

Drawing Index

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

SITE READINESS

C1

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A1

(Equipment locations, heat loads, component weights, environmental specs)

STRUCTURAL LAYOUT

S1

(Structural support/mounting locations for floor/wall/ceiling, wall support elevations)

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(Floor and Ceiling loading information)

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E1

(Contractor supplied wiring, interconnect methods, junction point locations and descriptions)

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E2

(Maximum wiring run lengths, interconnect diagram, system power specifications)

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E3

EQUIPMENT DETAILS

D1

These 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 operation of such equipment in compliance with GE Healthcare's written specifications and all applicable federal, state, and/or local requirements.

* REQUIRED REFERENCE *

Infinia 2 w/Hawkeye
Pre Installation Manual
2411013-100

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

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 D0C0422752						
GEHC Global Order # : _____			Customer: _____			
GEHC PMI: _____			FE / Installer: _____			
The customer is responsible for proper site preparation regardless of any GEHC measurements/inspections/assessments.						
Inspection Date: _____				Comments		
GEHC Minimum Requirements				Storage is ready?	PMI is ready?	
				FE is ready?		
1	MR Magnet Delivery Requirements: Ensure cryogen venting system is available for magnet connection as defined by GEHC 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 vibromat installed where required. Magnet room final flooring is in place.					
2	MR RF Screen Room Requirements: RF Screen Room is tested with copy of Test Report, emailed to 56davin@GE.com, that it 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	State Regulatory Requirements: Facility registration number provided for states of <u>IL, KY, HI, RI, SC, TX, & WA</u> . X-ray shielding plan and state acknowledgment letter provided to installer for <u>AR, DC, NC, SC, CO</u>					
4	Site Drawing Requirements: Final version of equipment network and antenna, installation drawings (including red lined versions) verified to match actual room and has been provided to installer.					
5	Surface Penetration Requirements: 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.					
6	Pre-Delivery Route Requirements: 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).					
7	Finished Room Requirements: Rooms that will contain equipment, including storage areas not in scan suite, are dust free. Provisions 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.					
8	Electrical Requirements: 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.					
9	HVAC Requirements: 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.					
10	Flooring Requirements: 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.					
11	Ceiling Requirements: 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 PMI discretion.					
12	Staging Requirements: Space has been identified to support the active installation process only. This area meets PIM/project book requirements.					
13	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.					
14	Network Connectivity: 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.					
15	Medical Gases Requirements: Systems (hard piped or portable) in place to allow testing and calibration of equipment (anesthesia, including ventilation).					

GE Healthcare

Healthcare Project Implementation – Design Center

Milwaukee, Wisconsin

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SHEET TITLE: SITE READINESS

MODALITY TYPE: INFINIA 2 w/HAWKEYE

THIS PLAN IS SUBMITTED TO SUPPORT 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 TO THE ACTUAL CONSTRUCTION PURPOSES AND THE COMPANY CANNOT ACCEPT RESPONSIBILITY FOR ANY DAMAGES RESULTING THEREFROM.

PROJECT TITLE:

TYPICAL FINAL INSTALLATION DRAWING

PROJECT 7-64F

REVISION 00

DATE: 04.0ct.12

DRAWN BY: JLT


CHECKED BY: CPC

REVISION HISTORY:

SHEET C1

GE EQUIPMENT LISTING

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

ITEM NO. 	QUANTITY ORDERED	REFER TO SHEET "D"			STRC PLAN	ELEC PLAN
	ITEM DESCRIPTION (* = EXISTING/REINSTALL)	WEIGHT	HEAT OUTPUT (PER HOUR)	DETAIL NO.		

1	UPS CONTROL CABINET	39 lbs	1740 ktu		-	UPS	-
2	UPS BATTERY CABINET	198 lbs			-	BAT	-
3	OPERATORS CONSOLE ON CART	44 lbs	256 ktu	B4305G	-	AMC	-
4	IMAGING TABLE	881 lbs	341 ktu		.	NMT	S
5	TABLE SWING FOR COLLIMATOR EXCHANGE				.		
6	INFINIA II IMAGING SYSTEM GANTRY WITH HAWKEYE OPTION	6263 lbs	8600 ktu	H2504LY H2504LY00X1	H30	NMC	C
7	LIMIT OF TABLE TRAVEL				.		-
8	TABLE SWING PLATE FOR COLLIMATOR EXCHANGE				.		-
9	2 COLLIMATOR STORAGE CART	1058 lbs		H2504LE	.		-
10	XELERIS WORKSTATION	55 lbs	255 ktu	M1014AW	.	WS	S
11	COLOR PRINTER				.	CP	S
12	UPS SYSTEM	33 lbs	4436 ktu	R4504AA	.	UPS1	

[illegible]

SCALE: 1/4" = 1'-0" EQUIPMENT LAYOUT 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.

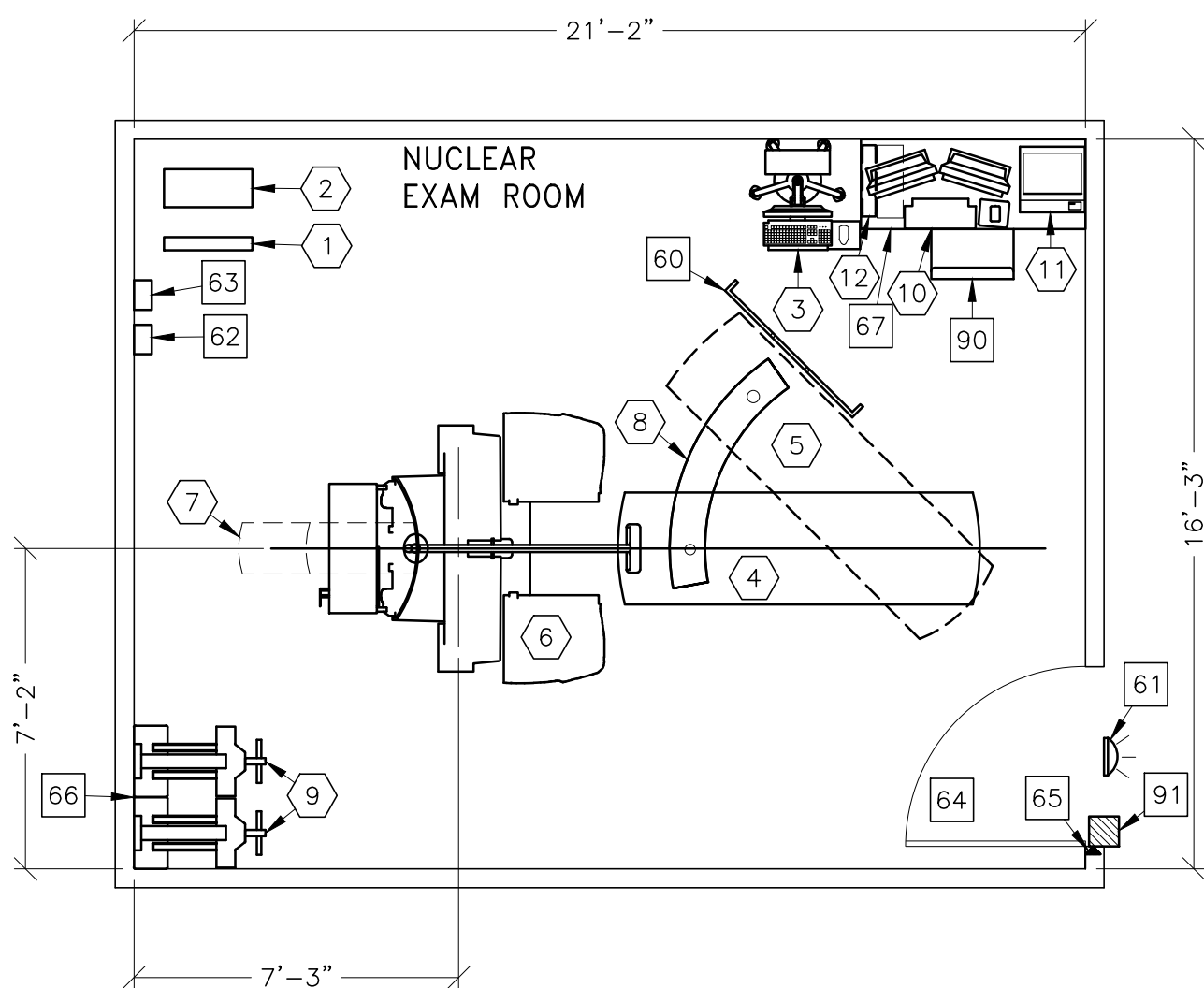
ASSIGNED BY THE HOSPITAL NET ADMIN IF CONNECTING TO THE HOSPITAL LAN	HOSTNAME	IP	AE TITLE	DICOM PORT
ACQUISITION HOST				
PROCESSING HOST				
HARDCOPY HOST				
LAN NET MASK				
GATEWAY TO OTHER NETWORKS				
OTHER				
HUB OR SWITCH				

* PREPARE ADEQUATE NETWORK SOCKETS IN THE PROPER LOCATIONS TO SUPPORT ALL ACQUISITION, LOCAL AND REMOTE WORKSTATION.

