

GENERAL NOTES:

- ALL ELECTRICAL AND AUDIO/VISUAL EQUIPMENT SHOWN ON THE DRAWINGS AND/OR REQUIRED FOR THE FULL INTEGRITY AND COMPLETION OF THE CONTRACT SHALL BE FURNISHED, INSTALLED AND CONNECTED BY THE CONTRACTOR, EXCEPT WHERE EQUIPMENT SHOWN IS IDENTIFIED AS 'EXISTING' OR OTHERWISE NOTED ON THE DRAWINGS, TO PRODUCE FULLY FUNCTIONAL AND COMPLETE SYSTEMS.
- EXCEPT WHERE SPECIFICALLY DIMENSIONED OR OTHERWISE LOCATED BY PERTINENT DETAILS, THE ROUTING OF CONDUITS SHOWN ON PLANS IS APPROXIMATE. THE CONTRACTOR MAY MODIFY CONDUIT ROUTINGS SHOWN ON DRAWINGS TO ACCOMMODATE EXISTING FIELD CONDITIONS, PROVIDED THAT PROPER PULL BOXES ARE PROVIDED TO FACILITATE CABLE PULLING. THE EXACT ROUTING AND METHODS OF SUPPORT SHALL BE DETERMINED IN THE FIELD.
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH FEDERAL REGULATIONS, INCLUDING THE AMERICANS WITH DISABILITIES ACT - ADA, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), ALL STATE CODES AND REGULATIONS GOVERNING THE INSTALLATION, INCLUDING BUT NOT LIMITED TO THE CURRENT EDITION OF THE FOLLOWING CODES:
 - NFPA 70 - 2008, NATIONAL ELECTRICAL CODE
 - NFPA 72 - 2007, NATIONAL FIRE ALARM CODE
 - NFPA 90A - 2009, STANDARD FOR THE INSTALLATION OF A/C AND VENTILATION SYSTEMS
 - NFPA 99 - 2009, HEALTH CARE FACILITY CODE
 - NFPA 101 - 2009, LIFE SAFETY CODE
 - NFPA 110 - 2009, STANDARD FOR EMERGENCY AND STANDBY POWER SYSTEMS
 - 2009 INTERNATIONAL BUILDING CODE
 - 2009 INTERNATIONAL MECHANICAL CODE
 - 2009 INTERNATIONAL FIRE CODE
 - 2007 ASME/ANSI A17.1 ELEVATOR CODE
 - VA FIRE PROTECTION DESIGN MANUAL
 - VA ELECTRICAL DESIGN MANUAL FOR HOSPITALS
- ALL 600 VOLT ELECTRICAL POWER CONDUCTORS SHALL BE COPPER, INSULATION TYPE XHHW OR DUAL RATED THHN/THWN, RATED 90 DEGREES CENTIGRADE, AND INSTALLED IN RACEWAY PER CODE AND SPECIFICATION REQUIREMENTS.
- THE CONTRACTOR SHALL PROVIDE ALL NECESSARY MATERIALS, LABOR AND ATTENDANCE FOR THE OPERATION OF TEMPORARY LIGHT AND CONSTRUCTION POWER AS REQUIRED DURING WORKING HOURS FOR THE ENTIRE CONSTRUCTION PERIOD.
- THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS. ALL DISCREPANCIES THAT MAY INTERFERE WITH THE PROJECT SHALL BE REPORTED TO THE COTR BEFORE STARTING WORK.
- ALL CONDUITS SHALL BE 3/4" MINIMUM SIZE UNLESS OTHERWISE NOTED. POWER CONDUITS SHALL BE RIGID GALVANIZED STEEL (RGS) IN MECHANICAL AND ELECTRICAL ROOMS, ELECTRICAL METALLIC TUBING (EMT) IN OTHER AREAS, OR AS OTHERWISE NOTED ON PLANS.
- ALL RACEWAYS, WIRING AND OTHER WORK IS NEW UNLESS SPECIFICALLY INDICATED OTHERWISE ON DRAWINGS OR DESCRIBED IN SPECIFICATIONS.
- MAINTAIN THE CONTINUITY OF EXISTING CIRCUITS THAT ARE NOT BEING REMOVED UNDER THIS CONTRACT, BUT WHICH MAY BE AFFECTED BY THIS WORK. PROVIDE CONDUIT, WIRING, ETC. THAT MAY BE NECESSARY TO MAINTAIN THE FUNCTIONALITY OF ALL EXISTING CIRCUITS AND SYSTEMS.
- EXISTING CONDUITS THAT ARE TO BE USED SHALL BE THOROUGHLY CLEANED BY PULLING THROUGH A TIGHT FITTING BRUSH (2 PASSES) PRIOR TO PULLING IN NEW CONDUCTORS.
- ALL EQUIPMENT THAT IS REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR, UNLESS INDICATED OTHERWISE BY THE COTR, AND SHALL BE REMOVED FROM THE PREMESIS AND DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE LAWS, ORDINANCES AND REQUIREMENTS.
- ALL NEW CONDUIT SHALL BE RUN ABOVE HUNG CEILINGS, OR OTHERWISE CONCEALED WHEREVER POSSIBLE.
- REMOVE EXISTING CEILING TILES AND GRID IN AREAS WHERE NECESSARY TO PERFORM WORK. REINSTALL CEILING TILES AND GRID AFTER COMPLETION OF WORK IN HUNG CEILING SPACES. REPLACE DAMAGED TILES AND GRID WITH NEW MATERIALS MATCHING THE EXISTING.
