

Bid Bulletin # 2
Memorial Health Care Systems
Bid Package 2

Date of Bid Bulletin Issue:

August 5, 2014

Bid Date:

August 14, 2014

NOTE TO ALL PLAN HOLDERS: Please insert this Bid Bulletin into your copy of the contract documents for the above named project.

The following changes to the contract documents are issued by Sampson Construction, shall be attached and made part of the plans and specifications, shall be acknowledged with the bidder's proposal and shall have the same force and effect as though a part of the original issue. All other stipulations and requirements of the plans and specifications remain in effect.

- Item 1 See attached construction schedule.

- Item 2 See attached bid form. Contractors are asked that they use the bid form provided and attach a list of clarifications or exclusions.

- Item 3 See attached CT Scanner drawings.

- Item 4 See attached scopes of work.

BID FORM

Owner: Memorial Health Care Systems
Project Location: 300 North Columbia, Seward, NE 68434
Construction Manager: Sampson Construction Co., Inc.
Bid Package No. **Bid Package # 2 - Building Construction**

Summary of Work:

- | | | |
|---|---|--|
| <input type="checkbox"/> Selective Demolition | <input type="checkbox"/> Joint Sealants | <input type="checkbox"/> Toilet Accessories |
| <input type="checkbox"/> Cast-In-Place Concrete Slabs | <input type="checkbox"/> HM & Wood Doors & Frames/Hdwe Supply | <input type="checkbox"/> Fire Extinguishers & Cabinets |
| <input type="checkbox"/> Concrete Paving | <input type="checkbox"/> Security Grilles | <input type="checkbox"/> Exterior Sun Control Devices |
| <input type="checkbox"/> Precast Structural Concrete Supply | <input type="checkbox"/> Aluminum and Glass | <input type="checkbox"/> Plam Countertops |
| <input type="checkbox"/> Precast Structural Concrete Erection | <input type="checkbox"/> Unit Skylights | <input type="checkbox"/> Simulated Stone Countertops |
| <input type="checkbox"/> Structural Steel Supply | <input type="checkbox"/> Louvers and Vents | <input type="checkbox"/> Entrance Floor Grilles |
| <input type="checkbox"/> Structural Steel Erection | <input type="checkbox"/> Metal Studs and Drywall | <input type="checkbox"/> Radiation Protection |
| <input type="checkbox"/> Rough Carpentry | <input type="checkbox"/> Acoustical Ceilings | <input type="checkbox"/> Electric Traction Elevators |
| <input type="checkbox"/> Finish Carpentry | <input type="checkbox"/> Ceramic Tile | <input type="checkbox"/> Fire Suppression |
| <input type="checkbox"/> Plam Faced Architectural Cabinets | <input type="checkbox"/> Resilient Base and Accessories | <input type="checkbox"/> Plumbing |
| <input type="checkbox"/> Plam Faced Wood Paneling | <input type="checkbox"/> Resilient Sheet Flooring | <input type="checkbox"/> HVAC |
| <input type="checkbox"/> Waterproofing | <input type="checkbox"/> Resilient Tile Flooring | <input type="checkbox"/> Electrical |
| <input type="checkbox"/> EIFS | <input type="checkbox"/> Tile Carpeting | <input type="checkbox"/> Site Utilities |
| <input type="checkbox"/> Weather Barriers | <input type="checkbox"/> Wall Coverings | <input type="checkbox"/> Unit Pavers |
| <input type="checkbox"/> Metal Wall Panels | <input type="checkbox"/> Painting | <input type="checkbox"/> Chain Link Fence and Gates |
| <input type="checkbox"/> Roofing | <input type="checkbox"/> Wall and Door Protection | <input type="checkbox"/> Termite Control |

Company Name _____

Address _____

City/State/Zip _____

Contact: _____

Telephone/FAX: _____

E-mail Address _____

Bid Proposal Amounts:

The undersigned, having examined the Contract Documents and the site of the proposed Work and being familiar with all the conditions affecting the construction of the proposed project, hereby proposes and agrees to provide and furnish all labor, material, equipment, supervision, and other items necessary to perform and complete, in a workmanlike manner, all Work required by the Contract Documents at the prices stated below. Stated sums include fees, insurance, payroll taxes, and all other charges applicable to materials, appliances, labor, and all charges that may be levied. **This Bid (excludes) sales tax.**

In the following proposals, the amounts shall be shown in both words and figures. In the case of discrepancy between the words and the figures, the words shall govern.

Addenda:

The Bidder hereby acknowledges receipt and inclusion in the Bid Proposal the following addenda:

Bid Bulletins	_____	Dates: _____
Addendum	_____	Dates: _____

Base Bid:

(Dollars) (\$)

ALTERNATES:

Furnish and install Aerco BMK condensing boilers and Hurst non-		
1. condensing boiler in lieu of specified.	(\$ _____)	(ADD/DEDUCT)
2. Remove existing McQuay chiller and furnish and install new chiller	(\$ _____)	(ADD/DEDUCT)
3. Furnish and install EPDM 60 mil fully adhered membrane roofing in lieu of TPO.	(\$ _____)	(ADD/DEDUCT)
4. Furnish and install Tyvek Commercial Wrap in lieu of liquid-applied air and weather barrier.	(\$ _____)	(ADD/DEDUCT)
5A. Provide Vapor Lock 20/20 concrete admixture in lieu of Ardex moisture control system on all new slabs receiving floor finishes.	(\$ _____)	(ADD/DEDUCT)
5B. Provide Vapor Lock 10/10 concrete admixture in lieu of Ardex moisture control system on all new concrete infill area and surrounding areas receiving new floor finishes in remodeled	(\$ _____)	(ADD/DEDUCT)

Changes in the Work:

Changes in the work shall be as established in the Contract Documents. The following fees shall be used for lump sum pricing and actual cost pricing of additions and deletions to that Work included in the Bid, namely:

	<u>Not to Exceed</u>
a. To Subcontractor for work performed by their own forces.	10%
b. To Subcontractor for work performed by other than their own forces.	5%
c. To Subcontractor's Subcontractor/Material supplier for work performed by Subcontractor's Subcontractor/Material Supplier own forces.	10%
d. To Subcontractor's Subcontractor/Material supplier for work performed by other than Subcontractor's Subcontractor/Material Supplier own forces.	5%
● Fee includes general requirements, all supervision, overhead and profit.	

Time of Commencement, Completion, and Damages:

- a. The Bidder agrees that if awarded the Contract, he will Substantially Complete the Work in accordance with the schedule developed by the Construction Manager.
1. The Bidder hereby agrees to commence work under the Contract within seven (7) days after the date of a "Notice to Proceed", unless otherwise stipulated in that notice.
2. Shop drawing submittals shall be assembled immediately upon the Notice to Proceed and forwarded to the Construction Manager within 14 calendar days of said notice.
- b. Time is expressly declared to be of the essence in completion of the Work covered by these Contract Documents, and the Successful Bidder shall be liable for actual damages for delay in completion of Work. Where additional time is allowed under the Agreement for the completion of the Work, the new time limits shall be of the essence of the Agreement.
- c. Substantial Completion of the Work: The undersigned will have the Work ready for either the following Contractor's work or the Final Inspection and Owner's acceptance within the time limit established in the Construction Milestone Schedule.

General Agreements:

- a. The Bidder agrees that he has had an opportunity to examine the site of the Work and has examined the Contract Documents, and that he has carefully prepared his proposal upon the basis thereof and that he has carefully examined and checked this Bid and the materials, equipment, and labor required thereunder, the cost thereof, and his figures therefore, and hereby states that the amount or amounts set forth in this Bid is, or are, correct and that no mistake or error has occurred in this Bid or in the Bidder's computations upon which this Bid is based and the Bidder agrees that he will make no claim for reformation, modification, rescission, or correction of this Bid after the scheduled closing time for receipt of Bid.
- b. The Bidder acknowledges that the Owner reserves the right to waive informalities and to reject any or all Bids.
- c. The Bidder agrees that Bid shall not be withdrawn or altered for a period of forty five (45) calendar days after the last date scheduled for the submission of Bids.
- d. By signing this Bid, each Bidder certifies that this Bid has been arrived at independently, without consultation, communication, or agreement as to any matter relating to this Bid with any other Bidder or with any competitor.

The undersigned Bidder agrees that, when these requirements have been completed, he will execute an agreement with the Owner and/or the Construction Manager on the Agreement included in the bidding documents.

DATED THIS _____ DAY OF _____, 2014.

Name of Firm

Address

City, State and ZIP

By: Signature of Authorized Officer

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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(Structural support/mounting locations for floor/wall/ceiling, wall support elevations)	
STRUCTURAL DETAILS	S2
(Floor and Ceiling loading information)	
ELECTRICAL LAYOUT	E1
(Contractor supplied wiring, interconnect methods, junction point locations and descriptions)	
ELECTRICAL SPECIFICATIONS	E2
(Maximum wiring run lengths, interconnect diagram, system power specifications)	
ELECTRICAL DETAILS	E3
EQUIPMENT DETAILS	D1 THRU D2

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 ***
BrightSpeed Elite
Enhanced
Pre Installation Manual
5341627-1EN

A mandatory component of this drawing set is the GE Healthcare Pre Installation manual. Failure to reference the Pre Installation 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

- 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				
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:				
GEHC Minimum Requirements	Storage is ready?	PHI is ready?	FE is ready?	Comments If "N", enter comments or action plan
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 vibratmat 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 Sales@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. State Regulatory Requirements: Facility registration number provided for states of <u>IL, KY, HI, RI, SC, TX, & VA</u> . X-ray shielding plan and state acknowledgment letter provided to installer for <u>AR, DC, NC, SC, CO</u> . 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.				
4. 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. 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).				
6. Finished Room Requirements: 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 the risk 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: 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. 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.				
9. 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.				
10. 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 PIM discretion.				
11. Staging Requirements: 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. 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.				
13. 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, WI
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SHEET TITLE: **SITE READINESS**
 MODALITY TYPE: **BRIGHTSPEED ELITE ENHANCED**
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 LATEST REVISED DRAWINGS AND TO THE USER'S OR THE USER'S ACTUAL CONSTRUCTION PURPOSES. GE HEALTHCARE AND THE COMPANY CANNOT ACCEPT RESPONSIBILITY FOR ANY DAMAGES RESULTING THEREFROM.

PROJECT TITLE:
MEMORIAL HEALTH CARE SYSTEMS
 SEWARD, NEBRASKA

PROJECT	REVISION
142137	00
DATE:	02.Jul.14
DRAWN BY:	DMH
CHECKED BY:	REK

REVISION HISTORY:

SHEET
C1

This drawing is based on Sketch No.: 140MA011 Seward Memorial Hospital Seward Ne CT Prelim.dwg
 PIM R10 RQ - 144835

GE EQUIPMENT LISTING

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

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

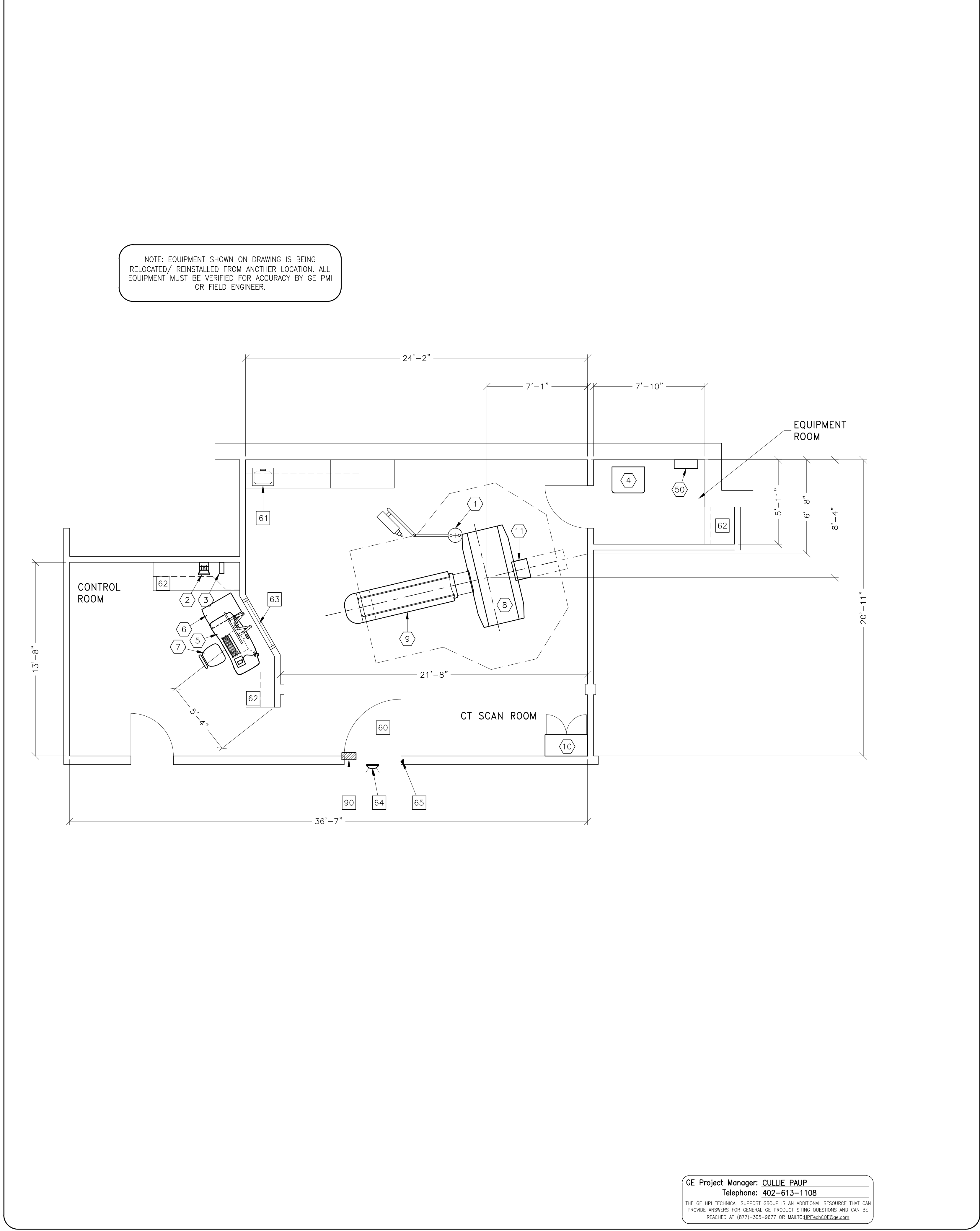
ITEM NO.	QUANTITY ORDERED	REFER TO SHEET "D"	ITEM DESCRIPTION (* = EXISTING/REINSTALL)	WEIGHT	HEAT OUTPUT (PER HOUR)	DETAIL NO.	STRC PLAN	ELEC PLAN	EQUIPMENT CROSS REFERENCE CHART	
									P = PREAPPROVAL	C = CALCULATIONS/ PENDING APPROVAL
SEISMIC STATUS										
S = SPECIFICATIONS ONLY										
1			INJECTOR HEAD ON OVERHEAD COUNTERPOISED SUSPENSION.	22 lbs		B5031N	B5031B	1H	S	
2			INJECTOR CONTROL CONSOLE	8 lbs		B8007C		1CC	S	
3			INJECTOR ELECTRONICS	13 lbs		B8007C		1E	S	
4			POWER DISTRIBUTION UNIT	740 lbs	5119 btu	B7858D		PM	S	
5			FREEDOM WORKSPACE SMALL TABLE	97 lbs	8191 btu	B8106		DC	S	
6			T. I. O. CABINET	194 lbs		B8105			S	
7			OPERATOR'S CHAIR						S	
8			CT BRIGHTSPEED GANTRY	3899 lbs	18768 btu	B8108 B8109 B7816F B7816G B7816H B7996M		CTT	C	
9			PATIENT TABLE WITH EXTENDED TABLE TOP.	1558 lbs	1023 btu	B8110			S	
10			STORAGE CABINET (EMPTY CABINET WEIGHT)	99 lbs		M33005			S	
11			REAR CABLE COVER			B8141			S	

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

90			MAIN DISCONNECT CONTROL CAT NO. E4502AB (IF A UPS IS NOT OR WILL NOT BE ORDERED, THE E4502AD CAN BE USED.)	90 lbs				A1	C	
----	--	--	--	--------	--	--	--	----	---	--

EQUIPMENT LAYOUT SCALE: 1/4" = 1'-0" CEILING HEIGHT = 9'-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.



ANCILLARY ITEMS

CUSTOMER/CONTRACTOR SUPPLIED AND INSTALLED ITEMS

ITEM NO.	ITEM DESCRIPTION (* INDICATES EXISTING)
60	MINIMUM DOOR OPENING FOR EQUIPMENT DELIVERY IS 44 IN. W X 89 IN. H (1118mm X 2108mm). CONTINGENT ON A 96 IN. (2438mm) CDRR DOOR WIDTH
61	COUNTER TOP WITH SINK, BASE AND WALL CABINETS
62	COUNTER TOP WITH WALL CABINETS
63	LEAD GLASS WINDOW
64	X-RAY ON WARNING LIGHT - AVAILABLE FROM GE SUPPLY CALL: 800-200-9760 GE CAT. NO. WX1ABWW-DF-XIU
65	DOOR LIMIT SWITCH (REQUIRED IN SOUTH CAROLINA, OTHERWISE NEEDED ONLY IF REQUIRED BY STATE/LOCAL CODES)

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

90	X-RAY ROOM WARNING LIGHT CONTROL PANEL REFERENCE JUNCTION POINT 'WLC' ON SHEET 'E1' FOR DETAILED DESCRIPTION -E4502RL FOR WARNING LIGHT CONTROL ONLY.
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GENERAL SPECIFICATIONS

- 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.
- 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.
- 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.
- 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

SITE ENVIRONMENT SPECIFICATIONS

- AMBIENT OPERATING TEMPERATURE: 64° TO 79° F, (18° TO 26° C) MAXIMUM ALLOWABLE TEMPERATURE CHANGE OF 5° F (3° C)/HOUR, MAXIMUM ROOM TEMPERATURE GRADIENT 5° F, (3° C).
- HUMIDITY: 30 TO 60 PERCENT NON-CONDENSING, MAXIMUM ALLOWABLE CHANGE OF 5 PERCENT/HOUR.
- ALTITUDE: NOT TO EXCEED 7875 FT. (2400M) ABOVE SEA LEVEL.
- THE ENVIRONMENT FOR THE ELECTRONICS CABINET MUST BE CONTROLLED SO THE ABOVE RESTRICTIONS ARE NOT EXCEEDED.
- DO NOT RESTRICT THE AIR INTAKE OR AIR EXHAUST OF THE SYSTEM COMPONENTS.
- ENVIRONMENTAL CONDITIONS LISTED ABOVE MUST BE MAINTAINED AT ALL TIMES INCLUDING FOR EXAMPLE OVERNIGHT, WEEKENDS, AND HOLIDAYS.

