

LIGHTING FIXTURE SCHEDULE

ID	MANUFACTURER	MODEL NO.	VOLTAGE	REQUIRED LAMPS		DESCRIPTION	NOTES
				NUM.	TYPE		
A	LITHONIA	LB-3-32-1/3	120	3	32W TB	2'x4' SURFACE MOUNTED 3-LAMP 32W TB WRAPAROUND.	1,2,3
B	LITHONIA	CB-2-32	120	2	32W TB	1'x4' SURFACE MOUNTED 2-LAMP 32W TB WRAPAROUND.	1,2,3
C	LITHONIA	IBZ-432-WD-WGX	120	4	32W TB	2'x4' FLUORESCENT HIGH BAY 4-LAMP 32W TB WITH WIRE GAURD.	1,2,3
D	LITHONIA	C-2-TB	120	2	32W TB	1'x4' SURFACE MOUNTED 2-LAMP 32W TB WITH WIRE GUARD.	1,2,3
E	PHILLIPS	7508-H01-Q-N-1-1-E	120	1	TSHO	4' WALL DIRECT/INDIRECT 1 TSHO LAMP. VERIFY FIXTURE COLOR AND FINISH WITH OWNER.	1,2,3
F	ACCESS LIGHTING	20362	120	2	13W CFL	DECORATIVE SCOCNE. BRONZE FINISH, OPAL GLASS. VERIFY FIXTURE TYPE WITH OWNER.	1,2,3
G	PHILLIPS	1101HCD/1101F2642U	120	1	42W CFL	6" RECESSED CAN LIGHT, RATED FOR WET LOCATION.	1,2,3
H	LITHONIA	MNS8-1-25-120-RE	120	1	25W TB	LOW PROFILE UNDERCABINET LIGHT. FIXTURE IS 36" LONG. FIXTURE TO BE HARD WIRED AND CONTROLLED BY WALL TIMED SWITCH.	1,2,3
J	PHILLIPS	2001CD/2001F181CU/N	120	1	18W CFL	4" RECESSED CAN DOWN LIGHT INTERIOR.	1,2,3
K	ACCESS LIGHTING	52230GU-BS	120	3	18W CFL	DECORATIVE PENDANT. 3 LAMPS AT 18W SPIRAL FLUORESCENT BASE GU-24. COORDINATE FINISH WITH THE OWNER.	1,2,3
X	LITHONIA	LQM-S-W-3-R	120	LED	LED	THERMOPLASTIC EXIT SIGN WITH WHITE HOUSING, RED LETTERS, BATTERY STANDARD 90 MINUTES. PROVIDE WIREGUARDS FOR FIXTURES LOCATED IN THE GYM.	1,2,3
X1	LITHONIA	LQM-S-W-3-R-HORO/ELA-T-6CS-WP-M12	120	LED	LED	THERMOPLASTIC EXIT SIGN WITH WHITE HOUSING, RED LETTERS, 6V 12W REMOTE LOAD BATTERY STANDARD 90 MINUTES. PROVIDE WIREGUARDS FOR FIXTURES LOCATED IN THE GYM. TWIN REMOTE LAMPS 5.4W HEADS VIA 6V BATTERY.	1,2,3
X2	LITHONIA	EU2-LED-M12	120	-	LED	THERMOPLASTIC HOUSING LED LAMP 90 MIN BATTERY EMERGENCY LIGHTING UNIT. WIRE-GUARD FOR FIXTURES LOCATED IN THE GYM	1,2,3

NOTES:  
 1. FIXTURE SHALL BE PROVIDED WITH ALL NECESSARY MOUNTING HARDWARE, OPTIONS, AND COMPONENTS AS REQUIRED FOR THE INSTALLATION AND AS DESCRIBED IN SPECIFICATIONS.  
 2. ALL FIXTURES TO MATCH SPECIFIED PERFORMANCE BY MANUFACTURE OR OWNER APPROVED EQUIVALENT.  
 3. PROVIDE TANDEM WIRING FOR ALL 1 AND 3 LAMP FIXTURES PER ASHRAE 90.1 2007.