- MAINTAIN EXISTING FIRE ALARM, DETECTION, COMMUNICATIONS, SECURITY AND OTHER SYSTEMS FULLY OPERATIONAL AND IN SERVICE AT ALL TIMES, UNLESS OTHERWISE APPROVED IN WRITING BY THE COTR. THE CONTRACTOR SHALL COMPLY WITH NFPA 101 IF FIRE ALARM OR SPRINKLER SYSTEMS WILL BE OUT OF SERVICE DUE TO PROJECT RELATED WORK. A FIRE WATCH, AT THE CONTRACTOR'S EXPENSE, SHALL BE PROVIDED AS REQUIRED OR DIRECTED.
- ALL ASBESTOS CONTAINING MATERIALS (ACM) AND LEAD PAINT KNOWN TO THE VA HAVE BEEN REMOVED, ABATED, OR ARE NOT IN AREAS AFFECTED BY THIS WORK. SHOULD THE CONTRACTOR ENCOUNTER ANY SUSPECTED ACM OR LEAD PAINT WHILE PERFORMING WORK, NOTIFY THE COTR IMMEDIATELY.
- THE VA WILL OCCUPY THE BUILDING DURING THE ENTIRE PERIOD OF CONSTRUCTION. THE CONTRACTOR SHALL COOPERATE FULLY WITH ALL VA PERSONNEL DURING CONSTRUCTION OPERATIONS TO MINIMIZE CONFLICTS AND INCONVENIENCE TO FACILITY OPERATIONS. PERFORM ALL WORK DURING NORMAL FACILITY WORKING HOURS, EXCEPT FOR THOSE TASKS REQUIRING POWER OUTAGES WHICH MUST BE DONE NIGHTS/WEEKENDS AS APPROVED BY THE COTR 7 DAYS IN ADVANCE OF SUCH OUTAGE. ALL NECESSARY CORE DRILLING MUST BE PERFORMED BY THE CONTRACTOR AND MUST BE SCHEDULED AND APPROVED BY THE COTR 48 HOURS IN ADVANCE. THE CONTRACTOR SHALL NOT INTERFERE WITH BUILDING OPERATIONS. THE HOSPITAL IS OCCUPIED AND OPERATIONAL 24 HOURS, 7 DAYS PER WEEK.
- THE CONTRACTOR SHALL MAINTAIN ALL MEANS OF EGRESS FROM THE WORKPLACE FREE OF OBSTRUCTIONS OR IMPEDIMENTS TO TRAVEL, SO THAT PERSONNEL WILL HAVE IMMEDIATE AND UNINHIBITED PASSAGE FROM OR THROUGH THE WORKPLACE IN THE EVENT OF A FIRE OR OTHER EMERGENCY. THE CONTRACTOR WILL AT ALL TIMES PREVENT ANY MATERIALS OR DEBRIS FROM BLOCKING ACCESS TO EXITS AND PASSAGEWAYS TO EXITS. CONSTRUCTION MATERIALS SHALL BE SECURLY STORED, WITH DEBRIS REMOVED AT THE END OF EACH WORK DAY.
- THE CONTRACTOR SHALL PATCH AND SEAL ALL OPENINGS IN WALLS, FLOORS OR CEILINGS WITH UL OR FM APPROVED FIRE RESISTIVE MATERIALS, AS FURTHER DESCRIBED IN SPECIFICATIONS AND DRAWING DETAILS. THE RATING OF THE FIRESTOPPING MUST AT LEAST EQUAL THE RATING OF THE EXISTING BARRIER (SMOKE TIGHT, 1-HOUR FIRE RATED, 2-HOUR FIRE RATED, ETC.) OPENINGS IN FLOORS MUST BE SEALED AT THE END OF EACH WORK DAY WITH TEMPORARY 'FIRE STOPS' OR 'FIRE PLUGS' UNTIL THE PERMANENT FIRE STOPPING MATERIALS ARE APPLIED.
- THE CONTRACTOR MUST NOT WORK ON ANY ENERGIZED EQUIPMENT ON THIS PROJECT UNLESS APPROVED BY THE COTR. ALL CONTRACTOR PERSONNEL MUST UTILIZE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT (PPE) FOR WORKING CONDITIONS ENCOUNTERED.
- THE CONTRACTOR MAY ONLY WORK ON ONE FLOOR OF THE HOSPITAL AT A TIME, UNLESS OTHERWISE APPROVED BY THE COTR.
- ALL ELECTRICAL EQUIPMENT THAT IS SHUT DOWN FOR REPLACEMENT OR MODIFICATION SHALL BE LOCKED-OUT AND TAGGED-OUT. THE CONTRACTOR SHALL SUBMIT A LOCK-OUT / TAG-OUT PLAN TO THE COTR FOR APPROVAL PRIOR TO STARTING WORK, WHICH SHALL BE COORDINATED WITH THE FACILITY ELECTRICAL SHOP.
- THE CONTRACTOR SHALL PROVIDE TEMPORARY CONSTRUCTION BARRIERS AS REQUIRED AND AS DIRECTED TO PREVENT DUST IN CONSTRUCTION AREAS FROM ENTERING THE OCCUPIED AREAS.
- CONTRADICTIONARY OR MISSING INFORMATION ON THESE DRAWINGS, SUCH AS WIRE SIZES, CIRCUIT BREAKER AMPS OR NUMBER OF POLES, ETC., WHICH ARE FOUND TO BE DIFFERENT FROM ACTUAL FIELD CONDITIONS OBSERVED WHILE PERFORMING WORK UNDER THIS CONTRACT, SHALL BE CAREFULLY MARKED ON THE AS-BUILT DRAWINGS.

