

## **DRAWING CONTENTS**

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TOSHIBA Leading Innovation

REVISED SHEET(S)								
REV DATE								
PINNACLE HEALTH AT CGOH	(AQUILION - RXL)	4300 LONDONERRY RD. HARRISBURG, PA 17109						
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:  SCALE:		29-13  FO SCALE	-					
PLANNER:		M.C.	-					
SID:	30	)005080						
PROJECT NO	D.							

130013497CTF

#### **GENERAL NOTES**

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

A. TOSHIBA RESERVES THE RIGHT TO CHANGE THESE DESIGNS AND SPECIFICATIONS WITHOUT NOTICE.

- B. THE CUSTOMER/CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL APPLICABLE FEDERAL STATE, AND LOCAL CODES AND ORDINANCES ARE COMPLIED WITH.
- C. 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.
- D. ANY CABINETRY THAT MAY BE REQUIRED TO HOUSE VIDEO RECORDERS, MONITORS KEYBOARDS, OR OTHER ANCILLARY EQUIPMENT SHALL BE SUPPLIED AND INSTALLED BY CUSTOMER/CONTRACTOR.
- . PROVIDE ADEQUATE VENTILATION WITHIN CABINETRY AND INSTALL AXIAL FANS ON THE TOP, SIDE, OR BACK OF CABINETS, IF REQUIRED.
- F. 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.
- G. DESIGN, FABRICATE, AND INSTALL MEDICAL GAS PEDESTAL, IF REQUIRED. CONSULT WITH TOSHIBA INSTALLATION PROJECT MANAGER FOR SUITABLE LOCATIONS.
- H. CUSTOMER/CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AN OPERATING PHONE IN THE CONTROL ROOM AT THE TIME TOSHIBA EQUIPMENT INSTALLATION BEGINS.
- CUSTOMER/CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE LIGHTING FOR SERVICING OF EQUIPMENT IN ALL AREAS OF THE INSTALLATION.
- THE CUSTOMER/CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL COSTS REQUIRED FOR THE ENGINEERING AND/OR REMOVAL OF ANY HAZARDOUS MATERIALS SUCH AS
- K. 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.

#### PLUMBING

L. PLUMBING IS NOT REQUIRED FOR THIS TOSHIBA EQUIPMENT.

M. IT IS RECOMMENDED THAT A SINK BE PROVIDED FOR USE BY PERSONNEL

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

- O. CT GANTRY SHOULD NOT BE INSTALLED WITHIN 0.5 MAGNETIC GAUSS FIELD.
- P. THE WINDOW FOR MONITORING THE SCAN ROOM SHOULD BE IN FRONT OF OR ON THE SIDE OF THE CONSOLE DESK. THE LOWEST WINDOW FRAME SHOULD BE 36" ABOVE THE FLOOR FOR EASY PATIENT MONITORING.
- Q. A DOOR BETWEEN THE SCAN AND CONTROL ROOM IS RECOMMENDED.
- R. THE INSTALLATION ALTITUDE SHOULD BE NO MORE THAN 3,280 FT. (1,000 M) ABOVE SEA LEVEL. PRIOR CONSULTATION IS REQUIRED FOR INSTALLATIONS HIGHER THAN 3,280 FT. (1,000 M).

#### NETWORKING REQUIREMENTS

NETWORK REQUIREMENTS WILL VARY BY SITE. TOSHIBA REPRESENTATIVE WILL REQUIRE DICOM DEVICE INFORMATION. ADDITIONAL I.P. ADDRESSES, AND I.T. DEPARTMENT CONTACT INFORMATION PRIOR TO INSTALLATION.

#### TRANSPORT REQUIREMENTS

EQUIPMENT INGRESS ROUTE MUST BE CHECKED PRIOR TO EQUIPMENT DELIVERY TO ENSURE THE LARGEST AND HEAVIEST ITEMS OF EQUIPMENT CAN BE ACCOMMODATED, PRIOR TO EQUIPMENT DELIVERY. DIMENSIONS OF DOORWAYS SHOULD BE NO LESS THAN 4'-0" CLEAR IN WIDTH. CONTACT THE TOSHIBA INSTALLATION PROJECT MANAGER FOR DETAILS PERTAINING TO THE LARGEST AND HEAVIEST COMPONENTS FOR THIS INSTALLATION (SEE DETAIL 2, SHEET GN2).

02-13-13

#### 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.
- DUE TO THE DYNAMIC NATURE OF THE LOAD, BOTH HORIZONTAL AND VERTICAL ACCELERATION SHOULD BE INCLUDED IN THE DESIGN CALCULATIONS FOR THE SUPPORT STRUCTURE AS WELL AS ANCHORING AND THRU-BOLTING FOR THE TOSHIBA EQUIPMENT.
- IN THE INTEREST OF SAFETY, TOSHIBA RESERVES THE RIGHT TO DELAY INSTALLATION COMMENCEMENT UNTIL STRUCTURAL DESIGN DRAWINGS STAMPED BY THE STRUCTURAL ENGINEER OF RECORD HAVE BEEN PROVIDED.

#### FLOOR.

H. IN ORDER TO AVOID COLLISION WITH MOVEABLE TOSHIBA CEILING MOUNTED EQUIPMENT, ALL CEILING FIXTURES SUCH AS LAMPS, SMOKE DETECTORS, SPRINKLERS, ETC. MUST BE FLUSH MOUNTED (SEE DETAIL 1, SHEET GN2).

G. UNDER NO CIRCUMSTANCE SHOULD THE TOSHIBA EQUIPMENT BE INSTALLED ON A WOOD

#### **UNISTRUT NOTES**

- CEILING UNISTRUT SUPPORT STRUCTURES TO BE DESIGNED BY OTHERS BASED ON SPECIFICATIONS SHOWN ON TOSHIBA SITE PLANS (IF APPLICABLE).
- J. UNISTRUT OR EQUIVALENT CHANNEL SUPPORT SYSTEM TO BE SUPPLIED AND INSTALLED BY CUSTOMER/CONTRACTOR (IF APPLICABLE).
- K. UNISTRUT ARE TO BE P1001 OR P5001 OR EQUIVALENT, MOUNTED FLUSH WITH FINISHED CEILING. ALL UNISTRUT ARE TO BE MOUNTED PARALLEL AND LEVEL WITH A MAXIMUM DEVIATION OF 1/16". UNISTRUT IS TO BE CAPABLE OF SUPPORTING LOAD REQUIREMENTS OF TOSHIBA EQUIPMENT. UNISTRUT LOAD REQUIREMENTS AND DESIGN ARE THE RESPONSIBILITY OF THE STRUCTURAL ENGINEER OF RECORD.

#### **SPECIAL NOTES**

#### **SPECIAL SEISMIC CERTIFICATION**

- 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-0174-10 GANTRY

AQUILION ONE 640 SERIES: CGGT-024A/1A

AQUILION PREMIUM 320 SERIES: CGGT-024A/1B AQUILION PRIME 80/160 SERIES: CGGT-027A/1A

AQUILION LB: CGGT-020A/1C, CGGT-020A/2A

AQUILION CX: CGGT-024A/1B

AQUILION 64: CGGT-021A/1A AQUILION 32: CGGT-021A/2A

AQUILION RXL: CGGT-018B/1A

AQUILION 16/8/4: CGGT-018A/1C PATIENT COUCH

AQUILION ONE/PREMIUM: CBTB-021A/1A (STANDARD)

AQUILION ONE/PREMIUM: CBTB-021B/1A (COMPACT) AQUILION CX: CBTB-023A/1A (STANDARD)

AQUILION PRIME 80/160: CBTB-026A/1A (STANDARD) AQUILION PRIME 80/160: CBTB-026B/1A (COMPACT)

LATERAL MOVEMENT UNIT: CALU-001A/1C (OPTIONAL)

