ELECTRICAL GENERAL NOTES:

1. ALL CONDUITS ARE SHOWN DIAGRAMMATICALLY, EXACT RUNS SHALL BE DETERMINED IN FIELD EXCEPT WHERE SPECIFICALLY DIMENSIONED ON CONDUIT LAYOUTS. CONTRACTOR SHALL FOLLOW MINIMUM SPACING REQUIREMENTS TO REDUCE ELECTROMAGNETIC INTERFERENCE. COORDINATE CONDUIT ROUTING WITH ALL OTHER TRADES.
2. ALL EXPOSED CONDUIT SHALL BE RUN PARALLEL TO BUILDING WALLS AND BEAMS EXCEPT WHERE OTHERWISE SHOWN. CONTRACTOR SHALL INSTALL CONDUIT IN SUCH A MANNER TO AVOID ALL INTERFERENCES.
3. DEFLECTION/EXPANSION FITTINGS SHALL BE PROVIDED WHERE RIGID METAL CONDUITS CROSSES STRUCTURAL EXPANSION JOINTS.
4. EXPOSED CONDUIT SHALL BE SUPPORTED ON WALLS OR CEILINGS BY APPROVED HANGERS OF ANGLE OR CHANNEL CONSTRUCTION. CONDUITS SHALL BE SUPPORTED AT LEAST EVERY EIGHT (8) FEET.
5. ALL SPARE CONDUITS SHALL BE TERMINATED AS SHOWN ON CONDUIT LAYOUTS AND SHALL BE CAPPED 3" ABOVE FINISHED FLOOR.
6. NO CONDUIT SHALL BE SMALLER THAN ¾" UNLESS NOTED OTHERWISE ON PLANS.
7. EXACT CONDUIT STUB-UP LOCATIONS ARE TO BE DETERMINED BY THE ELECTRICAL CONTRACTOR BASED ON CERTIFIED MANUFACTURER'S DRAWINGS OF THE RESPECTIVE EQUIPMENT. CONDUIT SHALL BE INSTALLED TO AGREE WITH THE EQUIPMENT FURNISHED.
8. ALL LIGHTING WIRING SHALL BE #12AWG. UNLESS OTHERWISE NOTED. THE NUMBER OF WIRES SHOWN ON THE DRAWINGS IS NOT NECESSARILY THE CORRECT NUMBER REQUIRED. THE CONTRACTOR SHALL INSTALL AS MANY AS ARE NECESSARY FOR PROVIDING A COMPLETE ELECTRICAL SYSTEM IN EACH CASE.
9. CONDUITS PASSING THROUGH BUILDING FLOORS OR WALLS BELOW GRADE ARE TO BE INSTALLED WITH WATERTIGHT THRU WALL CONDUIT SEAL FITTINGS.
10. EQUIPMENT FURNISHED BY OTHERS SHALL BE INSTALLED & ENERGIZED BY THE ELECTRICAL CONTRACTOR.
11. CONDUITS IN STRUCTURAL SLABS ARE TO BE SPACED SO AS TO PROVIDE NO LESS THAN THREE CONDUIT DIAMETERS, CENTER TO CENTER, WHEREVER POSSIBLE. LARGER SPACING IS PREFERRED.
12. CONTINUOUS ROWS OF CONDUITS ARE NOT TO BE PLACED IMMEDIATELY ALONG BEARING ENDS OF SLABS.
13. THE ELECTRICAL CONTRACTOR SHALL NOT ENDANGER THE STABILITY OF THE STRUCTURE OR ANY PART THEREOF BY CUTTING, DRILLING OR OTHERWISE, AND SHALL NOT IN ANY WAY CUT OR ALTER THE WORK OF ANY OTHER CONTRACTOR, EXCEPT WITH THE WRITTEN CONSENT OF AND UNDER THE DIRECTION OF THE ARCHITECT AND/OR GENERAL CONTRACTOR.
14. THE ELECTRICAL CONTRACTOR SHALL SECURE ALL APPROVALS AND CERTIFICATES AND PAY ALL FEES FOR ALL THE WORK INSTALLED. CERTIFICATES SHALL BE DELIVERED TO THE GENERAL CONTRACTOR BEFORE FINAL PAYMENT WILL BE MADE.
15. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST APPLICABLE VERSION OF THE NEC AS WELL AS ALL STATE AND LOCAL CODES.
