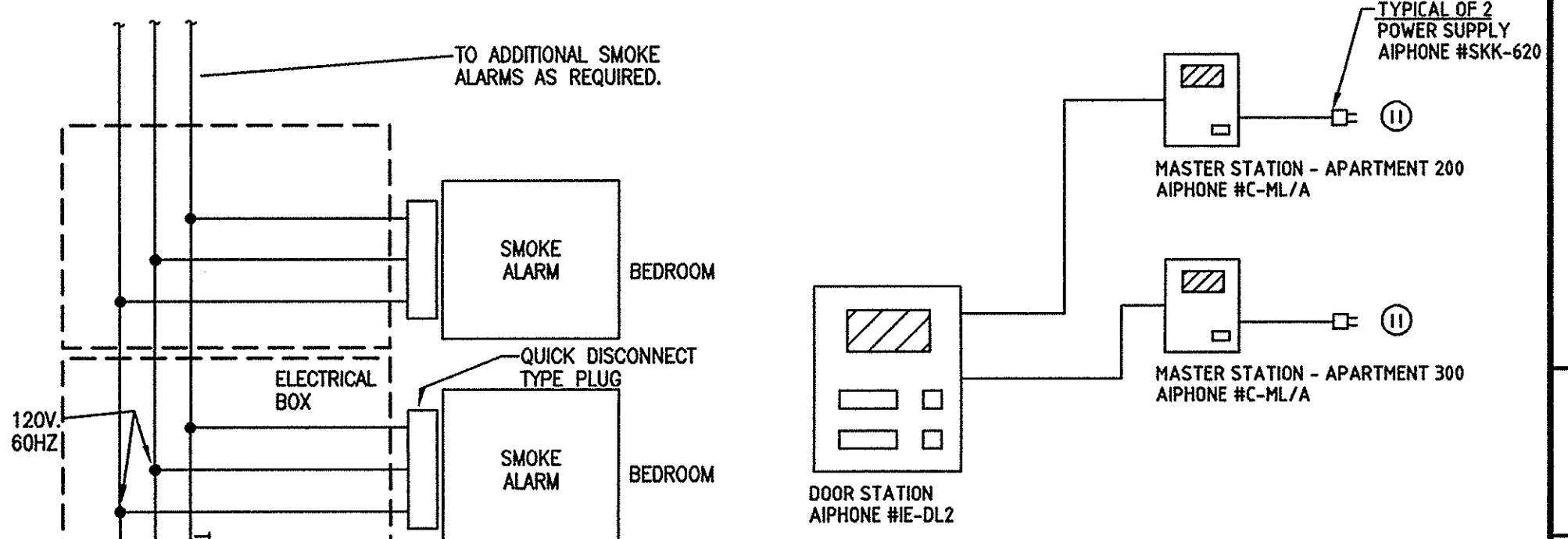


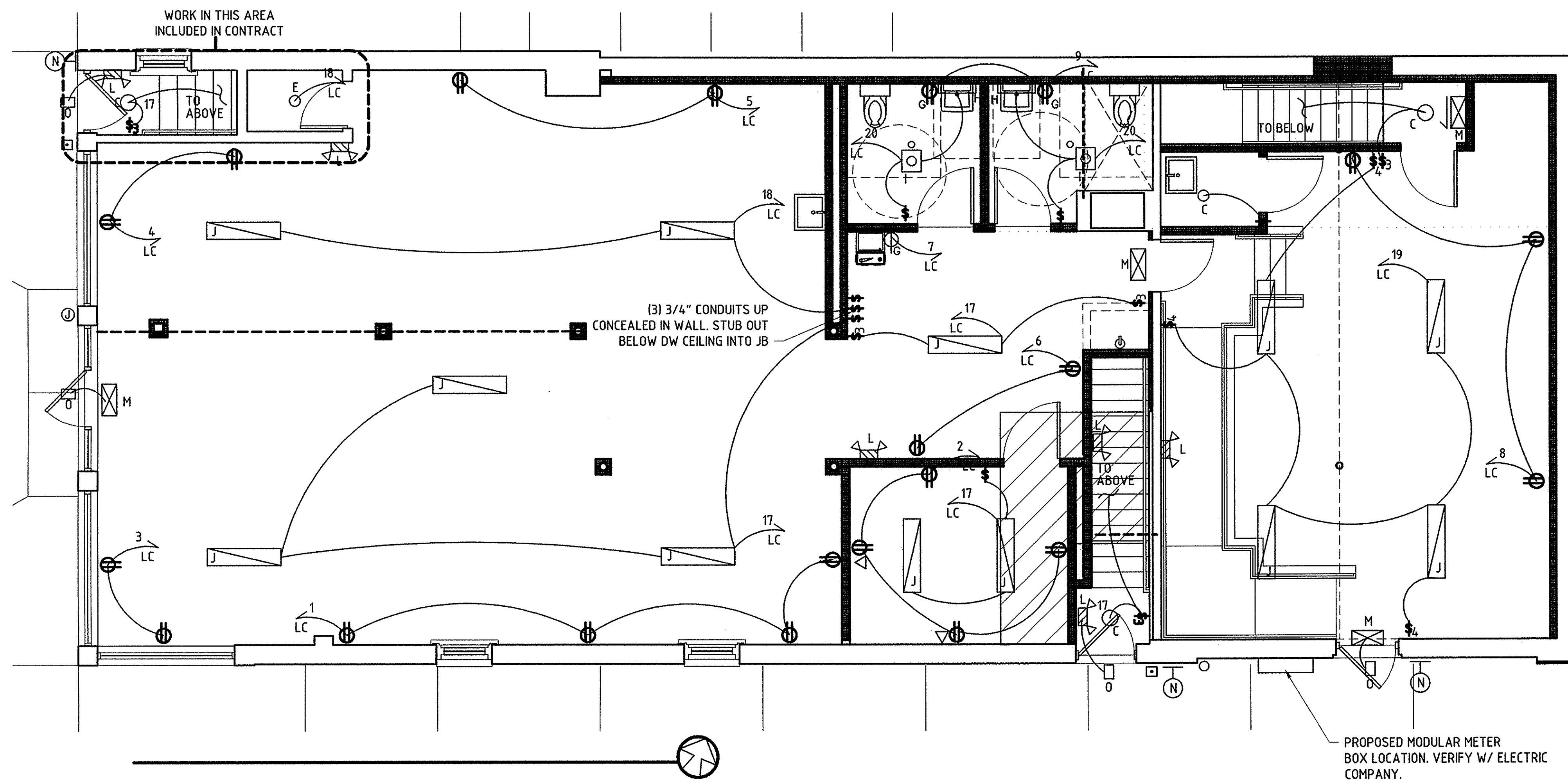
**ELECTRICAL SYMBOLS LEGEND**

- DUPLEX OUTLET AT 18" AFF
- SPECIAL PURPOSE RECEPTACLE
- SINGLE OUTLET AT 18" AFF U.N.O.
- DUPLEX OUTLET - G.F.C.I.
- DUPLEX OUTLET - MOUNT 7" ABOVE COUNTER
- CABLE TV OUTLET AT 18" AFF
- PHONE/ DATA OUTLET AT 18" AFF  
INSTALL BOX AND 3/4" CONDUIT  
IN WALL TO DEMARK BOARD W/  
PULLSTRING.
- DOOR ENTRY SYSTEM MASTER STATION
- SMOKE ALARM - RESIDENTIAL GRADE
- SINGLE POLE SWITCH - MOUNT AT 48" AFF
- THREE WAY SWITCH - MOUNT AT 48" AFF
- FOUR WAY SWITCH - MOUNT AT 48" AFF
- DISCONNECT SWITCH
- CIRCUIT BREAKER PANELBOARD- FLUSH MOUNTED