PROJECT NOTES:

- PROVIDE OUTLET BOX EXTENSION RINGS FOR ALL OUTLETS SHOWN AS EXISTING TO REMAIN, AS REQUIRED TO ACCOMMODATE WALL THICKNESS INCREASED BY NEW WALL FINISHES. PROVIDE BRUSHED STAINLESS STEEL DEVICE PLATE FOR ALL NEW AND EXISTING OUTLETS.
- PROVIDED IP20A CIRCUIT BREAKERS IN EXISTING PANEL FOR ALL NEW BRANCH CIRCUITS SHOWN. ASSIGN CIRCUIT NUMBERS IN FIELD AND UPDATE PANEL DIRECTORY.
- COORDINATE MOUNTING HEIGHT AND EXACT LOCATION OF TV RECEPTACLES WITH ARCHITECTURAL WALL SECTION.
- PROVIDE RIGID STEEL CONDUITS BELOW FLOOR (ABOVE HUNG CEILING ON FLOOR BELOW) FROM FLOOR OUTLET TO RECESSED J-BOX SHOWN. POWER CONDUIT TO BE 3/4", DATA CONDUIT 2".
- THE CONTRACTOR SHALL RETAIN THE SERVICES OF AN APPROVED AUDIO/VIDEO SUBCONTRACTOR, EXPERIENCED AND SPECIALIZED IN THE INSTALLATION, PROGRAMMING AND COMMISSIONING OF ALL A/V EQUIPMENT SHOWN. PROVIDE ALL COMPONENTS, WIRING AND PROGRAMMING TO MAKE FULLY FUNCTIONAL SYSTEMS WHETHER SHOWN ON PLANS OR NOT. BASIS OF DESIGN IS AMX "RMS ENTERPRISE" SYSTEM. COMPETITIVE SYSTEMS HAVING EQUAL OR GREATER CAPABILITY MAY BE SUBMITTED FOR APPROVAL.
- THE CONTRACTOR SHALL RETAIN THE SERVICES OF THE TRI-M GROUP (610-444-1002) TO INSTALL A LEMEL EXPANDABLE SECURITY PANEL IN THE 7TH FLOOR AND 8TH FLOOR ELECTRIC CLOSETS, AND CONNECT TO EXISTING CAMPUS WIDE SECURITY SYSTEM. INSTALL A CARD READER AND ELECTRICAL DOOR STRIKE AT TWO LOCATIONS SHOWN, WIRED TO NEW SECURITY PANEL ON SAME FLOOR.
- ALL TELEVISION, TELEPHONE AND NETWORK WIRING SHALL BE RUN TO APPROPRIATE SWITCHES IN UTILITY CLOSETS ADJACENT TO CENTRAL ELEVATORS. ALL SWITCHES PROVIDED BY VA, TERMINATIONS BY CONTRACTOR.

