

OCCUPANCY SENSOR SCHEDULE	
100	MULTI-TECHNOLOGY, CEILING MOUNTED OCCUPANCY SENSOR, WITH BUILT IN LIGHT LEVEL SENSING. (LINE VOLTAGE) WATTSTOPPER: DT-355-3 HUBBELL: #OMNIDT2000
105	MULTI-TECHNOLOGY CEILING MOUNTED OCCUPANCY SENSOR (LOW VOLTAGE) WATTSTOPPER: DT-300 HUBBELL: #OMNIDT2000RP PROVIDE WITH POWER PACKS AS REQUIRED PER LAYOUT.
110	ULTRASONIC CEILING MOUNTED OCCUPANCY SENSOR, SINGLE SWITCH. WATTSTOPPER: #UT-355 HUBBELL: #OMNIUS2000
120	MULTI-TECHNOLOGY WALL SINGLE SWITCH SENSOR, PIR AND ULTRASONIC. FITS IN SINGLE GANG BOX, SINGLE TRIM RING. WATTSTOPPER: #DW-100 HUBBELL: #LHMTS1
130	MULTI-TECHNOLOGY DUAL SWITCHING, DUAL RELAY, LIGHT LEVEL SENSING. FITS IN SINGLE GANG BOX, SINGLE TRIM RING. WATTSTOPPER: #DW-200 HUBBELL: #LHMTD2
GENERAL NOTES: E.C. SHALL CONTACT ARCHITECT FOR COLOR SELECTION PRIOR TO ORDER OF ANY SENSOR. FOR CEILING SPACES 14 FT. A.F.F. PIR TYPE CEILING MOUNTED SENSORS SHALL BE USED.	

GENERAL ELECTRICAL NOTES	
1.	ALL WORK SHALL BE IN CONFORMANCE WITH NATIONAL, STATE, AND LOCAL CODES AND/OR ORDINANCES.
2.	SEE ARCHITECTURAL, MECHANICAL, & PLUMBING DRAWINGS FOR ADDITIONAL REQUIREMENTS.
3.	ELECTRICAL DRAWINGS ARE DIAGRAMMATIC ONLY. THEY ARE INTENDED TO GIVE APPROXIMATE LOCATIONS AND OVERALL DESIGN INTENT. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PRODUCTS, MATERIALS, AND ELECTRICAL METHODS WHICH HAVE NOT BEEN SHOWN OR INDICATED BUT ARE REQUIRED FOR A COMPLETE SYSTEM TO THE STANDARDS OF THE INDUSTRY.
4.	INSTALL LIGHTING FIXTURES IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. PROVIDE SUPPORTING DEVICES FOR ADEQUATE SUPPORT OF FIXTURES FROM STRUCTURE.
5.	UPON COMPLETION OF THE ELECTRICAL WORK, THE INSTALLATION SHALL BE TESTED FOR CONTINUITY, GROUNDS, AND SHORT CIRCUITS. THE ELECTRICAL CONTRACTOR SHALL DEMONSTRATE PROPER PERFORMANCE OF ALL SYSTEMS. ALL DEFECTIVE WORK OR MATERIALS SHALL BE REPLACED OR REPAIRED AS NECESSARY AND RETESTED.
6.	ELECTRICAL RACEWAYS THAT PENETRATE FIRE RATED ASSEMBLIES SHALL BE SLEEVED AND SEALED AS PER THE LOCAL BUILDING CODE.
7.	ELECTRICAL DEVICES/EQUIPMENT SHOWN AS DASHED AND BOLD ARE EXISTING TO BE REMOVED, ELECTRICAL DEVICES/EQUIPMENT SHOWN AS LIGHT AND SOLID ARE EXISTING TO REMAIN, AND ELECTRICAL DEVICES/EQUIPMENT SHOWN AS BOLD AND SOLID SHALL BE NEW.
8.	ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASSOCIATED COSTS AND SCHEDULING OF REQUIRED ELECTRICAL INSPECTIONS.
9.	ELECTRICAL CONTRACTOR SHALL REMOVE EXISTING LIGHTNING PROTECTION FROM EQUIPMENT BEING REMOVED FROM THE ROOF. EC SHALL INSTALL NEW LIGHTNING PROTECTION ON NEW EQUIPMENT. EC SHALL CONTRACT CERTIFIED LIGHTNING PROTECTION CONTRACTOR TO PERFORM THE WORK.