MAGNETIC INTERFERENCE SPECIFICATIONS

- CT GANTRY MUST BE LOCATED IN AMBIENT STATIC MAGNETIC FIELDS OF LESS THAN ONE GAUSS TO GUARANTEE SPECIFIED IMAGING PERFORMANCE. AMBIENT AC MAGNETIC FIELDS MUST BE BELOW 0.01 GAUSS PEAK.
- CT COMPUTER EQUIPMENT MUST BE LOCATED IN AMBIENT STATIC MAGNETIC FIELDS OF LESS THAN TEN GAUSS TO GUARANTEE DATA INTEGRITY.
- MULTIFORMAT CAMERA EQUIPMENT MUST BE LOCATED IN AMBIENT STATIC MAGNETIC FIELDS OF LESS THAN THREE GAUSS TO OBTAIN SPECIFIED GEOMETRIC LINEARITY.
- CT CONSOLE EQUIPMENT MUST BE LOCATED IN AMBIENT STATIC MAGNETIC FIELDS OF LESS THAN TEN GAUSS TO OBTAIN SPECIFIED GEOMETRIC LINEARITY.

GE Healthcare
Healthcare Project Implementation - Design Center
Milwaukee, WI

SHEET TITLE: **EQUIPMENT LAYOUT**
MODALITY TYPE: **BRIGHTSPEED ELITE ENHANCED**

THIS PLAN IS SUBMITTED TO SUGGEST LOCATION OF GE HEALTHCARE EQUIPMENT AND ASSOCIATED ELECTRICAL WIRING DETAILS AND ROOM ARRANGEMENTS. IN PREPARING THIS PLAN, EVERY EFFORT HAS BEEN MADE TO CONFORM TO ALL APPLICABLE REGULATIONS AND STANDARDS. GE HEALTHCARE ACCEPTS NO LIABILITY FOR ANY DAMAGES RESULTING THEREFROM.

PROJECT TITLE:
MEMORIAL HEALTH CARE SYSTEMS
SEWARD, NEBRASKA

PROJECT	REVISION
142137	00

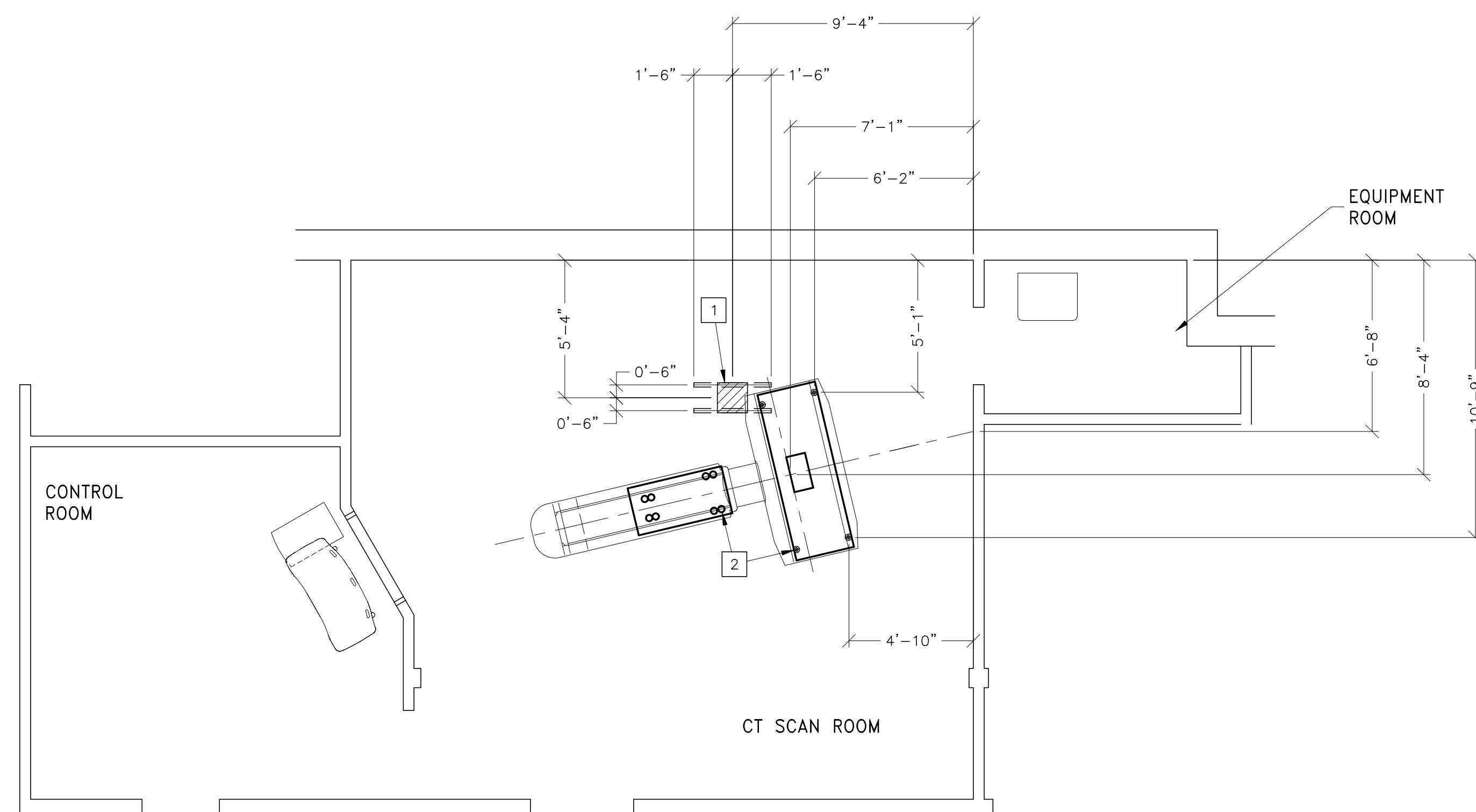
DATE: 02.Jul.14
DRAWN BY: DMH
CHECKED BY: REK

REVISION HISTORY:

SHEET
A1

CUSTOMER/CONTRACTOR SUPPLIED AND INSTALLED ITEMS

ITEM NO.	ITEM DESCRIPTION (* INDICATES EXISTING)
1	THE PEDESTAL-CEILING MOUNT REQUIRES A FLUSH CEILING MOUNTING PLATE THAT IS STRUCTURALLY SUPPORTED TO HANDLE THE WEIGHT OF THE LOAD AS SHOWN IN DETAIL B50-31B. IF AN EQUIVALENT PLATE IS USED, THE SUPPLIED TEMPLATE SHOULD BE USED TO DRILL THE REQUIRED 4" DIA. HOLES IN A PATTERN AS SHOWN IN DETAIL B50-31B. AN ADDITIONAL 3/8" HOLE IS REQUIRED FOR THE PEDESTAL-CEILING MOUNT SAFETY CHAIN.
2	LEVELING AREA FOR GANTRY AND TABLE SEE DETAIL B78163 ON SHEET S2.



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, AIR VENTS, SPRINKLERS, ETC. TO BE FLUSH MOUNTED, OR SHALL NOT EXTEND MORE THAN 1/4" BELOW THE FINISHED CEILING.
- FLOOR SLABS ON WHICH EQUIPMENT IS TO BE INSTALLED MUST BE LEVEL TO 1/4" IN 10'-0"
- DIMENSIONS ARE TO FINISHED SURFACES OF ROOM.
- 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.
- THE CUSTOMER IS 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"

GE Project Manager: CULLIE PAUP
Telephone: 402-613-1108
THE GE HR TECHNICAL SUPPORT GROUP IS AN ADDITIONAL RESOURCE THAT CAN PROVIDE ANSWERS FOR GENERAL GE PRODUCT SIZING QUESTIONS AND CAN BE REACHED AT (877)-305-9677 OR MAILTO:HRTECH@GE.COM

SHEET TITLE: STRUCTURAL LAYOUT
MODALITY TYPE: BRIGHTSPEED ELITE ENHANCED
THIS PLAN IS SUBMITTED TO SUPPORT 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 LATEST GE DRAWINGS AND TO THE GE DRAWING STANDARDS. THE COMPANY CANNOT ACCEPT RESPONSIBILITY FOR ANY DAMAGES RESULTING THEREFROM.

PROJECT TITLE:
MEMORIAL HEALTH CARE SYSTEMS
SEWARD, NEBRASKA

PROJECT	REVISION
142137	00

DATE: 02.Jul.14
DRAWN BY: DMH
CHECKED BY: REK

REVISION HISTORY:

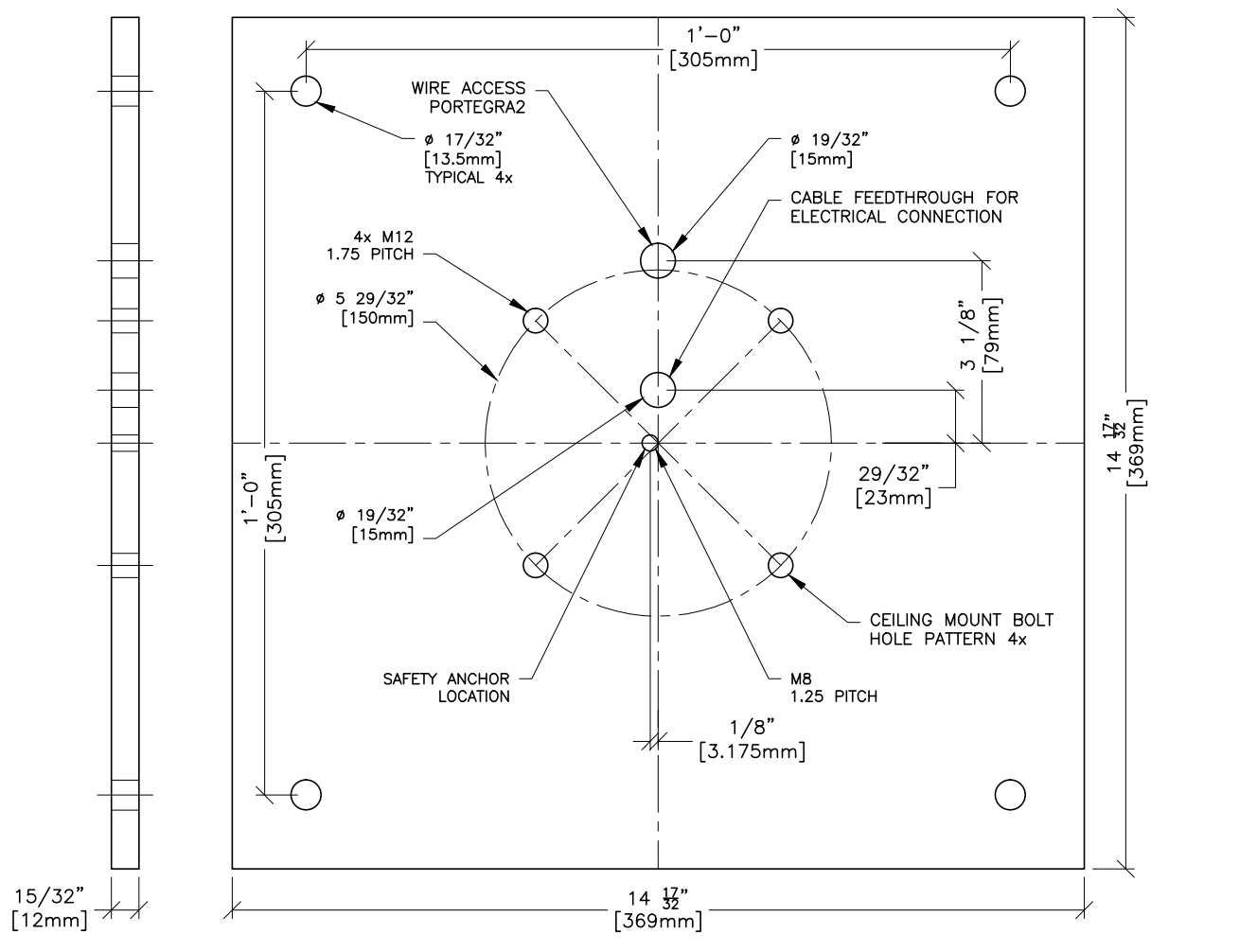
SHEET
S1

This drawing is based on Sketch No.: 140MA011 Seward Memorial Hospital Seward Ne CT Prelim.dwg

SUPPORT DETAIL
OVERHEAD COUNTERPOISED SUSPENSION

B50-31B

REV. DATE: 09.Jul.13



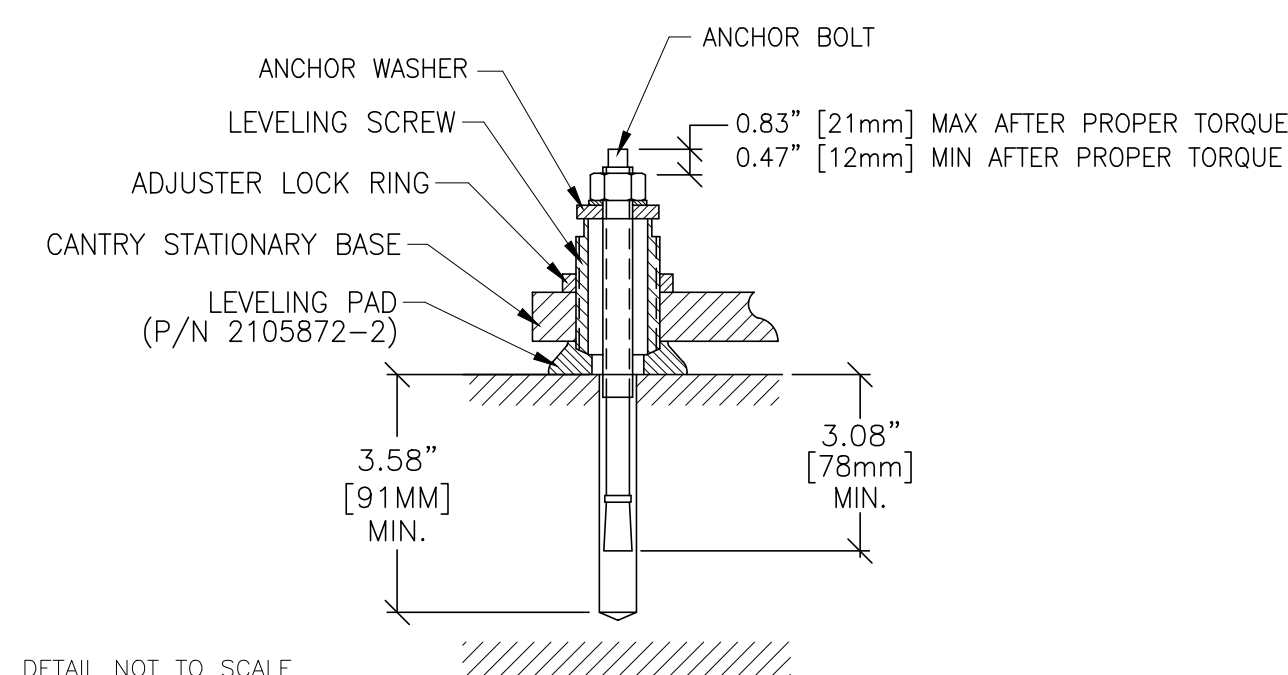
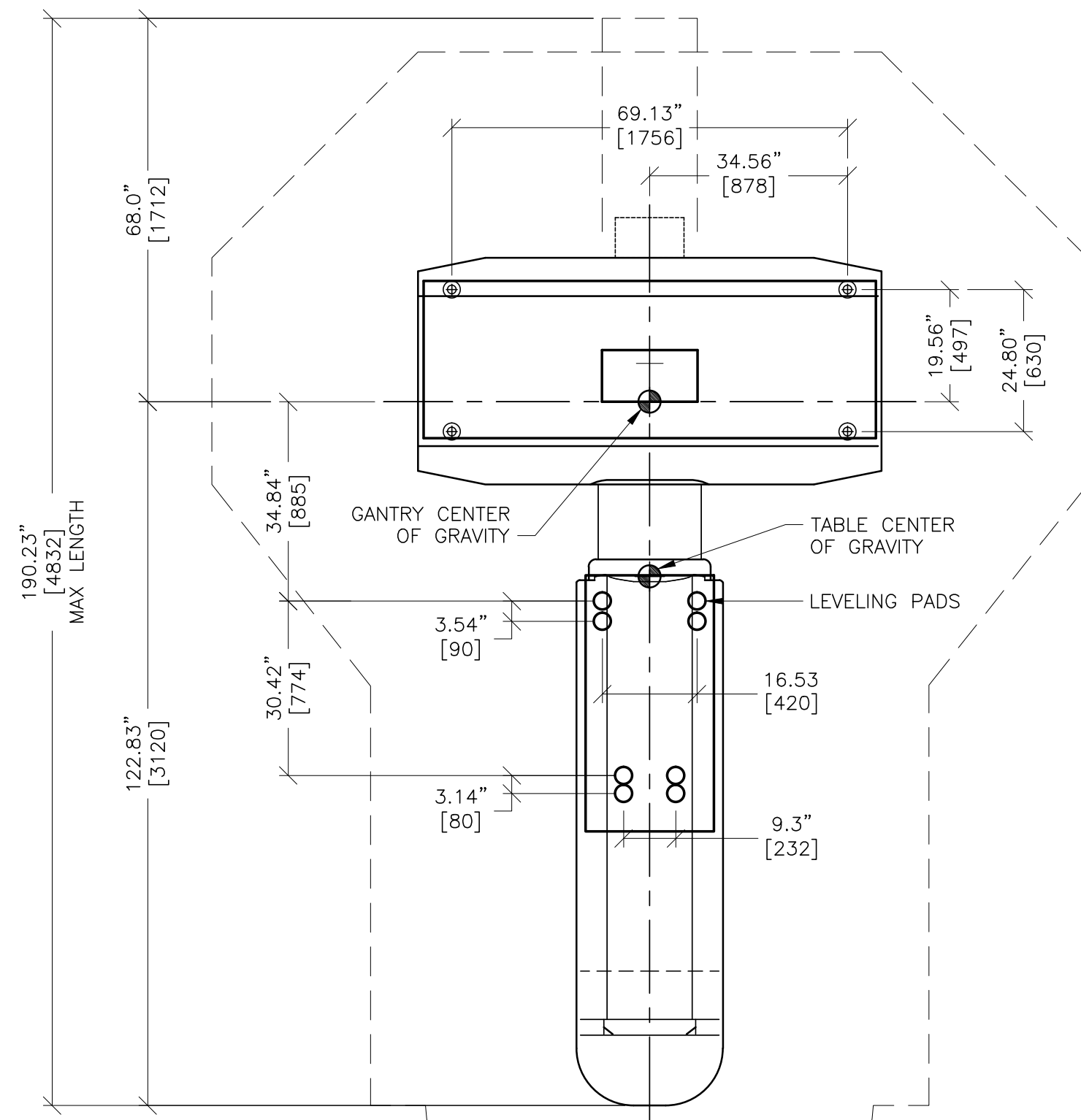
THE SUPPORT STRUCTURE FOR THIS CEILING MOUNTED OPTION AND A FLUSH MOUNTING PLATE MUST BE DESIGNED BY A STRUCTURAL ENGINEER AND INSTALLED BY A QUALIFIED CONTRACTOR PRIOR TO THE CT INSTALLATION

DRAWING NOT TO SCALE

CT GANTRY AND TABLE ANCHOR/LEVELING

B78163

REV. DATE: 10/19/09



DETAIL NOT TO SCALE

FLOOR VIBRATION

THE CT EQUIPMENT MAY BE SENSITIVE TO VIBRATION IN THE FREQUENCY RANGE OF 0.5 TO 20 HZ DEPENDING ON THE AMPLITUDE OF THE VIBRATION. IT IS THE CUSTOMERS RESPONSIBILITY TO CONTRACT A VIBRATION CONSULTANT OR QUALIFIED ENGINEER TO IMPLEMENT DESIGN MODIFICATIONS TO MEET THE SPECIFIC LIMITS. HOWEVER, IT IS ULTIMATELY THE CUSTOMER/ARCHITECT/ENGINEER RESPONSIBILITY TO DESIGN THE SITE SOLUTION.

