

DRAWING CONTENTS

SECTION A

A1	EQUIPMENT LAYOUT
A2	MAGNETIC FIELD LAYOUT
A3	DETAILS
A4	EQUIPMENT ELEVATIONS
A5	EQUIPMENT ELEVATIONS

THESE TOSHIBA PLANS ARE FOR INFORMATIONAL PURPOSES ONLY AND SHALL NOT BE USED FOR ANY PURPOSE OTHER THAN THAT AGREED UPON BETWEEN TOSHIBA AND THE CUSTOMER. THESE SITE PLANS ARE NOT TO BE USED FOR CONSTRUCTION PURPOSES.

C1

FOR REFERENCE ONLY. NOT TO BE USED FOR CONSTRUCTION PURPOSES.

MINIMUM SITE REQUIREMENTS CHECKLIST

PROJECT:		SITE INSPECTION DATE:	
EQUIPMENT DELIVERY DATE:		INSPECTED BY:	
IN ORDER TO ENSURE A TIMELY AND SUCCESSFUL INSTALLATION, IT IS NECESSARY TO COMPLETE THIS FORM PRIOR TO INSTALLATION. PLEASE ASSIST US BY HAVING THE CONTRACTOR OR YOUR REPRESENTATIVE COMPLETE THE FOLLOWING:			
	1.	ALL WALLS, FLOORS, AND CEILINGS FINISHED. WALLS PAINTED, FLOORS TILED, AND CEILING GRID WORK AND FIXTURES INSTALLED.	
	2.	MONOLITHIC OR LAY-IN CEILING? PLEASE CIRCLE ONE. ALL MATERIALS IN SCAN ROOM MUST BE NON-FERROUS.	
	3.	DOORS AND WINDOWS INSTALLED AND LOCKABLE. DOORS TO BE REMOVED PRIOR TO DELIVERY BY CUSTOMER OR CONTRACTOR AND REINSTALLED AFTER EQUIPMENT MOVE-IN. RESERVE SECURE ROOM FOR STORAGE DURING INSTALLATION.	
	4.	AREA SET ASIDE FOR EQUIPMENT RIGGING AND MOVE-IN (INCLUDING MAGNET OPENING IN SCAN ROOM). ENVIRONMENTAL ISSUES ADDRESSED AND RESOLVED PRIOR TO EQUIPMENT DELIVERY. RECEPTACLE FOR TRASH AVAILABLE (LARGE ENOUGH FOR SHIPPING CRATES IF REQUIRED). EQUIPMENT (INGRESS) ROUTES ARE CLEAR AND OBSTACLE FREE.	
	5.	ALL CONDUIT, TROUGHING (WITH COVERS), AND BOXES INSTALLED (CLEAN AND DUST FREE). GROMMETED OPENINGS, CHASE NIPPLES, RACEWAY DIVIDERS, ETC. COMPLETE.	
	6.	CIRCUIT BREAKER INSTALLED AND INCOMING POWER (PER POWER QUALITY REQUIREMENTS) OPERATIONAL AND CONNECTED TO ROOM BREAKER(S).	
	7.	LOCATION OF ALL ELECTRICAL BREAKERS IN POWER CHAIN NOTED.	
	8.	ALL CONTRACTOR-INSTALLED STRUCTURAL SUPPORT DEVICES INSTALLED AND LEVELED ACCORDING TO TAMS SPECIFICATIONS ON SITE PLANS.	
	9.	ALL CONTRACTOR-SUPPLIED CABLES PULLED AND TERMINATED, INCLUDING GROUND WIRE IN TROUGHING AS SPECIFIED IN THE TOSHIBA SITE PLANS.	
	10.	DUST-FREE ENVIRONMENT IN ALL RELATED ROOMS.	
	11.	HEATING AND AIR-CONDITIONING INSTALLED, OPERATIONAL AND STABILIZED PER TOSHIBA SITE PLANS. FILTERS TO BE CHANGED 24 HOURS BEFORE DELIVERY.	
	12.	ALL MILLWORK COMPLETE AND INSTALLED. ENSURE THAT NON-FERROUS MATERIAL IS USED FOR ANY MILLWORK IN SCAN ROOM.	
	13.	COMPUTER FLOORING INSTALLED, IF APPLICABLE.	
	14.	ALL UNFINISHED AREAS SEALED OFF TO PREVENT DUST CONTAMINATION.	
	15.	RECEPTACLE FOR TRASH AVAILABLE (LARGE ENOUGH FOR SHIPPING CRATES IF REQUIRED).	
	16.	"PCDU/VRDU/UPS" INSTALLED AND CONNECTED TO "CB".	
	17.	LINE FILTER PANEL INSTALLED IN SCAN ROOM.	
	18.	RF ROOM COMPLETE AND TESTED. PROVIDED COPY OF SIGNED TEST RESULTS TO SITE PLANNING.	
	19.	ALL REQUIRED WAVE GUIDES INSTALLED (INCLUDED MED-GASES, IF APPLICABLE).	
	20.	PLUMBING FOR CHILLER AND CRYO COOLER INSTALLED, FLUSHED, AND TESTED.	
	21.	SEISMIC REQUIREMENTS, AND REQUIRED SEISMIC ANCHORING DEVICES INSTALLED (IF APPLICABLE).	
	22.	NETWORK CONNECTIONS INSTALLED AND OPERATIONAL.	
	23.	QUENCH PIPE INSTALLED PER TOSHIBA SPECIFICATIONS (SEE SHEETS M1-M4). USE ONLY STAINLESS STEEL OR ALUMINUM MATERIAL FOR QUENCH PIPE AS SHOWN ON PLAN.	
	24.	ALL APPLICABLE PERMITS OBTAINED.	
	25.	MAGNETIC/RF SHIELDING DESIGNED, MODELED, AND BUILT.	
	26.	ALL MATERIALS IN SCAN ROOM MUST BE NON-FERROUS.	
	27.	CLEAN WORK AREA SET ASIDE OUTSIDE PROCEDURE ROOM DOOR AND CONTROL AREA.	
	28.	EMERGENCY VENT INSTALLED AND OPERATIONAL.	
	29.	CUSTOMER SUPPLIED WATER CHILLER SYSTEM INSTALLED AND OPERATIONAL.	
NOTICE: CUSTOMER MUST COMPLETE ALL ITEMS ON THIS CHECKLIST BEFORE SCHEDULED DELIVER DATE FOR THE EQUIPMENT. IF CUSTOMER FAILS TO DO SO, DELIVERY MAY BE DELAYED. FURTHERMORE, THE EQUIPMENT WARRANTY MAY BE VOIDED.			
COMMENTS:			
SIGNED TOSHIBA:			
CONTRACTOR:			
CUSTOMER:			

01-30-12

NOISE SPECIFICATION

NOISE IS GENERATED BY THE COOLING FANS IN EACH UNIT. THE NOISE LEVEL DIFFERS AMONG UNITS. THE REFERENCE NOISE LEVELS FOR UNITS THAT ARE PARTICULARLY LOUD ARE SHOWN BELOW.

REFRIGERATOR COMPRESSOR	: 75 dB (A)
TRANSFORMER CABINET	: 65 dB (A)
ECO CABINET	: 64 dB (A)
FAN BOX	: 67 dB (A)
FILTER PANEL	: 59 dB (A)

09-05-12

CEILING HEIGHT

RECOMMENDED CEILING HEIGHT: 8'-10 5/16"
MINIMUM CEILING HEIGHT: 7'-10 1/2"

IF A CEILING HEIGHT OF 8'-10 5/16" IS NOT AVAILABLE, THE SYSTEM CAN STILL BE INSTALLED AS LONG AS THE MINIMUM CEILING HEIGHT IS 7'-10 1/2" AND A SERVICE OPENING IS PROVIDED IN THE CEILING UP TO 8'-10 5/16".

09-05-12

VIBRATION SPECIFICATION

0.02 M/S² (PEAK TO PEAK) = 2.0 GAL OR LESS
VIBRATION TESTING (IF REQUIRED) IS RESPONSIBILITY OF CUSTOMER / CONTRACTOR.

01-10-11

GENERAL NOTES

CUSTOMER/CONTRACTOR IS RESPONSIBLE FOR THE FOLLOWING UNLESS OTHERWISE NOTED.

GENERAL

- A. TOSHIBA RESERVES THE RIGHT TO CHANGE THESE DESIGNS AND SPECIFICATIONS WITHOUT NOTICE.
- B. CUSTOMER/CONTRACTOR SHALL SUPPLY AND INSTALL MATERIALS AND OTHER FEATURES SPECIFIED IN THE TOSHIBA SITE PLANS. CUSTOMER/CONTRACTOR SHALL SUPPLY AND INSTALL ALL COUNTERTOPS, SINKS, CASE WORK AND CABINETS SPECIFIED IN THE TOSHIBA SITE PLANS.
- C. ANY CABINETRY THAT MAY BE REQUIRED TO HOUSE VIDEO RECORDERS, MONITORS, KEYBOARDS, OR OTHER ANCILLARY EQUIPMENT SHALL BE SUPPLIED AND INSTALLED BY CUSTOMER/CONTRACTOR.
- D. THESE TOSHIBA SITE PLANS DO NOT INDICATE EQUIPMENT REQUIREMENTS FOR ITEMS NOT SOLD BY TOSHIBA SUCH AS, PHYSIOLOGICAL MONITORS, LASER CAMERAS, INJECTORS, ETC. SPECIFICATIONS FOR THOSE ITEMS MUST BE OBTAINED FROM THE VENDOR AND INCLUDED IN THE DESIGN TOTALS.
- E. IF REQUIRED, THE CUSTOMER/CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AN INTERCOM SPEAKER SYSTEM BETWEEN THE EQUIPMENT ROOM, CONTROL ROOM, AND PROCEDURE ROOM.
- F. THE CUSTOMER/CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL COSTS REQUIRED FOR THE ENGINEERING AND/OR REMOVAL OF ANY HAZARDOUS MATERIALS SUCH AS ASBESTOS.
- G. CUSTOMER/CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AN OPERATING PHONE IN THE CONTROL ROOM AT THE TIME TOSHIBA EQUIPMENT INSTALLATION BEGINS.
- H. CUSTOMER/CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE LIGHTING FOR SERVICING OF EQUIPMENT IN ALL AREAS OF THE INSTALLATION.
- I. PRIOR TO EQUIPMENT DELIVERY AND INSTALLATION, THE SITE MUST BE 100% COMPLETE, CLEAN AND FREE OF DUST. CUSTOMER/CONTRACTOR AND TOSHIBA INSTALLATION PROJECT MANAGER MUST COMPLETE A SITE WALK THROUGH 1 WEEK PRIOR TO DELIVERY AND DETERMINE ACCEPTABILITY FOR DELIVERY.
- J. CUSTOMER/CONTRACTOR/ARCHITECT SHALL BE RESPONSIBLE FOR PROVIDING THE ENTIRE NETWORKING AND COMMUNICATION SYSTEMS.
- K. ALL MATERIAL IN SCAN ROOM MUST BE NON-FERROUS.

RF / MAGNETIC SHIELDING

- L. CUSTOMER/CONTRACTOR RESPONSIBLE FOR OBTAINING A SHIELDING VENDOR, TO MODEL, DESIGN, AND BUILD REQUIRED MAGNETIC AND RF SHIELDING.
- M. MAGNET FEET MUST BE INSULATED (ISOLATED) FROM RF ENCLOSURE.
- N. GAUSS LINES IN THESE DRAWINGS ARE REPRESENTED WITHOUT MAGNETIC SHIELDING.
- O. RF SHIELDING WEIGHT WILL VARY FROM SITE TO SITE. CUSTOMER'S STRUCTURAL ENGINEER MUST CONSULT WITH RF ENCLOSURE VENDOR FOR RF SHIELDING WEIGHTS.
- P. THE EXISTING AND PROPOSED STRUCTURAL/ENVIRONMENTAL STEEL INFORMATION WITH RELATIONSHIP TO MAGNET MUST BE PROVIDED TO SITE PLANNING FOR REVIEW (FOR ALL WALLS, CEILING AND FLOOR). ALL STRUCTURAL/ENVIRONMENTAL STEEL SHOULD BE IDENTIFIED INCLUDING, BUT NOT LIMITED TO, REBAR, BEAMS, PIPES, DRAINS, AND ANY STEEL USED FOR MAGNETIC SHIELDING.
- Q. THE MAGNET ENVIRONMENT IS SENSITIVE TO FERROUS MATERIAL, WHICH CAN AFFECT IMAGE QUALITY. THE MOST SENSITIVE AREA IS WITHIN AN 8' X 8' AREA BENEATH THE MAGNET TO A DEPTH OF 1'-4". CONTACT YOUR TOSHIBA INSTALLATION PROJECT MANAGER TO HAVE A STEEL SURVEY COMPLETED TO EVALUATE SITE SPECIFIC CONDITIONS.
- R. MAGNETOMETER SURVEY MUST BE PERFORMED BY TOSHIBA BEFORE SUBMITTING FINAL DRAWINGS (120V POWER IS REQUIRED FOR TOSHIBA TO BEGIN SURVEY. A MINIMUM OF 50'F IS REQUIRED FOR SURVEY AREA).
- S. THE SHIELDING WORK IS REQUIRED TO SUPPRESS EXTERNAL LEAKAGE OF THE ELECTROMAGNETIC RADIATION GENERATED BY THE SYSTEM.
- T. THE SHIELD MUST ATTENUATE ELECTROMAGNETIC RADIATION IN THE FREQUENCY BAND OF 63.86 MHz ± 0.5 MHz BY AT LEAST 90 dB.
90 dB OR MORE FROM 64.36 MHz TO 70 MHz
90 dB OR MORE FROM 70 MHz TO 300 MHz
50 dB OR MORE FROM 300 MHz TO 350 MHz
40 dB OR MORE FROM 350 MHz TO 1 GHz

CODES AND PERMITS

- U. THE CUSTOMER/CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES AND ORDINANCES ARE COMPLIED WITH.

SITE CONDITIONS

- V. DIMENSIONS TO WALLS AND/OR OTHER ROOM FEATURES, EXCEPT FOR NOTED COLUMN AND BEAM CENTER LINES SHALL BE FROM FINISHED SURFACES.

PLUMBING

- W. PLUMBING IS REQUIRED FOR CERTAIN COMPONENTS OF TOSHIBA EQUIPMENT.

TRANSPORT REQUIREMENTS

- X. EQUIPMENT INGRESS ROUTE MUST BE CHECKED PRIOR TO EQUIPMENT DELIVERY TO ENSURE THE LARGEST AND HEAVIEST ITEMS OF EQUIPMENT CAN BE ACCOMMODATED. DIMENSIONS OF CORRIDORS SHOULD BE NO LESS THAN 7'-0" IN WIDTH.
- Y. RECOMMENDED ENTRANCE TO SCAN ROOM SHOULD BE NO LESS THAN 7'-0"W X 8'-6"H FOR EQUIPMENT DELIVERY. SPECIAL ARRANGEMENTS MAY BE NECESSARY FOR MAGNET DELIVERY, INCLUDING A LARGER OPENING IN THE RF SHIELDING.
- Z. CONTACT THE TOSHIBA INSTALLATION PROJECT MANAGER FOR DETAILS OF THE LARGEST AND HEAVIEST ITEMS OF EQUIPMENT FOR THIS INSTALLATION.

09-05-12

CUSTOMER TO PROVIDE THE NECESSARY HVAC REQUIREMENTS FOR THE TOSHIBA EQUIPMENT TO OPERATE PROPERLY.

AMBIENT TEMPERATURE SHOULD BE IN ACCORDANCE WITH THE FOLLOWING FOR CORRECT EQUIPMENT OPERATION AND PATIENT/OPERATOR COMFORT.