ELECTRICAL SYMBOLS LEGEND	
RECEPTACLES	LIGHTING
20A, 120V, 2P, 3W GROUNDING DUPLEX RECEPTACLE	FIXTURE TYPE PER SCHEDULE
SINGLE-PLEX RECEPTACLE	TROFFER STYLE FIXTURE, TYPE AS NOTED
QUADPLEX RECEPTACLE	SWITCH LEGS
GFCI RECEPTACLE	FIXTURE ON EMERGENCY POWER
RECEPTACLE MTD. 6" ABOVE COUNTER OR HGT SHOWN	STRIP LIGHT
MULTI-PHASE RECEPTACLE	SURFACE MTD FIXTURE
WEATHER-PROOF GFCI RECEPTACLE	PENDANT/SURFACE MTD UP/DOWN LIGHT
QUADPLEX FLOORBOX	RECESSED/DOWNLIGHT FIXTURE
COMMUNICATIONS	SWITCHING
SURFACE MOUNTED RACEWAY WITH DEVICES AS NOTED	20A, 120/277V SPST SWITCH
TELEPHONE	20A, 120/277V 3-WAY SWITCH
TELEPHONE/DATA	20A, 120/277V 4-WAY SWITCH
DATA ONLY	DIMMER SWITCH
COMMUNICATION DEVICE MTD. 6" ABOVE COUNTER OR HGT SHOWN	CEILING MTD OCC. SENSOR
POWER	PHOTOCELL
PANEL BOARD	FIRE ALARM
DISTRIBUTION PANEL BOARD	MANUAL PULL STATION 46" A.F.F. CENTER
DISCONNECT	HORN/STROBE 82" A.F.F. TO CENTER
FUSED DISCONNECT SWITCH	STROBE ONLY 82" A.F.F. TO CENTER
COMBINATION MOTOR STARTER	CANDELA
PUSH BUTTON STATION AS NOTED	SMOKE DETECTOR
J-BOX	INDICATES ELEVATOR RECALL
ELECTRICAL EQUIPMENT CONNECTION	HEAT DETECTOR
MOTOR CONNECTION	DUCT DETECTOR

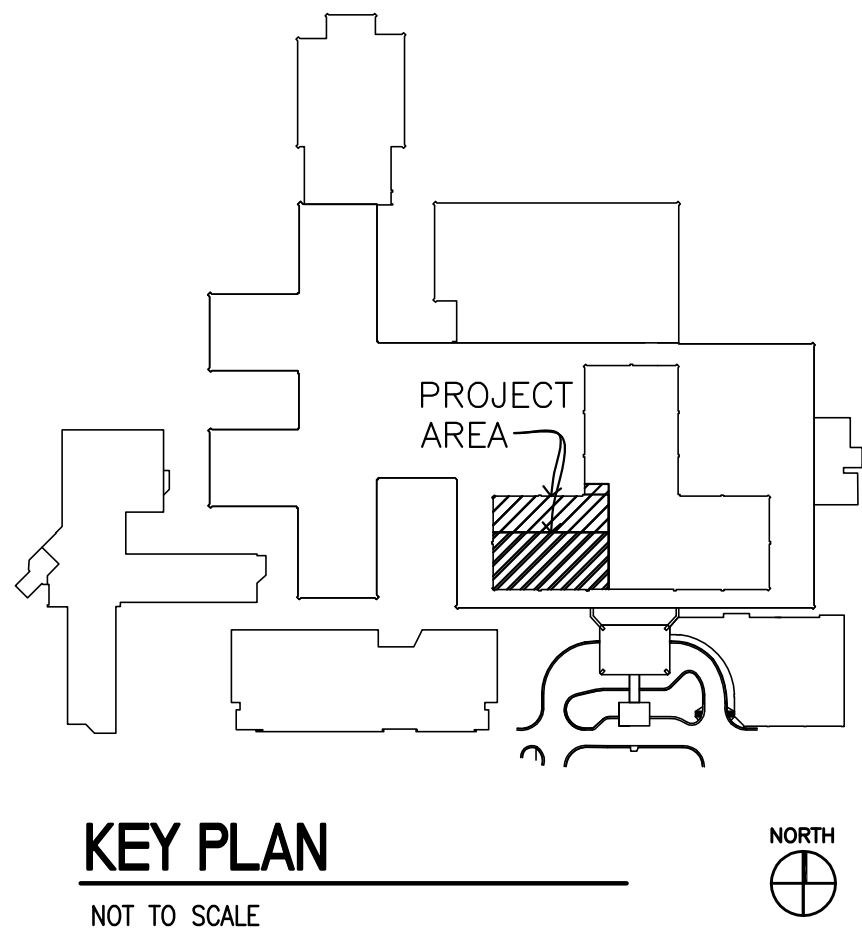
LIGHT FIXTURE SCHEDULE					
TYPE	DESCRIPTION	MANUFACTURER	REFERENCE CATALOG #	LAMPS	VOLTS
A	2X4 LED RECESSED VOLUMETRIC LIGHT FIXTURE, 4500 LMS MINIMUM, 50 WATT DRIVER, 4000K COLOR.DRIVER MUST BE ACCESSABLE FROM BELOW; 0-10V DIMMING CONTROL	COOPER	2AC-LD2-47-UNV-LP840-CD	LED	UNV
B	2X4 LED RECESSED PRISMATIC LIGHT FIXTURE, 5700 LUMENS, 4000K COLOR. 0-10V DIMMING	COLUMBIA	LEPC24-4044G-LL-EDU	LED	UNV
C	RECESSED LED DOWNLIGHT 8" 35K, NO LENS, DIMMING	METALUX LITHONIA	2GC-LD1-57-A-UNV-L840-CD1 2TL4 46L FW A12 D50 LP840	LED	UNV
D	2X4 LED RECESSED VOLUMETRIC LIGHT FIXTURE, 4500 LMS MINIMUM, 50 WATT DRIVER, 4000K COLOR.DRIVER MUST BE ACCESSABLE FROM BELOW; 0-10V DIMMING CONTROL	LITHONIA OR COOPER	DOM8 1500L 35K 120 D08	LED	UNV
10	EXIT LIGHT, CAST ALUMINUM, AC ONLY POWERED WITH LED LAMPS, MATCH EXISTING BUILDING FIXTURES. FOR USE WITH GENERATOR.	APPROVED EQUAL	14AC-LD4-47-UNV-LP840-CD	LED	UNV
11	EXIT LIGHT, CAST ALUMINUM, AC ONLY POWERED WITH LED LAMPS, MATCH EXISTING BUILDING FIXTURES. FOR USE WITH GENERATOR.	COLUMBIA SURE-LITES LITHONIA APPROVED EQUAL	LEPC12-4044G-LL-EDU CX61RW LES-W-1-R-120/277	LED	DUAL
NOTES: 1. CONNECT BATTERY TO UN-SWITCHED POWER FROM THE SAME CIRCUIT FEEDING THE LIGHT. 2. FIXTURE SHALL BE ON FOCUS ON ENERGIES LIST OF HIGH EFFICIENCY LOW GLARE LINEAR FLUORESCENT FIXTURES. 3. PROVIDE WITH DRYWALL FRAMING KIT. 4. MUST BE ENERGY STAR RATED.					
GENERAL NOTES: NO SUBSTITUTIONS WITHOUT TEN DAYS PRIOR APPROVAL. PROVIDE SINGLE OR DUAL BALLASTED FIXTURES PER LAYOUT. MULTI-TAP BALLASTS ACCEPTABLE.					





