Drawing II	ndex
These sheets are a document set and sl Electrical information and references are	
SITE READINESS	C1
EQUIPMENT LAYOUT (Equipment locations, heat loads, component weight	A1 s, environmental specs)
STRUCTURAL LAYOUT (Structural support/mounting locations for floor/wal	S1 I/ceiling, wall support elevations)
STRUCTURAL DETAILS (Floor and Ceiling loading information)	S2
ELECTRICAL LAYOUT (Contractor supplied wiring, interconnect methods, ju	E1 unction point locations and descriptions)
ELECTRICAL SPECIFICATIONS (Maximum wiring run lengths, interconnect diagram,	E2 system power specifications)
ELECTRICAL DETAILS	E3
EQUIPMENT DETAILS	D1

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 *

ADVANTAGE WORKSTATION Pre Installation Manual

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



CT Site Planning



imagination at work

Customer Site Readiness Requirements

- prior to making changes.
- analysis, 4. Restrooms.
- containment 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.

	GEHC Global Order #: Cu				
		Installer:			
	The customer is responsible for proper site preparation regardle			asurement	s/inspections/assessments.
	Inspection Date:	,			
ltem #	GEHC Minimum Requirements	Storage: Is item ready?	PMI Is item ready?	FE Is item ready?	Comments If "N", enter comments or action plan
1	MR Magnet Delivery Requirements: Ensure cryagen venting system is designed and installed with objective evidence that it is compliant with the 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.				
2	MR RF Screen Room Requirements: RF Screen Room is tested with objective evidence that it is compliant with GEHC specifications.				
3	Site Drawing Requirements: Final version of equipment installation drawings (including red lined versions) verified to match actual room and has been provided to installer. X-ray shielding plan and state acknowledgment letter provided to installer for AR, DC, NC, SC & WA.				
	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.				
5	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).				
6	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). 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	Electrical Requirements: Main Disconnect Panel (MDP) is installed 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.				
	HVAC Requirements: The HVAC/Chilled Water systems designed to maintain the environment are running and appear to provide the desired environmental conditions (temperature and humidity)for system operation.				
	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.				
	Ceiling Requirements: Unistrut (or equivalent) location, levelness and spacing is measured (or vendor confirmed) and consistent with the requirement of the installation drawings. Ceiling grid is installed. Permanent lighting is installed and operational. HVAC diffusers are installed and connected to ductwork. Ceiling tiles installed per PMI discretion.				

• Any deviation from these drawings must be communicated in writing to and reviewed by your local GE Healthcare Installation Project Manager

 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

• Provide for refuse removal and disposal (e.g. crates, cartons, packing)

