

PANEL A		BRANCHES: 22,000 A.I.C. THERMAL MAGNETIC CIRCUIT BREAKERS				
120/208V, 3 PHASE, 4 WIRE		ENCLOSURE: NEMA 1 SURFACE MOUNT				
225 AMPERE MAIN LUGS ONLY						
LOAD	CONDUCTORS	C.B.		C.B.	CONDUCTORS	LOAD
APPARATUS BAY LIGHTING	(2) #12 THHN, #12 GND, 3/4" EMT	20		20	(2) #12 THHN, #12 GND, 3/4" EMT	EXTERIOR OUTLETS
APPARATUS BAY LIGHTING	(2) #12 THHN, #12 GND, 3/4" EMT	20		20	(2) #12 THHN, #12 GND, 3/4" EMT	EXTERIOR OUTLETS
FIRST FLOOR LIGHTING	(2) #12 THHN, #12 GND, 3/4" EMT	20		20	(4) #12 THHN, #12 GND, 3/4" EMT	(3) GARAGE DOOR HOISTS
EXTERIOR EM. LIGHTING	(2) #10 THHN, #10 GND, 3/4" EMT	20		20		
FIRE ALARM CONTROL PANEL	(2) #12 THHN, #12 GND, 3/4" EMT	20		20		
HOSE REEL OUTLETS	(6) #12 THHN, #12 GND, 3/4" EMT	20		20	(4) #12 THHN, #12 GND, 3/4" EMT	(2) GARAGE DOOR HOISTS
HOSE REEL OUTLETS	(6) #12 THHN, #12 GND, 3/4" EMT	20		20		
HOSE REEL OUTLETS	(6) #12 THHN, #12 GND, 3/4" EMT	20		20		
PARKING LOT POLE OUTLETS	(4) #10 THHN, #10 GND, 3/4" EMT	20		20	(2) #12 THHN, #12 GND, 3/4" EMT	(4) APPARATUS BAY CEILING FANS
PARKING LOT LIGHTS	(2) #10 THHN, #10 GND, 3/4" EMT	20		20	(2) #10 THHN, #10 GND, 3/4" EMT	EXTERIOR SOFFIT OUTLETS
COMPRESSOR	(2) #8 THHN, #10 GND, 3/4" EMT	35		35	(2) #10 THHN, #10 GND, 3/4" EMT	EXTERIOR SOFFIT OUTLETS
OUTLETS (113,114,115, 116) & (3) EF-C	(2) #12 THHN, #12 GND, 3/4" EMT	20		20	(2) #8 THHN, #10 GND, 3/4" EMT	WATER BOOSTER PUMP (MBP-1)
ICE MAKER (116)	(2) #12 THHN, #12 GND, 3/4" EMT	15		15		
REFRIGERATOR OUTLET (116)	(2) #12 THHN, #12 GND, 3/4" EMT	20		15	(4) #12 THHN, #12 GND, 3/4" EMT	JOCKEY PUMP
OUTLETS (101)	(2) #12 THHN, #12 GND, 3/4" EMT	20		15		
OUTLETS (101)	(2) #12 THHN, #12 GND, 3/4" EMT	20		40	(2) #8 THHN, #10 GND, 3/4" EMT	A/C UNIT (CC-F)
OUTLETS (101)	(2) #12 THHN, #12 GND, 3/4" EMT	20		40		
OUTLETS (101)	(2) #12 THHN, #12 GND, 3/4" EMT	20		30		
FRONT FLOOR LIGHTS	(2) #10 THHN, #10 GND, 3/4" EMT	20		30	(4) #10 THHN, #10 GND, 3/4" EMT	A/C UNIT (AHU-E)
OUTLETS (110,111,112) & EF-C	(2) #12 THHN, #12 GND, 3/4" EMT	20		30		
EXTERIOR GEN. LIGHTING	(2) #10 THHN, #10 GND, 3/4" EMT	20		45	(2) #12 THHN, #12 GND, 3/4" EMT	A/C UNIT (AHU-F)
TRUCK EXHAUST CONTROL PANEL	(2) #12 THHN, #12 GND, 3/4" EMT	20		15		
TRUCK EXHAUST FAN	(3) #12 THHN, #12 GND, 3/4" EMT	20		20	(4) #10 THHN, #10 GND, 1" PVC	GENERATOR BLOCK HEATER
SPARE		20		20		GENERATOR BATTERY CHARGER
SPARE		20		54		SPACE ONLY
SPARE		20		56		SPACE ONLY
SPARE		20		58		SPACE ONLY
SPARE		20		60		SPACE ONLY

