



NOTE:  
1600/1200 MAIN BREAKER FOR THE NORMAL DISTRIBUTION SWITCHGEAR SHALL BE AIR POWER DRANOUT CIRCUIT BREAKERS WITH SOLID STATE TRIPPING DEVICES. ALL OTHER BREAKERS FOR NORMAL DISTRIBUTION SWITCHGEAR, 100/100-3P ENCLOSED BREAKER AND GENERATOR CONTROL PANEL SHALL BE MOLDED CASE WITH SOLID STATE TRIPPING DEVICES.

EXISTING #2, 12.47 KV LOOP FEEDER (TO BE REPLACED WITH NEW #2/0 AWG, 15 KV, UNDER PROJECT 516-053C)  
EXISTING CABLE MANUFACTURED BY COLLYER INSULATED WIRE CO. COLLYER N# R-72610. XLP INSULATION (SHIELDED)

NOTE:  
ALL WIRE AND CABLE SIZES INDICATED ARE COPPER SIZES AND ONLY COPPER WIRES AND CABLES ARE TO BE INSTALLED.  
APPROXIMATE FEEDER LENGTHS ARE SHOWN FOR VOLTAGE DROP AND SHORT CIRCUIT CALCULATIONS ONLY, AND ARE NOT INTENDED TO BE USED FOR ESTIMATING OR CONSTRUCTION.

### ELECTRICAL RISER DIAGRAM

NOT TO SCALE

TRANSFORMER SCHEDULE				
TRANSF. NO.	KVA	VOLTAGE	IMPEDANCE %	
		PRIMARY	SECONDARY	
T 1	75	480 V.	120/208V.	3.0 TO 4.0
T 2	30	480 V.	120/208V.	
T 3	75	480 V.	120/208V.	
T 4	30	480 V.	120/208V.	
T 5	112 1/2	480 V.	120/208V.	
T 6	30	480 V.	120/208V.	
T 7	30	480 V.	120/208V.	
T 8	9	480 V.	120/208V.	
SUB-STA	750	12.47 KV	277/480V.	5.75 %

CIRCUIT BREAKER COORDINATION TABLE											
NO.	TO FEED	LOAD			BKR. FRAME SIZE	CIRCUIT BREAKER SETTINGS					
		A	B	C		TRIP AMP. SET	LONG TIME TRIP BAND	SHORT TIME TRIP POINT	SHORT TIME DELAY TIME	INSTANT TRIP POINT	GRND. FAULT TRIP POINT
F1	NORMAL DIST. SWITCHBOARD	1000	1000	1000	1600	1200 (X1.0)	MAXIMUM	8 L	MAXIMUM	12 L	.7X
N1	NHA	80	80	80	225	175 (X1.0)		7 L	MINIMUM	H1	1.0X
N2	NHB	45	45	45	100	100					MIN.
N3	NHC	76	76	76	225	175					
N4	NHD	55	55	55	100	100					
N5	NHDK	129	129	129	225	200					
N6	ACC-I	190	190	190	400	250					
N7	NMCC	120	120	120	225	150					
N11	CRIT. DIST. PANEL	264	264	264	400	350					
N12	EHD	22	22	22	100	100					
G1	GEN. CONTROL PANEL	280	280	280	600	350		X 10		X 1	N.A.
G2	EHD	22	22	22	100	100		7 L		H1	N.A.

NOTE:  
1. ALL CIRCUIT BREAKER SETTINGS/AS REQUIRED TO ACHIEVE SELECTION COORDINATION SHALL BE DETERMINED BY THE CONTRACTOR IN ACCORDANCE WITH THE SPECIFICATION SECTION 800, BASIC ELECTRICAL REQUIREMENTS. SETTINGS SHOWN IN ABOVE TABLE ARE TYPICAL.

FEEDER DESCRIPTION						
NO.	WIRE	NEUTRAL	GRND.	COND.	LENGTH	VOLTS
F 1	1600A. BUS					480
N 1	3#2/0	1#2/0	1#4	2" C	360 FT.	480
N 2	3#3	1#3	1#8	1 1/4" C	230	480
N 3	3#2/0	1#2/0	1#4	2" C	175	480
N 4	3#3	1#3	1#8	1 1/4" C	20	480
N 5	3#3/0	1#3/0	1#2	2" C	75	480
N 6	3#250MCM		1#2	3" C	65	480
N 7	3#1		1#6	1 1/2" C	75	480
N 11	3#500MCM	1#500MCM	1#2	3 1/2" C	50	480
N 12	3#3	1#3	1#8	1 1/2" C	30	480
N 13	3#4/0	1#4/0	1#2	2 1/2" C	7	208
N 14	3#2	1#2	1#6	1 1/2" C	7	208
N 15	3#1	1#1	1#6	1 1/2" C	7	480
N 16	3#2	1#2	1#6	1 1/2" C	7	208
N 17	3#4/0	1#4/0	1#2	2 1/2" C	7	208
N 18	3#2	1#2	1#6	1 1/2" C	7	208
N 19	3#1	1#1	1#6	1 1/2" C	7	480
N 20	3#2	1#2	1#6	1 1/2" C	7	208
N 21	3#500MCM	1#500MCM	1#1/0	2 1/2" C	7	208
N 22	3#2/0	1#4	1#4	2" C	7	480
F 2	3#500MCM	1#500MCM	1#1/0	3 1/2" C	15	480
G 1	3#500MCM	1#500MCM	1#1/0	3 1/2" C	40	480
G 2	3#3	1#3	1#6	1 1/4" C	40	480
C 1	3#3	1#3	1#6	1 1/4" C	380	480
C 2	3#6	1#6	1#8	1" C	230	480
C 3	3#3	1#3	1#6	1 1/4" C	175	480
C 4	3#3		1#6	1 1/4" C	75	480
C 7	3#3	1#3	1#6	1 1/4" C	7	208
C 8	3#8	1#8	1#10	1" C	7	208
C 9	3#3	1#3	1#6	1 1/2" C	7	208
C 10	3#8	1#8	1#10	1" C	7	480
E 1	3#10	1#10	1#10	3/4" C	7	480
E 2	3#12	1#12	1#12	3/4" C	7	208

5-5-1-2250

EDUARDO F. ALONSO  
REGISTERED ENGINEER  
NO. 7670  
COMMONWEALTH OF PUERTO RICO

AS BUILT JUL 27 1981

NO. DATE DESCRIPTION

REVISIONS

SHEET TITLE: ELECTRICAL RISER DIAGRAM  
NTS

BUILDING NO. 101 PROJECT TITLE: 120 Bed Nursing Home Care Unit

DRAWN BY: JAC MORLANS  
ALLORANTE

CHECKED: DATE:

SHS Associates Inc.  
Architects, Engineers, Planners  
2600 - 9th Street North  
St. Petersburg, Florida 33704

APPROVED: PROJECT DIRECTOR

DRAWING NUMBER: 101-E14  
DWG. 114 OF 120  
PROJECT NUMBER: 516-053E

VETERANS ADMINISTRATION

LOCATION: V.A.C. Bay Pines, Florida