STEADY STATE VIBRATION

THE MAXIMUM STEADY STATE VIBRATION TRANSMITTED THROUGH THE FLOOR SHOULD NOT EXCEED 10^{-3} M/S² RMS MAXIMUM SINGLE FREQUENCY ABOVE AMBIENT BASELINE FROM 0.5 TO 80 HZ (MEASURED IN ANY 1 HOUR DURING A NORMAL OPERATING PERIOD).

TRANSIENT VIBRATION

THE BEHAVIORAL CHARACTERISTICS MUST BE SUCH THAT ANY MEASUREABLE TRANSIENT DISTURBANCE MUST ALSO BE MINIMIZED TO LESS THAN 0.01 M/S² PEAK-TO-PEAK.

EQUIPMENT LOCATION

TO MINIMIZE THE INTERFERENCE, THE SYSTEM SHOULD BE PLACED ON A SOLID FLOOR, LOCATED AS FAR AS POSSIBLE FROM THE VIBRATION SOURCES, SUCH AS PARKING LOTS, ROADWAYS, SUBWAYS, TRAINS, HALLWAYS, ELEVATORS, AND HOSPITAL PHYSICAL PLANTS. PLEASE NOTE THAT OTHER ITEMS NOT LISTED COULD ALSO BE POTENTIAL SOURCES OF VIBRATION.

This drawing is based on Sketch No.: 140MA011 Seward Memorial Hospital Seward Ne CT Prelim.dwg

PIM R10

RQ - 144835

SHEET TITLE: STRUCTURAL DETAILS
MODALITY TYPE: BRIGHTSPEED ELITE ENHANCED

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 DETAILS AND CONDITIONS OF THE CONTRACT. GE HEALTHCARE DOES NOT WARRANT OR ACCEPT LIABILITY FOR ANY DAMAGES RESULTING THEREFROM.

PROJECT TITLE:

MEMORIAL HEALTH
CARE SYSTEMS
SEWARD, NEBRASKA

PROJECT	REVISION
142137	00

DATE: 02.Jul.14
DRAWN BY: DMH
CHECKED BY: REK

REVISION HISTORY:

SHEET

S2



GE Healthcare

Healthcare Project Implementation - Design Center
Milwaukee, Wisconsin

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

ELECTRICAL PLAN

CEILING HEIGHT = 9'-0"

JUNCTION POINT DESCRIPTIONS

DESCRIPTION	QTY.	HARDWARE	DETAIL NO., SHT. E3
A1 MAIN DISCONNECT	1	PANEL - INCLUDED IN ORDER	ELEC-35
CTT CT SCANNER	1	3 1/2 IN. DIA. BUSHING & LOCKNUT	ELEC-9
DLK1 DOOR SWITCH (NEEDED ONLY IF REQUIRED BY STATE/LOCAL CODES)	1	ROOM DOOR INTERLOCK LIMIT SWITCH IN FRAME - NORMALLY OPEN (24V)	
ICC INJECTOR ELECTRONICS	1	EXTERNALLY CONNECTED	
IE INJECTOR CONTROL CONSOLE	1	COVERPLATE	ELEC-8
IH INJECTOR HEAD	1	8 X 6 X 4 IN. BOX	ELEC-8
OC OPERATORS CONSOLE	1	1/2 IN. DIA. CHASE NIPPLE	ELEC-9
PM POWER DISTRIBUTION UNIT	1	3 1/2 IN. DIA. BUSHING & LOCKNUT	ELEC-9
SED EMERGENCY OFF	1	1/2 IN. DIA. BUSHING & LOCKNUT	ELEC-16
WL WARNING LIGHT	1	SPLIT COVERPLATE	ELEC-22
WLC WARNING LIGHT CONTROL	1	1/2 IN. DIA. BUSHING & LOCKNUT	ELEC-72

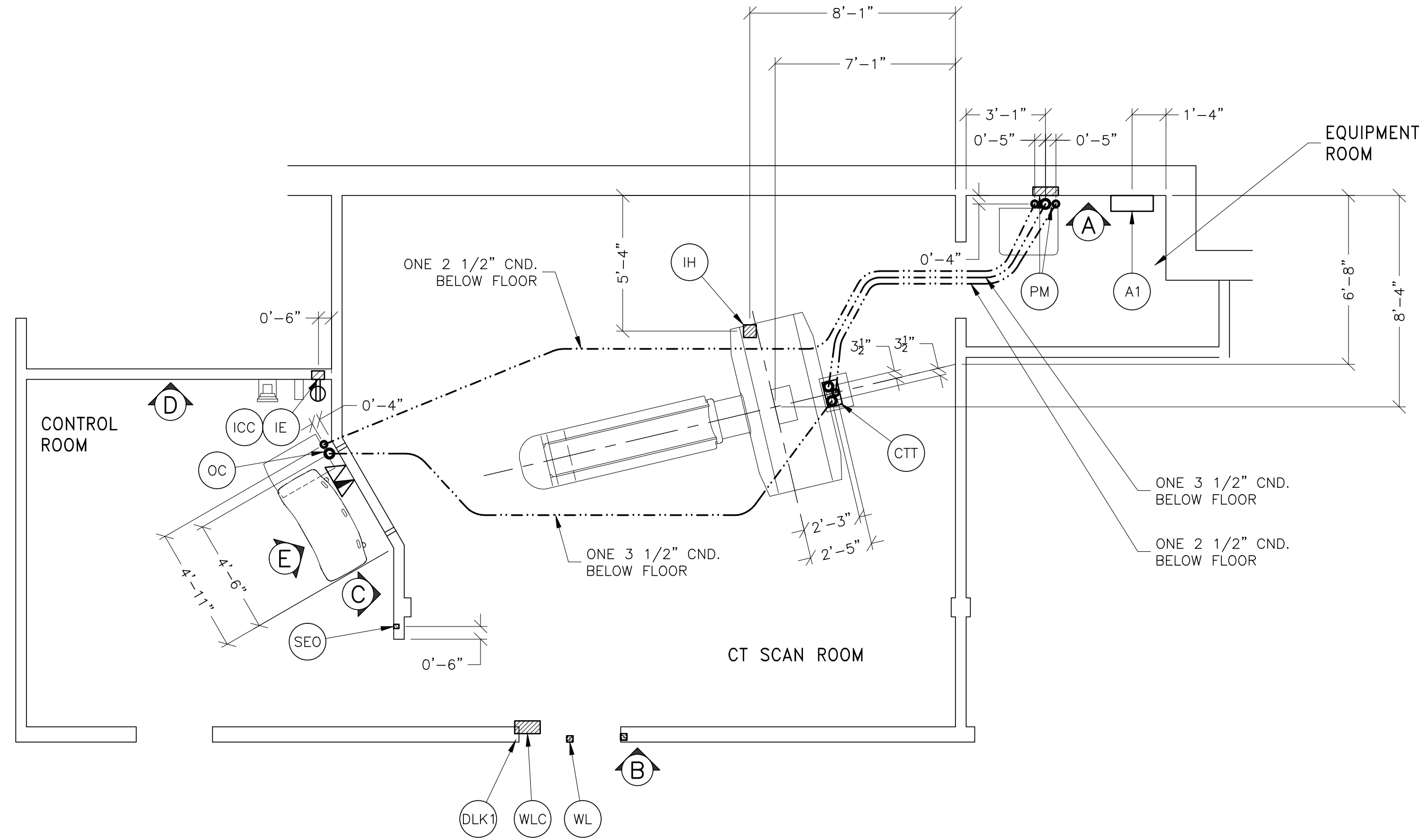
ELECTRICAL OUTLET LEGEND
CUSTOMER/CONTRACTOR SUPPLIED AND INSTALLED ITEMS. HEIGHT ABOVE FLOOR DETERMINED BY LOCAL CODES UNLESS OTHERWISE SPECIFIED.

△	DEDICATED TELEPHONE LINES (SEE ELECTRICAL DETAIL ELEC-1 OR ELEC-67)
▲	NETWORK OUTLET (SEE ELECTRICAL DETAILS ELEC-83 AND ELEC-84 OR ELEC-87)
⊕	DUPLEX HOSPITAL GRADE, DEDICATED WALL OUTLET 120-V, SINGLE PHASE POWER

- JUNCTION POINT NOTES**
- ALL JUNCTION BOXES, CONDUIT, DUCT, DUCT DIVIDERS, SWITCHES, CIRCUIT BREAKERS, ETC., ARE TO BE SUPPLIED AND INSTALLED BY CUSTOMER'S 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:
 - DUCTWORK SHALL BE METAL WITH DIVIDERS AND HAVE REMOVABLE, ACCESSIBLE COVERS.
 - DUCTWORK SHALL BE CERTIFIED/RATED FOR ELECTRICAL POWER PURPOSES.
 - DUCTWORK SHALL BE ELECTRICALLY AND MECHANICALLY BONDED TOGETHER IN AN APPROVED MANNER.
 - 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 CUSTOMER'S 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 THIN 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.

NOTE: CABLE LENGTHS LISTED MAY DIFFER FROM WHAT IS INCLUDED WITH REINSTALLED SYSTEM. CONTACT THE LOCAL FIELD ENGINEER FOR ACTUAL LENGTHS TO BE DELIVERED.



FEEDER TABLE - CT Brightspeed Series/ Optima CT540

○ CALCULATIONS BASED UPON NOMINAL VOLTAGE, WIRE SIZE IN AWG.
○ RECOMMENDED FEEDER SIZES FROM DISTRIBUTION TRANS. TO POWER DISTRIBUTION UNIT.
○ THE GROUNDING CONDUCTOR () WILL BE A 1/0 MINIMUM. THIS GROUND WILL RUN FROM THE EQUIPMENT BACK TO THE POWER SOURCE/MAIN GROUNDING POINT AND ALWAYS TRAVEL IN THE SAME CONDUIT WITH THE FEEDERS AND NEUTRAL.
○ NEUTRAL MUST BE TERMINATED PRIOR TO OR INSIDE THE MAIN DISCONNECT PANEL AND NOT BROUGHT INTO THE POWER DISTRIBUTION UNIT.
○ FOR A FULL SYSTEM UPS REFER TO ELECTRICAL DETAILS FOR UPS FEEDER WIRES.

RUN LENGTH IN FEET	POWER SUPPLY VOLTAGE							
	350-410		368-432		386-454		405-475	
	380	400	420	440	460	480	500	518
50	2 (1/0)	2 (1/0)	3 (1/0)	3 (1/0)	3 (1/0)	3 (1/0)	3 (1/0)	3 (1/0)
100	2 (1/0)	2 (1/0)	3 (1/0)	3 (1/0)	3 (1/0)	3 (1/0)	3 (1/0)	3 (1/0)
150	2 (1/0)	2 (1/0)	3 (1/0)	3 (1/0)	3 (1/0)	3 (1/0)	3 (1/0)	3 (1/0)
200	2 (1/0)	2 (1/0)	3 (1/0)	3 (1/0)	3 (1/0)	3 (1/0)	3 (1/0)	3 (1/0)
250	1 (1/0)	1 (1/0)	2 (1/0)	2 (1/0)	2 (1/0)	2 (1/0)	2 (1/0)	2 (1/0)
300	1/0 (1/0)	1/0 (1/0)	1 (1/0)	1 (1/0)	1 (1/0)	1 (1/0)	1 (1/0)	1 (1/0)
350	2/0 (1/0)	1/0 (1/0)	1/0 (1/0)	1 (1/0)	1 (1/0)	1 (1/0)	1 (1/0)	1 (1/0)
400	2/0 (1/0)	2/0 (1/0)	1/0 (1/0)	1/0 (1/0)	1/0 (1/0)	1/0 (1/0)	1 (1/0)	1 (1/0)

REV. DATE: 12.Sep.12

ADDITIONAL CONDUIT RUNS FOR ALL LIGHTSPEED, DISCOVERY, BRIGHTSPEED, OPTIMA SYSTEMS HISPEED QX/i & BRIVO 385 (BY CONTRACTOR)

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

WL TO WLC	ONE 1/2" CND.
WLC TO PM	ONE 1/2" CND.
PM TO A1	ONE CND. AS REQ'D
A1 TO SED	ONE 1/2" CND.
A1 TO FEEDER	ONE CND. AS REQ'D
WLC TO 120-V 1Ø POWER	CND. AS REQ'D
DLK1 TO PM	ONE 1/2" CND.