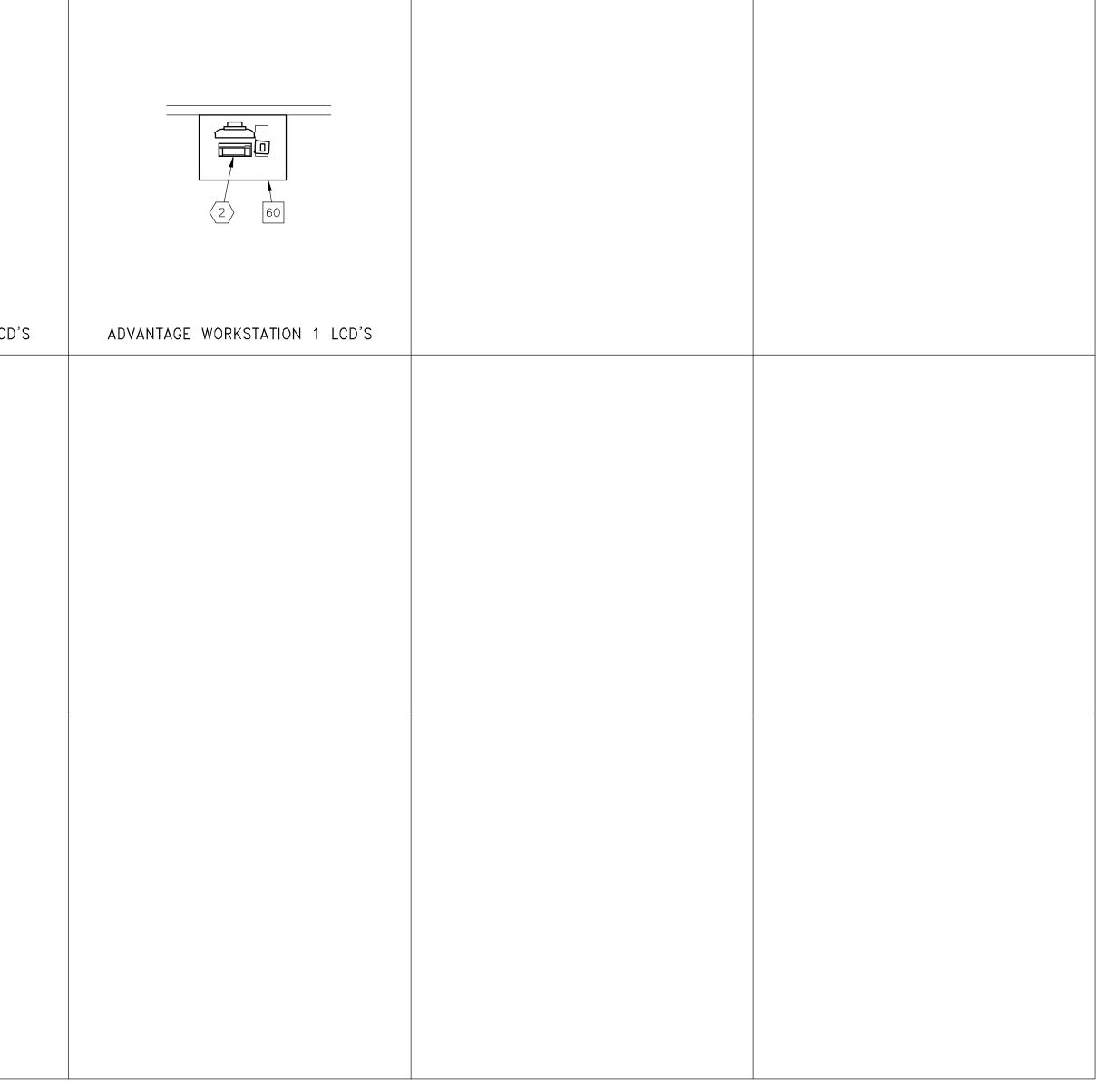
• Contact a radiation physicist or consultant to specify radiation

GE Equipment Delivery Requirements

	GE Healthcare	IS Services Design Center Milwaukee, Copyright 2009 General Electric Company – Proprietary to GE
SHEET TITLE: SITE READINESS	MODALITY TYPE: ADVANTAGE WORKSTATION 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 ACTUAL EQUIPMENT EXPECTED TO BE INSTALLED. IT IS NOT TO BE USED FOR ACTUAL CONSTRUCTION PURPOSES, HOWEVER, AND THE COMPANY CANNOT ACCEPT RESPONSIBILITY FOR ANY DAMAGES RESULTING THEREFROM.
PROJECT TITLE:	ADVANTAGE WORKSTATION	ONE & TWO LCD
DATE DRA CHE	P-AW	Apr.11 JGA JGA
DATE DRA CHE	P-AW E: 06 WN BY: CKED BY:	00 .Apr.11 JGA JGA