ROOM NAME	HEAT OUTPUT (BTU/H)				TEMP. (°F)	HUMIDITY (%RH)
	IN USE		STANDBY (NIGHT TIME)			
MRI SCAN ROOM	TOTAL	4,095	TOTAL	1,707	60.8–75.2°	40–60% (NO CONDENSATION)
MAGNET		4,095		1,707		
CONTROL ROOM	TOTAL	2,391	TOTAL	2,391	60.8–86.0°	40–75% (NO CONDENSATION)
HOST CABINET		1,707		1,707		
MONITOR		342		342		
CONTROL BOX & CONTROL PAD		342		342		
EQUIPMENT ROOM *	TOTAL	31,053	TOTAL	23,205	68.0–75.2°	40–70% (NO CONDENSATION)
TRANSFORMER CAB.		3,071		3,071		
REFRIGERATOR		10,578		10,578		
GRADIENT POWER SUPPLY & ECO CAB.		16,379		8,872		
FILTER PANEL		683		342		
MAGNET FAN BOX		342		342		
						<div>* NOTE: FINAL HEAT OUTPUT OF EQUIPMENT ROOM MUST INCLUDE SITE SPECIFIC POWER SYSTEM AND ANY OPTIONAL ITEMS. SEE SHEET A1 FOR ADDITIONAL HEAT OUTPUT OF OPTIONAL ITEMS.</div>
POWER SYSTEMS	TOTAL		TOTAL			
PCDU		3,669		N/A		
VRDU (480V)		14,000		N/A		
VRDU (208V)		14,000		N/A		
TRANSFORMER (FOR VRDU 208V)		4,700		N/A		
UPS (480V)		32,800		N/A		
PDU OR PCDU		4,100		N/A		
UPS (208V)		35,500		N/A		
PDU OR PCDU		4,100		N/A		

- NOTE:
- A. A MINIMUM OF 10 AIR CHANGES PER HOUR IS SUGGESTED, CONSULT LOCAL CODE.
 - B. AIR SUPPLY DUCTS SHOULD NOT BE PLACED DIRECTLY OVER EXAMINATION TABLES FOR PATIENT COMFORT.
 - C. EQUIPMENT IN ENCLOSED SPACES SUCH AS EQUIPMENT ROOMS, TRANSFORMER CLOSETS AND COMPUTER ROOMS MUST BE PROVIDED WITH ADEQUATE VENTILATION. THE AIRFLOW THROUGH TOSHIBA EQUIPMENT CABINETS IS FROM BOTTOM TO TOP. WHERE POSSIBLE, AIR CONDITIONING SUPPLY OUTLETS SHOULD BE LOCATED AT FLOOR LEVEL WITH RETURN GRILLES IN THE CEILING.
 - D. DEDICATED AIR CONDITIONER REQUIRED FOR SCAN AND EQUIPMENT ROOM.
 - E. AIR CONDITIONING EQUIPMENT MUST HAVE THE ABILITY TO AUTOMATICALLY RESTART IN THE CASE OF A BLACKOUT.
 - F. THE EQUIPMENT ROOM MUST NOT HAVE SUPPLYING AIR FROM OUTSIDE DUE TO THE POSSIBLE RISE OF HUMIDITY.
 - G. IT IS NOT RECOMMENDED TO INSTALL THE AIR CONDITIONING UNIT OR FAN INSIDE THE CEILING OF THE MRI SCAN ROOM.
 - H. THE AIR CONDITIONING SENSOR FOR THE MRI SCAN ROOM SHOULD BE LOCATED IN A RETURN DUCT.

03-12-13

STRUCTURAL NOTES

CUSTOMER/CONTRACTOR IS RESPONSIBLE FOR THE FOLLOWING UNLESS OTHERWISE NOTED.

- A. THESE SITE PLANS ARE INTENDED TO DEPICT ONLY A CONCEPT OF THE STRUCTURE REQUIRED FOR THE TOSHIBA EQUIPMENT. THE DESIGN OF ALL STRUCTURAL ELEMENTS MUST BE SPECIFIED BY A LICENSED STRUCTURAL ENGINEER IN ACCORDANCE WITH TOSHIBA SPECIFICATIONS AND ALL APPLICABLE CODES.
- B. THE CUSTOMER/CONTRACTOR SHALL FIELD VERIFY ALL EXISTING AND PROPOSED DIMENSIONS AND SITE CONDITIONS PRIOR TO COMMENCING CONSTRUCTION.
- C. THE TOSHIBA INSTALLATION PROJECT MANAGER SHALL BE NOTIFIED IN WRITING OF ANY FIELD CONDITIONS ENCOUNTERED THAT ARE CONTRADICTORY TO THOSE SHOWN IN THE TOSHIBA SITE PLANS.
- D. THE DEMOLITION, FABRICATION AND ERECTION OF SUPPORT STRUCTURES FOR TOSHIBA EQUIPMENT SHALL BE PERFORMED BY THE CUSTOMER/CONTRACTOR IN ACCORDANCE WITH THE DESIGN AND SPECIFICATIONS SET FORTH BY THE STRUCTURAL ENGINEER OF RECORD.
- E. VANTAGE TITAN MAGNET FEET MUST BE INSULATED/ISOLATED FROM SHIELDED ROOM.
- F. INSULATION/ISOLATION FOR MAGNET FEET TO BE PROVIDED BY CUSTOMER/CONTRACTOR.
- G. ALL STRUCTURAL MATERIAL IN SCAN ROOM MUST BE NON-FERROUS.
- H. IT IS RF VENDOR'S RESPONSIBILITY TO ANCHOR THE MAGNET.
- I. THE ENTIRE SCAN ROOM FLOOR TO BE LEVEL WITHIN 1/16".

FLOOR LOADING

- J. THE FLOOR MUST SUPPORT 11,904.96 LBS. FOR THE MAGNET, INCLUDING THE COVERS AND THE GRADIENT COIL. THE COMPLETE FLOOR MUST WITHSTAND A MAXIMUM CONCENTRATED MAGNET LOAD OF 3,903.27 LBS. PER SQUARE FOOT (2,976.24 LBS PER MAGNET FOOT). THE FLOOR MUST BE ABLE TO WITHSTAND BOTH THE MAGNET AND THE WEIGHT OF THE MAGNETIC SHIELDING.

05-03-13

SPECIAL NOTES

SPECIAL SEISMIC CERTIFICATION

- A. WHERE SPECIAL SEISMIC CERTIFICATION IS REQUIRED BY CODE THE STRUCTURAL ENGINEER OF RECORD SHALL BE RESPONSIBLE FOR NOTIFYING TOSHIBA'S INSTALLATION PROJECT MANAGER IN WRITING OF THE SEISMIC PERFORMANCE CATEGORY (SPC) RATING OF THE BUILDING IN WHICH TOSHIBA EQUIPMENT IS TO BE INSTALLED. FOR INSTALLATIONS IN A BUILDING RATED SPC3 OR HIGHER TOSHIBA WILL APPLY SPECIAL SEISMIC CERTIFICATION LABELING PER CBC SECTION 1703.5.
- B. THE FOLLOWING COMPONENTS HAVE SPECIAL SEISMIC CERTIFICATION:
B.A. OSP-0162-10
PCDU/VRDU - GROUP 1 ENCLOSURES (AS APPLICABLE)
B.B. OSP-0013-10
UPS - 9390 160 KVA (AS APPLICABLE)
B.C. OSP-0088-10
BAT - BC55 (AS APPLICABLE)
- C. WEIGHTS SHOWN ON THE OSP DOCUMENTS ARE GENERALLY A MAXIMUM AND THE WEIGHTS SHOWN ON THESE SITE PLANS REFLECT THE EQUIPMENT AS ORDERED.

08-19-13

ELECTRICAL REQUIREMENTS FOR MRI SYSTEM WITH VRDU

SUPPLY CONFIGURATION: 3 PHASE DELTA
102 KVA SERVICE

SUPPLY VOLTAGE: 480V - 150 AMP

03-14-12

ELECTRICAL NOTES

CUSTOMER/CONTRACTOR IS RESPONSIBLE FOR THE FOLLOWING UNLESS OTHERWISE NOTED.

- A. THESE SITE PLANS ARE INTENDED TO DEPICT ONLY A CONCEPT OF THE ELECTRICAL REQUIREMENTS FOR THE TOSHIBA EQUIPMENT. THE DESIGN OF ALL ELECTRICAL ELEMENTS MUST BE SPECIFIED BY A LICENSED ELECTRICAL ENGINEER IN ACCORDANCE WITH TOSHIBA SPECIFICATION AND ALL APPLICABLE CODES.
- B. IN ACCORDANCE WITH NEC ARTICLE 517-72(B), THE EQUIPMENT CIRCUIT BREAKER(S) MUST BE LOCATED SO THAT THEY SHALL BE OPERABLE FROM A LOCATION READILY ACCESSIBLE FROM THE EQUIPMENT AREA. IF THIS IS IMPOSSIBLE OR IMPRACTICAL, THE USE OF A SHUNT TRIP TYPE BREAKER WILL BE NECESSARY TO SATISFY THIS REQUIREMENT. THE EMERGENCY OFF BUTTON FOR THE SHUNT TRIP SHOULD BE LOCATED IN THE CONTROL AREA.
- C. THE CUSTOMER/CONTRACTOR SHALL SUPPLY AND INSTALL ALL CIRCUIT BREAKERS, CONDUITS, JUNCTION BOXES, DUCTS, A/C POWER RECEPTACLES, THERMOSTATS, EMERGENCY OFF BUTTONS, AND 12 VOLT POWER, ETC. SPECIFIED HEREIN.
- D. THE TOSHIBA SITE PLANS DO NOT SPECIFY ELECTRICAL REQUIREMENTS FOR EQUIPMENT NOT SOLD BY TOSHIBA. THESE REQUIREMENTS MUST BE OBTAINED BY THE VENDOR.
- E. TOSHIBA WILL SUPPLY INTERCONNECTING CABLES FOR THE TOSHIBA EQUIPMENT. TOSHIBA WILL INSTALL IF LOCAL TRADE LABOR PERMITS.
- F. TOSHIBA WILL PROVIDE CONNECTING AND FILTER PANELS TO RF PROVIDER FOR INSTALLATION, EXCEPT FOR THEIR USE IN POWER LINE CONNECTIONS TO EQUIPMENT CABINETS, FLEXIBLE CONDUIT SHALL NOT BE USED IN THIS INSTALLATION. ONLY FACTORY CONDUIT ELBOWS SHALL BE USED.
- G. DUCT WORK SHALL BE PROVIDED WITH SWEEP ELBOWS.
- H. ALL JUNCTION BOXES AND DUCTS THAT PENETRATE THE FLOOR SHALL BE WATERPROOF TYPE AND PROVIDED WITH GASKETED WATERPROOF COVERS. ALL FLOOR JUNCTION BOXES AND DUCT COVERS SHALL BE CAPABLE OF SUPPORTING A 200 LB. CONCENTRATED LOAD. ALL MATERIAL IN SCAN ROOM MUST BE NON-FERROUS.
- I. ALL ACCESS HOLES ARE TO BE MADE IN THE EQUIPMENT ROOM FLOOR PER TOSHIBA SITE PLANS. ACCESS HOLES MUST BE GROMMETED WITH NON-CHAFING MATERIAL SUCH AS RUBBER/PLASTIC OR SLEEVED WITH A SHORT NIPPLE WITH NON-ABRASIVE BUSHINGS.
- J. ALL CHASE OPENINGS SHALL HAVE PLASTIC/NYLON BUSHINGS.
- K. ALL DUCT WORK SHALL HAVE A MINIMUM OF THREE COMPARTMENTS. TRANSITIONS SUCH AS HORIZONTAL TO VERTICAL WALL DUCT OR JUNCTION BOXES MUST BE REVIEWED ON AN INDIVIDUAL BASIS WITH THE INSTALLATION PROJECT MANAGER. LOCAL CODES, MAY REQUIRE THE USE OF CROSS-OVER TUNNELS OR OTHER SUCH DEVICES TO MAINTAIN CABLE SEPARATION.
- L. ALL DUCT AND CONDUITS SHALL BE ELECTRICALLY BONDED AS A GROUNDING PATH IN ACCORDANCE WITH NEC ARTICLE 517-13(B).
- M. CUSTOMER/CONTRACTOR SHALL SUPPLY AND INSTALL GREENLEE NYLON MEASURING PULL STRING OR EQUIVALENT IN ALL CONDUITS AND CLOSED DUCT WORK.
- N. CONDUIT RUNS SHOWN ARE SCHEMATIC ONLY. ALL CONDUIT RUNS MUST TAKE THE SHORTEST MOST DIRECT ROUTE POSSIBLE.
- O. CONDUIT RUNS MAY HAVE A MAXIMUM OF (3) 90° BENDS.
- P. 110VAC GROUNDED OUTLETS SHALL BE PROVIDED ON WALLS NEAR THE TOSHIBA EQUIPMENT FOR USE DURING EQUIPMENT SERVICE.
- Q. CUSTOMER/CONTRACTOR MUST SUPPLY AND INSTALL ALL INCOMING POWER CABLES FROM CIRCUIT BREAKER(S) TO TOSHIBA EQUIPMENT CONNECTION POINT. CABLE TYPE MUST BE MT. MULTI-STRAND COPPER - NO ALUMINUM IS PERMITTED. CABLE SIZE MUST BE IN ACCORDANCE WITH TOSHIBA POWER QUALITY REQUIREMENTS.
- R. CUSTOMER/CONTRACTOR IS TO SUPPLY AND INSTALL ALL NECESSARY HARDWARE TO ENCLOSE INCOMING POWER CABLES IN FLEXIBLE WATER TIGHT CONDUIT FROM CIRCUIT BREAKER(S) TO TOSHIBA EQUIPMENT CABINET(S).
- S. ANY CHANGES IN THE LOCATION OR TYPE OF CONDUIT, DUCT WORK, JUNCTION BOXES, ETC. MUST BE SUBMITTED IN WRITING TO THE TOSHIBA INSTALLATION PROJECT MANAGER FOR APPROVAL.
- T. A SEPARATE CIRCUIT, FED FROM THE FACILITY RADIOLOGY PANEL OR A MAIN SERVICE PANEL IS REQUIRED. USE OF A SUB PANEL WITH LOADS SUCH AS ELEVATORS, HVAC, MOTORS, ETC. IS NOT PERMITTED.

09-05-12

RF ROOM GROUNDING

CUSTOMER/CONTRACTOR IS RESPONSIBLE FOR THE FOLLOWING UNLESS OTHERWISE NOTED.

- A. WHEN INSTALLED BY THE RF/STEEL ROOM MANUFACTURER, THE RF ROOM MUST BE TOTALLY ISOLATED FROM GROUND. TO MAINTAIN THIS ISOLATION, NO CONDUCTIVE CONNECTIONS (I.E. ELECTRICAL CONDUITS, PLUMBING, HVAC DUCTS, OR ANY CONDUCTIVE BUILDING MATERIAL) CAN BE MADE TO THE OUTSIDE OF THE RF ROOM. TO KEEP THIS INTEGRITY, ALL ABOVE MENTIONED CONNECTIONS SHOULD BE MADE VIA DIELECTRIC CONNECTORS. A DIELECTRIC CONNECTOR IS A NON-FERROUS SLEEVE, NIPPLE, GASKET, ETC. THIS CONNECTOR MUST BE INSTALLED IN ALL HVAC DUCT, ELECTRICAL CONDUIT, AND ANY PIPE CONNECTION TO THE RF ROOM. THE LOCATION OF THE DIELECTRIC IS TO BE OUTSIDE OF THE RF ROOM, AS CLOSE TO THE WALL OR CEILING OF THE RF ROOM AS PRACTICAL.
- B. WHILE THE RF ROOM IS UNDER CONSTRUCTION, A BATTERY OPERATED BELL SHOULD BE TEMPORARILY MOUNTED TO THE ROOM. THE RF ROOM IS TO BE USED AS A GROUND FOR THE BELL. IF ANY CONDUCTIVE MATERIAL CONTACTS THE RF ROOM, THE BELL WILL SOUND ALERTING THE FOREMAN AND/OR CONTRACTOR WHO GROUNDED THE ROOM.
- C. DURING THE REMAINING CONSTRUCTION, A TEMPORARY #1 SAFETY GROUND SHOULD BE ATTACHED TO THE RF ROOM UNTIL THE "PCDU/VRDU/UPS" IS INSTALLED. AT THAT TIME, A PERMANENT #1 OR LARGER GROUND WIRE SHOULD BE INSTALLED BETWEEN THE MAGNET ROOM AND THE SECONDARY GROUND BUS OF THE POWER SOURCE. REFER TO DETAIL 4 SHEET E3 (FINAL DRAWINGS ONLY).
- D. RF ROOM MUST BE ACCESSIBLE FROM ABOVE FOR ENGINEERS TO FIND AND CORRECT RF GROUNDS IN ROOM.

