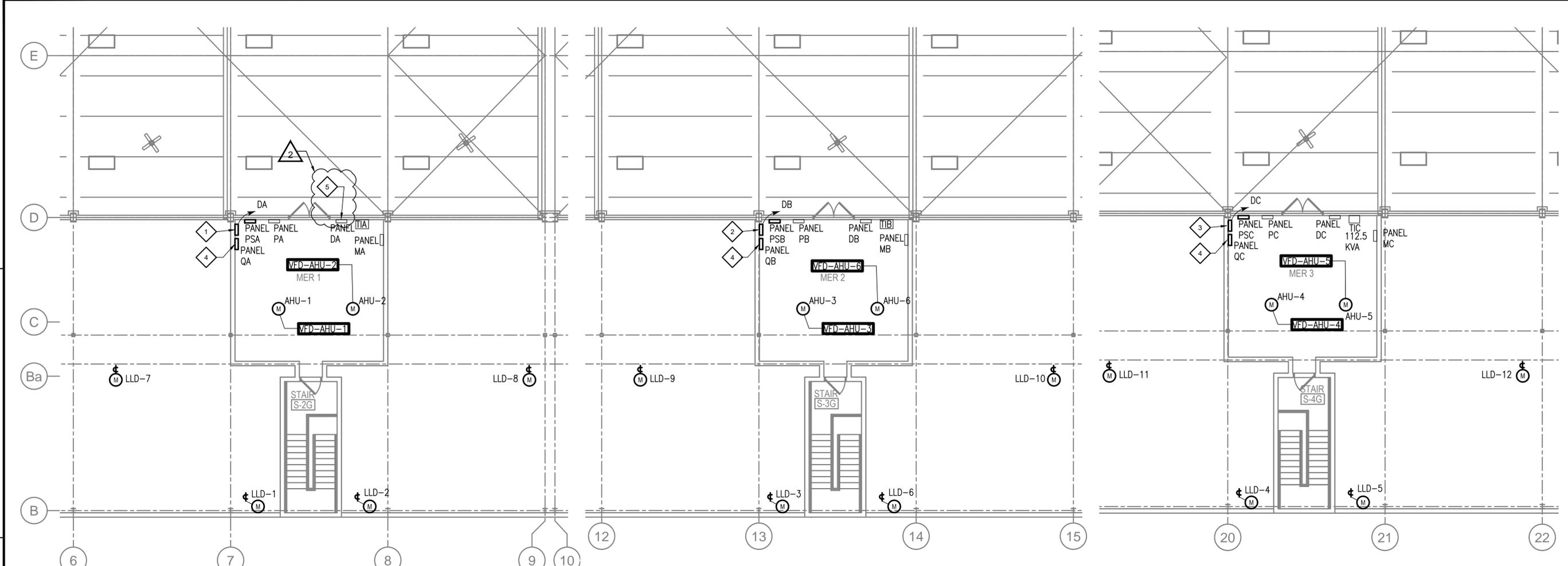
DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND - MID-ATLANTIC
HAMPDEN ROADS Bldg
VIRGINIA BEACH, VIRGINIA
NAVAL AIR STATION OCEANA
VIRGINIA BEACH, VIRGINIA

HANGAR 111 FIRE PROTECTION AND STRUCTURAL REPAIRS

ENLARGED PLAN - 1st FLOOR ELECTRICAL

SCALE: AS SHOWN
PROJECT NO.: 1372146
CONSTR. CONTR. NO.
NAVFAC DRAWING NO. 12716386
SHEET 164 OF 170
E-401
DRAWING REVISION: 10 MAY 2014

FILE NAME: C:\BA\18793\02 BIM-CADD\2.1 Cadd Files\1372146_E-402.dwg LAYOUT NAME: Aero C PLOTTED: Wednesday, June 01, 2016 - 9:16am USER: liberry



B1 ENLARGED PLAN - MER 1 NEW ELECTRICAL WORK
SCALE: 1/8" = 1'-0"

B2 ENLARGED PLAN - MER 2 NEW ELECTRICAL WORK
SCALE: 1/8" = 1'-0"

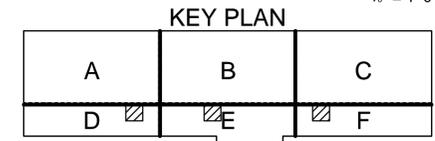
B4 ENLARGED PLAN - MER 3 NEW ELECTRICAL WORK
SCALE: 1/8" = 1'-0"



