

# Drawing Index

These sheets are a document set and should not be separated. Electrical information and references are contained on all sheets.

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These equipment IS drawings indicate the placement and interconnection of the listed equipment components. These drawings are not construction or site preparation drawings. Customer remains ultimately responsible for preparing the site to accommodate the IS and operation of such equipment in compliance with GE Healthcare's written specifications and all applicable federal, state, and/or local requirements.

## \* REQUIRED REFERENCE \*

Discovery NM 750b  
Pre Installation Manual  
5411135-1EN

A mandatory component of this drawing set is the GE Healthcare Pre Installation manual. Failure to reference the preIS manual will result in incomplete documentation required for site design and preparation.

Pre Installation documents for GE Healthcare products can be accessed on the web at:

[www.gehealthcare.com/siteplanning](http://www.gehealthcare.com/siteplanning)

# GE Healthcare



# Nuclear Medicine Site Planning



imagination at work

## Customer Site Readiness Requirements

- Any deviation from these drawings must be communicated in writing to and reviewed by your local GE Healthcare Installation Project Manager prior to making changes.
- Make arrangements for any rigging, special handling, or facility modifications that must be made to deliver the equipment to the installation site. If desired, your local GE Healthcare Installation Project Manager can supply a reference list of rigging contractors.
- New construction requires the following; 1. Secure area for equipment, 2. Power for drills and other test equipment, 3. Capability for image analysis, 4. Restrooms.
- Provide for refuse removal and disposal (e.g. crates, cartons, packing)
- Contact a radiation physicist or consultant to specify radiation containment requirements.

## GE Equipment Delivery Requirements

The items on the GE Healthcare Site Readiness Checklist are REQUIRED to facilitate equipment delivery to the IS site. Equipment will not be delivered if these requirements are not satisfied.

GE Healthcare Site Readiness Checklist Rev 19					
Before using this document ensure you have the latest Rev from MyWorkshop on DOC0422752					
GHC Global Order #:		Customer:			
GHC PMI:		FE / Installer:			
The customer is responsible for proper site preparation regardless of any GHC measurements/inspections/assessments.					
Inspection Date:	Storage is ready?	PHI is ready?	FE is ready?	Comments if "N", enter comments or action plan	
1				<b>MR Magnet Delivery Requirements:</b> Ensure cryogen venting system is available for magnet connection as defined by GHC Pre-Installation Manual (PIM) requirements, exhaust fan system is installed and operational, 480V power, and chilled water supply is available 24x7 that meets system cooling requirements. External connectivity is available for magnet monitoring and phone service is available during delivery. Surface mount vibratmat installed where required. Magnet room final flooring is in place.	
2				<b>MR RF Screen Room Requirements:</b> RF Screen Room is tested with copy of Test Report, emailed to Siddhiv@CEM@ge.com, that is compliant with GEHC specifications. Dock Bolt and magnet anchors (if applicable) installed using 2 part anchor. For HDx systems, blower box mount bolts installed by RF vendor using 2 part anchors	
3				<b>State Regulatory Requirements:</b> Facility registration number provided for states of IL, KY, HI, RI, SC, TX, X-ray shielding plan and state acknowledgment letter provided to installer for AR, DC, NC, SC, CO & VA. <b>Site Drawing Requirements:</b> Final version of equipment network and antenna, installation drawings (including red lined versions) verified to match actual room and has been provided to installer.	
4				<b>Surface Penetration Requirements:</b> Customer/Contractor scheduled to provide required drilling or cutting into floors, ceilings, and walls; OR surface penetration permit available and posted in the room when GEHC will perform the work.	
5				<b>Pre-Delivery Route Requirements:</b> The equipment delivery route from the truck to the final destination within the facility has been reviewed with all key stakeholders to safely meet the minimum requirements for equipment access, and all communications/notifications have occurred. Arrangements have been made for special handling (elevator, rigging, floor protection, fork lift, rollback truck, etc).	
6				<b>Finished Room Requirements:</b> Rooms that will contain equipment, including storage areas not in scan suite, are dust free. Precautions taken to maintain a dust free room. Precautions must be taken to prevent dust from entering rooms containing equipment when construction is incomplete in adjacent areas. All walls primed (final coat not needed on Day 1). Shielding, doors, and windows are to be installed. No contractor work being done during or after the installation that will cause dust in the installation areas or potential equipment damage. Room security to prevent unauthorized access and theft has been discussed with customer. The customer is aware of these security issues, implications and responsibility. For Storage: Room must meet PIM requirements for storage.	
7				<b>Electrical Requirements:</b> Lockable (LOTO) Main Disconnect Panel (MDP) is installed per GE guidelines and system power is available. Conduits, electrical cable ducting/dividers/cable trays, and access flooring is installed in proper location and height. Surface floor duct and load-side wires can be installed at time of system installation. Validate outlet location and requirements meet specifications for device/equipment.	
8				<b>HVAC Requirements:</b> The HVAC/Chilled Water systems designed to maintain the environment per spec/PIM is at running state and appears to provide the desired environmental conditions including location of vents, temperature and humidity for system operation.	
9				<b>Flooring Requirements:</b> Floor is clean and prepared for final floor covering. Floor levelness/flatness is measured and within tolerance, and there are no visible defects per GEHC specifications. Confirm customer anchoring plan aligns with designed floor thickness. Final flooring installed where required for network racks.	
10				<b>Ceiling Requirements:</b> Unistrut (or equivalent) location, levelness and spacing is measured (or vendor confirmed) and consistent with the requirement of the installation drawings. Ensure unistrut and rails are not used as mounting surfaces. Ceiling grid is installed. Permanent lighting is installed and operational. HVAC diffusers are installed and connected to ductwork. Ceiling tiles installed per PIM discretion.	
11				<b>Staging Requirements:</b> Space has been identified to support the active installation process only. This area meets PIM/project book requirements. Storage space has been identified, if needed. This secured space would be used to store equipment indefinitely. If offsite, transportation plan has been developed at customer expense. This space must meet PIM requirements.	
12				<b>Network Connectivity:</b> Hardware for network connectivity/network drop) is in place prior to delivery with specified network firewall configuration where required. Site Surveys for wireless mobile XR units have been completed.	
13				<b>Medical Gases Requirements:</b> Systems (hard piped or portable) in place to allow testing and calibration of equipment (anesthesia, including ventilation).	

GE Healthcare  
IS Services Design Center  
Milwaukee, Wisconsin  
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SHEET TITLE: SITE READINESS  
MODALITY TYPE: DISCOVERY NM750b  
THIS PLAN IS SUBMITTED TO SURVEY LOCATION OF GE HEALTHCARE EQUIPMENT AND ASSOCIATED APPARATUS, ELECTRICAL WIRING DETAILS AND ROOM ARRANGEMENTS. IN PREPARING THIS PLAN, EVERY EFFORT HAS BEEN MADE TO CONFORM DETAILS TO THE ACTUAL CONSTRUCTION PURPOSES, DIMENSIONS AND THE COMPANY CANNOT ACCEPT RESPONSIBILITY FOR ANY DAMAGES RESULTING THEREFROM.

PROJECT TITLE:  
TYPICAL FINAL  
INSTALLATION DRAWING

PROJECT	REVISION
7-80f	00
DATE:	26.Sep.12
DRAWN BY:	JLT
CHECKED BY:	CPC

REVISION HISTORY:


SHEET  
C1

**GE EQUIPMENT LISTING**

EQUIPMENT ON ORDER FROM GE HEALTHCARE, INSTALLED BY GE HEALTHCARE, PER : NEITHER A QUOTE OR GON WAS ISSUED AT THE DATE OF THESE DRAWINGS

NOTE: LOCAL CONDITIONS MAY DICTATE THAT ITEMS IDENTIFIED IN THIS CATEGORY BE INSTALLED BY OTHERS.

ITEM NO.	QUANTITY ORDERED	REFER TO SHEET "D"	ITEM DESCRIPTION (* = EXISTING/REINSTALL)	WEIGHT	HEAT OUTPUT (PER HOUR)	DETAIL NO.	STRC PLAN	ELEC PLAN	EQUIPMENT CROSS REFERENCE CHART	
									P = PREAPPROVAL	C = CALCULATIONS/PENDING APPROVAL
①	1		1.5 KVA UPS SYSTEM	39 lbs		B750BA	-	UPS	S	
②	1		DISCOVERY NM 750B GANTRY	859 lbs	849 btu	B750BB	-	NMC	-	
③	1		EMO PUSHBUTTON			B8105B	-	EMO	-	
④	1		DISCOVERY NM530c OPERATORS CONSOLE ON CART	33 lbs	511 btu	B4305D	-	AC	-	

THE FOLLOWING ITEMS, WHICH HAVE BEEN ORDERED FROM GE HEALTHCARE, ARE TO BE INSTALLED BY THE CUSTOMER OR HIS CONTRACTOR.

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**EQUIPMENT LAYOUT** SCALE: 1/4" = 1'-0" RECOMMENDED CEILING HEIGHT = 8'-0"

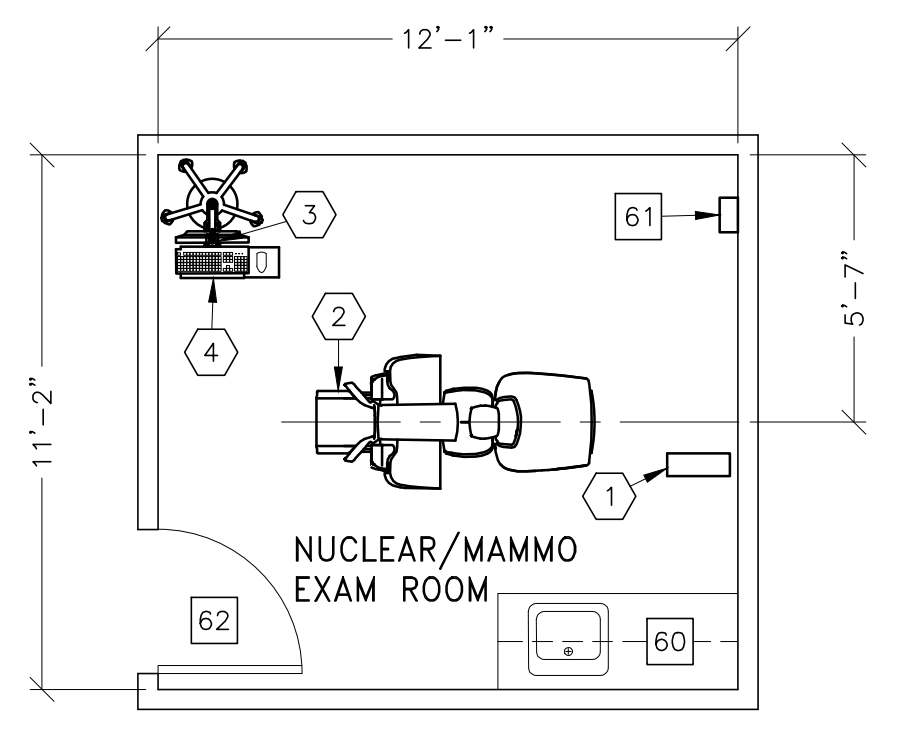
This equipment layout indicates the placement and interconnection of the indicated equipment components. There may be federal, state, and/or local requirements that could impact the placement of these components. It remains the Customer's responsibility for ensuring the site and final equipment placement complies with all applicable federal, state, and/or local requirements.