AQUILION LB STANDARD: CBTB-020A/1A, CBTB-030A/1A AQUILION LB COMPACT: CBTB-020B/1A, CBTB-030B/1A

AQUILION 64/32: CBTB-019A (STANDARD), CBTB-019B (COMPACT) AQUILION RXL: CBTB-028A/1A (STANDARD), CBTB-028B/1A (COMPACT)

AQUILION 16/8/4: CBTB-016A/1A (STANDARD), CBTB-016B (COMPACT) POWER DISTRIBUTOR

AQUILION ONE/PREMIUM: CETF-006A/2A

AQUILION PRIME: CETF-006A/3A AQUILION LB/RXL: CETF-006A/6A

RECONSTRUCTION UNIT(S) & CPU AQUILION ONE: CKCN-015A/1A

AQUILION PREMIUM: CKCN-015A/2A

AQUILION PRIME: CKCN-016A/2A AQUILION LB: CKCN-012C/5A, CKCN-016B/5A

AQUILION CX/64/32: CKCN-012B/5A

AQUILION VELOCT: CKCN-016C/1A

AQUILION RXL: CKCN-016B/4A AQUILION 16/8/4: CKCN-012C/7A

LCD MONITORS KEYBOARDS

MOUSE

B.B. OSP-0162-10

PCDU - GROUP 1 ENCLOSURES (AS APPLICABLE) B.C. OSP-0119-10

G8000 UNINTERRUPTIBLE POWER SUPPLY - G8000 (AS APPLICABLE)

B.D. OSP-0088-10 BAT - BC43 (WHEN PAIRED WITH G8000) (AS APPLICABLE)

BAT - BC55 (WHEN PAIRED WITH 9390) (AS APPLICABLE) B.E. OSP-0013-10

UPS - 9390 160 KVA (AS APPLICABLE)

WEIGHTS SHOWN ON THE OSP DOCUMENTS ARE GENERALLY A MAXIMUM AND THE

WEIGHTS SHOWN ON THESE SITE PLANS REFLECT THE EQUIPMENT AS ORDERED.

08-13-13

#### **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 CONTROL 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, 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.
- TOSHIBA WILL SUPPLY INTERCONNECTING CABLES FOR THE TOSHIBA EQUIPMENT. TOSHIBA WILL INSTALL IF LOCAL TRADE LABOR PERMITS.
- 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 CONCENTRATED LOAD OF 200
- GROMMETED OPENINGS ARE SHOWN FOR REFERENCE PURPOSES ONLY. VERIFY SIZE AND LOCATION WITH TOSHIBA REPRESENTATIVE. ALL GROMMETED OPENINGS SHALL HAVE NO SHARP EDGES.
- J. ALL CHASE & GROMMETED OPENINGS SHALL HAVE PLASTIC/NYLON BUSHINGS.
- K. ALL WALL DUCT WORK SHALL HAVE THE MINIMUM NUMBER OF COMPARTMENTS SPECIFIED IN THE ELECTRICAL DUCT LEGEND (SHEET E1). TRANSITIONS SUCH AS HORIZONTAL TO VERTICAL WALL DUCT OR WALL DUCT TO JUNCTION BOXES MUST BE REVIEWED ON AN THE USE OF CROSS-OVER TUNNELS OR OTHER SUCH DEVICES TO MAINTAIN CABLE
- 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 FOR REFERENCE ONLY. ALL CONDUIT RUNS MUST TAKE THE SHORTEST MOST DIRECT ROUTE POSSIBLE.
- 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 FQUIPMENT CONNECTION POINT. CABLE TYPE MUST BE MTW MULTI-STRAND COPPER - NO ALUMINUM IS PERMITTED. CABLE SIZE MUST BE IN ACCORDANCE WITH TOSHIBA POWER QUALITY REQUIREMENTS. (SEE SHEET E3).
- 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
- r. 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.
- U. ALL DUCT WORK MAKING A 90° ANGLE MUST BE CHAMFERED FOR CABLE ACCESS.
- V. JUNCTION BOX SIZES SPECIFIED ON SHEET E1 MAY BE INCREASED AS NEEDED.
- W. FIBER OPTIC CABLES REQUIRE A MINIMUM RADIUS OF 4 1/2". DUCT WORK DESIGN MUST ACCOMMODATE THIS REQUIREMENT. 04-09-13

# **TOSHIBA POWER & ENVIRONMENTAL**

A. FOR YOUR SYSTEM TO PERFORM TO THE RELIABILITY AND QUALITY STANDARDS YOU EXPECT FROM TOSHIBA, IT IS CRUCIAL THAT THE ENVIRONMENT IN WHICH THE SYSTEM IS OPERATING MEET THE REQUIREMENTS STATED WITHIN THE TOSHIBA PUBLISHED SPECIFICATIONS AS DOCUMENTED IN YOUR TOSHIBA SITE PLAN. TO ENSURE QUALITY PERFORMANCE, TOSHIBA, <u>WITH NO COST TO YOU</u>, WILL CHECK THE TEMPERATURE, HUMIDITY, AND INCOMING POWER OF YOUR SITE PRIOR TO AND AFTER THE INSTALLATION OF TOSHIBA EQUIPMENT. TOSHIBA WILL PROVIDE A WRITTEN REPORT DETAILING THE STATUS OF YOUR SITE'S ENVIRONMENT AND INCOMING POWER. SHOULD ANY FAILURE TO MEET TOSHIBA'S SPECIFICATIONS BE IDENTIFIED PRE AND POST INSTALLATION, THE FACILITY WILL BE REQUIRED TO CORRECT THEM TO MEET TOSHIBA PUBLISHED SPECIFICATIONS. TOSHIBA WILL PROVIDE GUIDANCE TO DEVELOP SOLUTIONS TO ANY DEFICIENCIES TO THE ENVIRONMENT OR INCOMING POWER. HOWEVER, YOU ARE RESPONSIBLE FOR CORRECTING SUCH DEFICIENCIES, AT NO COST TO TOSHIBA. FAILURE TO CORRECT ANY KNOWN OR DISCOVERED DEFICIENCIES MAY RESULT IN SYSTEM REPAIRS THAT ARE NOT COVERED BY YOUR WARRANTY OR SERVICE CONTRACT. 04-09-13

#### **ELECTRICAL REQUIREMENTS FOR AQUILION**

SUPPLY CONFIGURATION: 3 PHASE DELTA OR WYE

SUPPLY VOLTAGE: 480V, 100 AMP, 60 Hz

DISTRIBUTION CAPACITY: 150 KVA

02-13-13

#### **VIBRATION SPECIFICATION**

 $0.98 \text{ M/S}^2 (0.1 \text{ G}) \text{ OR LESS}$ 

02-13-13

#### **CEILING HEIGHT**

RECOMMENDED CEILING HEIGHT: 9'-0" MINIMUM CEILING HEIGHT: 8'-2 1/2"

02-13-13

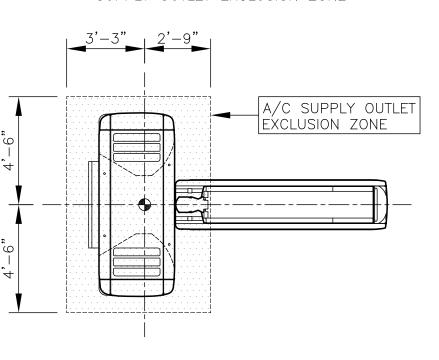
#### **HVAC REQUIREMENTS**

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

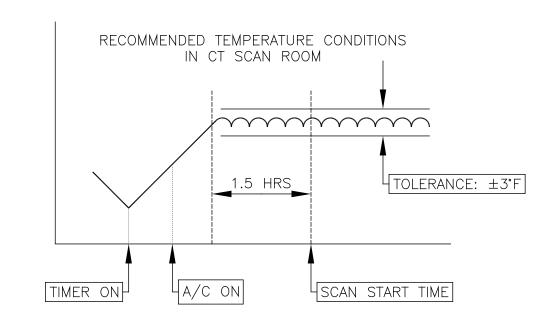
AMBIENT TEMPERATURE SHOULD BE 68°-74° F WITH EQUIPMENT HEAT LOADS (SEE EQUIPMENT LEGEND SHEET A1) HUMIDITY RANGE OF 40-70% NON-CONDENSING

- A. STATED AMBIENT TEMPERATURE IS TO BE PROVIDED AND MAINTAINED AS SPECIFIED. ALL CALCULATIONS ARE TO UTILIZE TOSHIBA PROVIDED HEAT OUTPUT SPECIFICATIONS OF EQUIPMENT.
- B. A MINIMUM OF 10 AIR CHANGES PER HOUR IS SUGGESTED, CONSULT LOCAL CODE.
- C. AIR SUPPLY DUCTS SHOULD NOT BE PLACED DIRECTLY OVER EXAMINATION TABLES FOR PATIENT COMFORT.

