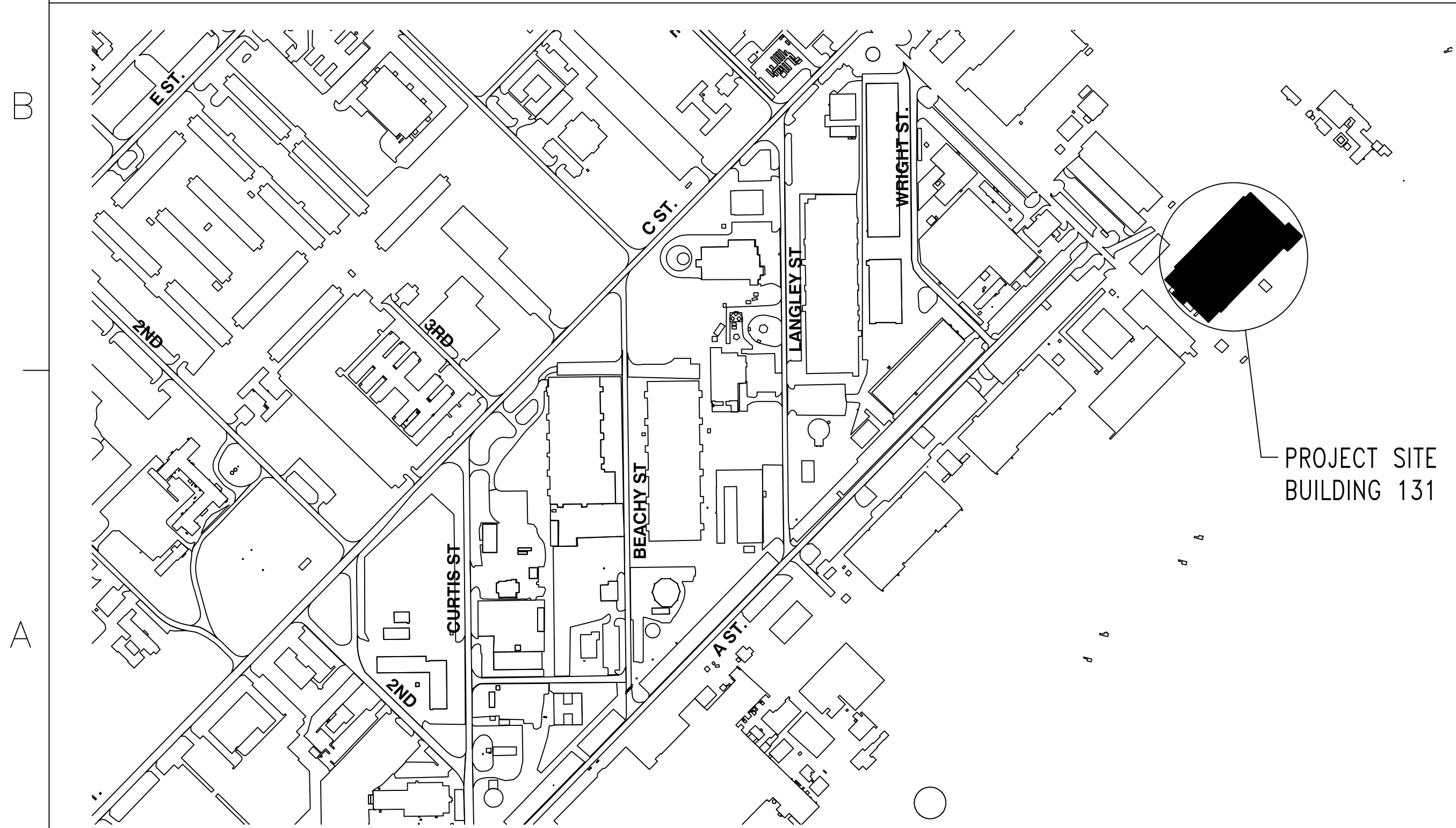


MCAS CHERRY POINT - STATION MAP



LOCATION PLAN

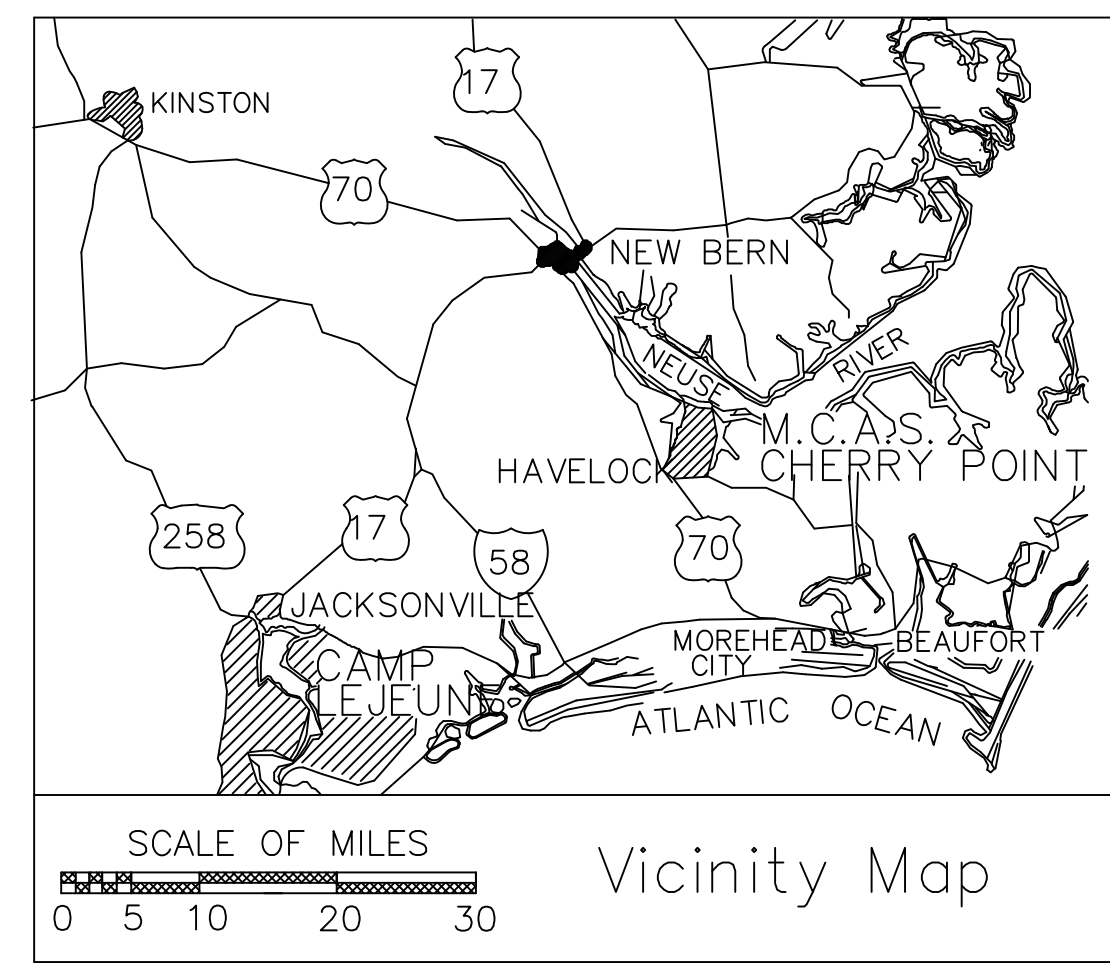
FACILITY ENERGY REPAIRS,
 BUILDING 131
 CP12024M
 WR5899390
 MARINE CORPS AIR STATION
 CHERRY POINT, NORTH CAROLINA

INDEX OF DRAWINGS

SHEET NO.	NAVFAC DWG. NO.	SHEET NO.	TITLE
1 OF 9	12618719	G-001	TITLE SHEET/INDEX OF DRAWINGS
2 OF 9	12618720	E-001	ELECTRICAL LEGEND AND GENERAL NOTES
3 OF 9	12618721	E-101	ELECTRICAL LIGHTING DEMOLITION PLAN
4 OF 9	12618722	E-102	ELECTRICAL LIGHTING DEMOLITION PLAN
5 OF 9	12618723	E-103	ELECTRICAL LIGHTING NEW WORK PLAN
6 OF 9	12618724	E-104	ELECTRICAL LIGHTING NEW WORK PLAN
7 OF 9	12618725	E-501	ELECTRICAL DETAILS AND SCHEDULES
8 OF 9	12618726	E-502	ELECTRICAL DETAILS
9 OF 9	12618727	E-503	ELECTRICAL SCHEDULES

GENERAL NOTES:

- CONTRACTOR IS RESPONSIBLE FOR VISITING SITE AND VERIFYING ACTUAL CONDITIONS AND DIMENSIONS.
- DRAWINGS ARE DIAGRAMMATIC AND NOT TO BE SCALED.