TEM NO.	(QUANTITY ORDERED REFER TO SHEET "D" -		HEAT OUTPUT		ELEC	
		(* = EXISTING/REINSTALL) advantage workstation with two advantage workstation with one LCD monitor	81 lbs 46 lbs	(PER HOUR) 1109 btu	NU.	 PLAN s c	
							ADVANTAGE WORKSTATION 2 LO
۲ م	-He Are	E FOLLOWING ITEMS, WHICH HAVE BEEN OF E TO BE INSTALLED BY THE CUSTOMER OF	RDERED FRO R HIS CONT	OM GE HEAL RACTOR.	THCARE,		

EQUIPME	ENT LAYOUT	RECOMMENDED	CEILING HEIGHT
placement and interconnection of the indicated equipment	components. There may be federal, s	state, and/or local requirem	ents that could impact th
e Customer's responsibility for ensuring the site and final	equipment placement complies with a	Il applicable federal, state, o	and/or local requirements.



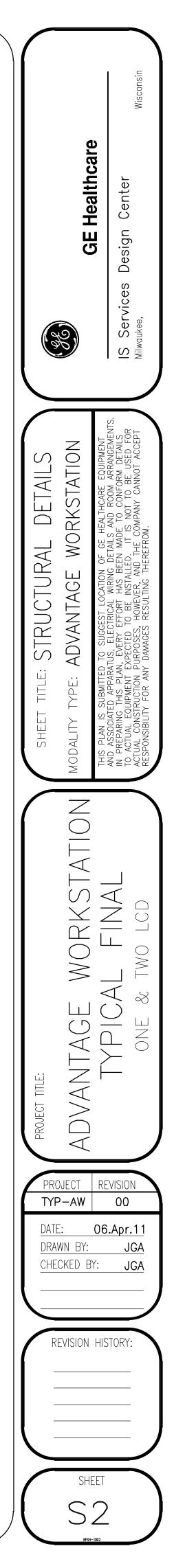
= 9'-0" e placement	ANCILLARY ITEMS CUSTOMER/CONTRACTOR SUPPLIED AND INSTALLED ITEM	Wisconsin
	NO. ITEM DESCRIPTION (* INDICATES EXISTING)	care
	60 WORKSTATION TABLE	GE Healthcare IS Services Design Center Milwoukee,
	THE FOLLOWING ITEMS ARE AVAILABLE FROM GE HEALTHCARE TECHNOLOGIES. CONTACT YOUR LOCAL GE HEALTHCARE SERVICE REPRESENTATIVE FOR PRICING AND AVAILABILITY.	FITLE: EQUIPMENT LAYOUT PE: EQUIPMER LAYOUT PE: ADVANTAGE WORKSTATION IBMITTED TO SUGGEST LOCATION OF GE HEALTHCARE EQUIPMENT APPARATUS, ELECTRICAL WIRING DETAILS AND ROOM ARRANGEMENTS. IS NOT TO BE UNSTALLED. IT IS NOT TO BE USED FOR MENT EXPECTED TO BE INSTALLED. IT IS NOT TO BE USED FOR DETION PURPOSES, HOWEVER, AND THE COMPANY CANNOT ACCEPT FOR ANY DAMAGES RESULTING THEREFROM.
	GENERAL SPECIFICATIONS	TTLE: TYPE: , SUBMITTED STHIS PLAN CUIPMENT E STRUCTION P TY FOR ANY
	 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. 	SHEET TITLE: MODALITY TYPE: THIS PLAN IS SUBMITTED AND ASSOCIATED APPARA IN PREPARING THIS PLAN TO ACTUAL CONSTRUCTION F ACTUAL CONSTRUCTION F RESPONSIBILITY FOR ANY
	 CHECK ALL DOOR OPENINGS AND HALLWAYS FROM DELIVERY LOCATION TO WHERE EQUIPMENT IS TO BE INSTALLED TO ENSURE THE ROUTE PHYSICALLY AND STRUCTURALLY WILL ACCOMODATE THE EQUIPMENT AS SHIPPED. RADIATION PROTECTION REQUIREMENTS ARE NOT INDICATED ON THIS PLAN. WHERE 	MOL
	 NEEDED PER NATIONAL OR LOCAL CODE THEY SHALL BE SPECIFIED BY A QUALIFIED RADIOLOGICAL PHYSICIST. 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 ALL WORK TO BE IN COMPLIANCE WITH NATIONAL AND LOCAL BUILDING SAFETY CODES. DIMENSIONS ARE TO FINISHED SURFACES OF ROOM 	E WORKSTATION CAL FINAL & TWO LCD
	SITE ENVIRONMENT SPECIFICATIONS	PROJECT TITLE: DIANTAGE TYPIC DNE DNE DNE DNE
	MAGNETIC INTERFERENCE SPECIFICATIONS	TYP-AW OO DATE: O6.Apr.11 DRAWN BY: JGA CHECKED BY: JGA REVISION HISTORY:
	THIS SHEET IS PART OF THE DOCUMENT SET LISTED ON SHEET C1 AND SHOULD NOT BE SEPARATED	SHEET A 1 NEN-1002

