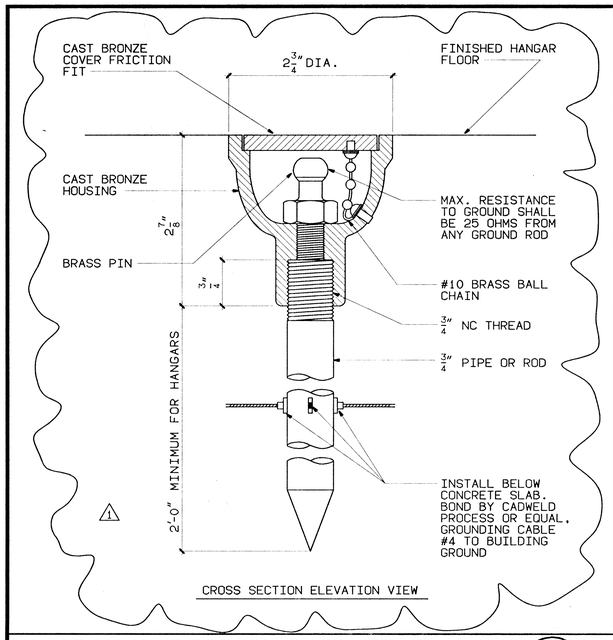
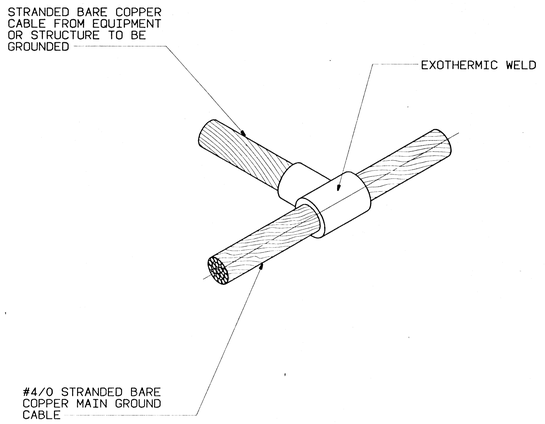


GROUND RECEPTACLE DETAIL

SCALE: NONE

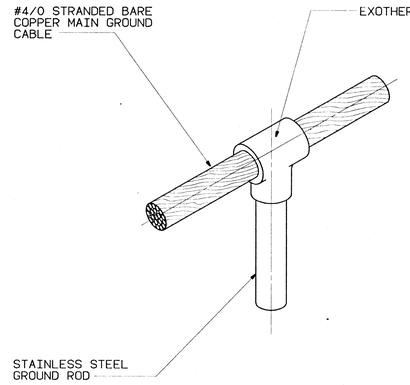
1 | E-5 | E-5



GROUND CONNECTION DETAIL

SCALE: NONE

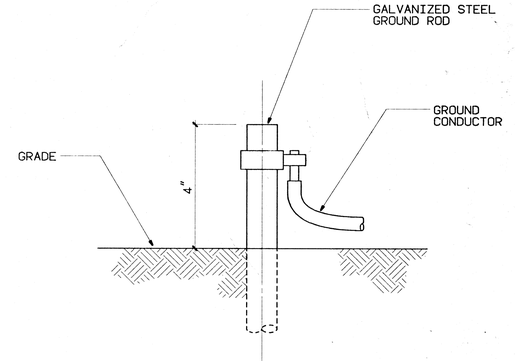
2 | E-17 | E-5



GROUND ROD DETAIL

SCALE: NONE

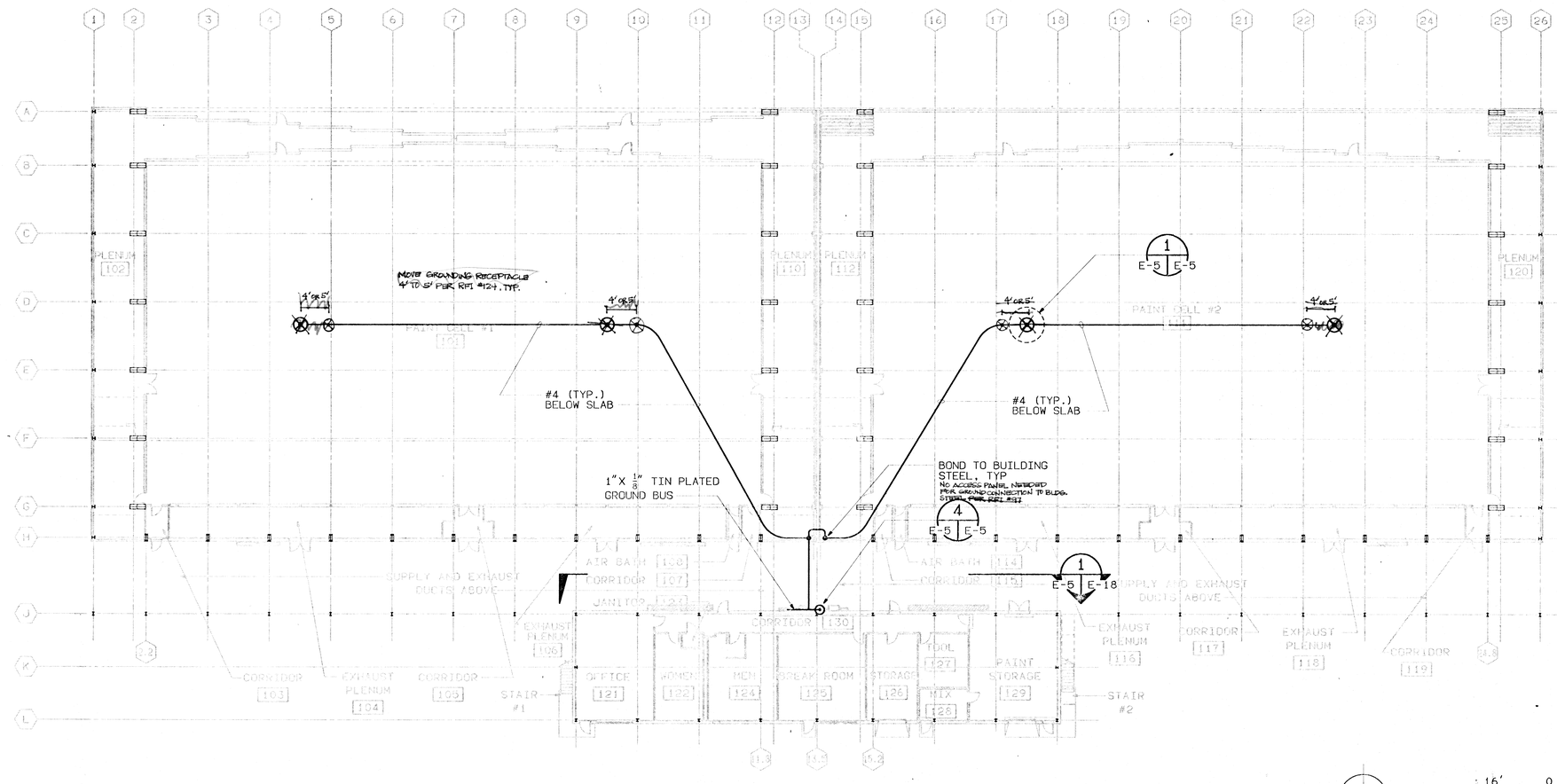
3 | E-17 | E-5



GROUND ROD DETAIL

SCALE: NONE

4 | E-5, E-17 | E-5



GROUNDING PLAN

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

1/16" = 1'-0" 0 16' 32'

Reference your RFI-149, dated September 28, 1994, regarding ground bus at service building.

Specification Section 16415, Paragraph 3.1.2, states in part "... noncurrent-carrying metal parts of electrical equipment shall be effectively grounded by bonding to the bus. The ground bus shall be bonded to both the entrance ground, and to a ground rod or rods...".

Therefore all the electrical equipment enclosures in this equipment area shall be bonded to the ground bus. Some of the electrical equipment in this area are MCC1, MCC2, DP1, LP1, PP1, PP2, EB, Emergency Battery Unit, etc. Additionally, bonding of the neutral point of the secondary side of Transformer T1 to the presently required adjacent ground rod is acceptable, provided the grounding electrode conductor is buried and fusion welded to the ground rod. Also, please note that other connections to this ground bus are shown on the contract drawings.

REVISION	DATE	DESCRIPTION	BY	BY
1	11/25/92	REVISED DETAIL #1		RT

NORMAN ENGINEERING CO.
CONSULTING ENGINEERS LOS ANGELES, CALIFORNIA

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

DESIGNED: R. SHEPARD
DRAWN: R. TAGAYUN
CHECKED: L. MYERS
SUBMITTED:
DATE APPROVED: 9/30/92

MCCLELLAN AIR FORCE BASE CALIFORNIA
ADAL DEPOT CORROSION CONTROL FACILITY
NEW AIRCRAFT PAINT FACILITY
GROUNDING PLAN BR

SCALE: 1/16" = 1'-0" SPEC No: 8529
SHEET: E-5 77 OF 95
FILE No: 100-25-2051

ENVIRONMENTAL ENHANCEMENT THRU ENGINEERING

NOTE:

1. ALL FIXTURES, SWITCHES, WIRING ETC. IN ROOMS #102, #103, #107 AND #108 SHALL BE LOCATED A MINIMUM DISTANCE OF 36" AWAY FROM THE DOORS ENTERING THE PAINT CELL SO THAT THEY ARE OUTSIDE OF THE CLASS I, DIVISION 1, AREA. (SEE DWG. E-2).
2. SEE DETAIL 3, DWG E-19 FOR EMERGENCY LIGHTING SCHEMATIC DIAGRAM.
3. PROVIDE 3#12, $\frac{1}{2}$" FLEX CONDUIT FROM J-BOX TO ALL 3-LAMP FLUORESCENT FIXTURES.

SEE RFI #23, RFP 13, P00012
5 LTG. H.R. VIA GUTTER ON BLDG. EXT. TO BALLAST CAB.
¾"C. 10#12, #12 GND.
SEE 5/E19 PER RFI'S 75+103, RFP 44 P00033

Circuits 23, 25, 27, & 29 should be controlled via a time switch as noted in the panel schedule on Sheet E-15. The lighting contactor and time switch is located adjacent to Panel LP1, shown on Sheet E-16. Provide 24 hr time switch with override switch. Provide power to time switch from Panel LP1. RFI #24

LIGHT FIXTURE L-1 IS NOT CONNECTED TO THE EMERGENCY LIGHTING CIRCUIT PER RFI #31

Reference your RFI #72, dated January 19, 1994, regarding the branch circuit conduits running underground in the Class 1 Division 1 hazardous area, as defined by the contract drawing sheet E-2. A review of your attached drawing produced the following comments:

a. The seal-off located at the conduit stub-up shall be relocated to immediately outside the classified boundary. The seal-off can be located at the adapter between the rigid steel and rigid non-metallic conduit, but, there shall be no fittings between the boundary and the seal-off. Reference NEC article 501-5(a)(4).

b. All conduit seal-offs shall remain accessible. Reference NEC article 501-5(c)(1).

c. Seal-offs will be required within 18 inches of each electrical device that is not factory sealed. Reference NEC article 501-5(a)(1).

d. Steel conduit in contact with earth shall be protected against corrosion. Reference specification section 16415 paragraph 3.2.2.1.

e. Conduit installed within the slab on grade shall comply with specification section 16415 paragraph 3.2.2.2.

f. Conduit crossing a structural joint shall be installed to comply with section 16415 paragraph 3.2.2.

add notes !

Reference your RFI #100, dated March 28, 1994, regarding E-1 light fixture at "G" line.

Since the filter wall between "G" and "H" lines has been deleted by modification, the E-1 light fixtures in question on "G" line do not need to be mounted. The conduits should still be stubbed up thru the concrete floor and capped. The E-1 fixtures not mounted are to be turned over to the Government at the end of the project to be used as spares. Units to be in their original packaging with full mounting instructions.