**ENTRY SYSTEM WIRING DIAGRAM**  
NO SCALE

**DIAGRAM NOTES:**  
1. CONFIRM EXACT WIRING REQUIREMENTS WITH MANUFACTURER.



**TYPICAL RESIDENTIAL SMOKE ALARM WIRING DIAGRAM**  
NO SCALE

- DIAGRAM NOTES:**
1. WIRE TO MANUFACTURER'S RECOMMENDATIONS AND STATE AND LOCAL CODES.
  2. ALL ALARMS IN A TANDEM INSTALLATION MUST BE CONTROLLED BY THE SAME FUSE OR CIRCUIT BREAKER. OTHERWISE TANDEM UNITS WILL NOT OPERATE. TANDEM WILL OPERATE IN THE EVENT OF AN AC POWER FAILURE IF BATTERY IS CONNECTED TO THE ALARM.
  3. CIRCUIT BREAKER PROVIDING 120 VOLT POWER SHALL BE AFCI TYPE.



**PLANROOMDIRECT.COM**  
**Demonstration**  
**Project**

DATE:	04-18-08
ISSUED FOR:	BIU RESUBMITTAL
NO.:	

ELECTRICAL FLOOR PLANS AND DETAILS

JOB NO:	
DATE:	OCTOBER 29, 2007
SCALE:	AS NOTED



PLANROOMDIRECT.COM  
**Demonstration Project**

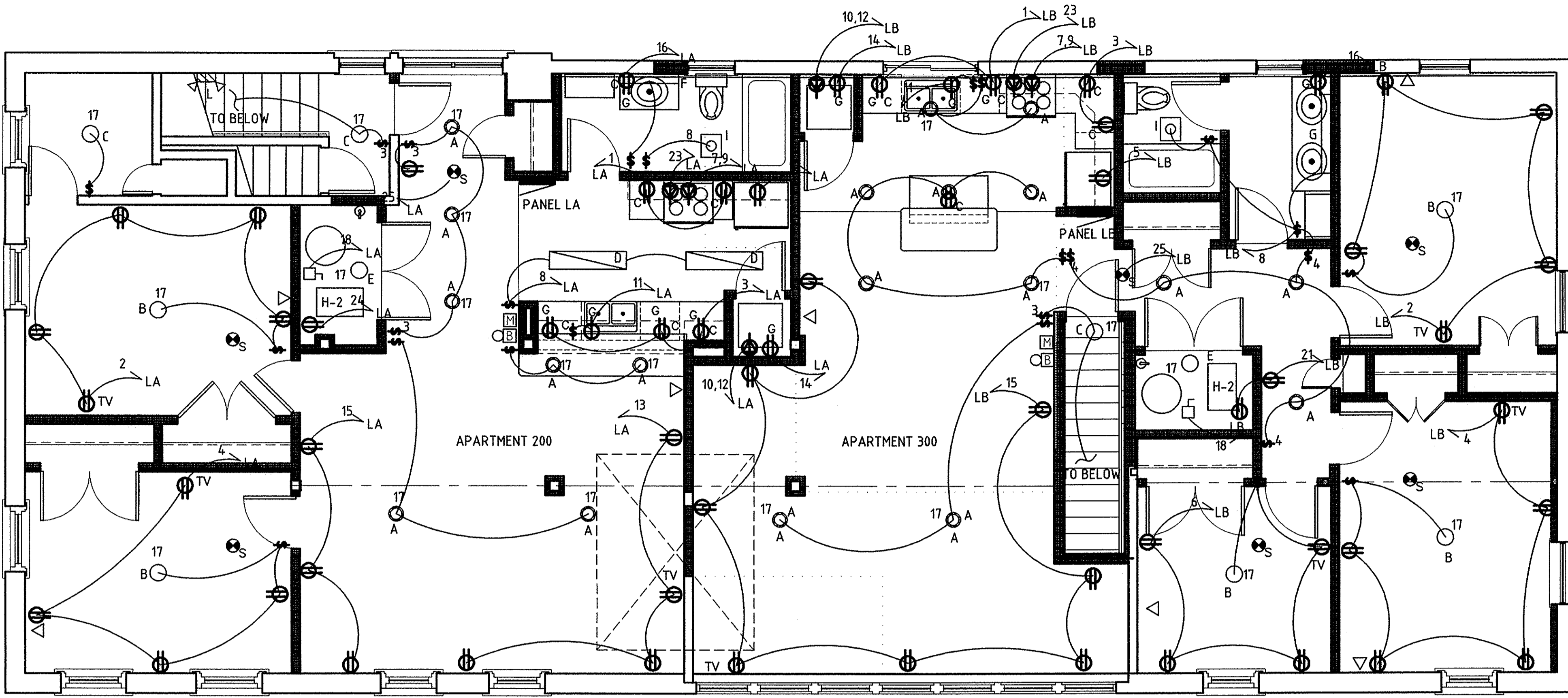
DATE: 04-18-08

ISSUED FOR: BILL RESUBMITTAL

NO:

SECOND FLOOR ELECTRICAL PLAN, SCHEDULES

JOB NO: \_\_\_\_\_  
 DATE: OCTOBER 29, 2007  
 SCALE: AS NOTED



### CIRCUIT BREAKER PANEL SCHEDULE

PANEL: LC VOLTAGE: 120/240 1Ø 3W AMPS: 200 TYPE: SURFACE  
 SPACES: 42 LOCATION: BASEMENT MCB: 200 KWD: \_\_\_\_\_

CKT.	LOCATION	LTG.	REC.	HTG.	MISC.	C/B	Ø	C/B	MISC.	HTG.	REC.	LTG.	LOCATION	CKT.
1	RETAIL					20/1	A	20/1					OFFICE	2
3	RETAIL					20/1	B	20/1					RETAIL	4
5	RETAIL					20/1	A	20/1					OFFICE	6
7	EW					20/1	B	20/1					RETAIL	8
9	REST ROOMS					20/1	A	20/2					HOT WATER HEATER	10
11	BASEMENT					20/1	B	20/2						12