TYPICAL WALL SUPPORT ELEVATIONS	SCALE: $1/4" = 1'-0"$	STRUCTURAL LAYOUT	RECOMMENDED CEILING HEIGHT =
	ADVANTAGE WORKSTATION 2 LCD'S ADVANTA	AGE WORKSTATION 1 LCD'S	

STRUCTURAL	LAYOUT

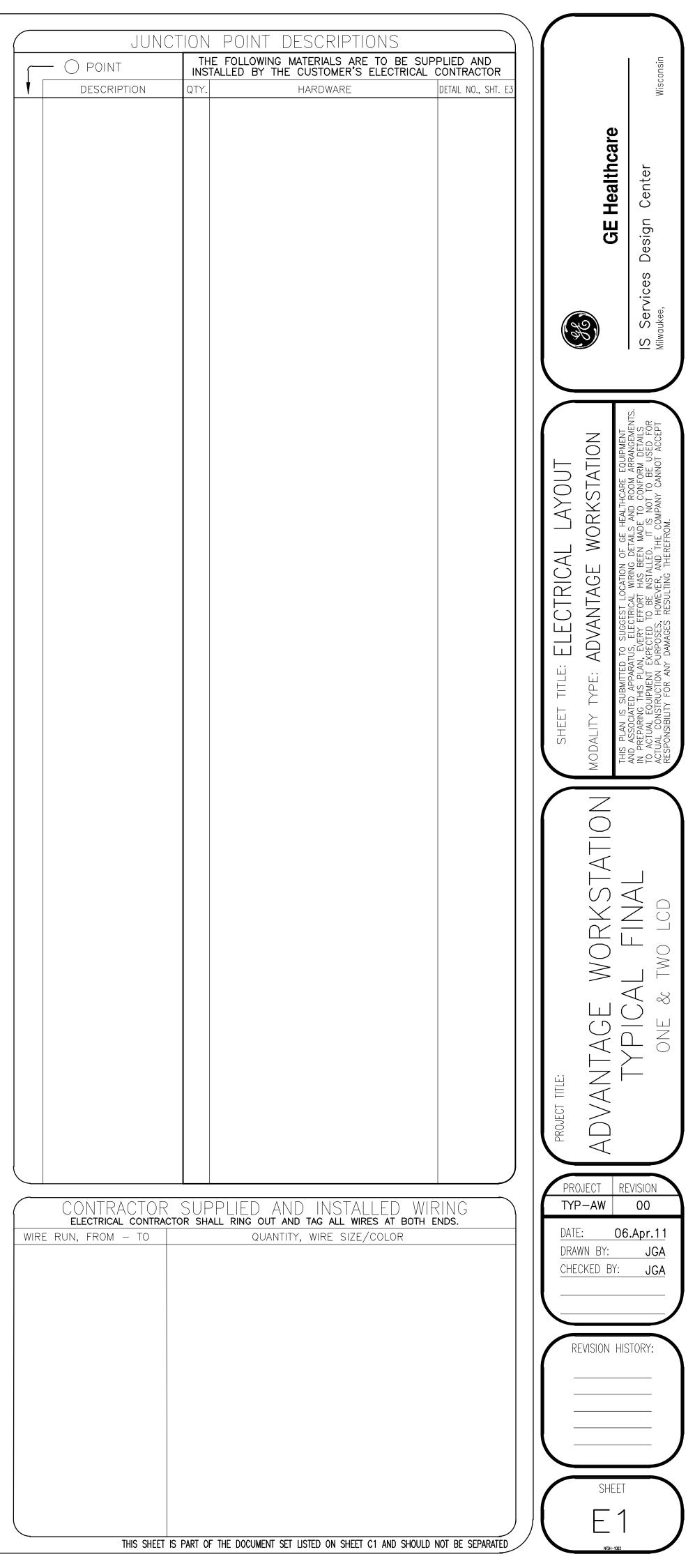
T = 9'-0"	STRUCTURAL SUPPORT METHODS	Wisconsin
	ITEM ITEM ITEM DESCRIPTION	Wisc
	(* INDICATES EXISTING)	CE Healthcare Is Services Design Center Milwaukee,
		ION BREAT TITLE: STRUCTURAL LAYOUT MODALITY TYPE: STRUCTURAL LAYOUT MODALITY TYPE: ADVANTAGE WORKSTATION THIS PLAN IS SUBMITTED TO SUGGEST LOCATION OF GE HEALTHCARE EQUIPMENT AND ASSOCIATED APPARATUS, ELECTRICAL WINNG DETAILS AND ROOM ARRANGEMENTS. IN PREPARING THIS PLAN, EVERY EFFORT HAS BEEN MADE TO CONFORM DETAILS IN PREPARING THIS PLAN, EVERY EFFORT HAS BEEN MADE TO CONFORM DETAILS TO ACTUAL EQUIPMENT EXPECTED TO BE INSTALLED. IT IS NOT TO BE USED FOR ACTUAL CONSTRUCTION PURPOSES, HOWEVER, AND THE COMPANY CANNOT ACCEPT RESPONSIBILITY FOR ANY DAMAGES RESULTING THEREFROM.
	 STRUCTURAL NOTES ALL STEEL WORK AND PARTS NECESSARY TO SUPPORT CEILING MOUNTED EQUIPMENT IS TO BE SUPPLIED BY THE CUSTOMER OR HIS CONTRACTORS. METHODS OF SUPPORT FOR THE STEELWORK THAT WILL PERMIT ATTACHMENT TO STRUCTURAL STEEL OR THROUGH BOLTS IN CONCRETE CONSTRUCTION SHOULD BE FAVORED. DO NOT USE CONCRETE OR MASONRY ANCHORS IN DIRECT TENSION. 