CEMS ENGINEERING
 CEMS Engineering, Inc.
 3508 Iron Horse Drive
 Lenoir, NC 28656
 (P)843.875.3637
 (F)843.875.4599
 www.cemseng.com
 CEMS Project #09154
 Project Manager: R. Alvar

May 31, 2012

APPROVED
 ACTIVITY - SATISFACTORY TO
 DATE
 APPROVED
 FOR EFD FOR COMMANDER NAVFAC
 DATE
 A/E _____ EFD _____
 RRA _____ DESIGN _____
 RRA _____ DRAWN _____
 JNB _____ REVIEW _____
 QC
 CHIEF ARCH./ ENGR.
 PROJECT MANAGER _____
 FIRE PROTECTION _____
 BRANCH MANAGER _____
 DESIGN DIRECTOR _____

NAVAL FACILITIES ENGINEERING COMMAND
 MARINE CORPS AIR STATION, CHERRY POINT, N.C.
**FACILITY ENERGY REPAIRS,
 BUILDING 131**
 TITLE SHEET/INDEX OF DRAWINGS

DEPARTMENT OF THE NAVY

CODE ID. NO. 80091 SIZE D
 SCALE: AS NOTED
 FED. NO. WR5899390
 STA. PROJ. NO. CP12024M
 WORK ORD. NO.
 CONSTR. CONTR. NO.

NAVFAC DRAWING NO. 12618719
 SHEET 1 OF 9
G-001
 DRAWFORM REVISION JULY 2003

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LEGEND

- EXISTING HIGH BAY FIXTURE
- EXISTING HIGH BAY FIXTURE FED FROM NIGHT LIGHT CIRCUIT
- SURFACE MOUNT PANELBOARD
- ▣ EXISTING PUSH-BUTTON LIGHTING CONTROLS
- Ⓞ OS OCCUPANCY SENSOR, LOW VOLTAGE, SEE SHEET E-501
- Ⓟ PC AUTOMATIC DIMMING CONTROL PHOTOCCELL, LOW VOLTAGE, SEE SHEET E-501
- Ⓟ PP LIGHTING CONTROLS POWER PACK, SEE SHEET E-501
- ⊕ LIGHTING FIXTURE, SEE FIXTURE SCHEDULE
- △(##) FIXTURE SYMBOL, # DENOTES QUANTITY OF FIXTURES IF OTHER THAN ONE, SEE FIXTURE SCHEDULE

GENERAL ELECTRICAL NOTES (APPLIES TO ALL DRAWINGS):

1. ALL WORK AND MATERIALS, UNLESS NOTED OTHERWISE AS EXISTING, ON NEW WORK SHEETS ARE NEW AND SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR. MATERIALS ARE TO CONFORM TO THE STANDARDS OF THE UNDERWRITER'S LABORATORIES, INC. (U.L.) AND THE NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA). ELECTRICAL INSTALLATION SHALL CONFORM TO REQUIREMENTS OF NFPA 70, NFPA 101, NECA 1, AND REQUIREMENTS SPECIFIED HEREIN. WORK PLACE SHALL MEET REQUIREMENTS OF NFPA 70E.
2. FOR CLARITY, WIRING AND CONDUITS ARE NOT SHOWN. THE ARRANGEMENT AND ROUTING OF THE CIRCUITS WILL BE AT THE CONTRACTORS DISCRETION IN ACCORDANCE WITH GENERALLY ACCEPTED GOOD PRACTICE FOR ELECTRICAL WORK AND NFPA 70 REQUIREMENTS.
3. CONTRACTOR SHALL CONSIDER VOLTAGE DROP WHEN DETERMINING THE EXACT ROUTING OF BRANCH CIRCUIT AND FEEDER WIRING. ADJUST WIRE AND CONDUIT SIZE AS NECESSARY TO PREVENT A VOLTAGE DROP EXCEEDING 3% AT THE FURTHEST DEVICE LOCATION.
4. ELECTRICAL DRAWING IS GENERALLY DIAGRAMMATIC. COORDINATE WORK WITH ALL TRADES PRIOR TO START OF CONSTRUCTION. BRANCH CIRCUIT CONDUIT ROUTING SHALL BE COORDINATED IN THE FIELD BY THE CONTRACTOR TO MEET SPECIFICATIONS, CODE REQUIREMENTS, AND TO PROVIDE A NEAT, WORKMAN LIKE, FULLY OPERATIONAL SYSTEM.
5. PROVIDE A TYPED SCHEDULE IN PANELBOARDS CLEARLY DESCRIBING THE LOCATION AND TYPE OF LOAD BEING SERVED FOR ALL CIRCUITS.
6. CONTRACTOR IS TO BE AWARE OF ALL RULES, REGULATIONS, AND CODES REQUIRED FOR SUCCESSFUL COMPLETION OF CONSTRUCTION.
7. CONTRACTOR TO VERIFY EXISTING CONDITIONS PRIOR TO START OF WORK.
8. VERIFY ALL EQUIPMENT CHARACTERISTICS AND MOUNTING REQUIREMENTS PRIOR TO INSTALLATION. PROVIDE PROPER MOUNTING ACCESSORIES, TRIMS, ETC. TO SUIT THE SYSTEM.
9. ONLY EXISTING ELECTRICAL SYSTEM DIRECTLY AFFECTING THIS CONTRACT IS SHOWN.
10. CONTRACTOR TO PROVIDE A WORK PLAN WITH SCHEDULED OUTAGES FOR GOVERNMENT APPROVAL BEFORE STARTING ANY MAIN FEEDER AND PANEL WORK.

DATE	DESCRIPTION	BY

CEMS
ENGINEERING
CEMS Engineering, Inc.
3509 Iron Horse Drive
Ladson, SC 29456
(P)843.875.3637
(F)843.875.4599
www.cemseng.com
CEMS Project #09154J
Project Manager: R. Alvar

May 31, 2012 SEAL

APPROVED

ACTIVITY - SATISFACTORY TO

DATE

APPROVED

FOR EFD FOR COMMANDER NAVFAC

DATE

A/E RRA DESIGN EFD

RRA DRAWN

JNB REVIEW

QC

CHIEF ARCH./ ENGR.

PROJECT MANAGER

FIRE PROTECTION

BRANCH MANAGER

DESIGN DIRECTOR

DEPARTMENT OF THE NAVY
MARINE CORPS AIR STATION, CHERRY POINT, N.C.
NAVAL FACILITIES ENGINEERING COMMAND
**FACILITY ENERGY REPAIRS,
BUILDING 131**
ELECTRICAL LEGEND AND GENERAL NOTES