GENERAL NOTES

- A. PERFORM WORK IN ACCORDANCE WITH THE LATEST EDITIONS, REVISIONS, AMENDMENTS, OR SUPPLEMENTS OF APPLICABLE STATUTES, ORDINANCES, CODES OR REGULATIONS OF FEDERAL, STATE, AND LOCAL AUTHORITIES HAVING JURISDICTION IN EFFECT ON THE DATE BIDS ARE RECEIVED.
- B. WHERE APPROVED STANDARDS HAVE BEEN ESTABLISHED BY OSHA, UNDERWRITERS LABORATORIES, AMERICAN CODES, ASA, ASHRAE, ARI, NEC, STATE FIRE INSURANCE REGULATION BODY, NFPA, NEC OR OTHERS, THESE STANDARDS SHALL BE FOLLOWED WHETHER OR NOT INDICATED ON THE DRAWING AND SPECIFICATIONS.
- C. ALL CONDUITS LOCATED IN INTERIOR SPACE MUST BE RECESSED IN WALLS OR LOCATED HIGH UP IN CEILING SPACE ABOVE. SURFACE MOUNTED CONDUIT WILL NOT BE ALLOWED UNLESS NOTED OTHERWISE.
- D. USE #10 AWG WIRE FOR EXTERIOR BUILDING MOUNTED LIGHTING CIRCUITS AND SITE LIGHTING CIRCUITS.
- E. PROVIDE AN UNSWITCHED HOT WIRE TO ALL EMERGENCY LIGHTING UNITS, INVERTERS AND EXIT SIGNS. EMERGENCY LIGHTS ARE NOT NIGHT LIGHTS, THEY ARE TO BE SWITCHED IN THE SAME FASHION AS THE FIXTURES IN THE SURROUNDING AREA. CONNECT TO LIGHTING CIRCUIT OF SURROUNDING AREA.
- F. ALL LIFE SAFETY SYSTEM WIRING SHALL BE IN DEDICATED CONDUITS, BOXES, ENCLOSURES ETC.
- G. WHERE MULTIPLE SWITCHES ARE GROUPED TOGETHER, MOUNT SWITCHES UNDER (1) COVERPLATE.
- H. ALL CONDUIT AT INTERIOR, DRY LOCATIONS TO BE EMT.
- I. UNDERGROUND CONDUIT TO BE PVC, TRANSITION TO METALLIC CONDUIT ABOVE GRADE/FLOOR.
- J. MC CABLE MAY ONLY BE USED FOR FINAL CONNECTION TO LIGHT FIXTURES 6'-0" LENGTH MAX.

