

PROJECT NO 2203-1

DRAWN BY KVE CHECKED BY TJC 07/12/23

SHEET NO E-405

GENERAL PROJECT NOTES

1. THE WORK SHALL BE PERFORMED AT TIMES AND DAYS AS DICTATED BY THE OWNER.

2. ALL FLOOR MOUNTED ELECTRICAL PANELS, SWITCH BOARDS, TRANSFER SWITCHES, ETC. SHALL HAVE A

4" CONCRETE PAD.

FOR ALL DEMOLITION ITEMS, VERIFY WHICH ITEMS AND/OR EQUIPMENT THE OWNER DESIRES TO RETAIN AND PLACE SUCH ITEMS ON THE PROPERTY AS LOCATED BY THE OWNER. ALL OTHER ITEMS AND/OR EQUIPMENT SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR.

IT IS NOT INTENDED THAT THE PLANS INDICATE ALL THE NECESSARY BENDS, OFFSETS, PULL BOXES AND OBSTRUCTIONS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL HIS WORK TO CONFORM TO THE STRUCTURE, MAINTAIN HEADROOM AND KEEP OPENINGS AND PASSAGEWAYS CLEAR. REFER TO THE ARCHITECTURAL DRAWINGS FOR DIMENSIONS.

IT IS NOT INTENDED THAT THE PLANS INDICATE ALL CONDUIT ROUTES, PULL BOXES, ETC. CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING ACTUAL CONDUIT ROUTING, QUANTITY AND LOCATION OF PULL BOXES WITHIN NUMBER OF BENDS TO NO MORE THAN THREE (3) OR 270 DEGREES TOTAL. SIZE PULL BOXES IN ACCORDANCE WITH NEC, ARTICLE 314.28. DOCUMENT ON RECORD DRAWINGS, SIZE AND LOCATION OF PULL BOXES USED IN FEEDER CONDUIT RUNS.

6. ALL CONDUITS SHALL BE CONCEALED, EXCEPT IN ELECTRICAL OR MECHANICAL ROOMS. VERIFY LOCATIONS OF ALL ELECTRICAL EQUIPMENT WITH ARCHITECTURAL DRAWINGS AND INTERIOR DETAILS

AND FINISHES. IN CENTERING OUTLETS AND LOCATING BOXES AND OUTLETS, ALLOW FOR OVERHEAD PIPES, DUCTS, AND MECHANICAL EQUIPMENT, VARIATIONS IN FIREPROOFING AND PLASTERING, WINDOW AND DOOR TRIM, PANELING, HUNG CEILINGS AND THE LIKE, AND CORRECT ANY INACCURACY RESULTING FROM FAILURE TO DO SO

REFER TO ARCHITECTURAL CASEWORK ELEVATIONS FOR EXACT PLACEMENT OF ABOVE-COUNTER MOUNTED DEVICES. COORDINATE LOCATION AND INSTALLATION OF OUTLET BOXES WITH MILLWORK SUPPLIER.

9. PROVIDE REQUIRED EXPANSION/DEFLECTION FITTINGS AT LOCATIONS WHERE CONDUIT PASSES THRU EXPANSION JOINTS. FITTINGS SHALL ALLOW SEISMIC MOVEMENT REQUIRED BY STRUCTURAL ENGINEER.

PROVIDE 24" MINIMUM HORIZONTAL SEPARATION BETWEEN OUTLET BOXES INSTALLED ON OPPOSITE SIDES OF A COMMON WALL SO AS TO MAINTAIN ACOUSTICAL INTEGRITY OF WALL AND FIRE RATING. PROVIDE UL LISTED FIRE RATED SEALS FOR ALL RACEWAY PENETRATIONS THRU FIRE RATED WALLS, SLABS, AND CEILINGS IN ACCORDANCE WITH NEC 300.21. PROPOSED FIRE-STOPPING MATERIAL SHALL BE SUBMITTED FOR APPROVAL BY THE LOCAL FIRE INSPECTOR PRIOR TO INSTALLATION.

PROVIDE ALL CUTTING AND PATCHING WHICH MAY BE REQUIRED FOR THE PROPER INSTALLATION OF THE NEW ELECTRICAL WORK. ALL PATCHING SHALL BE OF THE SAME MATERIALS, WORKMANSHIP, AND FINISH AND SHALL ACCURATELY MATCH ALL ADJACENT WORK.