PANEL B		BRANCHES: 22,000 A.I.C. THERMAL MAGNETIC CIRCUIT BREAKERS				
120/208V, 3 PHASE, 4 WIRE		ENCLOSURE: NEMA 1 SURFACE MOUNT				
225 AMPERE MAIN LUGS ONLY						
LOAD	CONDUCTORS	C.B.		C.B.	CONDUCTORS	LOAD
FIRST FLOOR LIGHTING	(2) #12 THHN, #12 GND, 3/4" EMT	20		20	(2) #12 THHN, #12 GND, 3/4" EMT	OUTLETS (107,108, 104) & (2)EF-C, EF-G
FIRST FLOOR LIGHTING	(2) #12 THHN, #12 GND, 3/4" EMT	20		20	(2) #12 THHN, #12 GND, 3/4" EMT	OUTLETS (107,108, 104) & (2)EF-C, EF-G
COPIER (102)	(2) #12 THHN, #12 GND, 3/4" EMT	20		20	(2) #12 THHN, #12 GND, 3/4" EMT	REFRIGERATOR OUTLET (117)
OUTLETS (102) & EF-C	(2) #12 THHN, #12 GND, 3/4" EMT	20		20	(2) #12 THHN, #12 GND, 3/4" EMT	COFFEE MAKER (117)
RADIO ROOM OUTLETS (102)	(2) #12 THHN, #12 GND, 3/4" EMT	20		15	(2) #12 THHN, #12 GND, 3/4" EMT	MICROWAVE OUTLET (117)
RADIO ROOM OUTLETS (102)	(2) #12 THHN, #12 GND, 3/4" EMT	20		20	(2) #12 THHN, #12 GND, 3/4" EMT	OUTLETS (119,120,121)
WATER FOUNTAIN (101)	(2) #12 THHN, #12 GND, 3/4" EMT	20		40	(2) #8 THHN, #10 GND, 3/4" EMT	RANGE (117)
SPARE		20		40		
SPARE		20		16		
SPARE		20		18		
LAV (103), JANITOR (104)	(2) #12 THHN, #12 GND, 3/4" EMT	20		20	(2) #12 THHN, #12 GND, 3/4" EMT	WATER FOUNTAIN (123)
WORK ROOM (106)	(2) #12 THHN, #12 GND, 3/4" EMT	20		20	(2) #12 THHN, #12 GND, 3/4" EMT	WASHER (125)
WORK ROOM (106)	(2) #12 THHN, #12 GND, 3/4" EMT	20		20	(2) #12 THHN, #12 GND, 3/4" EMT	OUTLETS (126,127) & EF-E, EF-G
WORK ROOM (106)	(2) #12 THHN, #12 GND, 3/4" EMT	20		30	(2) #10 THHN, #10 GND, 3/4" EMT	CLOTHES DRYER (125)
WORK ROOM (106)	(2) #12 THHN, #12 GND, 3/4" EMT	20		30		
WORK ROOM (106)	(2) #12 THHN, #12 GND, 3/4" EMT	20		28	(2) #12 THHN, #12 GND, 3/4" EMT	EXERCISE ROOM (124)
WORK ROOM (106)	(2) #12 THHN, #12 GND, 3/4" EMT	20		20	(2) #12 THHN, #12 GND, 3/4" EMT	EXERCISE ROOM (124)
SPARE		20		20	(2) #12 THHN, #12 GND, 3/4" EMT	EXERCISE ROOM (124)
WORK ROOM (106) OUTLET	(2) #8 THHN, #10 GND, 3/4" EMT	50		20	(2) #12 THHN, #12 GND, 3/4" EMT	EXERCISE ROOM (124)
WORK ROOM (106) OUTLET	(2) #8 THHN, #10 GND, 3/4" EMT	50		20	(2) #12 THHN, #12 GND, 3/4" EMT	EXERCISE ROOM (124)
CLOTHES DRYER (107)	(2) #10 THHN, #10 GND, 3/4" EMT	30		20	(2) #12 THHN, #12 GND, 3/4" EMT	EXERCISE ROOM (124)
WASHER (107)	(2) #12 THHN, #12 GND, 3/4" EMT	20		40	(2) #12 THHN, #12 GND, 3/4" EMT	EXERCISE ROOM (124)
WASHER (107)	(2) #12 THHN, #12 GND, 3/4" EMT	20		42	(2) #12 THHN, #12 GND, 3/4" EMT	EXERCISE ROOM (124)
SEWAGE EJECTOR PUMP (SE-1)	(2) #12 THHN, #12 GND, 3/4" EMT	20		45	(2) #12 THHN, #12 GND, 3/4" EMT	EXERCISE ROOM (124)
SEWAGE EJECTOR PUMP (SE-1)	(2) #12 THHN, #12 GND, 3/4" EMT	20		15	(2) #12 THHN, #12 GND, 3/4" EMT	A/C UNIT (HP-G)
SEWAGE EJECTOR PUMP (SE-1)	(2) #12 THHN, #12 GND, 3/4" EMT	20		15		
SPARE		20		20	(2) #12 THHN, #12 GND, 3/4" EMT	SUMP PUMP (SP-1)
SPARE		20		52		SPACE ONLY
SPARE		20		54		SPACE ONLY
SPARE		20		56		SPACE ONLY
SPARE		20		58		SPACE ONLY
SPARE		20		60		SPACE ONLY