LIGHTING PLAN - SOUTH

SCALE: $\frac{1}{8}$" = 1'-0"

KEY PLAN

NOT TO SCALE

REGISTERED PROFESSIONAL ENGINEER No. E 10290 ELECTRICAL STATE OF CALIFORNIA

SIGNED ON BEHALF OF NORMAN ENGINEERING CO

REVISION	DATE	DESCRIPTION	BY	BY

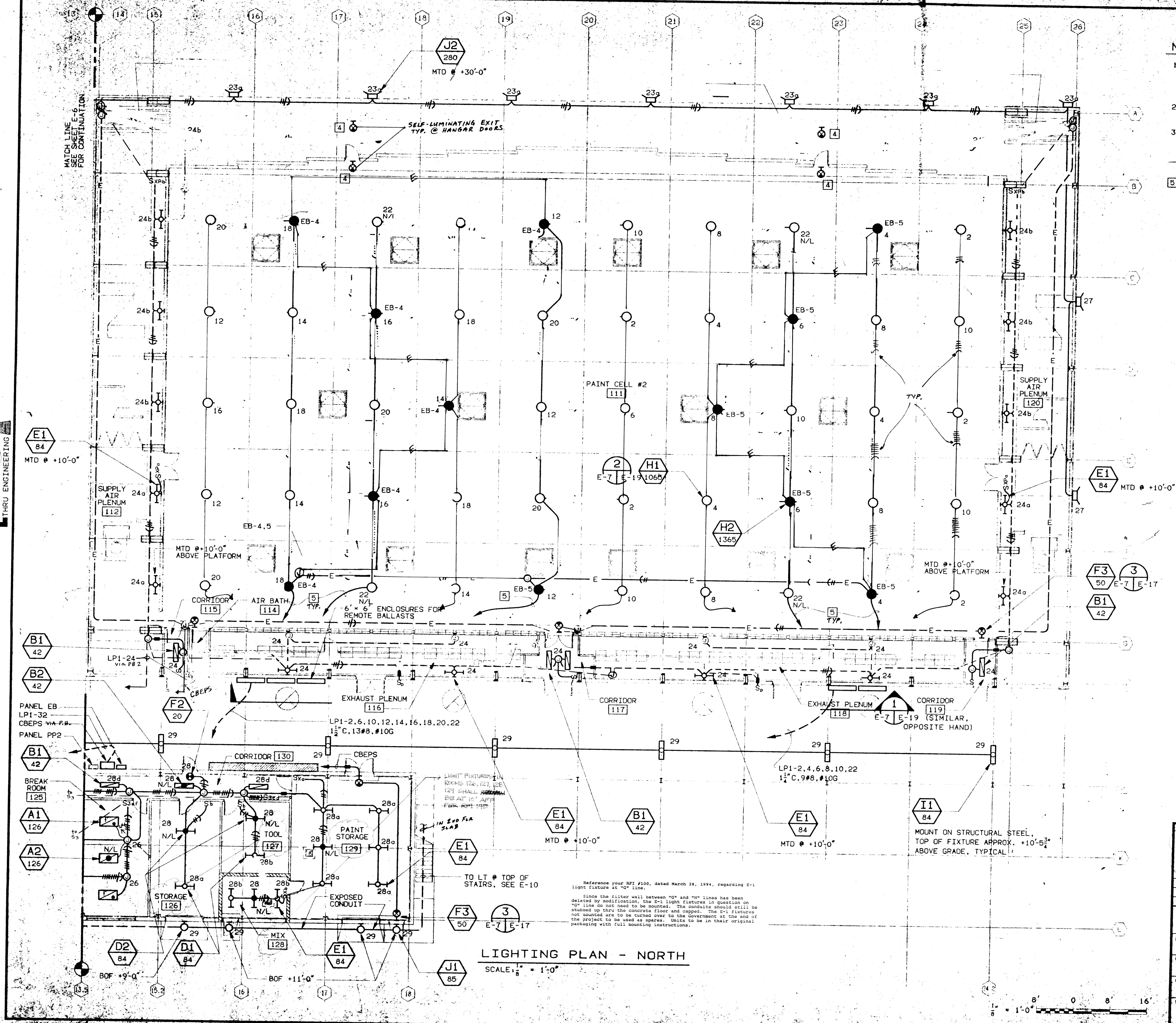
NORMAN ENGINEERING CO. CONSULTING ENGINEERS LOS ANGELES, CALIFORNIA

DEPARTMENT OF THE ARMY SACRAMENTO DISTRICT, CORPS OF ENGINEERS SACRAMENTO, CALIFORNIA

DESIGNED: R. SHEPARD
DRAWN: R. TAGAYUN
CHECKED: L. MYERS
SUBMITTED:
DATE APPROVED: 9/30/93

MCCLELLAN AIR FORCE BASE CALIFORNIA
ADAL DEPOT CORROSION CONTROL FACILITY
NEW AIRCRAFT PAINT FACILITY
LIGHTING PLAN - SOUTH

SCALE: 1/8" = 1'-0"
DRAWING NO. E-5
CONTRACT NO. F04699-93-C-0051



Reference your RFI #100, dated March 28, 1994, regarding E-1 light fixture at "G" line.

Since the filter wall between "G" and "H" lines has been deleted by modification, the E-1 light fixtures in question on "G" line do not need to be mounted. The conduits should still be stubbed up thru the concrete floor and capped. The E-1 fixtures not mounted are to be turned over to the Government at the end of the project to be used as spares. Units to be in their original packaging with full mounting instructions.

LIGHTING PLAN - NORTH

SCALE: ⅛" = 1'-0"

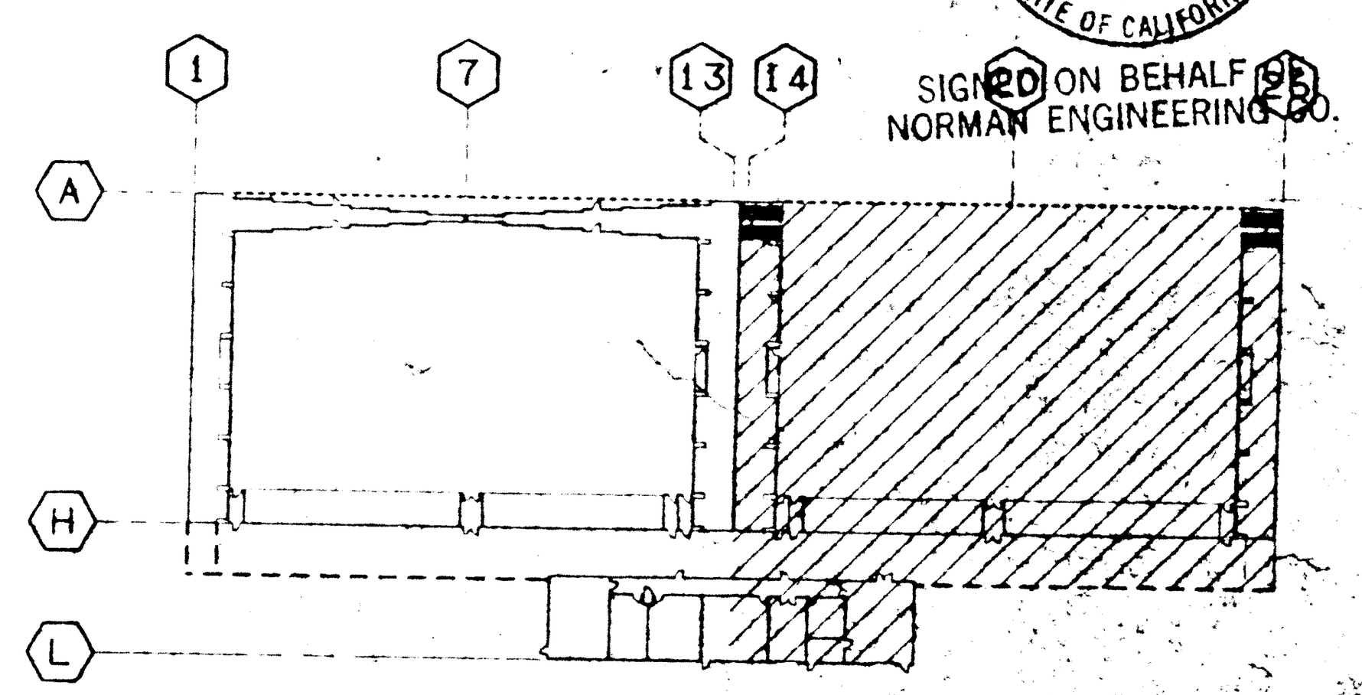
NOTE:

1. ALL FIXTURES, SWITCHES, WIRING ETC. IN ROOMS #114, #116, #117, AND #119 SHALL BE LOCATED A MINIMUM DISTANCE OF 36" AWAY FROM THE DOORS ENTERING THE PAINT CELL SO THAT THEY ARE OUTSIDE OF THE CLASS I, DIVISION 1 AREA (SEE DWG. E-2).
2. SEE DETAIL 3, DWG E-19 FOR EMERGENCY LIGHTING SCHEMATIC DIAGRAM.
3. PROVIDE 3#12, ½" FLEX CONDUIT FROM J-BOX TO ALL 3-LAMP FLUORESCENT FIXTURES.

5 SEE RFI #63
¾ C. 10 #12, #12 GND. LTG. HR. VIA GUTTER ON BLDG. EXT. TO BALLAST CAB.

LIGHT CIRCUIT L-1 IS NOT CONNECTED TO THE EMERGENCY LIGHTING CIRCUIT PER RFI #51

SIGNED ON BEHALF OF NORMAN ENGINEERING CO.



KEY PLAN

NOT TO SCALE

COLLINS ELECTRICAL CO., INC.
4107 Northgate Blvd.
Sacramento, CA 95834
Phone: (916) 567-1100
Record Drawing

