Department of Community Affairs
Construction Project Review
Project No. 5018-17
Amended Electrical Release
Electrical
Richard Butterfield
Released: 07/09/18
N.J.S.A. 52:27D-119 ET SEQ., AS AMENDED

CONTACTOR TABLE

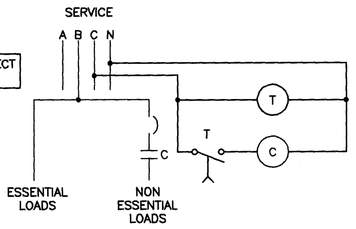
BUILDING NO. KEYPLAN	BUILDING NAME	SERVICE	CONTACTOR * EXISTING	CONTACTOR * AMPS
	EMCF			
EM1	NORTH HALL	1600A	Y	800
EM2	SOUTH HALL	1600A	Y	800
~~EM3~~	~~VISITOR~~	~~400A~~	~~N~~	~~400A~~
~~EM4~~	~~STOWE~~	~~800A~~	~~N~~	~~800A~~
~~EM5~~	~~HILLCREST~~	~~1200A~~	~~N~~	~~1200A~~
~~EM6~~	~~COMMISSARY~~	~~800A~~	~~N~~	~~800A~~
~~EM7~~	~~MEDICAL~~	~~350A~~	~~N~~	~~350A~~
~~EM8~~	~~COTTAGE "C"~~	~~225A~~	~~N~~	~~225A~~
EM9	FOOD SERVICE	1600A	Y	800
~~EM10~~	~~THOMPSON BUILDING~~	~~1600A~~	~~N~~	~~800~~
	HDC			
~~H1~~	~~HDC~~	~~400A~~	~~N~~	~~400A~~
~~H2~~	~~HDC~~	~~400A~~	~~N~~	~~400A~~
~~H3~~	~~HDC APARTMENTS~~	~~400A~~	~~N~~	~~400A~~
H6 THRU H23	COTTAGES	400A	Y	225

* CONTACTOR Y= EXISITNG CONTACTOR
SEE DETAIL 1/E-3
~~N= NEW CONTACTOR SEE DETAIL 2/E-3~~

REMOVED FROM PROJECT SEE DRAWING E-3A.

SHEET NOTES:

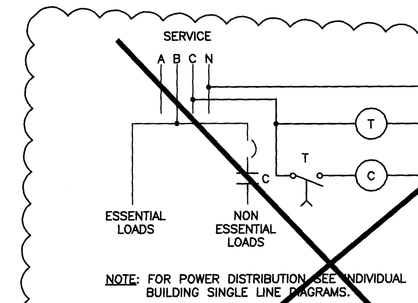
1. PROVIDE NEW ~~CONTACTOR AND~~ TIME DELAY RELAYS IN NEMA 12 ENCLOSURES.TIME DELAY RELAYS SHALL BE POWER TRIGGERED ON DELAY, ADJUSTABLE 30 SECONDS TO 30 MINUTES, DPDT RELAY CONTACTS AND COIL VOLTAGE COORDINATED WITH THE POWER SOURCE; MANUFACTURED BY EATON, SCHNEIDER ELECTRIC, SIEMENS OR APPROVED EQUAL.
   ~~CONTACTORS SHALL BE THREE POLES, AMPERAGE RATING TO SHOWN ON DRAWINGS, COIL VOLTAGE COORDINATED WITH THE POWER SOURCE; MANUFACTURED BY EATON, SCHNEIDER ELECTRIC, SIEMENS OR APPROVED EQUAL.~~
   REMOVED FROM PROJECT SEE DRAWING E-3A.
2. COMMUNICATION CABLE ON MESSENGER FOR REMOTE ANNUNCIATORS IN THOMPSON BUILDING. USE FOR SUPPORTS EXISTING POLES FOR MEDIUM VOLTAGE LINES TO HDC. RUN AERIAL CABLE TO A NEW WEATHER HEAD ON THE BUILDING REAR WALL, THEN PENETRATE TO A PLACE ABOVE INTERIOR CEILING. CONTINUE ABOVE THE CEILING IN 1-1/2 INCH CONDUIT, THEN DROP TO THE ANNUNCIATOR LOCATION IN THE COMMAND ROOM AT A LOCATION INDICATED BY THE AGENCY.
3. COMMUNICATION CABLE ON MESSENGER FOR HDC REMOTE ANNUNCIATORS AND INTERFACE WITH HDC JOHNSON CONTROLS BUILDING MANAGEMENT SYSTEM (BMS). USE FOR SUPPORTS EXISTING POLES FOR MEDIUM VOLTAGE LINES TO HDC. RUN AERIAL CABLE TO THE LAST POLE ON HDC SITE, THEN UNDERGROUND IN DIRECTLY BURIED CONDUIT TO THE HDC FACILITIES OFFICE BUILDING, UP THE BUILDING WALL, THEN PENETRATE TO A PLACE UNDER THE CEILING. CONTINUE IN 1-1/2 INCH CONDUIT, THEN DROP TO THE EXISTING BMS NODE IN THE MECHANICAL ROOM. PROVIDE IN THE HOSPITAL BUILDING H1 NEW GENERATOR REMOTE ANNUNCIATORS IN THE NURSE OFFICE. PROVIDE FROM EXISTING BMS NODE IN HOSPITAL BUILDING H1 ALL SOFTWARE AND HARDWARE, INCLUDING A CONNECTING CABLE TO INTERFACE AND SERVE THE NEW ANNUNCIATORS.
4. ALTERNATE BID NO.1. PROVIDE FOR HDC BUILDINGS ONLY BMS SOFTWARE SIGNALS IN LIEU OF HARDWARE TIME DELAY RELAYS INDICATED IN SHEET NOTE 1. INTERFACE WITH GENERATOR PARALLELING COMPLETION SIGNAL AS DESCRIBED IN SPECIFICATION SECTION 260913, SEQUENCE OF OPERATION. CONNECT BMS DRY CONTACT OUTPUT TO INDIVIDUAL HDC BUILDING CONTACTORS FROM EACH HDC BUILDING BMS NODE. ASSUME AN AVERAGE OF 100 FT OF CABLE AT EACH LOCATION.



