



LIGHTING PLAN
SCALE: 1/8" = 1'-0"
NORTH

NOTES REFERENCED ON THE PLANS

- 1) RE-CIRCUIT BUILDING MOUNTED EXTERIOR LIGHTS TO EMERGENCY PANEL TO PROVIDE CODE MANDATED GENERATOR BACKED EMERGENCY EGRESS LIGHTING.
- 2) PROVIDE 4 TYPE "K" LIGHTING FIXTURES IN CRAWL SPACE. SPACE TO ILLUMINATE CABLE TRAY. SEE SYSTEMS PLAN FOR LOCATION OF TRAY.
- 3) WIRE NEW LIGHTING FIXTURES TO EXISTING LIGHTING CIRCUIT WHICH ALREADY SERVES THIS AREA.
- 4) EXTEND EXISTING CORRIDOR LIGHTING CIRCUIT TO NEW LIGHTING FIXTURE. ADD NEW 4-WAY LIGHTING SWITCH AT NEW EXTERIOR DOOR AND REVISE WIRING.
- 5) EXTEND EXISTING EMERGENCY CORRIDOR LIGHTING CIRCUIT TO NEW LIGHTING FIXTURE.

STATEMENT OF COMPLIANCE WITH THE INTERNATIONAL ENERGY CONSERVATION CODE - 2006

SECTION 505.2 - INTERIOR LIGHTING CONTROLS
THIS SECTION REQUIRES A MANUAL LIGHTING CONTROL FOR EACH ROOM, EXCEPT SECURITY AREAS, EMERGENCY AREAS, AND MEANS OF EGRESS LIGHTING. FOR THIS PROJECT, SWITCHES HAVE BEEN PROVIDED FOR EACH ROOM WHERE MANDATED.

SECTION 505.2.1 - ADDITIONAL INTERIOR LIGHTING CONTROLS
THIS SECTION REQUIRES A LIGHT REDUCING CONTROL FOR EACH ROOM, EXCEPT THOSE WITH ONLY ONE LUMINAIRE, OCCUPANT-SENSING DEVICE, PUBLIC AREAS, SLEEPING UNIT, OR SPACE LESS THAN 0.6 WATTS PER SQUARE FOOT. FOR THIS PROJECT, THIS SECTION HAS BEEN COMPLIED WITH THROUGH THE USE OF BLEVEL SWITCHING OF FIXTURES.

SECTION 505.2.2 - AUTOMATIC LIGHTING SHUTOFF
THIS SECTION REQUIRES AN AUTOMATIC LIGHTING SYSTEM SHUTOFF DEVICE IN NON-RESIDENTIAL BUILDINGS OF 5000 SQUARE FEET OR MORE. THIS AUTOMATIC DEVICE SHALL BE A PROGRAMMABLE TIME-OF-DAY CONTROLLER, AN OCCUPANCY SENSOR, OR A SIGNAL FROM ANOTHER CONTROL OR ALARM SYSTEM WHICH INDICATED THAT THE BUILDING IS UNOCCUPIED. BASED ON EXCEPTION #3 SPACES WHERE AN AUTOMATIC SHUTOFF WOULD ENDANGER OCCUPANT SAFETY OR SECURITY THIS DEVICE WILL NOT BE PROVIDED. THIS IS AN INDUSTRIAL BUILDING WHERE HEAVY MACHINERY IS CONSTANTLY IN MOTION, AND WHERE POTENTIALLY LIFE THREATENING OPERATIONS (WELDING) ARE BEING PERFORMED CONSTANTLY.

SECTION 505.2.4 - EXTERIOR LIGHTING CONTROLS
THIS SECTION REQUIRES EXTERIOR LIGHTING NOT INTENDED FOR 24-HOUR OPERATION TO HAVE AUTOMATIC SWITCHING OR PHOTOCELL CONTROLS. FURTHER, IT REQUIRES TIME SWITCHES TO BE ASTRONOMICAL, 7-DAY, AND A MINIMUM 4 HOUR BATTERY OR MECHANICAL BACK-UP. FOR THIS PROJECT, THE EXTERIOR LIGHT SYSTEM IS CONTROLLED BY A PHOTOCELL TIME CLOCK COMBINATION.