REVISION	DATE	DESCRIPTION	BY	

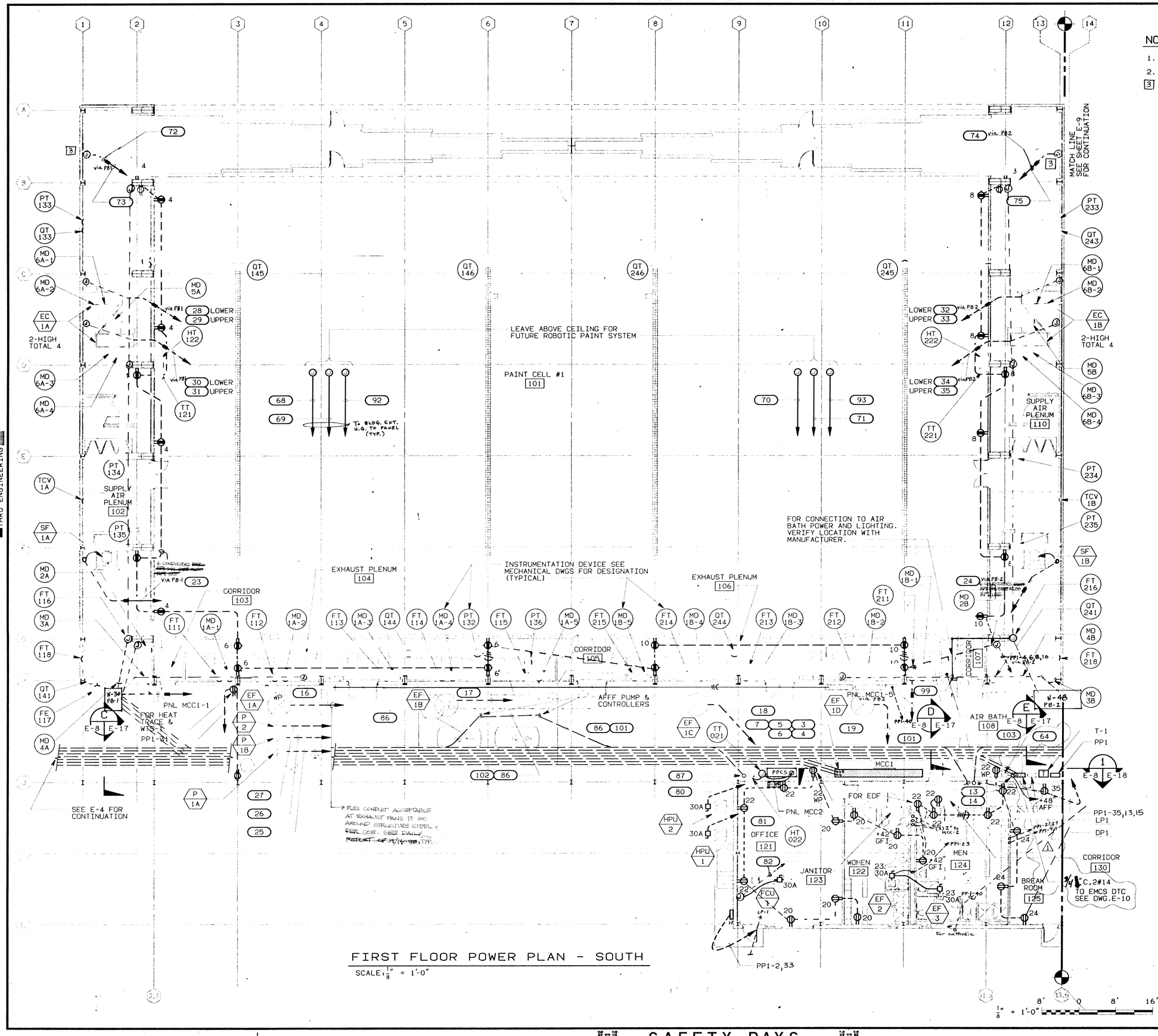
NORMAN ENGINEERING CO.
CONSULTING ENGINEERS LOS ANGELES, CALIFORNIA

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

DESIGNED: R. SHEPARD
DRAWN: R. TAGAYUN
CHECKED: L. MYERS

MCCLELLAN AIR FORCE BASE CALIFORNIA
ADAL DEPOT CORROSION CONTROL FACILITY
NEW AIRCRAFT PAINT FACILITY
LIGHTING PLAN - NORTH

SUBMITTED: DATE APPROVED: 9/30/92
SCALE: ⅛" = 1'-0"
SPEC. No. 8529
SHEET E-7
FILE No. 100-25-2051

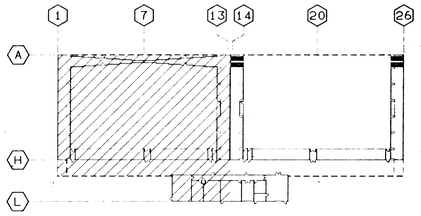


NOTES:

1. SEE DWG E-14 FOR CONDUIT AND CABLE SCHEDULE.
2. SEE DWGS E-15 & E-16 FOR PANEL SCHEDULES.
3. CONNECT TO FESTOON CABLE FEEDING CONTROLLER/DISCONNECT ON HANGAR DOORS.

HOMERUNS FROM CLASSIFIED AREAS ROUTED VIA U.G. PULLBOXES OUTSIDE CLASSIFIED AREAS

Both circuits for units FCU-1 and FCU-2 should be fed from the one (1) 20A/2P circuit breaker in panel PP1, circuits 9 and 11 shown on Sheet E-15. The two circuits should be spliced together in panel PP1 and then 2-#8 AWG from the splice should be run to the 30A/2P circuit breaker. OPT. 23



KEY PLAN

NOT TO SCALE

FIRST FLOOR POWER PLAN - SOUTH

SCALE: 1/8" = 1'-0"

0 8' 16'

1/8" = 1'-0"

ENVIRONMENTAL ENHANCEMENT THRU ENGINEERING

COLLINS ELECTRICAL CO., INC.
4107 Northgate Blvd.
Sacramento, CA 95834
Phone: (916) 567-1100
Record Drawing

REVISION	DATE	DESCRIPTION	BY
1	11/25/92	MISCELLANEOUS REVISION	RT

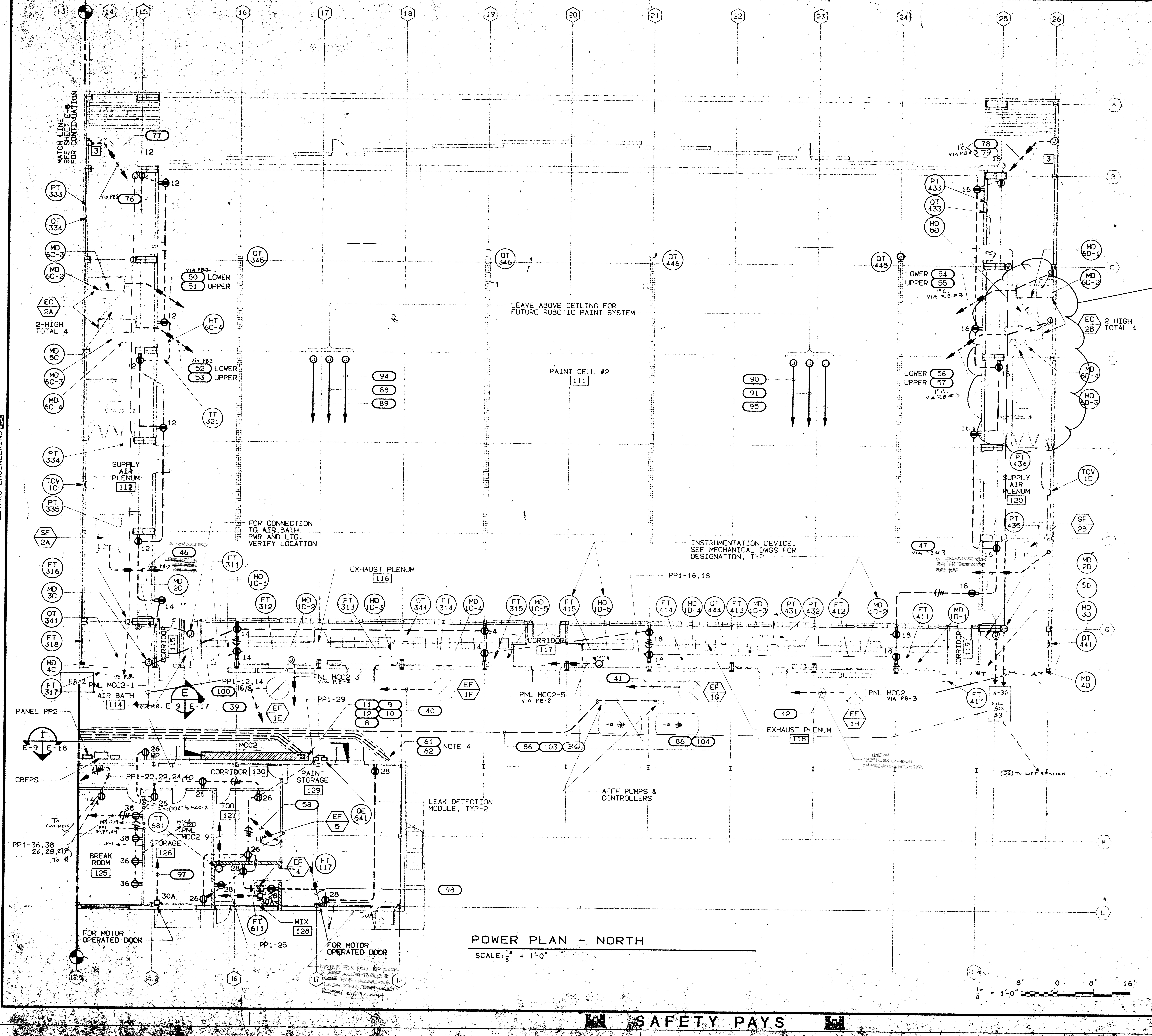
NORMAN ENGINEERING CO.
CONSULTING ENGINEERS LOS ANGELES, CALIFORNIA

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

DESIGNED: R. SHEPARD
DRAWN: , R. TAGAYUN
CHECKED: L. MYERS

MCCLELLAN AIR FORCE BASE CALIFORNIA
ADAL DEPOT CORROSION CONTROL FACILITY
NEW AIRCRAFT PAINT FACILITY
POWER PLAN - SOUTH

SUBMITTED:
DATE APPROVED: 9/30/92
SCALE: 1/8" = 1'-0" DSC No.: 8529
SHEET E-8 80 OF 95
FILE No: 100-25-2051



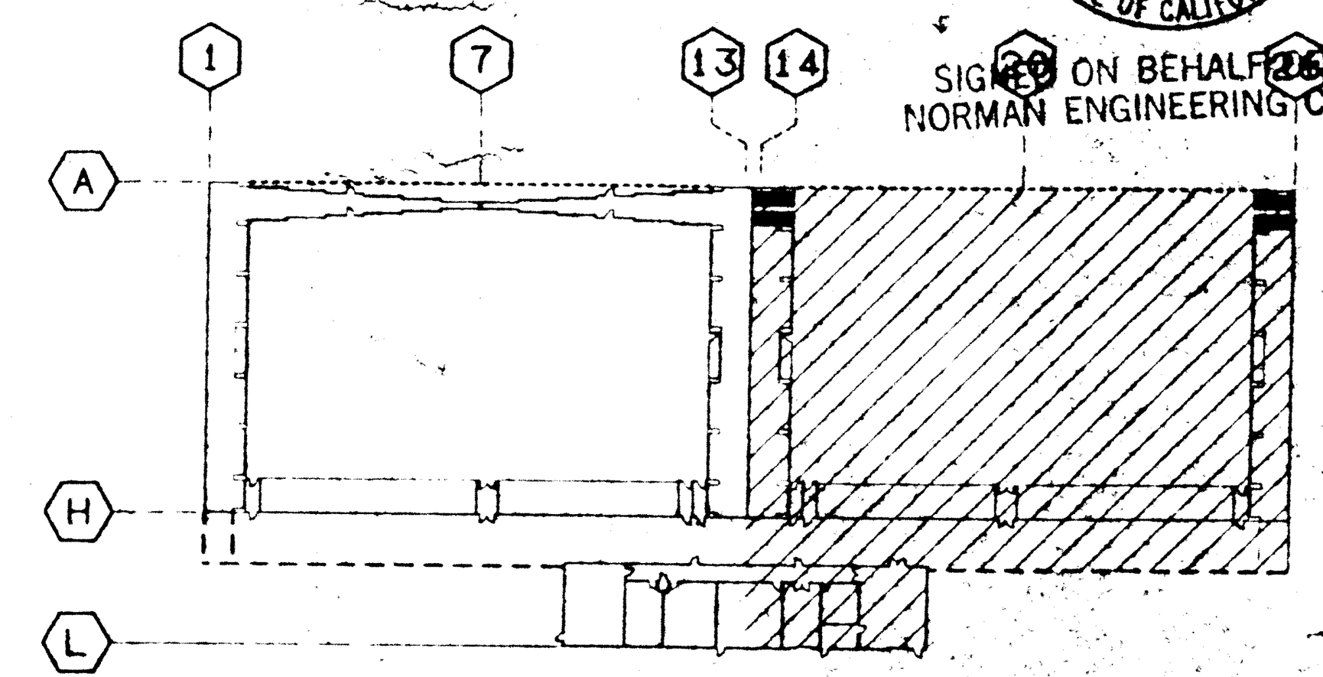
POWER PLAN - NORTH

SCALE: $\frac{1}{8}'' = 1'-0''$

NOTES:

1. SEE DWG E-14 FOR CONDUIT AND CABLE SCHEDULE.
2. SEE DWGS E-15 & E-16 FOR PANEL SCHEDULES.
3. To disconnect on door via festoon cable.
4. STUB-UP AND CAP 4" ABOVE FINISHED GRADE.

Underground homeruns from classified areas are routed via U.G. pullboxes @ 13,14 line & 26 line.