13	FURNACE H-1					20/1	A	20/1					FURNACE H-1A	14
15	BASEMENT					20/1	B	20/1					LIGHTING	16
17	LIGHTING					20/1	A	20/1					LIGHTING	18
19	LIGHTING					20/1	B	20/1					EXHAUST FANS	20
21	SPARE					20/1	A	60/2					CONDENSER C-1A	22
23	CONDENSER C-1					60/2	B	HACR						24
25	SPARE					20/1	A	-					SPACE	26
27	SPARE					20/1	B	-					SPACE	28
29	SPARE					20/1	A	-					SPACE	30
31	SPARE					20/1	B	-					SPACE	32
33	SPARE					20/1	A	-					SPACE	34
35	SPARE					20/1	B	-					SPACE	36
37	SPARE					20/1	A	-					SPACE	38
39	SPARE					20/1	B	-					SPACE	40
41	SPARE					20/1	A	-					SPACE	42

### CIRCUIT BREAKER PANEL SCHEDULE

PANEL: LA & LB VOLTAGE: 120/240 1Ø 3W AMPS: 100 TYPE: FLUSH  
 SPACES: 30 LOCATION: \_\_\_\_\_ MCB: 100 KWD: \_\_\_\_\_

CKT.	LOCATION	LTG.	REC.	HTG.	MISC.	C/B	Ø	C/B	MISC.	HTG.	REC.	LTG.	LOCATION	CKT.
1	KITCHEN COUNTER					20/1	A	20/1					BEDROOM	2
3	KITCHEN COUNTER					20/1	B	20/1					BEDROOM	4
5	REFRIGERATOR					20/1	A	20/1					BEDROOM	6
7	ELECTRIC RANGE					50/2	B	20/1					LIGHTING	8
9	DISPOSAL					20/1	A	30/2					ELECTRIC DRYER	10
11	DISPOSAL					20/1	B	30/2						12
13	DINING ROOM					20/1	A	20/1					LAUNDRY	14
15	LIVING ROOM					20/1	B	20/1					BATHROOM	16
17	LIGHTING					20/1	A	20/1					FURNACE	18
19	SPARE					20/1	B	60/2					A/C CONDENSER	20
21	SPARE					20/1	A	HACR						22
23	MICROWAVE					20/1	B	20/1					UTILITY	24
25	SMOKE DETECTORS					20/1	A	20/1					SPACE	26
27	SPARE					20/1	B	20/1					SPACE	28
29	SPARE					20/1	A	20/1					SPACE	30

