

LIGHT FIXTURE SCHEDULE										
TYPE	DESCRIPTION	LAMP	# OF LAMPS	TOTAL FIXTURE WATTAGE	BALLAST/DRIVER	VOLTAGE	MANUFACTURER	MODEL	REMARKS	EXAMPLE
EMB5	INTERIOR EMERGENCY BATTERY EGRESS LIGHT AND EXIT COMBO	LED	2	5W	INTEGRAL LED DRIVER	UNIV	LITHONIA HUBBELL JUNO COOPER PHILIPS	UHQML LED R HD CCR INXPCL R WH APC7 R VLLC	TEST SWITCH PROVIDED SEALED 90 MINUTE BATTERY RED WHITE THERMOPLASTIC HOUSING	
EMB1	INTERIOR EMERGENCY BATTERY EGRESS LIGHT	LED	LED	2W	INTEGRAL LED DRIVER	UNIV	LITHONIA HUBBELL JUNO ISOLITE PHILIPS	ELM2 LED DUAL LITE L2 SERIES NAVILITE NL PLE LED CHLORIDE V16L	TEST SWITCH PROVIDED SEALED 90 MINUTE BATTERY 20" (ON CENTER) X 6" V DESIGN PATH	
EX1B	CLEAR EDGE LIT EXIT SIGN, BATTERY	LED	LED	1W	INTEGRAL LED DRIVER	UNIV	LITHONIA HUBBELL JUNO COOPER PHILIPS	LRP RC 120/277 EL N LE RANE NAVILITE SURE-LITES	NICKEL CADMIUM BATTERY EXIT SIGN; SEE PLANS FOR FACE STYLE AND QTY 90 MINUTE OPERATION; RED LETTERS	
CEM4	INTERIOR/EXTERIOR EMERGENCY EGRESS (LOW PROFILE)	LED	LED	17W	INTEGRAL LED DRIVER	UNIV	HUBBELL JUNO COOPER	DUAL LITE PGRN W APPROVED EQUAL APPROVED EQUAL	TEST SWITCH PROVIDED UL LISTED FOR DAMP LOCATIONS UL LISTED MFG LOCATION IS CODE 101 COMPLIANT PROVIDE 90 MIN. REMOTE BATT. VERIFY FINISH WITH ARCHITECT.	
DL1	6" RECESSED LED DOWNLIGHT	LED	LED	18W	INTEGRAL LED DRIVER	UNIV	GOTHAM PATHWAY JUNO COOPER SPECTRUM	EVO 14 6AR LS MVOLT 6V LED 1500 INDY 16 13 35 U G2 L000P L06A 15 1500DUQUITE FRM6A15 8 35 6LMD U S2ELEDG2 30W 35K MD	6" APERTURE MINIMUM 1250 LUMEN PACKAGE MINIMUM 10% DIMMING CLEAR SPECULAR	
DLP1	DECORATIVE LED PENDANT	LED	LED	8W	PROVIDE REMOTE DRIVER 277V INPUT, 12V OUTPUT	277	TECH LIGHTING ACLITY EATON	700 FJ MLP X X LED590 APPROVED EQUAL APPROVED EQUAL	VERIFY FINISHES, OPTIONS, AND SUSPENSION LENGTH WITH ARCHITECT. LED MODULE INCLUDED 300 LUMEN, 3000K, 90CRI	
LTC1	LED TAPE COVE LIGHT	LED	LED	2.5W/FT	PROVIDE DIMMABLE REMOTE DRIVER 277V INPUT, 24V OUTPUT	277	LUMINER ACLITY EATON	LL30-35K APPROVED EQUAL APPROVED EQUAL	VERIFY OPTIONS & FIXTURE LENGTH WITH ARCHITECT. PROVIDE DRIVER AS REQUIRED BASED ON FIXTURE LENGTHS. 3500K, 200 LUMENS/FT	
OW1L	WALL PACK TRAPEZOID LED	LED	LED	30W	INTEGRAL LED DRIVER (STANDARD 0-10V DIMMING)	UNIV	LITHONIA HUBBELL JUNO COOPER PHILIPS	WST LED P2.35K VV MVOLT APPROVED EQUAL APPROVED EQUAL APPROVED EQUAL	VERIFY FINISH WITH ARCHITECT. MINIMUM 3000 LUMENS, 3500K WIDE THROW REFER TO ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHTS	
P1L1	PENDANT LED LINEAR DIRECT	LED	LED	25W	INTEGRAL LED DRIVER (STANDARD 0-10V DIMMING)	277	LEDALITE FOCAL POINT CORONET COOPER LITECONTROL	2501 1A G GN X07 7/N 2 E APPROVED EQUAL APPROVED EQUAL APPROVED EQUAL	2300 LUMEN/FT MIN, 4000K, VERIFY FINISHES, OPTIONS, AND LENGTH WITH ARCHITECT. VERIFY SUSPENSION LENGTH WITH ARCHITECT. EX WHERE SHOWN.	
R1L1	RECESSED LED LINEAR	LED	LED	46W	INTEGRAL LED DRIVER (STANDARD 0-10V DIMMING)	UNIV	LEDALITE FOCAL POINT CORONET COOPER LITECONTROL	F5M4L FL 1000LF 40K 1C UNV LDI XX WH 4FT0N APPROVED EQUAL APPROVED EQUAL APPROVED EQUAL	1000 LUMEN/FT MIN, 4000K, VERIFY FINISHES, OPTIONS, AND LENGTH WITH ARCHITECT. PROVIDE EMERGENCY BATTERY PACK WHERE SHOWN ON PLANS.	
STL1	4 FT. LED STRIP	LED	LED	40W	INTEGRAL LED DRIVER (STANDARD 0-10V DIMMING)	UNIV	LITHONIA COLUMBIA CREE COOPER DAY-BRITE	L2L7N 1A6 5000LM MDD M/CLT 80CRI WH LCL 4' 40 5A E L U S4 40L 40K 10V SNLED-LD4-465L-UNV-L840-CD1-U LF 4 FR 39 40 DZT	4000 MINIMUM LUMENS, 4000K LENSED	
VL14	VOLUMETRIC LED TROFFER 0-10V DIMMING	LED	LED	35W	INTEGRAL LED DRIVER (STANDARD 0-10V DIMMING)	UNIV	LITHONIA COLUMBIA EATON	2RT14 40L E21 LP840 APPROVED EQUAL APPROVED EQUAL	0-10V DIMMING MINIMUM 4000 LUMENS 4000K	
VL14A	VOLUMETRIC LED TROFFER BI-LEVEL STEP DIMMING	LED	LED	35W	INTEGRAL STEP-LEVEL DIMMING DRIVER	UNIV	LITHONIA COLUMBIA EATON	2RT14 40L 5LD LP840 APPROVED EQUAL APPROVED EQUAL	0/50/100% STEP DIMMING MINIMUM 4000 LUMENS 4000K	
VL15	VOLUMETRIC LED TROFFER 0-10V DIMMING	LED	LED	40W	INTEGRAL LED DRIVER (STANDARD 0-10V DIMMING)	UNIV	LITHONIA COLUMBIA EATON	2RT14 48L E21 LP840 APPROVED EQUAL APPROVED EQUAL	0-10V DIMMING MINIMUM 4800 LUMENS 4000K	
VL17	VOLUMETRIC LED TROFFER 0-10V DIMMING	LED	LED	62W	INTEGRAL LED DRIVER (STANDARD 0-10V DIMMING)	UNIV	LITHONIA COLUMBIA EATON	2RT14 72L E21 LP840 APPROVED EQUAL APPROVED EQUAL	0-10V DIMMING MINIMUM 7200 LUMENS 4000K	
	SPACE									
	SPACE									