LOW VOLTAGE NOTES

- PHONE AND NETWORK WIRES**
- EVERY CLASSROOM AND KITCHEN PHONE JACK SHOULD BE INSTALLED WITH THE BOTTOM OF THE JUNCTION BOX AT APPROX 56" FROM THE GROUND.
  - STAINLESS STEEL WALL MOUNT JACK LEVITON #223-S SHOULD BE USED FOR WALL MOUNT PHONES (CLASSROOMS AND KITCHEN)
  - PHONE JACKS SHOULD BE TERMINATED TO A PATCH PANEL AND LABELED BY NUMBER
  - CAT5E JACKS SHOULD BE ON EACH WORK IN OFFICE (RECEPTION AREA, AND CAMERA CLOSET). THESE SHOULD ALL BE TERMINATED TO A PATCH PANEL AND LABELED BY NUMBER.
  - PHONE SYSTEM (TO BE SUPPLIED BY RAINBOW) SHALL BE AN ANAYA PARTNER ACS (USE 4 WIRE, 4 WIRES PER PHONE).
  - INSTALL PHONE SYSTEM IN UTILITY ROOM (CONNECT ALL PHONE JACKS TO SYSTEM AND PROVIDE WIRES AND INTERCOM FUNCTIONALITY TO ALL PHONES.
  - RECEPTION PHONE GOES TO DIRECTOR'S OFFICE
  - PLACEMENT IN RECEPTION DESK, AND HANG AND CONNECT PHONE AT EVERY PHONE THROUGHOUT BUILDING (ONE PER CLASSROOM, AND 1 IN THE KITCHEN). LARGE CLASSROOMS WITH 2 PHONE JACKS ONLY NEEDS ONE PHONE INSTALLED.
  - EXTENSIONS 10 DIRECTOR'S OFFICE, 11-RECEPTION DESK, 12 AND UP SHOULD BE CLASSROOMS/KITCHEN
  - ACCESS POINTS IN HALLWAY (TO BE SUPPLIED BY RAINBOW) SHOULD BE MOUNTED IN EACH LOCATION WHERE SPECIFIED ON BLUE PRINTS AND CONNECTED. CONNECT POE POWER INJECTORS IN UTILITY ROOM TO ENSURE POWER IS SUPPLIED.
  - ALL WIRING SHOULD BE DONE USING 568B WIRING LAYOUT AND SHOULD BE THE SAME LAYOUT ON BOTH JACK AS WELL AS AT PATCH PANEL TO ENSURE A SEAMLESS INSTALL.
  - RUNS SHOULD BE TESTED USING A NETWORK CABLING TESTER TO ENSURE THAT THERE IS COMMUNICATION ON ALL RUNS.
- CAMERAS**
- CAMERAS - RG59 BNC CONNECTORS SHALL BE INSTALLED ON ENDS OF EACH CABLE FOR EVERY CAMERA AS WELL AS A 2.1MM 12V MALE POWER CONNECTOR TO CONNECT TO CAMERA
  - CAMERAS - (TO BE SUPPLIED BY RAINBOW) SHOULD BE CONNECTED AT EACH LOCATION, TESTED, AND PROPERLY FOCUSED AND AIMED TO ENSURE WIDEST RANGE AND BEST VIEWING OF THE APPROPRIATE TARGET IMAGE/ROOM.
  - IN CAMERA WIRING CLOSET - 18" DEEP X 36" WIDE WHITE LAMINATE SHELF SHOULD BE MOUNTED AT 65" FROM GROUND FOR CAMERA SYSTEM TO BE PLACED ON.
  - CAMERA POWER SUPPLY (TO BE SUPPLIED BY RAINBOW) SHALL BE MOUNTED ON WALL UNDER THE ABOVE SHELF.
  - ALL WIRES IN CAMERA WIRING CLOSET SHALL BE TERMINATED WITH BNC ENDS ON THE RG59 SIDE AND ALL POWER LINES SHALL BE SEPARATED FROM THE RG59 AND RUN INTO AND CONNECTED TO THE CAMERA POWER SUPPLY.
  - 55" MONITOR SCREEN (SUPPLIED BY RAINBOW) SHALL BE MOUNTED ON WALL WHERE SPECIFIED AND CONNECTED VIA HDMI CABLE THAT TERMINATES AT THE DVR. MOUNT USING SANUS MODEL VLL5 MOUNT.
- SUPPORT**
- PROVIDE J-HOOKS ABOVE THE FINISHED CEILING FOR LOW VOLTAGE WIRING. COORDINATE J-HOOK LOCATIONS WITH OTHER TRADES. INSTALL ALL FIRE ALARM, COMMUNICATION, SECURITY AND LIGHTING CONTROL WIRING IN J-HOOKS.

