

## ELECTRICAL DEMO NOTES

- THE ELECTRICAL CONTRACTOR SHALL INSPECT THE SITE PRIOR TO SUBMITTING HIS BID AND SHALL INVESTIGATE ALL CONDITIONS UNDER WHICH THIS WORK WILL BE PERFORMED. THIS SHALL INCLUDE DETERMINATION OF EXACT LOCATIONS OF ITEMS INDICATED ON THE DRAWINGS AS EXISTING. SUCH EXISTING LOCATIONS ARE DIAGRAMMATIC AND SHALL NOT BE CONSIDERED AS EXACT ENOUGH TO USE FOR EQUIPMENT AND LABOR ESTIMATION PURPOSES. FAILURE TO INSPECT EXISTING CONDITIONS OR TO FULLY UNDERSTAND THE WORK REQUIRED SHALL NOT EXCUSE THE ELECTRICAL CONTRACTOR FROM HIS OBLIGATION TO SUPPLY AND INSTALL THE WORK IN ACCORDANCE WITH THE SPECIFICATION AND DRAWINGS AND UNDER ALL CONDITIONS AS THEY EXIST.
- THE SCOPE OF WORK INCLUDES DISCONNECTION AND REMOVAL OF ALL EXISTING ELECTRICAL EQUIPMENT, CONDUITS, WIRING, FIXTURES, DEVICES, ETC. IN THE WORK AREA INDICATED UNLESS OTHERWISE NOTED.
- USE CAUTION TO AVOID DAMAGE TO EXISTING UTILITY LINES AND SERVICES AND/OR HARM TO PERSONNEL ENGAGED IN WORKING IN ADJACENT AREAS THAT ARE TO REMAIN OCCUPIED.
- IN AREAS WHERE EXISTING ELECTRICAL EQUIPMENT IS TO REMAIN AND IF EXISTING CIRCUIT AND SYSTEM WIRING IS PRESENTLY ROUTED OUTSIDE DESIGNATED AREAS WHERE EXISTING MATERIALS AND/OR EQUIPMENT ARE TO BE REMOVED, THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL RACEWAYS, BOXES AND NEW WIRING AS REQUIRED TO MAINTAIN EXISTING CIRCUIT AND SYSTEM WIRING TO COMPONENTS WHICH ARE TO REMAIN.
- EXISTING ABANDONED CONDUIT, OUTLETS AND BOXES MAY BE USED AT THE OPTION OF THE ELECTRICAL CONTRACTOR PROVIDING THAT THEY ARE COMPATIBLE FOR USE WITH THIS PROJECT DESIGN, SPECIFICATIONS AND MEET THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE AND LOCAL GOVERNING AUTHORITIES.
- EXISTING CONDUIT, WIRING, DEVICES AND OUTLET BOXES, UNLESS NOTED OTHERWISE, WHICH ARE CONCEALED IN EXISTING WALLS AND/OR CEILINGS WHICH ARE TO BE REMOVED SHALL BE DE-ENERGIZED AND REMOVED BY THE ELECTRICAL CONTRACTOR. THE ABOVE ITEMS, WHEN FOUND CONCEALED IN EXISTING WALLS AND CEILINGS WHICH ARE TO REMAIN, SHALL BE ABANDONED, WIRING REMOVED AND OUTLETS BLANKED BY THE ELECTRICAL CONTRACTOR.
- EXISTING CONDUIT, WIRING, DEVICES AND OUTLET BOXES, UNLESS NOTED OTHERWISE, WHICH ARE SURFACE MOUNTED ON EXISTING WALLS AND/OR CEILINGS WHICH ARE BEING REMOVED SHALL BE DE-ENERGIZED BY THE ELECTRICAL CONTRACTOR AND REMOVED. THE ABOVE ITEMS WHEN FOUND SURFACE MOUNTED ON EXISTING WALLS AND CEILINGS WHICH ARE TO REMAIN SHALL BE DE-ENERGIZED BY THE ELECTRICAL CONTRACTOR AND REMOVED.
- WHERE EXISTING DEVICE OUTLETS ARE INDICATED ON PLAN TO REMAIN, THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ON THAT DEVICE ALL NECESSARY OUTLET BOX EXTENSIONS OF THE PROPER TYPE AND DEPTH AS MAY BE REQUIRED TO ACCOMMODATE ANY NEW WALL FINISH, COVERING OR MATERIAL. THIS WORK SHALL ALSO INCLUDE THE REINSTALLATION AND RECONNECTION OF THE DEVICE AS MAY BE REQUIRED.
- THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE INTEGRITY AND CONDITION OF EXISTING FEEDERS AND BRANCH CIRCUITS WHICH ARE TO REMAIN IN SERVICE. ALL DAMAGED OR NONFUNCTIONAL WIRING SHALL BE REPLACED WITH NEW 98% CONDUCTIVITY, COPPER, MINIMUM #12 AWG SIZE, THW/THHN INSULATION, 600 VOLT RATED CONDUCTORS.
- THE ELECTRICAL CONTRACTOR SHALL RETURN ALL REMOVED, EXISTING AND REUSABLE EQUIPMENT TO THE OWNER. ALL OTHER MATERIALS SHALL BE DISPOSED OF IN AN ACCEPTABLE MANNER AS DIRECTED IN THE FIELD BY THE GENERAL CONTRACTOR.
- ALL EXISTING ELECTRICAL EQUIPMENT NOTED WITH A SUBSCRIPT "XM" SHALL BE PROPERLY PROTECTED AGAINST DAMAGE DURING THE PERIOD OF THIS RENOVATION.
- REFER TO HVAC AND PLUMBING CONTRACT DRAWINGS AND SPECIFICATIONS FOR EXACT QUANTITIES AND LOCATIONS OF ALL MECHANICAL AND PLUMBING EQUIPMENT BEING ABANDONED OR REMOVED, WHICH WILL REQUIRE DE-ENERGIZATION BY THE ELECTRICAL CONTRACTOR.