16. THE DRAWINGS INDICATE AND THE SPECIFICATIONS DESCRIBE THE GENERAL ARRANGEMENTS AND LOCATION OF OUTLET BOXES, ETC. THE CONTRACTOR SHALL, WITHOUT EXTRA COST TO THE OWNER, MAKE ALL REASONABLE MODIFICATIONS IN THE WORK AS MAY BE REQUIRED TO PREVENT CONFLICT WITH EXISTING CONDITIONS, THE WORK OF OTHER TRADES AND FOR THE PROPER INSTALLATION OF THE WORK.
17. PRIOR TO SUBMISSION OF THE BID PROPOSAL THE CONTRACTOR SHALL VISIT THE SITE AND EXAMINE CAREFULLY THE EXISTING CONDITIONS AND THE DIFFICULTIES THAT WILL BE INCURRED DURING THE PERFORMANCE OF HIS WORK.
    A. VERIFY & COORDINATE CONDUIT ROUTING.
    B. VERIFY & COORDINATE SCOPE OF DEMOLITION WORK
    C. VERIFY AND COORDINATE SCOPE OF WORK INVOLVING CONNECTIONS TO EXISTING BASE BUILDING SYSTEMS.
    D. VERIFY SCOPE OF WORK THAT HAS TO BE DONE WITH EXISTING FIRE ALARM SYSTEM AS REQUIRED TO ACCOMMODATE ALL ADDED DEVICES.
    E. VERIFY WITH GENERAL CONTRACTOR SCOPE OF WORK ASSOCIATED WITH RIGGING OF EQUIPMENT TO BE PREPURCHASED.
18. ARRANGE FOR SITE VISIT WITH THE BLDG. OWNER REPRESENTATIVE AND GENERAL CONTRACTOR.
19. CLAIMS FOR ADDITIONAL COMPENSATION ARISING DUE TO FAILURE OF THE CONTRACTOR TO FULLY UNDERSTAND THE SITE CONDITIONS SHALL NOT BE PAID FOR BY ANY OTHER PARTY.
20. CONNECTIONS TO EXISTING WORK:
    A. INSTALL NEW WORK AND CONNECT TO EXISTING WORK WITH MINIMAL INTERFERENCE TO EXISTING FACILITIES.
    B. TEMPORARY SHUTDOWNS OF EXISTING SERVICES:
        1. AT NO ADDITIONAL CHARGES
        2. AT TIMES NOT TO INTERFERE WITH NORMAL OPERATION OF EXISTING SERVICES.
        3. ONLY WITH WRITTEN CONSENT OF THE GENERAL CONTRACTOR AND/OR BUILDING OWNERS REPRESENTATIVE.
    C. ALARM AND EMERGENCY SYSTEMS: NOT TO BE INTERRUPTED.
    D. MAINTAIN CONTINUOUS OPERATION OF EXISTING FACILITIES AS REQUIRED WITH NECESSARY TEMPORARY CONNECTIONS BETWEEN NEW AND EXISTING WORK.
    E. CONNECT NEW WORK TO EXISTING WORK IN NEAT AND ACCEPTABLE MANNER. RESTORE EXISTING DISTURBED WORK TO ORIGINAL CONDITION, INCLUDING MAINTENANCE OF WIRING CONTINUITY AS REQUIRED.
    F. PRIOR TO DEMOLITION OF AN EXISTING POWER PANEL, THE CONTRACTOR SHALL SEARCH OUT ALL EXISTING CIRCUITS FED FROM THE PANEL TO PREVENT ANY ACCIDENTAL SERVICE INTERRUPTIONS.
21. LEAVE WIRE SUFFICIENTLY LONG TO PERMIT MAKING FINAL CONNECTIONS. CONDUIT OVER 10 FEET IN WHICH WIRING IS NOT INSTALLED-FURNISH PULL STRING.
22. DO NOT PULL THERMOPLASTIC WIRES AT TEMPERATURES LOWER THAN 32 DEG F (0 DEG C). PROVIDE CABLE SUPPORTS FOR WIRE IN RISER CONDUITS AS REQUIRED BY CODE.
23. LOCATIONS INDICATED FOR LOCAL WALL SWITCHES ARE SUBJECT TO MODIFICATIONS AT OR NEAR DOORS. INSTALL SWITCH ON SIDE OPPOSITE HINGE; VERIFY FINAL DOOR HINGE LOCATION IN FIELD PRIOR TO SWITCH OUTLET INSTALLATION.