SECTION 505.3 - TANDEM WIRING
THIS SECTION REQUIRES TANDEM WIRING FOR 1 AND 3 LAMP FIXTURES MOUNTED IN CONTINUOUS ROWS OR RECESSED IN ACCESSIBLE CEILINGS WITHIN 10' OF EACH OTHER. IT ALLOWS AN EXCEPTION IF ELECTRONIC HIGH FREQUENCY BALLASTS ARE USED OR IF FIXTURES ARE NOT ON SAME SWITCH CONTROL. THIS PROJECT WAS DESIGNED UTILIZING ELECTRONIC HIGH FREQUENCY BALLASTS.

SECTION 505.4 - EXIT SIGNS
THIS SECTION REQUIRES INTERNALLY ILLUMINATED EXIT SIGNS NOT EXCEED 5W/SIDE. LED EXIT SIGNS HAVE BEEN SPECIFIED. THEIR POWER CONSUMPTION MEETS THIS REQUIREMENT.

SECTION 505.5 - INTERIOR LIGHTING POWER
THIS SECTION REQUIRES THAT THE CONNECTED LOAD FOR ALL INTERIOR LIGHTING NOT EXCEED POWER DENSITIES LISTED IN TABLE 505.5.2. IT ALLOWS EXCEPTIONS FOR MERCHANDISING. FOR THIS PROJECT, THE TABLE REQUIRES A POWER DENSITY NOT EXCEEDING 1.0 WATTS PER SQUARE FOOT. THIS BUILDING IS 7,047 SQUARE FEET. THE LIGHTING SYSTEM CONSUMES 6,526 WATTS. THE POWER DENSITY FOR THIS PROJECT IS .93 WATTS PER SQUARE FOOT. THIS IS WITHIN THE MAXIMUM POWER DENSITY LISTED IN TABLE 505.5.2.

SECTION 505.6 - EXTERIOR LIGHTING POWER
THIS SECTION REQUIRES THAT ALL EXTERIOR LIGHT SOURCES OVER 100 WATTS HAVE AN EFFICACY OF AT LEAST 80 LUMENS PER WATT. IT ALLOWS AN EXCEPTION FOR LOW VOLTAGE LANDSCAPE LIGHTING. IT ALSO ALLOWS AN EXCEPTION, WHERE APPROVED, FOR HISTORICAL, SAFETY, SIGNAGE, OR EMERGENCY LIGHTING. FOR THIS PROJECT, ALL EXTERIOR FIXTURES ARE METAL HALIDE OR FLUORESCENT, AND MEET THIS MINIMUM EFFICACY REQUIREMENT.

TABLE 505.6.2 - LIGHTING POWER DENSITIES FOR BUILDING EXTERIORS
THIS TABLE REQUIRES A MAXIMUM POWER DENSITY OF .15 WATT/SQ FOR PARKING LOTS AND DRIVES. FOR THIS PROJECT THE PARKING LOT LIGHTING IS EXISTING AND NO CHANGES WILL BE MADE.

TABLE 506.6.2 - LIGHTING POWER DENSITIES FOR BUILDING EXTERIORS
THIS TABLE REQUIRES A MAXIMUM POWER DENSITY OF 30 WATTS PER LINEAR FOOT OF DOOR WIDTH AT MAIN ENTRIES, AND 20 WATTS PER LINEAR FOOT OF DOOR WIDTH AT OTHER BUILDING ENTRIES. FOR THIS PROJECT, OUR LIGHTING POWER DENSITY AT MAIN ENTRIES IS EXISTING AND NO CHANGES WILL BE MADE. OTHER BUILDING ENTRIES IS 6.5 WATTS PER LINEAR FOOT.

