EXISTING

2LC1

BUS NUMBER: 100 | SERVED FROM: N/A | MOUNTING: SURFACE | REMARKS:

AMPERE RATING: 225 | MAIN TYPE: MAIN BREAKER | LUG OPTIONS:

VOLTAGE (L–L): 208 | VOLTAGE (L–N): 120

PHASE: 3 | WIRE: 4 | MIN. KAIC: 22

CKT NO.	CIRCUIT BRKR TRIP	P	LOAD DESCRIPTION	CODE	LOAD KVA	SETS	PHASE/NEUT. NO	SIZE	GND SIZE	MIN CND SIZE	SETS	PHASE/NEUT. NO	SIZE	GND SIZE	MIN CND SIZE	LOAD KVA	CODE	LOAD DESCRIPTION	CIRCUIT BRKR TRIP	P	CKT NO.
1	20	1	DOOR OPERATOR	N	0.52	1	2	12	12	3/4	1	2	12	12	3/4	1.44	R	RECEPTACLES	20	1	2
3	20	1	RECEPTACLES	R	1.44	1	2	12	12	3/4	1	2	12	12	3/4	0.36	R	RECEPTACLES	20	1	4
5	20	1	RECEPTACLES	R	0.36	1	2	12	12	3/4	1	2	12	12	3/4	1.44	R	RECEPTACLES	20	1	6
7	20	1	RECEPTACLES	R	0.72	1	2	12	12	3/4	1	2	12	12	3/4	0.36	R	RECEPTACLES	20	1	8
9	20	1	RECEPTACLES	R	0.18	1	2	12	12	3/4	1	2	12	12	3/4	1.44	R	RECEPTACLES	20	1	10
11	20	1	RECEPTACLES	R	1.44	1	2	12	12	3/4	1	2	12	12	3/4	0.72	R	RECEPTACLES	20	1	12
13	20	1	RECEPTACLES	R	0.36	1	2	12	12	3/4	1	2	12	12	3/4	0.90	R	RECEPTACLES	20	1	14
15	20	1	RECEPTACLES	R	1.44	1	2	12	12	3/4	1	2	12	12	3/4	0.54	R	RECEPTACLES	20	1	16
17	20	1	RECEPTACLES	R	0.36	1	2	12	12	3/4	1	2	12	12	3/4	0.54	R	RECEPTACLES	20	1	18
19	20	1	ICE MACH	K	0.40	1	2	12	12	3/4	1	2	12	12	3/4	1.44	R	RECEPTACLES	20	1	20
21	20	1	REFRIG	K	0.45	1	2	12	12	3/4	1	2	12	12	3/4	0.36	R	IT RM RECEPTACLE	20	1	22
23	20	1	MICROWAVE	K	0.50	1	2	12	12	3/4	1	3	12	12	3/4	0.36	R	IT RM RECEPTACLE	20	1	24
25	20	1	RECEPTACLES	R	0.18	1	2	12	12	3/4	1	2	12	12	3/4	1.26	R	RECEPTACLES	20	1	26
27	60	1	LIGHTING	A	5.28	1	2	6	10	3/4	1	2	12	12	3/4	0.72	R	RECEPTACLES	20	1	28
29	20	1	LIGHTING	A	0.90	1	2	12	12	3/4	1	2	12	12	3/4	0.36	R	RECEPTACLES	20	1	30
31	20	1	LIGHTING	A	1.00	1	2	12	12	3/4								SPARE	20	1	32
33	20	1	SPARE															SPARE	20	1	34
35	20	1	SPARE								1	2	12	12	3/4	0.36	R	RECEPTACLES	20	1	36
37	20	1	SPARE													12.39	X				
39		1	SPACE ONLY								1	4	350	2	3	10.16	X	1CL1	150	3	40
41		1	SPACE ONLY													9.94	X				

NEC ART. 220 LOAD CATEGORY	TOTAL CONNECTED LOAD (KVA)	× NEC ART. 220 FEEDER SIZING FACTOR	= NEC ART. 220 FEEDER SIZING LOAD (KVA)
A – HOSPITAL LIGHTING	12.51	0.40	5.00
B – HOTEL/MOTEL LIGHTING	0.00	0.00	0.00
C – SPACE COOLING*	0.00	0.00	0.00
D – OTHER HVAC LOADS	0.00	0.00	0.00
H – SPACE HEATING*	0.00	0.00	0.00
K – KITCHEN APPLIANCES	5.75	1.00	5.75
L – GENERAL LIGHTING	0.00	0.00	0.00
M – MISC. CONTINUOUS	1.70	1.25	2.12
N – MISC. NONCONTINUOUS	5.56	1.00	5.56
R – RECEPTACLES	35.10	0.64	22.55
W – WAREHOUSE LIGHTING	0.00	0.00	0.00
LARGEST MOTOR**	0.00	0.25	0.00
	60.62		40.98