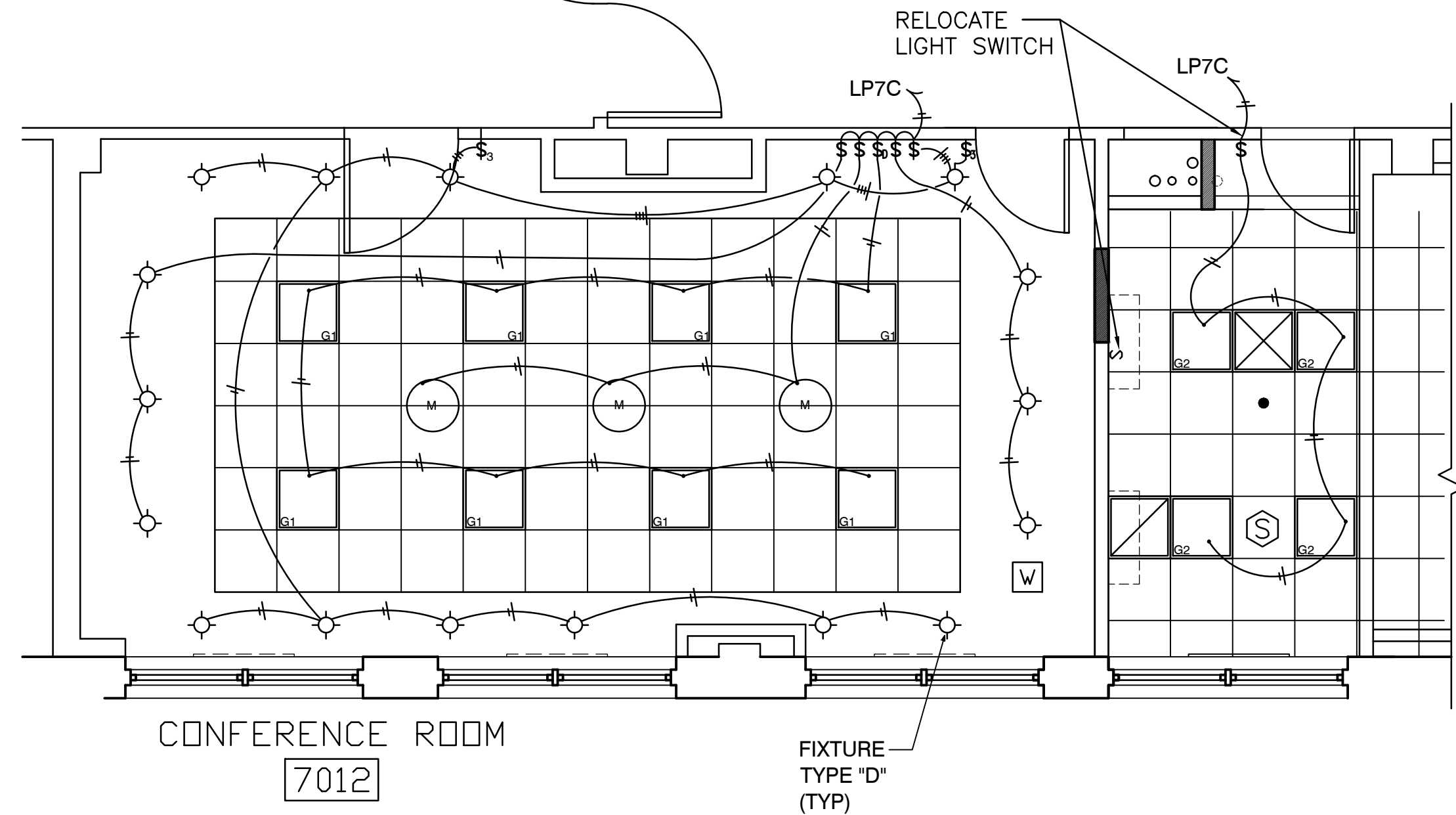
SEE DWG. EL-102 FOR LIGHT FIXTURE SCHEDULE

