BACHELOR ENLISTED QUARTERS

NAVAL HOSPITAL CAMP LEJEUNE, N.C.

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED

LIST OF DRAWINGS

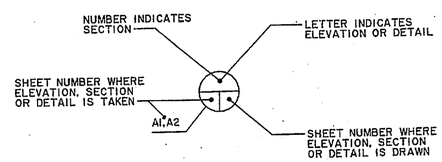
SHEET NO.	EFD NO.	NAVFAC NO.	TITLE
T-1	257723	4157723	TITLE, LOCATION AND VICINITY MAPS, INDEX OF DRAWINGS, ABBREVIATIONS
C-1	257724	4157724	PLAN - NEW ROAD
C-2	257725	4157725	SITE PLAN
C-3	257726	4157726	PARTIAL SITE PLAN & DETAILS
C-4	257727	4157727	ROAD CENTERLINE PROFILE & SECTIONS
C-5	257728	4157728	STORM & SANITARY SEWER CENTERLINE PROFILES
C-6	257729	4157729	SEWAGE PUMP STATION
C-7	257730	4157730	DETAILS
C-8	257731	4157731	DETAILS
C-9	257732	4157732	DETAILS
C-10	257733	4157733	WATER METER DETAILS
C-11	257734	4157734	EROSION CONTROL DETAILS
C-12	257735	4157735	CROSS SECTIONS - NEW ROAD
B-1	257736	4157736	SOIL BORINGS
L-1	257737	4157737	PLANTING PLAN, SCHEDULE & DETAILS
A-1	257738	4157738	FIRST FLOOR PLAN
A-2	257739	4157739	SECOND FLOOR PLAN
A-3	257740	4157740	ELEVATIONS
A-4	257741	4157741	LARGE ROOM PLANS
A-5	257742	4157742	LARGE CORE PLANS
A-6	257743	4157743	BUILDING SECTIONS, DETAILS
A-7	257744	4157744	HANDRAIL DETAILS, WALL SECTIONS
A-8	257745	4157745	STAIR PLANS, SECTIONS & DETAILS
A-9	257746	4157746	STAIR DETAILS
A-10	257747	4157747	DOOR SCHEDULE & DETAILS
A-11	257748	4157748	PARTIAL ELEVATION, STOREFRONT DETAILS
A-12	257749	4157749	ROOF PLAN & DETAILS
A-13	257750	4157750	REFLECTED CEILING PLAN, MISC. DETAILS
A-14	257751	4157751	INTERIOR ELEVATIONS, DETAILS
S-1	257752	4157752	FIRST FLOOR & FOUNDATION PLAN
S-2	257753	4157753	SECOND FLOOR PLAN
S-3	257754	4157754	ROOF PLAN
S-4	257755	4157755	SECOND FLOOR DETAILS
S-5	257756	4157756	FOUNDATION DETAILS
S-6	257757	4157757	ROOF DETAILS
S-7	257758	4157758	STAIR & MISCELLANEOUS DETAILS
S-8	257759	4157759	BALCONY & PARAPET DETAILS

SHEET NO.	EFD NO.	NAVFAC NO.	TITLE
P-1	257760	4157760	PLUMBING FLOOR PLANS
P-2	257761	4157761	PLUMBING RISER DIAGRAMS
P-3	257762	4157762	PARTIAL FLOOR PLANS
P-4	257763	4157763	SCHEDULES & DETAILS
M-1	257764	4157764	MECHANICAL FLOOR PLAN
M-2	257765	4157765	PARTIAL FLOOR PLANS
M-3	257766	4157766	MECHANICAL ROOM PLAN
M-4	257767	4157767	SECTIONS
M-5	257768	4157768	DETAILS
M-6	257769	4157769	MISC. SECTIONS & DETAILS
M-7	257770	4157770	CONTROLS
M-8	257771	4157771	CONTROLS
M-9	257772	4157772	MECHANICAL SCHEDULES
E-1	257773	4157773	LEGEND & FIXTURE SCHEDULE
E-2	257774	4157774	FIRST FLOOR ELECTRICAL PLAN
E-3	257775	4157775	SECOND FLOOR PLAN, ELECTRICAL
E-4	257776	4157776	1ST & 2ND FLOOR CORE POWER PLANS
E-5	257777	4157777	1ST & 2ND FLOOR CORE LIGHTING PLANS
E-6	257778	4157778	TYPICAL ROOM ELECTRICAL PLANS
E-7	257779	4157779	CORE ROOF & ENLARGED MECH. RM. PLANS
E-8	257780	4157780	PANEL SCHEDULES
E-9	257781	4157781	PANEL SCHEDULES
E-10	257782	4157782	POWER & INTERCOM RISER DIAGRAMS
E-11	257783	4157783	CATV, TEL., & F.A. RISER DIAGRAM
E-12	257784	4157784	EXIT LIGHT RISER & LIGHTING CONTROL DIAGRAMS
E-13	257785	4157785	LIGHTING FIXTURE PLATES & DETAILS
E-14	257786	4157786	LIGHTING FIXTURE PLATES & DETAILS
E-15	257787	4157787	POLE PLATES
E-16	257788	4157788	POLE & HANDHOLE PLATES
E-17	257789	4157789	ELECTRICAL SITE PLAN
E-18	257790	4157790	TELEPHONE SITE PLAN

ABBREVIATIONS

&	AND		
BLKG	BLOCKING	BALC.	BALCONY
B.E.J.	BRICK EXPANSION JOINT		
C	CENTERLINE		
CLG	CEILING		
CONC	CONCRETE	COMP.	COMPARTMENT
CT	CERAMIC TILE		
DIA	DIAMETER		
DN	DOWN	E.W.C.	ELECTRIC WATER COOLER
ELAS	ELASTOMERIC	ELECT.	ELECTRICAL
FIN	FINISHED	F.E.C.	FIRE EXTINGUISHER CABINET
FL	FLOOR		
GWB	GYPSUM WALLBOARD		
HD	HEAD		
HM	HOLLOW METAL	J.C.	JANITOR'S CLOSET
HT	HEIGHT	LAUN	LAUNDRY
MAX	MAXIMUM	MECH	MECHANICAL
MTD	MOUNTED		
MTL	METAL		
O.C.	ON CENTER	N.I.C.	NOT IN CONTRACT
OPNG	OPENING		
PDN	POWER DRIVEN NAILS		
PTD	PAPER TOWEL DISPENSER, PAINTED	PRIV.	PRIVATE
QT	QUARRY TILE		
R	RISER		
SAT	SUSPENDED ACOUSTIC TILE		
SC	SOLID CORE		
SCHED	SCHEDULE		
SF	SQUARE FEET	STOR.	STORAGE
TEMP	TEMPORARY	T. TOIL.	TOILET
TPH	TOILET PAPER HOLDER		
TYP	TYPICAL		
VCT	VINYL COMPOSITION TILE	VEND	VENDING
W/	WITH		
WD	WOOD		

LEGEND



ELEVATION, SECTION OR DETAIL SYMBOL

CONCRETE

BRICK

RIGID INSULATION

BATT INSULATION

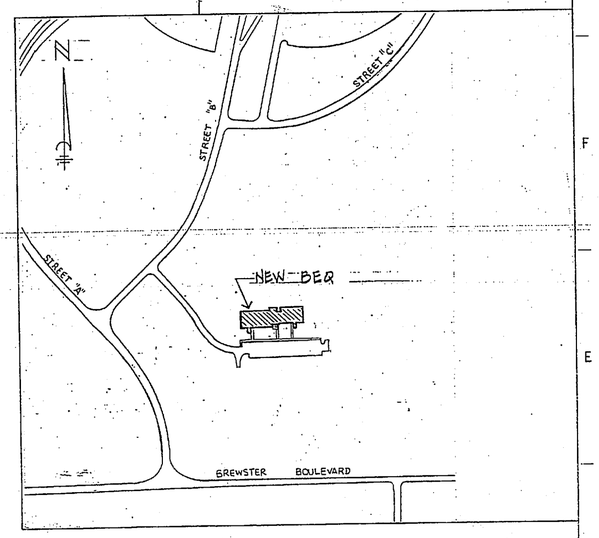
200 ROOM NUMBER

DOOR NUMBER (SEE DOOR SCHEDULE SHEET A-10)

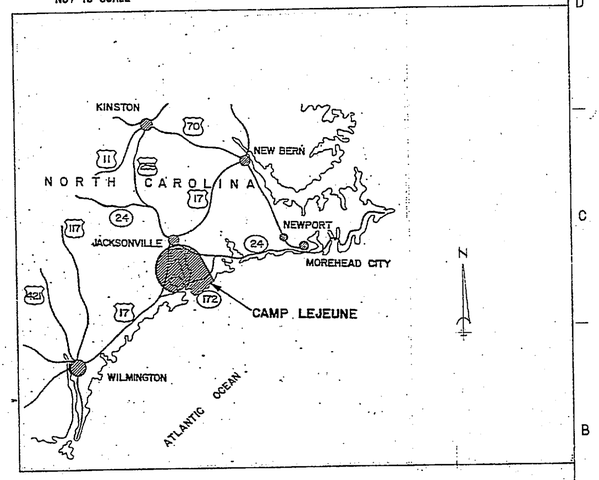
HANDRAIL TYPES (SEE SHEET A-7)

QUALITY CONTROL REVIEW

Edward R. Reynolds 2/19/87
SIGNATURE DATE



LOCATION MAP
NOT TO SCALE



VICINITY MAP
NOT TO SCALE

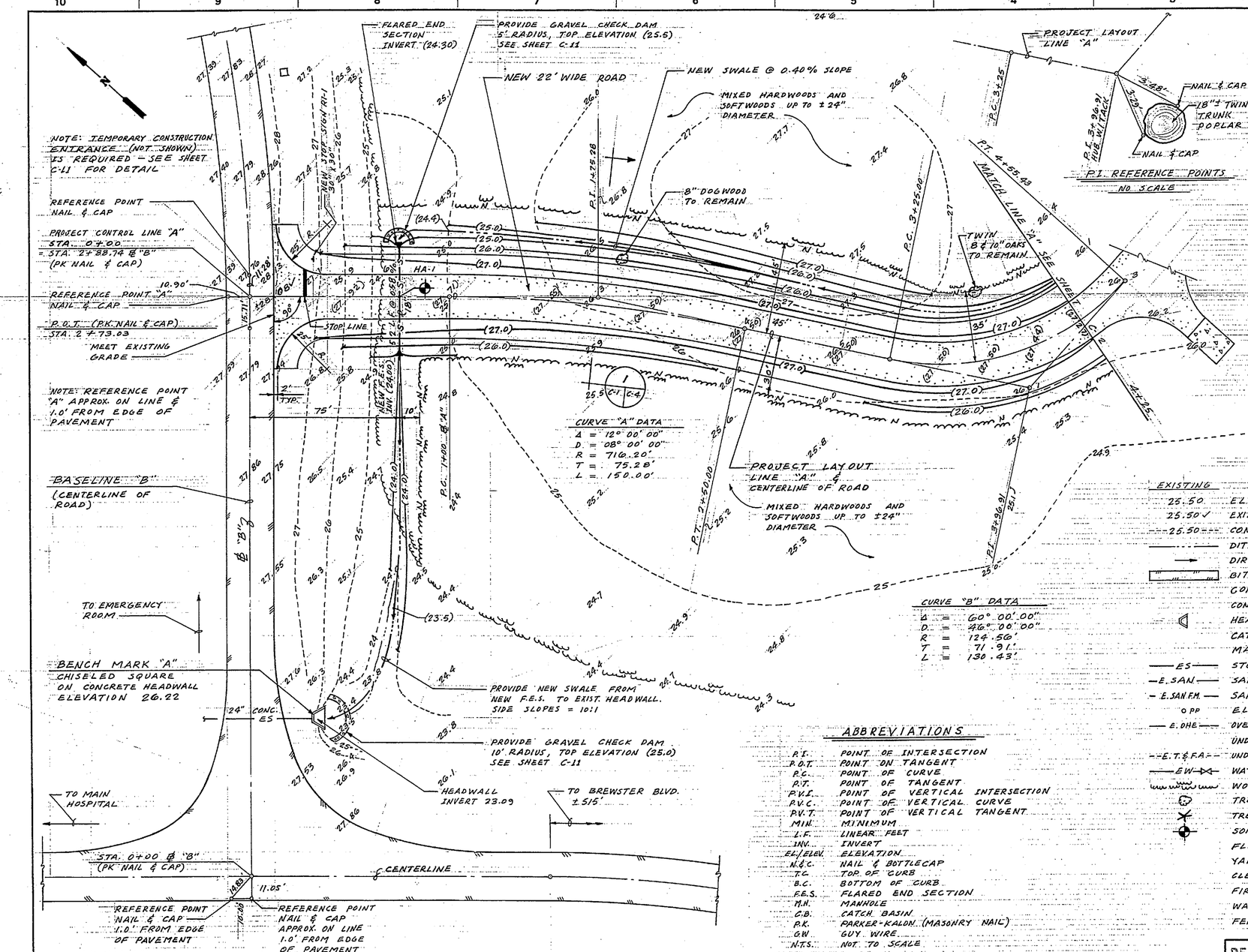
RECORD DRAWING
LETTER DATED

T-1

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
NAVAL STATION — ATLANTIC DIVISION — NORFOLK, VIRGINIA

EFD ENG. NO. 257723	NAVAL HOSPITAL — CAMP LEJEUNE, N.C.
JOB ORDER NO. 5F5306	BACHELOR ENLISTED QUARTERS
ETA PROJ.NO. P-721	TITLE, LOCATION AND VICINITY MAPS, INDEX OF DRAWINGS, ABBREVIATIONS
DES. YLM / DRN. YLM	
PROJ. MGR. SMG / CHARGE/INDR. YLM	
EFD:R/D. / F.P.	
DR MGR. / DES DR.	
APPROVED / DATE	
ACTIVITY-SATISFACTORY TO / DATE	
APPROVED 2-20-87	
FOR EFD FOR COMMANDER, NAVFAC	

SIZE F — CODE IDENT NO. 80091 — NAVFAC DRAWING NO. 4157723
SCALE NOTED — SPEC. 05-85-5306 — CONTR. CONTR. NO. N62470-85-B-3142 — SHEET 1 OF 68



PLAN — NEW ROAD

SCALE: 1" = 20'

GRAPHIC SCALE

25' 0 25' 50' 75' 100'

1" = 20'

TRAFFIC CONTROL NOTES

1. PROVIDE NEW STOP SIGN AT STATION 0+92, 6 TO 8 FEET FROM PAVEMENT EDGE. SEE DETAIL SHEET C-7.
2. PROVIDE NEW STOP LINE 15' FROM EDGE OF EXISTING ROAD AS INDICATED. STOP LINE SHALL BE 18 INCH WIDE REFLECTIVE WHITE.
3. PROVIDE DOUBLE 4" WIDE SOLID YELLOW STRIPES (SEPARATED BY 3-4" SPACE) ON CENTERLINE OF NEW ROAD FROM NEW STOP LINE (STA. 0+28.5) TO STATION 4+84.

LEGEND

EXISTING		NEW
25.50	ELEVATION	(25.50)
25.50✓	EXISTING ELEVATION TO BE MET	25.50✓
25.50	CONTOUR	(25.50)
	DITCH OR SWALE	
	DIRECTION OF FLOW	
	BITUMINOUS CONCRETE PAVEMENT	
	CONCRETE PAVEMENT (PLAN)	
	CONCRETE CURB	
	HEADWALL	
	CATCH BASIN (C.B.)	
	MANHOLE (M.H.)	
ES	STORM DRAIN PIPE	S
E.SAN	SANITARY DRAIN PIPE	SAN
E.SAN F.M.	SANITARY FORCE MAIN	SAN. F.M.
PP	ELECTRIC OR TELEPHONE POLE	PP
E.OHE	OVERHEAD ELECTRIC LINE(S)	
	UNDERGROUND ELEC., TEL., CATV., & F.A.	E&T
E.T.&F.A.	UNDERGROUND TELEPHONE & FIRE ALARM	
EW	WATER LINE & VALVE WITH VALVE BOX	W
	WOODS LINE	
	TREE — DECIDUOUS	
	TREE — EVERGREEN	
	SOIL BORING	
	FLARED END SECTION (F.E.S.)	
	YARD HYDRANT (3/4")	
	CLEANOUT	C.O.
	FIRE HYDRANT	
	WATER METER	M
	FENCE	XX

ABBREVIATIONS

P.I.	POINT OF INTERSECTION
P.O.T.	POINT ON TANGENT
P.C.	POINT OF CURVE
P.T.	POINT OF TANGENT
P.V.I.	POINT OF VERTICAL INTERSECTION
P.V.C.	POINT OF VERTICAL CURVE
P.V.T.	POINT OF VERTICAL TANGENT
MIN.	MINIMUM
L.F.	LINEAR FEET
INV.	INVERT
EL/ELEV.	ELEVATION
N.&C.	NAIL & BOTTLECAP
T.C.	TOP OF CURB
B.C.	BOTTOM OF CURB
F.E.S.	FLARED END SECTION
M.H.	MANHOLE
C.B.	CATCH BASIN
P.K.	PARKER-KALON (MASONRY NAIL)
G.W.	GUY WIRE
N.T.S.	NOT TO SCALE

REVISIONS

SYM.	DESCRIPTION	DATE	APPROVED

RECORD DRAWING LETTER DATED JAN 31 1991

C-1

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NAVAL STATION NORFOLK, VA.

NAVAL HOSPITAL, CAMP LEJEUNE, N.C.

BACHELOR ENLISTED QUARTERS

PLAN — NEW ROAD

EFD DWG. NO. 257,724
JOB ORDER NO. 5F5306
STA. PROJ. NO. P-721
DES. RLT DRWN. RLT
PROJ. MGR. SMG CHARGE/ENGR. YLM
EFD. RVD. P.P.
BR. MGR. DES. DR.
APPROVED DATE
ACTIVITY - SATISFACTORY TO
APPROVED 5-20-91
FOR EFD. FOR COMMANDER NAVFAC

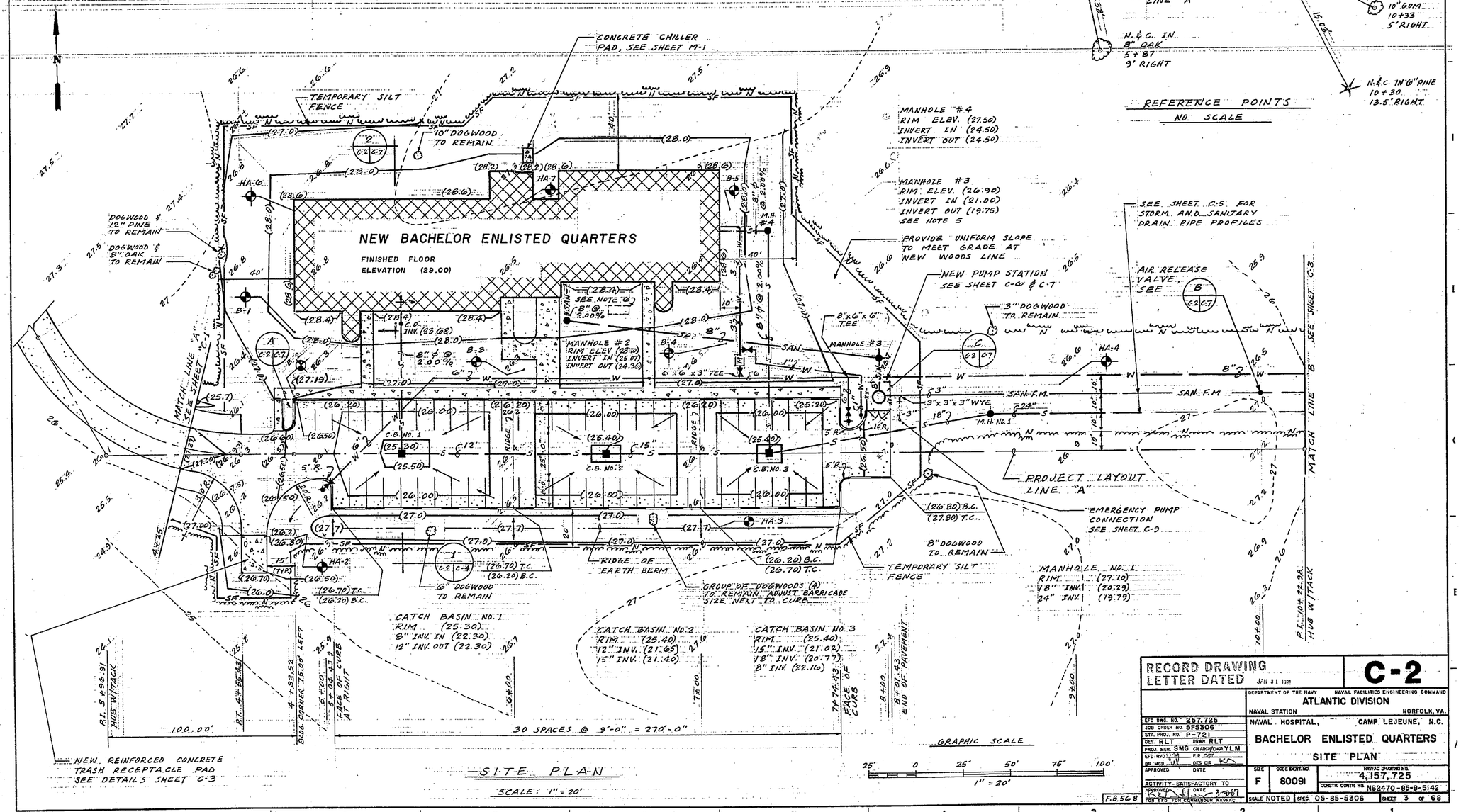
SIZE F | CODE IDENT. NO. 80091 | NAVFAC DRAWING NO. 4,157,724
SCALE NOTED | SPEC. 05-85-5306 | CONSTR. CONTR. NO. N62470-85-B-5142 | SHEET 2 OF 68

F.B. 568

GENERAL NOTES

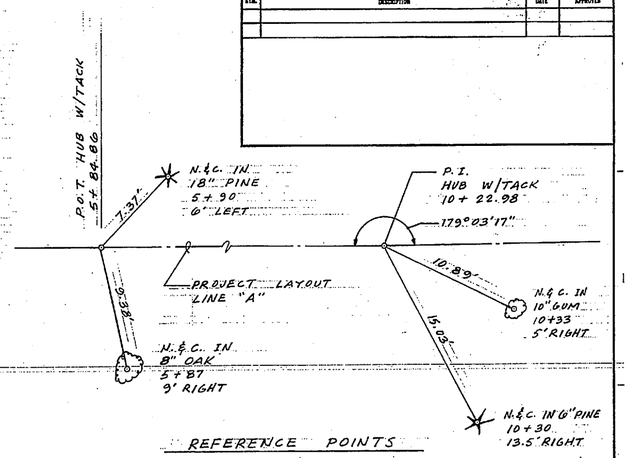
1. ELEVATIONS ARE BASED ON NORTH AMERICAN DATUM OF 1927.
2. SOME CONTROL POINTS MAY HAVE BEEN DESTROYED. CONTRACTOR SHALL VERIFY AND/OR ESTABLISH REQUIRED CONTROL ON PROJECT LAYOUT LINE "A".
3. VEGETATE ALL GRADED AND DISTURBED EARTH AREAS.
4. SEE SHEET L-1 FOR SIDEWALK DIMENSIONS AND JOINTING PATTERN OF SIDEWALKS.
5. PROVIDE 2, 8" & 4, 4" PIPE STUBS AT MANHOLE NO. 3 AS INDICATED. INVERTS AT MANHOLE SHALL BE 19.75. SLOPE PIPE STUBS 1/2". PROVIDE BRICK & MORTAR PLUG AT PIPE ENDS OUTSIDE OF MANHOLE.
6. FOR UNDERGROUND FUEL OIL TANK, SEE SHEET M-4.
7. TREES NOTED FOR RETENTION (WITHIN AREA TO BE CLEARED) SHALL BE BARRICADED WITH 2" x 4" x 5' LUMBER POSTS EXTENDING 3'-6" ABOVE THE GROUND WITH A 2" x 4" TOP RAIL AFFIXED THERETO. BARRICADE SHALL BE HEXAGONAL WITH A RADIUS OF 8' CENTERED ON TREE. MARK BARRICADE WITH SURVEYOR'S FLAGGING TO MAKE HIGHLY VISIBLE. PROTECT TREES FROM ALL CLEARING OPERATIONS. NO EXCAVATION PERMITTED WITHIN BARRICADE, EXCEPT WHERE ABSOLUTELY REQUIRED. WHERE FILL IS REQUIRED, LIMIT FILL TO 6" MAXIMUM TOPSOIL AND DO NOT COMPACT.
8. SEE SHEET C-11 FOR EROSION CONTROL DETAILS.
9. PROVIDE TEMPORARY SEDIMENT BARRIER AROUND CATCH BASINS.
10. SEE SHEET C-10 FOR WATER METER DETAILS.

REVISIONS			
SYM.	DESCRIPTION	DATE	APPROVED



SITE PLAN

SCALE: 1" = 20'



REFERENCE POINTS

NO. SCALE

RECORD DRAWING LETTER DATED JAN 31 1991

C-2

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

ATLANTIC DIVISION

NAVAL STATION NORFOLK, VA.

NAVAL HOSPITAL, CAMP LEJEUNE, N.C.

BACHELOR ENLISTED QUARTERS

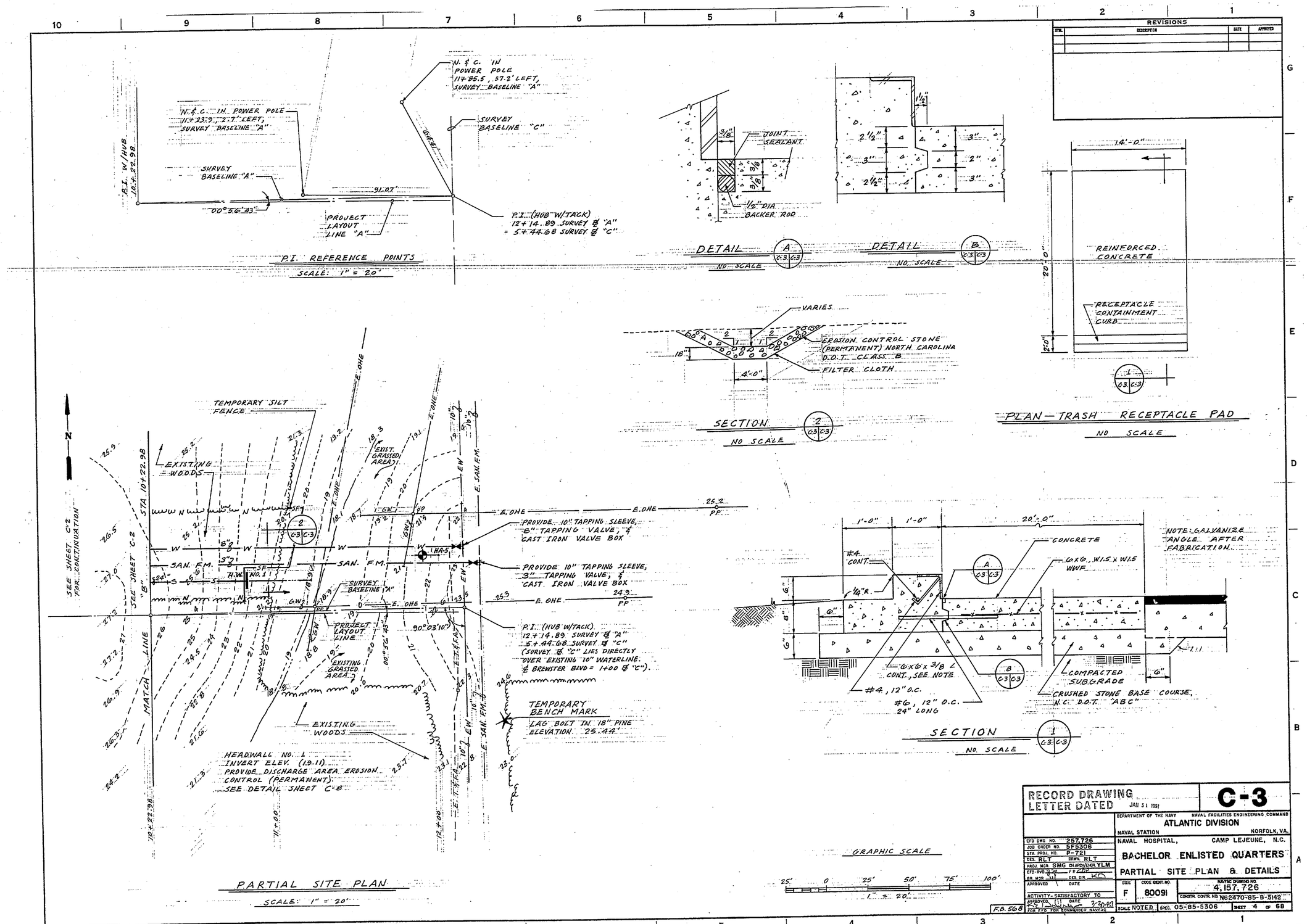
SITE PLAN

EFD DWG. NO.	257,725
JOB ORDER NO.	5F5306
STA. PROJ. NO.	P-721
DES.	RLT
DRWN.	RLT
PROJ. MGR.	SMG
CHKD/ENGR.	YLM
EFD RVD.	
F.P.	
BR. MGR.	
DES. DIR.	
APPROVED	
DATE	

ACTIVITY - SATISFACTORY TO
APPROVED DATE 3-29-91
FOR EFD FOR COMMANDER NAVFAC

F.B. 568

SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.
F	80091	4,157,725
CONSTR. CONTR. NO.	N62470-85-B-5142	
SCALE NOTED	SPEC. 05-85-5306	SHEET 3 OF 68



REVISIONS

SYM.	DESCRIPTION	DATE	APPROVED

RECORD DRAWING LETTER DATED JAN 31 1991

C-3

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NAVAL STATION — NORFOLK, VA.

NAVAL HOSPITAL, CAMP LEJEUNE, N.C.

BACHELOR ENLISTED QUARTERS

PARTIAL SITE PLAN & DETAILS

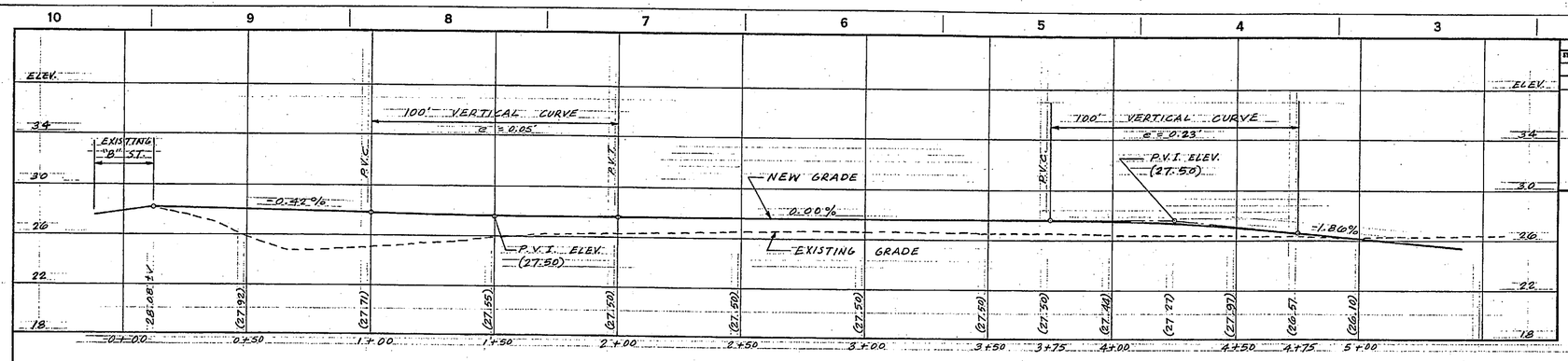
EFD DWG NO.	257,726
JOB ORDER NO.	5F5306
STA PROJ. NO.	P-721
DES. RLT	DRWN. RLT
PROJ MGR. SMG	CHARCH/ENGR. YLM
EFD-RVD.	FP
BR MGR	DES. DIR.
APPROVED	DATE
ACTIVITY - SATISFACTORY TO	
APPROVED	DATE 3-20-89
FOR EFD FOR COMMANDER NAVFAC	

SIZE F — CODE IDENT. NO. 80091 — NAVFAC DRAWING NO. 4,157,726

CONSTR. CONTR. NO. N62470-85-B-5142

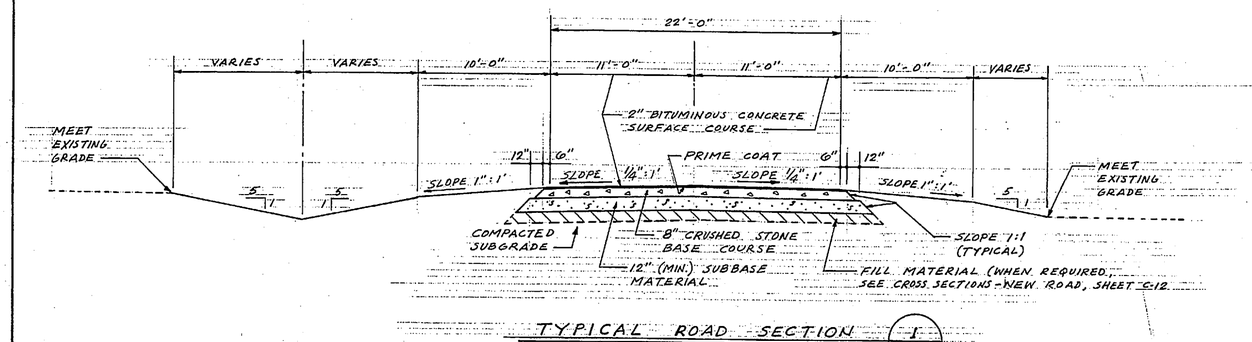
SCALE NOTED — SPEC. 05-85-5306 — SHEET 4 OF 68

F.B. 568



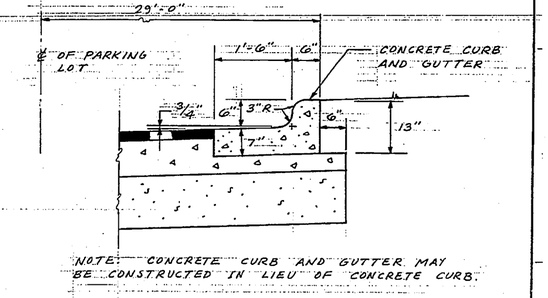
℄ PROFILE — NEW ROAD

SCALES: VERT. 1" = 4'
HORZ. 1" = 20'



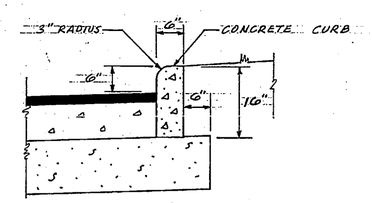
TYPICAL ROAD SECTION (1 / C-2 C-4)

NO SCALE



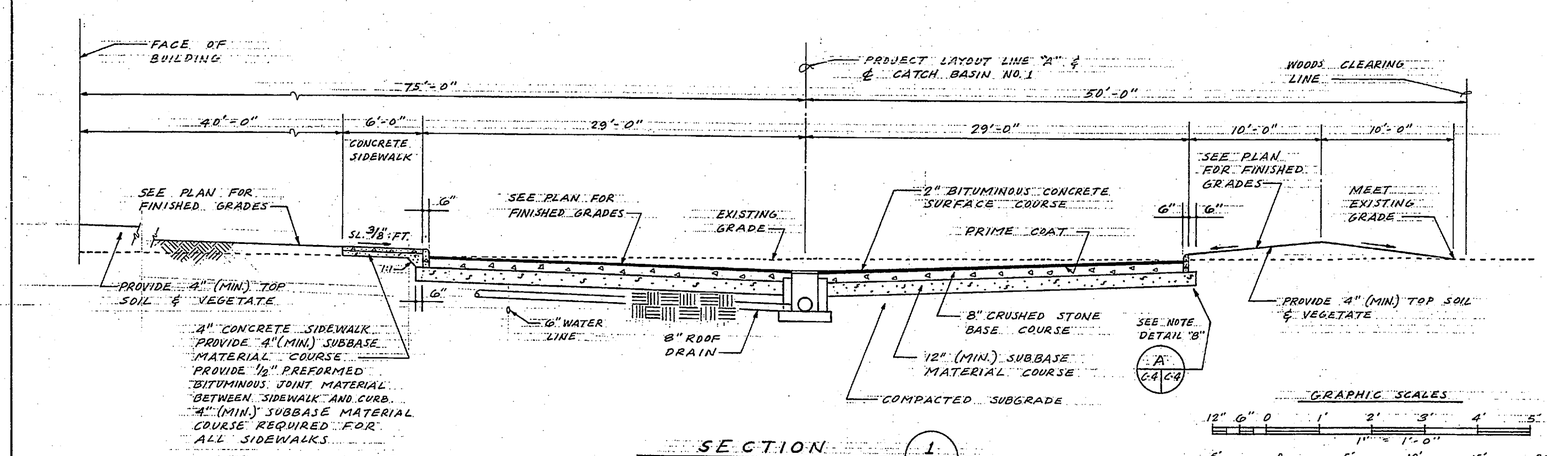
DETAIL (B / C-4 C-4)

SCALE: 1" = 1'-0"



DETAIL (A / C-4 C-4)

SCALE: 1" = 1'-0"



SECTION (1 / C-2 C-4)

SCALE: 1/4" = 1'-0"

GRAPHIC SCALES

12" 6" 0 1' 2' 3' 4' 5'
1" = 1'-0"

5' 0 5' 10' 15' 20'
1" = 4'

25' 0' 25' 50' 75' 100'
1" = 20'

REVISIONS

SYM.	DESCRIPTION	DATE	APPROVED

RECORD DRAWING LETTER DATED JAN 31 1991

C-4

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NAVAL STATION — NORFOLK, VA.

EFD DWG. NO. 257,727
JOB ORDER NO. 5F5306
STA. PROJ. NO. P-721
DES. RLT — DRWN. RLT
PROJ. MGR. SMG — CH ARCH/ENGR. YLM
EFD RVD. LEE — F.P. 25.50
BR. MGR. LEE — DES. CIR. KD
APPROVED — DATE
ACTIVITY-SATISFACTORY TO
APPROVED — DATE 2-28-91
FOR EFD FOR COMMANDER NAVFAC

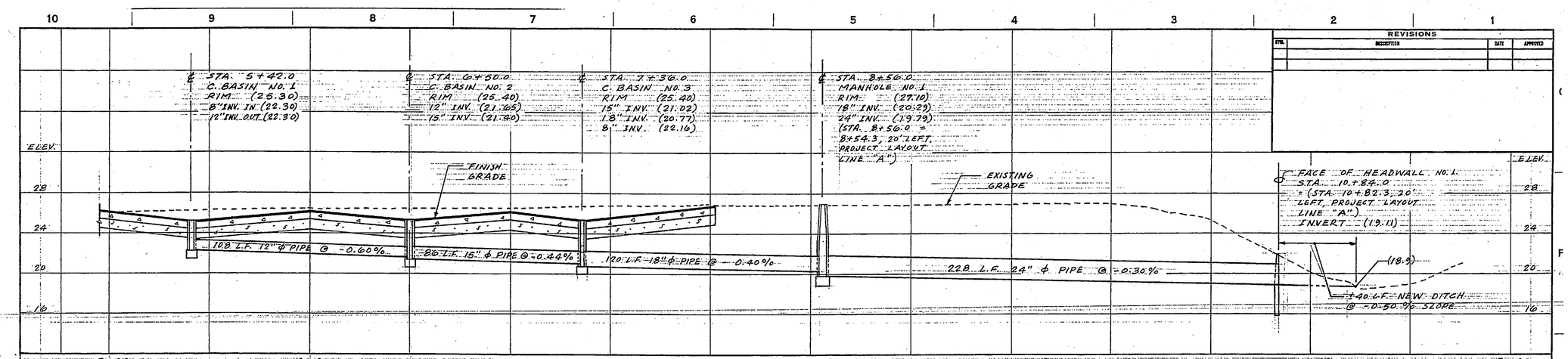
NAVAL HOSPITAL, CAMP LEJEUNE, N.C.

BACHELOR ENLISTED QUARTERS

ROAD ℄ PROFILE AND SECTIONS

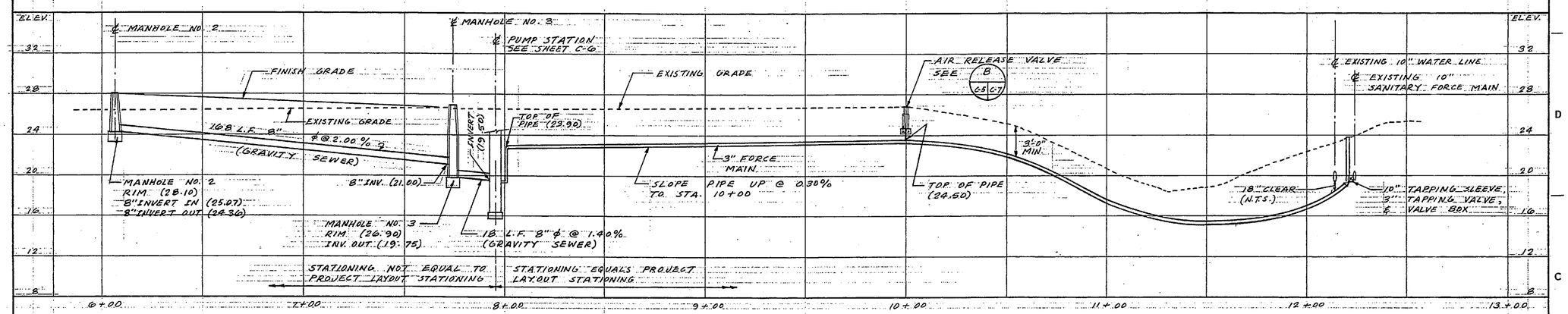
SIZE F — CODE IDENT. NO. 80091 — NAVFAC DRAWING NO. 4,157,727
CONSTR. CONTR. NO. N62470-85-B-5142
SCALE NOTED — SPEC. 05-85-5306 — SHEET 5 OF 68

REVISIONS			
SYM.	DESCRIPTION	DATE	APPROVED



STORM DRAIN ℄ PROFILE

SCALES: VERT. 1" = 4'
HORZ. 1" = 20'



SANITARY SEWER ℄ PROFILE

SCALES VERT. 1" = 4'
HORZ. 1" = 20'

NOTE: SEE SHEETS C-8 & C-9 FOR SANITARY AND STORM DRAINAGE STRUCTURE DETAILS.

GRAPHIC SCALES

5' 0 5' 10' 15' 20'
1" = 4'

25' 0' 25' 50' 75' 100'
1" = 20'

RECORD DRAWING LETTER DATED JAN 31 1991

C-5

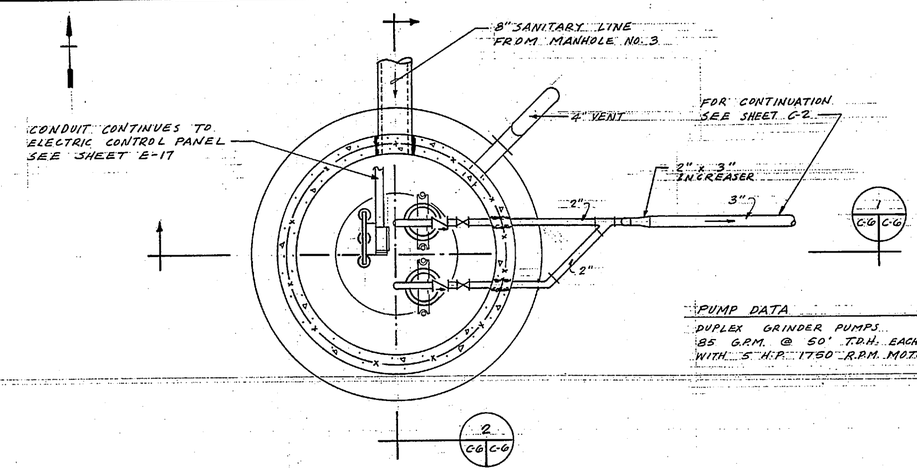
DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NAVAL STATION NORFOLK, VA.

EFD DWG NO. 257,728
JOB ORDER NO. 5F5306
STA. PROJ. NO. P-721
DES. RLT DRWN. RLT
PROJ. MGR. SMG CHAIRMAN/HALYLM
EFD. INVO. FB
GR. MGR. DES DIR.
APPROVED DATE
ACTIVITY - SATISFACTORY TO
APPROVED DATE 7-20-87
FOR EFD FOR COMMANDER NAVFAC

NAVAL HOSPITAL, CAMP LEJEUNE, N.C.
BACHELOR ENLISTED QUARTERS
STORM AND SANITARY SEWER ℄ PROFILES

SIZE F | CODE IDENT. NO. 80091 | NAVFAC DRAWING NO. 4,157,728
CONSTR. CONTR. NO. N62470-85-B-5142
SCALE NOTED | SPEC. 05-85-5306 | SHEET 6 OF 68

REVISIONS			
SYM.	DESCRIPTION	DATE	APPROVED

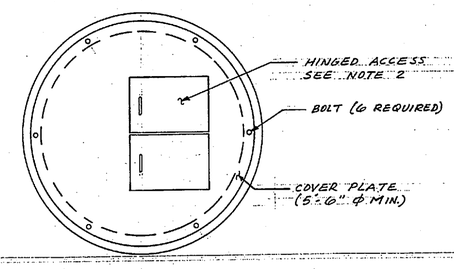


PUMP DATA

DUPLEX GRINDER PUMPS
85 G.P.M. @ 50' T.D.H. EACH
WITH 5 H.P. 1750 R.P.M. MOTORS

PLAN WITH TOP REMOVED

SCALE: 3/4" = 1'-0"

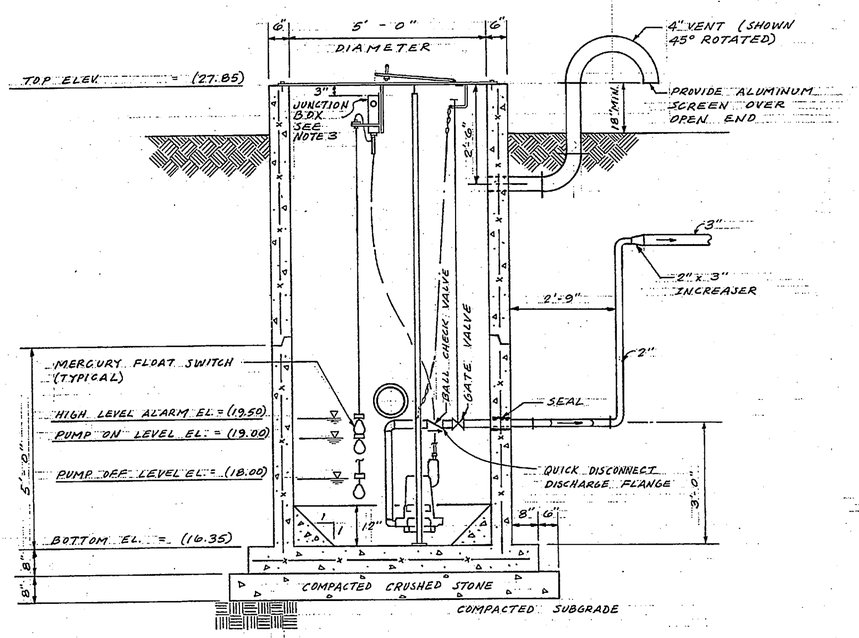


TOP PLAN

SCALE: 3/4" = 1'-0"

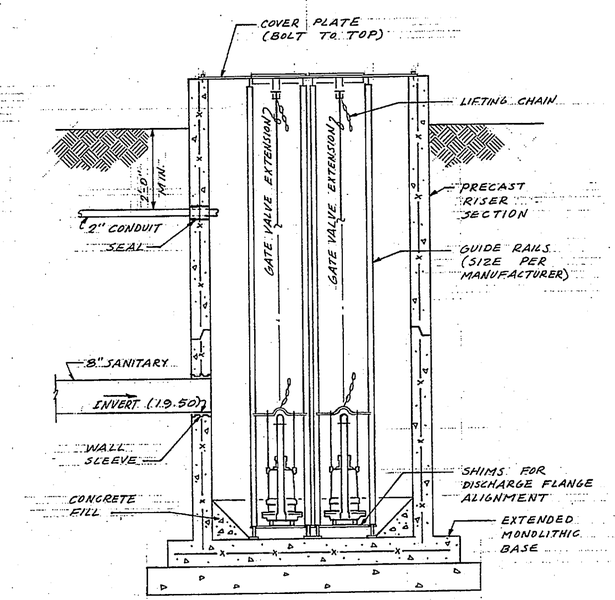
NOTES

1. THE DUPLEX PUMP SYSTEM SHALL BE OBTAINED BY THE CONTRACTOR FROM ONE SOURCE TO INSURE COMPATABILITY OF EQUIPMENT. THE PUMP SYSTEM SHALL INCLUDE, BUT NOT LIMITED TO, THE FOLLOWING:
   - A. TWO SUBMERSIBLE GRINDER PUMPS WITH QUICK DISCONNECT FLANGES.
   - B. PUMP GUIDE RAILS.
   - C. SHIMS FOR DISCHARGE FLANGE ALIGNMENT.
   - D. COVER PLATE WITH HINGED ACCESS DOOR AND GUIDE RAIL SUPPORTS.
   - E. PUMP LIFTING CHAINS AND HOOKS.
   - F. DUPLEX PUMP CONTROL PANEL WITH ASSOCIATED ALARMS.
   - G. FLOAT SWITCHES FOR DUPLEX PUMP CONTROLS.
2. COVER PLATE WITH HINGED ACCESS DOOR SHALL BE SIZED TO ACCOMMODATE SUBMERSIBLE PUMPS PROVIDED. CONTRACTOR SHALL VERIFY ALL PUMP DIMENSIONS AND SIZE OF OPENINGS REQUIRED FOR ACCESS DOORS PRIOR TO CONSTRUCTION.
3. PROVIDE NEMA VII JUNCTION BOX (AS SHOWN) WITH A 14" x 14" MIN. (12" x 12" MIN. OPENING) HINGED ACCESS DOOR (NOT SHOWN) FOR ACCESS TO JUNCTION BOX, OR PROVIDE NEMA IV JUNCTION BOX OUTSIDE OF WET WELL (NOT SHOWN) MOUNTED ON OUTSIDE OF WALL OF WET WELL IN ACCORD WITH PUMP MANUFACTURER'S STANDARD INSTALLATION.



SECTION 1 (C-6 / C-6)

SCALE: 3/4" = 1'-0"



SECTION 2 (C-6 / C-6)

SCALE: 3/4" = 1'-0"

GRAPHIC SCALE

1' 0 1' 2' 3' 4' 5' 6' 7'

3/4" = 1'-0"

RECORD DRAWING
LETTER DATED JAN 31 1991

C-6

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NAVAL STATION — NORFOLK, VA.

NAVAL HOSPITAL, CAMP LEJEUNE, N.C.

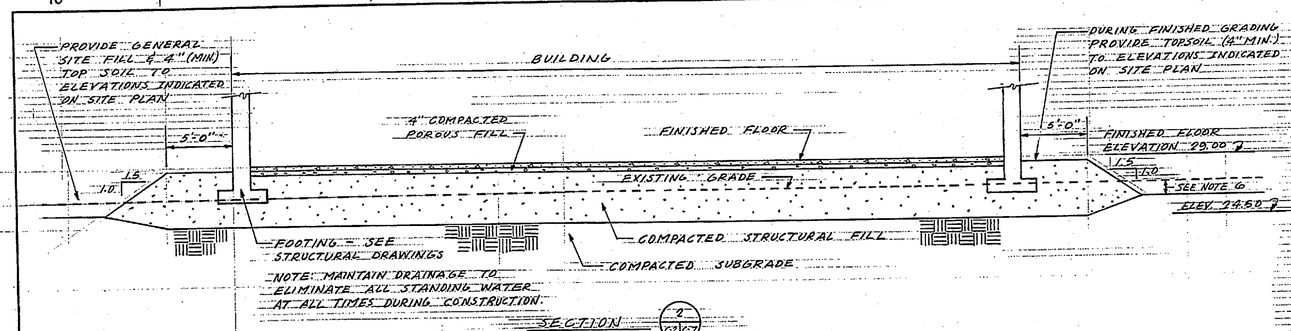
BACHELOR ENLISTED QUARTERS

SEWAGE PUMP STATION

EFD DWG. NO. 257,729
JOB ORDER NO. 5F5306
STA. PROJ. NO. P-721
DES. CCS — DWN. RLT
PROJ. MGR. SMG — CHARGE/DWG YLM
EFD: RVD 12 JUN — F P
SR. MGR. — DES DIR.
APPROVED — DATE
ACTIVITY - SATISFACTORY TO
APPROVED — DATE 5-26-87
FOR EFD FOR COMMANDER NAVFAC

SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.
F	80091	4,157,729
SCALE NOTED	SPEC. 05-85-5306	CONSTR. CONTR. NO. N62470-85-B-5142 — SHEET 7 OF 68

AS-4200



SECTION 2 / C-2 C-7

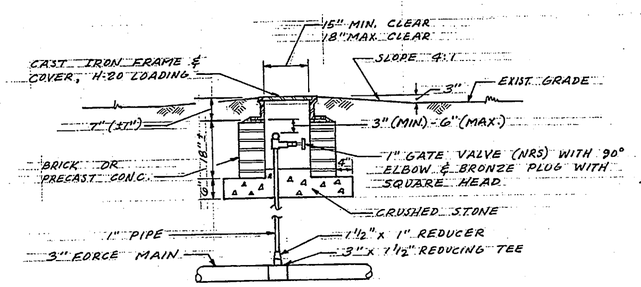
TYPICAL SITE PREPARATION DETAIL

SCALE: 1/4" = 1'-0"

SITE PREPARATION NOTES

1. SEE CONTRACT SPECIFICATIONS FOR POROUS FILL MATERIAL, STRUCTURAL FILL MATERIAL, AND COMPACTION REQUIREMENTS.
2. PRIOR TO CONSTRUCTION, ALL VEGETATION, TOPSOIL, FILL, AND OTHER DELETERIOUS MATERIAL SHALL BE REMOVED FROM THE BUILDING AREA TO ELEVATION 24.50, AND THE EXPOSED SUBGRADE LEVELED. FOR THE STRIPPING AND FILLING OPERATIONS, THE BUILDING AREA SHALL EXTEND FIVE (5) FEET MINIMUM BEYOND THE BUILDING LINE MEASURED AT ELEVATION 29.00 (FINISHED FLOOR).
3. AFTER STRIPPING, THE BUILDING AREA SHALL BE COMPACTED WITH APPROVED COMPACTION EQUIPMENT. COMPACT THE AREA TO NOT LESS THAN 95 PERCENT OF ASTM D698 MAXIMUM DENSITY TO A DEPTH OF 12 INCHES. THE COMPACTION OPERATION SHALL BE INSPECTED BY THE CONTRACTING OFFICER TO DETERMINE IF FURTHER EXCAVATION IS REQUIRED.
4. COMPACTED STRUCTURAL FILL SHALL BE PLACED OVER THE ENTIRE BUILDING AREA TO THE BOTTOM OF THE POROUS FILL. FOOTINGS MAY BE PLACED USING STRUCTURAL FILL FOR EARTH FORM.
5. SEE TYPICAL SITE PREPARATION DETAIL, THIS SHEET.
6. STRIP EXISTING TOPSOIL TO A DEPTH OF 12".

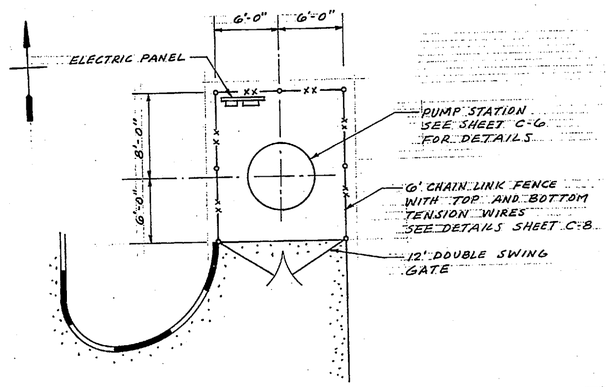
REVISIONS			
NO.	DESCRIPTION	DATE	APPROVED



AIR RELEASE VALVE DETAIL

NOT TO SCALE

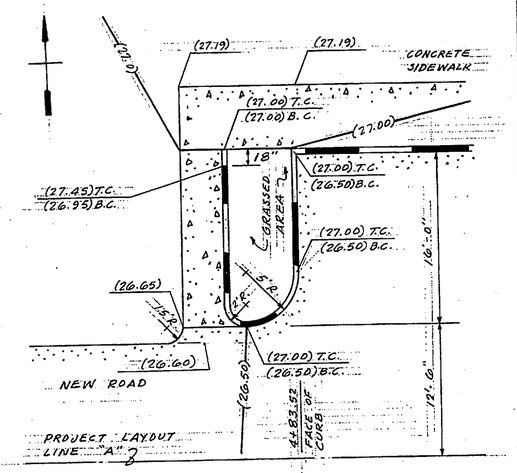
B / C-2, C-5



DETAIL

SCALE: 1" = 5'

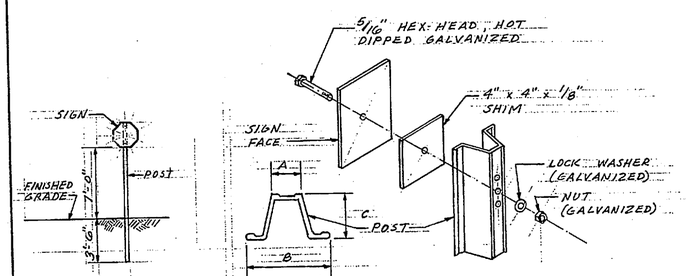
C / C-2 C-7



DETAIL

SCALE: 1" = 5'

A / C-2 C-7



POST DIMENSIONS

	MIN.	MAX.
A	1 17/64"	1 5/8"
B	3 3/16"	3 1/2"
C	1 1/2"	1 7/8"

SIGN MOUNTING DETAIL

NOT TO SCALE

GRAPHIC SCALES

5' 0 5' 10' 15' 20' 25'
1/4" = 1'-0"

5' 0 5' 10' 15' 20' 25' 30'
1" = 5'

RECORD DRAWING LETTER DATED JAN 31 1991

C-7

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NAVAL STATION NORFOLK, VA.
NAVAL HOSPITAL, CAMP LEJEUNE, N.C.