POWER AND DIAGRAMS

- NOTE A: RECEPTACLES LOCATED AT COUNTERS SHALL BE LOCATED 18" AFF IN KNEE SPACE IF PROVIDED OR 4" ABOVE COUNTER OR BACK SPLASH AS APPLICABLE IF NO KNEE SPACE IS PROVIDED U.O.N.
- NOTE B: RECEPTACLES IN MECHANICAL AND ELECTRICAL SPACES SHALL BE MOUNTED AT +48" U.O.N.
- THE FOLLOWING SUBSCRIPTS ARE USED TO INDICATE DIFFERENT TYPES OF RECEPTACLES
- GFCI/GFI - GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE AT +42" IN TOILETS
  - ST - SAFETY TYPE RECEPTACLE
  - IG - ISOLATED GROUND RECEPTACLE
  - WP - WEATHERPROOF
  - SW - TOP HALF OF DUPLEX RECEPTACLE SWITCHED
  - H - HORIZONTAL MOUNTING
  - 20A, 125V, 2 POLE, 3 WIRE GROUNDING DUPLEX RECEPTACLE, NEMA 5-20R
  - 20A, 125V, 2 POLE, 3 WIRE GROUNDING SINGLE RECEPTACLE, NEMA 5-20R
  - 20A, 125V, 2 POLE, 3 WIRE GROUNDING DOUBLE DUPLEX RECEPTACLE, NEMA 5-20R
  - PEDESTAL TYPE, FLOOR OR COUNTER MOUNTED RECEPTACLE RECEPTACLE TYPE AS INDICATED ABOVE
  - CEILING MOUNTED RECEPTACLE, TYPE AS INDICATED ABOVE
  - FLUSH FLOOR BOX WITH RECEPTACLE, TYPE AS INDICATED ABOVE
  - COMBINATION POWER/COMMUNICATIONS FLOOR BOX, SEE COMMUNICATIONS PLAN FOR SYSTEMS DEVICE
  - PICHAL DENOTES CONNECTION TO LIGHT SWITCH, LIGHT FIXTURE OR FIRE EQUIPMENT
  - SPECIAL PURPOSE RECEPTACLE SUBSCRIPTS DENOTES NEMA TYPE, REFER TO SPECIFICATIONS
  - JUNCTION BOX, 4 INCH SQUARE UNLESS OTHERWISE NOTED
  - 208 VOLT RECEPTACLE AT +72" TO TOP
  - 480 VOLT PANELBOARD AT +72" TO TOP
  - SAFETY SWITCH AT +54" CHARACTERISTICS AS INDICATED BY FRAME/POLES.
  - FUSE SAFETY SWITCH AT +54" CHARACTERISTICS AS INDICATED BY FRAME/POLES/POLES.
  - CIRCUIT BREAKER, AMP/POLES AS INDICATED
  - TRANSFORMER
  - GROUND CONNECTION
  - MOTOR CONNECTION, HP AS INDICATED
  - GROUND BUS ON STANDOFFS
  - PUSHBUTTON STATION AT +48"
  - MOTOR RATED SWITCH