CODE ID. NO. 80091	SIZE D
SCALE: NONE	
FED. NO. WR5899390	
STA. PROJ. NO. CP12024M	
WORK ORD. NO.	
CONSTR. CONTR. NO.	
NAVFAC DRAWING NO. 12618720	
SHEET 2 OF 9	
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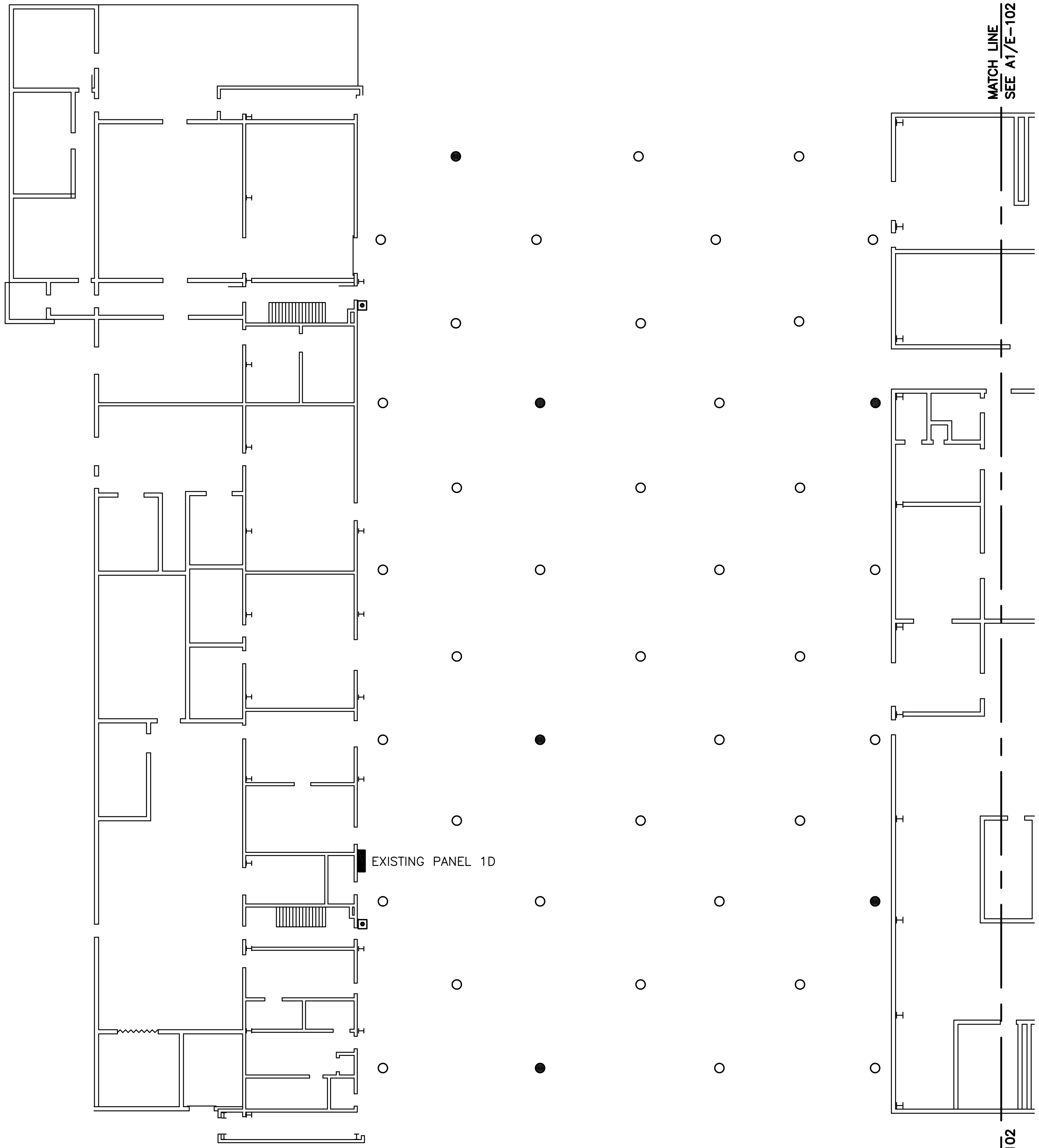
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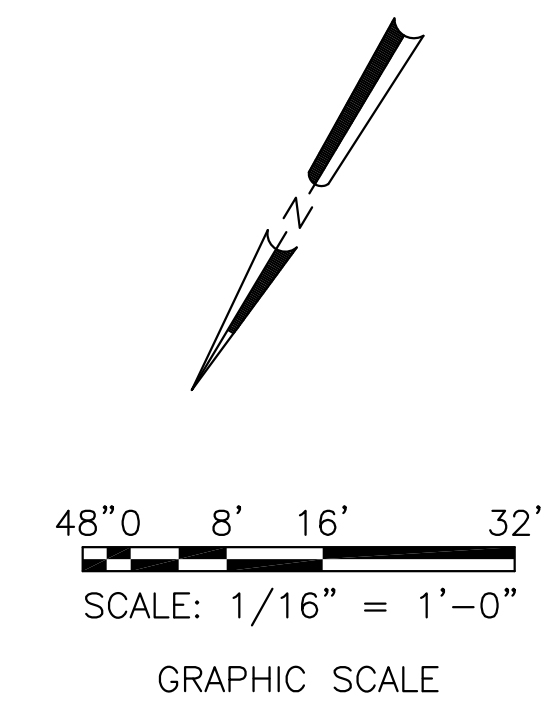
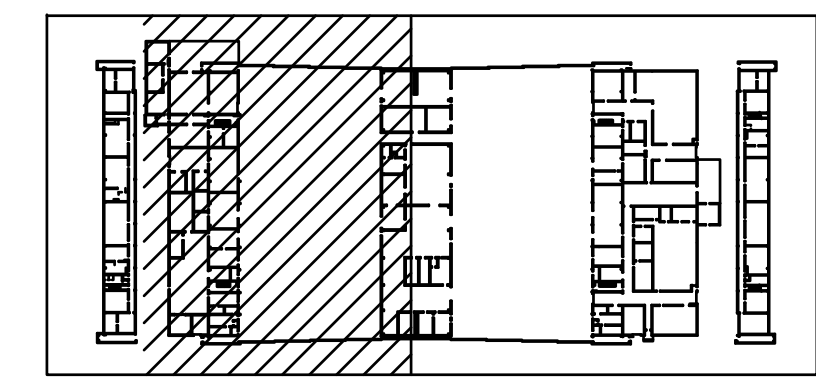
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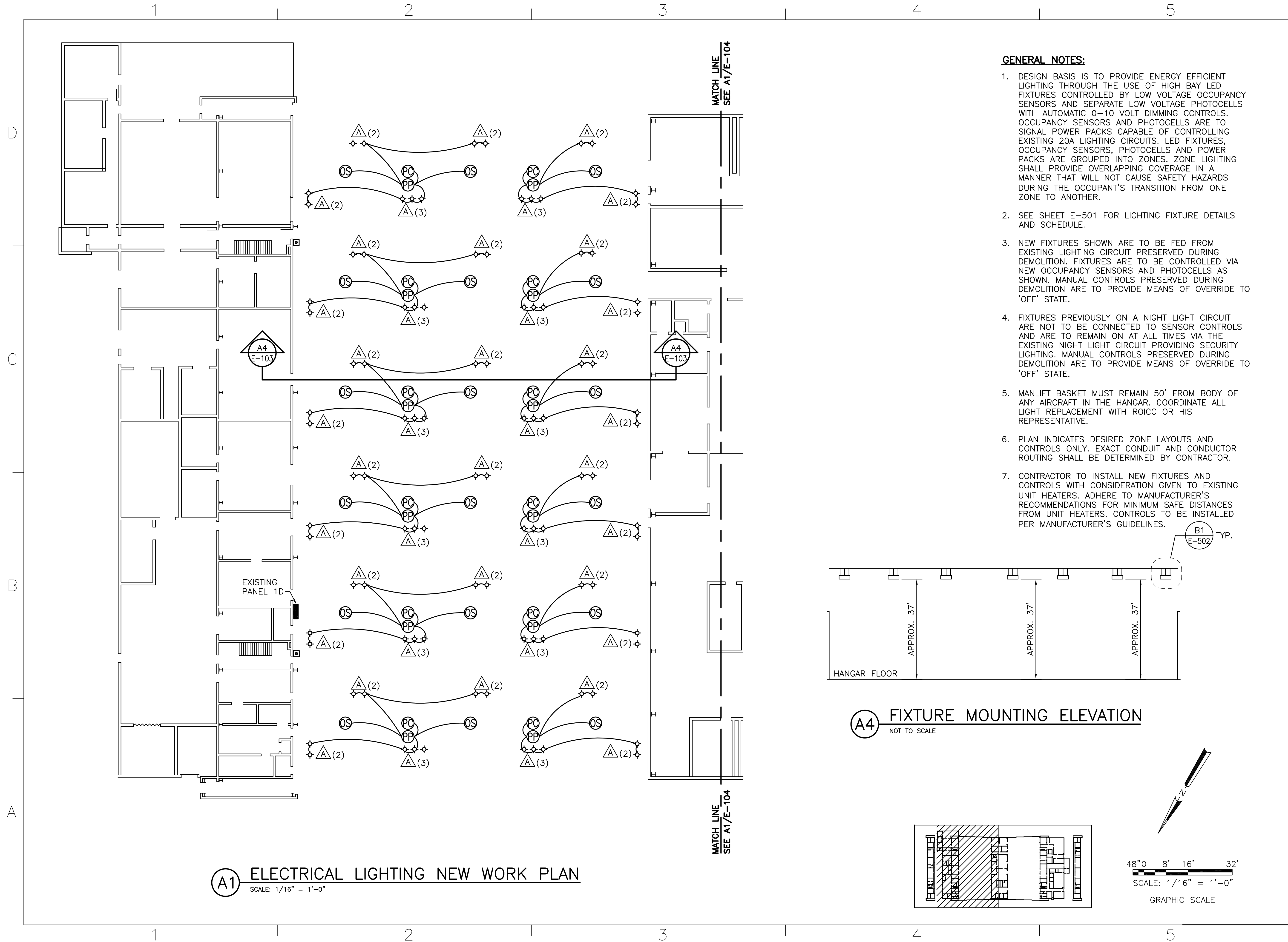


- GENERAL NOTES:**
1. REMOVE ALL EXISTING HIGH BAY LIGHTING SHOWN. PRESERVE ALL ASSOCIATED MANUAL LIGHTING CONTROLS. PRESERVE ALL ASSOCIATED CONDUIT, WIRING, AND WIRING DEVICES FOR RE-USE UNLESS OTHERWISE INDICATED. PRESERVE EXISTING LIGHTING CIRCUIT FOR RE-USE. FIXTURES FED FROM EXISTING CIRCUIT THAT ARE OUTSIDE OF AREA OF WORK ARE TO REMAIN.
 2. MANLIFT BASKET MUST REMAIN 50' FROM BODY OF ANY AIRCRAFT IN THE HANGAR. COORDINATE ALL LIGHT REPLACEMENT WITH ROICC OR HIS REPRESENTATIVE.

