

ELECTRICAL LEGEND

	CONDUIT AND WIRE, CONCEALED IN CEILING, CAVITY, OR WALL IN FINISHED AREAS. EXPOSED IN UNFINISHED AREAS.
	CONDUIT AND WIRE, CONCEALED IN SLAB OR UNDERGROUND.
	CIRCUIT HOMERUN TO DESIGNATED PANEL AND CIRCUIT NUMBER.
	SHORT TICK LINE INDICATE PHASE CONDUCTOR(S); LONG TICK LINE INDICATES NEUTRAL CONDUCTOR(S); HALF-ARROW TICK LINE INDICATES GROUND CONDUCTOR(S). ADDITIONAL GROUND CONDUCTOR (NOT SHOWN) SHALL BE PROVIDED IN PVC CONDUIT. PHASE AND NEUTRAL WIRE SIZE IS #12 UNLESS NOTED OTHERWISE AS SHOWN. GROUND AND CONDUIT SIZED PER NEC.
	CONDUIT UP/DOWN.
	GROUND.
	TELEPHONE CONDUIT HOMERUN TO TELEPHONE CABINET (IF PRESENT) OR TELEPHONE SERVICE DEMARCATION POINT.
	MOTORS: FRACTIONAL HORSEPOWER OR HORSEPOWER AS SHOWN.
	UTILITY COMPANY METER.
	DISCONNECT SWITCHES: NON-FUSED AND FUSED. DISCONNECTS ARE 30/2NF/1240V UNO. NOTATION AS FOLLOWS: ENCLOSURE RATING/POLES/FUSE RATING/NEMA RATING/VOLTAGE RATING.
	PANELBOARD: SURFACE MOUNTED AND FLUSH MOUNTED.
	3/4" FIRE-RATED PLYWOOD TELEPHONE BACKBOARD WITH #6 GROUND CONDUCTOR TO BUILDING STEEL.
	SWITCHES, 20A, 120/277V, WALL MOUNTED 44" AFF UNO: SINGLE POLE, 2-POLE, 3-WAY, AND 4-WAY.
	SWITCHES, 20A, 120/277V, WALL MOUNTED 44" AFF UNO: OCCUPANCY SENSOR, VACANCY SENSOR, MOTOR RATED, AND KEYED.
	DIMMER SWITCH, 2000W, 120/277V, 44" AFF UNO.
	OCCUPANCY SENSOR, VACANCY SENSOR, 120/277V, CEILING MOUNTED.
	CEILING FAN OR HVLS FAN.
	DUPLEX RECEPTACLE, 15A 125V, WALL MOUNTED 18" AFF UNO.
	DEDICATED DUPLEX RECEPTACLE, 20A 125V, WALL MOUNTED 18" AFF UNO.
	QUADRUPLX RECEPTACLE, 15A 125V, WALL MOUNTED 18" AFF UNO.
	SPECIAL RECEPTACLE, COORDINATE WITH EQUIPMENT, WALL MOUNTED 18" AFF UNO.
	LOW VOLTAGE OUTLETS, WALL MOUNTED 18" AFF UNO: DATA, TELEPHONE, AND COMBINATION TELEPHONE/DATA OUTLET.
	POWER JUNCTION BOX, WALL MOUNTED.
	TELE/DATA JUNCTION BOX, WALL MOUNTED.
	TELEVISION OUTLET, WALL MOUNTED 18" AFF UNO.
	DUPLEX RECEPTACLE, 15A 125V, CEILING MOUNTED.
	DEDICATED DUPLEX RECEPTACLE, 20A 125V, CEILING MOUNTED.
	QUADRUPLX RECEPTACLE, 15A 125V, CEILING MOUNTED.
	SPECIAL RECEPTACLE, COORDINATE WITH EQUIPMENT, CEILING MOUNTED.
	LOW VOLTAGE OUTLETS, CEILING MOUNTED: DATA, TELEPHONE, AND COMBINATION TELEPHONE/DATA OUTLET.
	POWER JUNCTION BOX, CEILING MOUNTED.
	LOW VOLTAGE JUNCTION BOX, CEILING MOUNTED.
	DUPLEX RECEPTACLE IN FLUSH FLOOR BOX, 15A 125V.
	DEDICATED DUPLEX RECEPTACLE IN FLUSH FLOOR BOX, 20A 125V.
	QUADRUPLX RECEPTACLE IN FLUSH FLOOR BOX, 20A 125V.
	SPECIAL RECEPTACLE IN FLUSH FLOOR BOX, COORDINATE WITH EQUIPMENT.
	FLUSH FLOOR BOXES: DATA, TELEPHONE, AND COMBINATION TELEPHONE/DATA OUTLET.
	POWER JUNCTION BOX, FLOOR MOUNTED.
	TELE/DATA JUNCTION BOX, FLOOR MOUNTED.
	2-CHANNEL POWER AND TELE/DATA POWER POLE.
	SECURITY CAMERA.
	POWER PLUGMOLD, 2-CHANNEL IF TELE/DATA IS REQUIRED.
	SPEAKERS: WALL MOUNTED AND CEILING MOUNTED.
	CARD READER, WALL MOUNTED 44" AFF UNO.
	DOOR MAGLOCK: PROVIDE 120V POWER AS NECESSARY. CONNECT TO NEAREST RECEPTACLE CIRCUIT.
	PUSH BUTTON, WALL MOUNTED 44" AFF UNO.
	DOORBELL, WALL MOUNTED 44" AFF UNO AND DOORBELL CHIME, WALL MOUNTED 80" AFF UNO.
	JUNCTION BOXES FOR FURNITURE, WALL MOUNTED: POWER AND TELE/DATA.
	JUNCTION BOXES FOR FURNITURE, CEILING MOUNTED: POWER AND TELE/DATA.
	FURNITURE FLUSH FLOOR BOXES: POWER AND TELE/DATA.