LIGHTING

- NOTE A: UPPER CASE ALPHANUMERIC SUBSCRIPT DENOTES FIXTURE TYPE. SEE SCHEDULE(S)
- NOTE B: LOWER CASE LETTER SUBSCRIPT PROVIDED ADJACENT TO SWITCHING DEVICE AND ASSOCIATED LIGHT FIXTURE(S) WHERE REQUIRED FOR CLARIFICATION.
- CEILING LIGHT OUTLET WITH FIXTURE CONNECTED TO NORMAL SOURCE
  - DIRECTIONAL AIMED FIXTURE AIM IN DIRECTION OF ARROW
  - WALL BRACKET LIGHT OUTLET WITH FIXTURE CONNECTED TO NORMAL SOURCE
  - FLUORESCENT LIGHT OUTLET WITH FIXTURE CONNECTED TO NORMAL SOURCE
  - FLUORESCENT WALL BRACKET LIGHT OUTLET WITH FIXTURE CONNECTED TO NORMAL SOURCE
  - FLUORESCENT UNDER CABINET/COUNTER LIGHT OUTLET OR STRIP LIGHT OUTLET WITH FIXTURE CONNECTED TO NORMAL SOURCE
  - EXIT LIGHT OUTLET WITH FIXTURE - SHADING INDICATES LOCATION OF FACE(S), ARROWS INDICATE DIRECTIONAL ARROWS WHERE REQUIRED, WALL MOUNTED SIGNS AT +90" CENTERED ABOVE DOOR WHERE APPLICABLE
  - LIGHTING STANDARD POLE FIXTURE, PROVIDE QUANTITY OF HEADS AND ORIENTATION AS INDICATED
  - LIGHTING STANDARD WITH POST-TOP FIXTURE
  - BOLLARD FIXTURE
  - CEILING LIGHT OUTLET WITH FIXTURE CONNECTED TO EMERGENCY SOURCE (LIFE SAFETY BRANCH)
  - WALL BRACKET LIGHT OUTLET WITH FIXTURE CONNECTED TO EMERGENCY SOURCE (LIFE SAFETY BRANCH)
  - FLUORESCENT LIGHT OUTLET WITH FIXTURE CONNECTED TO EMERGENCY SOURCE (LIFE SAFETY BRANCH)
  - FLUORESCENT WALL BRACKET LIGHT OUTLET WITH FIXTURE CONNECTED TO EMERGENCY SOURCE (LIFE SAFETY BRANCH)
  - FLUORESCENT STRIP LIGHT OUTLET WITH FIXTURE CONNECTED TO EMERGENCY SOURCE (LIFE SAFETY BRANCH)
  - LED LIGHT OUTLET WITH EMERGENCY BATTERY
  - SWITCH AT +48" U.O.N.
- THE FOLLOWING SUBSCRIPTS ARE USED TO INDICATE VARIOUS TYPES OF SWITCHES.
- NO SUBSCRIPT - SINGLE POLE
  - 3 - THREE WAY
  - M - MOTOR RATED
  - T - TIMER SWITCH
- LOW VOLTAGE SWITCH
- PHOTOCELL
- TIME CLOCK AT +48"
- OCCUPANCY SENSOR WITH INTEGRAL SWITCH-WALL MOUNTED SENSORSWITCH #WSXPOT
- OCCUPANCY SENSOR - CEILING MOUNTED SENSORSWITCH #CWPOT10
- THE FOLLOWING SUBSCRIPTS ARE USED TO INDICATE THE VARIOUS TYPES OF OCCUPANCY SENSORS
- I - INFRARED SENSOR
  - U - ULTRASONIC SENSOR

FIRE DETECTION AND ALARM

- CONTROL PANEL AT +72" TO TOP
- FIRE ALARM ANNUNCIATOR PANEL AT +72" TO TOP
- FIRE SUPPRESSION SYSTEM ABORT SWITCH STATION AT +48"
- MANUAL STATION AT +48"
- THE FOLLOWING SUBSCRIPTS ARE USED TO INDICATE THE VARIOUS TYPES OF MANUAL STATIONS, FIRE SUPPRESSION SYSTEM CONTROL PANELS AND ABORT SWITCHES
- NO SUBSCRIPT - STANDARD FIRE ALARM PULL STATION
- SMOKE DETECTOR
- THE FOLLOWING SUBSCRIPTS ARE USED TO INDICATE THE VARIOUS TYPES OF SMOKE DETECTORS
- NO SUBSCRIPT - PHOTO ELECTRIC AREA BEAM
- DUCT SMOKE DETECTOR
- AUTOMATIC HEAT DETECTOR
- THE FOLLOWING SUBSCRIPTS ARE USED TO INDICATE THE VARIOUS TYPE OF HEAT DETECTORS
- NO SUBSCRIPT - FIXED TEMPERATURE (155 DEGREE U.O.N.)
- COMBINATION RATE OF RISE FIXED TEMPERATURE (135 DEGREE U.O.N.)
- EXPLOSION PROOF, FIXED TEMPERATURE (135 DEGREE U.O.N.) CLASS 1, GROUP C
- NOTE: WALL MOUNT VISUAL AND COMBINATION AUDIO/VISUAL NOTIFICATION APPLIANCES AT +80" AFF TO BOTTOM OF FACE PLATE U.O.N.
- VISUAL NOTIFICATION APPLIANCE
- WALL MOUNTED AUDIBLE NOTIFICATION APPLIANCE
- WALL MOUNTED COMBINATION AUDIBLE/VISUAL NOTIFICATION APPLIANCE
- CEILING MOUNTED VISUAL NOTIFICATION APPLIANCE, # INDICATES CANDELA
- CEILING MOUNTED COMBINATION AUDIBLE/VISUAL NOTIFICATION APPLIANCE
- MAGNETIC DOOR HOLDER/RELEASE. COORDINATE MOUNTING HEIGHT WITH DOOR MANUFACTURER.
- SPRINKLER OR STANDPIPE FLOW ALARM SWITCH CONNECTION
- VALVE TAMPER SWITCH
- SOLENOID VALVE FOR PREACTION SPRINKLER SYSTEM
- AIR PRESSURE MONITOR SWITCH FOR PRE-ACTION OR DRY PIPE SPRINKLER SYSTEM
- CEILING MOUNTED REMOTE ALARM INDICATOR
- WALL MOUNTED REMOTE ALARM INDICATOR AND TEST STATION AT +48"
- CONNECTION TO FIRE ALARM ACTIVATED DOOR CLOSER, ELECTRIC DOOR OPERATOR OR LOCK
- FIRE FIGHTERS TELEPHONE JACK AT +48"
- FIRE FIGHTERS TELEPHONE IN ENCLOSURE AT +48"