SUPPLY OUTLET EXCLUSION ZONE



- EQUIPMENT IN ENCLOSED SPACES SUCH AS EQUIPMENT ROOMS, TRANSFORMER CLOSETS AND COMPUTER ROOMS MUST BE PROVIDED WITH ADEQUATE VENTILATION.
- E. THE AIRFLOW THROUGH TOSHIBA EQUIPMENT CABINETS IS FROM BOTTOM TO TOP.
- F. WHERE POSSIBLE, AIR CONDITIONING SUPPLY OUTLETS SHOULD BE LOCATED AT FLOOR LEVEL. NO AIR CONDITIONING OUTLET SHOULD BE WITHIN THE EXCLUSION ZONE SHOWN BELOW AND AT NO TIME SHOULD THE CT SYSTEM BE EXPOSED TO DIRECT AIRFLOW.
- G. RETURN GRILLES ARE TO BE INSTALLED IN THE CEILING.
- H. A/C SUPPLY OUTLET TO BE PROVIDED BY CUSTOMER AT FLOOR LEVEL AT CONTROL ROOM
- DUE TO HEAT GENERATED BY THE "CPU" UNIT. ADDITIONAL VENTILATION IN THE CONTROL AREA IS REQUIRED. CUSTOMER/CONTRACTOR PROVIDED FAN(S) MAY BE NECESSARY BELOW THE DESKTOP FOR TECHNICIAN COMFORT. THE "CPU" UNIT SHOULD NOT BE ENCLOSED IN CASEWORK.



- J. IN GENERAL, THE SCANNING ROOM MUST BE PROVIDED WITH AN INDEPENDENT AIR CONDITIONING SYSTEM. EVEN IF THE ROOM IS MAINTAINED WITHIN THE PERMISSIBLE TEMPERATURE RANGE, GRADUAL TEMPERATURE SHIFTS (FOR EXAMPLE, A SLOW INCREASE IN ROOM TEMPERATURE FROM MORNING TO EVENING) MAY ADVERSELY AFFECT SYSTEM PERFORMANCE. THEREFORE, THE ROOM TEMPERATURE MUST BE KEPT UNDER CONSTANT CONTROL (WITHIN ±3°F) AS SHOWN IN THE ABOVE FIGURE.
- K. THE AIR CONDITIONING SYSTEM IN THE SCANNING ROOM MUST BE INSTALLED SO THAT THE CT SYSTEM IS NOT EXPOSED TO DIRECT AIRFLOW. FAILURE TO DO SO MAY CAUSE THE TEMPERATURE INSIDE THE CT SYSTEM TO FLUCTUATE, POSSIBLY AFFECTING THE DISPLAYED IMAGES ADVERSELY.

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THESE TOSHIBA PLANS ARE FO INFORMATIONAL PURPOSES ONL' AND SHALL NOT BE USED FO ANY PURPOSE OTHER THAN THA AGREED UPON BETWEEN TOSHIBA AND THE CUSTOMER. THESE PLANS ARE NOT TO BE USE FOR CONSTRUCTION PURPOSES

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08-29-13 SCALE: NOT TO SCALE M.C. PLANNER:

30005080

PROJECT NO. 130013497CTF

GN1

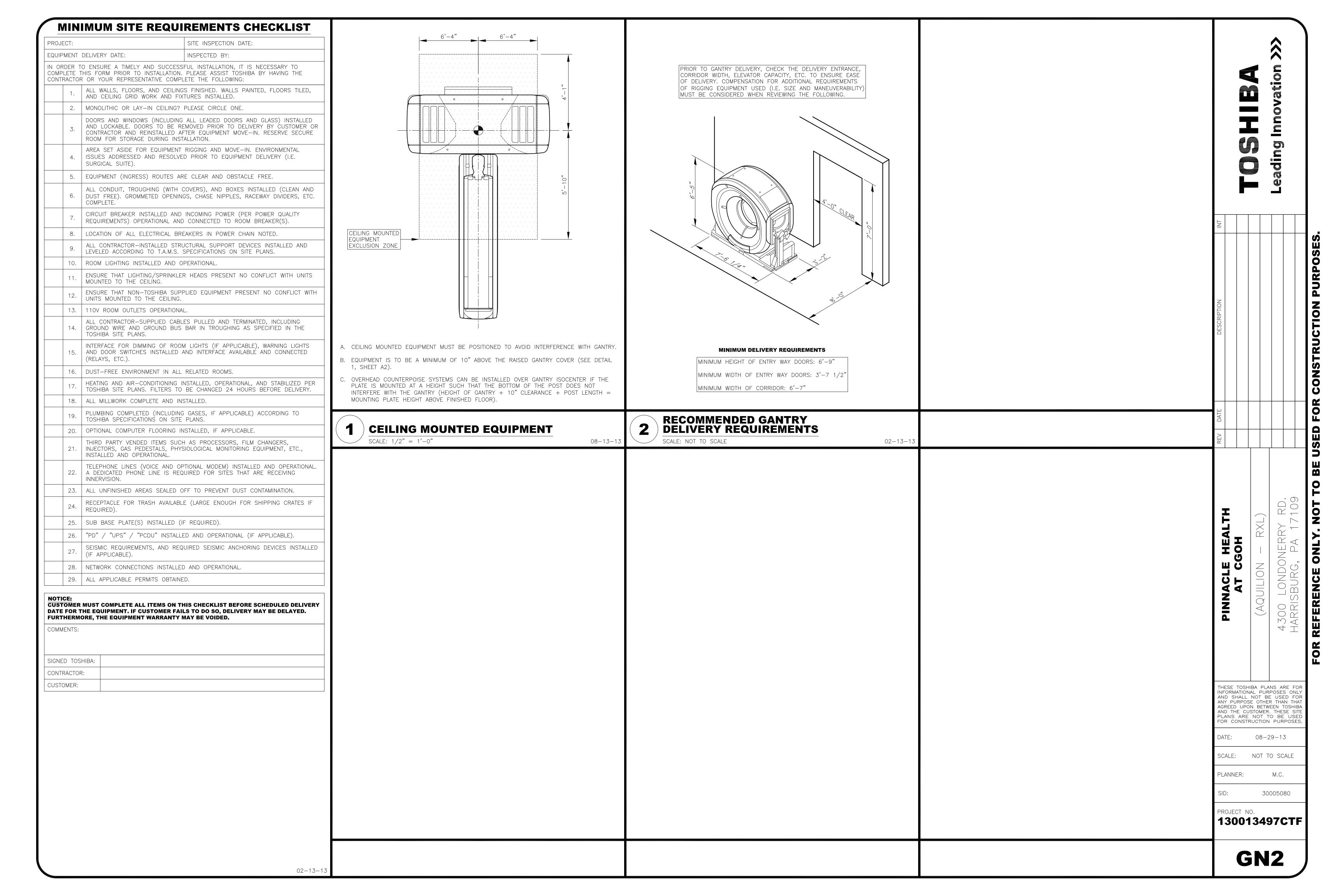
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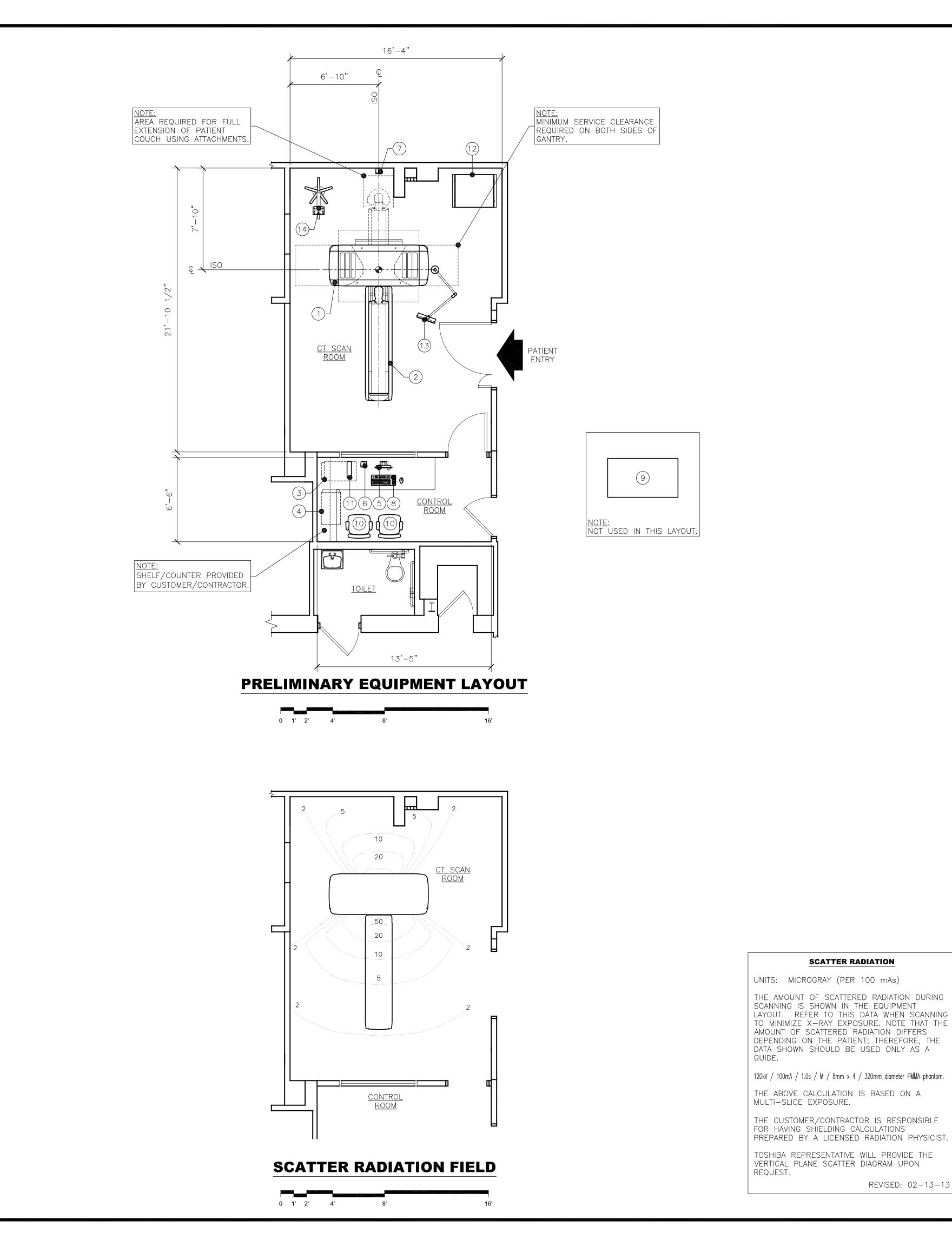
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INDIVIDUAL BASIS WITH THE INSTALLATION PROJECT MANAGER. LOCAL CODES MAY REQUIRE