**IMPORTANT CUSTOMER READINESS ALERT:**

THIS EQUIPMENT INVOLVES THE USE OF RADIOACTIVE ISOTOPES, INCLUDING THOSE SOURCES NECESSARY FOR EQUIPMENT CALIBRATION. APPROPRIATE REGULATORY COMPLIANCE AND LICENSING MUST BE ARRANGED BY THE CUSTOMER EARLY IN THE PLANNING PROCESS AND THEN DEMONSTRATED/AVAILABLE FOR EQUIPMENT INSTALLATION.

ASSIGNED BY THE HOSPITAL NET ADMIN IF CONNECTING TO THE HOSPITAL LAN	HOSTNAME	IP	AE TITLE	DICOM PORT
ACQUISITION HOST				
PROCESSING HOST				
HARDCOPY HOST				
LAN NET MASK				
GATEWAY TO OTHER NETWORKS				
OTHER				
HUB OR SWITCH				

- PREPARE ADEQUATE NETWORK SOCKETS IN THE PROPER LOCATIONS TO SUPPORT ALL ACQUISITION, LOCAL AND REMOTE WORKSTATION.
- IT DEPARTMENT MUST ASSIGN DEDICATED IP ADDRESSES (NOT DHCP) NOTE THE ADDRESSES BELOW FOR THE ACQUISITION, LOCAL AND REMOTE WORKSTATIONS.
- PREPARE BROADBAND CONNECTIVITY LINE AND DEDICATED IP ADDRESSES FOR INSITE CONNECTIVITY.
- REFER TO TABLE ON A1 PAGE



**ANCILLARY ITEMS**

**CUSTOMER/CONTRACTOR SUPPLIED AND INSTALLED ITEMS**

ITEM NO.	ITEM DESCRIPTION (* INDICATES EXISTING)
60	COUNTER TOP WITH SINK, BASE AND WALL CABINETS
61	MAIN DISCONNECT, REFERENCE JUNCTION POINT 'A' ON SHEET E1 FOR DETAILED DESCRIPTION
62	MINIMUM DOOR OPENING FOR EQUIPMENT DELIVERY IS 36 IN. W X 83 IN. H (914mm X 2108mm), CONTINGENT ON A 96 IN. (2438mm) CORRIDOR WIDTH

THE FOLLOWING ITEMS ARE AVAILABLE FROM GE HEALTHCARE TECHNOLOGIES. CONTACT YOUR LOCAL GE HEALTHCARE SERVICE REPRESENTATIVE FOR PRICING AND AVAILABILITY.

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**GENERAL SPECIFICATIONS**

- o THE REQUIRED CEILING HEIGHT INDICATED ON THESE PLANS IS TO ENSURE EQUIPMENT FUNCTION IS NOT INHIBITED. CONSULT WITH YOUR LOCAL GEHC SPECIALIST REGARDING ACCEPTABILITY OF OTHER CEILING HEIGHTS.
- o CHECK ALL DOOR OPENINGS AND HALLWAYS FROM DELIVERY LOCATION TO WHERE EQUIPMENT IS TO BE INSTALLED TO ENSURE THE ROUTE PHYSICALLY AND STRUCTURALLY WILL ACCOMMODATE THE EQUIPMENT AS SHIPPED.
- o RADIATION PROTECTION REQUIREMENTS ARE NOT INDICATED ON THIS PLAN. WHERE NEEDED PER NATIONAL OR LOCAL CODE THEY SHALL BE SPECIFIED BY A QUALIFIED RADIOLOGICAL PHYSICIST.
- o THE DEVELOPMENT OF THE EQUIPMENT LAYOUT, ROOM DIMENSIONS, MECHANICAL AND ELECTRICAL SUGGESTIONS IS PREDICATED UPON THE BEST INFORMATION OBTAINABLE FROM THE SITE, COUPLED WITH THE CUSTOMER'S KNOWN DESIRES. ARCHITECTURAL OR ELECTRICAL CHANGES INCLUDING RELOCATION OF EQUIPMENT ILLUSTRATED ON THIS DRAWING IS ALLOWED ONLY WITH NOTIFICATION, IN WRITING, AND REVIEW BY GEHC SERVICE DEPARTMENT. EQUIPMENT OPERATION, SERVICEABILITY, AND RESTRICTING CABLE LENGTHS, ETC., MAKE THIS ESSENTIAL FOR A PROPER IS. GEHC RESERVES THE RIGHT TO MAKE ON THE JOB CHANGES BECAUSE OF CUSTOMER REQUIREMENTS AND/OR OBSTACLES IN CONSTRUCTION, ETC..
- o ALL WORK TO BE IN COMPLIANCE WITH NATIONAL AND LOCAL BUILDING SAFETY CODES.
- o DIMENSIONS ARE TO FINISHED SURFACES OF ROOM

**SITE ENVIRONMENT SPECIFICATIONS**

- o AMBIENT OPERATING TEMPERATURE: 64° TO 81° F [18° TO 27° C], MAXIMUM ALLOWABLE TEMPERATURE CHANGE OF 5° F [3° C] /HOUR.
- o DO NOT PLACE CAMERA NEAR REGISTERS, WINDOWS OR OTHER COMPONENTS THAT COULD AFFECT TEMPERATURE LEVEL CHANGES IN CAMERA VICINITY.
- o HUMIDITY: 40 TO 60 PERCENT NON-CONDENSING, MAXIMUM ALLOWABLE CHANGE OF 10 PERCENT/HOUR.
- o ELECTROSTATIC DISCHARGE IS KNOWN TO CAUSE SEVERE DAMAGE TO SOPHISTICATED ELECTRONICS. STATIC CHARGES ASSOCIATED WITH LOWER HUMIDITY LEVELS (BELOW 40%) MAY INTERFERE WITH SYSTEM OPERATION.
- o ALTITUDE: NOT TO EXCEED 8000 FT. (2438 m) ABOVE SEA LEVEL.
- o THE ENVIRONMENT FOR THE ELECTRONICS CABINET/CPU MUST BE CONTROLLED SO THE ABOVE RESTRICTIONS ARE NOT EXCEEDED.
- o BACKGROUND RADIATION SHOULD BE KEPT TO A MINIMUM. RADIOACTIVE SOURCES MUST BE KEPT IN SHIELDED CONTAINERS AND THE EXAMINATION ROOM SHIELDED FROM EXTERNAL SOURCES (FOR EXAMPLE X-RAY AND CT SYSTEMS, AND PATIENTS UNDERGOING TREATMENT).

**MAGNETIC INTERFERENCE SPECIFICATIONS**

NUCLEAR CAMERA DETECTORS MUST BE LOCATED IN AMBIENT STATIC MAGNETIC FIELDS OF LESS THAN 0.5 GAUSS TO GUARANTEE SPECIFIED IMAGING PERFORMANCE.

NUCLEAR COMPUTER EQUIPMENT MUST BE LOCATED IN AMBIENT STATIC MAGNETIC FIELDS OF LESS THAN 10 GAUSS TO GUARANTEE DATA INTEGRITY.

MULTIFORMAT CAMERA MUST BE LOCATED IN AMBIENT STATIC MAGNETIC FIELDS OF LESS THAN 3 GAUSS TO OBTAIN SPECIFIED GEOMETRIC LINEARITY.

NUCLEAR DIAGNOSTIC CONSOLE MUST BE LOCATED IN AMBIENT STATIC MAGNETIC FIELDS OF LESS THAN 1 GAUSS IF CONSOLE HAS A COLOR DISPLAY AND 10 GAUSS IF MONOCHROME. TO OBTAIN SPECIFIED GEOMETRIC LINEARITY AND FREEDOM FROM COLOR DISTORTION.

**GE Healthcare**

Healthcare Project Implementation - Design Center

Minneapolis, MN

SHEET TITLE: **EQUIPMENT LAYOUT**

MODALITY TYPE: **DISCOVERY NM750b**

THIS PLAN IS SUBMITTED TO SURVEY LOCATION OF GE HEALTHCARE EQUIPMENT AND ASSOCIATED ELECTRICAL WIRING DETAILS AND ROOM ARRANGEMENTS. IN PREPARING THIS PLAN, EVERY EFFORT HAS BEEN MADE TO CONFORM DETAILS TO THE CUSTOMER'S REQUIREMENTS. GEHC DOES NOT ACCEPT LIABILITY FOR ANY DAMAGES RESULTING THEREFROM.

PROJECT TITLE:

**TYPICAL FINAL INSTALLATION DRAWING**

PROJECT	REVISION
7-80f	00
DATE:	26.Sep.12
DRAWN BY:	JLT
CHECKED BY:	CPC

REVISION HISTORY:


SHEET

**A1**

TYPICAL WALL SUPPORT ELEVATIONS

SCALE: 1/4" = 1'-0"

STRUCTURAL LAYOUT

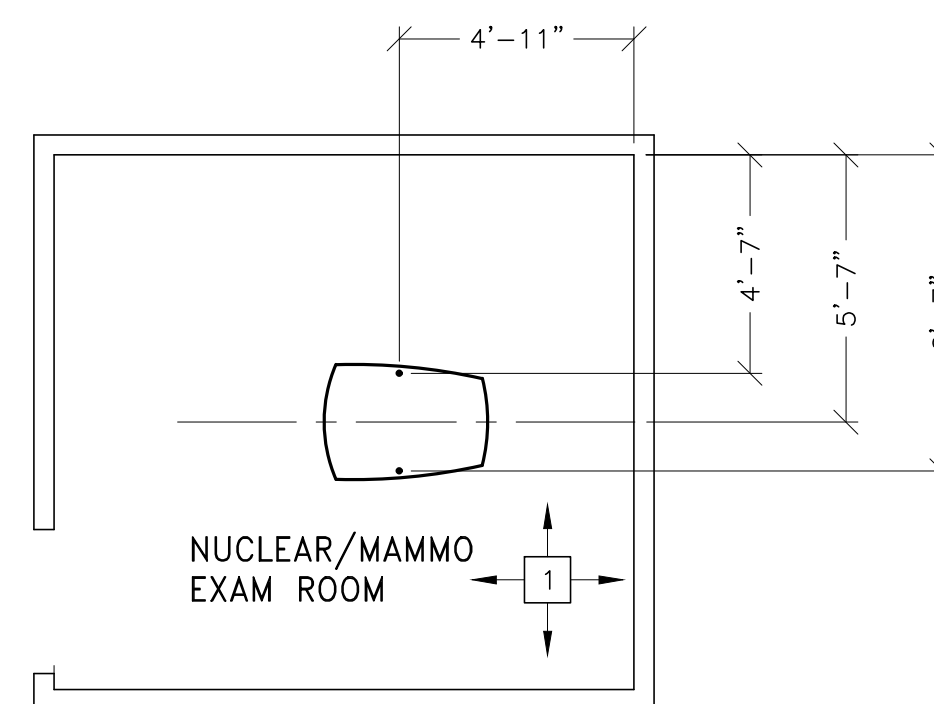
RECOMMENDED CEILING HEIGHT = 8'-0"

STRUCTURAL SUPPORT METHODS

CUSTOMER/CONTRACTOR SUPPLIED AND INSTALLED ITEMS

ITEM NO.	ITEM DESCRIPTION (* INDICATES EXISTING)
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1	FLOOR REQUIREMENTS: FLOOR LEVELNESS IN THE EXAM ROOM MUST BE LEVEL WITHIN 1/10 IN. (2.5 MM) OVER 39 IN. (1 M). FLOOR FLATNESS IN THE EXAM ROOM MUST HAVE NO DEVIATIONS GREATER THAN 0.1" (2.5 MM) OVER 11'-5.8" IN. (350 CM). IF THE DISCOVERY NM 750b SYSTEM IS INSTALLED ON A FLOOR TYPE THINNER THAN 120MM (4.75") CONCRETE FLOOR, THE CUSTOMER SHALL AT ITS EXPENSE, PROVIDE ACCEPTABLE ANCHORING AND MOUNTING METHODS THAT MEET ALL STRUCTURAL SPECIFICATIONS PROVIDED IN THE PRE-INSTALLATION MANUAL AND COORDINATE WITH THE INSTALLATION TEAM. VIBRATION REQUIREMENTS: THE MAXIMUM STEADY STATE VIBRATION TRANSMITTED THROUGH THE FLOOR SHOULD NOT EXCEED 0.001 PER METER SQUARED RMS MAXIMUM SINGLE FREQUENCY ABOVE AMBIENT BASELINE FROM 0.5 TO 60 Hz (MEASURED IN ANY 1 HOUR DURING A NORMAL OPERATING PERIOD).
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STRUCTURAL NOTES