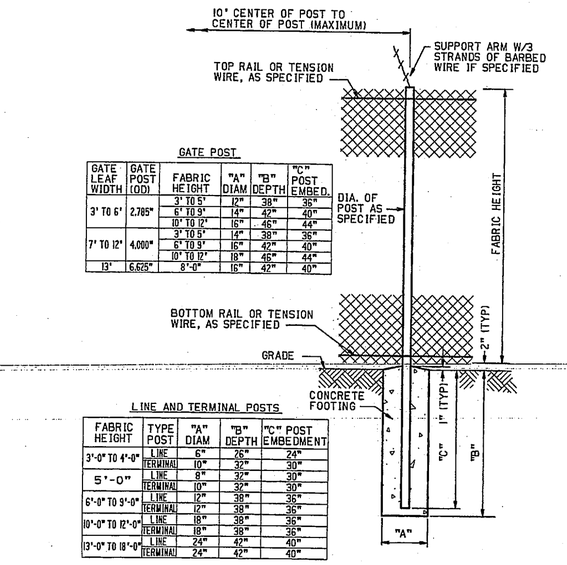
BACHELOR ENLISTED QUARTERS

DETAILS

EFD DWG. NO. 257,730
JOB ORDER NO. 5F5306
STA. PROJ. NO. P-781
DES. RLT, DGB DWN. RLT
PROJ. MGR. SMG CHAPO/ENGR YLM
EFD RVD LJOP F.P. SSM
BR. MGR SJ DES. DIR. KS
APPROVED DATE
ACTIVITY - SATISFACTORY TO
APPROVED DATE 5-20-87
FOR EFD FOR COMMANDER NAVFAC

SIZE F | CODE IDENT. NO. 80091 | NAVFAC DRAWING NO. 4,157,730
CONCTR CONTR. NO. N62470-85-B-5142
SCALE NOTED | SPEC. 05-85-5306 | SHEET 8 OF 68

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED



GATE POST

GATE LEAF WIDTH	GATE POST (OD)	FABRIC HEIGHT	"A" DIAM	"B" DEPTH	"C" POST EMBED.
3' TO 6'	2.785"	3' TO 5'	12"	38"	36"
		6' TO 9'	14"	42"	40"
		10' TO 12'	16"	46"	44"
7' TO 12'	4.000"	3' TO 5'	14"	38"	36"
		6' TO 9'	16"	42"	40"
		10' TO 12'	18"	46"	44"
13'	6.625"	8'-0"	16"	42"	40"

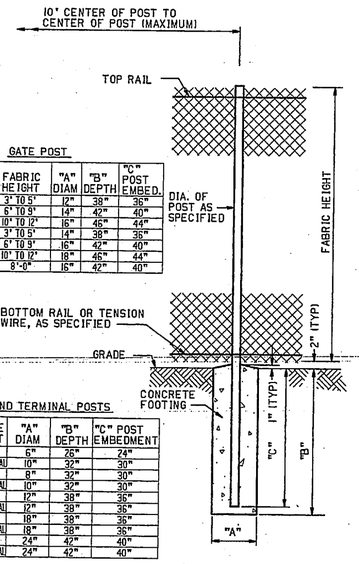
LINE AND TERMINAL POSTS

FABRIC HEIGHT	TYPE POST	"A" DIAM	"B" DEPTH	"C" POST EMBEDMENT
3'-0" TO 4'-0"	LINE	6"	26"	24"
	TERMINAL	10"	32"	30"
5'-0"	LINE	8"	32"	30"
	TERMINAL	10"	32"	30"
6'-0" TO 9'-0"	LINE	12"	38"	36"
	TERMINAL	12"	38"	36"
10'-0" TO 12'-0"	LINE	16"	38"	36"
	TERMINAL	18"	38"	36"
13'-0" TO 18'-0"	LINE	24"	42"	40"
	TERMINAL	24"	42"	40"

NOTE: TERMINAL POSTS INCLUDE END, CORNER, AND PULL POSTS

CHAIN LINK FENCE FOUNDATION

NTS



GATE POST

GATE LEAF WIDTH	GATE POST (OD)	FABRIC HEIGHT	"A" DIAM	"B" DEPTH	"C" POST EMBED.
3' TO 6'	2.785"	3' TO 5'	12"	38"	36"
		6' TO 9'	14"	42"	40"
		10' TO 12'	16"	46"	44"
7' TO 12'	4.000"	3' TO 5'	14"	38"	36"
		6' TO 9'	16"	42"	40"
		10' TO 12'	18"	46"	44"
13'	6.625"	8'-0"	16"	42"	40"

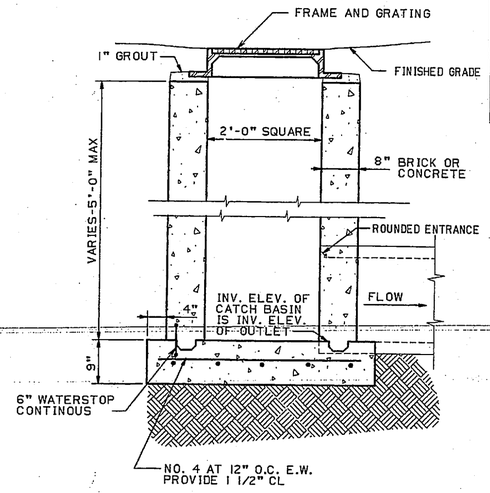
LINE AND TERMINAL POSTS

FABRIC HEIGHT	TYPE POST	"A" DIAM	"B" DEPTH	"C" POST EMBEDMENT
3'-0" TO 4'-0"	LINE	6"	26"	24"
	TERMINAL	10"	32"	30"
5'-0"	LINE	8"	32"	30"
	TERMINAL	10"	32"	30"
6'-0" TO 9'-0"	LINE	12"	38"	36"
	TERMINAL	12"	38"	36"
10'-0" TO 12'-0"	LINE	18"	38"	36"
	TERMINAL	18"	38"	36"
13'-0" TO 18'-0"	LINE	24"	42"	40"
	TERMINAL	24"	42"	40"

NOTE: TERMINAL POSTS INCLUDE END, CORNER, AND PULL POSTS

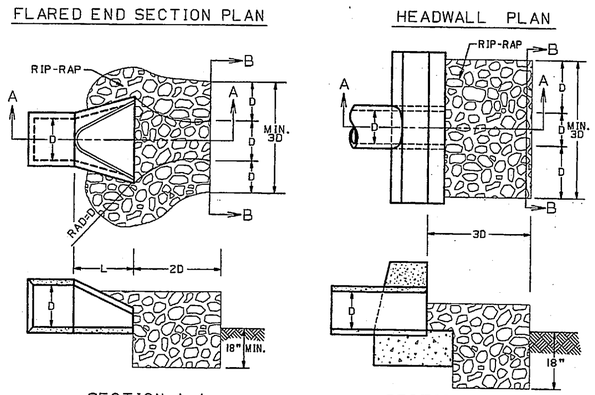
CHAIN LINK FENCE

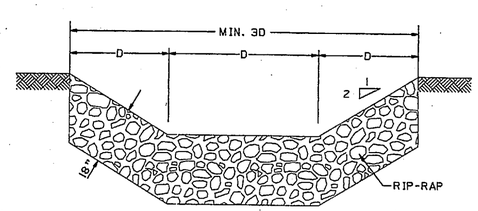
NTS



CATCH BASIN

18" PIPE AND SMALLER

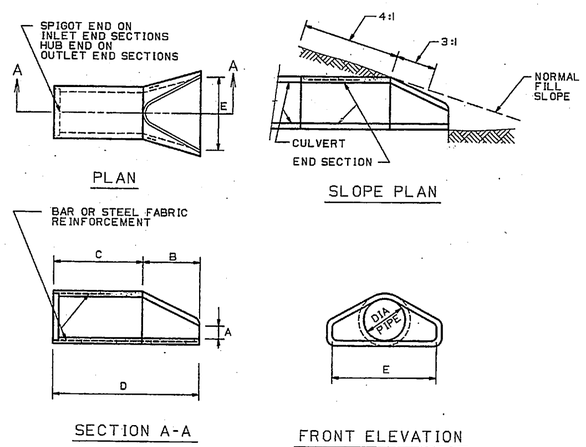




SECTION B-B

TYPICAL DISCHARGE AREA EROSION CONTROL DETAIL

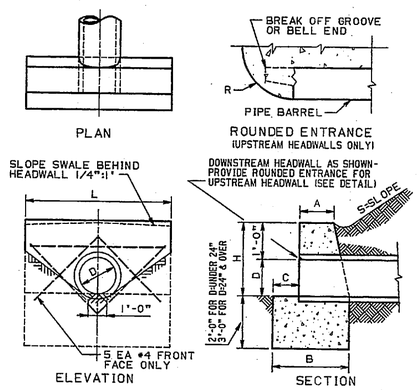
NTS



END SECTION DIMENSIONS					
DIAM	A	B	C	D	E
12"	4"	2'-0"	2'-0"	4'-0"	2'-0"
15"	6"	2'-3"	1'-9"	4'-0"	2'-6"
18"	9"	2'-3"	1'-9"	4'-0"	3'-0"
24"	9 1/2"	3'-7"	2'-6"	6'-1"	4'-0"
30"	1'-0"	4'-6"	1'-7 3/4"	6'-1 3/4"	5'-0"
36"	1'-3"	5'-3"	1'-10 3/4"	8'-1 3/4"	6'-0"
42"	1'-9"	5'-3"	2'-11"	8'-2"	6'-6"
48"	2'-0"	6'-0"	2'-2"	8'-2"	7'-0"
54"	2'-3"	5'-5"	2'-9 1/4"	8'-2 1/4"	7'-6"
60"	2'-11"	5'-0"	3'-3"	8'-3"	8'-0"

FLARED END SECTION 12" - 60" PIPE

NTS



ALL SLOPES						S:1 1/2	S:2:1	S:3:1
D	H	A	B	C	R	L	L	L
8"	1'-8"	8"	1'-0"	0	—	3'-6"	4'-2"	5'-6"
10"	1'-10"	8"	1'-0"	0	—	4'-0"	4'-10"	6'-6"
12"	2'-0"	10"	1'-4"	4"	—	4'-6"	5'-6"	7'-6"
15"	2'-3"	10"	1'-4"	4"	2 1/4"	5'-3"	6'-6"	9'-0"
18"	2'-6"	10"	1'-7"	6"	3 3/4"	6'-0"	7'-6"	10'-6"
21"	2'-9"	1'-0"	1'-8"	6"	3 1/8"	6'-9"	8'-6"	12'-0"
24"	3'-0"	1'-0"	1'-9"	6"	2 5/8"	7'-6"	9'-6"	13'-6"
27"	3'-3"	1'-2"	2'-0"	8"	4"	8'-3"	10'-6"	15'-0"
30"	3'-6"	1'-3"	2'-1"	8"	4 1/2"	9'-0"	11'-6"	16'-6"
36"	4'-0"	1'-6"	2'-4"	10"	5 1/2"	10'-6"	13'-6"	19'-6"
42"	4'-6"	1'-6"	2'-7"	12"	6 3/8"	12'-0"	15'-6"	22'-6"

CONCRETE HEADWALL

NTS

RECORD DRAWING LETTER DATED JAN 31 1991

C-8

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
NAVAL STATION ATLANTIC DIVISION NORFOLK, VIRGINIA
NAVAL HOSPITAL CAMP LEJEUNE, N.C.

BACHELOR ENLISTED QUARTERS

DETAILS

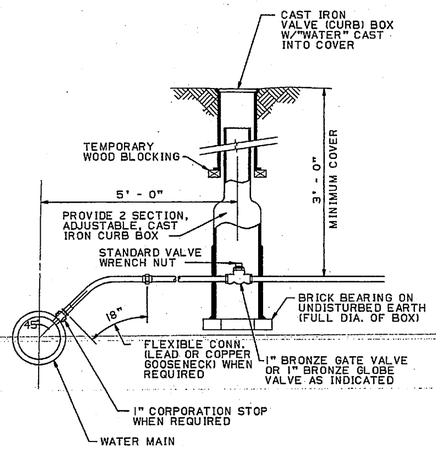
EFD DWG. NO.	257731
JOB ORDER NO.	5F5306
STA. FORUMS.	P-721
DES. RLT	CHKD. DFT
PROJ. MGR. SMG	ENLARGEMENT YLM
EFD: SYD.	F.P.
DRAWN	DESIGN
APPROVED / DATE	
ACTIVITY-SATISFACTORY TO	
APPROVED / DATE	3-30-87
FOR EFD-FOR COMMANDER NAVFAC	

SIZE	CODE IDENT.NO.	NAVFAC DRAWING NO.
F	80091	4157731

CONSTR. CONTR. NO. N62470-85-B-5142

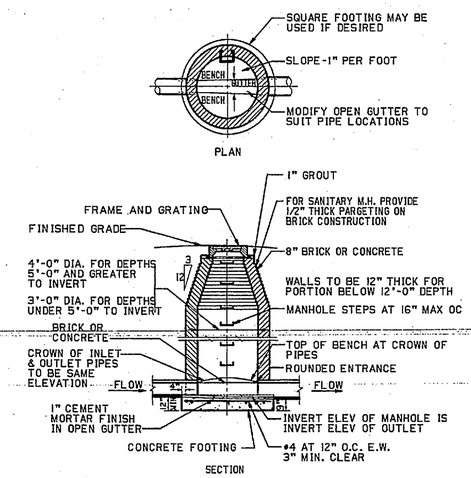
SCALE AS NOTED SPEC. 05-85-5306 SHEET 9 OF 68

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED



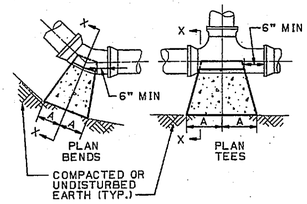
WATER LATERAL CONNECTION

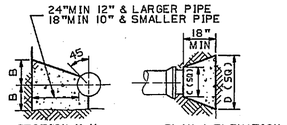
NTS



MANHOLE

NTS

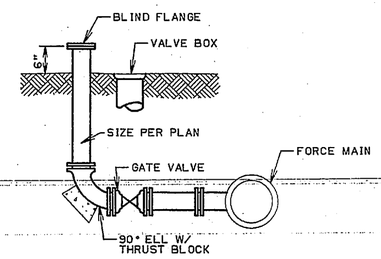




SIZE	1/4 BENDS		1/8 BENDS		1/16 BENDS		TEES		PLUGS	
	A	B	A	B	A	B	A	B	C	D
6"	16"	10"	9"	10"	6"	8"	10"	12"	10"	21"
8"	22"	13"	12"	13"	8"	10"	13"	16"	12"	29"
10"	26"	17"	14"	17"	10"	13"	16"	20"	14"	36"
12"	29"	21"	16"	21"	11"	16"	18"	24"	16"	41"
14"	35"	24"	19"	24"	12"	20"	22"	27"	18"	48"
16"	38"	27"	21"	27"	12"	24"	24"	30"	20"	54"

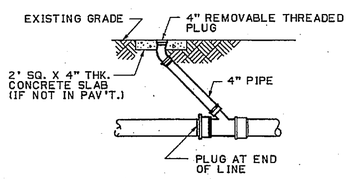
THRUST BLOCKS

NTS



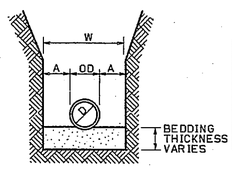
EMERGENCY PUMP CONNECTION

NTS



CLEANOUT DETAIL

NTS



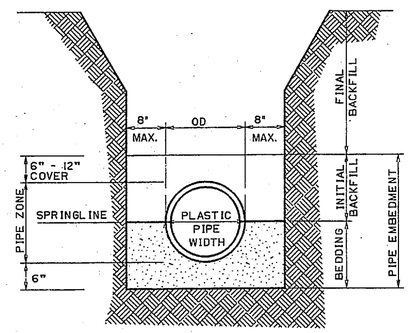
PIPE DIA "D"	MAXIMUM "A"
6" TO 15"	8"
16" TO 21"	10"
24" TO 30"	12"
33" TO 42"	15"
48" & LARGER	18"

MAXIMUM TRENCH WIDTH "W" TAKEN AT TOP OF PIPE

NOTE: PROVIDE BEDDING IN ACCORDANCE WITH THE SPECIFICATIONS.

TRENCH CROSS SECTION FOR NON-PLASTIC PIPE

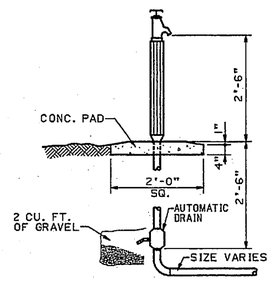
NOT TO SCALE



NOTE: PROVIDE BEDDING IN ACCORDANCE WITH THE SPECIFICATIONS.

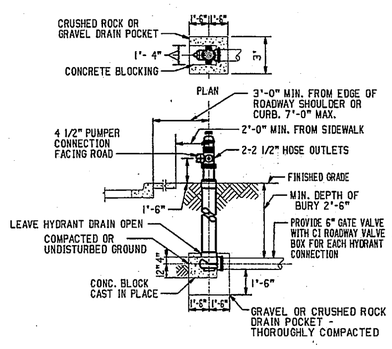
TRENCH CROSS SECTION FOR PLASTIC PIPE

NTS



YARD HYDRANT DETAIL

NTS



FIRE HYDRANT

NTS

RECORD DRAWING
LETTER DATED JAN 31 1991

C-9

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NAVAL STATION — NORFOLK, VIRGINIA

EFD SPEC. NO. 257732
JOB ORDER NO. 5P5306
STA. PROJ.NO. P-721
DES. RLT — DWN. DFT
PROJ. MGR. SMG — CHKD/SHKR. YLM
EFD NO. — F.P. —
DR.NGR. — DES.DIR. —
APPROVED — DATE —
ACTIVITY-SATISFACTORY TO
APPROVED — DATE 3-30-89
FOR CAPT FOR COMMANDER NAVFAC

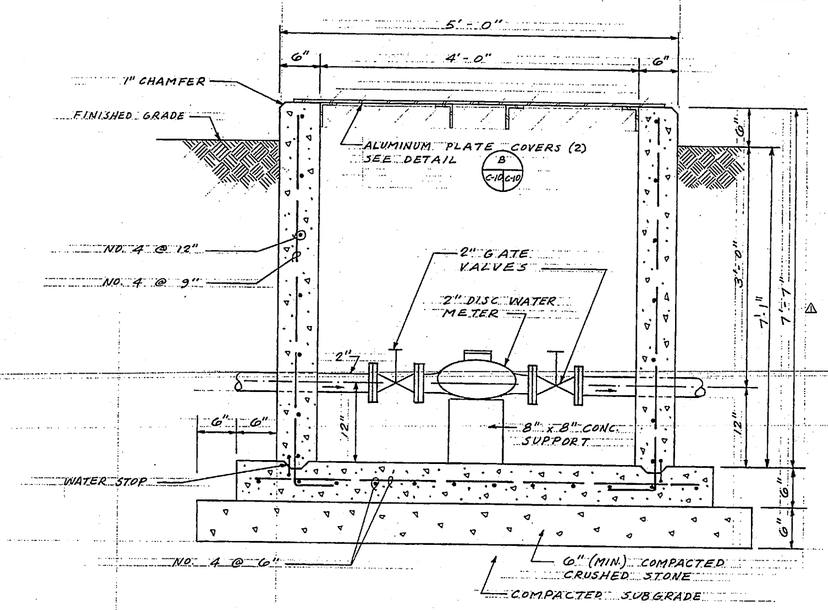
NAVAL HOSPITAL — CAMP LEJEUNE, N.C.

BACHELOR ENLISTED QUARTERS

DETAILS

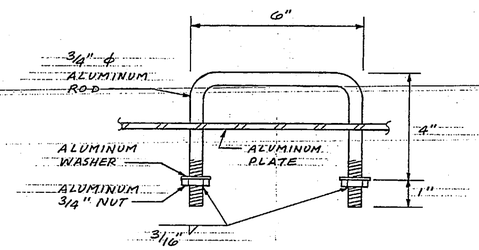
SIZE F — CODE IDENT.NO. 80091 — NAVFAC DRAWING NO. 4157732
CONSTR. CONTR. NO. N62470-85-B-5142
SCALE AS NOTED — SPEC. 05-85-5306 — SHEET 10 OF 68

REVISIONS			
SYM.	DESCRIPTION	DATE	APPROVED
1	REVISED AS-BUILT	10-1-91	RSC



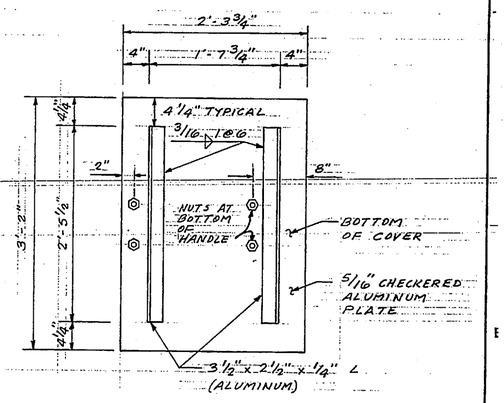
SECTION A C-10 C-10

SCALE: 1½" = 1'-0"



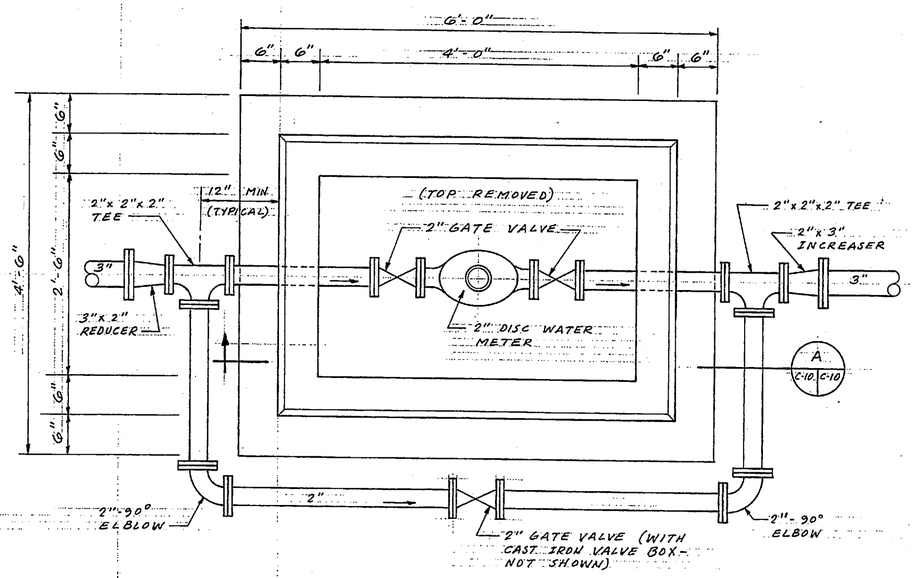
HANDLE

NO SCALE



DETAIL B C-10 C-10

SCALE: 1½" = 1'-0"



PLAN — WATER METER VAULT

SCALE: 1½" = 1'-0"

GRAPHIC SCALE

12" 9" 6" 3" 0 1' 2' 3'

1½" = 1'-0"

RECORD DRAWING LETTER DATED JAN 31 1991

C-10

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

ATLANTIC DIVISION

NAVAL STATION — NORFOLK, VA.

NAVAL HOSPITAL, CAMP LEJEUNE, N.C.

BACHELOR ENLISTED QUARTERS

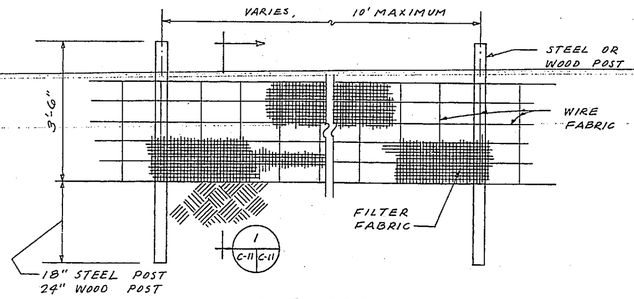
WATER METER DETAILS

EFD DWG. NO.	257,733
JOB ORDER NO.	5F5306
STA PROJ. NO.	P-721
DES. RLT	DRWN RLT
PROJ. MGR SMG	CHARCH/ENGR YLM
EFD RVD	F P
BR. MGR	DES DIR
APPROVED	DATE
ACTIVITY - SATISFACTORY TO	
APPROVED	DATE 9-30-91
FOR EFD FOR COMMANDER NAVFAC	

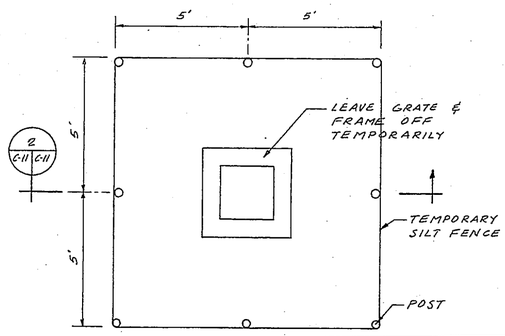
SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.
F	80091	4,157,733
		CONSTR. CONTR. NO. N62470-85-B-5142
SCALE NOTED	SPEC. 05-85-5306	SHEET 11 OF 68

SILT FENCE NOTES

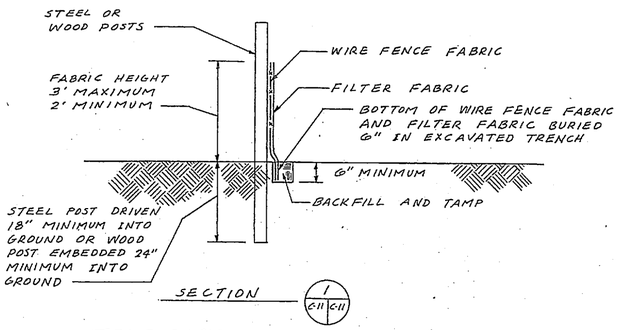
1. STEEL POSTS SHALL BE 5'-0" LONG, 1 3/4" WIDE, 1.33 POUNDS PER FOOT, AND HAVE PROJECTIONS FOR FASTENING THE WIRE TO THE FENCE.
2. WOOD POSTS SHALL BE 5'-6" MINIMUM LONG AND 3 TO 4" IN DIAMETER. WIRE FENCE FABRIC SHALL BE FASTENED TO WOOD POSTS WITH NOT LESS THAN NO. 9 STAPLES, 1 1/2" MINIMUM LENGTH, AT 9" O.C. MAXIMUM.
3. WIRE FENCE FABRIC SHALL BE AT LEAST 32" HIGH, AND SHALL HAVE AT LEAST 6 HORIZONTAL WIRES. VERTICAL WIRES SHALL BE SPACED 12" MAXIMUM APART. TOP AND BOTTOM WIRES SHALL BE AT LEAST 10 GAGE. ALL OTHER WIRES SHALL BE AT LEAST 12 1/2 GAGE.
4. FILTER FABRIC SHALL BE AS SPECIFIED. BURLAP FABRIC IS NOT PERMITED.
5. FASTEN FILTER FABRIC TO WIRE FENCE FABRIC WITH WIRE HOG RINGS.



ELEVATION



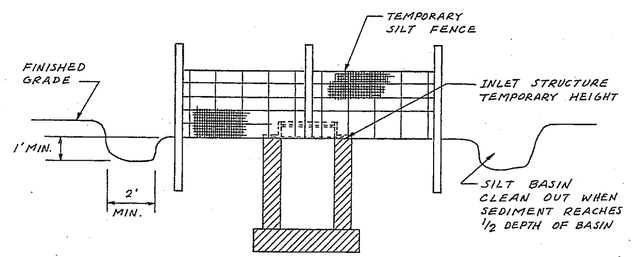
PLAN



SECTION 1 C-11 C-11

TEMPORARY SILT FENCE

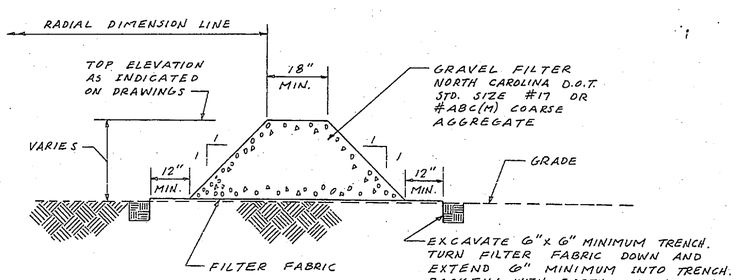
NO SCALE



SECTION 2 C-11 C-11

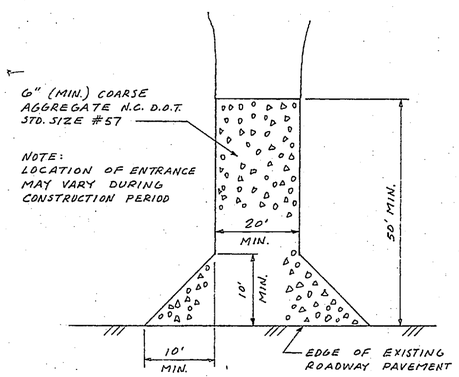
TEMPORARY SEDIMENT BARRIER AT CATCH BASIN

NO SCALE



TEMPORARY GRAVEL CHECK DAM

NO SCALE



TEMPORARY CONSTRUCTION ENTRANCE

NO SCALE

EROSION CONTROL NOTES

1. ALL EROSION CONTROL DEVICES SHALL BE PROVIDED AND MAINTAINED AS REQUIRED TO ASSURE EFFECTIVE AND CONTINUOUS CONTROL. INSPECT IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
2. THE LOCATION AND SIZE OF EROSION CONTROL DEVICES ARE APPROXIMATE. THE DEVICES SHALL BE LOCATED GENERALLY AS SHOWN BUT THEIR LOCATIONS SHALL FACILITATE MAXIMUM PROTECTION FOR THE METHOD OF CONSTRUCTION UTILIZED.
3. ALL CONTROL DEVICES SHALL BE REMOVED DURING FINAL STAGES OF CONSTRUCTION. ANY AREAS DAMAGED BY THE DEVICES OR THEIR REMOVAL SHALL BE REPAIRED AND VEGETATED.
4. EROSION CONTROL METHODS OTHER THAN THOSE SHOWN ON THE DRAWINGS MAY BE UTILIZED IF APPROVED IN WRITING BY THE NORTH CAROLINA DEPT. OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT, (WILMINGTON, N.C.) AND THE CONTRACTING OFFICER PRIOR TO THEIR USE.
5. DUST CONTROL SHALL BE PROVIDED BY THE CONTRACTOR DURING THE ENTIRE CONSTRUCTION PERIOD. ALL DISTURBED OR DENUDED AREAS SHALL BE MAINTAINED WITH DUST SUPPRESSORS (WATER, CALCIUM CLORIDE, ETC.) TO PROHIBIT ENVIRONMENTAL CONTAMINATION.
6. THE CONTRACTOR SHALL PLAN AND CONDUCT GRADING OR STRIPPING OPERATIONS IN A MANNER THAT WILL MINIMIZE THE EXTENT AND DURATION OF UNPROTECTED SOIL THAT HAS THE POTENTIAL OF ERODING.
7. THE CONTRACTOR SHALL PROVIDE TEMPORARY SEEDING OPERATIONS ON ALL DISTURBED OR DENUDED AREAS THAN REMAIN AS SUCH FOR 30 DAYS OR MORE. UPON COMPLETION OF FINE GRADING OPERATIONS ALL AREAS DISTURBED TO OBTAIN FINAL DESIGN GRADES SHALL FURTHER RECEIVE PERMANENT SEEDING OPERATIONS.
8. THE TEMPORARY CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AND MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OF MATERIALS ONTO ROADWAY PAVEMENTS. GRAVEL SURFACE SHALL BE PROVIDED WITH PERIODIC DRESSING OF ADDITIONAL GRAVEL AS CONDITIONS DEMAND. ALL MATERIALS TRACKED ONTO ROADWAY SHALL BE IMMEDIATELY REMOVED.
9. EXERCISE CARE DURING CONSTRUCTION TO PREVENT DAMAGE TO EXISTING TREES OCCURRING AT THE EDGE OF THE CLEARING LIMIT.
10. SEEDING OPERATIONS LIMIT SHALL EXTEND TO THE NEW WOODS LINE OR PAVEMENT EDGE, AND TO EXISTING VEGETATED AREAS DENUDED BY CONSTRUCTION.
11. ALL STORM INLETS AND PIPES SHALL BE CLEANED OF ERODED MATERIALS AT LAST STAGES OF CONSTRUCTION.
12. IF THE GRAVEL FILTER (GRAVEL CHECK DAM) BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER PERFORMS ITS FUNCTION, THE GRAVEL MUST BE REMOVED, CLEANED AND REPLACED (OR PROVIDE NEW GRAVEL).

REVISIONS			
SYM.	DESCRIPTION	DATE	APPROVED

RECORD DRAWING LETTER DATED JAN 31 1991

C-11

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NAVAL STATION NORFOLK, VA.

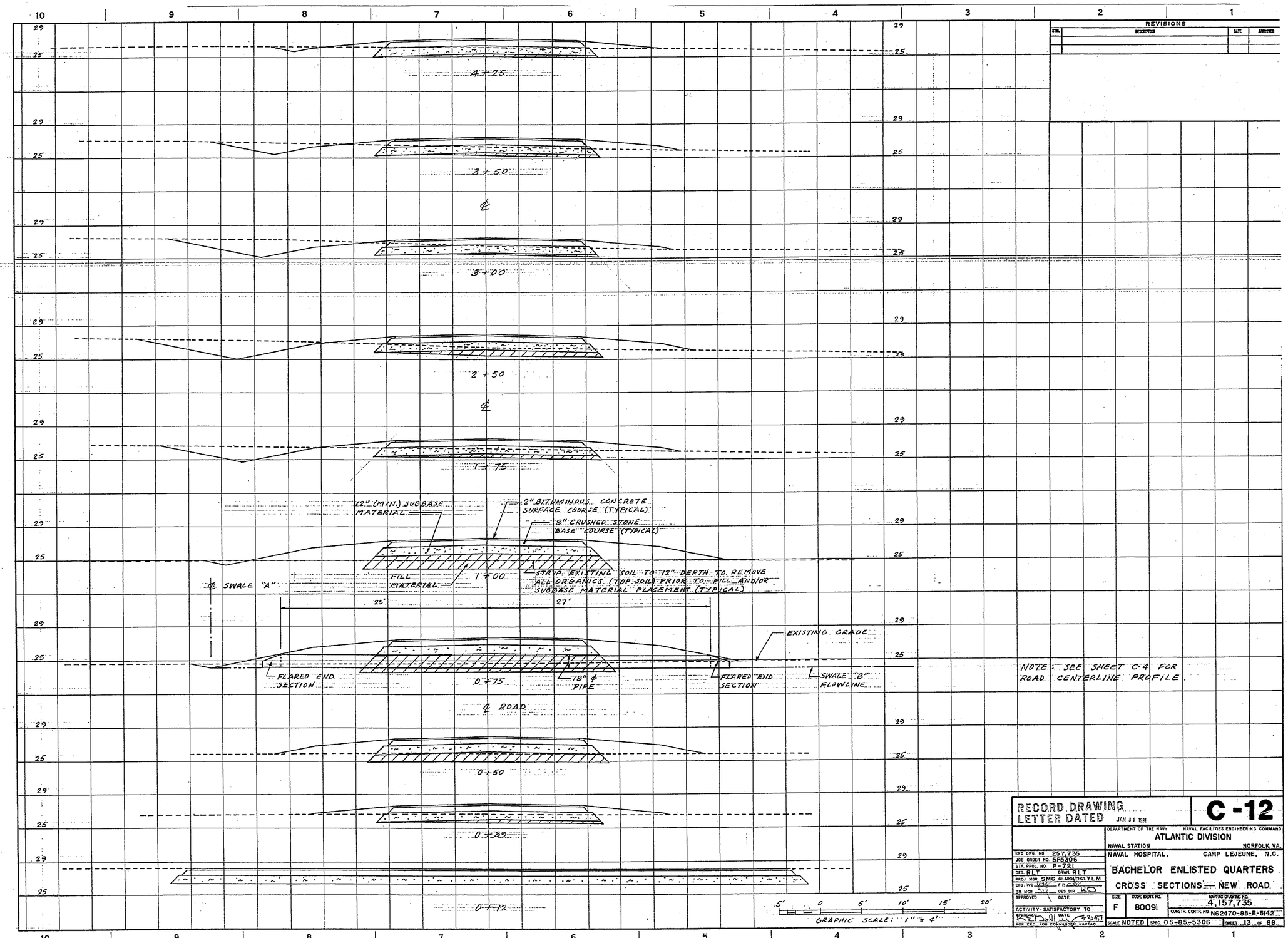
NAVAL HOSPITAL, CAMP LEJEUNE, N.C.

BACHELOR ENLISTED QUARTERS

EROSION CONTROL DETAILS

SPD DWG NO 257,734
JOB ORDER NO 5F5306
SSA PROJ NO P-721
DES. RLT DRN. RLT
PROJ. MGR SMG CHARGEWORK YLM
EFD PMD
DR. MGR DES DR
APPROVED DATE
ACTIVITY SATISFACTORY TO
APPROVED DATE
FOR EFD FOR COMMANDER NAVFAC

SIZE F | CODE IDENT NO 60021 | NFAC DWG NO 4,157,734
CONTR CONTR NO N62470-85-B-5142
SCALE NOTED | SPEC 05-85-5306 | SHEET 12 OF 66



NOTE: SEE SHEET C-4 FOR ROAD CENTERLINE PROFILE.

REVISIONS

SYM.	DESCRIPTION	DATE	APPROVED

RECORD DRAWING LETTER DATED JAN 31 1991

C-12

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NAVAL STATION — NORFOLK, VA.

NAVAL HOSPITAL, CAMP LEJEUNE, N.C.

BACHELOR ENLISTED QUARTERS
CROSS SECTIONS — NEW ROAD

EFD DWG. NO. 257,735
JOB ORDER NO. 5F5306
STA. PROJ. NO. P-721
DES. RLT DRWN. RLT
PROJ. MGR. SMG CHARGE/ENGR. YLM
EFD. RVD. [illegible] F.P. [illegible]
BR. MGR. [illegible] DES. DIR. KO
APPROVED DATE
ACTIVITY-SATISFACTORY TO
APPROVED [illegible] DATE 4-30-91
FOR EFD FOR COMMANDER NAVFAC

SIZE F | CODE IDENT. NO. 80091 | NAVFAC DRAWING NO. 4,157,735
CONSTR. CONTR. NO. N62470-85-B-5142
SCALE NOTED | SPEC. 05-85-5306 | SHEET 13 OF 68

BORING NO. 1

DEPTH	DESCRIPTION	ELEV.	BLOWS / 6 INCHES	REC.	GW	Op
1.0	TOPSOIL					
	Very loose, damp, brown, fine sandy silty CLAY (CL) with trace organics		2-2-1-2	20		
			2-3-3-4	14		
6.0	Grades to loose, moist gray	CL	3-3-5-7	18		
	Firm, moist, mottled gray and brown silty, clayey SAND (SM/SC) with minor silty CLAY to clayey SILT layers (ML/CL)		3-5-6-7	17		
		10	4-2-5-6	18		
		SM SC	4-7-7-9	16		
	Grades to wet, light gray		4-6-13	14		
17.5	Firm moist mottled gray and brown silty CLAY to clayey SILT (ML/CL)	ML CL				
19.5	Dense, wet, gray fine to coarse grained SAND (SP)	20	1-2-5	17		
			5-8-14	13		
		SP				
	Grades to mottled brown and gray with chemical odor	30	13-19-24	11		
			4-3-1	8		
		40	8-10-19	14		
	Grades to brownish gray		13-18-19	4		
	Grades to very dense	SP 50	14-24-28	13		
			25-31-38	13		
		60	23-25-36	14		
	Boring terminated at 60.0 feet. Boring wet upon completion. Boring caved at 58.0 feet.					

BORING NO. 2

DEPTH	DESCRIPTION	ELEV.	BLOWS / 6 INCHES	REC.	GW	Op
1.0	TOPSOIL					
1.5	Very loose, moist, grayish brown silty, clayey, fine SAND (SM/SC) with TRACE ORGANICS		2-2-1	15		
	Firm damp brown fine sandy silty CLAY (CL)	CL	3-3-3	10		
	Grades to mottled brown and gray		4-5-5	15		
	Loose damp mottled brown and gray, silty clayey fine SAND (SM/SC) with clayey layers	SM SC	4-4-5	16		
			4-6-7	18		
	Grades to firm	10	5-3-4	14		
			6-9-9	15		
13.0	Firm, wet very light gray medium to coarse grained SAND (SP)	SP	6-6-6	15		
15.0	Firm, wet very light gray silty clayey medium to coarse grained SAND (SM/SC)	SM SC	5-6-7	10		
18.0	Firm, wet brownish gray, fine to medium grained SAND (SP)	20	5-7-6	12		
			5-11-15	10		
	Grades to dense, brown	SP				
		30	11-16-20	10		
	Grades to firm		4-3-2	14		
	Grades to Dense	40	11-16-25	10		
		SP	9-15-20	10		
		50	14-20-35	14		
	Boring terminated at 50.0 feet. Boring wet upon completion.					

BORING NO. 3

DEPTH	DESCRIPTION	ELEV.	BLOWS / 6 INCHES	REC.	GW	Op
1.0	TOPSOIL					
	Firm, damp, brown, silty fine sandy CLAY (CL) with trace organics	CL	2-1-2-3	19		
	Grades to Stiff		2-3-4-4	21		
			3-4-5-5	18		
			4-6-6-5	20		
8.0	Firm to hard, wet, very light gray fine to medium grained SAND (SP)	10 SP	2-4-7-7	23		
			9-17-17-14	21		
12.0	Firm wet, gray, sandy CLAY (CL)	CL	2-2-5	16		
17.0	Firm, wet, gray fine to medium grained SAND (SP) with chemical Odor	20 SP	4-8-11	14		
	Grades to Dense		9-16-24	9		
	Grades to very dense	30	17-23-27	4		
	Grades to very loose, no odor detected		3-1-1	14		
		40	15-19-20	12		
	Grades to very dense, chemical odor		14-28-40	15		
		SP 50	20-26-30	8		
	No odor detected		30-36-42	14		
		60	20-28-38	12		
	Boring terminated at 60.0 ft. Boring wet upon completion.					

BORING NO. 4

DEPTH	DESCRIPTION	ELEV.	BLOWS / 6 INCHES	REC.	GW	Op
1.0	TOPSOIL					
	Soft moist grayish brown silty fine sandy CLAY (CL) with trace organics		1-1-2-2	16		
	Grades to stiff brown	CL	3-3-5-6	15		
	Grades to mottled brown and gray		3-4-6-7	15		
6.0	Firm wet very light gray fine to medium grained clayey SAND (SP) with brown, sandy CLAY (CL) layers	SC 10	3-4-6-3	14		
			2-5-5-6	14		
			5-7-10-	14		
13.0	Stiff, wet, light brown, sandy CLAY (CL)	CL	4-3-8	12		
		20	4-5-6	12		
21.0	Dense, wet, light gray, fine to medium grained SAND (SP) with chemical odor	SP	10-20-28	10		
	Grades to firm mottled brown and gray	30	12-14-15	12		
32.0	Loose, wet, silty clayey fine to medium grained SAND (SM/SC)	SM SC	2-4-8	16		
36.0	Dense, wet, fine to medium grained SAND (SP)	SP 40	11-17-24	12		
	Grades to very dense, chemical odor		19-24-28	10		
	Grades to no chemical odor	SP 50	18-25-33	12		
			20-24-28	10		
56.0	Black wet silty fine grained SAND (SM)	SM 60	19-29-39	6		
	Boring terminated at 60.0 ft. Boring wet upon completion.					

*After 24 hrs

HAND AUGER NO. 7

DEPTH FROM	FT. TO	SOIL DESCRIPTION AND REMARKS	DEPTH FT.	AVG. PEN. READING	BAG AND JAR SAMPLES NO.	FROM	TO
0.0		TOPSOIL - Dark gray, silty,					
		fine-grained SAND					
	0.5	with roots					
0.5		Very loose to loose, light	1.0-1.4	3-4-5*			
		brown, damp, silty,			S-1	1.0	1.5
	3.0	fine-grained SAND (SM)					
3.0		Firm, mottled brown and	3.5-3.9	5-6-6*			
		gray, moist, silty,			S-2	4.0	4.5
		fine-grained sandy	4.0	2.0*			
	6.9	CLAY (CH/CL)					
6.9		Mottled brown and gray,					
		moist, silty, clayey,			S-3	7.0	7.2
		fine- to medium-grained					
		SAND (SP)					
		Boring terminated at 7.2 ft.					
	7.2	Boring dry upon completion.					

HAND AUGER NO. 1

DEPTH FROM	FT. TO	SOIL DESCRIPTION AND REMARKS	DEPTH FT.	AVG. PEN. READING	BAG AND JAR SAMPLES NO.	FROM	TO
0.0	1.0	TOPSOIL					
1.0		Gravish brown to black moist			S-1	1.0	2.0
	2.0	silty SAND (SM with trace organics					
3.0		Mottled brown and gray moist					
	10.0	silty sandy CLAY (CL)			S-2	2.0	3.0
					S-3	5.0	8.0
					S-4	9.0	10.0
		Auger boring terminated at 10.0 feet					

HAND AUGER NO. 2

DEPTH FROM	FT. TO	SOIL DESCRIPTION AND REMARKS	DEPTH FT.	AVG. PEN. READING	BAG AND JAR SAMPLES NO.	FROM	TO
0.0	1.0	TOPSOIL					
1.0		Mottled dark gray and brown			S-1	1.0	2.5
		moist silty sandy CLAY (CL) with trace organics			S-2	2.5	3.0
		Grades to brown			S-3	7.0	8.0
	10.0	Grades to gray			S-4	8.5	10.0
		Auger boring terminated at 10.0 feet					

HAND AUGER NO. 3

DEPTH FROM	FT. TO	SOIL DESCRIPTION AND REMARKS	DEPTH FT.	AVG. PEN. READING	BAG AND JAR SAMPLES NO.	FROM	TO
0.0	1.0	TOPSOIL					
1.0	2.5	Mottled dark brown and			S-1	1.0	2.5
		gray, damp, fine sandy SILT					
		(ML) with trace organics					
2.5		Mottled brown and gray, moist,			S-2	4.0	5.0
		silty, fine sandy CLAY (CL)					
	10.0	Grades to gray, CLAY			S-3	7.5	10.0
		Auger boring terminated at 10.0 ft.					

HAND AUGER NO. 4

DEPTH FROM	FT. TO	SOIL DESCRIPTION AND REMARKS	DEPTH FT.	AVG. PEN. READING	BAG AND JAR SAMPLES NO.	FROM	TO
0.0	1.0	TOPSOIL					
1.0	2.5	Mottled dark brown and			S-1	1.0	2.5
		gray, damp, fine sandy SILT					
		(ML) with trace organics					
2.5		Mottled brown and gray, moist,			S-2	4.0	5.0
		silty, fine sandy CLAY (CL)					
	10.0	Grades to gray, CLAY			S-3	7.5	10.0
		Auger boring terminated at 10.0 ft.					

HAND AUGER NO. 5

DEPTH FROM	FT. TO	SOIL DESCRIPTION AND REMARKS	DEPTH FT.	AVG. PEN. READING	BAG AND JAR SAMPLES NO.	FROM	TO
0.0	0.6	TOPSOIL					
0.6		Mottled brown and gray,			S-1	0.6	1.5
	1.5	damp, fine sandy SILT (ML) with trace organics					
1.5		Mottled brown and gray,			S-2	1.5	2.5
	6.0	damp, fine sandy, silty CLAY (CL)					
6.0		Brown to orangish brown, wet,			S-3	6.0	7.0
		silty, clayey, fine to			S-4	9.0	10.0
		medium grained SAND (SP)					
		Auger boring terminated at 10.0 ft.					

HAND AUGER NO. 6

DEPTH FROM	FT. TO	SOIL DESCRIPTION AND REMARKS	DEPTH FT.	AVG. PEN. READING	BAG AND JAR SAMPLES NO.	FROM	TO
0.0		TOPSOIL - Dark gray,					
		silty, fine-grained SAND					
	0.3	with roots					
0.3		Loose light brown, moist, silty,	1.0-1.4	6-7-7*			
	2.5	clayey (25-35%) SAND (SM/SC)			S-1	2.0	2.5
2.5		Firm, light reddish brown,	3.5-3.9	6-7-8*			
		moist, fine-grained			S-2	2.5	3.0
		sandy CLAY (CL),					
		Grades to mottled	5.0	2.0*			
		brown and gray at					
	5.5	3.0 ft					
5.5		Loose to firm, light brown	5.0-6.4	9-10-12*			
		moist, silty, clayey			S-3	7.0	7.2
		fine- to medium-grained					
		SAND (SM/SC) with					
		thin beds of sandy		Boring dry upon completion.			
	7.2	CLAY (CL)		Boring terminated at 7.2 ft.			

HAND AUGER NO. 5

DEPTH FROM	FT. TO	SOIL DESCRIPTION AND REMARKS	DEPTH FT.	AVG. PEN. READING	BAG AND JAR SAMPLES NO.	FROM	TO
0.0	1.0	TOPSOIL					
1.0		Mottled dark gray and brown			S-1	1.0	2.5
		moist silty sandy CLAY (CL) with trace organics			S-2	2.5	3.0
		Grades to brown			S-3	7.0	8.0
	10.0	Grades to gray			S-4	8.5	10.0
		Auger boring terminated at 10.0 feet					

BORING NO. 5

DEPTH	DESCRIPTION	ELEV.	BLOWS / 6 INCHES	REC.	GW	Op
1.0	TOPSOIL					
	Loose damp mottled brown and gray silty fine sandy CLAY (CL) to clayey SILT (ML) with trace organics	CL ML	1-2-2-2	16		
	Grades to moist		2-3-3-4	15		
			2-3-6-6	15		
			3-6-6-6	15		
		10	2-2-3-4	15		
10.0	Stiff, moist gray sandy CLAY (CL) with clayey SAND (SC) layers	CL SC	3-4-6-7	16		
	Grades to soft		2-2-2	14		
17.0	Firm, wet, gray fine to medium grained SAND (SP)	20	5-5-6	12		
	Grades to very dense, chemical odor	SP				
	Grades to no chemical odor		9-13-20	12		
	Grades to loose	30	17-25-30	10		
	Grades to firm		6-4-3	14		
		40	7-11-19	12		
	Grades to very dense		22-34-50/5	12		
	Grades to Dense	50	17-16-20	12		
	Grades to firm		6-10-19	12		
	Grades to dense	60	15-17-20	12		
	Boring terminated at 60.0 ft. Boring wet upon completion.					

LEGEND FOR GROUNDWATER OBSERVATIONS

▽ AT COMPLETION OF BORING
▼ 24 HRS AFTER BORING COMPLETION

MOISTURE CONTENTS (%)

BORING NO	DEPTH (FEET)	NATURAL MOISTURE
B-1	2.0-4.0	25.7
B-1	4.0-6.0	10.0
B-1	13.5-15.0	21.0
B-1	18.5-20.0	26.9
B-2	1.5-3.0	20.5
B-2	10.5-12.0	22.4
B-2	13.5-15.0	13.9
B-2	28.5-30.0	21.6
B-3	0.0- 2.0	14.4
B-3	2.0-4.0	20.1
B-3	4.0-6.0	18.4
B-3	6.0-8.0	17.4
B-3	8.0-10.0	29.5

MOISTURE CONTENTS (%)

BORING NO	DEPTH (FEET)	NATURAL MOISTURE
B-3	10.0-12.0	14.2
B-3	13.5-15.0	35.8
B-3	23.5-25.0	21.6
B-3	33.5-35.0	30.0
B-3	38.5-40.0	26.3
B-4	0.0-2.0	12.7
B-4	6.0-8.0	18.5
B-4	13.50-15.0	22.1
B-4	18.5-20.0	23.7
B-5	2.0-4.0	23.6
B-5	4.0-6.0	31.1
B-5	8.0-10.0	28.8
B-5	13.5-15.0	28.4

SOIL BORING GENERAL NOTES

1. BORINGS B-1 THROUGH B-5 ADVANCED BY MUD ROTARY DRILLING TECHNIQUES.
2. "PENETRATION BLOWS PER FOOT" COLUMN INDICATES DEPTH OF SAMPLE AND NUMBER OF BLOWS REQUIRED TO DRIVE A 2" O.D. SPLIT SPOON SAMPLER ONE FOOT INTO UNDISTURBED SOIL IN 6" INCREMENTS WITH 140 LB. HAMMER FALLING 30" AS PER ASTM D-1586.
3. "REC" COLUMN INDICATES THE LENGTH OF SAMPLE RECOVERED.
4. "GW" COLUMN INDICATES GROUNDWATER ELEVATIONS EXISTING AT THE TIME SUBSURFACE INVESTIGATIONS WERE MADE AND DO NOT NECESSARILY REPRESENT GROUNDWATER ELEVATIONS AT THE TIME OF CONSTRUCTION. GROUNDWATER LEVELS MAY FLUCTUATE WITH SEASONAL CHANGE, TEMPERATURE VARIATION, RAINFALL, AND TIDAL INFLUENCES AND THEREFORE SHOULD NOT BE CONSTRUED AS ABSOLUTE.
5. NOTE THAT THE TERM "MOTTLED" USED IN THE SOIL DESCRIPTION COLUMN INDICATES GROUNDWATER EXISTS, OR HAS EXISTED, WITHIN THIS SOIL STRATA TO AN EXTENT THAT IT HAS CHANGED OR STAINED THE NATURAL SOILS COLOR. THEREFORE GROUNDWATER COULD BE ENCOUNTERED UNDER USUAL CIRCUMSTANCES AT THE ELEVATION OF THE MOTTLED SOIL.
6. ALL DEPTHS AND LOCATIONS ARE APPROXIMATE. FOR BORING LOCATIONS SEE SHEET C-1,C-6&C-5
7. BORINGS DRILLED BY ATEC ASSOCIATES, INC. IN APRIL 1986.
8. SP, ML, CL, ETC. FROM UNIFIED SOIL CLASSIFICATION SYSTEM. DESCRIPTION OF SOIL IN ACCORDANCE WITH BURMISTERS CLASSIFICATION ON BASIS OF VISUAL ESTIMATE BY DRILLER.
9. DEPTHS AND GROUNDWATER ELEVATION OBSERVATIONS REFERENCED TO EXISTING GROUND SURFACE AT TIME OF BORING.
10. FOR SOIL STRATA CHANGE LOCATIONS: A DASHED LINE (----) REPRESENTS SOIL MATERIALS WITH ONLY SUBTLE DIFFERENCES AND A SOLID LINE (—) REPRESENTS MATERIALS WITH SIGNIFICANT DIFFERENCES.
11. THE NATURAL MOISTURE CONTENT OF SOIL SAMPLES DETERMINED AS PER ASTM TEST D-2216.
12. BORINGS NOT DRAWN TO SCALE
13. FOR SOIL SAMPLES CONSISTING OF TWO OR MORE TYPES, RELATIVE PROPORTIONS OF SECONDARY COMPONENTS (PERCENT BY WEIGHT) ARE INDICATED AS FOLLOWS:

DESCRIPTIVE TERM	PERCENT
TRACE	1-10
LITTLE	11-20
SOME	21-35
AND	35-50

14. CLEARING, GRUBBING, AND SITE PREPARATION CAN BE ACCOMPLISHED USING EQUIPMENT CAPABLE OF MANEUVERING OVER VERY SOFT MATERIAL.

REVISIONS			
SYM.	DESCRIPTION	DATE	APPROVED

RECORD DRAWING LETTER DATED JAN 31 1991

B-1

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NAVAL STATION NORFOLK, VA.

NAVAL HOSPITAL CAMP LEJEUNE, N.C.

BACHELOR ENLISTED QUARTERS

SOIL BORINGS

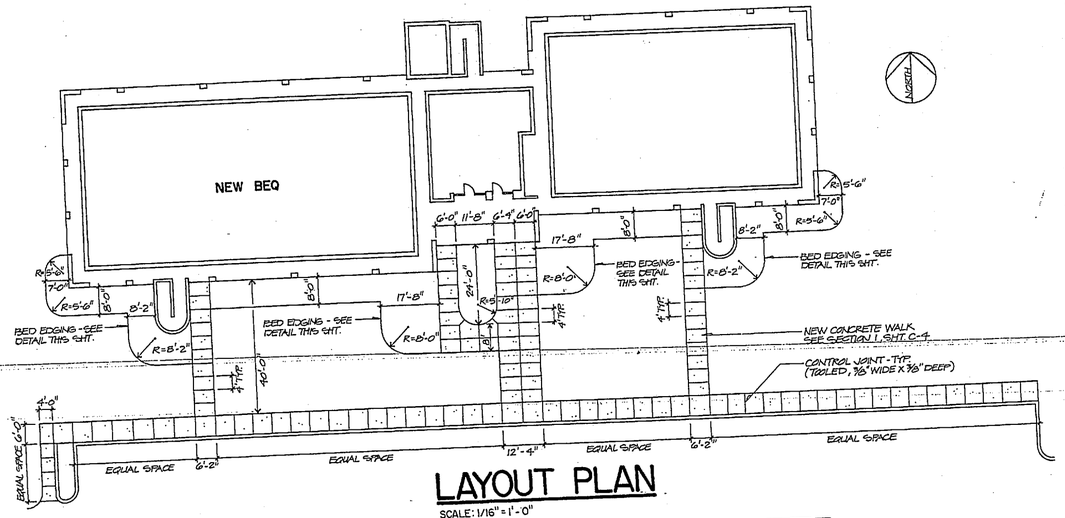
EFD DWG NO. 257736
JOB ORDER NO. 5P5306
STA. PROJ. NO. P-74
DES. INGR DRWN. INGR
PROJ. MGR CHARGEVINA
EFD. RVD DES
BR MGR DES DR
APPROVED DATE
ACTIVITY-SATISFACTORY TO
APPROVED DATE
FOR EFD FOR COMMANDER NAVFAC

SIZE F | CODE IDENT. NO. 80091 | NAVFAC DRAWING NO. 4157736
CONTR. CONTR. NO. N62470-85-B-5142
SCALE NONE | SPEC. 05-85-5306 | SHEET 14 OF 68

REVISIONS			
SYM.	DESCRIPTION	DATE	APPROVED

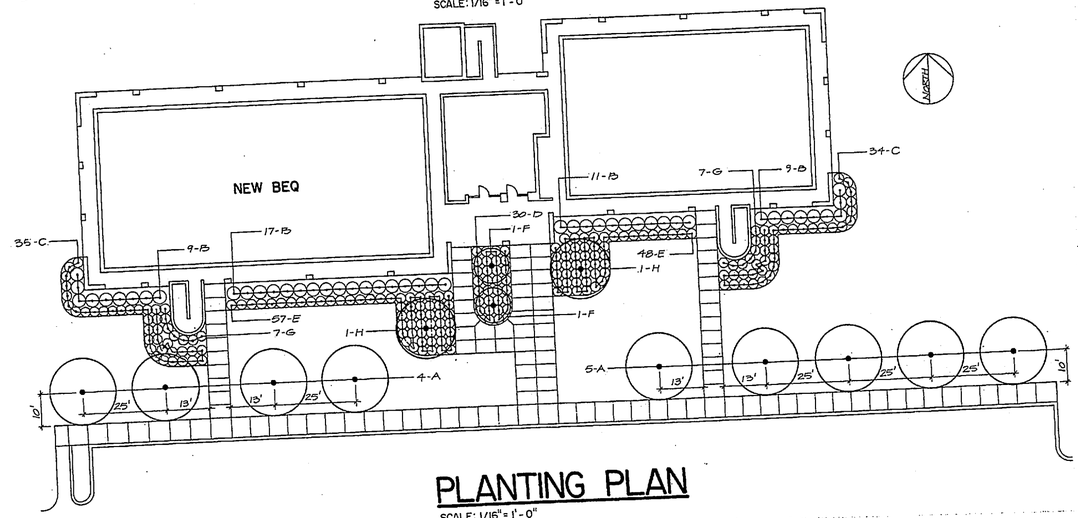
GENERAL NOTES

1. VERIFICATION OF TOTAL QUANTITIES AS SHOWN IN THE PLANT SCHEDULE SHALL BE THE RESPONSIBILITY OF THE PLANTING CONTRACTOR, AND THE KEYED PLAN SHALL GOVERN.
2. ALL PLANTS SHALL BEAR THE SAME RELATIONSHIP TO FINISH GRADE AS THEY DID TO THEIR PREVIOUS EXISTING GRADE.
3. TOTAL BED EDGING EQUALS 292± LINEAR FT.



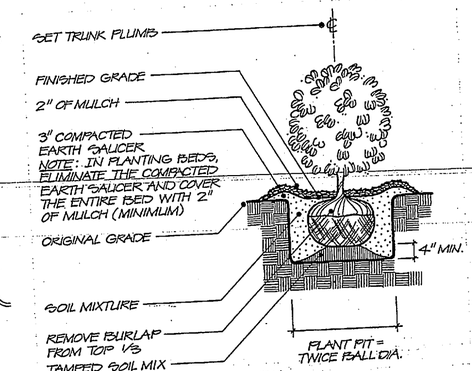
LAYOUT PLAN

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



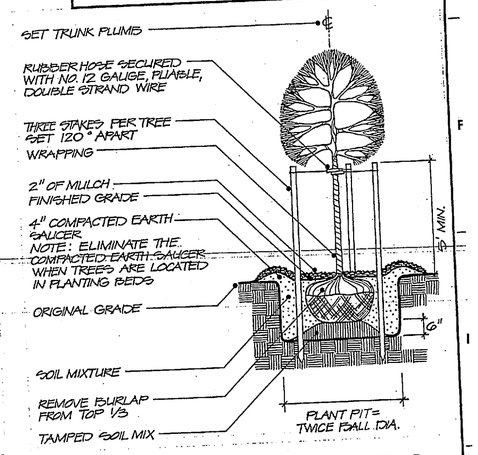
PLANTING PLAN

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



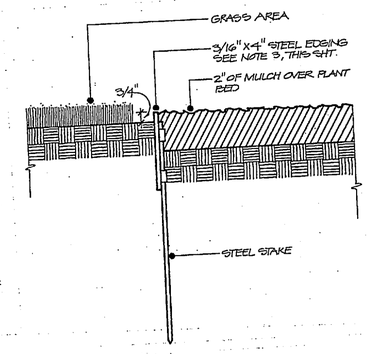
PLANTING METHOD NO. 1

NOT TO SCALE



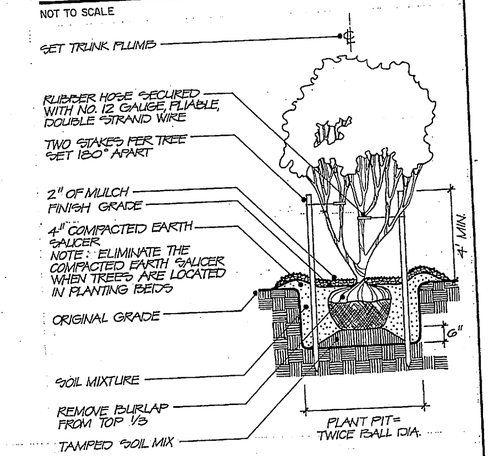
PLANTING METHOD NO. 2

NOT TO SCALE



BED EDGING DETAIL

NOT TO SCALE



PLANTING METHOD NO. 3

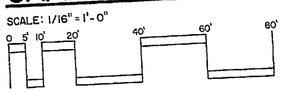
NOT TO SCALE

PLANT SCHEDULE

KEY	BOTANICAL NAME / COMMON NAME	PLANTING METHOD NO.	SIZE HEIGHT	SIZE SPREAD	CALIPER	ROOT	QUANTITY	REMARKS
A	ACER RUBRUM 'OCTOBER GLORY' FP NO. 211G / OCTOBER GLORY RED MAPLE	2	14'-16'	—	3½"-4"	B&B	9	FULL HEADS
B	ILEX CORNUTA 'BURFORDII NANA' / DWARF BURFORD HOLLY	1	24"-30"	—	—	B&B OR CONTAINER	46	SPACE AT 4' O.C.
C	ILEX CORNUTA 'ROTUNDA' / DWARF CHINESE HOLLY	1	—	18"-24"	—	CONTAINER	69	SPACE AS SHOWN
D	ILEX CRENATA 'HELLERI' / DWARF JAPANESE HOLLY	1	—	18"-24"	—	CONTAINER	30	SPACE AS SHOWN
E	ILEX VOMITORIA 'NANA' / DWARF YAUPON HOLLY	1	—	18"-24"	—	CONTAINER	105	SPACE AS SHOWN
F	LAGERSTROEMIA INDICA 'WATERMELON RED' / RED FLOWERING CRAPE-MYRTLE	3	6'-8'	—	—	B&B	2	MULTI-STEMMED
G	NANDINA DOMESTICA / HEAVENLY BAMBOO	1	30"-36"	—	—	B&B OR CONTAINER	14	SPACE AT 3' O.C.
H	PYRUS CALLERYANA 'BRADFORD' / BRADFORD PEAR	2	8'-10'	—	2"-2½"	B&B	2	FULL HEADS

GRAPHIC SCALE

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



RECORD DRAWING LETTER DATED JAN 31 1991

L-1

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NAVAL STATION NORFOLK, VA.

EFD DWG. NO. 257737
JOB ORDER NO. 8F93.00
STA. PROJ. NO. P-721
DES. BLACKBURN/DRWN. BLACKBURN
PROJ. MGR. OLARON/ENGR.
EFD RVD. FP
BR. MGR. DES. DR.
APPROVED DATE
ACTIVITY - SATISFACTORY TO
APPROVED DATE 3-20-91
FOR EFD FOR COMMANDER NAVFAC

NAVAL HOSPITAL CAMP LEJEUNE, N.C.

BACHELOR ENLISTED QUARTERS

PLANTING PLAN, SCHEDULE & DETAILS

SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.
F	80091	4157737.

SCALE AS NOTED SPEC. 05-85-5306 CONSTR. CONTR. NO. N62470-86-B-5142 SHEET 15 OF 65

— — — 2 HOUR RATED FIREWALL

———— 1 HOUR RATED FIREWALL

GENERAL NOTES:
1. ROOM NUMBERS ARE PROVIDED FOR CONSTRUCTION PURPOSES.