LIGHTING SEQUENCE OF OPERATION

A COMPLETE AND OPERATIONAL LIGHTING CONTROL SYSTEM SHALL BE INSTALLED AS INTENDED ON THESE PLANS. IN THE EVENT THAT THE VERBIAGE IS IN CONFLICT OR CONTRADICTS THE REQUIREMENTS LISTED HERE, THE QUESTION SHALL BE ASKED PRIOR TO BIDDING OR THE MORE STRINGENT SHALL APPLY.

SYSTEM DESCRIPTION:
LIGHTING CONTROLS ARE BASED ON INDEPENDENT OCCUPANCY / VACANCY SENSORS WITH SEPARATE LIGHTING CONTROL PANEL FOR SPECIALTY AREAS.

OCCUPANCY SENSORS
1. ALL OCCUPANCY SENSORS SHALL BE PROGRAMMED FOR AUTOMATIC ON (FULL LEVELS) AND AUTOMATIC OFF.
2. ALL VACANCY SENSORS SHALL BE PROGRAMMED FOR MANUAL ON (FULL LEVELS) AND AUTOMATIC OFF.

SENSOR SETTINGS:
A. WALL SWITCH PASSIVE INFRARED: 2 MINUTES FOR INDIVIDUAL RESTROOMS AND STORAGE ROOMS.
B. MEETING/BOARD ROOM OCCUPANCY: 15 MINS.
C. DAY ROOM OCCUPANCY: 10 MINS.
D. WALL SWITCH OCCUPANCY SENSORS OFFICES: 5 MINS.
E. WALL SWITCH VACANCY SENSORS SLEEPING AREA: 15 MINS.

EXTERIOR LIGHTING CONTROL:
A. EXTERIOR LIGHTING CONTROL IS VIA LIGHTING CONTROL PANEL "LCP1".
B. MANUAL SWITCHING FOR LOCAL EXTERIOR LIGHTING AREAS.

EMERGENCY LIGHTING CONTROL:
A. EXTERIOR LIGHTING CONTROL IS VIA LIGHTING CONTROL PANEL "LCP1".
B. EXTERIOR EMERGENCY LIGHTING IS VIA BACKUP BATTERY PACK AT FIXTURE. UPON LOSS OF NORMAL POWER BATTERY PACK WILL ENGAGE ON THOSE FIXTURES WITH BACKUP BATTERY PACKS.
C. WHERE NOTED (NL), LIGHTING IS VIA "NIGHTLIGHTS", NON-SWITCHED ALWAYS "HOT". ALSO, NL FIXTURES ARE CONNECTED TO AN EMERGENCY BATTERY PACK FOR EMERGENCY LIGHTING.