## LIGHTING FIXTURE NOTES

- THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL LIGHTING FIXTURES COMPLETE WITH MOUNTING ACCESSORIES TO MEET JOB REQUIREMENTS.
- THE ELECTRICAL CONTRACTOR SHALL VERIFY FIXTURE MOUNTING AND LOCATION AGAINST ARCHITECTURAL REFLECTED CEILING PLANS, ELEVATIONS AND DETAIL DRAWINGS. EXACT LOCATION OF ALL FIXTURES SHALL BE CONFIRMED WITH THE ARCHITECT PRIOR TO ROUGHING IN.
- SERIES FIXTURES SHALL SATISFY LENGTHS AS SHOWN ON THE DRAWINGS.
- FIXTURE LETTERS SHOWN ONCE ON A CONTINUOUS ROW OF FIXTURES SHALL BE TYPICAL FOR THAT ROW UNLESS OTHERWISE NOTED.
- ALL FIXTURES SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE, INDEPENDENT OF HUNG CEILINGS.
- MANUFACTURERS CATALOG NUMBERS ARE SHOWN FOR REFERENCE PURPOSES ONLY. THEY ARE MEANT TO PROVIDE A GENERAL DESCRIPTION OF THE DESIGN AND QUALITY OF FIXTURES REQUIRED. EQUIVALENT PRODUCTS, BY OTHER MANUFACTURERS, WILL BE CONSIDERED.
- ALL INCANDESCENT LAMPS SHALL BE RATED 130 VOLTS UNLESS OTHERWISE SPECIFIED.
- ALL FLOURESCENT LAMPS SHALL BE ENERGY SAVING TYPE.
- ALL FLOURESCENT FIXTURES SHALL HAVE ENERGY SAVING ELECTRONIC BALLASTS- U.L. APPROVED AS A COMBINATION WITH ENERGY SAVING LAMPS SUPPLIED.
- REFER TO LIGHTING FIXTURE SCHEDULE OR PROJECT ELECTRICAL SPECIFICATIONS FOR FIXTURE DESIGNATIONS, SPECIFICATIONS, VOLTAGE AND LAMP REQUIREMENTS.
- THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING COMPATIBILITY BETWEEN ALL FLOURESCENT DIMMING BALLASTS, LED DRIVERS, AND DIMMING SYSTEMS/SWITCHES INCLUDED IN THE PROJECT SCOPE. THE LIGHTING SUBMITTAL PACKAGE SHALL INCLUDE ALL STANDALONE DIMMING SWITCH AND/OR CENTRAL DIMMING SYSTEM PRODUCT DATA AND A WRITTEN STATEMENT THAT ALL COMPONENTS HAVE BEEN CERTIFIED AS COMPATIBLE BY THE MANUFACTURERS OF THE INTERCONNECTED COMPONENTS.