Order Plans @

3Ø PANELBOARD - LA

MAIN: 400A MLO SERVICE: 208Y/120V, 3P, 4W MOUNTING: SURFACE ENCLOSURE: NEMA 1
 FED BY: DA MIN. BREAKER A.I.C.: 22000 TOTAL DEMAND AMPS: 214.90 A

CKT #	AMP/ POLE	CIRCUIT DESCRIPTION	KVA	PH	KVA	CIRCUIT DESCRIPTION	AMP/ POLE	CKT #
1	20/1	LIGHTING	0.83	A	1.50	WH-1	15/2	2
3	20/1	LIGHTING	0.92	B	1.90	WH-1	15/2	4
5	20/1	LIGHTING	0.97	C	1.90	WH-1	15/2	6
7	20/1	TRB	0.50	A	1.50	WH-1	15/2	8
9	20/1	RECEPTS	1.08	B	1.50	WH-2	15/2	10
11	20/1	RECEPT KITCHEN	1.00	C	1.50	WH-2	15/2	12
13	20/1	RECEPT KITCHEN	1.00	A				14
15	20/1	FREDGE	1.00	B				16
17	20/1	RECEPTS	1.44	C				18
19	20/1	RECEPTS	0.90	A				20
21	20/1	CHAIR	1.00	B	5.29			22
23	20/1	CHAIR	1.00	C	5.29	FCU-1	60/3	24
25	20/1	RECEPTS	1.26	A	5.29			26
27	20/1	COOPER	1.00	B	5.29			28
29	20/1	RECEPTS	1.08	C	5.29	FCU-2	60/3	30
31	20/1	RECEPTS	1.08	A	5.29			32
33	20/1	RECEPTS	0.90	B	1.54			34
35	20/1	CHAIR	1.00	C	1.54	HP-1	20/3	36
37	20/1	CHAIR	1.00	A	1.54			38
39	20/1	RECEPT NURSE STATION	1.00	B	1.54	HP-2	20/3	40
41	20/1	RECEPT NURSE STATION	1.00	C	1.54			42
43	20/1	XRAY	1.00	A	1.54			44
45	20/1	RECEPTS	1.26	B		SPARE	20/1	46
47	20/1	RECEPTS	1.08	C		SPARE	20/1	48
49	20/1	CHAIR	1.00	A		SPARE	20/1	50
51	20/1	MICROWAVE	1.00	B		SPARE	20/1	52
53	20/1	SPARE		C		SPARE	20/1	54