- ALL UNITS THAT ARE WALL MOUNTED OR WALL SUPPORTED ARE TO BE PROVIDED WITH SUPPORTS WHERE NECESSARY. WALL SUPPORTS ARE TO BE SUPPLIED AND INSTALLED BY THE CUSTOMER OR HIS CONTRACTORS. SEE PLAN AND DETAIL SHEETS FOR SUGGESTED LOCATIONS AND MOUNTING HOLE LOCATIONS.
- FLOOR SLABS ON WHICH EQUIPMENT IS TO BE INSTALLED MUST BE LEVEL TO SPECIFICATIONS. (IF NOT SPECIFIED ELSEWHERE ON THIS SHEET THE FLOOR LEVELNESS SHOULD BE 1/8 IN. (3 MM) IN 10 FT. (3.05 M).
- DIMENSIONS ARE TO FINISHED SURFACES OF ROOM.
- FOR SEISMIC REGIONS ENSURE SUPPORTS SPAN THREE MEMBERS.
- CUSTOMERS CONTRACTOR MUST PROVIDE ALL PENETRATIONS IN POST TENSION FLOORS.
- CUSTOMERS CONTRACTOR MUST PROVIDE AND INSTALL ANY NON-STANDARD ANCHORING. DOCUMENTS FOR STANDARD ANCHORING METHODS ARE INCLUDED WITH GE EQUIPMENT DRAWINGS FOR GEOGRAPHIC AREAS THAT REQUIRE SUCH DOCUMENTATION.
- CUSTOMERS CONTRACTOR MUST PROVIDE AND INSTALL HARDWARE FOR "THROUGH THE FLOOR" ANCHORING AND/OR ANY BRACING UNDER ACCESS FLOORS. THIS CONTRACTOR MUST ALSO PROVIDE FLOOR DRILLING THAT CANNOT BE COMPLETED BECAUSE OF AN OBSTRUCTION ENCOUNTERED WHILE DRILLING BY THE GE INSTALLER SUCH AS REBAR ETC.
- IT IS THE CUSTOMER'S RESPONSIBILITY TO PERFORM ANY FLOOR OR WALL PENETRATIONS THAT MAY BE REQUIRED. THE CUSTOMER IS ALSO RESPONSIBLE FOR ENSURING THAT NO SUBSURFACE UTILITIES (E.G., ELECTRICAL OR ANY OTHER FORM OF WIRING, CONDUITS, PIPING, DUCT WORK OR STRUCTURAL SUPPORTS (I.E. POST TENSION CABLES OR REBAR)) WILL INTERFERE OR COME IN CONTACT WITH SUBSURFACE PENETRATION OPERATIONS (E.G. DRILLING AND INSTALLATION OF ANCHORS/SCREWS) PERFORMED DURING THE INSTALLATION PROCESS. TO ENSURE WORKER SAFETY, GE INSTALLERS WILL PERFORM SURFACE PENETRATION OPERATIONS ONLY AFTER THE CUSTOMER'S VALIDATION AND COMPLETION OF THE "GE SURFACE PENETRATION PERMIT"

SHEET TITLE: STRUCTURAL LAYOUT  
MODALITY TYPE: DISCOVERY NM750b

THIS PLAN IS SUBMITTED TO SURVEY LOCATION OF GE HEALTHCARE EQUIPMENT AND ASSOCIATED APPARATUS, ELECTRICAL WIRING DETAILS AND ROOM ARRANGEMENTS. IN PREPARING THIS PLAN, EVERY EFFORT HAS BEEN MADE TO CONFORM DETAILS TO THE ACTUAL CONSTRUCTION PURPOSES. HOWEVER, THE COMPANY CANNOT ACCEPT RESPONSIBILITY FOR ANY DAMAGES RESULTING THEREFROM.

PROJECT TITLE:  
TYPICAL FINAL  
INSTALLATION DRAWING

PROJECT	REVISION
7-80f	00

DATE: 26.Sep.12  
DRAWN BY: JLT  
CHECKED BY: CPC

REVISION HISTORY:  
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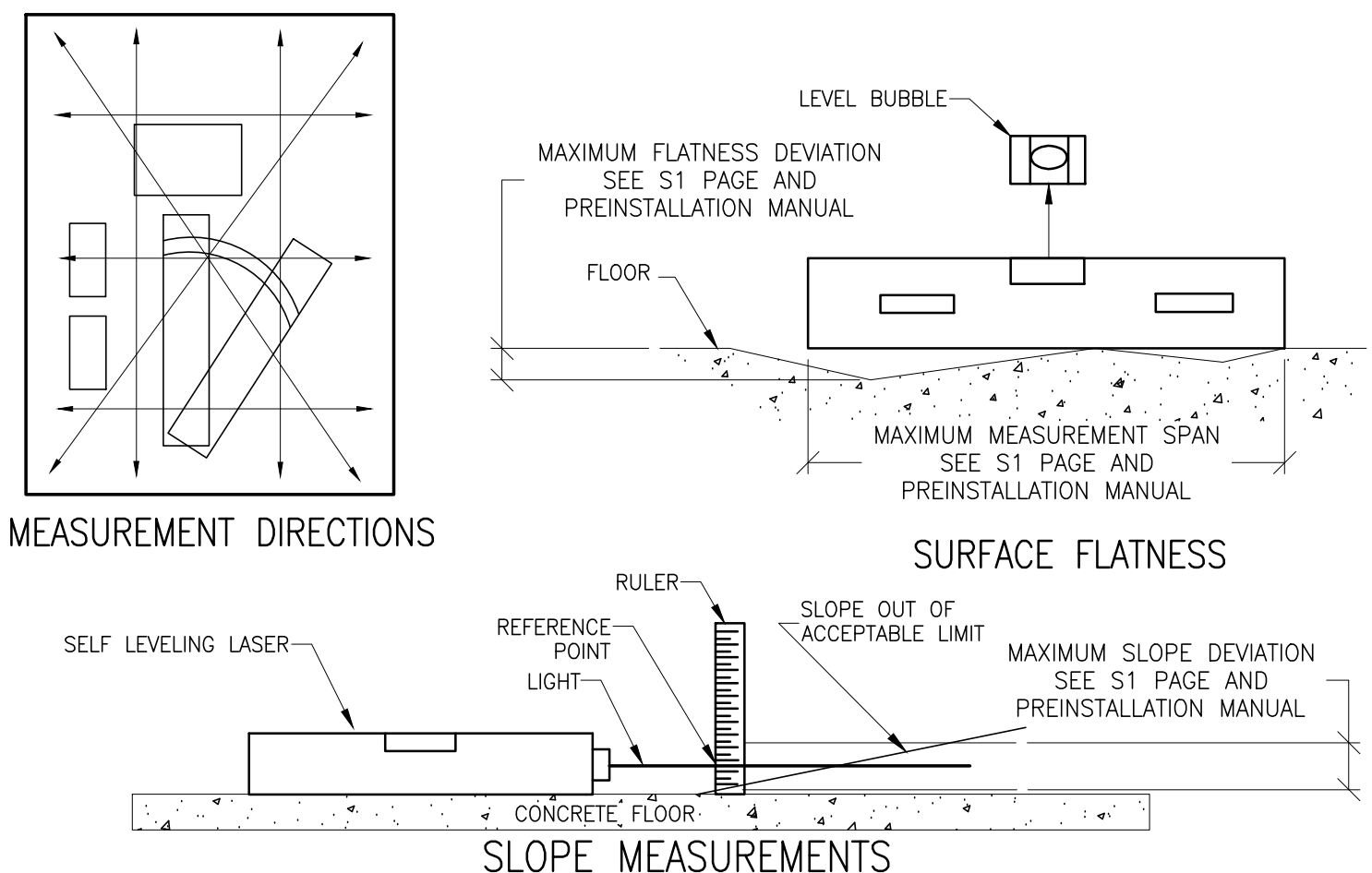
SHEET  
S1

P1M R1

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Healthcare Project Implementation - Design Center  
Milwaukee, Wisconsin

**SUPPORT DETAIL**  
**LEVELING AND FLATTENING FLOOR AREA DETAIL**

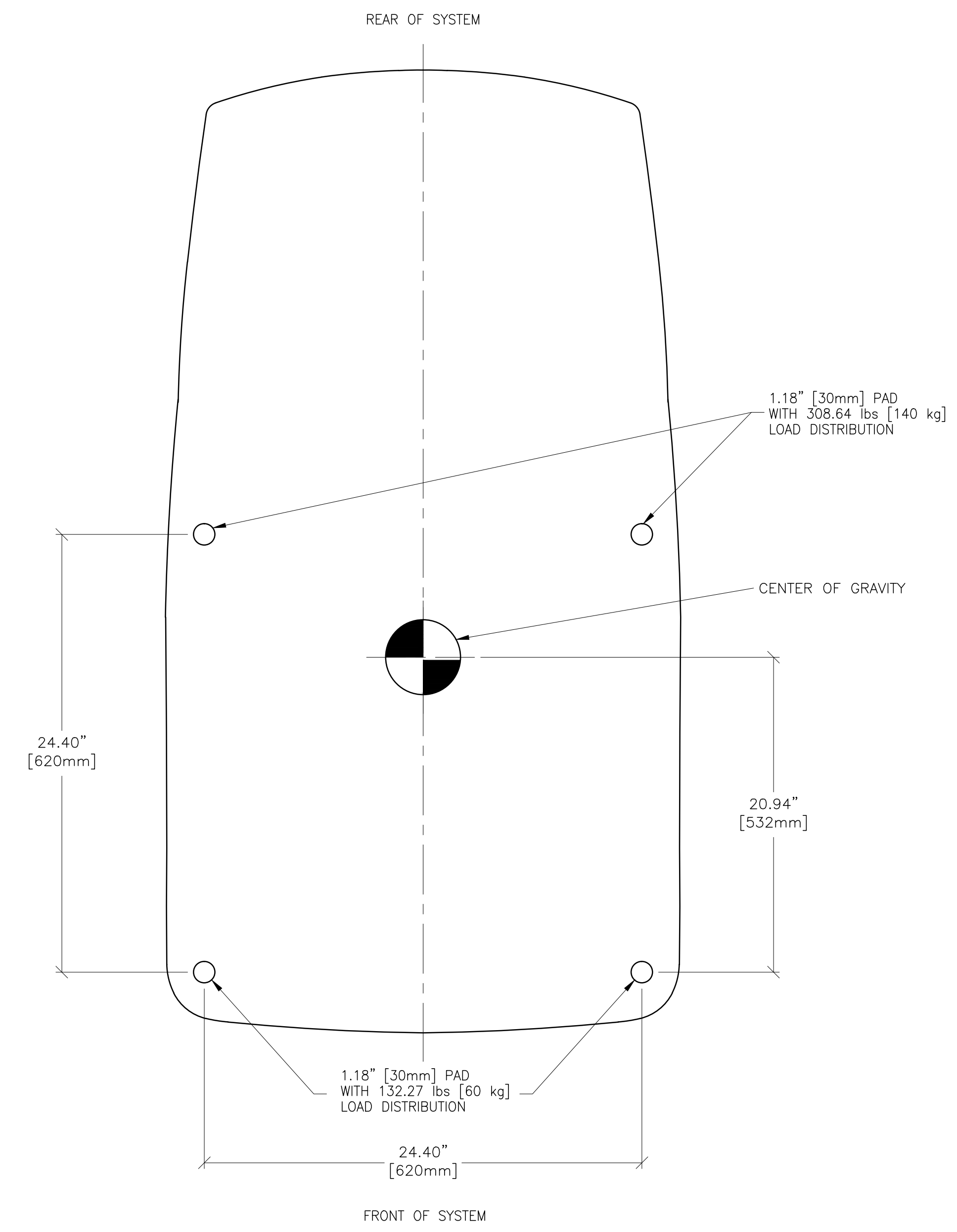
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 REV. DATE: 04.May.2012