(A1) ELECTRICAL LIGHTING DEMOLITION PLAN
 SCALE: 1/16" = 1'-0"



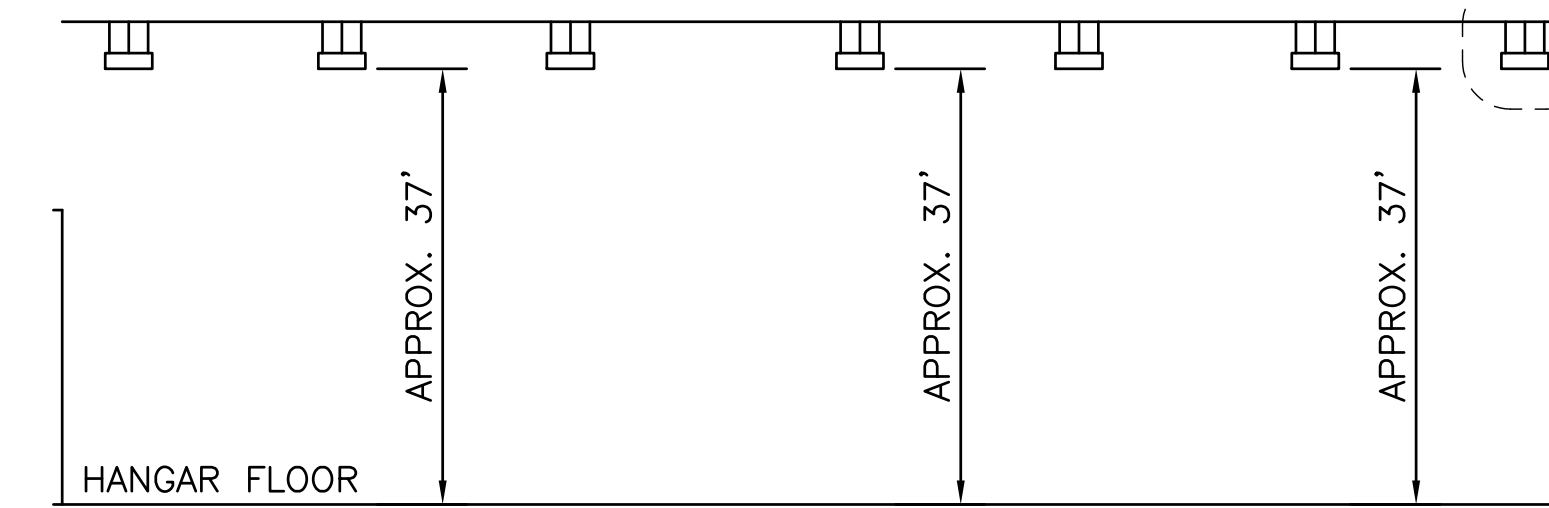
DATE	HPR
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SYMBOL	
<small>CEMS Engineering, Inc. 3509 Iron Horse Drive Ladson, SC 29456 (P)843.875.3637 (F)843.875.4509 www.cemsengineering.com CEMS Project #09154J Project Manager: R. Alvar</small>	
APPROVED	SEAL
May 31, 2012	
ACTIVITY - SATISFACTORY TO	
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FOR EFD FOR COMMANDER NAVFAC	
DATE	
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RRA	DESIGN
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JNB	REVIEW
	QC
	CHIEF ARCH./ ENGR.
PROJECT MANAGER	
FIRE PROTECTION	
BRANCH MANAGER	
DESIGN DIRECTOR	
DEPARTMENT OF THE NAVY MARINE CORPS AIR STATION, CHERRY POINT, N.C. FACILITY ENERGY REPAIRS, BUILDING 131 ELECTRICAL LIGHTING DEMOLITION PLAN	
CODE ID. NO. 80091	SIZE D
SCALE: AS NOTED	
FED. NO. WR5899390	
STA. PROJ. NO. CP12024M	
WORK ORD. NO.	
CONSTR. CONTR. NO.	
NAVFAC DRAWING NO. 12618721	
SHEET 3 OF 9	
E-101	
<small>DRAWING REVISION JULY 2003</small>	



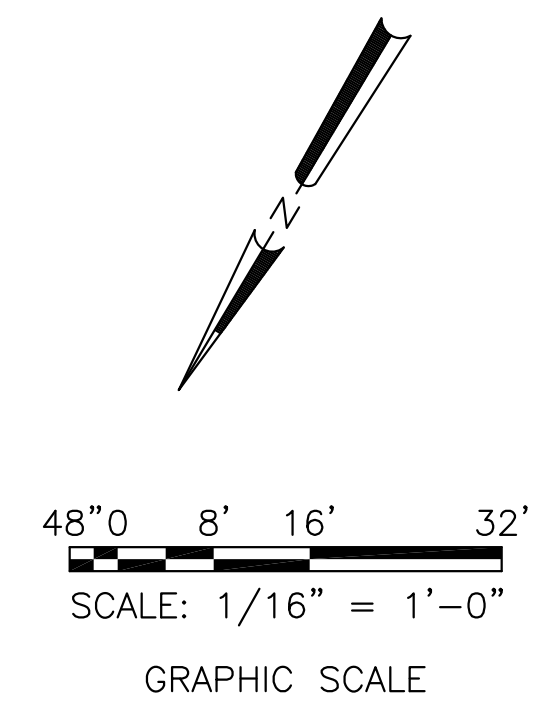
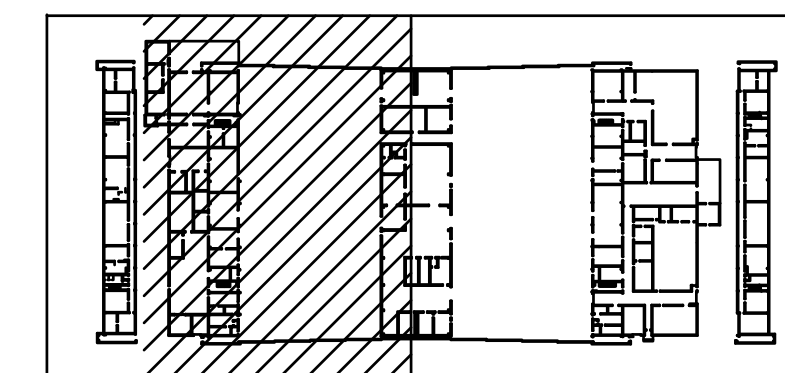
A1 ELECTRICAL LIGHTING NEW WORK PLAN
SCALE: 1/16" = 1'-0"

GENERAL NOTES:

- DESIGN BASIS IS TO PROVIDE ENERGY EFFICIENT LIGHTING THROUGH THE USE OF HIGH BAY LED FIXTURES CONTROLLED BY LOW VOLTAGE OCCUPANCY SENSORS AND SEPARATE LOW VOLTAGE PHOTOCELLS WITH AUTOMATIC 0-10 VOLT DIMMING CONTROLS. OCCUPANCY SENSORS AND PHOTOCELLS ARE TO SIGNAL POWER PACKS CAPABLE OF CONTROLLING EXISTING 20A LIGHTING CIRCUITS. LED FIXTURES, OCCUPANCY SENSORS, PHOTOCELLS AND POWER PACKS ARE GROUPED INTO ZONES. ZONE LIGHTING SHALL PROVIDE OVERLAPPING COVERAGE IN A MANNER THAT WILL NOT CAUSE SAFETY HAZARDS DURING THE OCCUPANT'S TRANSITION FROM ONE ZONE TO ANOTHER.
- SEE SHEET E-501 FOR LIGHTING FIXTURE DETAILS AND SCHEDULE.
- NEW FIXTURES SHOWN ARE TO BE FED FROM EXISTING LIGHTING CIRCUIT PRESERVED DURING DEMOLITION. FIXTURES ARE TO BE CONTROLLED VIA NEW OCCUPANCY SENSORS AND PHOTOCELLS AS SHOWN. MANUAL CONTROLS PRESERVED DURING DEMOLITION ARE TO PROVIDE MEANS OF OVERRIDE TO 'OFF' STATE.
- FIXTURES PREVIOUSLY ON A NIGHT LIGHT CIRCUIT ARE NOT TO BE CONNECTED TO SENSOR CONTROLS AND ARE TO REMAIN ON AT ALL TIMES VIA THE EXISTING NIGHT LIGHT CIRCUIT PROVIDING SECURITY LIGHTING. MANUAL CONTROLS PRESERVED DURING DEMOLITION ARE TO PROVIDE MEANS OF OVERRIDE TO 'OFF' STATE.
- MANLIFT BASKET MUST REMAIN 50' FROM BODY OF ANY AIRCRAFT IN THE HANGAR. COORDINATE ALL LIGHT REPLACEMENT WITH ROICC OR HIS REPRESENTATIVE.
- PLAN INDICATES DESIRED ZONE LAYOUTS AND CONTROLS ONLY. EXACT CONDUIT AND CONDUCTOR ROUTING SHALL BE DETERMINED BY CONTRACTOR.
- CONTRACTOR TO INSTALL NEW FIXTURES AND CONTROLS WITH CONSIDERATION GIVEN TO EXISTING UNIT HEATERS. ADHERE TO MANUFACTURER'S RECOMMENDATIONS FOR MINIMUM SAFE DISTANCES FROM UNIT HEATERS. CONTROLS TO BE INSTALLED PER MANUFACTURER'S GUIDELINES.