01-10-11

PLUMBING NOTE

- A. IT IS THE CUSTOMER'S RESPONSIBILITY TO SUPPLY AND INSTALL THE CHILLED WATER SYSTEM PER TOSHIBA SPECIFICATIONS.

01-10-11

INT	V. H.	V. H.	V. H.			
DESCRIPTION	ORIGINAL PRELIMINARY DRAWING COMPLETED.	NO CHANGES MADE TO THIS SHEET.	NO CHANGES MADE TO THIS SHEET.			
DATE	09-12-13	10-25-13	11-09-13			
REV	Δ	Δ	Δ			
TRISTAN UNION DEPOSIT MRI #3				(MR SCAN ROOM - TITAN)		
				2808 OLD POST RD. HARRISBURG, PA 17110		

THESE TOSHIBA PLANS ARE FOR INFORMATIONAL PURPOSES ONLY AND SHALL NOT BE USED FOR ANY PURPOSE OTHER THAN THAT AGREED UPON BETWEEN TOSHIBA AND THE CUSTOMER. THESE SITE PLANS ARE NOT TO BE USED FOR CONSTRUCTION PURPOSES.

DATE: 11-06-13

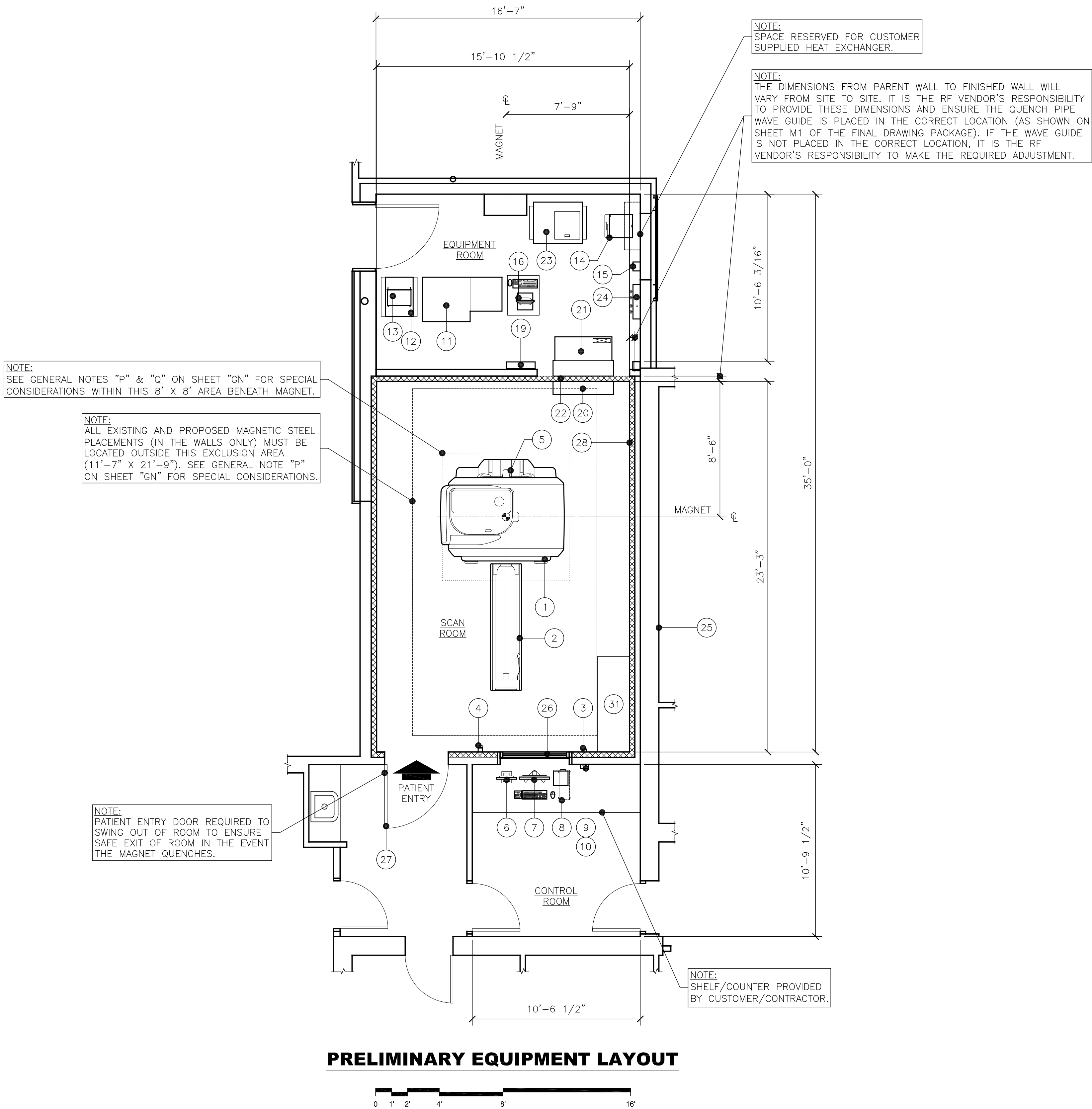
SCALE: NOT TO SCALE

PLANNER: V. H.

SID: 30008347

PROJECT NO.
130013978MRP2

GN



PRELIMINARY EQUIPMENT LAYOUT

NOTE:
EXISTING/PROPOSED STRUCTURAL STEEL SHIELDING LOCATIONS WERE NOT SPECIFIED AT THE TIME THESE SITE PLANS WERE GENERATED. THE EXISTING AND PROPOSED STRUCTURAL/ENVIRONMENTAL STEEL INFORMATION WITH RELATIONSHIP TO MAGNET MUST BE PROVIDED TO SITE PLANNING FOR REVIEW (FOR ALL WALLS, CEILING AND FLOOR). ALL STRUCTURAL/ENVIRONMENTAL STEEL SHOULD BE IDENTIFIED INCLUDING, BUT NOT LIMITED TO, REBAR, BEAMS, PIPES, DRAINS, AND ANY STEEL USED FOR MAGNETIC SHIELDING. THE MAGNET ENVIRONMENT IS SENSITIVE TO FERROUS MATERIAL, WHICH CAN AFFECT IMAGE QUALITY. THE MOST SENSITIVE AREA IS WITHIN AN 8' X 8' AREA BENEATH THE MAGNET TO A DEPTH OF 1'-4". THESE SITE PLANS MUST BE CONSIDERED TENTATIVE UNTIL THIS INFORMATION IS PROVIDED. THE FINAL SITING OF THE MAGNET AND EQUIPMENT MAY BE AFFECTED BY ANY EXISTING/PROPOSED STRUCTURAL STEEL OR STEEL SHIELDING. THE CUSTOMER IS RESPONSIBLE FOR ANY ASSOCIATED CONSTRUCTION THAT MAY RESULT.

ALL MATERIAL IN SCAN ROOM
MUST BE NON-FERROUS

SITE PLAN APPROVAL

PLEASE REVIEW, SIGN AND RETURN THIS SET TO HEADQUARTERS BEFORE FINAL PLANS. IF THERE ARE ANY CHANGES, PLEASE INDICATE ACCORDINGLY ON THIS SET.

CUSTOMER:

DATE:

SALES:

DATE:

I.P.M.:

DATE:

EQUIPMENT LEGEND

ITEM	ELEC. SYM.	ITEM DESCRIPTION SUPPLIED AND INSTALLED BY TOSHIBA	BTU/HR	WEIGHT	REF.
1	MAG	1.5 TESLA MAGNET	4,095	11,905	1 A4
2	PCH	PATIENT COUCH	-	706	1 A4
3	OXMS	OXYGEN SENSOR	-	1	4 A5
4	SUVS	SUPERVISORY UNIT SWITCH	-	1	7 A5
5	CAM	PATIENT OBSERVATION SYSTEM CAMERA (ON MAGNET)	-	-	- -
6	POSM	PATIENT OBSERVATION SYSTEM MONITOR	120	10	2 A5
7	CON	WIDESCREEN LCD, CONTROL PAD, SPEAKER, AND CONTROL BOX	684	34	1 A5
8	HOST	HOST CABINET	1,707	47	1 A5
9	OXMM	OXYGEN MONITOR	-	1	4 A5
10	FSB	EMERGENCY VENTILATION FAN SWITCH BOX	100	3	- -
11	GECO	GRADIENT POWER SUPPLY AND ECO CABINET	16,379	2,161	2 A4
12	TFR	TRANSFORMER CABINET	3,071	574	3 A4
13	SUVU	SUPERVISORY UNIT (MOUNTED ON TRANSFORMER CABINET)	0	27	6 A5
14	RFG	REFRIGERATOR CABINET	10,578	221	3 A5
15	FLS	FLOW SWITCH	-	12	- -
16	INV	INNERVISION PC (ON CART SUPPLIED BY CUSTOMER / CONTRACTOR)	500	22	5 A5
17	SPK1	CONTROL ROOM SPEAKER (NOT SHOWN)	-	-	- -
18	SPK2	SCAN ROOM SPEAKER (NOT SHOWN)	-	-	- -
19	MFB	MAGNET FAN BOX	342	38	9 A5
20	FPC1	FILTER PANEL COVER (SCAN ROOM SIDE)	-	40	4 A4
21	FPC2	FILTER PANEL COVER (EQUIPMENT ROOM SIDE)	-	93	5 A4
ITEM	ELEC. SYM.	OPTIONAL ITEM DESCRIPTION SUPPLIED AND INSTALLED BY TOSHIBA	BTU/HR	WEIGHT	REF.
22	LFP	LINE FILTER PANEL	683	265	- -
23	VRDU	VOLTAGE REGULATION DISTRIBUTION UNIT	14,000	1,778	8 A5
24	MFOLD	MANIFOLD (FIELD VERIFY LOCATION)	-	80	6 A4
ITEM	ELEC. SYM.	ITEM DESCRIPTION SUPPLIED AND INSTALLED BY CUSTOMER / CONTRACTOR	BTU/HR	WEIGHT	REF.
25	WALL	PARENT WALL	-	-	- -
26	RFW	RF WINDOW-SITE SPECIFIC PER ROOM CONDITIONS	-	-	- -
27	RFD	RF SHIELDED DOOR-SITE SPECIFIC PER ROOM CONDITIONS	-	-	- -
28	RFS	RF SHIELDED ENCLOSURE-SITE SPECIFIC PER ROOM CONDITIONS (THICKNESS VARIES PER MANUFACTURER)	-	-	- -
29	HVAC	AIR CONDITIONING UNIT (NOT SHOWN)	-	-	- -
30	CB	CIRCUIT BREAKER (NOT SHOWN)	-	-	- -
31	NFCC	NON-FERROUS COIL CABINET	-	-	- -

TOSHIBA

Leading Innovation >>>

INT

V. H.

V. H.

V. H.

DESCRIPTION

ORIGINAL PRELIMINARY DRAWING COMPLETED.

UPDATED ARCHITECTURAL & EQUIPMENT LAYOUT.

UPDATED ARCHITECTURAL & EQUIPMENT LAYOUT.

REV

DATE

09-12-13

10-25-13

11-06-13

TRISTAN UNION DEPOSIT
MRI #3

(MR SCAN ROOM - TITAN)

2808 OLD POST RD.
HARRISBURG, PA 17110

THESE TOSHIBA PLANS ARE FOR INFORMATIONAL PURPOSES ONLY AND SHALL NOT BE USED FOR ANY PURPOSE OTHER THAN THAT AGREED UPON BETWEEN TOSHIBA AND THE CUSTOMER. THESE SITE PLANS ARE NOT TO BE USED FOR CONSTRUCTION PURPOSES.

DATE: 11-06-13

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

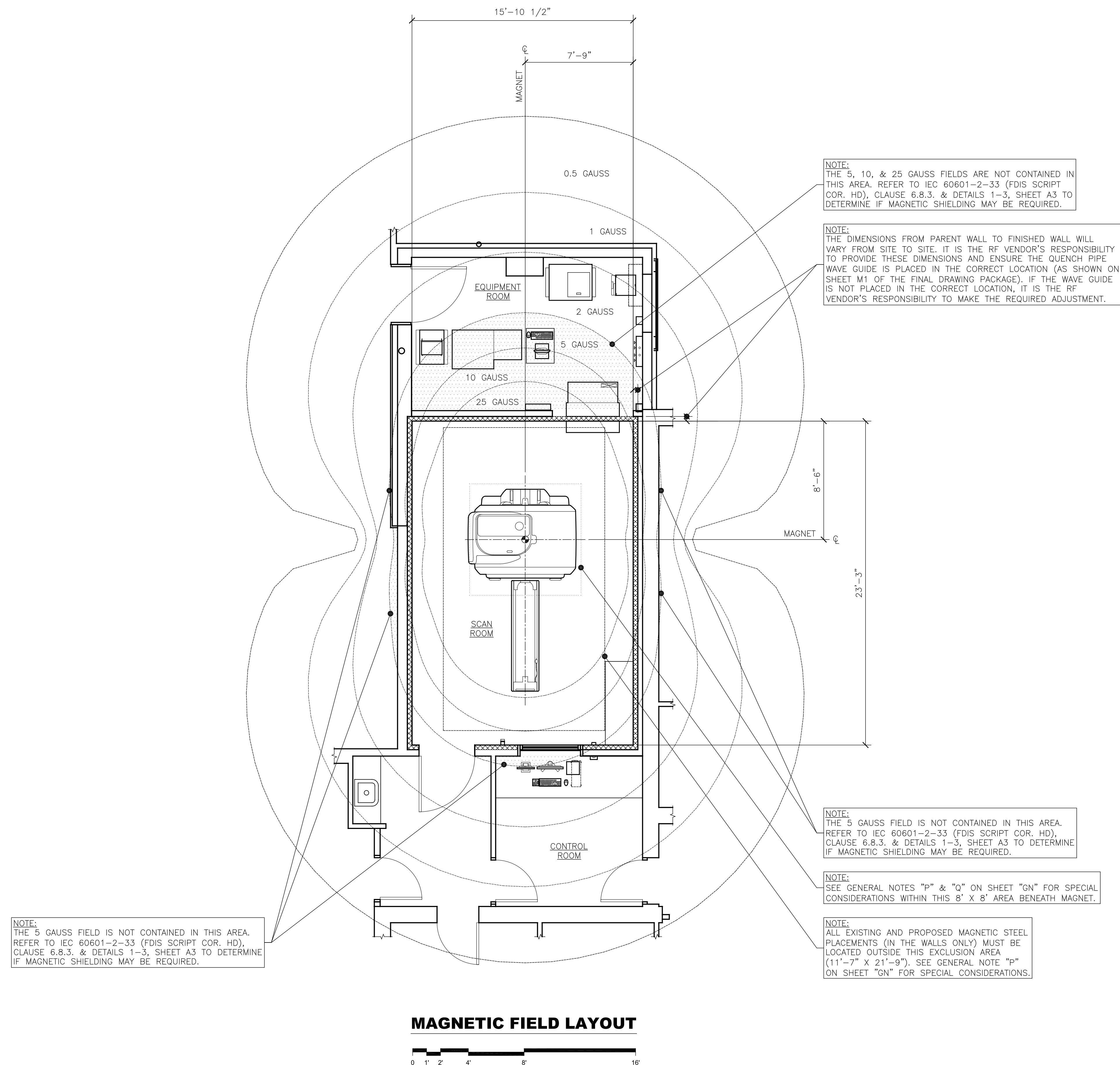
PLANNER: V. H.

SID: 30008347

PROJECT NO.
130013978MRP2

A1




ALL INFORMATION ON THIS SHEET IS TO BE CONSIDERED PRELIMINARY AND TENTATIVE AND IS SUBJECT TO CHANGE OR REVISION WITHOUT PRIOR NOTICE. THIS INFORMATION IS FOR PLANNING PURPOSES ONLY.