O. CONDUIT RUNS MAY HAVE A MAXIMUM OF (3) 90° BENDS.

# **QUALITY NOTIFICATION / ASSESSMENT**





		EQUIPMENT LEGEND		
ITEM	ELEC. SYM.	ITEM DESCRIPTION SUPPLIED AND INSTALLED BY TOSHIBA	BTU/HR	WEIGHT
1	GANT	AQUILION GANTRY (TYPE C)	*	3,859
2	PCH	AQUILION PATIENT COUCH (STANDARD)	*	1,070
3	CPU	CENTRAL PROCESSING UNIT	10,246	261
4	REC	RECONSTRUCTION UNIT (BTU/HR INCLUDED WITH "CPU")	_	298
5	MON	CONTROL MONITOR	192	18
6	SPK1	SPEAKER (DESKTOP)	0	5
7	SPK2	SPEAKER (WALL MOUNT)	0	5
8	SKBD	KEYBOARD (SCAN)	0	6
9	DESK	DESK FOR MONITORS & KEYBOARDS	0	221
10	CHR	CHAIR	0	55
11)	INV	INNERVISION WORKSTATION	T.B.D.	17
ITEM	ELEC. SYM.	ITEM DESCRIPTION - SUPPLIED BY TOSHIBA & INSTALLED BY CUSTOMER / CONTRACTOR	BTU/HR	WEIGHT
(12)	PD	POWER DISTRIBUTOR	2,730	1,197
ITEM	ELEC. SYM.	OPTIONAL ITEM DESCRIPTION - SUPPLIED & INSTALLED BY TOSHIBA	BTU/HR	WEIGHT
13	FPMC	CT FLUOROSCOPY FLAT PANEL MONITOR (CEILING MOUNTED)	137	56
14	EOP	CT FLUOROSCOPY EXTENSION OPERATING PANEL (PEDESTAL MOUNTED)	0	T.B.D.
ITEM	ELEC. SYM.	OPTIONAL ITEM DESCRIPTION - SUPPLIED BY TOSHIBA & INSTALLED BY CUSTOMER / CONTRACTOR	BTU/HR	WEIGHT
		* AQUILION GANTRY & COUCH BE  EXAM ROOM SCANNING 2 PATIENTS: 20,081 E EXAM ROOM SCANNING 3 PATIENTS: 21,104 E EXAM ROOM SCANNING 4 PATIENTS: 22,128 E EXAM ROOM SCANNING 5 PATIENTS: 23,151 E EXAM ROOM SCANNING MAXIMUM: 24,175 E	BTU/HR BTU/HR BTU/HR BTU/HR	UR:
		FUTURE GROWTH OF FACILITY MUST BE CONSIDER	ED WHEN	

**EQUIPMENT LEGEND** 

FUTURE GROWTH OF FACILITY MUST BE CONSIDERED WHEN FORECASTING PATIENT NUMBERS FOR A/C REQUIREMENTS.

**SCATTER RADIATION** 

REVISED: 02-13-13

## **SITE PLAN APPROVAL**

IN ORDER TO USE THIS SET OF FINAL SITE PLANS, A CUSTOMER SIGNATURE IS REQUIRED BELOW. THE CUSTOMER'S SIGNATURE DEMONSTRATES ACCEPTANCE OF THE LAYOUT SHOWN AND ALL STATED SPECIFICATIONS.

CUSTOMER:	DATE:
SALES:	DATE:
I.P.M.:	DATE:

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.

