GENERAL TELECOMMUNICATIONS NOTES: (APPLY TO ALL DRAWINGS)

- A. IN GENERAL, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING RACEWAYS, BACKBOXES, RJ45 PORTS, COVERPLATES AND CABLING. THE CONTRACTOR SHALL ALSO PROVIDE TESTING AND TERMINATIONS FOR ALL CABLING. SYSTEM EQUIPMENT SUCH AS CAMERAS, WIRELESS ACCESS POINTS, TELEPHONE HANDSETS, SERVERS AND RACK MOUNTED EQUIPMENT SHALL BE PROVIDED BY OTHERS.
- PROVIDE LABELING OF ALL EQUIPMENT, DEVICES AND CABLING IN SCOPE OF WORK IN ACCORDANCE WITH ANSI/TIA/EIA-606-A AND THE NEC. SUCH ITEMS INCLUDE, BUT ARE NOT LIMITED TO, CABLES AND END DEVICES/OUTLETS.
- ALL TELE/DATA CABLES SHALL BE INSTALLED IN CONDUIT WHERE CONCEALED BEHIND WALLS OR ABOVE NON-ACCESSIBLE CEILING SPACES. TELE/DATA CABLES SHALL BE SUSPENDED BY J-HOOKS WHERE INSTALLED ABOVE ACCESSIBLE CEILING SPACES OR WHERE THERE IS NO CEILING.
- D. ALL DATA CABLING SHALL BE CAT6.

BASIC ELECTRICAL REQUIREMENTS:

- (APPLY TO ALL DRAWINGS) A. PROVIDE ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES TO PERFORM ALL OPERATIONS REQUIRED FOR THE COMPLETE INSTALLATION AND RELATED WORK AS SHOWN ON THE DRAWINGS AND AS SPECIFIED HEREIN, ELECTRIC EQUIPMENT SHALL BE INSTALLED IN A
- B. PROVIDE ALL ELECTRICAL EQUIPMENT CONNECTIONS.

NEAT AND WORKMANLIKE MANNER.