24. VERIFY LOCATIONS OF OUTLETS AND EQUIPMENT IN FINISHED ROOMS WITH ARCHITECTURAL DRAWINGS OF INTERIOR DETAILS AND FINISH. 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 CEILING AND THE LIKE, AND CORRECT ANY INACCURACY RESULTING FROM FAILURE TO DO SO WITHOUT THE EXPENSE TO OWNER.
25. JUNCTION & PULL BOXES: DO NOT LOCATE EXPOSED IN FINISH SPACES UNLESS REQUIRED BY NEC. WHERE NECESSARY, REROUTE CONDUIT OR MAKE OTHER ARRANGEMENTS FOR CONCEALMENT. PROVIDE PULL BOXES AS INDICATED AND WHEREVER NECESSARY TO FACILITATE PULLING OF WIRE AND COORDINATE LOCATIONS WITH OTHER TRADES. COVERS OF CONDUITS, INSTALL PULL BOXES EVERY 100 FEET AND AS INDICATED. COORDINATE LOCATIONS WITH OTHER TRADES.
26. SUPPORT PANEL, JUNCTION AND PULL BOXES INDEPENDENTLY TO BUILDING STRUCTURE WITH NO WEIGHT BEARING ON CONDUIT.
27. ALL ACCESS DOOR LOCATIONS OF OTHER TRADES EQUIPMENT, SEE RESPECTIVE TRADE DRAWINGS.
28. FOR EACH LOCATION OF OTHER TRADES EQUIPMENT, SEE RESPECTIVE TRADE DRAWINGS.
29. FOR RECEPTACLE & OUTLETS MOUNTING HEIGHTS AND POSITION (HORIZONTAL, VERTICAL), COORDINATE WITH ARCHITECT, OWNER, REPRESENTATIVE & DATA/COMMUNICATION CONSULTANT.
30. CONTRACTOR SHALL PROVIDE AND INSTALL ALL COMPONENTS INDICATED ON DETAIL SHEETS, PLANS, SPECIFICATIONS AND ALL PERTINENT EQUIPMENT REQUIRED FOR A COMPLETE WORKABLE SYSTEM.
31. USE OF ISOLATED TYPE GROUNDING CONDUCTOR FOR IG TYPE RECEPTACLES, PLUG MOLDS & EQUIPMENT DOES NOT RELIVE REQUIREMENT FOR GROUNDING CONDUIT SYSTEM, DEVICES AND EQUIPMENT AS REQUIRED BY ALL APPLICABLE CODES. PROVIDE AND INSTALL GROUNDING FITTING, EQUIPMENT GROUND WIRING ETC. AS REQUIRED.
32. ALL CONDUITS, TRANSFORMERS ETC. SHALL BE SUPPORTED FROM STRUCTURAL STEEL ONLY. COORDINATE WITH GENERAL CONTRACTOR.
33. PROVIDE BARRIERS IN ALL PULL BOXES FOR CONDUIT SETS.
34. PAINT AND RUST PROOF ALL HARDWARE & CONDUITS ON ROOF AND IN EXPOSED ARES AS DIRECTED BY GENERAL CONTRACTOR.
35. NUMBER SHOWN ADJACENT TO LIGHTING FIXTURES, RECEPTACLES, OUTLETS, JUNCTION BOXES ETC. INDICATES CIRCUIT NUMBER.
36. ALL GROUND CONNECTIONS TO THE BUILDING STEEL SHALL BE EXOTHERMIC WELDED.
37. FOR RAISED FLOOR SYSTEMS, THE ELECTRICAL CONTRACTOR SHALL DRILL HOLE IN THE FLOOR TILE FOR TRANSITION FROM BELOW FLOOR TO DEVICE SERVED.
38. FLEXIBLE CONNECTIONS IN EXPOSED AREAS SHALL NOT EXCEED 18" MAXIMUM.
39. ALL EQUIPMENT DEVICES, WIRING, ETC. SHOWN ON THE DRAWINGS IS NEW UNLESS OTHERWISE NOTED.
40. ELECTRICAL CONTRACTOR SHALL PROVIDES SLEEVES/ OPENINGS FOR ALL CONDUIT RISERS PENETRATING WALLS, ROOF & FLOOR SLABS. ALL ROOF AND MECH. ROOMS SLAB PENETRATIONS SHALL BE WATERPROOF. METHOD PENETRATIONS & FIRE/WATER PROOFING SHALL BE APPROVED BY ARCHITECT AND STRUCTURAL ENGINEER, COORDINATE WITH GENERAL CONTRACTOR.