REMOVED FROM PROJECT SEE DRAWING E-3A.

1 / E-3 TYPICAL BUILDING W/ CONTACTOR FOR NON ESSENTIAL LOADS – 26 LOCATIONS

SCALE: NO SCALE
APPLIES TO BUILDINGS:
EDNA MAHAN CORRECTIONAL FACILITY: EM1, EM2, EM9, EM10. SEE SHEET NOTE 1. PROVIDE NEW TIME DELAY RELAY T.
HUNTERDON DEVELOPMENTAL CENTER: ~~H4 THROUGH H14 AND~~ H6 THROUGH H23. SEE SHEET NOTES #1 AND #4. PROVIDE NEW TIME DELAY RELAY T FOR BASE BID AND BMS CONTROLS FOR ALTERNATE BID.

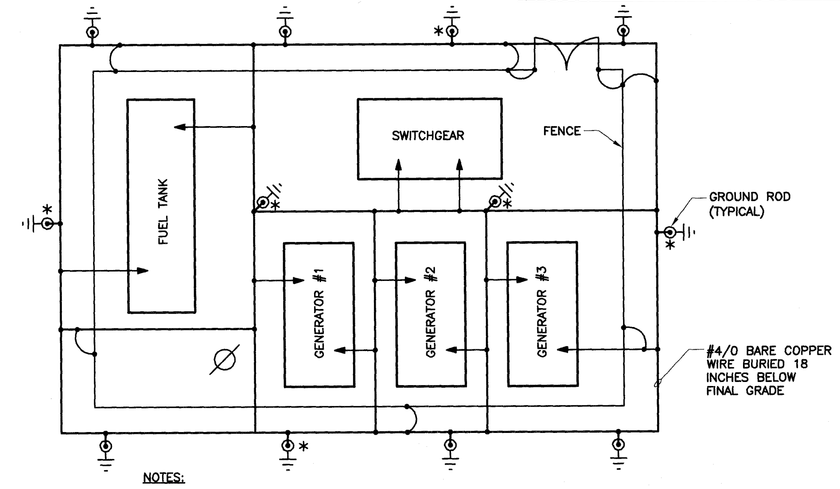


NOTE: FOR POWER DISTRIBUTION SEE INDIVIDUAL BUILDING SINGLE LINE DIAGRAMS.