- C. PROVIDE ALL REQUIRED SUPPORTS AND ACCESSORIES.
- D. PROVIDE ALL WORK IN COMPLIANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) AND THE LATEST EDITION OF THE: I. BUILDING CODE OF NEW YORK STATE ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE
- OSHA REQUIREMENTS 4. LOCAL MUNICIPAL ORDINANCES AND CODES 5. AUTHORITY HAVING JURISDICTION (AHJ) 6. SERVING UTILITY COMPANIES
- E. PROVIDE ELECTRICAL INSPECTION CERTIFICATE FROM INSPECTION AGENCY RECOGNIZED AS ACCEPTABLE FROM THE AHJ.
- F. PROVIDE ELECTRICAL AND COMMUNICATION SERVICES IN COMPLIANCE WITH THE UTILITY AND COMMUNICATION COMPANIES.
- G. PROVIDE TEMPORARY ELECTRICAL SERVICE IN SIZES TO ACCOMMODATE CONSTRUCTION WHERE REQUIRED.
- H. REPAIR OR REPLACE ALL DEFECTS IN MATERIAL OR WORKMANSHIP WITHIN ONE YEAR OF CONSTRUCTION CLOSE OUT DATE AT NO ADDTIONAL COST TO THE OWNER.
- I. PERFORM ALL OPERATIONS REQUIRED FOR A COMPLETE SYSTEM TEST. PRIOR TO CLOSE OUT DATE SUBMIT ALL SATISFACTORY SYSTEM TEST RESULTS FOR RECORD.
- 1. ALL ITEMS OF EQUIPMENT AND MATERIALS PROVIDED SHALL BE SUBMITTED FOR ENGINEERING REVIEW. 2. SUBMIT A MINIMUM OF THREE COPIES OF SHOP DRAWINGS/PRODUCT DATA INFORMATION.
- K. CONTRACTOR IS HERE BY CAUTIONED THAT ELECTRIC POWER CHARACTERISTICS (VOLTAGE, PHASE, HORSEPOWER, AMPERAGE, ETC.) OF EQUIPMENT IS BASED ON AVAILABLE INFORMATION AT THE TIME OF PROJECT DESIGN. CONTRACTOR MUST VERIFY CHARACTERISTICS FOR EACH PIECE OF NEW EQUIPMENT PRIOR TO ORDERING ELECTRICAL EQUIPMENT. INDICATE VERIFICATION ON SUBMITTALS.
- L. LOCATIONS INDICATED FOR LIGHTING FIXTURES ARE APPROXIMATE. LOCATE FIXTURES AS REQUIRED TO AVOID INTERFERENCE WITH BUILDING STEEL, PIPING, DUCTWORK, CONDUIT, DIFFUSERS, GRILLES, SPEAKERS, SMOKE DETECTORS, ETC. FIELD COORDINATE EXACT LOCATIONS AS NEAR AS POSSIBLE TO THE LOCATION INDICATED. VERIFY COMPLIANCE WITH NEC ARTICLE 410.16 FOR INSTALLATION OF LIGHT FIXTURES IN CLOTHES CLOSETS, PRIOR TO ROUGH-IN. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS.
- M. EXACT LOCATIONS OF CEILING MOUNTED SMOKE DETECTORS, EXIT SIGNS, ETC. SHALL BE COORDINATED WITH OTHER CEILING MOUNTED EQUIPMENT TO AVOID CONFLICT. LOCATE DEVICES AS NEAR AS POSSIBLE TO THE LOCATION INDICATED. FIRE ALARM SMOKE AND HEAT DETECTORS SHALL BE LOCATED 3'-O" MINIMUM FROM HVAC DIFFUSERS, REGISTERS, GRILLES, ETC. SMOKE DETECTORS AT SMOKE DOORS MUST BE INSTALLED WITHIN 5'-0" OF THE DOORS (REFER TO NFPA 72).
- N. ALL NEW CIRCUITING SHALL BE CONCEALED (EXCEPT IN UNFINISHED SPACES). PROVIDE ALL CUTTING AND PATCHING AS REQUIRED.
- O. ALL FIRE ALARM VISUAL STROBE UNITS SHALL BE MOUNTED AT 6'-8" A.F.F. MAXIMUM PER A.D.A. REQUIREMENTS.
- P. CONTRACTOR SHALL REVIEW ALL TRADES' CONTRACT DOCUMENTS TO DETERMINE SPECIFIC MOUNTING LOCATIONS FOR ELECTRICAL EQUIPMENT. COORDINATE EXACT MOUNTING LOCATIONS WITH THE ARCHITECT AND OTHER CONTRACTORS. REFER TO ARCHITECTURAL PLANS FOR CASEWORK LAYOUT, ELEVATIONS, ETC. COORDINATE WITH LOCATIONS OF ELECTRICAL DEVICES AND OUTLETS
- Q. EXACT LOCATION OF MECHANICAL AND PLUMBING EQUIPMENT THAT REQUIRE ELECTRICAL CONNECTIONS ARE SHOWN ON THE MECHANICAL AND PLUMBING DRAWINGS.
- R. PROVIDE CONDUIT/WIRING (CIRCUITING) AND REQUIRED CONNECTIONS TO ALL DEVICES/EQUIPMENT. CONNECT TO CIRCUIT(S) AS INDICATED.
- S. CIRCUITING TO DEVICES/EQUIPMENT SHALL BE (2) *12 WITH (1) *12 GROUND FOR EACH 20 AMPERE CIRCUIT UNLESS OTHERWISE NOTED.
- COORDINATE ALL WORK WITH OTHER TRADES; REFER TO ARCHITECTURAL DRAWINGS FOR COORDINATING LOCATIONS.
- U. RISER DIAGRAMS ARE DIAGRAMMATIC ONLY; WIRE AND DEVICE QUANTITIES, SIZES, TYPES SHALL BE AS CALLED FOR IN CONTRACT DOCUMENTS.
- V. SLEEVE AND SEAL ALL WALL AND FLOOR PENETRATIONS. PROVIDE APPROPRIATE FIRE STOPPING FOR ALL PENETRATIONS.
- W. COORDINATE EXACT LOCATION OF ALL WIRING ROUTES, EQUIPMENT AND DEVICES WITH OTHER TRADES.
- X. MAINTAIN SERVICE CLEARANCES OF ALL EQUIPMENT. ADVISE OTHER TRADES OF SERVICE CLEARANCES AND ENSURE NO SERVICES OR TRADES RUN THROUGH SERVICE AREA.
- Y. ALL ELECTRICAL BOXES LOCATED IN A FIRE RATED WALL/CEILING SHALL HAVE A FIRE RATING TO MATCH THE RATING OF THE WALL/CEILING. UTILIZE FIRE RATED PUDDY PADS IN THESE LOCATIONS.
- Z. ALL RECEPTACLES INDICATED AS GFI TYPE MUST BE A GFI RECEPTACLE, CONNECTING NORMAL RECEPTACLES DOWNSTREAM OF ONE GFIRECEPTACLE IS NOT ACCEPTABLE.
- AA. ALL WIRING INDICATED ON PLANS IS TO BE COPPER WIRING UNLESS OTHERWISE NOTED. REFER TO ONE LINE DIAGRAM FOR FEEDERS THAT MAY BE ALUMINUM.
- AB. ALL SWITCHES, RECPETACLES, TV AND OTHER WIRING DEVICES SHALL BE WHITE.
- AC. PROVIDE AFCI PROTECTION OF BRANCH CIRCUITS IN ALL APARTMENTS PER NEC 210.12 B.
- AD. PROVIDE ALL INTERIOR TELEPHONE WIRING WITHIN THE BUILDING TO DEMARC LOCATION IN THE ELECTRICAL ROOM. PROVIDE ALL CONNECTIONS AND INTERFACE DEVICE AS APPROVED
- AE. PROVIDE ALL INTERIOR CABLE TV WIRING WITHIN THE BUILDING TO DEMARC LOCATION IN THE ELECTRICAL ROOM. PROVIDE ALL CONNECTIONS AND INTERFACE DEVICE AS APPROVED