**APARTMENT ELECTRICAL NOTES**

- ① DISHWASHER - MOUNT RECEPTACLE AT 12" A.F.F.
- ② DISPOSAL - MOUNT RECEPTACLE AT 12" A.F.F. PROVIDE SINGLE-POLE SWITCH AT COUNTER HEIGHT FOR ON/OFF CONTROL
- ③ ELECTRIC RANGE - MOUNT RECEPTACLE AT 12" A.F.F.
- ④ MICROWAVE/ HOOD FAN - COORDINATE RECEPTACLE MOUNTING HEIGHT AND LOCATION W/ MANUFACTURER'S ROUGH IN.
- ⑤ DOOR ENTRY SYSTEM MASTER STATION - SEE WIRING DIAGRAM ON DRAWING E-1.
- ⑥ CLOTHES DRYER - 120/ 240V, 1Ø, WIRING SHALL BE 3 #10, 1#10 GND
- ⑦ RUN POWER AND DISCONNECT FOR CONDENSING UNIT FOR FURNACES H-2 TO ROOF LOCATION. SEE A-3...

#### APARTMENT 200 LOAD CALCULATION

GENERAL LIGHTING/RECEPTACLES: 3 x 1,159 SQ. FT. = 3,477  
 SMALL APPLIANCE BRANCH CIRCUITS: 2 x 1500 = 3000  
 LAUNDRY BRANCH CIRCUIT: 1 x 1500 = 1500

APPLIANCES:  
 CLOTHES DRYER = 5000  
 DISHWASHER = 1200  
 DISPOSAL = 1200  
 RANGE = 12000  
 REFRIGERATOR = 1200  
 = 28,577 VA

DEMAND FACTOR:  
 28,577 - 10,000 = 18,577 x 40% = 7,431  
 +10,000  
 = 17,431

HEATING/AC:  
 FURNACE = 600  
 CONDENSING UNIT = 2000  
 = 2600

TOTAL VOLT-AMPERE DEMAND LOAD:  
 17,431 + 2,600 = 20,031

MINIMUM SERVICE AND/OR FEEDER:  
 20,031 / 240V. = 83.4 AMPERES

100 AMPERE SERVICE (MINIMUM)

#### APARTMENT 300 LOAD CALCULATION

GENERAL LIGHTING/RECEPTACLES: 3 x 1290 SQ. FT. = 3870  
 SMALL APPLIANCE BRANCH CIRCUITS: 2 x 1500 = 3000  
 LAUNDRY BRANCH CIRCUIT: 1 x 1500 = 1500

APPLIANCES:  
 CLOTHES DRYER = 5000  
 DISHWASHER = 1200  
 DISPOSAL = 1200  
 RANGE = 12000  
 REFRIGERATOR = 1200  
 = 28,970 VA