BASE BID EQUIPMENT COORDINATION SCHEDULE																
TAG	DESCRIPTION	HP / KW	MCA RLA/FLA	VOLTS	CONDUCTORS			CONDUIT	LOCATION	PANEL	CIRCUIT	BREAKER SIZE	STARTER			NOTE
					PH	N	GND						TYPE	PROVIDED BY	INSTALLED BY	
EXF-7-02A	EXISTING EF(INTERSTITIAL SPACE)	NA	NA	NA	NA	NA	NA	NA	B730.5	NA	NA	NA	VFD/D	MC	EC	1
GENERAL NOTES: A. COORDINATE INSTALLATION OF MOTORS WITH MECHANICAL CONTRACTOR. REFER TO MECHANICAL DRAWINGS. B. CONTROL WIRING SHALL BE BY MECHANICAL CONTRACTOR UNLESS NOTED OTHERWISE. C. MCA=MINIMUM CIRCUIT AMPS; MOC=MINIMUM OVER-CURRENT PROTECTION; RLA=RATED LOAD AMPS; FLA=FULL LOAD AMPS D. EC=ELECTRICAL CONTRACTOR; MC=MECHANICAL CONTRACTOR; INT=INTERGRAL TO UNIT; EQM=EQUIPMENT MANUFACTURER																
MOTOR SCHEDULE NOTES: 1. CONTRACTOR TO REMOVE EXISTING COMBINATION STARTER AND INSTALL NEW VFD. EXTEND CIRCUIT AS REQUIRED.																