PHASE BALANCE (% OF 3 PHASE LOAD) A: 103.9 % B: 110.8 % C: 85.6 %

BALANCED 3 PHASE NEC ART. 220 FEEDER SIZING LOAD (AMPS): 113.7 A.
X LARGEST UNBALANCED PHASE %: × 1.10
TOTAL: 126.1 A.
+ RESERVED FUTURE CAPACITY: + 22.5 A.
TOTAL UNBALANCED 3 PHASE NEC ART. 220 FEEDER SIZING LOAD: 148.6 A.

MIN. NEC ART. 220 REQUIRED OVERCURRENT PROTECTION: 150 A.

* NON-COINCIDENTAL LOADS. LARGEST LOAD INCLUDED IN TOTAL. ** LARGEST MOTOR LOAD INCLUDED IN CATEGORIZED LOADS.

EXISTING

13AN1

BUS NUMBER: 21 | SERVED FROM: N/A | MOUNTING: SURFACE | REMARKS: EXISTING NORMAL BRANCH

AMPERE RATING: 100 | MAIN TYPE: MAIN BREAKER | LUG OPTIONS:

VOLTAGE (L–L): 208 | VOLTAGE (L–N): 120

PHASE: 3 | WIRE: 4 | MIN. KAIC: 22

CKT NO.	CIRCUIT BRKR TRIP	P	LOAD DESCRIPTION	CODE	LOAD KVA	SETS	PHASE/NEUT. NO	SIZE	GND SIZE	MIN CND SIZE	SETS	PHASE/NEUT. NO	SIZE	GND SIZE	MIN CND SIZE	LOAD KVA	CODE	LOAD DESCRIPTION	CIRCUIT BRKR TRIP	P	CKT NO.
1	20	1	EWC	N	0.35	1	2	12	12	3/4	1	2	12	12	3/4	0.30	L	LIGHTING	20	1	2
3	20	1	FILM VIEWER	N	0.40	1	2	12	12	3/4	1	2	12	12	3/4	1.20	K	RECEPT	20	1	4
5	20	1	RECEPT EXAM	R	0.90	1	2	12	12	3/4	1	2	12	12	3/4	1.20	K	RECEPT	20	1	6
7	20	1	RECEPT	R	0.90	1	2	12	12	3/4	1	2	12	12	3/4	1.00	K	RECEPT	20	1	8
9	20	1	RECEPT 102, 103	R	1.08	1	2	12	12	3/4	1	2	12	12	3/4	0.54	R	RECEPT 136	20	1	10
11	20	1	LIGHTING	A	0.59	1	2	12	12	3/4	1	2	12	12	3/4	0.54	R	RECEPT 135	20	1	12
13	20	1	DDC CONTROL PANEL	D	1.00	1	2	12	12	3/4	1	2	12	12	3/4	0.54	R	RECEPT 134	20	1	14
15	20	1	RECEPTACLES	R	0.54	1	2	12	12	3/4								SPARE	20	1	16
17	20	1	RECEPTACLES	R	0.72	1	2	12	12	3/4								SPARE	20	1	18
19	20	1	SPARE															SPARE	20	1	20
21	20	1	SPARE															SPARE	20	1	22
23		1	SPACE ONLY															SPARE	20	1	24
25		1	SPACE ONLY															SPARE	20	1	26
27		1	SPACE ONLY															SPARE	20	1	28
29		1	SPACE ONLY															SPACE ONLY		1	30
31		1	SPACE ONLY															SPACE ONLY		1	32
33		1	SPACE ONLY															SPACE ONLY		1	34
35		1	SPACE ONLY															SPACE ONLY		1	36

NEC ART. 220 LOAD CATEGORY	TOTAL CONNECTED LOAD (KVA)	× NEC ART. 220 FEEDER SIZING FACTOR	= NEC ART. 220 FEEDER SIZING LOAD (KVA)
A – HOSPITAL LIGHTING	0.59	0.40	0.23
B – HOTEL/MOTEL LIGHTING	0.00	0.00	0.00
C – SPACE COOLING*	0.00	0.00	0.00
D – OTHER HVAC LOADS	1.00	1.00	1.00
H – SPACE HEATING*	0.00	0.00	0.00
K – KITCHEN APPLIANCES	3.40	0.90	3.06
L – GENERAL LIGHTING	0.30	1.24	0.37
M – MISC. CONTINUOUS	0.00	0.00	0.00
N – MISC. NONCONTINUOUS	0.75	0.99	0.75
R – RECEPTACLES	5.76	1.00	5.76
W – WAREHOUSE LIGHTING	0.00	0.00	0.00
LARGEST MOTOR**	0.00	0.25	0.00
	11.80		11.18