PLAN INSTALLATION OF NEW WORK AND CONNECTIONS TO EXISTING WORK TO INSURE MINIMUM INTERFERENCE WITH REGULAR OPERATION OF EXISTING FACILITIES. ALL SYSTEM SHUTDOWNS AFFECTING OTHER AREAS SHALL BE COORDINATED WITH BUILDING OWNER. ALARM, EMERGENCY AND LIFE SAFETY SYSTEMS SHALL NOT BE INTERRUPTED OR COMPROMISED. ALL SHUTDOWNS/INTERRUPTIONS SHALL BE DURING PREMIUM TIME.

REMOVE OR RELOCATE ANY EXISTING ELECTRICAL ITEM OR DEVICE NECESSARY FOR EXISTING OR NEW INSTALLATION BUT INTERFERING WITH NEW INSTALLATION. RECONNECT ANY ELECTRICAL ITEM THAT IS RELOCATED. SPLICE OR RE-ROUTE AND EXTEND EXISTING BRANCH CIRCUIT WIRING FROM THE ORIGINAL LOCATION OF THE DEVICE TO IT'S NEW LOCATION. FOR ALL ELECTRICAL ITEMS THAT ARE REMOVED AND AND NOT RELOCATED, DISCONNECT AND REMOVE ALL ASSOCIATED WIRING BACK TO IT'S SOURCE, JUNCTION

BOX OR NEXT DEVICE TO REMAIN FOR FUTURE EXTENSION. 14. CUT, CHANNEL OR FISH EXISTING WALLS SCHEDULED TO REMAIN AS REQUIRED TO INSTALL ELECTRICAL ITEMS AS SHOWN ON THE PLANS. WHERE EXISTING WALLS HAVE BEEN CUT, PATCH AND FINISH WALL SURFACE TO

MATCH ADJACENT AREA AS DIRECTED BY ARCHITECT. 15. PATCH EXISTING WALLS OR CEILINGS SCHEDULED TO REMAIN FOLLOWING REMOVAL OF ANY ELECTRICAL ITEM OR DEVICE THAT WILL NOT BE REPLACED DURING THE NEW CONSTRUCTION PHASE. MATCH EXISTING WALL OR

CEILING SURFACE AND FINISH. RELATED WORK SHALL BE PERFORMED BY WORKERS SKILLED IN THAT TRADE. 16. REMOVE AND RE-INSTALL CEILING TILES AS REQUIRED FOR ELECTRICAL WORK IN AREAS WHERE NO OTHER TRADES ARE INVOLVED. REPLACE ANY TILES THAT ARE DAMAGED DURING REMOVAL OR REINSTALLATION

WITH NEW TILES TO MATCHING EXISTING. THE CONTRACTOR SHALL VISIT THE SITE AND THOROUGHLY EXAMINE THE EXISTING CONDITIONS AND THE EXISTING CONDITIONS IMPACT ON THE WORK TO BE PERFORMED. THE CONTRACTOR WILL NOT RECEIVE ADDITIONAL COMPENSATION FOR WORK NECESSARY TO COMPLETE THE INTENDED INSTALLATION DUE TO EXISTING CONDITIONS.

18. <u>ALL BRANCH CIRCUITS MUST HAVE SEPARATE NEUTRALS</u>

19. FOR ALL FLUORESCENT AND/OR LED FIXTURES, PROVIDE A DISCONNECTING MEANS TO DISCONNECT SIMULTANEOUSLY FROM THE SOURCE OF SUPPLY ALL CONDUCTORS OF THE BALLAST, INCLUDING THE GROUNDED CONDUCTOR, IF ANY. THIS REQUIREMENT SHALL BE IN STRICT ACCORDANCE WITH ARTICLE 410.73 (G) OF THE N.E.C.

CONNECT ALL ELECTRONIC DOOR DEVICES. COORDINATE MOUNTING LOCATIONS AND WIRING REQUIREMENTS WITH DOOR HARDWARE SUPPLIER.