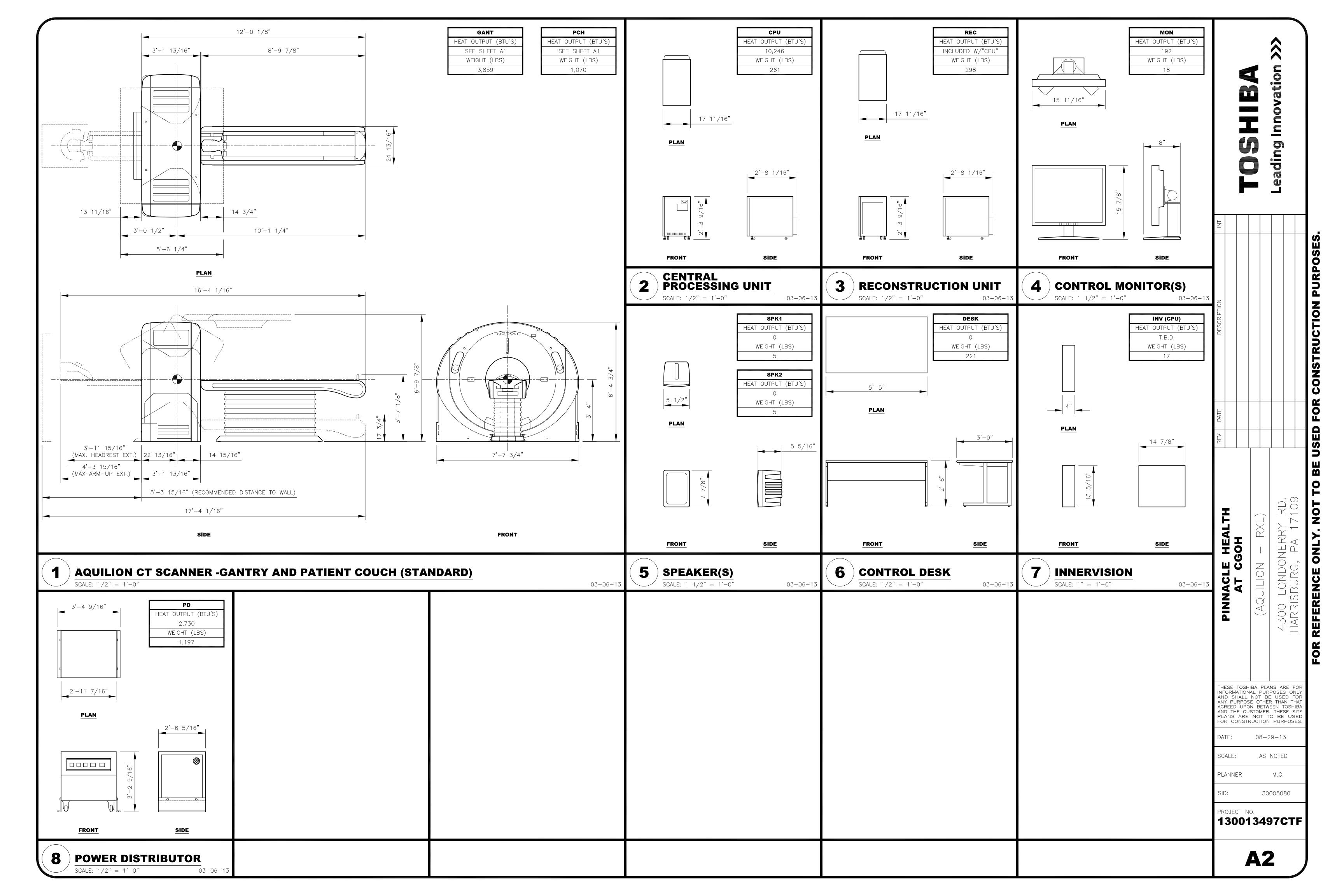
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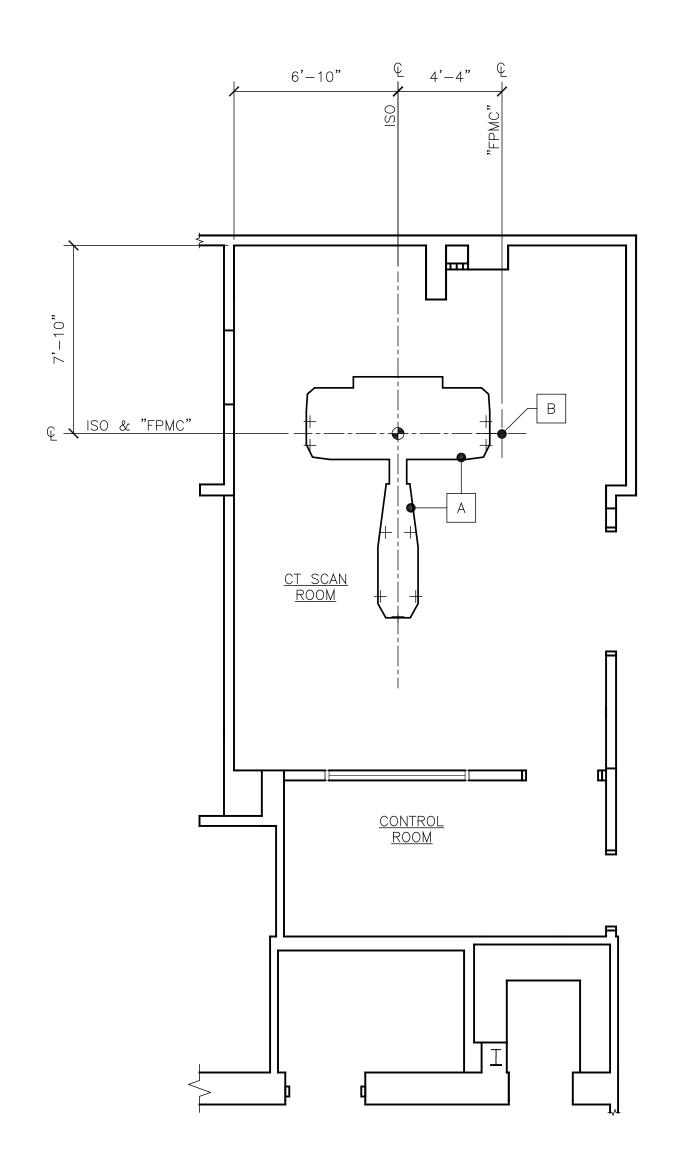
HEALTH GOH