	ABBREVIATIONS	
ABBREV.	DESCRIPTION	
А	AMPERE	
AC	MOUNTED ABOVE COUNTER HEIGHT	
AFCI	ARC FAULT CIRCUIT INTERRUPTER	
AFF	ABOVE FINISHED FLOOR	
AFG	ABOVE FINISHED GRADE	
AFI	ARC FAULT INTERRUPTING	
AHJ	AUTHORITY HAVING JURISDICTION	
AWG	AMERICAN WIRE GAUGE	
С	CONDUIT	
FACP	FIRE ALARM CONTROL PANEL	
GFCI/GFI/G	GROUND FAULT CIRCUIT INTERRUPTER	
HVAC	HEATING, VENTILATION & AIR CONDITIONING CONTRACTOR/TRADE	
KVA	KILOVOLT AMPERES	
KW	KILOWATT	
LV	LOW VOLTAGE, MOMENTARY CONTACT	
мсв	MAIN CIRCUIT BREAKER	
MLO	MAIN LUG ONLY	
NEC	NATIONAL ELECTRIC CODE	
NM	NON-METALLIC SHEATHED CABLE	
NTS	NOT TO SCALE	
PC	PHOTOCELL	
SE	SERVICE ENTRANCE	
TYP	TYPICAL	
UC	MOUNTED UNDER COUNTER HEIGHT	
UG	UNDERGROUND	
UL	UNDERWRITER'S LABORATORY	
V	VOLT	
w	WIRE	
WP	WEATHERPROOF	

COMMUNICATIONS	
SYMBOL	DESCRIPTION
1 P 1D	COMBINATION POWER AND DATA OUTLETS; REFER TO TYPICAL COMBINATION POWER AND DATA OUTLET DETAIL. SUBSCRIPT INDICATES QUANTITY:
	*P - QUANTITY OF DUPLEX RECEPTACLES *D - QUANTITY OF DATA PORTS/CABLES.
∇	ONE (1) TELEPHONE OUTLET AND CABLE
TV	TELEVISION OUTLET. REFER TO TYPICAL TELEVISION DETAIL.
TELE	TELEPHONE MAIN DISTRIBUTION FRAME
CTV	CABLE TV MAIN DISTRIBUTION FRAME

	SECURITY
SYMBOL	DESCRIPTION
DC	DOOR CONTACT(S)
DCMP	DOOR CONTACT MONITORING PANEL

	POWER DISTRIBUTION AND CONTROL	
SYMBOL	DESCRIPTION	
=	208/120 VOLT PANELBOARD	
ď	FUSED DISCONNECT SWITCH AMP RATING AS INDICATED	
+	SINGLE POINT CONNECTION TO EQUIPMENT	
€	ELECTRICAL CONNECTION, REFER TO ELECTRIC EQUIPMENT AND CONTROL SCHEDULE FOR DESCRIPTION, LETTERS AND NUMBERS REFER TO "ITEM DESIGNATION" ON THE SCHEDULE.	
ATS	AUTOMATIC TRANSFER SWITCH	
Т	TRANSFORMER	

	FIRE ALARM	
	SYMBOL	DESCRIPTION
	S	SYSTEM SMOKE DETECTOR
	SBCO	SINGLE STATION SMOKE ALARM WITH SOUNDER BASE; SUBSCRIPT "CO" INDICATES COMBINATION CARBON MONOXIDE DETECTOR
	F ⋖ 15	FIRE ALARM NOTIFICATION APPLIANCE, AUDIBLE AND VISUAL; * INDICATES STROBE CANDELA RATING
	F \1 5	FIRE ALARM NOTIFICATION APPLIANCE, VISUAL ONLY; * INDICATES STROBE CANDELA RATING
	FACP	FIRE ALARM CONTROL PANEL
	FAAP	FIRE ALARM ANNUCIATOR PANEL
,	CO	CARBON MONOXIDE DETECTOR
	-	FIRE ALARM MINI HORN
	WF	SPRINKLER WATERFLOW SWITCH (PADDLE OR PRESSURE SWITCH TYPE)
	TS	TAMPER SWITCH
	Н	COMBINATION SET TEMPERATURE AND RATE OF RISE HEAT DETECTOR
-	F	MANUAL PULLSATION
_	СМ	CONTROL MODULE
-	IM	INTERFACE MODULE
	DH	DOOR HOLD
	EC	ELEVATOR CAPTURE