DESIGNATION	VOLTAGE WATTS HEIGHT WIDTH/DEIA LENGTH	HOUSING MATERIAL FINISH DIFFUSER/REFLECTOR LAMP AIMING FIXTURE MOUNTING	LAMP DESCRIPTION LAMP LUMENS FIRST BALLAST SECOND BALLAST	MANUFACTURER CATALOG NUMBER OTHER APPROVED MANUFACTURERS	FIXTURE DESCRIPTION
F	120 VOLTS 50 WATTS 8 INCHES 3.5 INCHES 6.2 INCHES	STEEL PAINTED WHITE NONE ADJUSTABLE CEILING SURFACE	50PAR20 825 LUMENS NONE NONE	PRESCOLITE MONOPOINT-AKTMP HEAD: AKTFCP20	1 LAMP INCANDESCENT TRACK FIXTURE TO BE USED IN A 60 DEGREES F DRY ENVIRONMENT. FIXTURE TO HAVE A ROUND APERTURE. MINIATURE TRACK HEAD MOUNTED ON MONO-POINT. WHITE FINISH.
G	120 VOLTS 25 WATTS 9.87 INCHES 4.87 INCHES 3.87 INCHES	STEEL PAINTED WHITE WHITE GLASS DIRECT WALL SURFACE	FLE13HT22/827 1400 LUMENS ---	PRESCOLITE 4020 V COPPER INDUSTRIES HUBBELL	1 LAMP FLUORESCENT SELF BALLASTED WALL BRACKET/SCONCE FIXTURE TO BE USED IN A 0' F WET ENVIRONMENT. FIXTURE TO HAVE A RECTANGULAR APERTURE. LITEFORM WALL BRACKET.
H	120 VOLTS 51 WATTS 7 INCHES 12 INCHES 11 INCHES	STEEL PAINTED WHITE DIRECT CEILING RECESSED	F280BX/835/ECCO CRI: 82 1710 1710 LUMENS NONE	LITHONIA LFRN 226DIT FBL3 *** GEB PRESOLITE OR 5 DAY PRIOR APPROVAL	2 LAMP COMPACT FLUORESCENT DOWNLIGHT FIXTURE TO BE USED IN A 60' F DAMP ENVIRONMENT. FIXTURE TO HAVE A 6" ROUND APERTURE. SHOWER LIGHT WITH WHITE SPLAY RING AND DROPPED OPAL LENS. RATED FOR DAMP LOCATION.
K	120 VOLTS 35 WATTS 8.6 INCHES 6 INCHES 7.75 INCHES	PLASTIC BLACK WHITE TRANSLUCENT DIRECT WALL SURFACE	F32TBX/835/A/ECCO CRI: 82 2200 2200 LUMENS QUICK START NONE	LITHONIA VR18 32TRT *** FAIL SAFE KENALL OR 5 DAY PRIOR APPROVAL	1 LAMP COMPACT FLUORESCENT WALL BRACKET/SCONCE FIXTURE TO BE USED IN A 0' F DRY ENVIRONMENT. FIXTURE TO HAVE A RECTANGULAR APERTURE. SURFACE FIXTURE WITH BLACK PERIMETER TRIM. PROVIDE BALLAST WITH 1.0 BALLAST FACTOR.
L	120 VOLTS 9 WATTS 3 INCHES 9.4 INCHES 4.5 INCHES	PLASTIC CLEAR LENS DIRECT WALL SURFACE	WITH FIXTURE SLED33 35K *** SLMB BEGA NONE NONE	PRESOLITE SLED33 35K *** SLMB BEGA KIM OR 5 DAY PRIOR APPROVAL	1 LAMP LED SPECIALTY FIXTURE TO BE USED IN A 0' F DRY ENVIRONMENT. FIXTURE TO HAVE A RECTANGULAR APERTURE. RECESSED STEP LIGHT.
U	120 VOLTS 13 WATTS 1.7 INCHES 21 INCHES	STEEL PAINTED PEARL CLEAR POLYCARBONATE DIRECT UNDER CABINET	LED 4000K 325 LUMENS NONE NONE	AIKCO ARIS-21401-120-PR-L/S-LC LITHONIA NULITE OR 5 DAY PRIOR APPROVAL	1 LAMP LIGHT EMITTING DIODE ACCENT FIXTURE TO BE USED IN A 60' F DRY ENVIRONMENT. FIXTURE TO HAVE A RECTANGULAR APERTURE. UNDER CABINET FIXTURE WITH CLEAR LENS AND SWITCHED LEADER CABLE.