KEY PLAN

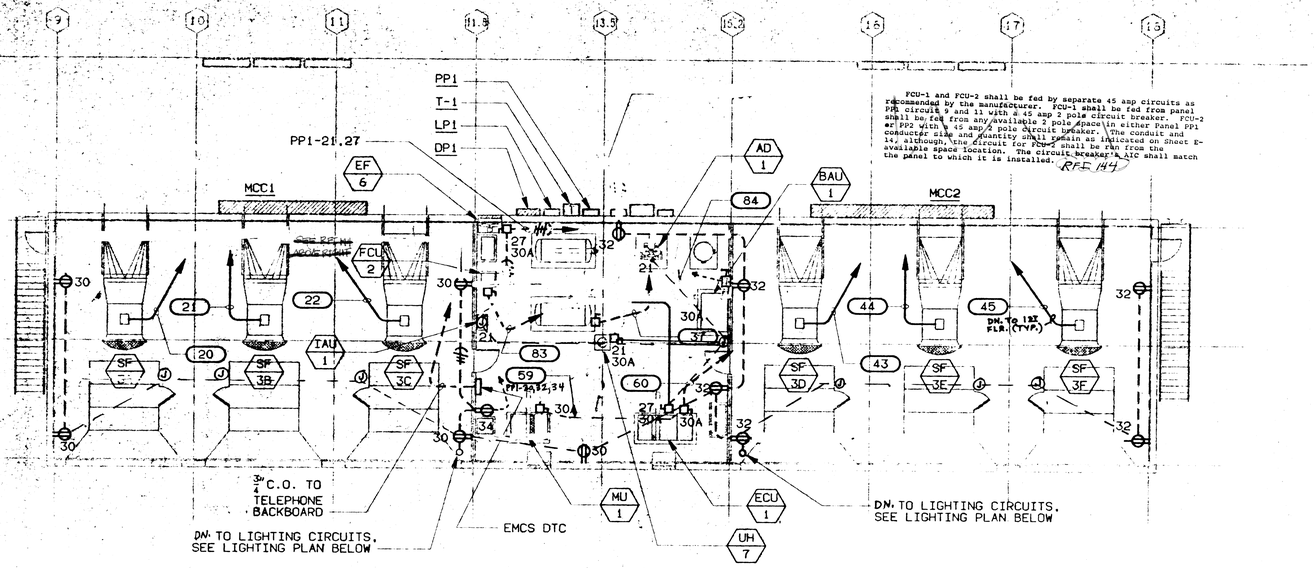
NOT TO SCALE

SIGNED ON BEHALF OF NORMAN ENGINEERING CO.

REGISTERED PROFESSIONAL ENGINEER — ELECTRICAL — STATE OF CALIFORNIA

COLLINS ELECTRICAL CO., INC. — Record Drawing

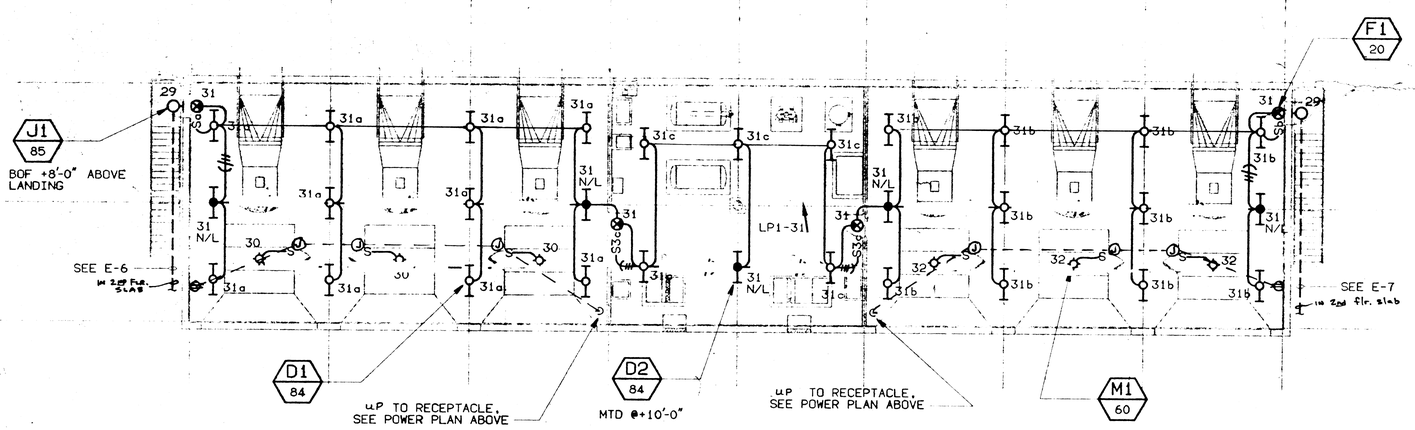
NORMAN ENGINEERING CO. CONSULTING ENGINEERS, LOS ANGELES, CALIFORNIA	DEPARTMENT OF THE ARMY, SACRAMENTO DISTRICT, CORPS OF ENGINEERS, SACRAMENTO, CALIFORNIA
DESIGNED: R. SHEPARD	MCCLELLAN AIR FORCE BASE, CALIFORNIA
DRAWN: R. TAGAYUN	ADAL DEPOT CORROSION CONTROL FACILITY
CHECKED: L. MYERS	NEW AIRCRAFT PAINT FACILITY
SUBMITTED:	POWER PLAN - NORTH
DATE APPROVED: 9/30/92	100-25-205



FCU-1 and FCU-2 shall be fed by separate 45 amp circuits as recommended by the manufacturer. FCU-1 shall be fed from panel PPA circuit 9 and 11 with a 45 amp 2 pole circuit breaker. FCU-2 shall be fed from any available 2 pole space in either Panel PP1 or PP2 with a 45 amp 2 pole circuit breaker. The conduit and conductor size and quantity shall remain as indicated on Sheet E-14, although, the circuit for FCU-2 shall be ran from the available space location. The circuit breaker's AIC shall match the panel to which it is installed. RFI 149

MECHANICAL EQUIPMENT SPACE POWER PLAN

SCALE: 1/8" = 1'-0"



MECHANICAL EQUIPMENT SPACE LIGHTING PLAN

SCALE: 1/8" = 1'-0"

NOTES:

1. SEE DWG E-14 FOR CONDUIT AND CABLE SCHEDULE.
2. SEE DWGS E-15 AND E-16 FOR PANEL SCHEDULES.

Both circuits for units FCU-1 and FCU-2 should be fed from the one (1) 20A/2P circuit breaker in panel PP1, circuits 9 and 11 shown on Sheet E-15. The two circuits should be spliced together in panel PP1 and then 2-#8 AWG. from the splice should be run to the 20A/2P circuit breaker. Addendum #3

PROVIDE CONTROLS, DEVICES AND WIRING MEC E.Q. AS NEEDED BUT NOT SHOWN PER RFI #19

Reference your RFI #70, dated January 19, 1994, regarding the branch circuit conduits running underground in the Class 1 Division 1 HAZARDOUS AREA, as defined by the contract drawing sheet E-2. A review of your attached drawing produced the following comments:

a. The seal-off located at the conduit stub-up shall be relocated to immediately outside the classified boundary. The seal-off can be located at the adapter between the rigid steel and rigid non-metallic conduit, but, there shall be no fittings between the boundary and the seal-off. Reference NEC article 501-5(a)(4).

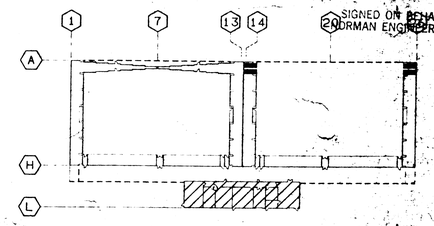
b. All conduit seal-offs shall remain accessible. Reference NEC article 501-5(c)(1).

c. Seal-offs will be required within 18 inches of each electrical device that is not factory sealed. Reference NEC article 501-5(a)(1).

d. Steel conduits in contact with earth shall be protected against corrosion. Reference specification section 16415 paragraph 3.2.2.1.

e. Conduit installed within the slab on grade shall comply with specification section 16415 paragraph 3.2.2.2.

f. Conduit crossing a structural joint shall be installed to comply with section 16415 paragraph 3.2.2.



SIGNED ON BEHALF OF NORMAN ENGINEERING CO.

KEY PLAN

NOT TO SCALE

1/8" = 1'-0" 8' 0 8' 16'

COLLINS ELECTRICAL CO., INC.
4107 Northgate Blvd.
Sacramento, CA 95834
Phone: (916) 567-1100

Record Drawing

REVISION	DATE	DESCRIPTION	BY

NORMAN ENGINEERING CO.
CONSULTING ENGINEERS LOS ANGELES, CALIFORNIA

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

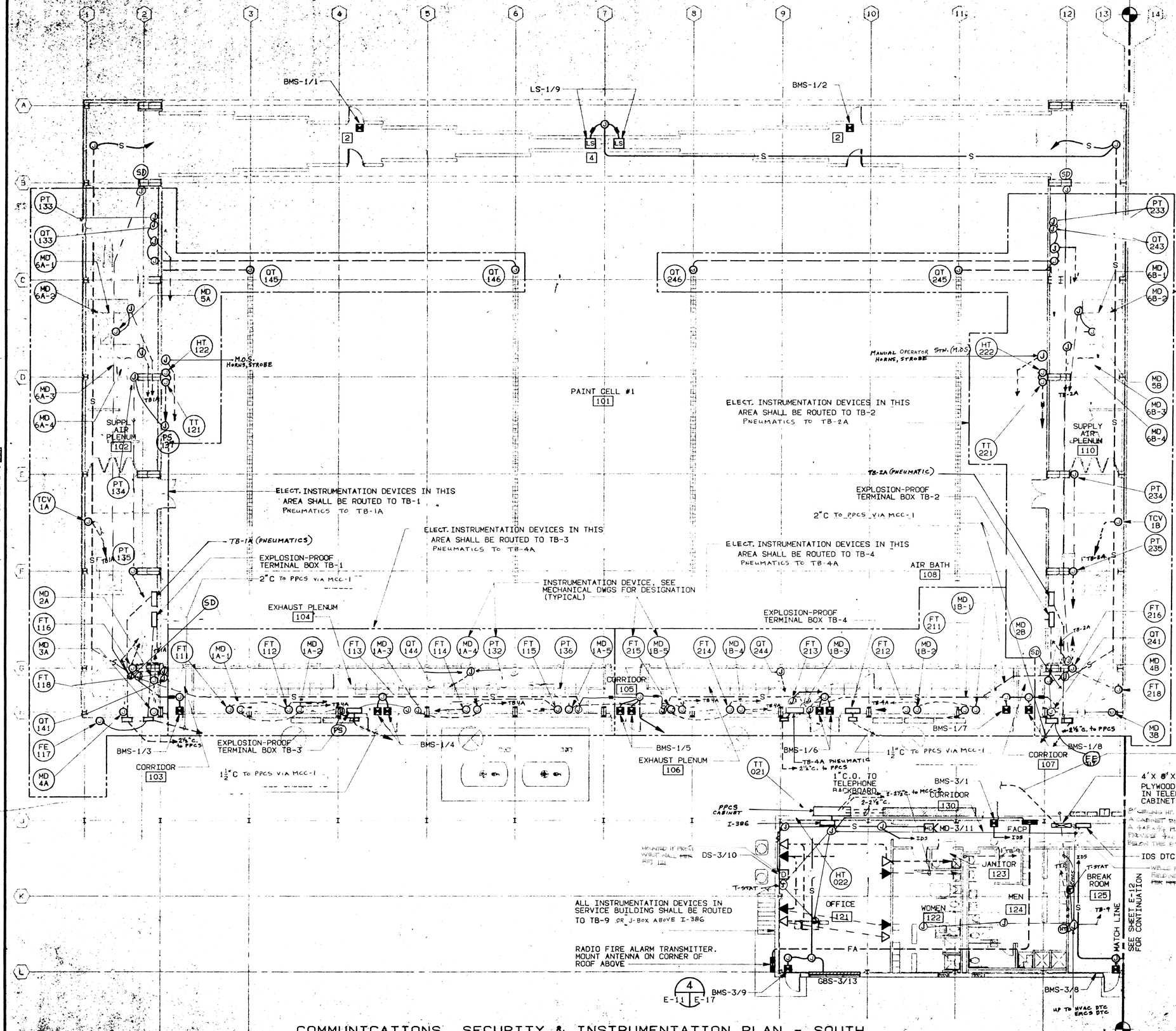
DESIGNED: R. SHEPARD
DRAWN: R. TAGAYUN
CHECKED: L. MYERS
SUBMITTED:
DATE APPROVED: 9/30/92

MCCLELLAN AIR FORCE BASE, CALIFORNIA
ADAL DEPOT CORROSION CONTROL FACILITY
NEW AIRCRAFT PAINT FACILITY
SERVICE BUILDING UPPER LEVEL
POWER AND LIGHTING PLAN

SCALE: AS SHOWN
DRAWING NO. E-10
82 of 95
FILE NO. 100-25-2051

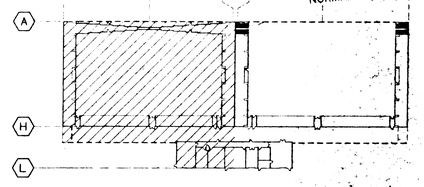
ENVIRONMENTAL ENHANCEMENT THRU ENGINEERING

SAFETY PAYS



NOTES:

1. ALL IDS JUNCTION BOXES, ENCLOSURES, ETC. TO BE TACK-WELDED.
2. CONNECT TO JUNCTION BOX WITH FESTOON CABLE PER MANUFACTURERS REQUIREMENTS.
3. SEE DWG E-20 FOR IDS BLOCK DIAGRAM.
4. EXPLOSION PROOF ROLLER-ARM TYPE LIMIT SWITCH AT UPPER TRACK DOOR. SET TO GENERATE ALARM SIGNAL WHEN LEAD LEAF OF OUTER DOOR MOVES 2" FROM FULLY CLOSED POSITION.