2. FINISH SCHEDULE APPLIES TO BOTH 1ST & 2ND FLOORS

FINISH SCHEDULE

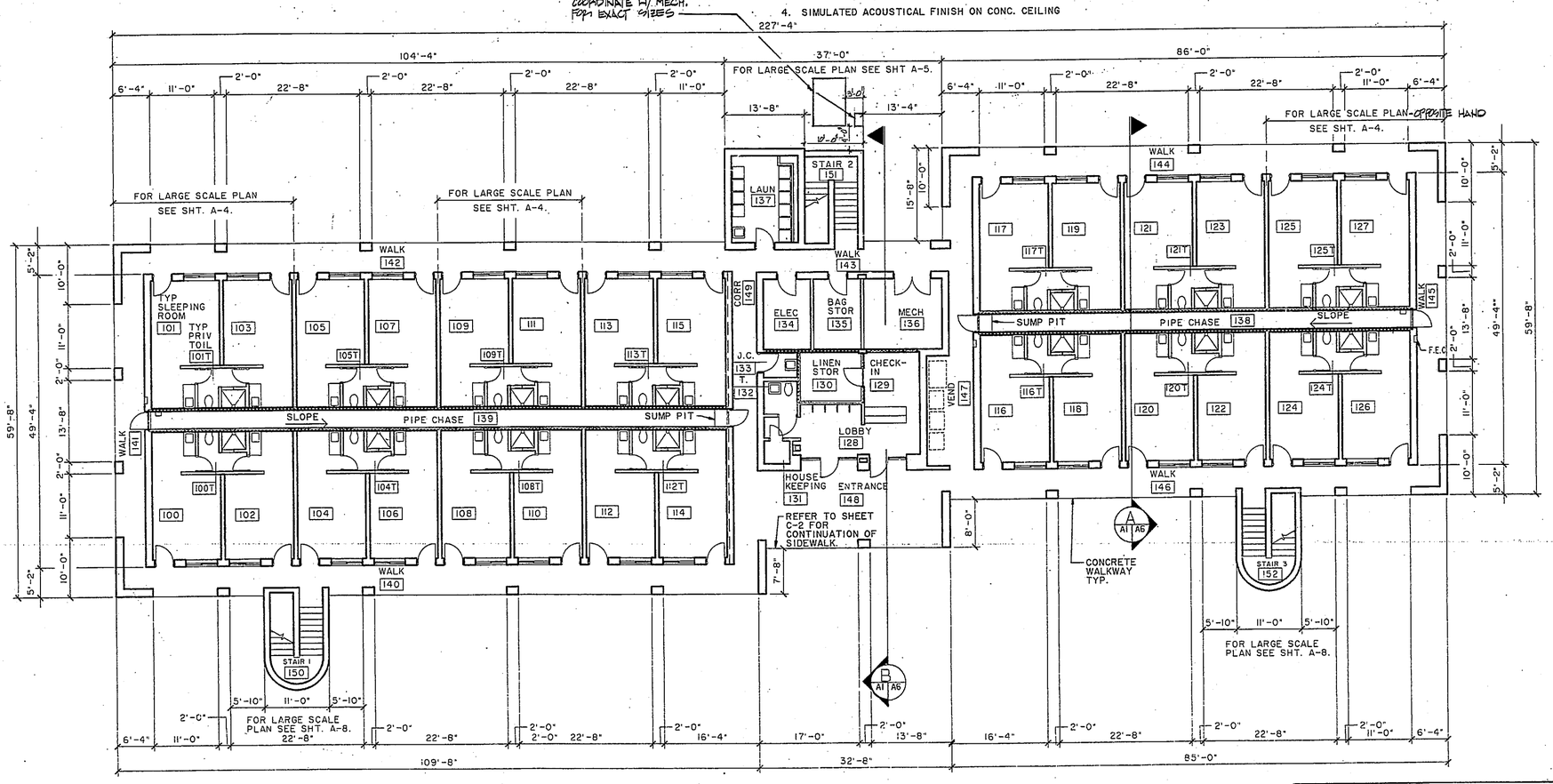
* FOR COLOR CODES SEE COLOR SCHEDULE SHT. A-2

ROOM NAME	FLOOR	COLOR	BASE	COLOR	WALLS	COLOR	CEILING	COLOR	CEILING HEIGHT	NOTES
SLEEPING ROOM	VCT	AA	VINYL	BB	CMU - PTD.	CC	CONC/GWB	DD	9'-4"/7'-3"	3,4
PRIVATE TOILET	CT	EE	CT	HH	CMU - PTD./CT	CC/HH	GWB/CT	DD/HH	7'-3"	2
LAUNDRY	ELAS. TOPPING	FF	ELAS. TOPPING	FF	CMU - PTD.	CC	GWB	DD	7'-11"	
ELEC	SEALED CONC.	-	-	-	CMU	-	CONC	-	9'-4"	1
PUBLIC TOILET	CT	EE	CT	HH	CMU - PTD./CT	CC/HH	GWB	DD	7'-11"	2
PIPE CHASE	SEALED CONC.	-	-	-	CMU	—	CONC	DD	9'-4"	
J. C.	SEALED CONC.	-	VINYL	BB	CMU	—	CONC	DD	9'-4"	1
LOBBY	QT	II	QT	II	ACRYLIC PLASTER	JJ	GWB	DD	7'-11"	
CHECK-IN	QT	II	QT	II	ACRYLIC PLASTER	JJ	GWB	DD	7'-11"	
HOUSEKEEPING	VCT	AA	VINYL	BB	CMU - PTD.	CC	GWB	DD	7'-11"	
LINEN STOR.	VCT	AA	VINYL	BB	CMU - PTD.	CC	GWB	DD	7'-11"	
BAG STOR.	VCT	AA	VINYL	BB	CMU - PTD.	CC	CONC	DD	9'-4"	4
MECHANICAL	SEALED CONC.	-	-	-	CMU	—	CONC	-	9'-4"	
LOUNGE	VCT	AA	VINYL	BB	CMU-PTD	CC	GWB	DD	7'-11"	

REVISIONS

SYM	DESCRIPTION	DATE	APPROVED

1. PROVIDE BRUSH FINISH ON CONCRETE FLOOR AT ENTRANCE, BALCONIES, WALKWAYS, AND AS INDICATED IN INTERIOR AREAS.
2. PROVIDE CT WAINSCOT TO 4'-0" ABOVE FINISHED FLOOR. PROVIDE CT FLOOR & WALLS IN SHOWERS.
3. PARTIAL GWB CEILING - SEE REFLECTED CEILING PLAN SHT A-13
4. SIMULATED ACOUSTICAL FINISH ON CONC. CEILING



FIRST FLOOR PLAN

SCALE 1/8 = 1 -0

NORTH

GRAPHIC SCALE

1/8" = 1'-0" 5' 0 5' 10' 15' 20' 25'

RECORD DRAWING LETTER DATED MAY 1 1991

A-1

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
NAVAL STATION ATLANTIC DIVISION NORFOLK, VIRGINIA

NAVAL HOSPITAL — CAMP LEJEUNE, N.C.

BACHELOR ENLISTED QUARTERS

FIRST FLOOR PLAN

CO ENG. NO.	257738
JOB ORDER NO.	5F5306
STA. PROJ. NO.	P-721
DES. YLM	DRWN. YLM
PROJ. MGR. SMG	DR.MGR/CHK. YLM
SPEC NO. Gary	CP. SDP
ENGR. RAS	DES DYR. KLS
APPROVED	DATE
ACTIVITY-SATISFACTORY TO	
APPROVED	DATE 5-20-87
FOR CYD FOR COMMANDER NAVFAC	

SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.
F	80091	4157738

CONTR. CONTRL. NO. N62470-85-B-5142

SCALE AS NOTED SPEC. 05-85-5306 SHEET 16 OF 68

COLOR SCHEDULE

AA VINYL COMPOSITION TILE
MANUFACTURER: KENTILE
STYLE: "RUSTIC STONE"
COLOR: 1071 EARTHEN BROWN

BB FOUR INCH VINYL COVE BASE
MANUFACTURER: KENTILE
STYLE: GROUP I
COLOR: KC-3 BURNT UMBER

CC PAINTED WALLS
MANUFACTURER: BENJAMIN MOORE
COLOR NUMBER: HC-84

DD PAINTED CEILINGS
MANUFACTURER: BENJAMIN MOORE
COLOR NUMBER: OW-50

EE CERAMIC MOSAIC FLOOR TILE
INSTALLATION PATTERN: "SPIRAL
FIELD TILE:
MANUFACTURER: DAL-TILE
SIZE OF TILE: 1 INCH BY 2 INCH
COLOR: DK-157 TANSTONE
FINISH: ABRASIVE

CENTER ACCENT TILE:
MANUFACTURER: DAL-TILE
SIZE OF TILE: 1 INCH BY 1 INCH
COLOR: DJ-51 BLACK
FINISH: GLOSS

GROUT:
COLOR: BLACK

FF ELASTOMERIC TOPPING FOR CONCRETE FLOOR AND BASE:
MANUFACTURER: DEX-O-TEX
COLOR: 619 RED

GG PAINTED METAL DOOR FRAMES
PAINT MANUFACTURER: BENJAMIN MOORE
COLOR: HC-87

HH CERAMIC WALL TILE:
MANUFACTURER: DAL-TILE
SIZE: APPROXIMATELY 4 INCH BY 4 INCH
COLOR: D-725 DOVE
FINISH: MANUFACTURER'S STANDARD SATIN

GROUT:
MANUFACTURER: SUMMITVILLE
COLOR: PALIMINO

II QUARRY TILE:
INSTALLATION PATTERN: "HERRINGBONE"
MANUFACTURER: DAL-TILE
SIZE: 4 INCH BY 8 INCH
STYLE: "DAL-PAVER"
COLOR: BARN GRAY

JJ ACRYLIC PLASTER WALL FINISH:
MANUFACTURER: STO INDUSTRIES, INC.
COLOR: MATCH BENJAMIN MOORE PAINT COLOR HC-87
FINISH TEXTURE: "FLOAT"

KK PAINTED METAL DOORS:
PAINT MANUFACTURER: BENJAMIN MOORE
COLOR: HC-87

LL, MM, & NN

CHECK-IN COUNTER-PLASTIC LAMINATE FINISHES:
MANUFACTURER: FORMICA
COLORS:
LL: 968-C BURGUNDY (COLORCORE)
MM: AX36 "STEELTONED ALUMINUM TRIANGLE" (METAL LAMINATE)
NN: 939 SABLE, MATTE FINISH

NON COLOR-CODED FINISHES:

1. ONE-INCH HORIZONTAL SLAT WINDOW BLINDS:
MANUFACTURER: LEVOLOR
STYLE: "RIVIERA"
COLOR: INCA SILVER

2. WARDROBE CABINETS-PLASTIC LAMINATE FINISH:
MANUFACTURER: FORMICA
CABINET (ALL EXPOSED SURFACES INCLUDING TOP AND BACK)
COLOR: 913 INDIAN SMOKE, MATTE FINISH
DOORS (ALL EXPOSED SURFACES)
COLOR: 7155 WHITE FLAX, FLAX FINISH

SINK VANITIES - PLASTIC LAMINATE FINISH:
MANUFACTURER: FORMICA
COLOR: 913 INDIAN SMOKE, MATTE FINISH

3. ONE INCH NARROW SLAT HORIZONTAL BLINDS:
MANUFACTURER: LEVOLOR LORENTZEN
STYLE: "RIVIERA"
COLOR: INCA SILVER

4. WARDROBE CABINETS - FINISHES:
PLASTIC LAMINATE MANUFACTURER: FORMICA
DOORS - ALL EXPOSED SURFACES
COLOR: 7155 WHITE FLAX, FLAX FINISH

CABINET - ALL EXPOSED SURFACES
COLOR: 913 INDIAN SMOKE, MATTE FINISH

5. SINK VANITIES - FINISH:
PLASTIC LAMINATE MANUFACTURER: FORMICA
COLOR: 913 INDIAN SMOKE, MATTE FINISH

6. WOOD DOORS, MISCELLANEOUS WOOD TRIM AND SHELVING:
RED OAK WITH CLEAR, NATURAL FINISH

7. SWITCH PLATES, CONVENIENCE OUTLET PLATES, TELEPHONE OUTLET PLATES: OFF-WHITE

8. WATER CLOSETS, SINKS, BATH/SHOWERS, LAVATORIES: WHITE

9. FIRE EXTINGUISHERS AND CABINETS:
FEDERAL STANDARD COLOR 595A, 11105

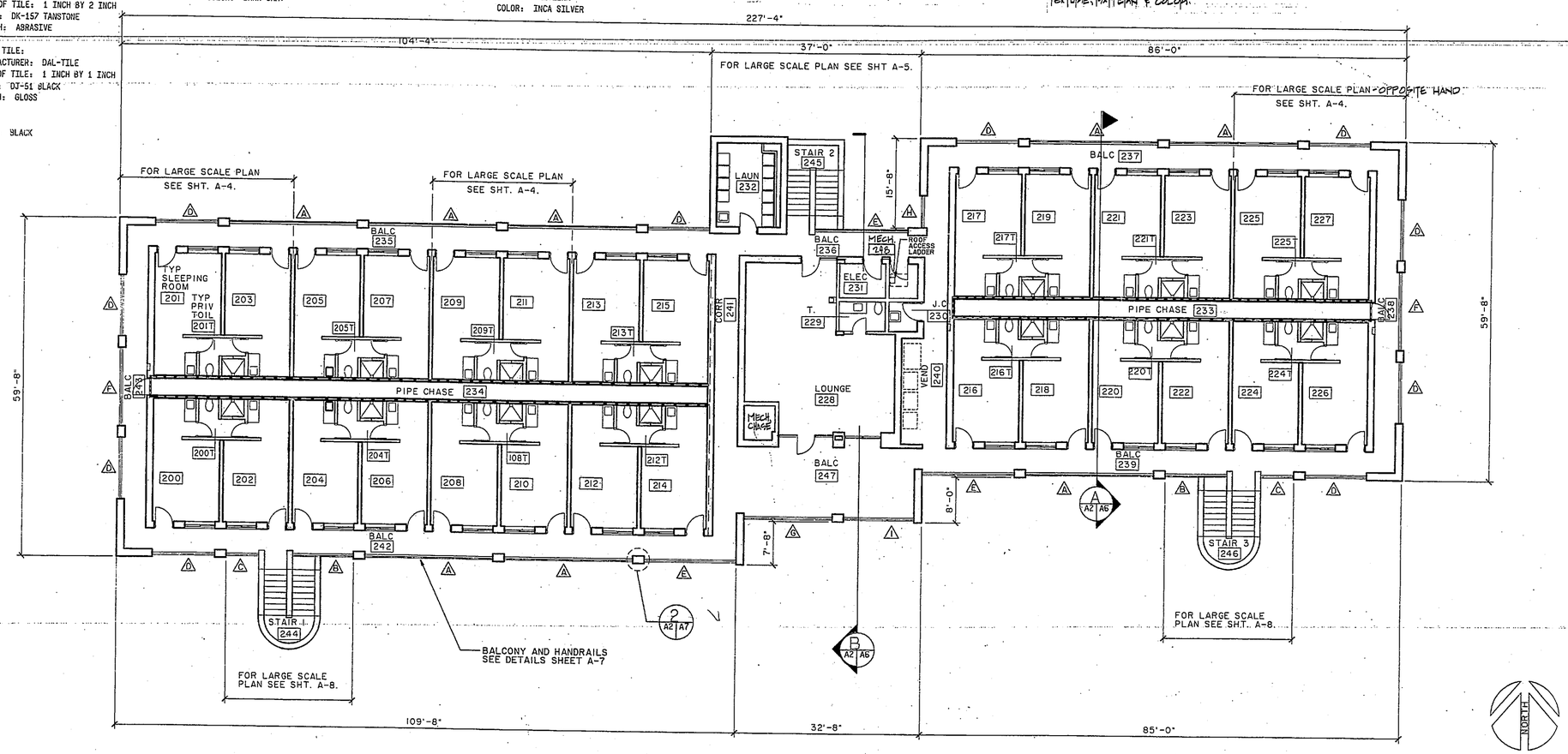
10. MISCELLANEOUS SURFACES REQUIRING FIELD PAINTING PAINT TO MATCH ADJACENT SURFACE.

NOTE:
MANUFACTURERS SPECIFIED ARE FOR QUALITY, TEXTURE, PATTERN & COLOR.

REVISIONS

SYM	DESCRIPTION	DATE	APPROVED

2 HOUR RATED FIRE WALL
1 HOUR RATED FIRE WALL



SECOND FLOOR PLAN

SCALE : 1/8 =1 -0

NOTE:
SEE SHT. A-1 FOR TYPICAL DIMENSIONS

GRAPHIC SCALE
1/8" = 1'-0" 5' 0 5' 10' 15' 20' 25'

RECORD DRAWING
LETTER DATED

A-2

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
NAVAL STATION — ATLANTIC DIVISION — NORFOLK, VIRGINIA

CO ORD. NO.	257739
JOB ORDER NO.	5F5306
STA. PROJ.NO.	P-721
DES.	YLM
DRWN.	YLM
PROJ. MGR.	SMG
ENLARGEMENT	YLM
CHD. NO.	
F.A.	
RANGE	
DESIGN	
APPROVED	DATE
ACTIVITY-SATISFACTORY TO	
APPROVED FOR CEC FOR COMMANDER NAVFAC	DATE 3-30-87

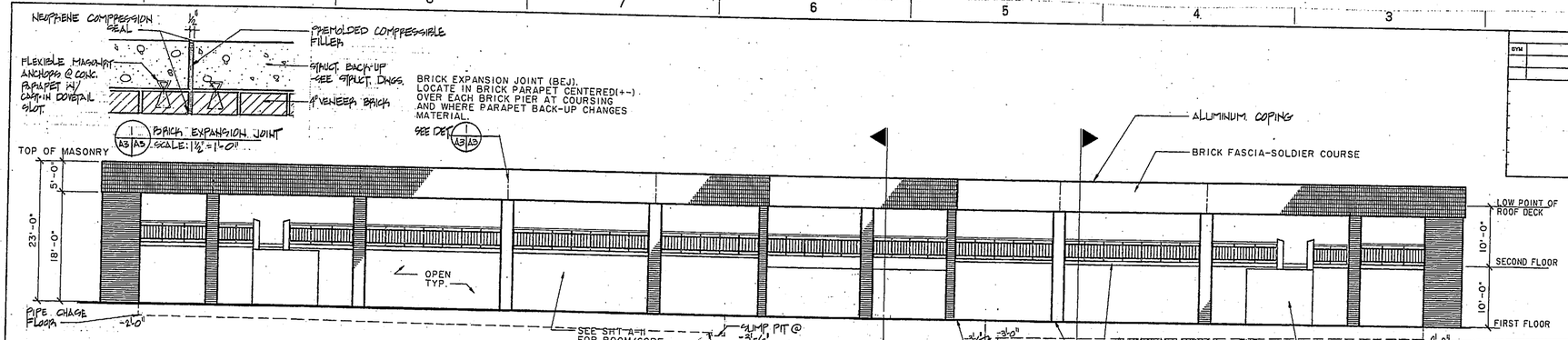
NAVAL HOSPITAL — CAMP LEJEUNE, N.C.

BACHELOR ENLISTED QUARTERS

SECOND FLOOR PLAN

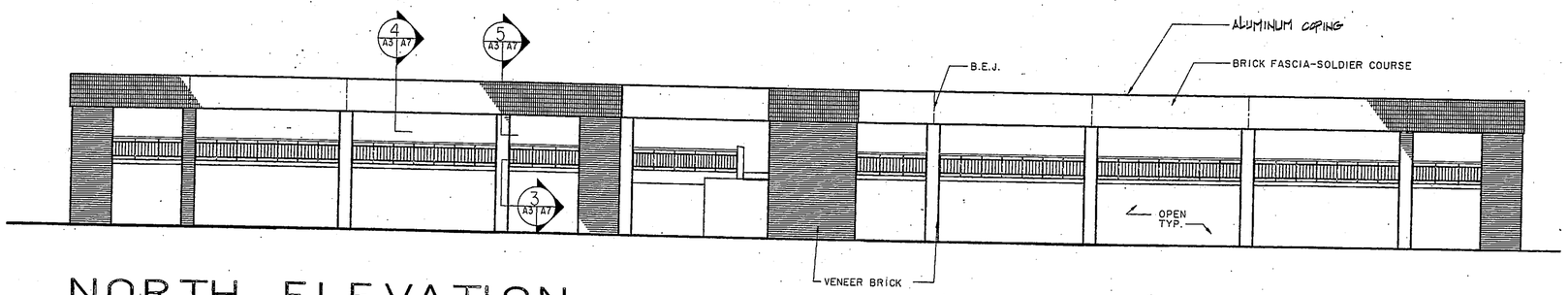
SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.
F	80091	4157739

CONSTR. CONTR. NO. N62470-85-B-5142
SCALE AS NOTED SPEC. 05-85-5306 SHEET 17 OF 68



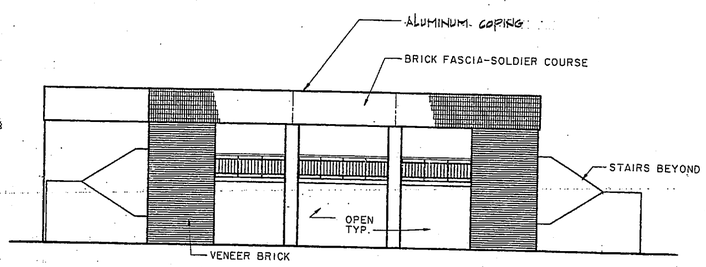
SOUTH ELEVATION

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



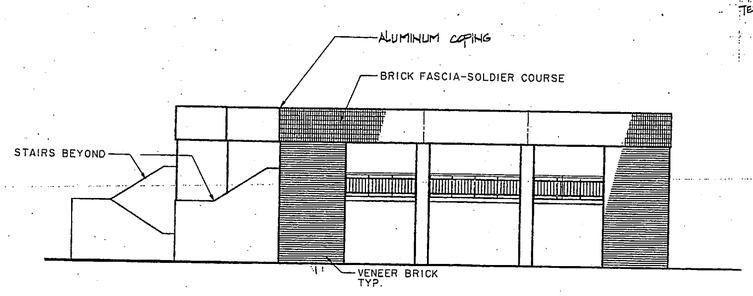
NORTH ELEVATION

SCALE: 1/8 = 1 - 0



EAST ELEVATION

SCALE: 1/8 = 1 - 0



WEST ELEVATION

SCALE: 1/8 = 1 - 0

REVISIONS

SYM	DESCRIPTION	DATE	APPROVED

EXTERIOR COLOR SCHEDULE

MATERIAL	COLOR	COMPANY
BRICK	CHESTNUT	CAROLINA CERAMICS
MORTAR	BLACK C-58	FLAMINGO
GLASS	BRONZE	PPG
EXPOSED CONC. STAIR WALLS	CLEAR, RUBBED FINISH	–
COPING	DARK BRONZE ANODIZED	ARCHITECTURAL PRODUCTS
EXTERIOR CEILING FINISH SYSTEM	RED PR-79	MOORE PAINTS
ALUMINUM STOREFRONT	DARK BRONZE ANODIZED	KAWNEER
H. M. FRAMES & DOORS	BROWN ET-75	MOORE PAINTS
ALUMINUM HANDRAILS	DARK BRONZE ANODIZED	ARCHITECTURAL ART MFG., INC.
METAL STAIR HANDRAIL & MISC. METALS	BROWN ET-75	MOORE PAINTS

NOTE: MANUFACTURERS SPECIFIED ARE FOR QUALITY, TEXTURE, PATTERN & COLOR.

NOTE:

REFER TO PARTIAL ELEVATIONS A/A5/A11 FOR ROOM AND CORE ELEVATIONS

GRAPHIC SCALE

1/8" = 1'-0" 5' 0 5' 10' 15' 20' 25'

RECORD DRAWING LETTER DATED JAN 1 1991

A-3

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NORFOLK, VIRGINIA

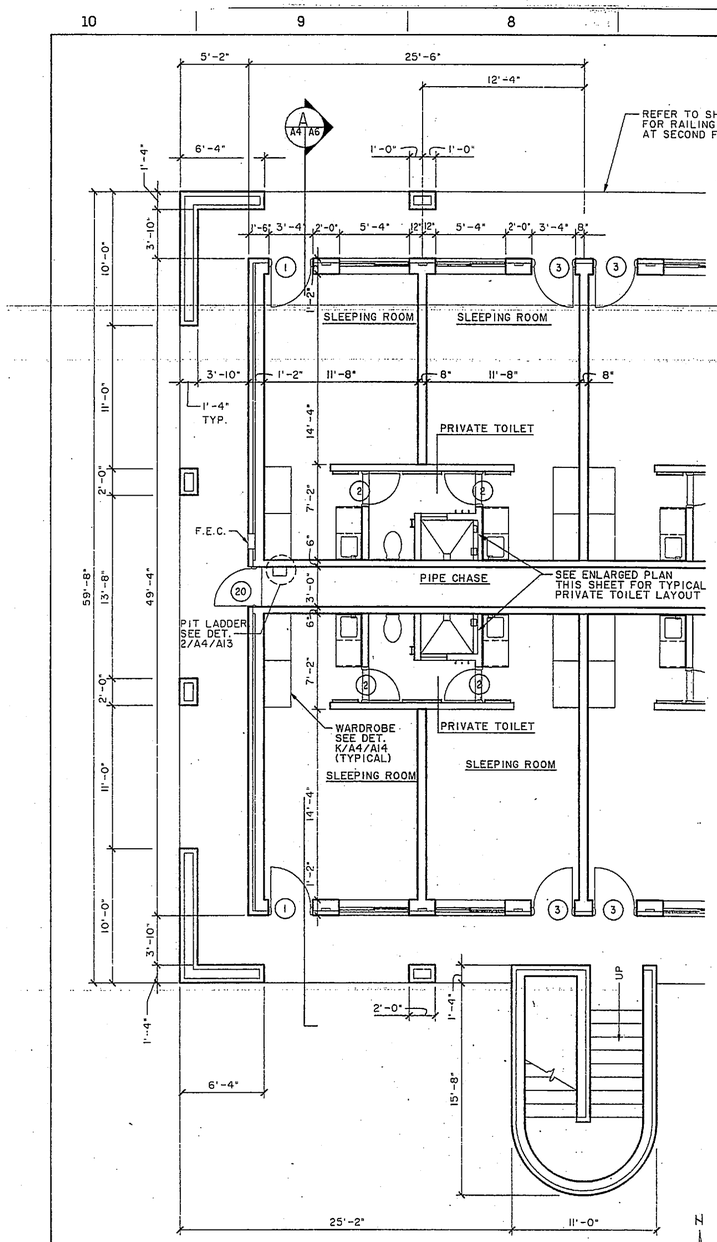
NAVAL STATION: NAVAL HOSPITAL — CAMP LEJEUNE, N.C.

BACHELOR ENLISTED QUARTERS

ELEVATIONS

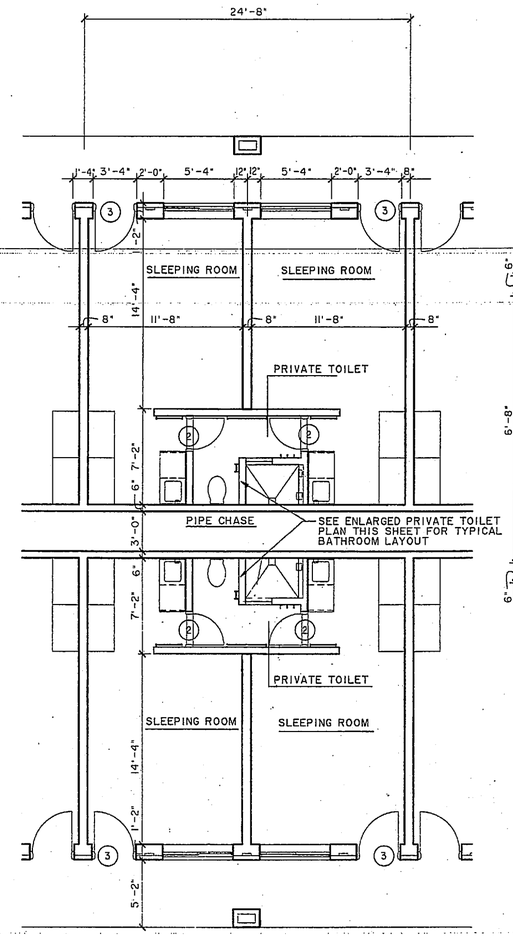
EFD CHG. NO. 257740
JOB GROUP NO. 5F5306
STA. PROJ. NO. P-721
DES. YLM DRWN. YLM
PROJ. MGR. SMG CHAROUCHIA, YLM
STD. ENG. F.P. SCHIFF
BRANCH DESIGN KS
APPROVED DATE
ACTIVITY-SATISFACTORY TO
APPROVED DATE
FOR EFD FOR COMMANDER NAVFAC

SIZE F — CODE IDENT. NO. 80091 — NAVFAC DRAWING NO. 4157740
CONTR. CONTL. NO. N62470-85-B-5142
SCALE AS NOTED SPEC. 05-85-5306 SHEET 18 OF 68



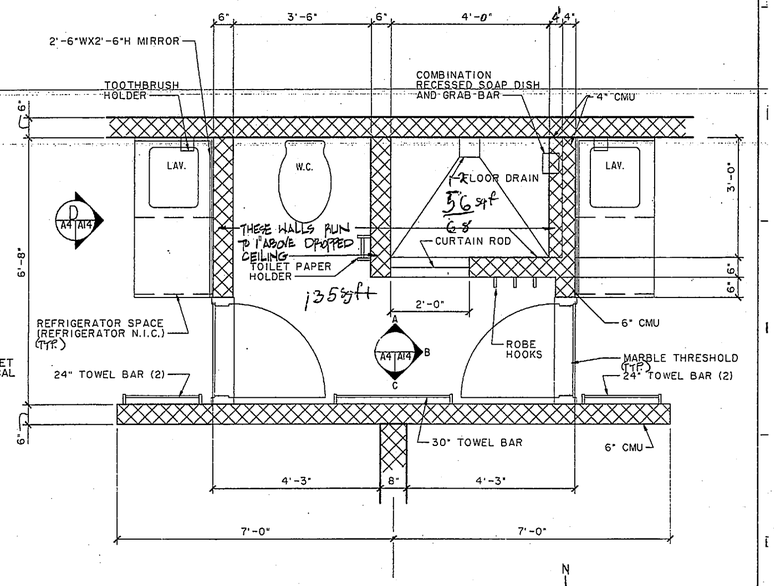
FLOOR PLAN
END UNIT

SCALE: 1/4"=1'-0"



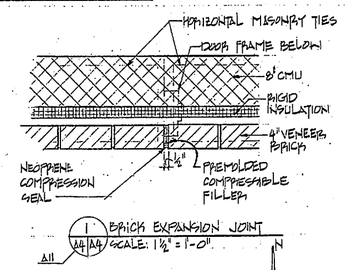
FLOOR PLAN
TYP. ROOM UNIT

SCALE: 1/4"=1'-0"



PRIVATE TOILET PLAN

SCALE: 3/4"=1'-0"



GENERAL NOTES:

1. FOR ROOM NUMBERS REFER TO SHEETS A-1 AND A-2
2. FOR INTERIOR ELEVATIONS SEE SHT. A-14.
3. INTERIOR PARTITIONS ARE 8" OR 6" CMU AS DIMENSIONED
4. EXTERIOR WALLS ARE 8" CMU WITH RIGID INSULATION (R=5 MIN.) IN A 2" AIR SPACE AND 4" VENEER BRICK.
5. PIERS ARE 8" POURED-IN-PLACE CONCRETE WITH 4" VENEER BRICK. SEE STRUCT DRAWINGS.
6. BALCONY WALLS ARE 8" CMU WITH 4" BRICK VENEER. SEE STRUCT. DRAWINGS.
7. PROVIDE CMU EXPANSION JOINT AT 24'-8" O.C. MAX.
8. PROVIDE BRICK EXPANSION JOINT ON ROOM EXTERIOR WALLS AT EVERY OTHER ROOM ENTRANCE DOOR.

SEE 1/A4-A6 FOR DETAIL & A/A6/A11 FOR LOCATION

GRAPHIC SCALE

1/4" = 1'-0" 5' 0 5' 10'

3/4" = 1'-0" 1' 6" 0 1' 2' 3' 4' 5'

REVISIONS

SYM	DESCRIPTION	DATE	APPROVED

REPORTS DRAWING LETTER DATED JAN 11 1991

A-4

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
NAVAL STATION — ATLANTIC DIVISION — NORFOLK, VIRGINIA

EFD DWG. NO. 257741
JOB ORDER NO. SF9306
STA. PROJ.NO. P-721
DES. YLM DRAWN YLM
PROJ. MGR. SMG CLEARANCE/CNSR. YLM
EFD REVD. [illegible] F.P. [illegible]
SR.MGR. [illegible] M.E.O.R. [illegible]
APPROVED DATE
ACTIVITY-SATISFACTORY TO
APPROVED [illegible] DATE 5-30-97

NAVAL HOSPITAL — CAMP LEJEUNE, N.C.

BACHELOR ENLISTED QUARTERS

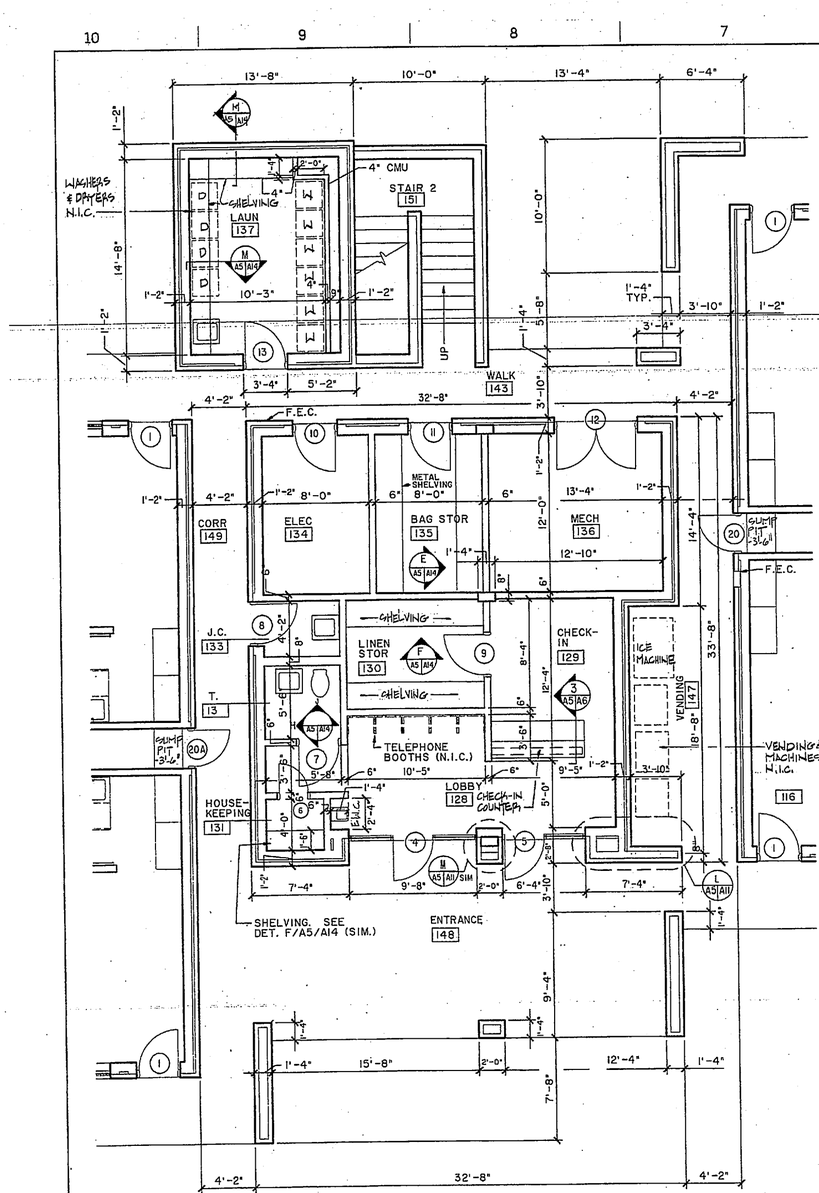
LARGE ROOM PLANS

SIZE F — CODE IDENT.NO. 80091 — NAVFAC DRAWING NO. 4157741

CONTR. CONST. NO. N62470-85-B-5142

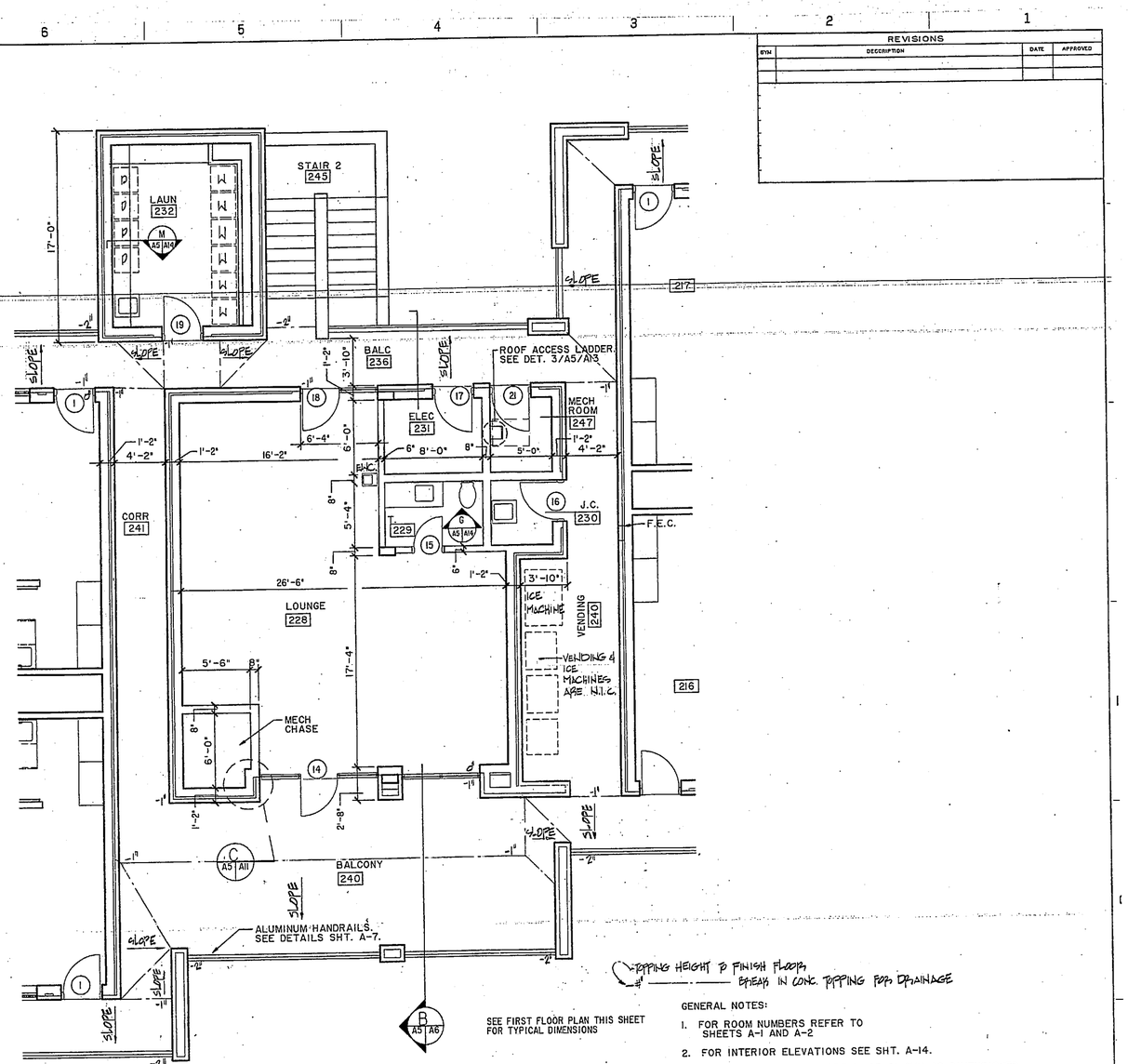
UNLESS AS NOTED REV. 05-85-5306 — SHEET 10 OF 68

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED



FIRST FLOOR

NOTE:
6" WALLS AT HOUSKEEPING AREA RUN TO 8'-0" HIGH ONLY.



SECOND FLOOR

TOPPING HEIGHT @ FINISH FLOOR
BREAKS IN CONC. TOPPING FOR DRAINAGE

GENERAL NOTES:

1. FOR ROOM NUMBERS REFER TO SHEETS A-1 AND A-2
2. FOR INTERIOR ELEVATIONS SEE SHT. A-14.
3. INTERIOR PARTITIONS ARE 8" OR 6" CMU AS DIMENSIONED
4. EXTERIOR WALLS ARE 8" CMU WITH RIGID INSULATION (R=5 MIN.) IN A 2" AIR SPACE AND 4" VENEER BRICK.
5. PIERS ARE 8" POURED-IN-PLACE CONCRETE WITH 4" VENEER BRICK.
6. BALCONY WALLS ARE 8" CMU WITH 4" VENEER BRICK.

CORE AREA PLANS

SCALE: 1/4"=1'-0"

GRAPHIC SCALE

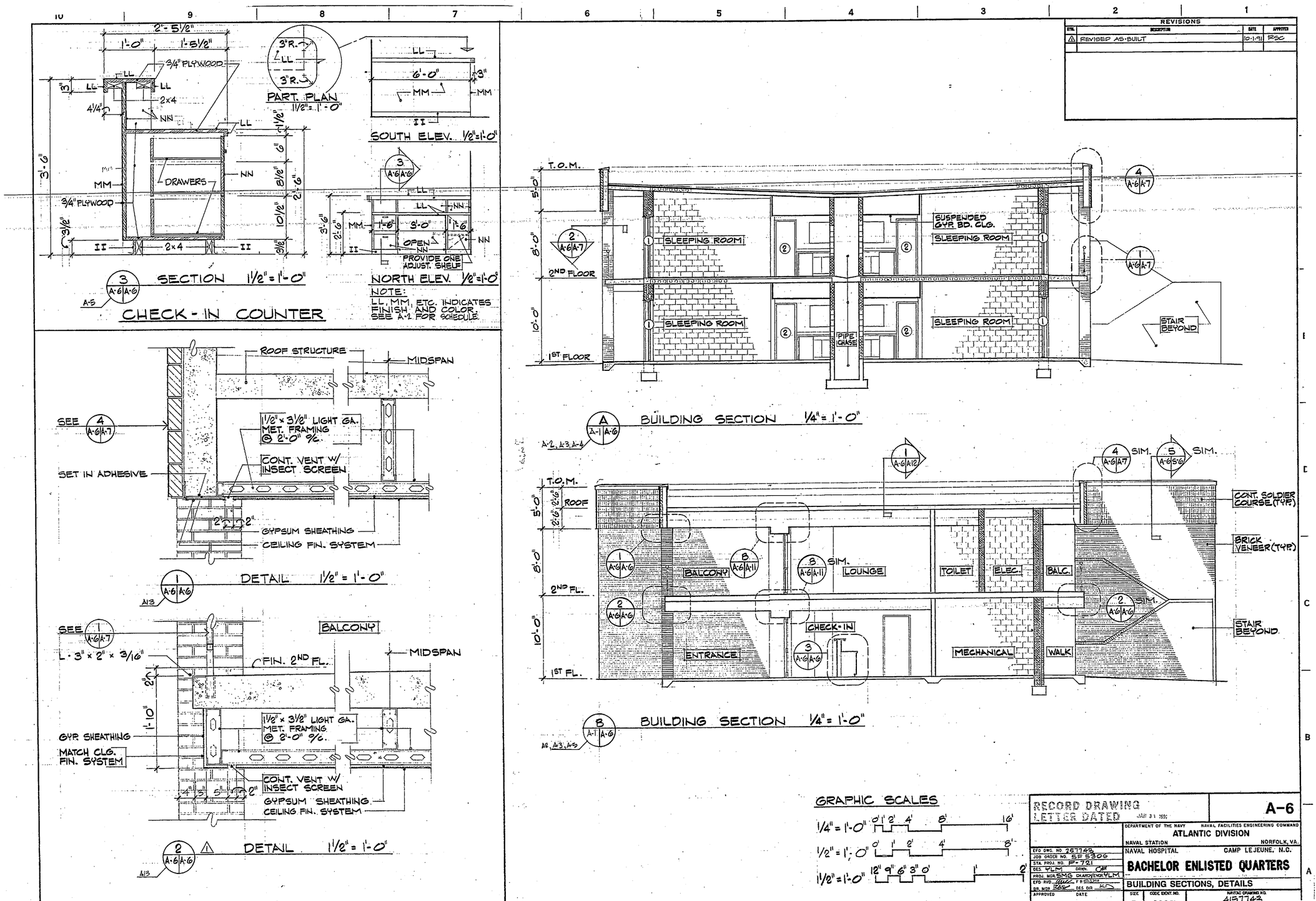
1/4" = 1'-0" 5' 0 5' 10'

RECORD DRAWING
LETTER DATED 10 JUL 92

A-5

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NAVAL STATION NORFOLK, VIRGINIA

EFD DWG. NO. 257742	NAVAL HOSPITAL CAMP LEJEUNE, N.C.
JOB ORDER NO. 5F5306	BACHELOR ENLISTED QUARTERS
CTL PROJ.NO. P-721	LARGE CORE PLANS
DES. YLM DRWN. YLM	
PROJ. MGR. SMG CHARGEVINGE. YLM	
EFD RIC. EFD F.P.	
BRANCH. EFD SEC.BR.	
APPROVED DATE	SIZE F / CODE IDENT.NO. 80091 / NAVFAC DRAWING NO. 4157742
ACTIVITY-SATISFACTORY TO	
APPROVED DATE 3-2-87	CONSTR. CONTR. NO. N62470-85-B-5142
SCALE AS NOTED SPEC. 05-85-5306	SHEET 20 OF 68



RECORD DRAWING LETTER DATED JAN 31 1991

A-6

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

ATLANTIC DIVISION

NAVAL STATION — NORFOLK, VA.

NAVAL HOSPITAL — CAMP LEJEUNE, N.C.

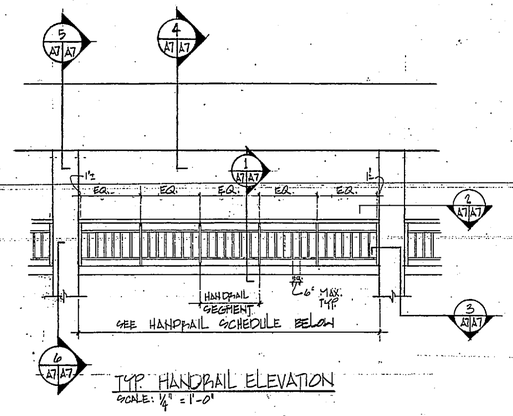
BACHELOR ENLISTED QUARTERS

BUILDING SECTIONS, DETAILS

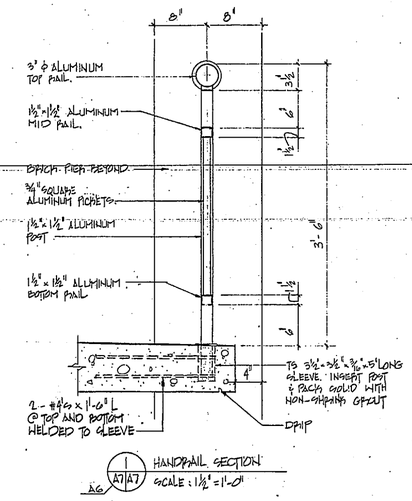
EFD DWG. NO. 257743
JOB ORDER NO. SF 5306
STA. PROJ. NO. P-721
DES. YLM DRWN. OP
PROJ. MGR. SMG CHARCH/ENGR. YLM
EFD RVD. F.P. SMG
BR. MGR. RAS DES. DIR. KN
APPROVED DATE

SIZE — CODE IDENT. NO. — NAVFAC DRAWING NO. 4157742

REVISIONS			
SYM.	DESCRIPTION	DATE	APPROVED



TYP. HANDRAIL ELEVATION
SCALE: ¼" = 1'-0"

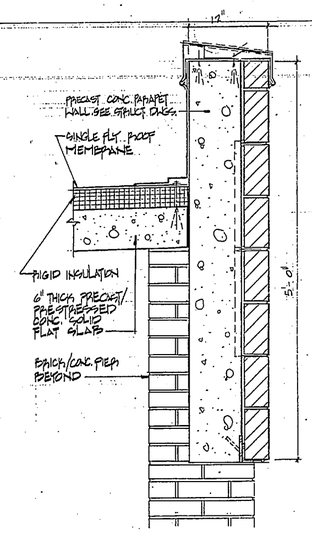


1 A7 A7 HANDRAIL SECTION
A6 SCALE: 1½" = 1'-0"

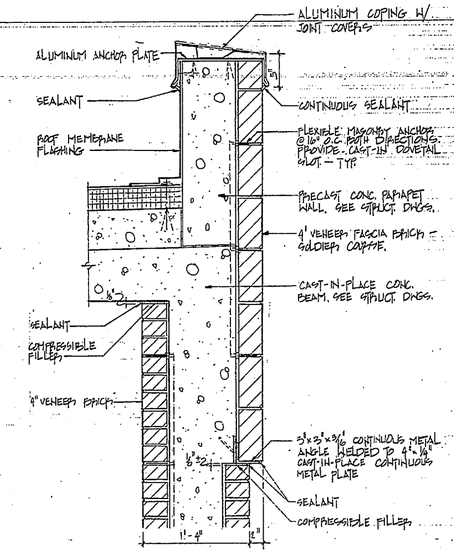
HANDRAIL SCHEDULE △		
TYPE	MASONRY OPNG.	NO. OF SEGMENTS*
A	22'-8"	7
B	10'-10"	3
C	9'-10"	2
D	11'-0"	3
E	16'-4"	5
F	13'-8"	4
G	15'-8"	5
H	8'-8"	2
I	12'-4"	4

* SEE ELEVATION ABOVE

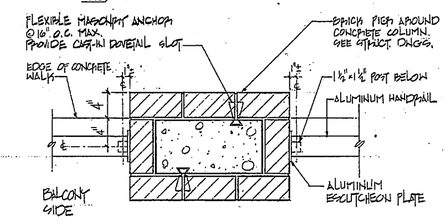
NOTE: VERIFY OPENINGS IN FIELD.



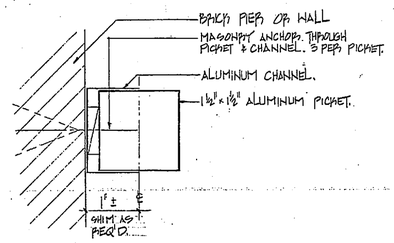
4 A7 A7 PARAPET DETAIL
A6, A3 SCALE: 1½" = 1'-0"



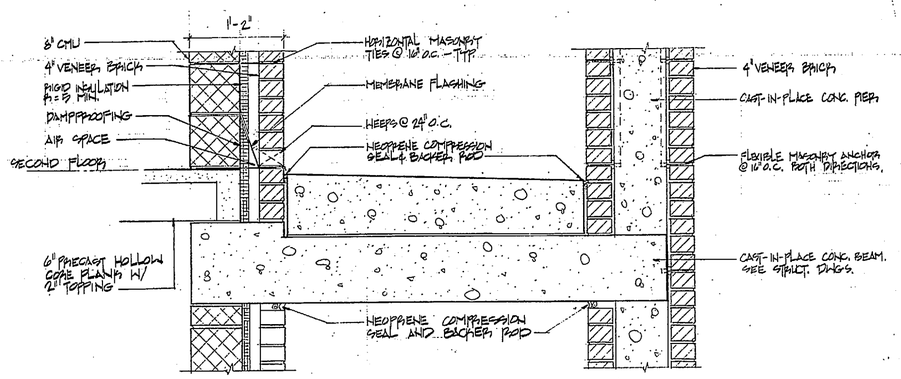
5 A7 A7 PARAPET DETAIL
A3 SCALE: 1½" = 1'-0"



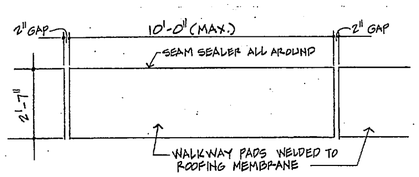
2 A7 A7 HANDRAIL DETAIL
A6, A2 SCALE: 1½" = 1'-0"



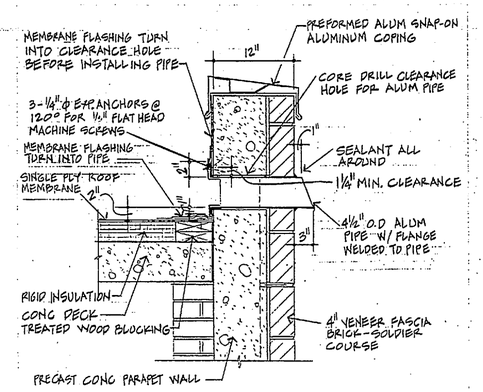
3 A7 A7 PICKET DETAIL
A3 FULL SCALE



6 A7 A7 DETAIL @ PIER
SCALE: 1½" = 1'-0"

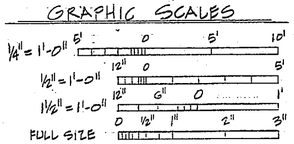


7 A12 A7 TYP. WALKWAY PADS - PLAN
SCALE: ½" = 1'-0"



8 A12 A7 TYP. SCUPPER THRU WALL
SCALE: 1½" = 1'-0"

GRAPHIC SCALES



RECORD DRAWING
LETTER DATED JAN 31 1991

A-7

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NAVAL STATION — NORFOLK, VA.
NAVAL HOSPITAL — CAMP LEJEUNE, N.C.

BACHELOR ENLISTED QUARTERS

HANDRAIL DETAILS, WALL SECTIONS

EFD DWG. NO. 257744
JOB ORDER NO. 6F5356
STA PROJ. NO. P-721
DES. YLM DRWN. YLM
PROJ. MGR. SMG CHARGEWORK YLM
EFD. RVD. ZSMC FREZ
DR. MGR. ZASS DES. DIR. KD
APPROVED DATE
ACTIVITY - SATISFACTORY TO
APPROVED DATE 3-30-87

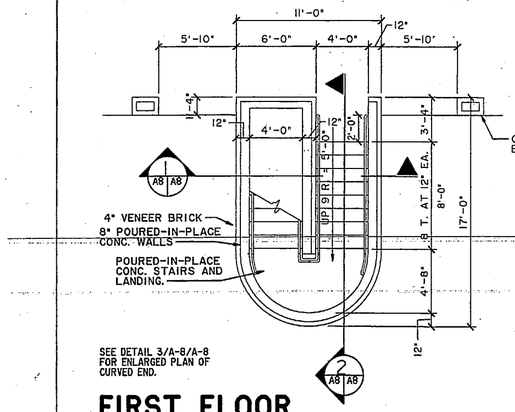
SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.
F	80091	4157744

CONSTR. CONTR. NO. N62470-85-B-5142

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED

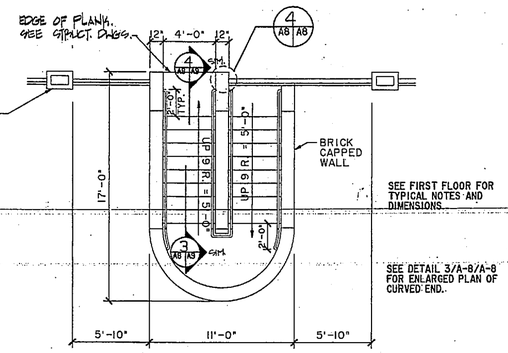
STAIR NO. 1

(STAIR NO. 3 OPPOSITE HAND)



FIRST FLOOR

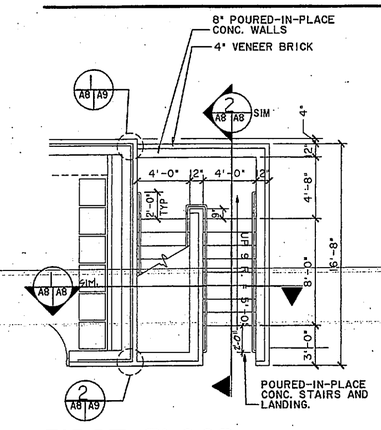
SCALE: 1/4"=1'-0"



SECOND FLOOR

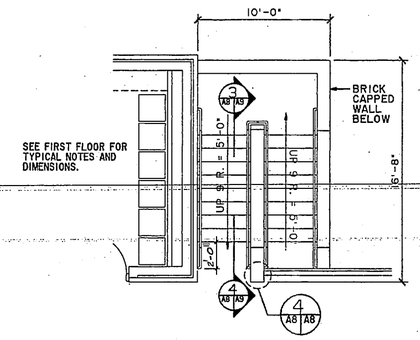
SCALE: 1/4"=1'-0"

STAIR NO. 2



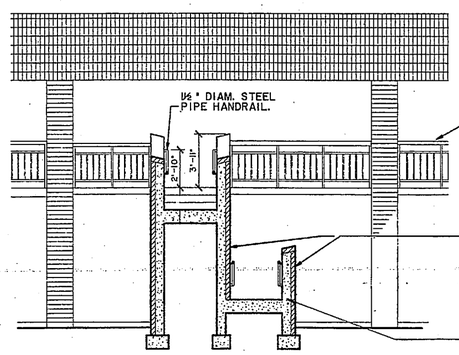
FIRST FLOOR

SCALE: 1/4"=1'-0"



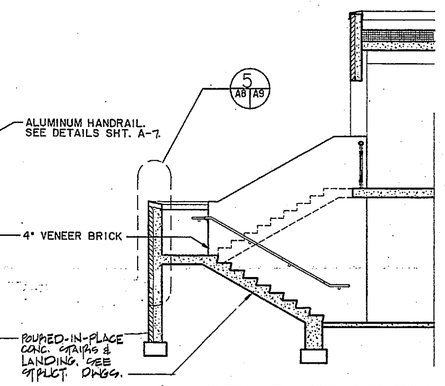
SECOND FLOOR

SCALE: 1/4"=1'-0"



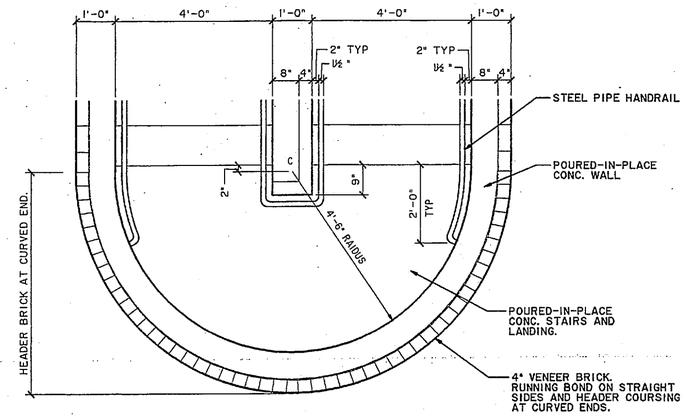
STAIR SECTION

SCALE: 1/4"=1'-0"



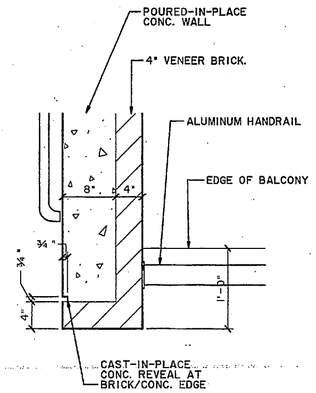
STAIR SECTION

SCALE: 1/4"=1'-0"



STAIR PLAN DETAIL

SCALE: 3/4" = 1'-0"



STAIR PLAN DETAIL

SCALE: 1 1/2"=1'-0"

GRAPHIC SCALE

¼" = 1'-0" 5' 0 5' 10'

½" = 1'-0" 1' 9" 6" 3" 0 1' 2'

3/4" = 1'-0" 2' 1' 0 1' 2' 3'

RECORD DRAWING LETTER DATED

A-8

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
NAVAL STATION — ATLANTIC DIVISION — NORFOLK, VIRGINIA

EFD DWG. NO. 257745
JOB ORDER NO. 5F5306
STA. FRD.NO. P-721
DES. YLM CHKD. YLM
PROJ. MGR. SMG CALMOD/DATE YLM
EFD RVD. YLM F.P. SEE
REVIEW. DESIG. RVS
APPROVED DATE
ACTIVITY-SATISFACTORY TO
APPROVED DATE
FOR EFD FOR COMMANDER NAVFAC

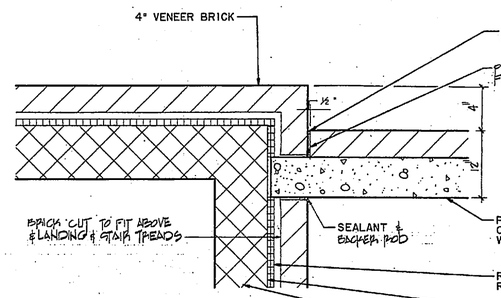
NAVAL HOSPITAL — CAMP LEJEUNE, N.C.