BRANCH CIRCUITIN	IG IDENTIFICATION
M HP-108	— ITEM DESIGNATION, SEE ELECTRICAL EQUIPMENT & CONTROL SCHEDULE FOR ALL REQUIREMENTS.
12 —	— CIRCUIT DESIGNATION
PP1-12 ◄	— PANEL AND CIRCUIT DESIGNATION
b A1 2	 SWITCHING DESIGNATION LIGHTING FIXTURE TYPE, SEE LUMINAIRE SCHEDULE FOR REQUIREMENTS.
	— PANEL AND CIRCUIT DESIGNATION
PP1-12 ◆	— PANEL AND CIRCUIT DESIGNATION

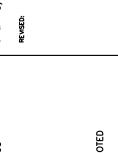
LUMINAIRES	
SYMBOL	DESCRIPTION
□ □ O	LUMINAIRE. UPPER CASE LETTERS INDICATE FIXTURE TYPE ON SCHEDULE, LOWER CASE LETTER INDICATES SWITCHING DESIGNATION.
FAR P P	WALL MOUNTED LUMINAIRE. UPPER CASE LETTERS INDICATE FIXTURE TYPE ON SCHEDULE, LOWER CASE LETTER INDICATES SWITCHING DESIGNATION.
2	WALL MOUNTED EMERGENCY LUMINAIRE WITH BATTERY PACK
≅	CEILING MOUNTED EXIT LUMINAIRE
<u></u> 4⊗ŀ	WALL MOUNTED EXIT LUMINAIRE

ONE	ONE LINE DIAGRAM SYMBOLS	
SYMBOL	DESCRIPTION	
~	THERMAL MAGNETIC MOLDED CASE CIRCUIT BREAKER	
М	UTILITY METER	
-} -	TRANSFORMER	
⟨ A ⟩	FEEDER DESIGNATION - REFER TO FEEDER SCHEDULE	
	PANELBOARD	
L		

	ELECTRICAL SYMBOLS LIST BASIC MATERIALS AND METHODS	
SYMBOL	DESCRIPTION	
•	SPECIAL PURPOSE RECEPTACLE. PROVIDE PROPER VOLTAGE, CLASS, CURRENT RATING AND NEMA CONFIGURATION AS REQUIRED BY BRANCH CIRCUIT AND/OR MATCH CAP ON EQUIPMENT BEING FURNISHED BY OTHERS. PROVIDE CORD AND CAP. SUBSCRIPT INDICATES TYPE:	
	* - NEMA TYPE D - DRYER RECEPTACLE, 30A, 125/250V	
S ³ ,b,c	TOGGLE SWITCH, VOLTAGE AS INDICATED ON FIXTURE SCHEDULE, SUBSCRIPTS INDICATE TYPE:	
	3 - THREE WAY SWITCH 4 - FOUR WAY SWITCH a,b,c - SWITCHING DESIGNATIONS NUMBER OF LETTERS EQUALS NO. OF GANGED SWITCHES V - VACANCY SENSOR OP - OCUPANCY SENSOR, PASSIVE INFRARED	
	M - MOTOR RATED TOGGLE SWITCH LV - LOW VOLTAGE, MOMENTARY CONTACT	
Ø _{a,b,c}	DIMMER SWITCH, VOLTAGE AS INDICATED ON FIXTURE SCHEDULE, SUBSCRIPTS INDICATE TYPE:	
	3 - THREE WAY DIMMER SWITCH a,b,c - SWITCHING DESIGNATIONS NUMBER OF LETTERS EQUALS NO. OF GANGED SWITCHES V - VACANCY SENSOR LV - LOW-VOLTAGE, MOMENTARY CONTACT	
Ф	DUPLEX RECEPTACLE, SUBSCRIPTS INDICATE TYPE:	
	GFI - GROUND FAULT CIRCUIT INTERRUPTING AC - ABOVE COUNTER UC - UNDER THE COUNTER	
Φ	DUPLEX RECEPTACLE WITH ARC FAULT CIRCUIT INTERRUPTING WITH PROTECTION, SUBSCRIPTS INDICATE TYPE	
	GFI - GROUND FAULT CIRCUIT INTERRUPTING AC - ABOVE COUNTER UC - UNDER THE COUNTER	
НН	UNDERGROUND ELECTRIC HANDHOLE	
<u> </u>	JUNCTION BOX, NORMAL POWER	
TC	TIME CLOCK	
3	REFERENCE TO DRAWING NOTE	
——UD——	UNDERGROUND DATA	
——UE——	UNDERGROUND ELECTRICAL	
——UF ——	UNDERGROUND FIRE ALARM	







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CIL F, AD CARE TOWN RO