41. ELECTRICAL CONTRACTOR SHALL BECOME FAMILIAR AND COMPLY WITH OWNERS BUILDING STANDARDS FOR CONSTRUCTION.
42. ALL FINAL CONNECTIONS TO VIBRATING EQUIPMENT (MOTORS, GENERATORS, ETC.) SHALL BE THROUGH A LIQUID TIGHT FLEXIBLE METAL CONDUIT.
43. LOCATION OF ALL SLAB PENETRATIONS FOR SLEEVES & CONDUITS SHALL BE REVIEWED & APPROVED BY STRUCTURAL ENGINEER & ARCHITECT.
44. CONTRACTORS SHALL WIRE NO MORE THAN SIX CONVENIENCE RECEPTACLES TO A 20A SINGLE POLE CIRCUIT. UTILIZE 2-#12 & 1 #12 GND IN ½" CONDUIT & 1-20A SINGLE POLE CIRCUIT BREAKER FOR EACH CIRCUIT. INSTALL ADDITIONAL CIRCUIT AS NECESSARY TO MEET THIS REQUIREMENT.
45. ALL PENETRATIONS THROUGH FIRE RATED PARTITIONS SHALL BE SEALED FIRE AND SMOKE TIGHT WITH AN APPROPRIATE U.L. LISTED FIRESTOPPING MATERIAL AND/OR SYSTEM.
46. THE TERMS "PROVIDE" OR "FURNISH", AS USED ON THESE PLANS, INDICATE THAT THE CONTRACTOR IS TO FURNISH AND INSTALL THE REFERENCED EQUIPMENT OR SYSTEMS IN THEIR ENTIRETY AS REQUIRED FOR A COMPLETE AND OPERABLE SYSTEM.
47. CONTRACTOR SHALL PROVIDE AND INSTALL ALL COMPONENTS INDICATED ON DETAIL SHEETS, PLANS, SPECIFICATION AND ALL PERTINENT EQUIPMENT REQUIRED FOR A COMPLETE AND WORKABLE SYSTEM.
48. CONTRACT CLOSE OUT: IN THE PRESENCE OF THE OWNER, ENGINEER, OR ARCHITECT, DEMONSTRATING OPERATION OF SYSTEMS AND THAT ALL SPECIFICATIONS HAVE BEEN MET TO THE SATISFACTION OF ALL PARTIES.
49. IT IS THE INTENTION THAT THESE SPECIFICATIONS, AND DRAWINGS ACCOMPANYING SAME, SHALL PROVIDE FOR THE FURNISHING AND INSTALLING OF THE ELECTRICAL SYSTEMS COMPLETE AS SPECIFIED AND SHOWN. ANY WORK SHOWN ON THE DRAWINGS AND NOT PARTICULARLY DESCRIBED IN THE SPECIFICATIONS OR VICE VERSA, OR ANY WORK CHANGES WHICH MAY BE EVIDENTLY NECESSARY TO COMPLETE THE INSTALLATION SHALL BE FURNISHED BY THIS CONTRACTOR.
50. IT IS THE INTENT AND PURPOSE OF THESE SPECIFICATIONS AND DRAWINGS TO INCLUDE AND PROVIDE FOR ALL MATERIALS, APPLIANCES AND LABOR TO PROPERLY COMPLETE AND LEAVE IN PERFECT WORKING CONDITION THE ENTIRE SYSTEM HEREINAFTER SPECIFIED, ANY MATERIAL, LABOR OR APPLIANCE NOT SPECIFICALLY MENTIONED IN THESE SPECIFICATIONS OR SHOWN ON THE DRAWINGS, BUT NECESSARY FOR A COMPLETE INSTALLATION MUST BE FURNISHED BY THIS CONTRACTOR.
51. IT IS THE INTENT OF THESE PLANS AND SPECIFICATIONS TO PROVIDE ALTERATIONS AND/OR NEW CONSTRUCTION AS INDICATED ON THE DRAWINGS AND IN THE SPECIFICATIONS TO PROVIDE COMPLETE NEW SYSTEMS IN EVERY RESPECT, CAPABLE OR OPERATING AS DESIGNED. IT IS NOT INTENDED THAT EVERY FITTING, MINOR DETAIL OR FEATURE BE SHOWN ON DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DETAIL NECESSARY FOR COMPLETION OF THESE SYSTEMS IN ACCORDANCE WITH GOOD PRACTICE.