KEY PLAN

NOT TO SCALE

COMMUNICATIONS, SECURITY & INSTRUMENTATION PLAN - SOUTH

SCALE: 1/8" = 1'-0"

8' 0' 8' 16'

1/8" = 1'-0"

SEE SHEET E-12 FOR CONTINUATION

SIGNED ON BEHALF OF NORMAN ENGINEERING CO.

REVISION	DATE	DESCRIPTION	BY	CHK

NORMAN ENGINEERING CO. CONSULTING ENGINEERS LOS ANGELES, CALIFORNIA

DEPARTMENT OF THE ARMY SACRAMENTO DISTRICT, CORPS OF ENGINEERS SACRAMENTO, CALIFORNIA

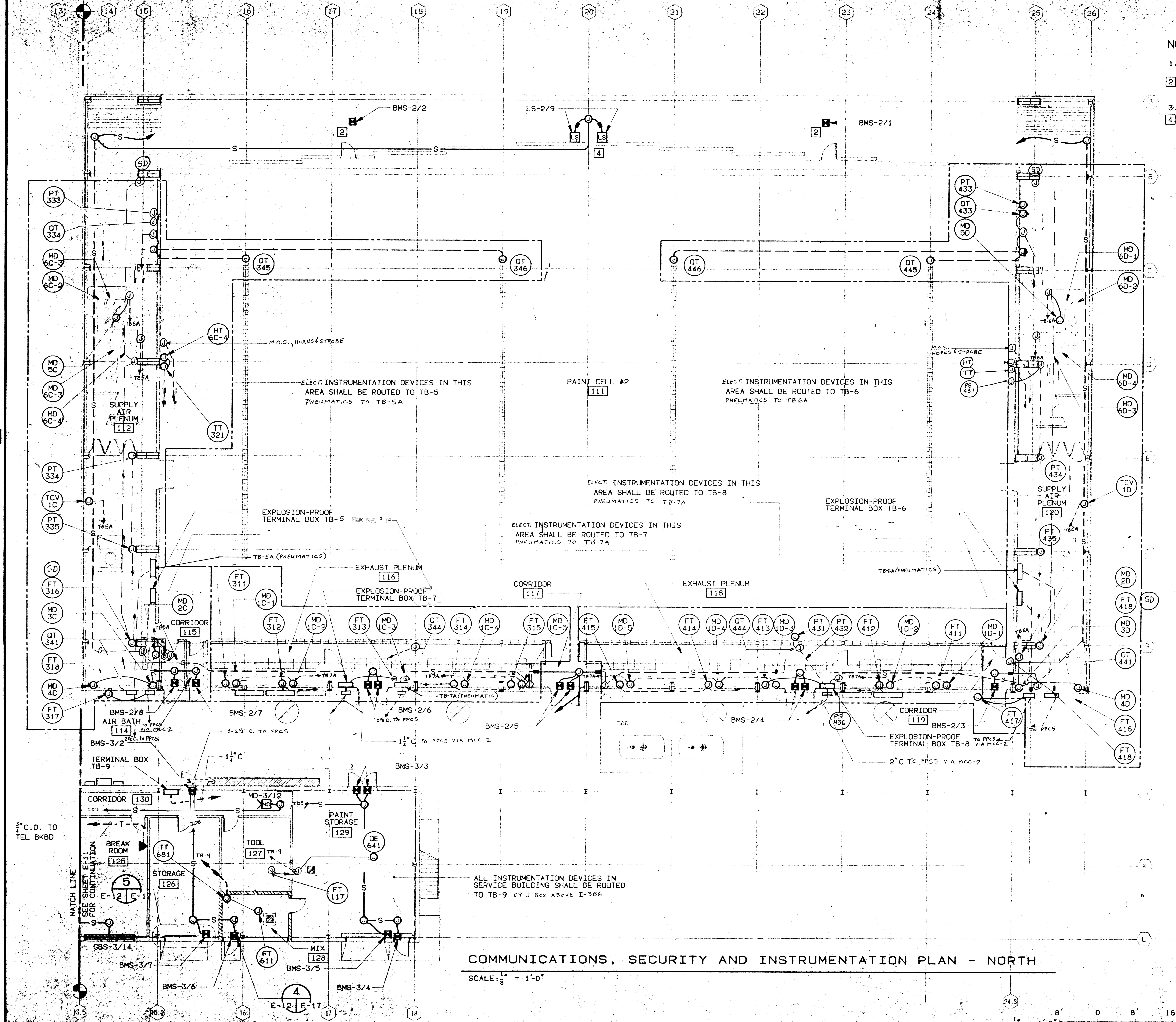
DESIGNED: R. SHEPARD
DRAWN: R. TAGAYUN
CHECKED: L. MYERS

MCCLELLAN AIR FORCE BASE CALIFORNIA
ADAL DEPOT CORROSION CONTROL FACILITY
NEW AIRCRAFT PAINT FACILITY
COMMUNICATIONS, SECURITY AND INSTRUMENTATION PLAN - SOUTH

SUBMITTED: DATE APPROVED: 9/30/92

SCALE: 1/8" = 1'-0" SHEET E-11 83 OF 95 FILE NO. 100-95-2051

ENVIRONMENTAL ENHANCEMENT THRU ENGINEERING


BMS-2/2
LS-2/9
BMS-2/1
ELECT. INSTRUMENTATION DEVICES IN THIS AREA SHALL BE ROUTED TO TB-5
PNEUMATICS TO TB-5A
PAINT CELL #2
111
ELECT. INSTRUMENTATION DEVICES IN THIS AREA SHALL BE ROUTED TO TB-6
PNEUMATICS TO TB-6A
M.O.S. HORNS & STROBE
SUPPLY AIR PLENUM
112
ELECT. INSTRUMENTATION DEVICES IN THIS AREA SHALL BE ROUTED TO TB-8
PNEUMATICS TO TB-7A
EXPLOSION-PROOF TERMINAL BOX TB-5
EXPLOSION-PROOF TERMINAL BOX TB-6
ELECT. INSTRUMENTATION DEVICES IN THIS AREA SHALL BE ROUTED TO TB-7
PNEUMATICS TO TB-7A
TB-5A (PNEUMATICS)
TB-6A (PNEUMATICS)
SUPPLY AIR PLENUM
120
EXHAUST PLENUM
116
EXPLOSION-PROOF TERMINAL BOX TB-7
CORRIDOR
117
EXHAUST PLENUM
118
CORRIDOR
115
BMS-2/8
AIR BATH
114
BMS-2/7
BMS-2/6
BMS-2/5
BMS-2/4
CORRIDOR
119
BMS-2/3
EXPLOSION-PROOF TERMINAL BOX TB-8
2"C TO PPCS VIA MCC-2
1¼"C TO PPCS VIA MCC-2
BMS-3/2
TERMINAL BOX TB-9
BMS-3/3
CORRIDOR
130
MD-3/12
PAINT STORAGE
129
¾"C.O. TO TEL BKBD
BREAK ROOM
125
STORAGE
126
TOOL
127
MATCH LINE SEE SHEET E-11 FOR CONTINUATION
ALL INSTRUMENTATION DEVICES IN SERVICE BUILDING SHALL BE ROUTED TO TB-9 OR J-BOX ABOVE I-386
GBS-3/14
BMS-3/7
BMS-3/6
MIX
128
BMS-3/5
BMS-3/4

COMMUNICATIONS, SECURITY AND INSTRUMENTATION PLAN - NORTH

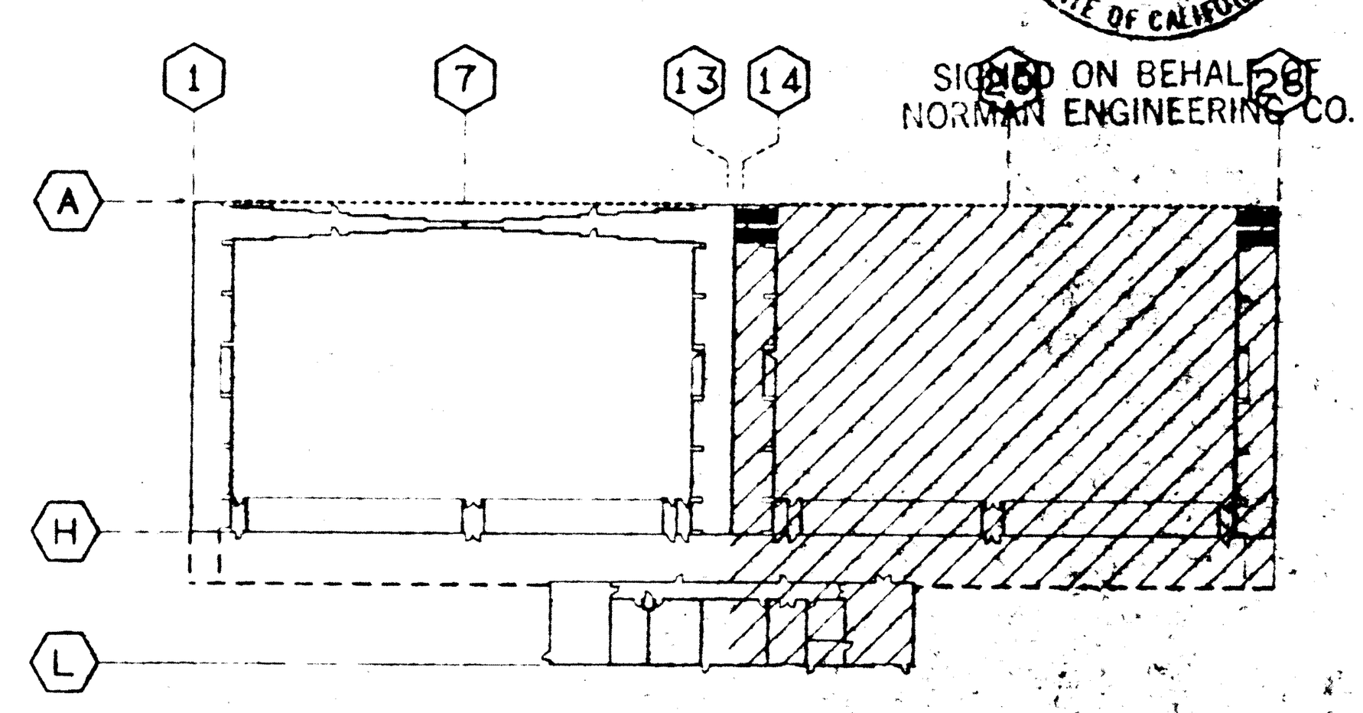
SCALE: 1/8" = 1'-0"

1/8" = 1'-0" 8' 0 8' 16'

NOTES:

1. ALL IDS JUNCTION BOXES, ENCLOSURES, ETC. TO BE TACK-WELDED.
2. CONNECT TO JUNCTION BOX WITH FESTOON CABLE PER MANUFACTURERS REQUIREMENTS. LOCATE ON MANDOORS OF EXTERIOR HANGAR DOOR. SIMILAR TO DOORS AS SHOWN ON DWG. E-11.
3. SEE DWG E-20 FOR IDS BLOCK DIAGRAM.
4. SEE NOTE 4 ON DRAWING E-11.