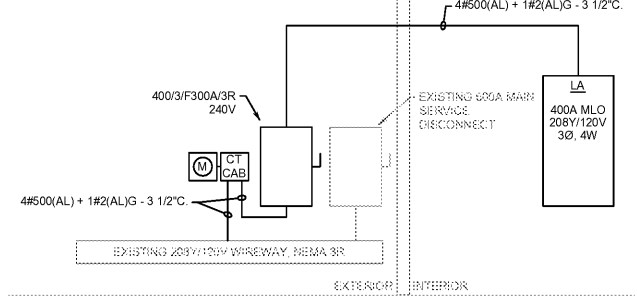
LIGHTING: 2.41 RECEPTACLES: 10.08 1Ø MOTORS: 5.30 3Ø MOTORS:
 A/C: 10.94 HEATING: 30.00 WATER HEATER: 9.00 MISC CONTINUOUS: 0.50
 MISC NON-CONTINUOUS: 8.00 KITCHEN: DWELLING: GUEST:
 TOTAL CONNECTED LOAD (A: 25.21, B: 25.80, C: 25.22): 78.23 KVA TOTAL DEMAND LOAD: 77.42 KVA
 NOTES:

3Ø FAULT ANALYSIS

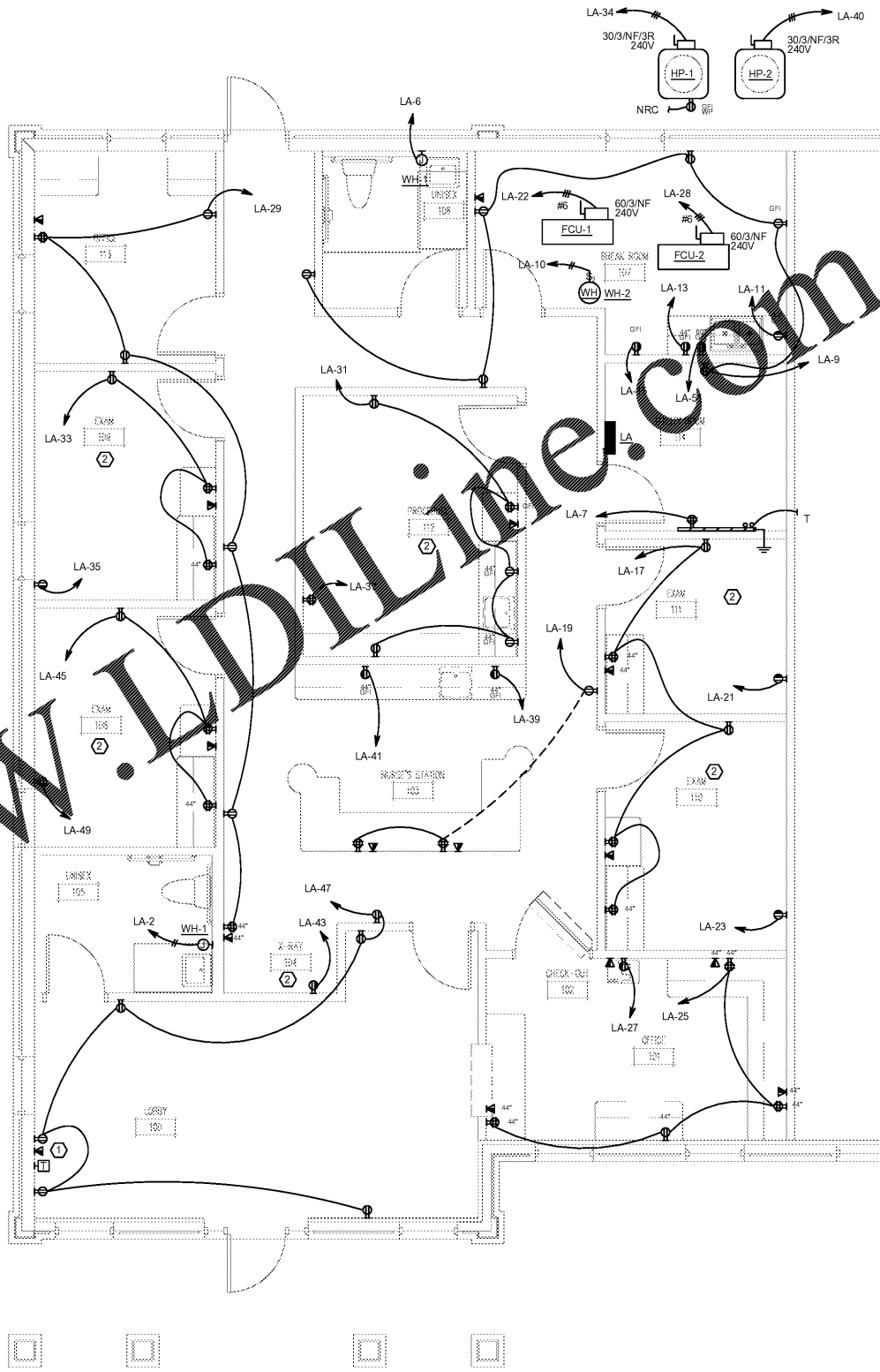
POINT A: WIREWAY WWV
 POINT B: DISCONNECT DA
 A TO B DISTANCE (FT): 3
 ISCA (AMPS): 36947
 # OF SETS: 1
 C VALUE: 21391
 VOLTAGE L-L: 208
 F=(V x DISTANCE x ISCA)/(C VALUE x # of SETS x VOLTAGE)
 F=(1.732 x 3 x 36947)/(21391 x 1 x 208) = 0.0431
 M=1/(1+F) = 0.98
 ISCB= ISCA x M = 35419
 LET-THRU CURRENT OF 300A RKS FUSE AT 1000A = 13000