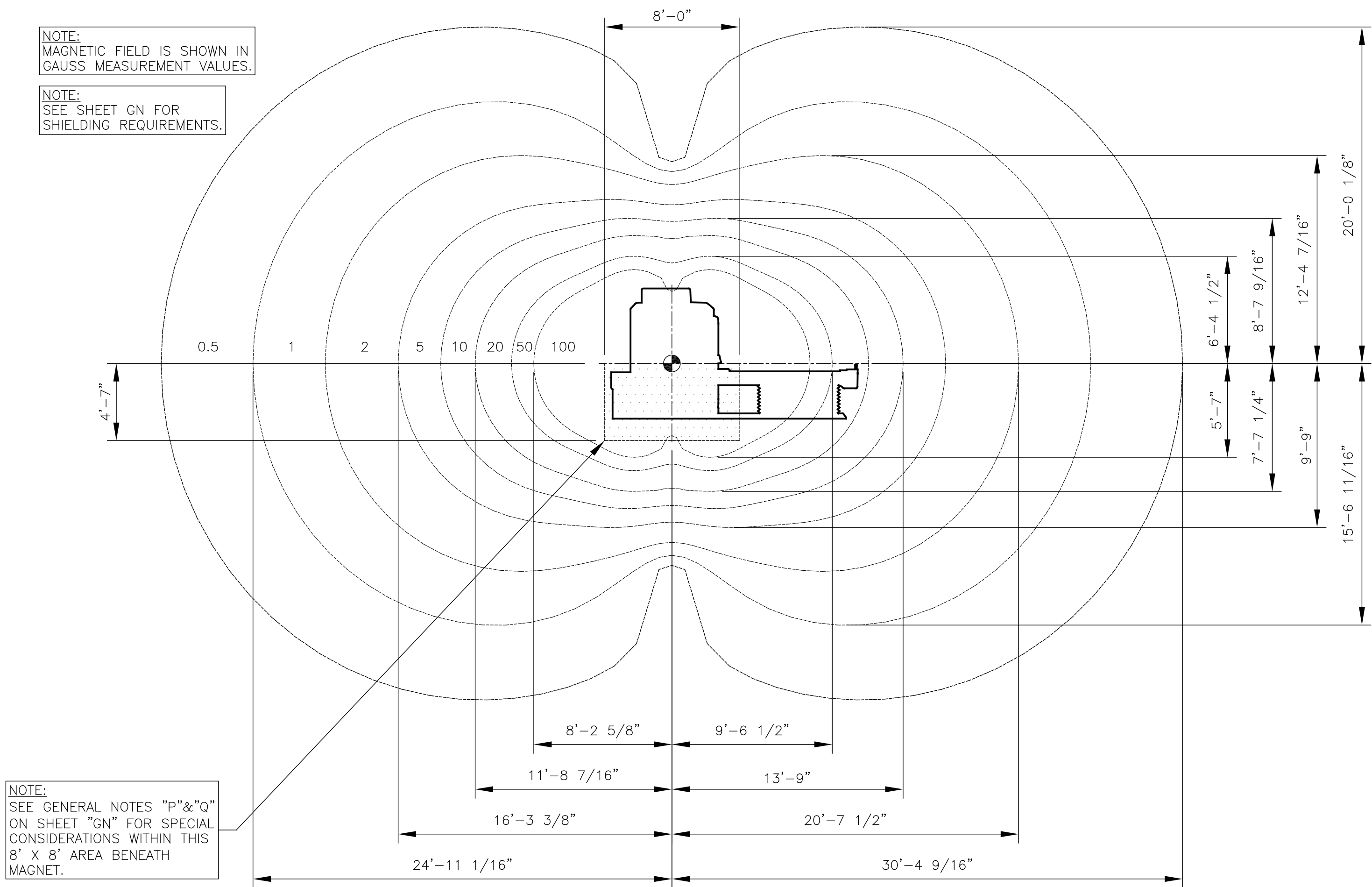
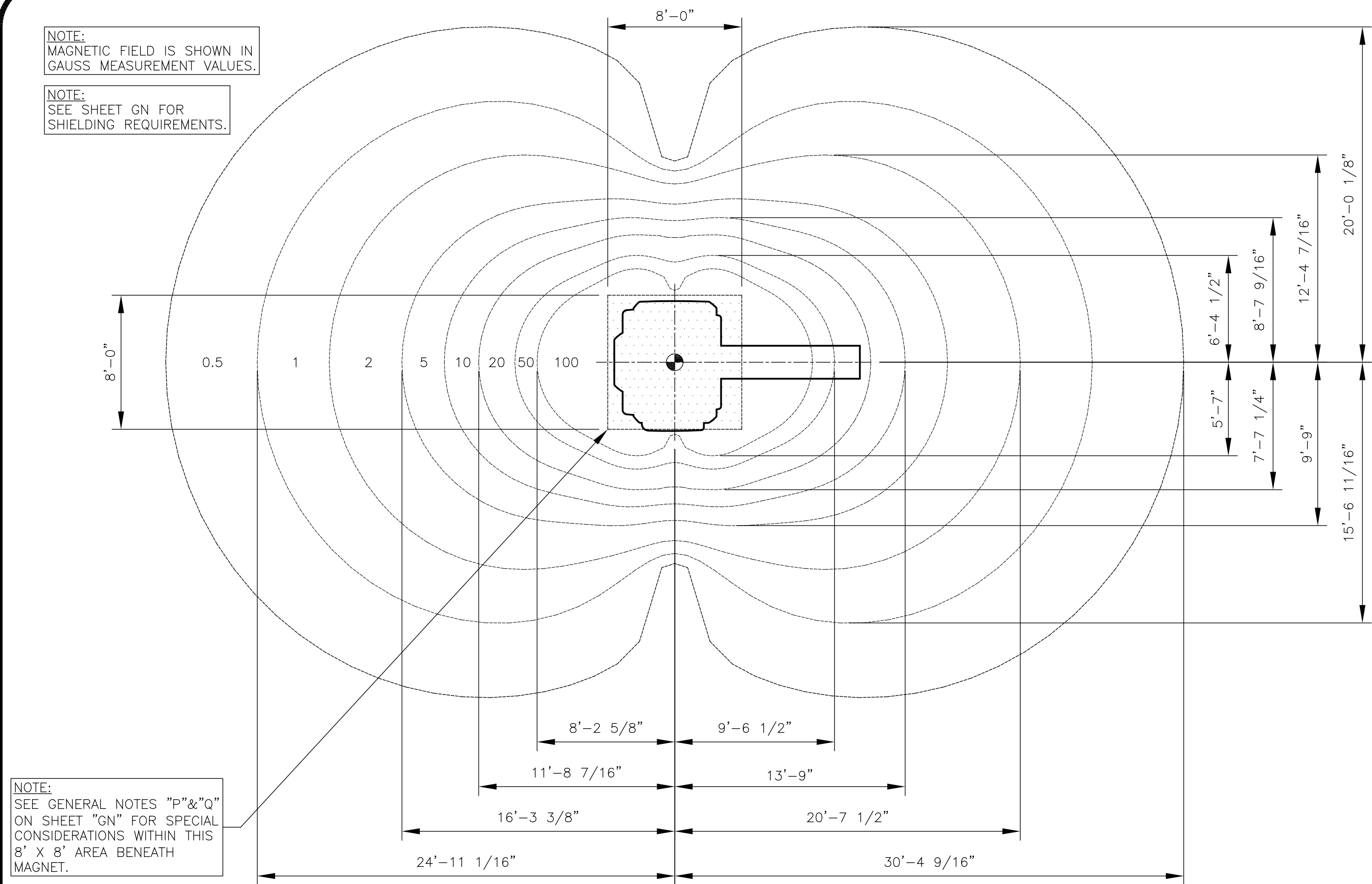
**RF / MAGNETIC SHIELDING**

- A. CUSTOMER/CONTRACTOR RESPONSIBLE FOR OBTAINING A SHIELDING VENDOR, TO MODEL, DESIGN, AND BUILD REQUIRED MAGNETIC AND RF SHIELDING.
- B. MAGNET LEGS MUST BE INSULATED (ISOLATED) FROM RF ENCLOSURE.
- C. GAUSS LINES IN THESE DRAWINGS ARE REPRESENTED WITHOUT MAGNETIC SHIELDING.
- D. RF SHIELDING WEIGHT WILL VARY FROM SITE TO SITE. CUSTOMER'S STRUCTURAL ENGINEER MUST CONSULT WITH RF ENCLOSURE VENDOR FOR RF SHIELDING WEIGHTS.
- E. THE EXISTING/FUTURE STEEL INFORMATION WITH RELATIONSHIP TO MAGNET MUST BE PROVIDED TO SITE PLANNING FOR REVIEW (ALL SIDES OF THE ROOM, INCLUDING CEILING AND FLOOR).
- F. ANY STEEL BENEATH THE MAGNET MUST BE LOCATED A MINIMUM OF 4'-7" FROM MAGNET ISOCENTER. SOME STEEL REBAR COULD BE ACCEPTABLE, CONSULT WITH TOSHIBA INSTALLATION PROJECT MANAGER FOR APPROVAL OF ANY STEEL IN THIS CRITICAL AREA.
- G. MAGNETOMETER SURVEY MUST BE PERFORMED BY TOSHIBA BEFORE SUBMITTING FINAL DRAWINGS (120V POWER IS REQUIRED FOR TOSHIBA TO BEGIN SURVEY. A MINIMUM OF 50°F IS REQUIRED FOR SURVEY AREA).
- H. THE SHIELDING WORK IS REQUIRED TO SUPPRESS EXTERNAL LEAKAGE OF THE ELECTROMAGNETIC RADIATION GENERATED BY THE SYSTEM.
- I. THE SHIELD MUST ATTENUATE ELECTROMAGNETIC RADIATION IN THE FREQUENCY BAND OF 63.86 MHz \pm 0.5 MHz BY AT LEAST 90 dB.

NOTE:
IF A CEILING HEIGHT OF 8'-10 5/16" IS NOT AVAILABLE, THE SYSTEM CAN STILL BE INSTALLED AS LONG AS THE MINIMUM CEILING HEIGHT IS 7'-10 1/2" AND A SERVICE OPENING IS PROVIDED IN THE CEILING UP TO 8'-10 5/16".

MAGNET LEGS MUST BE INSULATED (ISOLATED) FROM RF ENCLOSURE.

<p>TRISTAN UNION DEPOSIT MRI #3</p>				REV	DATE	DESCRIPTION	INT
<p>(MR SCAN ROOM - TITAN)</p> <p>2808 OLD POST RD. HARRISBURG, PA 17110</p>					09-12-13	ORIGINAL PRELIMINARY DRAWING COMPLETED.	V. H.
					10-25-13	UPDATED ARCHITECTURAL & EQUIPMENT LAYOUT.	V. H.
					11-06-13	UPDATED ARCHITECTURAL & EQUIPMENT LAYOUT.	V. H.
<p>THESE TOSHIBA PLANS ARE FOR INFORMATIONAL PURPOSES ONLY AND SHALL NOT BE USED FOR ANY PURPOSE OTHER THAN THAT AGREED UPON BETWEEN TOSHIBA AND THE CUSTOMER. THESE SITE PLANS ARE NOT TO BE USED FOR CONSTRUCTION PURPOSES.</p>							
DATE:		11-06-13					
SCALE:		1/4" = 1'-0"					
PLANNER:		V. H.					
SID:		30008347					
<p>PROJECT NO. 130013978MRP2</p>							



1 FRINGE FIELD MEASUREMENTS (PLAN VIEW)

SCALE: 3/16" = 1'-0"

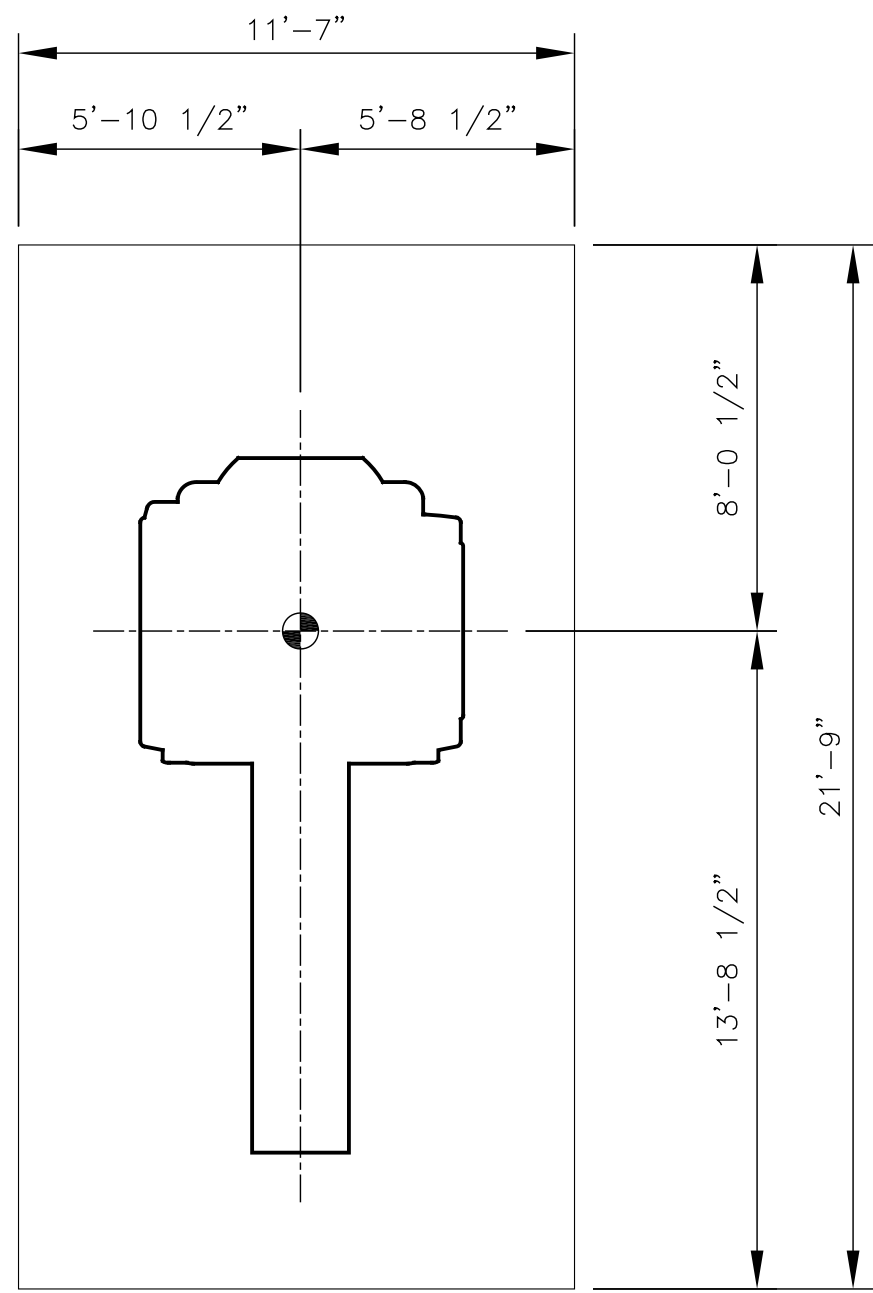
09-05-12

UNIT	EXAMPLE	GAUSS (NOTE A)	DISTANCE (FT.) (NOTE B)
ACCELERATING TUBE	LINEAR ACCELERATORS	0.5	30'-4 9/16"
I.I.	X-RAY SYSTEMS	0.5	30'-4 9/16"
NON-SHIELDED PHOTO-MULTIPLIER TUBE	CT, GAMMA CAMERA, PET SYSTEMS	0.5	30'-4 9/16"
REED RELAY	PACEMAKERS**	5	16'-3 3/8"
X-RAY TUBE	CT, X-RAY SYSTEMS	10	13'-9"
CRT	MONOCHROME MONITORS (SHIELDED)	5	16'-3 3/8"
	MONOCHROME MONITORS (UNSHIELDED)	2	20'-7 1/2"
	COLOR MONITORS (SHIELDED)	1	24'-11 1/16"
	COLOR MONITORS (UNSHIELDED)	0.5	30'-4 9/16"
	MULTIFORMAT CAMERAS	10	13'-9"
	ULTRASONIC DIAGNOSTIC SYSTEMS	2	20'-7 1/2"
	ELECTROCARDIOGRAPHS	2	20'-7 1/2"
	ELECTROENCEPHALOGRAPHS	2	20'-7 1/2"
OXYGEN MONITOR	INCLUDED IN THE MRI SYSTEM	20	11'-8 7/16"
SUPERVISORY UNIT	INCLUDED IN THE MRI SYSTEM	20	11'-8 7/16"
FILTER PANEL	INCLUDED IN THE MRI SYSTEM	100	8'-7"
GRADIENT POWER SUPPLY	INCLUDED IN THE MRI SYSTEM	5	16'-3 3/8"
TRANSFORMER CABINET (WITH VACUUM PUMP UNIT)	INCLUDED IN THE MRI SYSTEM	5	16'-3 3/8"
ECO CABINET	INCLUDED IN THE MRI SYSTEM	5	16'-3 3/8"
HOST CABINET	INCLUDED IN THE MRI SYSTEM	5	16'-3 3/8"
MAGNETIC RECORDING MEDIA	MAGNETIC TAPES, FLOPPY DISKS	10	13'-9"
MAGNETIC RECORDING MEDIA	BANK, CREDIT CARDS	20	11'-8 7/16"
OTHERS	WATCHES	30	10'-9 15/16"

NOTE:
THE DEVICES LISTED ABOVE ARE AFFECTED BY MAGNETIC FIELDS AND MAY NOT OPERATE PROPERLY NEAR THE GANTRY.