PHASE BALANCE (% OF 3 PHASE LOAD) A: 104.1% B: 95.7% C: 100.5%

BALANCED 3 PHASE NEC ART. 220 FEEDER SIZING LOAD (AMPS): 31.0 A.
X LARGEST UNBALANCED PHASE %: × 1.04
TOTAL: 32.3 A.
+ RESERVED FUTURE CAPACITY: + 10.0 A.
TOTAL UNBALANCED 3 PHASE NEC ART. 220 FEEDER SIZING LOAD: 42.3 A.

MIN. NEC ART. 220 REQUIRED OVERCURRENT PROTECTION: 45 A.

* NON-COINCIDENTAL LOADS. LARGEST LOAD INCLUDED IN TOTAL. ** LARGEST MOTOR LOAD INCLUDED IN CATEGORIZED LOADS.

HVAC EQUIPMENT CONNECTION SCHEDULE

CONNECTION DESIGNATION	LOAD DESCRIPTION	VOLTS	PHASE	LOAD INFORMATION: HP	KVA	AMPS	MCA	MOCP	EMERG. POWER REQD.	FURN. BY	INST. BY	STARTER INFORMATION: NEMA SIZE	TYPE	STARTER DISCONNECT TYPE	TRIP OR FUSE SIZE	NEMA ENCL TYPE	DISCONNECT INFORMATION: FURN. BY	INST. BY	TYPE	SWITCH RATING	POLE	FUSE OR TRIP RATING	NEMA ENCL TYPE	CIRCUIT INFORMATION: CIRCUIT ID	CIRCUIT BRKR TRIP	P	BRANCH CIRCUIT: SETS	PHASE/NEUT. NO	SIZE	GND SIZE	MIN CND SIZE	CONNECTION NOTES	CONNECTION DESIGNATION
AHU-13A	AIR HANDLER	460	3	N/A	87.20	105.0	N/A	N/A	NO	N/A	N/A	N/A	N/A	N/A		N/A	EQ. MFR.	DIV. 16	FUSED SWITCH	200	3	PER NAMEPLATE	3R	13QH-3	125	3	1	3	1	6	1-1/2	3 4	AHU-13A
IA-1	ISOLATION ALARM	120	1	N/A	0.20	1.6	N/A	N/A	YES	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A			13ALS-9	20		1	1	12	12	3/4		IA-1
IA-2	ISOLATION ALARM	120	1	N/A	0.20	0.0	N/A	N/A	YES	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A			13ALS-11	20		1	1	12	12	3/4		IA-2

1. PROVIDE LOCAL DISCONNECT ADJACENT TO OPERATOR
2. CARD READER ACCESS. SEE ARCH DOOR SCHEDULE
3. VFD PROVIDED WITH EQUIPMENT
4. SINGLE POINT CONNECTION FOR SUPPLY AND RETURN FANS
5. COORDINATE WITH SECURITY FOR 'VIP' INTERFACE
6. VERIFY RECEPTACLE MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS
7. SEE ASSIGNED CIRCUIT
8. CORD AND PLUG CONNECTION.
9. DISCONNECT FURNISHED WITH EQUIPMENT.
10. UTILIZE EXISTING SPACE IN PANEL
11. PROVIDE WITH GROUND FAULT PROTECTION
12. PROVIDE SNAP SWITCH ADJACENT TO PANEL CONNECTION