A4 FIXTURE MOUNTING ELEVATION
NOT TO SCALE



DATE	PPR	
DESCRIPTION		
<p align="center">CEMS ENGINEERING CEMS Engineering, Inc. 3559 Iron Horse Drive Ladson, SC 29655 (P)843.875.3637 (F)843.875.4599 www.cemsengineering.com CEMS Project #09154J Project Manager: R. Alvar</p>		
DATE	SEAL	
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ACTIVITY - SATISFACTORY TO		
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FOR EFD FOR COMMANDER NAVFAC		
DATE		
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JNB	REVIEW	
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	CHIEF ARCH/ ENGR.	
PROJECT MANAGER		
FIRE PROTECTION		
BRANCH MANAGER		
DESIGN DIRECTOR		
DEPARTMENT OF THE NAVY MARINE CORPS AIR STATION, CHERRY POINT, N.C.	FACILITY ENERGY REPAIRS, BUILDING 131 ELECTRICAL LIGHTING NEW WORK PLAN	
CODE ID. NO. 80091		SIZE D
SCALE: AS NOTED		
FED. NO. WR5899390		
STA. PROJ. NO. CP12024M		
WORK ORD. NO.		
CONSTR. CONTR. NO.		
NAVFAC DRAWING NO. 12618723		
SHEET 5 OF 9		
E-103		
DRAWN/REVISION JULY 2003		

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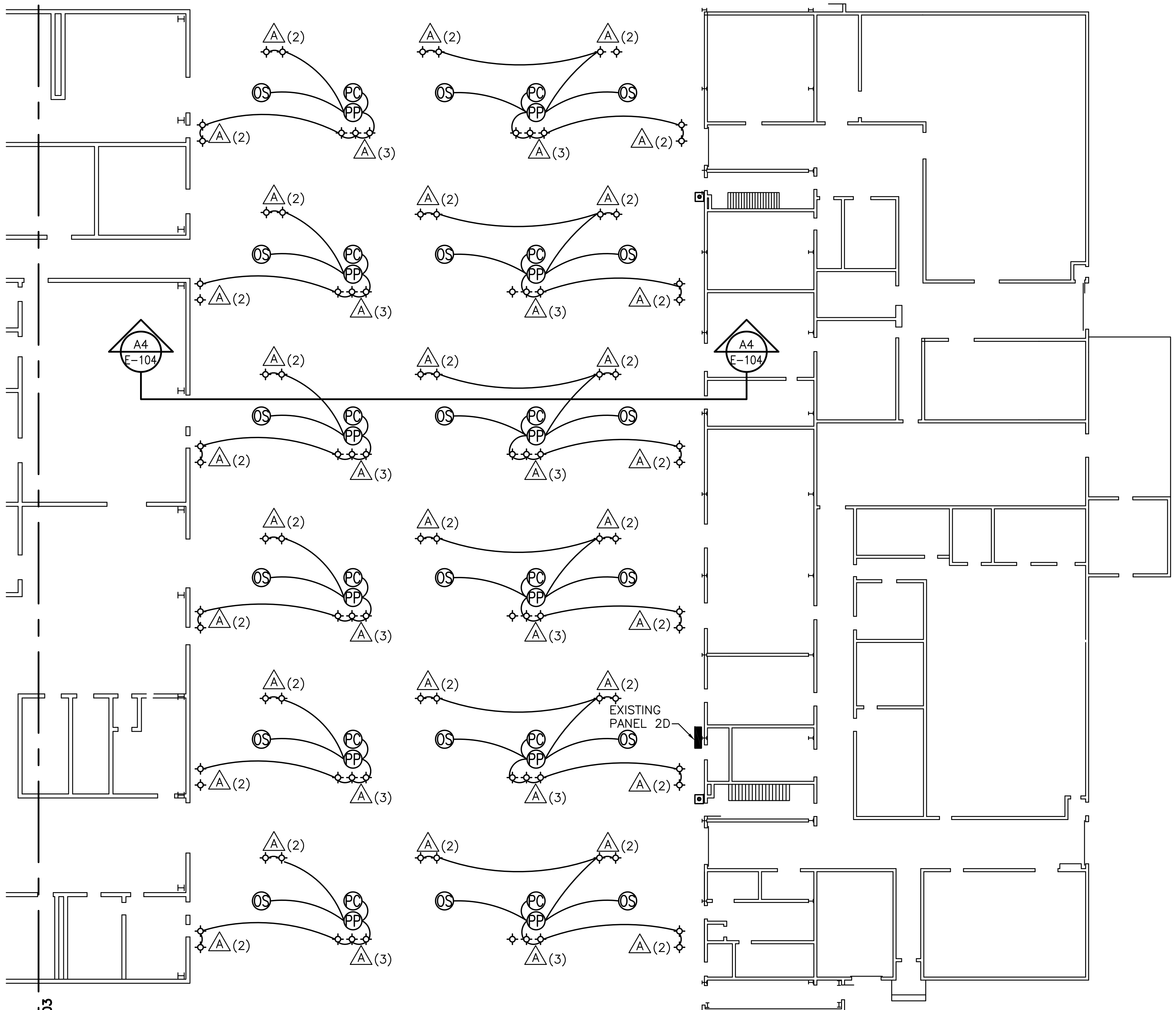
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MATCH LINE
SEE A1/E-103

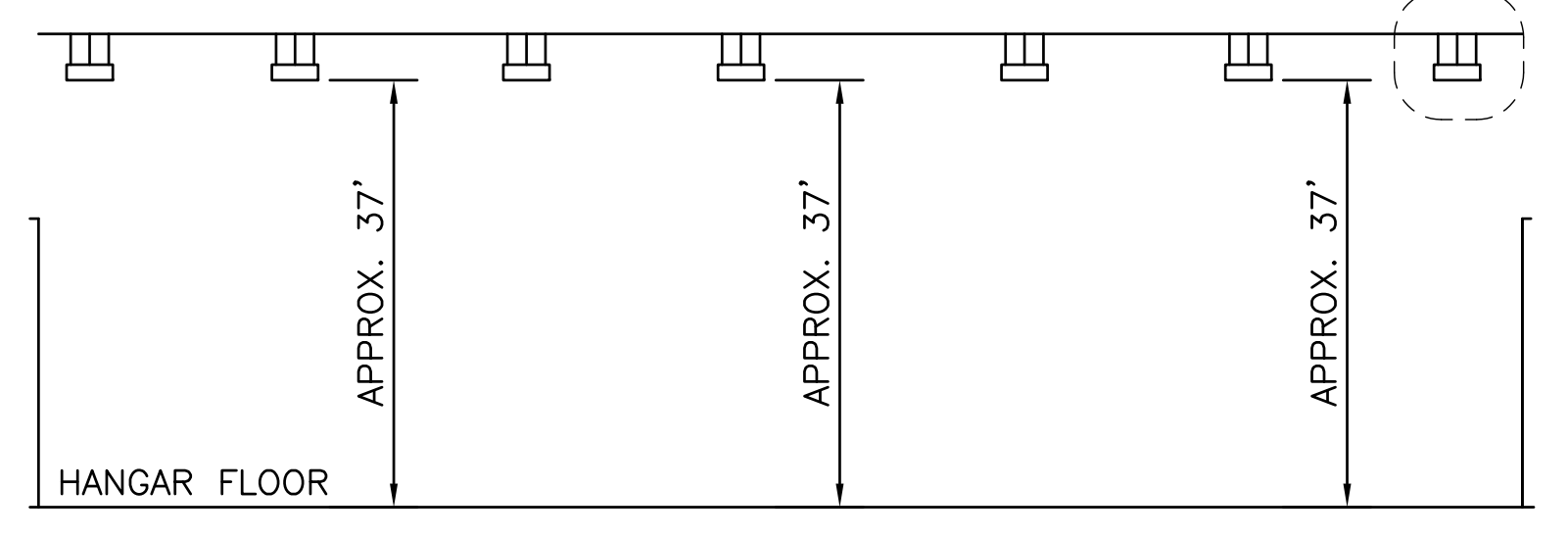


MATCH LINE
SEE A1/E-103

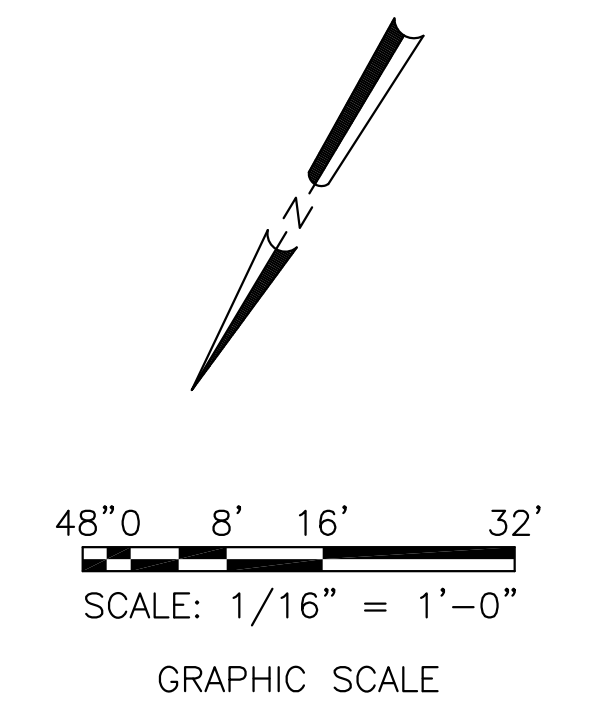
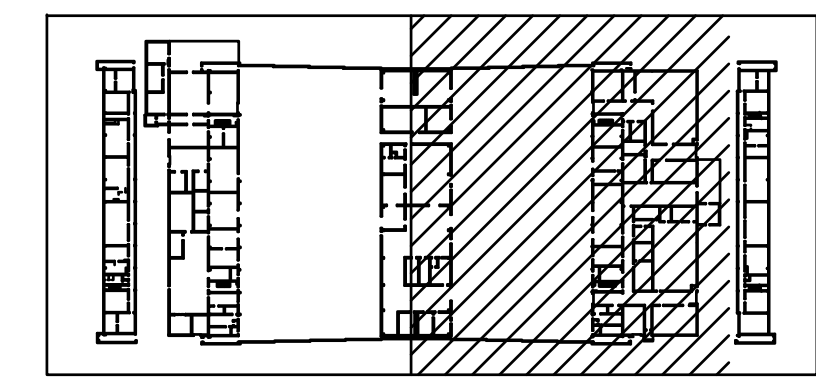
(A1) ELECTRICAL LIGHTING NEW WORK PLAN
 SCALE: 1/16" = 1'-0"