PANEL D		BRANCHES: 22,000 A.I.C. THERMAL MAGNETIC CIRCUIT BREAKERS				
120/208V, 3 PHASE, 4 WIRE		ENCLOSURE: NEMA 1 SURFACE MOUNT				
225 AMPERE MAIN LUGS ONLY						
LOAD	CONDUCTORS	C.B.		C.B.	CONDUCTORS	LOAD
3RD FLOOR LIGHTING	(2) #12 THHN, #12 GND, 3/4" EMT	20		20	(2) #12 THHN, #12 GND, 3/4" EMT	OUTLETS (311)
3RD FLOOR LIGHTING	(2) #12 THHN, #12 GND, 3/4" EMT	20		20	(2) #12 THHN, #12 GND, 3/4" EMT	AV (313)
3RD FLOOR LIGHTING	(2) #12 THHN, #12 GND, 3/4" EMT	20		20	(2) #12 THHN, #12 GND, 3/4" EMT	AV (313)
3RD FLOOR LIGHTING	(2) #12 THHN, #12 GND, 3/4" EMT	20		20	(2) #12 THHN, #12 GND, 3/4" EMT	AV (313)
3RD FLOOR LIGHTING	(2) #12 THHN, #12 GND, 3/4" EMT	20		20	(2) #12 THHN, #12 GND, 3/4" EMT	OUTLETS (315)
3RD FLOOR LIGHTING	(2) #12 THHN, #12 GND, 3/4" EMT	20		20	(2) #12 THHN, #12 GND, 3/4" EMT	OUTLETS (315)
3RD FLOOR LIGHTING	(2) #12 THHN, #12 GND, 3/4" EMT	20		20	(2) #12 THHN, #12 GND, 3/4" EMT	(2) FRIDGE OUTLETS (315,316)
OUTLETS (302,303,304,305)	(2) #12 THHN, #12 GND, 3/4" EMT	20		20	(2) #12 THHN, #12 GND, 3/4" EMT	MICROWAVE OUTLET (316)
WATER FOUNTAIN (302)	(2) #12 THHN, #12 GND, 3/4" EMT	20		20	(2) #12 THHN, #12 GND, 3/4" EMT	OUTLETS (316) & RANGE HOOD
OUTLETS (306,307,308)	(2) #12 THHN, #12 GND, 3/4" EMT	20		20	(2) #12 THHN, #12 GND, 3/4" EMT	COFFEE MAKER (316)
KITCHEN OUTLETS (304)	(2) #12 THHN, #12 GND, 3/4" EMT	20		40	(2) #8 THHN, #10 GND, 3/4" EMT	RANGE (316)
KITCHEN OUTLETS (304)	(2) #12 THHN, #12 GND, 3/4" EMT	20		20	(2) #12 THHN, #12 GND, 3/4" EMT	OUTLETS (316) & RANGE HOOD
MICROWAVE OUTLET (304)	(2) #12 THHN, #12 GND, 3/4" EMT	20		22	(2) #12 THHN, #12 GND, 3/4" EMT	FRIDGE OUTLET (307)