- A. MAXIMUM MAGNETIC FIELD INTENSITY AT WHICH THE UNIT OPERATES NORMALLY. THESE VALUES INCLUDE THE EARTH'S MAGNETIC FIELD (APPROXIMATELY 0.4 GAUSS). IF THE DIRECTION IN WHICH THE GANTRY IS INSTALLED IS CLOSE TO THAT OF THE EARTH'S MAGNETIC FIELD, THE MAXIMUM MAGNETIC INTENSITY (INCLUDING THE EARTH'S MAGNETIC FIELD) OF EACH UNIT MAY EXCEED THE LIMIT. IN THIS SITUATION, THE INSTALLED DIRECTION MUST BE CHANGED. OTHERWISE, DO NOT ALLOW ANY EQUIPMENT TO BE SET UP BEYOND ALLOWABLE LIMIT OR PERSONS TO ENTER THIS AREA.
- B. MINIMUM DISTANCE FROM THE CENTER OF THE MAGNET FOR NORMAL OPERATION.
- C. SPECIAL CAUTION IS REQUIRED FOR ELECTRON MICROSCOPES BECAUSE THEY CAN BE AFFECTED BY MAGNETIC FIELD VARIATIONS AS SMALL A FEW MILLIGAUSS.

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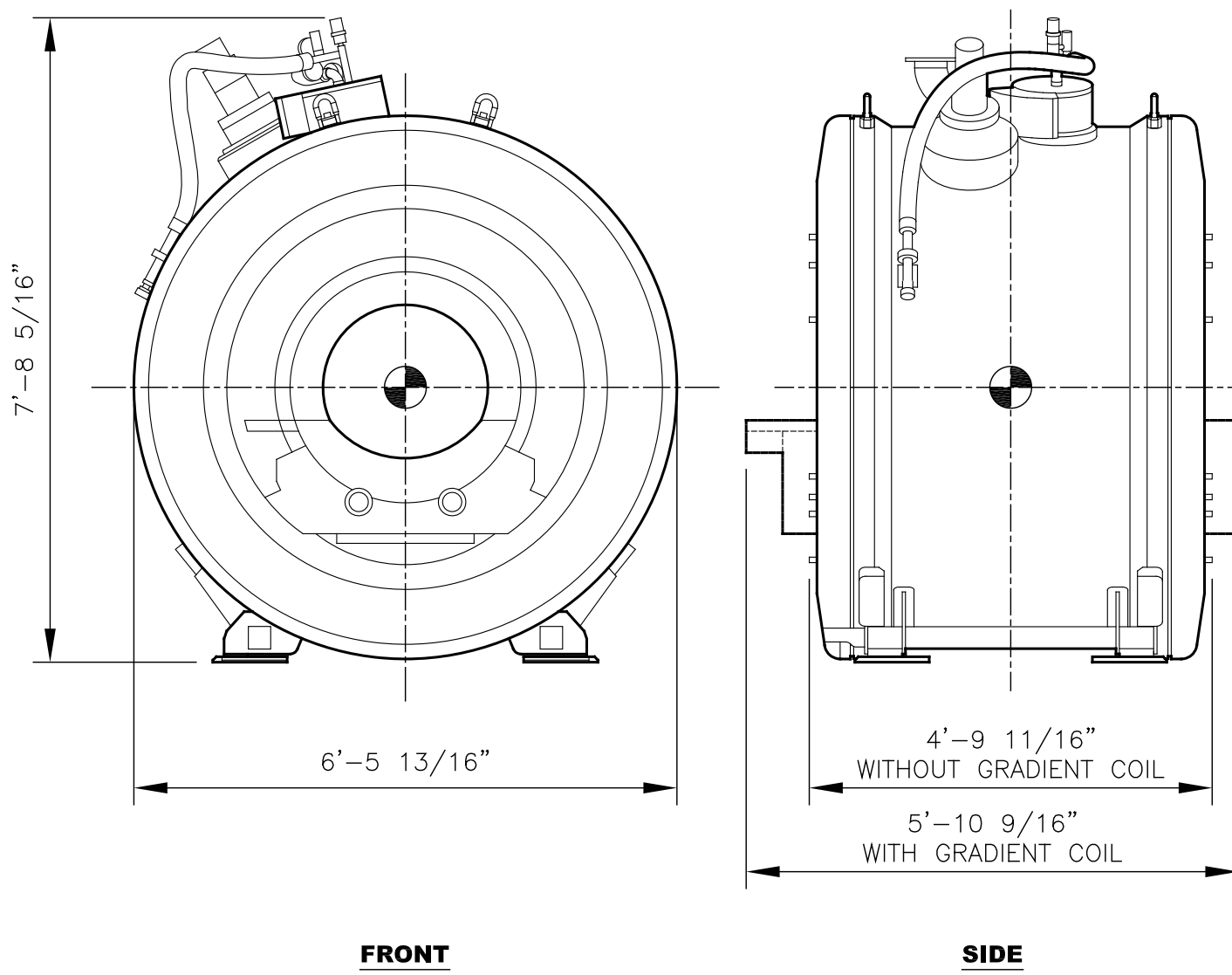


NOTE:
ALL EXISTING AND PROPOSED MAGNETIC STEEL PLACEMENTS (IN THE WALLS ONLY) MUST BE LOCATED OUTSIDE THIS EXCLUSION AREA (11'-7" X 21'-9").

2 FRINGE FIELD MEASUREMENTS (ELEVATION VIEW)

SCALE: 3/16" = 1'-0"

09-05-12

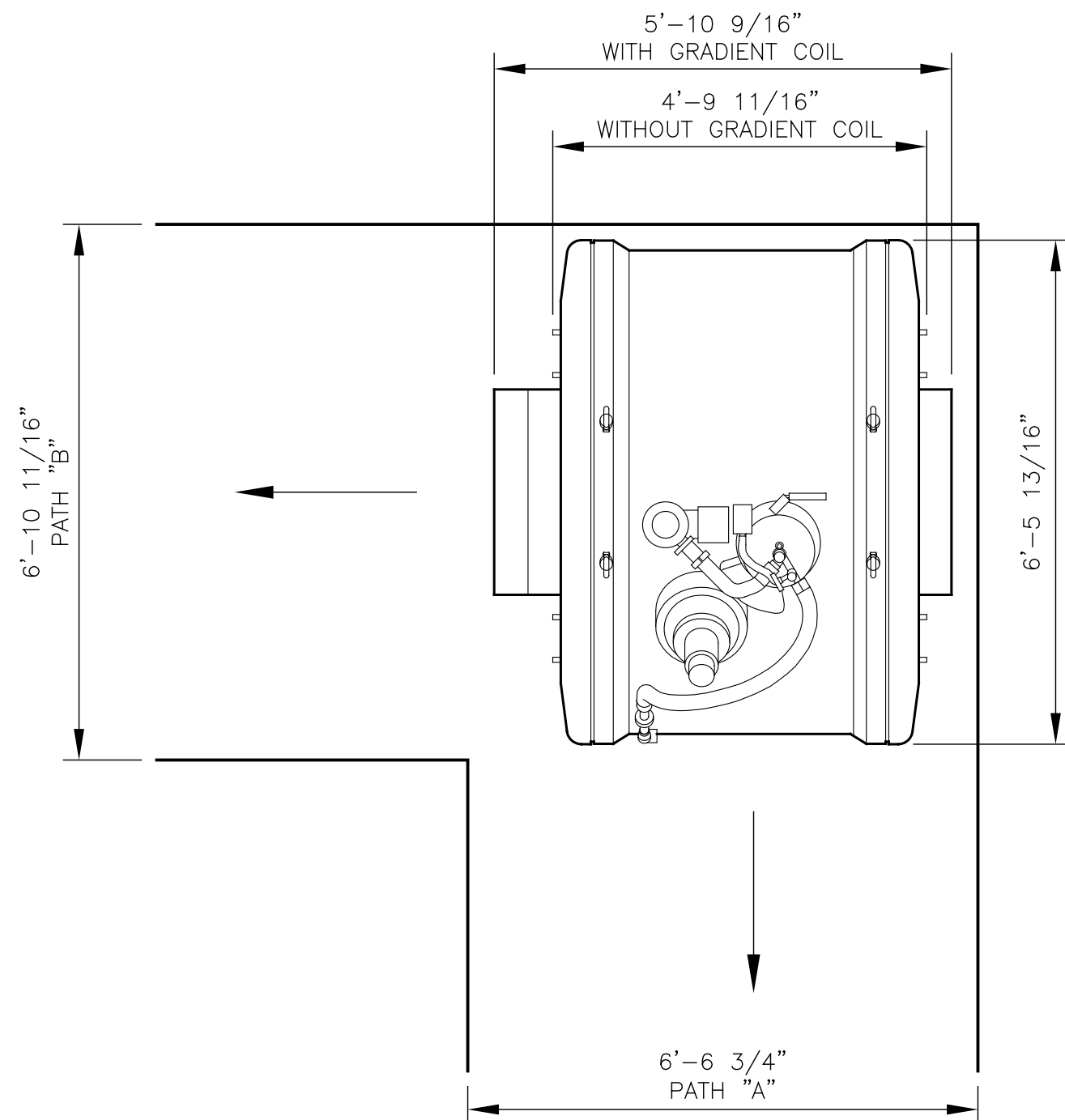


FRONT

SIDE

NOTE:
FOR DELIVERY: CONSULT RIGGING CONTRACTOR FOR HEIGHT REQUIREMENTS FOR MATERIALS USED TO TRANSPORT MAGNET TO FINAL LOCATION.

- CASTER HEIGHTS WILL VARY.
- CARRYING IN WEIGHT WITHOUT GRADIENT COIL, COVER IS 8,800 LBS (FILLED).



NOTE:
IF ORIENTATION IS NOT CHANGED AT THE CORNER, 6'-6 3/4" WIDTH IS SUFFICIENT FOR PATH "A" AND 6'-10 11/16" FOR PATH "B".

3 EFFECTS OF THE MAGNETIC FIELD

SCALE: NOT TO SCALE

09-05-12

4 STEEL EXCLUSION ZONE OF MAGNET

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

09-05-12

5 MAGNET ASSEMBLY FOR CARRYING IN

SCALE: 1/2" = 1'-0"

09-05-12

6 MINIMUM CORRIDOR WIDTH FOR MAGNET INGRESS

SCALE: 1/2" = 1'-0"

01-10-11

REV	DATE	DESCRIPTION	INT
Δ	09-12-13	ORIGINAL PRELIMINARY DRAWING COMPLETED.	V. H.
Δ	10-25-13	NO CHANGES MADE TO THIS SHEET.	V. H.
Δ	11-06-13	NO CHANGES MADE TO THIS SHEET.	V. H.

TRISTAN UNION DEPOSIT
MRI #3

(MR SCAN ROOM - TITAN)

2808 OLD POST RD.
HARRISBURG, PA 17110

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DATE: 11-06-13

SCALE: AS NOTED

PLANNER: V. H.

SID: 30008347

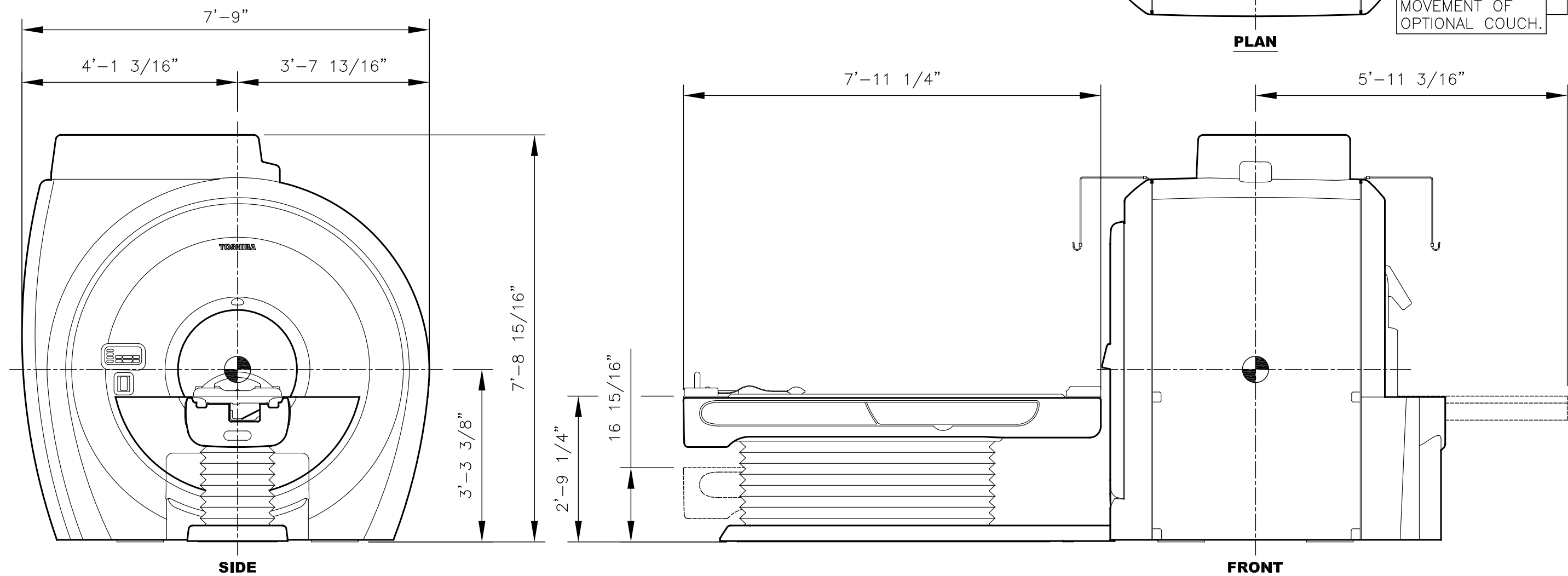
PROJECT NO.
130013978MRP2

A3

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MAG
HEAT OUTPUT (BTU'S)
4,095
WEIGHT (LBS)
11,905