GENERAL NOTES:

1. DESIGN BASIS IS TO PROVIDE ENERGY EFFICIENT LIGHTING THROUGH THE USE OF HIGH BAY LED FIXTURES CONTROLLED BY LOW VOLTAGE OCCUPANCY SENSORS AND SEPARATE LOW VOLTAGE PHOTOCELLS WITH AUTOMATIC 0-10 VOLT DIMMING CONTROLS. OCCUPANCY SENSORS AND PHOTOCELLS ARE TO SIGNAL POWER PACKS CAPABLE OF CONTROLLING EXISTING 20A LIGHTING CIRCUITS. LED FIXTURES, OCCUPANCY SENSORS, PHOTOCELLS AND POWER PACKS ARE GROUPED INTO ZONES. ZONE LIGHTING SHALL PROVIDE OVERLAPPING COVERAGE IN A MANNER THAT WILL NOT CAUSE SAFETY HAZARDS DURING THE OCCUPANT'S TRANSITION FROM ONE ZONE TO ANOTHER.
2. SEE SHEET E-501 FOR LIGHTING FIXTURE DETAILS AND SCHEDULE.
3. NEW FIXTURES SHOWN ARE TO BE FED FROM EXISTING LIGHTING CIRCUIT PRESERVED DURING DEMOLITION. FIXTURES ARE TO BE CONTROLLED VIA NEW OCCUPANCY SENSORS AND PHOTOCELLS AS SHOWN. MANUAL CONTROLS PRESERVED DURING DEMOLITION ARE TO PROVIDE MEANS OF OVERRIDE TO 'OFF' STATE.
4. FIXTURES PREVIOUSLY ON A NIGHT LIGHT CIRCUIT ARE NOT TO BE CONNECTED TO SENSOR CONTROLS AND ARE TO REMAIN ON AT ALL TIMES VIA THE EXISTING NIGHT LIGHT CIRCUIT PROVIDING SECURITY LIGHTING. MANUAL CONTROLS PRESERVED DURING DEMOLITION ARE TO PROVIDE MEANS OF OVERRIDE TO 'OFF' STATE.
5. MANLIFT BASKET MUST REMAIN 50' FROM BODY OF ANY AIRCRAFT IN THE HANGAR. COORDINATE ALL LIGHT REPLACEMENT WITH ROICC OR HIS REPRESENTATIVE.
6. PLAN INDICATES DESIRED ZONE LAYOUTS AND CONTROLS ONLY. EXACT CONDUIT AND CONDUCTOR ROUTING SHALL BE DETERMINED BY CONTRACTOR.
7. CONTRACTOR TO INSTALL NEW FIXTURES AND CONTROLS WITH CONSIDERATION GIVEN TO EXISTING UNIT HEATERS. ADHERE TO MANUFACTURER'S RECOMMENDATIONS FOR MINIMUM SAFE DISTANCES FROM UNIT HEATERS. CONTROLS TO BE INSTALLED PER MANUFACTURER'S GUIDELINES.



(A4) FIXTURE MOUNTING ELEVATION
 NOT TO SCALE



		DATE	DPPR
CE MS ENGINEERING			
CEMS Engineering, Inc. 3558 Iron Horse Drive Ladson, SC 29456 (P)843.875.3637 (F)843.875.4599 www.cemsi.com CEMS Project #09154 Project Manager: R. Alvar			
May 31, 2012 SEAL			
APPROVED			
ACTIVITY - SATISFACTORY TO			
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JNB	REVIEW		
	QC		
	CHIEF ARCH/ ENGR.		
	PROJECT MANAGER		
	FIRE PROTECTION		
	BRANCH MANAGER		
	DESIGN DIRECTOR		
NAVAL FACILITIES ENGINEERING COMMAND MARINE CORPS AIR STATION, CHERRY POINT, N.C. FACILITY ENERGY REPAIRS, BUILDING 131 ELECTRICAL LIGHTING NEW WORK PLAN			
CODE ID. NO. 80091	SIZE	D	
SCALE:	AS NOTED		
FED. NO.	WR5899390		
STA. PROJ. NO.	CP12024M		
WORK ORD. NO.			
CONSTR. CONTR. NO.			
NAVFAC DRAWING NO.	12618724		
SHEET	6	OF	9
E-104			
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LUMINAIRE REQUIREMENTS:

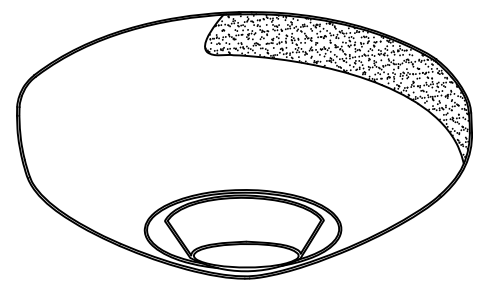
- HOUSING – POWDER COATED ALUMINUM
- FINISH – POLYESTER/EPOXY POWDER COAT GRAY RAL 7040 FOR CORROSION RESISTANCE.
- LENS – ACRYLIC UL1598 DRY LOCATION
- INTERNAL FUSING. TRANSIENT PROTECTION – 1KV LINE TO LINE, 2KV LINE TO GROUND. UNIVERSAL INPUT VOLTAGE.
- LAMPS – LED, CRI – 72, CCT – 4,300K
- CABLING – 10' POWER CORD, 10' DIMMING CABLE, SEE MANUFACTURER'S WIRING DIAGRAM

HIGH-BAY INDUSTRIAL LED FIXTURE

REVISED: APRIL 2012 LIGHTING PLATE: NL-50A

LIGHTING FIXTURE SCHEDULE					
FIXTURE SYMBOL	SKETCH NO. & TYPE	NUMBER AND TYPE OF LAMPS	VOLTAGE	MOUNTING	NOTES
⚠	NL-50A	LED	277	PENDANT	①

① PROVIDE DIMMABLE FIXTURE WITH CIRCULAR PATTERN DISTRIBUTION, 17,000 INITIAL LUMENS, 72 CRI, CCT 4,300K, NOMINAL INPUT WATTS 170 AND 100 LUMENS PER WATT. DESIGN BASIS IS DIALIGHT MODEL 'HBGNMZ'.

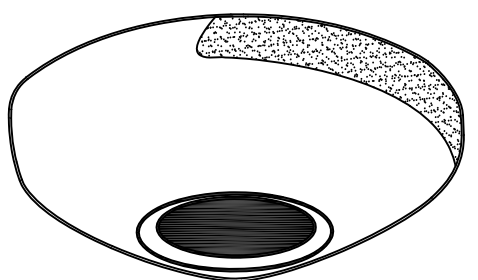


NOTES:

1. HIGH BAY SENSING FROM 15 TO 45 FEET, MOUNTED AT SAME HEIGHT AS BOTTOM OF FIXTURE, INSTALL PER MANUFACTURER'S RECOMMENDATIONS, 4.55" DIAMETER X 1.6" DEEP NOMINAL DIMENSIONS, OCCUPANCY DETECTION OVER A 15' TO 20' RADIAL COVERAGE PATTERN THAT OVERLAPS THE AREAS LIT BY A HIGH BAY FIXTURE, STANDARD OCCUPANCY TIME DELAY ENSURES LIGHTS TURN OFF (ASSUMING MINIMUM ON TIMER HAS ELAPSED) IF NO OCCUPANCY IS DETECTED. THIS TIMER IS FACTORY SET AT 10 MINUTES TO PROMOTE ENERGY SAVINGS, BUT IS ADJUSTABLE BETWEEN 30 SECONDS AND 20 MINUTES. ADJUSTMENTS CAN BE DONE MANUALLY, THROUGH THE UNIT'S PUSH-BUTTON, OR AUTOMATICALLY EVERY TWO WEEKS THROUGH AN ADVANCED MODE THAT DETERMINES THE OPTIMUM TIME DELAY IN ORDER TO MAXIMIZE BOTH LAMP LIFE AND ENERGY SAVINGS. ADDITIONALLY, THIS SENSOR MAINTAINS STATISTICS ON TOTAL LAMP ON TIME AND NUMBER OF CYCLES, UL LISTED, LOW TEMPERATURE (SENSOR OPERATES DOWN TO -40°F/C), HIGH HUMIDITY (SENSOR IS CORROSION RESISTANT TO MOISTURE), 12-24 VAC/VDC, SENSOR'S MOUNTING HOLES ALSO ALIGN WITH 3.5" OCTAGON OR SINGLE GANG HANDY BOX, DESIGN BASIS IS SENSOR SWITCH MODEL 'CM-6-LT'. PROVIDE REQUIRED POWER PACKS FOR FULL CONTROL OF 20A CIRCUITS. DESIGN BASIS FOR POWER PACK IS SENSOR SWITCH MODEL 'PP-20'.