KITCHEN OUTLETS (304)	(2) #12 THHN, #12 GND, 3/4" EMT	20		24	(2) #12 THHN, #12 GND, 3/4" EMT	FREEZER OUTLET (307)
KITCHEN OUTLETS (304)	(2) #12 THHN, #12 GND, 3/4" EMT	20		28	(2) #12 THHN, #12 GND, 3/4" EMT	COFFEE MAKER (309)
DISHWASHER (304)	(2) #12 THHN, #12 GND, 3/4" EMT	20		40	(3) #8 THHN, #10 GND, 3/4" EMT	COFFEE MAKER (309)
KITCHEN OUTLETS (304)	(2) #12 THHN, #12 GND, 3/4" EMT	20		30	(2) #12 THHN, #12 GND, 3/4" EMT	ICE MAKER (304)
OUTLETS (305,302,332)	(2) #12 THHN, #12 GND, 3/4" EMT	20		15	(2) #12 THHN, #12 GND, 3/4" EMT	ICE MAKER (304)
HAND DRYER (303)	(2) #12 THHN, #12 GND, 3/4" EMT	15		34	(2) #12 THHN, #12 GND, 3/4" EMT	PROJ./SCREEN & OUTLETS (314)
HAND DRYER (304)	(2) #12 THHN, #12 GND, 3/4" EMT	15		38	(2) #12 THHN, #12 GND, 3/4" EMT	OUTLETS (314)
SPARE		20		38		
COPIER (333)	(2) #12 THHN, #12 GND, 3/4" EMT	20		40	(2) #12 THHN, #12 GND, 3/4" EMT	RANGE HOOD AND FAN (316)
OUTLETS (331)	(2) #12 THHN, #12 GND, 3/4" EMT	20		42	(2) #12 THHN, #12 GND, 3/4" EMT	RANGE HOOD AND FAN (304)
OUTLETS (318,319)	(2) #12 THHN, #12 GND, 3/4" EMT	20		44	(2) #12 THHN, #12 GND, 3/4" EMT	KITCHEN HOOD CONTROL PANEL
OUTLETS (328)	(2) #12 THHN, #12 GND, 3/4" EMT	20		46	(4) #12 THHN, #12 GND, 3/4" EMT	KITCHEN HOOD CONTROL PANEL
OUTLETS (326)	(2) #12 THHN, #12 GND, 3/4" EMT	20		48		
OUTLETS (327)	(2) #12 THHN, #12 GND, 3/4" EMT	20		50		
OUTLETS (327)	(2) #12 THHN, #12 GND, 3/4" EMT	20		52	(4) #12 THHN, #12 GND, 3/4" EMT	KITCHEN HOOD CONTROL PANEL
OUTLETS (324)	(2) #12 THHN, #12 GND, 3/4" EMT	20		54		
FAN (EF-F)	(2) #12 THHN, #12 GND, 3/4" EMT	20		56		SPACE ONLY
SPARE		20		58		SPACE ONLY
SPARE		20		60		SPACE ONLY