SIGNED ON BEHALF OF NORMAN ENGINEERING CO.



KEY PLAN

NOT TO SCALE

COLLINS ELECTRICAL CO., INC.
4107 Northgate Blvd
Sacramento, CA 955..
Phone: (916) 567-...

REVISION	DATE	DESCRIPTION	BY	BY

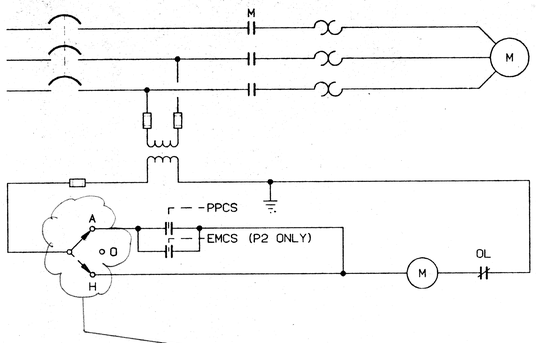
NORMAN ENGINEERING CO.
CONSULTING ENGINEERS — LOS ANGELES, CALIFORNIA

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

DESIGNED: R. SHEPARD
DRAWN: R. TAGAYUN
CHECKED: L. MYERS

MCCLELLAN AIR FORCE BASE — CALIFORNIA
ADAL DEPOT CORROSION CONTROL FACILITY
NEW AIRCRAFT PAINT FACILITY
COMMUNICATIONS, SECURITY AND INSTRUMENTATION PLAN - NORTH

SUBMITTED:
DATE APPROVED: 9/30/92
E-12
64 OF 95
100-25-2051

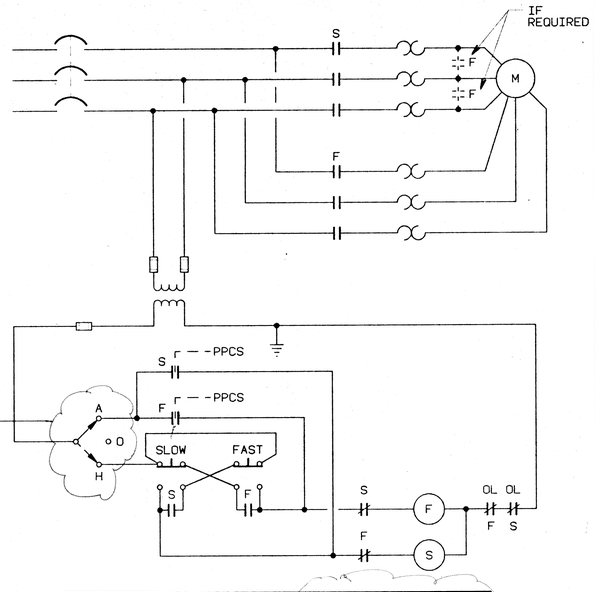


MOTOR	MCC CKT#	PPCS TAG#
EF1A	MCC1, #1	071
EF1B	MCC1, #2	072
EF1C	MCC1, #3	073
EF1D	MCC1, #4	074
EF1E	MCC1, #5	075
EF1F	MCC1, #6	076
EF1G	MCC1, #7	077
EF1H	MCC1, #8	078
P1A	MCC1, #9	561
P1B	MCC1, #10	562
P2	MCC1, #11	563
EC1A	MCC1, #12	161
EC1A	MCC1, #13	161
EC1A	MCC1, #14	161
EC1A	MCC1, #15	161
EC1B	MCC1, #16	261
EC1B	MCC1, #17	261
EC1B	MCC1, #18	261
EC1B	MCC1, #19	261
SF3A	MCC2, #1	081
SF3B	MCC2, #2	082
SF3C	MCC2, #3	083
SF3D	MCC2, #6	084
SF3E	MCC2, #7	085
SF3F	MCC2, #8	086
EF7	MCC2, #11	061
EF8	MCC2, #12	062
EC2A	MCC2, #13	361
EC2A	MCC2, #14	361
EC2A	MCC2, #15	361
EC2A	MCC2, #16	361
EC2B	MCC2, #17	461
EC2B	MCC2, #18	461
EC2B	MCC2, #19	461
EC2B	MCC2, #20	461
EF5	MCC2, #21	681
ECU1	MCC2, #23	683

SEE T.N.B. CONTROL DRWGS.

480V-3Ø NON-REVERSING MOTOR

SCALE: NONE

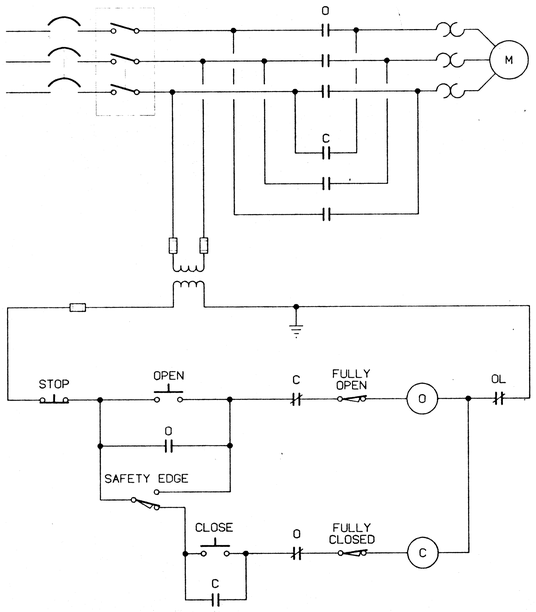


MOTOR	MCC CKT#	PPCS TAG# (SLOW)	PPCS TAG# (FAST)
SF1A	MCC2, #4	181	182
SF1B	MCC2, #5	281	282
SF2A	MCC2, #9	381	382
SF2B	MCC2, #10	481	482

NOTE: SEE CONTROL DRWGS.

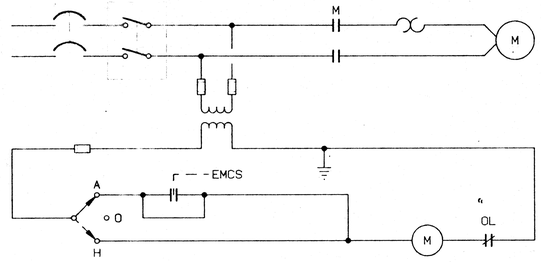
480V-3Ø TWO-SPEED NON-REVERSING MOTOR

SCALE: NONE



480V-3Ø ROLL-UP DOOR MOTOR

SCALE: NONE (TYP FOR DOORS #140 & #142)

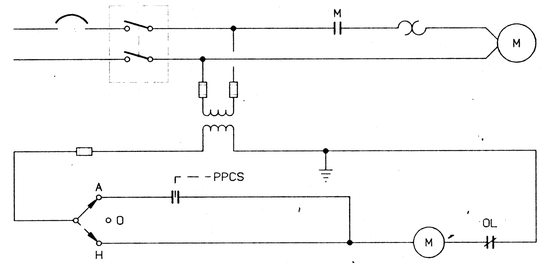


MOTOR	PNL CKT#
FCU-1	PP1-9,11
FCU-2	~~PP1-13,15~~ PP2-26,28

Both circuits for units FCU-1 and FCU-2 should be fed from the one (1) 20A/2P circuit breaker in panel PP1, circuits 9 and 11 shown on Sheet E-15. The two circuits should be spliced together in panel PP1 and then 2-#8 AWG from the splice should be run to the 20A/2P circuit breaker. RFI# 23

208V-1Ø NON-REVERSING MOTOR

SCALE: NONE

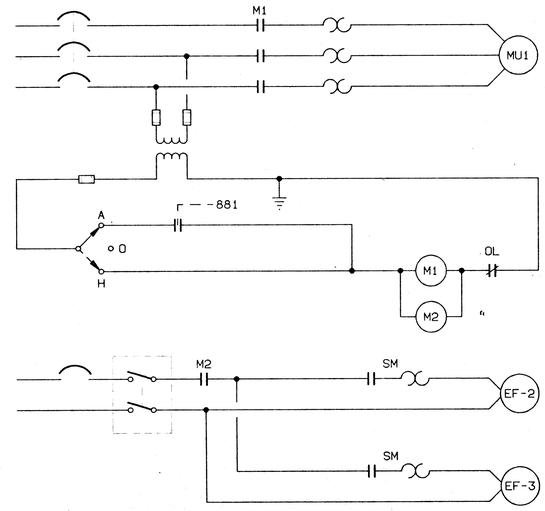


MOTOR	PNL CKT#	PPCS TAG#
EF-4	PP1-25	682
EF-6	PP1-27	884

NOTE: SEE CONTROL DRWGS.

120-1Ø NON-REVERSING MOTOR

SCALE: NONE



INTERLOCK OF MU1 WITH EF-2 & EF-3

SCALE: NONE

REVISION	DATE	DESCRIPTION	BY	BY

NORMAN ENGINEERING CO. — CONSULTING ENGINEERS — LOS ANGELES, CALIFORNIA

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

DESIGNED: R. SHEPARD
DRAWN: R. TAGAYUN
CHECKED: L. MYERS

MCCLELLAN AIR FORCE BASE — CALIFORNIA
ADAL DEPOT CORROSION CONTROL FACILITY
NEW AIRCRAFT PAINT FACILITY
CONTROL DIAGRAMS - 1