NEW LOAD STUDY

LOAD TYPE	LOAD (KVA)
LIGHTING	2.41
RECEPTACLES	10.08
1Ø MOTORS	5.30
3Ø MOTORS	0.00
A/C	10.94
HEATING	30.00
WATER HEATER	9.00
MISC CONTINUOUS	0.50
MISC NON-CONTINUOUS	8.00
KITCHEN	0.00
DWELLING	0.00
GUEST	0.00
TOTAL LOAD	78.23

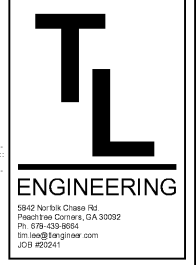


2 RISER DIAGRAM
E-1 SCALE: NTS



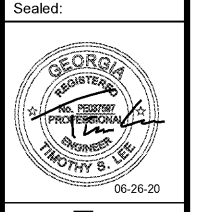
1 POWER PLAN
E-1 SCALE: 1/4" = 1'-0"

- KEY NOTES**
- COORDINATE LOCATION, HEIGHT, AND INSTALLATION REQUIREMENTS OF TV PRIOR TO ROUGH IN. PROVIDE RECESSED "CLOCK BOX" TYPE OUTLETS.
 - PROVIDE HOSPITAL GRADE MC CABLE AND IN PATIENT TREATMENT AREAS TO ACHIEVE SEPARATE SECONDARY EQUIPMENT GROUNDING PATH PER NEC 517.13. UTILIZE METAL CONDUIT AND WET LOCATION LISTED CONDUCTORS BELOW GRADE.
 - COORDINATE LOCATION AND INSTALLATION REQUIREMENTS OF MECHANICAL/PLUMBING DEVICE. ELECTRICAL VALUES BASED ON TYPICAL SIZES.



ARCHITECTURE
ENGINEERING

3680 Pleasant Hill Road
Suite 200
Duluth, Georgia 30096
p 770.622.9858
f 770.622.9535
www.hillfoleyrossi.com



Suite 101 - Village Podiatry Centers
 Sugar Hill Professional Park
 4749 Nelson Brogdon Blvd., Bldg. 300 Suite 101
 Sugar Hill, GA, 30518
 Owner: DR. CLIFF JOHNSON
 Phone: 678-643-1742

ISSUED FOR CONSTRUCTION

ISSUED / REVISIONS:

DATE	DESCRIPTION:

POWER PLAN
E-1

HFR 20-164.00