### KEYED NOTES

(APPLIES TO THIS SHEET ONLY)

- PROVIDE PHOTOCELL 'ON' AND 7-DAY TIME CLOCK OFF FOR CONTROL OF EXTERIOR LIGHTS. TIME CLOCK SHALL BE CAPABLE OF RETAINING PROGRAMMING DURING LOSS OF POWER FOR A PERIOD OF AT LEAST 10 HOURS.
- PROVIDE PHOTOCELL 'ON' AND 7-DAY TIME CLOCK OFF FOR EXTERIOR EMERGENCY LIGHT FIXTURES. PROVIDE 250 WATT INVERTER (EMA) FOR 90 MINUTE BACKUP POWER. ALL EMERGENCY WIRING SHALL BE WIRED SEPARATELY WITH DEDICATED NEUTRAL AND IN SEPARATE CONDUIT FROM ALL OTHER LIGHTING BRANCH CIRCUITS. REFER TO DETAIL 4/E6.01.
- VERIFY CIRCUIT BREAKER SIZE ACCORDING TO THE SPECIFICATIONS OF THE OWNER'S EQUIPMENT AT THIS LOCATION.

### NOTES:

- ALL BRANCH CIRCUITRY SHALL BE EXTENDED WITH DEDICATED NEUTRAL CONDUCTOR UNLESS OTHERWISE INDICATED.

### FIRE ALARM NOTES

- FIRE ALARM SYSTEM WIRING, NUMBER AND SIZE OF CONDUCTORS SHALL BE PER MANUFACTURER'S RECOMMENDATIONS BUT NOT LESS THAN 18 AWG, COPPER CONDUCTOR. UL LISTED FLEMUR RATED SIGNALING CABLE MAY BE USED IN CONCEALED SPACES.
- FIRE ALARM SYSTEM SHALL BE FULLY ADDRESSABLE, WITH DISCREET ADDRESSES FOR EACH ACTIVATING DEVICE. MAIN PANEL SHALL IDENTIFY DEVICE BY ROOM NAMES AND LOCATIONS TO BE PROVIDED BY THE BUILDING OPERATOR.
- ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL A COMPLETE AND OPERABLE FIRE ALARM AND SMOKE DETECTION SYSTEM IN ACCORDANCE WITH NFPA 72, BUILDING CODE OF NEW YORK STATE AND ALL LOCAL CODES, INCLUDING ALL CIRCUITRY, SMOKE DETECTORS, HEAT DETECTORS, ZONE MODULES, ANNUNCIATION DEVICES, FIRE ALARM PANEL, POWER MODULES, BATTERY BACKUP, MUNICIPAL TIE AND CONNECTION AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THIS DRAWING TO RENDER FIRE ALARM SYSTEM COMPLETE AND OPERATIVE.
- ELECTRICAL CONTRACTOR SHALL HIRE MANUFACTURER'S REPRESENTATIVE TO FULLY DEMONSTRATE SYSTEM FUNCTION, OPERATION AND MAINTENANCE OF FIRE ALARM SYSTEM TO OWNER.
- HVAC CONTRACTOR SHALL INSTALL DUCT SMOKE DETECTORS IN DUCTS. DUCT SMOKE DETECTORS SHALL BE FURNISHED AND WIRED BY ELECTRICAL CONTRACTOR.
- ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL ALL WIRING, RELAYS AND MISCELLANEOUS EQUIPMENT ASSOCIATED WITH HVAC AIR HANDLER UNIT SHUTDOWN FROM FIRE ALARM PANEL.

PANEL C		BRANCHES: 22,000 A.I.C. THERMAL MAGNETIC CIRCUIT BREAKERS				
120/208V, 3 PHASE, 4 WIRE		ENCLOSURE: NEMA 1 SURFACE MOUNT				
225 AMPERE MAIN LUGS ONLY						
LOAD	CONDUCTORS	C.B.		C.B.	CONDUCTORS	LOAD
2ND FLOOR LIGHTING	(2) #12 THHN, #12 GND, 3/4" EMT	20		20	(2) #12 THHN, #12 GND, 3/4" EMT	EXTERIOR OUTLETS
OUTLETS (201)	(2) #12 THHN, #12 GND, 3/4" EMT	20		45		
SERVER OUTLET (203)	(4) #12 THHN, #12 GND, 3/4" EMT	30		45	(4) #8 THHN, #10 GND, 3/4" EMT	A/C UNIT (CC-A)
ACCESS CONTROL PANEL (203)	(4) #12 THHN, #12 GND, 3/4" EMT	30		45		
OUTLETS (206,207)	(2) #12 THHN, #12 GND, 3/4" EMT	20		35	(2) #8 THHN, #10 GND, 3/4" EMT	A/C UNIT (CC-B)
OUTLETS (208,204)	(2) #12 THHN, #12 GND, 3/4" EMT	20		50	(2) #8 THHN, #10 GND, 3/4" EMT	A/C UNIT (CC-C)
WATER BOOSTER PUMP (MBP-2)	(4) #8 THHN, #10 GND, 3/4" EMT	40		50	</	