ABBREVIATIONS

A, AMP	AMPERE	MAX	MAXIMUM
AC	ALTERNATING CURRENT	MECH	MECHANICAL
AF	AMPERE FRAME	MER	MECHANICAL EQUIPMENT ROOM
AFF	ABOVE FINISHED FLOOR	MFR	MANUFACTURER
APPROX	APPROXIMATELY	MIN	MINIMUM
AUX	AUXILIARY	MISC	MISCELLANEOUS
AWG	AMERICAN WIRE GAUGE	MTD	MOUNTED
BKR	BREAKER	N, NEUT	NEUTRAL
BLDG	BUILDING	N/C	NORMALLY CLOSED
C, CDT	CONDUIT	NEC	NATIONAL ELECTRIC CODE
CAT	CATALOG	N/O	NORMALLY OPEN
CKT BKR	CIRCUIT BREAKER	PNL	PANEL
CKT(S)	CIRCUIT(S)	POWER	POWER
COTR	VA CONTRACTING OFFICERS TECHNICAL REPRESENTATIVE	RECEPT	RECEPTACLE
		REF	REFERENCE
		REQD	REQUIRED
		RGS	RIGID GALVANIZED STEEL
		SP	SINGLE POLE
		SPEC	SPECIFICATION
		SPST	SINGLE POLE SINGLE THROW
		SW	SWITCH
		SYM	SYMMETRICAL
		SYS	SYSTEM
		SUPT	SUPPORT
		TEL	TELEPHONE
		TEMP	TEMPERATURE
		THD	TOTAL HARMONIC DISTORTION
		UNO	UNLESS NOTED OTHERWISE
		V	VOLT
		VAC	VOLTS ALTERNATING CURRENT
		WP	WEATHER PROOF
		W/	WITH
CRI	COLOR RENDERING INDEX		
DISC	DISCONNECT		
DWG(S)	DRAWING(S)		
ELECT	ELECTRIC, ELECTRICAL		
EM, EMERG	EMERGENCY		
EQUIP	EQUIPMENT		
E, EX, EXIST	EXISTING		
FA	FIRE ALARM		
FACP	FIRE ALARM CONTROL PANEL		
FDR	FEEDER		
FIXT	FIXTURE		
G, GND, GRD	GROUND		
G.F.	GOVERNMENT FURNISHED		
GFI	GROUND FAULT CIRCUIT INTERRUPT		
GOVT.	GOVERNMENT		
HP	HORSEPOWER		
HTR	HEATER		
J.BOX	JUNCTION BOX		
KVA	KILOVOLT AMPERE		
KW	KILOWATT		
LTG	LIGHTING		