BACHELOR ENLISTED QUARTERS

STAIR PLANS/SECTIONS/DETAILS

SIZE F — CODE IDENT.NO. 80091 — NAVFAC DRAWING NO. 457745
CONSTR. CONTR. NO. N62470-85-B-5142
SCALE AS NOTED — SPEC. 05-85-5306 — SHEET 23 OF 68

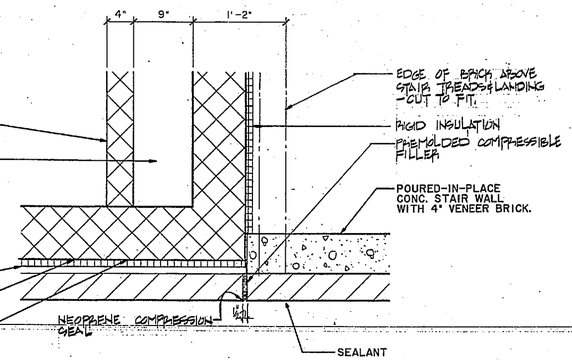
REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED



STAIR PLAN DETAIL

(1 / A8 A9)

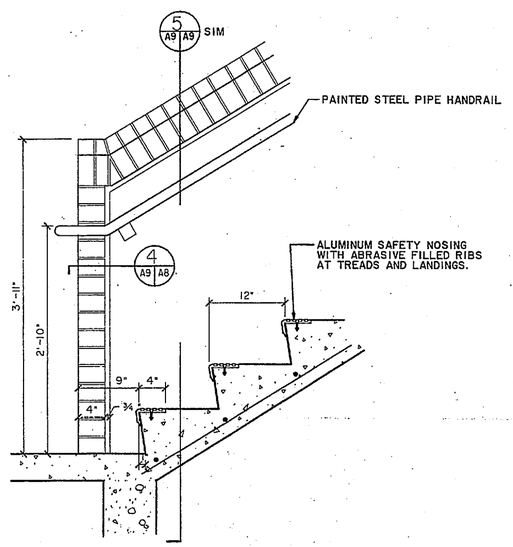
SCALE: 1 1/2"=1'-0"



STAIR PLAN DETAIL

(2 / A8 A9)

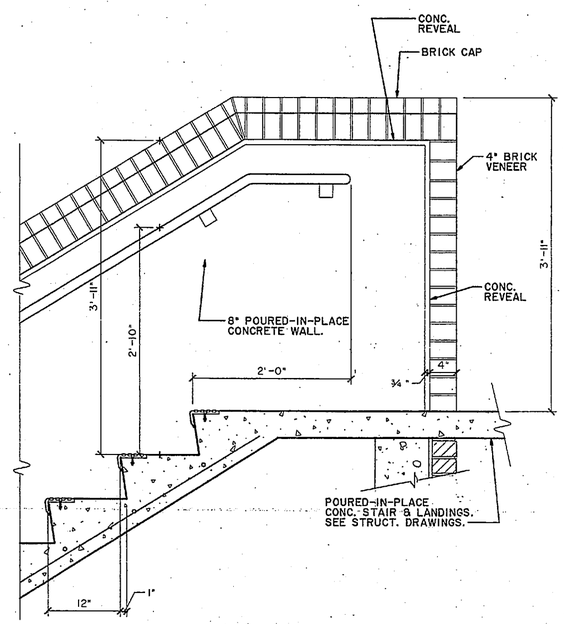
SCALE: 1 1/2"=1'-0"



STAIR DETAIL

(3 / A8 A9)

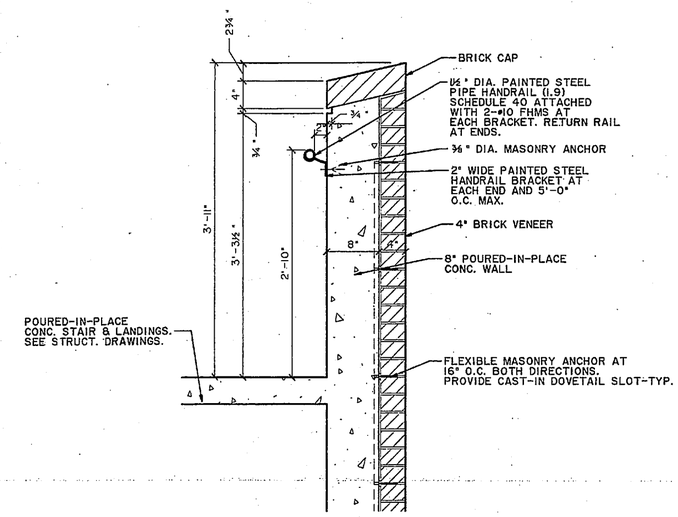
SCALE: 1 1/2"=1'-0"



STAIR DETAIL

(4 / A8 A9)

SCALE: 1 1/2"=1'-0"



STAIR DETAIL

(5 / A8 A9)

A9

SCALE: 1 1/2"=1'-0"

GRAPHIC SCALE

SCALE: 1½" = 1'-0"

-1' -9" -6" -3" 0" 1' 2'

RECORD DRAWING LETTER DATED JAN 31 1991

A-9

EFD CML NO. 257746	DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
JCS ORDER NO. 5F5306	ATLANTIC DIVISION, NORFOLK, VIRGINIA
STA. PROJ. NO. P-721	NAVAL STATION: NAVAL HOSPITAL — CAMP LEJEUNE, N.C.
DES. YLM / DRWN. YLM	BACHELOR ENLISTED QUARTERS
PROJ. MGR. SMG / DR/ENGR/ARCH. YLM	STAIR DETAILS
EFD RVD. / F.P. CDR	
ENGRS. / DES.DR. KG	
APPROVED / DATE	SIZE F — CODE IDENT. NO. 80091 — NAVFAC DRAWING NO. 4157746
ACTIVITY-SATISFACTORY TO	CONTR. CONTR. NO. N62470-85-B-5142
APPROVED / DATE 3-20-87	SCALE AS NOTED — SPEC. 05-85-5306 — SHEET 24 OF 66
FOR EFD FOR COMMANDER, NAVFAC	

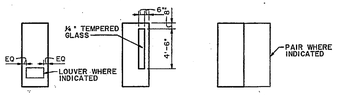
DOOR SCHEDULE

DOOR NO	DOOR SIZE	DOOR TYPE	DETAILS HEAD	DETAILS JAMB	DETAILS SILL	LABEL	LOUVER	NOTES
1	3'-0"X7'-2"	C	2	1 & 2	1			1
2	2'-4"X6'-8"	A	1	3 & 4	3		9" UNDERCUT	
3	3'-0"X7'-2"	C	2	2 & 7	1			1
4	ALUMINUM DOORS - SEE ELEVATION F SHEET A-11							
5	ALUMINUM DOORS - SEE ELEVATION G SHEET A-11							
6	2'-4"X6'-8"	A	1	4	3			
7	3'-0"X6'-8"	A	1	4 & 8	4		9" UNDERCUT	
8	3'-0"X7'-2"	C	2	5 & 2	1			
9	3'-0"X6'-8"	A	1	4	3	3/4 HR	12"X12"	5
10	3'-0"X7'-2"	C	2	2	1		24"X12"	
11	3'-0"X7'-2"	C	2	2	1			
12	2- 3'-0"X7'-2"	C	2	2	1		24"X24"	
13	3'-0"X7'-2"	B	2	2	1			
14	ALUMINUM DOORS - SEE ELEVATION F SHEET A-11							
15	4'-4"X6'-8"	A	1	4	3		24"X12"	
16	3'-0"X7'-2"	C	2	5 & 2	1			
17	3'-0"X7'-2"	C	2	2	1		12"X12"	
18	ALUMINUM DOORS - SEE ELEVATION G SHEET A-11							
19	3'-0"X7'-2"	B	2	2	1			
20	2'-8"X7'-2"	C	2	5	1 & 5	1 HR.		2, 4
21	2'-8"X7'-2"	C	2	5 & 2	1			

* ALL DOORS ARE 1 3/4" THICK

NOTES

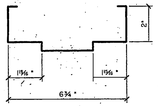
1. PROVIDE PEEP HOLE AT 5'-0" A.F.F.
2. SILL 1 FOR SECOND FLOOR ONLY.
3. LOUVER MUST BE FIRE-RATED
4. PROVIDE 1 1/2 HR. LABELED DOOR AT DOOR 20A



INTERIOR WOOD-SC-FLUSH TYPE-A

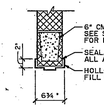
EXTERIOR METAL-INSULATED TYPE-B

EXTERIOR METAL-INSULATED TYPE-C

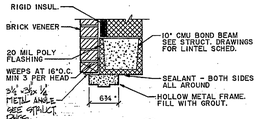


TYP. H.M. FRAME

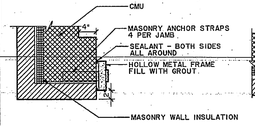
SCALE: HALF SIZE



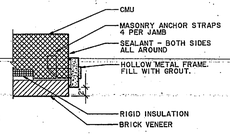
HEAD 1



HEAD 2



JAMB 1



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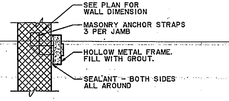

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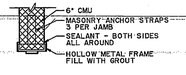

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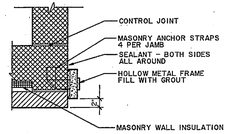
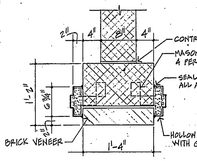


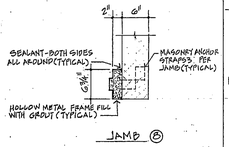
JAMB 5

NOT USED

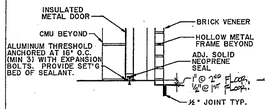
JAMB 6



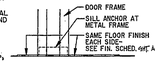
JAMB 7



JAMB 8



SILL 1



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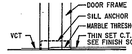

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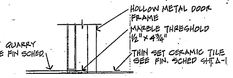

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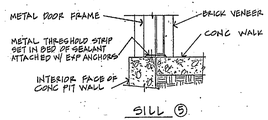


SILL 5

TYPICAL DOOR DETAILS

SCALE: 1 1/2" = 1'-0"

GRAPHIC SCALES

1 1/2" = 1'-0" 12" 6" 0 1'

0 1/2" 1" 2" 3" 4" 5" 6"

HALF SIZE

REVISIONS			
SYM.	DESCRIPTION	DATE	APPROVED

RECORD DRAWING

A-10

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND

ATLANTIC DIVISION

NAVAL FACILITIES ENGINEERING COMMAND, NORFOLK, VIRGINIA

NAVAL HOSPITAL CAMP LEJEUNE, N.C.

BACHELOR ENLISTED QUARTERS

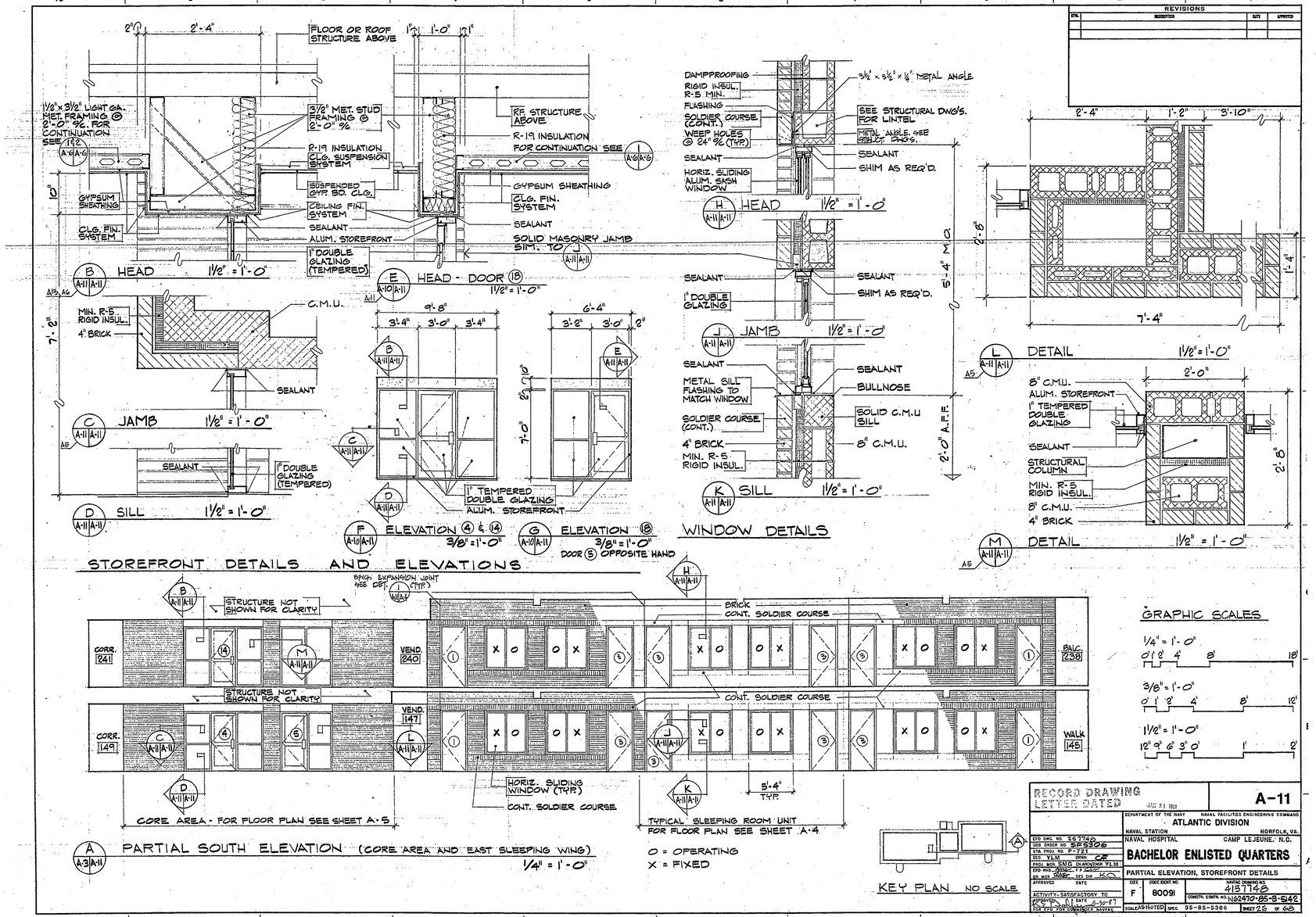
DOOR SCHEDULE/DETAILS

CO DWG. NO. 257747
JOB ORDER NO. 5F5306
CSL FILE NO. 2-721
DSN. YLM DRN. YLM
FIELD NO. 5360 CHARGEHOUR YLM
STD NO. [illegible] FX. CHARGE
BRANCH [illegible] SECTOR [illegible]

APPROVED DATE
ACTING CO/DATE/FACILITY TO
[illegible] 3-3-80
FOR CO/OIC CONSTRUCTION DIVISION

SIZE F CODE IDENT NO. 80091 PLANT ACCOUNT NO. 4157747
SERIAL NO. N62470-85-B-5142
SCALE AS NOTED SPEC. 05-85-5306 SHEET 25 OF 68

REVISIONS			
SYM.	DESCRIPTION	DATE	APPROVED



RECORD DRAWING LETTER DATED JUN 21 1989

A-11

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NAVAL STATION NORFOLK, VA.
NAVAL HOSPITAL CAMP LEJEUNE, N.C.

BACHELOR ENLISTED QUARTERS

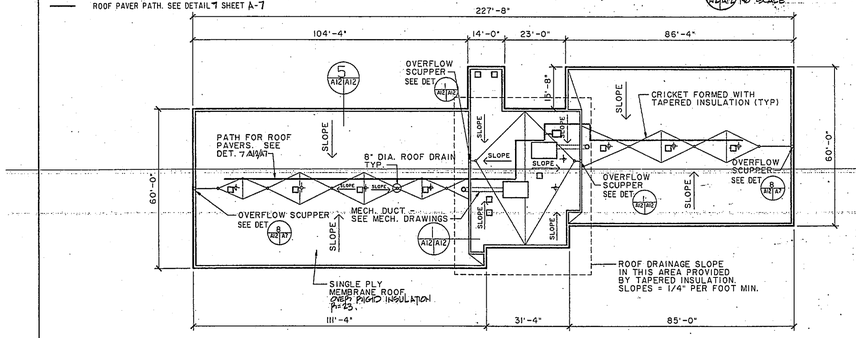
PARTIAL ELEVATION, STOREFRONT DETAILS

EFD DWG. NO. 267740
JOB ORDER NO. SP5306
STA PROJ NO. P-721
DES. Y.L.M. DRWN. CJR
PROJ. MGR. SMG CLARK/DWR. Y.L.M.
EFD INVD. SPAGE FP SMITH
AS NOW SPAGE DES SUP. RCC
APPROVED DATE
ACTIVITY - SATISFACTORY TO
APPROVED 5-20-87
FOR EFD FOR COMMANDER NAVFAC

SIZE F | CODE IDENT NO. 80091 | NAVFAC DRAWING NO. 4157148
CONTR. CONTR. NO. N62470-85-B-5142
SCALE AS NOTED | SPEC. 05-85-5306 | SHEET 20 OF 68

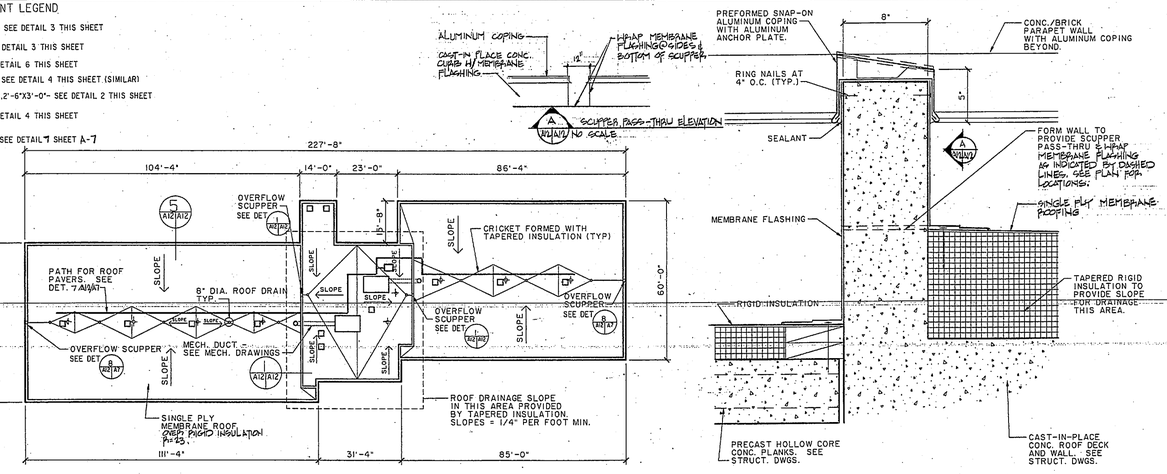
ROOF EQUIPMENT LEGEND

- AIR HANDLER UNIT - SEE DETAIL 3 THIS SHEET
- EXHAUST FAN - SEE DETAIL 3 THIS SHEET
- ROOF DRAIN - SEE DETAIL 6 THIS SHEET
- SUPPLY AIR DUCT - SEE DETAIL 4 THIS SHEET (SIMILAR)
- ROOF ACCESS HATCH, 2'-6"X3'-0"- SEE DETAIL 2 THIS SHEET
- VENT STACK - SEE DETAIL 4 THIS SHEET
- ROOF PAVER PATH. SEE DETAIL 7 SHEET A-7



ROOF PLAN

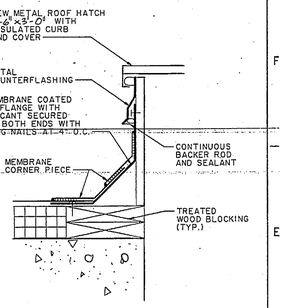
SCALE: 1/16 =1 -0



ROOF WALL DETAIL

A-6 1 A-12/A-12

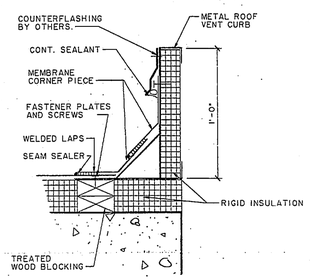
SCALE: 3"=1'-0"



2 TYP. NEW ROOF HATCH

A-12/A-12

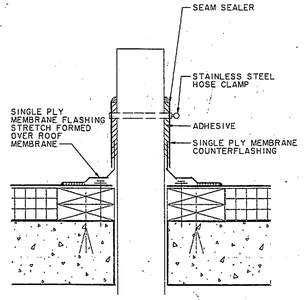
SCALE: 3"=1'-0"



3 TYP. ROOF VENT. CURB

A12/A12

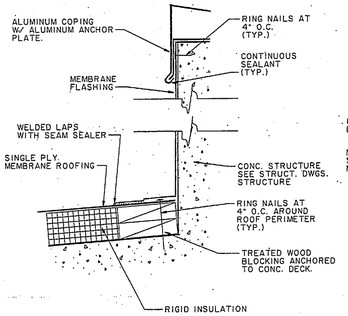
SCALE: 3"=1'-0"



4 VENT STACK DETAIL

A-12/A-12

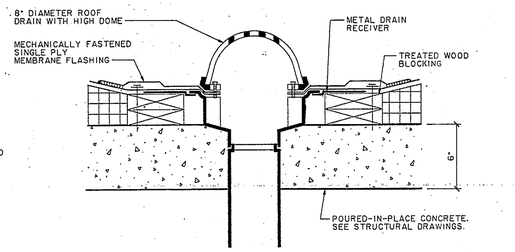
SCALE: 3"=1'-0"



5 FLASHING AT EXTERIOR WALL

A-12/A-12

SCALE: 3"=1'-0"



6 ROOF DRAIN DETAIL

A-12/A-12

SCALE: 3"=1'-0"

GRAPHIC SCALE

1/16" = 1'-0" 10' 0 10' 20' 30' 40' 50'

3" = 1'-0" 6" 3" 0 1'

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED

RECORD DRAWING LETTER DATED

A-12

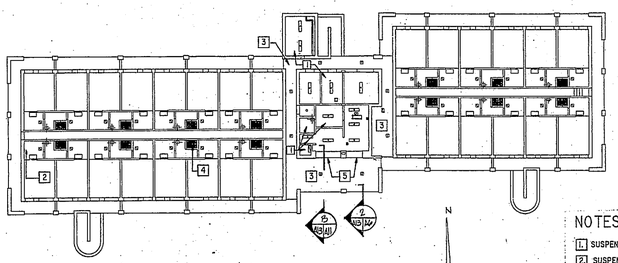
DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
NAVAL STATION — ATLANTIC DIVISION — NORFOLK, VIRGINIA
NAVAL HOSPITAL — CAMP LEJEUNE, N.C.

BACHELOR ENLISTED QUARTERS

ROOF PLAN/DETAILS

EFD DWG. NO. 257749
JOB ORDER NO. SF5306
EFD. PROJ.NO. P-721
DES. Y.L.M. DWN. Y.L.M.
PROJ. MGR. S.M.G. CHARGEHOUR Y.L.M.
STD-NO. 1110C rev 1 SEP
MANAG. SAS STD-NO. SF5
APPROVED DATE
ACTIVITY-SATISFACTORY TO
APPROVED DATE
FOR EFD FOR CONSTRUCTION ACCEPT

SIZE F — CODE IDENT.NO. 80091 — NAVFAC DRAWING NO. 4157749
SCALE AS NOTED — SPEC. 05-85-5306 — CONTR.DWGS.NO. N62470-85-B-5142 — SHEET 27 OF 68



1ST FLOOR REFLECTED CEILING

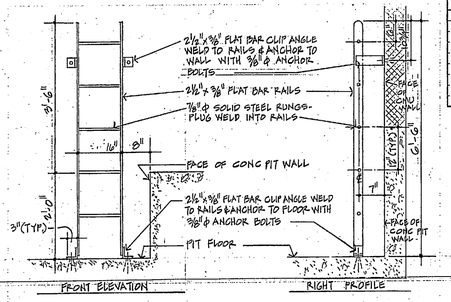
SCALE: 1/16"=1'-0"

SYMBOL LEGEND

- 1'X4' FLOURESCENT FIXTURE
- HIGH PRESSURE SODIUM
- SUPPLY AIR GRILLE
- RETURN AIR GRILLE
- MECH. ACCESS PANEL SEE DET.
- INCANDESCENT LIGHT FIXTURE
- EXHAUST FAN GRILLE

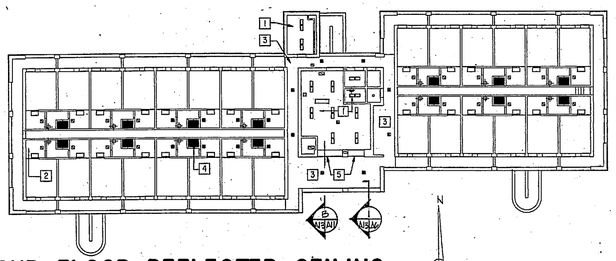
NOTES

1. SUSPENDED 5/8" GWB CEILING AT 7'-11" A.F.F.
2. SUSPENDED 5/8" GWB CEILING AT 7'-9" A.F.F.
3. EXTERIOR CEILING FINISH SYSTEM
4. 5/8" EXTERIOR GYPSUM SOFFIT BOARD
5. EXTERIOR CEILING FINISH SYSTEM SOFFIT @ 7'-2" A.F.F.



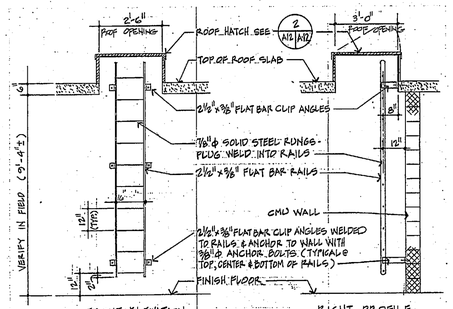
2 (A6/A13) TYPICAL PIT ACCESS LADDER DETAIL

SCALE 1"=1'-0"



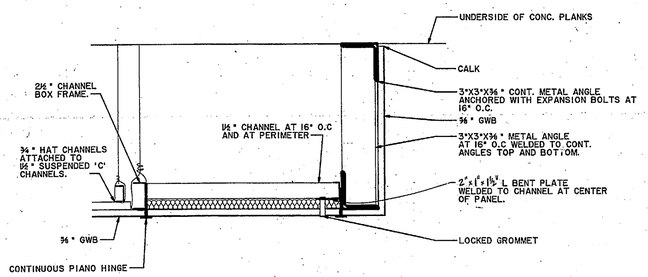
2ND FLOOR REFLECTED CEILING

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



3 (A6/A13) TYPICAL ROOF ACCESS LADDER DETAIL

SCALE ½"=1'-0"



A13/A13 SOFFIT/ACCESS PANEL DETAIL

SCALE: 3"=1'-0"

SEE MECH. DRAWINGS FOR SIZE & EXACT LOCATION OF ACCESS PANEL.

GRAPHIC SCALES

1/16" = 1'-0" 10' 0 10' 20' 30' 40' 50'

1/2" = 1'-0" 12" 0 1' 2' 3' 4' 5' 6'

1" = 1'-0" 12" 6" 0 1' 2' 3'

3" = 1'-0" 0 3" 6" 9" 12"

REVISIONS

SYM	DESCRIPTION	DATE	APPROVED

AS BUILT DRAWING

A-13

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

NAVAL STATION ATLANTIC DIVISION NORFOLK, VIRGINIA

NAVAL HOSPITAL CAMP LEJEUNE, N.C.

BACHELOR ENLISTED QUARTERS

REFLECTED CEILING PLANS

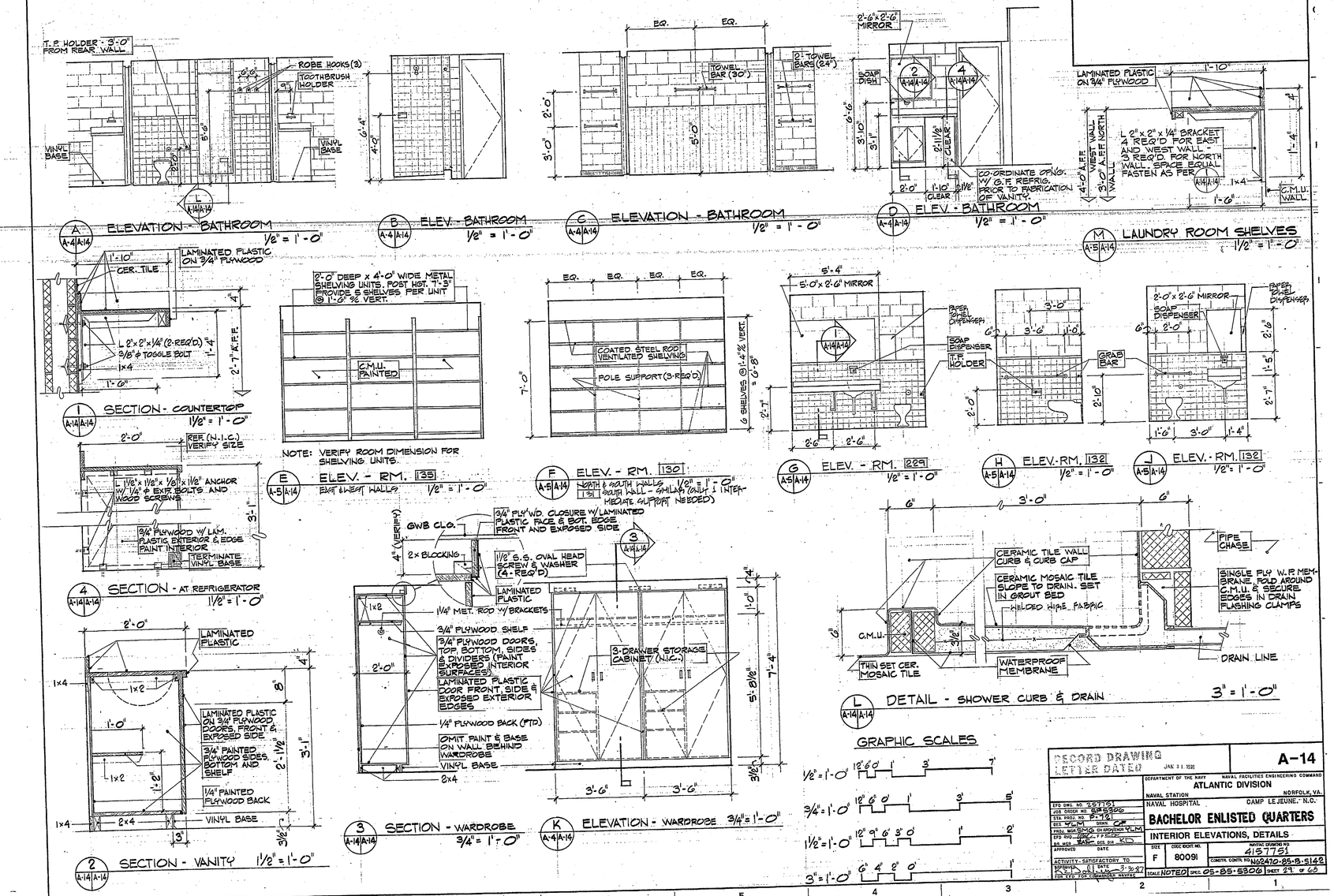
AED CPS. NO. 457750	
AIR CHECK NO. SF5306	
SYS. PROJECT P-721	
DES. YLM	DRWN. YLM
FIELD NOTE SMG	DRAWING NO. YLM
SITE REV.	F.F. SEC.
REVISION	COLOR
APPROVED	DATE
ACTIVITY-SATISFACTORY TO	
APPROVED	DATE
3-26-87	
FOR AED FIELD ENGINEERING GROUP	

SIZE F — CODE IDENT NO. 80091 — NAVFAC DRAWING NO. 457750

CONTR. CONTR. NO. N62470-85-B-5142

SCALE AS NOTED SPEC. 05-85-5306 SHEET 28 OF 60

REVISIONS			
SYM.	DESCRIPTION	DATE	APPROVED



RECORD DRAWING
LETTER DATED JAN 31 1991

A-14

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NAVAL STATION — NORFOLK, VA.
NAVAL HOSPITAL — CAMP LEJEUNE, N.C.

BACHELOR ENLISTED QUARTERS

INTERIOR ELEVATIONS, DETAILS

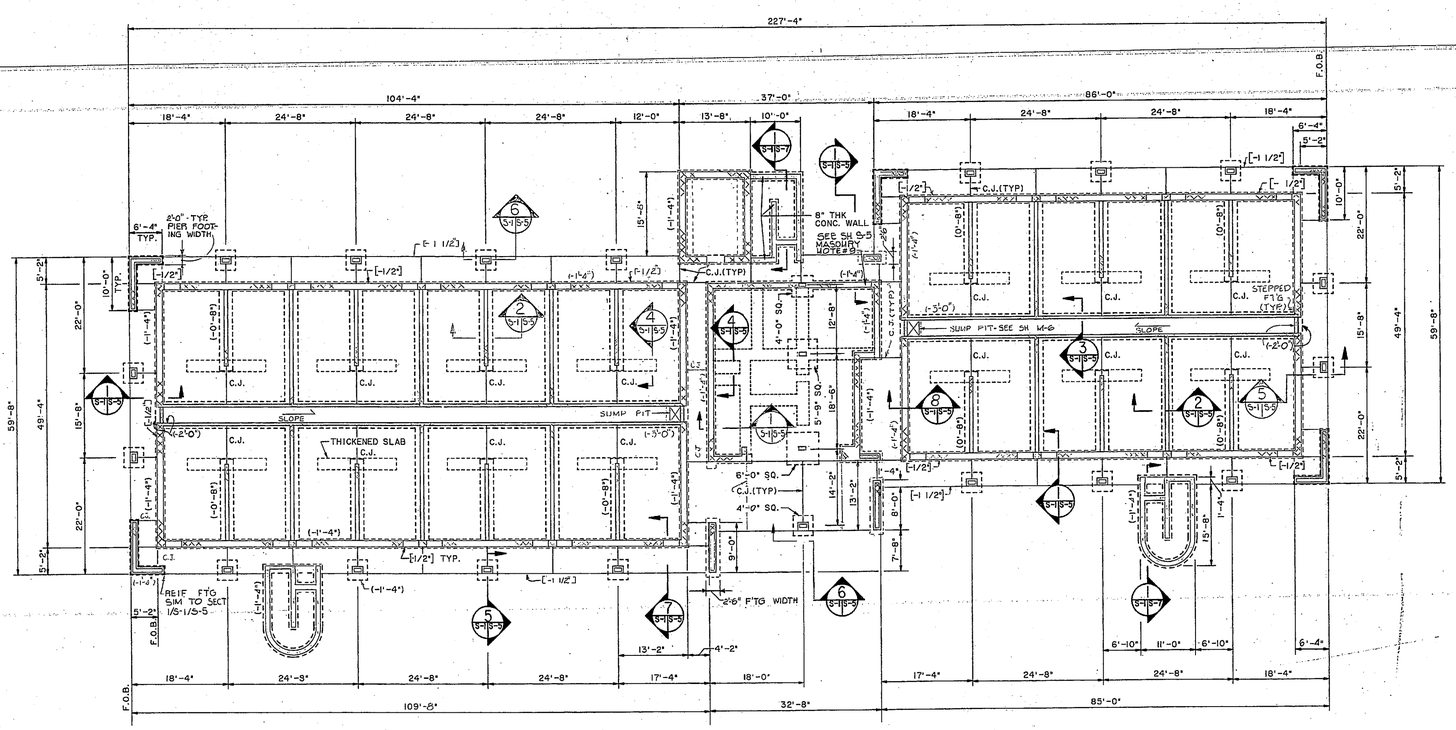
EFD DWG. NO. 257-T-131	
JOB ORDER NO. 85-5306	
STA. PROJ. NO. P-131	
DES. W.L.M.	DRWN. C.W.
PROJ. MGR. SMG	CH. ARCHITECT W.L.M.
EFD RVD. JMC	F.P. SUPV.
B.R. MGR.	DES. BR. KD
APPROVED DATE	
ACTIVITY - SATISFACTORY TO	
SUPERVISOR	DATE 3-26-87
FOR EFD COMMANDING OFFICER	

SIZE	CODE IDENT NO.	NAVFAC DRAWING NO.
F	80091	4157751
SCALE NOTED	SPEC 05-85-5306	CONTR. CONTR. NO. N62470-85-B-5142 SHEET 29 OF 60

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED

FOUNDATION NOTES:

1. DATUM FOR ALL ELEVATIONS GIVEN ON THESE PLANS IS FINISHED FIRST FLOOR ELEVATION 29'-0" = 0'-0".
2. TOP OF CONCRETE SLAB IS AT (±0") UNLESS NOTED THUS [±] ON PLAN.
3. FLOOR CONSTRUCTION IS A 4" CONCRETE SLAB ON GRADE ON VAPOR BARRIER. REINFORCE SLAB WITH 6 X 6 - W2.1 X W2.1 PLACE WIRE MESH 1 1/2" FROM TOP OF SLAB.
4. ALL FOOTINGS HAVE BEEN DESIGNED BASED ON A MINIMUM ALLOWABLE SOIL BEARING PRESSURE OF 2500 P.S.F.
5. LOCATIONS OF CRACK CONTROL JOINTS FOR SLAB ON GRADE ARE NOTED THUS (C.J.) ON PLAN. CONSTRUCTION JOINTS MAY BE SUBSTITUTED FOR CRACK CONTROL JOINTS.
6. WHERE UNSUITABLE MATERIAL IS ENCOUNTERED IN EXCAVATIONS, THE CONTRACTING OFFICER SHALL BE NOTIFIED IMMEDIATELY.
7. MARKS SHOWN THUS ( ) INDICATE TOP OF FOOTING ELEVATION AS REFERENCED TO FINISHED FLOOR.
8. TOP OF EXTERIOR FOOTINGS TO BE 16" BELOW FINISHED FLOOR. TOP OF INTERIOR FOOTINGS TO BE 8" BELOW FINISHED FLOOR (U.O.N.).
9. ALL DIMENSIONS ARE TO FACE OF BUILDING OR CENTERLINE OF BEAMS AND COLUMNS.



FIRST FLOOR AND FOUNDATION PLAN

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

GRAPHIC SCALE

1/8" = 1'-0" 5' 0 5' 10' 15' 20' 25'

RECORD DRAWING
LETTER DATED JAN 21 1921

S-1

NAVAL FACILITIES ENGINEERING COMMAND

DEPARTMENT OF THE NAVY
NAVAL STATION ATLANTIC DIVISION NORFOLK, VIRGINIA

NAVAL HOSPITAL CAMP LEJEUNE, N.C.

BACHELOR ENLISTED QUARTERS

FIRST FLOOR AND FOUNDATION PLAN

E/O DWG. NO. 2317752	
JOB ORDER NO. SF5306	
ETA PROJ.NO. P-721	
DES. VBD	DRN. C.J.VED
PROJ. MGR. MCD	CHAIRCHECKER Y.L.M
STD.DWG.	F.A. Eckner
IN.MAN.	DESIGN
APPROVED	DATE
ACTIVITY-SATISFACTORY TO	
APPROVED	DATE
FOR VERIFICATION OF RECORD	

SIZE	CODE IDENT.NO.	SAWTAC DRAWING NO.
F	80091	4157752
SCALE AS NOTED	SPEC. CONTR. NO. N62470-85-B-5142	SHEET 30 OF 60

GENERAL NOTES – SECOND FLOOR:

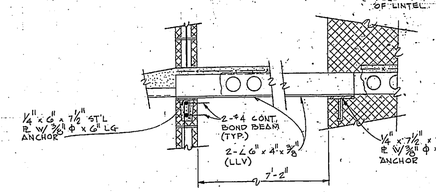
1. ⚠ INDICATES FIXED END OF BALCONY PLANK, AS OPPOSED TO GUIDED END OF BALCONY PLANK.
2. NON-STRUCTURAL PARTITIONS SHALL BE ERECTED ONLY AFTER FLOOR AND ROOF SLABS ARE IN PLACE. SEQUENCE OF ERECTION TO START ON 2ND FLOOR AND PROGRESS TOWARD 1ST FLOOR.
3. LEAVE OUT ONE BLOCK JUST BELOW BOND BEAM WHEREVER RETURN AIR OP'NG IS REQ'D. SEE MECH SH M-2 FOR OP'NG LOCATIONS.

FLOOR FRAMING NOTES:

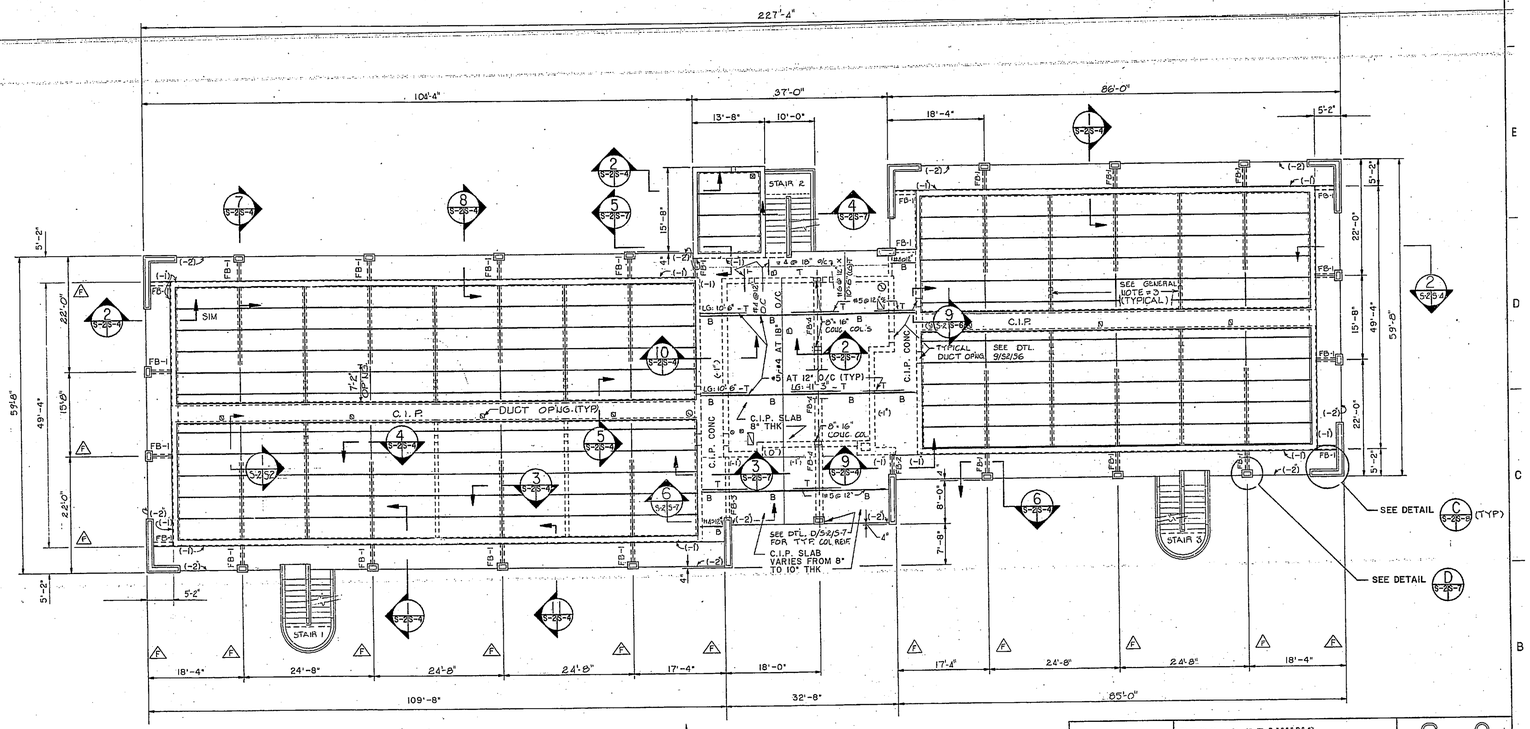
1. 2ND FLOOR IS FRAMED WITH 6" THICK PRECAST HOLLOW CORE SLAB UNITS WITH 2" CONCRETE TOPPING. REINFORCE TOPPING SLAB WITH 6 X 6 – W1.4 X W1.4 WWF. GROUT ALL JOINTS BETWEEN SLAB UNITS.
2. TOP OF CONCRETE SLAB IS AT (±0") UNLESS NOTED. (±) ON PLAN WITH RESPECT TO FINISHED SECOND FLOOR.
3. CAST-IN-PLACE SLAB MARKED THUS: C.I.P. ON PLAN.
4. FOR EXACT SIZE AND LOCATION OF MECHANICAL SLAB AND WALL OPENS, SEE MECHANICAL DRAWINGS, SHEET M-2.
5. FOR FLOOR SLAB OPENINGS GREATER THAN 100 SQUARE INCHES PROVIDE 2#4 BARS 8'-0" LONG, EACH SIDE OF OPENING.

BEAM SCHEDULE

MARK	WIDTH	DEPTH	REINFORCEMENT	STIRRUPS
FB-1	12"	10"	2 - #5 (T) 3 - #5 (B)	#3 @ 5" O/C
FB-2	8"	10"	2 - #5 (T&B)	#3 @ 5" O/C
FB-3	8"	18"	2 - #6 (T&B)	#3 @ 9" O/C
FB-4	16"	20"	3 - #7 (T) 3 - #5 (B)	#3 @ 10" O/C



SECTION 1 / S-2.5-3
SCALE: 1" = 1'-0"



SECOND FLOOR PLAN
SCALE: 1/8" = 1'-0" (F.F. ELEV. 10'-0")

GRAPHIC SCALE

1/8" = 1'-0" 5' 0 5' 10' 15' 20' 25'

1" = 1'-0" 12" 9" 6" 3" 0 1' 2' 3'

REVISIONS			
SYM.	DESCRIPTION	DATE	APPROVED

RECORD DRAWING LETTER DATED JAN 3 1 1991

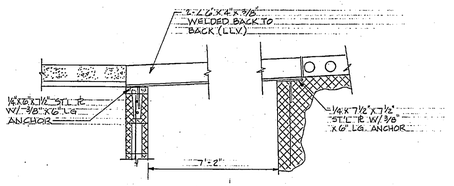
S-2

NAVAL FACILITIES ENGINEERING COMMAND
DEPARTMENT OF THE NAVY
NAVAL STATION ATLANTIC DIVISION MEDICAL VICINITY
NAVAL HOSPITAL CAMP LEJEUNE, N.C.
BACHELOR ENLISTED QUARTERS
SECOND FLOOR PLAN

STD OFFICE NO. 2.5-1755
JOB ORDER NO. 573306
ENG. PROJ. NO. P-721
DES. VRD/DP ENG. S./VBD
FIELD ENG. MCD DRAFTSMAN YLL
STD ENG. JBA FA. 2-521
SR ENG. RWP SUPA. SLD
APPROVE DATE
ACCURTY-SATISFACTORY TO
PROJ. ENG. DATE
CODE IDENT. NO. F 80091
NAVFAC DRAWING NO. 415753
SERIAL CONTR. NO. N62470-85-B-5142
SCALE AS NOTED SPEC. 05-85-5306 SHEET 31 OF 66

FRAMING NOTES:

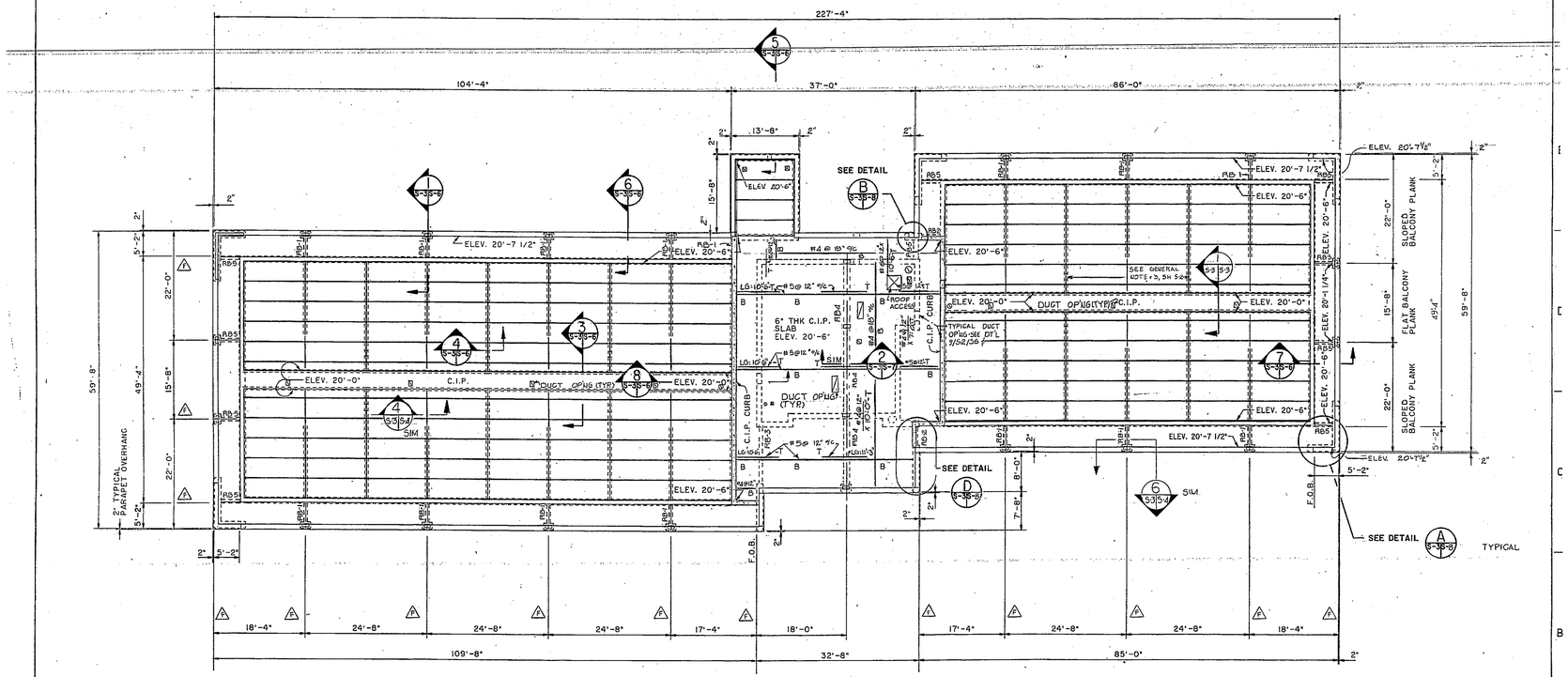
1. DATUM FOR ALL ELEVATIONS GIVEN ON THIS PLAN IS FINISHED FIRST FLOOR ELEVATION 29.0' = 0'-0".
2. CAST-IN-PLACE SLABS MARKED THUS: C.I.P. ON PLAN.
3. FOR EXACT SIZE AND LOCATION OF MECH. ROOF AND WALL OPENINGS, SEE MECH. DRAWINGS.
4. FOR ROOF SLAB OPENINGS GREATER THAN 100 SQUARE INCHES, PROVIDE 2 #4 BARS 8'-0" LONG EACH SIDE OF OPENING, EXCEPT ROOF ACCESS OPENING WHICH SHALL BE PROVIDED W/ 2 #5 BARS 8'-0" LONG EACH SIDE OF OPENING.
5. SEE ARCH DRWG SH A-12 FOR ROOF ACCESS OPENING SIZE.



SECTION 1 S-3 S-3
SCALE: 1"=1'-0"

BEAM SCHEDULE				
MARK	WIDTH	DEPTH	REINFORCEMENT	STIRRUPS
RB-1	12"	VARIES 8" MIN	2 - #3 (T) 2 - #5 (B)	#3 @ 5" o/c
RB-2	8"	VARIES-8" MIN	2 - #3 (T) 2 - #5 (B)	#3 @ 5" o/c
RB-3	8"	18"	2 - #6 (T&B)	#3 @ 9" o/c
RB-4	16"	18"	3 - #7 (T) 3 - #5 (B)	#3 @ 9" o/c
RB-5	12"	8"	2 - #3 (T) 2 - #5 (B)	#3 @ 5" o/c

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED



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

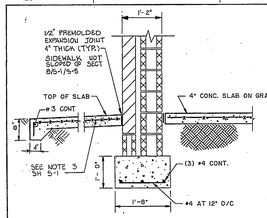
GRAPHIC SCALE
1/8" = 1'-0"
1" = 1'-0"

RECORD DRAWING
LETTER DATED JAN 31 1991

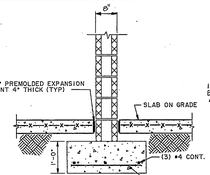
S-3

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
NAVAL STATION ATLANTIC DIVISION NORFOLK, VIRGINIA

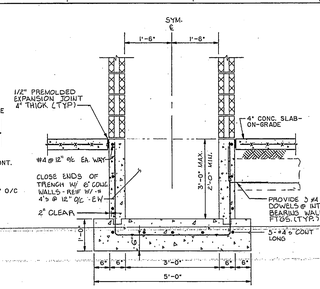
GEO DWG. NO. 2577754	NAVAL HOSPITAL — CAMP LEJEUNE, N.C.
JOB ORDER NO. SF5306	BACHELOR ENLISTED QUARTERS
STA. PROJ. NO. P-721	ROOF PLAN
DES. VBD/JT DRWN. S/VBD	
PREP. WOR. MPO CHARGEHOURS Y.L.M.	
REVIEW JTS/ FA. SLOPE	
CHECK JDP DESIGN KD	
APPROVED DATE	SIZE F — CODE IDENT.NO. 80091 — NAVFAC DRAWING NO. 4157754
ACTIVITY-SATISFACTORY TO	CONTR. CONTR. NO. N62470-83-B-5142
APPROVED DATE	SCALE AS NOTED SPEC. 03-85-5306 SHEET 32 of 68
FOR THE NAVY FACILITIES ENGINEERING COMMAND	



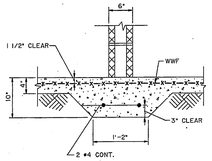
SECTION 1/S-5 & 8/S-5
SCALE: 1" = 1'-0" SIMILAR



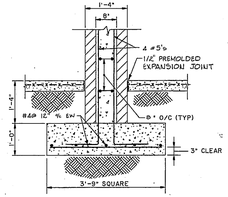
SECTION 2/S-5
SCALE: 1" = 1'-0"



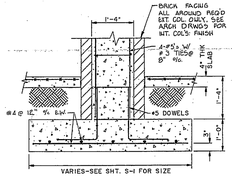
SECTION 3/S-5
SCALE: 1" = 1'-0"



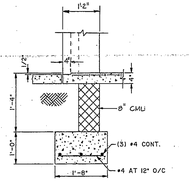
SECTION 4/S-5
SCALE: 1 1/2" = 1'-0"



SECTION 5/S-5
SCALE: 1" = 1'-0"



SECTION 6/S-5
SCALE: 1" = 1'-0"



SECTION 7/S-5
SCALE: 1" = 1'-0"

GENERAL:

1. DIMENSIONS, LOCATION AND SIZES OF OPENINGS IN FLOORS AND WALLS SHALL BE VERIFIED WITH ARCHITECTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS.
2. NO PIPES OR DUCTS SHALL BE PLACED IN SLABS OR WALLS UNLESS SPECIFICALLY DETAILED FOR THAT PURPOSE.
3. DESIGN LIVE LOADS:

ROOF:	20 PSF
FLOOR:	
CLEANING UNITS	60 PSF
STORAGE AREAS	60 PSF
STAIRS & WALKWAYS	100 PSF
CORRI DORS	100 PSF
MECHANI CAL	150 PSF
ENTRIES & LOBBIES	100 PSF
LAUNDRY & VENDING	100 PSF
ELECTRICAL & CLOSETS	100 PSF
KITCHENS	150 PSF
LINEN & STORAGE	125 PSF
OFFICES	50 PSF
BALCONY	100 PSF

MECHANICAL CHASE 40 PSF

EARTHQUAKE
SEISMIC ZONE 1
$C_a = 1.33$

WIND VELOCITY: 115 MPH

THE LATERAL LOAD DESIGN WAS CONTROLLED BY WIND

CONCRETE:

1. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF

CAST IN PLACE	3,000 PSI	PRECAST 4000 PSI
PRECAST/PRESTRESSED	5,000 PSI	

2. PRECAST/PRESTRESSED HOLLOW CORE AND SOLID PANELS SHALL BE DESIGNED IN ACCORDANCE WITH ACI 318 FOR THE INDICATED DEAD LOADS SHOWN ON PLAN, PARTITION LOADS (SEE NOTE 4), LIVE LOADS (SEE GENERAL NOTES), AND ANY ERECTION LOADS.
3. ALL CAST-IN WELD PLATES OR INSERTS IN PRECAST OR PRECAST/PRESTRESSED WORK SHALL BE CAPABLE OF SUSTAINING MINIMUM SHEAR LOADS OF 5,000 LBS AND PULLOUT OF 2,000 LBS OR VOLUME CHANGE STRESSES, WHICHEVER IS GREATER.
4. NON-STRUCTURAL PARTITIONS AS SHOWN ON ARCHITECTURAL DRAWINGS SHALL NOT BE ASSUMED TO GIVE SUPPORT TO THE PANELS, BUT SHALL BE CONSIDERED AS DEAD LOADS.
5. PROVIDE 1/8" HARDBOARD BEARING UNDER ALL PRECAST/PRESTRESSED HOLLOW CORE PANELS.
6. PANEL MANUFACTURER SHALL PROVIDE REQUIRED HEADERS. SUBMIT CALCULATIONS.
7. CONCRETE ANCHORS SHALL CONFORM TO FEDERAL SPEC. FF-S-325, AMEND. 3, GROUP II, TYPE 4, CLASS 1.
8. PRECAST PARAPET BEAMS SHALL BE DESIGNED FOR LIFTING BY THE PRECASTER. PROVIDE ANCHORS, WELDING INSERTS, OR CONNECTING PLATES AS NOED.

REINFORCING STEEL:

1. DETAILING, FABRICATION, AND ERECTION OF REINFORCING BARS (UNLESS OTHERWISE NOTED) MUST FOLLOW THE A. C. I. MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES. ACI 315-80.
2. ALL REINFORCING BARS SHALL CONFORM TO THE STANDARD SPECIFICATION FOR DEFORMED BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT. ASTM DESIGNATION OR A615, GRADE 60.
3. LAP SPLICES IN CONCRETE SHALL BE 36 ϕ FOR GRADE 60 UNLESS OTHERWISE SHOWN.
4. REINFORCING STEEL SHALL HAVE A MINIMUM CONCRETE COVER AS TABULATED IN ACI 318-83.
5. WHERE CONTINUOUS BARS ARE CALLED OUT, PROVIDE CONTACT SPLICES (AS REQUIRED) IN ACCORDANCE WITH NOTE 3.
6. ALL DOWELS FROM CONC BEAMS INTO MASONRY WALLS SHALL BE THE SAME SIZE AND SPACING AS THE WALL VERT. REINF. AND LAP WITH THE WALL REINF. 40 ϕ.
7. PRESTRESSING STRANDS SHALL CONFORM TO THE ASTM A416 OR A421 WITH A MINIMUM TENSILE STRENGTH OF 250 KSI.
8. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.

MASONRY:

1. ALL CMU MORTAR & GROUT SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2,500 PSI.
2. LAP ALL REINFORCING BARS IN MASONRY 40 DIAMETERS AT SPLICES. HORIZONTAL MASONRY REINFORCING SHALL BE CONTINUOUS AROUND ALL CORNERS AND INTERSECTIONS.
3. ALL CONCRETE HOLLOW BLOCK UNITS SHALL BE LAID IN RUNNING BOND PATTERN, UNLESS OTHERWISE NOTED.
4. ALL HORIZONTAL REINFORCING BARS SHALL BE IN BOND BEAM BLOCKS.
5. ALL BEAMS AND LINTELS SHALL BEAR A MINIMUM OF 8" ON MASONRY, UNLESS BRG. PL. PROVIDED. FILL CELLS OF CMU FOR 2-BLOCK COURSES DEEP BY 3 BEAM WIDTHS WIDE BELOW BEAM OR LINTEL BEARINGS.
6. FILL ALL CELLS CONTAINING REINFORCING SOLID WITH GROUT.
7. ALL VERTICAL WALL REINFORCING SHALL BE CONTINUOUS FOR FULL HEIGHT OF WALL AND DOWELED INTO SPREAD FTG. BELOW AND ROOF ABOVE.
8. SEE ARCHITECTURAL DRAWINGS FOR THE LOCATIONS OF ALL WALLS.
9. LINTEL ABOVE 1ST FLOOR MECH ROOM SHALL BE 16" DEEP x 10" WIDE CMU W/ 4 #8'S (BOT). ALL OTHER LINTELS SHALL BE A MIN. 8" DEEP x 10" WIDE CMU W/ 2 #4'S (BOT).

STRUCTURAL STEEL:

1. ALL MISCELLANEOUS STEEL WORK SHALL BE PERFORMED ACCORDING TO AISC SPECIFICATIONS FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS, LATEST EDITION.
2. ALL STRUCTURAL STEEL PLATES, ANGLES, ANCHORS, ETC. SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR STRUCTURAL STEEL FOR BRIDGES AND BUILDINGS, SERIAL DESIGNATION ASTM A-36.
3. ALL WELDING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE A. W. S. SPECIFICATIONS IE-701.
4. ALL EXTERIOR MISCELLANEOUS STEEL WHICH WILL BE PERMANENTLY EXPOSED TO THE ATMOSPHERE SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION.
5. ALL WELDING DONE AFTER GALVANIZING SHALL BE COATED WITH GALVANIZING REPAIR PAINT.

GRAPHIC SCALES

1" = 1'-0" 1' 6" 0 1' 2' 3'

3/4" = 1'-0" 1' 9" 6" 3" 0 1' 2'

REVISIONS

SYM	DESCRIPTION	DATE	APPROVED

RECORD DRAWING LETTER DATED JAN 31 1991

S-5

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NORFOLK, VIRGINIA

NAVAL HOSPITAL — CAMP LEJEUNE, N.C.

BACHELOR ENLISTED QUARTERS

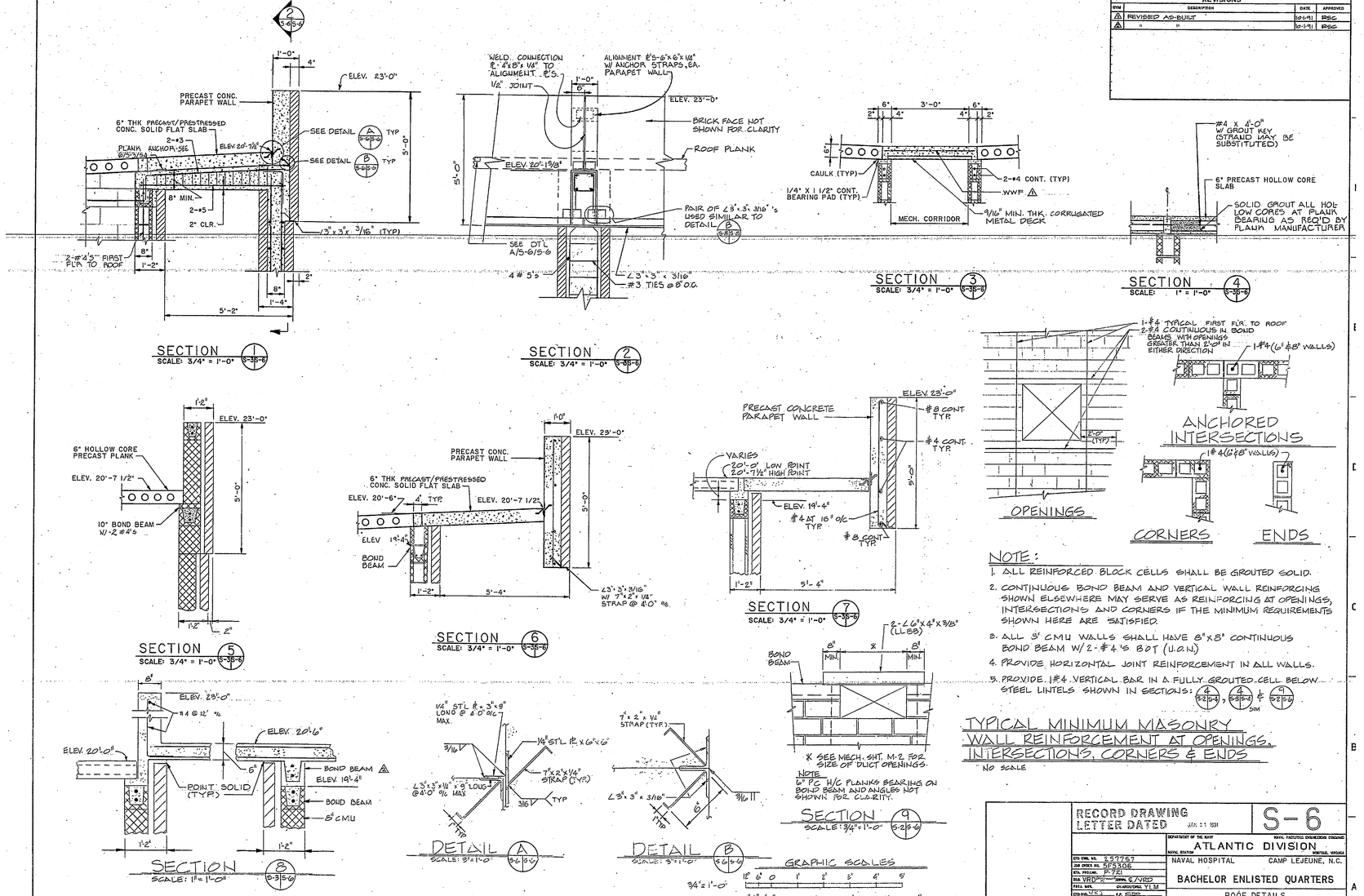
FOUNDATIONS DETAILS

DES. CHIEF		
DES. ENGR.		
DR. ENGR.		
DR. ARCH.		
DR. ELEC.		
DR. MECH.		
DR. STRUC.		
DR. CIVIL		
DR. CHIEF		
APPROVED	DATE	

ARCHITECT-ENGINEER (AE)
APPROVED: N/A
AE CONTRACT NO. N62470-85-B-5142
AE DWG. NO. S-5
DATE: 7-24-91
FOR USE AND MAINTENANCE

SIZE: F
SHEET CONTROL: 80091
CONTRACT DRAWING NO. 4157756
SCALE AS NOTED
SPEC. 05-85-5306
SHEET 96 OF 68

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED
1	REVISED AS-BUILT	10-1-91	RSC
2	" "	10-1-91	RSC



NOTE:

1. ALL REINFORCED BLOCK CELLS SHALL BE GROUTED SOLID.
2. CONTINUOUS BOND BEAM AND VERTICAL WALL REINFORCING SHOWN ELSEWHERE MAY SERVE AS REINFORCING AT OPENINGS, INTERSECTIONS AND CORNERS IF THE MINIMUM REQUIREMENTS SHOWN HERE ARE SATISFIED.
3. ALL 3" CMU WALLS SHALL HAVE 8"x8" CONTINUOUS BOND BEAM W/ 2-#4's BOT (U.O.N.)
4. PROVIDE HORIZONTAL JOINT REINFORCEMENT IN ALL WALLS.
5. PROVIDE 1#4 VERTICAL BAR IN A FULLY GROUTED CELL BELOW STEEL LINTELS SHOWN IN SECTIONS: 4 S-2/S-6, 4 S-3/S-6 SIM & 9 S-2/S-6

TYPICAL MINIMUM MASONRY WALL REINFORCEMENT AT OPENINGS, INTERSECTIONS, CORNERS & ENDS

NO SCALE

RECORD DRAWING LETTER DATED JAN. 21 1991

S-6

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
NAVAL STATION ATLANTIC DIVISION NORFOLK, VIRGINIA

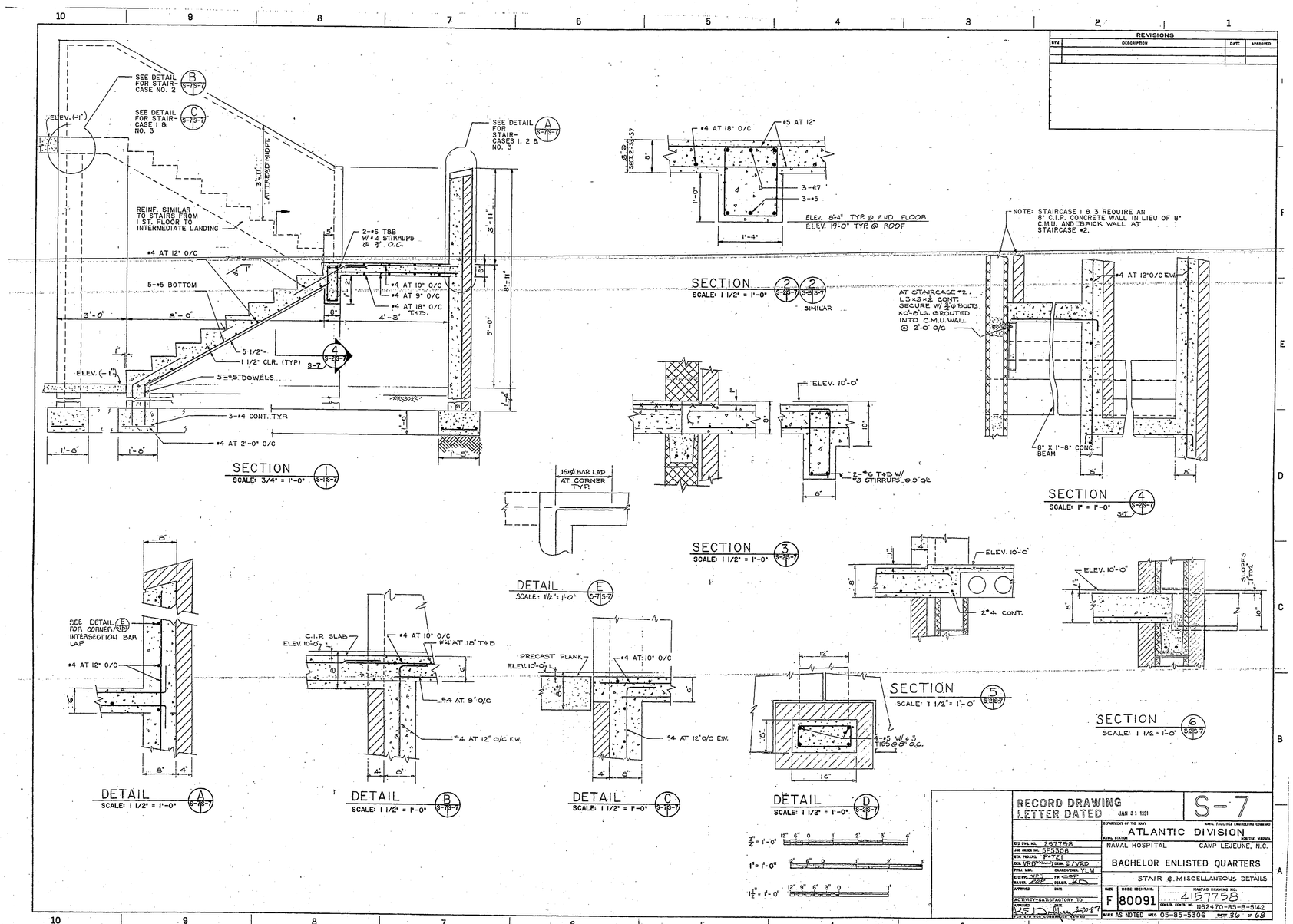
NAVAL HOSPITAL CAMP LEJEUNE, N.C.