* IF NECESSARY MUST ASSIGN DEDICATED IP ADDRESSES (NOT DHCP) NOTE THE ADDRESSES BELOW FOR THE ACQUISITION, LOCAL AND REMOTE WORKSTATIONS.

* REFER TO THE WIRING DIAGRAM 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	MOBILE RADIATION SHIELD
61	X-RAY ON WARNING LIGHT - 24V FIXTURE
62	MAIN DISCONNECT CONTROL, GE CAT. NO. E4502SN
63	DISCONNECT
64	MINIMUM DOOR OPENING FOR EQUIPMENT DELIVERY IS 45 IN. W X 60 IN. H [1143mm X 2083mm], CONTINGENT ON A 84 IN. [2134mm] CORRIDOR WIDTH
65	DOOR LIMIT SWITCH (REQUIRED IN SOUTH CAROLINA, OTHERWISE NEEDED IF REQUIRED BY STATE/LOCAL CODES)
66	OPTIONAL WALL PROTECTION FROM COLLIMATOR CART. ALSO, FINISHED FLOORING SHOULD BE SUBJECT TO DAMAGE DURING MOVEMENT AND BEING PARKED FOR A LONG PERIOD. SUFFICIENT FLOORING MUST BE USED TO PREVENT DAMAGE.
67	TABLE

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

90	OPERATORS CHAIR
91	X-RAY ROOM WARNING LIGHT CONTROL PANEL. REFERENCE JUNCTION POINT "XRLC" ON SHEET "E1" FOR DETAILED DESCRIPTION-E4500AK FOR WARNING LIGHT CONTROL ONLY.

GENERAL SPECIFICATIONS

- o THE REQUIRED CEILING HEIGHT INDICATED ON THESE PLANS IS TO ENSURE EQUIPMENT FUNCTION IS NOT INHIBITED. CONSULT WITH YOUR LOCAL GEHC IS 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 PRECIPITATED 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. THE APARTMENT EQUIPMENT OPERATION, SERVICEABILITY, AND RESTRICTING CABLE LENGTHS, ETC., MAKE THIS ESSENTIAL FOR A PROPER IS. GEHC RESERVES THE RIGHT TO MAKE 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: 68° TO 77° F [20° TO 25° 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.

SHEET TITLE: EQUIPMENT LAYOUT

MODALITY TYPE: INFINIA 2 W/HAWKEYE

PROJECT TITLE:

TYPICAL FINAL INSTALLATION DRAWING

SHEET

A1

THIS SHEET IS PART OF THE DOCUMENT SET LISTED ON SHEET C1 AND SHOULD NOT BE SEPARATED

TYPICAL WALL SUPPORT ELEVATIONS

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

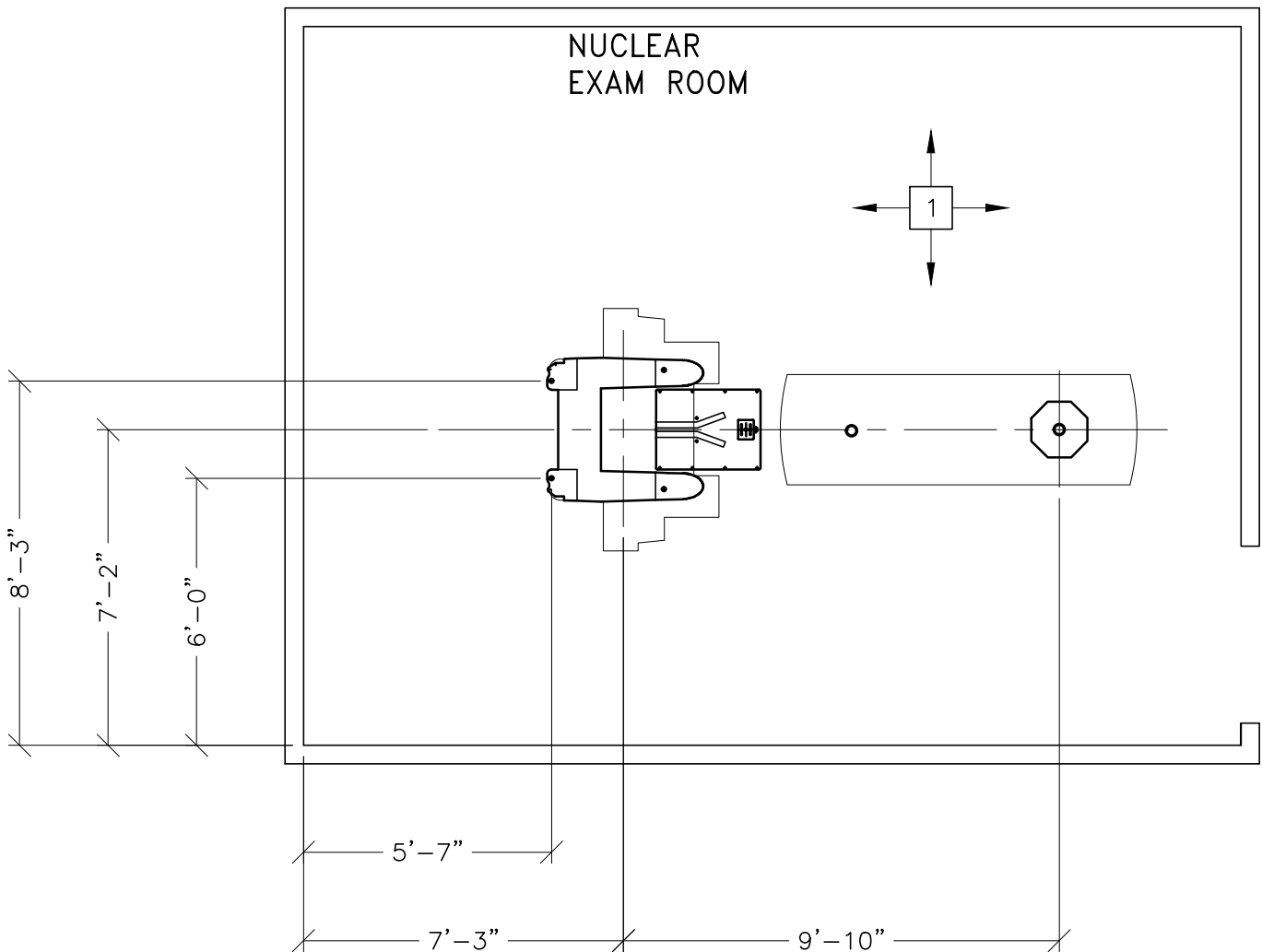
STRUCTURAL LAYOUT

RECOMMENDED CEILING HEIGHT = 8'-0"

STRUCTURAL SUPPORT METHODS

CUSTOMER/CONTRACTOR SUPPLIED AND INSTALLED ITEMS

ITEM NO.	ITEM DESCRIPTION (* INDICATES EXISTING)
<input type="checkbox"/>	
1	FLOOR LEVELNESS IN THE EXAM ROOM MUST BE LEVEL WITHIN 1/32" IN. [3 CM] OVER 170 IN. [430 CM]. SEE DETAIL H3000X1 ON SHEET S2. FLOOR FLATNESS IN THE EXAM ROOM MUST HAVE NO DEVIATIONS GREATER THAN 3/16" [0.5 CM] OVER 60 IN. [150 CM].



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: INFINIA 2 W/HAWKEYE

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 ACTUAL CONSTRUCTION PURPOSES. HOWEVER, AND THE COMPANY CANNOT ACCEPT RESPONSIBILITY FOR ANY DAMAGES RESULTING THEREFROM.

PROJECT TITLE:

TYPICAL FINAL
INSTALLATION DRAWING

PROJECT	REVISION
7-64f	00
DATE:	04.Oct.12
DRAWN BY:	JLT
CHECKED BY:	CPC

REVISION HISTORY:

SHEET

S1

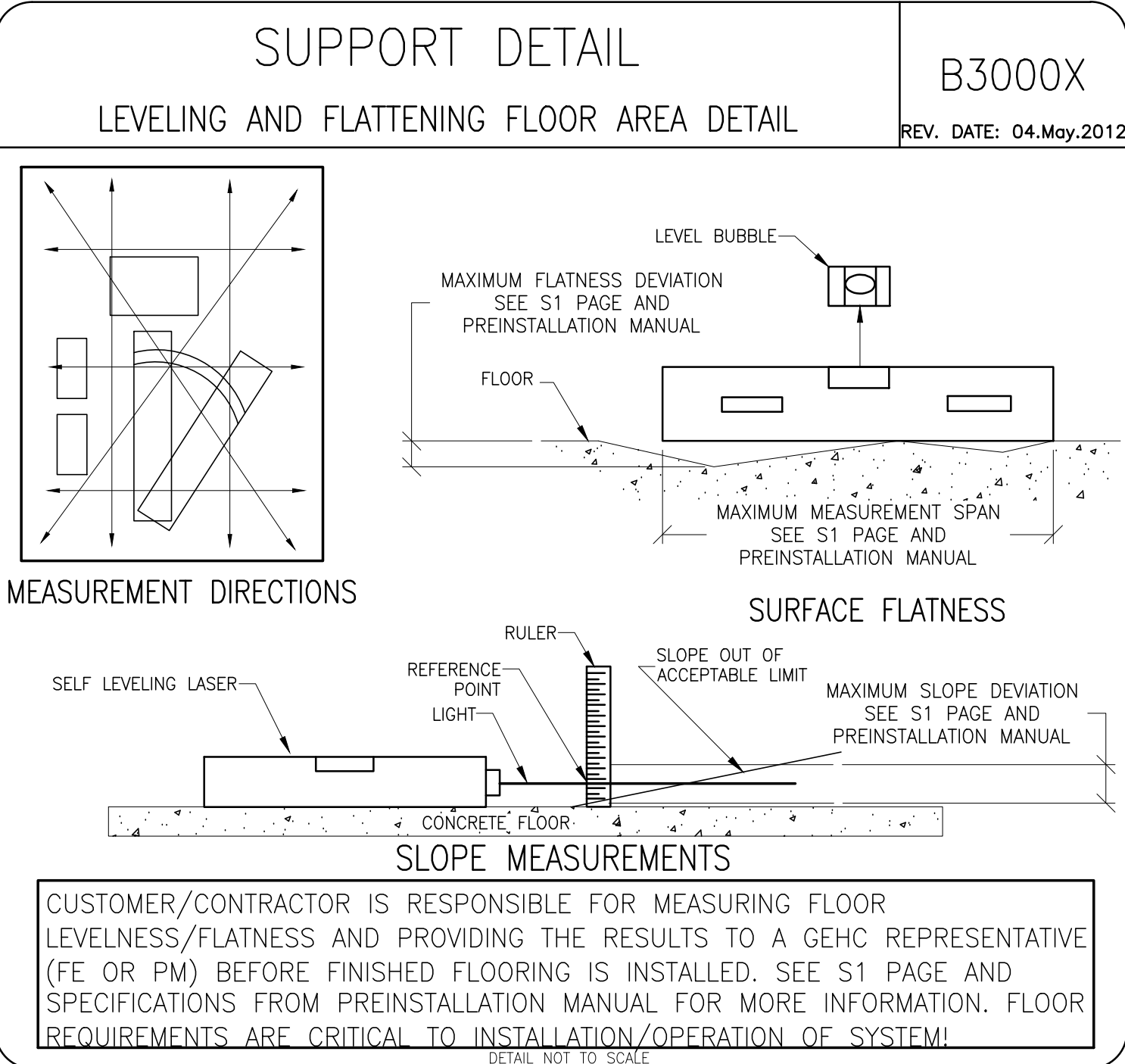
THIS SHEET IS PART OF THE DOCUMENT SET LISTED ON SHEET C1 AND SHOULD NOT BE SEPARATED



GE Healthcare

Healthcare Project Implementation - Design Center
Milwaukee, Wisconsin

PIM R3

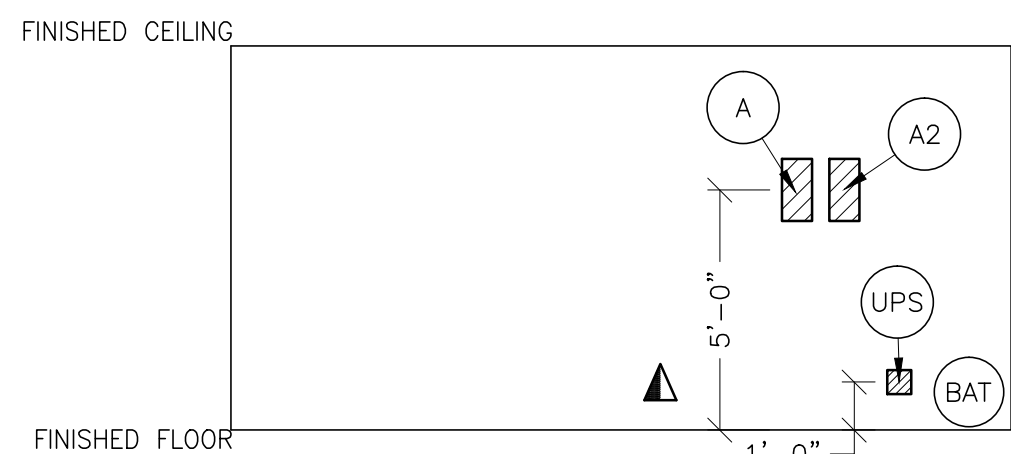


SCALE: $1/4'' = 1'-0''$

ELECTRICAL PLAN

RECOMMENDED CEILING HEIGHT = 8'-0"

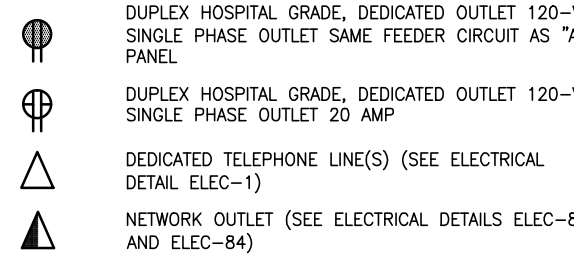
JUNCTION POINT DESCRIPTIONS



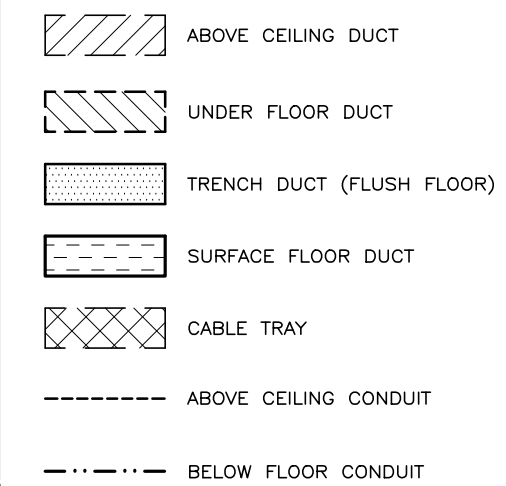
FEEDER TABLE -- INFINIA SYSTEM			
<ul style="list-style-type: none"> o CALCULATIONS BASED UPON NOMINAL VOLTAGE, WIRE SIZE IN AWG. o RECOMMENDED FEEDER SIZES FROM POWER SOURCE TO MAIN DISCONNECT. o THE GROUNDING CONDUCTOR WILL BE THE SAME SIZE AS THE POWER FEEDER. THIS GROUND WILL RUN FROM THE EQUIPMENT BACK TO THE FACILITY POWER SOURCE/MAIN DISCONNECT POINT AND ALWAYS TRAVEL IN THE SAME CONDUIT WITH THE FEEDERS AND NEUTRAL. o FOR A FULL SYSTEM UPS REFER TO ELECTRICAL DETAILS FOR UPS FEEDER WIRES. 			
RUN LENGTH IN FEET	POWER SUPPLY VOLTAGE		
	187-229 208 (60 Hz)	360-440 400 (50 Hz)	
SIZE OF FEEDERS AND GROUND WIRES (AWG)			
50	10		12
100	10		12
150	8		12
200	6		12
250	6		12
			REV. DATE: 02/25/06