LIGHTING SYMBOLS

- 2'x4' - LIGHTING FIXTURE (SEE SCHEDULE)
- 2'x2' - LIGHTING FIXTURE (SEE SCHEDULE)
- CEILING MOUNTED OCCUPANCY SENSOR
- EXIT LIGHT (SEE SCHEDULE)
- $ — 1P, 20A, LIGHTING TOGGLE SWITCH, PROVIDE WITH MATCHING FACE PLATE, COLOR BY ARCHITECT. MOUNT 48" AFF.
- $3 — 1P, 20A, 3-WAY LIGHTING TOGGLE SWITCH, PROVIDE WITH MATCHING FACE PLATE, COLOR BY ARCHITECT. MOUNT 48" AFF.
- $d — 1P, 20A, LIGHTING DIMMER SWITCH, PROVIDE WITH MATCHING FACE PLATE, COLOR BY ARCHITECT. MOUNT 48" AFF.
- $ — 1P, 20A, LIGHTED TOGGLE SWITCH, PROVIDE WITH MATCHING FACE PLATE, COLOR BY ARCHITECT. MOUNT 48" AFF.
- $$ — SAME AS ABOVE EXCEPT WIRED FOR DUAL LIGHTING. SWITCH NEAREST TO DOOR SHALL OPERATE OUTER LAMPS. SECOND SWITCH SHALL OPERATE INNER LAMP(S).
- $ — DECORA 4 CHANNEL RADIO TRANSMITTING SIGNAL (RTS) SWITCH. DRAPER MODEL NO. C112.076 PROVIDE WITH MATCHING FACE PLATE, COLOR BY ARCHITECT, MOUNT AT 48" AFF.

COMMUNICATION SYMBOLS

- TELEPHONE OUTLET. PROVIDE & INSTALL CAT 5E CABLE FROM OUTLET LOCATION TO ABOVE CEILING IN ½" CONDUIT. MOUNT OUTLET 18" AFF UNLESS OTHERWISE NOTED.
- COMBINATION TELEPHONE/DATA OUTLET. PROVIDE & INSTALL (2) CAT. 5E CABLES FROM THE OUTLET LOCATION TO ABOVE CEILING EACH IN ½" CONDUIT. MOUNT 18" AFF UNLESS OTHERWISE NOTED.
- DATA OUTLET. PROVIDE & INSTALL CAT. 5E CABLE FROM OUTLET LOCATION TO ABOVE CEILING EACH IN ½" CONDUIT. MOUNT 18" AFF UNLESS OTHERWISE NOTED.
- TV — TV OUTLET. PROVIDE & INSTALL PULL STRING FROM OUTLET LOCATION TO ABOVE CEILING EACH IN ½" CONDUIT. MOUNT 18" AFF UNLESS OTHERWISE NOTED.