PINNACLE AT CO

DATE: 08-29-13SCALE: 1/4" = 1'-0"PLANNER: M.C. 30005080

PROJECT NO. 130013497CTF

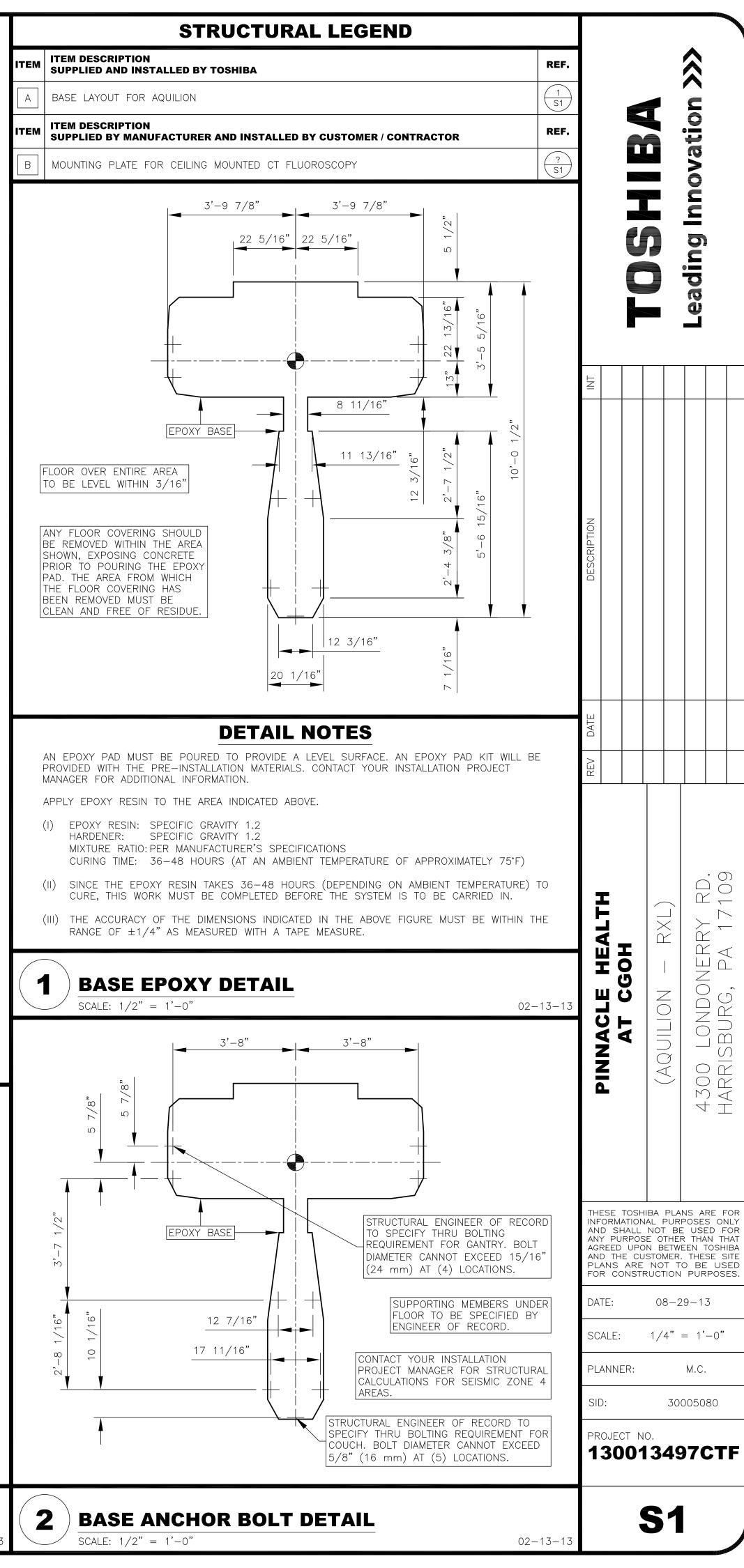


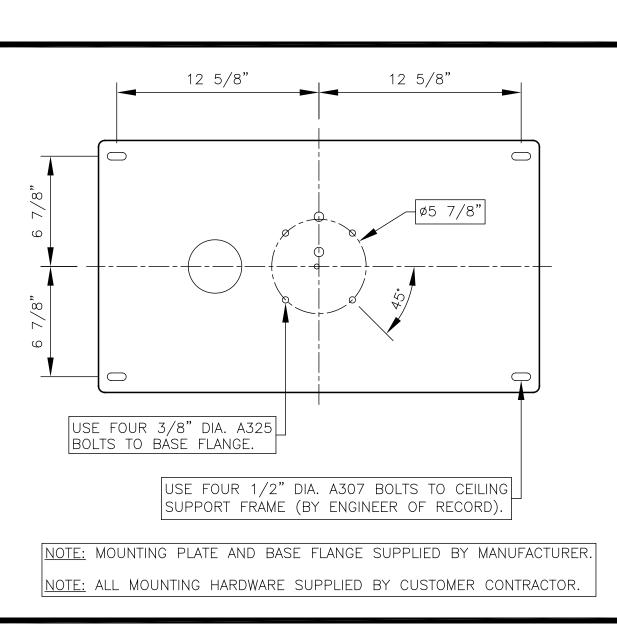


#### STRUCTURAL LAYOUT

0 1' 2' 4' 8'

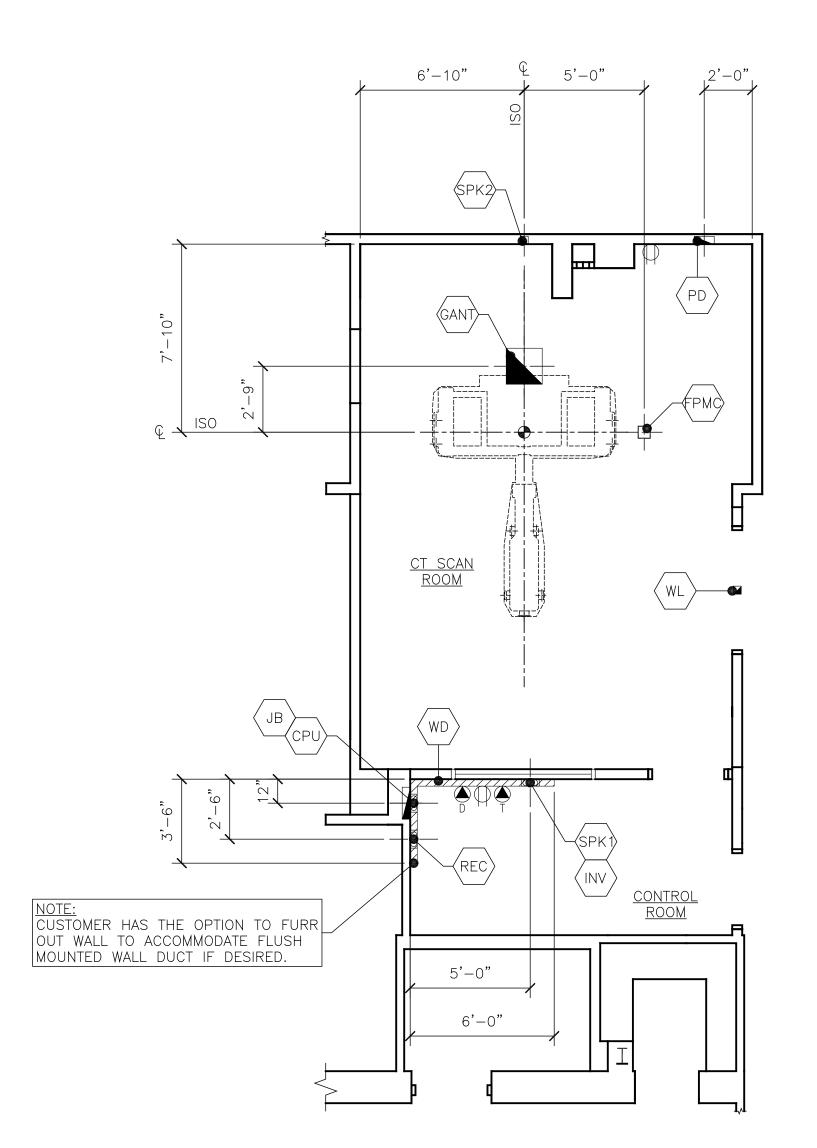
ANY FLOOR COVERING SHOULD BE REMOVED WITHIN THE AREA SHOWN IN DETAIL 1 EXPOSING CONCRETE PRIOR TO POURING THE EPOXY PAD. THE AREA FROM WHICH THE FLOOR COVERING HAS BEEN REMOVED MUST BE CLEAN AND FREE OF RESIDUE.



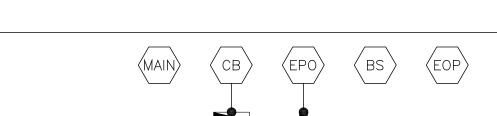


**CEILING MOUNTED** "FPMC" PLATE DETAIL SCALE: 3" = 1'-0"

03-06-13



#### **ELECTRICAL LAYOUT**



NOTE:

TO BE LOCATED BY CUSTOMER / CONTRACTOR.

ADDITIONAL "EPO" SWITCHES TO BE LOCATED IN ADJACENT ROOMS WITH TOSHIBA EQUIPMENT IF MAIN "EPO" IS NOT ACCESSIBLE (VERIFY WITH LOCAL CODE). ALL "EPO" SWITCHES TO BE PROVIDED BY CUSTOMER / CONTRACTOR.

NOTE:
TOSHIBA SUPPLIED POWER CABLE BETWEEN
THE "PD" AND TOSHIBA EQUIPMENT ARE TO
BE USED IF THE CABLE LENGTHS PROVIDED
ARE SUFFICIENT. SEE DETAIL 2, SHEET E3. IN
CASES WHERE EXTENDED CABLE LENGTHS ARE
REQUIRED, THE CUSTOMER/CONTRACTOR MUST
PROVIDE CABLES PER LOCAL/NATIONAL
CODES.