UNLESS OTHERWISE INDICATED, THE FOLLOWING NOTES APPLY TO THE ABOVE LIGHTING FIXTURES WHERE APPLICABLE:

- 1) PROVIDE A SINGLE MULTI-LAMP BALLAST FOR FLUORESCENT FIXTURES.
- 2) IF CATALOG NUMBER CONFLICTS WITH FIXTURE DESCRIPTION, THEN DESCRIPTION TAKES PRECEDENCE.
- 3) ALL FIXTURES WHICH DO NOT LIST MULTIPLE MANUFACTURERS MUST BE BID ON A UNIT PRICE BASIS.
- 4) FIVE DAY PRIOR APPROVAL OF SUBSTITUTE FIXTURES IS REQUIRED FOR MANUFACTURERS NOT LISTED.
- 5) FIXTURE HOUSINGS AND BALLASTS MUST COMPLY WITH ENVIRONMENTAL CONDITIONS IN DESCRIPTION.
- 6) ALL ACCESSORIES NECESSARY FOR THE INSTALLATION OF THE FIXTURES SHALL BE SUPPLIED.
- 7) ACCESSORIES AND LAMPS SHALL BE SUPPLIED BY THE FIXTURE MANUFACTURER IF AVAILABLE.
- 8) THE BALLAST FACTOR FOR FLUORESCENT BALLASTS SHALL BE THE CLOSEST TO 1.00 AVAILABLE.
- 9) THE COLOR TEMPERATURE OF ALL LAMPS SHALL BE THE SAME. INFORM THE ENGINEER OF CONFLICTS.
- 10) INFORM THE ENGINEER OF ANY CONFLICTS BETWEEN SPECIFIED BALLAST AND LAMPS PRIOR TO PURCHASE.
- 11) ALL BATTERIES TO BE SIZED TO PROVIDE 50% OF SINGLE LAMP RATED LUMEN OUTPUT FOR 90 MINUTES.
- 12) ALL FLUORESCENT BALLASTS SHALL HAVE THD EQUAL TO OR LESS THAN 20%.
- 13) UNLESS OTHERWISE NOTED, ALL FLUORESCENT BALLASTS SHALL BE HIGH FREQUENCY ELECTRONIC TYPE.
- 14) ALL BALLASTS SHALL HAVE THE LOWEST SOUND RATING AVAILABLE.
- 15) CONFIRM THAT FIXTURES ARE COMPATIBLE WITH CEILING TYPES PRIOR TO RELEASE OF ORDER.
- 16) ASTERISKS IN THE FIXTURE CATALOG NUMBER REFER TO FIXTURE VOLTAGE.
- 17) SUBMIT CATALOG CUTS FOR APPROVAL FOR ALL LIGHT FIXTURES AND BALLASTS PRIOR TO RELEASE.
- 18) ALL LAMPS SHALL BE LOW MERCURY, TCLP COMPLIANT IF AVAILABLE.