2 / E-3 TYPICAL NEW CONTACTOR FOR NON ESSENTIAL LOADS – 6 LOCATIONS

SCALE: NO SCALE
APPLIES TO BUILDINGS:
EDNA MAHAN CORRECTIONAL FACILITY: EM3, EM4, EM5, EM6, EM7, EM8.
PROVIDE NEW CONTACTOR AND NEW TIME DELAY RELAY. FOR CONTACTOR RATING SEE INDIVIDUAL BUILDING PARTIAL SINGLE LINE DIAGRAMS. SEE SHEET NOTES #1.

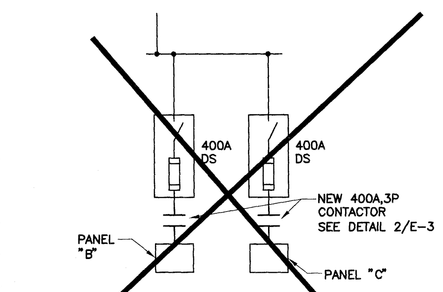
REMOVED FROM PROJECT SEE DRAWING E-3A.



NOTES:
1. ✱ INDICATES TEST WELL.
2. ACTUAL DIMENSIONS TO BE DETERMINED BASED ON FINAL EQUIPMENT LAYOUT.

8 / E-3 GENERATING PLANT GROUNDING

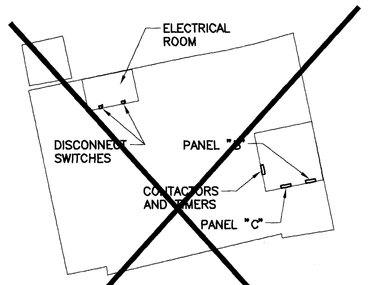
SCALE: NO SCALE



3 / E-3 VISITOR BUILDING (EM3) PARTIAL SINGLE LINE DIAGRAM

SCALE: NO SCALE

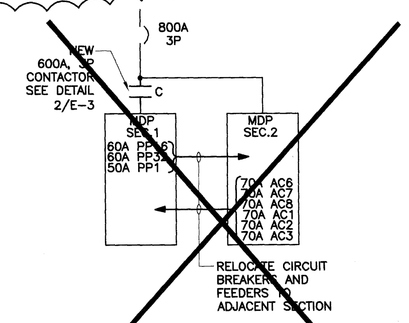
REMOVED FROM PROJECT SEE DRAWING E-3A.



3A / E-3 VISITOR BUILDING (EM3) KEYPLAN

SCALE: NO SCALE

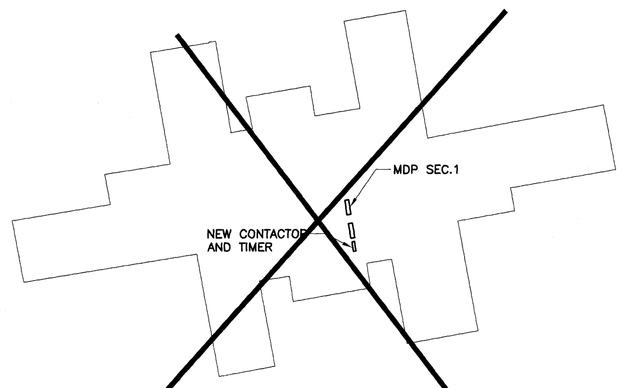
REMOVED FROM PROJECT SEE DRAWING E-3A.



4 / E-3 STOWE II BUILDING (EM4) PARTIAL SINGLE LINE DIAGRAM

SCALE: NO SCALE

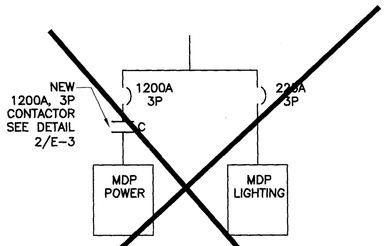
REMOVED FROM PROJECT SEE DRAWING E-3A.



4A / E-3 STOWE II BUILDING (EM4) KEYPLAN

SCALE: NO SCALE

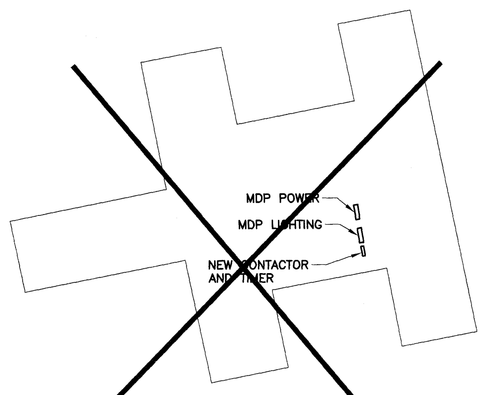
REMOVED FROM PROJECT SEE DRAWING E-3A.