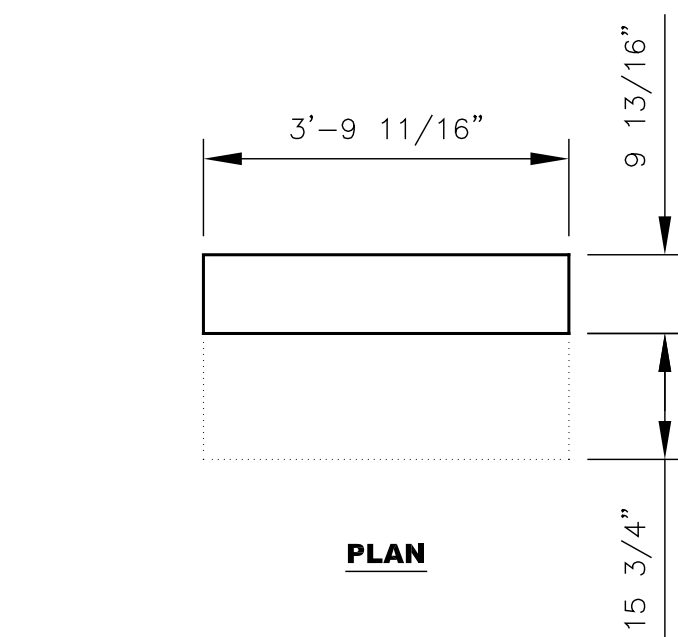
PCH
HEAT OUTPUT (BTU'S)
-
WEIGHT (LBS)
706



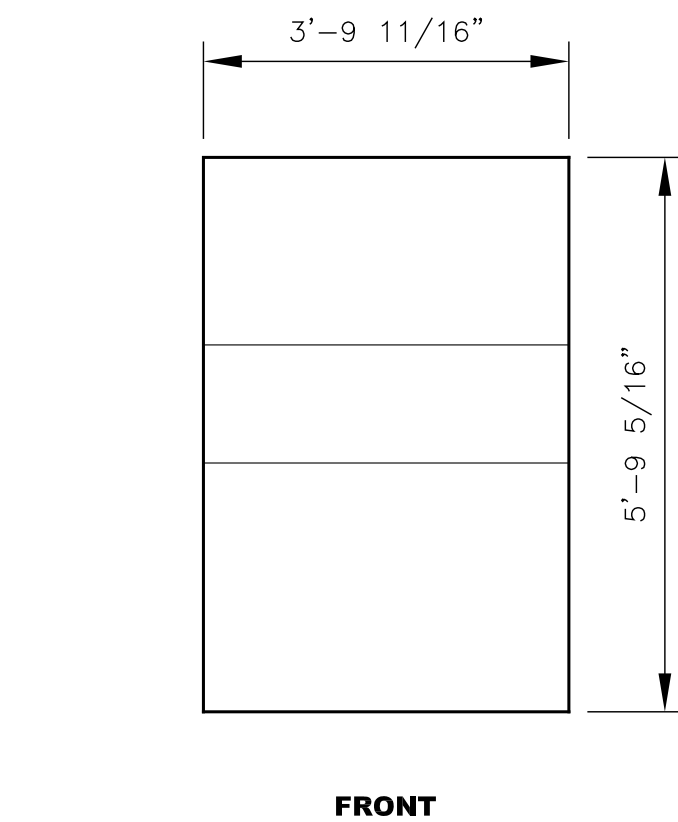
1 TITAN 1.5 TESLA MAGNET AND COUCH

SCALE: 1/2" = 1'-0"

03-12-13



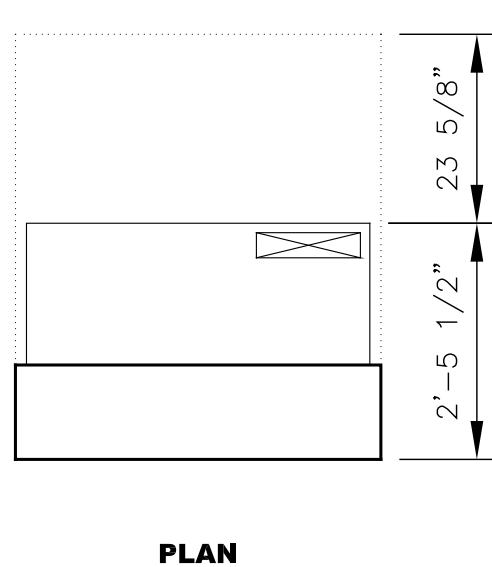
FPC1
HEAT OUTPUT (BTU'S)
-
WEIGHT (LBS)
40



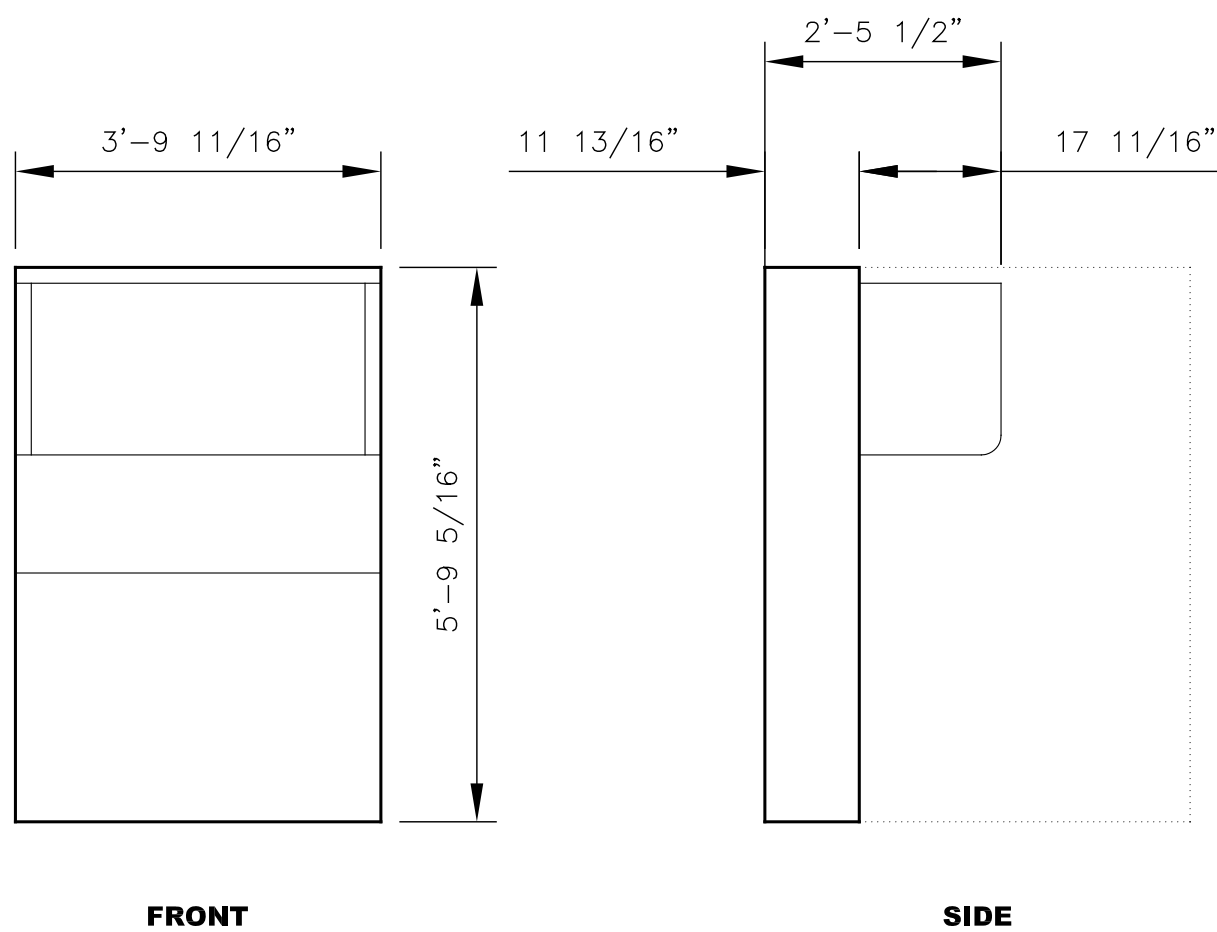
4 FILTER PANEL COVER (SCAN ROOM SIDE)

SCALE: 1/2" = 1'-0"

03-12-13



FPC2
HEAT OUTPUT (BTU'S)
-
WEIGHT (LBS)
93



5 FILTER PANEL COVER (EQUIPMENT ROOM SIDE)

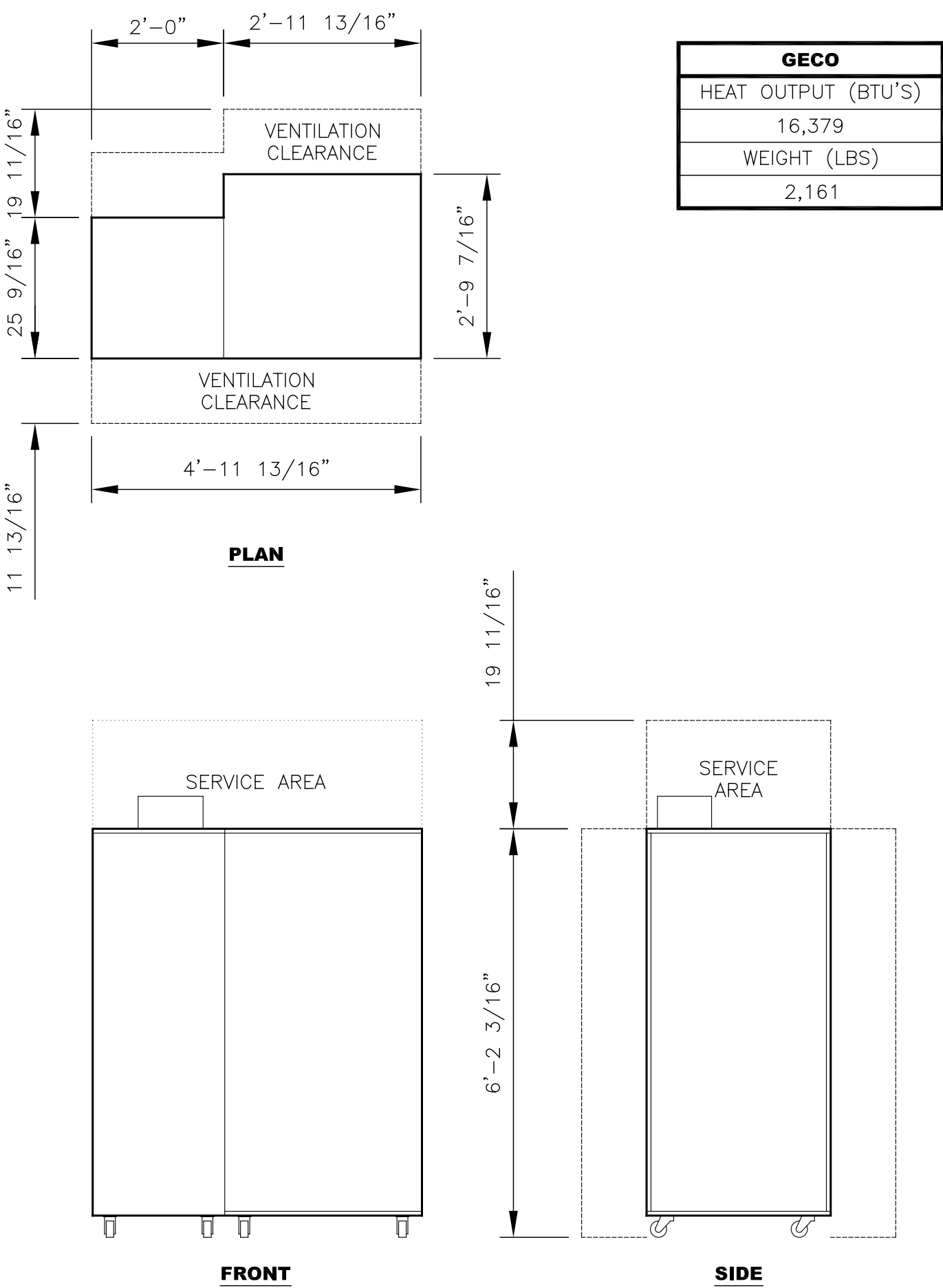
SCALE: 1/2" = 1'-0"

03-12-13

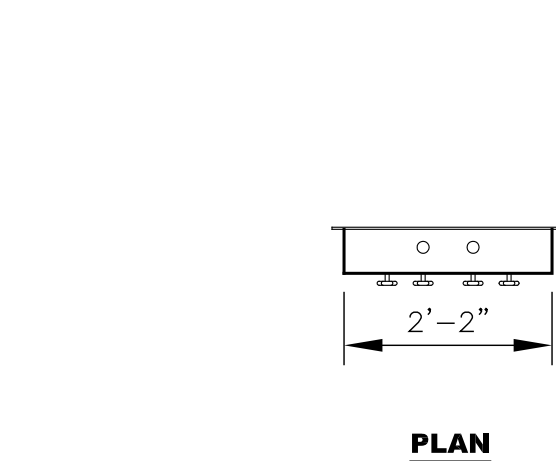
2 GRADIENT POWER SUPPLY AND ECO CABINET

SCALE: 1/2" = 1'-0"

03-12-13



GECO
HEAT OUTPUT (BTU'S)
16,379
WEIGHT (LBS)
2,161



MFOLD
HEAT OUTPUT (BTU'S)
-
WEIGHT (LBS)
80

6 MANIFOLD

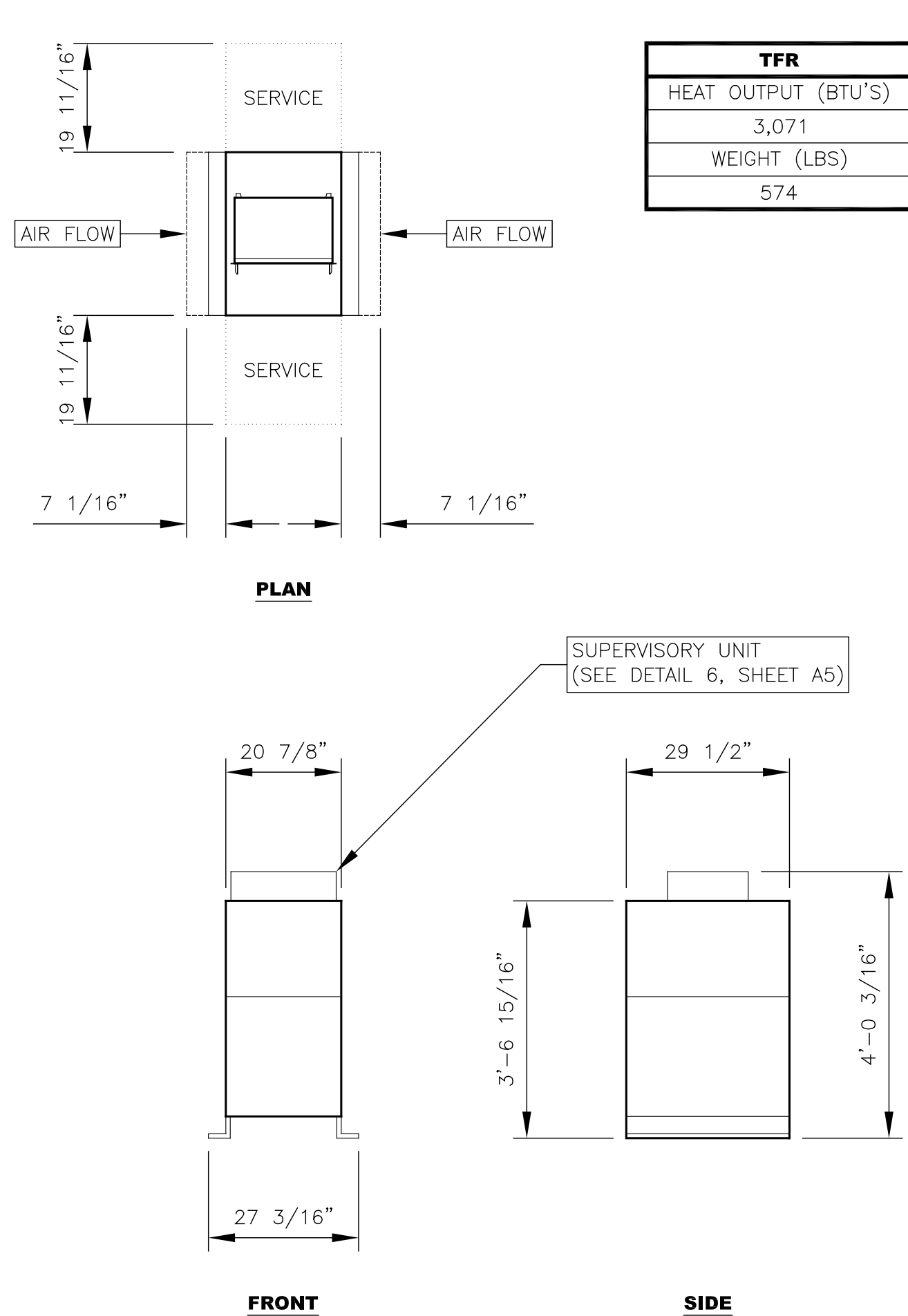
SCALE: 1/2" = 1'-0"