THE CONTRACTOR SHALL PROVIDE THE FOLLOWING ITEMS TO BE LOCATED IN THE FIELD. THESE ITEMS ARE IN ADDITION TO THOSE SHOWN ELSEWHERE ON THE DRAWINGS. ASSUME 80' OF CONDUIT/WIRING/FITTINGS, ETC.

FOR EACH RESPECTIVE DEVICE: A. THIRTY DUPLEX RECEPTACLES (()

B. THIRTY VOICE/DATA ROUGH-INS (\rightarrow

C. TEN FIRE ALARM PULL STATIONS (F)

E. TEN FIRE ALARM VISUAL STROBES (F =)

F. TEN FIRE ALARM SMOKE DETECTORS ((SD))

G. TEN EXIT SIGNS (😧)

THE CONTRACTOR SHALL PROVIDE UNIT PRICING FOR EACH OF THE ITEMS ABOVE IN THE EVENT THAT THE QUANTITIES NEEDED ARE MORE/LESS THAN THE QUANTITIES SHOWN.

22. THE CONTRACTOR SHALL INCLUDE ALL FEES FROM ELECTRICAL UTILITY.

23. THE CONTRACTOR SHALL VERIFY SHORT CIRCUIT FAULT CURRENT AND ARC FLASH VALUE WITH UTILITY COMPANY

PRIOR TO PURCHASE OF EQUIPMENT AND PROVIDE LABELING AND EQUIPMENT AS REQUIRED BY THE NEC.

24. PROVIDE ALL ROUGH-IN INCLUDING BOXES, CONDUITS, FITTINGS, ETC. FOR ALL TECHNOLOGY REQUIREMENTS SHOWN ON THE TECHNOLOGY DRAWINGS. COORDINATE THE LOCATIONS OF THE TECHNOLOGY OUTLETS AND THE

POWER RECEPTACLES SO THAT THEY ARE ADJACENT TO ONE ANOTHER AT EACH INSTALLATION. 25. PROVIDE ALL EXCAVATION, BACKFILL, ETC. FOR ELECTRICAL INSTALLATIONS.

26. THE CONTRACTOR SHALL PROVIDE BONDING AND GROUNDING FOR THE METAL ROOF PER OBC AND NFPA.

27. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FIRE-STOPPING ASSOCIATED WITH ANY/ALL ELECTRICAL INSTALLATIONS. PROVIDE LOW VOLTAGE WIRING FOR ALL LED FIXTURES BETWEEN THE FIXTURES AND TO THE WALL SWITCH