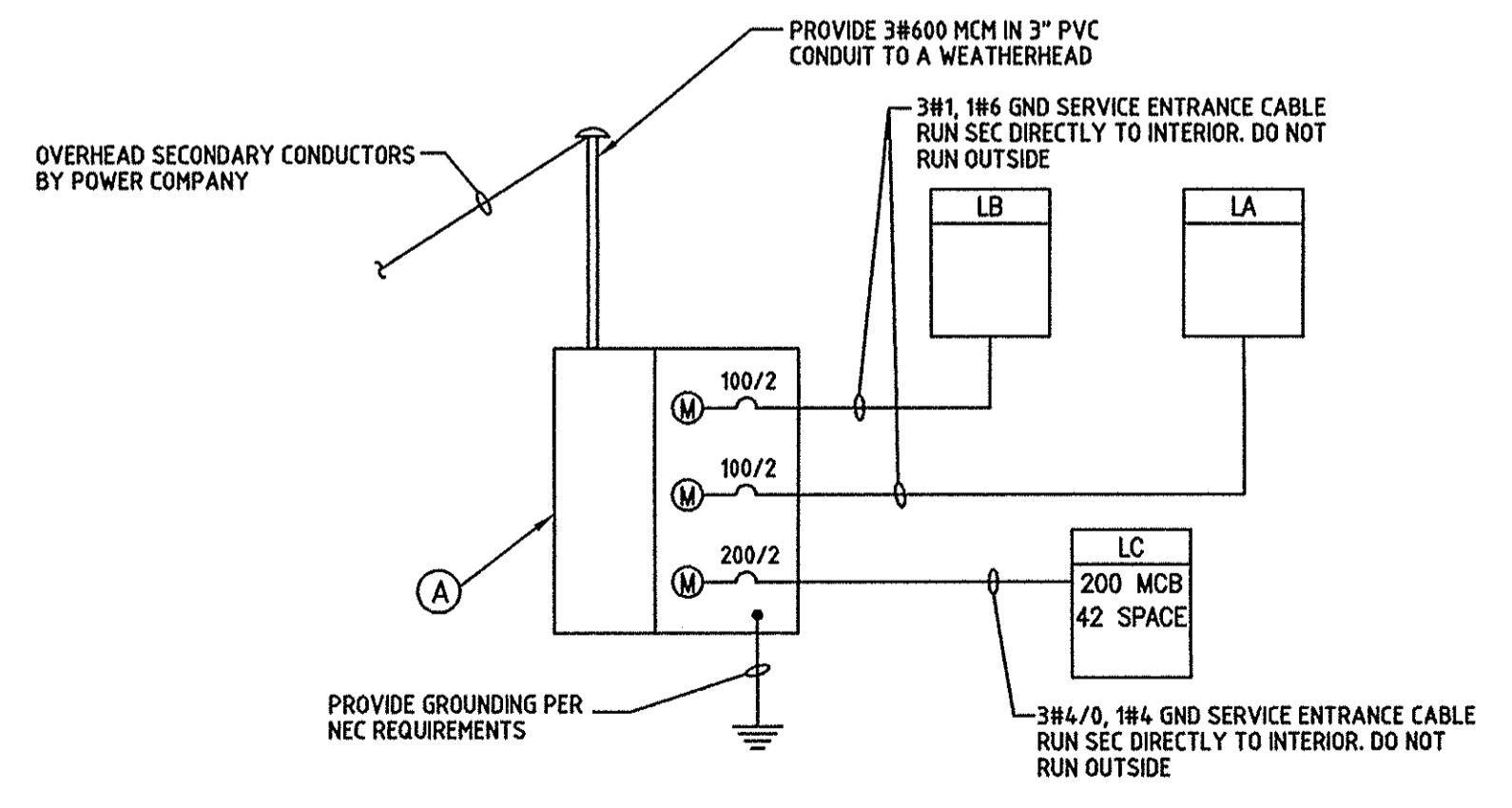
DEMAND FACTOR:  
 28,970 - 10,000 = 18,970 x 40% = 7,588  
 +10,000  
 = 17,588

HEATING/AC:  
 FURNACE = 600  
 CONDENSING UNIT = 2000  
 = 2600

TOTAL VOLT-AMPERE DEMAND LOAD:  
 17,588 + 2,600 = 20,188

MINIMUM SERVICE AND/OR FEEDER:  
 20,188 / 240V. = 84 AMPERES

100 AMPERE SERVICE (MINIMUM)



**POWER DISTRIBUTION RISER**  
 NO SCALE

- RISER NOTE:**
- ① PROVIDE MODULAR METER CENTER CONSISTING OF (1) SERVICE ENTRANCE RATED MAIN LUG TERMINAL BOX (120V/240V, 1Ø, 3W IN/OUT, 400A (MINIMUM), MIN. 22 KAIC (VERIFY W/ ELECTRIC CO), NEMA 3R AND (1) 3-METER BRANCH UNIT (120/240V, 1Ø, 3W, 225A MAX. BRANCH UNIT, NEMA 3R). COORDINATE METER SOCKET TYPE WITH THE POWER COMPANY.