LIGHTING FIXTURE NOTES

- ALL LAMPS SHALL BE OSRAM/SYLVANIA UNLESS OTHERWISE NOTED. ALL FLUORESCENT LAMPS SHALL BE 4000K AS SPECIFIED. ALL FLUORESCENT BALLASTS SHALL BE ELECTRONIC AS SPECIFIED. SUBMITTAL SHEETS SHALL BE SUBMITTED WITH FIXTURE SUBMITTALS. FLUORESCENT LAMP AND BALLAST WARRANTY SHALL BE COMPLETED BY CONTRACTOR AND TURNED OVER TO OWNER AT END OF PROJECT.
- SUBSTITUTIONS APPROVED BY THE ENGINEER SHALL BE ACCEPTABLE. LONGER IF THEY ARE EQUAL TO THE FIXTURE SPECIFIED, UNLESS OTHERWISE NOTED. THIS INCLUDES LENS, COLORS, REFLECTORS, FINISHES, FINISHING MATERIALS, FINISHES. ALL SUBSTITUTIONS SHALL BE SUBMITTED TO THE ENGINEER WITH CUT SHEETS FOR APPROVAL. SUBSTITUTED FIXTURES SHALL BE PRICED IN THE SPECIFICATIONS. FIXTURES LISTED SEPARATELY SO THE ENGINEER AND OWNER CAN MAKE AN INFORMED DECISION.
- SEE ARCHITECTURAL REFLECTED LIGHTING PLAN FOR EXACT FIXTURE LOCATIONS.
- FIXTURES SHALL BE FIRE RATED.
- PROVIDE INTEGRAL SURGE PROTECTION ON ALL EXTERIOR LIGHTING DRIVER TYPES.
- PROVIDE LOW-TEMP (0°F MINIMUM) BALLASTS FOR ALL FIXTURES INSTALLED IN EXTERIOR LOCATIONS OR OTHER AREAS SUBJECT TO COLD WEATHER.
- SUSPEND ALL FOUR CORNERS WITH WIRE. STRUCTURE DO NOT ALLOW GRID ALONE TO SUPPORT FIXTURE.
- FIXTURES WITH EMERGENCY BATTERY PACK SHALL BE SUPPLIED WITH 1100 LUMEN INVERTERS.
- MODULAR WIRELESS RELOC SYSTEMS ARE ACCEPTABLE FOR LIGHTING CIRCUITS.
- THE CONTRACTOR SHALL VERIFY THE LEAD TIME OF ALL PRODUCTS SPECIFIED IN THIS SCHEDULE AT THE TIME OF PACKAGE QUOTE.
- DURING THE BID PROCESS, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER OF ANY DELIVERY/SCHEDULING ISSUES.
- NO SUBSTITUTIONS WILL BE ALLOWED DUE TO LACK OF COORDINATION OF DELIVERY DATES AND CONSTRUCTION SCHEDULE AFTER BID.
- ALL EXPEDITED EXPENSES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- FIXTURES TO BE INSTALLED IN CEILING LOCATED ON ARCHITECTURAL PLANS AS HAVING INSULATION IN CONTACT WITH CEILING SURFACE, SHALL BE IC RATED BY MANUFACTURER.
- BALLAST BY ADVANCE. UNUSUAL TRAD ARE ACCEPTABLE FOR SUBMISSION PROVIDED THEY MEET INTENDED CRITERIA AS LISTED IN THIS SCHEDULE.
- LED DRIVERS LOCATED IN UNUSUAL SPACES SHALL BE RATED FOR 90 DEGREES F.
- PROVIDE 90 MINUTE EMERGENCY BATTERY BACK UP. EMERGENCY BACK UP SHALL BE BASED ON TYPE OF FIXTURE, LED DRIVER, BALLAST, ETC. EMERGENCY BACKUP SHALL BE DUAL INPUT FOR BOTH SWITCHING AND CHARGING. PROVIDE UNSWITCHED "HOT" FROM LOCAL CIRCUIT UNLESS OTHERWISE INDICATED ON PLANS. PROVIDE WITH INDICATOR LIGHT. INSTALL LED INDICATOR ON LIGHT FIXTURE UNLESS DECORATIVE. DECORATIVE FIXTURES SHALL HAVE INDICATOR PLACED AT LOCAL CEILING. BODINE, PHILIPS, POWER SENTRY OR ETC. VERIFY ALL FIXTURE FINISHES, TRIM, AND COLOR OPTIONS WITH ARCHITECT PRIOR TO ORDERING.

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BID DOCUMENTS

LIGHT FIXTURE SCHEDULE & NOTES

DATE 4-5-2019
PROJECT NO 16063

REVISIONS

NO	DATE	DESCRIPTION

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04/02/19

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