KEYNOTES

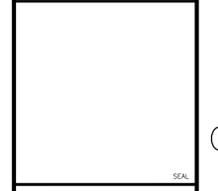
- 1 PROVIDE ONE DEDICATED 20A CIRCUIT FROM PANEL DA TO FIRE ALARM SYSTEM NOTIFICATION APPLIANCE BOOSTER PANELS (1-120V CIRCUIT FOR 4 TOTAL BOOSTER PANELS). PROVIDE 20A-1P CIRCUIT BREAKER IN PANEL DA TO MATCH PANEL CHARACTERISTICS (GE. TYPE Q 120/208V, 3-PH, 4-W). PROVIDE TERMINATIONS AT BOOSTER PANEL. REFER TO FIRE ALARM DRAWINGS FOR ADDITIONAL INFORMATION.
- 2 PROVIDE ONE DEDICATED 20A CIRCUIT FROM PANEL DB TO FIRE ALARM SYSTEM NOTIFICATION APPLIANCE BOOSTER PANELS (1-120V CIRCUIT FOR 4 TOTAL BOOSTER PANELS). PROVIDE 20A-1P CIRCUIT BREAKER IN PANEL DB TO MATCH PANEL CHARACTERISTICS (GE. TYPE Q 120/208V, 3-PH, 4-W). PROVIDE TERMINATIONS AT BOOSTER PANEL. REFER TO FIRE ALARM DRAWINGS FOR ADDITIONAL INFORMATION.
- 3 PROVIDE ONE DEDICATED 20A CIRCUIT FROM PANEL DC TO FIRE ALARM SYSTEM NOTIFICATION APPLIANCE BOOSTER PANELS (1-120V CIRCUIT FOR 4 TOTAL BOOSTER PANELS). PROVIDE 20A-1P CIRCUIT BREAKER IN PANEL DC TO MATCH PANEL CHARACTERISTICS (GE. TYPE Q 120/208V, 3-PH, 4-W). PROVIDE TERMINATIONS AT BOOSTER PANEL. REFER TO FIRE ALARM DRAWINGS FOR ADDITIONAL INFORMATION.
- 4 DO NOT ROUTE Q PANEL SOURCE FEEDER OR BRANCH CIRCUIT CONDUITS OUT OF PLAN NORTH SIDE (TO RIGHT OF Q PANEL). THIS SPACE IS RESERVED FOR FIRE ALARM SYSTEM BOOSTER PANELS. REFER TO FIRE ALARM DRAWINGS FOR ADDITIONAL INFORMATION.
- 5 PROVIDE A 20A-1P CIRCUIT BREAKER IN PANEL DA TO SERVE THE ENVIRONMENTAL PANEL LOCATED IN THE HANGAR BAY ON DRAWING E-101. PROVIDE CIRCUIT BREAKER TO MATCH PANEL DA CHARACTERISTICS (GE. TYPE Q 120/208V, 3-PH, 4-W)

CAUTION: IF THIS PLAN IS A REDUCTION, GRAPHIC SCALE MUST BE USED.
0 4' 8' 12' 16'
1/8" = 1'-0"



APPROVED:	SEAL:
FOR COMMANDER NAVFAC	
ACTIVITY:	
SATISFACTORY TO:	
DES: KSD DRW: ASC CHK: RPP	
PA/DM: KPL/IAS	
BRANCH MANAGER:	
CHIEF ENGR/ARCH: Mark J. Airaghi, PE	
FIRE PROTECTION:	
DEPARTMENT OF THE NAVY	
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HAMPSON ROADS IPT	
NAVAL AIR STATION OCEANA	
VIRGINIA BEACH, VIRGINIA	
HANGAR 111 FIRE PROTECTION AND STRUCTURAL REPAIRS	
ENLARGED PLAN - ELECTRICAL RM - ELECTRICAL	
SCALE: AS SHOWN	
EPROJECT NO.: 1372146	
CONSTR. CONTR. NO.:	
NAVFAC DRAWING NO. 12716387	
SHEET 165 OF 170	
E-402	
DRAWING REVISION: 10 MAY 2014	

REV	DATE	DESCRIPTION
1	5/2/2016	FINAL SUBMISSION
2	6/1/2016	ENVIRONMENTAL PANEL POWER



the PROTECTION ENGINEERING GROUP
14555 Avon Parkway, Suite 150
Charlottesville, Virginia 22901
www.PEGroup-nc.com