ELECTRICAL OUTLET LEGEND

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



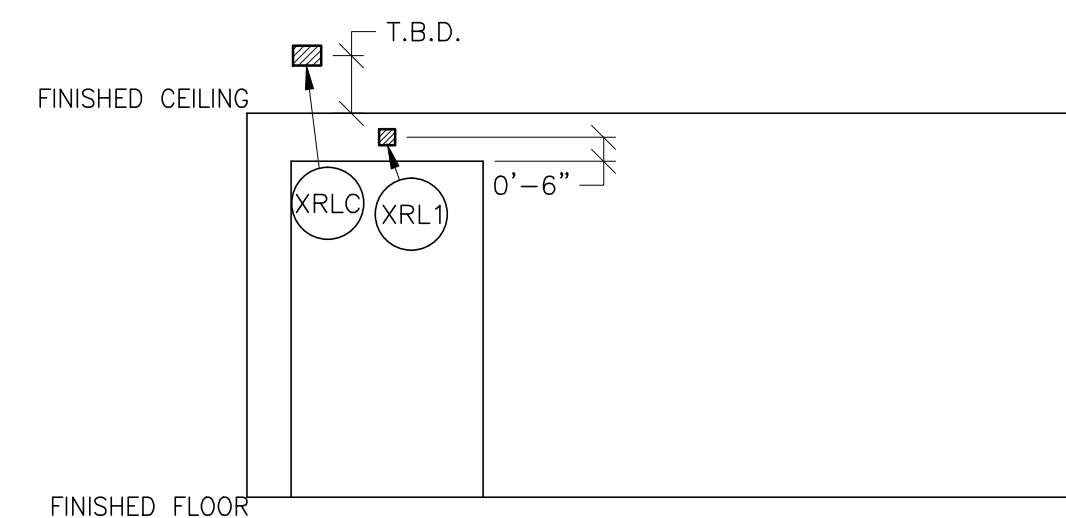
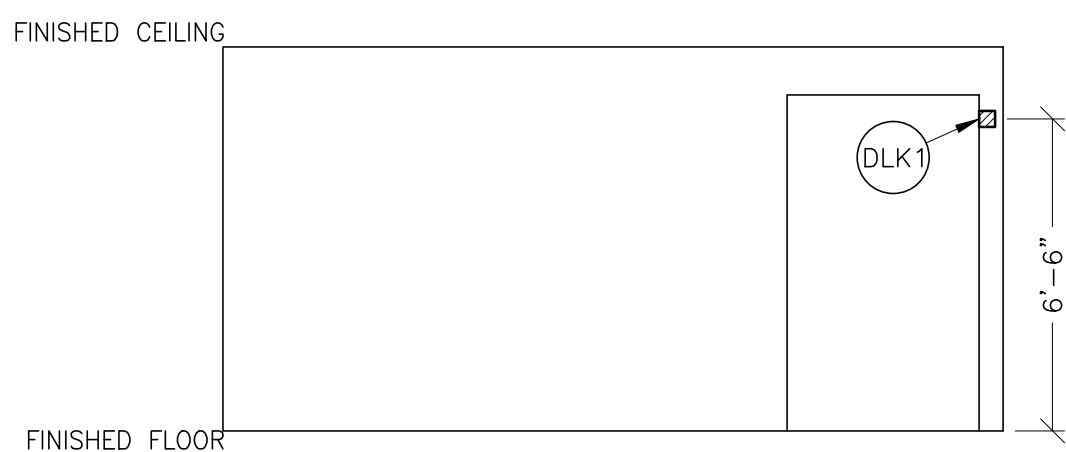
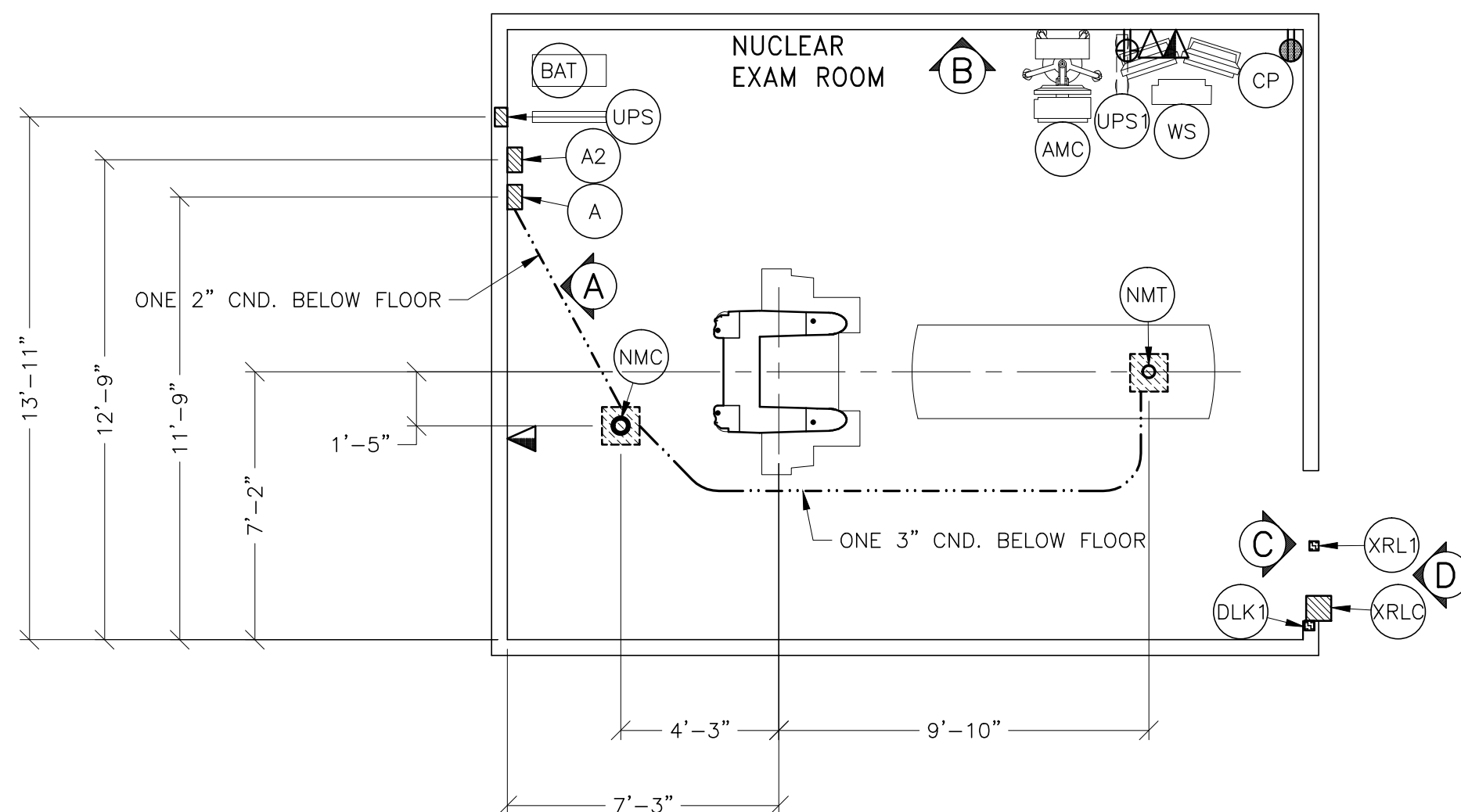
DUCT HATCHING LEGEND



JUNCTION POINT NOTES

- o ALL JUNCTION BOXES, CONDUIT, DUCT, DUCT DIVIDERS, SWITCHES, CIRCUIT BREAKERS, ETC., ARE TO BE SUPPLIED AND INSTALLED BY CUSTOMERS ELECTRICAL CONTRACTOR.
- o CONDUIT AND DUCT RUNS SHALL HAVE SWEEP RADIUS BENDS
- o CONDUITS AND DUCT ABOVE CEILING OR BELOW FINISHED FLOOR MUST BE INSTALLED AS NEAR TO CEILING OR FLOOR AS POSSIBLE TO REDUCE RUN LENGTH.
- o CEILING MOUNTED JUNCTION BOXES ILLUSTRATED ON THIS PLAN MUST BE INSTALLED FLUSH WITH FINISHED CEILING.
- o 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.
- o ALL OPENINGS IN ACCESS FLOORING ARE TO BE CUT OUT AND FINISHED OFF WITH GROMMET MATERIAL BY THE CUSTOMERS CONTRACTOR.
- o GENERAL CONTRACTOR TO INSERT PULL CORDS FOR ALL CABLE RUN CONDUITS BETWEEN THE EQUIPMENT ROOM AND THE OPERATORS CONTROL ROOM.
- o 10 FOOT PITTAILS AT ALL JUNCTION POINTS.
- o ALL WIRING MUST BE THHN OR TFFN STRANDED COPPER THERMOPLASTIC 600 VOLT OR EQUIVALENT INSULATION. **ALUMINUM OR SOLID BARE NOT ALLOWED.**
- o 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.



○ POINT		THE FOLLOWING MATERIALS ARE TO BE SUPPLIED AND INSTALLED BY THE CUSTOMER'S ELECTRICAL CONTRACTOR		
	DESCRIPTION	QTY.	HARDWARE	DETAIL NO., SHT. E3
A	MAIN DISCONNECT AVAILABLE FROM GEMSG. CALL: 800-558-5102 OR LOCAL GE INSTALLATION PROJECT MANAGER	1	25-AMP, 208V DISCONNECT WITH LOCKOUT. GEMS CAT. NO. E4502SN NOTE: THE GANTRY IS HARDWIRED.	
A2	DISCONNECT	1	NEMA 1 FLUSH MOUNTED ENCLOSURE, WITH INSULATED GROUNDABLE NEUTRAL	ELEC-130
		1	35 AMP 208V FRONT OPERATED FUSED SAFETY SWITCH OR CIRCUIT BREAKER, PROVIDE LOCKOUT.	
AMC	ACQUISITION MOBILE CART	1	EXTERNALLY CONNECTED	
BAT	UPS BATTERY CABINET	1	EXTERNALLY CONNECTED	
CP	COLOR PRINTER	1	EXTERNALLY CONNECTED	
DLK1	DOOR SWITCH (NEEDED ONLY IF REQUIRED BY STATE/LOCAL CODES)	1	ROOM DOOR INTERLOCK LIMIT SWITCH IN FRAME - NORMALLY OPEN (24V)	
		1	SINGLE GANG BOX	
NMC	NUCLEAR MEDICINE CAMERA	1	4 IN. DIA. BUSHING & LOCKNUT	ELEC-85
		1	12 X 12 X 6 IN. BOX BELOW FLOOR	
		1	TERMINATE 4 IN. CONDUIT 1-1/2 IN. ABOVE FINISHED FLOOR	
		1	COVERPLATE	
NMT	IMAGING TABLE	1	12 X 12 X 6 IN. BOX BELOW FLOOR	ELEC-127
		1	TERMINATE 4 IN. CONDUIT FLUSH WITH FINISHED FLOOR	
UPS	UPS CABINET	1	EXTERNALLY CONNECTED TO BATTERY CABINET	ELEC-71
		1	COVERPLATE	
		2	6 X 6 X 4 IN. BOX	
		4	6 FT. LENGTH OF 1 IN. FLEXIBLE METAL CONDUIT	
		4	1 IN. DIA. BUSHING & LOCKNUT	
UPS1	UPS CABINET	1	EXTERNALLY CONNECTED	
WS	WORKSTATION	1	EXTERNALLY CONNECTED	
XRL1	WARNING LIGHT	1	COVERPLATE	ELEC-72
		1	SINGLE GANG BOX	
		1	24 VOLT FIXTURE	
XRLC	WARNING LIGHT CONTROLLER AVAILABLE FROM GEMSG. CALL: 800-558-5102 OR LOCAL GE INSTALLATION PROJECT MANAGER	1	E4500AK WARNING LIGHT CONTROL OR EQUIVALENT, MAX 24V CONTROLLER	