## ELECTICAL GENERAL NOTES

- THE ELECTRICAL CONTRACTOR SHALL VISIT THE SITE TO DETERMINE ALL PRE-EXISTING CONDITIONS AND WORK NECESSARY PRIOR TO SUBMISSION OF BID PRICES.
- THE ELECTRICAL CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH ALL CONTRACT DOCUMENTS, FOR ALL TRADES, MAKE ALL EQUIPMENT CONNECTIONS AND COORDINATE WITH OTHER TRADES.
- DRAWINGS ARE DIAGRAMMATIC ONLY. EXACT LOCATIONS, MOUNTING HEIGHTS OF EQUIPMENT AND ROUTING OF RACEWAYS SHALL BE COORDINATED WITH THE EQUIPMENT REQUIREMENTS AND FIELD CONDITIONS.
- THE ELECTRICAL CONTRACTORS' SCOPE OF WORK SHALL INCLUDE, BUT NOT BE LIMITED TO, ALL ELECTRICAL POWER AND CONTROL REQUIREMENTS INDICATED.
- THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL INCIDENTAL ACCESSORIES NECESSARY TO MAKE THE ELECTRICAL WORK COMPLETE AND READY FOR OPERATION.
- BRANCH CIRCUITS SHALL BE INSTALLED IN THE FOLLOWING RACEWAYS:
  - CONCEALED ABOVE HUNG CEILINGS AND IN WALLS SHALL BE METAL GLAD CABLE (MGC) WITH FULL SIZE INSULATED GREEN GROUND CONDUCTORS.
  - EXPOSED IN NON-FINISHED ROOMS (I.E. STORAGE ROOMS, ELECTRIC ROOMS, MECHANICAL ROOMS, ETC.) SHALL BE E.M.T. MINIMUM SIZE 1/2" C, UNLESS SUBJECT TO INQUIRY, THEN RIGID STEEL.
  - FLEXIBLE METAL CONDUIT SHALL BE USED FOR ALL FINAL CONNECTIONS TO MOTORS AND VIBRATING EQUIPMENT.
- ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH OSHA, THE NATIONAL ELECTRICAL CODE AND LOCAL GOVERNING AUTHORITIES.
- RIGID STEEL CONDUIT AND ELECTRICAL METALLIC TUBING SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE.
- WIRE AND CONDUIT SIZE INDICATED ON HOORUMERS SHALL BE CONTINUOUS THROUGH CIRCUIT.
- THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE HVAC AND PLUMBING CONTRACTORS AND MANUFACTURERS SHOP DRAWINGS FOR THE EXACT LOCATIONS AND ROUGHING IN DIMENSIONS OF ALL EQUIPMENT AND SHALL MAKE ALL FINAL POWER CONNECTIONS AS REQUIRED, I.E. POWER, CONTROLS, INTERLOCKS, ETC.
- THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL CODE REQUIRED STARTERS AND DISCONNECTS WHICH ARE NOT FURNISHED BY THE HVAC OR PLUMBING CONTRACTOR.
- THE ELECTRICAL CONTRACTOR SHALL USE CAUTION TO AVOID DAMAGE TO EXISTING UTILITY LINES AND/OR HARM TO PERSONNEL ENGAGED IN WORKING IN THESE AREAS.
- ALL BRANCH CIRCUIT CONDUCTORS SHALL BE 98% CONDUCTIVITY, COPPER, MINIMUM #12 AWG SIZE, THW/THHN WITH DUAL RATED 75/90°C INSULATION, 600 VOLTS RATED, UNLESS OTHERWISE NOTED. 120 VOLT 20 AMP BRANCH CIRCUITS OF MORE THAN 75 FEET AND 277 VOLT 20 AMP BRANCH CIRCUITS OF MORE THAN 150 FEET FROM CENTER OF LOAD TO PANEL SHALL BE #10 AWG.