NOTE: SEE E2 PAGE FOR MAXIMUM RUN LENGTHS

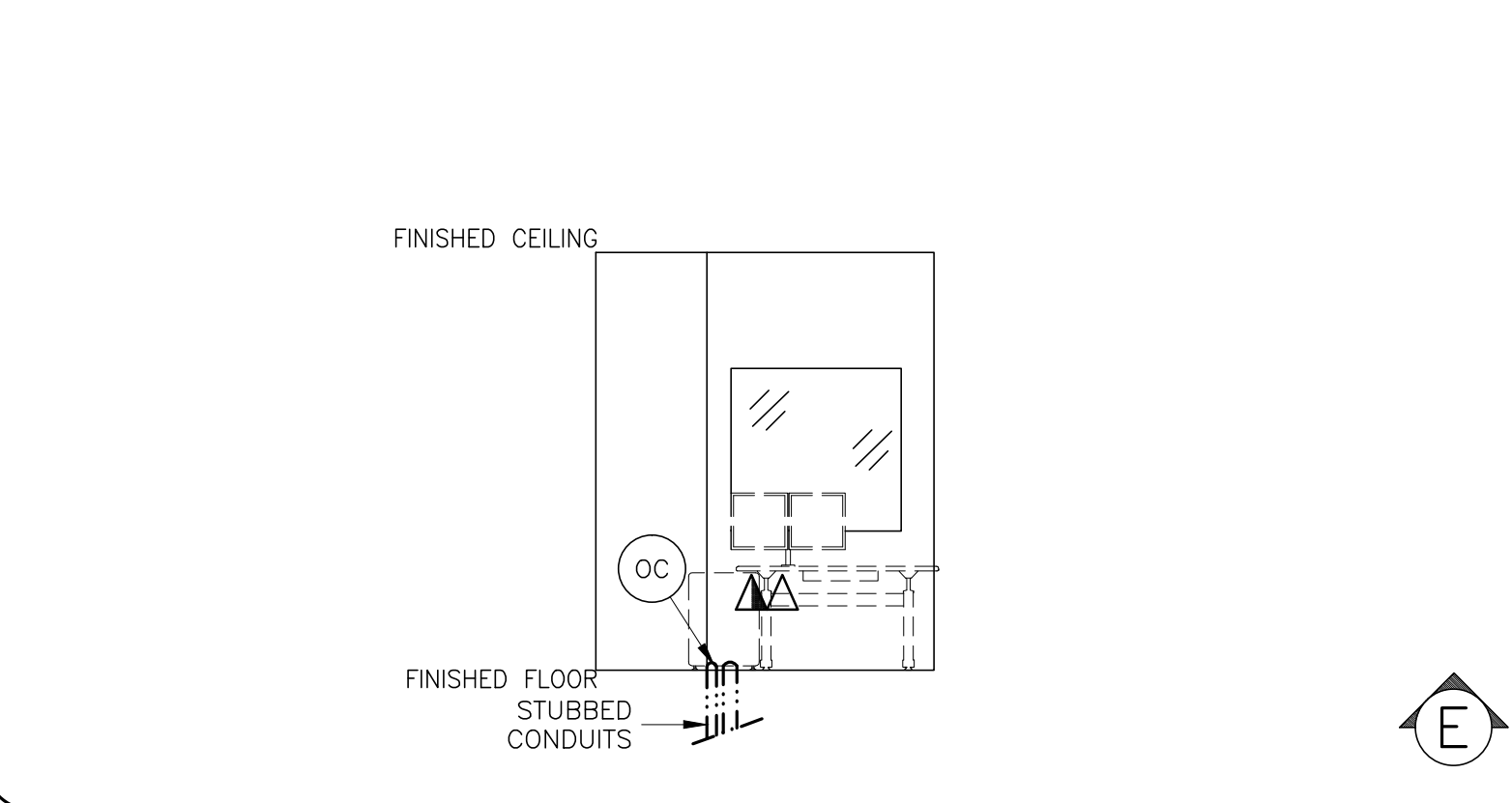
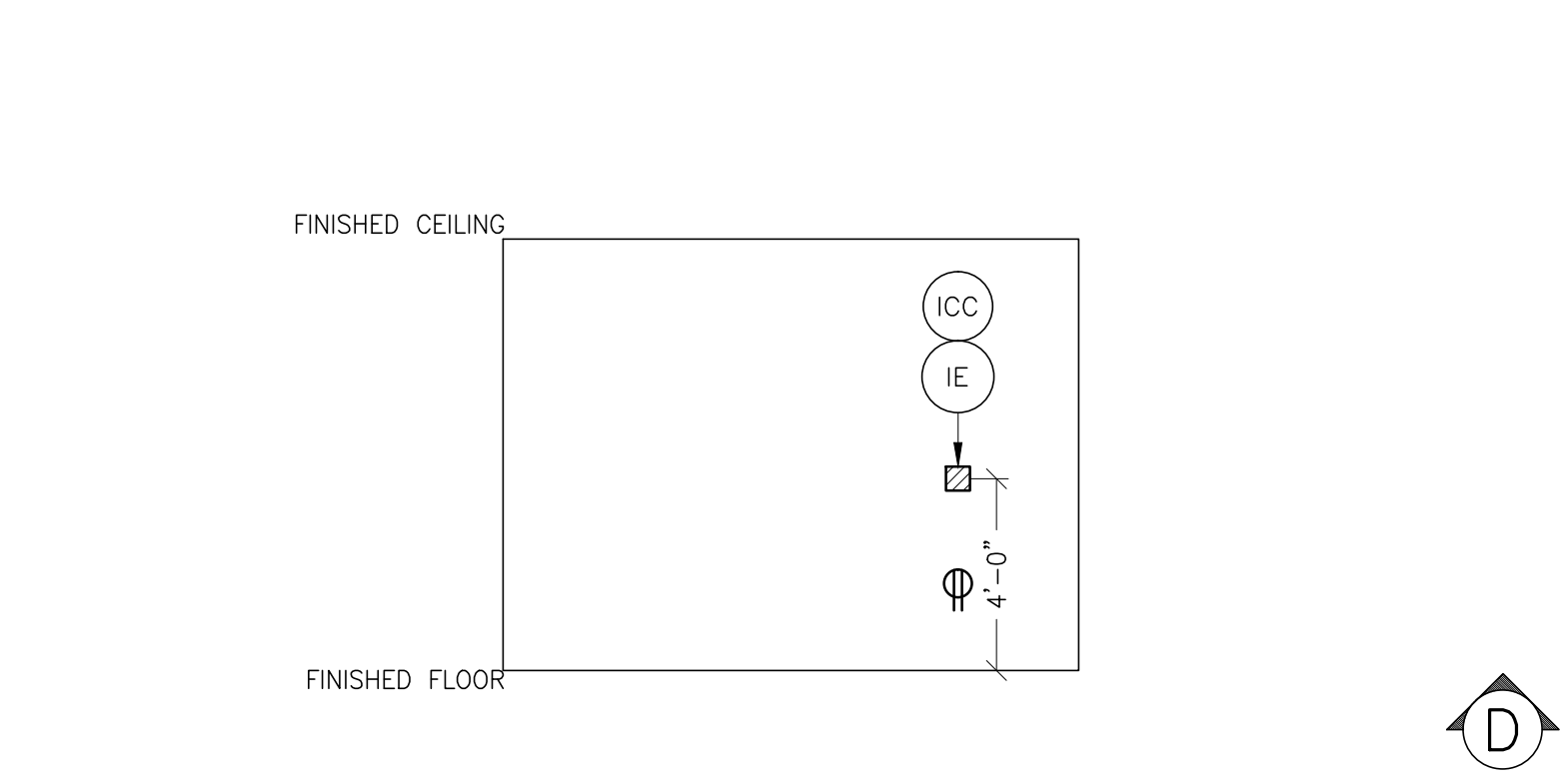
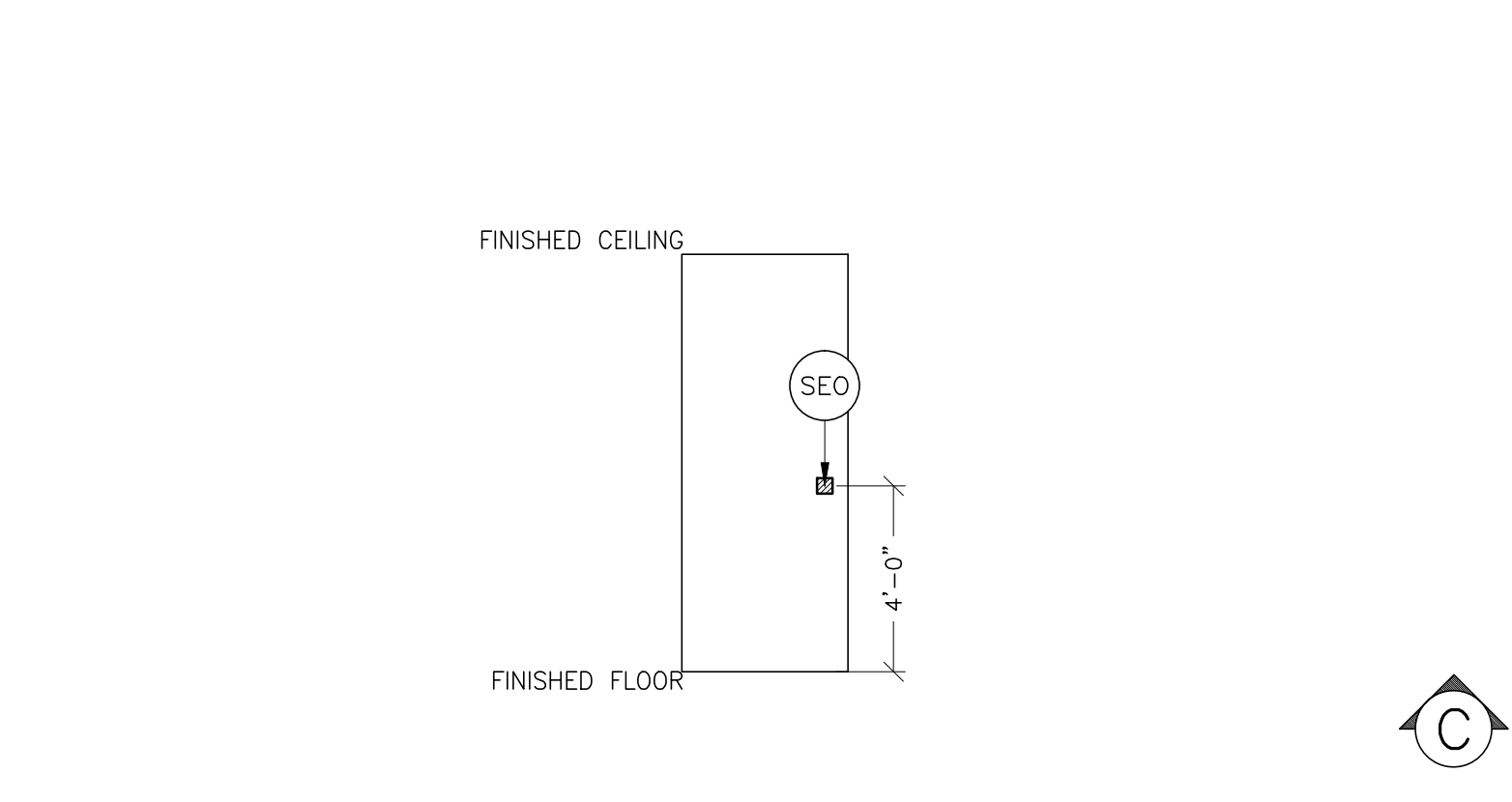
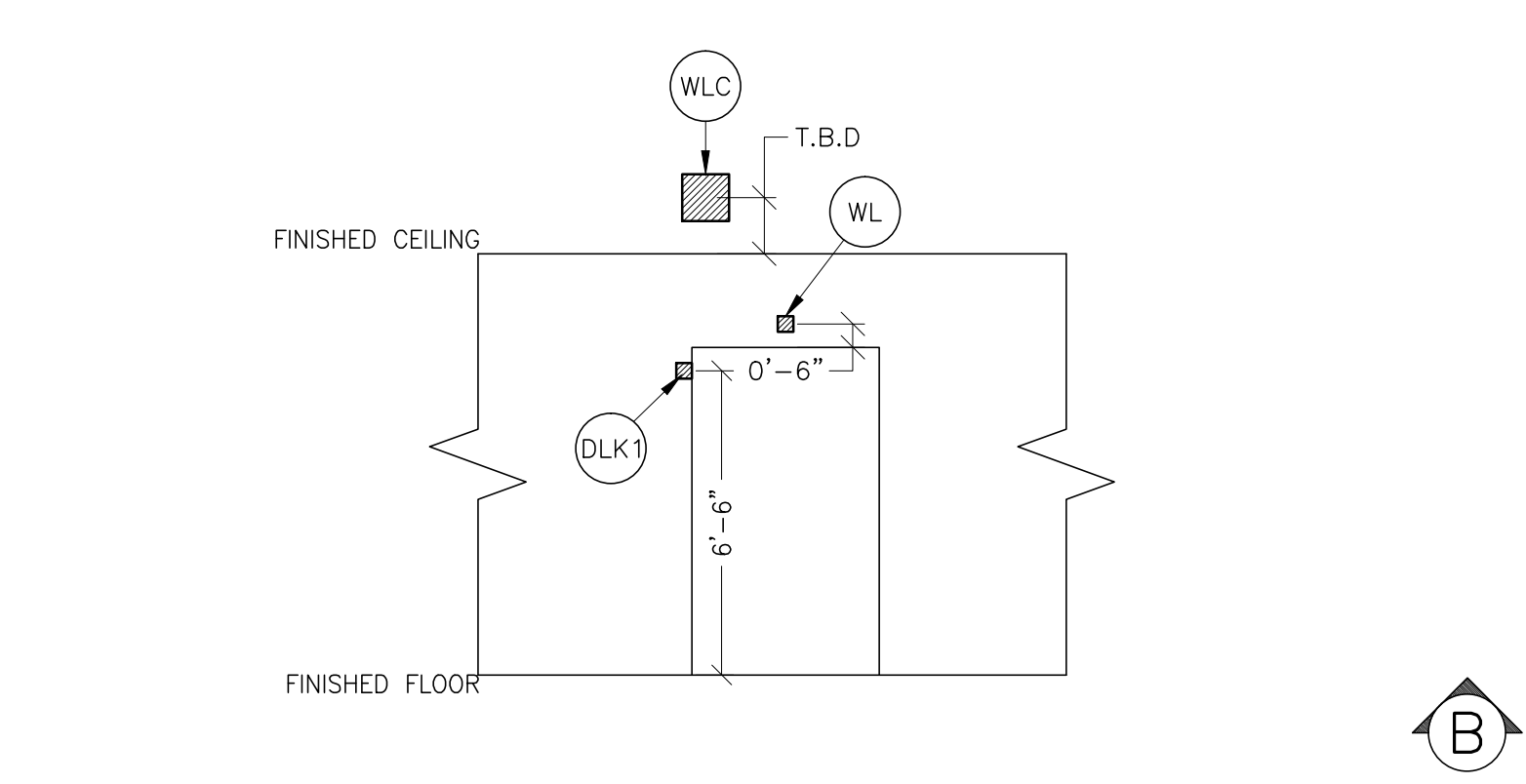
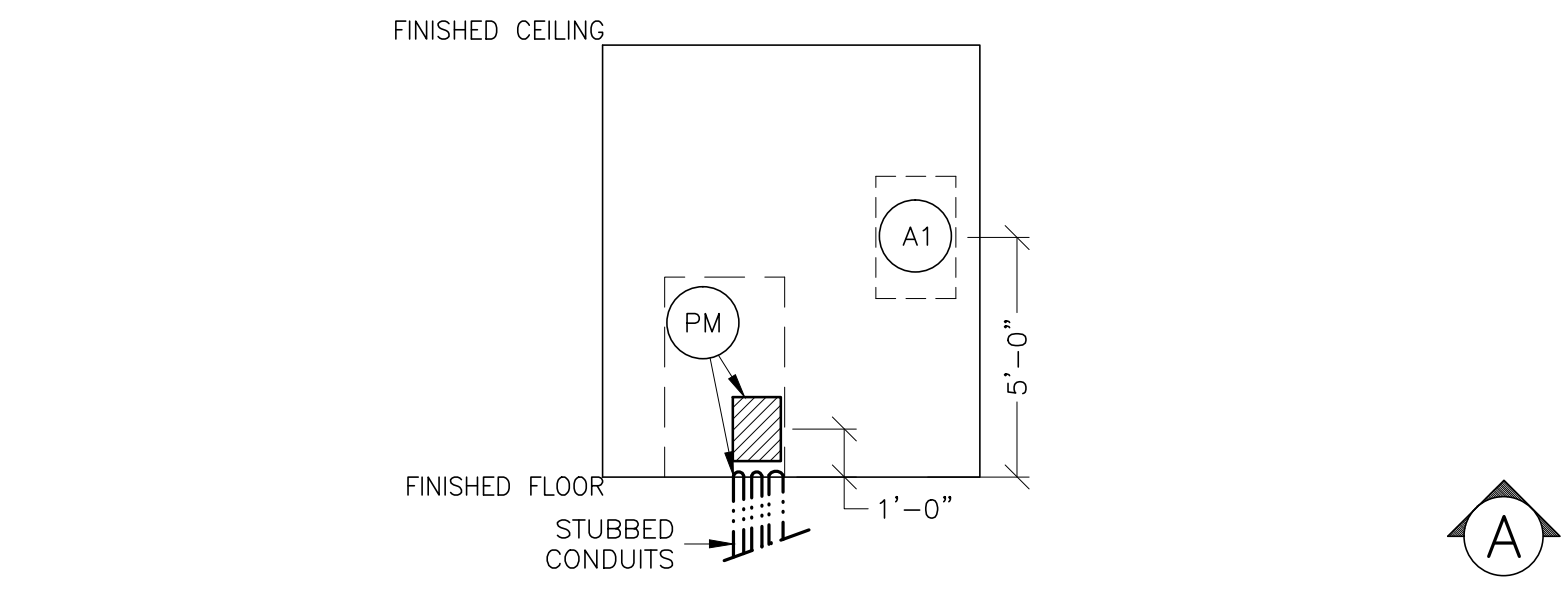
CONDUITS REQUIRED FOR INJECTOR: NEMOTO (CONDUITS ARE LOCATED ABOVE CEILING)

IH TO IH	ONE 2 1/2" CND.
----------	-----------------

REV. DATE: 10/01/08

GE Project Manager: CULLIE PAUP
Telephone: 402-613-1108

THE GE HR TECHNICAL SUPPORT GROUP IS AN ADDITIONAL RESOURCE THAT CAN PROVIDE ANSWERS FOR GENERAL GE PRODUCT SIZING QUESTIONS AND CAN BE REACHED AT (877)-305-9677 OR MAIL TO: HETECH@GE.COM



GE Healthcare
Healthcare Project Implementation - Design Center
Minneapolis, MN

SHEET TITLE: ELECTRICAL LAYOUT
MODALITY TYPE: BRIGHTSPEED ELITE ENHANCED

THIS PLAN IS SUBMITTED TO SUPPORT LOCATION OF HEALTHCARE EQUIPMENT AND ASSOCIATED ELECTRICAL WIRING DETAILS AND ROOM ARRANGEMENTS. IN PREPARING THIS PLAN, EVERY EFFORT HAS BEEN MADE TO CONFORM TO ALL APPLICABLE ELECTRICAL CODES AND REGULATIONS. THE COMPANY CANNOT ACCEPT RESPONSIBILITY FOR ANY DAMAGES RESULTING THEREFROM.