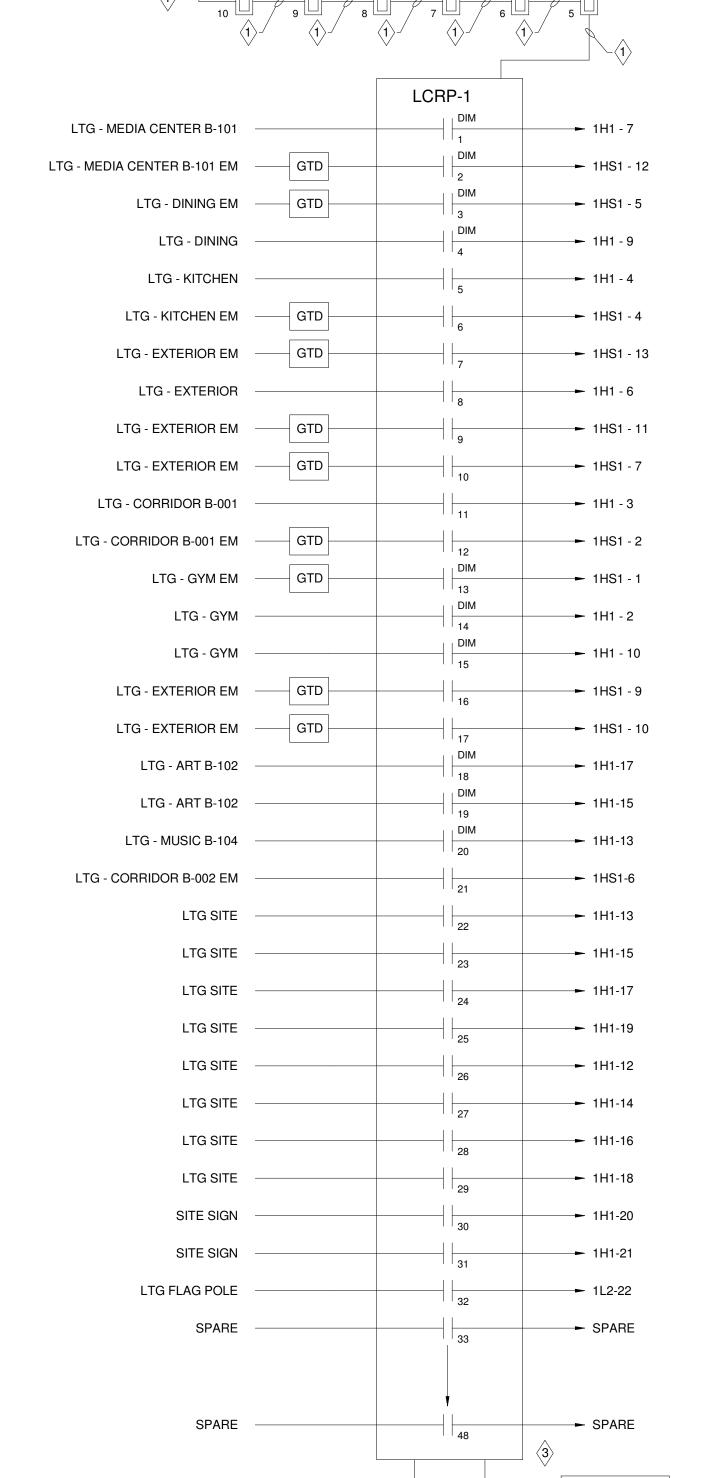
SWITCH/CONTROL PANEL FOR DIMMING. 29. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR FIRE ALARM VENDOR DRAWINGS PER OBC 907.1.

THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO SUBMIT THE FIRE ALARM DRAWINGS TO ALL LOCAL AND STATE BUILDING DEPARTMENTS AS REQUIRED.

PROVIDE INTEGRAL TVSS ON ALL EMERGENCY SYSTEMS SWITCHBOARDS AND PANELBOARDS PER NEC 700.8.

PROVIDE ARC ENERGY REDUCTION FOR ALL OVERCURRENT DEVICES 1200 AMPS OR HIGHER PER NEC 240.87.

EMERGENCY CIRCUIT BREAKER +6 \rightarrow HOT \bullet \bullet \bullet LIGHTING LOCAL LOAD UP TO SWITCHING MEANS



PHOTOCELL

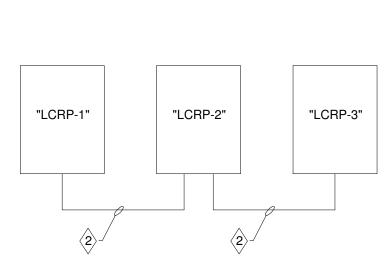
LTG - CORRIDOR A-003 EM → 1HS2 - 1 LTG - CORRIDOR A-003 —**►** 1H2 - 7 LTG - ELA A 1ST FLR → 1H2 - 6 LTG - ELA A 1ST FLR EM → 1HS2 - 16 LTG - EXTERIOR EM —— GTD | → 1HS2 - 9 LTG - EXTERIOR LTG - EXTERIOR EM — ► 1HS2 - 7 LTG - EXTERIOR EM GTD → 1HS2 - 12 LTG - EXTERIOR → 1H2 - 18 LTG - ELA C 1ST FLR → 1H2 - 16 LTG - ELA C 1ST FLR EM — ► 1HS2 - 4 LTG - EXTERIOR EM LTG - STAIRS A-007 → 1HS2-10 LTG - VESTIBUL A-001 → 1HS2-15 → SPARE

120V, 20A 🚤

LTG - EXTERIOR EM

"LCRP-2" WIRING DIAGRAM

→ 1HS2 - 13



LCRP RISER DIAGRAM

RELAY PANEL WITH PHOTOCELL, PHOTOCELL MODULE, AND NETWORK CLOCK/PROGRAMMER.