CUSTOMER/CONTRACTOR IS RESPONSIBLE FOR MEASURING FLOOR LEVELNESS/FLATNESS AND PROVIDING THE RESULTS TO A GEHC REPRESENTATIVE (FE OR PM) BEFORE FINISHED FLOORING IS INSTALLED. SEE S1 PAGE AND SPECIFICATIONS FROM PREINSTALLATION MANUAL FOR MORE INFORMATION. FLOOR REQUIREMENTS ARE CRITICAL TO INSTALLATION/OPERATION OF SYSTEM!  
DETAIL NOT TO SCALE

**DISCOVERY NM 750b BASEPLATE DETAIL**

B750B  
 REV. DATE: 04.NOV.11



DETAIL NOT TO SCALE

**GE Healthcare**  
 Healthcare Project Implementation - Design Center  
 Milwaukee, Wisconsin

SHEET TITLE: **STRUCTURAL DETAILS**  
 MODALITY TYPE: **DISCOVERY NM750b**  
THIS PLAN IS SUBMITTED TO SUGGEST LOCATION OF GE HEALTHCARE EQUIPMENT AND ASSOCIATED APPARATUS. ELECTRICAL WIRING DETAILS AND ROOM ARRANGEMENTS IN PREPARING THIS PLAN, EVERY EFFORT HAS BEEN MADE TO CONFORM DETAILS TO THE MANUFACTURER'S SPECIFICATIONS. GE HEALTHCARE, HOWEVER, AND THE COMPANY CANNOT ACCEPT ANY LIABILITY FOR ANY DAMAGES RESULTING THEREFROM.

PROJECT TITLE:  
**TYPICAL FINAL  
 INSTALLATION DRAWING**

PROJECT	REVISION
7-80f	00
DATE:	26.Sep.12
DRAWN BY:	JLT
CHECKED BY:	CPC

REVISION HISTORY:  
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SHEET  
**S2**

PIM R1

SCALE: 1/4" = 1'-0"

ELECTRICAL PLAN

RECOMMENDED CEILING HEIGHT = 8'-0"

FEEDER TABLE -- DISCOVERY NM 750b SYSTEMS		
<ul style="list-style-type: none"> <li>○ CALCULATIONS BASED UPON NOMINAL VOLTAGE, WIRE SIZE IN AWG.</li> <li>○ RECOMMENDED FEEDER SIZES FROM POWER SOURCE TO CAMERA OUTLET.</li> <li>○ THE GROUNDING CONDUCTOR WILL BE THE SAME SIZE AS THE POWER FEEDER. THIS GROUND WILL RUN FROM THE EQUIPMENT BACK TO THE FACILITY POWER SOURCE/MAIN GROUNDING POINT AND ALWAYS TRAVEL IN THE SAME CONDUIT WITH THE FEEDERS AND NEUTRAL.</li> <li>○ FOR A FULL SYSTEM UPS REFER TO ELECTRICAL DETAILS FOR UPS FEEDER WIRES.</li> </ul>		
RUN LENGTH IN FEET	POWER SUPPLY VOLTAGE	
	110-125 115 (60 Hz)	220-253 230 (50 Hz)
	SIZE OF FEEDERS AND GROUND WIRES (AWG)	
50	14	14
100	14	14
150	12	14
200	12	14
250	10	14

REV. DATE: 06.Nov.11

**ELECTRICAL OUTLET LEGEND**  
 CUSTOMER/CONTRACTOR SUPPLIED AND INSTALLED ITEMS. HEIGHT ABOVE FLOOR DETERMINED BY LOCAL CODES UNLESS OTHERWISE SPECIFIED.

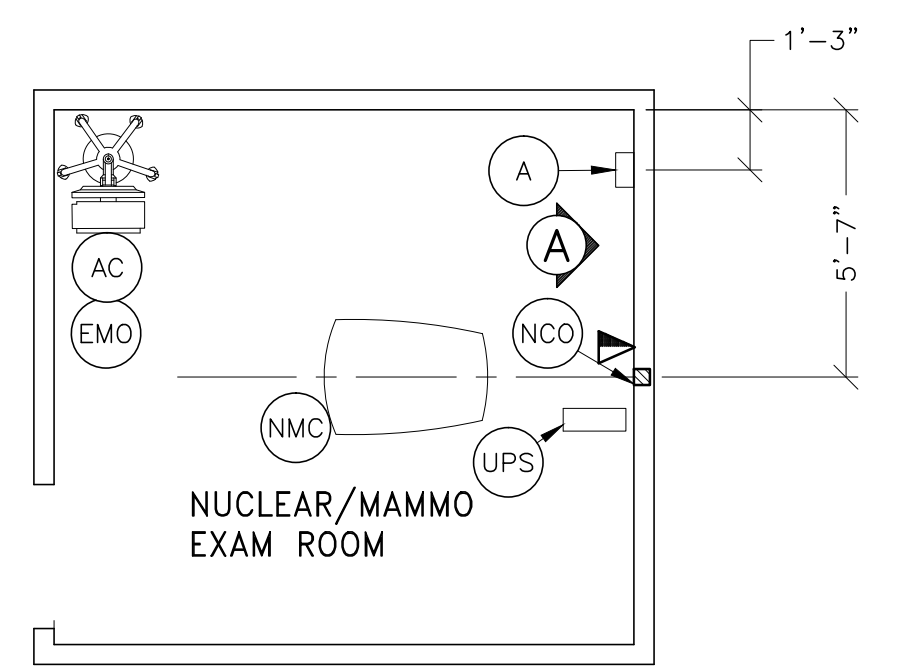
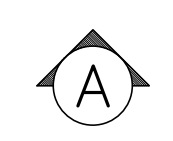
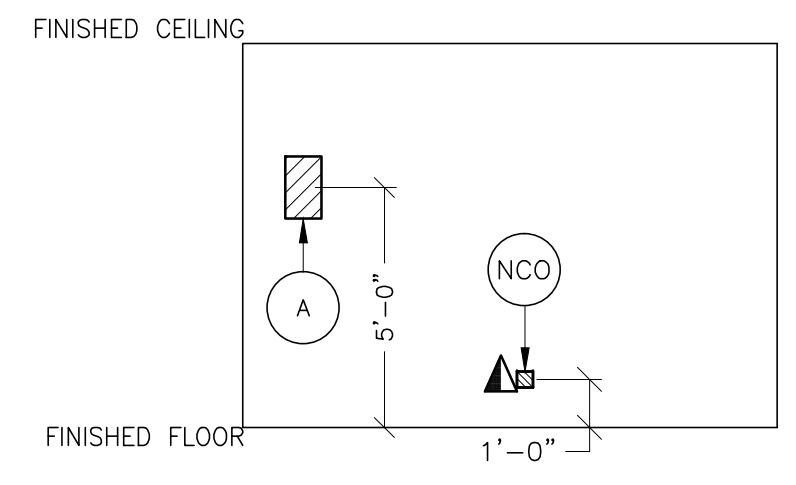
▲ NETWORK OUTLET (SEE ELECTRICAL DETAILS ELEC-83 AND ELEC-84)

- JUNCTION POINT NOTES**
- ALL JUNCTION BOXES, CONDUIT, DUCT, DUCT DIVIDERS, SWITCHES, CIRCUIT BREAKERS, ETC., ARE TO BE SUPPLIED AND INSTALLED BY CUSTOMERS ELECTRICAL CONTRACTOR.
  - CONDUIT AND DUCT RUNS SHALL HAVE SWEEP RADIUS BENDS
  - CONDUITS AND DUCT ABOVE CEILING OR BELOW FINISHED FLOOR MUST BE INSTALLED AS NEAR TO CEILING OR FLOOR AS POSSIBLE TO REDUCE RUN LENGTH.
  - CEILING MOUNTED JUNCTION BOXES ILLUSTRATED ON THIS PLAN MUST BE INSTALLED FLUSH WITH FINISHED CEILING.
  - ALL DUCTWORK MUST MEET THE FOLLOWING REQUIREMENTS:
    1. DUCTWORK SHALL BE METAL WITH DIVIDERS AND HAVE REMOVABLE, ACCESSIBLE COVERS.
    2. DUCTWORK SHALL BE CERTIFIED/RATED FOR ELECTRICAL POWER PURPOSES.
    3. DUCTWORK SHALL BE ELECTRICALLY AND MECHANICALLY BONDED TOGETHER IN AN APPROVED MANNER.
    4. PVC AS A SUBSTITUTE MUST BE USED IN ACCORDANCE WITH ALL LOCAL AND NATIONAL CODES.
  - ALL OPENINGS IN ACCESS FLOORING ARE TO BE CUT OUT AND FINISHED OFF WITH GROMMET MATERIAL BY THE CUSTOMERS CONTRACTOR.
  - GENERAL CONTRACTOR TO INSERT PULL CORDS FOR ALL CABLE RUN CONDUITS BETWEEN THE EQUIPMENT ROOM AND THE OPERATORS CONTROL ROOM.
  - 10 FOOT PIGTAILS AT ALL JUNCTION POINTS.
  - ALL WIRING MUST BE THHN OR TFFN STRANDED COPPER THERMOPLASTIC 600 VOLT OR EQUIVALENT INSULATION. **ALUMINUM OR SOLID WIRES ARE NOT ALLOWED.**
  - GROUNDING IS CRITICAL TO EQUIPMENT FUNCTION AND PATIENT SAFETY. SITE MUST CONFORM TO WIRING SPECIFICATIONS SHOWN ON THIS PLAN.

PLEASE SEE BELOW FOR ADDITIONAL REQUIRED CONDUIT RUNS AND SIZES.

JUNCTION POINT DESCRIPTIONS

POINT	DESCRIPTION	QTY.	THE FOLLOWING MATERIALS ARE TO BE SUPPLIED AND INSTALLED BY THE CUSTOMER'S ELECTRICAL CONTRACTOR	
			HARDWARE	DETAIL NO., SHT. E3
A	DISCONNECT	1	NEMA 1 FLUSH MOUNTED ENCLOSURE WITH INSULATED GROUNDABLE NEUTRAL	
AC	ACQUISITION MOBILE CART	1	15 AMP 120/240V SPST 3N FRONT OPERATED FUSED SAFETY SWITCH OR CIRCUIT BREAKER. LOCKABLE IN THE OFF POSITION.	
EMO	EMO PUSHBUTTON	1	SAME ROUTING AS 'AC'	
NCO	CAMERA OUTLET COVERPLATE AVAILABLE FROM GE/XPED. CALL 800-200-9760 OR LOCAL GE INSTALLATION PROJECT MANAGER	1	4 X 4 X 2 IN. BDX DUPLEX HOSPITAL GRADE RECEPTACLE RECEPTACLE AND GROUND STUD. OR EQUIVALENT GE CAT. NO. 006096XWI	ELEC-176
NMC	NUCLEAR MEDICINE CAMERA	1	EXTERNAL CONNECTION	
UPS	UPS CABINET	1	EXTERNAL CONNECTION	



**ADDITIONAL CONDUIT RUNS FOR NUCLEAR DISCOVERY NM 750b (BY CONTRACTOR)**

CONDUITS REQUIRED FOR BASE SYSTEM (CONDUITS ARE LOCATED ABOVE CEILING)

REV. DATE: 02.Mar.2012

A	TO NCO	ONE CND. AS REQ'D
A	TO POWER	CND AS REQ'D REFER SIZE PER FEEDER TABLE

CONTRACTOR SUPPLIED AND INSTALLED WIRING

ELECTRICAL CONTRACTOR SHALL RING OUT AND TAG ALL WIRES AT BOTH ENDS.