**LIGHT FIXTURE SCHEDULE**

- TYPE "A"** - RECESSED INCANDESCENT LIGHTING, SEA GULL LIGHTING # 1119 IC AIRTIGHT HOUSING W/ WHITE 1135-15 FLAT GLASS TRIM, 1- 40W (M) LAMPS..
- TYPE "B"** - SURFACE MOUNTED 12" DIAMETER FIXTURE W/ WHITE ALUMINUM FINISH AND WHITE GLASS FITTER, THREE (M) 60W MAX, SEA GULL LIGHTING 7640-15.
- TYPE "C"** - SURFACE MOUNTED 9 1/2" DIAMETER FIXTURE W/ WHITE ALUMINUM FINISH AND WHITE GLASS FITTER, THREE (M) 75W MAX, SEA GULL LIGHTING 7639-15.
- TYPE "D"** - SURFACE MOUNTED 51-5/8" LONG x 15" WIDE x 4 1/2" DEEP LIGHT FIXTURE W/ WHITE ACRYLIC PILLLOW DIFFUSER, LIGHT PROCESS COMPANY #LP68524-15-4 32 0 EL.
- TYPE "E"** - SURFACE MOUNTED, 7 3/4" HIGH LIGHT FIXTURE, W/ WHITE GLASS GLOBE, PULL CHAIN, (1) 60W- M LAMP MAX, SEA GULL LIGHTING 537PC-15..
- TYPE "F"** - WALL MOUNTED BATH FIXTURE 16 1/2" WIDE x 9 3/4" HIGH, ANTIQUE BRONZE FINISH, (2) 100W MAX M- LAMPS, SEA GULL LIGHTING #40018-71..
- TYPE "G"** - SIMILAR TO TYPE "F". PROVIDE TWO (2) TYPE "F" FIXTURES
- TYPE "H"** - WALL MOUNTED 26" LONG x 6 3/8" HIGH x 3 1/2" DEEP LIGHTING FIXTURE, LIGHT PROCESS COMPANY # LP64990-15-2 17 0.
- TYPE "I"** - RECESSED CEILING FAN, BROAN # QTR080L, W/ (1) 100W INCANDESCENT (MAX), 1.0 SONES, 80 CFM.
- TYPE "K"** - SURFACE MOUNTED 48" LONG x 8 5/8" WIDE x 2 3/4" HIGH FLUORESCENT LIGHT FIXTURE W/ WRAP AROUND ACRYLIC LENSE AND (2) 32W, T8 LAMPS, LIGHTOLIER # JS4A232120 AND ELECTRONIC BALLAST.
- TYPE "J"** - SURFACE MOUNTED 48" LONG x 14" WIDE x 2 3/4" HIGH FLUORESCENT LIGHT FIXTURE W/ WRAP AROUND ACRYLIC LENSE AND (4) 32W, T8 LAMPS, LIGHTOLIER # JS4B432120 AND ELECTRONIC BALLAST.
- TYPE "L"** - SURFACE MOUNTED EMERGENCY LIGHTING UNIT W/ WHITE THERMOPLASTIC HOUSING, SEALED LEAD CALCIUM BATTER, (2) 6V, 5W DC T5 WEDGE BASE LAMPS, AND 120V INPUT. LIGHTOLIER, E8 SERIES EMERGENCY LIGHTING UNIT
- TYPE "M"** - SURFACE MOUNTED LED EXIT SIGN W/ WHITE THERMOPLASTIC HOUSING, 120V INPUT, LIGHTOLIER #LTN1R W.
- TYPE "N"** - REMOTE LAMP WEATHERHEAD LAMP, LIGHTOLIER ER SERIES, #ER1T9W.
- TYPE "O"** - SURFACE MOUNTED EXTERIOR WALL LIGHT FIXTURE, PHOTOCCELL CONTROLLED, KIM LIGHTING SITE WALLFORMS, # SW3 (2) 13WPL. MOUNT AT 8'-0" ABOVE GRADE.