- ALL FEEDER CONDUCTORS SHALL BE 98% CONDUCTIVITY, COPPER, AWG SIZE AS NOTED, XHHW INSULATION, 600 VOLTS RATED, UNLESS OTHERWISE NOTED.
- A GROUNDING CONDUCTOR SHALL BE INCLUDED IN EACH RACEWAY OR CABLE, SIZED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.
- ALL ELECTRICAL WORK SHALL BE RECESSED INTO WALLS OR RUN ABOVE THE HUNG CEILING WHERE PRACTICABLE.
- BACK-TO-BACK RECEPTACLES, SWITCHES, TELEPHONE OUTLETS, ETC. WILL NOT BE ACCEPTABLE.
- WIRING SHOWN ON DRAWINGS ONLY FOR SPECIFIC ROUTES OR SPECIAL CONDITIONS.
- WIRING AND CONDUIT SHALL BE REQUIRED BETWEEN ALL OUTLETS INDICATED WITH CIRCUIT NUMBERS AND PANEL DESIGNATIONS.
- ALL SWITCH CONTROLS SHALL BE PROVIDED WITH WIRING AND CONDUIT AS REQUIRED.
- ALTHOUGH ALL BRANCH CIRCUIT WIRE AND CONDUIT IS NOT SHOWN, IT IS THE INTENT OF THESE DOCUMENTS THAT A COMPLETE BRANCH CIRCUIT WIRING SYSTEM BE INSTALLED.
- ALL 120V SINGLE PHASE CIRCUITS SHALL HAVE DEDICATED NEUTRALS, NO SHARED NEUTRALS SHALL BE ALLOWED EXCEPT FOR FURNITURE FEEDS.
- WHERE SINGLE POLE BREAKERS ARE SPECIFIED, OR REUSED, TO PROTECT MULTIPLE BRANCH CIRCUITS, THE CIRCUIT BREAKER PHASE LOADS, PROVIDE IDENTIFIED HANDLE TIES PER NEC 240.15(B)(1).
- ALL ELECTRICAL EQUIPMENT SHALL BE MOUNTED AT THE FOLLOWING HEIGHTS UNLESS NOTED OR DETAILED OTHERWISE ON THE ELECTRICAL DRAWINGS OR ARCHITECTURAL DRAWINGS. NOTES OR DETAILS ON THE ARCHITECTURAL DRAWINGS PERTAINING TO MOUNTING HEIGHTS OR LOCATIONS OF ELECTRICAL EQUIPMENT SHALL SUPERSEDE THOSE NOTED OR DETAILED ON THE ELECTRICAL DRAWINGS. IF THE MOUNTING HEIGHT OF ANY ELECTRICAL COMPONENT IS QUESTIONABLE, OBTAIN A CLARIFICATION FROM THE ARCHITECT BEFORE INSTALLATION. ALL MOUNTING HEIGHTS SHALL COMPLY WITH THE FEDERAL ADA (AMERICANS WITH DISABILITIES ACT) AND THE STATE OF MASSACHUSETTS PUBLICATION 821 CMR, ARCHITECTURAL BARRIERS BOARD FOR BUILDINGS, FACILITIES, ETC. FOR THE VISUALLY AND PHYSICALLY HANDICAPPED.
- REFLECTED CEILING PLANS FOR ANY AND ALL AREAS PREPARED BY THE ARCHITECT SHOWING THE LOCATION OF LIGHTING FIXTURES SHALL TAKE PRECEDENCE OVER THE LOCATIONS OF SAME SHOWN ON THE LIGHTING PLANS OF THE CONTRACT SET OF ELECTRICAL DRAWINGS. INSTALL THE LIGHTING FIXTURES IN ANY GIVEN AREA TO AGREE WITH THE ARCHITECT'S REFLECTED CEILING PLANS. WHERE QUANTITIES OF LIGHT FIXTURES SHOWN ON THE ARCHITECTURAL DRAWINGS DEVIATE FROM THOSE SHOWN ON ELECTRICAL DRAWINGS, THE CONTRACTOR SHALL NOTIFY ARCHITECT.