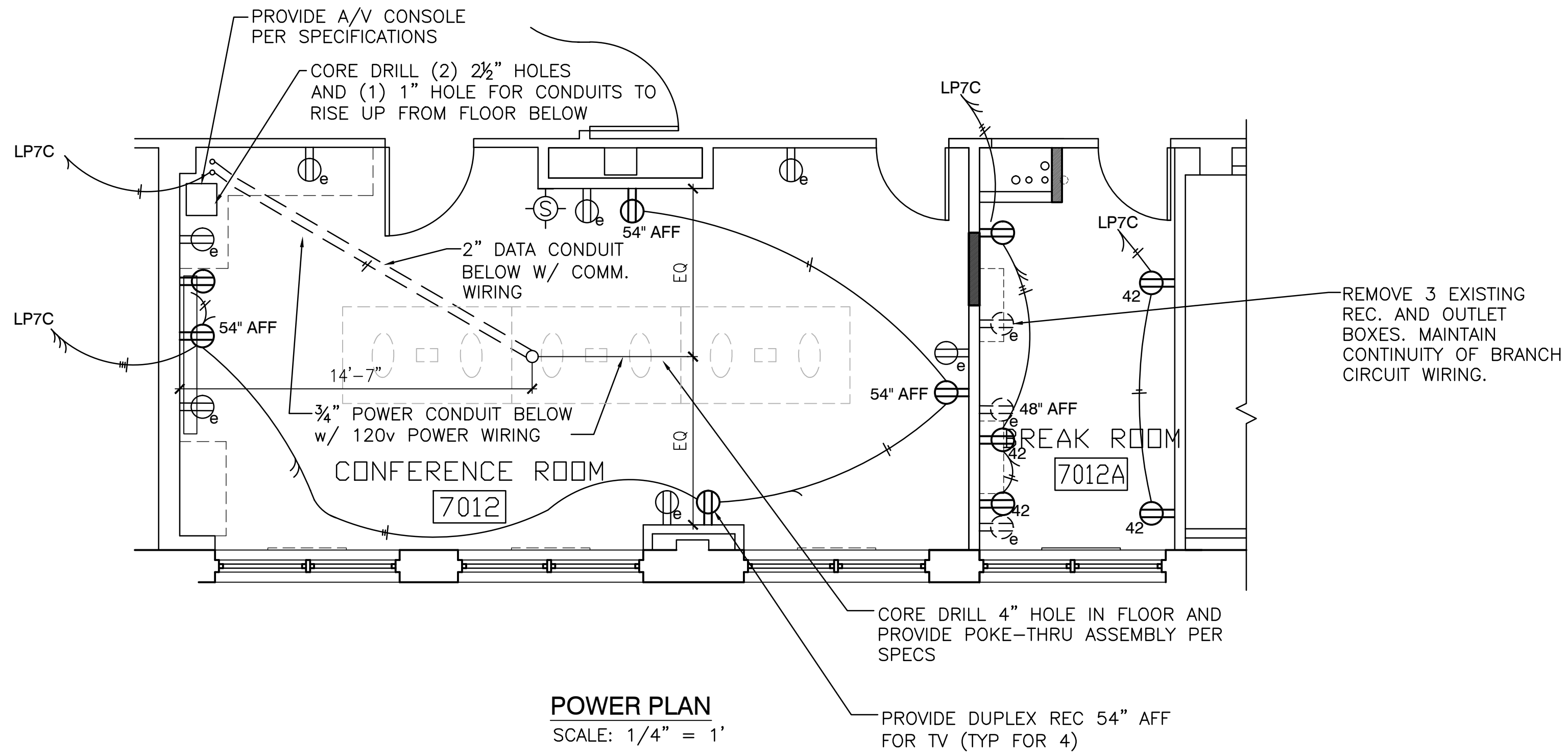
LEGEND

S	SINGLE POLE SWITCH, 277V, 20A
S ₃	3 WAY SWITCH, 277V, 20A
S ₆	WIDE RANGE FLUORESCENT DIMMING WALL SWITCH
	STANDARD DUPLEX ELECTRICAL RECEPTACLE, 120V., UNLESS OTHERWISE NOTED. MOUNT AT 18" A.F.F. UNLESS OTHERWISE NOTED. PROVIDE WHITE PLASTIC COVERS. "e" INDICATES EXISTING TO REMAIN, "F" INDICATES MOUNTING HT, AFF.
	FLOOR MOUNTED DUPLEX ELECTRICAL RECEPTACLE, 120V, 20A
	FLOOR MOUNTED TELEPHONE/DATA JACK
	JUNCTION BOX, 4"x4" RECESSED UNO
	2X2 RECESSED FLUORESCENT LIGHTING SEE FIXTURE SCHEDULE
	PHONE / 3 DATA JACK
	TELEPHONE JACK
e	INDICATES EXISTING TO REMAIN
	THERMOSTAT
	RECESSED FLUORESCENT DOWN LIGHTING SEE FIXTURE SCHEDULE
	FIRE ALARM STROBE - WALL MTD., WIRED TO EXIST. FIRE ALARM SYSTEM
	SMOKE DETECTOR PHOTOELECTRIC, CEILING MOUNTED, WIRED TO EXIST. FIRE ALARM SYSTEM
	SPEAKER, WIRED TO A/V SYSTEM
	EXISTING WIFI ANTENNA REMOVE AND REINSTALL
	SURFACE MOUNTED FLUORESCENT LIGHT FIXTURE. SEE FIXTURE SCHEDULE