POWER SYMBOLS

- SPEC GRADE NEMA 5-20R RECEPTACLE. GFI INDICATES GROUND FAULT INTERRUPTION, WP INDICATES WEATHER PROOF ENCLOSURE.
- SPEC GRADE NEMA 5-20R RECEPTACLE. GFI INDICATES GROUND FAULT INTERRUPTION, WP INDICATES WEATHER PROOF ENCLOSURE. MOUNT AT 44" AFF OR 6" ABOVE COUNTER, UON.
- 1P, 3 WIRE, 125V QUAD RECEPTACLE. GFI INDICATES GROUND FAULT INTERRUPTION, WP INDICATES WEATHER PROOF ENCLOSURE.
- E — SPEC GRADE NEMA 5-20R RECEPTACLE, ON CRITICAL BRANCH. RED WITH RED FACEPLACE.
- FSR - FL500 FLOOR BOX WITH DUPLEX RECEPTACLE.
- FSR - FL500 FLOOR BOX WITH QUAD RECEPTACLE.
- SPECIAL PURPOSE CONNECTION.
- J — JUNCTION BOX, SIZE PER N.E.C.
- 3P, FUSED DISCONNECT SWITCH, FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR. SHALL HAVE THE SAME # OF POLES & AMPERE RATING AS CONNECTING CIRCUIT UNLESS OTHERWISE NOTED.
- M — COMBINATION NON-FUSED DISCONNECT SWITCH & MAGNETIC MOTOR STARTER WITH HAND/OFF/AUTO SWITCH. FURNISHED BY MECHANICAL CONTRACTOR, INSTALLED BY ELECTRICAL CONTRACTOR.
- PB — PULL BOX
- 120 / 208V, 3Ø, 4W PANEL BOARD (SEE SCHEDULE)
- CONDUIT HOME RUN TO DESIGNATED PANEL. REFER TO PANEL SCHEDULE FOR CONDUIT & CABLE QUANTITY AND SIZE.
- DOUBLE HOME RUN
- TRIPLE HOME RUN
- GROUND
- 100A-1P — CIRCUIT BREAKER - 100A TRIP - SINGLE POLE
- 100A-3P — FUSE SWITCH - 100A FUSE - 3 POLE

ABBREVIATIONS

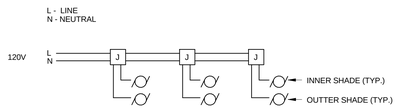
A	AMPERE
ACT	ACOUSTIC CEILING TILE
AD	AUTOMATIC DAMPER
AF	AMPERE FRAME
AFF	ABOVE FINISHED FLOOR
AIC	AMPERE INTERRUPTING CAPACITY
AL	ALUMINUM
ATS	AUTOMATIC TRANSFER SWITCH
AUTO	AUTOMATIC
AWG	AMERICAN WIRE GAUGE
BCW	BARE COPPER WIRE
C	CONDUIT
CAT	CATALOG
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CLG	CEILING
CT	CURRENT TRANSFORMER
CU	COPPER
DP	DISTRIBUTION PANEL
DIV	DIVISION
DS	DISCONNECT (LOCKOUT) SWITCH
DWG	DRAWING
EA	EACH
EC	ELECTRICAL CONTRACTOR
ELEC.	ELECTRICAL
ELEV	ELEVATOR
E.P.O.	EMERGENCY POWER OFF
EQUIP.	EQUIPMENT
EMT	ELECTRICAL METALLIC TUBING
FA	FIRE ALARM
FAP	FIRE ALARM PANEL
FL	FLOOR
FLEX	FLEXIBLE
FT	FEET OR FOOT
FLUOR.	FLUORESCENT
F.W.E.	FURNISHED WITH EQUIPMENT
G. GND	GROUND
GEN.	GENERATOR
GFI	GROUND FAULT INTERRUPTER
G.C.	GENERAL CONTRACTOR
HH	HAND HOLE
HP	HORSEPOWER
HS	HAND SWITCH
HVAC	HEATING VENTILATING & AIR CONDITIONING
HZ	HERTZ
IC	INTERRUPTING CAPACITY
IG, I	ISOLATED GROUND
IMC	INTERMEDIATE METAL CONDUIT
JB	JUNCTION BOX
KV	KILO VOLT
KVA	KILO VOLT AMP
KW	KILO WATT
LP	LIGHTING PANEL
LTG	LIGHTING
M.C.	MECHANICAL CONTRACTOR
MCM	THOUSAND CIRCULAR MILS
MCB	MAIN CIRCUIT BREAKER
MECH	MECHANICAL
MDP	MAIN DISTRIBUTION PANEL
MLO	MAIN LUGS ONLY
MTD	MOUNTED
MTG	MOUNTING
MTS	MANUAL TRANSFER SWITCH
N	NEUTRAL
NIC	NOT IN CONTRACT
NEC	NATIONAL ELECTRIC CODE
NTS	NOT TO SCALE
NM	NON-METALLIC CONDUIT
P	POLE
PB	PULL BOX
Ø	PHASE
PWR	POWER
RECEPT.	RECEPTACLE
REQ.	REQUIRED
RGS	RIGID GALVANIZED STEEL
RM	ROOM
SCHED.	SCHEDULE
SECT.	SECTION
SPEC.	SPECIFICATION
SW	SWITCH
SWBD	SWITCH BOARD
SYS	SYSTEM
TEL	TELEPHONE
TC	TIME CLOCK
TYP	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
UPS	UN-INTERRUPTIBLE POWER SUPPLY
VFC	VARIABLE FREQUENCY CONTROLLER
VIF	VERIFY IN FIELD
VSD	VARIABLE SPEED DRIVE
WP	WEATHER PROOF
W	WATT
XFMR/ TRANSF.	TRANSFORMER