WIRE RUN, FROM - TO	QUANTITY, WIRE SIZE/COLOR
A > 1 PHASE	1-BLACK, 1-WHITE, 1-GREEN <REFER TO FEEDER TABLE FOR SIZE>
A > NCO	1-BLACK, 1-WHITE, 1-GREEN <REFER TO FEEDER TABLE FOR SIZE>

**GE Healthcare**

Healthcare Project Implementation - Design Center

Minneapolis, Wisconsin

SHEET TITLE: ELECTRICAL LAYOUT

MODALITY TYPE: DISCOVERY NM750b

THIS PLAN IS SUBMITTED TO SURVEY LOCATION OF HEALTHCARE EQUIPMENT AND ASSOCIATED APPARATUS. ELECTRICAL WIRING DETAILS AND ROOM ARRANGEMENTS IN PREPARING THIS PLAN, EVERY EFFORT HAS BEEN MADE TO CONFORM DETAILS TO THE LATEST EDITIONS OF THE NATIONAL ELECTRICAL CODE AND THE LOCAL CODES. GE HEALTHCARE ASSUMES NO LIABILITY FOR ANY DAMAGES RESULTING THEREFROM.

PROJECT TITLE:

**TYPICAL FINAL INSTALLATION DRAWING**

PROJECT	REVISION
7-80f	00
DATE:	26.Sep.12
DRAWN BY:	JLT
CHECKED BY:	CPC

REVISION HISTORY:

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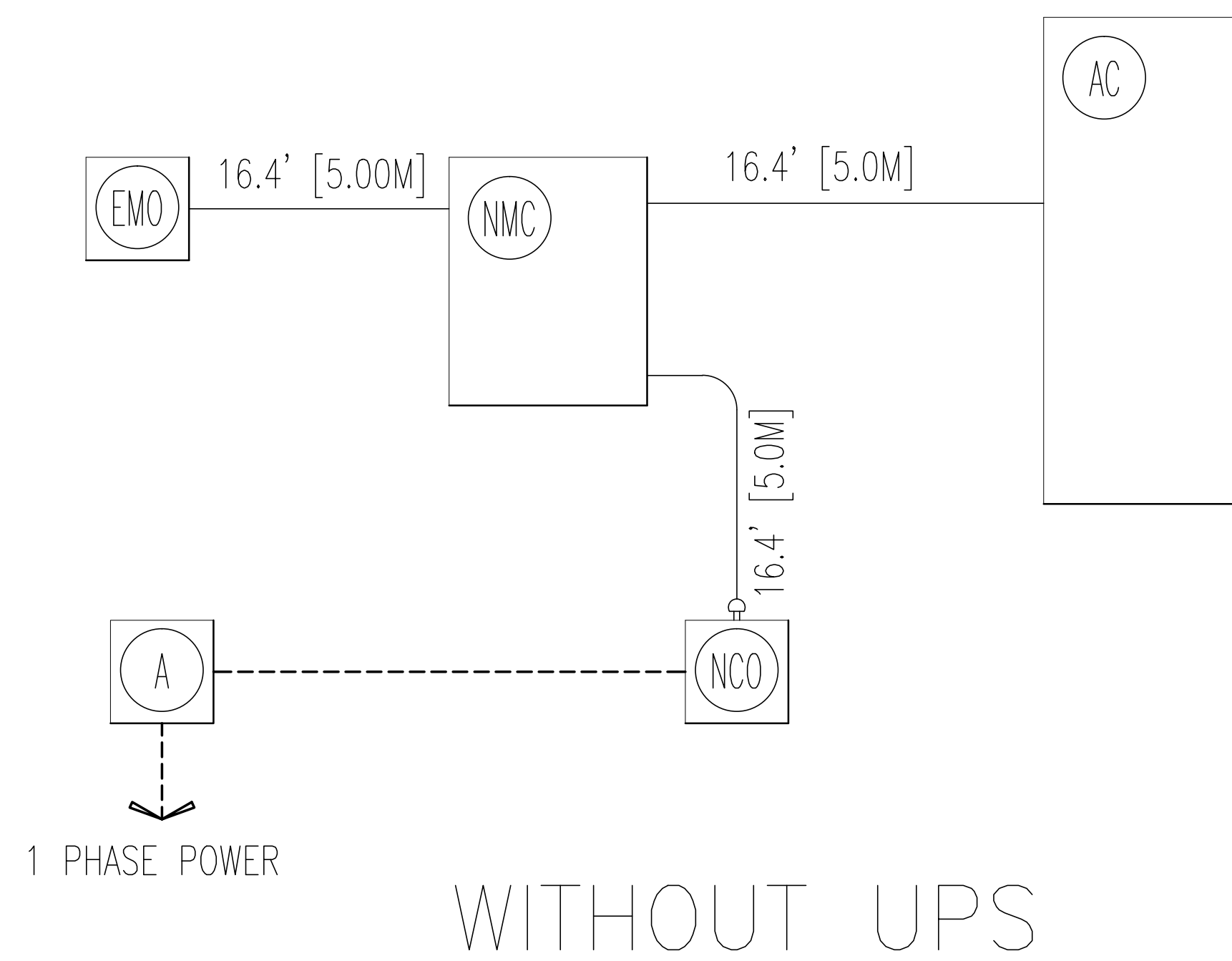
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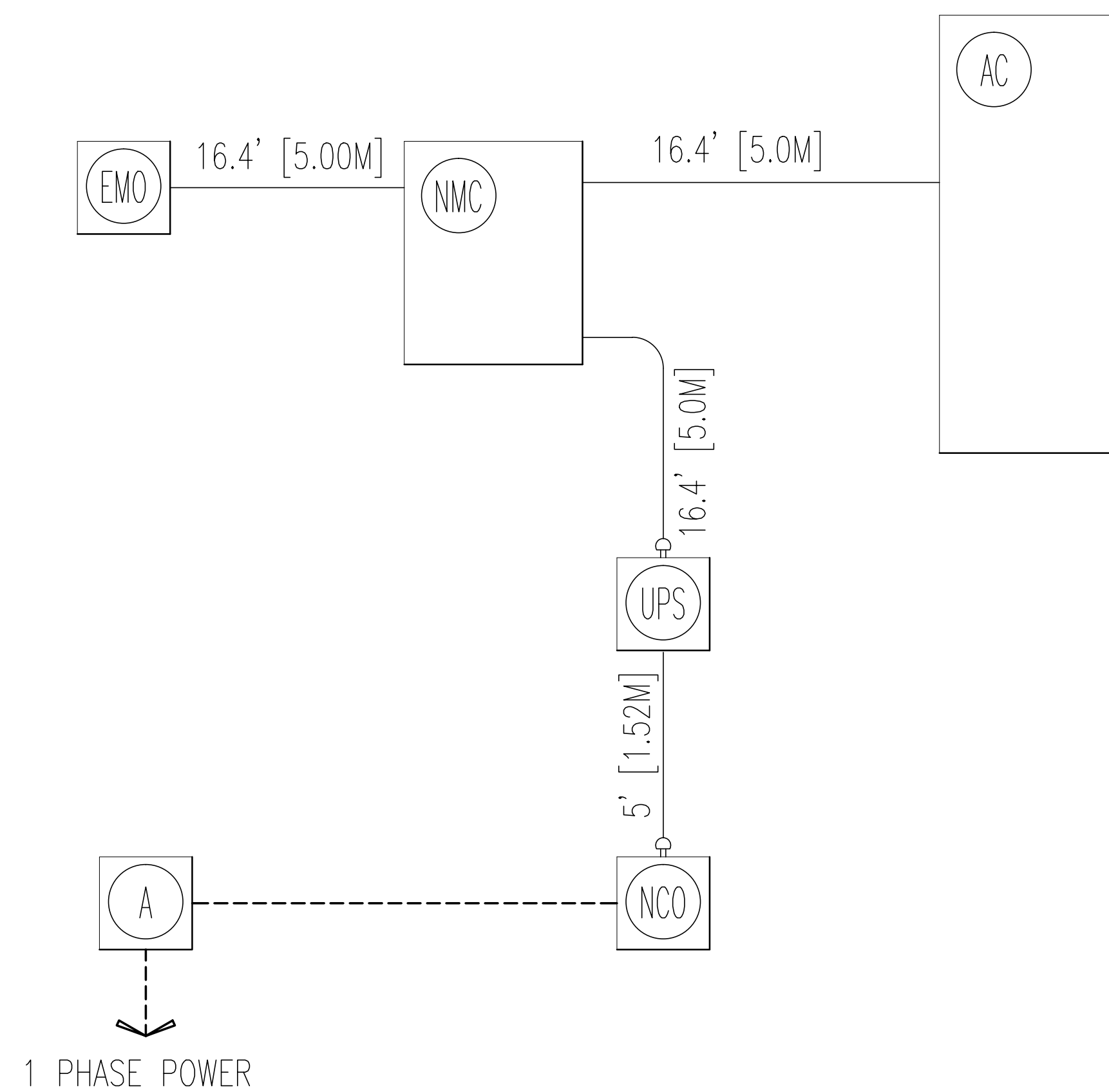
SHEET

**E1**

INTERCONNECT DIAGRAM



WITHOUT UPS



WITH UPS

POWER SPECIFICATIONS

DISCOVERY NM 750b (REV. DATE 04.Nov.11)

VOLTAGE PRIMARY DEDICATED SINGLE PHASE SOURCE IS REQUIRED FOR ALL INSTALLATIONS. RANGE OF LINE VOLTAGES: NOMINAL LINE VOLTAGE OF 115 VAC, 15 AMP OR 230 VAC, 10 AMP. LINE FREQUENCY 50 Hz or 60 Hz (+/- 1 Hz)

MAXIMUM DAILY VOLTAGE VARIATION MUST FALL WITHIN ONE OF THE RANGES IN TABLE A.

TABLE A ALLOWABLE INPUT VOLTAGES/ CURRENT DEMAND

NOMINAL VOLTAGE	ABSOLUTE RANGE	MAXIMUM MOMENTARY AMPS (AT NOMINAL VOLTAGE)	* MINIMUM STANDARD OVERCURRENT PROTECTION
115	90 to 260	15	15-A
230		10	10-A

\* CIRCUIT BREAKERS SHOULD HAVE A TIME DELAY OF GREATER THAN ONE SECOND TO WITHSTAND SWITCH-ON SURGE.

TRANSIENT VOLTAGES MUST BE WITHIN 5 PERCENT OF THE LOWEST VOLTAGE. MAXIMUM ALLOWABLE TRANSIENT VOLTAGE EXCURSIONS ARE 5 PERCENT OF RATED LINE VOLTAGE AT A MAXIMUM DURATION OF 5 CYCLES AND FREQUENCY OF 10 TIMES PER HOUR.