MISCELLANEOUS EQUIPMENT CONNECTION SCHEDULE

CONNECTION DESIGNATION	LOAD DESCRIPTION	VOLTS	PHASE	LOAD INFORMATION: HP	KVA	AMPS	MCA	MOCP	EMERG. POWER REQD.	FURN. BY	INST. BY	STARTER INFORMATION: NEMA SIZE	TYPE	STARTER DISCONNECT TYPE	TRIP OR FUSE SIZE	NEMA ENCL TYPE	DISCONNECT INFORMATION: FURN. BY	INST. BY	TYPE	SWITCH RATING	POLE	FUSE OR TRIP RATING	NEMA ENCL TYPE	CIRCUIT INFORMATION: CIRCUIT ID	CIRCUIT BRKR TRIP	P	BRANCH CIRCUIT: SETS	PHASE/NEUT. NO	SIZE	GND SIZE	MIN CND SIZE	CONNECTION NOTES	CONNECTION DESIGNATION
AC	AIR COMPRESSOR	480	3	5	6.31	7.6	N/A	N/A	YES	DIV. 26	DIV. 26	1	FVNR	MAG ONLY CKT BKR	20	1	DIV. 26	DIV. 26	FUSED SWITCH	30	2	PER NAMEPLATE	1	EP13-15	20	1	1	1	12	12	3/4	10	AC
ACD	AIR COMP DRYER	120	1	N/A	0.20	1.6	N/A	N/A	YES	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	SEE NOTES	N/A	N/A				20	1	1	1	12	12	3/4	7 8	ACD
CR	CARD READER	120	1	N/A	0.10	0.8	N/A	N/A	YES	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A			1CL2-6	20	1	1	2	12	12	3/4	2 5	CR
D01	DOOR OPERATOR-EAST	120	1	1/6	0.52	4.4	N/A	N/A	YES	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 26	DIV. 26	MOTOR-RTD SWITCH	N/A	N/A	N/A		1CL2-2	20	1	1	2	12	12	3/4	1	D01
D02	DOOR OPERATOR WEST	120	1	1/6	0.72	4.4	N/A	N/A	YES	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 26	DIV. 26	MOTOR-RTD SWITCH	N/A	N/A	N/A		1CL2-4	20	1	1	2	12	12	3/4	1	D02
D03	INFRARED DOOR CONTR	120	1	1/6	0.52	4.4	N/A	N/A	YES	N/A	N/A	N/A	N/A	N/A		N/A	DIV. 26	DIV. 26	MOTOR-RTD SWITCH	N/A	N/A	N/A		1CL1-16	20	1	1	1	12	12	3/4	1	D03
EF-13A-1	EXHAUST FAN 1	480	1	3/4	0.00	2.1	N/A	N/A	NO	DIV. 26	DIV. 26	1	FVNR	MAG ONLY CKT BKR	15	1	DIV. 26	DIV. 26	FUSED SWITCH	30	2	PER NAMEPLATE	1	13QH-4	15	3	1	3	12	12	3/4		EF-13A-1
EF-13A-2	EXHAUST FAN 2	120	1	1/6	0.52	4.4	N/A	N/A	NO	N/A	N/A	N/A	N/A	N/A		N/A	EQ. MFR.	EQ. MFR.	MOTOR-RTD SWITCH	30	N/A	N/A		13QL-1	15	1	1	2	12	12	3/4	9	EF-13A-2
EF-13A-3	EXHAUST FAN 3	120	1	1/6	0.52	4.4	N/A	N/A	NO	N/A	N/A	N/A	N/A	N/A		N/A	EQ. MFR.	EQ. MFR.	MOTOR-RTD SWITCH	N/A	N/A			13QL-3	20	1	1	2	12	12	3/4	9	EF-13A-3
EF-13A-4	EXHAUST FAN 4	480	3	3/4	1.33	1.6	N/A	N/A	NO	DIV. 26	DIV. 26	1	MAN. MTR. STR.	MAG ONLY CKT BKR	15	1	DIV. 26	DIV. 26	ENCLOSED CB	N/A	N/A	PER NAMEPLATE		13QH-9	15	3	1	3	12	12	3/4		EF-13A-4
EF-13A-5	EXHAUST FAN 5	480	3	3/4	1.33	1.6	N/A	N/A	NO	DIV. 26	DIV. 26	1	MAN. MTR. STR.	MAG ONLY CKT BKR	15	1	DIV. 26	DIV. 26	ENCLOSED CB	N/A	N/A	PER NAMEPLATE		13QH-10	15	3	1	3	12	12	3/4		EF-13A-5
EF-13A-6	EXHAUST FAN 6	120	1	1/6	0.52	4.4	N/A	N/A	NO	N/A	N/A	N/A	N/A	N/A		N/A	EQ. MFR.	EQ. MFR.	N/A	N/A	N/A			13QL-5	15	1	1	2	12	12	3/4	9	EF-13A-6
EF-13A-7	EXHAUST FAN 7	120	1	1/2	1.17	9.8	N/A	N/A	NO	N/A	N/A	1	N/A	N/A		N/A	EQ. MFR.	DIV. 26	N/A	N/A	N/A			13QL-6	20	1	1	2	12	12	1	9	EF-13A-7
EF-13A-8	EXHAUST FAN 8	120	1	1/6	0.52	4.4	N/A	N/A	NO	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	MOTOR-RTD SWITCH	N/A	N/A	N/A		13QL-8	15	1	1	2	12	12	3/4	9	EF-13A-8
FV	FILM VIEWER	120	1	N/A	0.05	0.4	N/A	N/A	NO	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A				20	1	1	2	12	12	3/4	6 7	FV
HFP	HEPA FILTER PANEL	120	1	N/A	0.20	0.0	N/A	N/A	YES	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	SEE NOTES	N/A	N/A				15	1	1	1	12	12	3/4	7 8	HFP
HW	HEAD WALL CONNECTION	120	1	N/A	0.20	1.6	N/A	N/A	YES	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A				20	1	1	2	12	12	3/4	7	HW
MGA-1	MEDICAL GAS PANEL	120	1	N/A	0.30	2.5	N/A	N/A	YES	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A			13ALS-2	20	1	1	2	12	12	3/4		MGA-1
MGA-2	MEDICAL GAS PANEL	120	1	N/A	0.3	2.5	N/A	N/A	YES	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A			13ALS-6	20	1	1	2	12	12	3/4		MGA-2
MPL	MINOR PROC LT	120	1	N/A	0.50	4.1	N/A	N/A	YES	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	SEE NOTES	N/A	N/A			1CL2-32	20	1	1	1	12	12	3/4		MPL
PIX	IV MEDS DISPENSOR	120	1	N/A	0.00	5.0	N/A	N/A	YES	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A			1CL1-4	20	1	1	2	12	12	3/4	8	PIX
PL	PATIENT LIFT	120	1	1/6	0.52	4.4	N/A	N/A	YES	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	SEE NOTES	N/A	N/A				20	1	1	1	12	12	3/4	7 8	PL
SW	SCOPE WASH	120	1	N/A	0.20	0.0	N/A	N/A	YES	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	SEE NOTES	N/A	N/A				20	1	1	1	12	12	3/4	7 8 11	SW
WS	WATER SOFTNER	120	1	N/A	0.2	0.0	N/A	N/A	YES	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	SEE NOTES	N/A	N/A				20	1	1	1	12	12	3/4	7 8	WS