GENERAL SYMBOLS

- POINT OF CONNECTION BETWEEN NEW AND EXISTING WORK
- POINT OF DISCONNECT
- X / XX — INDICATES SECTION LETTER / INDICATES DRAWING NUMBER WHERE LOCATED

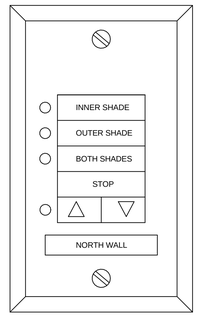
AUDIO-VIDEO EQUIPMENT SCHEDULE

QTY.	DESCRIPTION
1	CHRISTIE LWU505A 5000 LUMEN WUXGA HD LCD PROJECTOR WITH MATCHED ZOOM LENS.
1	CHRISTIE CEILING MOUNT HARWDARE.
1	DRAPER SERIES E 123" DIAGONAL SCREEN WITH LOW VOLTAGE.
	CONTROLLER. LOW VOLTAGE CONTROL SWITCH TO BE INSTALLED NEAR SCREEN.
1	CRESTRON V-PANEL 15" TILT TOUCH SCREEN DISPLAY.
1	CRESTRON TOUCH PANEL GRAPHICS PROCESSOR WITH HDMI INPUT.
1	CRESTRON 8x8 DIGITAL MEDIA SWITCHER.
2	CRESTRON DIGITAL MEDIA 8G+ TRANSMITTER 201.
2	CRESTRON DIGITAL MEDIA 8G STP INPUT CARD FOR DM SWITCHERS.
1	CRESTRON OUTPUT HDMI/AUDIO DUAL.
1	CRESTRON 4 DM 8G STP W/2 HDMI OUTPUT CARD.
3	CRESTRON DIGITAL MEDIA 8G+ REVR & ROOM CONTROLLER SCALER.
3	CRESTRON HDMI INPUT CARD FOR DM SWITCHERS.
1	CRESTRON 3-SERIES CONTROL SYSTEM.
1	CLEAR ONE CONVERGE PRO 880T AUDIO PROCESSOR WITH PHONE.
	INTERFACE
1	CLEAR ONE CONVERGE PRO 8i.
4	CLEAR ONE WHITE CEILING MICROPHONE ARRAY KIT.
1	SHURE MINITURE GOOSENECK PODIUM MICROPHONE WITH SHOCK MOUNT.
1	SHURE UHF WIRELESS LAPEL MICROPHONE.
1	SHURE UHF WIRELESS HANDHELD MICROPHONE SET.
1	SHURE RACK HARDWARE FOR DUAL ULX RECEIVERS.
9	JBL 6.5" 2 WAY CEILING SPEAKER WITH BACK BOX AND TILE BRIDGE.
1	EXTRON XPA 2001-70V, 70 VOLT MONO POWER AMP - 200 WATTS.
1	EXTRON RSU 129, 1U 9.5" DEEP UNIVERSAL RACK SHELF KIT.
1	SHURE 2x2 AUDIO PROCESSOR WITH DIGITAL FEEDBACK REDUCTION.
2	AVSG CUSTOM RACK SHELF FOR OFE SATELLITE RECEIVER AND CABLE TUNER.
1	AVSG CUSTOM WALL PLATE FOR PODIUM CONNECTIONS.
1	MILLER MILLWORKS 42" HIGH CUSTOM RACK CABINET WITH LOCKING DOORS AND REAR ACCESS.
1	AVSG RACK HARDWARE.
2	MITSUBISHI MDT551S 55". COMMERCIAL GRADE LCD HD DISPLAY, 700CD/m BRIGHTNESS AND
	3 YEAR MANUFACTURE'S WARRANTY.
2	CHIEF FULL SWING WALL MOUNT WITH 37" EXTENSION. OR AVC/CHIEF CEILING MOUNT WITH FLANGE PLATE.