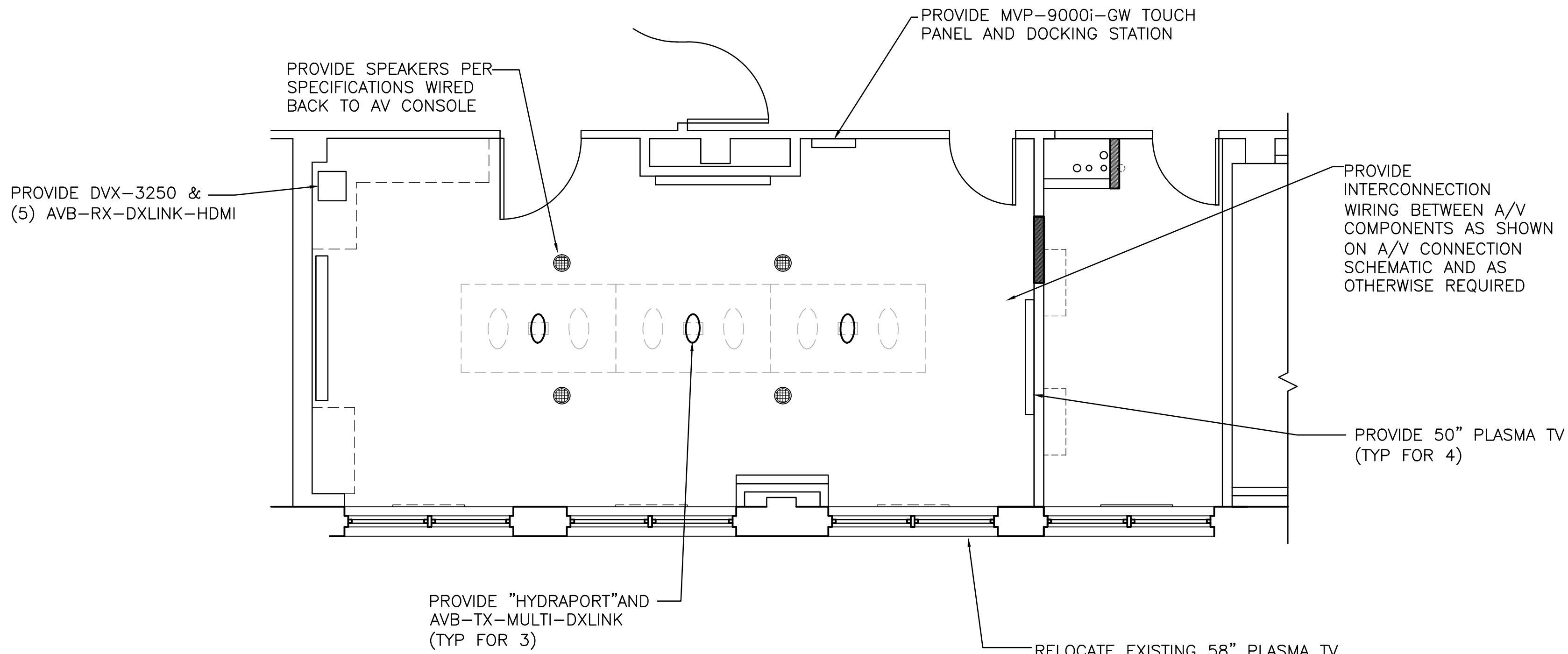
LIGHTING PLAN

SCALE: 1/4"=1'



POWER PLAN

SCALE: 1/4" = 1'



AUDIO/VISUAL SYSTEM

SCALE: 1/4" = 1'

Revisions		Date	Professional Seal		DCS INFRASTRUCTURE, LLC DESIGN & CONSTRUCTION SERVICES 33 GRANT STREET MT. HOLLY, N.J. 08060 609-351-1486 3239 ROUTE 112 BLDG. 8, STE. 4B MEDFORD, N.Y. 11763 631-320-1706		Drawing Title SEVENTH FL TRAINING ROOM ELECTRICAL PLANS AND NOTES		Project Title VAMC WILMINGTON, DE RENOVATE 7th and 8th FLOOR MULTI-MEDIA TRAINING ROOMS		Date 14 FEB 2012 Project No. 460-10-002 Drawing No. EL-101 Dwg. 8 of 11		FINAL SUBMISSION WILMINGTON VAMC Department of Veterans Affairs			
							Approved:		Building Number 01		Checked TK		Drawn CW			
							Approved:		Location WILMINGTON, DE							