1. PROVIDE LOCAL DISCONNECT ADJACENT TO OPERATOR
2. CARD READER ACCESS. SEE ARCH DOOR SCHEDULE
3. VFD PROVIDED WITH EQUIPMENT
4. SINGLE POINT CONNECTION FOR SUPPLY AND RETURN FANS
5. COORDINATE WITH SECURITY FOR 'VIP' INTERFACE
6. VERIFY RECEPTACLE MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS
7. SEE ASSIGNED CIRCUIT
8. CORD AND PLUG CONNECTION.
9. DISCONNECT FURNISHED WITH EQUIPMENT.
10. UTILIZE EXISTING SPACE IN PANEL
11. PROVIDE WITH GROUND FAULT PROTECTION
12. PROVIDE SNAP SWITCH ADJACENT TO PANEL CONNECTION

2LC1	13AN1

100% SUBMITTAL

REVISION NO.	REVISION DESCRIPTION	By	Date

Revisions

Department of Veterans Affairs
Medical Center
1826 Veterans Blvd.
Dublin, Ga. 31021

SEAL: NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 025444 LEE E. HARRELL, JR.

Architect/Engineer Address

Harrell, Saltrick & Hopper
Design & Management Solutions for the Built Environment
151 LOCUST STREET, SUITE #1 AVONDALE ESTATES, GA 30002 P 704.814.1325 F 704.321.0833 WWW.HSHPC.COM

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HSH PROJECT # 10004

Recommended Approvals:

1. MEDICAL DIRECTOR	6. OPERATIONS SERVICE LINE MANAGER
2. ASSOCIATE DIRECTOR	7. INFECTION CONTROL SAFETY MANAGER
3. CHIEF OF STAFF	8. SAFETY MANAGER
4. ASSOC. DIRECTOR	9. GENERAL ENGINEER
5. SERVICE LINE MGRS.	10. COTR

Drawing Title: PANEL SCHEDULES

FULLY SPRINKLERED

Project Title: RENOVATE 13A FOR ENDOSCOPY SUITE

Drawn	Building Number 13A	AutoCAD File Name
Checked	Reviewed	Const. Contract No.

Date: June 10, 2011

Project Number: 557-10-108

DRAWING No. E-603

Veterans Affairs