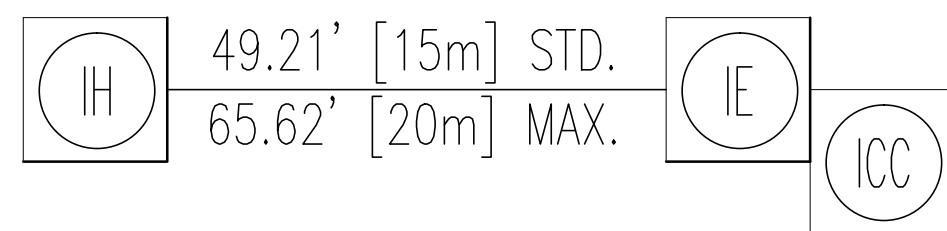
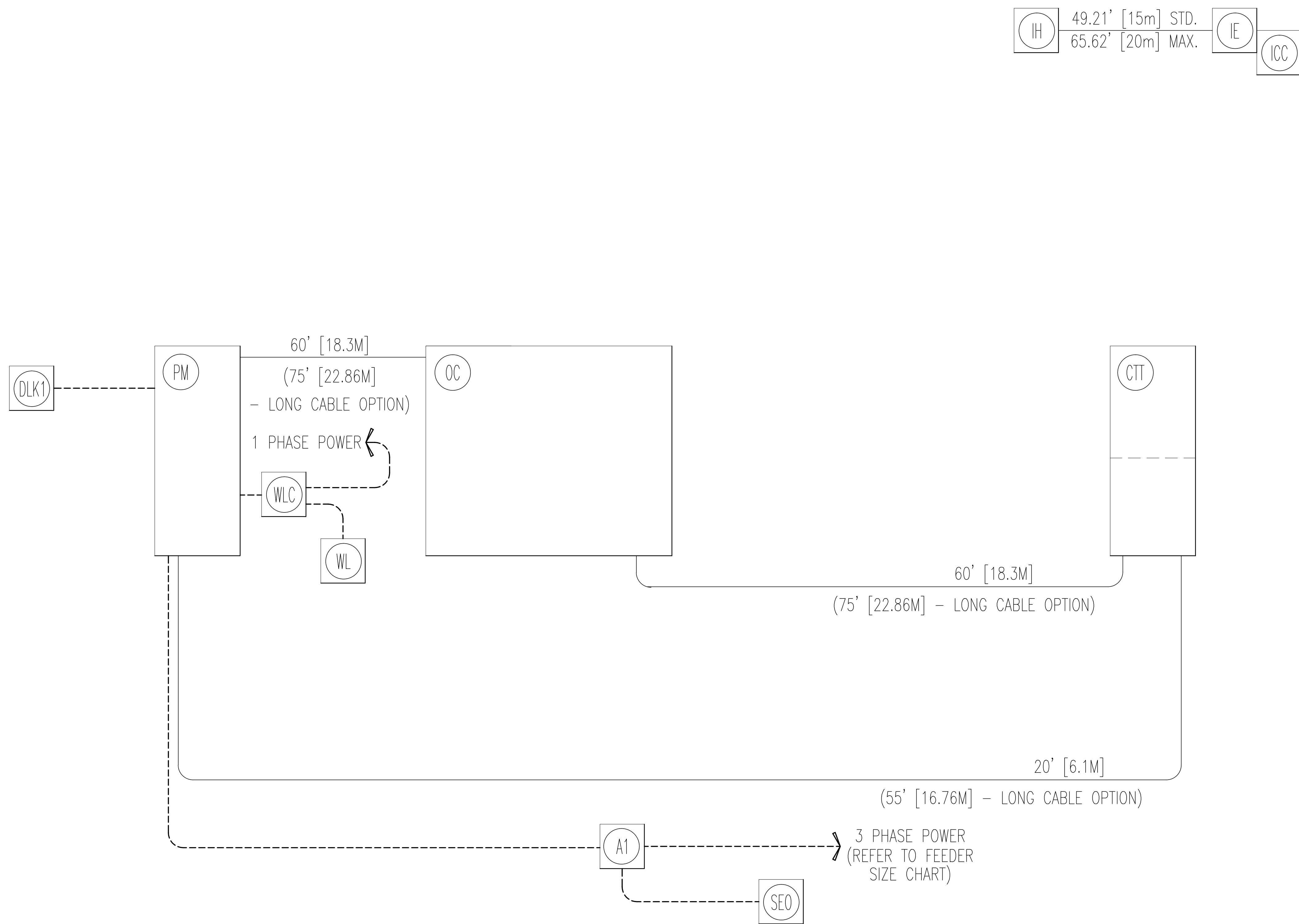
PROJECT TITLE: MEMORIAL HEALTH CARE SYSTEMS
SEWARD, NEBRASKA

PROJECT	REVISION
142137	00
DATE:	02.Jul.14
DRAWN BY:	DMH
CHECKED BY:	REK

REVISION HISTORY:

SHEET
E1

INTERCONNECT DIAGRAM



POWER SPECIFICATIONS

CT Brightspeed Series/Optima CT540

(REV. DATE 12.Sep.12)

VOLTAGE: PRIMARY SOURCE IS REQUIRED FOR ALL INSTALLATIONS. RANGE OF LINE VOLTAGES: NOMINAL LINE VOLTAGE OF 380 TO 480, 3 PHASE, 50 OR 60 Hz.
REQUIRED POWER SUPPLY: WYE CONNECTED
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	CURRENT (AMPS)		MINIMUM STANDARD OVERCURRENT PROTECTION
		MOMENTARY	CONTINUOUS	
380	342-418	137	30	110-A
400	360-440	130	29	110-A
420	378-462	124	27	100-A
440	396-484	118	26	100-A
460	414-506	113	25	90-A
480	432-528	108	24	90-A

(ALL CALCULATIONS BASED UPON NOMINAL VOLTAGE)

PHASE-BALANCE:

PHASE-TO-PHASE VOLTAGES MUST BE WITHIN +2 PERCENT OF THE LOWEST PHASE-TO-PHASE VOLTAGE. MAXIMUM ALLOWABLE TRANSIENT VOLTAGE SHOULD BE LIMITED TO 1500V PEAK.

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.

POWER DEMAND

CONTINUOUS POWER DEMAND = 20 KVA (MAX DEMAND = 90 KVA)

TABLE B MAXIMUM MOMENTARY POWER DEMAND.

DEMAND	CT HiSpeed
kVa *	90
POWER FACTOR AT	0.85

* DEMAND INCLUDES POWER FOR ENTIRE CT SYSTEM. LINE VOLTAGE REGULATION AT MAXIMUM POWER DEMAND MUST BE LESS THAN OR EQUAL TO 6 PERCENT.

DISTRIBUTION TRANSFORMER

FOR A SINGLE UNIT INSTALLATION, THE MINIMUM TRANSFORMER SIZE IS 112.5 KVA, WITH 2.4% RATED REGULATION AT UNITY POWER FACTOR. RESULTANT MAXIMUM ALLOWABLE FEEDER REGULATION IS 3.4%

NOTE: THE CT SYSTEM MUST NOT BE POWERED IN A MULTIPLE INSTALLATION WHERE FILM CHANGERS ARE USED. FILM CHANGERS UTILIZE A LARGE NUMBER OF HIGH POWERED CLOSELY SPACED EXPOSURES WHICH MAY COINCIDE WITH THE CT SCAN.

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.
- NOTE 12: GEHC CONDUCTS POWER AUDITS TO VERIFY QUALITY OF POWER BEING DELIVERED TO THE SYSTEM. THE CUSTOMER'S ELECTRICAL CONTRACTOR IS REQUIRED TO BE AVAILABLE TO SUPPORT THIS ACTIVITY.

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

This drawing is based on Sketch No.: 140MA011 Seward Memorial Hospital Seward Ne CT Prelim.dwg PIM R10 RQ - 144835

GE Healthcare
Healthcare Project Implementation - Design Center
Milwaukee, Wisconsin