03-12-13

3 TRANSFORMER CABINET

SCALE: 1/2" = 1'-0"

03-12-13



TFR
HEAT OUTPUT (BTU'S)
3,071
WEIGHT (LBS)
574

TRISTAN UNION DEPOSIT
MRI #3

(MR SCAN ROOM - TITAN)
2808 OLD POST RD.
HARRISBURG, PA 17110

DATE: 11-06-13

SCALE: AS NOTED

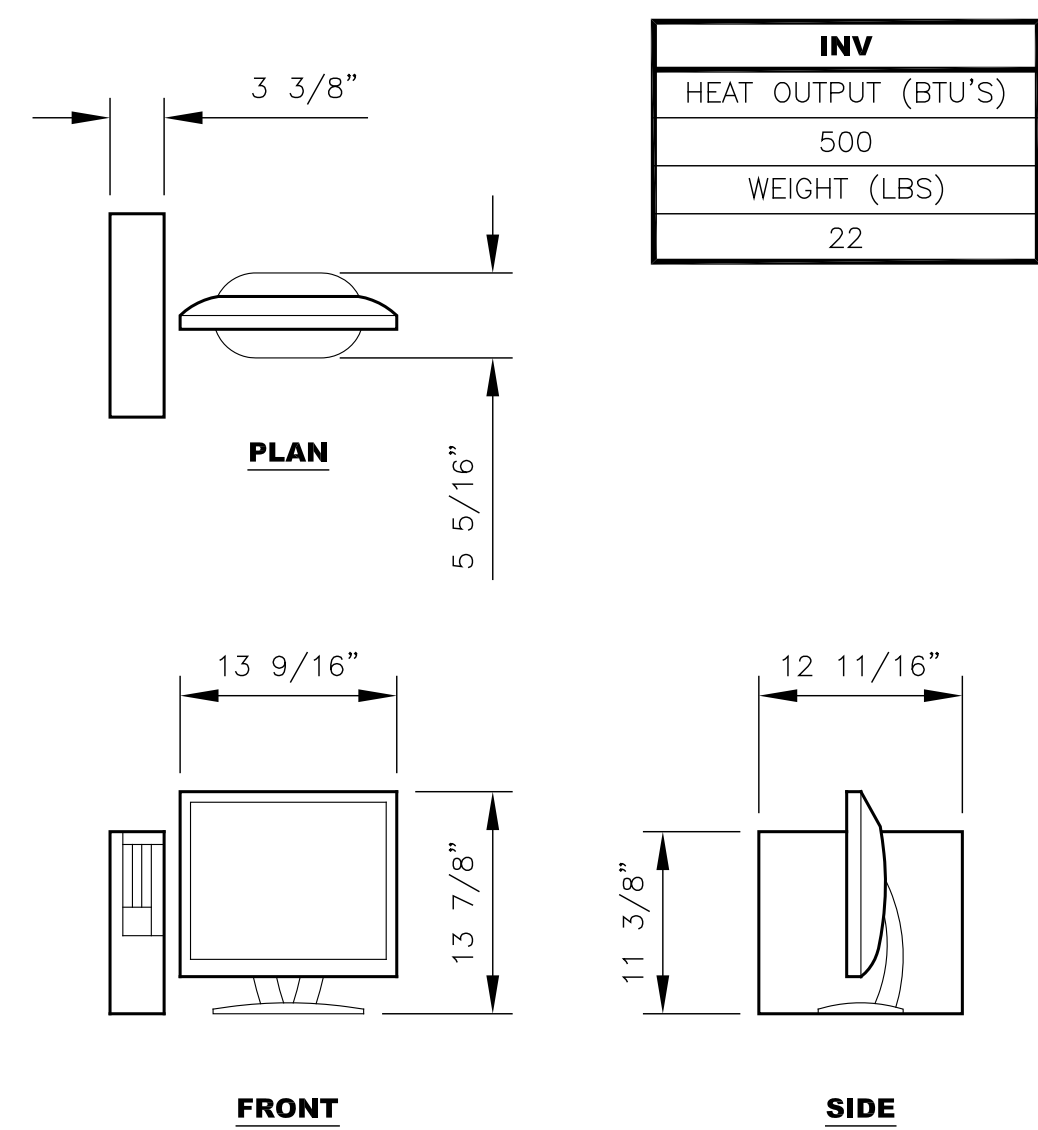
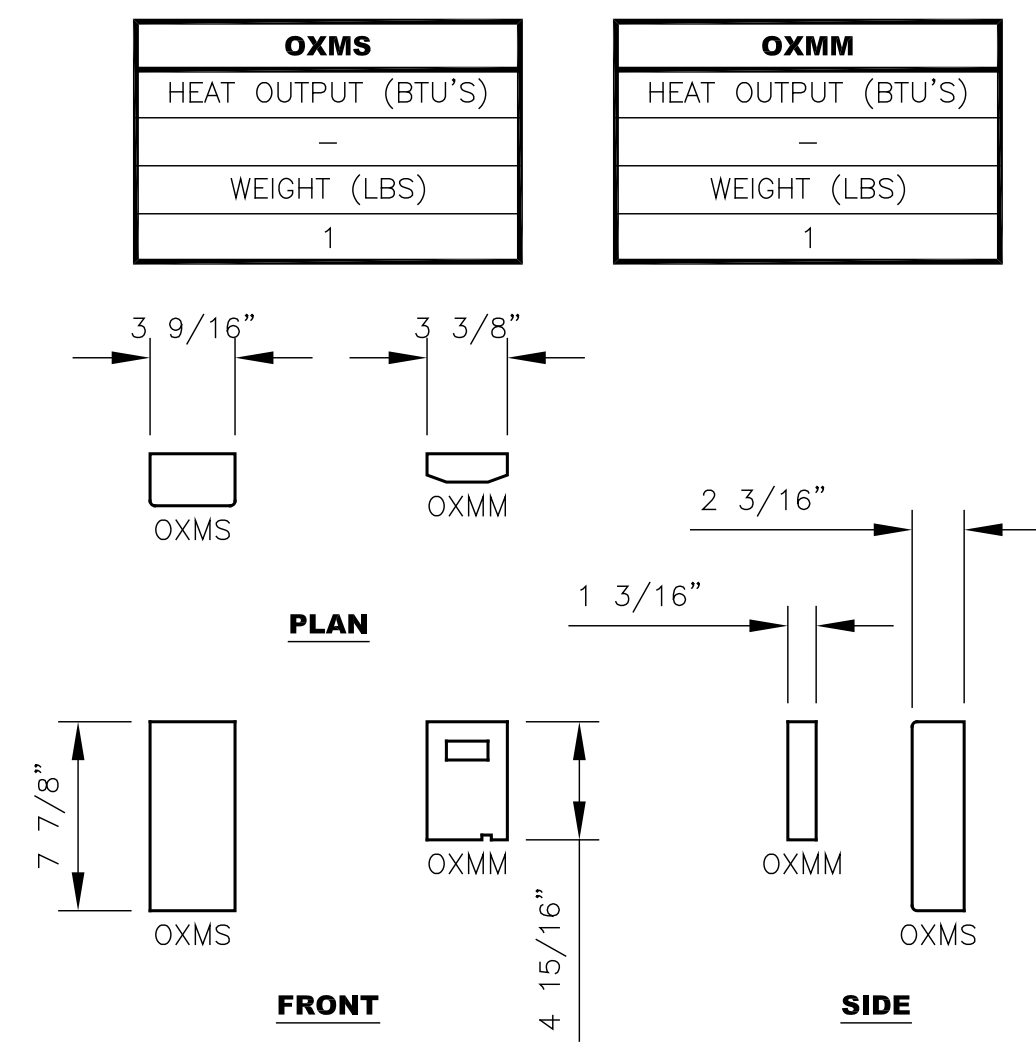
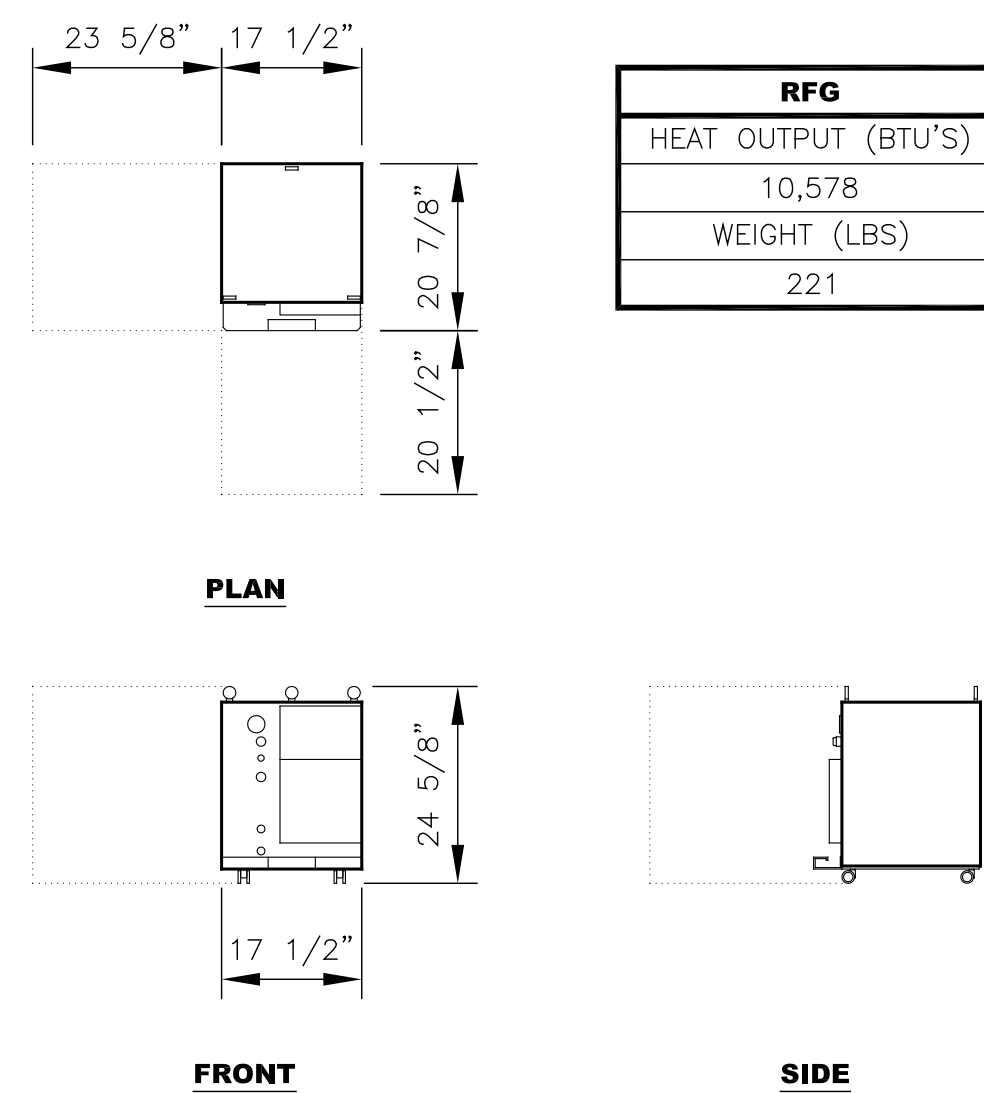
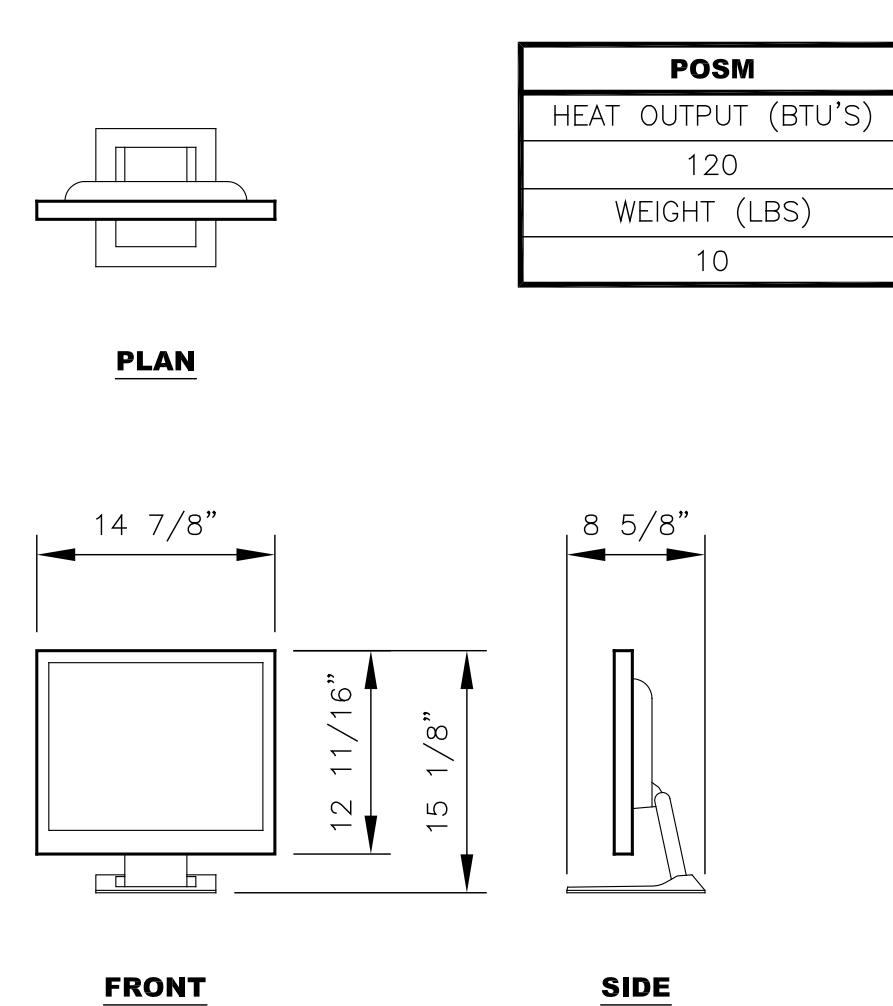
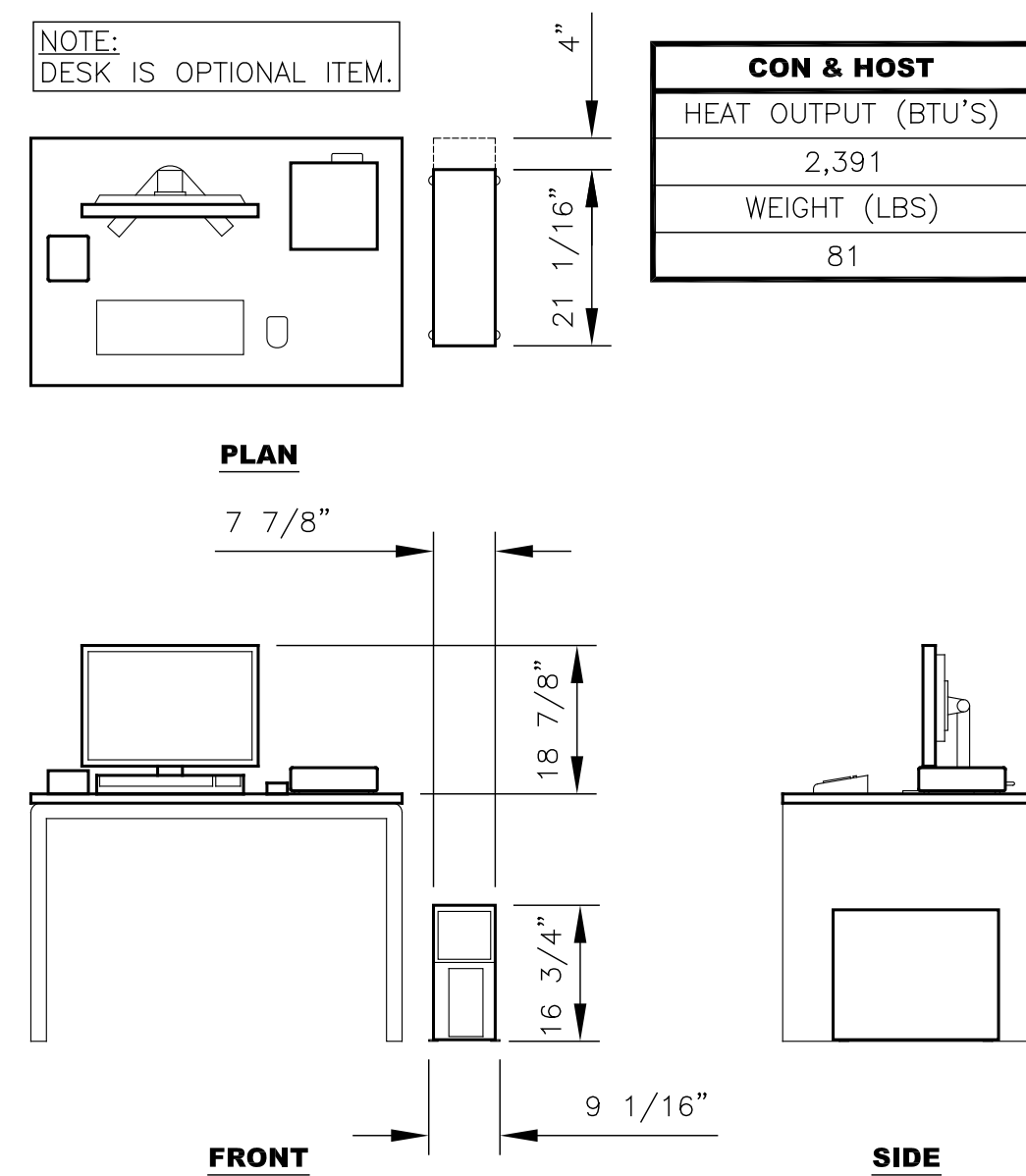
PLANNER: V. H.