LOW VOLTAGE PASSIVE INFRARED OCCUPANCY SENSOR
 NOT TO SCALE

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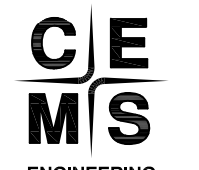


NOTES:

1. PHOTOCELL SENSOR, MOUNTED AT SAME HEIGHT AS BOTTOM OF FIXTURE, INSTALL PER MANUFACTURER'S RECOMMENDATIONS, 3.63" X 3.63" X 1.5" NOMINAL DIMENSION, FIELD PROGRAMMABLE, CAPABLE OF CONTROLLING 0-10 VDC DIMMABLE BALLAST, UL LISTED, COMPATIBLE WITH OCCUPANCY SENSOR SWITCH MODEL 'HM-50', DESIGN BASIS IS SENSOR SWITCH MODEL 'CMB-ADC'. PROVIDE REQUIRED POWER PACKS FOR FULL CONTROL OF 20A CIRCUITS. DESIGN BASIS FOR POWER PACK IS SENSOR SWITCH MODEL 'PP-20'.

LOW VOLTAGE PHOTOCELL/AUTOMATIC DIMMING CONTROL
 NOT TO SCALE

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DATE	HPR
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SYMBOL	
 CEMS ENGINEERING CEMS Engineering, Inc. 3503 Iron Horse Drive Ladson, SC 29456 (P)843.875.3637 (F)843.875.4509 www.cemsengineering.com CEMS Project #09154J Project Manager: R. Alvar	
DATE	SEAL
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ACTIVITY – SATISFACTORY TO	
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FOR EFD FOR COMMANDER NAVFAC	
DATE	
A/E	EFD
RRA DESIGN	
RRA DRAWN	
JNB REVIEW	
QC	
CHIEF ARCH./ ENGR.	
PROJECT MANAGER	
FIRE PROTECTION	
BRANCH MANAGER	
DESIGN DIRECTOR	
UNIV. FACILITIES ENGINEERING COMMAND DEPARTMENT OF THE NAVY MARINE CORPS AIR STATION, CHERRY POINT, N.C. FACILITY ENERGY REPAIRS, BUILDING 131 ELECTRICAL DETAILS AND SCHEDULE	
CODE ID. NO. 80091	SIZE D
SCALE: NONE	
FED. NO. WR5899390	
STA. PROJ. NO. CP12024M	
WORK ORD. NO.	
CONSTR. CONTR. NO.	
NAVFAC DRAWING NO. 12618725	
SHEET 7 OF 9	
E-501	
<small>DRAWING REVISION JULY 2003</small>	

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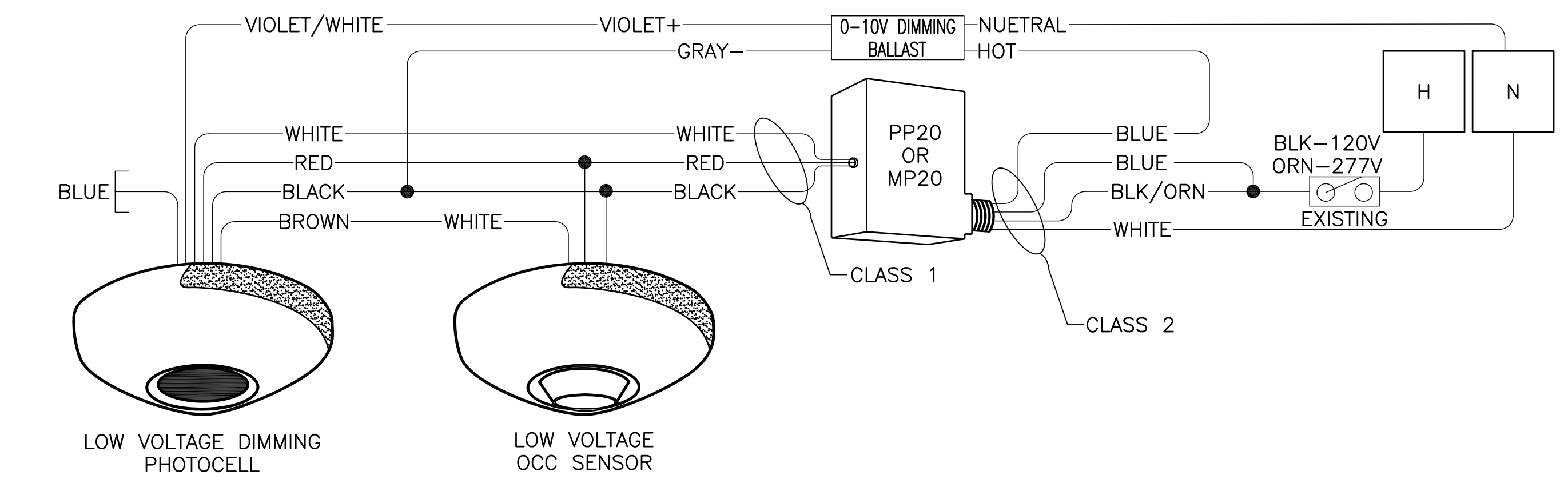
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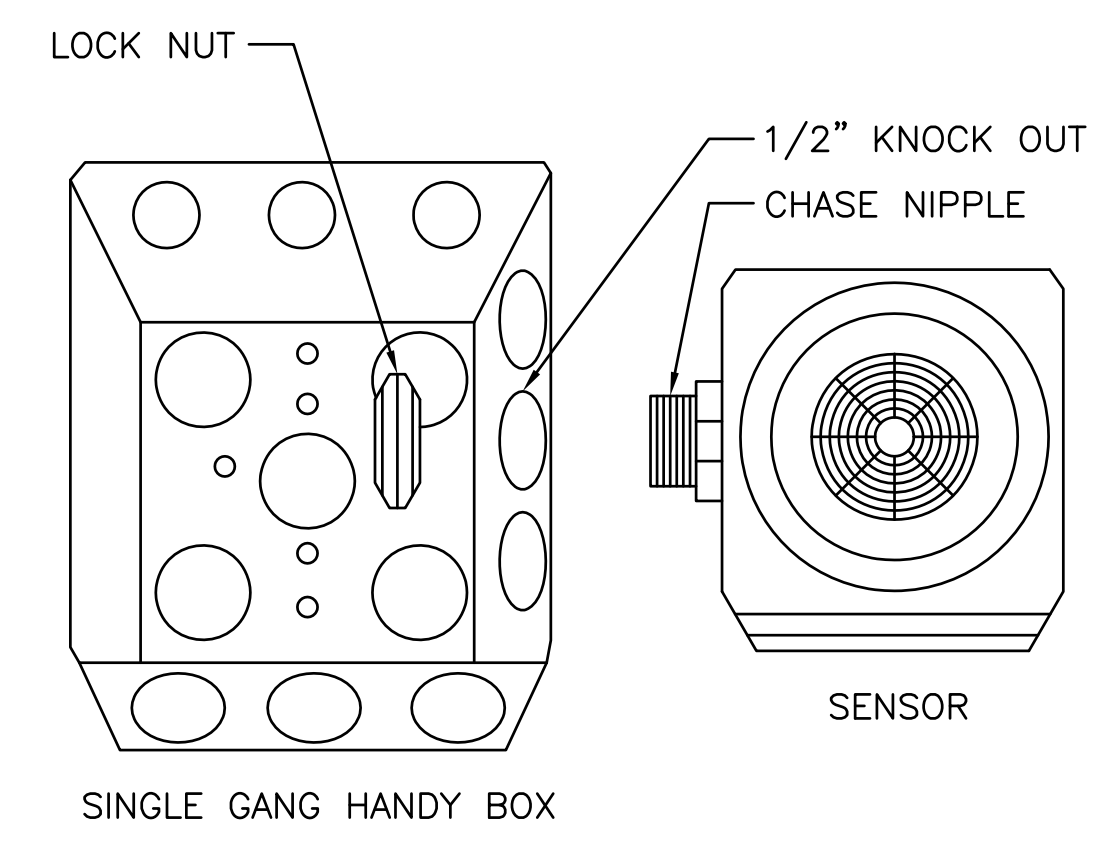
OPERATION NOTES

- LIGHTS WILL DIM AS DAYLIGHT LEVEL INCREASES
- LIGHTS WILL TURN OFF WITH NO OCCUPANCY OR SUFFICIENT DAYLIGHT (50 FOOTCANDLES)

NOTES:

- DESIGN BASIS IS SENSOR SWITCH SENSOR AND POWER PACK. WIRING DIAGRAM IS SPECIFIC TO THE SENSOR SWITCH SENSORS AND POWER PACKS ONLY. CONTRACTOR TO INSTALL DEVICE PER MANUFACTURER'S SPECIFICATIONS.