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. ALL CEILING MOUNTED FIXTURES, AR VENTS, SPRINKLERS, ETC. TO BE FLUSH MOUNTED, OR SHALL NOT EXTEND MORE THAN 1/4" BELOW THE FINSHED CEILING. FLOOR SLABS ON WHICH EQUIPMENT IS TO BE INSTALLED MUST BE LEVEL TO 1/8" in 10'-0" DIMENSIONS ARE TO FINISHED SURFACES OF ROOM. CUSTOMERS CONTRACTOR MUST PROVIDE AND INSTALL ANY NON-STANDARD ANCHORING. DOCUMENTS FOR STANDARD ANCHORING METHODS ARE INCLUDED WITH GE EQUIPMENT DRAWINGS FOR CONTRACTOR MUST PROVIDE AND INSTALL ANY NON-STANDARD ANCHORING. DOCUMENTS FOR STANDARD ANCHORING METHODS ARE INCLUDED WITH GE EQUIPMENT DRAWINGS FOR COORRACTOR MUST PROVIDE AND INSTALL ANY NON-STANDARD ANCHORING. DOCUMENTS FOR STANDARD ANCHORING METHODS ARE INCLUDED WITH GE EQUIPMENT DRAWINGS FOR COORRACTOR MUST PROVIDE AND INSTALL HARDWARE FOR "THROUGH THE FLOOR" ANCHORING AND/OR ANY BRACING UNDER ACCESS FLOORS. THIS CONTRACTOR MUST ALSO PROVIDE FLOOR DRILLING BY THE GE INSTALLES SUCH AS REBAR FTC. 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 UTILINES BY CLORES. TO ENSURE WORKER SAFELY, GE INSTALLERS WILL PERFORM SURFACE PENETRATION OF ANCHORS/SCEWS) PENETRATION OFERATIONS (E.G. DRILLING BY THE GE INSTALLET FOR FOR FOR WING PENETRATION OFERATIONS (E.G. DRILLING	LAND LOD LOD LOD LOD LOD LOD LOD LOD LOD LO
	CUSTOMER'S VALIDATION AND COMPLETION OF THE "GE SURFACE PENETRATION PERMIT"	REVISION HISTORY:



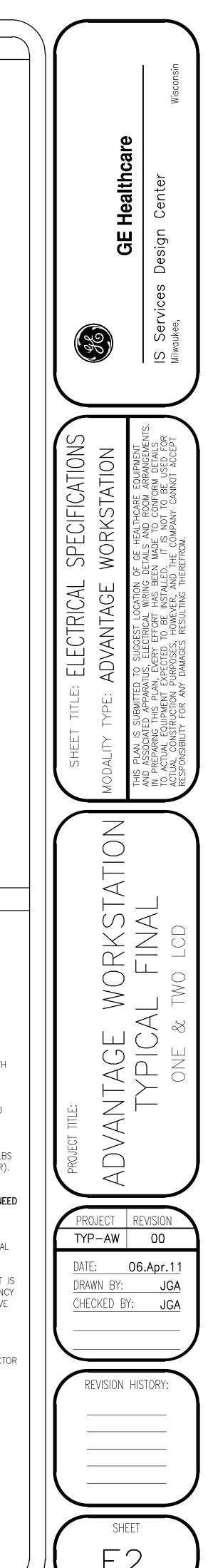


(1/4" =	1'. ()''			
	JUALL.	-/	I U			ELECTRI
					ADVANTAGE WORKSTATIC	N 2 LCD'S
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ALL LUNC KEN BOOSES CONJUNIT BUCT DEVIDES, SMOURS, C.R.COT ENGANCIES, T. COT ENGANCIES, C.R.COT ENGANCIES DE SUBJECT BUCKELES FOR	TRICAL	_ PLAN	RECOMMENDED CEILING HEIGHT = $9'-0"$			
		 ALL JUNCTION BOXES, CONDUIT, DUCT, DUCT DIVIDERS, SWITCHES, CIRCUIT BREAKERS, ETC., ARE TO BE SUPPLIE 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 CEILI ALL DUCTWORK WUST MEET THE FOLLOWING REQUIREMENTS: DUCTWORK SHALL BE CERTIFIED/RATED FOR ELECTRICAL POWER PURPOSES. DUCTWORK SHALL BE CERTIFIED/RATED FOR ELECTRICAL POWER TIN AN APPROVED MANNER. PUC 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. IO FOOT PIGTALS AT ALL JUNCTION POINTS. ALL WIRING MUST BE THIN OR TFFIN STRANDED COPPER THERMOPLAST				
EC'S AGVANTAGE WORKSTATION 1 LCD'S Image: Second						
	D'S	ADVANTAGE WORKSTATION 1 LCD'S				



INTERCONNECT DIAGRAM



POWER SPECIFICATIONS

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 DISTRITBUTION 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