BACHELOR ENLISTED QUARTERS

ROOF DETAILS

STD ENG. NO. 257757
JOB CODE NO. 5F5306
STA. PROJ. NO. P-721
DRA. VBD/JRD SUPVR. G/JRD
FIELD INTL. CHARGEUNIT YLM
CDR ENG. W.K.J. PA. CDR. [illegible]
SR.ENG. [illegible] SR.P.E. [illegible]
APPROVED DATE
ACTIVITY—SATISFACTORY TO
APPROVED DATE
CAPT. [illegible] 1-28-91
FOR VOL. OF ENGINEERING

SIZE F | CODE IDENT.NO. 80091 | NAVFAC DRAWING NO. 417757
CONTR. CONTL. NO. N62470-85-B-5142
SCALE AS NOTED SPEC 05-85-5306 SHEET 35 OF 68



REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED

RECORD DRAWING LETTER DATED JAN 31 1991

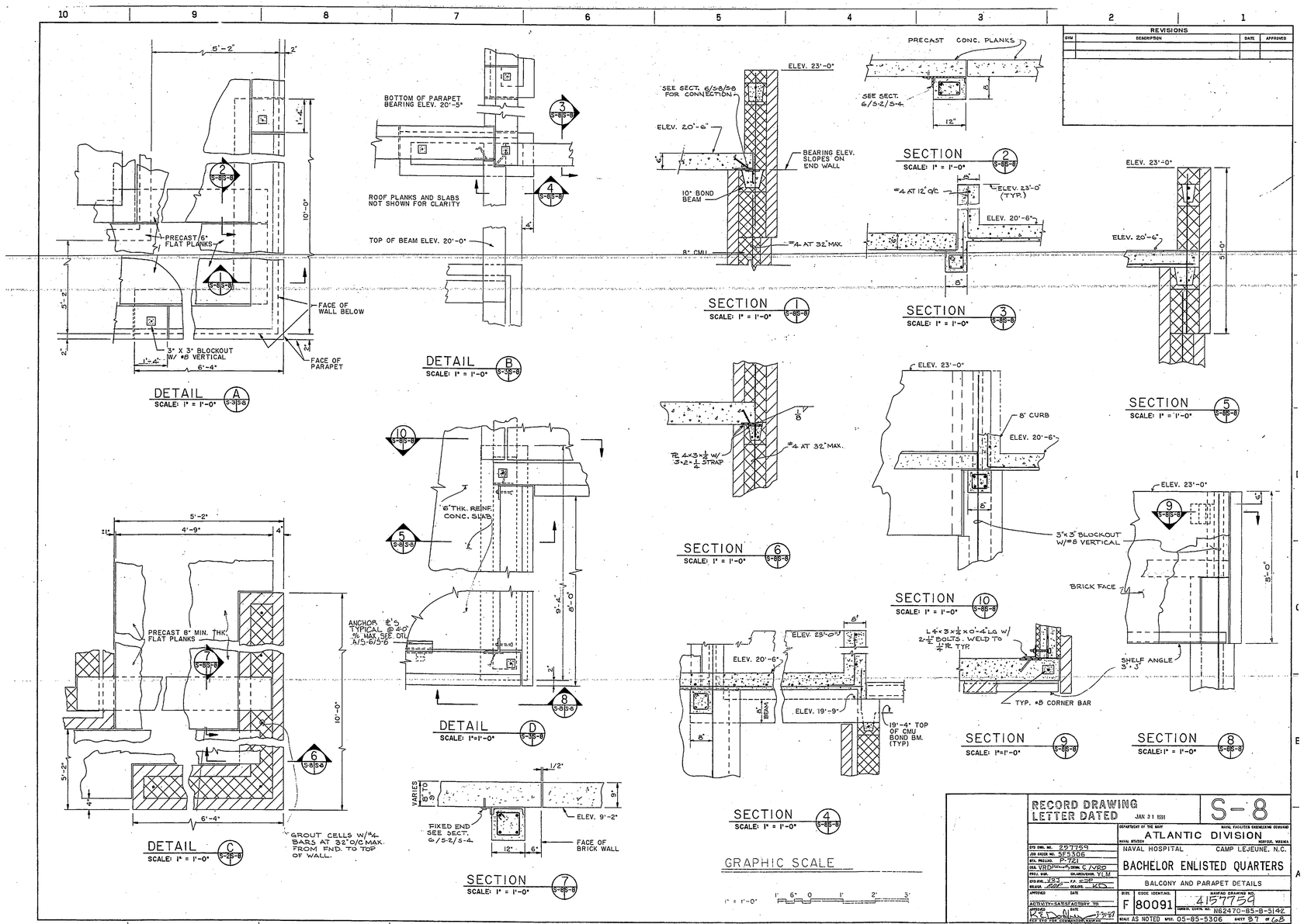
S-7

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
AVAIL. STATION — ATLANTIC DIVISION — NORFOLK, VIRGINIA
NAVAL HOSPITAL — CAMP LEJEUNE, N.C.
BACHELOR ENLISTED QUARTERS
STAIR & MISCELLANEOUS DETAILS

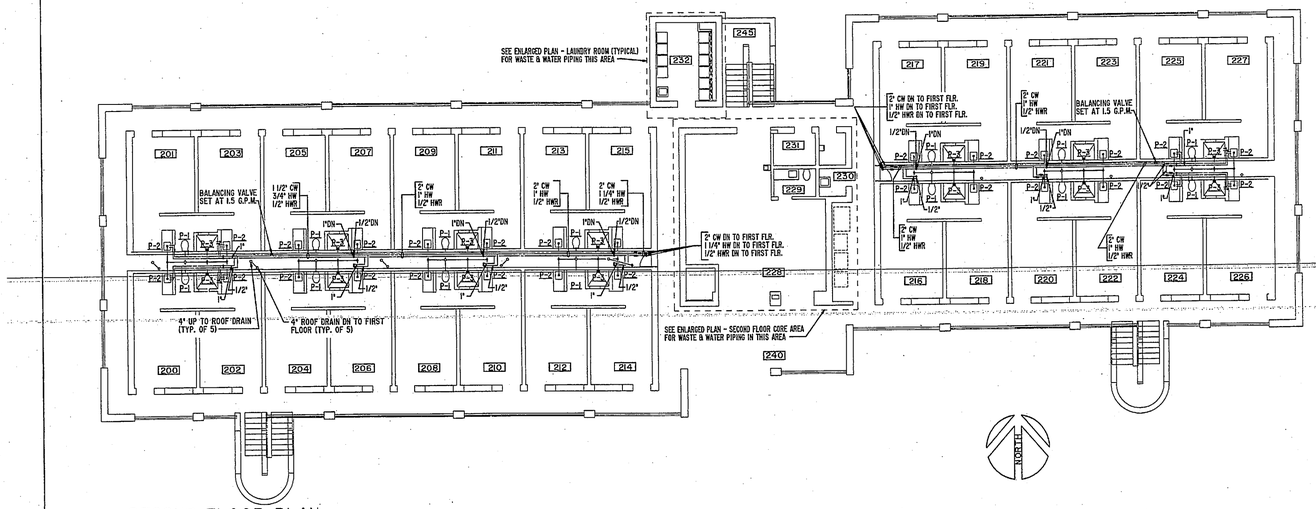
DP2 SYS. NO. 257758
JOB INDEX NO. 5R5306
STA. PREFIX. P-721
DES. VRD/[illegible] DRWN. G./VRD
PRELI. SUB. CHECKED BY. Y.L.M.
CFD REV. VRD F.A. [illegible]
REVIEW [illegible] REVIEW [illegible]
APPROVED DATE
ACTIVITY-SATISFACTORY TO
APPROVED DATE
FOR CO. FOR COMMANDER NAVFAC

SIZE F — CODE IDENT.NO. 80091 — NAVFAC DRAWING NO. 4157758
SCALE AS NOTED — SPEC. 05-85-5306 — CONTR. CONTR. NO. N62470-85-B-5142 — SHEET 36 OF 68

DS-4

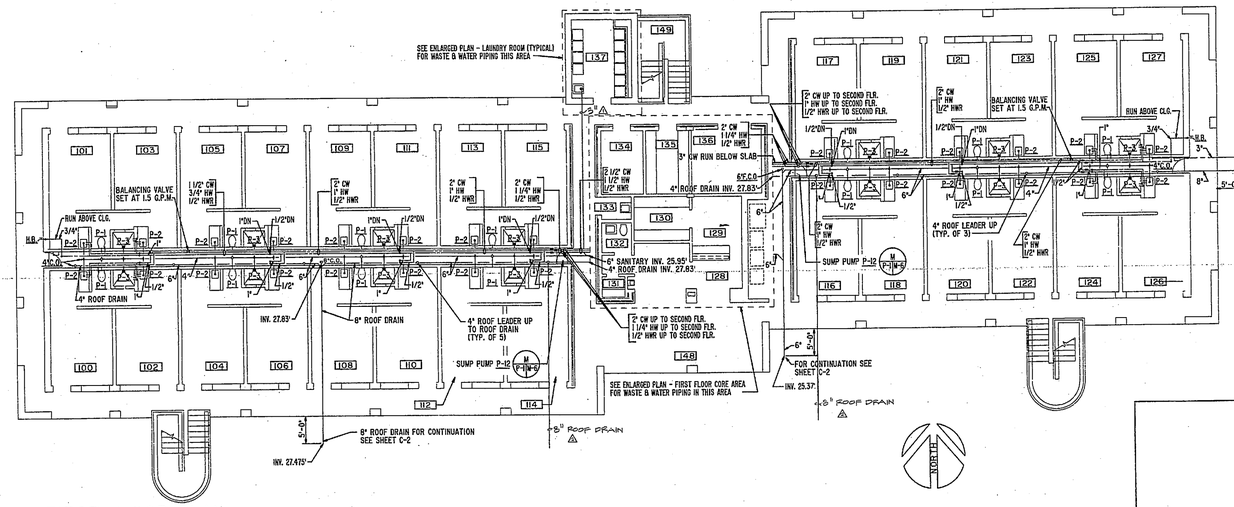

REVISIONS
SYM | DESCRIPTION | DATE | APPROVED
5'-2"
2"
1'-4"
10'-0"
PRECAST 6" FLAT PLANKS
3" X 3" BLOCKOUT W/ #8 VERTICAL
6'-4"
FACE OF WALL BELOW
FACE OF PARAPET
DETAIL A
SCALE: 1" = 1'-0"
BOTTOM OF PARAPET BEARING ELEV. 20'-5"
ROOF PLANKS AND SLABS NOT SHOWN FOR CLARITY
TOP OF BEAM ELEV. 20'-0"
DETAIL B
SCALE: 1" = 1'-0"
ELEV. 23'-0"
SEE SECT. 6/S-2/S-8 FOR CONNECTION
ELEV. 20'-6"
BEARING ELEV. SLOPES ON END WALL
10" BOND BEAM
8" CMU
#4 AT 32" MAX.
SECTION 1
SCALE: 1" = 1'-0"
PRECAST CONC. PLANKS
SEE SECT. 6/S-2/S-4
12"
SECTION 2
SCALE: 1" = 1'-0"
#4 AT 12" O/C
ELEV. 23'-0" (TYP.)
ELEV. 20'-6"
SECTION 3
SCALE: 1" = 1'-0"
ELEV. 23'-0"
ELEV. 20'-6"
SECTION 5
SCALE: 1" = 1'-0"
6" THK. REINF. CONC. SLAB
ANCHOR BOLTS TYPICAL @ 2'-0" % MAX. SEE DTL. A/S-6/S-8
9'-4"
8'-0"
DETAIL D
SCALE: 1"=1'-0"
PL 4x3x1/4 W/ 3x2x1/4 STRAP
#4 AT 32" MAX.
SECTION 6
SCALE: 1" = 1'-0"
ELEV. 23'-0"
8" CURB
ELEV. 20'-6"
3"x3" BLOCKOUT W/#8 VERTICAL
SECTION 10
SCALE: 1" = 1'-0"
ELEV. 23'-0"
BRICK FACE
SHELF ANGLE 3"x3"
8'-0"
SECTION 8
SCALE: 1" = 1'-0"
5'-2"
4'-9"
PRECAST 8" MIN. THK. FLAT PLANKS
10'-0"
6'-4"
GROUT CELLS W/#4 BARS AT 32" O/C MAX. FROM FND. TO TOP OF WALL.
DETAIL C
SCALE: 1" = 1'-0"
VARIES 8" TO 12"
1/2"
9"
ELEV. 9'-2"
FIXED END SEE SECT. 6/S-2/S-4
12"
6"
FACE OF BRICK WALL
SECTION 7
SCALE: 1" = 1'-0"
ELEV. 23'-0"
ELEV. 20'-6"
BEAM
ELEV. 19'-9"
19'-4" TOP OF CMU BOND BM. (TYP)
SECTION 4
SCALE: 1" = 1'-0"
L4x3x1/2x0'-4 Lg W/ 2-1/2" BOLTS. WELD TO PL 1/4" TYP.
TYP. #8 CORNER BAR
SECTION 9
SCALE: 1"=1'-0"
GRAPHIC SCALE
1" = 1'-0"
1' 6" 0 1' 2' 3'
RECORD DRAWING LETTER DATED JAN 31 1991
S-8
DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NAVAL STATION NORFOLK, VIRGINIA
NAVAL HOSPITAL CAMP LEJEUNE, N.C.
BACHELOR ENLISTED QUARTERS
BALCONY AND PARAPET DETAILS
CFD DWG. NO. 227159
JOB ORDER NO. 5E5306
BTL PREL.NO. P-721
DSN. VRD
DRWN. C. JVRD
PREL. SUB. GRADUATE YLM
CFD PRE. JBJ
TP. JCE
BRANCH
CHKDR. KS
APPROV
DATE
ACTIVITY-SATISFACTORY TO
APPROV
DATE
KS
3-26-87
CFD FOR COMMANDER, NAVFAC
SIZE F
CODE IDENT.NO. 80091
NAVFAC DRAWING NO. 4157759
TOWER, SUPPL. NO. N62470-85-B-5142
SCALE AS NOTED
NAVFAC 05-85-5306
SHEET 37 OF 68
DS-5

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED
1	REVISED AS-BUILT	10-1-93	RGC
2	" "	10-1-93	RGC



SECOND FLOOR PLAN

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



FIRST FLOOR PLAN

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

PLUMBING NOTES

1. COORDINATE PLUMBING WORK WITH OTHER TRADES.
2. SEE SHEET P-4 FOR PLUMBING LEGEND AND FIXTURE SCHEDULE.
3. COLD WATER PIPING IN PIPE CHASES WILL BE UNINSULATED. COLD WATER PIPING IN OTHER AREAS WILL BE INSULATED IN ACCORDANCE WITH SPECIFICATION 15250.
4. ALL SANITARY PIPING IN FIRST FLOOR CORE AREA SHALL BE RUN BENEATH SPREAD FOOTINGS.
5. RUN INCOMING 3" CW LINE IN TRENCH AT THE FLOOR OF THE TRENCH.
6. PROVIDE SHUTOFF VALVE ON HW, CW & HWR TO EACH WING ON EACH FLOOR AS SHOWN.

GRAPHIC SCALE

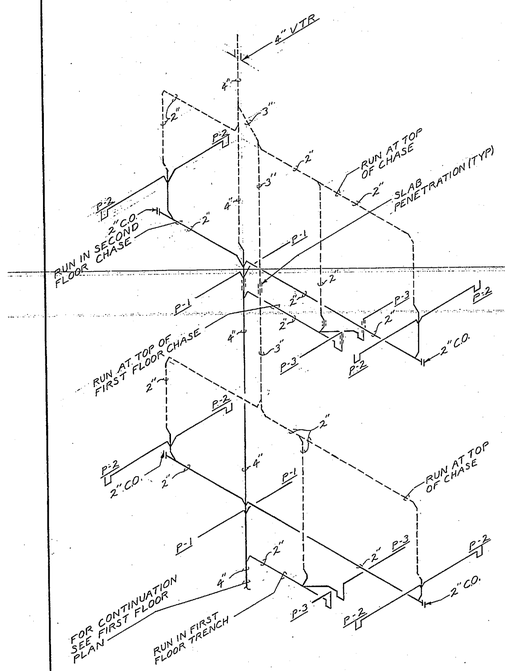
1/8" = 1'-0" 5' 0 5' 10' 15' 20' 25'

P-1

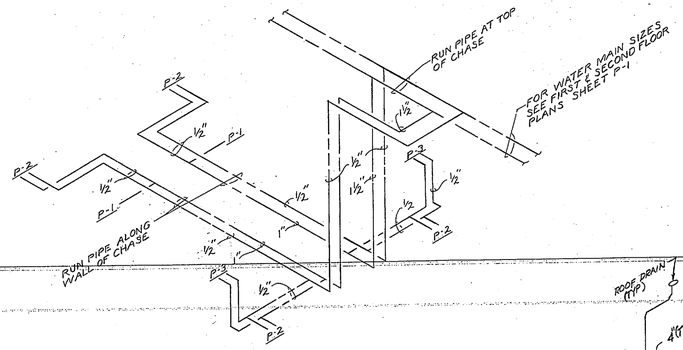
DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
NAVAL ESTABS. — ATLANTIC DIVISION — NORFOLK, VIRGINIA

CTO DWG. NO. 257760	NAVAL HOSPITAL — CAMP LEJEUNE, N.C.
JOB ORDER NO. SF5306	BACHELOR ENLISTED QUARTERS
STA. PREPARD. P-721	
DES. LRP DRWN. WWH	
REVD. NAM. SMG CALCULATED BY YLM	PLUMBING FLOOR PLANS
CHK. BY. F.K. EDF	
REVIEW. SCD. RCS.D.	
APPROVED DATE	SIZE F — CODE IDENT. NO. 80091 — ISAYAC DRAWING NO. 4157760
ACTIVITY-SATISFACTORY TO	
APPROVED DATE	SCALE AS NOTED — SPEC. 05-85-5306 — SHEET 38 OF 68
FOR USE FOR ENGINEERING REVIEW	

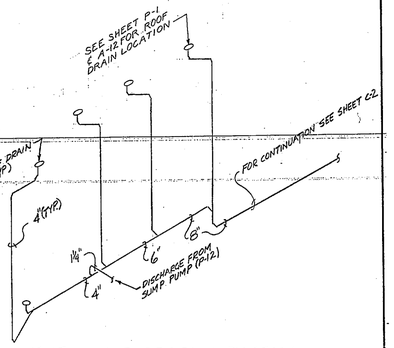
REVISIONS			
SYM.	DESCRIPTION	DATE	APPROVED
1	REVISED AS-BUILT	10-1-91	RDC



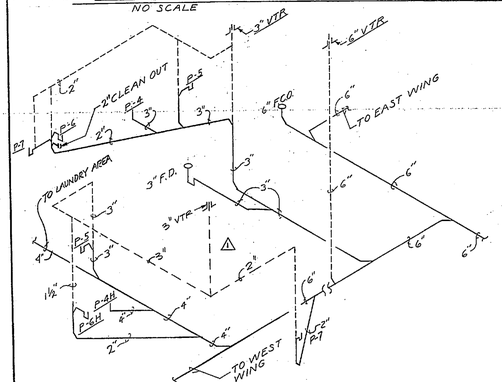
WASTE & VENT RISER DIAGRAM (TYPICAL)
NO SCALE



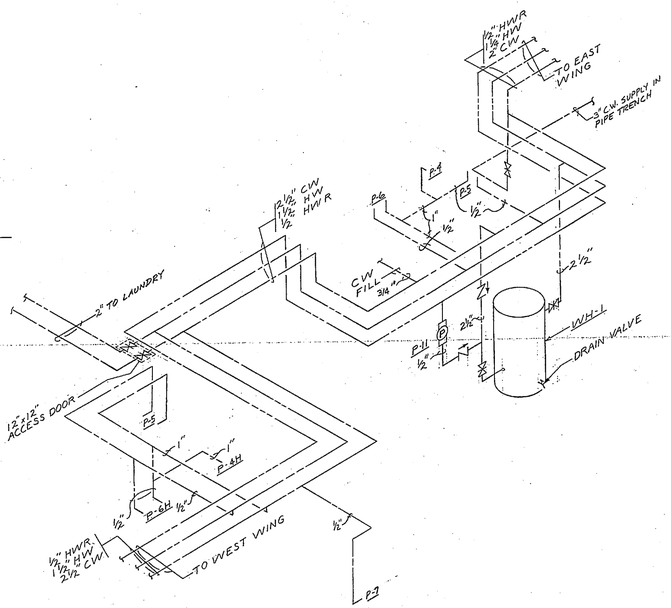
WATER RISER DIAGRAM (TYPICAL)
NO SCALE



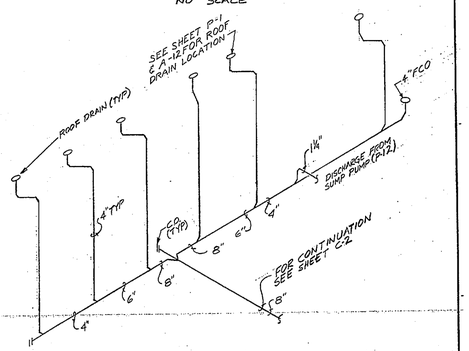
EAST WING ROOF DRAIN DIAGRAM
NO SCALE



CORE AREA WASTE & VENT RISER DIAGRAM
NO SCALE



CORE AREA WATER RISER DIAGRAM
NO SCALE



WEST WING ROOF DRAIN DIAGRAM
NO SCALE

RECORD DRAWING
LETTER DATED JAN 31 1991

P - 2

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NAVAL STATION NORFOLK, VA.
NAVAL HOSPITAL CAMP LEJEUNE, N.C.

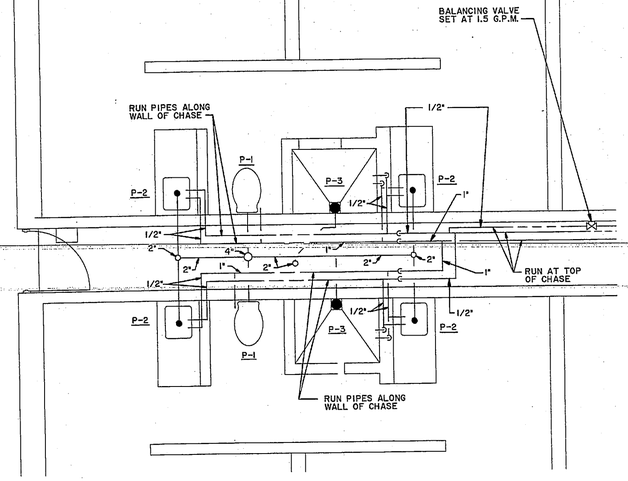
BACHELOR ENLISTED QUARTERS

PLUMING RISER DIAGRAMS

LFD DWG. NO.	2577761
JOB ORDER NO.	5F-5306
STA. PROJ. NO.	P-72
DES./RDS	DRAWN DAV
PROJ. MGR. SMG	CHARGEVNOR YLM
EFD RPV. JBSC	F.F. SUBC
AR MGR. SPS	DES DIR. KL
APPROVED	DATE
ACTIVITY - SATISFACTORY TO	
REVIEWED Q	DATE 5-2-91
FOR F.F.C. FOR COMMANDER REVIEW	

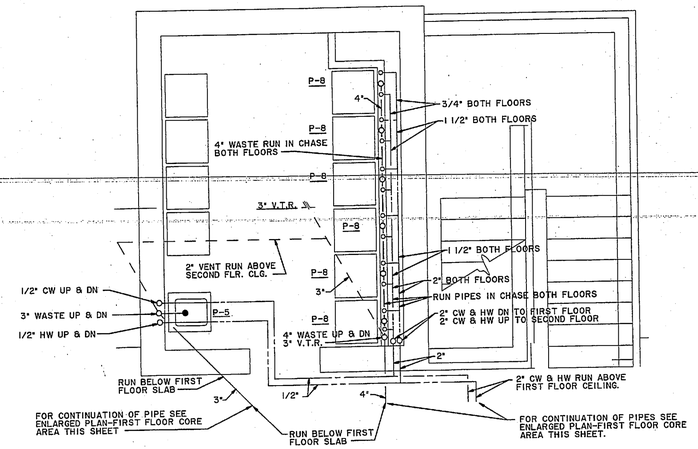
SIZE F | CODE IDENT NO. 80091 | NAVFAC DRAWING NO. 4157761
CONSTR. CONTR. NO. NG2478F-85-B-5142
SCALE NOTED | SPEC. 05-85-5306 | SHEET 37 of 68

NOTE: SEE SHEET P-1 FOR PIPE MAIN SIZES.



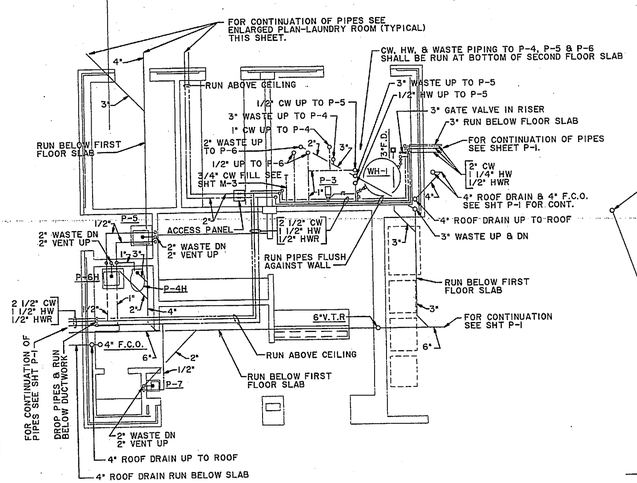
ENLARGED PLAN - BEDROOM TOILETS (TYPICAL)

SCALE: 1/2"=1'-0"



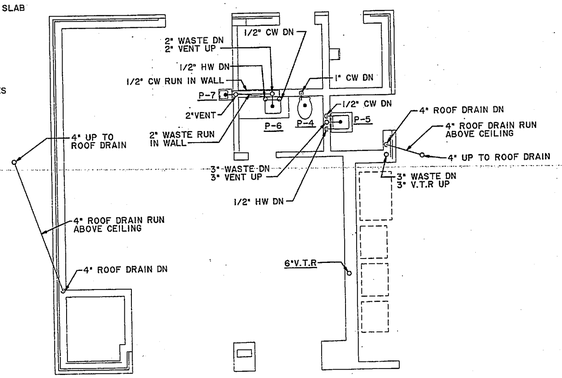
ENLARGED PLAN - LAUNDRY ROOM (TYPICAL)

SCALE: 1/2"=1'-0"



ENLARGED PLAN - FIRST FLOOR CORE AREA

SCALE: 1/4"=1'-0"



ENLARGED PLAN - SECOND FLOOR CORE AREA

SCALE: 1/4"=1'-0"

GRAPHIC SCALES

½" = 1'-0" 1' 0 1' 2' 3' 4' 5' 6' 7' 8'

¼" = 1'-0" 5' 0 5' 10'

REVISIONS

SYM	DESCRIPTION	DATE	APPROVED

RECORD DRAWING LETTER DATED

P-3

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
NAVAL STATION — ATLANTIC DIVISION — NORFOLK, VIRGINIA
NAVAL HOSPITAL — CAMP LEJEUNE, N.C.

BACHELOR ENLISTED QUARTERS

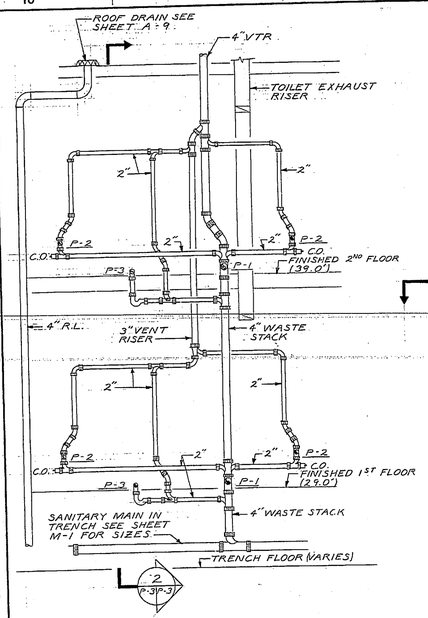
PARTIAL FLOOR PLANS

STD DWG. NO.	257762
JOB INDEX NO.	SF5306
STA. FACILITY.	P-721
DES.	LRP
DRWN.	WWH
FIELD SUPV.	SMG
DRAWN/CHKD.	Y.L.M
STD NO.	
F.P. CHECKER	
SR. ARC.	
WELDER	
APPROVED	DATE
ACTIVITY-SATISFACTORY TO	
APPROVED	DATE
W. J. Q.	2-20-87
FOR CO'S FOR CONTRACTING OFFICER	

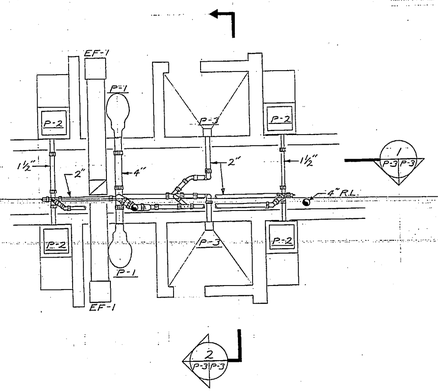
SIZE F — CODE IDENT.NO. 80091 — NAVFAC DRAWING NO. 417762

CONTR. SPEC. NO. N62470-85-B-5142

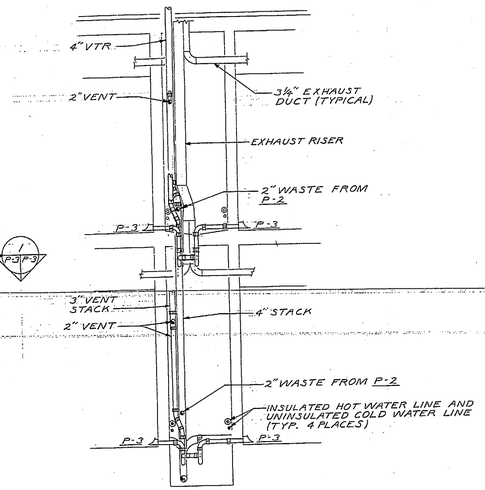
SCALE AS NOTED — SPEC. 05-85-5306 — SHEET 40 OF 68



PLUMBING ELEVATION
PIPING CHASE
SCALE: 1/2" = 1'-0"



PARTIAL PLAN PLUMBING CHASE
SCALE: 1/2" = 1'-0"



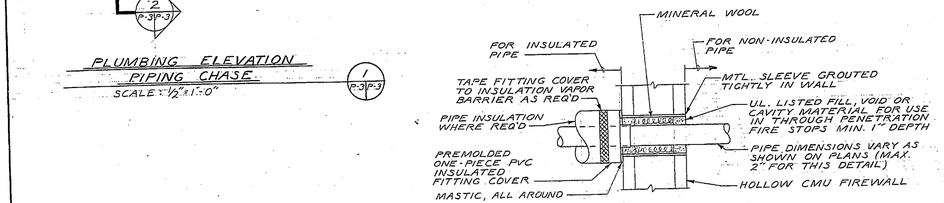
SECTION THRU
PIPE CHASE
SCALE: 1/2" = 1'-0"

REVISIONS

SYM.	DESCRIPTION	DATE	APPROVED

LEGEND

- COLD WATER LINE (CW)
- HOT WATER LINE (HW)
- HOT WATER RETURN LINE (HWR)
- VENT LINE
- SANITARY LINE
- GATE VALVE
- UNION
- C.O. FLOOR CLEAN OUT
- C.O. WALL CLEAN OUT
- FLOOR DRAIN (FD)
- W.H. WALL HYDRANT
- H.B. HOSE BIBB
- BALANCING VALVE
- CHECK VALVE (ARROW INDICATES FLOW)
- VTR VENT THRU ROOF
- R.L. RAIN LEADER
- R.D. ROOF DRAIN
- WH-1 DOMESTIC WATER HEATER

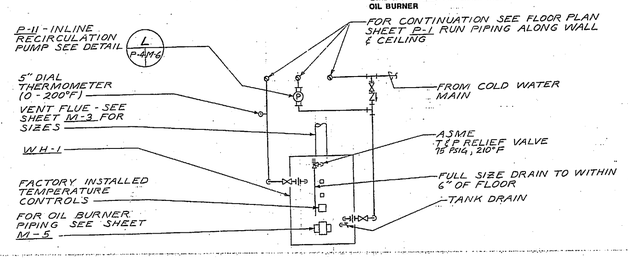


NOTE:
DETAIL ILLUSTRATES PIPE INSULATION ON ONE SIDE OF FIRE RATED WALL. WHERE PIPE IS REQ'D TO BE INSULATED ON BOTH SIDES, THE INSULATION END TREATMENT SHALL BE DUPLICATED ON BOTH SIDES.

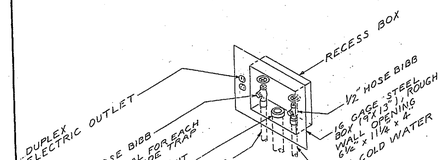
PIPE PENETRATION DETAIL
(THROUGH FIRE RATED WALL)
N.T.S.

DOMESTIC WATER HEATER (WH-1)

250 GAL STORAGE. OIL FIRED BURNER CAPABLE OF 915 GAL/HR MAXIMUM RECOVERY AT 80 F TEMPERATURE RISE. BURNER FIRING RATE 7.1 GAL/HR. MAXIMUM 1/2 HP BURNER MOTOR 115V/1ØP. GLASS-LINED STORAGE TANK. PROVIDE FACTORY INSTALLED ASME PRESSURE/TEMPERATURE RELIEF VALVE, TEMPERATURE LIMITING DEVICE, AND DRAIN VALVE. **BASED ON NO. 2 FUEL OIL BURNER**



HOT WATER TANK INSTALLATION DETAIL
N.T.S.



WASHING MACHINE ACCESS DETAIL (TYPICAL)
N.T.S.

PLUMBING FIXTURE SCHEDULE

MARK	FIXTURE	CW	HW	WASTE	VENT	REMARKS
P-1	WATER CLOSET	1"	—	4"	—	FLUSH VALVE, BACK OUTLET
P-2	LAVATORY	1/2"	1/2"	1 1/2"	1 1/2"	COUNTER TOP
P-3	SHOWER	1/2"	1/2"	2"	1 1/2"	
P-4	WATER CLOSET	1"	—	4"	—	FLUSH VALVE, BOTTOM OUTLET
P-5	SERVICE SINK	1/2"	1/2"	3"	1 1/2"	
P-6	LAVATORY	1/2"	1/2"	1 1/2"	1 1/2"	WALL MOUNTED
P-7	ELECTRIC WATER COOLER	1/2"	—	1 1/2"	1 1/2"	
P-8	WASHER	1/2"	1/2"	2"	—	

H - SUFFIX ON PLUMBING MARK DESIGNATES HANDICAP FIXTURE.

GRAPHIC SCALE
1/8" = 1'-0" 1 1/2 0 1 2 3 4 5 10

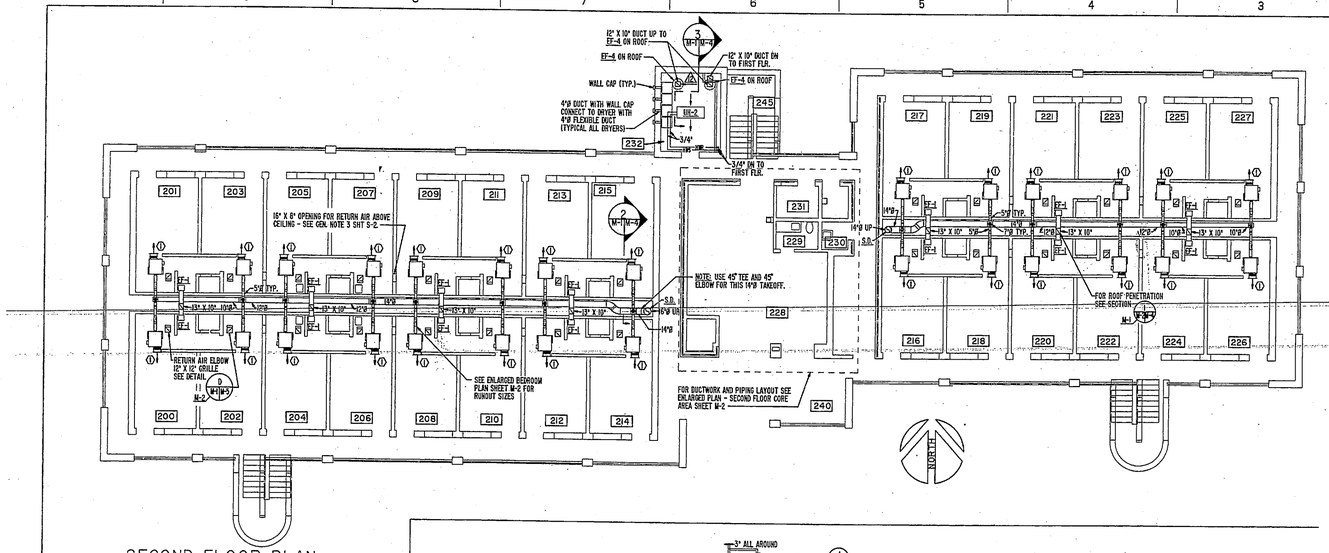
RECORD DRAWING
LETTER DATED JAN 23 1981

P-4

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NAVAL STATION NORFOLK, VA.
NAVAL HOSPITAL CAMP LEJEUNE, N.C.
BACHELOR ENLISTED QUARTERS
SCHEDULES & DETAILS

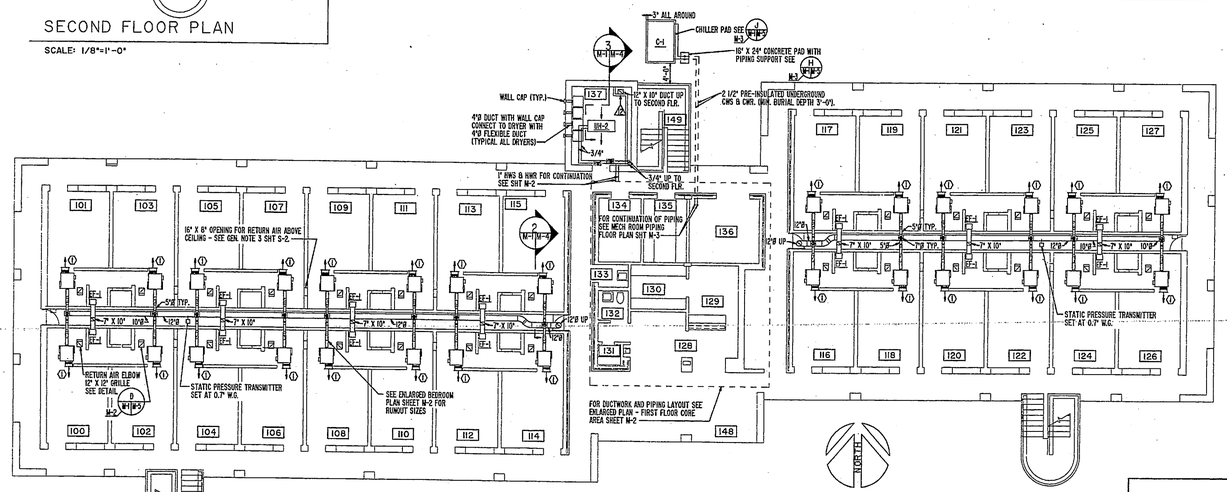
EFD DWG. NO. 25,776.5
JOB ORDER NO. 57F-5306
STD. FIELD NO. P-77
DES. L.R.C. DRWN. DAV
FIELD MGR. S.MG CHARGEMAN VLM
EFD INVG. MGR. F.F. [illegible]
BR. MGR. [illegible] SEC. DIR. [illegible]
APPROVED DATE
ACTIVITY - SATISFACTORY TO
APPROVED [illegible] DATE 8-30-87
FOR CVE, FOR CONTRACTING OFFICER

SIZE F | CODE IDENT NO. 80091 | NAVFAC DRAWING NO. 415 776 5
SCALE NOTED | SPEC. B5-85-5306 | CONSTR. CONTR. NO. N62470-85-B-5142 | SHEET 41 OF 68



SECOND FLOOR PLAN

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



FIRST FLOOR PLAN

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

GRAPHIC SCALE

1/8" = 1'-0" 5' 0 5' 10' 15' 20' 25'

REVISIONS

SYM	DESCRIPTION	DATE	APPROVED

MECHANICAL LEGEND

F.D.	FIRE DAMPER
	2-WAY CONTROL VALVE
	3-WAY CONTROL VALVE
	GLOBE VALVE
	CHECK VALVE
	WEIGHTED CHECK VALVE
	COMBINATION BALANCING/SHUT-OFF VALVE WITH FLOW FITTINGS
	GATE VALVE
	UNION
	STRAINER
	FLEXIBLE PIPE CONNECTION
SLOPE	DIRECTION OF DOWNWARD SLOPE
	DIRECTION OF FLOW
	MANUAL AIR VENT
	PRESSURE GAUGE WITH ISOLATION VALVE
	THERMOMETER
	RELIEF VALVE
T H	THERMOSTAT, HEATING
T C	THERMOSTAT, COOLING
T HC	THERMOSTAT, HEATING & COOLING
T V	THERMOSTAT, VENTILATION
	ECCENTRIC REDUCER
	PIPE CAP
	PIPE ANCHOR
	OPPOSED BLADE DAMPER
	PARALLEL BLADE DAMPER
	FLEXIBLE DUCT CONNECTION
MVD	MANUAL VOLUME DAMPER
—CHWS—	CHILLED/HOT WATER SUPPLY
—CHWR—	CHILLED/HOT WATER RETURN
—CWS—	CHILLED WATER SUPPLY
—CWR—	CHILLED WATER RETURN
—HWS—	HOT WATER SUPPLY
—HWR—	HOT WATER RETURN
—D—	COIL CONDENSATE DRAIN
CV-1	VALVE DESIGNATION
PRV	PRESSURE REDUCING VALVE
AHU-1	AIR HANDLING UNIT
UH-1	UNIT HEATER
FCU-1	FAN COIL UNIT
EF-1	EXHAUST FAN
RAD-1	FINNED-TUBE RADIATION
E.S.P.	EXTERNAL STATIC PRESSURE
W.G.	WATER GAGE
S.P.	STATIC PRESSURE
S.D.	SMOKE DETECTOR
A.E.	AIR EXTRACTOR
BLR-1	BOILER
WH-1	DOMESTIC WATER HEATER
P-1	PUMP
	DOMESTIC COLD WATER
	DOMESTIC HOT WATER
	DOMESTIC HOT WATER RECIRC.
DTC	DATA TERMINAL CABINET
W.P.D.	WATER PRESSURE DROP
	DUCT AIR TEST PORT (ATP)
	SUPPLY REGISTER
	RETURN / EXHAUST GRILLE
FPVAV	FAN POWERED VARIBLE AIR VOLUME
	SLEEVE THRU WALL
COND	CONDENSATE
FOS	FUEL OIL SUPPLY
FOR	FUEL OIL RETURN
	MOTOR OPERATOR DAMPER
BFP	BACKFLOW PREVENTER

RECORD DRAWING
AS BUILT DATE: MAY 1987

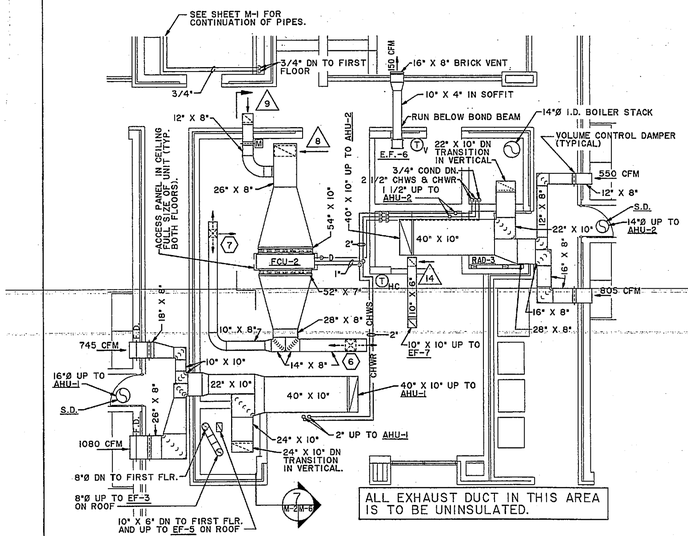
M-1

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
NAVAL STATION — ATLANTIC DIVISION — NORFOLK, VIRGINIA

NAVAL HOSPITAL	CAMP LEJEUNE, N.C.
BACHELOR ENLISTED QUARTERS	
MECHANICAL FLOOR PLAN	

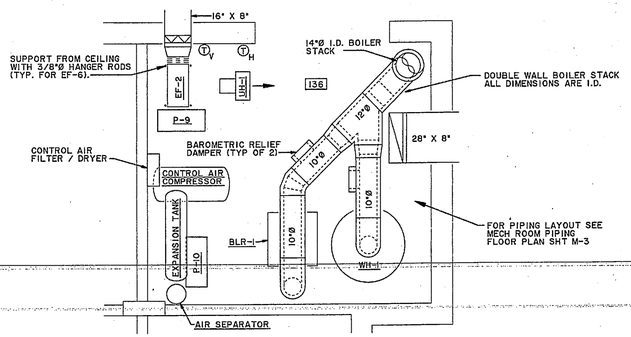
CTO SRQ. NO. 257764
JOB DECK NO. SF5306
SPL PROJ.NO. P-721
DES. LRP SPEC. WWH
FIELD NOTE SMG CHARGEOUT VLM
STD NO. 2000-C F.A. 2000
GAUGE 1/8"=1'-0" NO.SYS. 1
APPROVED DATE
ACTIVITY-SATISFACTORY TO
APPROVED DATE
K.C. 5-20-87
FOR EFD USE ONLY

SYSTEM CODE IDENT.NO. F 80091
NAVFAC DRAWING NO. 4157764
CONTR. CODE IDENT. NO. N62470-85-B-5142
SCALE AS NOTED SPEC. 05-85-5306 SHEET 42 OF 68



ENLARGED PLAN - SECOND FLOOR CORE AREA

SCALE: 1/4"=1'-0"

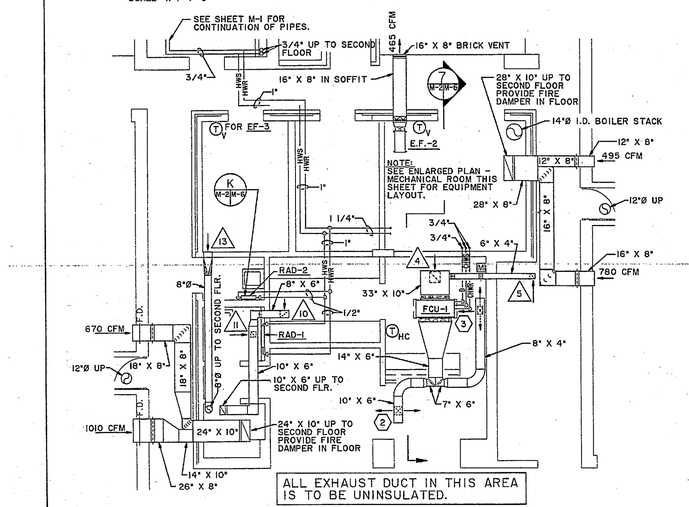


ENLARGED PLAN - MECHANICAL ROOM

SCALE: 1/2"=1'-0"

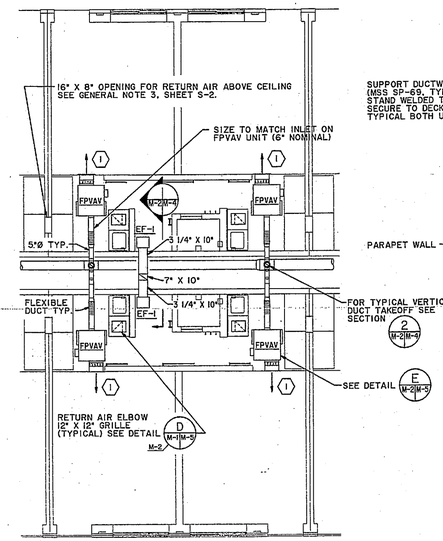
MECHANICAL GENERAL NOTES

1. ALL DUCTWORK SHALL BE RUN TIGHT AGAINST CEILING SLAB, UNLESS OTHERWISE NOTED.
2. ALL DUCTWORK SHALL BE INSULATED UNLESS OTHERWISE NOTED.
3. FOR DIFFUSER CFM QUANTITIES SEE SCHEDULE SHEET M-9.
4. FOR ACCESS PANEL DETAILS SEE SHEET A-13.
5. ALL WATER PIPING SHALL BE PITCHED FOR DRAINAGE.
6. COORDINATE MECH. WORK WITH OTHER TRADES.
7. ROOM THERMOSTATS SHALL BE MOUNTED WHERE SHOWN AT APPROXIMATELY 5'-6" ABOVE FLOOR.
8. ARRANGE ALL PIPING AT AIR HANDLING UNITS TO PERMIT EASY COIL REMOVAL.



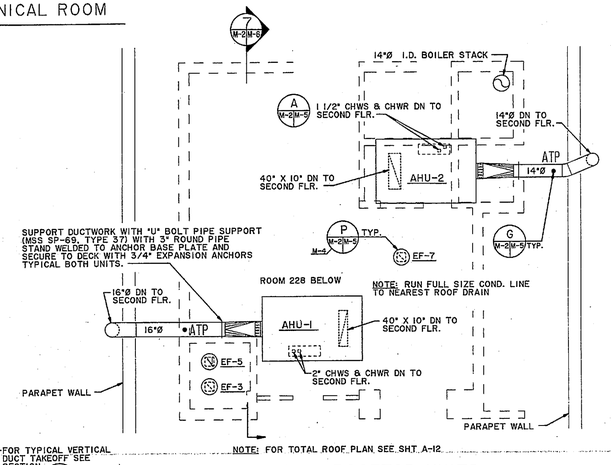
ENLARGED PLAN - FIRST FLOOR CORE AREA

SCALE: 1/4"=1'-0"



ENLARGED PLAN - BEDROOMS (TYPICAL)

SCALE: 1/4"=1'-0"



ENLARGED PLAN - ROOFTOP UNITS

SCALE: 1/4"=1'-0"

GRAPHIC SCALES

½" = 1'-0" 1' 0 1' 2' 3' 4' 5' 6' 7' 8'

¼" = 1'-0" 5' 0 5' 10'

REVISIONS			
ITM	DESCRIPTION	DATE	APPROVED

RECORD DRAWING

M-2

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
NAVAL STATION ATLANTIC DIVISION NORFOLK, VIRGINIA

CTO ENG. NO. 257765
JOB ORDER NO. 5P5306
STA. PROJ.NO. P-721
DES. LBP APPR. WWH
PROJ. MGR. SMG CHARGEINTHER. YLM
EFD.PRO. [illegible] F.F. [illegible]
TRAVEL [illegible] PER DIM. [illegible]
APPROVED DATE
ACTIVITY - SATISFACTORY TO
APPROVED DATE
FOR TYP. FIRE DAMPER, SHAFT

NAVAL HOSPITAL CAMP LEJEUNE, N.C.

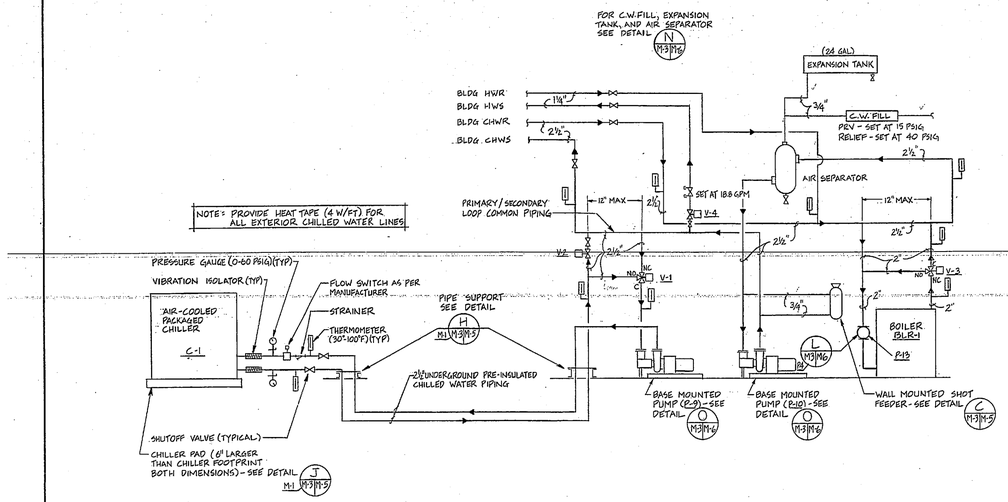
BACHELOR ENLISTED QUARTERS

PARTIAL FLOOR PLANS

SIZE F | CODE IDENT.NO. 80091 | NAVFAC DRAWING NO. 4157765 | CONTR. DWG. NO. N62470-85-B-5142

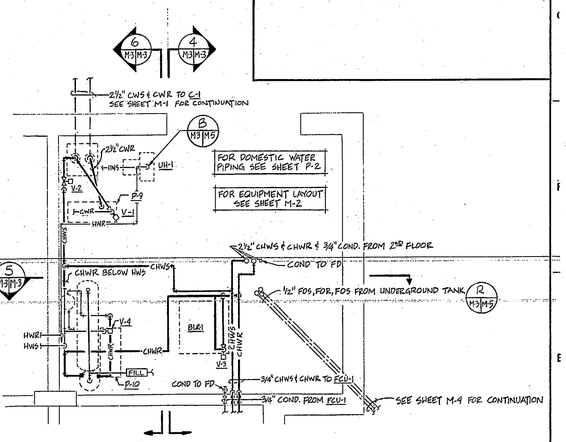
SCALE AS NOTED | DFS. 05-85-5306 | SHEET 43 OF 68

REVISIONS			
SYM.	DESCRIPTION	DATE	APPROVED



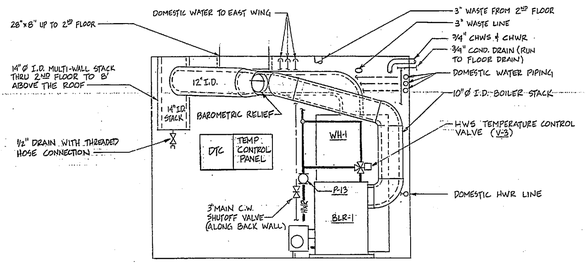
DUAL TEMPERATURE HYDRONIC SYSTEM FLOW DIAGRAM

NO SCALE



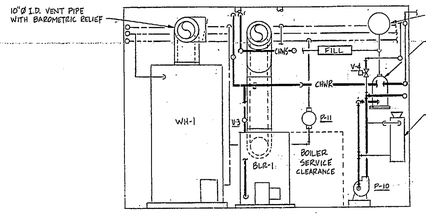
MECH ROOM PIPING FLOOR PLAN

SCALE: 1/2" = 1'-0"



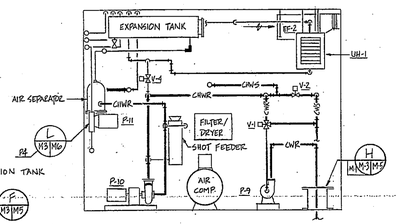
SECTION 4 M-3/M-3

SCALE: 1/2" = 1'-0"



SECTION 5 M-3/M-3

SCALE: 1/2" = 1'-0"



SECTION 6 M-3/M-3

SCALE: 1/2" = 1'-0"

GRAPHIC SCALE

1/2" = 1'-0" 1 0 1 2 3 4 5

RECORD DRAWING LETTER DATED JAN 31 1995

M - 3

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NAVAL STATION NORFOLK, VA.

NAVAL HOSPITAL — CAMP LEJEUNE, N.C.