1	MILLER MILLWORKS CUSTOM HARDWOOD PODIUM (TO RE-USE EXISTING LITTLELITE"). RECESSED TOUCH PANEL CUT-OUT, KEYBOARD DRAWER, DOUBLE DOOR RACK ENCLOSURE, FRONT ACCESS PANEL AND CASTERS.
1	EXTRON SMALL CABLE ACCESS PANEL LAPTOP CONNECTION AND POWER.
1	CISCO C40 CODEC WITH 12x CAMERA, AND PODIUM RESOLUTION.
1	CISCO 12x HD SECONDARY CAMERA.
2	AVSG CUSTOM WALL BRACKETS FOR VTC CAMERA.
2	CRESTRON HDMI EXTENDER FOR CAMERA.
1	AVSG CABLES, CONNECTORS AND HARDWARE.
1	AVSG CUSTOM PROGRAMMING.
1	AVSG SYSTEM INSTALLATION AND LABOR.
1	LG 32LD350C 32" DISPLAY.
1	AVSG CUSTOM MOUNT.
1	CRESTON DIGITAL MEDIA 8G+ REVR & ROOM CONTROLLER SCALER.
1	MITSUBISHI MDT701S 70" DIAGONAL COMMERCIAL GRADE HD LED DISPLAY WITH 3 YEAR. MANUFACTURER'S WARRANTY.
1	MITSUBISHI/INNOVOX TWO CHANNEL SOUND BAR WITH WALL MOUNT.
1	CHIEF EXTRA LARGE STATIC MOUNT ASSEMBLY.
1	AVSG CUSTOM MOUNT FOR VTC CAMERA.
1	CISCO SET-TOP VTC INTEGRATOR PACKAGE WITH 4X ZOOM CAMERA.
1	CISCO WALL MOUNT KIT.
1	LIBERTY 2 GANG WALL PLATE, HDMI/VGA AND AUDIO TO MONITOR-FRONT OF ROOM CONNECTIONS - FOR SURFACE MOUNTED BOX.
1	AVSG CABLES, CONNECTORS AND HARDWARE.



NOTE:
1. MOTOR IS TO BE PROVIDED AND INSTALLED BY CONTRACTOR MOTOR IS TO BE DRAPER MODEL NO. 504S2RHST-RTS, WITH BUILT-IN RADIO RECIEVER.

1 TYPICAL MOTOR WIRING DETAIL
N.T.S.



NOTE:
1. CONTRACTOR TO PROVIDE LABELS FOR SHADES BEING CONTROLLED EX. (INNER SHADE, OUTER SHADE) AND LABELS FOR LOCATION OF SHADES, EX. (NORTH WALL, EAST WALL).

2 TYPICAL RTS SWITCH LABELING
N.T.S.

REV #	REVISION DESCRIPTION	DATE

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UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF STATE EDUCATION LAW

Drawing Title: ELECTRICAL SYMBOLS, ABBREVIATIONS & NOTES

Approved: Project Director

Approved: FMS Manager

Approved: Project Section Manager

Project Title: **RENOVATE FOR AUDITORIUM STRATTON VA MEDICAL CENTER**

Location: V.A.M.C. ALBANY, NY

Date: 2/21/14 | Checked | Drawn

Project Number: 528A8-11-801

Building Number: 1

Drawing Number: 1-ES-001

Dwg. 20 of 24

Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231