CABLE, PLENUM RATED, IN CONDUIT, PER MANUFACTURER'S

4-CONDUCTOR DATA COMMUNICATIONS CABLE, PLENUM RATED, IN

7. FOR SWITCH LOCATIONS, PROVIDE LIGHTING INTEGRATOR

CONDUIT, PER MANUFACTURER'S RECOMMENDATIONS.

GLOBAL DATA LINE. 4-CONDUCTOR DATA COMMUNICATIONS

8. SEE "GENERATOR TRANSFER DEVICE WIRING DIAGRAM FOR

10. PROVIDE (2) CONDUCTORS FROM DIMMABLE RELAYS TO ALL DIMMABLE LIGHTING FIXTURES FOR 0-10V CONTROL. COORDINATE WITH CONTROLS MANUFACTURER. 11. PROVIDE ALL HARDWARE, SOFTWARE, WIRING, ETC. TO

1. THIS RISER REPRESENTS A TYPICAL SYSTEM AND IS NOT

THE SYSTEM SUPPLIER. SUBMITTAL SHALL INCLUDE: A) RELAY PANEL SCHEDULES INDICATING CIRCUIT

B) LAYOUT OF EACH LIGHTING CONTROL STATION AND SUGGESTED OPERATION OF BUTTON

2. SYSTEM SUPPLIER SHALL SUPERVISE INSTALLATION, PROGRAM

4. PROGRAM ALL EXTERIOR LIGHTING CIRCUITS VIA SITE LIGHTING

5. EMERGENCY / NIGHT LIGHT CIRCUITS SHALL BE PROVIDED WITH

6. PROVIDE MULTIPLE COMMISSIONING BY THE MANUFACTURER AS

DATALINE SWITCHES WITH NECESSARY QUANTITY OF BUTTONS,

9. "DIM" DENOTES DIMMABLE RELAY. ALL OTHER RELAYS SHALL BE

MASTER BUTTON AND OVERRIDE BUTTON AS REQUIRED AT EACH

VARIOUS PHASES OF THE PROJECT ARE COMPLETE.

AND TEST SYSTEM, AND INSTRUCT OWNER ON SYSTEM OPERATION. ALL PROGRAMMING SHALL BE APPROVED AND

3. PROGRAM ALL INTERIOR LIGHTING CIRCUITS VIA CONTROL

STATION (WITH OVERRIDE) AND TIME CLOCK.

AND AREA SERVED.

COORDINATED WITH THE OWNER.

PHOTOCELL AND TIME CLOCK.

WIRING OF ALL "GTD" DEVICES.

"GTD" DEVICES.

NON-DIMMABLE.

INTENDED FOR INSTALLATION. THE SYSTEM SUPPLIER SHALL

PROVIDE INSTALLATION DRAWINGS AND WIRING DIAGRAMS. EXACT SYSTEM REQUIREMENTS SHALL BE COORDINATED WITH

LTG - ELA A 2ND FLR

LTG - CORRIDOR A201 EM — GTD -

LTG - ELA C 2ND FLR EM —— GTD —

GTD -

GTD -

120V, 20A 🚤

LTG - ELA A 2ND FLR EM

LTG - CORRIDOR A201

LTG - STAIR/LANDING A202

LTG - CLEAR STORY LED

LTG - ELA C 2ND FLR

—► 2H1 - 5

—► 2HS1 - 1

—► 2HS1 - 5

—**-** 2H1 - 7

→ 2HS1-6

—► 2H1 - 13

→ 2HS1 - 2

—► 2H1 - 10

→ SPARE

→ SPARE

| | 24

"LCRP-3" WIRING DIAGRAM

GTD NOTE: APPROVED MANUFACTURERS SHALL BE BODINE #GTD20A AND NINE24 #BLTC2.4-SP1.

> NORMAL CIRCUIT BREAKER -HOT+- \Diamond \Diamond -+— ● ● ● ● HEUTRAL --NEUTRAL +| ullet ulle

 $\langle 4 \rangle$ $| \square |$ - DENOTES DATALINE LIGHTING INTEGRATOR SWITCH.

TIE INTO BUILDING BAS SYSTEM.

GENERATOR TRANSFER DEVICE

ELECTRONICS COVER

TERMINAL BLOCKS

LIGHTING CONTROL DETAILS