## RENOVATION NOTES

- THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE INTEGRITY AND CONDITION OF THE EXISTING BRANCH CIRCUIT WIRING WHICH IS TO BE REUSED FOR NEW EQUIPMENT CIRCUITING ACCORDING TO THE NATIONAL ELECTRIC CODE. ALL DAMAGED WIRING OR WIRING FOUND TO BE NONFUNCTIONAL SHALL BE REPLACED.
- EXISTING BRANCH CIRCUITS SHALL BE EXTENDED AND CONNECTED TO ALL EXISTING RELOCATED EQUIPMENT, AS REQUIRED FOR A COMPLETE WORKING SYSTEM.
- RECONNECT ALL EXISTING CIRCUITING WHICH ORIGINATES OR PASSES THROUGH THE RENOVATED AREAS BUT SERVES OTHER AREAS NOT BEING RENOVATED. EXTEND THESE CIRCUITS AS MAY BE NECESSARY TO THE EXISTING PANELBOARDS. UTILIZE SPARE CIRCUIT BREAKERS.
- DEMOLITION WORK SHALL BE DONE BY THE ELECTRICAL CONTRACTOR. THE ELECTRICAL CONTRACTOR SHALL COORDINATE ALL WORK CONCERNING EXISTING EQUIPMENT AND SERVICES REMAINING IN THE BUILDING.
- THE ELECTRICAL CONTRACTOR SHALL RETURN ALL REMOVED EXISTING EQUIPMENT TO THE OWNER AT A LOCATION DESIGNATED BY THE OWNER.

-  LIGHT SOLID LINE DENOTES EXISTING EQUIPMENT.
-  DARK SOLID LINE DENOTES NEW EQUIPMENT.
-  DARK DASHED LINE DENOTES EITHER EXISTING EQUIPMENT TO BE REMOVED OR FUTURE NEW EQUIPMENT.
-  X EXISTING EQUIPMENT TO BE REMOVED AND CIRCUIT PULLED BACK TO NEXT ACTIVE OUTLET/BACK TO PANEL.
-  XM EXISTING EQUIPMENT TO REMAIN.
-  XN EXISTING EQUIPMENT TO BE REMOVED AND NEW EQUIPMENT AS SPECIFIED INSTALLED ON EXISTING OUTLET, RECONNECT TO EXISTING CIRCUIT.
-  XE EXISTING DEVICE TO BE REMOVED, OUTLET BLANKED AND CIRCUIT EXTENDED TO NEW EQUIPMENT AS SHOWN.
-  XR EXISTING EQUIPMENT TO BE REMOVED AND RELOCATED.
-  XL NEW LOCATION OF RELOCATED EXISTING EQUIPMENT.

## LIGHTING FIXTURE SYMBOLS

	STANDARD DESIGNATION FOR ALL LIGHTING FIXTURES. "FR," "R" INDICATES FIXTURE TYPE; "3" INDICATES CIRCUIT NUMBER, "9" INDICATES SWITCH CONTROL. "NL" INDICATES UNSWITCHED NIGHT LIGHTING CIRCUIT.
	WALL MOUNTED LIGHTING FIXTURE.
	DIRECTIONAL/WALL WASHER LIGHTING FIXTURE.
	TRACK LIGHTING SYSTEM. LENGTH OF TRACK AND QUANTITY OF LIGHTING HEADS AS INDICATED ON THE DRAWINGS.
	LIGHTING FIXTURES WITH INTEGRAL EMERGENCY BALLAST BATTERY PACK. E.C. SHALL PROVIDE SPECIFICATION GRADE BATTERY PACKS WITH INDIVIDUAL TEST SWITCHES AND COORDINATE TEST SWITCH LOCATIONS WITH ARCHITECT AND ENGINEER PRIOR TO ROUGH-IN IF DEVICE IS NOT INTEGRAL TO FIXTURE HOUSING/REFLECTOR.
	EXIT LIGHTING FIXTURE. CEILING AND WALL MOUNTED. ARROWS AS INDICATED ON DRAWINGS.
	EMERGENCY BATTERY UNIT WITHOUT LIGHTING HEADS.
	EMERGENCY BATTERY REMOTE LIGHTING HEADS, SINGLE AND DOUBLE HEADS.
	EMERGENCY BATTERY UNIT WITH LIGHTING HEADS.