CUSTOMER/CONTRACTOR IS RESPONSIBLE FOR ENSURING ALL CABLES ARE IN COMPLIANCE WITH ALL LOCAL/NATIONAL CODES.

NOTE:

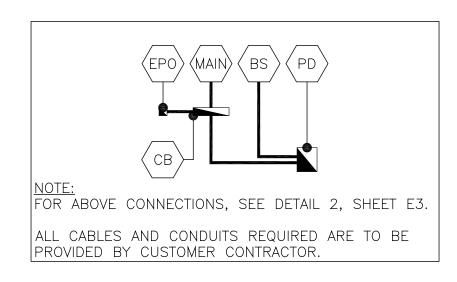
J-BOX SIZES MAY BE INCREASED AS NEEDED

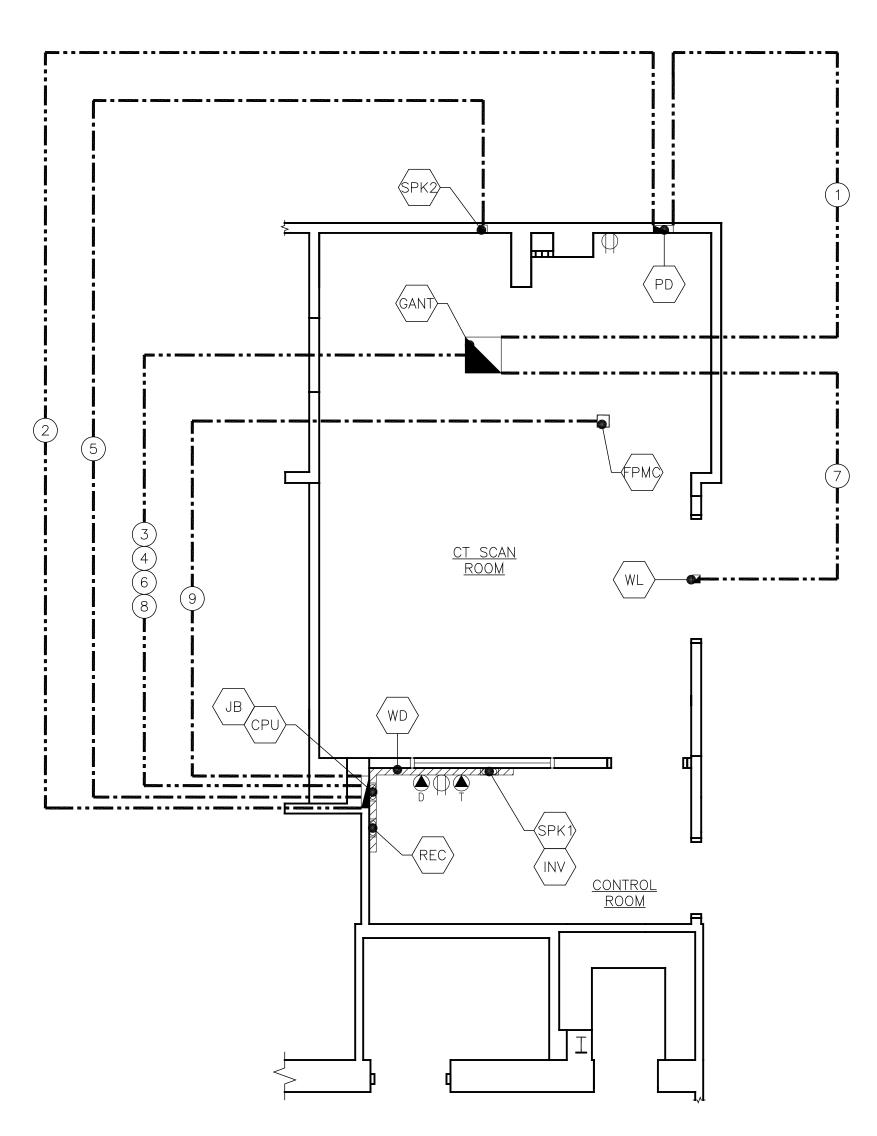
WITH EXCEPTION TO THE "PD" J-BOX.

NOTE:
GROMMETED OPENINGS ARE SHOWN FOR
REFERENCE ONLY. VERIFY SIZE AND LOCATION
WITH TOSHIBA REPRESENTATIVE.

NOTE:
FIBER OPTICAL CABLES FROM RECONSTRUCTION UNITS REQUIRE A MINIMUM BENDING RADIUS
OF 4 1/2". DUCT WORK DESIGN MUST ACCOMMODATE THIS REQUIREMENT.

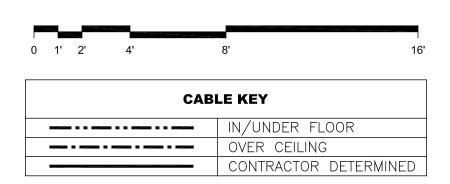
	ELECTRICAL LEGEND					
ITEM	ITEM DESCRIPTION SUPPLIED AND INSTALLED BY CUSTOMER / CONTRACTOR	REF.				
MAIN	MAIN SERVICE ENTRANCE PANEL	2 E3				<u></u>
$\left\langle \mathbb{CB}\right\rangle$	THREE PHASE CIRCUIT BREAKER PER TOSHIBA POWER SPECIFICATIONS (SEE DETAIL) CIRCUIT BREAKER LOCATION PER CODE REQUIREMENTS BY ELECTRICAL CONTRACTOR.	2 E3				nnovation
$\left\langle PD\right\rangle$	10" W X 10" H X 4" D J—BOX, RECESSED 4" INTO WALL, MOUNTED 12" A.F.F. TO BOTTOM OF BOX. FLEX CONDUIT FROM J—BOX TO CABINET.	$\begin{bmatrix} 2 \\ E3 \end{bmatrix}$				Na Va
EPO>	4" STD. J-BOX FOR REMOTE OFF SWITCH. LOCATED BY CUSTOMER/CONTRACTOR. DPDT, NORMALLY OPEN MUSHROOM HEAD PUSH BUTTON.	2 E3				
$\left\langle \mathbb{WL}\right\rangle$	4" STD. J-BOX FOR "X-RAY ON" OR WARNING LIGHT MOUNTED ABOVE PATIENT ENTRY DOOR.	3 E3		U		
BS	BUILDING STEEL.	2 E3				ading
GANT	18" W X 18" L X 6" D, J—BOX FLUSH MOUNTED IN FLOOR. OPEN TO GANTRY CABLE TRAY.	5 E3				eac
CPU	GROMMETED OPENING IN "WD".	5 E3				Ĭ
SPK1		15				
	SHARED GROMMETED OPENING IN WALL DUCT "WD".	5 E3	N N			
REC	GROMMETED OPENING IN "WD". FLEX CONDUIT MAY BE REQUIRED TO MEET LOCAL CODE.	5 E3				
SPK2	4" STD. J-BOX FOR SCAN ROOM SPEAKER, FLUSH MOUNTED 58" A.F.F. TO BOTTOM OF BOX (IN PROCEDURE ROOM).	-				
-PMC	6" W X 6" H X 4" D J-BOX, MOUNTED ABOVE FINISHED CEILING.					
EOP	CONNECTS TO "GANT".	-	PTION			
$\sqrt{JB}$	16" W X 16" H X 4" D J-BOX, FLUSH MOUNTED 9" A.F.F. TO BOTTOM OF BOX. OPEN TO "WD".	5 E3	ESCRIF			
$\bigcirc$	110V ELECTRICAL OUTLETS FOR SYSTEM EQUIPMENT AND/OR SERVICE EQUIPMENT. OUTLETS TO BE LOCATED IN EACH ROOM WHERE SYSTEM EQUIPMENT IS LOCATED.	-				
	RJ45 CONNECTOR, CAT5 CABLE TO BE USED FOR DATA CONNECTION FOR NETWORKING.					
	DEDICATED PHONE LINE SUPPLIED/INSTALLED BY CUSTOMER/CONTRACTOR.	-				
-						
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	ELECTRICAL DUCT LEGEND  ITEM DESCRIPTION					
ITEM	SUPPLIED AND INSTALLED BY CUSTOMER / CONTRACTOR	REF.				
WD	10" W X 3 1/2" D FLUSH/SURFACE MOUNTED WALL DUCT, W/(3) EQUALLY PARTITIONED COMPARTMENTS THROUGHOUT & REMOVABLE ACCESS COVERS. MOUNTED 12" A.F.F. TO BOTTOM OF DUCT.	5 E3	THFS	 F TOSH	IRA PLA	NS ARE F
			INFOF AND ANY	RMATION SHALL PURPOS	AL PURI NOT BE SE OTHER	POSES ON USED F R THAN TH
			AND PLAN	THE CU IS ARE	STOMER.	EEN TOSH THESE S O BE US PURPOS
			DATE	:	08-2	9-13
			SCAL	 .E:	1/4"	= 1'-0"
			PLAN	INER:		M.C.
			SID:		300	005080
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#### **ELECTRICAL SCHEMATIC**