SUBMITTED:
DATE APPROVED: 9/30/92
SCALE: NONE
SPEC No. 8529
SHEET E-13 85 OF 95
FILE No. 100-25-2051

ENVIRONMENTAL ENHANCEMENT THRU ENGINEERING

CONDUIT AND WIRE SCHEDULE

REV NO	CONDUIT NO	SERVICE	LOAD: HP, FLA OR KVA	LOAD: VOLTS	RUN: FROM	RUN: TO	CONDUIT SIZE	CONDUCTORS: QUANTITY AND SIZE	CONDUCTORS: GROUND	REFERENCE DRAWING NUMBER	REMARKS
	1	NEW DIST FEEDER BS-4	400A	12.4KV	BELL AVE.SUBST	SS-708	2/5" RFI #16	3#500MCM	1#1/0	E-3,4,17,18	VIA EXIST DUCT BANK & MANHOLES
	2	TAP TO LOADCENTER A	155A	12.4KV	SS-708	LOADCENTER A	4"	3#1/0	1#6	E-3,4,17	
	3	MOTOR CONTROL CENTER MCC1	2000A	480	LOADCENTER A	MCC1	4"	3#750MCM	1#250MCM	E-3,4,8,17,18	
	4	MOTOR CONTROL CENTER MCC1	2000A	480	LOADCENTER A	MCC1	4"	3#750MCM	1#250MCM	E-3,4,8,17,18	
	5	MOTOR CONTROL CENTER MCC1	2000A	480	LOADCENTER A	MCC1	4"	3#750MCM	1#250MCM	E-3,4,8,17,18	
	6	MOTOR CONTROL CENTER MCC1	2000A	480	LOADCENTER A	MCC1	4"	3#750MCM	1#250MCM	E-3,4,8,17,18	
	7	MOTOR CONTROL CENTER MCC1	2000A	480	LOADCENTER A	MCC1	4"	3#750MCM	1#250MCM	E-3,4,8,17,18	
	8	MOTOR CONTROL CENTER MCC2	2000A	480	LOADCENTER A	MCC2	4"	3#750MCM	1#250MCM	E-3,4,9,17,18	
	9	MOTOR CONTROL CENTER MCC2	2000A	480	LOADCENTER A	MCC2	4"	3#750MCM	1#250MCM	E-3,4,9,17,18	
	10	MOTOR CONTROL CENTER MCC2	2000A	480	LOADCENTER A	MCC2	4"	3#750MCM	1#250MCM	E-3,4,9,17,18	
	11	MOTOR CONTROL CENTER MCC2	2000A	480	LOADCENTER A	MCC2	4"	3#750MCM	1#250MCM	E-3,4,9,17,18	
	12	MOTOR CONTROL CENTER MCC2	2000A	480	LOADCENTER A	MCC2	4"	3#750MCM	1#250MCM	E-3,4,9,17,18	
	13	DISTRIBUTION PANEL DP1	600A	480	LOADCENTER A	DP1	4"	3#350MCM	1#1	E-3,4,8,17,18	
	14	DISTRIBUTION PANEL DP1	600A	480	LOADCENTER A	DP1	4"	3#350MCM	1#1	E-3,4,8,17,18	
	15	TELEPHONE	N/A	N/A	EXIST. POLE	BACKBOARD	4"	PULLWIRE	-	E-4,11,17	
	16	EXHAUST FAN EF1A	150HP	480	MCC1	EF1A	2"	3#4/0	1#2	E-3,8,18	
	17	EXHAUST FAN EF1B	150HP	480	MCC1	EF1B	2"	3#4/0	1#2	E-3,8,18	
	18	EXHAUST FAN EF1C	150HP	480	MCC1	EF1C	2"	3#4/0	1#2	E-3,8,18	
	19	EXHAUST FAN EF1D	150HP	480	MCC1	EF1D	2"	3#4/0	1#2	E-3,8,18	
	20	SUPPLY FAN SF3A	125HP	480	MCC2	SF3A	2"	3#3/0	1#4	E-3,10,18	
	21	SUPPLY FAN SF3B	125HP	480	MCC2	SF3B	2"	3#3/0	1#4	E-3,10,18	
	22	SUPPLY FAN SF3C	125HP	480	MCC2	SF3C	2"	3#3/0	1#4	E-3,10,18	
	23	SUPPLY FAN SF1A	125HP	480	MCC2	SF1A	2"	6 ~~3~~#3/0 RFI 141	1#4	E-3,8,18	
	24	SUPPLY FAN SF1B	125HP	480	MCC2	SF1B	2"	6 ~~3~~#3/0 RFI #141	1#4	E-3,8,18	
	25	PUMP P1A	20HP	480	MCC1	P1A	3/4"	3#10 SEE ALSO	1#10	E-3,8,18	
	26	PUMP P1B	20HP	480	MCC1	P1B	3/4"	3#10 RFI 155	1#10	E-3,8,18	
	27	PUMP P2	3HP	480	MCC1	P2	3/4"	3#12	1#12	E-3,8,18	
	28	EVAPORATIVE COOLER EC1A	1HP	480	MCC1	EC1A	~~3/4"~~ 1"	3#12	1#12	E-3,8,18	
	29	EVAPORATIVE COOLER EC1A	1HP	480	MCC1	EC1A	~~3/4"~~	3#12	1#12	E-3,8,18	
	30	EVAPORATIVE COOLER EC1A	1HP	480	MCC1	EC1A	~~3/4"~~ 1"	3#12	1#12	E-3,8,18	
	31	EVAPORATIVE COOLER EC1A	1HP	480	MCC1	EC1A	~~3/4"~~	3#12	1#12	E-3,8,18	
	32	EVAPORATIVE COOLER EC1B	1HP	480	MCC1	EC1B	~~3/4"~~ 1"	3#12	1#12	E-3,8,18	
	33	EVAPORATIVE COOLER EC1B	1HP	480	MCC1	EC1B	~~3/4"~~	3#12	1#12	E-3,8,18	
	34	EVAPORATIVE COOLER EC1B	1HP	480	MCC1	EC1B	~~3/4"~~ 1"	3#12	1#12	E-3,8,18	
	35	EVAPORATIVE COOLER EC1B	1HP	480	MCC1	EC1B	~~3/4"~~	3#12	1#12	E-3,8,18	
	36	IW LIFT STATION	2×1/2HP	480	DP1	LIFT STATION	1"	3#12	1#12	E-3,4,18	
	37	WATER HEATER T-5	45 KW	480	DP1	T-5	1"	3#4	1#8	E-3,10,18	
	38	VOC MONITORING	N/A	-	QT-142,442	MCC-2	1"	2-PR #18 SHIELDED	1#12	E-4,18	
	39	EXHAUST FAN EF1E	150HP	480	MCC1	EF1E	2"	3#4/0	1#2	E-3,9,18	
	40	EXHAUST FAN EF1F	150HP	480	MCC1	EF1F	2"	3#4/0	1#2	E-3,9,18	
	41	EXHAUST FAN EF1G	150HP	480	MCC1	EF1G	2"	3#4/0	1#2	E-3,9,18	
	42	EXHAUST FAN EF1H	150HP	480	MCC1	EF1H	2"	3#4/0	1#2	E-3,9,18	
	43	SUPPLY FAN SF3D	125HP	480	MCC2	SF3D	2"	3#3/0	1#4	E-3,10,18	
	44	SUPPLY FAN SF3E	125HP	480	MCC2	SF3E FLEX CONDUIT ACCEPTABLE	2"	3#3/0	1#4	E-3,10,18	
	45	SUPPLY FAN SF3F	125HP	480	MCC2	SF3F TO GO AROUND STRUCT STL.	2"	3#3/0	1#4	E-3,10,18	
	46	SUPPLY FAN SF2A	125HP	480	MCC2	SF2A AT EXHAUST FANS PER	2"	3/0 AWG AND 6 ~~3~~#3/0 RFI 141	1#4	E-3,9,18	
	47	SUPPLY FAN SF2B	125HP	480	MCC2	SF2B COE. SEE DAILY REPORT	2"	4 AWG CONDUC-6 ~~3~~#3/0 RFI 141	1#4	E-3,9,18	
	48	EXHAUST FAN EF7	5HP	480	MCC2	EF7 OF 9/14/94	3/4"	TORS ARE ACCEPTABLE 3#12 SEE RFI 155	1#12	E-3,4,18	
	49	EXHAUST FAN EF8	5HP	480	MCC2	EF8	3/4"	PER RFI #157 3#12	1#12	E-3,4,18	
	50	EVAPORATIVE COOLER EC2A	1HP	480	MCC2	EC2A	~~3/4"~~ 1"	3#12	1#12	E-3,9,18	
	51	EVAPORATIVE COOLER EC2A	1HP	480	MCC2	EC2A	~~3/4"~~	3#12	1#12	E-3,9,18	
	52	EVAPORATIVE COOLER EC2A	1HP	480	MCC2	EC2A	~~3/4"~~ 1"	3#12	1#12	E-3,9,18	
	53	EVAPORATIVE COOLER EC2A	1HP	480	MCC2	EC2A	~~3/4"~~	3#12	1#12	E-3,9,18	
	54	EVAPORATIVE COOLER EC2B	1HP	480	MCC2	EC2B	~~3/4"~~ 1"	3#12	1#12	E-3,9,18	
	55	EVAPORATIVE COOLER EC2B	1HP	480	MCC2	EC2B	~~3/4"~~	3#12	1#12	E-3,9,18	
	56	EVAPORATIVE COOLER EC2B	1HP	480	MCC2	EC2B	~~3/4"~~ 1"	3#12	1#12	E-3,9,18	
	57	EVAPORATIVE COOLER EC2B	1HP	480	MCC2	EC2B	~~3/4"~~	3#12	1#12	E-3,9,18	
	58	EXHAUST FAN EF-5	3/4HP	480	MCC2	EF-5	3/4"	3#12	3#12	E-3,9,18	
	59	MAKE-UP AIR UNIT MU-1	3/4HP	480	MCC2	MU-1	3/4"	3#12	3#12	E-3,10,18	
	60	EVAPORATIVE COOLER ECU-1	1HP	480	MCC2	ECU-1	3/4"	3#12	3#12	E-3,10,18	
	61	SPARE			LOADCENTER A	SEE NOTE 1	4"			E-3,4,9,17,18	
	62	SPARE			LOADCENTER A	SEE NOTE 1	4"			E-3,4,9,17,18	
	63	TELEPHONE	N/A	N/A	EXIST. POLE	EXIST. POLE	4"	PULLWIRE	-	E-4	
	64	ENERGY MONITORING	N/A	N/A	LOADCENTER A	EMCS DTC	4"	2#14	1#14	E-3,4,8	△1
	65	PANEL LP1	225A	480	DP1	LP1	2"	4#3/0	1#4	E-3,18	
	66	TRANSFORMER T-1	150KVA	480	DP1	T-1	2"	3#3/0	1#8	E-3,18	
	67	PANEL PP1	400A	208/120	T-1	PP1	3"	4#500MCM	1#4	E-3,18	
	68	ROBOTIC PAINT SYSTEM		480	DP1	J-BOX	3/4"	3#10	1#10	E-3,8	
	69	ROBOTIC PAINT SYSTEM		480	DP1	J-BOX	3/4"	3#10	1#10	E-3,8	
	70	ROBOTIC PAINT SYSTEM		480	DP1	J-BOX	3/4"	3#10	1#10	E-3,8	
	71	ROBOTIC PAINT SYSTEM		480	DP1	J-BOX	3/4"	3#10	1#10	E-3,8	
	72	HANGAR DOORS	2HP	480	DP1	HANGAR DOOR	~~3/4"~~	3#12	1#12	E-3,8	
	73	HANGAR DOORS	2HP	480	DP1	HANGAR DOOR	~~3/4"~~	3#12	1#12	E-3,8	
	74	HANGAR DOORS	2HP	480	DP1	HANGAR DOOR	~~3/4"~~	3#12	1#12	E-3,8	
	75	HANGAR DOORS	2HP	480	DP1	HANGAR DOOR	~~3/4"~~	3#12	1#12	E-3,8	
	76	HANGAR DOORS	2HP	480	DP1	HANGAR DOOR	~~3/4"~~	3#12	1#12	E-3,8	
	77	HANGAR DOORS	2HP	480	DP1	HANGAR DOOR	~~3/4"~~	3#12	1#12	E-3,8	
	78	HANGAR DOORS	2HP	480	DP1	HANGAR DOOR	~~3/4"~~	3#12	1#12	E-3,8	
	79	HANGAR DOORS	2HP	480	DP1	HANGAR DOOR	~~3/4"~~	3#12	1#12	E-3,8	
	80	HEAT PUMP HPU-1		208	PP1	HPU-1	~~3/4"~~ 3/4"	2#8	1#10	E-8	
	81	HEAT PUMP HPU-2		208	PP1	HPU-2	3/4"	2#8	1#10	E-8	
	82	FAN COIL UNIT FCU-1	SEE RFI #23 AT RIGHT	208	PP1	FCU-1	3/4"	2#8	1#10	E-8	
	83	FAN COIL UNIT FCU-2	ALSO 144 AT RIGHT	208	PP1	FCU-2	3/4"	2#8	1#10	E-10	
	84	BREATHING AIR UNIT BAU-1		208	PP1	BAU-1	3/4"	2#8	1#10	E-10	
	85	EMERGENCY BATTERY UNIT	1800W	277	LP1	CBEPS	3/4"	RFI #135 ~~2#12~~ 3#10 AWG	1#12	E-3,18	
	86	FIRE PROTECTION	4×15HP	480	LOADCENTER A	AFFF PUMPS	4"	~~2#2~~ SEE REVISED SCHEDULE @ RIGHT. ADD. 0006	1#8	E-3,4,8,9,17	
	87	SPARE			LOADCENTER A	SERVICE BLDG	4"			E-3,4,8,17	
	88	ROBOTIC PAINT SYSTEM		480	DP1	J-BOX	3/4"	3#10	1#10	E-3,9	
	89	ROBOTIC PAINT SYSTEM		480	DP1	J-BOX	3/4"	3#10	1#10	E-3,9	
	90	ROBOTIC PAINT SYSTEM		480	DP1	J-BOX	3/4"	3#10	1#10	E-3,9	
	91	ROBOTIC PAINT SYSTEM		480	DP1	J-BOX	3/4"	3#10	1#10	E-3,9	
	92	ROBOTIC PAINT SYSTEM		480	PP2	J-BOX	1 1/2"	~~2#3~~, 3#10, 3#12	1#8	E-8	
	93	ROBOTIC PAINT SYSTEM		480	PP2	J-BOX	1 1/2"	~~2#3~~, 3#10, 3#12	1#8	E-8	
	94	ROBOTIC PAINT SYSTEM		480	PP2	J-BOX	1 1/2"	~~2#3~~, 3#10, 3#12	1#8	E-9	
	95	ROBOTIC PAINT SYSTEM		480	PP2	J-BOX	1 1/2"	~~2#3~~, 3#10, 3#12	1#8	E-9	
	96	PANEL PP2	225A	208/120	PP1	PP2	2 1/2"	4#4/0	1#2	E-3,18	
	97	ROLL-UP DOOR	1/2HP	480	DP1	DOOR#140	3/4"	3 ~~2~~#12	1#12	E-3,9	
	98	ROLL-UP DOOR	1/2HP	480	DP1	DOOR#142	3/4"	3 ~~2~~#12	1#12	E-3,9	
	99	AIR BATH	5HP	~~480~~	DP1	AIR BATH #108	3/4"	~~2#12~~	~~1#12~~	E-3,8	
	100	AIR BATH	5HP	~~480~~	DP1	AIR BATH #114	3/4"	~~2#12~~	~~1#12~~	E-3,9	
	101	AFFF CONTROLS	N/A	-	FACP	AFFF PUMP	1"	12#14	1#12	E-8,17,18	
	102	AFFF CONTROLS	N/A	-	AFFF PUMP	AFFF PUMP	1"	6#14	1#12	E-8,17,18	
	103	AFFF CONTROLS	N/A	-	FACP	AFFF PUMP	1"	12#14	1#12	E-8,9,17,18	
	104	AFFF CONTROLS	N/A	-	FACP	AFFF PUMP	1"	6#14	1#12	E-9,17,18	
	105										