SHEET TITLE: ELECTRICAL SPECIFICATIONS
MODALITY TYPE: BRIGHTSPEED ELITE ENHANCED

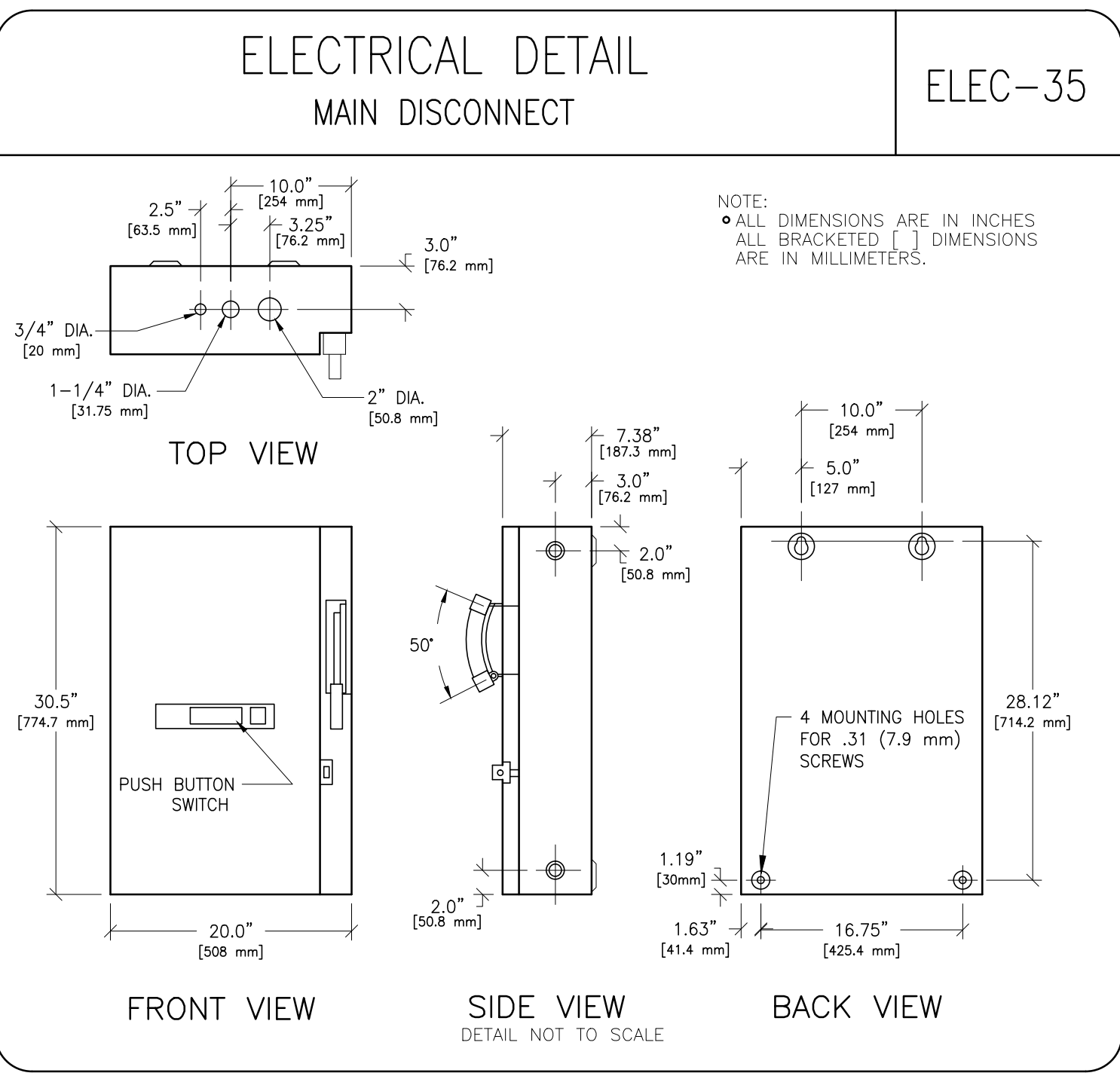
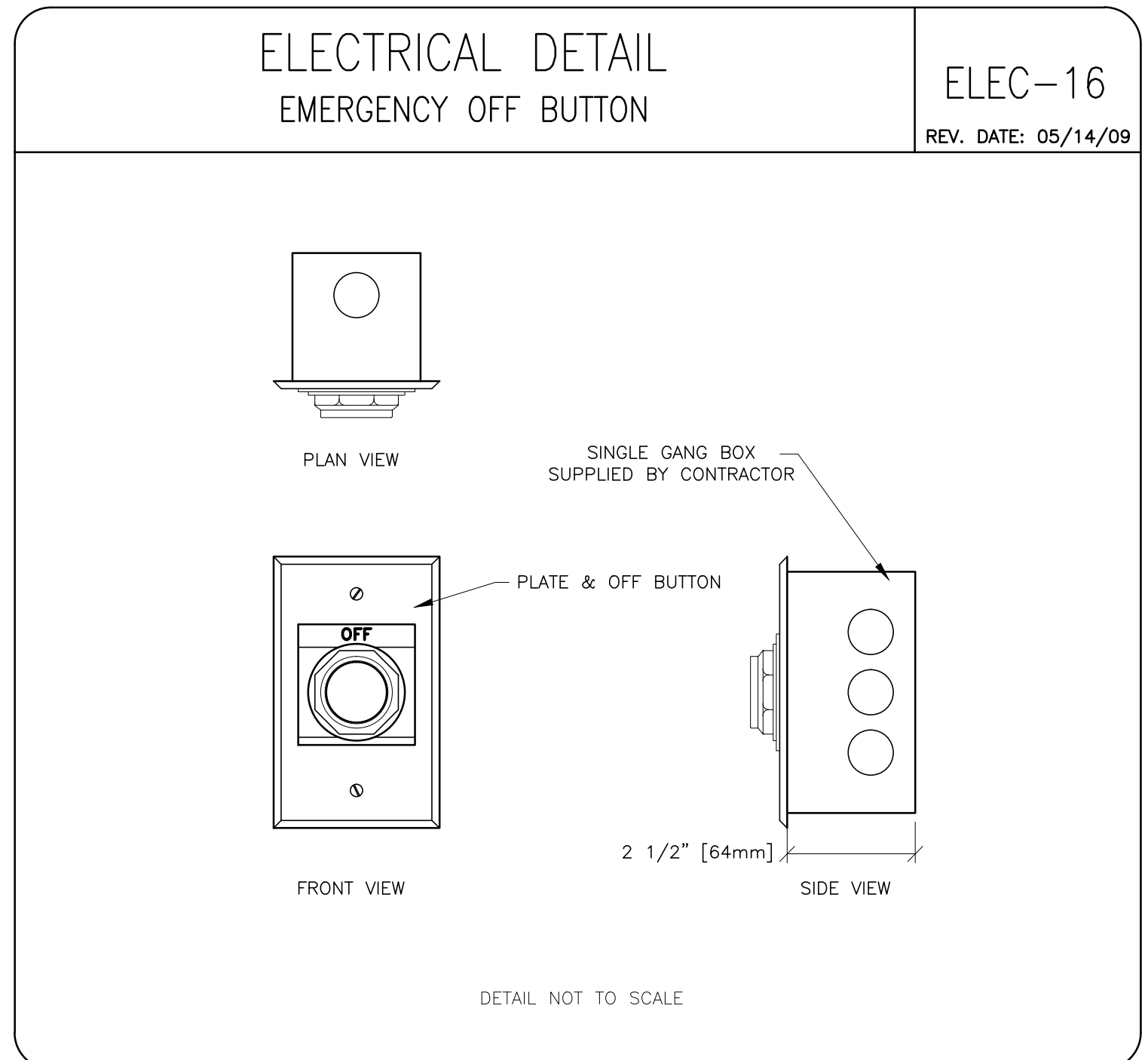
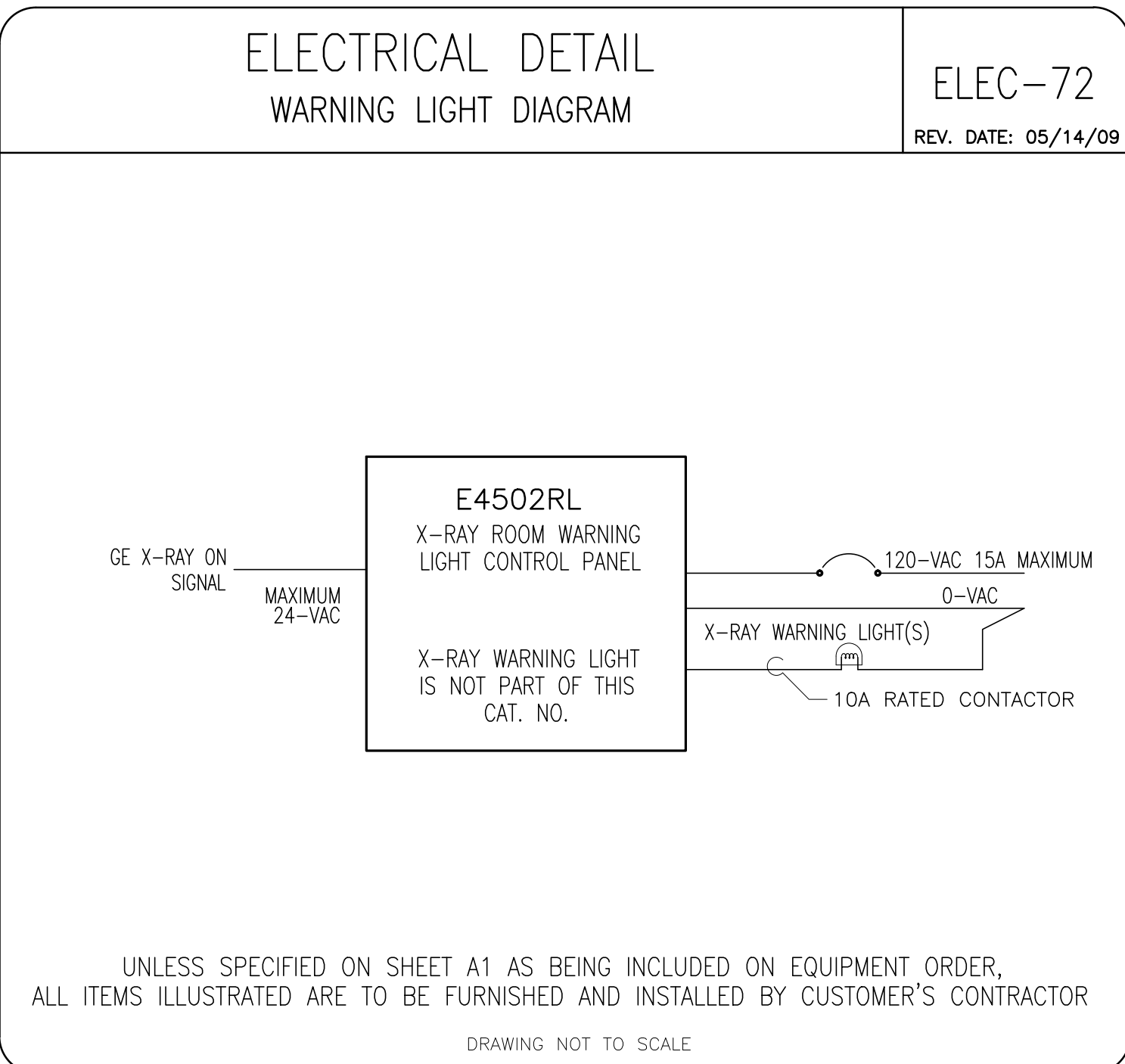
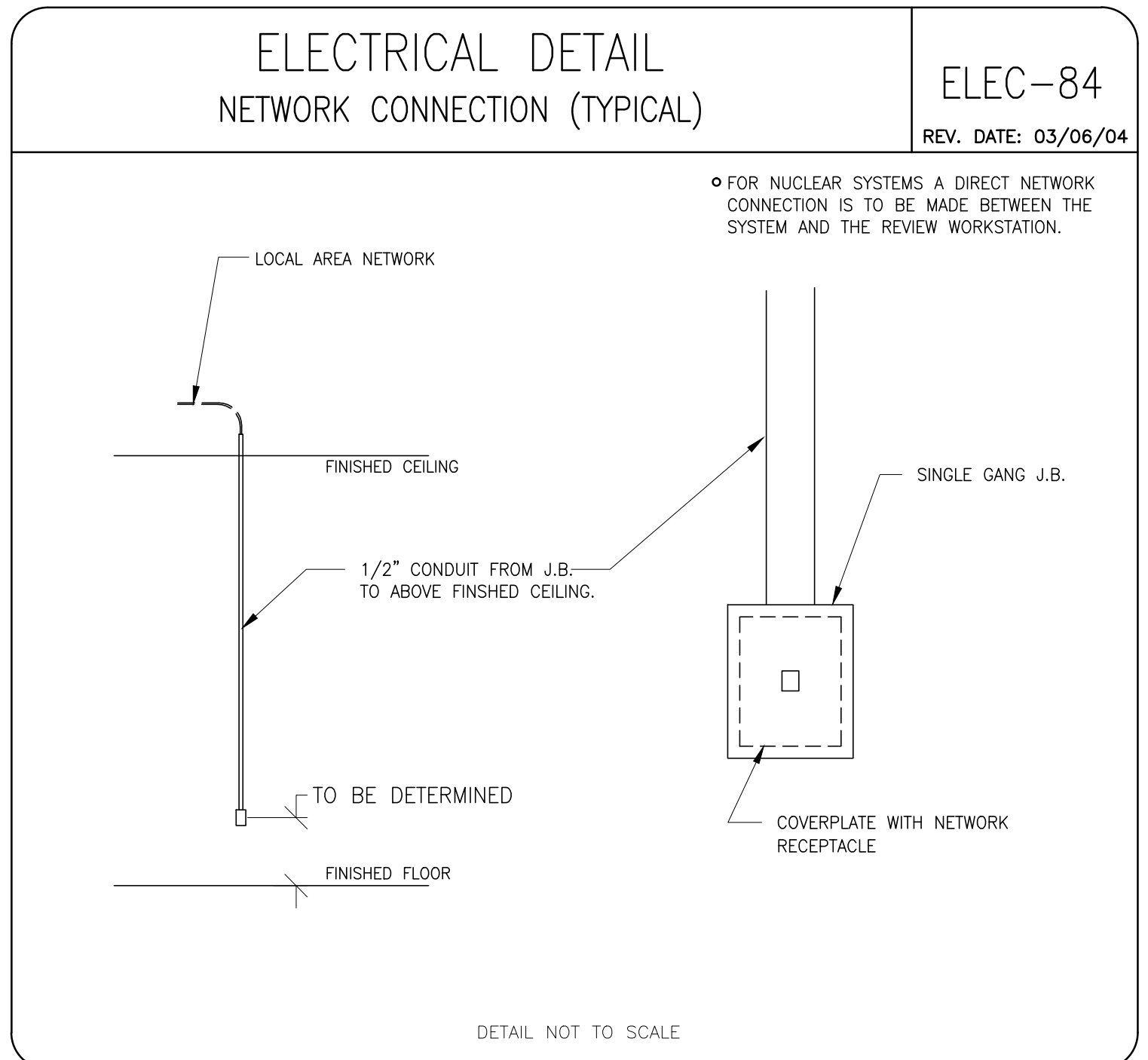
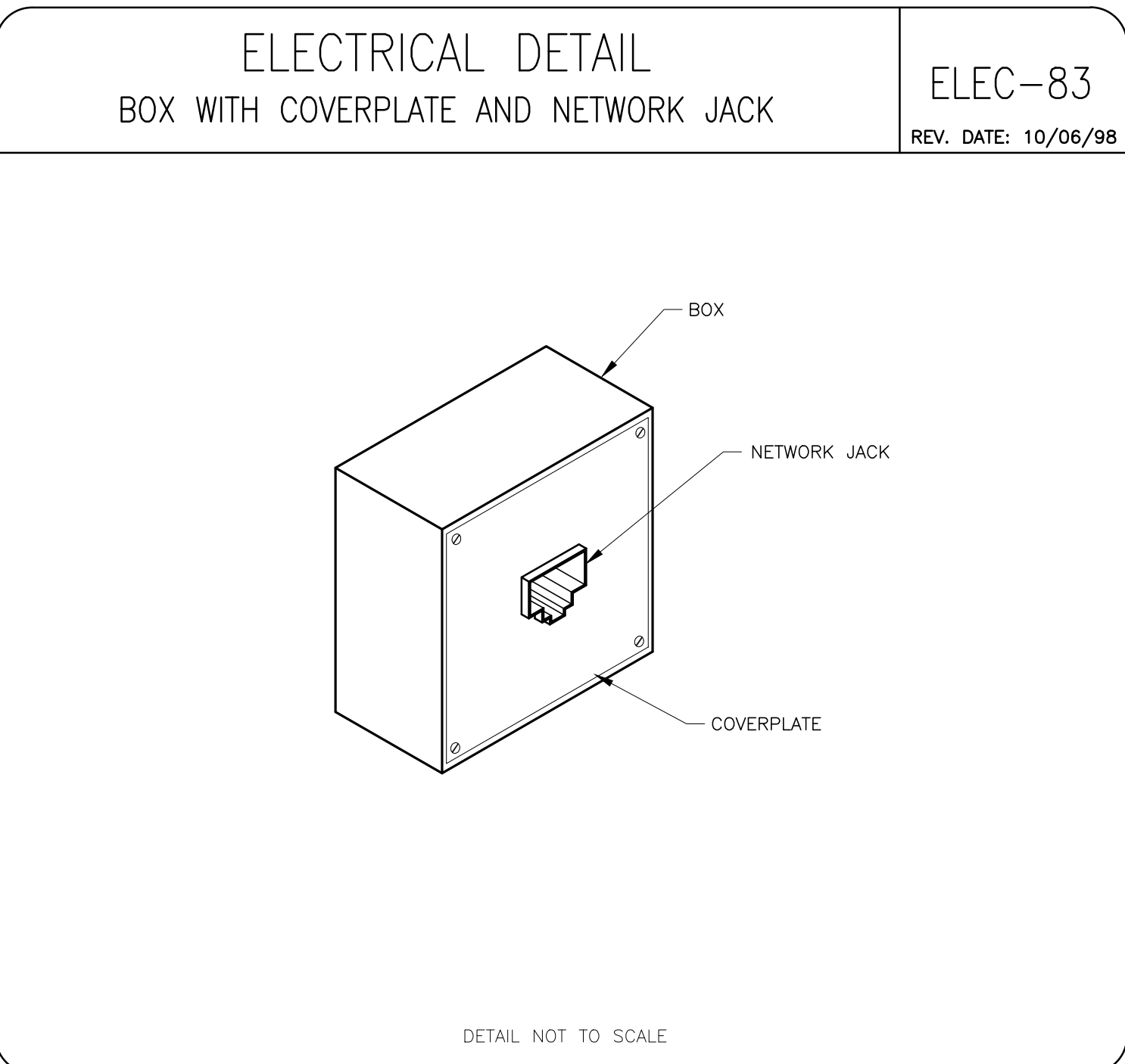
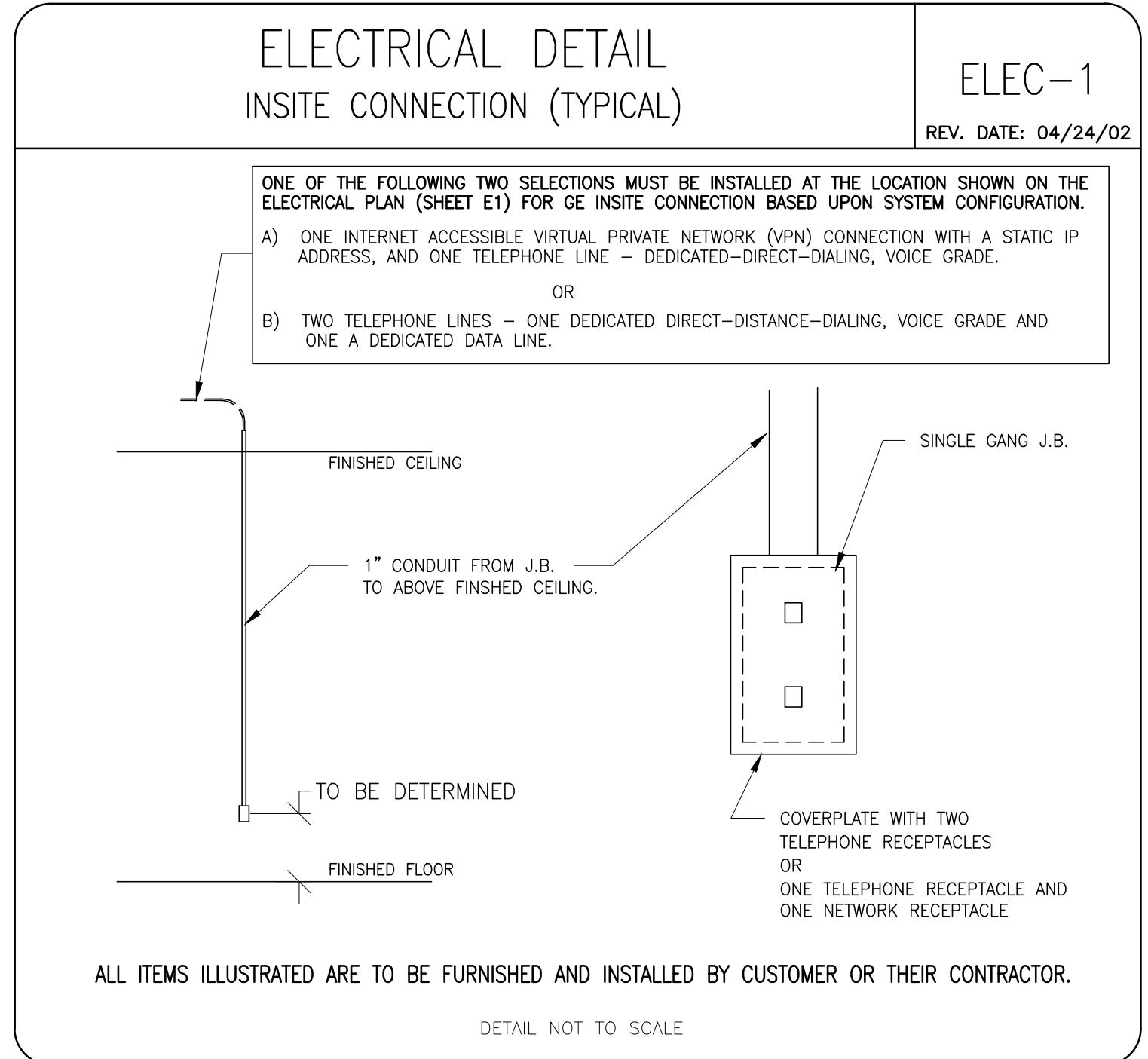
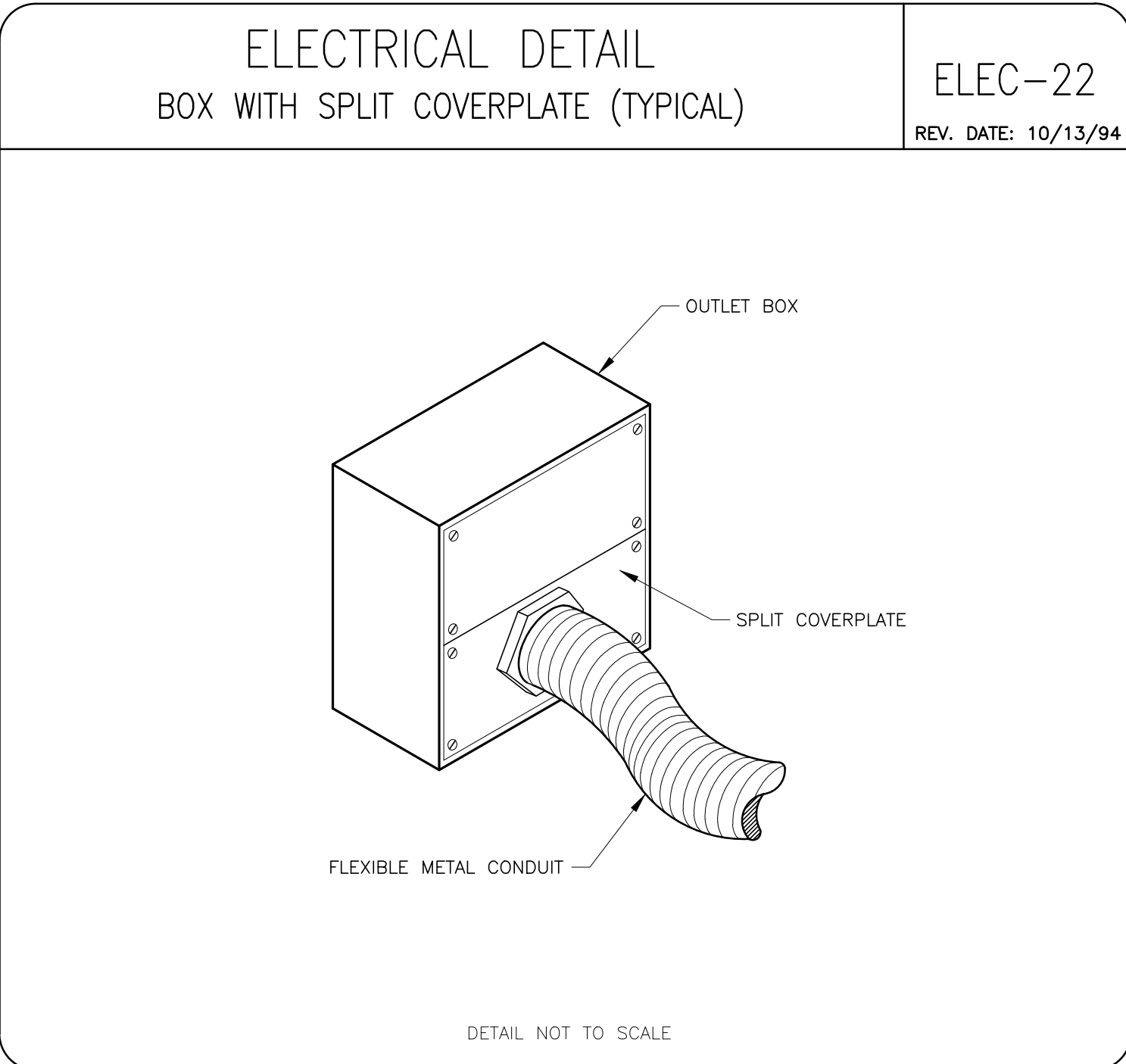
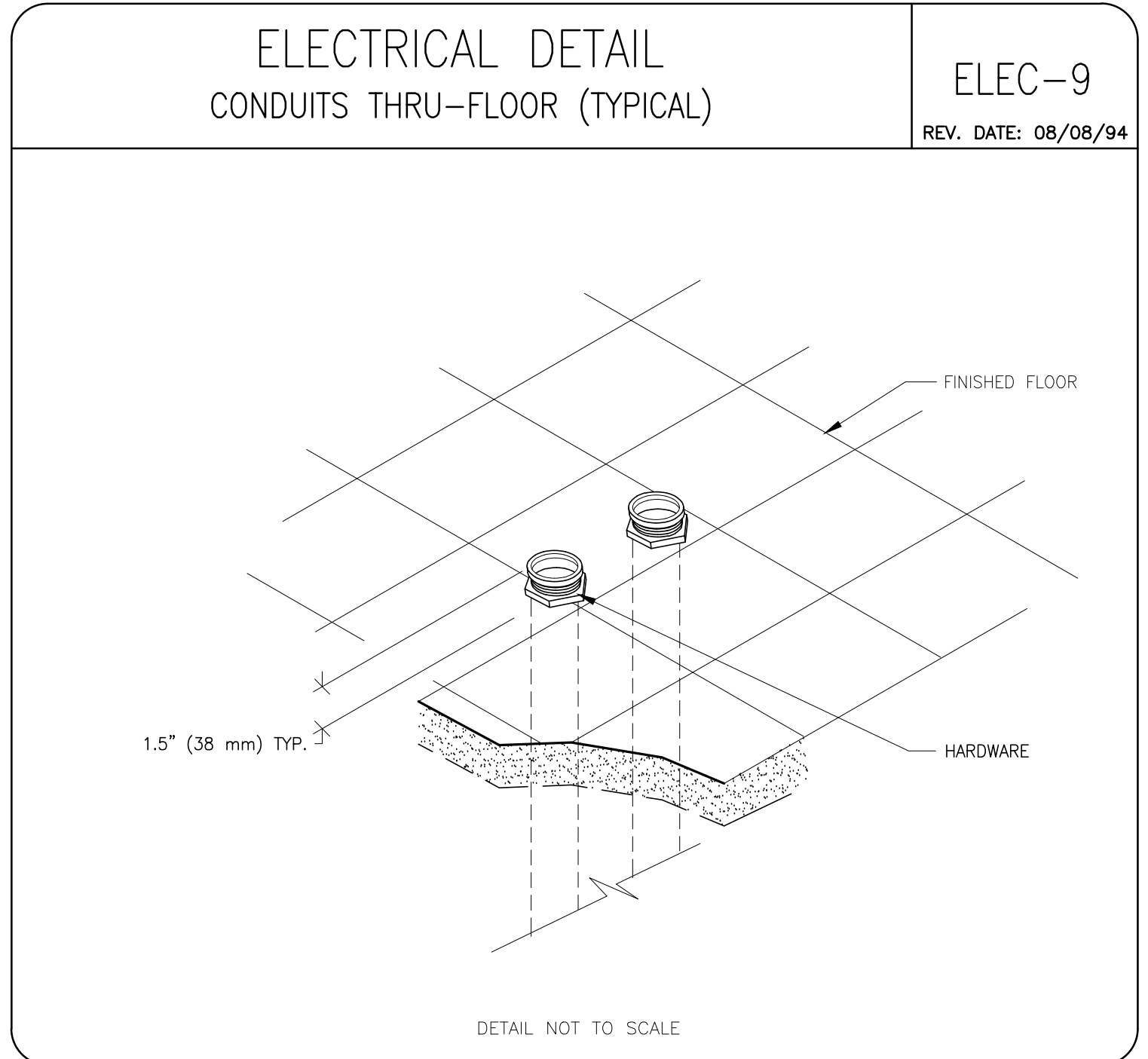
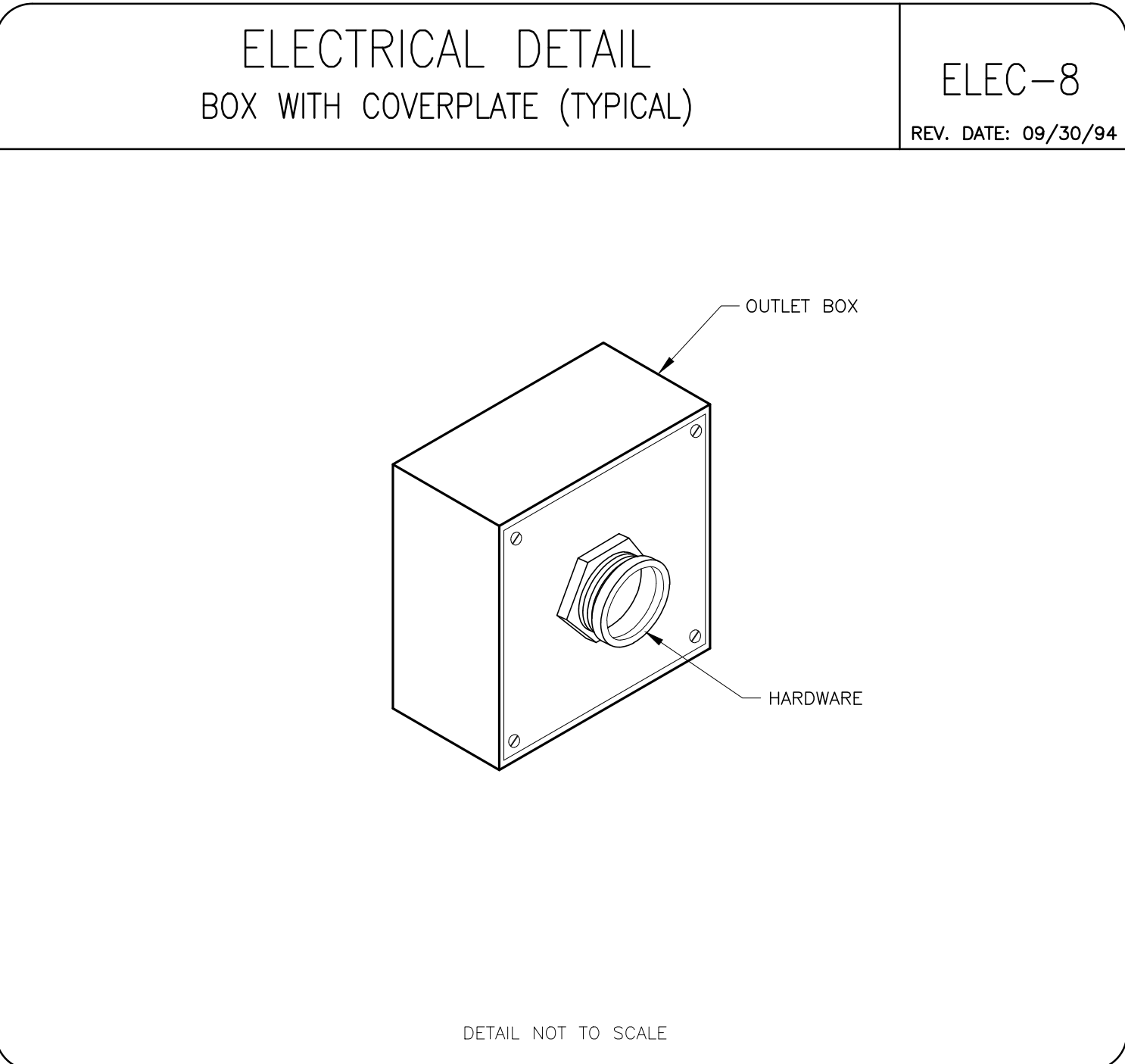
THIS PLAN IS SUBMITTED TO SURVEY LOCATION OF GE HEALTHCARE EQUIPMENT AND ASSOCIATED APPARATUS. ELECTRICAL WIRING DETAILS AND ROOM ARRANGEMENTS IN PREPARING THIS PLAN, EVERY EFFORT HAS BEEN MADE TO CONFORM DETAILS TO THE ACTUAL CONSTRUCTION PURPOSES AND TO THE USER'S AND THE COMPANY CANNOT ACCEPT RESPONSIBILITY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