## SWITCHING SYMBOLS

	SINGLE-POLE SWITCH, MOUNTING HEIGHT 48" AFF.
	THREE-WAY SWITCH, MOUNTING HEIGHT 48" AFF.
	FOUR-WAY SWITCH, MOUNTING HEIGHT 48" AFF.
	LOW VOLTAGE SWITCH, MOUNTING HEIGHT 48" AFF.
	CEILING MOUNTED LOW VOLTAGE MOTION SENSOR EQUAL TO WATSTOPPER DT-300.
	LIGHTING CONTROL PANEL EQUAL TO GREENGATE LK8. PROVIDE CONTACT FOR CONNECTION TO BMS. COORDINATE WITH OWNER FOR EXACT REQUIREMENTS.
	LOW VOLTAGE MOMENTARY CONTACT SWITCH, MOUNTING HEIGHT 48" AFF. Z# INDICATES ZONE NUMBER. E.C. SHALL COORDINATE DEVICE COMPATIBILITY WITH LIGHTING CONTROL PANEL.
	PHOTO-ELECTRIC CELL. SURFACE OR WALL MOUNTED.
	DIGITAL ASTRONOMIC TIME CLOCK.
	LIGHTING CONTACTOR

## PANELBOARDS AND DISTRIBUTION SYMBOLS

	LIGHTING, POWER, OR DISTRIBUTION PANEL
	TRANSFORMER
	PULL BOX, SIZE AS INDICATED
	METER

## RECEPTACLES AND OUTLETS

	SINGLE CONVENIENCE RECEPTACLE. MOUNTING HEIGHT 18" AFF.
	DUPLEX CONVENIENCE RECEPTACLE. MOUNTING HEIGHT 18" AFF.
	DOUBLE DUPLEX (QUAD) CONVENIENCE RECEPTACLE. MOUNTING HEIGHT 18" AFF.
	GROUND FAULT INTERRUPTING RECEPTACLE. MOUNTING HEIGHT 18" AFF.
	"C" INDICATES RECEPTACLE MOUNTED 6" ABOVE COUNTER OR 42" AFF.
	"WP" INDICATES RECEPTACLE PROVIDED WITH A WEATHERPROOF COVER/PLATE.
	JUNCTION BOX
	SINGLE-GANG STEEL FULLY ADJUSTABLE SHALLOW FLUSH FLOOR BOX WITH 20A-125V-2P-3W DUPLEX RECEPTACLE. WIREMOLD OMNIBOX #880M1 WITH BRASS COMBINATION FLANGE #817B AND BRASS DUPLEX COVER PLATE #828R. CONFIRM FLANGE AND COVER FINISHES WITH ARCHITECT. BOXES CAST IN SLAB ON OR BELOW GRADE SHALL BE CAST-IRON, WIREMOLD OMNI BOX 880CM-1.
	TWO-GANG STEEL FULLY ADJUSTABLE SHALLOW FLUSH FLOOR BOX WITH INTERNAL DIVIDER. PROVIDE 20A-125V-2P-3W DUPLEX RECEPTACLE IN ONE COMPARTMENT AND PROVISIONS FOR A TELECOMMUNICATIONS OUTLET IN THE SECOND COMPARTMENT. WIREMOLD OMNIBOX #880M2 WITH BRASS COMBINATION FLANGE #827B, ONE BRASS DUPLEX COVER PLATE #828R AND ONE BRASS GFI COVER PLATE #828G/FITC. CONFIRM FLANGE AND COVER FINISHES WITH ARCHITECT. COORDINATE TELECOMMUNICATIONS REQUIREMENTS WITH TELECOMMUNICATIONS CONTRACTOR. PROVIDE #10 NYLON PULL CORD (10 FEET OF SLACK ON BOTH ENDS) FROM TELECOMMUNICATION COMPARTMENT TO ABOVE ACCESSIBLE CEILING. BOXES CAST IN SLAB ON OR BELOW GRADE SHALL BE CAST-IRON, WIREMOLD OMNI BOX 880CM2-1.
	TELECOMMUNICATIONS OUTLET. MOUNTING HEIGHT 18" AFF. PROVIDE SINGLE-GANG OUTLET BOX WITH 3/4" EMPTY CONDUIT, WITH PULL STRING, RUN IN WALL UP TO 6" ABOVE ACCESSIBLE CEILING AND TERMINATED WITH PLASTIC BUSHING.
	CEILING MOUNTED TELECOMMUNICATIONS OUTLET.
	TELEPHONE OUTLET. MOUNTING HEIGHT 18" AFF. "W" INDICATES WALL PHONE WITH MOUNTING HEIGHT OF 48". PROVIDE SINGLE-GANG OUTLET BOX WITH 3/4" EMPTY CONDUIT, WITH PULL STRING. RUN IN WALL UP TO 6" ABOVE ACCESSIBLE CEILING AND TERMINATE WITH PLASTIC BUSHING. COORDINATE EXACT REQUIREMENTS WITH BUILDING OWNER AND TENANT.