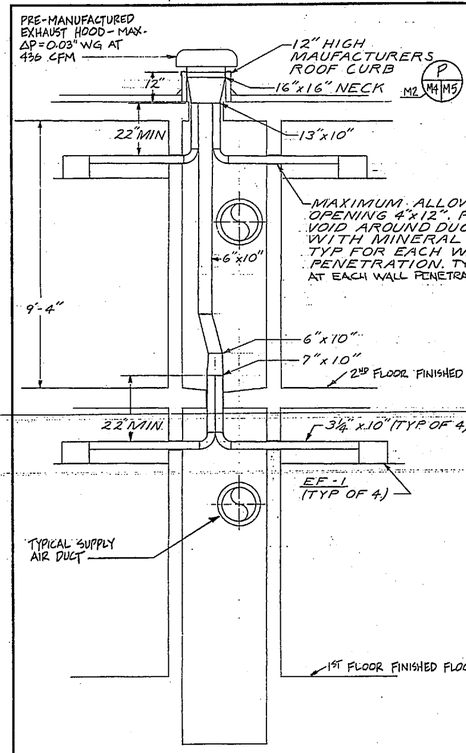
BACHELOR ENLISTED QUARTERS

MECHANICAL ROOM PLAN

EFD DWG. NO.	257766
JOB ORDER NO.	5P3306
STA. PROJ. NO.	P-287
DES. LRP	DWNG. LRP
PROJ. MGR. SGM	CH ARCHITECT YLM
EFD RVD.	
NB MGR.	SPEC DIS.
APPROVED	DATE

ACTIVITY - SATISFACTORY TO
APPROVAL: | DATE 2-20-97
FOR EFD FOR COMMANDER NAVAL

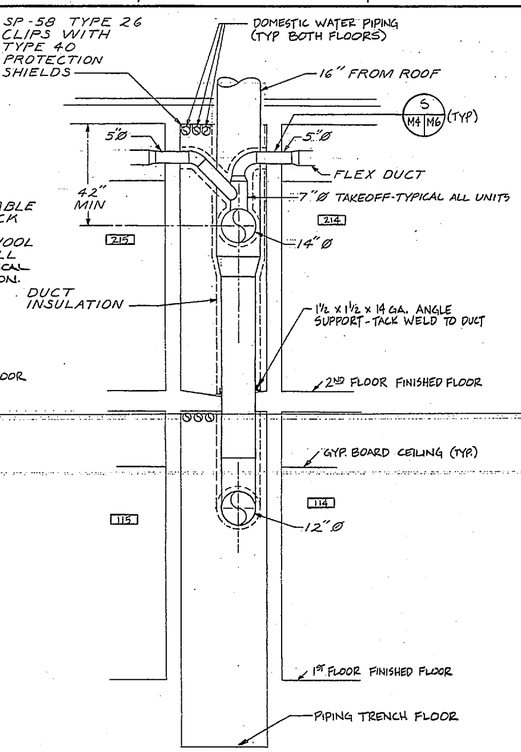
SIZE F	CODE IDENT NO. 80091	NAVAL DRAWING NO. 4157766
SCALE AS NOTED	SPEC.	CONSTR. CONTR. NO. N62470-85-B-5142
		05-B5-5306 SHEET 46 OF 68



TYPICAL TOILET EXHAUST FAN RISER

SCALE: 1/2" = 1'-0"

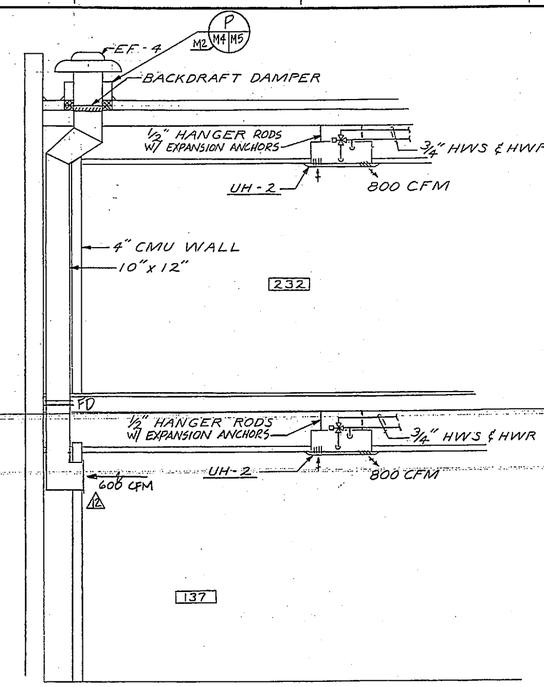
1 M-2 M-4



SECTION - TYPICAL EACH TAKEOFF

SCALE: 1/2" = 1'-0"

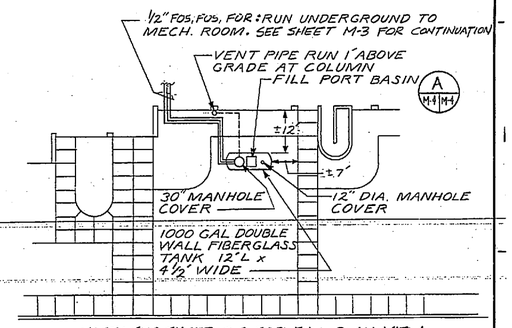
2 M-1 M-4



SECTION

SCALE: 1/2" = 1'-0"

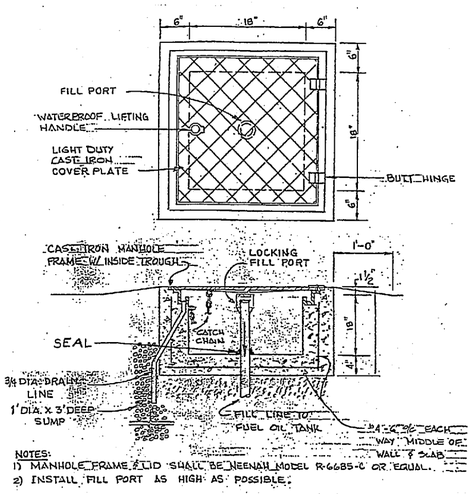
3 M-1 M-4



NOTE: SEE SHEET C-2 FOR FULL PLAN VIEW

FUEL OIL TANK PARTIAL PLAN

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

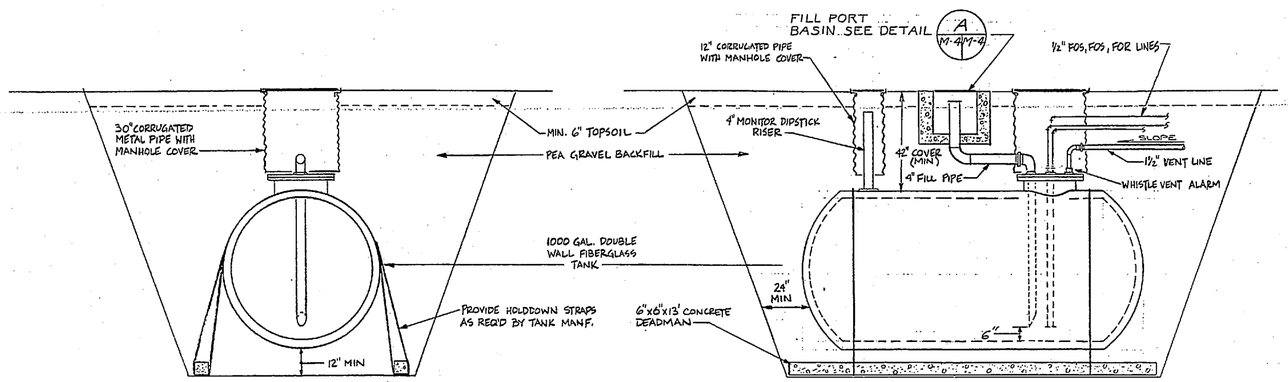


NOTES:
1) MANHOLE FRAME & LID SHALL BE NEENAH MODEL R-6685-C OR EQUAL.
2) INSTALL FILL PORT AS HIGH AS POSSIBLE.

FILL PORT BASIN DETAIL

N.T.S.

A M-4 M-4



1000 GAL. UNDERGROUND FUEL OIL TANK

N.T.S.

GRAPHIC SCALES

SCALE: 1/16" = 1'-0" 0 5 10 20 30 40 50 75 100

SCALE: 1/2" = 1'-0" 1½ 0 1 2 3 4 5 10 15

REVISIONS			
SYM.	DESCRIPTION	DATE	APPROVED

RECORD DRAWING LETTER DATED JAN 31 1991

M - 4

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NAVAL STATION NORFOLK, VA.

EFD DWG. NO. 257767
JOB ORDER NO. 9F5306
STA. PROJ. NO. P-721
DES. LRP DRWN. DAV
PROJ. MGR. SMG GUARANTOR YLM
EFD RVD. FP
BR. MGR. DES. DIR.
APPROVED DATE
ACTIVITY - SATISFACTORY TO
APPROVED DATE
FOR EFD FOR COMMANDER NAVFAC

NAVAL HOSPITAL CAMP LEJEUNE, N.C.

BACHELOR ENLISTED QUARTERS

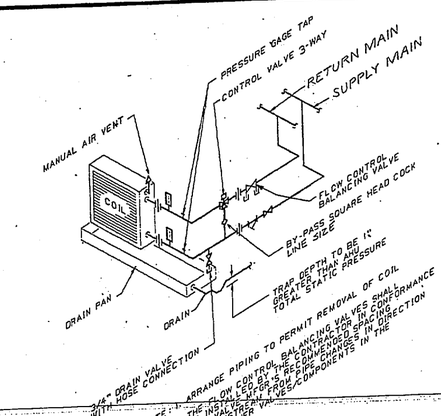
SECTIONS

SIZE F | CODE IDENT. NO. 80091 | NAVFAC DRAWING NO. 4157767

CONSTR. CONTR. NO. N62470-85-B-5142

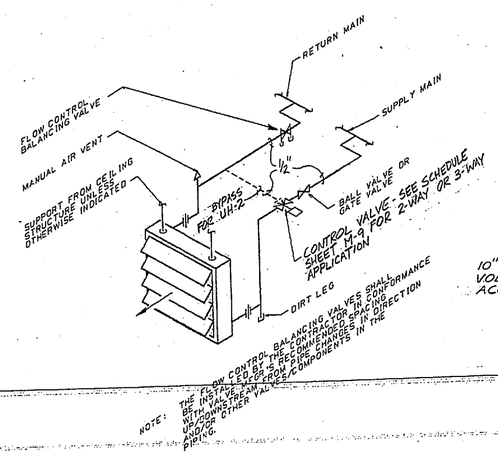
SCALE NOTED | SPEC. 05-85-5306 | SHEET 45 OF 68

REVISIONS			
SYM.	DESCRIPTION	DATE	APPROVED



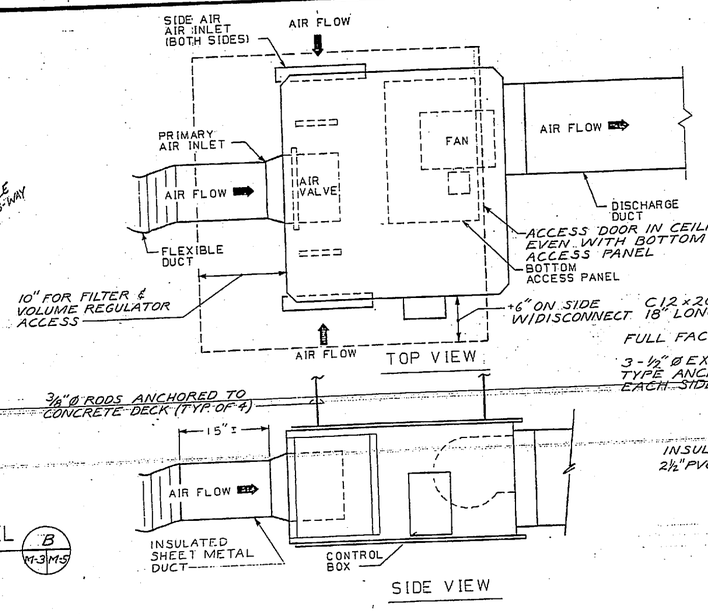
A.H.U. COIL PIPING DETAIL (A, M-2/M-5)

NOT TO SCALE



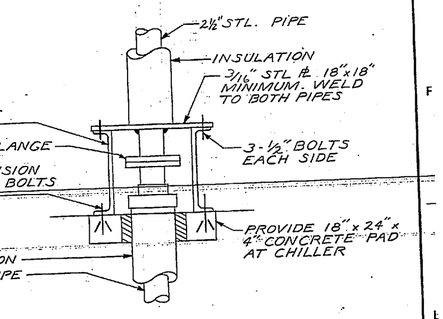
HOT WATER UNIT HEATER PIPING DETAIL (B, M-3/M-5)

NOT TO SCALE



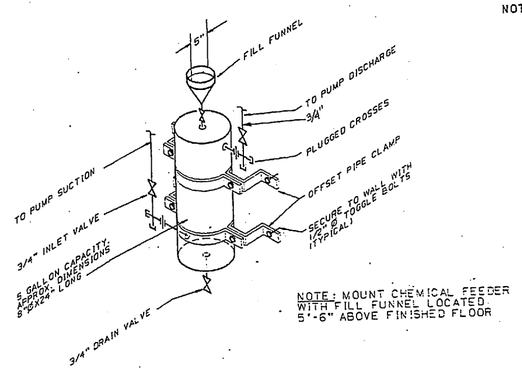
FAN POWERED VAV BOX DETAIL (E, M-2/M-5)

NOT TO SCALE



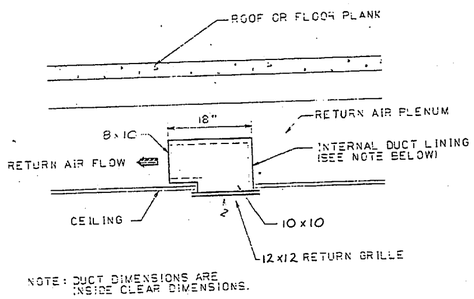
CHILLED WATER PIPING SUPPORT (H, M-3/M-5, M-1)

NOT TO SCALE



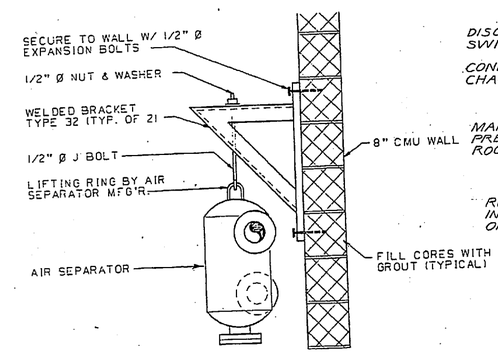
CHEMICAL SHOT-TYPE FEEDER DETAIL (C, M-3/M-5)

NOT TO SCALE



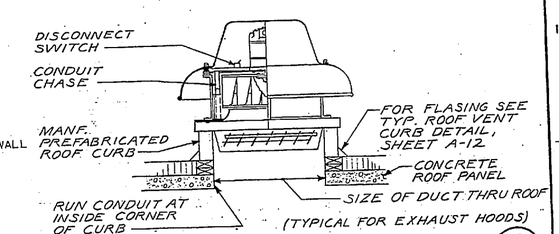
ACOUSTICAL RETURN DETAIL (D, M-1/M-5, M-2)

NOT TO SCALE



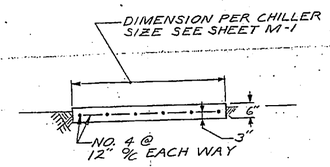
AIR SEPARATOR SUPPORT DETAIL (F, M-3/M-5)

NOT TO SCALE



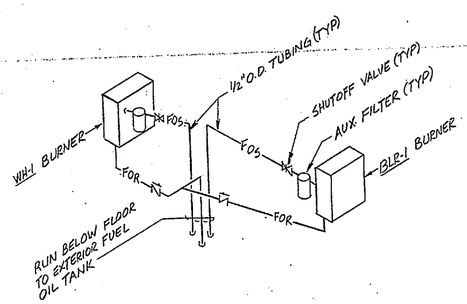
ROOF TOP EXHAUST FAN (P, M-2/M-5, M-4)

NOT TO SCALE



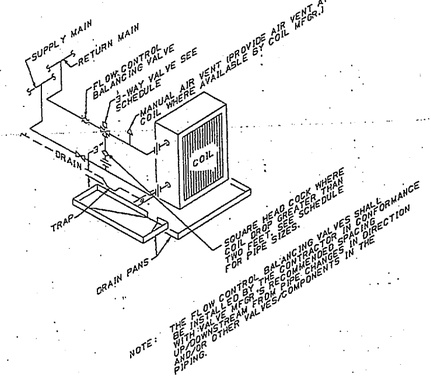
CHILLER PAD DETAIL (J, M-1/M-5)

NOT TO SCALE



FUEL OIL SUPPLY PIPING (R, M-3/M-5)

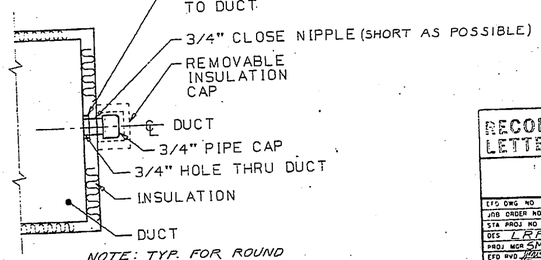
NOT TO SCALE



3-WAY VALVE PIPING CONFIGURATION

FAN COIL UNIT PIPING DETAIL (T, M6/M5)

NOT TO SCALE



AIR TEST PORT DETAIL (ATP) (G, M-2/M-5)

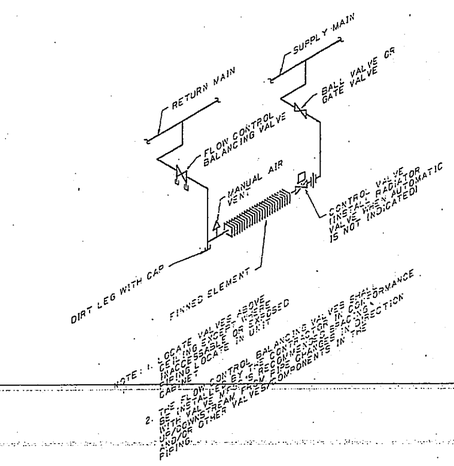
NOT TO SCALE

RECORD DRAWING LETTER DATED JAN 31 1991

M - 5

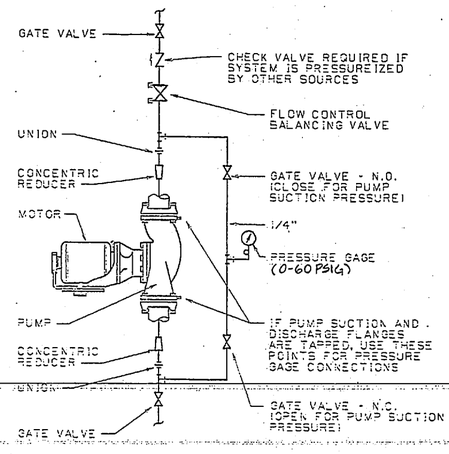
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NAVAL STATION NORFOLK, VA

EFD DWG NO 2577768	NAVAL HOSPITAL CAMP LEJEUNE, N.C.
JOB ORDER NO SF5306	BACHELOR ENLISTED QUARTERS
STA PROJ NO P-421	
DES LAP DRWN DAV	
PROJ MGR CHRISTMAN CH ARCHITECT YLM	DETAILS
EFD PMD PROCTOR EFD DESIGN	
BR MGR DES DIR KD	
APPROVED DATE	SIZE F · CODE IDENT NO 80091 · NAVFAC DRAWING NO 4157768
ACTIVITY - SATISFACTORY TO	CONSTR CONTR NO N62470-85-B-5142
APPROVED DATE 5-30-87 FOR EFD FOR COMMANDER NAVFAC	SCALE NOTED · SPEC 05-85-5306 · SHEET 46 OF 68



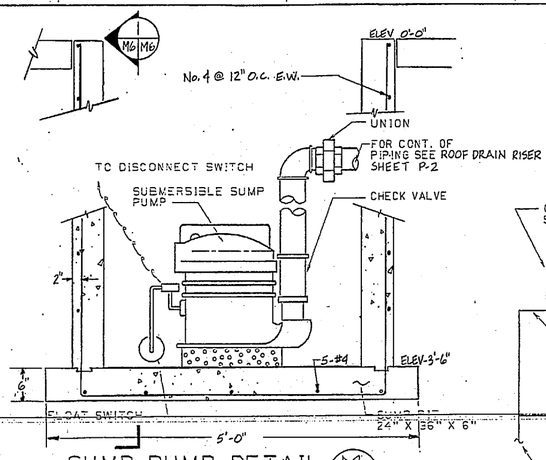
DOWN FEED HOT WATER FINTUBE PIPING DETAIL (K) M-2|M-6

NOT TO SCALE



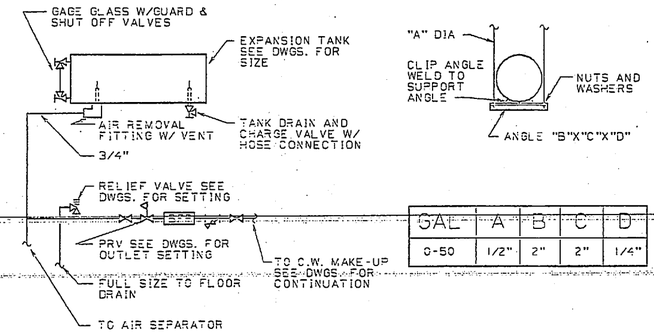
INLINE CENTRIFUGAL PUMP (L) P4 M-3|M-6

NOT TO SCALE



SUMP PUMP DETAIL (M) P-1|M-6

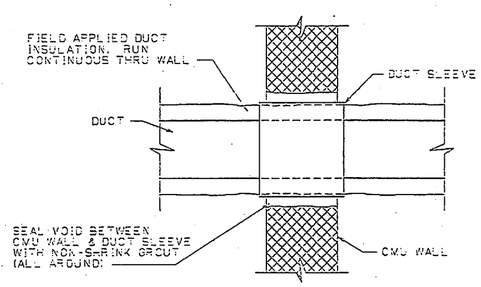
NOT TO SCALE



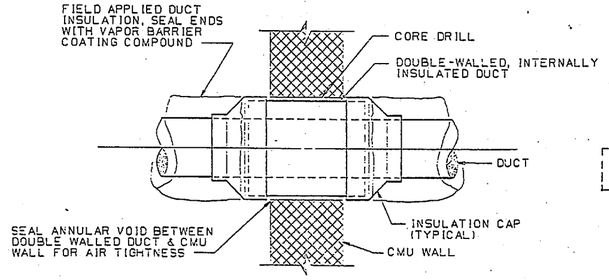
GAL	A	B	C	D
0-50	1/2"	2"	2"	1/4"

EXPANSION TANK DETAIL (N) M-3|M-6

NOT TO SCALE



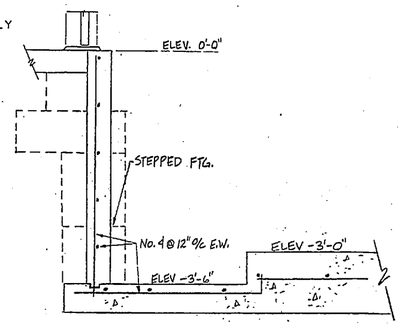
INSULATED RECTANGULAR DUCT PENETRATION



INSULATED ROUND DUCT PENETRATION

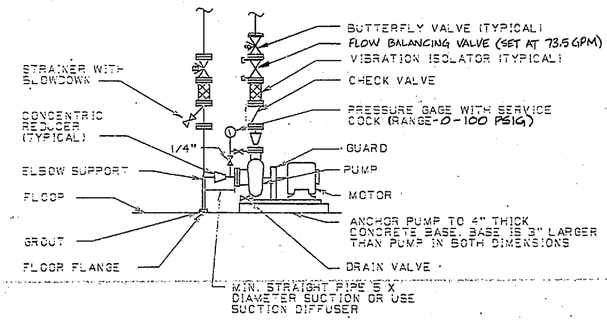
DUCT PENETRATION DETAIL (TYPICAL) (S) M-4|M-6

NOT TO SCALE



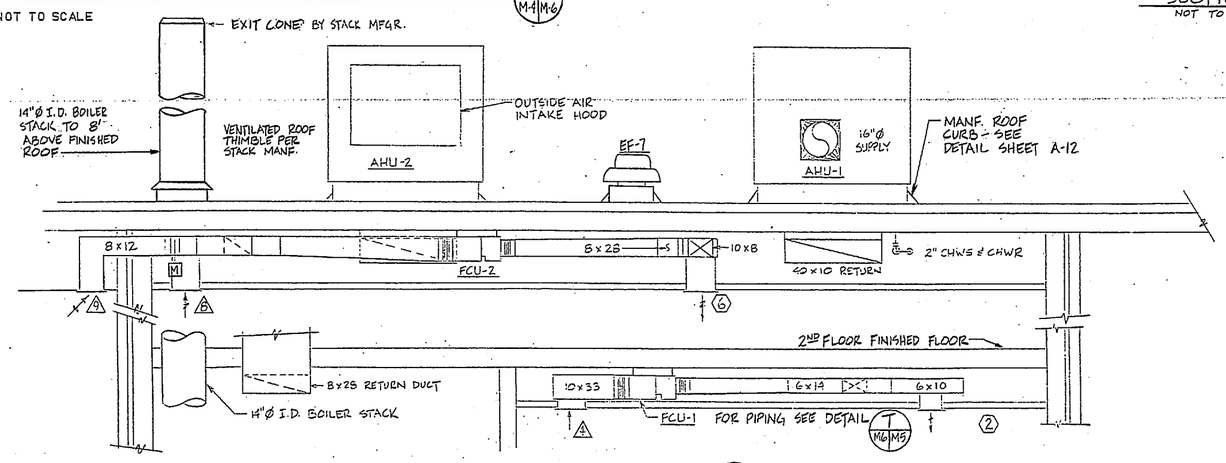
SECTION (1) M6|M6

NOT TO SCALE



BASE MOUNTED CENTRIFUGAL PUMP (O) M-3|M-6

NOT TO SCALE



SECTION (7) M-2|M-6

SCALE: 1/2"=1'-0"

GRAPHIC SCALE

1/2"=1'-0" 1 0 1 2 3 4 5

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED

RECORD DRAWING LETTER DATED JAN 31 1991

M-6

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
NAVAL STATION — ATLANTIC DIVISION — NORFOLK, VIRGINIA

NAVAL HOSPITAL — CAMP LEJEUNE, N.C.

BACHELOR ENLISTED QUARTERS

MISC. SECTIONS & DETAILS

ETC SPEC. NO. 257769
JOB ORDER NO. 5P5306
EST. FDP/UNIT. P-72
DES. LRP DRAW. JMJ
PROJ. MGR. SMG CHARTERED ENG. VLM
STRUCT. MGR. FA. SDP
DRAWN. DEB DESIGN. KD
APPROVED DATE
ACTIVITY-SATISFACTORY TO
APPROVED DATE 3-20-87
FOR CTO TOP ECONOMISTS ONLY

SIZE F — CODE IDENT.NO. 80091

NAVFAC DRAWING NO. 4157769

CONTRACT GENERAL NO. N62470-85-B-5142

SCALE AS NOTED SPEC. 05-85-5306 SHEET 47 OF 68

XB

SEQUENCE OF OPERATION

CENTRAL SYSTEM CHANGE-OVER CONTROL
SYSTEM CHANGE OVER FROM HEATING TO COOLING (AND VICE VERSA) SHALL BE ACCOMPLISHED BY A MANUAL "SUMMER/WINTER" SWITCH. MOUNTED IN THE CONTROL PANEL IN THE MECHANICAL ROOM. WHEN THE CHANGEOVER SWITCH IS IN THE "SUMMER" POSITION. 15 PSI CONTROL AIR SHALL BE SUPPLIED TO THE CHILLER CIRCUIT ISOLATION VALVE V-2 OPENING THE VALVE. THE 15 PSI AIR SHALL ALSO BE SUPPLIED TO P.E. CHILLER. WHICH IS WIRED TO THE CHILLER START/STOP CONTROL CIRCUIT. 15 PSI AIR IS ALSO SENT TO THE RECIEVER - CONTROLLER OF THE CHILLER PROTECTION VALVE V-1. VALVE V-1 SHALL BEGIN TO OPEN TO THE BUILDING SYSTEM TO MAINTAIN 80°F MAXIMUM TEMPERATURE AT THE CHILLED WATER PUMP INLET. THE VALVE SHALL BE FULLY OPEN TO THE BUILDING SYSTEM WHEN THE WATER TEMPERATURE REACHES 60°F. WHEN THEY CHANGE OVER SWITCH IS IN THE "WINTER" POSITION. VALVES V-1 AND V-2 CONTROL CIRCUITS SHALL BE DEENERGIZED. 15 PSI CONTROL AIR SHALL BE SENT TO THE RECIEVER-CONTROLLER OF THE HOT WATER TEMPERATURE CONTROL VALVE V-3. THE RECIEVER-CONTROLLER SHALL MAINTAIN HWS TEMP ACCORDING TO THE RESET SCHEDULE SHOWN. 15 PSI CONTROL AIR SHALL ALSO BE SUPPLIED TO P.E. BOILER WHICH WILL ENERGIZE THE BOILER CONTROL CIRCUIT TO MAINTAIN 190°F BOILER WATER TEMPERATURE.

AIR HANDLER AND TERMINAL UNIT CHANGEOVER CONTROL
TERMINAL UNIT HEATING/COOLING CHANGEOVER SHALL BE ACCOMPLISHED BY THE SAME "SUMMER/WINTER" SWITCH SPECIFIED UNDER "CENTRAL SYSTEM CHANGEOVER CONTROL". WHEN THE CHANGEOVER SWITCH IS IN THE "WINTER" POSITION. 20 PSI MAIN CONTROL AIR SHALL BE DELIVERED TO THE BUILDING AIR HANDLERS AND TERMINAL UNITS. INDEXING THEIR CONTROLS FOR HEATING OPERATION. WHEN THE CHANGEOVER SWITCH IS IN THE "SUMMER" POSITION. 15 PSI MAIN CONTROL AIR SHALL BE DELIVERED TO THE AIR HANDLERS AND TERMINAL UNITS. INDEXING THEIR CONTROLS FOR COOLING OPERATION.

CHILLER (C-1) CONTROL
THE AIR-COOLED WATER CHILLER. C-1. SHALL HAVE SELF CONTAINED CONTROLS WHICH SHALL START THE UNIT ON A DEMAND FOR COOLING. INTEGRAL CAPACITY CONTROLS SHALL OPERATE SYSTEM UNLOADERS TO MAINTAIN THE INDICATED CHILLED WATER TEMPERATURE. A FLOW SWITCH SHALL PREVENT THE CHILLER FROM STARTING UNLESS THERE IS A FLOW IN THE CHILLED WATER LINE. FOR SYSTEM CHANGEOVER FROM "HEAT" TO "COOL". SEE "CENTRAL SYSTEM CHANGEOVER CONTROL".

BOILER (BLR-1) CONTROLS
THE BOILER BLR-1 SHALL BE CONTROLLED BY A "HAND-OFF-AUTO" SWITCH. IN THE "HAND" POSITION THE PACKAGED BOILER CONTROLS SHALL BE ENERGIZED TO MAINTAIN A 190° F BOILER TEMPERATURE. IN THE "AUTO" POSITION THE PACKAGED BOILER CONTROLS SHALL BE ENERGIZED BY P.E. BOILER SWITCH FROM THE "SUMMER/WINTER" CHANGEOVER SWITCH SEE "CENTRAL SYSTEM CHANGEOVER CONTROL." PUMP P-3 SHALL BE ENERGIZED WITH THE PACKAGED BOILER CONTROLS.

CHILLED WATER PUMP (P-1) CONTROL
PUMP P-1 SHALL BE CONTROLLED BY A "HAND-OFF-AUTO" SWITCH. IN THE "AUTO" POSITION. PUMP P-1 SHALL BE ENERGIZED THROUGH RELAY ACTION EITHER WHEN THE CHILLER IS STARTED MANUALLY OR AUTOMATICALLY BY A PE SWITCH ACTIVATED BY THE SUMMER/WINTER CHANGEOVER SWITCH. IN THE "HAND" POSITION. PUMP P-1 SHALL RUN CONTINUOUSLY: FLOW SHALL BE SENSED BY A FLOW SWITCH AND VERIFIED BY A PANEL MOUNTED PILOT LIGHT.

DUAL TEMPERATURE PUMP (P-2) CONTROL
PUMP P-2 SHALL BE CONTROLLED BY AN "ON-OFF" SWITCH. (IN THE "ON" POSITION. PUMP P-2 SHALL RUN CONTINUOUSLY. FLOW SHALL BE VERIFIED BY A PANEL MOUNTED PILOT LIGHT.

DOMESTIC HOT WATER RECIRCULATING PUMP (P-3) CONTROL
PUMP P-3 SHALL BE CONTROLLED BY AN "ON-OFF" SWITCH IN THE "ON" POSITION. PUMP P-3 SHALL RUN CONTINUOUSLY. FLOW SHALL BE VERIFIED BY A PANEL MOUNTED PILOT LIGHT.

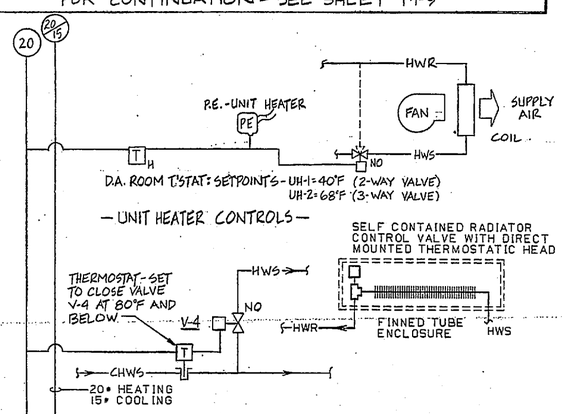
SUMP PUMP (P-4) CONTROL
PUMP P-4 SHALL BE CONTROLLED BY AN "ON-OFF" SWITCH IN THE "ON" POSITION PUMP P-4 SHALL BE ENERGIZED BY A FLOAT SWITCH SET TO CLOSE AT A PREDETERMINED WATER LEVEL.

AIR HANDLING UNIT (AHU) CONTROL
EACH AHU SHALL BE INDIVIDUALLY ENERGIZED BY AN "ON OFF" SWITCH LOCATED IN THE TEMPERATURE CONTROL PANEL. WITH THE SWITCH IN THE "ON" POSITION. THE AHU FAN SHALL ENERGIZE AHU RUN CONTINUOUSLY. THROUGH EP-AHU. CONTROL AIR SHALL BE DELIVERED TO THE AHU PNEUMATIC CONTROL COMPONENTS AND TO THE OUTSIDE AIR DAMPER ACTUATOR. THUS ACTIVATING THE AHU CONTROLS AND OPENING THE OUTSIDE AIR DAMPER. AN AHU'S ASSOCIATED FAN POWERED VARIABLE AIR VOLUME UNITS (FPVAV) SHALL BE INTERLOCKED BY RELAY ACTION (SEE"FPVAV CONTROL" SEQUENCE). THE AHU SUPPLY AIR TEMPERATURE SHALL BE CONTROLLED BY A SINGLE INPUT RECIEVER CONTROLLER IN THE "HEAT" MODE AND BY A SINGLE INPUT CONTROLLER IN THE "COOL" MODE. IN THE "HEAT" MODE. THE HEATING CONTROLLER SHALL MODULATE THE DUAL TEMPERATURE COIL CONTROL VALVE FULL OPEN TO MAINTAIN A SUPPLY AIR TEMPERATURE. IN THE "COOL" MODE THE COOLING CONTROLLER SHALL MODULATE THE DUAL TEMPERATURE COIL CONTROLLER WHICH SHALL MODULATE THE DUAL TEMPERATURE COIL CONTROL VALVE OPEN TO MAINTAIN THE SUPPLY AIR TEMPERATURE. A COMMON SUPPLY AIR TEMPERATURE SENSOR SHALL BE USED FOR BOTH CONTROLLERS ON A GIVEN AHU. EACH AHU SHALL BE PROVIDED WITH A FREEZESTAT. LOCATED IN THE RETURN MIXED AIR. WITH A SETPOINT OF 38 DEGREES FAHRENHEIT. SHOULD THE RETURN AIR TEMPERATURE FALL BELOW ITS SETPOINT. THE AHU FAN. THE ASSOCIATED CONTROL AIR SUPPLY. AND THE FPVAVU'S SHALL SHUT DOWN BY ACTION OF APPROPRIATE EP SWITCHES AND RELAYS. SHOULD THE FIRE ALARM CONTROLLER PANEL GO INTO ALARM CONDITION. A NORMALLY OPEN (N.O.) CONTACT IN THE PANEL. SHALL CLOSE. ACTIVATING A RELAY(S) TO DE-ENERGIZE AHU AND FPVAVU FANS AND OUTSIDE AIR DAMPERS.

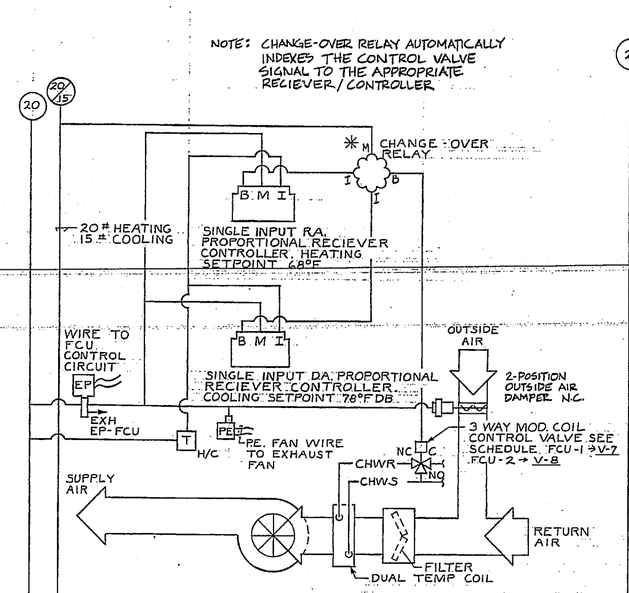
AIR SUPPLY STATIC PRESSURE CONTROL
A STATIC PRESSURE (S.P.) CONTROLLER SHALL BE PROVIDED FOR EACH AHU SUPPLY AIR DUCT WITH A DUCT S.P. SENSOR LOCATED AS INDICATED. ON A RISE IN SUPPLY AIR S.P. ABOVE THE SETPOINT OF THE S.P. CONTROLLER THE CONTROLLER SHALL GRADUALLY CLOSE THE AHU INLET VORTEX DAMPER TO MAINTAIN ITS SETTING. THE REVERSE SHALL OCCUR ON A FALL IN SUPPLY AIR S.P.

HWS & HWR SYSTEM CONTROLS
ON A DROP IN TEMPERATURE BELOW 80°F IN THE CHWS LINE VALVE V-4 SHALL CLOSE STOPPING FLOW TO THE RADIATION LINES. ON A RISE IN TEMPERATURE THE REVERSE SHALL OCCUR.

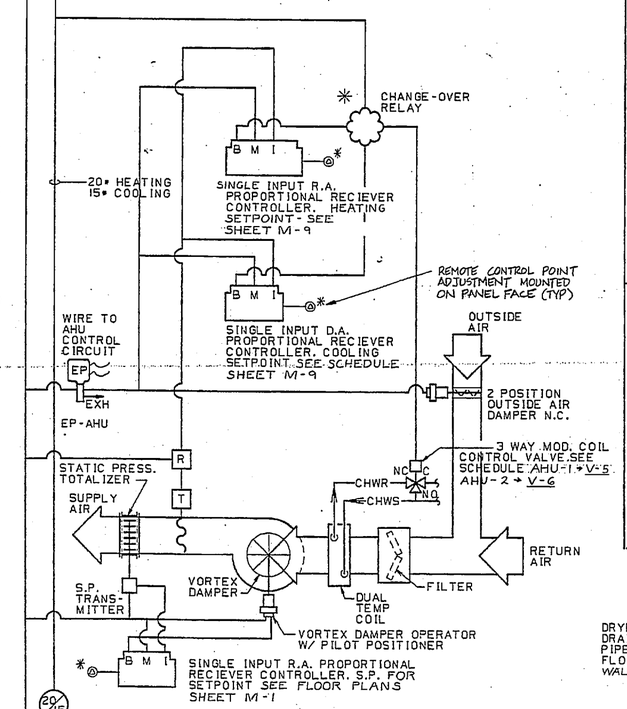
FOR CONTINUATION - SEE SHEET M-9



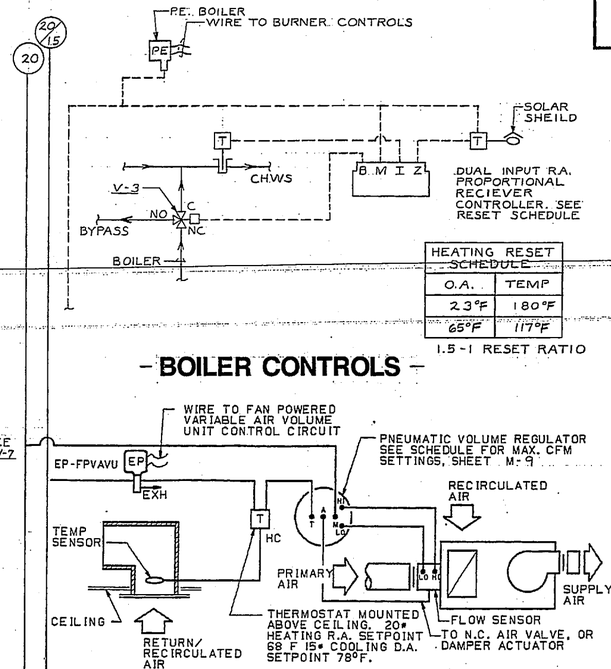
- HWS SYSTEM CONTROLS -



- FAN COIL UNIT CONTROLS -



- AHU CONTROLS -

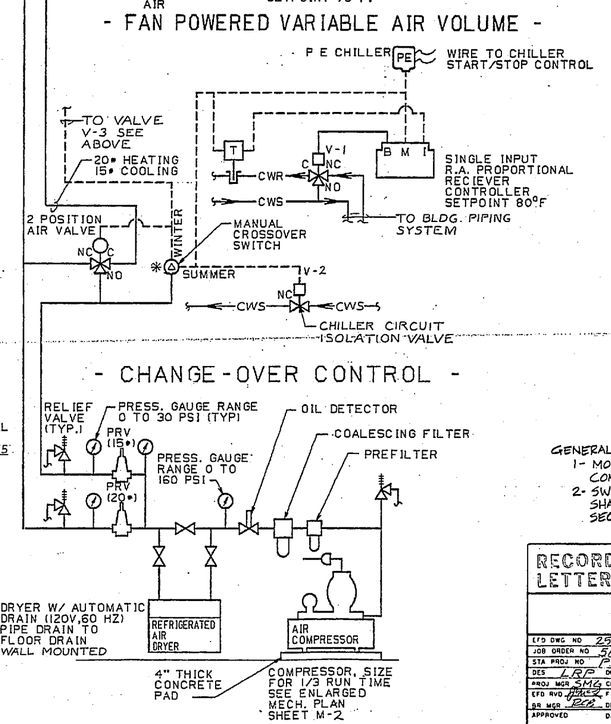


- BOILER CONTROLS -

HEATING RESET SCHEDULE	
O.A.	TEMP
23°F	180°F
65°F	117°F

1.5-1 RESET RATIO

- FAN POWERED VARIABLE AIR VOLUME -



- CHANGE-OVER CONTROL -

- CONTROL COMPRESSOR -

CONTROL LEGEND

T H	HEATING THERMOSTAT
T V	VENTILATION THERMOSTAT
T HC	HEATING/COOLING THERMOSTAT
R	RESTRICTOR
T	THERMOSTAT
	2-WAY CONTROL VALVE
	3-WAY CONTROL VALVE
	AIR VALVE
EP	EP SWITCH
PE	PE SWITCH
24	EMCS MONITORING
	SENSOR WELL
R.A.	REVERSE ACTING
D.A.	DIRECT ACTING
N.O.	NORMALLY OPEN
N.C.	NORMALLY CLOSED
C	COMMON
O.A.	OUTSIDE AIR
—CHWR—	CHILLED/HOT WATER RETURN
—CHWS—	CHILLED/HOT WATER SUPPLY
—HWR—	HOT WATER RETURN
—HWS—	HOT WATER SUPPLY
—CWR—	CHILLED WATER RETURN
—CWS—	CHILLED WATER SUPPLY
DTC	DATA TERMINAL CABINET
EXH	EXHAUST
OL	OVERLOAD
HOA	HAND-OFF-AUTOMATIC
C	MOTOR CONTACT
M	MOTOR
EP	ELECTRIC-PNEUMATIC
PE	PNEUMATIC-ELECTRIC
SC	SPEED CONTROLLER
20	CONTROL AIR (PSI)
ST	START/STOP INTERFACE
STR	MOTOR STARTER
PRV	PRESSURE REDUCING VALVE
MOD	MODULATING
2 POS	TWO POSITION
CLG	COOLING
HTG	HEATING
FS	FREEZESTAT
	N.O. CONTACT
	N.C. CONTACT
	PILOT LIGHT
R	RELAY
	DAMPER ACTUATOR
	PANEL MOUNTED
	DIRECTION OF FLOW
	PRESSURE GAUGE

GENERAL NOTES:
1- MOUNT ALL THE RECIEVER CONTROLLER IN THE CONTROL PANEL
2- SWITCHES AND PILOT LIGHTS ON CONTROL PANEL SHALL BE PROVIDED WITH LABELS PER SPEC SECTION 15901.

REVISIONS

SYM.	DESCRIPTION	DATE	APPROVED

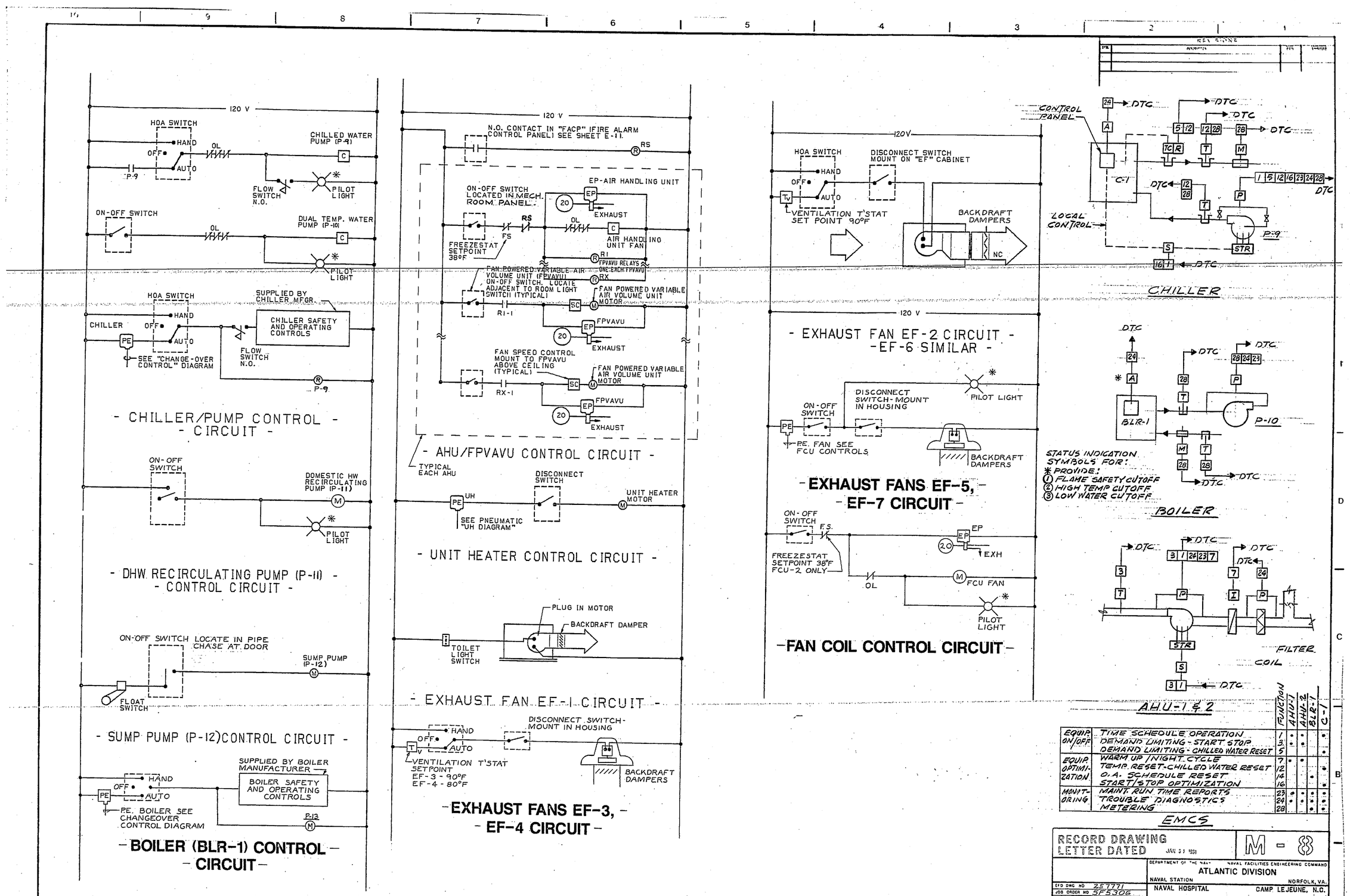
RECORD DRAWING
LETTER DATED JAN 31 1991

M - 7

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NAVAL STATION — NORFOLK, VA
NAVAL HOSPITAL — CAMP LEJEUNE, N.C.
BACHELOR ENLISTED QUARTERS
CONTROLS

EFD DWG NO 257770
JOB ORDER NO 5F5306
STA PROJ NO P-721
DES LRP DRWN DAV
PROJ MGR SHG CH ARCHITECT YLM
EFD RVD PROJ FP CBB
BR MGR DCA DES DIR KD
APPROVED DATE
ACTIVITY SATISFACTORY TO
APPROVED DATE
FOR EFD FOR COMMANDER NAVFAC

SIZE F | CODE IDENT NO 80091 | NAVFAC DRAWING NO 4157770
CONSTR CONTR NO N62470-85-B-5142
SCALE NOTED | SPEC 05-85-5306 | SHEET 48 OF 68



		FUNCTION	AHU-1	AHU-2	BLR-1	C-1
EQUIP. ON/OFF	TIME SCHEDULE OPERATION	1	•	•		•
	DEMAND LIMITING - START STOP	3	•	•		
	DEMAND LIMITING - CHILLED WATER RESET	5				•
EQUIP. OPTIMIZATION	WARM UP / NIGHT CYCLE	7	•	•		
	TEMP. RESET - CHILLED WATER RESET	12				•
	O.A. SCHEDULE RESET	14			•	
	START/STOP OPTIMIZATION	16				•
MONITORING	MAINT. RUN TIME REPORTS	23	•	•	•	•
	TROUBLE DIAGNOSTICS	24	•	•	•	•
	METERING	28			•	•

EMCS

RECORD DRAWING LETTER DATED JAN 31 1991

M - 8

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NAVAL STATION NORFOLK, VA.
NAVAL HOSPITAL CAMP LEJEUNE, N.C.

BACHELOR ENLISTED QUARTERS

CONTROLS

EFD DWG NO 257771
JOB ORDER NO 5F5306
STA PROJ NO P-721
DES LRP DRWN DAV
PROJ MGR SMG CH ARCH/ENGR YLM
EFD RVD F P
BR MGR DES DIR KD
APPROVED DATE
ACTIVITY - SATISFACTORY TO
APPROVED DATE 3-30-87
FOR EFD FOR COMMANDER NAVFAC

SIZE F | CODE IDENT. NO 80091 | NAVFAC DRAWING NO. 4157771
CONSTR CONTR NO N62470-85-B-5142
SCALE NOTED | SPEC 05-85-5306 | SHEET 49 OF 68

REVISIONS			
SYM	DESCRIPTION	BY	APPROVED

560 CFM

AIR HANDLING UNIT SCHEDULE

MARK	CFM TOTAL	CFM O.A.	E.S.P.* (IN. W.G.)	MAX. H.P.	VOLTS/PH.	NEMA STARTER	COOLING COIL PERFORMANCE TOTAL (BTUH)	SENS. (BTUH)	EAT (°FDB)	EAT (°FWB)	LAT (°FDB)	LAT (°FWB)	GPM	APD (IN. H_2O)	WPD (FT. H_2O)	HEATING PERFORMANCE BTUH	EAT (°FDB)	LAT (°FDB)	GPM	PD (FT. H_2O)	VALVE	LOCATION ROOM	REMARKS
AHU-1	3825	220	1.85	5	208/3	INTEGRAL	143,000	103,740	79.9	66.8	54.8	54.6	35.8	0.72	0.6	128,200	64	95	26.6	0.6	V-5	ROOF	INLET VANES
AHU-2	2870	240	1.75	5	208/3	INTEGRAL	105,000	78,200	79.9	66.5	54.8	54.6	26.8	0.48	0.8	96,000	64	95	19.9	0.8	V-6	ROOF	INLET VANES

* E.S.P. DOES NOT INCLUDE COIL APD
* E.W.T. FOR BOTH UNITS IS 45°F

FAN COIL UNIT SCHEDULE

MARK	COOLING TOTAL BTUH	SENS BTUH	GPM	EWT	EAT ①	WPD ②	HEATING MBH	EAT	EWT	③ CFM	APD	MOTOR
FCU-1	12,400	8,800	3.1	45°F	80/67	5.5	9.4	68°F	180°F	350	0.20	325 W
FCU-2	30,000	17,700	8.4	45°F	84/72	14.5	27.0	68°F	180°F	625	0.20	405 W

① DEDB/DEWB
② FT H_2O
③ "WET COIL" CFM

FIN TUBE RADIATION SCHEDULE

MARK	LOAD	BTUH/LF	LENGTH	GPM	EWT	EAT	
RAD-1	1440	720	2'	2.6	180	68	SLOPED TOP ENCLOSURE
RAD-2	1960	980	2'	2.6	180	45	↓
RAD-3	2205	980	2.25'	2.6	180	45	↓

BOILER SCHEDULE

MARK	LOAD BTUH	EWT	LWT	GPM	GPH *	MIN EFF
BLR-1	335,000	171°F	190°F	35.3	3.0	80%

* BASED ON #2 FUEL OIL

AIR COOLED CHILLER SCHEDULE

MARK	LOAD (BTUH)	EWT	LWT	GPM	WPD	MAX. POWER	VOLTS/PH. Hz	NEMA STARTER	STEPS UNLOADING (%)
C-1	304920	52.3°F	44°F	73.5	19 FT.	30 KW*	200/208/60	INTEGRAL	100/66/33

* MAXIMUM KW IS COMPRESSOR KW ONLY
* RATING BASED ON 95°F AMBIENT CONDITIONS

UNIT HEATER SCHEDULE

MARK	LOAD (BTUH)	CFM	EAT	EWT	LWT	GPM	WPD (FT. HD)	HP	RPM	VOLTS/PH.	LOCATION
UH-1	21,900	630	40°F	180°F	138°F	1.0	0.05	1/20	1550	120/1/60HZ	MECH. RM.
UH-2	37,000	800	68°F	180°F	153°F	2.75	1.05	1/7	1360	120/1/60HZ	LAUNDRY

1. UH-2 IS CEILING MOUNTED CABINET TYPE UNIT HEATER

2625

FAN SCHEDULE

MARK	CFM	ESP	MAX. HP.	MAX. RPM	VOLTS/PH.	TYPE	APPLICATION	NEMA STARTER	LOCATION	REMARKS
EF-1	105	0.125"	BOW	1200	120/1	CENTRIF.	EXHAUST	—	SLEEPING RMS.	CEILING TYPE
EF-2	485	0.25"	1/20	1400	120/1	IN-LINE		—	ROOM 136	W/INLET GUARD
EF-3	300	0.25"	1/12	1140	120/1	CENTRIF.		—	ROOF TOP	
EF-4	600	0.125"	1/12	845	120/1			—	↓	W/SPEED CONTROL
EF-5	225	0.25"	1/12	1750	120/1			—		
EF-6	150	0.10"	100 W	1550	120/1			—	ROOM 231	CEILING TYPE
EF-7	320	0.20"	1/12	1140	120/1	↓	↓	—	ROOF TOP	

NOTE: ALL FANS TO BE PROVIDED WITH BACKDRAFT DAMPERS

PUMP SCHEDULE

MARK	GPM	HEAD (FT. H_2O)	MAX. HP.	VOLTS/PH.	RPM	SERVICE	NEMA STARTER	TYPE	REMARKS
P-9	73.5	50	2.0	208/3	1750	CHILLED WTR	O	BASE MOUNTED	—
P-10	73.5	35	1.5	208/3	1750	PRIMARY	OO	BASE MOUNTED	—
P-11	6	10	1/12	120/1	1750	HWR	—	IN-LINE	—
P-12	50	5	1/3	120/1	—	SUMP	—	SUBMERSIBLE	AUTO FLOAT
P-13	35.5	15	1/4	120/1	1750	BOILER	—	IN-LINE	—

FPVAV SCHEDULE

ROOM #	PRIMARY AIR	INLET S.P.	ROOM #	PRIMARY AIR	INLET S.P.
100	185	.30	200	185	.31
101	140	.18	201	155	.21
102	165	.25	202	170	.26
103	105	.10	203	115	.12
104	165	.26	204	170	.26
105	105	.10	205	115	.12
106	160	.23	206	165	.25
107	105	.10	207	115	.12
108	160	.23	208	165	.02
109	100	.09	209	115	.11
110	160	.23	210	165	.02
111	100	.09	211	110	.11
112	160	.22	212	160	.24
113	100	.09	213	110	.11
114	155	.22	214	160	.23
115	105	.10	215	120	.13
116	155	.22	216	160	.23
117	105	.10	217	120	.13
118	160	.23	218	150	.02
119	100	.09	219	110	.11
120	160	.23	220	165	.02
121	100	.09	221	110	.11
122	165	.02	222	165	.25
123	105	.10	223	115	.12
124	165	.24	224	170	.26
125	105	.10	225	115	.12
126	175	.27	226	180	.16
127	120	.13	227	135	.16

NOTES: (1) ALL FPVAV BOXES SHALL BE PROVIDED WITH FACTORY MOUNTED THROW AWAY FILTERS.
(2) PROVIDE INTEGRAL DISCONNECT SWITCH ON ALL UNITS.
(3) ALL FPVAV FANS SHALL BE 120V/1Ø/60HZ. MAXIMUM 1/10 HP. AND CAPABLE OF 240 CFM AT 0.1" E.S.P.

REGISTER & GRILLE SCHEDULE

MARK	CFM	NECK SIZE	MAX S.P. IN WG	APPLICATION	OPPOSED DAMPER BLADE	REMARKS
1	240	12x6	0.10	FPVAV SUP	YES	SIDEWALL
2	220	9x9	0.05	SUPPLY AIR	YES	2-WAY THROW
3	130	6x9	0.05	SUPPLY AIR	YES	3-WAY THROW
A	290	12x12	0.03	RETURN AIR	NO	
B	60	6x6	0.03	O.A. INTAKE	YES	IN BREEZEWAY
6	400	12x12	0.05	SUPPLY AIR	YES	2-WAY THROW
7	225	9x9	0.05	SUPPLY AIR	YES	3-WAY THROW
A	305	12x12	0.03	RETURN AIR	NO	
B	320	12x10	0.05	O.A. INTAKE	YES	IN BREEZEWAY
D	165	10x8	0.05	EXHAUST	YES	
1	60	6x6	0.03		YES	
6	600	12x12	0.08		YES	EGG CRATE STYLE
3	300	10x8	0.10		NO	EGG CRATE STYLE
4	320	12x10	0.05	↓	YES	

CONTROL VALVE SCHEDULE

MARK	UNIT SERVED	SERVICE	TYPE	ACTION	CAPACITY GPM	LOCATION	MIN CV	MAX ΔP	NOM SIZE	REMARKS
V-1	C-1	CWS/R	3-WAY	MODULATING	73.5	RM. 136	40	7.7'	2"	MIXING
V-2	C-1	CWS/R	2-WAY	2-POSITION	73.5	RM. 136	40	7.7'	2"	
V-3	BLR-1	HWS	3-WAY	MODULATING	35.3	RM. 136	25	4.6'	1½"	MIXING
V-4	—	HWS/R	2-WAY	2-POSITION	18.8	RM. 136	16	3.2'	1½"	
V-5	AHU-1	CWS/R	3-WAY	MODULATING	35.8	ROOF TOP	16	11.5'	1½"	DIVERTING
V-6	AHU-2	CHWS/R	3-WAY	MODULATING	26.8	ROOF TOP	16	6.5'	1½"	DIVERTING
V-7	FCU-1	CHWS/R	3-WAY	MODULATING	3.1	RM. 129	1.5	10'	½"	DIVERTING
V-8	FCU-2	CHWS/R	3-WAY	MODULATING	8.4	RM. 228	4	10.2'	½"	DIVERTING
V-9	UH-2	HWS/R	3-WAY	2-POSITION	2.75	RMS. 137/232	6.3	0.45'	¾"	DIVERTING
V-10	UH-1	HWS/R	2-WAY	2-POSITION	1.0	RM. 136	1.5	1.0'	½"	

FAN POWERED VARIABLE AIR VOLUME UNIT CONTROL
A WALL-MOUNTED "ON-OFF" SWITCH SHALL BE PROVIDED WITH EACH FPVAV UNIT. WHEN THE CENTRAL AHU FAN IS ENERGIZED AND THE FPVAV ON-OFF SWITCH IS IN THE "ON" POSITION, THE FPVAV FAN SHALL RUN CONTINUOUSLY AND THE FPVAV PNEUMATIC CONTROLS SUPPLIED WITH CONTROL AIR. WHEN THE FPVAV SWITCH IS IN THE "OFF" POSITION, OR IF THE CENTRAL AHU FAN IS DE-ENERGIZED THE FPVAV FAN SHALL DE-ENERGIZE AND THE FPVAV PNEUMATIC CONTROLS SHALL BE SHUT-OFF FROM CONTROL AIR, THUS CLOSING THE PRIMARY AIR DAMPER TO ITS NORMAL POSITION: CLOSED TO THE PRIMARY AIR DUCT. WITH THE CENTRAL AHU AND RESPECTIVE FPVAV FANS ENERGIZED, THE SPACE TEMPERATURE SHALL BE CONTROLLED BY A RETURN AIR HEATING/COOLING THERMOSTAT WITH SETPOINTS AS INDICATED. WHEN THE CENTRAL CHANGE-OVER SWITCH IS SET FOR THE "HEAT" MODE, THE RETURN AIR THERMOSTAT SHALL BE INDEXED FOR HEATING. ON A RISE IN ROOM RETURN AIR TEMPERATURE, THE THERMOSTAT SHALL MODULATE THE FPVAV PRIMARY AIR DAMPER (OR VALVE) CLOSED TO THE PRIMARY AIR DUCT. ON A FALL IN ROOM RETURN AIR TEMPERATURE, THE REVERSE SHALL OCCUR. WHEN THE CENTRAL CHANGEOVER SWITCH IS SET FOR THE "COOL" MODE, THE RETURN AIR THERMOSTAT SHALL BE INDEXED FOR COOLING. ON A RISE IN ROOM RETURN AIR TEMPERATURE, THE THERMOSTAT SHALL MODULATE THE FPVAV PRIMARY AIR DAMPER (OR VALVE) OPEN TO THE PRIMARY AIR DUCT TO ITS MAXIMUM INDICATED SETTING. DURING BOTH HEATING AND COOLING MODES, THE FPVAVS PRIMARY AIR INLET HIGH AND LOW PRESSURE FLOW SENSORS SHALL SEND PNEUMATIC SIGNALS TO THE PNEUMATIC VOLUME REGULATORS TO ALTER THE ROOM RETURN AIR THERMOSTAT SIGNAL FOR REPOSITIONING THE FPVAV PRIMARY AIR DAMPER (OR VALVE) TO COMPENSATE FOR UPSTREAM STATIC PRESSURE FLUCTUATIONS. THE PNEUMATIC VOLUME REGULATORS SHALL FURTHER BE FACTORY SET TO THE INDICATED (MAXIMUM) PRIMARY AIR CFM'S.

RADIATOR CONTROL
RADIATORS SHALL BE CONTROLLED BY SELF-CONTAINED MODULATING RADIATOR VALVE. ON A DROP IN TEMPERATURE BELOW THE SETPOINT THE VALVE SHALL OPEN. ON A RISE IN TEMPERATURE THE REVERSE SHALL OCCUR.

EXHAUST FAN EF-1 CONTROL
THE TOILET EXHAUST FAN EF-1 SHALL BE CONTROLLED BY THE TOILET LIGHT SWITCH. WHEN THE LIGHT SWITCH IS TURNED ON THE FAN SHALL BE ENERGIZED.

EXHAUST FANS EF-2, EF-3, EF-4, EF-6 CONTROL
EXHAUST FANS EF-2, EF-3, EF-4, & EF-6 SHALL BE CONTROLLED BY A "HAND-OFF-AUTO" SWITCH. IN THE "HAND" POSITION THE FANS SHALL RUN CONTINUOUSLY. IN THE "AUTO" POSITION, ON A RISE IN TEMPERATURE ABOVE THE SET POINT THE FAN SHALL ENERGIZE. ON A FALL IN TEMPERATURE THE REVERSE SHALL OCCUR.

EXHAUST FANS EF-5, EF-7 CONTROL
EXHAUST FANS EF-5, AND EF-7 SHALL BE CONTROLLED BY AN "ON-OFF" SWITCH. IN THE "ON" POSITION THE FAN SHALL BE ENERGIZED BY RELAY ACTION THROUGH A P.E SWITCH IN THE FAN COIL CONTROLS. OPERATION SHALL BE VERIFIED BY A PANEL MOUNTED PILOT LIGHT.