5 / E-3 HILLCREST BUILDING (EM5) PARTIAL SINGLE LINE DIAGRAM

SCALE: NO SCALE

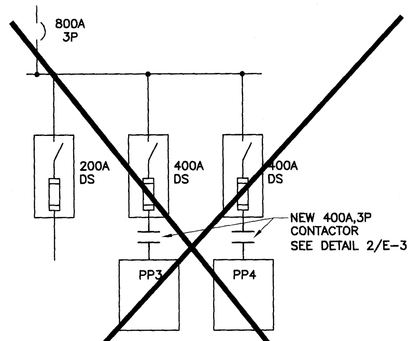
REMOVED FROM PROJECT SEE DRAWING E-3A.



5A / E-3 HILLCREST BUILDING (EM5) KEY PLAN

SCALE: NO SCALE

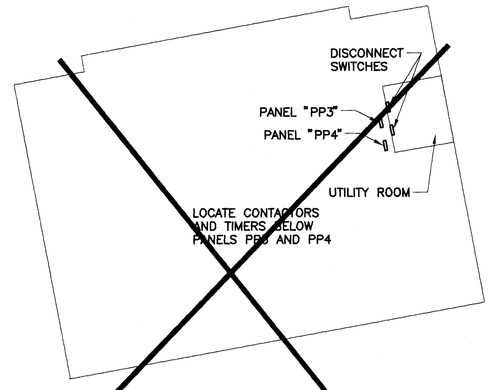
REMOVED FROM PROJECT SEE DRAWING E-3A.



6 / E-3 COMMISSARY BUILDING (EM6) PARTIAL SINGLE LINE DIAGRAM

SCALE: NO SCALE

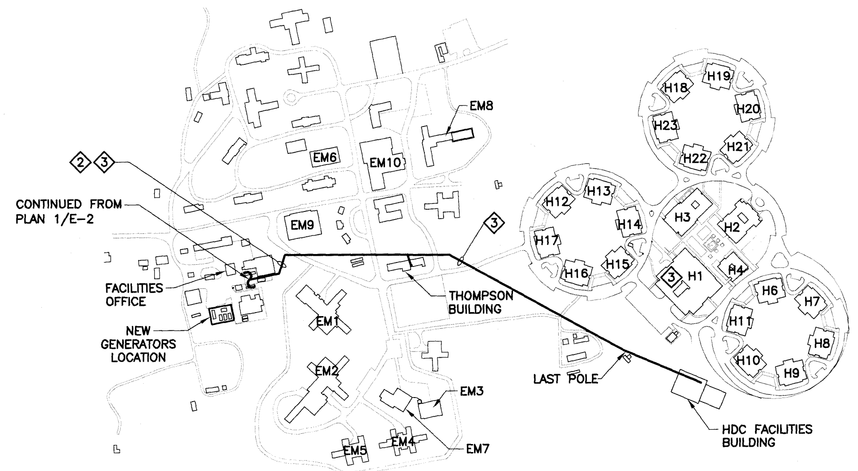
REMOVED FROM PROJECT SEE DRAWING E-3A.



6A / E-3 COMMISSARY BUILDING (EM6) KEYPLAN

SCALE: NO SCALE

REMOVED FROM PROJECT SEE DRAWING E-3A.

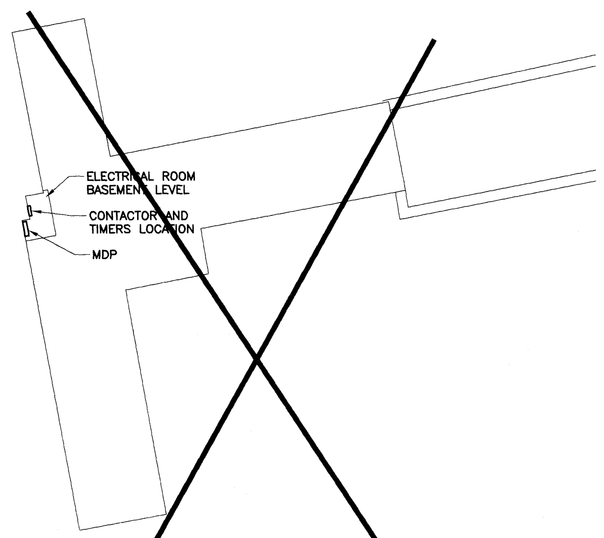


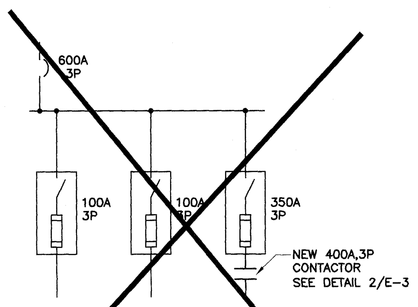
NOTE:

FOR BIDDING PURPOSES, ASSUME THE FOLLOWING DISTANCES:
1. AERIAL LINE FROM POLE AT CORNER OF SHED ON PLAN 1/E-2 TO THOMPSON BUILDING: 1,000 FT.
2. LINE INSIDE THOMPSON BUILDING: 100 FT.
3. AERIAL LINE FROM POLE AT CORNER OF SHED ON PLAN 1/E-2 TO LAST POLE ON HDC SITE: 2,150 FT.
4. UNDERGROUND LINE FROM LAST POLE ON HDC SITE TO HDC FACILITIES BUILDING: 300 FT.
5. LINE INSIDE HDC FACILITIES BUILDING: 200 FT.

9 / E-3 KEY PLAN

SCALE: 1" = 400'-0"

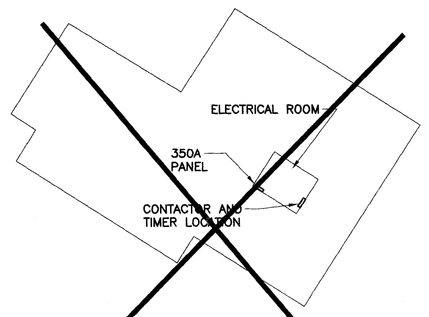




7 / E-3 MEDICAL BUILDING (EM7) PARTIAL SINGLE LINE DIAGRAM

SCALE: NO SCALE

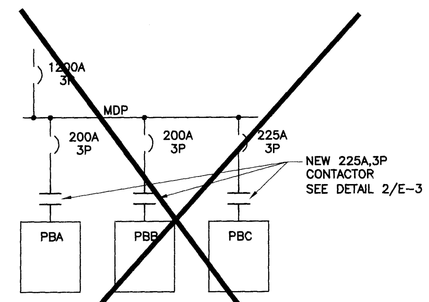
REMOVED FROM PROJECT SEE DRAWING E-3A.



7A / E-3 MEDICAL BUILDING (EM7) KEYPLAN

SCALE: NO SCALE

REMOVED FROM PROJECT SEE DRAWING E-3A.



8 / E-3 COTTAGE "C" BUILDING (EM8) PARTIAL SINGLE LINE DIAGRAM

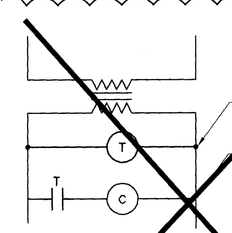
SCALE: NO SCALE

REMOVED FROM PROJECT SEE DRAWING E-3A.

8A / E-3 COTTAGE "C" BUILDING (EM8) KEYPLAN

SCALE: NO SCALE

REMOVED FROM PROJECT SEE DRAWING E-3A.



NOTE: ONE TIMER EACH FOR CHILLERS #1 AND #2

10 / E-3 HDC HOSPITAL (H1) CHILLER CONTROL DETAIL

SCALE: NO SCALE

REMOVED FROM PROJECT SEE DRAWING E-3A.

REV	DATE	DESCRIPTION	APP
C	06/08/2018	DETAILS REMOVED FROM DRAWING	DRH
B	03/15/2017	ISSUE FOR BIDS	AN
A	01/13/2017	ISSUE FOR DCA HEALTHCARE REVIEW	-

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SEAL

SHEET TITLE
ELECTRICAL DETAILS

PROJECT
DPMC A1209-00
EMERGENCY GENERATOR REPLACEMENT
EMCF & HDC

SEAL

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ENGINEER: MICHAEL S. GILLAN, PE NO. 24GE04470000 DATE: 7/11/18

DRAWN BY	DATE	JOB NO.	SHEET
JTM	01-13-2017	2015-247	E-3
CHECKED BY: AN	SCALE: NONE	COMM. NO.	