ALTERNATE #1 EQUIPMENT COORDINATION SCHEDULE																
TAG	DESCRIPTION	HP / KW	MCA RLA/FLA	VOLTS	CONDUCTORS			CONDUIT	LOCATION	PANEL	CIRCUIT	BREAKER SIZE	STARTER			NOTE
					PH	N	GND						TYPE	PROVIDED BY	INSTALLED BY	
EXF-7-02A	EXISTING EF(INTERSTITIAL SPACE)	NA	NA	NA	NA	NA	NA	NA	B730.5	NA	NA	NA				1
1-EF-1	EXISTING EF(ON ROOF)	NA	NA	NA	NA	NA	NA	NA	ROOF	NA	NA	NA				2
CP-1	CIRCUIT PUMP 1	.4	NA	120	#12	#12	#12	3/4"	INTER. L7H	NA	NA	20/1	NA	NA	NA	HP/S
CP-2	CIRCUIT PUMP 2	.4	NA	120	#12	#12	#12	3/4"	INTER. L7H	NA	NA	20/1	NA	NA	NA	HP/S
AHU-72A	EXISTING AHU(ON ROOF)	NA	NA	NA	NA	NA	NA	NA	ROOF	NA	NA	NA				4
AHU-72A	NEW AHU(ON ROOF)	2(6)/2(6)	480/3	(3) #4	-	#8	1 1/4"	ROOF	EX	EX	EX	EX	VFD	EQM	EQM	HP/S
GENERAL NOTES: A. COORDINATE INSTALLATION OF MOTORS WITH MECHANICAL CONTRACTOR. REFER TO MECHANICAL DRAWINGS. B. CONTROL WIRING SHALL BE BY MECHANICAL CONTRACTOR UNLESS NOTED OTHERWISE. C. MCA=MINIMUM CIRCUIT AMPS; MOC=MINIMUM OVER-CURRENT PROTECTION; RLA=RATED LOAD AMPS; FLA=FULL LOAD AMPS D. EC=ELECTRICAL CONTRACTOR; MC=MECHANICAL CONTRACTOR; INT=INTERGRAL TO UNIT; EQM=EQUIPMENT MANUFACTURER																
MOTOR SCHEDULE NOTES: 1. CONTRACTOR TO REMOVE EXISTING EXF-7-2A INCLUDING STARTER, CONDUIT AND WIRE BACK TO SOURCE 2. CONTRACTOR TO REMOVE EXISTING 1-EF-1 INCLUDING CONDUIT AND WIRE BACK TO SOURCE 3. PROVIDE HP RATED SWITCH TO ACT AS DISCONNECT. PUMPS ARE LOCATED DIRECTLY BELOW AHU-72A IN THE INTERSTITIAL SPACE. PROVIDE NEW 20A/1 BREAKER IN PANEL L7H FOR PUMP. 4. CONTRACTOR TO DISCONNECT AND REMOVE EXISTING CONDUIT AND WIRE BACK TO SOURCE. 5. EC SHALL USE EXISTING BREAKER FROM DEMOED AHU. BREAKER SIZE SHALL REMAIN THE SAME. CONDUIT AND CONDUCTOR SIZE SHALL BE UPSIZED.																

ELECTRICAL ABBREVIATIONS			
AC	ABOVE COUNTERTOP	MC	MECHANICAL CONTRACTOR
AFF	ABOVE FINISH FLOOR	MCA	MINIMUM CIRCUIT AMPS
AFG	ABOVE FINISH GRADE	MDP	MAIN DISTRIBUTION PANEL
ANNC	ANNUNCIATOR	MTD	MOUNTED
CC	CONTROLS CONTRACTOR	OCC	OCCUPANCY
EC	ELECTRICAL CONTRACTOR	PC	PLUMBING CONTRACTOR
EX	EXISTING	PNL	PANEL
EXR	EXISTING RELOCATED	SPST	SINGLE POLE SINGLE THROW
GC	GENERAL CONTRACTOR	WP	WEATHER PROOF
GFCI	GROUND FAULT CIRCUIT INTERRUPT	20A	20 AMP
IBC	INTERNATIONAL BUILDING CODE	PHASE	ø
IG	ISOLATED GROUND	3W	3 WIRE
HP	HORSEPOWER	20/1	20 AMP, SINGLE PHASE
LV	LOW VOLTAGE		

ELECTRICAL SHEET INDEX	
E-000	ELECTRICAL SYMBOLS AND SPECIFICATIONS
ED-100	ELECTRICAL DEMOLITION PLAN
E-100	ELECTRICAL PLAN



		CONSULTANTS:				ARCHITECT/ENGINEERS:		Drawing Title		Project Title		Project Number		Office of Construction and Facilities Management	
								ELECTRICAL SYMBOLS AND SPECIFICATIONS		REFURBISH BONE MARROW TRANSPLANT UNIT		67-15-100			
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Addendum 02		04/06/17						-----		NOVEMBER 12, 2015		S/JW			
Revisions		Date						-----				S/JW			