VOLTAGE TRANSIENT OR IMPULSE ON THE INCOMING POWER MUST BE HELD TO A MINIMUM. TRANSIENTS CAUSED BY LIGHTNING SURGES, LOAD SWITCHING, STATIC ELECTRICITY ETC. CAN CAUSE SCAN ABORTS OR IN EXTREME INSTANCES, COMPONENT FAILURE IN THE COMPUTER SUBSYSTEM.

THE MAXIMUM ALLOWABLE TRANSIENT AMPLITUDE IS 2.5 TIMES THE RMS LINE VOLTAGE. (FILTERS MAY BE REQUIRED IF TRANSIENT LEVEL EXCEEDS THIS VALUE.)

REGULATION POWER SUPPLY REGULATION MUST BE 5 PERCENT OR BETTER.

POWER SUPPLY TEST IT IS RECOMMENDED THAT THE POWER SUPPLY BE MONITORED TO ASCERTAIN THE AVERAGE LINE VOLTAGE, SURGES, SAGS, IMPULSES AND FREQUENCY OF THE SUPPLY VOLTAGE. THE ANALYSIS OF A SIMULATED LOAD USING A POWER SYSTEMS ANALYZER CAPABLE OF THE ABOVE SPECIFICATIONS, SHOULD BE CARRIED OUT OVER A CONTINUOUS SEVEN DAY PERIOD PRIOR TO INSTALLATION. THE RESULTS OF THIS ANALYSIS SHOULD BE REVIEWED WITH THE LOCAL SERVICE REPRESENTATIVE TO DETERMINE WHETHER A VOLTAGE/FREQUENCY STABILIZER, POWER LINE PROTECTOR OR FILTERS ARE REQUIRED TO BE INSTALLED BY THE PURCHASER, AS PART OF THE PREINSTALLATION WORK, TO COMPLY WITH THE ABOVE ELECTRICAL REQUIREMENTS.

EMERGENCY POWER EMERGENCY POWER IS NOT RECOMMENDED FOR THE SYSTEM. SERIOUS DISRUPTION OF EQUIPMENT OPERATION CAN RESULT FROM POWERLINE DISTURBANCES BY SWITCHING TO EMERGENCY POWER. IF CONTINUOUS OPERATION IS REQUIRED AN ON-LINE TYPE UPS IS RECOMMENDED. EMERGENCY POWER RECOMMENDED IS THE LIGHTING IN THE ROOM TO ALLOW SAFE EVACUATION OF THE PATIENT AND PERSONNEL.

ELECTRICAL NOTES

- NOTE 1: ALL WIRES SPECIFIED SHALL BE COPPER STRANDED, FLEXIBLE, THERMO-PLASTIC, COLOR CODED, CUT 10 FOOT LONG AT OUTLET BOXES, DUCT TERMINATION POINTS OR STUBBED CONDUIT ENDS. ALL CONDUCTORS, POWER, SIGNAL AND GROUND, MUST BE RUN IN A CONDUIT OR DUCT SYSTEM. ELECTRICAL CONTRACTOR SHALL RING OUT AND TAG ALL WIRES AT BOTH ENDS. WIRE RUNS MUST BE CONTINUOUS COPPER STRANDED AND FREE FROM SPLICES. ALUMINUM OR SOLID WIRES ARE NOT ALLOWED.
- NOTE 2: WIRE SIZES GIVEN ARE FOR USE OF EQUIPMENT. LARGER SIZES MAY BE REQUIRED BY LOCAL CODES.
- NOTE 3: IT IS RECOMMENDED THAT ALL WIRES BE COLOR CODED, AS REQUIRED IN ACCORDANCE WITH NATIONAL AND LOCAL ELECTRICAL CODES.
- NOTE 4: CONDUIT SIZES SHALL BE VERIFIED BY THE ARCHITECT, ELECTRICAL ENGINEER OR CONTRACTOR, IN ACCORDANCE WITH LOCAL OR NATIONAL CODES.
- NOTE 5: CONVENIENCE OUTLETS ARE NOT ILLUSTRATED. THEIR NUMBER AND LOCATION ARE TO BE SPECIFIED BY OTHERS. LOCATE AT LEAST ONE CONVENIENCE OUTLET CLOSE TO THE SYSTEM CONTROL, THE POWER DISTRIBUTION UNIT AND ONE ON EACH WALL OF THE PROCEDURE ROOM. USE HOSPITAL APPROVED OUTLET OR EQUIVALENT.
- NOTE 6: GENERAL ROOM ILLUMINATION IS NOT ILLUSTRATED. CAUTION SHOULD BE TAKEN TO AVOID EXCESSIVE HEAT FROM OVERHEAD SPOTLIGHTS. DAMAGE CAN OCCUR TO CEILING MOUNTING COMPONENTS AND WIRING IF HIGH WATTAGE BULBS ARE USED. RECOMMEND LOW WATTAGE BULBS NO HIGHER THAN 75 WATTS AND USE DIMMER CONTROLS (EXCEPT MR). DO NOT MOUNT LIGHTS DIRECTLY ABOVE AREAS WHERE CEILING MOUNTED ACCESSORIES WILL BE PARKED.
- NOTE 7: ROUTING OF CABLE DUCTWORK, CONDUITS, ETC., MUST RUN DIRECT AS POSSIBLE OTHERWISE MAY RESULT IN THE NEED FOR GREATER THAN STANDARD CABLE LENGTHS (REFER TO THE INTERCONNECTION DIAGRAM FOR MAXIMUM USABLE LENGTHS POINT TO POINT).
- NOTE 8: CONDUIT TURNS TO HAVE LARGE, SWEEPING BENDS WITH MINIMUM RADIUS IN ACCORDANCE WITH NATIONAL AND LOCAL ELECTRICAL CODES.
- NOTE 9: A SPECIAL GROUNDING SYSTEM IS REQUIRED IN ALL PROCEDURE ROOMS BY SOME NATIONAL AND LOCAL CODES. IT IS RECOMMENDED IN AREAS WHERE PATIENTS MIGHT BE EXAMINED OR TREATED UNDER PRESENT, FUTURE, OR EMERGENCY CONDITIONS. CONSULT THE GOVERNING ELECTRICAL CODE AND CONFER WITH APPROPRIATE CUSTOMER ADMINISTRATIVE PERSONNEL TO DETERMINE THE AREAS REQUIRING THIS TYPE OF GROUNDING SYSTEM.
- NOTE 10: THE MAXIMUM POINT TO POINT DISTANCES ILLUSTRATED ON THIS DRAWING MUST NOT BE EXCEEDED.
- NOTE 11: PHYSICAL CONNECTION OF PRIMARY POWER TO GE EQUIPMENT IS TO BE MADE BY CUSTOMERS ELECTRICAL CONTRACTOR WITH THE SUPERVISION OF A GE REPRESENTATIVE. THE GE REPRESENTATIVE WOULD BE REQUIRED TO IDENTIFY THE PHYSICAL CONNECTION LOCATION, AND INSURE PROPER HANDLING OF GE EQUIPMENT.

DIAGRAM KEY

- CUSTOMER/CONTRACTOR SUPPLIED WIRING. ROUTE IN ADEQUATE CONDUIT OR RACEWAY.
- GE FURNISHED CABLE RUNS. ROUTE IN EMPTY CONDUIT OR RACEWAY.
- 59' [18M] MAXIMUM RUN LENGTH BETWEEN JUNCTION POINTS. Feet, [Meters]

**GE Healthcare**  
Healthcare Project Implementation - Design Center  
Madison, Wisconsin

SHEET TITLE: ELECTRICAL SPECIFICATIONS  
MODALITY TYPE: DISCOVERY NM750b

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PROJECT TITLE:  
**TYPICAL FINAL  
INSTALLATION DRAWING**

PROJECT	REVISION
7-80f	00

DATE: 26.Sep.12  
DRAWN BY: JLT  
CHECKED BY: CPC

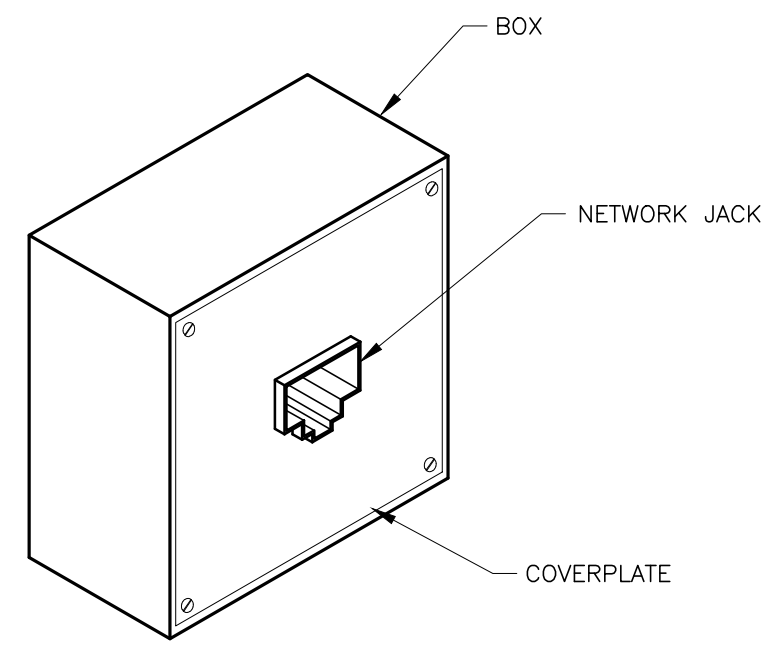
REVISION HISTORY:


SHEET  
**E2**

P1M R1

ELECTRICAL DETAIL  
BOX WITH COVERPLATE AND NETWORK JACK

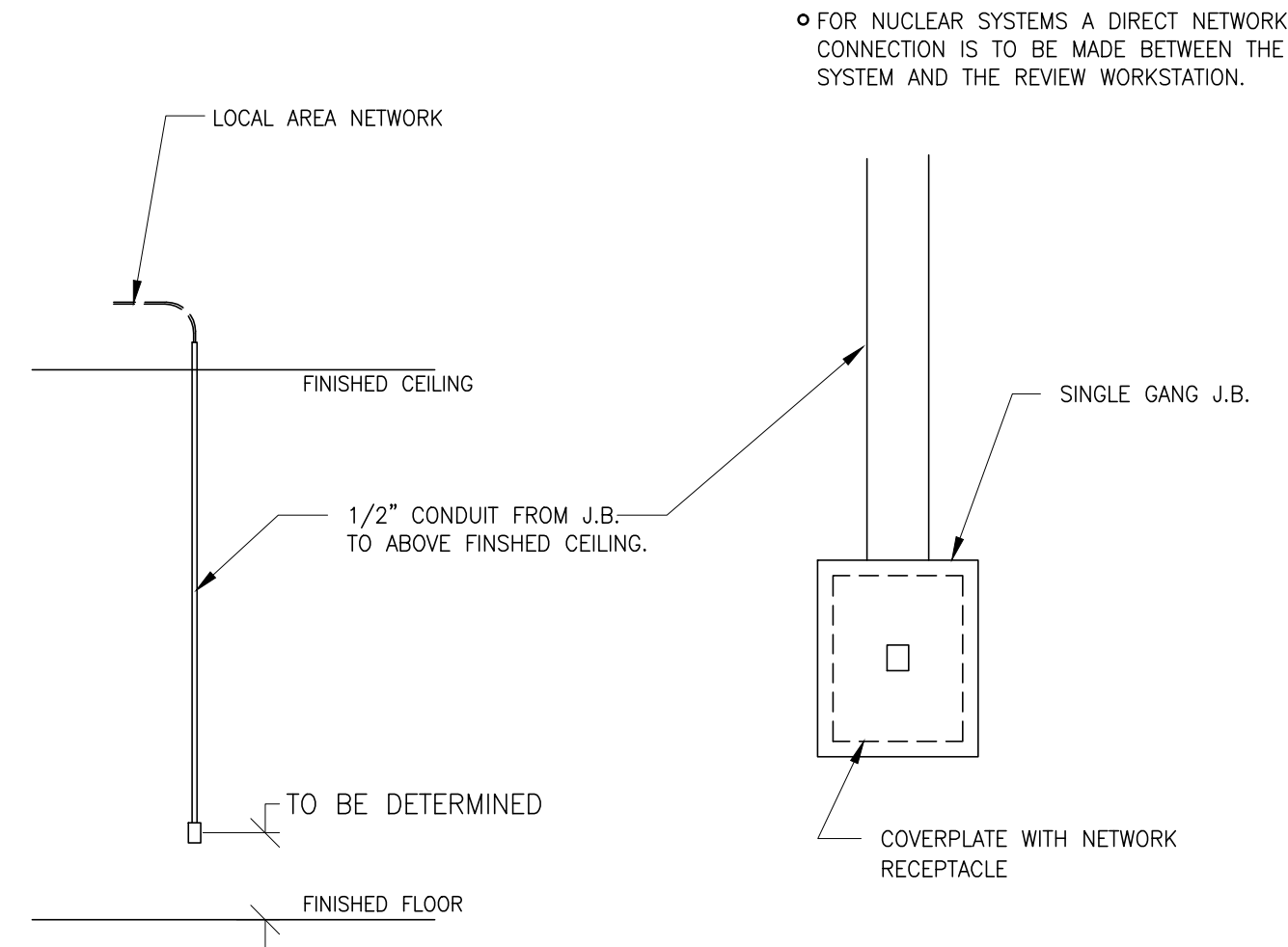
ELEC-83  
REV. DATE: 10/06/98



DETAIL NOT TO SCALE

ELECTRICAL DETAIL  
NETWORK CONNECTION (TYPICAL)

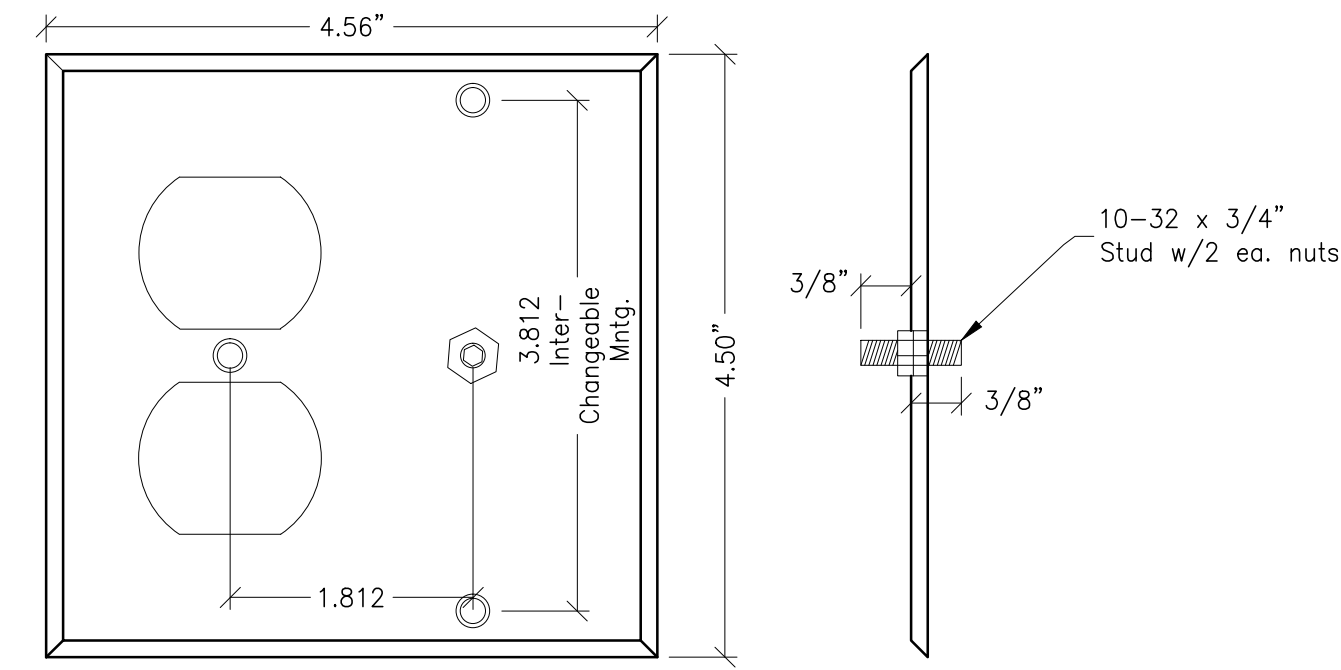
ELEC-84  
REV. DATE: 03/06/04



DETAIL NOT TO SCALE

ELECTRICAL DETAIL  
DUPLEX OUTLET COVERPLATE WITH GROUND STUD

ELEC-176  
REV. DATE: 24.JUN.11



DETAIL NOT TO SCALE

SHEET TITLE: ELECTRICAL DETAILS  
MODALITY TYPE: DISCOVERY NM750b

THIS PLAN IS SUBMITTED TO SURVEY LOCATION OF GE HEALTHCARE EQUIPMENT AND ASSOCIATED APPARATUS. ELECTRICAL WIRING DETAILS AND ROOM ARRANGEMENTS IN PREPARING THIS PLAN, EVERY EFFORT HAS BEEN MADE TO CONFORM DETAILS TO THE ACTUAL CONSTRUCTION PURPOSES. HOWEVER, THE COMPANY CANNOT ACCEPT RESPONSIBILITY FOR ANY DAMAGES RESULTING THEREFROM.

PROJECT TITLE:  
**TYPICAL FINAL  
INSTALLATION DRAWING**

PROJECT	REVISION
7-80f	00
DATE:	26.Sep.12
DRAWN BY:	JLT
CHECKED BY:	CPC

REVISION HISTORY:  
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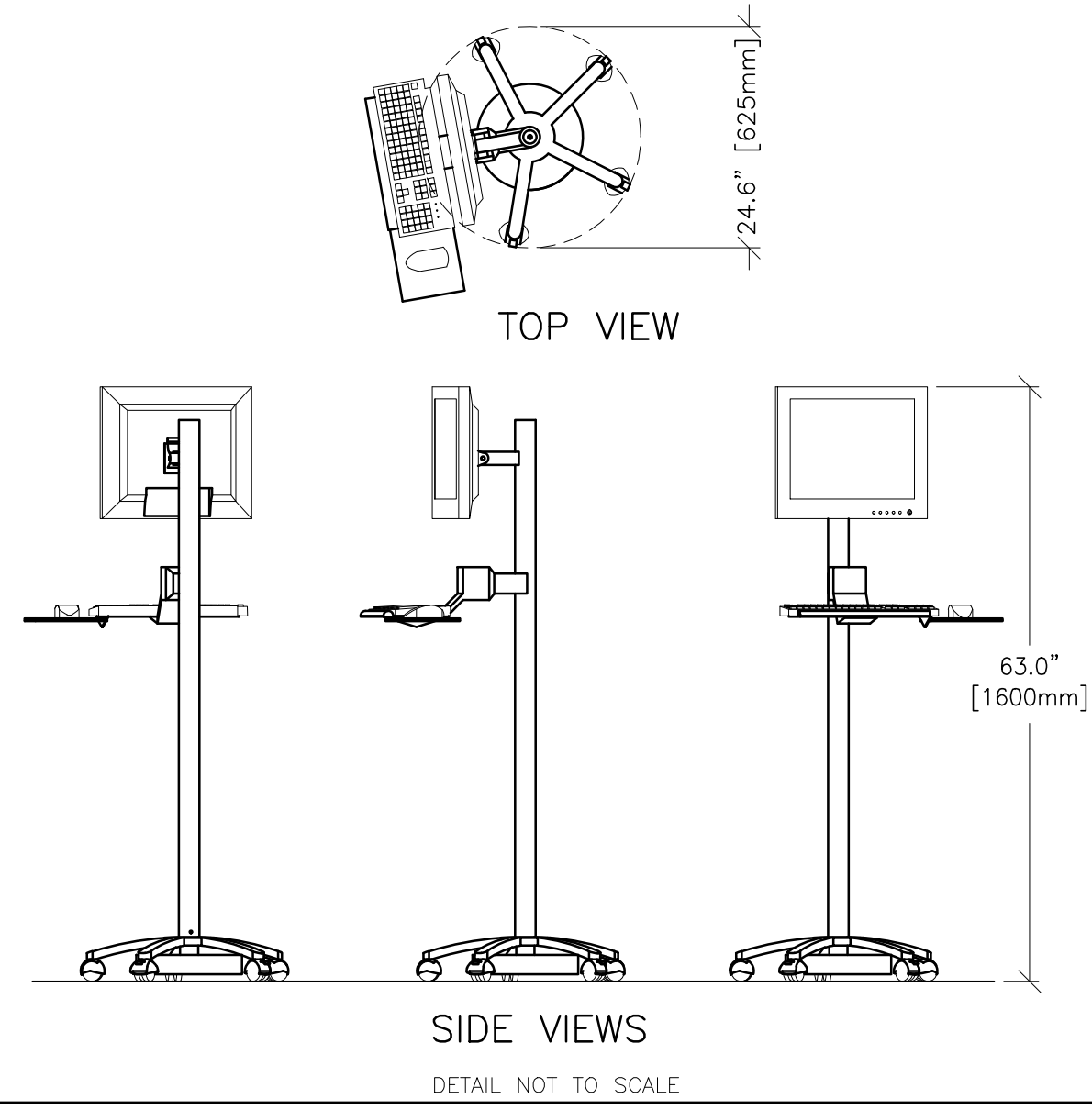
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**E3**

P1M R1

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Healthcare Project Implementation - Design Center  
Milwaukee, Wisconsin