FAN COIL UNIT FCU-1 & FCU-2 CONTROL
EACH FAN COIL UNIT SHALL BE INDIVIDUALLY ENERGIZED BY "ON-OFF" SWITCH LOCATED IN ROOM 129. WITH THE SWITCH IN THE "ON" POSITION, THE FCU SHALL RUN CONTINUOUSLY. THROUGH EP-FCU, CONTROL AIR SHALL BE DELIVERED TO THE FCU PNEUMATIC CONTROL COMPONENTS AND TO THE OUTSIDE AIR DAMPER, THUS ACTIVATING THE AHU CONTROLS AND OPENING THE OUTSIDE AIR DAMPER. THE ROOM AIR TEMPERATURE SHALL BE CONTROLLED BY SINGLE INPUT RECEIVER CONTROLLER IN BOTH THE "HEAT" AND "COOL" MODES. A COMMON THERMOSTAT SHALL BE USED FOR BOTH CONTROLLERS ON EACH FCU. THE RECEIVER-CONTROLLERS SHALL MODULATE THE DUAL TEMPERATURE COIL CONTROL VALVE TO MAINTAIN ROOM CONDITIONS. FCU-2 SHALL BE PROVIDED WITH A FREEZESTAT, LOCATED IN THE MIXED RETURN AIR. SHOULD THE RETURN AIR TEMPERATURE FALL BELOW IT'S SETPOINT, THE FCU, ASSOCIATED CONTROL AIR SUPPLY, AND THE ASSOCIATED EXHAUST FAN SHALL SHUT DOWN. FAN OPERATION SHALL BE VERIFIED BY A PILOT LIGHT MOUNTED WITH THE "ON-OFF" SWITCH AND CHANGE OVER RELAY.

UNIT HEATER CONTROL
SPACE THERMOSTATS SHALL CONTROL UH OPERATION. ON A DROP IN ROOM TEMPERATURE BELOW THE SETPOINT THE FAN MOTOR SHALL BE ENERGIZED THROUGH A PE SWITCH AND THE CONTROL VALVE SHALL OPEN TO THE COIL. ON A RISE IN TEMPERATURE THE REVERSE SHALL OCCUR.

RECORD DRAWING
LETTER DATED JUN 11 1985

M - 9

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NAVAL STATION — NORFOLK, VA.
NAVAL HOSPITAL — CAMP LEJEUNE, N.C.

BACHELOR ENLISTED QUARTERS

MECHANICAL SCHEDULES

SIZE F — CODE IDENT NO 80091 — NAVFAC DRAWING NO 4157772
CONTR CONTR NO N62470-85-B-5142
SCALE NOTED — SPEC 05-85-5306 — SHEET 50 of 68

ESC DWG NO 257772
JOB ORDER NO SF5306
STA PROJ NO P-721
DES LRP — DRWN DAV
PROJ MGR SMG — CHIEF ENGR YLM
EFD PWD JARCALA / P. ELDRIDGE
BR MGR JCD — DES CH JCD
APPROVED — DATE
ACTIVITY SATISFACTORY TO
CO/OIC — DATE 5-20-87
FOR CO/OIC FOR CHARGE OF WORK

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED

LEGEND

SYMBOL	DESCRIPTION
	FLUORESCENT LIGHTING FIXTURE
	FLUORESCENT LIGHTING FIXTURE W/EMERGENCY LIGHTING BATTERY PACK
	INCANDESCENT OR HIGH INTENSITY DISCHARGE LIGHTING FIXTURE-CEILING MOUNTED
	INCANDESCENT OR HIGH INTENSITY DISCHARGE LIGHTING FIXTURE-WALL MOUNTED
	EXIT LIGHTING FIXTURE CEILING MOUNTED
	DIRECTIONAL ARROW WHEN USED
A	LIGHTING FIXTURE TYPE SYMBOL. SEE LIGHTING FIXTURE SCHEDULE ON THIS SHEET
	DUPLEX CONVENIENCE RECEPTACLE, 125 VAC., 20 A. MOUNT 18" A.F.F. U.O.N.
	GROUND FAULT INTERRUPTER FEED THRU TYPE RECEPTACLE, 125 VAC., 20 A. MOUNT 48" A.F.F. U.O.N.
C	CLOCK OUTLET, 125 VAC., 15 A. MOUNT 7'-0" A.F.F.
	DRYER RECEPTACLE-NEMA 14-30, 240 VAC., 30 A. MOUNT 36" A.F.F.
$\$^{a}$	SINGLE POLE TOGGLE SWITCH, 120/277 VAC.,20A.MOUNT 46" A.F.F. LOWER CASE SUBSCRIPT WHEN USED, INDICATES FIXTURE CONTROLLED.
$\$^{3}$	THREE-WAY TOGGLE SWITCH, 120/277 VAC.,20 A.,MOUNT 46" A.F.F.
E	ELECTRICAL EQUIPMENT CONNECTION.
	ELECTRICAL PANELBOARD-SURFACE MOUNTED
	ELECTRICAL PANELBOARD-FLUSH MOUNTED
	BRANCH CIRCUIT IN CONDUIT, LOCATED IN WALL, CEILING, FLOOR OR ABOVE DROP CEILING. TICK MARKS INDICATE NUMBER OF CONDUCTORS IF OTHER THAN 2 #12 & 1 #12 GROUND. (G) INDICATES GROUND
E1-1,3,5	HOMERUNS TO PANEL. PANEL CIRCUIT DESIGNATIONS INDICATED
J	JUNCTION BOX
M 1/2	MOTOR CONNECTION-HP INDICATED
	MAGNETIC MOTOR CONTROLLER
	DISCONNECT SWITCH, 240 VAC., 30 A., 3-P., IN A NEMA 1 ENCLOSURE U.O.N.
▲	TELEPHONE OUTLET W/BLANK COVER PLATE (IN SLEEPING ROOMS). 1/2"C.WITH BUSHING STUBBED INTO PIPE CHASE.MT.OUTLET 18" A.F.F.
▲W	WALL TELEPONE OUTLET W/BLANK COVER PLATE. MT. 60" A.F.F.
▲A	TELEPHONE OUTLET (ADMIN OR OFFICE AREAS) MT. 18" A.F.F. U.O.N.
	HIGH INTENSITY DISCHARGE LIGHTING FIXTURE RECESSED CEILING MOUNTED
FACP	FIRE ALARM CONTROL PANEL- MTG. 4'-0" A.F.F.
S	SINGLE-STATION,RESIDENTIAL-TYPE SMOKE DETECTOR HARD-WIRED TO UNSWITCHED LEG OF ADJACENT 120 VAC. LIGHTING CIRCUIT
	FIRE ALARM HORN- MOUNT 6" BELOW CEILING
RFAT	RADIO FIRE ALARM TRANSMITTER- MOUNT BELOW FACP
F	FIRE ALARM MANUAL STATION-MOUNT 46" A.F.F.
TV	CATV SYSTEM OUTLET-MOUNT 18" A.F.F.
I	INTERCOM SYSTEM REMOTE STATION FLUSH MT. IN WALL 7'-0" A.F.F.
P	PHOTOCELL SWITCH
H	FIXED TEMP./ RATE-OF-RISE HEAT DETECTOR- CEILING MTG.
HF	FIXED TEMP. HEAT DETECTOR- CEILING MTG.
D	DUCT MOUNTED SMOKE DETECTOR
S_M	MANUAL MOTOR STARTER WITH OVERLOAD
SD	DUCT SMOKE DETECTOR

ABBREVIATIONS

C. -------- CONDUIT
EWC ------- ELECTRIC WATER COOLER
EXIST ------EXISTING
GND. -------- GROUND
GFI --------GROUND FAULT INTERRUPTER
MHT. -------MOUNTING HEIGHT
MT. --------MOUNT
PNL -------- PANEL
U.O.N.------ UNLESS OTHERWISE NOTED
WP -------- WEATHERPROOF
A.F.F.-------ABOVE FINISHED FLOOR
A.F.G.-------ABOVE FINISHED GRADE
CATV -------COMMUNITY ANTENNA TELEVISION (CABLE TV)
REQ'D ------REQUIRED
FPVAV ------ FAN POWERED VARIABLE AIR VOLUME
LWRS ------ LITE WHITE, RAPID START

NOTES AND CIRCUIT DESIGNATOR INFORMATION

1. --- CIRCUITS FOR INDIVIDUAL UNITS ARE LISTED ON THE FLOOR PLANS (SHEETS E-2 AND E-3) AS FOLLOWS:

HOMERUN DESIGNATOR AS SHOWN ON ENGARGED PLANS: SHT. E-6

A = W2-1

PANEL DESIGNATION

CIRCUIT NO.

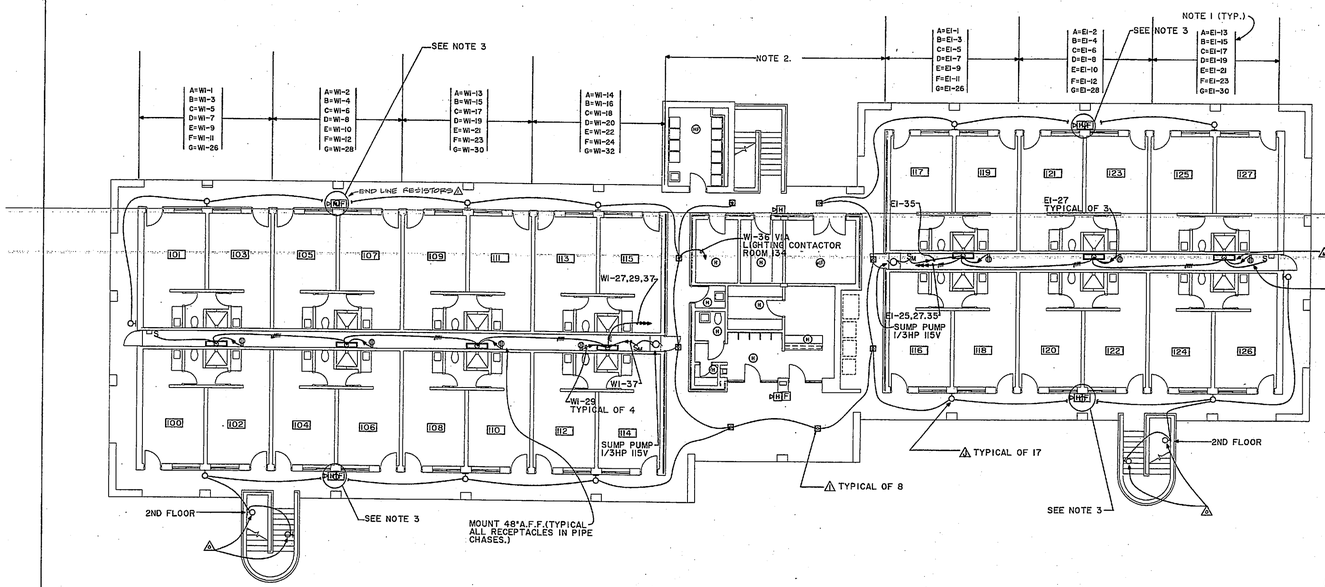
LIGHTING FIXTURE SCHEDULE

FIXTURE SYMBOL	LANTDIV PLATE NO. & TYPE SEE DETAIL ON SHEETS E-13 & E-14.	NUMBER AND TYPE OF LAMPS	VOLT	MOUNTING	REMARKS
A	NL-14	2-F34T12 LWRS	120	SURFACE CEILING	PROVIDE 2 LAMP FIXTURE
A	NL-1 TYPE A	2-F34T12 LWRS	120	SURFACE CEILING	
A	NL-7 TYPE A	1-F34T12 LWRS	120	SURFACE CEILING	
A	NL-4 TYPE B	2-F30T12 LWRS	120	WALL MT. CENTER OVER MIRROR	
A	NL-6 TYPE A	2-F34T12 LWRS	120	SURFACE CEILING	
A	NL-46 TYPE C	1-22W CIRCLINE	120	SURFACE CEILING	POLYCARBONATE LENS
A	PORCELAIN SOCKET	1-60 W INC	120	SURFACE CEILING U.O.N.	
A	NL-8	2-F34T12 LWRS	120	SURFACE CEILING	
A	SEE DETAIL SHEET E-14	1-70 WATT HPS	120	RECESSED CEILING	
A	NL-26 TYPE B	1-18 WATT LPS	120	WALL MT 7' A.F.F.	
A	SEE DETAIL SHEET E-13	1-75W INC	120	RECESSED CEILING	SUITABLE FOR DAMP LOCATIONS
A	XL-1,XL-23D,XL-31C	1-150W HPS	208	POLE 30' AFG	IES TYPE III CUTOFF
A	NL-7 TYPE B	2-F34T12 LWRS	120	WALL MT 7'AFF	
A	NL-48 TYPE B	2-20 T6 1/2	120	SURFACE CEILING	SELF POWERED BATTERY TYPE
A	SEE DETAIL SHEET E-14	70W HPS	120	RECESSED WALL 2' ABOVE STAIRS	
A	XL-10,XL-22A	1-150W HPS	208	POLE 10' AFG	BUFF, NATURAL POLISHED, AGGREGATE FINISH POLE
A	NL-25 D	1-70W HPS	120	WALL MT 16'AFG U.O.N.	

		E-1
	DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND NAVAL STATION ATLANTIC DIVISION NORFOLK, VIRGINIA	
STD DWG. NO. 257773	NAVAL HOSPITAL CAMP LEJEUNE, N.C.	
JOB ORDER NO. 5F5306	BACHELOR ENLISTED QUARTERS	
STA. PREPARED D-721		
DES. REF. CHKD. LDS	LEGEND & FIXTURE SCHEDULE	
FIELD VER. MCO CHLADKOVSKA Y.L.M		
STA.ENG. ATCO F.P. CLOUGH		
SR.ARCH. DK DRAWN MT		
APPROVED DATE		
ACTIVITY-SATISFACTORY TO APPROVED DATE	SIZE F	CODE IDENT.NO. 80091
FOR SYS. ENG. COORDINATION/CLEARANCE	NAVFAC DRAWING NO. 4157773	
	CONTRL. GENER. NO. N62470-85-B-5142	
	SCALE AS NOTED DATE 03-85-5306	SHEET 51 OF 68

X6

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED
1	REVISED AS-BUILT	10-1-91	RSS

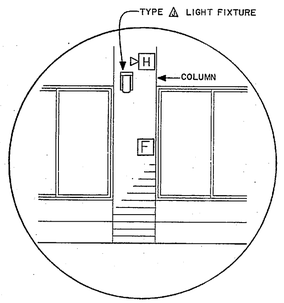


FIRST FLOOR ELECTRICAL PLAN

SCALE 1/8"=1'-0"

NOTES

1. SEE SHEET E-6 FOR TYPICAL ENLARGED ROOM PLANS. LETTER INDICATES CIRCUIT NUMBERS FOR BLOCK OF FOUR ROOMS
2. SEE SHEET E-4 AND E-5 FOR ENLARGED PLAN OF CENTRAL CORE.
3. SEE ELEVATION DETAIL THIS SHEET FOR EQUIPMENT ARRANGEMENT.



ELEVATION DETAIL

TYPICAL 4 LOCATIONS N.T.S.

GRAPHIC SCALE

1/8" = 1'-0" 5' 0 5' 10' 15' 20' 25'

AS BUILT DRAWING

E-2

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NAVAL STATION NORFOLK, VIRGINIA
NAVAL HOSPITAL CAMP LEJEUNE, N.C.

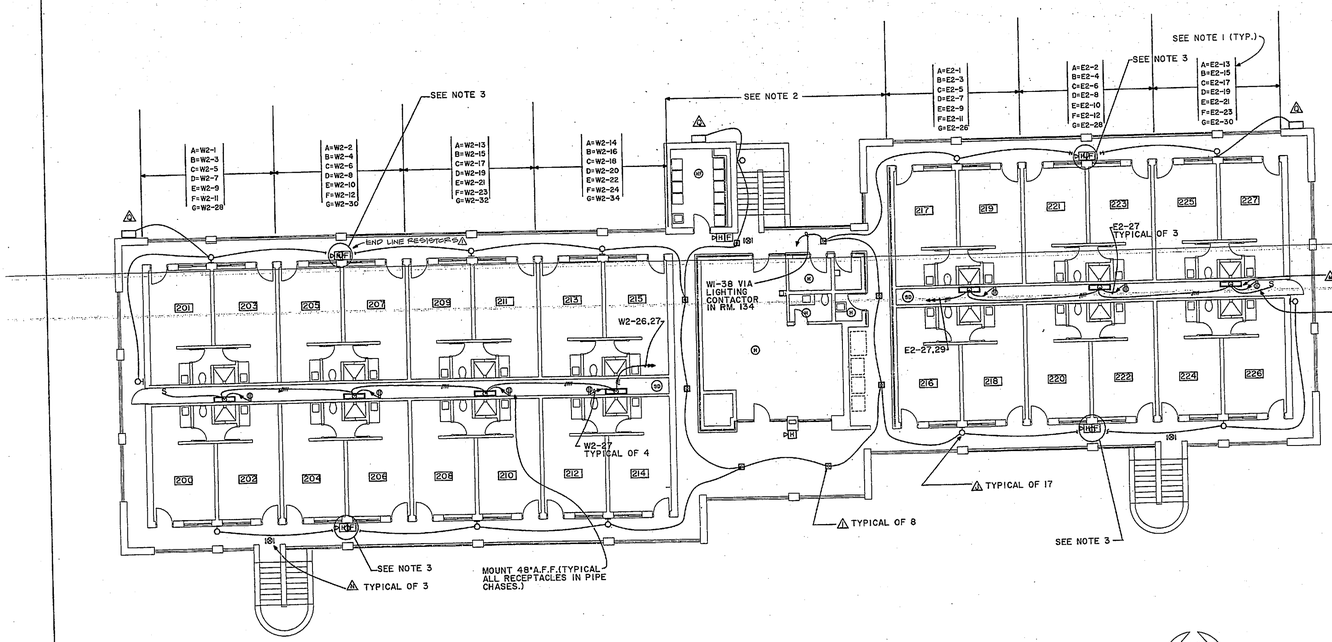
BACHELOR ENLISTED QUARTERS

FIRST FLOOR ELECTRICAL PLAN

EFD ENG. NO. 257774	
JOB ORDER NO. SP5306	
CDR. PRELIM. P-72	
DES. REF	DRW. LDS/JJC
FIELD SUR. MCD	CALCULATOR YLM
EFD RES. JJC	T.P. SCF
DRAFT. BAL	DESIGN. WCS
APPROVED	DATE
ACTIVITY-SATISFACTORY TO	
APPROVED WCS	DATE 2-26-91
FOR CDR FIRST COMMANDER NAVFAC	

SIZE F — CODE IDENT.NO. 80091 — NAVFAC DRAWING NO. 4157774
SCALE AS NOTED SPEC. 05-85-5306 — CONTR. CONTR. NO. N62470-85-B-5142 — SHEET 52 OF 68

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED
1	REVISED AS-BUILT	10-3-91	RSC

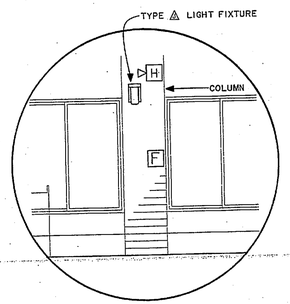


NOTES

1. SEE SHEET E-6 FOR TYPICAL ENLARGED ROOM PLANS. LETTER INDICATES CIRCUIT NUMBERS FOR BLOCK OF FOUR ROOMS
2. SEE SHEET E-4 AND E-5 FOR ENLARGED PLAN OF CENTRAL CORE.
3. SEE ELEVATION DETAIL THIS SHEET FOR EQUIPMENT ARRANGEMENT

SECOND FLOOR ELECTRICAL PLAN

SCALE 1/8=1'-0"



ELEVATION DETAIL

TYPICAL 4 LOCATIONS N.T.S.

GRAPHIC SCALE

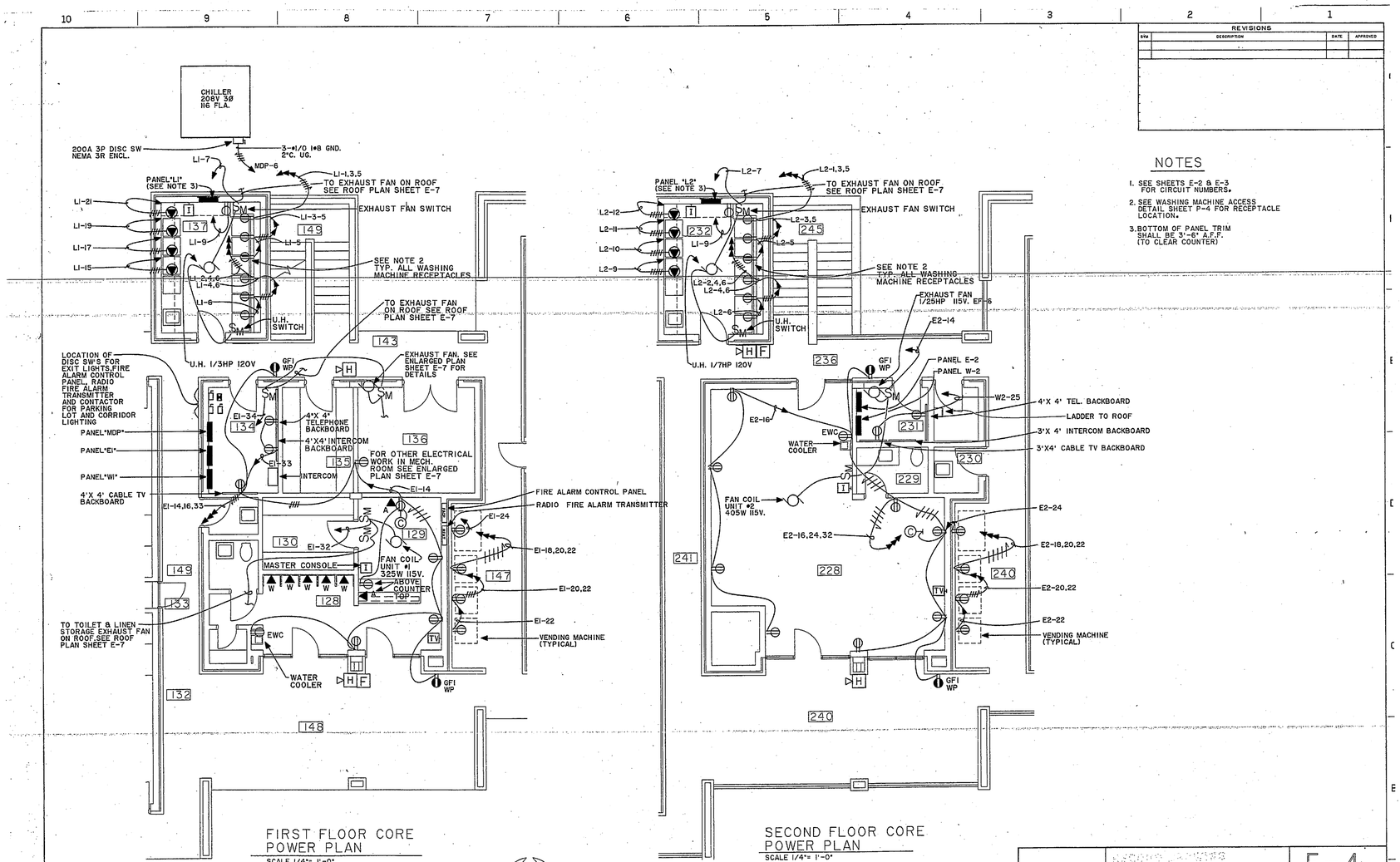
1/8" = 1'-0" 5' 0 5' 10' 15' 20' 25'

E-3

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION — NORFOLK, VIRGINIA
NAVAL STATION — NAVAL HOSPITAL — CAMP LEJEUNE, N.C.
BACHELOR ENLISTED QUARTERS
SECOND FLOOR PLAN,ELECTRICAL.

ENG DWG. NO.	257775
JOB INDEX NO.	5F5306
ENL PROJ. NO.	P-721
DES. REF.	DRAN. LDS/JJC
PRELI. NOR. MCD	CHARRCHKD. YLM
STD.NO. NFGS	F.P. JCD
SR.ARCH.	HELDR
APPROVED	DATE
ACTIVITY-SATISFACTORY TO	
APPROVED	DATE 1-20-93
FOR CEC FOB STRUCTURES USE ONLY	

SIZE F	CODE IDENT.NO. 80091	NAVFAC DRAWING NO. 4157775
		CONTR. CONTR. NO. N62470-85-B-5142
SCALE AS NOTED	SPEC. 05-85-5306	SHEET 53 OF 68



NOTES

1. SEE SHEETS E-2 & E-3 FOR CIRCUIT NUMBERS.
2. SEE WASHING MACHINE ACCESS DETAIL SHEET F-4 FOR RECEPTACLE LOCATION.
3. BOTTOM OF PANEL TRIM SHALL BE 3'-6" A.F.F. (TO CLEAR COUNTER)

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED

E-4

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NAVAL STATION NORFOLK, VIRGINIA

NAVAL HOSPITAL — CAMP LEJEUNE, N.C.

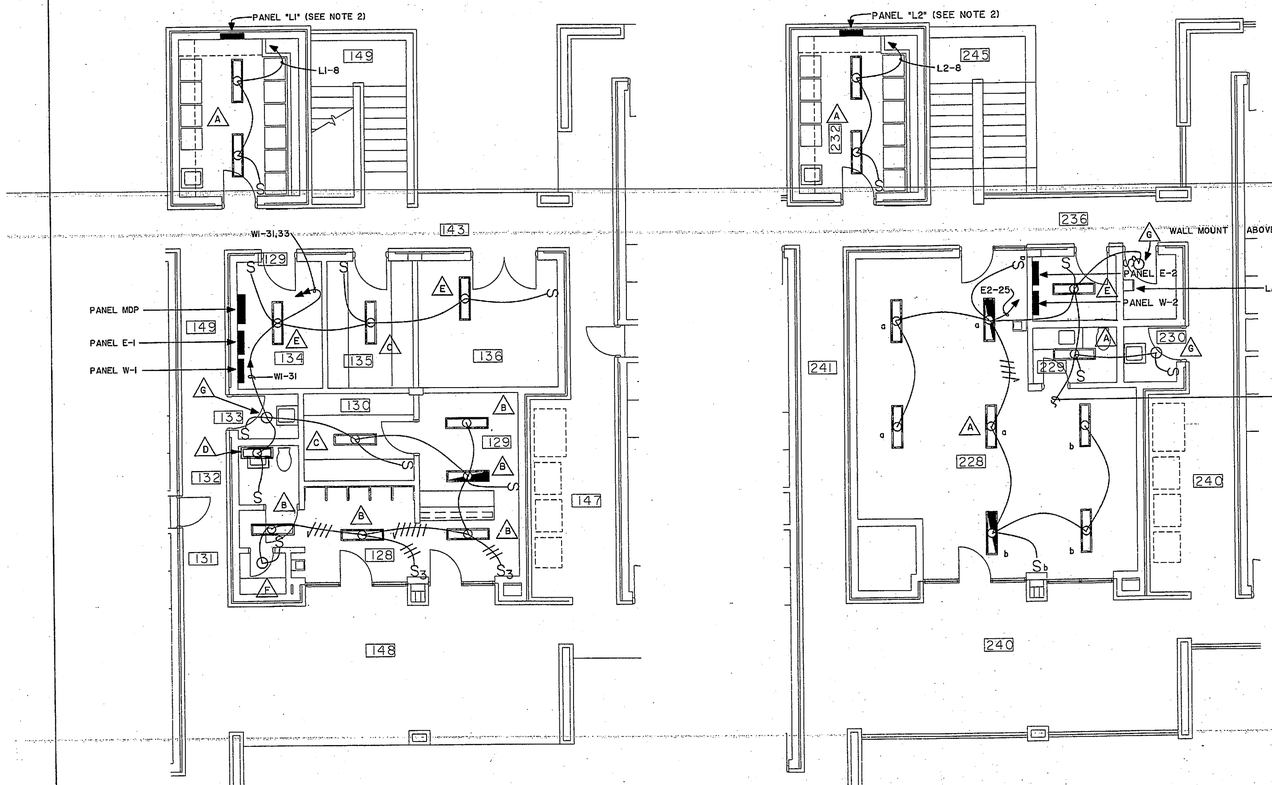
BACHELOR ENLISTED QUARTERS

1ST & 2ND FLOOR CORE POWER PLANS

DFS DWG. NO. 257776
JOB ORDER NO. 5F5306
EFA PROJ.NO. P-721
DES. REF. — DRN. LDS
TRES. WGL MCD — CHKD/VERIF. YLM
DFS RVW. INITIAL — FP. — DATE
BRANCH — DES.SUB. — DES.SUP.
APPROVED — DATE
ACTIVITY-SATISFACTORY TO
APPROVED — DATE
FOR AFD FOR PUBLICATION

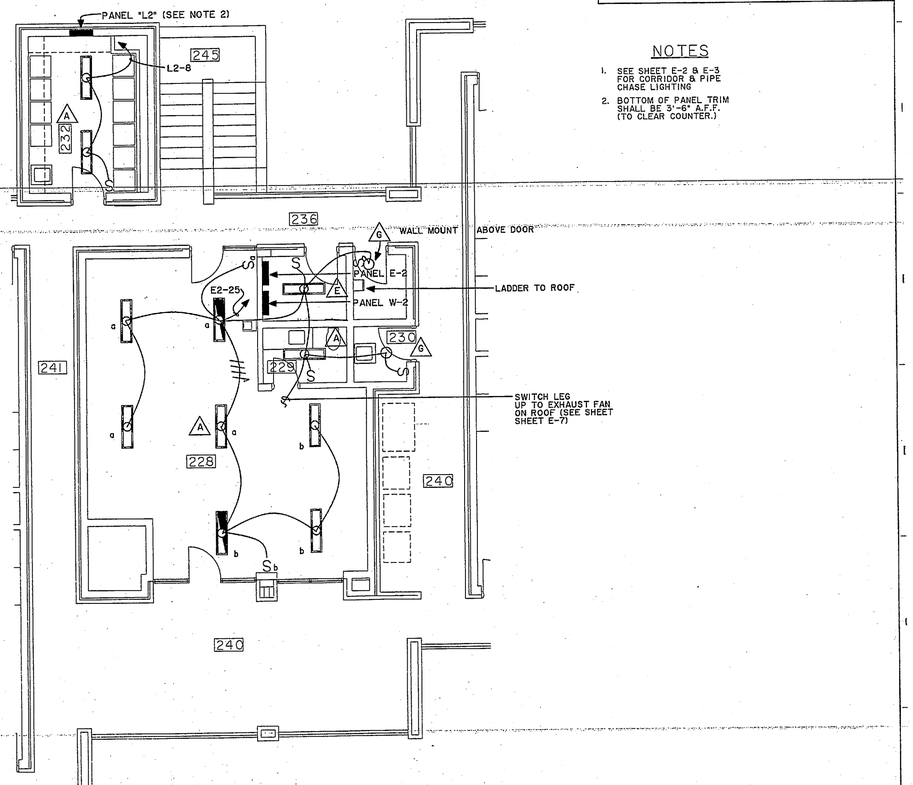
SIZE F — CODE IDENT.NO. 80091
NAVFAC DRAWING NO. 4157776
CONTR. TECHN. FILE NO. N62470-85-B-5142
SCALE AS NOTED — WUC 05-85-5306 — SHEET 54 OF 68

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED



FIRST FLOOR CORE LIGHTING PLAN

SCALE 1/4"= 1'-0"



SECOND FLOOR CORE LIGHTING PLAN

SCALE 1/4"= 1'-0"

NOTES

1. SEE SHEET E-2 & E-3 FOR CORRIDOR & PIPE CHASE LIGHTING
2. BOTTOM OF PANEL TRIM SHALL BE 3'-6" A.F.F. (TO CLEAR COUNTER.)

GRAPHIC SCALE

1/4" = 1'-0" 5' 0 5' 10'

E-5

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NAVAL STATION NORFOLK, VIRGINIA

NAVAL HOSPITAL — CAMP LEJEUNE, N.C.

BACHELOR ENLISTED QUARTERS

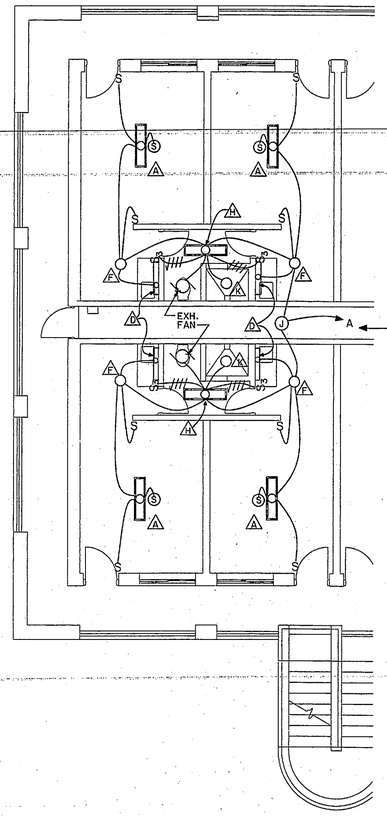
1ST & 2ND FLOOR CORE LIGHTING PLANS

LFD DWG. NO.	257777
JOB ORDER NO.	SP5306
STA. PROJ. NO.	P-721
DES.	REF
DRW.	LOS
PROJ. MGR.	MCD
CHAIRMAN, Y.L.M.	
CHIEF, ELEC.	
DRAWN	
CHECKED	
APPROVED	DATE

ACTIVITY - SATISFACTORY TO
NAVFAC
DEC 2 1985
FOR USE FOR CONSTRUCTION

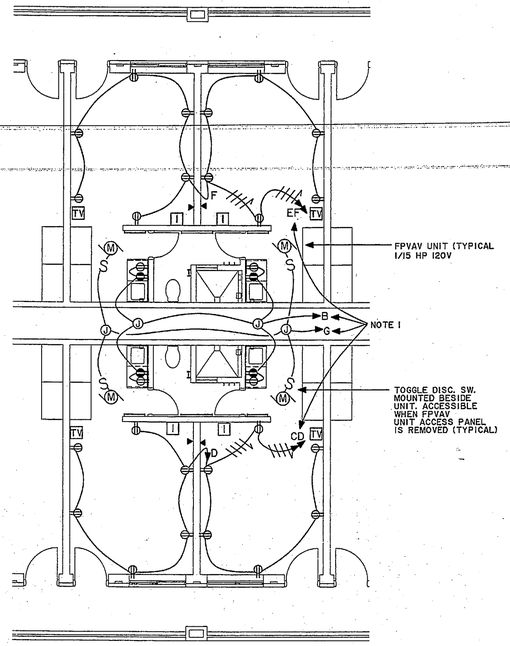
SIZE F — EFDC IDENTIFIC. 80091 — NAVFAC DRAWING NO. 4157777
CONTR. COMM. NO. N62470-85-B-5142
SCALE AS NOTED SPEC. 05-85-5306 SHEET 55 of 68

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED



TYPICAL ROOM UNIT LIGHTING PLAN

SCALE 1/4"=1'-0"



TYPICAL ROOM UNIT POWER PLAN

SCALE 1/4"=1'-0"

NORTH

NOTES

1. SEE SHEETS E-2 & E-3 FOR CIRCUIT NUMBERS.

GRAPHIC SCALE

1/4" = 1'-0" 5' 0 5' 10'

E-6

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND

ATLANTIC DIVISION

NAVAL STATION — NORFOLK, VIRGINIA

NAVAL HOSPITAL — CAMP LEJEUNE, N.C.

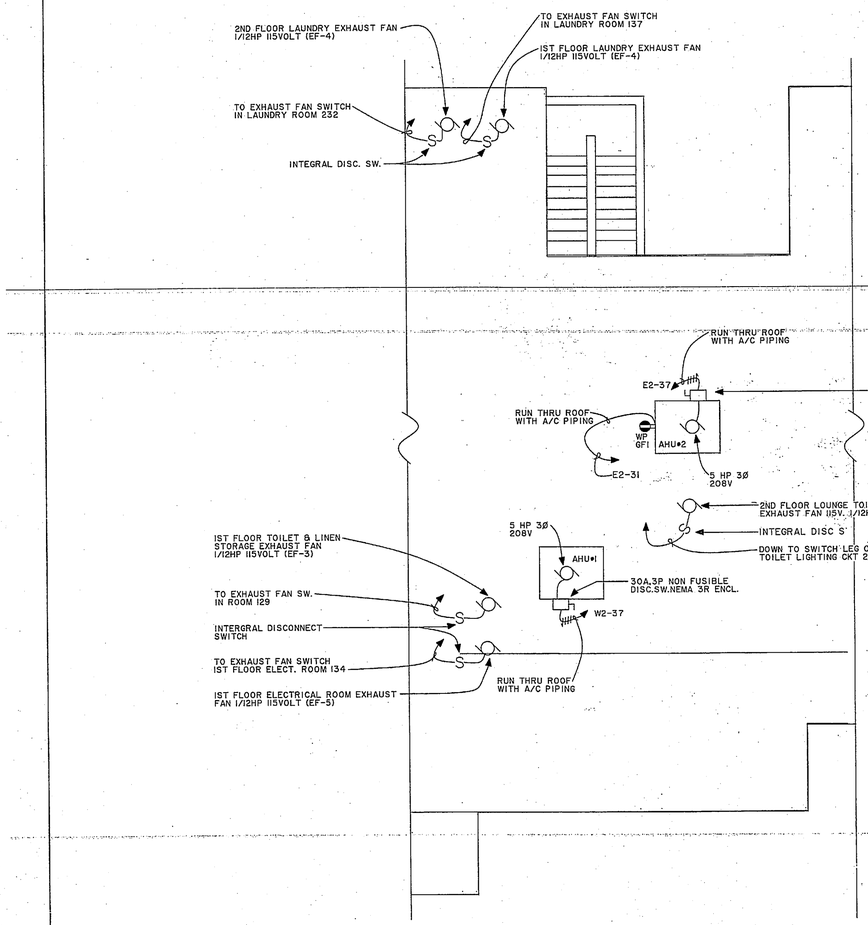
BACHELOR ENLISTED QUARTERS

TYPICAL ROOM ELECTRICAL PLANS

CTD ORIG. NO.	257778
JOB ORDER NO.	5F5306
CTL. PROJ.NO.	P-721
DES. REF.	CHKD. LDS
PROJ. MGR. MCD	CHARGEUPERS. YLM
CEN.PROJ. JOB NO.	D.P. GRD
CH.ARCH. PSA	DESIGN. KC
APPROVED	DATE
ACTIVITY-SATISFACTORY TO	
APPROVED KC	DATE 3/30/87
FOR F/O FOR CONSTRUCTION MASTER	

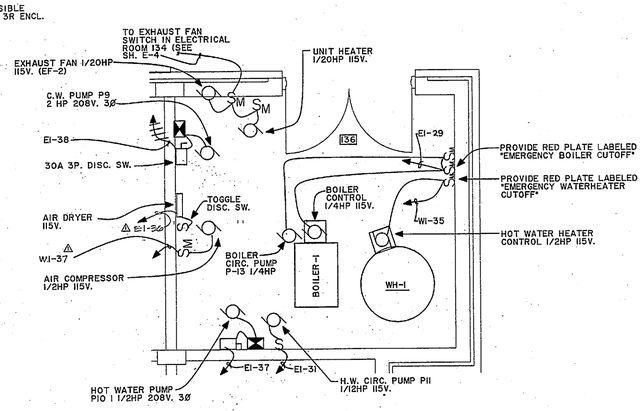
SIZE	CODE IDENT.NO.	NAVFAC DRAWING NO.
F	80091	4157778
		CONSTR. CONTR. NO. N62470-85-B-5142
SCALE AS NOTED	SPEC. 05-85-5142	SHEET 56 OF 68

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED
1	REVISED AS-BUILT	6-1-91	RSC



CORE ROOF PLAN

SCALE 1/4"=1'-0"



ENLARGED PLAN - MECHANICAL ROOM 136

SCALE 1/2"=1'-0"

NORTH

GRAPHIC SCALE

½" = 1'-0" 1' 0 1' 2' 3' 4' 5' 6' 7' 8'

¼" = 1'-0" 5' 0 5' 10'

AS BUILT DRAWING	E-7
DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND — ATLANTIC DIVISION — NORFOLK, VIRGINIA	
NAVAL STATION: NAVAL HOSPITAL — CAMP LEJEUNE, N.C.	
BACHELOR ENLISTED QUARTERS	
CORE ROOF & ENLARGED MECH.RM. PLANS	
EFD DWG. NO. 257779	
JOB ORDER NO. SF5306	
CTR. PREPARD. P-772	
CTR. REF.	CHKR. LDS
PROJ. MGR. MCD	CALCULATOR YLM
SPEC NO. (LATEST)	FA CODE
MAINT.	STE ENG
APPROVED	DATE
ACTIVITY-SATISFACTORY TO	
APPROVED (CO, FTF, OIC, ENGINEERING MANAGER)	DATE
SIZE F	CODE IDENT NO. 80091
NAVFAC DRAWING NO. 4157779	
CONTRACT NO. N62470-85-B-5142	
SCALE AS NOTED	SPEC. 05-85-5306 SHEET 57 OF 68

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED
1	REVISED AS-BUILT	10-1-91	PSG

PANELBOARD W1 SCHEDULE

225 A., MLO, 120/208 V., 3 PHASE, 4 WIRE, SURFACE MOUNT

LOAD SERVED	LOAD (AMPS.) A	B	C	CKT. BKR KAIC	TRIP	WIRE SIZE	CKT NO.	PHASE A	B	C	CKT NO.	WIRE SIZE	CKT. BKR KAIC	TRIP	LOAD (AMPS.) A	B	C	LOAD SERVED
LIGHTING RM 100-103	12.1			10	20	12	1				2	12	10	20	12.1			LIGHTING RM 104-107
GFI RECEPT RM 100-103		15.0		10	20	12	3				4	12	10	20		15.0		GFI RECEPT RM 104-107
RECEPT RM 102			9.0	10	20	12	5				6	12	10	20			9.0	RECEPT RM 106
RECEPT RM 100	9.0			10	20	12	7				8	12	10	20	9.0			RECEPT RM 104
RECEPT RM 103		9.0		10	20	12	9				10	12	10	20		9.0		RECEPT RM 107
RECEPT RM 101			9.0	10	20	12	11				12	12	10	20			9.0	RECEPT RM 105
LIGHTING RM 108-111	12.1			10	20	12	13				14	12	10	20	12.1			LIGHTING RM 112-115
GFI RECEPT RM 108-111		15.0		10	20	12	15				16	12	10	20		15.0		GFI RECEPT RM 112-115
RECEPT RM 110			9.0	10	20	12	17				18	12	10	20			9.0	RECEPT RM 114
RECEPT RM 108	9.0			10	20	12	19				20	12	10	20	9.0			RECEPT RM 112
RECEPT RM 111		9.0		10	20	12	21				22	12	10	20		9.0		RECEPT RM 115
RECEPT RM 109			9.0	10	20	12	23				24	12	10	20			9.0	RECEPT RM 113
SUMP PUMP RM. 131 △				10	20	—	25				26	12	10	20	4.4			FCU RM 100-103
LIGHTING PIPE CHASE 139		7.2		10	20	12	27				28	12	10	20		4.4		FCU RM 104-107
RECPT. PIPE CHASE 139			9.0	10	20	12	29				30	12	10	20			4.4	FCU RM 108-111
LIGHTING RM 128-133	10			10	20	12	31				32	12	10	20	4.4			FCU RM 112-115
LIGHTING RM 134-136		6		10	20	12	33				34	—	10	20				CONTROL CIRCUIT △
WATER HEATER			9.6	10	20	12	35				36	10	10	25			13.6	CORRIDOR LGT'S 1ST FL
	7.2			10	20	12	37				38	10	10	25	16.4			CORRIDOR LGT'S 2ND FL
AIR COMPRESSOR △		—	—	10	20		39				40	10	10	20		9	9	PARKING & STREET LGT'S

PANELBOARD W2 SCHEDULE

225 A., MAIN LUGS ONLY, 120/208 V., 3 PHASE, 4 WIRE, SURFACE MOUNT

LOAD SERVED	LOAD (AMPS.) A	B	C	CKT. BKR KAIC	TRIP	WIRE SIZE	CKT NO.	PHASE A	B	C	CKT NO.	WIRE SIZE	CKT. BKR KAIC	TRIP	LOAD (AMPS.) A	B	C	LOAD SERVED
LIGHTING RM 200-203	12.1			10	20	12	1				2	12	10	20	12.1			LIGHTING RM 204-207
GFI RECEPT RM 200-203		15.0		10	20	12	3				4	12	10	20		15.0		GFI RECEPT RM 204-207
RECEPT RM 202			9.0	10	20	12	5				6	12	10	20			9.0	RECEPT RM 206
RECEPT RM 200	9.0			10	20	12	7				8	12	10	20	9.0			RECEPT RM 204
RECEPT RM 203		9.0		10	20	12	9				10	12	10	20		9.0		RECEPT RM 207
RECEPT RM 201			9.0	10	20	12	11				12	12	10	20			9.0	RECEPT RM 205
LIGHTING RM 208-211	12.1			10	20	12	13				14	12	10	20	12.1			LIGHTING RM 212-215
GFI RECEPT RM 208-211		15.0		10	20	12	15				16	12	10	20		15.0		GFI RECEPT RM 212-215
RECEPT RM 210			9.0	10	20	12	17				18	12	10	20			9.0	RECEPT RM 214
RECEPT RM 208	9.0			10	20	12	19				20	12	10	20	9.0			RECEPT RM 212
RECEPT RM 211		9.0		10	20	12	21				22	12	10	20		9.0		RECEPT RM 215
RECEPT RM 209			9.0	10	20	12	23				24	12	10	20			9.0	RECEPT RM 213
RECEPT ELECT RM 231	4.5			10	20	12	25				26	12	10	20	7.2			LIGHTING PIPE CHASE 233
RECEPT PIPE CHASE 233		9.0		10	20	12	27				28	12	10	20		4.4		FCU RM 200-203
SPARE				10	20	—	29				30	12	10	20			4.4	FCU RM 204-207
SPARE				10	20	—	31				32	12	10	20	4.4			FCU RM 208-211
SPARE				10	20	—	33				34	12	10	20		4.4		FCU RM 212-215
SPARE				10	20	—	35				36	—	10	20				SPARE
	17																	
AHU#1 (ROOF)		17	17	10	35	10	37				38		10	20				SPARE

PANELBOARD E1 SCHEDULE

225 A., MAIN LUGS ONLY 120/208 V., 3 PHASE, 4 WIRE SURFACE MOUNT

LOAD SERVED	LOAD (AMPS.) A	B	C	CKT. BKR KAIC	TRIP	WIRE SIZE	CKT NO.	PHASE A	B	C	CKT NO.	WIRE SIZE	CKT. BKR KAIC	TRIP	LOAD (AMPS.) A	B	C	LOAD SERVED
LIGHTING RM 116-119	12.1			10	20	12	1				2	12	10	20	12.1			LIGHTING RM 120-123
GFI RECEPT RM 116-119		12.0		10	20	12	3				4	12	10	20		12.0		GFI RECEPT RM 120-123
RECEPT RM 118			9.0	10	20	12	5				6	12	10	20			9.0	RECEPT RM 122
RECEPT RM 116	9.0			10	20	12	7				8	12	10	20	9.0			RECEPT RM 120
RECEPT RM 119		9.0		10	20	12	9				10	12	10	20		9.0		RECEPT RM 123
RECEPT RM 117			9.0	10	20	12	11				12	12	10	20			9.0	RECEPT RM 121
LIGHTING RM 124-127	12.1			10	20	12	13				14	12	10	20	9.0			RECEPT RM 128,129
GFI RECEPT RM 124-127		12.0		10	20	12	15				16	12	10	20		7.5		RECEPT RM 134,135
RECEPT RM 126			9.0	10	20	12	17				18	12	10	20			12	RECEPT VEND MACH RM 147
RECEPT RM 124	9.0			10	20	12	19				20	12	10	20	12			RECEPT VEND MACH RM 147
RECEPT RM 127		9.0		10	20	12	21				22	12	10	20		12		RECEPT VEND MACH RM 147
RECEPT RM 125			9.0	10	20	12	23				24	12	10	20			12	RECEPT VEND MACH RM 147
LTG PIPE CHASE 138	9.8			10	20	12	25				26	12	10	20	4.4			FCU ROOMS 116-119
RECEPT PIPE CHASE 138		9.0		10	20	12	27				28	12	10	20		4.4		FCU ROOMS 120-123
BOILER-CONTROL			5.8	10	20	12	29				30	12	10	20			4.4	FCU ROOMS 124-127
HW CIRC.PUMP RM 136	2			10	20	12	31				32	12	10	20	6			F.C.U. & EX. FAN RM 128,129,132
RECPT RM 134 (TEL)		.9		10	20	12	33				34	12	10	20			10	EX. FAN & U.H. RM 134,136
SUMP PUMP RM 138			7.2	10	20	12	35				36	12	10	20			12	AIR COMP.& DRYER RM.136
H.W. PUMP RM 136	5.7	5.7	5.7	10	20	12	37				38	12	10	20	7.5	7.5	7.5	CW PUMP RM 136

PANELBOARD E2 SCHEDULE

225 A., MAIN LUGS ONLY, 120/208 V., 3 PHASE, 4 WIRE, SURFACE MOUNT

LOAD SERVED	LOAD (AMPS.) A	B	C	CKT. BKR KAIC	TRIP	WIRE SIZE	CKT NO.	PHASE A	B	C	CKT NO.	WIRE SIZE	CKT. BKR KAIC	TRIP	LOAD (AMPS.) A	B	C	LOAD SERVED
LIGHTING RM 216-219	12.1			10	20	12	1				2	12	10	20	12.1			LIGHTING RM 220-223
GFI RECEPT RM 216-219		15.0		10	20	12	3				4	12	10	20		15.0		GFI RECEPT RM 220-223
RECEPT RM 218			9.0	10	20	12	5				6	12	10	20			9.0	RECEPT RM 222
RECEPT RM 216	9.0			10	20	12	7				8	12	10	20	9.0			RECEPT RM 220
RECEPT RM 219		9.0		10	20	12	9				10	12	10	20		9.0		RECEPT RM 223
RECEPT RM 217			9.0	10	20	12	11				12	12	10	20			9.0	RECEPT RM 221
LIGHTING RM 224-227	12.1			10	20	12	13				14	12	10	20	3.0			F.C.U. & EX FAN RM 228 & 231
GFI RECEPT RM 224-227		15.0		10	20	12	15				16	12	10	20		10.5		RECEPT LOUNGE RM 228
RECEPT RM 226			9.0	10	20	12	17				18	12	10	20			12.0	RECEPT VEND MACH RM 240
RECEPT RM 224	9.0			10	20	12	19				20	12	10	20	12.0			RECEPT VEND MACH RM 240
RECEPT RM 227		9.0		10	20	12	21				22	12	10	20		12.0		RECEPT VEND MACH RM 240
RECEPT RM 225			9.0	10	20	12	23				24	12	10	20			12.0	RECEPT VEND MACH RM 240
LTG RM 228,229,230,231	15.4			10	20	12	25				26	12	10	20	4.4			FCU RM 216-219
RECEPT PIPE CHASE 234		9.0		10	20	12	27				28	12	10	20		4.4		FCU RM 220-223
LTG PIPE CHASE 234			5.4	10	20	12	29				30	12	10	20			4.4	FCU RM 224-227
RECEPTACLE ROOF				10	20	12	31				32	12	10	20	9.0			RECEPT RM 128,231
SPARE				10	20	—	33				34	—	10	20				SPARE
SPARE				10	20	—	35				36	—	10	20				SPARE
	17																	
AHU#2 (ROOF)		17	17	10	35	10	37				38	—	10	20				SPARE

DEPARTMENT OF THE NAVY	NAVAL FACILITIES ENGINEERING COMMAND
NAVAL STATION	ATLANTIC DIVISION NORFOLK, VIRGINIA
NAVAL HOSPITAL	CAMP LEJEUNE, N.C.
BACHELOR ENLISTED QUARTERS	
PANEL SCHEDULES	
SIZE F	IDENT. NO. 80091
NAVFAC DRAWING NO. 415780	
CONTR. GRID. NO. N62470-85-B-5142	
SCALE AS NOTED SPEC. 05-85-5306	SHEET 58 OF 68

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EFD DWG. NO. 257780
JOB ORDER NO. SP5306
STA. PROJ.NO. P-721
DES. REF DRN. LDS
PROJ. MGR. MCD CH.ARCH/CIVIL YLM
STA ENG. NAVAL FA. CORP
DR.MGR. TRAL DISCIP. RLS

APPROVED DATE
ACTIVITY-SATISFACTORY TO.
APPROVED DATE
FOR NAVAL FAC. ENGINEERING COMMAND

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED

PANELBOARD MDP SCHEDULE

600A., 600A MCB, 120/208V., 3 PHASE 4 WIRE SURFACE MOUNTED

LOAD SERVED	LOAD (AMPS.) A	B	C	CKT. BKR KAIC	TRIP	WIRE SIZE	CKT NO.	PHASE A	B	C	CKT NO.	WIRE SIZE	CKT. BKR KAIC	TRIP	LOAD (AMPS.) A	B	C	LOAD SERVED
		111													124			
PNL W1		114		25	225	4/0	1				2	4/0	25	225		120		PNL E1
			86														122	
	118														133			
PNL W2		131		25	225	4/0	3				4	4/0	25	225		125		PNL E2
			94														105	
	174														116			
PNL L1 & L2		212		25	225	4/0	5				6	1/0	25	225		116		CHILLER
			194														116	
	33.2																	
SEWAGE PUMP STA.		33.2		18	60	6	7				8	—	18	100				SPACE
			33.2															
SPACE				25	225		9				10	—	25	225				SPACE
							31				32							
							33				34							
							35				36							
							37				38							
							39				40							
							41				42							

* PANELBOARD L1 SCHEDULE

225 A., MAIN LUGS ONLY, 120/208 V., 3 PHASE, 4 WIRE, FLUSH MOUNT

LOAD SERVED	LOAD (AMPS.) A	B	C	CKT. BKR KAIC	TRIP	WIRE SIZE	CKT NO.	PHASE A	B	C	CKT NO.	WIRE SIZE	CKT. BKR KAIC	TRIP	LOAD (AMPS.) A	B	C	LOAD SERVED
RECEPT WASH RM 137	12.5			10	20	12	1				2	12	10	20	12.5			RECEPT WASH RM 137
RECEPT WASH RM 137		12.5		10	20	12	3				4	12	10	20		12.5		RECEPT WASH RM 137
RECEPT WASH RM 137			12.5	10	20	12	5				6	12	10	20			12.5	RECEPT WASH RM 137
U.H.& EX. FAN RM 137	11.6			10	20	12	7				8	12	10	20	2.3			LIGHTING RM 137
RECEPTACLE RM.137		9		10	20	12	9				10	10	10	20				SPARE
SPARE				10	20		11				12		10	20				SPARE
SPARE				10	20		13				14	10	10	20				SPARE
RECEPT DRYER RM 137		24.0	24.0	10	30	10	15				16	—	10					SPACE
RECEPT DRYER RM 137	24.0	24.0		10	30	10	17				18	—	10					SPACE
RECEPT DRYER RM 137	24.0		24.0	10	30	10	19				20	—	10					SPACE
RECEPT DRYER RM 137		24.0	24.0	10	30	10	21				22	—	10					SPACE

* PROVIDE 6 INCH MINIMUM SIDE GUTTERS.
FOR THRU FEED TO PANEL " L2 "

PANELBOARD L2 SCHEDULE

225 A., M ONLY, 120/208 V., 3 PHASE, 4 WIRE, FLUSH MOUNT

LOAD SERVED	LOAD (AMPS.) A	B		CKT. BKR		WIRE SIZE	CKT NO.	PHASE A	B	C	CKT NO.	WIRE SIZE	CKT. BKR KAIC	TRIP	LOAD (AMPS.) A	B	C	LOAD SERVED
RECEPT WASH RM 232	12.5					12	1				2	12	10	20	12.5			RECEPT WASH RM 232
RECEPT WASH RM 232		12.5				12	3				4	12	10	20		12.5		RECEPT WASH RM 232
RECEPT WASH RM 232			12.5			12	5				6	12	10	20			12.5	RECEPT WASH RM 232
U.H.& EX. FAN RM 232	11.6					12	7				8	12	10	20	2.3			LIGHTING RM 232
RECEPTACLE RM.232		9				12	9				10	—	10	20				SPARE
SPARE						—	11				12	—	10	20				SPARE
SPARE						—	13				14	—	10	20				SPARE
RECEPT DRYER RM 232		24.0	24.0			10	15				16	—	10					SPACE
RECEPT DRYER RM 232	24.0	24.0				10	17				18	—	10					SPACE
RECEPT DRYER RM 232	24.0		24.0			10	19				20	—	10					SPACE
RECEPT DRYER RM 232		24.0	24.0			10	21				22	—	10					SPACE

E-9

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
NAVAL STATION ATLANTIC DIVISION NORFOLK, VIRGINIA

NAVAL HOSPITAL CAMP LEJEUNE, N.C.

BACHELOR ENLISTED QUARTERS

PANEL SCHEDULES

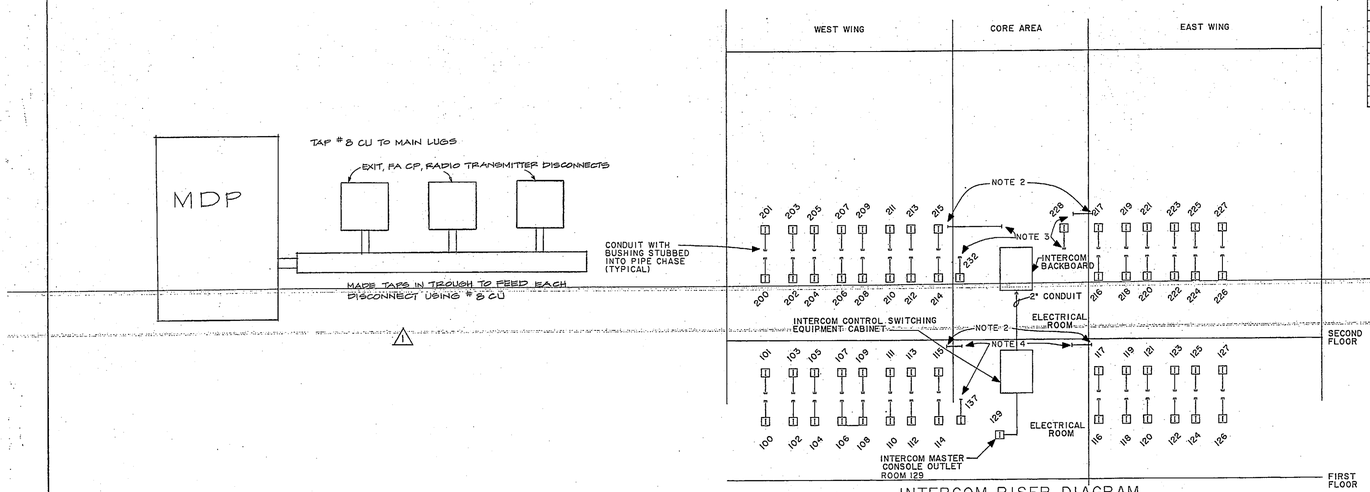
SFO DWG. NO.	257781
JOB ORDER NO.	5F5306
EFA. PREL.NO.	P-721
DES. RFF	DRWN. LDS
PREL.NOR. MCD	CHK.DESIGNER Y.L.M
SFO-N.W. JATTA	
REVIEW	CO.DR.
APPROVED DATE	
ACTIVITY-SATISFACTORY TO	
APPROVED DATE	
FOR SFO FOR COMMANDER NAVFAC	

CODE IDENT.NO.	NAVFAC DRAWING NO.
F 80091	4157781

CONTR. CONTR. NO. N62470-85-B-5142

SCALE AS NOTED APPL. 05-85-5306 SHEET 59 OF 68

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED
1	REVISED AS-BUILT	10-1-91	RSC



INTERCOM RISER DIAGRAM

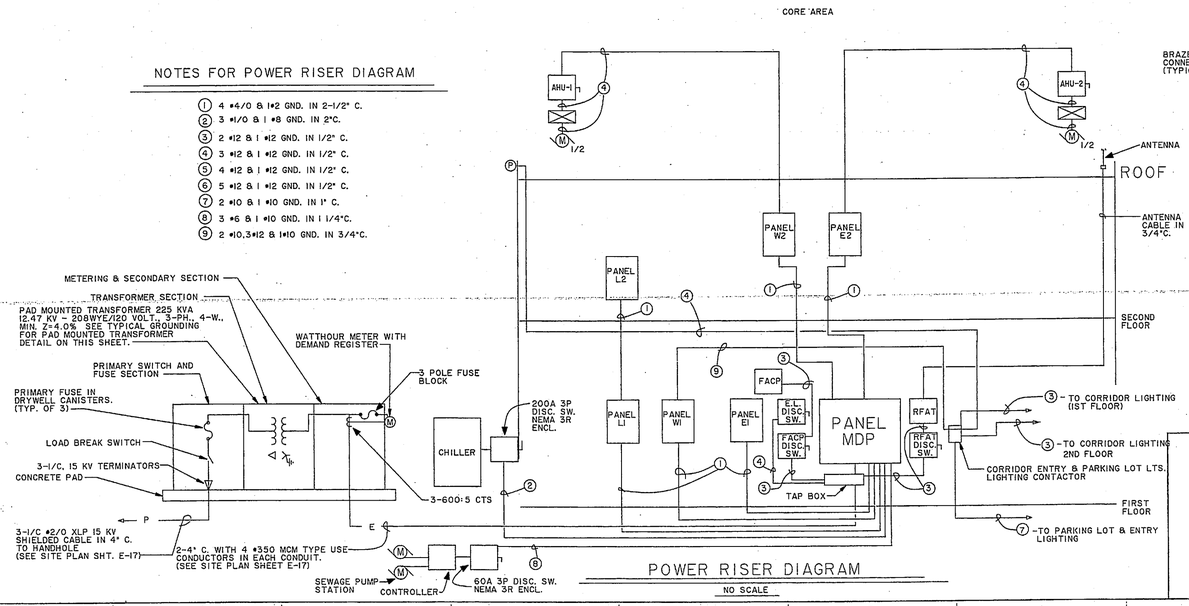
NO SCALE

INTERCOM NOTES

1. WIRING SHALL BE AS REQUIRED BY EQUIPMENT MANUFACTURER. ALL CONDUIT SHALL BE 1/2" MINIMUM.
2. 2" CONDUIT WITH BUSHING STUBBED INTO PIPE CHASE.
3. CONDUIT WITH BUSHING STUBBED INTO ELECTRICAL ROOM 231 6" ABOVE INTERCOM BACK BOARD
4. CONDUIT WITH BUSHING STUBBED INTO ELECTRICAL ROOM 134 6" ABOVE INTERCOM BACK BOARD.
5. RUN ALL CONDUIT CONTINUOUS WITHOUT JUNCTION BOXES FROM ELECTRICAL ROOM TO PIPE CHASE. USE LONG SWEEP ELBOWS ON ALL TURNS

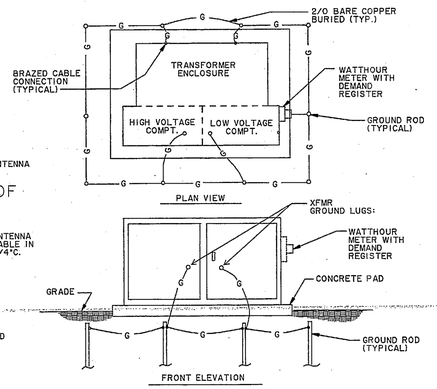
NOTES FOR POWER RISER DIAGRAM

1. 4 #4/0 & 1#2 GND. IN 2-1/2" C.
2. 3 #1/0 & 1 #8 GND. IN 2"C.
3. 2 #12 & 1 #12 GND. IN 1/2" C.
4. 3 #12 & 1 #12 GND. IN 1/2" C.
5. 4 #12 & 1 #12 GND. IN 1/2" C.
6. 5 #12 & 1 #12 GND. IN 1/2" C.
7. 2 #10 & 1 #10 GND. IN 1" C.
8. 3 #6 & 1 #10 GND. IN 1 1/4"C.
9. 2 #10,3#12 & 1#10 GND. IN 3/4"C.