SID: 30008347

PROJECT NO.
130013978MRP2

A4

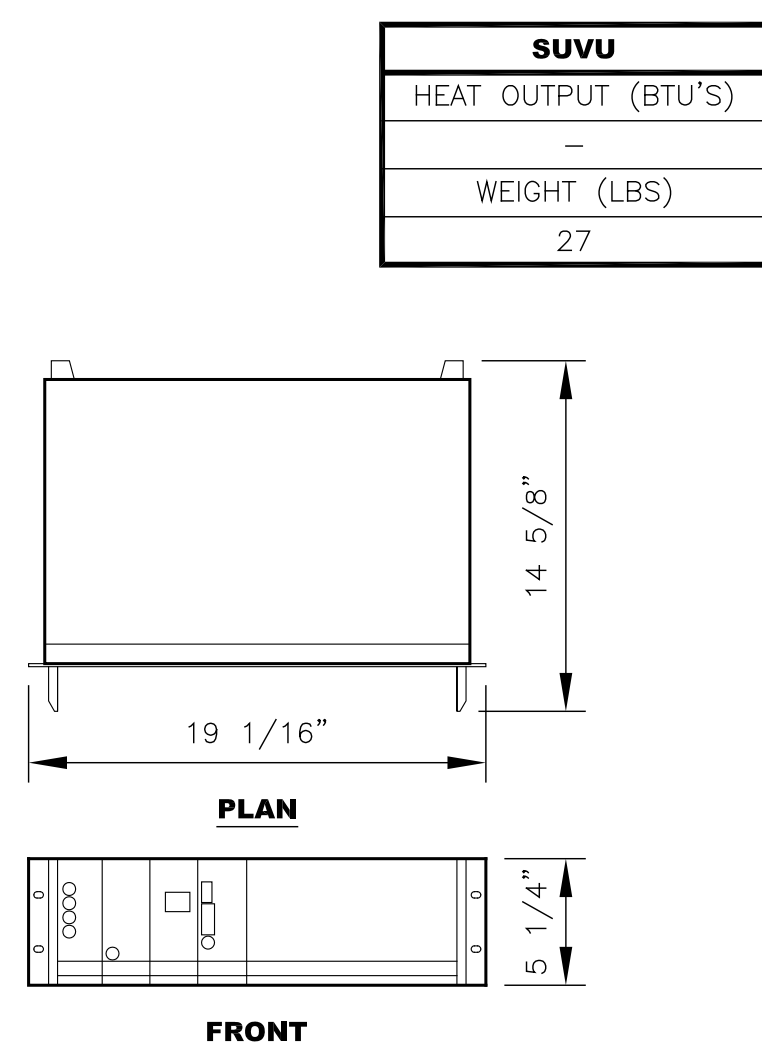
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1 CONTROL CONSOLE AND HOST CABINET

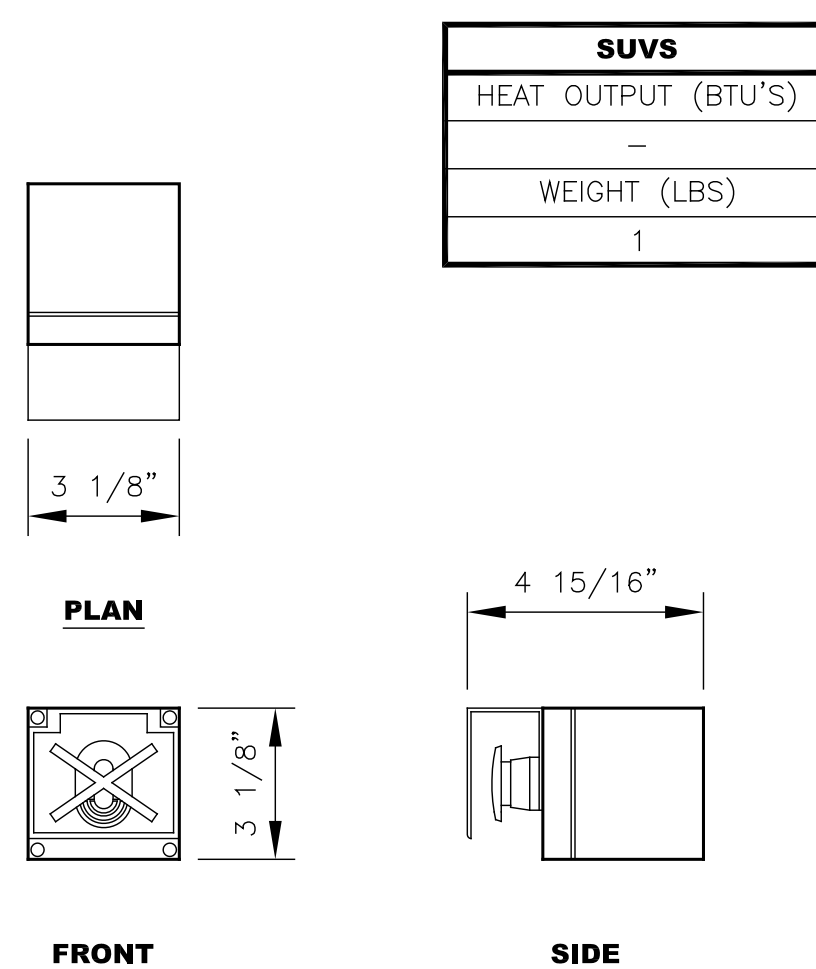
SCALE: 1/2" = 1'-0"

03-12-13



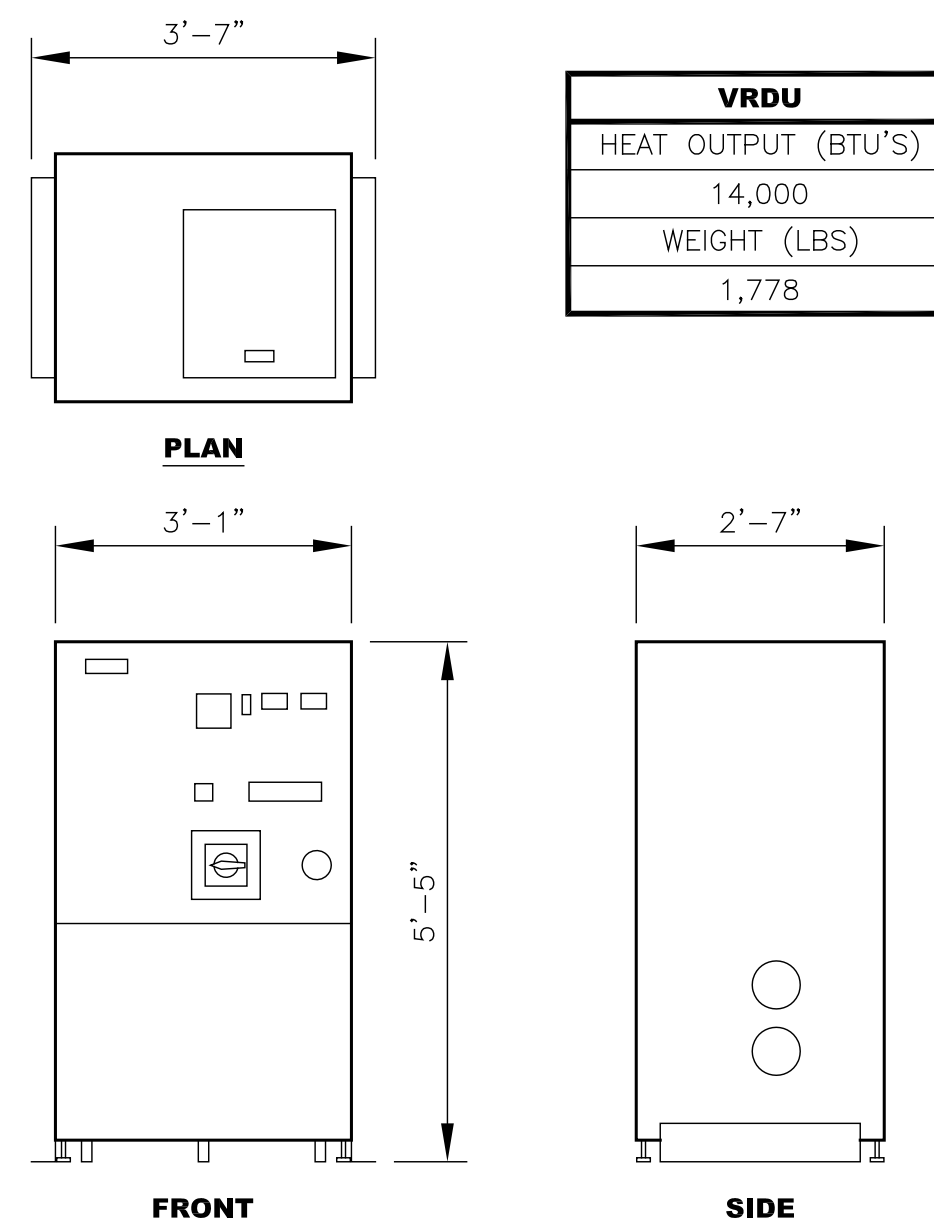
SCALE: 1" = 1'-0"

03-12-13



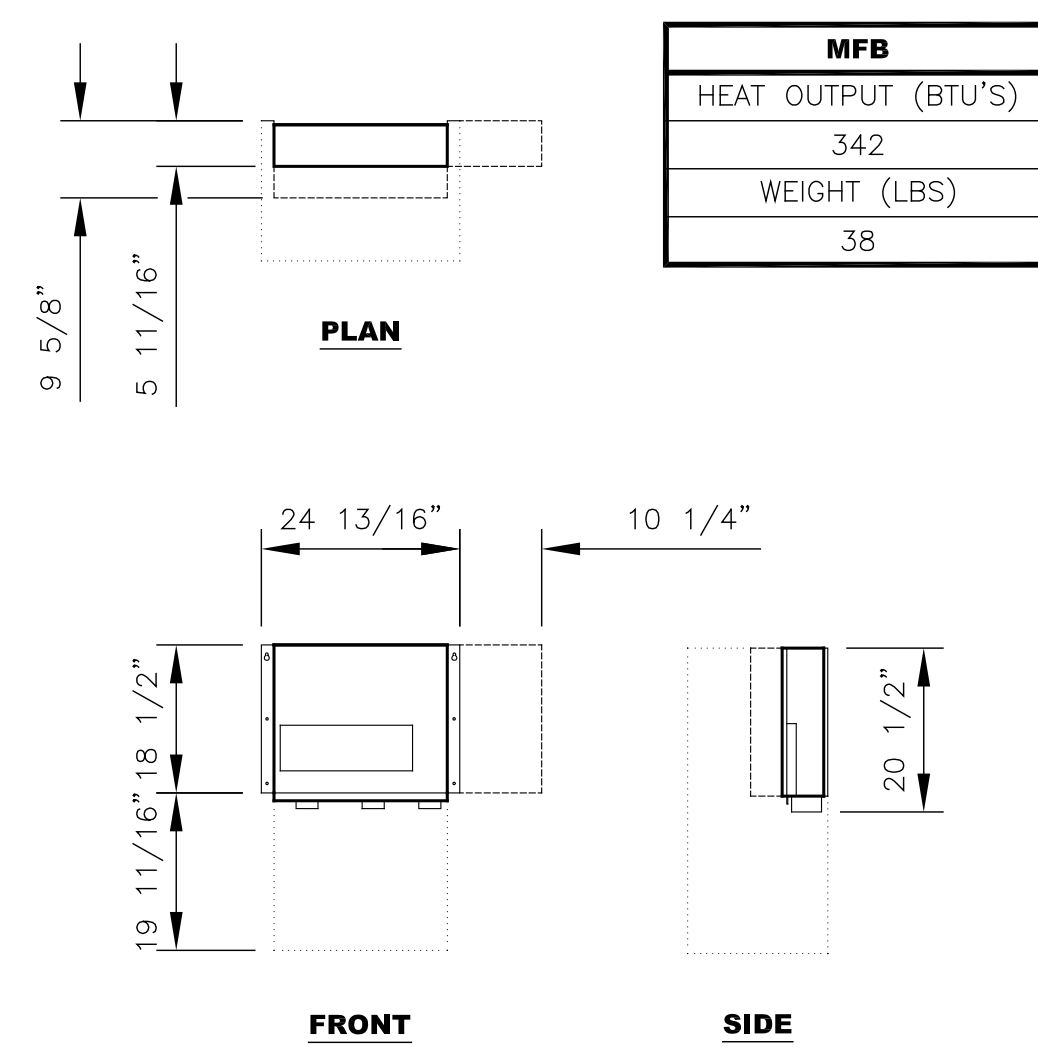
SCALE: 1/2" = 1'-0"

03-12-13



SCALE: 1 1/2" = 1'-0"

03-12-13



5 INNERVISION WORKSTATION

SCALE: 1" = 1'-0"

03-12-13

6 SUPERVISORY UNIT

SCALE: 1 1/2" = 1'-0"

03-12-13

7 SUPERVISORY UNIT SWITCH

SCALE: 3" = 1'-0"

03-12-13

8 VOLTAGE REGULATION DISTRIBUTION UNIT

SCALE: 1/2" = 1'-0"

03-12-13

9 MAGNET FAN BOX

SCALE: $1/2" = 1'-0"$

03-12-13

TRISTAN UNION DEPOSIT
MRI #3

(MR SCAN ROOM - TITAN)
2808 OLD POST RD.
HARRISBURG, PA 17110

DATE: 11-06-13

SCALE: AS NOTED

PLANNER: V. H.

SID: 3000834

PROJECT NO.
130013978MRP2

A5

TOSHIBA
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