TELECOMMUNICATION

- GENERAL NOTES**
- OUTLETS IN FINISHED OR SHELL SPACES SHALL BE MOUNTED AT +18" U.O.N.
  - OUTLETS LOCATED AT COUNTERS SHALL BE LOCATED 18" AFF IN KNEE SPACE IF PROVIDED OR 4" ABOVE COUNTER OR BACK SPLASH AS APPLICABLE IF NO KNEE SPACE IS PROVIDED U.O.N.
  - WHERE ASTERISK (\*) IS INDICATED NEXT TO OUTLET AT WORK COUNTER, OUTLET SHALL BE LOCATED ABOVE COUNTER RATHER THAN IN KNEE SPACE.
  - WHERE "W" IS INDICATED NEXT TO OUTLET IT IS A WALL MOUNTED PHONE AT HEIGHT OF 56" - REFER TO DETAIL 3/E.201.
  - STANDARD TELECOMMUNICATIONS OUTLET - PROVIDE EXTRA DEEP SINGLE GANG BOX WITH SINGLE GANG MUD RING AND (1) 3/4" CONDUITS TO ABOVE FINISHED CEILING. PROVIDE PLASTIC BUSHING AT THE ENDS OF THE CONDUITS. DATA DEVICES AND WIRING PROVIDED BY OTHERS U.O.N.

SECURITY

- FIXED VIDEO SURVEILLANCE CAMERA (VERIFY ALL FINAL LOCATIONS WITH OWNER PRIOR TO INSTALLATION)
- DOOR POSITION SWITCH
- CONNECTION TO ELECTRIC OR PNEUMATIC DOOR LOCK
- CARD READER AT +48"

ABBREVIATIONS

- AC - ABOVE COUNTER
- EDH - ELECTRIC DUCT HEATER
- GFI - GROUND FAULT INTERRUPTER
- MLO - MAIN LUGS ONLY
- MCB - MAIN CIRCUIT BREAKER
- TV - TELEVISION
- WP - WEATHERPROOF
- WH - WATER HEATER

NOTE: ALL SYMBOLS ARE NOT USED. SYMBOLS SHOWN ARE FOR REFERENCE ONLY AND DO NOT CONSTITUTE A CHECK LIST OF DEVICES REQUIRED BY THE CONTRACT



ARCHITECTURE  
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NO DATE REVISIONS



RAINBOW CHILD  
 CARE CENTER

C - PROTOTYPE  
 2609 W. LAKE MARY BLVD.  
 LAKE MARY, FL 32746

PROJECT NO: 2017.0250  
 DATE: 12.22.17

E.000  
 ELECTRICAL COVER SHEET

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