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
UPS > A	3-BLACK, 1-GREEN (REFER TO FEEDER FOR TABLE SIZE)
3 PHASE > A2	3-BLACK, 1-WHITE, 1-GREEN (SIZE AS REQUIRED)
A2 > UPS	3-BLACK, 1-WHITE, 1-GREEN (SIZE AS REQUIRED)
XRLC > 1 PHASE	1-ND. 14 BLACK, 1-ND. 14 WHITE, 1-ND. 14 GREEN
XRLC > NMC	1-BLACK, 1-WHITE, 1-GREEN - (SIZE AS REQUIRED)
NMC > XRLC	1-ND. 14 BLACK, 1-ND. 14 WHITE, 1-ND. 14 GREEN
DLK1 > DLK1	1-ND. 14 BLACK, 1-ND. 14 WHITE, 1-ND. 14 GREEN

ADDITIONAL CONDUIT RUNS
FOR NUCLEAR SYSTEM
(BY CONTRACTOR)

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

			REV DATE: 4/15/16
A2	TO	UPS	CONDUIT AS REQ'D
UPS	TO	A	CND AS REQ'D REFER SIZE PER FEEDER TABL
A2	TO	208-V 3 ϕ 35 AMP POWER	CONDUIT AS REQ'D
XRL1	TO	XLRC	ONE 1/2" CND.
XLRC	TO	120-V 1 ϕ POWER	CONDUIT AS REQ'D
XLRC	TO	NMC	ONE 1/2" CND.
DLK1	TO	NMC	ONE 1/2" CND.

NOTE: SEE E2 PAGE FOR MAXIMUM RUN LENGTH

SHEET TITLE: ELECTRICAL LAYOUT
MODALITY TYPE: INFINIA 2 W/HAWKEYE

PROJECT TITLE:

TYPICAL FINAL INSTALLATION DRAWING

PROJECT	REVISION
7-64f	00
DATE: 04.Oct.1	
DRAWN BY: JL	
CHECKED BY: CR	

REVISION HISTORY:

SHEET

E1

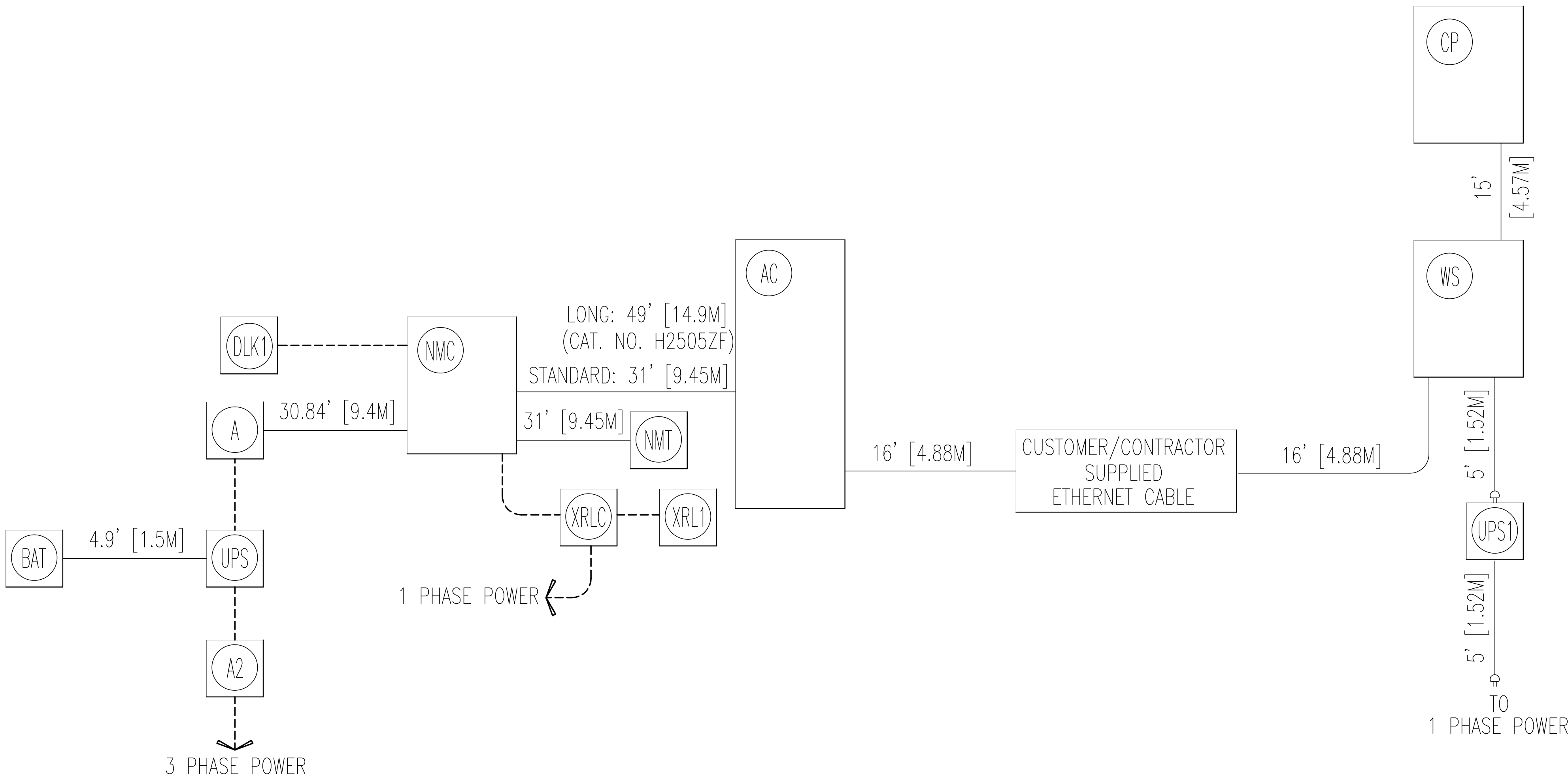
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PIM R.3

THIS SHEET IS PART OF THE DOCUMENT SET LISTED ON SHEET C1 AND SHOULD NOT BE SEPARATED

INTERCONNECT DIAGRAM



POWER SPECIFICATIONS

INFINIA SYSTEM (REV. DATE 23.JAN.12)

VOLTAGE PRIMARY DEDICATED THREE PHASE SOURCE IS REQUIRED FOR ALL INSTALLATIONS. RANGE OF LINE VOLTAGES: NOMINAL LINE VOLTAGE OF 208-V 60 HZ OR 400-V 50 HZ, 5 KVA.

REQUIRED POWER SUPPLY: WYE DISTRIBUTION

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

TABLE A
ALLOWABLE
INPUT
VOLTAGES/
CURRENT
DEMAND

NOMINAL VOLTAGE	NORMAL RANGE +10% -5%	MAXIMUM CURRENT (AMPS)	* MINIMUM STANDARD OVERCURRENT PROTECTION
208	187-229	17	25-A

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

GEHC
RECOMMENDED
UPS
REQUIREMENTS

UPS CIRCUIT BREAKER AND CONDUCTORS MUST BE SIZED FOR THE MAXIMUM INPUT CURRENT OF THE UPS. MAXIMUM INPUT CURRENT OF THE UPS. MAXIMUM INPUT CURRENT IS FULL LOAD CURRENT PLUS THE MAXIMUM BATTERY CHARGING CURRENT. CONSULT UPS NAMEPLATE AND INSTRUCTIONS TO DETERMINE REQUIREMENTS.

TRANSIENT

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 4 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.

NOTE:

THESE SPECIFICATIONS APPLY TO THE BASE SYSTEM. IF AN OPTIONAL FULL SYSTEM UPS IS APPLIED WITH THIS SYSTEM THE POWER REQUIREMENTS MAY VARY.

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]

THIS SHEET IS PART OF THE DOCUMENT SET LISTED ON SHEET C1 AND SHOULD NOT BE SEPARATED



GE Healthcare

Healthcare Project Implementation - Design Center

Minneapolis, Wisconsin

SHEET TITLE: ELECTRICAL SPECIFICATIONS

MODALITY TYPE: INFINIA 2 W/HAWKEYE

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 TO THE ACTUAL CONSTRUCTION PURPOSES. HOWEVER, THE COMPANY CANNOT ACCEPT RESPONSIBILITY FOR ANY DAMAGES RESULTING THEREFROM.