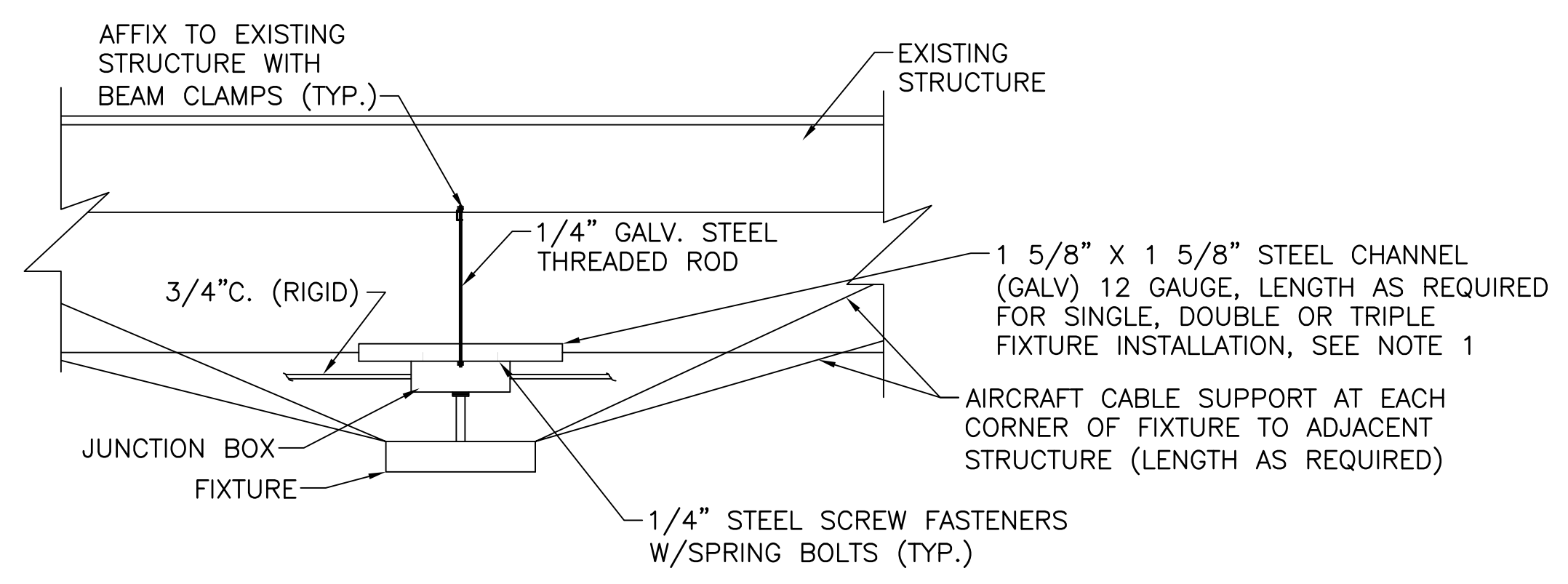
(C1) LOW VOLTAGE ON/OFF/DIM PHOTOCELL WITH OCC SENSOR AND POWER PACK
NOT TO SCALE



NOTES:

- DESIGN BASIS IS SENSOR SWITCH SENSOR. CONTRACTOR TO INSTALL DEVICE PER MANUFACTURER'S SPECIFICATIONS.

(C4) TYPICAL MOUNTING DETAIL
NOT TO SCALE



NOTES:

- FIXTURES TO BE SPACED AT 4' APART AND 3'-6" APART ON CENTER FOR DOUBLE AND TRIPLE FIXTURE INSTALLATIONS RESPECTIVELY.

(B1) FIXTURE MOUNTING DETAIL
NOT TO SCALE

DATE	DESCRIPTION
CEMS ENGINEERING	
CEMS Engineering, Inc. 3553 Iron Horse Drive Landon, SC 29495 (P)843.875.3637 (F)843.875.4599 www.cemsengineering.com CEMS Project #09154J Project Manager: R. Alvar	
May 31, 2012 SEAL APPROVED _____ ACTIVITY - SATISFACTORY TO _____ DATE APPROVED _____ FOR EFD FOR COMMANDER NAVFAC DATE A/E DESIGN EFD RRA DESIGN RRA DRAW JNB REVIEW OC CHIEF ARCH/ ENGR. PROJECT MANAGER _____ FIRE PROTECTION _____ BRANCH MANAGER _____ DESIGN DIRECTOR _____	
MAVAL FACILITIES ENGINEERING COMMAND MARINE CORPS AIR STATION, CHERRY POINT, N.C. FACILITY ENERGY REPAIRS, BUILDING 131 ELECTRICAL DETAILS	
CODE ID. NO. 80091	SIZE D
SCALE: NONE	
FED. NO. WR5899390	
STA. PROJ. NO. CP12024M	
WORK ORD. NO.	
CONSTR. CONTR. NO.	
NAVFAC DRAWING NO. 12618726	
SHEET 8 OF 9	
E-502	
DRAWING REVISION JULY 2003	

EXISTING PANEL IS SIEMENS, TYPE S3, CAT. NO. S3E30BC100ATS

PANEL NO. 1D EXISTING							
VOLTAGE 480Y/277 PHASE 3 WIRE 4 BUS SIZE 100A MAIN CB. 100A							
CKT. NO.	BRKR. SIZE	LOAD	VA	CKT. NO.	BRKR. SIZE	LOAD	VA
1				A 2	20	SPARE	
3				B 4			
R 5	20	LGTS-NIGHT, SOUTH		C 6	20	LGTS-NIGHT, NORTH	
R 7	20	LGTS-ROW 7, SOUTH		A 8	20	LGTS-ROW 1, NORTH	
R 9	20	LGTS-ROW 8, SOUTH		B 10	20	LGTS-ROW 2, NORTH	
R 11	20	LGTS-ROW 9, SOUTH		C 12	20	LGTS-ROW 3, NORTH	
R 13	20	LGTS-ROW 10, SOUTH		A 14	20	LGTS-ROW 4, NORTH	
R 15	20	LGTS-ROW 11, SOUTH		B 16	20	LGTS-ROW 5, NORTH	
R 17	20	LGTS-ROW 12, SOUTH		C 18	20	LGTS-ROW 6, NORTH	
19	20	SPARE		A 20	20	SPARE	
21				B 22			
23				C 24			
25				A 26			
27				B 28			
29				C 30			

R - RE-USE EXISTING CIRCUIT AS INDICATED.

EXISTING PANEL IS SIEMENS, TYPE S3, CAT. NO. S3E30BC100ATS

PANEL NO. 2D EXISTING							
VOLTAGE 480Y/277 PHASE 3 WIRE 4 BUS SIZE 100A MAIN CB. 100A							
CKT. NO.	BRKR. SIZE	LOAD	VA	CKT. NO.	BRKR. SIZE	LOAD	VA
1				A 2	20	SPARE	
3				B 4			
R 5	20	LGTS-NIGHT, SOUTH		C 6	20	LGTS-NIGHT, NORTH	
R 7	20	LGTS-ROW 7, SOUTH		A 8	20	LGTS-ROW 1, NORTH	
R 9	20	LGTS-ROW 8, SOUTH		B 10	20	LGTS-ROW 2, NORTH	
R 11	20	LGTS-ROW 9, SOUTH		C 12	20	LGTS-ROW 3, NORTH	
R 13	20	LGTS-ROW 10, SOUTH		A 14	20	LGTS-ROW 4, NORTH	
R 15	20	LGTS-ROW 11, SOUTH		B 16	20	LGTS-ROW 5, NORTH	
R 17	20	LGTS-ROW 12, SOUTH		C 18	20	LGTS-ROW 6, NORTH	
19	20	SPARE		A 20	20	SPARE	
21				B 22			
23				C 24			
25				A 26			
27				B 28			
29				C 30			

R - RE-USE EXISTING CIRCUIT AS INDICATED.

						DATE	HPR
							DESCRIPTION
							SYMBOL
CEMS ENGINEERING CEMS Engineering, Inc. 3559 Iron Horse Drive Ladson, SC 29456 (P)843.875.3637 (F)843.875.4599 www.cemsengineering.com CEMS Project #09154J Project Manager: R. Alvar							
May 31, 2012 SEAL							
APPROVED _____							
ACTIVITY - SATISFACTORY TO _____							
DATE _____							
APPROVED _____							
FOR EFD FOR COMMANDER NAVFAC _____							
DATE _____							
A/E							EFD
RRA	DESIGN						
RRA	DRAWN						
JNB	REVIEW						
	QC						
	CHIEF ARCH./ ENGR.						
PROJECT MANAGER _____							
FIRE PROTECTION _____							
BRANCH MANAGER _____							
DESIGN DIRECTOR _____							
NAVAL FACILITIES ENGINEERING COMMAND MARINE CORPS AIR STATION, CHERRY POINT, N.C. FACILITY ENERGY REPAIRS, BUILDING 131 ELECTRICAL SCHEDULES							
CODE ID. NO.	80091	SIZE	D				
SCALE:	NONE						
FED. NO.	WR5899390						
STA. PROJ. NO.	CP12024M						
WORK ORD. NO.							
CONSTR. CONTR. NO.							
NAVFAC DRAWING NO.	12618727						
SHEET	9	OF	9				
E-503							
DRAWING REVISION JULY 2003							

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C

B

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