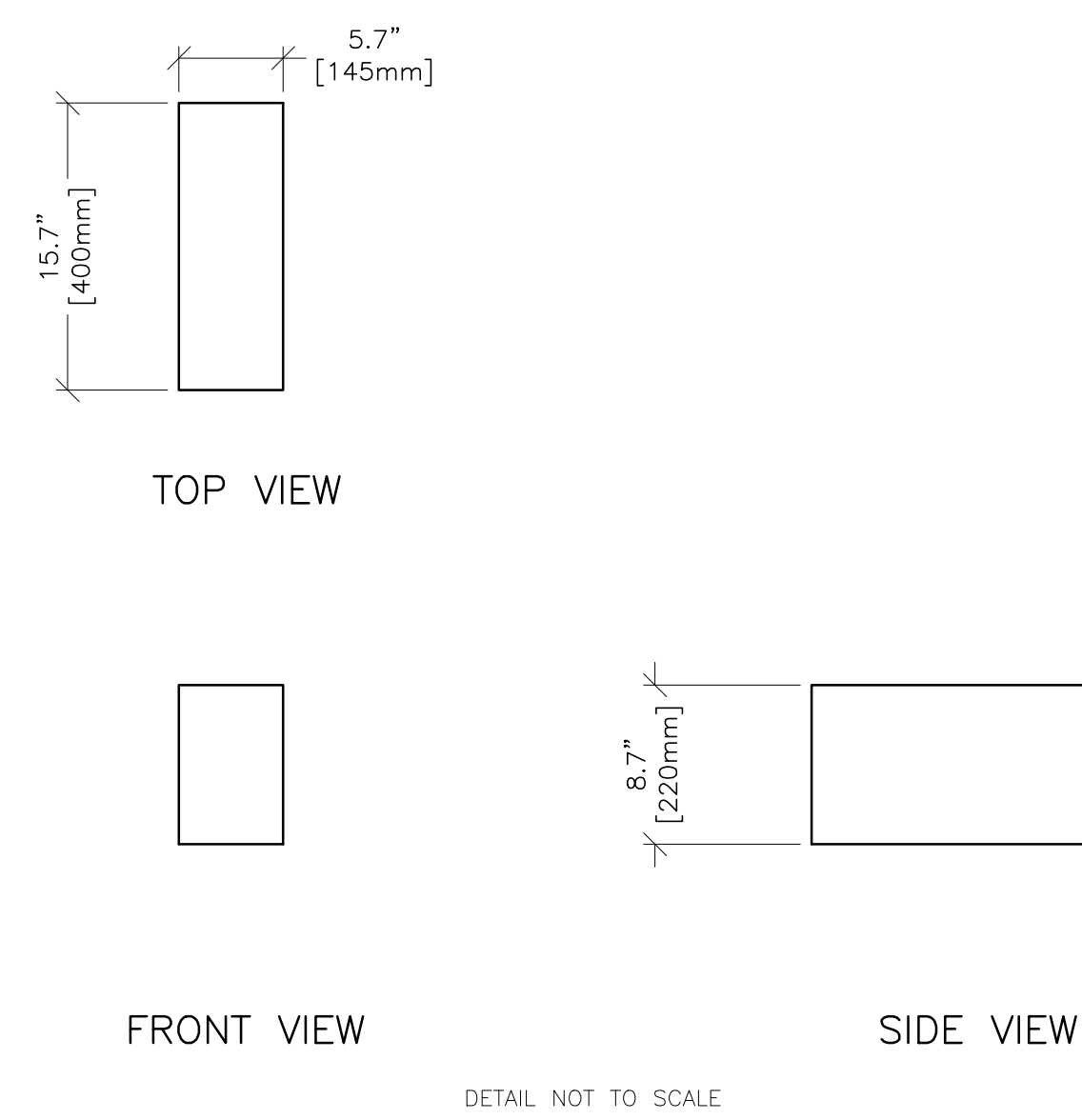
EQUIPMENT DETAIL  
OPERATORS CONSOLE

B4305D  
REV. DATE: 06.NOV.11



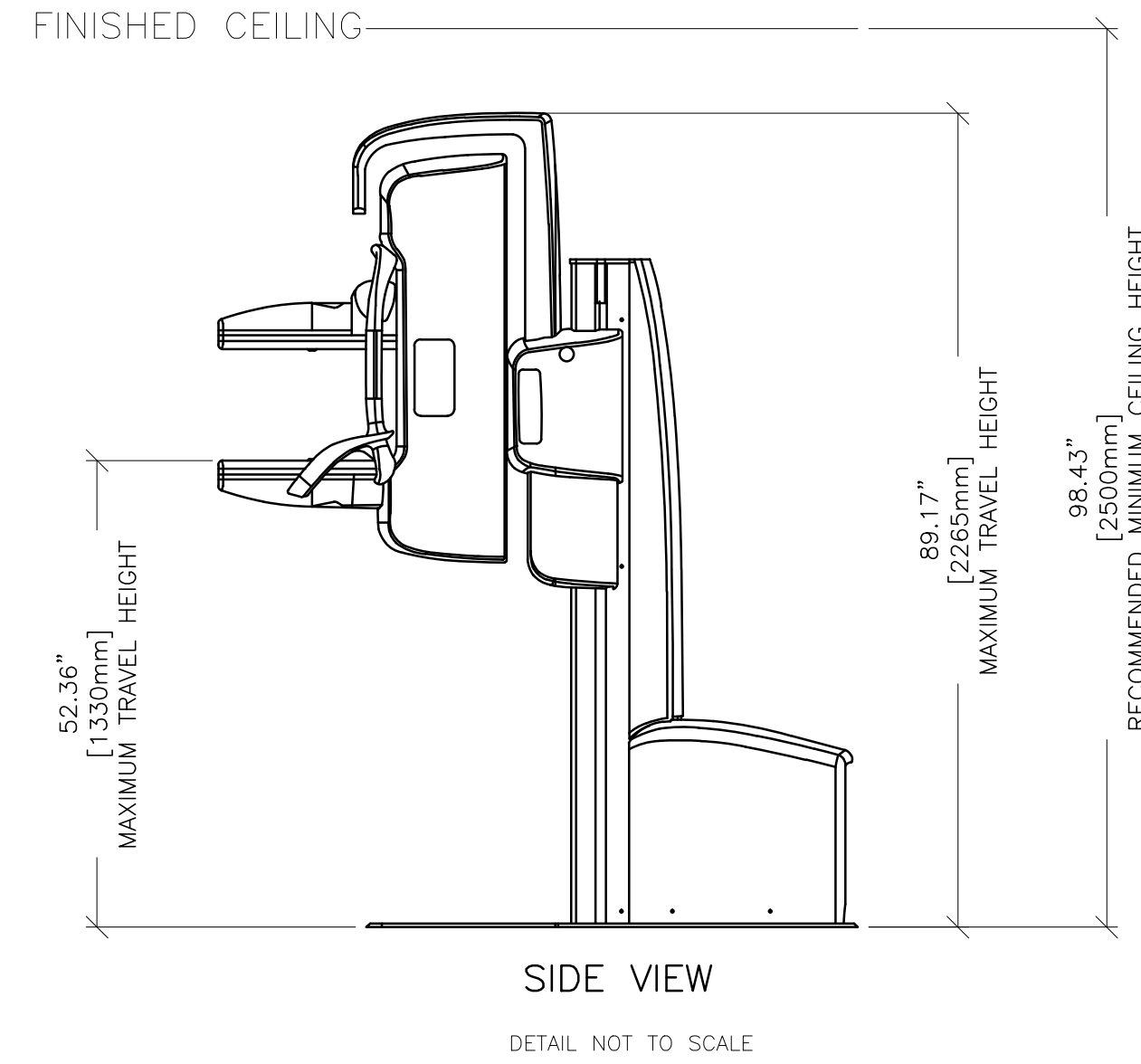
EQUIPMENT DETAIL  
1.5KVA UNINTERRUPTIBLE POWER SUPPLY (UPS)

B750BA  
REV. DATE: 06.NOV.11



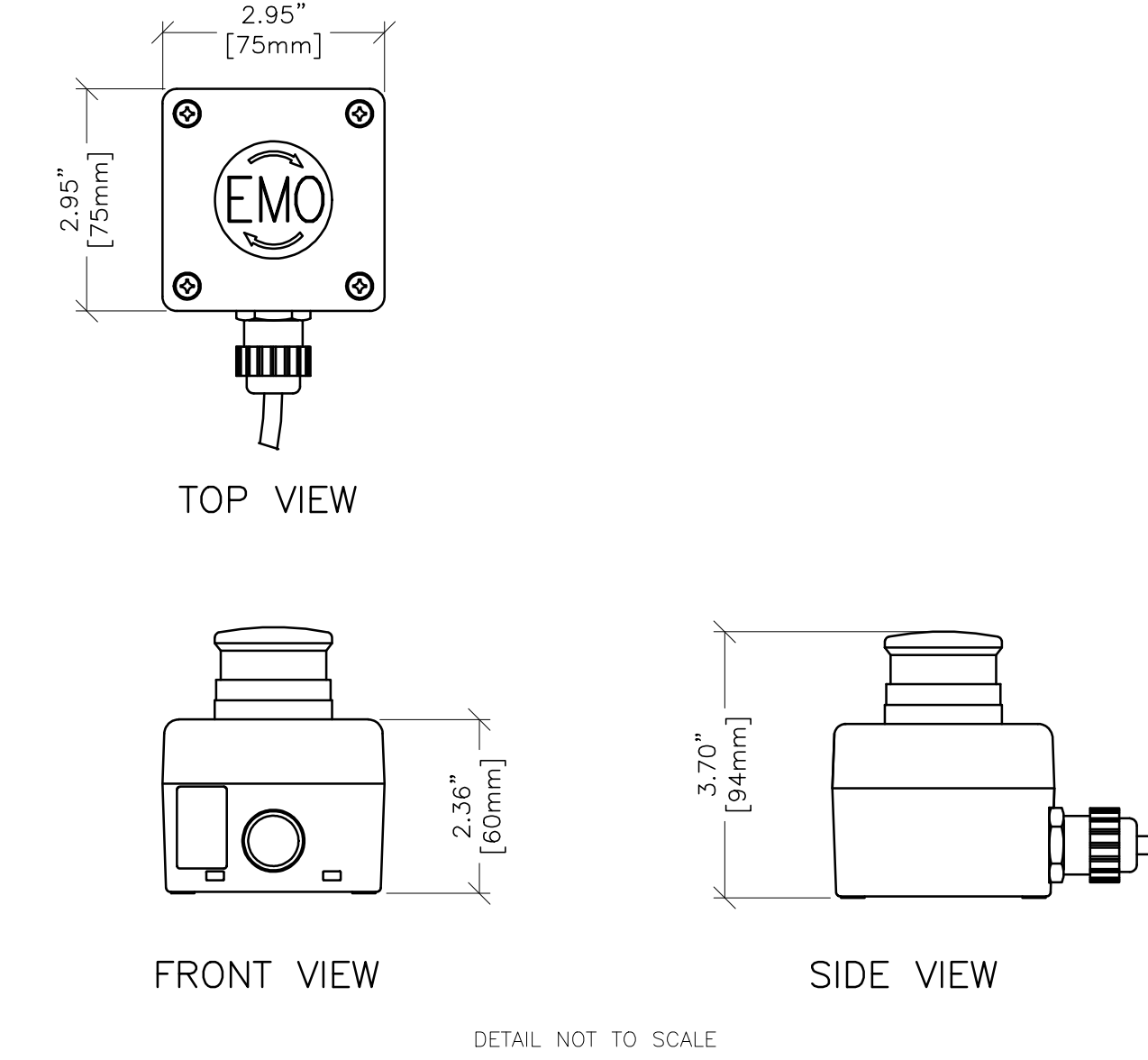
EQUIPMENT DETAIL  
DISCOVERY NM 750b GANTRY ASSEMBLY

B750BB  
REV. DATE: 06.NOV.11



EQUIPMENT DETAIL  
EMO PUSHBUTTON

DB81058  
REV. DATE: 22.SEP.11



SHEET TITLE: EQUIPMENT DETAILS  
MODALITY TYPE: DISCOVERY NM750b

THIS PLAN IS SUBMITTED TO SUGGEST LOCATION OF HEALTHCARE EQUIPMENT AND ASSOCIATED APPARATUS, ELECTRICAL WIRING DETAILS AND ROOM ARRANGEMENTS. IN PREPARING THIS PLAN, EVERY EFFORT HAS BEEN MADE TO CONFORM DETAILS TO THE MANUFACTURER'S DIMENSIONS AND TO THE US AND CANADIAN ELECTRICAL CODES AND THE US AND CANADIAN CONSTRUCTION PRACTICES. HOWEVER, THE COMPANY CANNOT ACCEPT RESPONSIBILITY FOR ANY DAMAGES RESULTING THEREFROM.

PROJECT TITLE:

TYPICAL FINAL  
INSTALLATION DRAWING

PROJECT	REVISION
7-80f	00
DATE:	26.Sep.12
DRAWN BY:	JLT
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REVISION HISTORY:

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SHEET  
D1

P1M R1

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Milwaukee, Wisconsin