PROJECT TITLE:

TYPICAL FINAL
INSTALLATION DRAWING

PROJECT	REVISION
7-64f	00
DATE:	04.Oct.12
DRAWN BY:	JLT
CHECKED BY:	CPC

REVISION HISTORY:

SHEET

E2

WPS-100

ELECTRICAL DETAIL
INSITE CONNECTION (TYPICAL)

ELEC-1
REV. DATE: 04/24/02

ONE OF THE FOLLOWING TWO SELECTIONS MUST BE INSTALLED AT THE LOCATION SHOWN ON THE ELECTRICAL PLAN (SHEET E1) FOR GE INSITE CONNECTION BASED UPON SYSTEM CONFIGURATION.

A) ONE INTERNET ACCESSIBLE VIRTUAL PRIVATE NETWORK (VPN) CONNECTION WITH A STATIC IP ADDRESS, AND ONE TELEPHONE LINE - DEDICATED-DIRECT-DIALING, VOICE GRADE.

OR

B) TWO TELEPHONE LINES - ONE DEDICATED DIRECT-DISTANCE-DIALING, VOICE GRADE AND ONE A DEDICATED DATA LINE.

ALL ITEMS ILLUSTRATED ARE TO BE FURNISHED AND INSTALLED BY CUSTOMER OR THEIR CONTRACTOR.

DETAIL NOT TO SCALE

ELECTRICAL DETAIL
BOX WITH COVERPLATE (TYPICAL)

ELEC-71
REV. DATE: 06/04/96

DETAIL NOT TO SCALE

ELECTRICAL DETAIL
WARNING LIGHT DIAGRAM

ELEC-72
REV. DATE: 02/19/09

UNLESS SPECIFIED ON SHEET A1 AS BEING INCLUDED ON EQUIPMENT ORDER, ALL ITEMS ILLUSTRATED ARE TO BE FURNISHED AND INSTALLED BY CUSTOMER'S CONTRACTOR

DRAWING NOT TO SCALE

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

FOR NUCLEAR SYSTEMS A DIRECT NETWORK CONNECTION IS TO BE MADE BETWEEN THE SYSTEM AND THE REVIEW WORKSTATION.

DETAIL NOT TO SCALE

ELECTRICAL DETAIL
MILLENNIUM BOX MOUNTING

ELEC-85
REV. DATE: 10/30/08

DETAIL NOT TO SCALE

ELECTRICAL DETAIL
TABLE INTERCONNECT DETAIL

ELEC-127
REV. DATE: 02/21/07

DETAIL NOT TO SCALE

ELECTRICAL DETAIL
10 KVA UPS SETUP CONNECTION

ELEC-130
REV. DATE: 12/08/03

REFER TO VENDOR DOCUMENTATION FOR COMPLETE INFORMATION.

GE Healthcare

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ELECTRICAL DETAILS

MODALITY TYPE: INFINIA 2 W/HAWKEYE

THIS PLAN IS SUBMITTED TO REQUEST 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 TO THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (NEC) AND THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 70B. THE COMPANY CANNOT ACCEPT RESPONSIBILITY FOR ANY DAMAGES RESULTING THEREFROM.

TYPICAL FINAL
INSTALLATION DRAWING

PROJECT TITLE:

PROJECT: 7-64f

REVISION: 00

DATE: 04.Oct.12

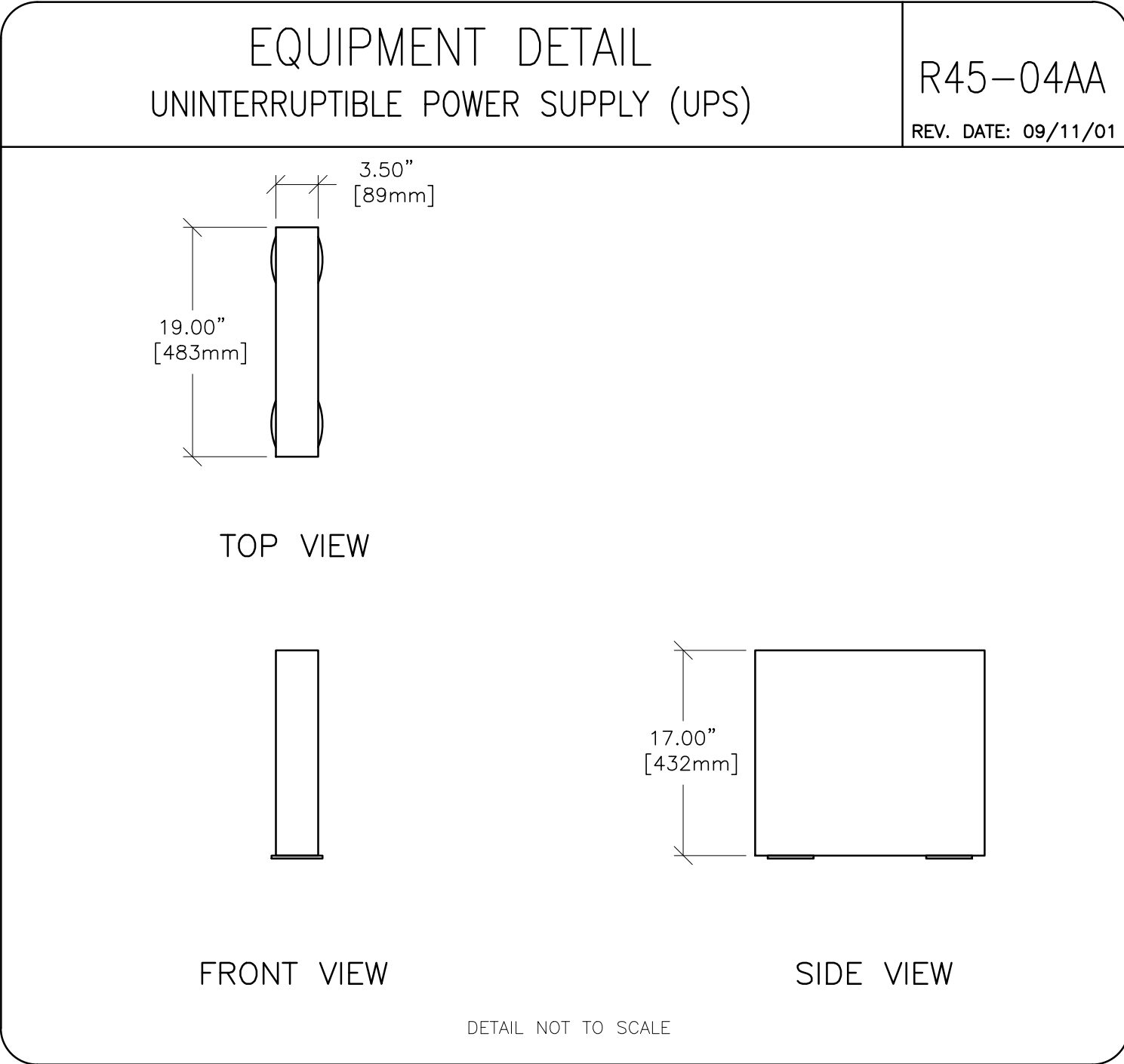
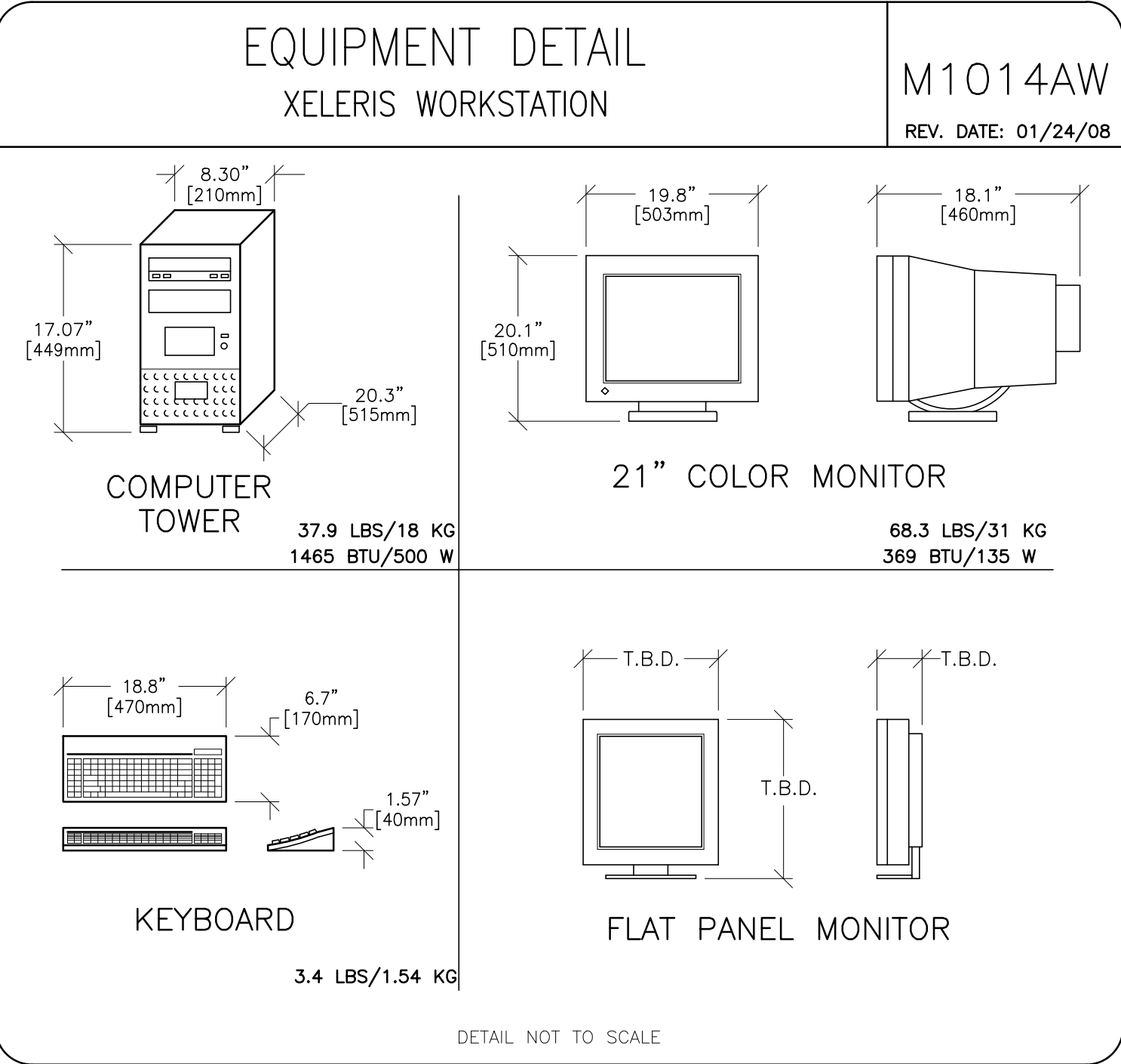
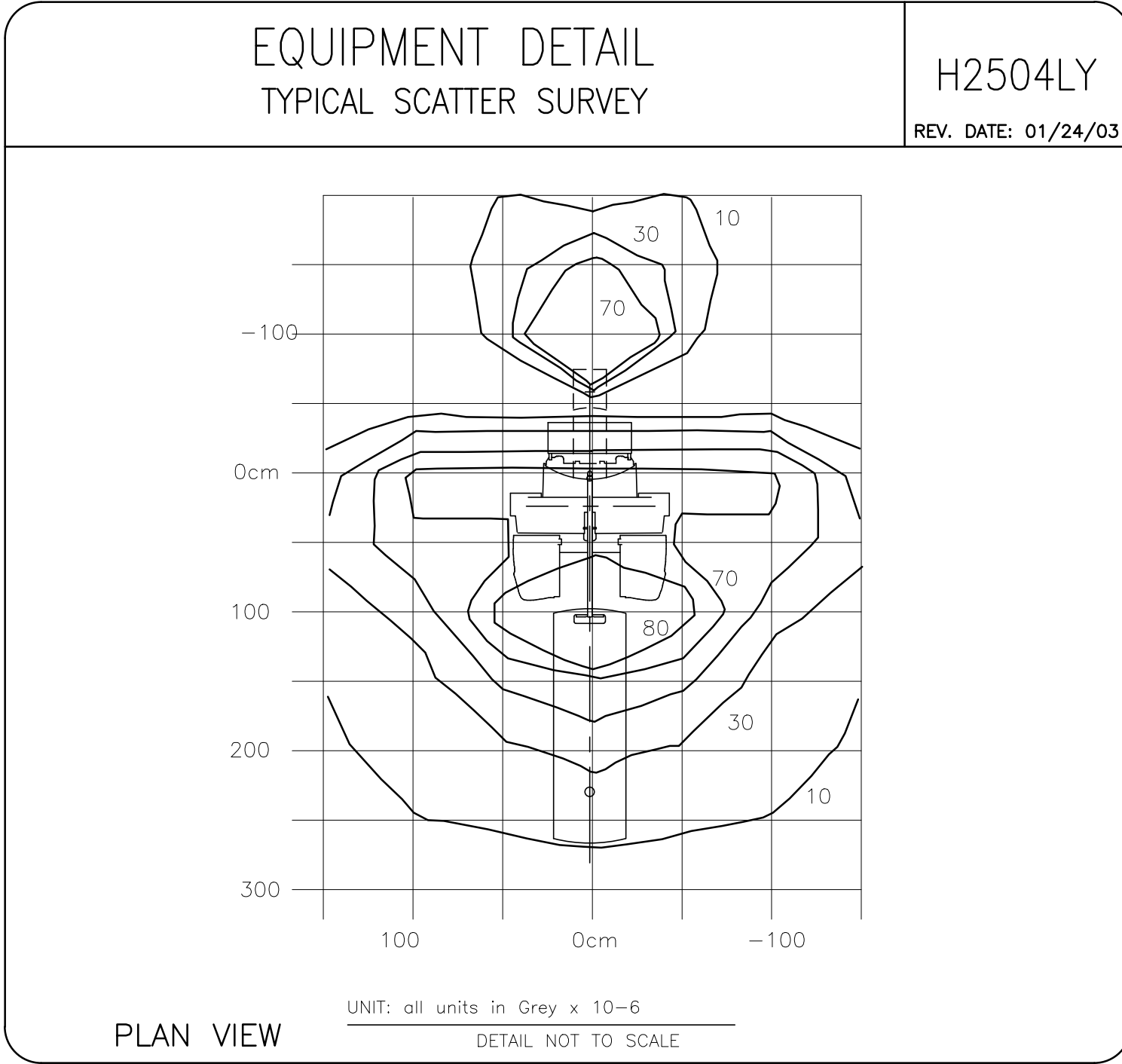
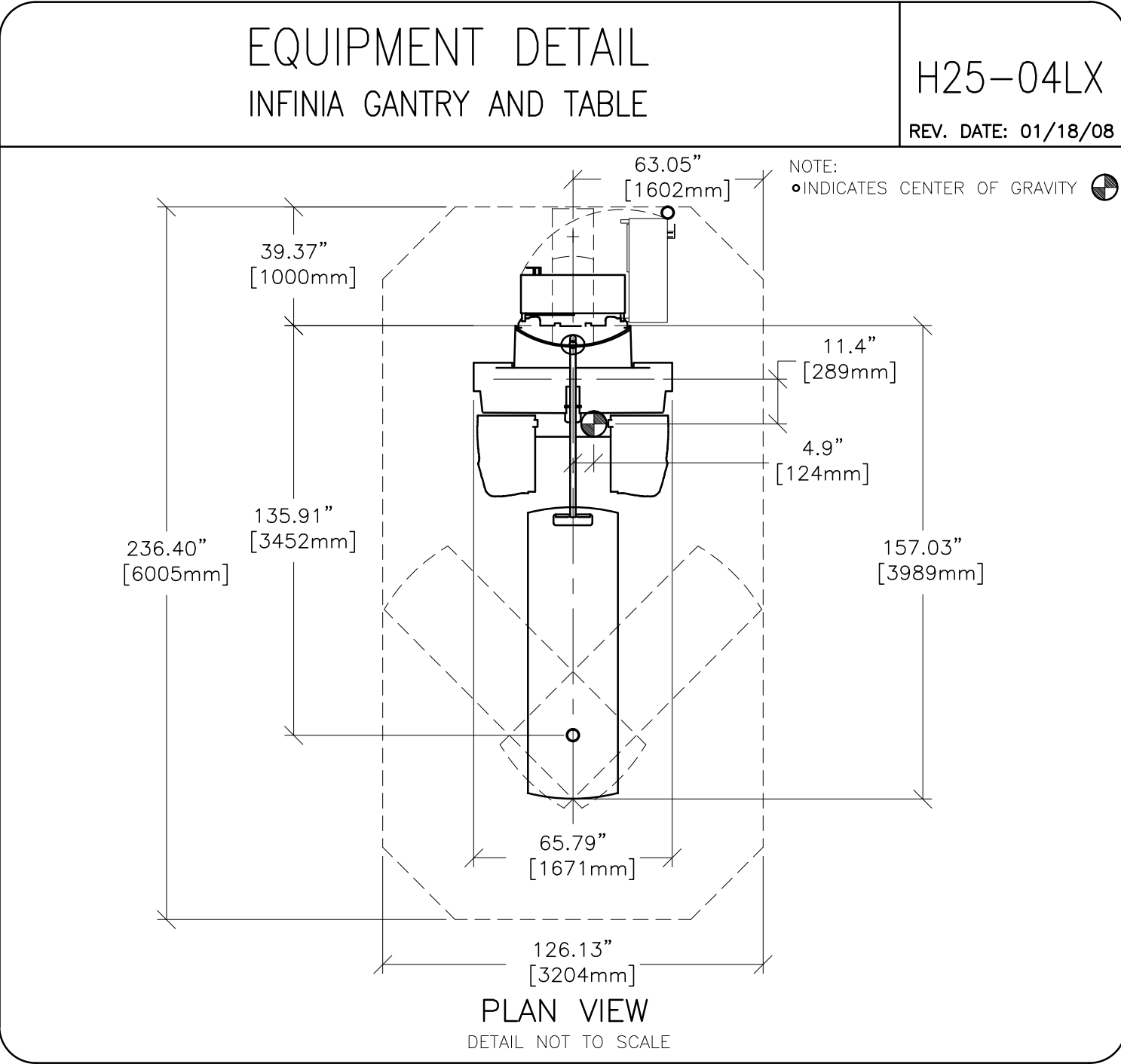
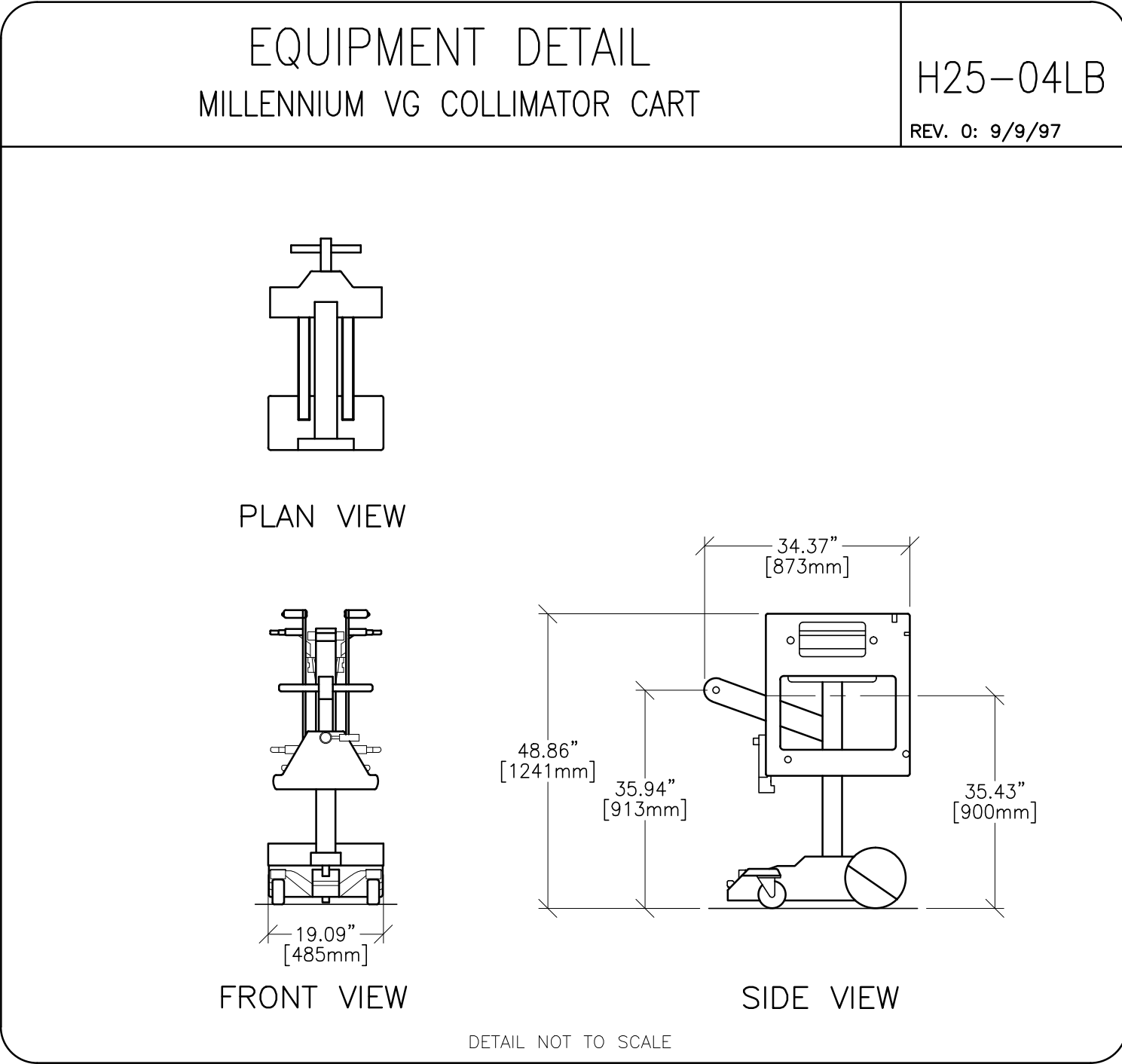
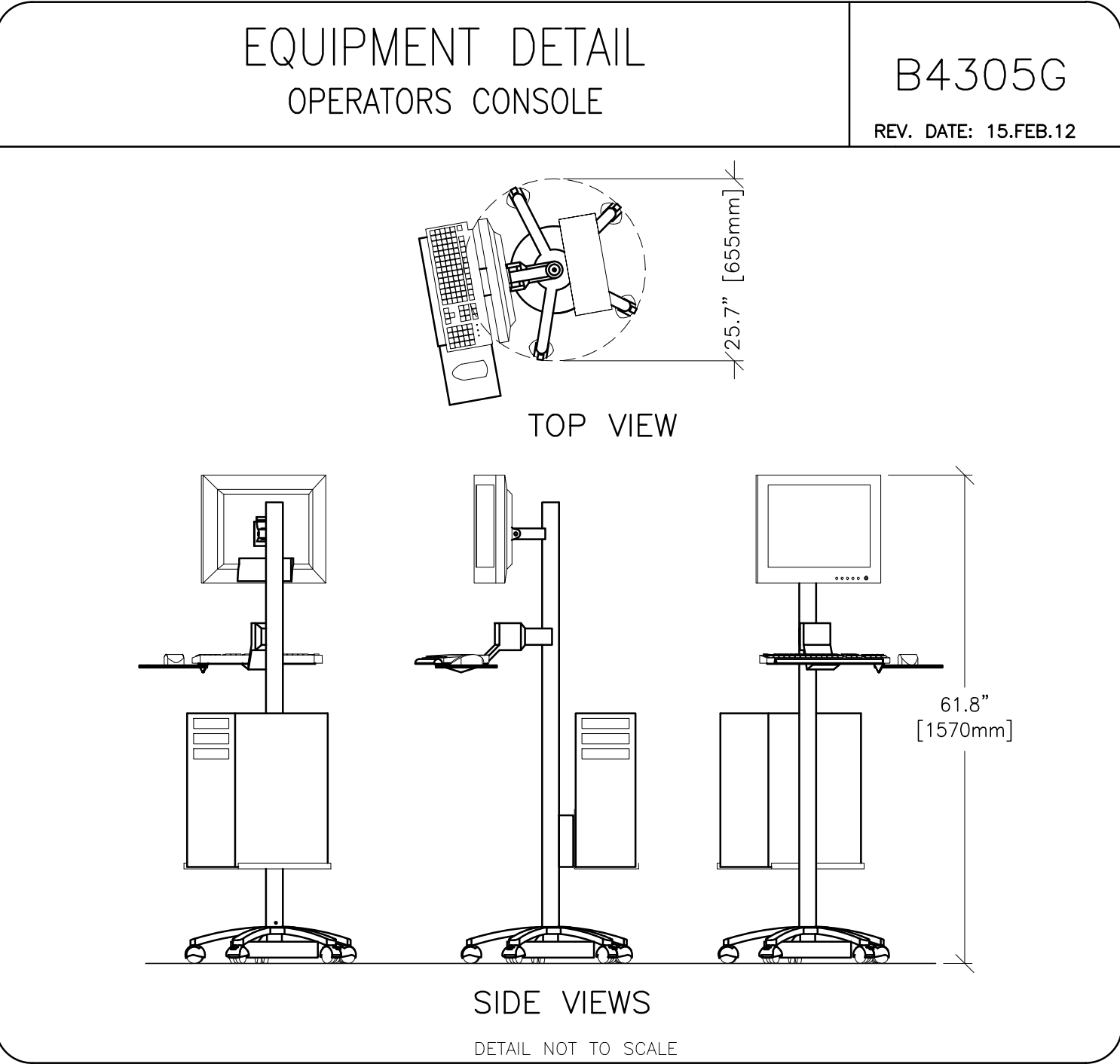
DRAWN BY: JLT

CHECKED BY: CPC

REVISION HISTORY:

SHEET

E3



PIM R3

GE Healthcare

Healthcare Project Implementation – Design Center
Milwaukee, Wisconsin

SHEET TITLE: EQUIPMENT DETAILS

MODALITY TYPE: INFINIA 2 W/HAWKEYE

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 TO THE LATEST EDITIONS OF THE NATIONAL ELECTRICAL CODE, THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) CODES, AND THE COMPANY'S DESIGN STANDARDS. THE COMPANY CANNOT ACCEPT RESPONSIBILITY FOR ANY DAMAGES RESULTING THEREFROM.

PROJECT TITLE:

TYPICAL FINAL
INSTALLATION DRAWING

PROJECT	REVISION
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DRAWN BY:	JLT
CHECKED BY:	CPC

REVISION HISTORY:

SHEET

D1