FCU-1 and FCU-2 shall be fed by separate 45 amp circuits as recommended by the manufacturer. FCU-1 shall be fed from panel PP1 circuit 9 and 11 with a 45 amp 2 pole circuit breaker. FCU-2 shall be fed from any available 2 pole space in either Panel PP1 or PP2 with a 45 amp 2 pole circuit breaker. The conduit and conductor size and quantity shall remain as indicated on Sheet E-14, although, the circuit for FCU-2 shall be run from the available space location. The circuit breaker's AIC shall match the panel to which it is installed. ~~RFI 144~~

Both circuits for units FCU-1 and FCU-2 should be fed from the one (1) 20A/2P circuit breaker in panel PP1, circuits 9 and 11 shown on Sheet E-15. The two circuits should be spliced together in panel PP1 and then 2-#8 AWG from the splice should be run to the 20A/2P circuit breaker. RFI #23

Addendum No. 0006

CONDUIT AND WIRE SCHEDULE

REV NO	CONDUIT NO	SERVICE	LOAD: HP, FLA OR KVA	LOAD: VOLTS	RUN: FROM	RUN: TO	CONDUIT SIZE	CONDUCTORS: QUANTITY AND SIZE	CONDUCTORS: GROUND
	83	FAN COIL UNIT FCU-2		208	PP1	FCU-2	3/4"	2#8	1#1.
	84	BREATHING AIR UNIT BAU-1		208	PP1	BAU-1	3/4"	2#8	1#[illegible]
	85	EMERGENCY BATTERY UNIT	1800W	277	LP1	CBEPS	3/4"	2#12	1#250
	86	FIRE PROTECTION	4=15HP	480	LOADCENTER A	AFFF PUMPS	4"	2#[illegible]	1#250
	87	SPARE			LOADCENTER A	SERVICE BLDG	4"		1#250
	88	ROBOTIC PAINT SYSTEM		480	DP1	J-BOX	3/4"	3#10	1#250
	89	ROBOTIC PAINT SYSTEM		480	DP1	J-BOX	3/4"	3#10	1#250
	90	ROBOTIC PAINT SYSTEM		480	DP1	J-BOX	3/4"	3#10	1#250
	91	ROBOTIC PAINT SYSTEM		480	DP1	J-BOX	3/4"	3#10	1#250
	92	ROBOTIC PAINT SYSTEM		208/120	PP2	J-BOX	1 1/2"	2#1, 3#10, 3#12	1#250
	93	ROBOTIC PAINT SYSTEM		208/120	PP2	J-BOX	1 1/2"	2#1, 3#10, 3#12	1#250
	94	ROBOTIC PAINT SYSTEM		208/120	PP2	J-BOX	1 1/2"	2#1, 3#10, 3#12	1#250
	95	ROBOTIC PAINT SYSTEM		208/120	PP2	J-BOX	1 1/2"	2#1, 3#10, 3#12	1#1
	96	PANEL PP2	225A	208/120	PP1	PP2	2 1/2"	4#4/0	1#1
	97	ROLL-UP DOOR	1/2HP	480	DP1	DOOR#140	3/4"	2#12	-
	98	ROLL-UP DOOR	1/2HP	480	DP1	DOOR#142	3/4"	2#12	1#[illegible]
	99	AIR BATH	5HP	480	DP1	AIR BATH #108	3/4"	2#12	1#[illegible]
	100	AIR BATH	5HP	480	DP1	AIR BATH #114	3/4"	2#12	1#[illegible]
	101	AFFF CONTROLS	N/A	-	FACP	AFFF PUMP	1"	12#14	1#[illegible]
	102	AFFF CONTROLS	N/A	-	AFFF PUMP	AFFF PUMP	1"	6#14	1#4
	103	AFFF CONTROLS	N/A	-	FACP	AFFF PUMP	1"	12#14	1#4
	104	AFFF CONTROLS	N/A	-	FACP	AFFF PUMP	1"	6#14	1#4
	105								1#4

SEE NOTE 2
SEE NOTE 3 △1
SEE NOTE 4
SEE NOTE 5

ADD ONE #12 PER RFP 38 & P00042

SEE NOTES SHEET E3

ADD ONE #2 ~~PER RFP 38 & P00042~~

AFFF GROUND CONDUCTORS WILL 3/0 ~~PER RFI 117~~

AFFF PUMPS SUBMITTED AS 30HP NOT 15 WIRE SIZE PENDING SUBMITTAL REVIEW ~~PER RFI #67~~

Reference your letter #ALB-H-052, dated February 15, 1994, your RFI's, RFI-87, dated March 3, 1994, and RFI-102, dated March 28, 1994. The above referenced correspondence all relates to the new AFFF fire pumps, and the electrical feeds for the same.

As noted in your letter, the pump size for the new AFFF systems in both the new facility and in existing Building 692 are required to be 30 horsepower.

You are correct in your RFI-87 when you state that the AFFF pumps selected will not work with the wiring sizes shown on the contract drawings:

a. For the four 30 horsepower pump motors being supplied by your sub-contractor for the new facility, you will need to use 3 - 3/0 AWG feeder conductors with 1 - 250 MCM ground conductor. This 250 MCM ground conductor (as specified in enclosure 3 to amendment 0006) is adequate and does meet the requirements of the National Electric Code (NEC). The 500 amp fuses feeding these pumps (as shown on drawing E-3), need to be changed to 1000 amp fuses.

b. For the two 30 horsepower pump motors being supplied by your sub-contractor for existing Building 692, you will need to use 3 - #2 AWG feeder conductors with 1 - #2 AWG ground conductor. The 250 amp fuses feeding these pumps (as shown on drawing E-23), need to be changed to 500 amp fuses.

In RFI-102, you wanted to know what size tap conductors to use to feed the fused disconnect switch you are planning on providing between existing switchboard MDS and the AFFF fire pumps for existing Building 692. See (b) above which lists the conductor and fuse requirements for these pumps.

We must point out, that per NFPA-20, Paragraph 6.3.3 (1992 edition) it states: "The fire pump feeder shall be connected ahead of all plant disconnecting means (1-7.1.3). There shall be no disconnecting means within the fire pump feeder circuit. Exception: The isolating switch and disconnecting means within the fire pump controller (Chapter 7)."

Therefore, you can not put a disconnecting switch between the fire pump controller and the tap ahead of the main breaker in existing panel MDS, or between the fire pump controller and the tap ahead of the main breaker in the new panel for the new facility.

In summary, the specifications required in Section 16415, Paragraph 3.10, states that: "The Contractor shall be responsible for selecting the actual horsepower ratings and other motor requirements necessary for the applications indicated. When electrically driven equipment furnished under other sections of these specifications materially differs from the design, the Contractor shall make the necessary adjustments to the wiring, disconnect devices and branch-circuit protection to accommodate the equipment actually installed."

NOTES:

1. RUN SPARE CONDUIT TO LOCATIONS AS SHOWN ON THE DRAWINGS. INSTALL PULLWIRE AND CAP.
2. △1 PP2 - #3 WIRES, CKT #1 AND 3
   #10 WIRES, CKT #5 AND 7 PLUS NEUTRAL
   #12 WIRES, CKT #9 AND 11 PLUS NEUTRAL
3. PP2 - #3 WIRES, CKT #13 AND 15
   #10 WIRES, CKT #17 AND 19 PLUS NEUTRAL
   #12 WIRES, CKT #21 AND 23 PLUS NEUTRAL
4. PP2 - #3 WIRES, CKT #2 AND 4
   #10 WIRES, CKT #6 AND 8 PLUS NEUTRAL
   #12 WIRES, CKT #10 AND 12 PLUS NEUTRAL
5. PP2 - #3 WIRES, CKT #14 AND 16
   #10 WIRES, CKT #18 AND 20 PLUS NEUTRAL
   #12 WIRES, CKT #22 AND 24 PLUS NEUTRAL

NOTES: Addendum No. 0006

1. RUN SPARE CONDUIT TO LOCATIONS AS SHOWN ON THE DRAWINGS. INSTALL PULLWIRE AND CAP.
2. △1 PP2 - #1 WIRES, CKT #1 AND 3
   △2 #10 WIRES, CKT #5 AND 7 PLUS NEUTRAL
   #12 WIRES, CKT #9 AND 11 PLUS NEUTRAL
3. PP2 - #1 WIRES, CKT #13 AND 15
   #10 WIRES, CKT #17 AND 19 PLUS NEUTRAL
   #12 WIRES, CKT #21 AND 23 PLUS NEUTRAL
4. PP2 - #1 WIRES, CKT #2 AND 4
   #10 WIRES, CKT #6 AND 8 PLUS NEUTRAL
   #12 WIRES, CKT #10 AND 12 PLUS NEUTRAL
5. PP2 - #1 WIRES, CKT #14 AND 16
   #10 WIRES, CKT #18 AND 20 PLUS NEUTRAL
   #12 WIRES, CKT #22 AND 24 PLUS NEUTRAL

QUESTION / REQUEST: Elect dwgs. show only cond/wire for pump to Indust waste lift station. Will any other electrical be required - i.e: lighting, controls instrumentation? Please advise ~~RERL 20~~

All accessories including transformer, relays, etc. are normally provided with the float control panel. Power would be provided by the same circuit as the pumps and stepped down for the controls. Please coordinate with your pump and float control supplier.

A SEPERATE NEUTRAL IS NEEDED BETWEEN LOAD CENTER A AND DP-1. ~~RFI #154~~

REVISION	DATE	DESCRIPTION	BY	BY
△2	1/13/93	60°C INSULATION ≤ 100A (ADDENDUM NO. 0006)	RH	
△1	11/25/92	MISCELLANEOUS REVISION	RT	.

NORMAN ENGINEERING CO.
CONSULTING ENGINEERS LOS ANGELES, CALIFORNIA

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA

DESIGNED: R. SHEPARD
DRAWN: R. SHEPARD
CHECKED: L. MYERS

MCCLELLAN AIR FORCE BASE CALIFORNIA
ADAL DEPOT CORROSION CONTROL FACILITY
NEW AIRCRAFT PAINT FACILITY
CONDUIT AND CABLE SCHEDULE

SUBMITTED: [signature]
DATE APPROVED: 9/30/92
SCALE: NONE
SPEC No: 8529
SHEET E-14, 86 OF 95
FILE No: 100-25-2051

Am-2 BF

ENVIRONMENTAL ENHANCEMENT THRU ENGINEERING