PROJECT TITLE:
MEMORIAL HEALTH CARE SYSTEMS
SEWARD, NEBRASKA

PROJECT	REVISION
142137	00
DATE:	02.Jul.14
DRAWN BY:	DMH
CHECKED BY:	REK

REVISION HISTORY:

SHEET
E2



GE Healthcare

Healthcare Project Implementation - Design Center
Milwaukee, Wisconsin

SHEET TITLE: **ELECTRICAL DETAILS**
MODALITY TYPE: **BRIGHTSPEED ELITE ENHANCED**

THIS PLAN IS SUBMITTED TO SUPPORT THE LOCATION OF 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. THE USER OF THIS PLAN SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL CONSTRUCTION ELEMENTS AND THE COMPANY CANNOT ACCEPT RESPONSIBILITY FOR ANY DAMAGES RESULTING THEREFROM.

PROJECT TITLE:
MEMORIAL HEALTH CARE SYSTEMS
SEWARD, NEBRASKA

PROJECT	REVISION
142137	00

DATE: 02 Jul 14
DRAWN BY: DMH
CHECKED BY: REK

REVISION HISTORY:

SHEET
E3

This drawing is based on Sketch No.: 140MA011 Seward Memorial Hospital Seward Ne CT Prelim.dwg

EQUIPMENT DETAIL

NEMOTO INJECTOR ON OVERHEAD COUNTERPOISED SUSPENSION

B50-31N
REV. DATE: 06/23/09

VERIFY MOUNTING ASSEMBLY DIMENSIONS WITH INJECTOR MANUFACTURER.

POST	LENGTHS	GE ECAT #
SHORT	22.8" / 580mm	E8004NA
INTERMEDIATE	33.5" / 850mm	E8004NJ
LONG	N/A	N/A

65" MAX. ARC [1660mm]

HIGHEST HEAD POSITION

INJECTOR

LOWEST HEAD POSITION

RECOMMENDED HEIGHT TO FLOOR
82" - 88" [2083mm - 2235mm]

POST	MIN. PLATE HEIGHT	MAX. PLATE HEIGHT
SHORT	107.75" [2737mm]	113.75" [2889mm]
INTERMEDIATE	118.5" [3010mm]	124.5" [3162mm]
LONG	-	-

DRAWING NOT TO SCALE

EQUIPMENT DETAIL

NEMOTO INJECTOR ELECTRONICS

B8007C
REV. DATE: 7/9/08

9.4" [240mm]

0.97" [246mm]

7.8" [190mm]

4.2" [107mm]

10.6" [270mm]

3.9" [100mm]

DISPLAY UNIT

MAIN UNIT

DRAWING NOT TO SCALE

EQUIPMENT DETAIL

POWER DISTRIBUTION UNIT

B78-58D
REV. DATE: 01/28/09

5.9" [150mm]

21.7" [550mm]

35.4" [900mm]

27.6" [700mm]

41.8" [1062mm]

13.8" [350mm]

19.4" [494mm]

24.0" [610mm]

9.3" [235mm]

66.0" [1676mm]

14.2" [360mm]

4.9" [125mm]

V/O CONNECTIONS PANEL

AC POWER INPUT BOX

SERVICE AREA

PLAN VIEW

FRONT VIEW

SIDE VIEW

NOTE:
• INDICATES AIR FLOW
• INDICATES CENTER OF GRAVITY

EQUIPMENT DETAIL

FREEDOM WORKSPACE TABLE

B81-06
REV. DATE: 30.APR.13

26.68" [683]

22.71" [577]

14.68" [373]

36.06" [916]

12.67" [322]

FRONT VIEW

SIDE VIEW

24.40" [620]

51.18" [1300]

TOP VIEW

• INDICATES CENTER OF GRAVITY
• NOTE: DETAIL NOT TO SCALE
• UNITS IN INCHES BRACKETED DIMENSIONS EQUAL [MM]

EQUIPMENT DETAIL

T.I.O. OPERATORS CONSOLE - COMPUTER

B81-05
REV. DATE: 20.NOV.12

NOTE: DETAIL NOT TO SCALE
UNITS IN INCHES BRACKETED DIMENSIONS EQUAL [MM]

25.25" [640]

18.5" [470]

FRONT VIEW

29.13" [740]

18.50" [470]

29.13" [740]

TOP VIEW

SIDE VIEW

EQUIPMENT DETAIL

CT GANTRY SHOWN TILTED 30° - SIDE VIEW

B81-08
REV. DATE: 10/16/09

141.53" [3595]

81.69" [2075]

40.0" [1016]

39.01" [991]

146.49" [3721]

76.37" [1940]

40.0" [1016]

39.01" [991]

• INDICATES CENTER OF GRAVITY
• NOTE: DETAIL NOT TO SCALE
• UNITS IN INCHES BRACKETED DIMENSIONS EQUAL [MM]

EQUIPMENT DETAIL

CT GANTRY AND TABLE LAYOUT - SIDE VIEW

B81-09
REV. DATE: 10/16/09

108.22" [2749]

76.53" [1944]

40.0" [1016]

39.01" [991]

40.78" [1036]

43.07" [1094]

122.83 [3120]

76.53" [1944]

40.0" [1016]

16.92" [430]

18.70" [475]

20.98" [533]

CRADLE CENTER LINE

• INDICATES CENTER OF GRAVITY
• NOTE: DETAIL NOT TO SCALE
• UNITS IN INCHES BRACKETED DIMENSIONS EQUAL [MM]

EQUIPMENT DETAIL

CT TYPICAL SCATTER SURVEY

B78-16F
REV. DATE: 06/15/06

NOTE: 140 Kv
100 mAs/scan
1 Sec
4 x 5.00mm Scan Acquisition
BODY PHANTOM

0.65 1.3 2.6 5.2 5.2 2.6 1.3 0.65

PLAN VIEW

ELEVATION

APPROX. 50 inches

EQUIPMENT DETAIL

CT TYPICAL SCATTER SURVEY

B78-16G
REV. DATE: 06/15/06

NOTE: 140 Kv
100 mAs/scan
1 Sec
4 x 5.00mm Scan Acquisition
HEAD PHANTOM

0.33 0.65 1.3 2.6 2.6 1.3 0.65 0.33

PLAN VIEW

ELEVATION

APPROX. 50 inches

EQUIPMENT DETAIL

CT GANTRY

B78-16H
REV. DATE: 12/13/05

81" [2057mm]

40.1" [1018mm]

6.6" [170mm]

76" [1930mm]

39.96" [1015mm]

11.89" [302.2mm]

24.8" [630mm]

FRONT VIEW

SIDE VIEW

DETAIL NOT TO SCALE

EQUIPMENT DETAIL

CT GANTRY SHIPPING DETAIL

B79-96MJ
REV. DATE: 01/28/09

22.00" [559mm]

3.00" [76mm]

8.4" [213mm]

34.17" [866mm]

8.4" [213mm]

81.0" [2057mm]

15.00" [381mm]

PLAN VIEW

CONFIGURATION	DIMENSIONS			PERSONS NEEDED	ADDITIONAL PERSON HOURS	COMMENT
	LENGTH IN. [mm]	WIDTH IN. [mm]	HEIGHT IN. [mm]			
NORMAL SHIPPING CONFIGURATION	111 [2819]	51 [1295]	79 [2006]	2	0	VAN DRIVERS DELIVER EQUIPMENT TO ROOM. GE REPS. SUPERVISE AND ASSIST. HEIGHT IS WITH 1 IN. (25.4mm) CLEARANCE FROM FLOOR.
REMOVE PROTECTIVE SIDE RAILS	111 [2819]	39.4 [1000]	79 [2006]	2	0.5	WITH RAILS REMOVED, BE VERY CAREFUL TO PREVENT DAMAGE TO COVERS.
REMOVE COVERS REMOVE DOLLIES	77 [1975]	34 [863]	73 [1854]	2	1.5	THIS CONFIGURATION IS USED TO GET GANTRY INTO A 9 FT. (2.74m) ELEVATOR. DO NOT PUSH ON GANTRY COVERS. PUSH ONLY ON FRAME MEMBERS. AUX DOLLIES PROVIDE 2.3 IN. (58mm) CLEARANCE FROM FLOOR. USE EXTREME CARE IN REMOVING, HANDLING AND INSTALLING COVERS. SEE PROCEDURE IN DIRECTION 5141177-100, BRIGHTSPEED ELITE, EDGE, AND EXCEL GENERAL SYSTEM INSTALLATION. SEE TWO PREVIOUS COMMENTS. SEE LIFTING PROCEDURE DIRECTION 5141177-100 BRIGHTSPEED ELITE, EDGE, AND EXCEL GENERAL SYSTEM INSTALLATION.

EQUIPMENT DETAIL

CT TABLE

B81-10
REV. DATE: 10/16/09

12.79" [325]

175.62" [4461]

15.75" [400] CRADLE EXTENDER

32.22" [844]

14.88" [378]

33.62" [854]

77.91" [1979]

88.26" [2242]

• INDICATES CENTER OF GRAVITY
• NOTE: DETAIL NOT TO SCALE
• UNITS IN INCHES BRACKETED DIMENSIONS EQUAL [MM]
• CENTER OF GRAVITY IS WITH 500lb [227kg] PATIENT FULLY EXTENDED

GE Healthcare

Healthcare Project Implementation - Design Center

Minneapolis, MN

SHEET TITLE: EQUIPMENT DETAILS

MODALITY TYPE: BRIGHTSPEED ELITE ENHANCED

THIS PLAN IS SUBMITTED TO REQUEST FOR CONSTRUCTION OF GE HEALTHCARE EQUIPMENT AND ASSOCIATED ELECTRICAL WIRING DETAILS AND ROOM ARRANGEMENTS. IN PREPARING THIS PLAN, EVERY EFFORT HAS BEEN MADE TO CONFORM TO ALL APPLICABLE CODES AND REGULATIONS. THE USER OF THIS PLAN SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND THE COMPANY CANNOT ACCEPT RESPONSIBILITY FOR ANY DAMAGES RESULTING THEREFROM.

PROJECT TITLE: MEMORIAL HEALTH CARE SYSTEMS SEWARD, NEBRASKA

PROJECT NO.: 140MA011 Seward Memorial Hospital Seward Ne CT Prelim.dwg

PROJECT	REVISION
142137	00

DATE: 02.Jul.14

DRAWN BY: DMH

CHECKED BY: REK

REVISION HISTORY:

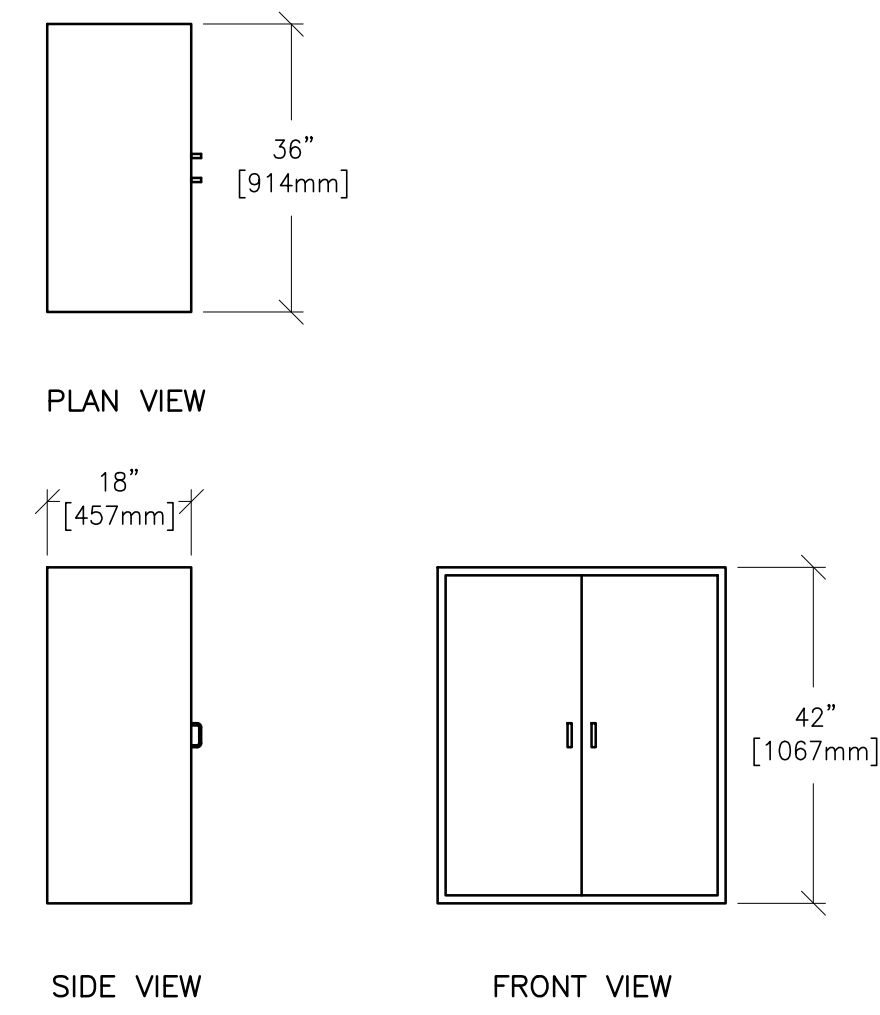
NO.	DESCRIPTION

SHEET

D1

EQUIPMENT DETAIL
TYPICAL STORAGE CABINET

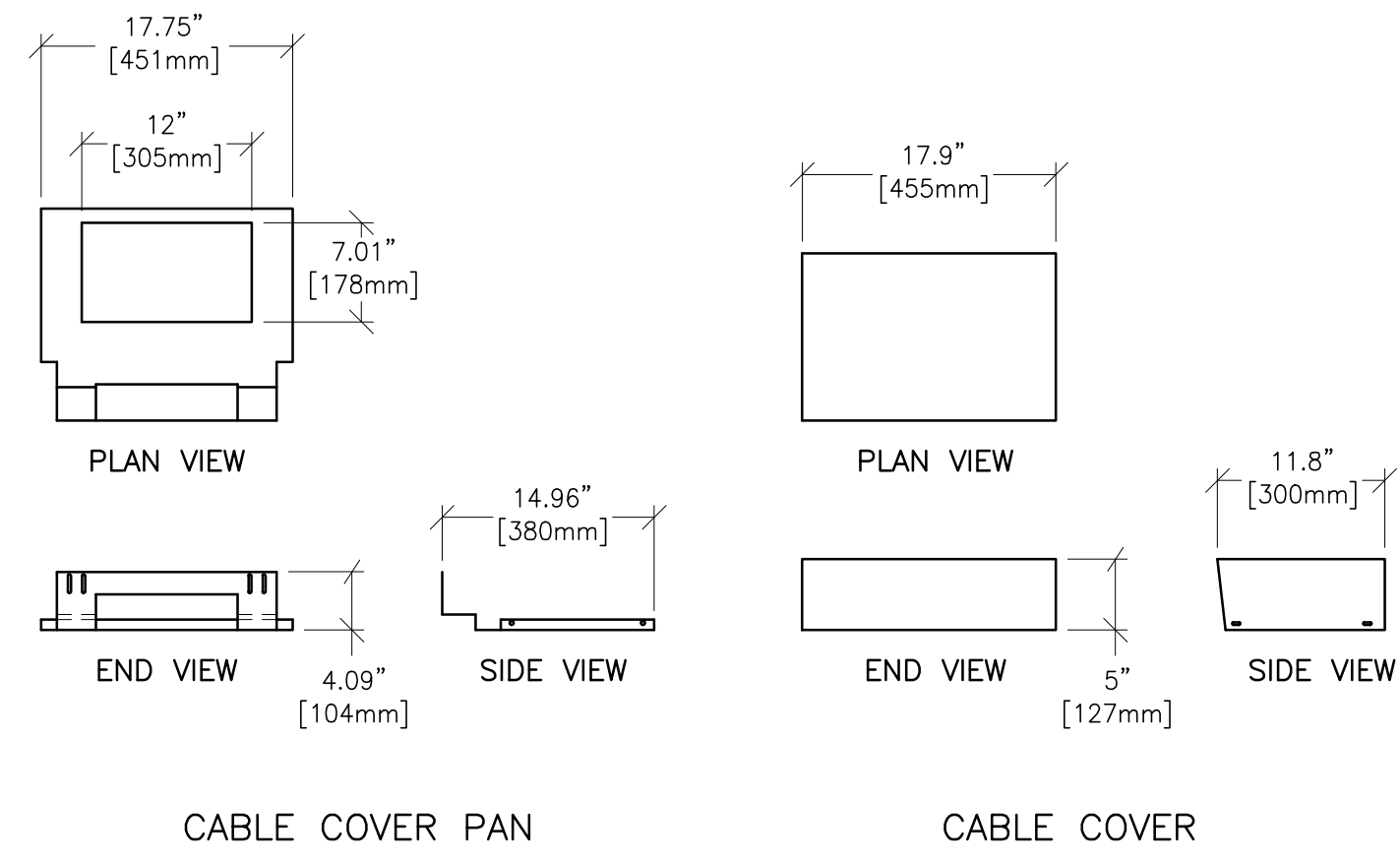
M33005
REV. DATE: 02/26/09



DETAIL NOT TO SCALE

EQUIPMENT DETAIL
REAR CABLE COVER

B8141
REV. DATE: 30.May.12



DETAIL NOT TO SCALE

This drawing is based on Sketch No.: 140MA011 Seward Memorial Hospital Seward Ne CT Prelim.dwg

PIM R10

RQ - 144835

SHEET TITLE: EQUIPMENT DETAILS
MODALITY TYPE: BRIGHTSPEED ELITE ENHANCED

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 IBC AND THE COMPANY'S ACTUAL CONSTRUCTION PRACTICES. HOWEVER, THE COMPANY CANNOT ACCEPT RESPONSIBILITY FOR ANY DAMAGES RESULTING THEREFROM.

PROJECT TITLE:
MEMORIAL HEALTH
CARE SYSTEMS
SEWARD, NEBRASKA

PROJECT	REVISION
142137	00

DATE: 02.Jul.14
DRAWN BY: DMH
CHECKED BY: REK

REVISION HISTORY:

SHEET
D2

Division 2- Existing Conditions

Selective Demo

- Detach items from existing construction and legally dispose of them off site- all debris shall be removed immediately so as not to clutter area. (Debris haul off by Contractor)
- Demo shall include all work associated with demo drawings including but not limited to: cutting floors, walls and steel to remove structure, removal of interior walls and materials listed to be removed
- Maintain and protect utilities indicated to remain- including but not limited to: power, gas, sewer, phone, data, HVAC and fire protection. Disruption/relocation and capping will be done by specific trades and will be coordinated and verified by demo contractor.
- Any items disturbed/demoed that are not listed shall be replace and/or fixed at contractors expense.
- Any utility disruption must be coordinated with owner prior to any work.
- Demo contractor to review Demo drawings and Structural drawings due to additional information.

Division 3- Concrete

Cast in place concrete- Slab on grade, slab on deck, concrete toppings/grouting at

Precast/Concrete Water vapor reducing admixture, termite control

- Provide and install all concrete, reinforcing, insulation and below grade material (fill, vapor barrier, and expansion material)
- Provide all labor to install embedded items provided by others
- Include layout of own work
- provide termite control
- provide hoisting of own material
- Wet curing will be allowed- no curing compounds will be allowed unless approved by flooring contractor
- Provide coordination with testing agency
- Contractor will be required to maintain flooring tolerances

- Provide weather protection of own material and work
- provide Termite control system
- Dewatering of slab area by this contractor
- Remove debris from site- NO washout pits allowed on site or off
- Coordinate any installation with mechanical and electrical contractors
- Attend weekly coordination meetings
- Provide verification of pit floor tolerances with pool company and correct any tolerance items.
- Provide and maintain impalement protection on all rebar.

Division 3- Precast Structural Concrete (supply)

- Water Repellents per specifications
- Provide all material and embeds pertaining to scope
- Coordinate deliveries with Steel erector
- Provide comprehensive engineering analysis by a qualified professional engineer

Division 4- Masonry

- Unit Masonry/Cast Stone Masonry/ Thermal Insulation/ Weather barriers/Water Repellents
- Install hollow metal frames as it pertains to new masonry
- Provide all unloading and hoisting of materials
- Provide and install all reinforcing steel in masonry
- PROVIDE-weather protection of own work and winter protection including but not limited to partitions/heaters and fuel
- Provide clean up of all materials and debris created during scope- Debris are to be removed from site and disposed of according to law- dumpsters are not to be filled with masonry debris
- Provide waterproofing and embedded flashing materials
- provide and install top of wall anchors
- Provide and maintain impalement protection on rebar when required

- Provide bracing plan and maintain

Division 5- Metals (Supply)

- Structural steel framing/ steel joist framing/Steel decking/metal fabrication/pipe and tube railings

- Provide all material and miscellaneous steel for areas described on drawings up to and including columns and beams, F.O.B jobsite to be erected by others

- Provide field verification and measurements

- Lintels and embeds to be delivered 1st

- Provide all misc. steel for roof penetrations and/or wall penetrations

- Coordinate steel delivery with erector

- provide all anchors and epoxy.

Division 5- Metals (Install)

- Structural steel framing/steel joist framing/steel decking/metal fabrication/pipe and tube railings/ Precast Structural Concrete

- Receiving/ unloading and erect all structural steel and misc. steel

- Receiving/unloading and erect all precast structural concrete

- Provide and install all grouting of base plates

- Install all misc. steel pertaining to roof/wall penetrations as it pertains to this scope.

- Provide all coordination with Testing as required by specifications

- Provide flag men when offloading and or hoisting above or around occupied areas

- Attend weekly coordination meetings.

- Provide hoisting during erection phase for AHU's and Pool equipment to be set in basement prior to Precast floor completion of main floor.

- Provide and maintain bracing plan.

Division 6- Wood Plastics and Composites (Supply)

- Include- Plastic laminated faced architectural cabinets, plastic laminate faced wood paneling, plastic laminated clad countertops, simulated stone countertops

- Provide all interior standing and running trim, provide all casework, provide all panel millwork, provide plastic laminate tops and simulated stone tops.
- Provide all bases for units
- Provide grommets to be installed by Finish Carpentry
- Provide all shelf and c-top brackets
- Provide all simulated stone tops W/ Install
- Provide all field verification
- Coordinate work and delivery with Finish Carpentry

Division 6- Wood and Plastics and Composites (Install) (Finish Carpentry)

- Include- Rough carpentry for backing for all materials (include- casework, panels, specialties)
- Install all plastic laminate cabinets, tops and wood paneling
- installation of all doors and hardware
- Installation of Wall and door protection, toilet accessories, fire x cabinets, fire extinguishers, entrance floor grilles- (Recessed floor by slab contractor)
- Provide all unloading and hoisting of materials included in this scope
- Provide and install backing during framing for items listed to be installed by this contractor
- coordinate work and delivery with suppliers
- provide grommet holes in tops- grommets provided by others.

Division 7-Thermal and Moisture Protection (Roofing)

- Include- Preparation for reroofing, Thermal insulation, EPDM, TPO, Sheet metal flashing and trim, roof accessories, joint sealants (As it pertains)
- Include all Rough Carpentry at it pertains to roofing-Backing, blocking, curbs, cants, nailers (wood required to be fire rated)
- Provide all unloading and hoisting of materials included in this scope
- Provide own dumpsters for reroofing areas
- Remove existing ballast as required for reroof

- Coordinate penetrations with HVAC, plumbing, and electrical contractor and provide boots/sealant for each penetration.
- Tie in's for weather proofing during demo when required
- Provide sealants of own work according to specifications
- Provide clean up no less then every Friday or as required.

Division 7-Thermal and Moisture Protection (Self adhering sheet waterproofing)

- Provide all materials per specification for waterproofing
- Provide clean up no less then every Friday or as required.

Division 7-Thermal and Moisture Protection (Metal Panels)

- Provide insulated-core metal wall panels, metal plate wall panels and composite , weather barrier, and joint sealants (as it pertains to scope)
- Provide all material, labor and supervision
- Provide own loading and unloading of product
- Provide and install all backing and nailers as required per this scope- blocking and nailers required to be fire rated
- Provide and install all flashing as it pertains to scope
- Provide clean up of material and debris

Division 7-Thermal and Moisture Protection (Joint Sealants)

- Provide joint sealant and concrete paving joint sealants
- Provide sealants at unit masonry, expansion control joints, tiling, openings (frames)
- provide sealants at exterior paving and sidewalks as indicated
- Provide sealants at cabinetry, countertops and specialty items
- Glazer to provide their own joint sealants
- Provide all unloading and hoisting of material

Division 8- Openings (Doors/Frames/Hardware- Supply

- provide all materials F.O.B
- Coordinate delivery with installer and inventory with finish carpentry

- Metal frames will be required prior to final shipment

- Deliver materials to the site in accordance to the phasing plan/ schedule. We will not accept the frames, doors and hardware on site until they are needed for the phase/schedule. Sub can chose to store them off site at their own expense.

Division 8- Openings (Aluminum framed entrances & storefronts, glazed aluminum curtain walls, unit skylights, glazing, sunshades, ICU/CCU doors and frames- including relocation of)

- Provide all Aluminum framed entrances and storefronts, glazed aluminum curtain walls, unit skylights and glazing- also include sun shades

- provide all unloading and hoisting of materials included in this scope

- provide all material and labor

- provide but not limited to fasteners/flashing/adhesives/and gutter work

- coordinate any penetrations of connections with other trades

- provide all backing/blocking to complete this work as it pertains to this scope

- provide and verify rough opening dimensions

- provide window testing

- provide sealant of own work

- contractor to provide own flashing to seal work

- Provide all non-framed mirrors, glass shelving or glazing items

Division 8- Openings (Automatic door operators)

- Provide all unloading and hoisting of material

- Provide all material, labor and supervision

- coordinate any penetrations or connections with other trades

- provide connections to low voltage and provide operation

Division 8- Openings (Security Grilles)

- Provide and install security grilles

- provide all backing and support for scope

Division 9- Finishes (Drywall)

- Provide gypsum board shaft wall assemblies, non-structural metal framing, gypsum board, thermal insulation, EIFS, Water repellents as it pertains to scope, Weather barriers as it pertains to scope, joint sealants, access doors and frames (install) Wall and corner guards (as it pertains to recessed embedded items) , door frame install as it pertains to scope
- Provide Radiation protection system and engineering requirement with stamp from licensed entity per specifications) Coordinate testing of area if required
- Provide all unloading and hoisting of materials
- Install corner guard retainers in drywall
- Provide control joints per standards
- Install frames as required for metal stud walls- Masonry frames installed by mason. Drywaller will grout frames in stud walls if required.

Division 9- Finishes (Tiling)

- Provide all tiling, ardex floor water control system
- Provide all unloading and hoisting of materials included in this scope
- provide all installation and accessories
- provide own floor prep
- provide protection of own work.

Division 9- Finishes (ACT)

- Provide all unloading and hoisting of own material
- provide all installation and accessories

Division 9-Finishes (Resilient base and accessories, resilient sheet flooring, resilient tile flooring, Tile carpeting, Water vapor emission control system)

- Providing all unloading and hoisting of material
- Floor prep by contractor
- Provide all installation and accessories
- Water vapor emission control system
- Provide testing of slab prior to installation

- Provide and maintain flooring protection until area is turned over to owner
- Provide clean up of scope no less than every Friday or as required

Division 9-Finishes- (Wall covering and Paint)

- provide all unloading and hoisting of materials
- paint and stain of interior and exterior surfaces marked to receive finishes
- painter to provide one coat of paint at temporary walls

Division 10- Specialties- Supply

- Wall and door protection, toilet accessories, fire extinguisher cabinets, fire extinguishers, entrance floor grilles
- Coordinate work and delivery with other contractors
- Provide corner guard embeds to drywaller prior to main shipment
- Price to include shipping to site.

Division 14- Conveying equipment

- Coordinate during construction for hoist way including verification
- Grout sills and thresholds as indicated
- Furnish and install cab finishes
- Furnish and install all rails, clips and other miscellaneous items necessary to complete this scope
- Provide layout as necessary to complete this scope of work
- Provide scaffold and lifting equipment to complete scope
- Provide work plan for sequence of operations and installation to Sampson construction
- Clean all excess materials off of surrounding areas and haul off to dumpster.

Division 21- Fire suppression

- include common work results for fire suppression
- include sleeves and sleeve seals for fire suppression piping

- provide wet pipe sprinkler system
- Provide all fire caulking for this scope of work.
- Provide all unloading and hoisting of material
- provide all structural supports for fire protection work
- contractor is required to maintain existing equipment and utilities during phasing work
- Provide own penetrations
- provide protection of existing heads to remain and install cages around
- patch holes for demoed or relocated equipment or penetrations
- provide a copy of state approved drawings to electrical, mechanical and utility contractor
- patching or replacing ceiling tiles or drywall damage during the installation

Division 22- (Plumbing)

Provide- 220500, 220513, 220517, 220523, 220529, 220553, 220719, 221116, 221119, 221316, 221319, 221329, 221413, 221423, 221429, 224000, 231113, 221123, 232123, 232213, 330500, 334100

- Provide all cast in place concrete as it pertains to equipment pads
- Provide all joint sealant and fire caulking as it pertains to scope
- This scope does include any exterior utilities
- Contractor to maintain existing equipment and utilities during construction
- All trenching, back-filling and pipe bedding necessary to complete work
- Provide access doors as needed- install by drywall contractor
- Provide and install any backing and support for own work
- Coordinate temperature control valves and devices provided by others
- Contractor to provide medgas certifications
- Temporary seal roof penetrations as soon as penetrations are made
- Patch holes for demoed or relocated equipment or penetrations to match existing
- Provide templates of openings to carpenters for sink installation

- Seal all piping penetrations as required per code
- Provide water test at completion
- Provide penetrations for own work

Division 23- HVAC

-provide- 230500, 230513, 230519, 230519, 30523,230529,230553,230593,230713,230719,230900, 230993,233113,233116,233300,233423,233600,233713,235100,235216,235239,236419,237314,238126 ,238236,238239.13

-Provide temporary connections and temp ducting to provide occupancy to owner for areas outside of the construction zone if required.

- Provide temporary HVAC under this scope for areas under construction- Electric heaters
- Provide all unloading and hoisting of materials
- provide all joint sealants and fire caulking for scope
- provide own penetrations for work
- provide access doors per scope to be installed by drywaller
- Furnish and install all louvers (089000)
- Provide firestopping at all HVAC penetrations
- provide own backing and support system for scope
- include testing and inspections as required
- Provide and install all equipment pads as required for this scope
- change out filters prior to balancing and provide required owner sets
- Follow ADVANCED SMACNA requirements
- include all work associated with installing roof curbs for HVAC equipment if required
- At end of day all duct ends and openings to be covered

Division 26- Electrical

- Provide all items listed in Division 26, Division 27 and Division 28 as listed
- Provide all concrete work associated with Electrical
- include all exterior work needed to complete scope

- Provide joint sealants, and fire caulking to complete scope
- Include all concrete light pole bases
- Installation of all suspended light fixtures shall include necessary hanger wires and supports per code
- Provide Temporary lights and power for temp HVAC and other power for all trade requirements
- Provide access panels as needed install by others
- Patch holes for demoed or relocated equipment or penetrations
- Contractor is required to maintain existing equipment and utilities during work
- provide all trenching, excavation, and backfill as it pertains to scope
- provide and install own backing and support of scope
- run necessary hookups between building and outside equipment as required
- provide own penetrations
- provide unloading and hoisting of own material

Division 32- Exterior Improvements- Concrete paving

- Provide all unloading and hoisting of material
- provide installation and coordinate with other trades
- Provide fill material, formwork, reinforcing, finishes
- Provide all concrete for scope
- Provide all signage and stenciled paving
- Provide concrete striping
- Coordinate testing with testing firm
- provide curb stops and cane detections when noted

Division 32- Exterior Improvements- (Unit Paving)

- Provide all material to complete scope
- Provide all layout and coordination
- Provide all unloading and hoisting

Division 32-Exterior Improvements (Fences and Gates)

- provide all material and labor to install fencing

Division 32- Exterior Improvements (Segmental retaining wall)

- provide all material and labor to install
- provide all unloading and hoisting of material
- provide clean up of wall once complete
- all digging and handwork by contractor,