(PROVIDED FOR REFERENCE PURPOSES ONLY)





### **CONDUIT SCHEDULE**

CONTRACTOR CONDUIT REFERENCE						CABLE REFERENCE					
RUN NO.					CONDUIT (MAX LENGTH)	CABLE (POINT TO POIN			CABLE LENGTH (USABLE)	CABLES (SUPPLIED BY	
1	PD	GANT	UNDER FLOOR	(2) 2 1/2"	68'-9"		PD	GANT	SEE RUN "B"* DETAIL (1/E4)	TOSHIBA	
2	PD	JB	UNDER FLOOR	2 1/2"	69'-1"		PD	CPU	SEE RUN "C"* DETAIL (1/E4)	TOSHIBA	
3	GANT	JB	UNDER FLOOR	2 1/2"	68'-9"		GANT	(CPU)	SEE RUN "D" DETAIL (1/E4)	TOSHIBA	
4	GANT	JB	UNDER FLOOR	(2) 3"	67'-9"		GANT	CPU	SEE RUN "E" DETAIL (1/E4)	TOSHIBA	
5	SPK2	JB	OVER CEILING	1/2"	42'-2"		SPK2	(CPU)	SEE RUN "G" DETAIL (1/E4)	TOSHIBA	
6	JB	GANT	UNDER FLOOR	2 1/2"	67'-9"		REC	GANT	SEE RUN "L" DETAIL (1/E4)	TOSHIBA	
7	(WL)	GANT	CONTRACTOR DETERMINED	PER MANUFACTURER	PER MANUFACTURER		WL	GANT	PER MANUFACTURER	CONTRACTOR	
8	GANT	JB	UNDER FLOOR	1"	69'-0"		GANT	(INV)	SEE RUN "H" DETAIL (1/E4)	TOSHIBA	
9	FPMO	JB	OVER CEILING	2"	46'-0"		FPMO	CPU	50'-0" (SIGNAL)	TOSHIBA	

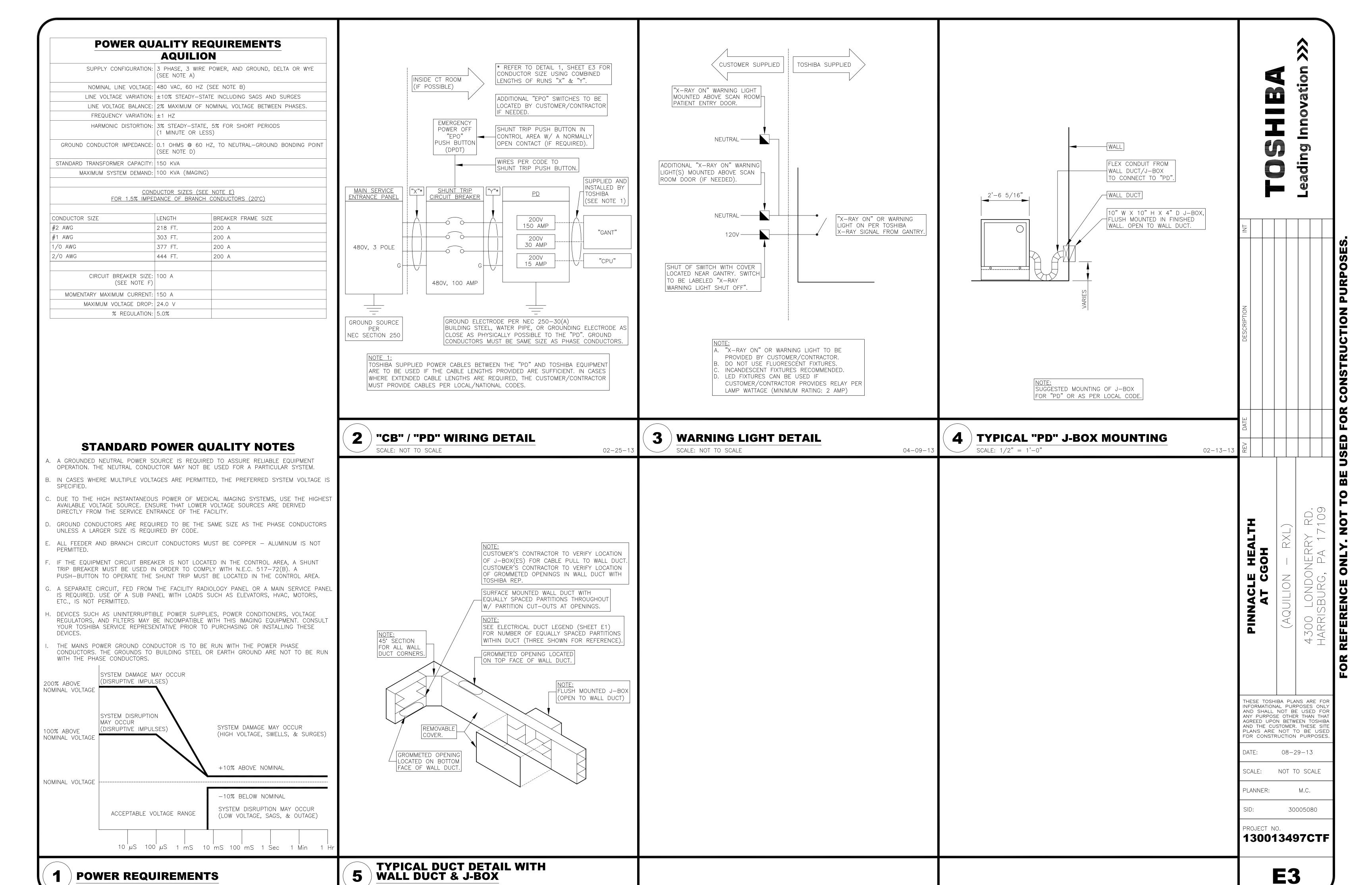
- A. CONDUITS SUPPLIED/INSTALLED BY CUSTOMER/CONTRACTOR. B. ALL CONDUIT RUNS MUST TAKE THE SHORTEST MOST DIRECT ROUTE POSSIBLE.
- C. \* IF RUN IS GREATER THAN LENGTH SHOWN, CUSTOMER/CONTRACTOR TO PROVIDE CABLES. REFER TO DETAIL 2, SHEET E3.
- D. CONDUIT IS NOT TO BE RUN IN SUCH A MANNER THAT WILL EXCEED CONDUIT MAXIMUM LENGTH AS SHOWN IN THE SCHEDULES.

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: 08-29-13SCALE: 1/4" = 1'-0"PLANNER: M.C.

30005080

PROJECT NO. 130013497CTF



04-09-13

SCALE: NOT TO SCALE

SCALE: NOT TO SCALE

08-13-13