POWER RISER DIAGRAM

NO SCALE



TYPICAL GROUNDING FOR PAD MOUNTED TRANSFORMER

NO SCALE

E-10

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NAVAL STATION — NORFOLK, VIRGINIA

NAVAL HOSPITAL — CAMP LEJEUNE, N.C.

BACHELOR ENLISTED QUARTERS

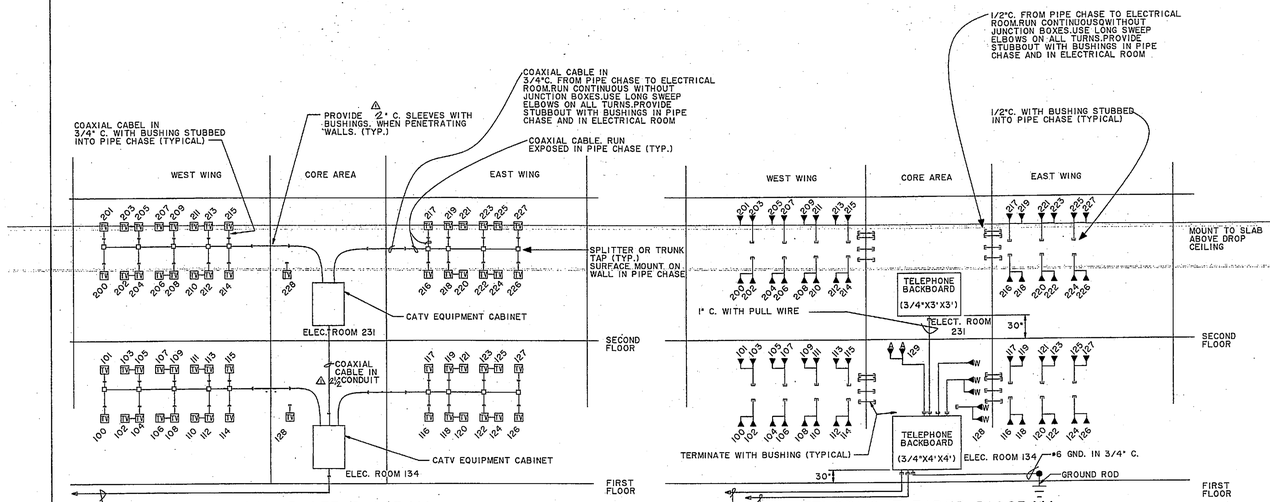
POWER & INTERCOM RISER DIAGRAMS

ESE DWG. NO.	257782
JOB DESIGN NO.	SF5306
STA. PROJ. NO.	P-721
DES. REF	DRWN. LDS
PROJ. MGR. MCD	CHARGEOVER. YLM
SYS PM.	
DESIGN.	
APPROVED	DATE
ACHITECT-SATISFACTORY TO	
APPROVED	DATE 3-30-81
CO NAVFAC FOR CHIEF ENGINEER NAVFAC	

SIZE	CODE IDENT.NO.
F	80091
SCALE AS NOTED	SPEC. 05-85-5306

MASTER DRAWING NO. 4157782
CONTR. CONTL. NO. N62470-85-B-5142
SHEET 60 OF 68

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED
1	REVISED AS-BUILT	10-1-91	RGC



CATV RISER DIAGRAM

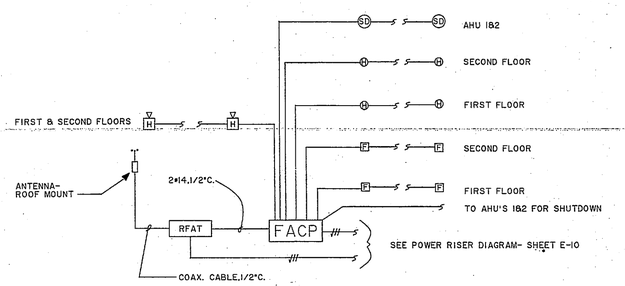
NO SCALE

TELEPHONE RISER DIAGRAM

NO SCALE

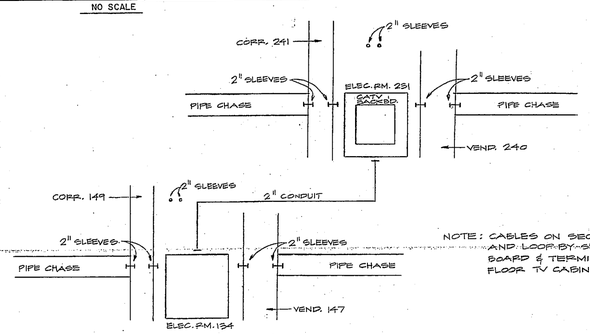
NOTES FOR TELEPHONE SYSTEM

1. ALL EXTERIOR CABLE SHALL BE A MINIMUM SIZE OF 22 AWG. COPPER AND SHALL BE FILLED.
2. ALL EXTERIOR CABLES SHALL BE TERMINATED ON A 4 CLIP 66 SERIES CONNECTING BLOCK.HOUSE BLOCKS SHALL BE MARKED WITH THE JACK NUMBER. FEEDER BLOCKS SHALL BE MARKED WITH THE PAIR NUMBER.
3. EXTERIOR CABLE SHALL BE SPLICED TO THE MAIN DISTRIBUTION SYSTEM BY THE GOVERNMENT. COORDINATE WITH STATION TELEPHONE OFFICER. CONTRACTOR SHALL PROVIDE ALL REQUIRED SPLICE KITS.
4. INSTALL EXTERIOR CABLE ON CONNECTING BLOCKS IN ORDER OF STANDARD TELEPHONE CABLE COLOR CODE.
5. ALL TELEPHONE OUTLETS SHALL BE IN A 4"SQ.JUNCTION BOX WITH A SINGLE GANG PLASTER RING & BLANK COVER.
6. ALL CONDUITS SHALL BE 1/2" MINIMUM U.O.N. WITH PULL WIRE.



FIRE ALARM RISER DIAGRAM

NO SCALE



NOTE: CABLES ON SECOND FLOOR RUN AND LOOP BY SECOND FLOOR BACK BOARD & TERMINATE IN FIRST FLOOR TV CABINET

CHANGE FOR CATV 1

AS BUILT DRAWING
LETTER DATED

E-11

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
NAVAL STATION ATLANTIC DIVISION NORFOLK, VIRGINIA

NAVAL HOSPITAL CAMP LEJEUNE, N.C.

BACHELOR ENLISTED QUARTERS

CATV, TEL.,& F.A. RISER DIAGRAMS

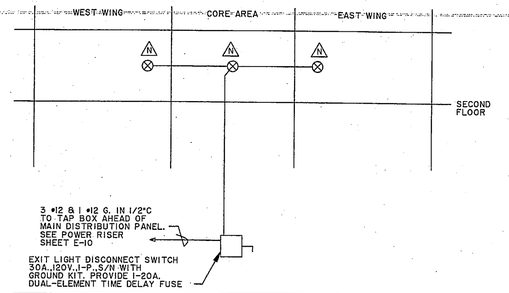
CTO DWG. NO.	257783
JOB INDEX NO.	5P5306
STA. PREAPR.	P-721
DES. REF	DRW. LDS
FIELD. WRK. MCD	CHARGEUNIT. YLM
CTO-DR. RCD	F.A. SEC
REVIEW TCN	DRAWN MCD
APPROVED DATE	
ACTIVITY-SATISFACTORY TO	
APPROVED	DATE
(NO CHG. DUE TO CONTRACTOR)	

SIZE F — CODE IDENT.NO. 80091 — NAVFAC DRAWING NO. 4157783

CONTR. CMPL. NO. N62470-85-B-5142

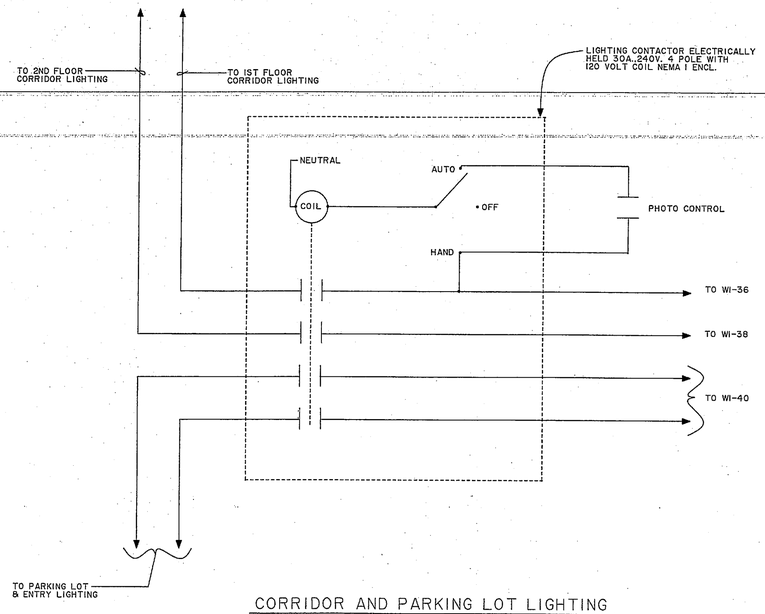
MAKE AS NOTED SPEC. 05-85-5306 SHEET 6 OF 68

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED



EXIT LIGHT RISER DIAGRAM

NO SCALE



CORRIDOR AND PARKING LOT LIGHTING CONTROL DIAGRAM

NO SCALE

E-12

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
NAVAL STATION ATLANTIC DIVISION NORFOLK, VIRGINIA

EFD DWG. NO. 257784
JOB ORDER NO. 5P5306
EFA PROJ.NO. P-721
CEL REF DRWG. LDS
PROJ. MGR. MCO CHI.MECH/CIVIL VLM
PFD.REV. NTP CP. SCSU
REVIEW NAD CODE ACO
APPROVED DATE
ACTIVITY-SATISFACTORY TO
APPROVED DATE
CO, OIC FOR CONSTRUCTION

NAVAL HOSPITAL CAMP LEJEUNE, N.C.

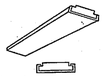
BACHELOR ENLISTED QUARTERS

EXIT LIGHT RISER & LIGHTING CONTROL DIAGRAM

SIZE F | CODE IDENT.NO. 80091 | NAVFAC DRAWING NO. 4157784

SCALE AS NOTED | AREA 05-65-5306 | CONTR. CONTR. NO. N62470-85-B-5142 | SHEET 62 of 67

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED



LUMINAIRE REQUIREMENTS

1. 0.032" MIN. THICKNESS FORMED STEEL HOUSING. CHEMICAL TREATMENT FOR RUST PREVENTION. BAKED WHITE ENAMEL FINISH. 80% MIN. REFLECTANCE (INTERIOR). ENTIRE HOUSING SHALL BE PAINTED WHITE. AFTER FABRICATION, HOUSING SHALL NOT PERMANENTLY DEFORM NOR SHALL IT DEFLECT MORE THAN ONE INCH (TWO INCHES FOR TYPE B) WHEN LIFTED BY ONE CORNER.
2. SECURE HOUSING ENDS BY RIVETS OR SCREWS. PROVIDE A KNOCKOUT IN EACH END AND TWO IN TOP OF HOUSING. HOUSING SHALL HAVE INTERNAL PROVISIONS FOR GROUNDING
3. OVERALL LUMINAIRE LENGTH SHALL BE 48 INCHES NOMINAL. OVERALL WIDTH SHALL BE 12 INCHES MINIMUM FOR 2 LAMP, 15-1/2 INCHES MINIMUM FOR 4 LAMP. OVERALL HEIGHT SHALL BE 5-1/2 INCHES MAXIMUM.
4. LENS SHALL BE CLEAR 100% ACRYLIC HAVING A MINIMUM OVERALL (BOTTOM OF LENS) THICKNESS OF 0.140 INCH WITH A MAXIMUM FRISM PENETRATION DEPTH OF 0.07 INCHES (0.55 INCH MIN. OVERALL SIDE THICKNESS).
5. LENS SHALL BE PRISMATIC TYPE. INJECTION MOLDED INTO A SINGLE 5 SIDED UNIT WITH 1/2 INCH MINIMUM RE-ENTRANT FLANGE ON EACH LONG SIDE FOR ADDITIONAL STRENGTH.
6. LENS SHALL BE CAPABLE OF HINGING AND LATCHING FROM EITHER SIDE OF FIXTURE.
7. LUMINAIRE SHALL HAVE LUMINOUS ENDS.
8. BALLAST: HIGH POWER FACTOR (≥ .9) ETL, CBM APPROVED RAPID START CLASS P ENERGY SAVING BALLAST WITH SOUND RATING OF "A". SECURE BALLASTS TO HOUSING WITH AT LEAST ONE SCREW AND SLIP ON BRACKET OR TWO SCREWS-ONE AT EACH END.
9. PHOTOMETRICS: MINIMUM COEFFICIENT OF UTILIZATION (CU) FOR THE FOLLOWING CAVITY REFLECTANCES: CEILING = 80% WALL = 50% FLOOR = 20%
LUMINANCE USING 310CL LAMP WITH AVG/MAX. RATIO NOT TO EXCEED 1:5.

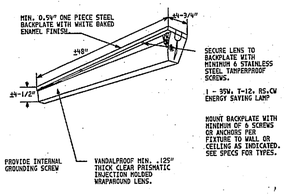
	TYPE A	TYPE B	AVG. LUMINANCE (FL)
RCR = 1	0.71	0.87	V5 = 2250
2	0.64	0.80	V5 = 1605
3	0.57	0.74	V5 = 1125
4	0.51	0.49	75 = 750
MIN. EFFICIENCY	69%	62%	85 = 495 (850 FOR TYPE B)

10. MINIMUM SPACING TO MOUNTING HEIGHT RATIO: 1.35 (TYPE A), 1.3 (TYPE B).

TYPE A - 2 LAMP
TYPE B - 4 LAMP

SURFACE MOUNTED WRAP-AROUND LUMINAIRE FOR OFFICE/CLASSROOM TYPE SPACES

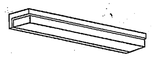
STYLE NL-1



BALLAST SHALL BE HIGH POWER FACTOR (≥ .9) ETL, CBM APPROVED RAPID START CLASS P, WITH SOUND RATING OF "A".

SURFACE MOUNTED 1-LAMP NONBREAKABLE LUMINAIRE

STYLE NL-14



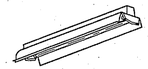
LUMINAIRE REQUIREMENTS

1. 0.032" MINIMUM THICKNESS STEEL BACK PLATE AND REFLECTOR. CHEMICAL TREATMENT FOR RUST PREVENTION. BAKED WHITE ENAMEL FINISH. PROVIDE KNOCKOUTS THRU BACK PLATE. HOUSING SHALL HAVE INTERNAL PROVISIONS FOR GROUNDING.
2. 0.032" MINIMUM THICKNESS DIE FORMED STEEL OR EXTRUDED ALUMINUM HOUSING. BAKED BLACK ENAMEL OR BRUSHED ALUMINUM FINISH OR WOOD GRAIN VINYL ON ALUMINUM HOUSING. UNLESS INDICATED OTHERWISE. STEEL HOUSINGS SHALL HAVE ALL JOINTS WELDED AND GROUND SMOOTH.
3. MAXIMUM OVERALL LUMINAIRE HEIGHT SHALL BE 5-1/2 INCHES. MAXIMUM LUMINAIRE DEPTH SHALL BE 8 INCHES. MAXIMUM LUMINAIRE LENGTH SHALL BE
   26 INCHES - TYPE A
   38 INCHES - TYPE B
   50 INCHES - TYPE C
4. LOWER LENS SHALL BE CLEAR SINGLE PIECE 100% ACRYLIC HAVING AN OVERALL NOMINAL THICKNESS OF 0.110 INCHES FLAT OR MINUS 10%. UPLIGHT LENS SHALL BE 100% ACRYLIC WITH A MINIMUM OF 0.09 INCHES OVERALL THICKNESS.
5. LENS SHALL BE PRISMATIC (TO REDIRECT LIGHT, PREVENTING DIRECT GLARE AT HIGH VIEWING ANGLES) OR LUMINAIRE SHALL HAVE OPAQUE FRONT.
6. LENS SHALL HAVE SPRING STEEL LATCHES FOR RETAINING LENS, OR POSITIVE MEANS OF HOLDING LENS IN PLACE.
7. LUMINAIRE SHALL PROVIDE UP AND DOWN LIGHT. UP LIGHT SHALL BE SEPARATELY SWITCHED WHERE INDICATED. LAMPS SHALL BE ENCLOSED ON TOP AND BOTTOM.
8. BALLAST SHALL BE HIGH POWER FACTOR (≥ .9) ETL CBM APPROVED CLASS P WITH SOUND RATING OF "A". BALLASTS FOR 30 AND 40 WATT LAMPS SHALL BE TRIGGER START. BALLASTS FOR 40 WATT LAMPS SHALL BE ENERGY SAVING TYPE. SECURE BALLASTS TO HOUSING WITH AT LEAST ONE SCREW AND SLIP-ON BRACKET OR 2 SCREWS - ONE AT EACH END.
9. WHERE LUMINAIRE REQUIRES SEPARATELY SWITCHED UP LIGHT, LUMINAIRE SHALL HAVE 2 BALLASTS AND METAL BAFFLE BETWEEN LAMPS.

TYPE A 2 - 20 W LAMPS
TYPE B 2 - 30 W LAMPS
TYPE C 2 - 40 W LAMPS

WALL MOUNTED FLUORESCENT

STYLE NL-4



LUMINAIRE REQUIREMENTS

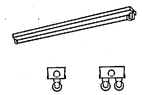
1. HOUSING SHALL BE 0.032" MINIMUM THICKNESS DIE FORMED COLD ROLLED STEEL. CHEMICALLY TREATED FOR RUST PREVENTION AND FINISHED WITH WHITE BAKED ENAMEL OR POLYESTER FINISH. PROVIDE TOP AND END KNOCKOUTS.
2. HOUSING WELDED OR SECURED BY SCREWS OR RIVETS INTO A SINGLE ASSEMBLY. PROVIDE INTERNAL PROVISIONS FOR GROUNDING
3. REFLECTOR SHALL BE 0.026" MINIMUM THICKNESS SPUN COOLED WHEN LUMINAIRE IS MOUNTED BELOW CATWALKS, ETC. (6-20% APPROVED WHEN PROJECTED FROM FALLING OBJECTS.) PROVIDE 30 SHIELDING CENTER VEIL. CHEMICALLY TREAT FOR RUST PREVENTION AND FINISH WITH WHITE BAKED ENAMEL, PORCELAIN ENAMEL, OR POLYESTER FINISH. MINIMUM REFLECTANCE SHALL BE 85%.
4. THE LUMINAIRE SHALL NOT PERMANENTLY DISTORT WHEN LIFTED BY ONE CORNER.
5. SPACING TO MOUNTING HEIGHT RATIO = 1.3.
6. LUMINAIRE SHALL BE CAPABLE OF CONTINUOUS ROW AND SINGLE UNIT PLACEMENT WITH PENDANT OR SURFACE MOUNTING.
7. PROVIDE SPRING LOADED PLUNGER TYPE LAMP SOCKETS.
8. BALLAST SHALL BE HIGH POWER FACTOR (≥ .9) ETL, CBM APPROVED CLASS P ENERGY SAVING BALLAST WITH A SOUND RATING OF B (RAPID START OR SLIMLINE).
9. MINIMUM COEFFICIENT OF UTILIZATION (CU) WITH THE FOLLOWING CAVITY REFLECTANCE OF: CEILING = 80% WALL = 50% FLOOR = 20%
LUMINANCE USING 310 LAMP WITH AVG/MAX. RATIO NOT TO EXCEED 1:5

ROOM CAVITY RATIO	CU	AVG. LUMINANCE (FL)
1	0.81	V5 - 1350
2	0.73	75 - 1250
3	0.66	85 - 1250
4	0.60	75 - 850
		85 - 800

TYPE A - 48" 2 LAMP 430 MA.
TYPE B - 96" 2 LAMP 430 MA.

INDUSTRIAL FLUORESCENT

STYLE NL-6



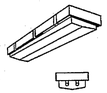
LUMINAIRE REQUIREMENTS

1. 0.028" MINIMUM THICKNESS STEEL CHANNEL. WELD RIVET OR SCREW END PLATES IN PLACE.
2. CHEMICALLY TREAT STEEL FOR RUST PREVENTION AND FINISH WITH BAKED WHITE ENAMEL.
3. PROVIDE SPRING LOADED PLUNGER TYPE LAMP SOCKETS.
4. BALLAST SHALL BE HIGH POWER FACTOR (≥ .9) ETL, CBM APPROVED, ENERGY SAVING CLASS P BALLAST WITH A SOUND RATING OF C.
5. HOUSING SHALL HAVE INTERNAL PROVISIONS FOR GROUNDING.
6. PROVIDE 0.032" MINIMUM THICKNESS STEEL REFLECTOR (SYMMETRIC OR ASYMMETRIC AS INDICATED) WHEN INDICATED.

TYPE A - 1 LAMP 48" LONG 430 MA.
TYPE B - 2 LAMPS 48" LONG 430 MA.
TYPE C - 1 LAMP 96" LONG 430 MA.
TYPE D - 2 LAMPS 96" LONG 430 MA.
TYPE E - 2 LAMPS END (IN TANDEM) 96" LONG 430 MA.
TYPE F - 4 LAMPS END (IN TANDEM) 96" LONG 430 MA.

STRIP FLUORESCENT

STYLE NL-7



LUMINAIRE REQUIREMENTS

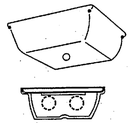
1. MOLDED 100% ACRYLIC DIFFUSE LENS (NOT CLEAR) FULLY GASKETED WITH FIBERGLASS OR PLASTIC HOUSING.
2. PROVIDE A MINIMUM OF 6 PLASTIC LATCHES TO SECURE LENS.
3. BALLAST SHALL BE HIGH POWER FACTOR (≥ .9) ETL CBM APPROVED RAPID START CLASS P ENERGY SAVING BALLAST WITH A SOUND RATING OF A. SECURE BALLAST TO HOUSING WITH AT LEAST ONE SCREW AND SLIP-ON BRACKET OR 2 SCREWS - ONE AT EACH END.
4. UL LISTED FOR DAMP LOCATION. PROVIDE UL "WET" LABEL WHEN INDICATED.
5. OVERALL LUMINAIRE LENGTH SHALL BE 48" NOMINAL.
6. MINIMUM COEFFICIENT OF UTILIZATION (CU) WITH CAVITY REFLECTANCES OF 80% CEILING, 50% WALLS AND 20% FLOOR SHALL BE:

RCR	CU
1	0.83
2	0.55
3	0.50
4	0.45

7. MINIMUM SPACING TO MOUNTING HEIGHT RATIO SHALL BE 1.3.
8. HOUSING SHALL HAVE INTERNAL PROVISIONS FOR GROUNDING.

WET/DAMP LOCATION LUMINAIRE

STYLE NL-8



TYPE A - UP TO 2-100W A-19 INCANDESCENT LAMPS
MAX. DIMENSIONS 12"X12"X6" D

TYPE B - 35W, 50W OR 70W HIGH PRESSURE SODIUM LAMP AS INDICATED
MAX. DIMENSIONS 12-1/2"X12-1/2"X10-1/2" D

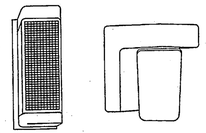
TYPE C - 20 OR 22W FLUORESCENT CIRCLINE
MAX. DIMENSIONS = 12"X12"X8" D

LUMINAIRE REQUIREMENTS

1. 0.094 INCH MINIMUM THICK STEEL OR ALUMINUM BACK PLATE.
2. POLYCARBONATE PRESMATIC OR OPAL LENS HELD IN PLACE WITH 4 STAINLESS STEEL SCREWS.
3. FULLY GASKETED AROUND LENS AND BETWEEN LUMINAIRE AND CEILING WITH DOUBLE BAKED NEOPRENE GASKETS.
4. U.L. LISTED FOR DAMP LOCATIONS.
5. MOUNT BACKPLATE TO CEILING WITH 4-1/4" Ø SCREWS OR ANCHORS.
6. PROVIDE WIRING COMPARTMENT SUITABLE FOR USE WITH 60 C WIRE INSULATION.
7. PROVIDE INTERNAL PROVISIONS FOR GROUNDING.

CEILING MOUNTED VANDAL-RESISTANT LUMINAIRE

STYLE NL-46



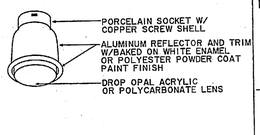
LUMINAIRE REQUIREMENTS

1. PROVIDE WITH ALUMINUM OR POLYCARBONATE BACKPLATE.
2. PROVIDE ACRYLIC OR POLYCARBONATE PRISMATIC (NON-CLEAR) LENS.
3. MAXIMUM DIMENSIONS SHALL BE 8"W X 20"H X 6-1/2"D (TYPE A), 7"W X 12"H X 9"D (TYPE B).
4. PROVIDE SOCKET AND 120 VOLT BALLAST SUITABLE TO SERVE A 18W LOW PRESSURE SODIUM LAMP.
5. PROVIDE HIGH POWER FACTOR (≥ .8) BALLAST.
6. PROVIDE INTERNAL GROUNDING LUG.

TYPE A: CEILING MOUNT
TYPE B: WALL MOUNT

LOW PRESSURE SODIUM FIXTURE

STYLE NL-26



LUMINAIRE REQUIREMENTS

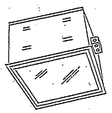
1 PROVIDE WITH TORSION SPRINGS FOR EASY RELAMPING.
2 UL LISTED FOR DAMP LOCATION
3 PROVIDE WITH THERMAL PROTECTION.
4 PROVIDE SUITABLE MOUNTING FRAME FOR CEILING CONSTRUCTION AT FIXTURE LOCATION.

FIXTURE K DETAIL

NOT TO SCALE

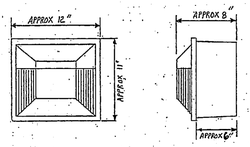
DESIGN CONTROL NO.	E-13
DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND	ATLANTIC DIVISION, NORFOLK, VIRGINIA
NAVAL STATION	NAVAL HOSPITAL CAMP LEJEUNE, N.C.
LDS DWG. NO. 257785	BACHELOR ENLISTED QUARTERS
JOB CHECK NO. 5F5306	
STA. PREL. NO. P-721	LIGHTING FIXTURE PLATES AND DETAILS
REV. REF DWN. LDS	
PREL. MTA. MCD CHARTERING Y.L.M	
STD MA. SCTN. N/A CK. [illegible]	
SD MA. N/A DES'D. [illegible]	
APPROVED DATE	DIVC CODE IDENT.NO. F 80091 — NAVFAC DRAWING NO. 4157785
ACTIVITY-SATISFACTORY TO	SERIAL NO. N62470-85-B-5142
APPROVED DATE	SCALE AS NOTED MTA. 05-85-5306 SHEET 63 OF 68
FOR USE FOR CONSTRUCTION/REPAIR	

REVISIONS			
SYM.	DESCRIPTION	DATE	APPROVED



1. 10" X 10" (NOMINAL) SQUARE, 8" MAXIMUM HEIGHT. PROVIDE HARDWARE SUITABLE FOR CEILING MATERIAL USED.
2. STEEL OR ALUMINUM HOUSING WITH CORROSION RESISTANT FINISH.
3. ALUMINUM REFLECTOR.
4. PRISMATIC (OR CLEAR WHEN INDICATED) TEMPERED GLASS LENS SECURED BY CAPTIVE SCREWS OR CAM LATCHES.
5. HIGH POWER FACTOR (.9) ENCAPSULATED BALLAST AND AS INDICATED IN THE SPECIFICATIONS.
6. ANODIZED ALUMINUM FACE PLATE
7. FULLY ENCLOSED & GASKETED, WEATHER PROOF
8. U.L. APPROVED FOR WET LOCATIONS.
9. PROVIDE LAMP AS INDICATED.
10. LAMP AND BALLAST SHALL BE SERVICEABLE FROM THE BOTTOM OF THE FIXTURE UNLESS OTHERWISE NOTED. PROVIDE INTERNAL GROUNDING PROVISIONS.
11. SPACING TO MOUNTING HEIGHT RATIO SHALL NOT BE LESS THAN 1.2.

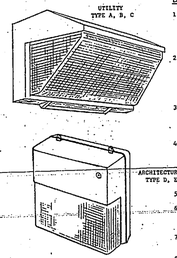
FIXTURE A DETAIL
NTS



1. CAST ALUMINUM HOUSING AND COVER PLATE.
2. ONE PIECE INJECTION MOLDED POLYCARBONATE LENS.
3. ALZAK FINISH REFLECTOR.
4. FULLY ENCLOSED AND GASKETED.
5. STAINLESS STEEL HARDWARE.
6. U.L. APPROVED FOR WET LOCATIONS.
7. HIGH POWER FACTOR BALLAST
8. PROVIDE LAMP AS INDICATED.

FIXTURE B DETAIL
NTS

NFGS-16510 (DECEMBER 1981)
SKETCH DATE: MARCH 1983



LUMINAIRE REQUIREMENTS

1. CAST ALUMINUM OR 1/8" MIN. THICKNESS EXTRUDED ALUMINUM HOUSING FOR HIGH PRESSURE SODIUM (HPS) AND METAL HALIDE (M.H.) LUMINAIRES.
2. CAST ALUMINUM, 1/8" MIN. THICKNESS EXTRUDED ALUMINUM, ABS PLASTIC OR POLYCARBONATE HOUSING FOR LOW PRESSURE SODIUM (LPS) AND 35/50/70W HPS LUMINAIRES.
3. HINGED, U.V. STABILIZED POLYCARBONATE LENS OR HINGED TEMPERED GLASS WITH POLYCARBONATE SHIELD.
4. LAMP SIZE AS INDICATED IN FIXTURE SCHEDULE.
5. PROVIDE ALUMINUM REFLECTOR.
6. BALLAST SHALL BE HIGH POWER FACTOR TYPE (.85) WITH CHARACTERISTICS AS INDICATED.
7. PROVIDE PHOTO ELECTRIC CONTROL WHEN INDICATED.
8. PROVIDE INTERNAL GROUNDING PROVISIONS.

TYPE A, D 35-150W HPS
TYPE B, E 175W M.H.
TYPE C 35, 55W LPS

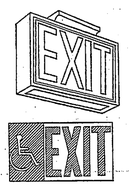
NOTE: TYPES D AND E MAY BE SUBSTITUTED FOR TYPES A AND B RESPECTIVELY BUT NOT VICE VERSA.

N.I.D. WALL MOUNTED LUMINAIRE

SKETCH NFGS-16510-27

STYLE
NL-25

NFGS-16510 (DECEMBER 1981)
SKETCH DATE: MARCH 1983



LUMINAIRE REQUIREMENTS

1. LETTERS SHALL BE 6" TALL WITH 3/4" STROKES FORMED BY A STENCIL FACE.
2. PROVIDE RED FIBERGLASS PANEL BEHIND STENCIL FACE.
3. PROVIDE 2 LONG LIFE INCANDESCENT LAMPS.
4. PROVIDE DOWN LIGHT PANEL IN FIXTURE.
5. PROVIDE ILLUMINATED ARROWS AS INDICATED.
6. PROVIDE SINGLE OR DOUBLE FACE AS INDICATED.
7. PROVIDE CEILING, END WALL, BACK WALL OR PENDANT MOUNTING AS INDICATED.
8. UNITS MOUNTED EXPOSED TO THE ENVIRONMENT SHALL HAVE A DAMP OR WET U.L. LABEL AS APPROPRIATE AND SHALL NOT BE CONSTRUCTED OF STEEL.
9. PROVIDE INTERNAL PROVISIONS FOR GROUNDING.
10. PROVIDE INTERNATIONAL SYMBOL OF ACCESS ON SIGN WHEN INDICATED.

TYPE A - ALUMINUM OR PAINTED STEEL HOUSING AND STENCIL FACE. (SEE NOTE 8.)

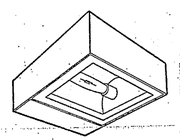
TYPE B - PLASTIC HOUSING ENCLOSED IN POLYCARBONATE WITH STENCIL ON INSIDE OF POLYCARBONATE HOUSING. (SEE NOTE 8.)

EXIT SIGN

SKETCH NFGS-16510-48

STYLE
NL-48

NFGS-16530 (MARCH 1985)
SKETCH DATE: MARCH 1985



NOTE:
DISTRIBUTION SHALL BE AS SPECIFIED AND SHALL BE IN ACCORDANCE WITH I.E.S. DEFINITIONS.

LUMINAIRE REQUIREMENTS

1. HOUSING, ALUMINUM - EXTRUDED OR FORMED WITH SEALED AND WELDED SEAMS.
2. REFLECTOR - FORMED ANODIZED ALUMINUM.
3. LENS - TEMPERED, IMPACT-RESISTANT CLEAR GLASS.
4. LENS DOOR - HINGED ALUMINUM WITH GASKET, CAPTIVE SCREW OR LATCHES.
5. INTERNAL MULTI-TAP BALLAST.
6. CONCEALED MOUNTING HARDWARE (ALL HARDWARE CORROSION RESISTANT).
7. PORCELAIN SOCKET WITH VIBRATION-PROOF LAMP GRIP SHELL.
8. FINISH - DARK BRONZE, BAKED ENAMEL, EXCEPT AS INDICATED.
9. SLIPFITTER - 2-3/8" TO 3" O.D. OR MOUNTING ARM.
10. LAMP - 70-TO 1000-WATT, HIGH-PRESSURE SODIUM, WATTAGE AS SPECIFIED.
11. LAMP STABILIZER, 1000-WATT ONLY.
12. UL LISTED - SUITABLE FOR OUTDOOR WET LOCATION.
13. "HOUSE SIDE OR REAR SPILL" LIGHT SHALL BE LIMITED TO 20%, WHEN SO SPECIFIED.

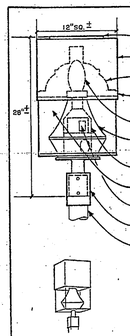
MAX. E.P.A. 3.0 SQ.FT.

ROADWAY AND AREA LIGHT

SKETCH 16530-1

XL - 1

NFGS-16530 (MARCH 1985)
SKETCH DATE: MARCH 1985



LAMP ACCESS COVER.
SPUN ALUMINUM HOUSING, BUG AND RAINTIGHT.
REFLECTOR, ANODIZED ALUMINUM.
FADE-RESISTANT POLYESTER POWER COATING, BRONZE UNLESS NOTED OTHERWISE.
H.P.S. LAMP, 70-TO 150-WATT, AS SPECIFIED.
DISTRIBUTING REFLECTOR. SPECULAR, COATED SPUN ALUMINUM.
BALLAST SUPPORT BRACKET.
ACRYLIC LOWER ENCLOSURE.
HIGH POWER FACTOR BALLAST.
SUPPORT ASSEMBLY FOR 2-3/8" O.D. TENON.
SQUARE POLE OR POST AS SPECIFIED.
UL LISTED - SUITABLE FOR OUTDOOR WET LOCATIONS.

PICTORIAL

SQUARE ARCHITECTURAL POST TOP AREA LIGHT

MAX. E.P.A. 2.1 SQ.FT.

SKETCH 16530-10

XL - 10

RECORD DRAWING
LETTER DATED JAN 31 1991

E-14

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NAVAL STATION NORFOLK, VA.
NAVAL HOSPITAL CAMP LEJEUNE, N.C.

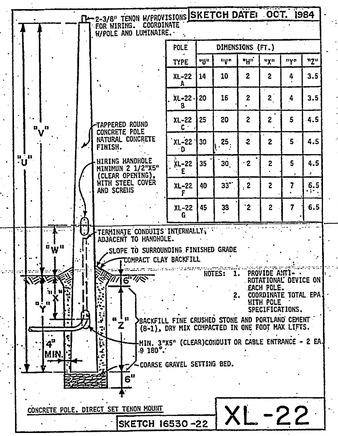
BACHELOR ENLISTED QUARTERS

LIGHTING FIXTURE PLATES & DETAILS

EFD DWG. NO.	2577786
JOB ORDER NO.	6F5306
STA PROJ. NO.	6-761
DES. REF.	DRWN. LDS
PROJ. MGR.	MCD CHARGEMAN YLM
EFD RVW.	FP FINISH
AR MGR.	DES DR.
APPROVED	DATE
ACTIVITY-SATISFACTORY TO	
APPROVED	DATE
FOR CTG FOR COMMANDING NAVAL	

SIZE F — CODE IDENT NO. 80091 — NAVFAC DRAWING NO. 2577786
SCALE NONE — SPEC. 05-85-5306 — CONTRA. CONTL. NO. N62470-85-B-5142 — SHEET 64 of 68

REVISIONS			
SYM.	DESCRIPTION	DATE	APPROVED



SKETCH DATE: OCT. 1984

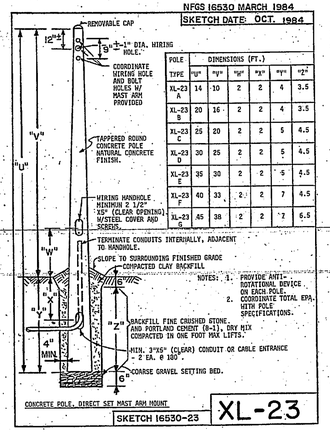
POLE TYPE	DIMENSIONS (FT.) "U"	"V"	"W"	"X"	"Y"	"Z"
XL-22 A	14	10	2	2	4	3.5
XL-22 B	20	16	2	2	4	3.5
XL-22 C	25	20	2	2	5	4.5
XL-22 D	30	25	2	2	5	4.5
XL-22 E	35	30	2	2	5	4.5
XL-22 F	40	33"	2	2	7	6.5
XL-22 G	45	38	2	2	7	6.5

NOTES: 1. PROVIDE ANTI-ROTATIONAL DEVICE ON EACH POLE.
2. COORDINATE TOTAL EPA WITH POLE SPECIFICATIONS.

SKETCH 16530-22 **XL-22**

NFGS 16530 MARCH 1984

SKETCH DATE: OCT. 1984



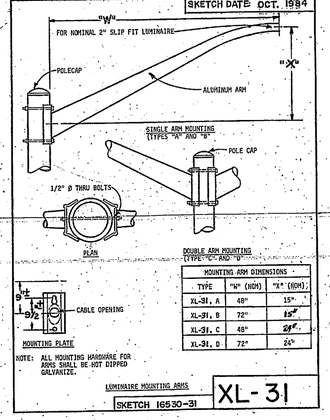
POLE TYPE	DIMENSIONS (FT.) "U"	"V"	"W"	"X"	"Y"	"Z"
XL-23 A	14	10	2	2	4	3.5
XL-23 B	20	16	2	2	4	3.5
XL-23 C	25	20	2	2	5	4.5
XL-23 D	30	25	2	2	5	4.5
XL-23 E	35	30	2	2	5	4.5
XL-23 F	40	33	2	2	7	4.5
XL-23 G	45	38	2	2	7	6.5

NOTES: 1. PROVIDE ANTI-ROTATIONAL DEVICE ON EACH POLE.
2. COORDINATE TOTAL EPA WITH POLE SPECIFICATIONS.

SKETCH 16530-23 **XL-23**

NFGS 16530 MARCH 1984

SKETCH DATE: OCT. 1984



MOUNTING ARM DIMENSIONS		
TYPE	"W" (MIN)	"X" (MIN)
XL-31, A	48"	15"
XL-31, B	72"	15"
XL-31, C	48"	24"
XL-31, D	72"	24"

NOTE: ALL MOUNTING HARDWARE FOR ARMS SHALL BE HOT DIPPED GALVANIZE.

LUMINAIRE MOUNTING ARMS

SKETCH 16530-31 **XL-31**

TS-16302L (SEPTEMBER 1980)

SYMBOL LEGEND

A	ANGLE
AB	ANGLE BRACE
D	DOUBLE
DE	DEADEND
F	FLAT (HORIZONTAL)
FB	FLAT BRACE
LP	LINE POST
N	NEUTRAL
R	RIDGE OR POLE TOP PIN
S	SECONDARY, OPEN WIRE
SC	SECONDARY, TRIPLEX
SQ	SECONDARY, QUADRUPLEX
T	TRANSFORMER
TERM	TERMINAL
UG	UNDERGROUND
V	VERTICAL
X	CROSSARM, 5'
X10	CROSSARM, 10'

GENERAL NOTES:

1. Symbols comprising the overhead sketches are not intended to be "all-inclusive" for use on every distribution pole line configuration. Only sketches which reflect typical arrangements are included. For other desired arrangements, sketches should be modified or separate details drawn to reflect the specific conditions.

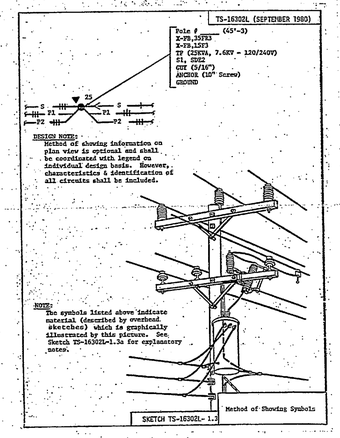
2. Each sketch contains material items which comprise a part of each individual symbol referenced by that sketch. These items are indicated by circled numerals which are identified by Sketches TS-16302L-1.5 and TS-16302L-1.5a.

3. Spacing requirements related to individual components of a symbol are indicated on the appropriate sketch. Vertical spacing requirements between circuits and/or systems are indicated on Sketch TS-16302L-1.4. All other separations between circuits, equipment, etc., shall conform to the National Electrical Safety Code- ANSI C2.

Symbol Legend & General Notes

SKETCH TS-16302L- 1.1

TS-16302L (SEPTEMBER 1980)



Method of Showing Symbols

SKETCH TS-16302L- 1.2

TS-16302L (SEPTEMBER 1980)

EXPLANATORY NOTES - METHOD OF SHOWING SYMBOLS

1. Symbols are shown in the basic order as they appear on the pole, by starting at the top and working down.
2. Numerals preceding the symbol indicate the minimum required voltage rating of the assembly, if applicable.
3. Numeral following the symbol indicates the number of conductor associated with the assembly, if applicable.
4. Numeral in parenthesis following the symbol denotes the number of assemblies required, if more than one.
5. Data in parenthesis following the symbol provides information relative to the symbol.

EXPLANATION OF SYMBOLS LISTED FOR POLE OF SKETCH TS-16302L-1.3

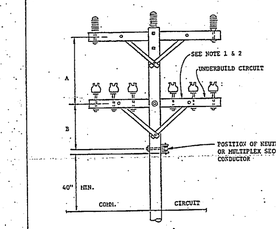
Provide 45 foot long, class 3 pole containing:

X-FB - 5' crossarm with flat brace
35F3 - 35KV insulators, flat (mounted horizontal on crossarm), ridge pin (center phase on pole top pin), three conductors
X-FB - 8' crossarm with flat brace
15F3 - 15KV insulators, flat (mounted horizontal on crossarm), three conductors. Note: this symbol calls for three crossarm mounted pins in lieu of ridge pin on center phase.
TF - transformer on flat (horizontal) construction. Data in parenthesis describes the transformer characteristics.
S1 - secondary, one conductor, tangent construction
SDE2 - secondary deadend, two conductors, open wire
GUY (5/16") - down guy - wire size 5/16"
ANCHOR (10" SCREW) - 10" screw type anchor. Note: No plate is included for the anchor symbol
GROUND - no explanation necessary

Explanation of Notes Symbols

SKETCH TS-16302L-1.3a

TS-16302L (SEPTEMBER 1980)



NOTES:

1. For new construction or operating voltages greater than 5KV, limit the number of conductors on crossarm to a maximum of three.
2. Use 10' crossarms for all underbuild circuits with operating voltages greater than 15KV.
3. For horizontal spacing requirements for conductors on same support, refer to the National Electrical Safety Code, ANSI C 2.

Ø - Ø VOLTAGE	0 - 15KV	15 - 50KV
SPACING A	40"	48" *
SPACING B	40"	40"

* Provide 60" clearance when operating voltage of underbuild circuit is greater than 15KV

Basic Vertical Spacing Requirements

SKETCH TS-16302L-1.4

TS-16302L (SEPTEMBER 1980)

POLE LINE MATERIAL LIST

1. Flat steel brace (two pieces)
2. Machine bolt, 3/8" x length needed with washer, nut and lockwasher
3. 8' wood crossarm
4. Machine bolt, 3/8" x length needed with washer, nut and lockwasher
5. Timber connector
6. Lagscrew, 1/2" x 4"
7. Angle steel brace (two pieces)
8. Machine bolt, 3/8" x length needed, with washer, nut & lockwasher
9. Deadend box
10. Steel pin
11. Pin insulator
12. Grid guin, used only when there is no pole guin.
13. Angle steel brace (one piece)
14. 10' wood crossarm
15. 5/8" eye nut
16. 5/8" eye bolt, length as needed, with washer, nut & lockwasher
17. Extension link
18. Ball type suspension insulator with connecting hardware
19. Strain clamp
20. Steel angle pin
21. Cluster mounting bracket, steel
22. Transformer grounding connection
23. Stirrup
24. Secondary lead support bracket
25. Adapter plate for cluster mounting
26. Clevis bracket for spool insulator
27. Spool insulator
28. U bolt clamp
29. Preformed guy grip
30. Guy hook
31. Guy strain insulator
32. Guy wire, size as specified
33. #4 WP Cu. soft drawn ground wire
34. Ground clamp
35. Conduit coupling
36. Conduit bend
37. Insulated bushing
38. Perforated strapping, 1 1/2" wide
39. Hot line clamp
40. Fused cutout, as specified
41. Surge arrester, as specified
42. Pole top pin
43. Crossarm angle pin
44. Angle pole top pin
45. Wire, #4 WP Cu., (unless otherwise specified) soft drawn
46. Tri-mount bracket
47. Terminator, porcelain housed
48. Mounting bracket
49. Cable grip hanger
50. Hose clamp

Pole Line Material List

SKETCH TS-16302L-1.5

RECORD DRAWING
LETTER DATED JAN 31 1991

E-15

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NAVAL STATION — NORFOLK, VA.
NAVAL HOSPITAL — CAMP LEJEUNE, N.C.

BACHELOR ENLISTED QUARTERS

POLE PLATES

EFD DWG. NO.	2-27787
JOB ORDER NO.	5P2306
STA. PROJ. NO.	0721
DES.	KEF
DWN.	LDS
PROJ. MGR.	MCD
CHARGE/DWR	YLM
EFD PMD	WEEL
FP SUPT	
EA MGR	PBS
DES SPL	KD
APPROVED / DATE	

ACTIVITY - SATISFACTORY TO
APPROVED: A. T. DATE 3-31-91
FOR FTG FOR CONVERSION MASTER

SIZE	CODE IDENT NO.	NAVFAC DRAWING NO.
F	80091	4-157787
SCALE NONE	SPEC. 05-85-5306	CONTR. CONTR. NO. N62470-85-B-5342 SHEET 65 OF 68

REVISIONS			
SYM.	DESCRIPTION	DATE	APPROVED

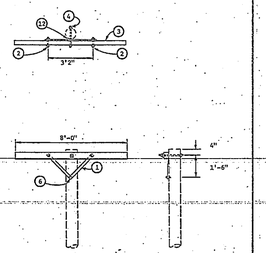
TS-16302L (SEPTEMBER 1980)

POLE LINE MATERIAL LIST

(31) Stud, 3/4" x 1 3/4"
(32) Line post insulator
(33) Triple insulator bracket
(34) Angle clamp
(35) Insulator, line post clamp
(36) 4' crossarm
(37) Crossarm gain bracket
(38) Pulley bracket
(39) Wedge clamp
(40) Midspan service clamp
(41) Stud, 7"
(42) Saddle, angle
(43) Saddle, crossarm
(44) Fitting, pole top
(45) Connector
(46) Suspension clamp
(47) Tie, service cable
(48) 24" Fiberglass strain insulator

SKETCH TS-16302L-1.5 — Pole Line Material List

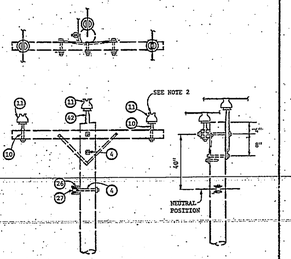
TS-16302L (SEPTEMBER 1980)



NOTE: DRAWING INDICATES X-FB. SUBSTITUTE (7) FOR (3) AND (8) FOR (6) ON X-AB.

SKETCH TS-16302L-2 — X-FB, X-AB

TS-16302L (SEPTEMBER 1980)

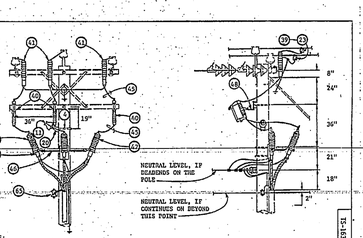


NOTES:

1. DRAWING REPRESENTS FR3-N. ELIMINATE (5), (9), AND (11) FOR NEUTRAL POSITION OR FR2.
2. ON CIRCUIT VOLTAGE OPERATING LEVELS GREATER THAN 15 KV, SUBSTITUTE (12) FOR (13), (14) FOR (10) AND (11) FOR (12).
3. REFER TO SPECIFICATIONS FOR REQUIRED CLASS OF INSULATORS.

SKETCH TS-16302L-12 — FR3-N, FR3 (0-50KV)

DUCT END TS-16302L-34



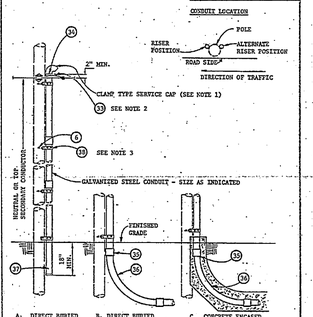
NOTES:

1. Position of terminal on deadends is for terminal to be under the conductors and the cutouts on the backside of crossarm. Pole riser must be offset to clear neutral clevis bracket.
2. Surge arrester lead shall be connected on line side of fused cutouts. Bottom lead of arrester should be connected directly to pole ground.
3. This plate should be used only for radial feeds to individual transformers or other selective applications.

TS-16302L (SEPTEMBER 1980)

TS-16302L (SEPTEMBER 1980)

CONDUIT LOCATION

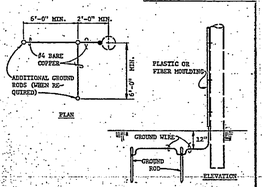


NOTES:

1. On conduit riser for primary circuits, eliminate service cap and provide grounding type insulating bushing.
2. Connect to grounded neutral or provide ground per specifications.
3. Space straps at maximum of 4' intervals.

SKETCH TS-16302L-37 — CONDUIT RISER (SIZE AS INDICATED)

TS-16302L (SEPTEMBER 1980)

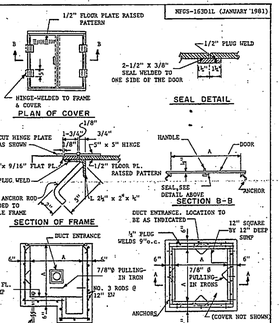


NOTES:

1. Use additional ground rods, when required, to obtain resistance value, as specified.
2. Make grounding connections to all equipment on pole as specified.

SKETCH TS-16302L-43 — GROUND

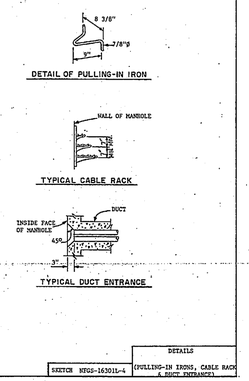
NFGS-16301L (JANUARY 1981)



MANHOLE	A
Type 1	3'-0"
Type 2	4'-0"

SKETCH NFGS-16301L-3 — STANDARD ELECTRICAL MANHOLE (NON-TRAFFIC) TYPE 1 & 2

NFGS-16301L (JANUARY 1981)



SKETCH NFGS-16301L-4 — DETAILS (PULLING-IN IRONS, CABLE RACK & DUCT ENTRANCE)

RECORD DRAWING LETTER DATED JAN 31 1991

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DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NAVAL STATION — NORFOLK, VA.
NAVAL HOSPITAL — CAMP LEJEUNE, N.C.

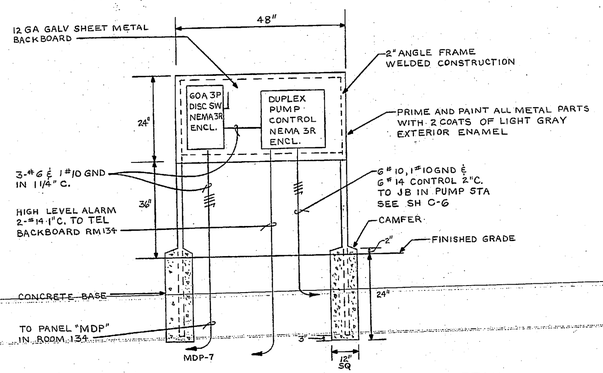
BACHELOR ENLISTED QUARTERS

POLE & HANDHOLE PLATES

EFD DWG. NO. 257788
JOB ORDER NO. 85-5306
EFA PROJ. NO. P-221
SIZE REF. DRWN. LDS
PROJ. MGR. MCD CHARGEMAN YLM
EFD RVD. RCS F.P. SLOP
AE MGR. JBB CES DR.
APPROVED DATE
ACTIVITY - SATISFACTORY TO
APPROVED DATE 1-31-91
FOR CTR FOR COMMUNITY SERVICE

SIZE F — CODE IDENT NO. 80091 — NAVFAC DRAWING NO. 415 7788
CONSTR. CONTR. NO. N62470-85-B-5142
SCALE NONE — SPEC. 05-85-5306 — SHEET 66 OF 68

REVISIONS			
SYM.	DESCRIPTION	DATE	APPROVED

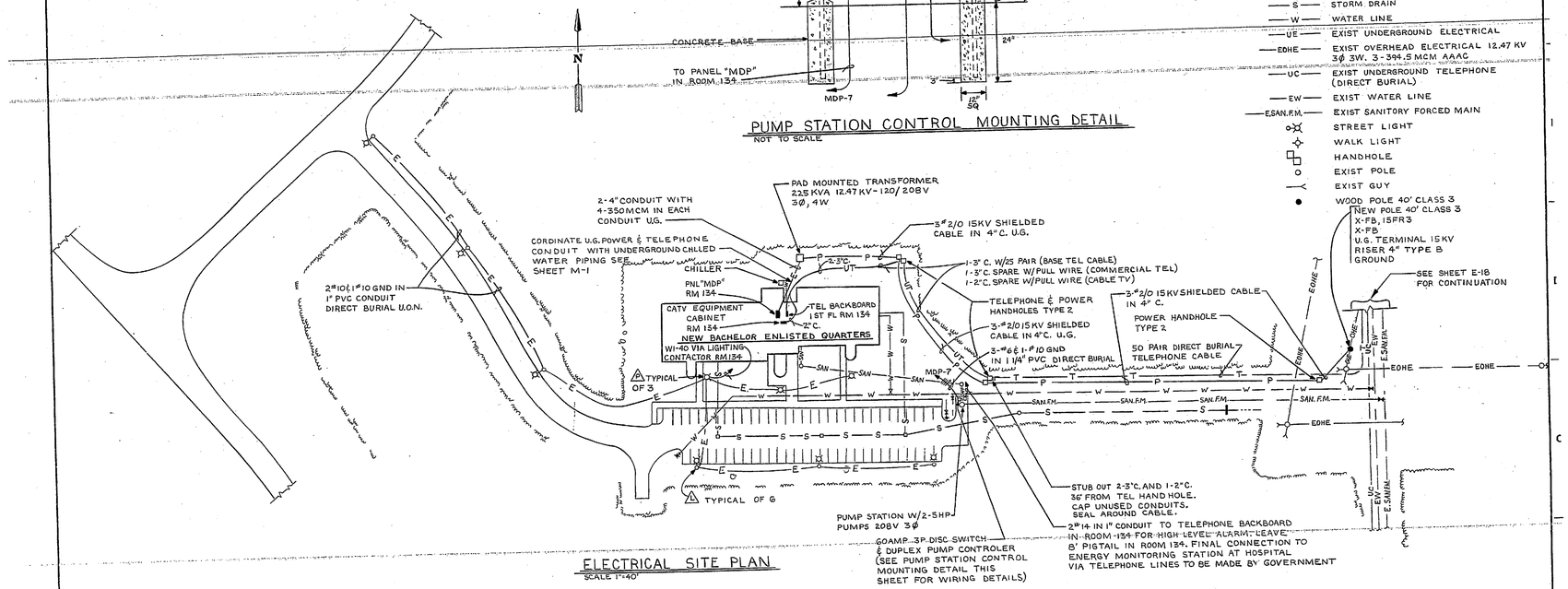


PUMP STATION CONTROL MOUNTING DETAIL

NOT TO SCALE

SITE PLAN LEGEND (NEW U.O.N.)

—E—	UNDERGROUND SECONDARY CIRCUIT
—P—	UNDERGROUND PRIMARY CIRCUIT
—T—	UNDERGROUND TELEPHONE CABLE, DIRECT BURIAL
—UT—	UNDERGROUND TELEPHONE CONDUIT & CABLE
—SAN—	SANITARY LINE
—SAN FM—	SANITARY FORCED MAIN
—S—	STORM DRAIN
—W—	WATER LINE
—UE—	EXIST UNDERGROUND ELECTRICAL
—EOHE—	EXIST OVERHEAD ELECTRICAL 12.47 KV 3Ø 3W. 3-394.5 MCM AAAC
—UC—	EXIST UNDERGROUND TELEPHONE (DIRECT BURIAL)
—EW—	EXIST WATER LINE
—ESAN.F.M.—	EXIST SANITORY FORCED MAIN
	STREET LIGHT
	WALK LIGHT
	HANDHOLE
	EXIST POLE
	EXIST GUY
	WOOD POLE 40' CLASS 3



ELECTRICAL SITE PLAN

SCALE 1"=40'

GRAPHIC SCALE

1" = 40'

0' 40' 80' 120' 160' 200'

RECORD DRAWING LETTER DATED JAN 31 1991

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DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NAVAL STATION NORFOLK, VA.

NAVAL HOSPITAL CAMP LEJEUNE, N.C.

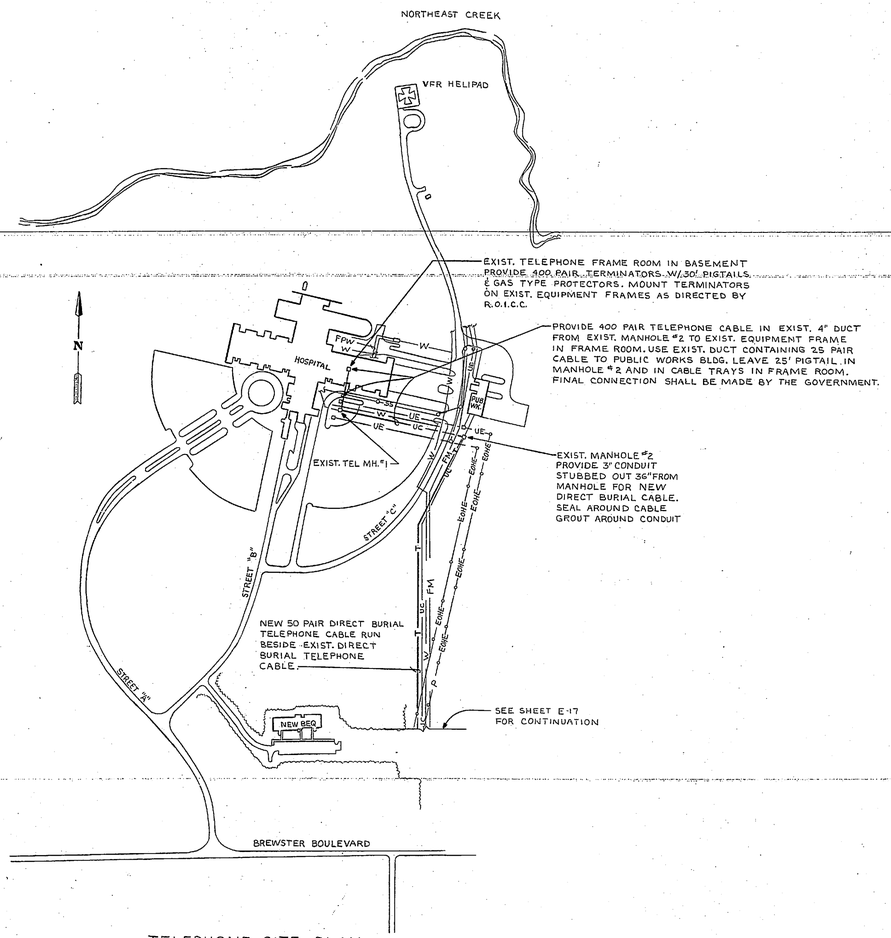
BACHELOR ENLISTED QUARTERS

ELECTRICAL SITE PLAN

EFD DWG. NO. 257789
JOB ORDER NO. 5PS306
STA. PROJ. NO. 7791
DES. REF CHKR. LBS
PROJ. MGR. MCD CHARGEHER YLM
EFD-RVD. WCS F.P. WCS
BR. MGR. PBA SES DR. WCS
APPROVED DATE
ACTIVITY - SATISFACTORY TO
FOR EFD / FOR CONTRACTOR
DATE 3-16-91

SIZE F — CODE IDENT NO. 80091 — NAVFac DRAWING NO. 4157789
SCALE AS NOTED — SPEC. 05-85-5306 — SHEET 67 OF 68
CONTR. CONTR. NO. N62470-85-B-5142

REVISIONS			
SYM.	DESCRIPTION	DATE	APPROVED



TELEPHONE SITE PLAN
SCALE: 1" = 200'-0"

GRAPHIC SCALE

1" = 200' 0 200' 400' 600' 800'

RECORD DRAWING
LETTER DATED

E-18

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NAVAL STATION — NORFOLK, VA.
NAVAL HOSPITAL — CAMP LEJEUNE, N.C.

BACHELOR ENLISTED QUARTERS

TELEPHONE SITE PLAN

EFD DWG. NO. 257790
JOB ORDER NO. SPF5306
STA. PROJ. NO. P721
DES. MEF — DRWN. L.D.S.
PROJ. MGR. MCD — CHK/ENGR. V.L.M.
EFD NO. — FY
RS NO. 198 — DES NO.
APPROVED — DATE
ACTIVITY - SATISFACTORY TO
APPROVED — DATE 5-30-85
FOR EFD FOR COMMANDER NAVFAC

SIZE: F — CODE IDENT NO. 80091 — NAVFAC DRAWING NO. 4157790
CONSTR. CONTR. NO. N62470-85-B-5142
SCALE: AS SHOWN — SPEC. 05-85-5306 — SHEET 68 OF 68