## MISCELLANEOUS

	CARD READER BY OTHERS. MOUNTING HEIGHT 36" AFF. PROVIDE SINGLE-GANG OUTLET BOX WITH 1/2" EMPTY CONDUIT, WITH PULL STRING, RUN IN WALL UP TO 6" ABOVE ACCESSIBLE CEILING AND TERMINATE WITH PLASTIC BUSHING. COORDINATE EXACT REQUIREMENTS WITH BUILDING OWNER AND TENANT.
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## ELECTRICAL LEGEND

	ABOVE FINISHED FLOOR		EMERGENCY		INTERRUPTING		NUMBER		THERMAL SWITCH
	ABOVE FINISHED GRADE		ELECTRIC MANHOLE		JUNCTION BOX		NOT TO SCALE		TYPICAL
	ALUMINUM		ELECTRIC METALLIC TUBING		THOUSAND CIRCULAR MILS		OPTIONAL STANDBY		VARIABLE FREQUENCY DRIVE
	AUTOMATIC TRANSFER SWITCH		ELECTRIC WATER COOLER		KILOVOLT-AMPERE		PUSH BUTTON		WEATHER PROOF
	AUXILIARY		FLEXIBLE CONNECTION		KILOWATT		PILOT LIGHT		TRANSFORMER
	AMERICAN WIRE GAUGE		FUSED DISCONNECT SWITCH		LIGHTING		PHASE		EXPLOSION-PROOF
	BREAKER		FEEDER		MAIN CIRCUIT BREAKER		PANEL		
	CONDUIT		GENERAL CONTRACTOR		MOTOR CONTROL CENTER		PANELBOARD		
	CIRCUIT BREAKER		GENERATOR		MISCELLANEOUS		POLYVINYL CHLORIDE CONDUIT		
	CIRCUIT		GROUND		MAIN LUGS ONLY MOUNTED		RECEPTACLE		
	CENTERLINE CONTACT		GROUND FAULT INTERRUPTER		MOUNTING		SECONDARY BUS ENCLOSURE		
	COPPER		HAND-OFF-AUTOMATIC		NEUTRAL		SWITCHBOARD		
	COPPER		HORSEPOWER		NORMALLY CLOSED		SWITCHGEAR		
	DISCONNECT SWITCH		HEATING, VENTILATING AIR CONDITIONING		NORMALLY OPEN				
	DRAWING		INTERRUPTING CAPACITY						
	ELECTRICAL CONTRACTOR								

## ABBREVIATIONS

	ABOVE FINISHED FLOOR		EMERGENCY		INTERRUPTING		NUMBER		THERMAL SWITCH
	ABOVE FINISHED GRADE		ELECTRIC MANHOLE		JUNCTION BOX		NOT TO SCALE		TYPICAL
	ALUMINUM		ELECTRIC METALLIC TUBING		THOUSAND CIRCULAR MILS		OPTIONAL STANDBY		VARIABLE FREQUENCY DRIVE
	AUTOMATIC TRANSFER SWITCH		ELECTRIC WATER COOLER		KILOVOLT-AMPERE		PUSH BUTTON		WEATHER PROOF
	AUXILIARY		FLEXIBLE CONNECTION		KILOWATT		PILOT LIGHT		TRANSFORMER
	AMERICAN WIRE GAUGE		FUSED DISCONNECT SWITCH		LIGHTING		PHASE		EXPLOSION-PROOF
	BREAKER		FEEDER		MAIN CIRCUIT BREAKER		PANEL		
	CONDUIT		GENERAL CONTRACTOR		MOTOR CONTROL CENTER		PANELBOARD		
	CIRCUIT BREAKER		GENERATOR		MISCELLANEOUS		POLYVINYL CHLORIDE CONDUIT		
	CIRCUIT		GROUND						