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A	120 VOLTS 65 WATTS 5.375 INCHES 11.25 INCHES 51.5 INCHES	STEEL PAINTED WHITE WHITE TRANSLUCENT DIRECT CEILING SURFACE	F32TB/SP35/ECCO CRI: 78 2800 LUMENS INSTANT START NONE	LITHONIA 10540 GEB METALLUX COLUMBIA OR 5 DAY PRIOR APPROVAL	2 LAMP FLUORESCENT DECORATIVE/ARCHITECTURAL FIXTURE TO BE USED IN A 60 DEGREES F DRY ENVIRONMENT. FIXTURE TO HAVE A RECTANGULAR APERTURE. CLOUD TYPE FIXTURE. PROVIDE BALLAST WITH 1.0 BALLAST FACTOR.
B	120 VOLTS 34 WATTS 5 INCHES 4 INCHES 27 INCHES	STEEL PAINTED WHITE WHITE TRANSLUCENT DIRECT WALL SURFACE	F17T8/SP35/ECCO CRI: 78 1325 LUMENS INSTANT START NONE	LITHONIA 11890 GEB METALLUX COLUMBIA OR 5 DAY PRIOR APPROVAL	2 LAMP FLUORESCENT DECORATIVE/ARCHITECTURAL FIXTURE TO BE USED IN A 60 DEGREES F DRY ENVIRONMENT. FIXTURE TO HAVE A RECTANGULAR APERTURE. CLOUD WALL FIXTURE. PROVIDE BALLAST 1.0 BALLAST FACTOR.
C	120 VOLTS 65 WATTS 6 INCHES 48 INCHES	STEEL PAINTED WHITE DIRECT/INDIRECT WALL SURFACE	F32TB/SP35/ECCO CRI: 78 2800 LUMENS INSTANT START NONE	PRECISION ARCH LIGHTING AS605-4-W-OP/BW-F01M-***-T8 ALERA LIGHTING CONTROL LITE OR 5 DAY PRIOR APPROVAL	2 LAMP FLUORESCENT WALL BRACKET/SCONCE FIXTURE TO BE USED IN A 60 DEGREES F DRY ENVIRONMENT. FIXTURE TO HAVE A SQUARE APERTURE. DIRECT/INDIRECT LINEAR WALL FIXTURE. PROVIDE BALLAST WITH 1.0 BALLAST FACTOR.
D	120 VOLTS 52 WATTS 6.1 INCHES 6 INCHES 18 INCHES	STEEL PAINTED WHITE WHITE GLASS DIRECT CEILING RECESSED	F280BX/835/ECCO CRI: 82 1710 1710 LUMENS INSTANT START NONE	LITHONIA LFRN 226DIT FBL3 *** GEB PRESOLITE OR 5 DAY PRIOR APPROVAL	2 LAMP COMPACT FLUORESCENT DOWNLIGHT FIXTURE TO BE USED IN A 60' F DRY ENVIRONMENT. FIXTURE TO HAVE A 6" ROUND APERTURE. DOWNLIGHT WITH WHITE LENS, WHITE SPLAY AND WHITE FLANGE. PROVIDE BALLAST WITH 1.0 BALLAST FACTOR.
E	120 VOLTS 52 WATTS 6.1 INCHES 6 INCHES 18 INCHES	STEEL PAINTED WHITE WHITE GLASS DIMMING DIRECT CEILING RECESSED	F280BX/835/ECCO CRI: 82 1710 1710 LUMENS DIMMING NONE	LITHONIA LFRN 226DIT FBL3 *** ADEZ PRESOLITE OR 5 DAY PRIOR APPROVAL	2 LAMP COMPACT DIMMABLE FLUORESCENT DOWNLIGHT FIXTURE TO BE USED IN A 60' F DRY ENVIRONMENT. FIXTURE TO HAVE A 6" ROUND APERTURE. DOWNLIGHT WITH WHITE LENS, WHITE SPLAY AND WHITE FLANGE. PROVIDE BALLAST WITH 1.0 BALLAST FACTOR.

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